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CITY AND COUNTY OF HONOLULU

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C2026-00835

June 24, 2026

Ms. Mary Alice Evans, Director
Office of Planning and Sustainable Development
Department of Business, Economic Development and Tourism
Environmental Review Program
State of Hawaiʻi
235 South Beretania Street, Suite 702
Honolulu, Hawaiʻi 96813

Dear Ms. Evans:

Subject: Draft Environmental Assessment and Anticipated Finding of No Significant Impact for the Keʻehi Lagoon Beach Park Improvements Project
Moanalua, Oʻahu, Hawaiʻi
Tax May Key (TMK): (1) 1-1-003:239

With this letter, the City and County of Honolulu, Department of Design and Construction hereby transmits the Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI) for the proposed Keʻehi Lagoon Beach Park Improvements project, situated on TMK parcel (1) 1-1-003:239, on the island of Oʻahu. The DEA has been prepared pursuant to Chapter 343 of the Hawaiʻi Revised Statues and Chapter 11-200.1 of the Hawaiʻi Administrative Rules.

We respectfully request that the DEA-FONSI be published in the next available edition of *The Environmental Notice*.

Should you have any questions, please contact Christine Choy of our Facilities Division at christine.choy@honolulu.gov, or our authorized agent of this project, Greg Nakai, of PBR Hawaiʻi at gnakai@pbrhawaii.com.

Sincerely,

Haku Milles, P.E., LEED AP
Director

HM:ln

cc: Department of Parks and Recreation
RMA Architects, Inc.
PBR Hawaiʻi & Associates, Inc.

From: dbedt.opsd.erp@hawaii.gov
To: DBEDT OPSD Environmental Review Program
Subject: New online submission for The Environmental Notice
Date: Tuesday, June 30, 2026 10:15:53 AM

Action Name

Keʻehi Lagoon Beach Park Improvements

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

Honolulu, Oʻahu

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

(1) 1-1-003:239

Action type

Agency

Other required permits and approvals

ROH Chapter 25 Compliance; SMA Use Permit – Major; Grading Permit; Building Permit (electrical, plumbing, civil); Occupancy Permit; Site Development Master Application for Sewer Connection; Storm Drain Connection License (if necessary); Storm Water Quality Permit; Rules Relating to Water Quality and Storm Drainage Standards Compliance; Flood Certification; Board of Water Supply (BWS) Review and Approval; Industrial Wastewater Discharge Permit (application submitted); Dust Control Plan; Noise Permit (if necessary); Disability and Communication Access Board (DCAB) Review and Approval; State Historic Preservation Division (SHPD) HRS Section 6E Review; Federal Aviation Administration (FAA) Form 7460-1 (Notice of Proposed Construction or Alteration)

Proposing/determining agency

Department of Design and Construction

Agency jurisdiction

City and County of Honolulu

Agency contact name

Christine Choy

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United States
Map It

Is there a consultant for this action?

Yes

Consultant

PBR HAWAII & Associates, Inc.

Consultant contact name

Greg Nakai

Consultant contact email

gnakai@pbrhawaii.com

Consultant contact phone

(808) 521-5631

Consultant address

1001 Bishop Street, Suite 650
Honolulu, HI 96813
United States
Map It

Action summary

The proposed Keʻehi Lagoon Beach Park Improvements Project consists of three main elements: a) the reconstruction of the park's Comfort Stations 1 and 2; b) the demolition of the existing Comfort Station 2; and c) the improvement of the existing onsite maintenance facility. The Project is not proposing to change the uses of the site beyond existing uses.

The reconstruction of the comfort stations is to replace the original Comfort Station 1 that had been demolished in 2025 due to fire damage, and to replace the existing Comfort Station 2 that has sustained substantial termite damage and is subject to flooding. The existing Comfort Station 2 will be kept in service until the construction of the replacement Comfort Station 2 is completed.

The existing maintenance facility is no longer sufficient to accommodate the equipment and employees to maintain 20 City & County of Honolulu parks in the area. Improvements to the existing maintenance facility site will include a replacement office with desks and lockers for the 15-20 workers that are deployed to the parks in the area for maintenance daily. Additional restrooms will be added as needed to better accommodate park employees. Improvements will also include the addition of secure storage for maintenance equipment.

Reasons supporting determination

Refer to Section 7.2 (Significance Criteria) of the DEA.

Attached documents (signed agency letter & EA/EIS)

- Keehi-Lagoon-Beach-Park-Improvements-DEA_July-2026_ADA.pdf
- 2026-06-Draft-EA-Agency-Cover-Letter_ADA.pdf

Action location map

- 20251223-Project-Area.zip

Compliance certification (HRS §368-1.5):

The authorized individual listed below certifies that documents submitted are unlocked, searchable, and compliant with the Hawaii Electronic Information Technology Disability Access Standards (including, but not limited to transcripts, captions, and other descriptions accompanying audio/video files). The individual acknowledges that the submitter retains the responsibility for compliance after documents have been published and any compliance queries will be directed back to the agency and/or applicant.

Authorized individual

Greg Nakai

Authorized individual email

gnakai@pbrhawaii.com

Authorized individual phone

(808) 521-5631

Authorization

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



Ke‘ehi Lagoon Beach Park Improvements

Draft Environmental Assessment/ Anticipated Finding of No Significant Impact

Prepared for:
City & County of Honolulu
Department of Design & Construction

DDC

Prepared by:
PBR HAWAII & Associates, Inc.

PBR HAWAII & ASSOCIATES, INC.

July 2026

KE‘EHI LAGOON BEACH PARK IMPROVEMENTS

DRAFT ENVIRONMENTAL ASSESSMENT/ ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT

Prepared for:

City & County of Honolulu

Department of Design & Construction

Prepared by:

PBR HAWAII & ASSOCIATES, INC.

July 2026

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LIST OF ABBREVIATIONS & ACRONYMS

The following is a list of terms, abbreviations, and acronyms used in this document.

A	
ADA	Americans with Disabilities Act
ALISH	Agricultural Lands of Importance to the State of Hawai'i
AMSL	Above Mean Sea Level
B	
BFE	Base Flood Elevation
BMPs	Best Management Practices
BWS	City and County of Honolulu, Board of Water Supply
C	
CCH	City and County of Honolulu
CIA	Cultural Impact Assessment
CZM	Coastal Zone Management
D	
DBEDT	State of Hawai'i, Department of Business, Economic Development & Tourism
DCAB	Disability and Communication Access Board
DDC	City and County of Honolulu, Department of Design and Construction
DNL	Day-Night (sound) Level
DPP	City and County of Honolulu, Department of Planning and Permitting
DPR	City and County of Honolulu, Department of Parks and Recreation
E	
EA	Environmental Assessment
EIS	Environmental Impact Statement
ENV	City and County of Honolulu, Department of Environmental Services
E.O.	Executive Order
F	
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
Footprint	A building footprint provides the outline of a building drawn along the exterior walls, with a description of the exact size, shape, and location of its foundation.
H	
HABS	Historic American Buildings Survey
HAR	Hawai'i Administrative Rules
HDOT	State of Hawai'i, Department of Transportation
HFD	Honolulu Fire Department
HNL	Daniel K. Inouye International Airport
HPC	Honolulu Plantation Company
HPD	Honolulu Police Department
HRS	Hawai'i Revised Statutes
L	
LRFI	Literature Review and Field Inspection
LSB	Land Study Bureau

LUC	State of Hawai‘i, Land Use Commission
LUO	Land Use Ordinance
M	
mph	Miles Per Hour
msl	Mean Sea Level
N	
NFPA	National Fire Protection Association
NHC	National Hurricane Center
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System Permit
NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
O	
OISC	O‘ahu Invasive Species Committee
OPSD	State of Hawai‘i, Office of Planning and Sustainable Development
P	
ppt	parts per thousand
PUC DP	Primary Urban Center Development Plan
R	
ROH	Revised Ordinances of Honolulu
S	
SF	square feet
SFP	State Functional Plan
SHPD	State of Hawai‘i, Historic Preservation Division
SIHP	State Inventory of Historic Places
SLR	Sea Level Rise
SMA	Special Management Area
T	
TAM	Technical Assistance Memorandum
TDM	Transportation Demand Management
TMK	Tax Map Key
TOD	Transit-Oriented Development
U	
UH	University of Hawai‘i
UIC	Underground Injection Control
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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1.0 INTRODUCTION

Preparation of this document is in accordance with the procedural steps of Hawai‘i Revised Statutes (HRS) Chapter 343 (2007) and Hawai‘i Administrative Rules (HAR) Title 11, Chapter 200.1, pertaining to Environmental Impact Statements.

1.1 PROJECT SUMMARY

Project Name:	Ke‘ehi Lagoon Beach Park Improvements
Location:	465 Lagoon Drive, Honolulu, Hawai‘i 96819
Judicial District:	Honolulu
Tax Map Key (TMK):	(1) 1-1-003:239
Proposing Agency:	City and County of Honolulu (CCH) Department of Design and Construction (DDC)
Landowner:	State of Hawai‘i (Executive Order to the CCH via Executive Order (E.O.) 1561)
Existing Uses:	CCH Beach Park
Proposed Action:	The proposed Project involves: a) the reconstruction of the park’s Comfort Stations 1 and 2; b) the demolition of the existing Comfort Station 2; and c) the improvement of the maintenance facility site.
Project Area:	Approximately 71.975 acres (gross area)
Land Use Designations:	• State Land Use: *Urban* • Primary Urban Center Development Plan Land Use Map: *Preservation Area* • County Zoning: *General Preservation (P-2)*
Special Management Area (SMA):	The Project is located within the SMA.
Permits/Approvals Required:	• ROH Chapter 25 Compliance • SMA Use Permit – Major • Grading Permit • Building Permit (electrical, plumbing, civil) • Occupancy Permit • Site Development Master Application for Sewer Connection • Storm Drain Connection License (if necessary) • Storm Water Quality Permit • Rules Relating to Water Quality and Storm Drainage Standards Compliance • Flood Certification • Board of Water Supply (BWS) Review and Approval • Industrial Wastewater Discharge Permit (application submitted)

	• Dust Control Plan • Noise Permit (if necessary) • Disability and Communication Access Board (DCAB) Review and Approval • State Historic Preservation Division (SHPD) HRS Section 6E Review • Federal Aviation Administration (FAA) Form 7460-1 (Notice of Proposed Construction or Alteration)
Determining Agency:	City and County of Honolulu (CCH) Department of Design and Construction (DDC)
Anticipated Determination:	Finding of No Significant Impact (FONSI)

1.2 LOCATION

As shown in Figure 1, Ke‘ehi Lagoon Beach Park is located in Honolulu, along the south shore of O‘ahu, Hawai‘i, at 465 Lagoon Drive, Honolulu, HI 96819. The Park is situated between the Daniel K. Inouye International Airport (HNL Airport) and major highways, providing open space amidst a very urban setting. The Park provides access to calm ocean waters ideal for boating and canoe paddling, as well as various land-based recreational activities.

During the pre-assessment consultation process (see Section 1.8.1), the Office of Planning and Sustainable Development (OPSD) wrote:

> "*…the EA should contain the project location maps, including the regional location on the Island of O‘ahu, and provide schematic plans or drawing indicating the scope of the project*." (Appendix A)

1.3 SURROUNDING LAND USES

The Project site is bordered on the mauka side (north) by Nimitz Highway and industrial uses around Waiwai Loop, and makai (south) by Ke‘ehi Lagoon. Along the beach park boundary, towards Diamond Head (east) is Ke‘ehi Lagoon Memorial State Park and on the ‘Ewa side (west) is Lagoon Drive and HNL Airport. Overall, nearby land uses are primarily industrial, except for Kahauiki Village across Moanalua stream and military housing developments mauka of H-1/Nimitz.

1.4 LAND OWNERSHIP

Utilizing the TMK system, the land under the Project site is identified as TMK (1) 1-1-003:239, which is owned by the State of Hawai‘i (Figure 2). However, E.O. 1561 extends use of this parcel to the CCH as a park.

1.5 IDENTIFICATION OF PROPOSING AGENCY

The CCH DDC is the Proposing Agency.

Contact: Facilities Division
Department of Design and Construction
City and County of Honolulu
650 South King Street, 9th Floor
Honolulu, HI 96813
Phone: (808) 768-8483
Email: DDCFD@honolulu.gov

1.6 IDENTIFICATION OF ENVIRONMENTAL CONSULTANT

The environmental consultant is PBR HAWAII & Associates, Inc. dba PBR HAWAII.

Contact: Greg Nakai
Senior Associate
PBR HAWAII
1001 Bishop Street, Suite 650
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1.7 COMPLIANCE WITH STATE OF HAWAI'I AND CITY AND COUNTY OF HONOLULU ENVIRONMENTAL LAWS

Preparation of this document is in accordance with the procedural steps of HRS Chapter 343 (2007), and HAR Title 11, Chapter 200.1, pertaining to Environmental Impact Statements. HRS Section 343-5 established nine "triggers" that require either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). The use of State or County lands or funds for the proposed CCH park improvements is one of the "triggers" requiring the preparation of an EA or EIS. There are no other "triggers" applicable to the proposed Project.

During the pre-Assessment consultation process, the OPSD wrote:

> *"The EA should discuss the triggers for the preparation of an EA set forth in Hawai'i Revised Statutes (HRS) Chapter 343..."* (Appendix A)

During the pre-Assessment consultation process, the CCH Department of Planning and Permitting (DPP) wrote:

> *"Regarding compliance with ROH Chapter 25, the proposed Project meets the ROH Chapter 25 definition of 'development,' which requires an SMA Permit… In this case, it should be noted that the EA is being prepared pursuant to both ROH Chapter 25 and HRS Chapter 343.*

> *Regarding compliance with ROH Chapter 26, the Draft EA should review the proposed Project in reference to the location of the certified shoreline and the applicable shoreline setback line to determine the extent to which this Project is related to and complies with this statute. The Project site is within the Primary Urban Center; therefore, the applicable shoreline setback for the site is 60 feet."* (Appendix A)

In the CCH, management of land within the Special Management Area (SMA) is regulated through Revised Ordinances of Honolulu (ROH) Chapter 25. Permit review guidelines (in ROH Chapter 25) used by DPP and the City Council, are derived from HRS Section 205A-26, Act 16 (SB2060, SD2, HD2), adopted on September 15, 2020, amended HRS Chapter 205A. The proposed Project requires an SMA Use Permit – Major. Per ROH Section 25-3.3(c)(1), "Any proposed development within the SMA requiring a SMA use permit shall be subject to an assessment by the agency in accordance with the procedural steps set forth in HRS Chapter 343."

The proposed Project involves the reconstruction of Comfort Stations 1 and 2, and improvements to the existing maintenance facility site. Of the three buildings, the closest building to the shoreline being proposed is the replacement of Comfort Station 1, which will be setback from the nearest shoreline by approximately 300 feet. Therefore, all of the proposed buildings will be setback at least an additional 240 feet inland from the 60-foot shoreline setback. As such, the proposed Project does not propose any use within the shoreline area as defined in HRS Section 205A-41.

1.8 IDENTIFICATION OF AGENCIES AND ORGANIZATIONS CONSULTED

1.8.1 Early Consultation

A pre-Assessment consultation was conducted from December 29, 2025 to January 28, 2026, prior to the preparation of the Draft EA. The purpose of the pre-Assessment consultation was to consult with agencies, organizations, and individuals with technical expertise or an interest in, or will be affected by, the proposed Project. This process is part of the scoping process for the Draft EA. Comments and input received during this process were used to identify environmental issues and concerns to be addressed in the Draft EA.

As part of this early consultation process, the agencies, organizations, and individuals who were sent pre-Assessment consultation solicitation letters are listed in Table 1 below. Those who provided written comments (either by hard copy or electronically) are indicated in Table 1. Copies of the written comments and responses are reproduced in Appendix A.

Table 1: List of Pre-Assessment Consultation Comments

Agencies/Organizations/Individuals	Pre-Assessment Consultation Letter Sent	Pre-Assessment Comment Received (Comment Date)
STATE		
DBEDT – Office of Planning and Sustainable Development	X	2026-01-26
Department of Transportation – Airports Division	X	2026-01-29
COUNTY		
Board of Water Supply	X	2026-01-28
Department of Community Services	X	
Department of Environmental Services	X	2026-02-02
Department of Facility Maintenance	X	2026-01-28
Department of Planning and Permitting	X	2026-01-27
Department of Transportation Services	X	
Honolulu Authority for Rapid Transportation	X	
O'ahu Transit Services	X	
Honolulu Fire Department	X	2026-01-08
Honolulu Police Department	X	2026-01-29
ELECTED OFFICIALS		
Mayor Rick Blangiardi	X	
Council Member Radiant Cordero	X	
Neighborhood Board Representative David Yomes	X	
LIBRARIES		
Kalihi-Pālama Public Library	X	
CITIZEN GROUPS/INDIVIDUALS, CONSULTED PARTIES		
Blue Zones Project	X	
O'ahu Hawaiian Canoe Racing Association	X	
The Trust for Public Land	X	
HMSA Blue Zones Hawaii	X	

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2.0 PROJECT DESCRIPTION

This section provides background information and a general description of the proposed Ke‘ehi Lagoon Beach Park Improvements (Project).

During the pre-Assessment consultation process, the DPP wrote:

> *“The Draft EA should describe all existing and proposed structures, including when the existing structures were built, and identify any associated building permits or other land use approvals.”* (Appendix A)

2.1 BACKGROUND AND NEED FOR THE PROJECT

Ke‘ehi Lagoon Beach Park is centrally located in urban Honolulu, and currently contains two comfort stations, referred to as the existing Comfort Stations 2 and 3 (a third comfort station, referred to as Comfort Station 1, had caught fire in 2015 and was subsequently demolished in 2025); 8 tennis courts; 12 pickle ball courts; 2 softball fields; 1 baseball field; 1 rugby/multi-use field; 1 children’s play apparatus (“Ke‘ehi Playground”); 1 canoe hale; a pavilion; a maintenance yard; and 470 parking stalls. Refer to Figure 3 and Figure 4.

According to a Historic American Building Survey (HABS) report prepared in 2024, the idea of creating a public park on the land between Ke‘ehi Lagoon and the airport was introduced in 1951. The Territorial Legislature at the time approved a bill that granted the CCH $600,000 to start the planning process. By 1954, the park was undergoing construction and the park’s shoreline area was altered to create a small artificial lagoon sometime between 1952-59. In August of 1960, building permits for Comfort Stations 1 and 2 were issued and the park opened to the public in November of that year. The HABS report lists the building permits for the comfort stations as “Application and Building Permit No. 171003, Building A” and “Application and Building Permit No. 171004, Building B” (City and County of Honolulu, Department of Buildings, 1960).

Due to the park’s age, the DPP’s Building Permit Search website contains little information regarding when existing structures were built. However, the webpage shows at least one permit for the demolition of Comfort Station 1 approved in 2024, which had been closed to the public since 2015 due to a fire.

Other CCH agencies, including the Honolulu Authority for Rapid Transportation, the Department of Environmental Services (ENV), and the Board of Water Supply (BWS), have had various other permits issued for the parcel for non-park-related uses, such as Skyline construction and stockpiling, sewer force main installation, and water pump station alteration permits.

During Hawaiian canoe racing season, the Park is the site of practices and contests of the Hui Wa‘a canoe racing association. In addition, the Park is the site of both the O‘ahu Hawaiian Canoe Racing Association Championships and the Hawaiian Canoe Racing Association Championships. Other major events include Samoan Heritage Week, cricket tournaments, softball, baseball, soccer, pickleball, tennis and flag football league play. During such events, there can be up to 1,500 attendees with only two operational comfort stations.

In addition, the existing park maintenance facility area contains an old house with an office, a trailer, and storage containers, along with open storage and vehicles exposed to the elements, which have attracted vandalism and theft. The primary office building was built in the 1940s and has experienced significant wear in that time. The maintenance base yard is no longer sufficient to accommodate the equipment and employees to maintain 20 parks in the area.

2.2 PROJECT OBJECTIVES

The CCH’s objective is to ensure that Ke‘ehi Lagoon Beach Park is well-maintained and fully operational. While the Park currently has two operational comfort stations, it plans improvements to yield three operational comfort stations, improving the health and safety of park users. To support maintenance of Ke‘ehi Lagoon Beach Park and surrounding parks, the CCH also plans to improve the existing onsite maintenance facility.

2.3 DESCRIPTION OF THE PROJECT

The proposed Project will consist of three main elements: a) the reconstruction of the park’s Comfort Stations 1 and 2; b) the demolition of the existing Comfort Station 2; and c) the improvement of the existing onsite maintenance facility. The Project is not proposing to change the uses of the Project site beyond existing uses.

Siting
Comfort Station 1 will be reconstructed between its original location and the tennis courts. The original Comfort Station 1 was damaged by fire in 2015 and has since been demolished. A reconstructed Comfort Station 2 will be built in the vicinity of the main parking lot, about 500 lineal feet to the west (‘Ewa) of its current location. Following construction of the replacement Comfort Station 2, the existing Comfort Station 2 will be demolished. The proposed locations of both comfort stations are shown on Figure 5.

Comfort Station Design
Both replacement comfort stations are designed alike, with pitched roofs, and will have an approximate building footprint of 912 square feet (SF) which includes accessible ramps. The restroom area will be approximately 250 SF with separate facilities for men and women. The men’s restroom will feature two urinals, two lavatories (one accessible stall), and four sinks. The women’s restroom will include four lavatories (one accessible stall) and four sinks. A restroom maintenance storage room (222 SF) will separate the men’s and women’s restroom facilities. Two drinking fountains will be provided at the front and a wheelchair accessible lateral path with a 1:20 slope will also be provided. The path leading up to Comfort Station 1 will connect to the existing playground. Restroom interiors and walkways will be ADA accessible.

Maintenance Facility Improvements
Improvements to the existing maintenance facility site will include a replacement office with space for desks and lockers for the 15-20 workers that are deployed to CCH parks in the area for maintenance daily. Additional restrooms will be added as needed to better accommodate Park employees. Improvements will also include the addition of secure storage for maintenance equipment, such as handheld tools, trucks, and lawnmowers. The design and construction of other park maintenance base yards in the CCH will be used as precedent. Refer to Figure 5.

Construction of the facility will begin sometime after the comfort stations are completed. Base yard operations will be moved to the triangular piece of grass 'Ewa of the current facility during construction.

Grading and Drainage
The area around both comfort stations will be graded and built up from an elevation of 8 feet above mean sea level (AMSL) to 9.5 feet AMSL. The change in elevation will place the finished floor at 10 feet AMSL, which is above 0.1 percent annual chance flood height and National Oceanic and Atmospheric Administration (NOAA) 7.9 feet sea level rise (SLR) estimates.

The area to be disturbed in the demolition of Comfort Station 2 is approximately 6,000 SF. The area to be disturbed in the construction of the new Comfort Stations is estimated to total 18,500 SF for grading and 15,000 SF for staging areas.

Roof runoff will collect in a gutter on the roofline above the entrance, and flow onto the lawn area around each comfort station. Paths leading up to the stations will be appropriately sloped for drainage.

During the pre-Assessment consultation process, the DPP wrote:

> *"Regarding compliance with ROH Chapter 26, the Draft EA should review the proposed Project in reference to the location of the certified shoreline and the applicable shoreline setback line to determine the extent to which this Project is related to and complies with this statute. The Project site is within the Primary Urban Center; therefore, the applicable shoreline setback for the site is 60 feet."* (Appendix A)

New comfort stations will be built outside of the shoreline setback line, over 300 feet from the shore (refer to Figure 5), and elevated outside of the 9.0 feet Flood Hazard Zone and above the NOAA 7.9 feet SLR to allow for use given flooding and future SLR (refer to Figure 9 and Figure 12).

Circulation and Parking
Changes to the existing vehicular circulation pattern are not proposed. Two accessible parking stalls will be provided with an accessible path to Comfort Station 2. Comfort Station 1 will connect to the existing paved walkways in the area, which lead to the tennis courts, main parking lot, and the shore.

Infrastructure
In-place water, wastewater, and electrical systems are available, and connections will be made with the respective systems. Water usage is estimated at 1,700 gallons per day for both comfort stations, and a minor increase in wastewater output is expected. Energy efficient fixtures will reduce overall demand.

2.4 PROJECT COST AND IMPLEMENTATION TIMEFRAME

The current construction budget estimate is approximately $4 million for the reconstruction of Comfort Stations 1 and 2, including the demolition of existing Comfort Station 2. Construction of the two comfort stations, and demolition of existing Comfort Station 2, are anticipated to start upon receipt of all required permits/clearances, with construction estimated to be completed in

approximately 9 months. The existing Comfort Station 2 will be kept in service until the construction of the new Comfort Station 2 is completed.

The current rough order of magnitude estimate for the construction of the maintenance facility improvements is approximately $8 million (staff estimate), subject to change as the design progresses. Construction of the maintenance facility improvements is projected to start in January 2029, based on funding availability, and is estimated to be completed in approximately 18 months.

3.0 DESCRIPTION OF THE NATURAL ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

This section describes the existing conditions of the physical or natural environment, potential impacts of the Project to the environment, and mitigation measures to minimize impacts.

3.1 CLIMATE

According to the Hawai‘i Climate Data Portal, the average monthly low temperatures in at Ke‘ehi Lagoon Beach Park range from 63 to 75 degrees Fahrenheit, while the average monthly high temperatures range from 77 to 88 degrees Fahrenheit, with the coolest temperatures occurring in January and February and the warmest months occurring in August and September. On average, the park has experienced the greatest amount of rainfall (averaging 5.3 inches in the last decade) in February. The minimum amounts of precipitation have occurred in August and September over the last decade (an average of approximately 3.4 inches). The predominant average hourly wind direction near the HNL Airport significantly varies throughout the year. The windiest month of the year is July with an average hourly wind speed of 16.3 miles per hour (mph), and the calmest month tends to be January with an average hourly wind speed of 12.4 mph.

Potential Impacts and Mitigation Measures of the Proposed Project

The proposed Project will be sustainably designed and constructed, and is not expected to have any short-term, long-term, direct, indirect, or cumulative impacts on the climate.

3.2 TOPOGRAPHY

According to a review of U.S. Geological Survey (USGS) topographical maps, the Beach Park has not experienced any significant changes to elevation or had many site modifications since the earliest map in 1953. Current elevations range from approximately 0 to 5 feet AMSL (refer to Figure 6). The shoreline in the area experienced changes with airport construction in the 1930s. As a part of further airport expansion, the Ke‘ehi Lagoon Basin was dredged from 1941-1943 for a seaplane runway, with the 10 million cubic yards of coral filling Hickam Field, HNL Airport, Fort Shafter Flats, and Māpunapuna. Seaplane runways and launching ramps were abandoned by 1944.

Potential Impacts and Mitigation Measures of the Proposed Project

The comfort stations will be built at a grade 3 feet higher than the current structures. Comfort Station 2 will be moved 500 lineal feet ‘Ewa from the existing facility. Comfort Station 1 will be built closer to the tennis courts than the previous site (see Figure 5: Proposed Site Plan). The Maintenance Facility will make use of the existing maintenance facility site. Topographic changes will be minimal and contained to the immediate vicinity of the structures. Very minor impacts are expected and no mitigation is planned.

3.3 SOILS

Three soil suitability studies prepared for lands in Hawai‘i principally focus on the relative agricultural productivity of different land types. These studies are: 1) the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Soil Survey; 2) the University of Hawai‘i Land Study Bureau (LSB) Detailed Land Classification; and 3) the State Department of Agriculture’s Agricultural Lands of Importance to the State of Hawai‘i (ALISH).

3.3.1 Natural Resources Conservation Service

As shown on Figure 7, the *Natural Resources Conservation Service, Soil Survey for the Island of O‘ahu* classifies the soil underlying most of the Ke‘ehi Lagoon Beach Park as Fill land, mixed (FL). In general, the fill consists of materials dredged to create Honolulu Harbor and adjoining waterways, such as earthen material hauled from nearby areas, garbage, and other general material from inland sources (Soil Conservation Service, 1972). The fill sits on top of elevated coral reef which is covered by alluvium carried out from the Ko‘olau Mountains.

3.3.2 Land Study Bureau Detailed Land Classification

The University of Hawai‘i Land Study Bureau (LSB) document, *Detailed Land Classification, Island of O‘ahu,* classifies soils based on a productivity rating. Letters indicate class of productivity with A representing the highest class and E the lowest. The soils of the Project site are unclassified.

3.3.3 Agricultural Lands of Importance to the State of Hawai‘i

The Agricultural Lands of Importance to the State of Hawai‘i (ALISH) system classifies important agricultural lands as Prime, Unique, or Other Agricultural Land. The land underlying the Project site is unclassified.

Potential Impacts and Mitigation Measures of the Proposed Project

Construction of the proposed Project will not have a deleterious effect on the park soil. The soils underlying the Project site have no capacity to impact the availability of agricultural land for cultivation. The Park site has been previously modified to accommodate the comfort stations and maintenance facility. Additionally, the HNL Airport, lagoon, and surrounding area have undergone serious modification, with a long history of dredging and filling.

The two reconstructed comfort stations, and the maintenance facility will require new foundations and grading. During grading and construction, there is always the potential for soil erosion and runoff, and the generation of fugitive dust. All construction activities will comply with all applicable State, and County regulations and rules for erosion, sedimentation, and dust control. Contractors will use best management practices (BMPs) to minimize erosion during construction, including watering loose soils during construction, and planting groundcover over areas where construction has been completed. These measures will address any direct impacts from construction and avoid any secondary or cumulative impacts from erosion or fugitive dust caused by construction. Following construction, exposed soils will have been built over, paved over or landscaped to control erosion. The estimated disturbed area should be less than one acre

(approximately 0.7 acres). Therefore, a general National Pollutant Discharge Elimination System (NPDES) Permit for construction activities should not be required.

3.4 HYDROLOGY

Surface Water
The Project site does not contain surface water, but it is bordered to the south by Ke‘ehi Lagoon and a drainage channel along the Park’s southwestern boundary.

Ground Water
According to the State of Hawai‘i’s Underground Injection Control (UIC) Program, the Project site is located makai of the UIC line, which means the underlying aquifer is not considered a drinking water source (State of Hawai‘i Department of Health, Safe Drinking Water Branch, n.d.).

Wetlands
Ke‘ehi Lagoon Beach Park is directly on the water (Figure 8: National Wetlands Inventory). The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory indicates that the shoreline on the Project site is an Estuarine and Marine Wetland habitat (classified as **E2USN**), (U.S. Fish and Wildlife Service, n.d.). Abutting the site, on the southwest boundary is a drainage canal. Across the basin, to the east, is a large area next to Sand Island Access Road identified as a wetland (classified as **E2EM1N**). Mokuoeo Island, located even further makai, spanning the length of Lagoon Drive, is also a wetland (code **M2US/ABM**).

Classification code **E2USN** stands for:

System **Estuarine (E):** The Estuarine System consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines, there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves (*Rhizophora mangle*) and eastern oysters (*Crassostrea virginica*), are also included in the Estuarine System.

Subsystem **Intertidal (2)**: The substrate in these habitats is flooded and exposed by tides; includes the associated splash zone.

Class **Unconsolidated Shore (US)**: Includes all wetland habitats having two characteristics: (1) unconsolidated substrates with less than 75 percent areal cover of stones, boulders or bedrock and; (2) less than 30 percent areal cover of vegetation. Landforms such as beaches, bars, and flats are included in the Unconsolidated Shore class.

Water Regime **Regularly Flooded (N)**: Tides alternately flood and expose the substrate at least once daily.

Classification code **E2EM1N** stands for:

System **Estuarine (E)**: The Estuarine System consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater

runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines, there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves (*Rhizophora mangle*) and eastern oysters (*Crassostrea virginica*), are also included in the Estuarine System.

Subsystem **Intertidal (2)**: The substrate in these habitats is flooded and exposed by tides; includes the associated splash zone.

Class **Emergent (EM)**: Characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.

Subclass **Persistent (1)**: Dominated by species that normally remain standing at least until the beginning of the next growing season. This subclass is found only in the Estuarine and Palustrine systems.

Water Regime **Regularly Flooded (N)**: Tides alternately flood and expose the substrate at least once daily.

Classification code **M2US/ABM** stands for:

System **Marine (M)**: The Marine System consists of the open ocean overlying the continental shelf and its associated high-energy coastline. Marine habitats are exposed to the waves and currents of the open ocean, and the Water Regimes are determined primarily by the ebb and flow of oceanic tides. Salinities exceed 30 parts per thousand (ppt), with little or no dilution except outside the mouths of estuaries. Shallow coastal indentations or bays without appreciable freshwater inflow, and coasts with exposed rocky islands that provide the mainland with little or no shelter from wind and waves, are also considered part of the Marine System because they generally support typical marine biota.

Subsystem **INTERTIDAL (2)**: The substrate in these habitats is flooded and exposed by tides; includes the associated splash zone.

Class **Unconsolidated Shore (US)**: Includes all wetland habitats having two characteristics: (1) unconsolidated substrates with less than 75 percent areal cover of stones, boulders or bedrock and; (2) less than 30 percent areal cover of vegetation. Landforms such as beaches, bars, and flats are included in the Unconsolidated Shore class.

Split Class **Aquatic Bed (AB)**: Includes wetlands and deepwater habitats dominated by plants that grow principally on or below the surface of the water for most of the growing season in most years.

Water Regime **Irregularly Exposed (M)**: Tides expose the substrate less often than daily.

Potential Impacts and Mitigation Measures of the Proposed Project

The proposed reconstructed comfort station buildings and maintenance facility building are not located near or on abutting surface waters and wetlands. Therefore, no impacts to surface waters or wetlands are anticipated. Wastewater generated by the proposed facilities will be collected and transmitted to the CCH municipal wastewater system, therefore there should be no impact on the underlying ground water aquifer.

3.5 NATURAL HAZARDS

Natural hazards like flooding, tsunami inundation, hurricanes, earthquakes, and volcanic eruptions have historically impacted the Hawaiian Islands. Climate change and SLR also impact the Islands.

Flooding
According to the DPP during the pre-assessment consultation process:

> *“Regarding compliance with ROH Chapter 21A, the portions of the subject property are located within Flood Zone VE with a Base Flood Elevation (BFE) of 13 feet, Flood Zone AE with a BFE of nine to 10 feet, and Flood Zones D, XS, and X, as mapped by the Federal Emergency Management Agency. Flood Zone VE is a coastal flood hazard zone with a one percent annual chance of flooding and additional hazards due to high-velocity storm waves. Flood Zone AE is a coastal flood hazard zone (flood fringe area) subject to inundation by a one-percent annual chance floodplain. Flood Zone D is unmapped, and therefore the status of the flood zone has not been determined.”* (Appendix A)

As shown on Figure 9, most of the park, including the comfort station sites, is located within Flood Hazard Zone AE. Zone AE areas are subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. Therefore, the Project site is subject to ROH Chapter 21A, Flood Hazard Areas.

The maintenance facility and surrounding area are primarily in Flood Hazard Zone X and slightly within zones XS and AE. Zone X is an area of minimal flood hazard, being at an elevation to avoid the 0.2-percent-annual-chance flood. Zone XS is between the limits of the base flood and the 0.2-percent-annual-chance flood.

Tsunami
Since the early 1800s, there have been more than 160 confirmed tsunamis in Hawai‘i. Seven historical events have caused major damage and two were generated locally. The most recent tsunamis impacting O‘ahu occurred on March 11, 2011, which caused damage to several locations around the island, especially the North Shore, and on July 29, 2025, which caused no major damage.

Figure 10 shows the extent of the Tsunami Evacuation and Extreme Tsunami Evacuation Zones. Ke‘ehi Lagoon Beach Park and the adjoining Ke‘ehi Lagoon Memorial State Park are in the Tsunami Evacuation Zones. In the event of an Extreme Tsunami event, the Māpunapuna area must evacuate, along with the warehouses on Waiwai Loop. Just outside the Extreme Tsunami Warning Evacuation zone is Home Depot and Chef Zone. The CCH recommends vertical evacuation, going to the fourth story of a building with 10 or more stories, if needed. However, there are few buildings at this height in the area, so vertical evacuation may not be possible.

Hurricanes
Since 1980, two hurricanes have had a devastating effect on Hawai‘i: Hurricane ‘Iwa in 1982 and Hurricane ‘Iniki in 1992. Long-term prediction of future hurricanes is impossible. Therefore, the prospect of another hurricane impacting the islands should be anticipated.

Hurricane events may also cause a storm surge, which is an abnormal rise of water generated by a storm, over and above the normal tidal levels. This rise in water level can cause extreme flooding

in coastal areas, particularly if a storm surge coincides with a normal high tide (NOAA, n.d.). According to the National Hurricane Storm Surge Hazard Map (Figure 11), half of the park may be subject to flooding inundation of less than 3 feet above ground level during a Category 1 hurricane event. During a Category 4 event the entire park is underwater more than 3 feet above ground level (National Oceanic and Atmospheric Administration (NOAA) National Hurricane Center (NHC), n.d.).

Climate Change and Sea Level Rise

During the pre-assessment consultation process, the DPP wrote:

> *"The Project site is susceptible to coastal hazards associated with sea level rise (SLR), wave action, flooding, tsunamis, erosion, and storm surge. Therefore, proposed development activities must be evaluated not only for potential impacts to sensitive SMA resources, but also for current and future susceptibility to these coastal hazards. According to the State of Hawaii Sea Level Rise Viewer, the makai (seaward) portion of the Project site is projected to be impacted by 2.0-feet of SLR and annual high wave flooding by 2075. By 2100, the makai and southern portions of the Project site are projected to be impacted by annual high wave action under a scenario of 3.2-feet of SLR. As it is likely that SLR will increase the risk of structure and electrical or other utility damage, the Draft EA should discuss how the design of the Project and proposed future renovations will avoid or minimize these impacts.*
>
> *The analysis in the Draft EA should evaluate the site's existing topographic, geologic, and shoreline environment, and explain how a proposed development can safely be located outside of the 3.2-foot SLR-Exposure Area, and avoid impacts associated with other coastal hazards. The Draft EA should also explore project alternatives, site design (siting and configuring the proposed building as far from the shoreline as possible), project design features (elevated structures, alternative foundations, etc.), Best Management Practices, and appropriate mitigation measures to reduce potential impacts related to coastal hazards to the extent practicable."*

SLR is one of the many growing concerns associated with global climate change and can be especially taxing on the limited resources of an island ecosystem. While it cannot be known how the Project site will be affected by SLR and climate change in the future, scientific models for potential climate change factors have been considered in the redevelopment of the Project site.

During the pre-assessment consultation process, the OPSD wrote:

> *"To assess potential impacts of sea level rise on the property area, the OPSD suggests the EA refer to the findings of the Hawaii Sea Level Rise Vulnerability and Adaptation Report 2017 and its 2022 update, accepted by the Hawaii Climate Change Mitigation and Adaptation Commission. The Report, and Hawaii Sea Level Rise Viewer at https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/ particularly identifies a 3.2-foot sea level rise exposure area across the main Hawaiian Islands which may occur in the mid to latter half of the 21st century. The EA should provide a map of the 3.2-foot sea level rise exposure area, especially from passive (high-tide) flooding, in relation to the project area,*

and assess the potential impacts of sea level rise, including inundation of saltwater on the proposed ground and underground infrastructure and facilities." (Appendix A)

Mayor Kirk Caldwell's 2018 directive on climate change and SLR (Directive 18-2) was used as a baseline for the assessment of the Ke‘ehi Lagoon Beach Park. Directive 18-2 was created in response to the CCH's Climate Change Commission's *Climate Change Brief* and *Sea Level Rise Guidance* as well as the State Climate Change Mitigation and Adaptation Commission's *Sea Level Rise Vulnerability and Adaptation Report* and Data Viewer. (PacIOOS, Sea Level Rise: Hawai‘i Sea Level Rise Viewer, 2019).

The Climate Change Commission's *Sea Level Rise Guidance* emphasized that the CCH should be planning for high tide flooding associated with 3.2 feet SLR (in mean higher high water, which is equivalent to 4.28 feet mean sea level (msl)) by mid-century, and, because of continued high global carbon emissions, take into consideration 6 feet SLR (mean higher high water, equivalent to 7.08 feet msl) in later decades of the century, especially for critical infrastructure with long expected lifespans and low-risk tolerance.

Directive 18-2 also strongly encourages independent agencies, City-affiliated entities, and City-related institutions to help advance these efforts and adopt similar initiatives; and requires all city department and agencies under the mayor's jurisdiction to take several actions, including the following.

- View climate change and the need for both climate change mitigation and adaptation as an urgent matter, and take a proactive approach in both reducing greenhouse gas emissions and protect and prepare the city for the physical and economic impacts of climate change.
- Use the *Sea Level Rise Guidance* and *Hawai‘i Sea Level Rise Vulnerability and Adaptation Report* in their planning, programming, and capital improvement decisions to mitigate impacts to infrastructure and critical facilities subject to SLR, which may include elevation or relocation of infrastructure and critical facilities; elevation of surfaces, structures, and utilities; and/or incorporation of other adaptation measures.
- Propose revisions to shoreline rules and regulations to incorporate SLR and conserve a natural, unarmored shoreline whenever possible.
- Work cooperatively to develop and implement land use policies, hazard mitigation actions, and design and construction standards to mitigate and adapt to the impacts of climate change and SLR.

Given 0.5 to 3.2 feet SLR, the proposed sites of the new comfort stations and the maintenance facility would not be inundated. In the 3.2 feet SLR scenario, water would reach about 15 linear feet from the canoe club hale, and the mauka half of the neighboring Ke‘ehi Lagoon Memorial State Park and a small portion of the Beach Park would be inundated. Given 5 feet passive high tide flooding, water would span about half the park and the parking area near the shore, with the minor hills near the shore still dry. At 6 feet, some of the parking spaces on the east side of the main parking area would be covered, but the proposed comfort station sites and the maintenance facility would not be inundated. At 8 feet, essentially the entire park would be covered in water, along with Nimitz Highway and the Māpunapuna area. See Figure 12: Sea Level Rise.

Earthquake and Volcanic Hazards

In Hawai‘i, volcanic activity produces most earthquakes in contrast to other areas sitting on tectonic plate margins. Thousands of earthquakes occur in Hawai‘i each year. However, most of them are undetectable through normal human senses. A few historical earthquakes have reached moderate and even disastrous magnitudes.

The last major earthquakes felt statewide were magnitudes of 6.7 and 6.0. These earthquakes occurred at Kīholo Bay along Hawai‘i Island’s Kona Coast on October 15, 2006. These earthquakes resulted in more than $100 million in damages to the northwest area of Hawai‘i Island and minimal damage on O‘ahu. From that same event, O‘ahu was also subject to an earthquake induced electrical blackout that paralyzed the city of Honolulu and shut down the HNL Airport for nearly a day.

Potential Impacts and Mitigation Measures of the Proposed Project

The proposed Project is not anticipated to have any deleterious effects on natural hazard conditions, and no unique mitigation measures are planned, other than observing the International Building Code in the design of the facility (to address the potential impacts from hurricanes and earthquakes). Since the proposed sites for the comfort stations are located within the Flood Hazard Zone AE, the new building pads will be elevated, to be outside of the 9.0 feet AE Flood Hazard Zone and above the NOAA 7.9 feet SLR. The potential SLR impacts on rising coastal groundwater conditions would not cause adverse impacts to the proposed Project.

3.6 FLORA AND FAUNA

A natural resource assessment, including a flora and fauna survey, was completed in February of 2026 by AECOS for the purposes of this document. The assessment is summarized below, and a full version can be found in Appendix B.

During the pre-Assessment consultation process, the DPP wrote:

> *“The Draft EA should identify the presence or potential presence of any sensitive habitat(s), flora, or fauna. The DPP recommends reviewing the U.S. Fish and Wildlife Service Information for Planning and Consultation database, and reaching out to the National Oceanic and Atmospheric Administration Fisheries, the State of Hawaii Division of Aquatic Resources, and the State of Hawaii Division of Forestry and Wildlife to obtain lists of State or Federally-listed protected species that are known or may potentially occur in the Project vicinity. Such outreach should also include any recommended mitigation measures to avoid or minimize impacts to protected flora and fauna species, wetlands, and critical habitat. The discussion should also identify the potential for invasive species in the Project area, and the Oahu Invasive Species Council Protocols developed to address them.”* (Appendix A)

The vegetation in the Project area is dominated by mowed and maintained Bermuda grass, with various weeds scattered throughout. Near Comfort Station 1 there are autograph, kou, and kamani trees. Along the south side of the park are milo, African sausage, and tropical almond trees. Out of all the plants observed, three are culturally significant: the native indigenous milo and kou and kamani which are Early Polynesian introductions. Five of the observed plants are not well-

established outside of cultivation and the remaining 36 were introduced to the Hawaiian Islands after 1778. The observed trees considered culturally significant are abundant across O‘ahu. No plants proposed or listed as threatened or endangered species as set forth in the Endangered Species Act were seen in the Project area.

Most avian fauna observed during the survey are non-native naturalized introductions. The exceptions are the kōlea (Pacific Golden-Plover), which is an indigenous migratory shorebird that spends the fall and winter months in Hawai‘i, and the ‘auku‘u (Black Crowned Night Heron), which is a common indigenous resident that can often be seen around any wetland, stream, or pond. Both species are common across O‘ahu. Additionally, no suitable nesting habitat exists within or close to the Project area for any protected Hawaiian seabirds. It is possible that they may fly over the Beach Park in small numbers between April and the middle of December.

Mammals observed included domestic dogs, some mongoose, and cats. It is also expected that rodents will frequent the area. It is possible that the endangered ‘ōpe‘ape‘a (Hawaiian Hoary Bat), which has a widespread distribution, uses trees to roost in the Project area. During pupping season (when females are taking care of their pups), pups are often left in their roost tree so females can forage.

There are no known habitats for rare, threatened, or endangered species on the Project site. However, there is honu (green sea turtle) and Hawaiian monk seal habitat in Ke‘ehi Lagoon.

A variety of invasive species were observed during the flora and fauna survey. The O‘ahu Invasive Species Council (OISC) has established a list of invasive species that are considered emergent pests, which would cause significant negative impacts given statewide establishment. Current targets include, the coconut rhinoceros beetle, the coqui frog, and rapid ‘ōhi‘a death, among others. None of the species on this list were observed.

Potential Impacts and Mitigation Measures of the Proposed Project

The proposed Project will involve changes and/or improvements to existing built, paved and landscaped areas, which will not attract or provide a feeding or nesting habitat. Due to the history of human utilization of the park, the proposed Project is not anticipated to have any impact on protected or endangered floral or faunal species habitat or ecosystems. The only potential exception is the ‘ōpe‘ape‘a. However, there are no plans to clear woody vegetation taller than 15 feet between June and September (during pupping season) or used barbed wire for fencing. Therefore, there will be no negative impacts on the ‘ōpe‘ape‘a population.

BMPs will be used to avoid dust or runoff that could potentially harm honu and monk seal populations. Due to the distance the proposed facilities are setback from the shoreline, it is highly unlikely construction areas will encounter nesting honu or resting monk seals.

Given that any species on the OISC priority species list are encountered, the OISC will be contacted immediately.

In the pre-assessment consultation process, the OPSD wrote:

> *“In enacting Act 224, Session Laws of Hawai‘i 2005, the legislature found that light pollution in Hawai‘i’s coastal areas and artificial lighting illuminating the shoreline and ocean waters can be disruptive to avian and marine life. Pursuant to HRS §§ 205A-30.5(b)*

> *and 205A-71(b), for artificial lighting provided by a government agency or its authorized users for government operations, security, public safety, or navigational needs, a government agency or its authorized users shall make reasonable efforts to properly position or shield lights to minimize adverse impacts of lighting."* (Appendix A)

External comfort station lights are needed for security and navigation but will be positioned to avoid disrupting marine or avian wildlife in the area, in accordance with HRS 205A. Lights will be dark sky compliant to avoid disorienting protected seabirds that fly nocturnally. Due to the distance between the shoreline and the proposed Comfort Stations 1 and 2, the lights will not directly illuminate the shoreline. Additionally, there are no plans to conduct construction at night to avoid further disorienting or confusing marine and avian wildlife. No mitigation measures are planned.

4.0 DESCRIPTION OF THE HUMAN ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

This section describes the existing conditions of the human environment, potential impacts of the proposed Project, and mitigation measures to minimize any impacts.

4.1 ARCHAEOLOGICAL AND CULTURAL RESOURCES

4.1.1 Archaeological Resources

An archaeological literature review and field inspection (LRFI) was conducted for the Project by Keala Pono. It is attached to this EA as Appendix C, and summarized below.

During the pre-Assessment consultation process, the DPP wrote:

> *“The Project site is underlain with Ewa silty clay loam and mixed Fill land, soil types area not generally known for the discovery of historic or cultural resources. Nonetheless, the Draft EA must include an analysis and discussion identifying archaeological resources and historic properties within the Project area. If potential impacts are anticipated as a result of the Project, describe the appropriate mitigation to be implemented.”* (Appendix A)

To preserve and understand culture, Keala Pono offers a historical review of the Moanalua Ahupua‘a. In pre-contact times, Moanalua was rich with natural resources, access to fresh water, plentiful ocean, salt flats, and two lush valleys. The area had many fishponds known for awa, and Āliapa‘akai (Salt Lake) was used for as a source of salt. One mo‘olelo credits the creation of Āliapa‘akai to Pele, several others connect ali‘i with Moanalua. The earliest historic accounts describe the area as prosperous, with systems of irrigated, terraced lo‘i. Later accounts remark on a sparse population and a Salt Lake that had disappeared. During the Great Māhele, Kamehameha V was awarded the entire Moanalua Area, which he passed along to his heirs, ending at Princess Bernice Pauahi Bishop. She left the Moanalua Ahupua‘a and Kaliawa Fishery to her husband’s business partner Samuel M. Damon who, along with his heirs, would end up purchasing many of the kuleana lots in Moanalua.

Large areas of the coast plain in Moanalua were leased to the Honolulu Plantation Company (HPC). Inland areas were used for grazing land and pasture, with wetlands being used for rice and taro cultivation. The Project area is located just east of the HPC lands. Rail lines came through Moanalua where Nimitz Highway is today. Upon the annexation of Hawai‘i in 1898, Pearl Harbor became the main focus of U.S. interests. Military presence in the region vastly and permanently changed the landscape. Pearl Harbor was dredged and established, then Fort Shafter, Hickam Air Force Base, and other naval reservations and military housing neighborhoods were built. What would later be renamed Honolulu International Airport was opened in 1927. Low-lying areas were filled in to support roads, other infrastructure, and future airport expansions. In 1941, the area in front of the Project site was dredged to support a seaplane runway and coastal fishponds were filled in, resulting in 1,000 meters of new land, and the landmass that supports Ke‘ehi Lagoon Beach Park.

Early archaeological surveys on O‘ahu in the 1930s documented many important Hawaiian cultural sites, including a Heiau and several coastal fishponds, within the Moanalua Ahupua‘a. The Kaloaloa Fishpond was historically located just west of the Project area. In 2017, an LRFI identified several architectural features at Ke‘ehi Lagoon Beach Park distinctive of O‘ahu postwar park development in the 1950s. The entirety of the park was designated as SIHP 50-80-14-09216. The survey noted Comfort Stations 1 and 2 and the northern set of courts with accompanying concrete benches ensconced in basalt and mortar pillars. Since the survey, Comfort Station 1 has been demolished and the tennis courts near Nimitz Highway have been resurfaced into pickleball courts.

Keala Pono’s LRFI documented the previously observed historic features on the Project site, as well as some additional features, including the plantation house in the maintenance yard, the canoe storage facility, open-air grandstand, baseball field structures, pipes, and footings, among others. Refer to Appendix C for a full description.

Potential Impacts and Mitigation Measures of the Proposed Project

Given the extensive historic and modern development within the Project area, Keala Pono concluded that it is unlikely that traditional surface features remain intact. The extensive land filling of the coastal region makes the survival of subsurface traditional features unlikely. Subsurface or submerged historic features may remain, considering the historic designation of the park and the features observed on the site. The State Historic Preservation Division (SHPD) will be consulted prior to the start of any construction activities.

4.1.2 Cultural Resources

Keala Pono Archaeological Consulting has prepared a Cultural Impact Assessment (CIA) and Ka Pa‘akai Analysis for the proposed Project. The purpose of this study is to assess any potential impacts caused by the proposed Project on cultural practices and beliefs. The CIA includes archival research and an ethnographic survey consisting of four in-person interviews with nine individuals (out of 24 individuals and organizations contacted), which are included in the CIA report (see Appendix D).

During the pre-Assessment consultation process, the DPP wrote:

> *“The Draft EA must include a discussion analyzing the impact of the proposed Project on Native Hawaiian cultural practices and features associated within the Project area (Ka Pa‘akai analysis). The content requirements for a CIA are detailed in HAR Sections 11-200-10 and 11-200-16 through 18.”*

Background Research

The background research synthesized traditional and historic accounts, mo‘olelo (stories, legends), and land use histories for Moanalua Ahupua‘a (land division). The background study revealed that the area was rich in natural resources such as fresh water, lush valleys, salt flats, and plentiful marine resources. The ahupua‘a had five fishponds along the coast, with Kaloaloa, the closest being situated 475 feet to the west of the Project site. However, during wartime airport improvements, the coastal fishponds surrounding Ke‘ehi Lagoon were filled in. Āliapa‘akai (Salt Lake), located about 0.9 miles inland of the site, was traditionally used as a source of salt for

medicinal purposes, ceremonial practices, seasoning, and food preservation. The makai (toward the sea) region around Āliapa‘akai was cultivated with niu (coconut), wetland kalo (taro), ‘ulu (breadfruit), and mai‘a (banana), while the upper reaches of Moanalua Valley supported uhi (yam), wauke (paper mulberry), semi-wild kalo, and olonā (native plant). Moanalua was also a place with religious and spiritual significance, with several heiau (places of worship) throughout the ahupua‘a, though none are located in the coastal region makai of Āliapa‘akai.

Ethnographic Study
Consultations with individuals knowledgeable about Moanalua Ahupua‘a produced information on its rich cultural history. There was diversity of connections to the project area and ahupua‘a among interviewees. The interviewees provided information on land use and archaeological sites, the natural environment and traditional cultural practices, mo‘olelo, mele (song), place names, and changes over time, along with concerns and recommendations for the proposed project.

The main cultural practices continuing today are hele wa‘a (canoe paddling) due to the sheltered nature of the lagoon, thus many of the interviewees have strong relationships with the Beach Park through the wa‘a community. Ke‘ehi Lagoon provides one of the main wa‘a racing grounds in the State, and wa‘a practices at the Beach Park include traditional ceremonies and sailing, along with the launching of the koa canoe A‘a. Sacred relationships to sharks within Ke‘ehi waters were also shared by interviewees, including shark riding and racing, breastfeeding of shark pups, a guardian or protector shark that burrows under one of the islands called Makali‘i, shapeshifting shark people, and ‘aumakua (family or personal gods)-based relationships. Several interviewees discussed fishing at Ke‘ehi for pāpio (juvenile jackfish), ‘ō‘io (bonefish), flounder, and mullet, along with gathering limu (seaweed) and shellfish, though these opportunities have been significantly diminished by pollution. It was unknown amongst the interviewees if there are any iwi kūpuna (ancestral remains) located directly within the proposed comfort station sites, though interviewees stated that burials are located around the fishing village and fishpond caretaker residences.

Ka Pa‘akai Analysis
The CIA also included a Ka Pa‘akai Analysis, which was established to identify cultural resources or practices that occur in the project area, determine if the proposed project will affect the resources or practices, and offer recommendations to protect Native Hawaiian rights if the Project moves forward. The CIA addressed these topics:

1. ***What and where are the valued cultural, historical, or natural resources within the project area and to what extent are traditional and customary Native Hawaiian rights exercised in the project area***

   “Several cultural and natural resources were identified within the project area through background research, past archaeological studies, and the ethnographic study. These traditionally included tidepools and lagoons used for subsistence gathering of resources such as limu, fish, and shellfish, as well as ‘alaea and pa‘akai beds. Kaloaloa Fishpond (SIHP 50-80-13-00080) is located immediately to the west of the project area. Sharks may be considered a natural resource, as a myriad of shark-related beliefs and practices were shared as ongoing within Ke‘ehi. Several of the interviewees discussed the potential for iwi kūpuna to be found within the project area and there

was uncertainty if there could be iwi subsurface of the proposed comfort station locations.

Ethnographic interviews identified several cultural rights that continue to be exercised within Ke‘ehi Lagoon Beach Park. These include hele wa‘a (both contemporary and traditional wa‘a), access of nearby fishponds (e.g., the fishpond at Mokauea Island), engaging in shark relationships, fishing (primarily of pāpio, ‘ō‘io, mullet, and flounder), and cultural stewardship (cleaning and caretaking of the park).”

2. ***The extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the Proposed Action***

“A general sense of loss and diminishment of cultural and natural resources was shared for Ke‘ehi. Interviewees remarked on declining abundances of subsistence resources in recent years and increasing levels of pollution (sewage and other contaminants). Extensive dredging and land reclamation filled former fishponds and wetlands to build new runways and military facilities has transformed the cultural and natural resources of the project area that existed prior to the 1930s. Any subsurface resources would most likely have been overlaid by fill land, believed to have originated from marine dredging at Ke‘ehi Lagoon and the Pearl Harbor entrance during large-scale infilling projects undertaken by the U.S. military between ca. 1931 and 1943.

Specific past harms include diminished cultural access due to decreased parking spaces [within the project area], burying of traditional pa‘akai beds [within the project area], diminishment of subsistence and swimming uses of Ke‘ehi Lagoon due to high levels of pollution [within the project area], and loss of access to gather shellfish (‘opihi and oysters) for subsistence due to pollution [within the project area] and FAA (Federal Aviation Administration) access limitations outside the reef runway [outside of the immediate project area]. The proposed project may contribute to some of these past harms, depending on ongoing waste management infrastructure maintenance and where project-related materials are dumped.

The addition of comfort stations to Ke‘ehi Lagoon Beach Park during the proposed project may positively affect the hele wa‘a community by providing needed additional restroom and shower facilities. Cultural access (for voyaging, hele wa‘a, and fishing) will not be affected by the proposed project. Access to visit other islands in Ke‘ehi including Mokauea, Kahaka‘ulana, and Mokueo likewise will not be affected by the proposed project.”

3. ***What feasible action, if any, could be taken to reasonably protect Native Hawaiian rights***

“Feasible actions to protect Native Hawaiian rights include routing work through pre-disturbed areas as much as possible, having archaeological and/or cultural monitors present during ground disturbance, continuing to have open and transparent conversations with community members, particularly the hele wa‘a community, providing additional parking to rectify recent losses in parking that hinder cultural access, ensuring that any material that is excavated during ground disturbance is not then placed upon a cultural resource such as was done with the pa‘akai beds, working

with Gino Dayton and other practitioners to remediate harm done to the pa‘akai beds, and providing historical signage and/or displays to provide education regarding Native Hawaiian histories within Ke‘ehi. As pollution and sewage influx are some of the primary concerns of park users (as it greatly affects cultural and natural resource health) every effort should be made to ensure that the added comfort stations have high quality waste management, plans for leakage, and ongoing maintenance. Security of comfort stations should also be maintained so that park users can use them safely without worries about the houseless population."

Takeaways from the Ka Pa‘akai Analysis show that despite historical change, Ke‘ehi Lagoon Beach Park remains a site of ongoing Native Hawaiian cultural rights and practices, and the Project has the potential to support and/or accompany these uses.

Potential Impacts and Mitigation Measures of the Proposed Project

Interviewees expressed general support for the proposed improvements at Ke‘ehi Lagoon Beach Park. They agreed that the comfort stations would address the shortage of bathroom facilities during race days. Continuous and transparent communication with the hele wa‘a community is recommended for the future. Several were tentative, given a previous lack of communication from government institutions and others were concerned about the level of maintenance required for clean and safe facilities, given the houseless population at the Beach Park. The following recommendations were given:

- Increase cultural thinking and cultural visioning in the management of Ke‘ehi Lagoon Beach Park
- Include an understanding of the reverence of the ‘āina (land) of Moanalua and of Ke‘ehi, for the plants and pōhaku (rocks)
- Actively involve the community in future planning and maintain transparent communication throughout the project process and future park endeavors
- Conduct cultural protocol prior to commencing work on the project
- Keep the bathroom slated to be demolished in place until the new comfort stations are constructed
- Do not remove historic pine trees near the official’s stand
- Increase management of the feral cat population
- Maintain the area as a recreational space for the public and do not pursue commercialization of the space
- Ensure that there are individuals who have relationship to Ke‘ehi and/or Moanalua included in the team working on the comfort stations project to ensure intuition-based and feelings-grounded attention to place as well as awareness of spiritual boundaries
- Take care of current native trees at the park (e.g., the niu trees) and restore native vegetation to the beach park including species such as wiliwili (native tree), naupaka (native shrub), and pā‘ū o Hi‘iaka (endemic Hawaiian sprawling vine)
- Consider expanding the parking space by moving the chain barriers further in from the road
- Use traditional Hawaiian name(s) for the beach park and Hawaiian signage on the comfort stations
- Provide historic displays to educate park users on the rich history and mo‘olelo of Ke‘ehi

- Increase the number of shower stations at the comfort station nearest to the canoe hālau (long house for canoes) as the current facilities are insufficient during race days
- Ensure that there is monitoring and maintenance of the comfort stations; one recommendation to accomplish this is to increase the number of staff assigned to Ke‘ehi Lagoon Beach Park

(*While all of the interviewees’ recommendations are listed above, some may not directly relate to the proposed park improvements; but may relate more to park operations)

The proposed Project is not anticipated to have a significant impact on cultural resources while following as many relevant recommendations possible. In particular, it is certain that the existing Comfort Station 2 will be demolished after the reconstructed comfort stations are built. Other recommendations in landscaping, signage, cultural thinking, and community involvement will be followed.

4.2 TRANSPORTATION

4.2.1 Roadways and Traffic

Motorized vehicular and bicycle access to Ke‘ehi Lagoon Beach Park is via the two-lane Lagoon Drive at its signalized intersection with Aolele Street. There are no bike paths or bike lanes on the roadways approaching this intersection. There are marked and signalized crosswalks across the Ke‘ehi Lagoon Beach Park Road, Aolele Street, and Lagoon Drive south of this intersection, but no pedestrian crossing is allowed across Lagoon Drive north of this intersection.

Lagoon Drive. Lagoon Drive is an arterial roadway serving the Moanalua–Airport area of Honolulu and functions as the primary vehicular access route to Ke‘ehi Lagoon Beach Park. In the vicinity of the Project Site, Lagoon Drive generally consists of two travel lanes in each direction, transitioning to a reduced cross-section toward the makai end where it terminates near a parking lot.

Lagoon Drive intersects Aolele Street at a signalized intersection that provides the main access point to Ke‘ehi Lagoon Beach Park and adjacent facilities. Mauka of Aolele Street, Lagoon Drive passes beneath Interstate H-1 and continues northward as Pu‘uloa Road, providing connectivity to surrounding industrial, airport-related, and commercial land uses.

Aolele Street. Aolele Street is an urban arterial roadway located in the Moanalua–Airport area of Honolulu. In the vicinity of Ke‘ehi Lagoon Beach Park, Aolele Street generally functions as a two-lane arterial roadway, carrying one travel lane in each direction and providing an important east–west connection between HNL Airport, Nimitz Highway, and adjacent industrial and park-serving uses.

Aolele Street connects directly to Lagoon Drive at a signalized intersection that serves as the primary vehicular access point to Ke‘ehi Lagoon Beach Park. To the west, Aolele Street provides access to airport roadways and aviation-related facilities, while to the east it transitions into the Ke‘ehi Lagoon Beach Park entrance road leading to internal park circulation and parking areas.

The roadway is characterized by relatively flat grades and an urban cross-section typical of arterial facilities serving mixed transportation functions.

Nimitz Highway. Nimitz Highway is a major principal arterial roadway serving the southern urban corridor of O‘ahu and providing regional connectivity between downtown Honolulu, the HNL Airport area, and Pearl Harbor. In the vicinity of Ke‘ehi Lagoon Beach Park, Nimitz Highway generally consists of four travel lanes in each direction, separated by a raised or painted median, and functions as a high-capacity urban highway designed to accommodate substantial commuter, commercial, and airport-related traffic volumes.

Near the Project site, Nimitz Highway is grade-separated from local and park-serving roadways, with no direct driveway access serving Ke‘ehi Lagoon Beach Park. Vehicular access to the Park is instead provided via Lagoon Drive and Aolele Street, which connect indirectly to Nimitz Highway through signalized intersections and interchanges. As a result, park-related traffic does not directly enter or exit Nimitz Highway, minimizing operational conflicts and safety concerns along the corridor.

Potential Impacts and Mitigation Measures

During the pre-Assessment consultation process, Honolulu Police Department (HPD) wrote:

> “*Based on the information provided, the Honolulu Police Department (HPD) recommends providing adequate notice to the public prior to any road closures as impacts to park visitors could lead to complaints.”* (Appendix A)

The Project will not require permanent rerouting or alteration of roadway traffic, though bringing construction equipment to the Project site may require minimal and brief rerouting. The inconvenience can be minimized by scheduling the transfer of construction equipment and materials during non-peak traffic hours. If there is a need to transport any oversized equipment/overweight loads on State highway facilities, a State of Hawai‘i, Department of Transportation (HDOT) Highways Division permit will be submitted. No work is planned directly abutting any major roads, so construction activities should not require the closure of any City or State street, traffic lane, or sidewalk. However, the public will be provided with adequate notice regarding any closures or delays.

Construction or operation of the proposed Project is not anticipated to result in a significant introduction of the number of visitors. Implementation of the comfort stations and the maintenance facility building are not anticipated to have any strong cumulative traffic impacts.

4.2.2 Public Transportation

The CCH operates TheBus, a public bus transportation service for the island of O‘ahu. There are bus stops near the tennis courts on the west side of the park, including two northbound stops on Lagoon Drive and one southbound. Additionally, the ‘Āhua (Lagoon Drive) Skyline Station can be accessed on Waiwai Loop, which is approximately a block north from the Park entry road.

‘Āhua (Lagoon Drive) Skyline Station

- East Kapolei/Kalihi Transit Center

Lagoon Drive Bus Stops

- 40 – Mākaha Towers/Honolulu – Ala Moana Center
- 42 – ‘Ewa Beach/Arizona Memorial/Waikīkī
- 51 – Wahiawā Heights/Alapai Transit Center
- A Line – ‘Āhua (Lagoon Drive) Skyline Station/UH Mānoa via Downtown Honolulu
- W Line – Airport/Waikīkī
- U Line – ‘Āhua (Lagoon Drive) Skyline Station/UH Mānoa via H-1 Freeway

Potential Impacts and Mitigation Measures of the Proposed Project

The proposed Project will not increase the number of residents in the area or alter the demand for public transportation. As the proposed Project will not present any negative long-term impacts to public transportation facilities, no mitigation measures are required.

4.2.3 Pedestrian and Bicycle Facilities

Generally, pedestrian and bicycle access to and from the park is limited to the main vehicular entry from Lagoon Drive. The Park is fenced along the north and east (along the boundary with Ke‘ehi Lagoon Memorial State Park).

According to the O‘ahu Bike Plan, there is a shared used bike path along westbound Nimitz Highway, going from the Mall at Pearl Harbor to Fort Shafter. There is a bike lane starting on the makai end of Pu‘uloa Road that turns onto Salt Lake Boulevard. Additionally, there is a paved path that follows H-1/Nimitz Highway, starting at Lagoon Drive and ending near the pickleball courts on the north side of Ke‘ehi Lagoon Beach Park, though it is fenced off from the park. The portion of Lagoon Drive abutting the western boundary of the Park does not have any sidewalks south of the Park entry. The block mauka, with the bus stop has sidewalks on both sides. The access road off Nimitz Highway to the Ke‘ehi Lagoon Memorial State Park does not have sidewalks, and the driveway that once linked both parks is gated and locked, preventing both pedestrian and bicycle access.

Within the park, there is a mixture of paved roads, walking paths, and dirt roads and paths that can be accessed by pedestrians and cyclists. On the site of the park, there is a paved path from the large, long mauka parking lot that leads to the previous site of Comfort Station 1 and then down to the water. The path also continues to the tennis courts and follows the border of the baseball field and connects back to where it ends by the water. Comfort Station 2 is on the Diamond Head side of the large, long mauka parking lot, with a paved path to the entrance. The third comfort station is located central to the makai parking lot, with a short, paved path leading to the entrance. There are plans to further improve accessibility in the reconstruction of the two mauka comfort stations (Comfort Stations 1 and 2).

Potential Impacts and Mitigation Measures of the Proposed Project

According to Figure 5.2 of the Primary Urban Center Development Plan (PUC DP), there is a “New South Shore bike/ped path connection” that would bisect the mauka portion of the Ke‘ehi Lagoon Beach Park.

The proposed Project will not increase the number of residents in the area or alter current traffic patterns on site that would impact the pedestrian or bike circulation along public rights-of-way. It

is anticipated that long-term pedestrian and bicycle circulation will remain unchanged from existing conditions. As the proposed Project will not present any negative long-term impacts to area bicycle and pedestrian facilities, no mitigation measures are required.

4.2.4 Airports

During the pre-Assessment consultation process, HDOT wrote:

> *"1. The proposed project is adjacent to Daniel K. Inouye International Airport (HNL). All projects within five miles from Hawaii State airports are advised to read the Technical Assistance Memorandum (TAM) for guidance with development and activities that may require further review and permits. The TAM can be viewed at this link: http://files.hawaii.gov/dbedt/op/docs/TAM-FAA-DOT-Airports_08-01-2016.pdf.*
>
> *2. The project site is approximately 1,562 feet from the end of Runway 4R/22L at HNL. Federal Aviation Administration (FAA) regulations require the submittal of the FAA Form 7460-1 Notice of Proposed Construction or Alteration pursuant to the Code of Federal Regulations, Title 14, Part 77.9, if the construction or alteration is within 20,000 feet of a public use or military airport, which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 feet.*
>
> *Construction equipment and staging area heights, including temporary construction cranes, shall be included in the submittal. The form and submission criteria can be found at the following website: https://oeaaa.faa.gov/oeaaa/external/portal.jsp. Please provide a copy of the FAA response to the Part 77 analysis to the HDOT Airports Planning Section."* (Appendix A)

Potential Impacts and Mitigation Measures of the Proposed Project

If the proposed comfort stations and maintenance facility building are expected to exceed a 100:1 slope from the nearest point on the runway, the FAA 7460-1 Notice of Proposed Construction or Alteration Form will be submitted. However, per FAA 14 Code of Federal Regulations Part 77.9: a notice for construction or alteration is not required for "Any object that will be shielded by existing structures of a permanent and substantial nature… and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation". If the nearby Skyline railway track constitutes a structure shielding the new facilities and the surrounding area is considered congested, a 7460-1 Form will not be required.

As the proposed comfort stations and maintenance facility designs will be prepared with FAA regulations and the TAM in mind, the Project will not create an aerial obstruction hazard to flight operations. Additionally, the Project is not anticipated to attract hazardous wildlife or create a glint or glare hazard for the airport. No mitigation measures are planned.

4.3 NOISE

Due to the proximity of the Project site near the HNL Airport, Honolulu Skyline Rail, the H-1 Freeway and Nimitz Highway, and Lagoon Drive, the Property is subject to significant man-made noise. Other typical noise sources include: motorized vehicles on Park roads, Park users, bird vocalizations, and wind blowing through vegetation. There are no noise sensitive uses adjoining

the Park such as schools, residences or hospitals. Surrounding uses are primarily industrial or large commercial, except for the Pacific Marina Inn and Kahauiki Village across the water.

During the pre-Assessment consultation process, HDOT wrote:

> *"3. The project site is within the 60-75 DNL (Day Night Level) noise contours on the attached 2008 HNL Noise Exposure Map. The HDOT recommends reviewing the attached State of Hawaii Land Use Compatibility Guidelines to ensure the project can include mitigations, dependent on the proposed uses.*
>
> *4. Due to the project's proximity to HNL, the applicant and future users should be aware of potential single-event noise from aircraft operations..."* (Appendix A)

The HNL Noise Exposure Map puts Ke'ehi Lagoon Beach Park in the 65-75 DNL (Day Night Level) noise contour.

Potential Impacts and Mitigation Measures of the Proposed Project

According to the State of Hawai'i Land Use Compatibility Guidelines, certain recreational uses are prohibited from being in 60-65 or 70-75 DNL sound contours but beach parks are classified as compatible at any sound level under the 75-80 DNL range. Ke'ehi Lagoon Beach Park will continue to experience noise associated with the airport, which has not significantly affected the use of the Project site as a beach park. No mitigation measures are planned.

Construction activities for the Project will inevitably create temporary noise impacts. The building contractor may employ mitigation measures to minimize those temporary noise impacts including the use of mufflers and implementing construction curfew periods. Pursuant to HAR Chapter 11-46, all Project activities must comply with all community noise controls. No post-construction mitigation measures are proposed because the addition of new comfort stations and a new maintenance facility building will not expose visitors to increased noise. The proposed Project is not expected to have any long-term, direct, indirect, or cumulative impacts on noise.

4.4 AIR QUALITY

The State's good air quality is largely a function of the predominant trade winds blowing from the northeast. However, during non-trade wind periods, man-made and volcanic pollutants tend to accumulate on island impacting visibility ("vog").

Potential Impacts and Mitigation Measures of the Proposed Project

During the pre-Assessment consultation process, HDOT wrote:

> *"4. Due to the project's proximity to HNL, the applicant and future users should be aware of potential single-event noise from aircraft operations. There is also potential for fumes, smoke, vibrations, odors, etc., resulting from occasional aircraft flight operations over or near the project. These incidences may increase or decrease over time and are dependent on airport operations."* (Appendix A)

It is acknowledged that there is a potential for fumes, smoke, odors, etc. resulting from occasional aircraft flight operations over or near the airport.

There is always potential for impacts on air quality during construction. This could occur from additional traffic generated by construction vehicles, machinery, and dust generated during demolition and construction.

An effective dust control plan will be implemented, as necessary. All construction activities will comply with the provisions of HAR Title 11, Chapter 59, related to Ambient Air Quality Standards and HAR Section 11-60.1-33, related to Fugitive Dust. Measures to control dust during various phases of construction include:

- Planning the different phases of construction, focusing on minimizing the amount of airborne, visible fugitive dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;
- Minimizing airborne, visible fugitive dust from shoulders and access roads;
- Controlling airborne, visible fugitive dust from debris being hauled away from the Project site;
- Providing an adequate water source at the site prior to start-up construction activities;
- Irrigating the construction site during periods of drought or high winds;
- Landscaping and rapid covering of bare areas, starting from the initial grading phase;
- Disturbing only the areas of construction that are in the immediate zone of construction to limit the amount of time that the areas will be subject to erosion;
- Providing adequate dust control measures during weekends, after hours, and before daily start-up of construction activities; and
- Installing silt screening in areas of disturbance.

In the long term, the proposed Project will not have a long-term impact on air quality in the vicinity. Therefore, no mitigation measures are required.

4.5 VISUAL RESOURCES

The existing comfort station (Comfort Station 2) is 1,485 SF in size. The footprint of the two new comfort stations is planned to be the same approximate size. The second will be demolished and rebuilt in the vicinity of the main parking lot about 500 lineal feet to the west (‘Ewa) of its current location. The first comfort station will be rebuilt in the same vicinity, on the ‘Ewa side of the existing playground.

According to Figure 2.5 of the PUC DP, there is a “significant public view” of Punchbowl from the shoreline of Ke‘ehi Lagoon Beach Park.

Potential Impacts and Mitigation Measures of the Proposed Project

During the pre-assessment consultation process, the DPP wrote:

> *“The analysis should include a comparison of the existing structures in relation to the proposed structures.”* (Appendix A)

The basic differences between the existing comfort stations and those proposed are as follows:

Table 2: Comparison of Existing and Proposed Buildings

	Comfort Station 1			Comfort Station 2		
	Previous Facility	**Proposed Facility**	**Differences**	**Existing Facility**	**Proposed Facility**	**Differences**
Footprint (in SF)	1,485 SF	~912 SF	- 573 SF	1,485 SF	~912 SF	- 573 SF
Height of Rooftop above finished floor elevation	~ 24 ft	~24 ft 6 in	+ 6 in	~24 ft.	~24 ft 6 in	+ 6 in

The proposed Project will not have a substantial adverse effect on scenic vistas and view planes identified in CCH plans. According to Figure 2.5 of the PUC DP, there is a "significant public view" of Punchbowl from the shoreline of Ke'ehi Lagoon Beach Park. It is anticipated that the new comfort stations will be a similar height to Comfort Station 2 and will not obstruct views from the shoreline towards Punchbowl. The proposed maintenance facility building will be setback approximately 1,000 feet from the shoreline and mauka of the Skyline columns and track (which is the predominant vertical feature in the mauka portion of the Park).

4.6 SOCIAL AND ECONOMIC CHARACTERISTICS

The postal zip code 96819 includes the areas referred to as Moanalua, Fort Shafter, Kalihi Kai, Kalihi Valley, Sand Island, and the HNL Airport. According to the Census Reporter, this zip code encompasses 21.8 square miles and a population of 51,961. The median age is 40 which is about the same as the median age in "Urban Honolulu" (39.4) and approximately the same percentage higher than median age in the State (40.6). Sixty-one percent of the population is between the ages of 18 to 64.

Zip code 96819 contains 13,287 housing units, of which 63 percent are single-family units. Of those housing units, 94 percent are occupied; and 51 percent are owner occupied. The median value of owner-occupied housing units is $963,900 (which is about 10 percent higher than the amount in "Urban Honolulu" ($873,200) and about 20 percent higher than the amount in the State ($808,200).

There are approximately 12,512 households in the zip code 96819 and approximately 4 persons per household. Within this zip code, 10.9 percent of the households moved since the previous year (compared with 13.4 and 12.6 percent, for "Urban Honolulu" and the State, respectively). Eighty-nine percent of the households were in the same home from a year ago.

The median household income in zip code 96819 is $96,346, which is about 92 percent of the median income of "Urban Honolulu" ($104,264) and the 98 percent of State ($98,317).

Potential Impacts and Mitigation Measures of the Proposed Project

The proposed Project will not result in adding new residents to the area within postal zip code 96819. During construction, there will be employment created and some positive impact in the collection of State income taxes and general excise taxes (paid during the purchase of construction

materials), but the benefits will be of a short-term duration. Over the long term, the social benefit of the proposed Project will make park experiences more sanitary for area park users and enhance park maintenance.

4.7 INFRASTRUCTURE AND UTILITIES

4.7.1 Water System

The Project site is served by an existing 16-inch municipal water main, with an existing 8-inch by 2-inch FM meter connecting to an 8-inch water main connection, that provides potable water and irrigation to park facilities, including the comfort stations and maintenance facility. The reconstructed comfort stations will be connected with new 2-inch water laterals connecting to the existing 8-inch water main. The existing irrigation system will be adjusted as required.

Potential Impacts and Mitigation Measures of the Proposed Project

The water demand for the proposed Project is expected to remain approximately the same as current usage.

During the pre-assessment consultation process, the CCH Board of Water Supply (BWS) wrote:

> *"The existing water system is currently adequate to accommodate the proposed development. However, please be advised that the existing Honolulu water system capacity has been reduced due to the shut-down of the Halawa Shaft station as a proactive measure to prevent fuel contamination from the Navy's Red Hill Bulk Storage Tank fuel releases. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval, pending evaluation of the water system conditions at that time on a first-come, first-served basis. 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.*
>
> *We continue to request 10% voluntary water conservation of all customers until new sources are completed and require water conservation measures in all new developments. If water consumption significantly increases, progressively restrictive conservation measures may be required to avoid low water pressures and disruptions of water service.*
>
> *Presently, there is no moratorium on the issuance of new and additional water services. Water distributed via the BWS water systems remains safe for consumption. The BWS is closely monitoring water usage and will keep the public informed with the latest findings. Please visit our website at www.boardofwatersupply.com and www.protectoahuwater.org for the latest updates and water conservation tips.*
>
> *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 on-site greywater reuse in accordance with Hawai'i State Department of Health guidelines, rain catchment for nonpotable uses, stormwater capture, and the use of Water Sense labeled ultra-low-flow water fixtures and toilets. Landscape elements*

should incorporate green infrastructure design, drought tolerant plants, xeriscaping, rain catchment, efficient irrigation systems such as a drip system and moisture sensors, and other Water Sense labeled fixtures and devices.

Consistent with Act 170, 2016 (H.B. 1749), Chapter 174C-31(g)(6), Hawai'i Revised Statutes, all City-owned and/or managed projects are required to utilize reclaimed water for uses other than drinking and potable water demands of the proposed project. The developer should investigate the feasibility of using reclaimed water and submit a report of the investigation to the BWS for our review.

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.

The BWS requests an update of the conversion of the Ke'ehi Lagoon Park irrigation system to the BWS Kalauao Spring nonpotable system, which fronts the park's entrance road. We understand the Department of Parks and Recreation requested the conversion in coordination with the BWS." (Appendix A)

The Department of Parks and Recreation (DPR) will continue to coordinate with the BWS regarding the conversion of the Ke'ehi Lagoon Park irrigation system to the BWS Kalauao Spring non-potable system. Coordination will be maintained with the BWS to ensure that the water system will not be adversely impacted and no interruption of water services to adjacent areas is anticipated. During the design phase, the construction drawings will be submitted to the BWS for review and approval, including confirmation of the existing and proposed water fixture units and flow requirements for the new building.

Water conservation measures suggested by BWS will be studied, and those that are appropriate to the climatic conditions and proposed building will be incorporated into the design of the proposed comfort stations and maintenance facility building. Water demand is currently estimated at 1,700 gallons per day for both comfort stations.

During the pre-Assessment consultation process, the Honolulu Fire Department (HFD) wrote:

"3. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1; 2021 Edition, Sections 18.3 and 18.4." (Appendix A)

Collaboration with BWS and HFD will ensure sufficient fire flow for fire protection.

4.7.2 Wastewater System

A 42-inch gravity sewer line crosses through the Park generally following its boundary with industrial lots to the northwest and north. The 42-inch gravity sewer line flows to a pumping station located in the northern corner of the Park. From the pumping station, a 36-inch force main line crosses Moanalua and Kalihi Streams and then eventually ties to the Sand Island Wastewater Treatment Plant. The existing park comfort stations have 6-inch sewer lines that connect to the existing 42-inch sewer line. The new comfort stations will reconnect to the existing 6-inch sewer lines.

Potential Impacts and Mitigation Measures of the Proposed Project

During the pre-Assessment consultation process, the ENV wrote: "The Department of Environmental Services has no comment." (Appendix A)

The proposed Project is not expected to increase significantly the number of park users or maintenance facility employees, so the quantity of wastewater that needs to be collected is not likely to increase significantly or require improvements to existing collection lines.

4.7.3 Drainage System

There are no storm water utilities on site. The nearest drainage system is the canal abutting the southwestern boundary of the site. Additionally, there is a culvert which drains into the canal between Lagoon Drive and the tennis courts.

Potential Impacts and Mitigation Measures of the Proposed Project

No impacts or mitigation measures are anticipated. The proposed comfort station buildings will have similar building footprints, resulting in similar areas of impervious surfaces. Site development of the proposed comfort stations will follow the same drainage patterns as the existing conditions, with integrated gutters, and stormwater quality provisions will be provided for the site redevelopment. As previously mentioned, the comfort stations' floors will be built above the 9-foot BFE to avoid flooding potential.

The proposed maintenance facility improvements may likely replace some of the existing structures in the maintenance facility area. Gutters and other runoff control measures will be utilized. To avoid the potential for flood damage, the building pad for the proposed maintenance facility building will be built above the BFE.

Although the proposed Project is located on a shoreline lot, the distance from the shoreline and compliance with stormwater quality rules are anticipated to mitigate any potential for direct discharge to the ocean. BMPs will be implemented during construction to prevent erosion and stormwater runoff during the construction phase.

4.7.4 Electrical Service

Presently, Hawaiian Electric Company provides electrical service to the park facilities.

Potential Impacts and Mitigation Measures of the Proposed Project

The operation of the proposed reconstructed comfort stations and maintenance facility improvements are not expected to significantly increase use of electricity at Ke‘ehi Lagoon Beach Park. No mitigation measures are planned.

4.7.5 Solid Waste

Currently, solid waste at the park and maintenance facility are collected and disposed of at the Ke‘ehi Transfer Station.

Potential Impacts and Mitigation Measures of the Proposed Project

During the pre-Assessment consultation process, the ENV wrote: “The Department of Environmental Services has no comment.” (Appendix A)

Waste generated during the demolition and construction phases of the proposed Project will be recycled, if possible, or properly disposed of. Since structural fill will be imported to elevate the Comfort Stations, excess excavated material and soil/vegetation will likely be disposed of offsite.

In the event that hazardous materials are encountered in the demolition of Comfort Station 2, any hazardous waste will be handled in accordance with HAR, Chapters 11-260.1 to 11-279.1 or Chapter 11-501 in the case of asbestos.

It is expected that the proposed reconstructed comfort stations and maintenance facility improvements will not generate additional waste over current conditions, therefore no potential impacts are expected and no mitigation measures are planned.

4.8 PUBLIC SERVICES AND FACILITIES

4.8.1 Police Protection

The Project site is located within Honolulu Police Department (HPD) District 5 – Kalihi. District 5 encompasses about 36 square miles in Central Honolulu, from Āliamanu to the Pali Highway and from the rim of the Ko‘olau Range to the central southeastern shoreline of O‘ahu. The district includes residential neighborhoods, commercial properties, the airport, and Kaiser Medical Center. The Kalihi Police Station is located at 1865 Kamehameha IV Road, next to Kalihi Valley District Park, and is approximately 10 minutes away from the Park by car.

Potential Impacts and Mitigation Measures of the Proposed Project

During the pre-Assessment consultation process, HPD wrote:

> “*… the HPD recommends due to the frequent presence of residents and visitors to the park, enhanced security, and monitoring of the construction site is recommended during site work and after hours.”* (Appendix A)

The contractor will be responsible for the security of the construction site and equipment. After construction of the proposed Project, demand for Police services is expected to remain the same.

4.8.2 Fire Protection

The closest fire station is 30 Moanalua, located at 2835 Ala 'Ilima St, which is approximately an eight-minute drive from the Park.

Potential Impacts and Mitigation Measures of the Proposed Project

During the pre-Assessment consultation process, the HFD wrote:

> *"1. Fire apparatus access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet (46 meters) from fire apparatus access roads as measured by an approved route around the exterior of the building or facility. (National Fire Protection Association [NFPA] 1; 2021 Edition, Section 18.2.3.2.2)*
>
> *A fire apparatus access road shall extend to within 50 feet (15 meters) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. (NFPA 1; 2021 Edition, Section 18.2.3.2.1)*
>
> *2. Fire apparatus access roads shall be in accordance with NFPA 1; 2021 Edition, Section 18.2.3…*
>
> *4. Civil drawings submitted to your department shall be routed to the HFD for review and approval."* (Appendix A)

The proposed Project buildings will be designed to be located within 150 feet of access roads and within 50 feet of an exterior door, making them accessible by fire truck. Civil drawings will be routed to HFD for review and approval.

The proposed comfort stations are not expected to put any long-term strain on Fire Department services and fire access will be maintained. Therefore, no mitigation measures are required.

4.8.3 Health Care Services

The closest emergency rooms are at Kaiser Permanente Moanalua Medical Center and Tripler Army Medical Center, which are both approximately three miles (or 8 minutes) away. There are also several medical clinics in the area, including: Concentra Urgent Care, Primary Care Clinic of Hawaii, Kalihi-Pālama Health Center, and Honolulu Urgent Care.

Potential Impacts and Mitigation Measures of the Proposed Project

There will be an unavoidable and occasional need for emergency health care services by park users. However, the proposed Project is unlikely to cause a significant increase in park users and as a result, is not expected to significantly increase the need for emergency services. Additionally, the proposed Project is not expected to have a long-term adverse impact on emergency medical service providers or their ability to service the community. No mitigation measures are proposed.

4.8.4 Recreational Facilities

Other nearby public recreational facilities include: Ke‘ehi Lagoon Memorial State Park, Ke‘ehi Boat Harbor, Moanalua Gardens, Ala Pu‘umalu Community Park, Salt Lake District Park, and Howard Shima Likini Street Mini Park.

Potential Impacts and Mitigation Measures of the Proposed Project

The CCH’s objective is to ensure that Ke‘ehi Lagoon Beach Park is well-maintained and fully operational. The proposed Project will not displace any existing public recreational facilities, add to the resident population, or create a significant increase in park users. No mitigation measures are proposed.

4.8.5 Schools

There are many nearby State of Hawai‘i Department of Education public schools. These include: Moanalua High School, Moanalua Middle School, Moanalua Elementary School, Major General William R. Shafter Elementary School, Pu‘uhale Elementary School, Kalihi Kai Elementary School, Kalākaua Middle School, and Farrington High School .

Potential Impacts and Mitigation Measures of the Proposed Project

Construction and operation of the proposed Project is not expected to generate noise or dust that would impact school operations. No mitigation measures are proposed.

4.8.6 Other Community Services

Nearby community services include Disabled American Veterans at Gov. John A. Burns Memorial Hall, Kahauiki Village with Headstart Daycare, Peltier Child Development Center, Faith Care Senior Hale, and New Hope O‘ahu.

Potential Impacts and Mitigation Measures of the Proposed Project

Construction of the proposed Project may generate noise or dust that may impact nearby community services; however, these impacts can be mitigated as previously described in Sections 4.3 and 4.4 of this EA. Operation of the proposed Project is not expected to generate noise or dust that would impact nearby community services.

5.0 LAND USE CONFORMANCE

State and County land use plans and policies and required permits and approvals relevant to the Project are described below.

During the pre-assessment consultation process, the DPP wrote:

> *"The Draft EA should describe compliance with all of the relevant State and City land use regulations, including but not limited to the following:*
> - *Revised Ordinances of Honolulu (ROH) Chapter 21 (the Land Use Ordinance), Chapter 21A (the Flood Hazard Areas Ordinance), Chapter 25 (the SMA Ordinance), and Chapter 26 (the Shoreline Setback Ordinance);*
> - *The DPP's Title 20, Chapter 31 Rules Relating Shoreline Setbacks and the SMA (DPP Rules);*
> - *Hawaii Revised Statutes (HRS) Chapter 205A (the Coastal Zone Management Act);*
> - *HRS Chapter 343; and*
> - *Hawaii Administrative Rules (HAR) Section 11.200.1 and Sections 11.200.10 and 11.200.16 through 18."* (Appendix A)

Per DPP's comments:
- ROH Chapter 21 is addressed in Section 5.2.3 of this EA;
- ROH Chapter 21A is addressed in Section 3.5 of this EA;
- ROH Chapter 25 is addressed in Section 5.2.4 of this EA;
- ROH Chapter 26 and DPP's Title 20, Chapter 31 are addressed in Sections 1.7 and 5.2.5 of this EA;
- HRS Chapter 205A is addressed in Section 5.1.2 of this EA;
- HRS Chapter 343 is addressed in Section 1.7 of this EA.

5.1 STATE OF HAWAI'I

5.1.1 State Land Use Law, Hawai'i Revised Statutes Chapter 205,

The State Land Use Law (HRS Chapter 205), establishes the State Land Use Commission (LUC) and authorizes this body to designate all lands in the State into one of four districts: Urban, Rural, Agricultural, or Conservation. These districts are defined and mapped by the LUC in order to ensure compatibility with neighboring land uses and protection of public health.

The proposed Project is located within the State Urban District. Urban districts include activities or uses as provided by ordinances or regulations of the county within which the urban district is situated.

5.1.2 Coastal Zone Management Act, Hawai'i Revised Statutes Chapter 205A

The Coastal Zone Management (CZM) Program aims to provide recreational opportunities, protect historic resources, protect scenic and open space resources, protect coastal ecosystems, provide facilities for economic development, reduce hazards, and manage development.

During the pre-assessment consultation process, the OPSD wrote:

> *"The Hawai'i CZM Law requires all state and county agencies to comply with the CZM objectives and policies. Pursuant to HRS § 205A-4, in implementing the objectives of the CZM Program, the agencies shall give full consideration to ecological, cultural, historic, esthetic, recreational, scenic, and open space values, and coastal hazards, as well as to needs for economic development. For information disclosure, the subject EA should include an assessment with mitigation measures, if needed, as to how the proposed project conforms to applicable CZM objectives and policies set forth in HRS § 205A-2, as amended."* (Appendix A)

Program objectives and applicability to the proposed Project are discussed in Table 3:

Table 3: Coastal Zone Management Act, HRS Chapter 205A

COASTAL ZONE MANAGEMENT ACT, HRS CHAPTER 205A (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
Recreational Resources			
Objective: *(A) Provide coastal recreational opportunities accessible to the public.*			
Policies:			
(A) Improve coordination and funding of coastal recreational planning and management; and			X
(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;			X
(ii) Requiring replacement of coastal resources having significant recreational value including, but not limited to, surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;			X
(iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;	X		
(iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;	X		
(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;	X		
(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;			X
(vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and			X
(viii) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use			X

COASTAL ZONE MANAGEMENT ACT, HRS CHAPTER 205A (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of section 46-6.			
Discussion: The proposed Project involves new facilities on the mauka portions of a shoreline park. The proposed Project will include two new comfort stations, making the Park more sanitary for users (tennis, pickleball, baseball, paddling, etc.). The proposed maintenance facility building will be located on the mauka portion of the Park and will not obstruct public access to the shoreline.			
Historic Resources			
Objective: *(A) 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;	X		
(B) Maximize information retention through preservation of remains and artifacts or salvage operations; and			X
(C) Support state goals for protection, restoration, interpretation, and display of historic resources.	X		
Discussion: Given the extensive historic and modern development within the Project area, Keala Pono concluded that it is unlikely that traditional surface features remain intact. The extensive land filling of the coastal region makes the survival of subsurface traditional features unlikely. Subsurface or submerged historic features may remain, considering the historic designation of the park and the features observed on the site. Therefore, archaeological monitoring is recommended for all ground disturbance. An archaeological monitoring plan will be prepared and accepted by the SHPD before any ground disturbing activities.			
Scenic and Open Space Resources			
Objective: *(A) 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;			X
(B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;	X		
(C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and			X
(D) Encourage those developments that are not coastal dependent to locate in inland areas.			X
Discussion: While the proposed Project will be located on a beach park, shoreline views will not be significantly altered, as the proposed comfort stations and maintenance building facility are located well-inland from the shoreline.			

COASTAL ZONE MANAGEMENT ACT, HRS CHAPTER 205A (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
Coastal Ecosystems			
Objective: *(A) 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;			X
(B) Improve the technical basis for natural resource management;			X
(C) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;			X
(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			X
(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.	X		
Discussion: The proposed Project buildings are not expected to directly impact coastal ecosystems as they will be setback from the nearest shoreline by a minimum of approximately 300 feet. BMPs will be implemented during construction to prevent erosion and stormwater runoff during the construction phase.			
Economic Uses			
Objective: *(A) 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;	X		
(B) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and			X
(C) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:			
(i) Use of presently designated locations is not feasible;			X
(ii) Adverse environmental effects are minimized; and	X		
(iii) The development is important to the State's economy.			X
Discussion: While Ke'ehi Lagoon Beach Park is located on the coastline, it is not important to the State's economy. Locating the two new comfort stations, and maintenance facility building in the mauka portion of the Park minimizes adverse environmental effects to the coastline.			

COASTAL ZONE MANAGEMENT ACT, HRS CHAPTER 205A (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
Coastal Hazards			
Objective: *(A) Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.*			
Policies:			
(A) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;	X		
(B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;			X
(C) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and	X		
(D) Prevent coastal flooding from inland projects.			X
Discussion: Information regarding flooding, tsunami evacuation zones, hurricane storm surge hazards and SLR are presented in Section 3.5 of this EA. The proposed comfort stations and maintenance facility building will be designed to meet the requirements of the Federal Flood Insurance Program.			
Managing Development			
Objective: *(A) 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;			X
(B) Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and			X
(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.	X		
Discussion: Early consultation (scoping) comments were obtained, incorporated into this EA and are reproduced in Appendix A. In addition, this EA discusses potential impacts and mitigation measures of the proposed Project and will provide an opportunity for additional public input during the Draft EA Public Comment period.			
Public Participation			
Objective: *(A) Stimulate public awareness, education, and participation in coastal management.*			
Policies:			
(A) Promote public involvement in coastal zone management processes;	X		
(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 issues, developments, and government activities; and			X
(C) Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.			X

COASTAL ZONE MANAGEMENT ACT, HRS CHAPTER 205A (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
Discussion: Early consultation (scoping) comments were obtained, incorporated into this EA and are reproduced in Appendix A. In addition, this EA discusses potential impacts and mitigation measures of the proposed Project and will provide an opportunity for additional public input during the Draft EA Public Comment period.			
Beach Protection			
Objective: *(A) Protect beaches for public use and recreation.*			
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;	X		
(B) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and			X
(C) Minimize the construction of public erosion-protection structures seaward of the shoreline.			X
(D) 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			X
(E) 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.			X
Discussion: The proposed Project buildings are not expected to directly impact coastal ecosystems as they will be setback from the nearest shoreline by a minimum of approximately 300 feet. BMPs will be implemented during construction to prevent erosion and stormwater runoff during the construction phase.			
Marine Resources			
Objective: *(A) 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;			X
(B) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;			X
(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;			X
(D) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and			X
(E) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.			X

COASTAL ZONE MANAGEMENT ACT, HRS CHAPTER 205A (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
Discussion: The proposed Project buildings are not expected to directly impact coastal ecosystems as they will be setback from the nearest shoreline by a minimum of approximately 300 feet. BMPs will be implemented during construction to prevent erosion and stormwater runoff during the construction phase.			

5.1.3 Hawai'i State Planning Act, Hawai'i Revised Statutes, Chapter 226

The Hawai'i State Plan, HRS Chapter 226 (2007) provides guidelines for the future growth of the State of Hawai'i. The Hawai'i State Plan identifies goals, objectives, policies, and priorities for allocating the State's resources, including public funds, services, human resources, land, energy, and water. The Plan was enacted to achieve "a desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people." Table 4 below outlines the proposed Project's conformance with each theme, goal, objective, policy, and guideline of the Plan.

5.1.3.1 Hawai'i State Plan, Part I: *Overall Theme, Goals, Objectives and Policies*

Table 4: Hawai'i State Plan, HRS Chapter 226 – Part I

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
HRS § 226-1: Findings and Purpose			
HRS § 226-2: Definitions			
HRS § 226-3: Overall Theme.			
Hawai'i's people, as both individuals and groups, generally accept and live by a number of principles or values which are an integral part of society. This concept is the unifying theme of the State Plan. The following principles or values are established as the overall theme of the Hawai'i State Plan: (1) Individual and family self-sufficiency refers to the rights of people to maintain as much self-reliance as possible. It is an expression of the value of independence, in other words, being able to freely pursue personal interests and goals. Self-sufficiency means that individuals and families can express and maintain their own self-interest so long as that self-interest does not adversely affect the general welfare. Individual freedom and individual achievement are possible only by reason of other people in society, the institutions, arrangements and customs that they maintain, and the rights and responsibilities that they sanction. (2) Social and economic mobility refers to the right of individuals to choose and to have the opportunities for choice available to them. It is a corollary to self-sufficiency. Social and economic mobility means that opportunities and incentives are available for people to seek out their own levels of social and economic fulfillment. (3) Community or social well-being is a value that encompasses many things. In essence, it refers to healthy social, economic, and physical environments that benefit the community as a whole. A sense of social responsibility, of caring for others and for the well-being of our community and of participating in social and political life, are important aspects of this concept. It further implies the aloha			

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
spirit--attitudes of tolerance, respect, cooperation and unselfish giving, within which Hawai'i's society can progress. *One of the basic functions of our society is to enhance the ability of individuals and groups to pursue their goals freely, to satisfy basic needs and to secure desired socio-economic levels. The elements of choice and mobility within society's legal framework are fundamental rights. Society's role is to encourage conditions within which individuals and groups can approach their desired levels of self-reliance and self-determination. This enables people to gain confidence and self-esteem; citizens contribute more when they possess such qualities in a free and open society.*			
Government promotes citizen freedom, self-reliance, self-determination, social and civic responsibility and goals achievement by keeping order, by increasing cooperation among many diverse individuals and groups, and by fostering social and civic responsibilities that affect the general welfare. The greater the number and activities of individuals and groups, the more complex government's role becomes. The function of government, however, is to assist citizens in attaining their goals. Government provides for meaningful participation by the people in decision-making and for effective access to authority as well as an equitable sharing of benefits. Citizens have a responsibility to work with their government to contribute to society's improvement. They must also conduct their activities within an agreed-upon legal system that protects human rights.			
Discussion: The proposed Project supports community and social well-being by improving park facilities which supports recreational use.			
HRS § 226-4: State Goals.			
In order to guarantee, for the present and future generations, those elements of choice and mobility that insure that individuals and groups may approach their desired levels of self-reliance and self-determination, it shall be the goal of the State to achieve: (1) A strong, viable economy, characterized by stability, diversity and growth that enables fulfillment of the needs and expectations of Hawai'i's present and future generations. (2) A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people. Physical, social and economic well-being, for individuals and families in Hawai'i, that nourishes a sense of community responsibility, of caring and of participation in community life.			
Discussion: The proposed Project is supportive of physical and social well-being, because it enhances facilities at a park where individuals go to exercise and socialize with their community.			
HRS § 226-5: Objectives and policies for population.			
(a) Objective: *It shall be the objective in planning for the State's population to guide population growth to be consistent with the achievement of physical, economic and social objectives contained in this chapter.*			

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(b) Policies:			
(1) Manage population growth statewide in a manner that provides increased opportunities for Hawai'i's people to pursue their physical, social and economic aspirations while recognizing the unique needs of each county.			X
(2) Encourage an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires.			X
(3) Promote increased opportunities for Hawai'i's people to pursue their socio-economic aspirations throughout the islands.			X
(4) Encourage research activities and public awareness programs to foster an understanding of Hawai'i's limited capacity to accommodate population needs and to address concerns resulting from an increase in Hawai'i's population.			X
(5) Encourage federal actions and coordination among major governmental agencies to promote a more balanced distribution of immigrants among the states, provided that such actions do not prevent the reunion of immediate family members.			X
(6) Pursue an increase in federal assistance for states with a greater proportion of foreign immigrants relative to their state's population.			X
(7) Plan the development and availability of land and water resources in a coordinated manner so as to provide for the desired levels of growth in each geographic area.			X
Discussion: The proposed Project will not generate new resident population and is not related to the State's objectives and policies for population.			
HRS § 226-6: Objectives and policies for the economy in general.			
(a) Objectives: *Planning for the State's economy in general shall be directed toward achievement of the following objectives:*			
(1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawai'i's people, while at the same time stimulating the development and expansion of economic activities capitalizing on defense, dual-use, and science and technology assets, particularly on the neighbor islands where employment opportunities may be limited.			X
(2) A steadily growing and diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands.			X
(b) Policies:			
(1) Promote and encourage entrepreneurship within Hawai'i by residents and nonresidents of the State.			X
(2) Expand Hawai'i's national and international marketing, communication, and organizational ties, to increase the State's capacity to adjust to and capitalize upon economic changes and opportunities occurring outside the State.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(3) Promote Hawai'i as an attractive market for environmentally and socially sound investment activities that benefit Hawai'i's people.			X
(4) Transform and maintain Hawai'i as a place that welcomes and facilitates innovative activity that may lead to commercial opportunities.			X
(5) Promote innovative activity that may pose initial risks, but ultimately contribute to the economy of Hawai'i.			X
(6) Seek broader outlets for new or expanded Hawai'i business investments.			X
(7) Expand existing markets and penetrate new markets for Hawai'i's products and services.			X
(8) Assure that the basic economic needs of Hawai'i's people are maintained in the event of disruptions in overseas transportation.			X
(9) Strive to achieve a level of construction activity responsive to, and consistent with, state growth objectives.			X
(10) Encourage the formation of cooperatives and other favorable marketing arrangements at the local or regional level to assist Hawai'i's small scale producers, manufacturers, and distributors.			X
(11) Encourage labor-intensive activities that are economically satisfying and which offer opportunities for upward mobility.			X
(12) Encourage innovative activities that may not be labor-intensive, but may otherwise contribute to the economy of Hawai'i.			X
(13) Foster greater cooperation and coordination between the government and private sectors in developing Hawai'i's employment and economic growth opportunities.			X
(14) Stimulate the development and expansion of economic activities which will benefit areas with substantial or expected employment problems.			X
(15) Maintain acceptable working conditions and standards for Hawai'i's workers.			X
(16) Provide equal employment opportunities for all segments of Hawai'i's population through affirmative action and nondiscrimination measures.			X
(17) Stimulate the development and expansion of economic activities capitalizing on defense, dual-use, and science and technology assets, particularly on the neighbor islands where employment opportunities may be limited.			X
(18) Encourage businesses that have favorable financial multiplier effects within Hawai'i's economy, particularly with respect to emerging industries in science and technology.			X
(19) Promote and protect intangible resources in Hawai'i, such as scenic beauty and the aloha spirit, which are vital to a healthy economy.			X
(20) Increase effective communication between the educational community and the private sector to develop relevant curricula and training programs to meet future employment needs in general, and requirements of new, potential growth industries in particular.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(21) Foster a business climate in Hawai'i--including attitudes, tax and regulatory policies, and financial and technical assistance programs--that is conducive to the expansion of existing enterprises and the creation and attraction of new business and industry.			X
Discussion: Construction and operation of the proposed Project will have an insignificant impact on the overall State's objectives and policies for the economy.			
HRS § 226-7: Objectives and policies for the economy – agriculture			
(a) Objectives: *Planning for the State's economy with regard to agriculture shall be directed towards achievement of the following objectives:*			
• Viability of Hawai'i's sugar and pineapple industries.			X
• Growth and development of diversified agriculture throughout the State.			X
• An agriculture industry that continues to constitute a dynamic and essential component of Hawai'i's strategic, economic, and social well-being.			X
(b) Policies:			
(1) Establish a clear direction for Hawai'i's agriculture through stakeholder commitment and advocacy.			X
(2) Encourage agriculture by making best use of natural resources.			X
(3) Provide the governor and the legislature with information and options needed for prudent decision making for the development of agriculture.			X
(4) Establish strong relationships between the agricultural and visitor industries for mutual marketing benefits.			X
(5) Foster increased public awareness and understanding of the contributions and benefits of agriculture as a major sector of Hawai'i's economy.			X
(6) Seek the enactment and retention of federal and state legislation that benefits Hawai'i's agricultural industries.			X
(7) Strengthen diversified agriculture by developing an effective promotion, marketing, and distribution system between Hawai'i's food producers and consumers in the State, nation, and world.			X
(8) Support research and development activities that strengthen economic productivity in agriculture, stimulate greater efficiency, and enhance the development of new products and agricultural by-products.			X
(9) Enhance agricultural growth by providing public incentives and encouraging private initiatives.			X
(10) Assure the availability of agriculturally suitable lands with adequate water to accommodate present and future needs.			X
(11) Increase the attractiveness and opportunities for an agricultural education and livelihood.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(12) In addition to the State's priority on food, expand Hawai'i's agricultural base by promoting growth and development of flowers, tropical fruits and plants, livestock, feed grains, forestry, food crops, aquaculture, and other potential enterprises.			X
(13) Promote economically competitive activities that increase Hawai'i's agricultural self-sufficiency, including the increased purchase and use of Hawai'i-grown food and food products by residents, businesses, and governmental bodies as defined under section 103D-104.			X
(14) Promote and assist in the establishment of sound financial programs for diversified agriculture.			X
(15) Institute and support programs and activities to assist the entry of displaced agricultural workers into alternative agricultural or other employment.			X
(16) Facilitate the transition of agricultural lands in economically nonfeasible agricultural production to economically viable agricultural uses.			X
Discussion: The proposed Project will have little to no impact on the State's objectives and policies for the economy in terms of agriculture.			
HRS § 226-8: Objectives and policies for the economy – visitor industry			
(a) Objectives: *Planning for the State's economy with regard to the visitor industry shall be directed towards the achievement of the objective of a visitor industry that constitutes a major component of steady growth for Hawai'i's economy.*			
(b) Policies:			
(1) Support and assist in the promotion of Hawai'i's visitor attractions and facilities.			X
(2) Ensure that visitor industry activities are in keeping with the social, economic, and physical needs and aspirations of Hawai'i's people.			X
(3) Improve the quality of existing visitor destination areas by utilizing Hawai'i's strengths in science and technology.			X
(4) Encourage cooperation and coordination between the government and private sectors in developing and maintaining well-designed, adequately serviced visitor industry and related developments which are sensitive to neighboring communities and activities.			X
(5) Develop the industry in a manner that will continue to provide new job opportunities and steady employment for Hawai'i's people.			X
(6) Provide opportunities for Hawai'i's people to obtain job training and education that will allow for upward mobility within the visitor industry.			X
(7) Foster a recognition of the contribution of the visitor industry to Hawai'i's economy and the need to perpetuate the aloha spirit.			X
(8) Foster an understanding by visitors of the aloha spirit and of the unique and sensitive character of Hawai'i's cultures and values.			X
Discussion: The proposed Project will not have a direct or significant impact on the State's objectives and policies for the visitor industry.			

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
HRS § 226-9: Objective and policies for the economy – federal expenditures			
(a) Objective: *Planning for the State's economy with regard to federal expenditures shall be directed towards achievement of the objective of a stable federal investment base as an integral component of Hawai'i's economy.*			
(b) Policies:			
(1) Encourage the sustained flow of federal expenditures in Hawai'i that generates long-term government civilian employment.			X
(2) Promote Hawai'i's supportive role in national defense, in a manner consistent with Hawai'i's social, environmental, and cultural goals by building upon dual-use and defense applications to develop thriving ocean engineering, aerospace research and development, and related dual-use technology sectors in Hawai'i's economy.			X
(3) Promote the development of federally supported activities in Hawai'i that respect state-wide economic concerns, are sensitive to community needs, and minimize adverse impacts on Hawai'i's environment.			X
(4) Increase opportunities for entry and advancement of Hawai'i's people into federal government service.			X
(5) Promote federal use of local commodities, services, and facilities available in Hawai'i.			X
(6) Strengthen federal-state-county communication and coordination in all federal activities that affect Hawai'i.			X
(7) Pursue the return of federally controlled lands in Hawai'i that are not required for either the defense of the nation or for other purposes of national importance, and promote the mutually beneficial exchanges of land between federal agencies, the State, and the counties.			X
Discussion: The proposed Project has no direct relation to the State's objectives and policies for federal expenditures.			
HRS § 226-10: Objectives and policies for the economy – potential growth and innovative activities.			
(a) Objective: *Planning for the State's economy with regard to potential growth and innovative activities shall be directed towards achievement of the objective of development and expansion of potential growth and innovative activities that serve to increase and diversify Hawai'i's economic base.*			
(b) Policies:			
(1) Facilitate investment and employment in economic activities that have the potential to expand and diversify Hawai'i's economy, including but not limited to diversified agriculture, aquaculture, renewable energy development, creative media, health care, and science and technology-based sectors.			X
(2) Facilitate investment in innovative activity that may pose risks or be less labor-intensive than other traditional business activity, but if successful, will generate revenue in Hawai'i through the export of services or products or substitution of imported services or products.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(3) Encourage entrepreneurship in innovative activity by academic researchers and instructors who may not have the background, skill, or initial inclination to commercially exploit their discoveries or achievements.			X
(4) Recognize that innovative activity is not exclusively dependent upon individuals with advanced formal education, but that many self-taught, motivated individuals are able, willing, sufficiently knowledgeable, and equipped with the attitude necessary to undertake innovative activity.			X
(5) Increase the opportunities for investors in innovative activity and talent engaged in innovative activity to personally meet and interact at cultural, art, entertainment, culinary, athletic, or visitor-oriented events without a business focus.			X
(6) Expand Hawai'i's capacity to attract and service international programs and activities that generate employment for Hawai'i's people.			X
(7) Enhance and promote Hawai'i's role as a center for international relations, trade, finance, services, technology, education, culture, and the arts.			X
(8) Accelerate research and development of new energy- related industries based on wind, solar, ocean, and underground resources and solid waste.			X
(9) Promote Hawai'i's geographic, environmental, social, and technological advantages to attract new economic activities into the State.			X
(10) Provide public incentives and encourage private initiative to attract new industries that best support Hawai'i's social, economic, physical, and environmental objectives.			X
(11) Increase research and the development of ocean-related economic activities such as mining, food production, and scientific research.			X
(12) Develop, promote, and support research and educational and training programs that will enhance Hawai'i's ability to attract and develop economic activities of benefit to Hawai'i.			X
(13) Foster a broader public recognition and understanding of the potential benefits of new, or innovative growth-oriented industry in Hawai'i.			X
(14) Encourage the development and implementation of joint federal and state initiatives to attract federal programs and projects that will support Hawai'i's social, economic, physical, and environmental objectives.			X
(15) Increase research and development of businesses and services in the telecommunications and information industries.			X
(16) Foster the research and development of nonfossil fuel and energy efficient modes of transportation.			X
(17) Recognize and promote health care and health care information technology as growth industries.			X
Discussion: The proposed Project has no direct relation to the State's objectives and policies for potential growth and innovative activities.			

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
HRS § 226-10.5: Objectives and policies for the economy – information industry			
(a) Objective: *Planning for the State's economy with regard to telecommunications and information technology shall be directed toward recognizing that broadband and wireless communication capability and infrastructure are foundations for an innovative economy and positioning Hawai'i as a leader in broadband and wireless communications and applications in the Pacific Region.*			
(b) Policies:			
(1) Promote efforts to attain the highest speeds of electronic and wireless communication within Hawai'i and between Hawai'i and the world, and make high speed communication available to all residents and businesses in Hawai'i.			X
(2) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawai'i to accommodate future growth and innovation in Hawai'i's economy.			X
(3) Facilitate the development of new or innovative business and service ventures in the information industry which will provide employment opportunities for the people of Hawai'i.			X
(4) Encourage mainland- and foreign-based companies of all sizes, whether information technology-focused or not, to allow their principals, employees, or contractors to live in and work from Hawai'i, using technology to communicate with their headquarters, offices, or customers located out-of-state.			X
(5) Encourage greater cooperation between the public and private sectors in developing and maintaining a well-designed information industry.			X
(6) Ensure that the development of new businesses and services in the industry are in keeping with the social, economic, and physical needs and aspirations of Hawai'i's people.			X
(7) Provide opportunities for Hawai'i's people to obtain job training and education that will allow for upward mobility within the information industry.			X
(8) Foster a recognition of the contribution of the information industry to Hawai'i's economy.			X
(9) Assist in the promotion of Hawai'i as a broker, creator, and processor of information in the Pacific.			X
Discussion: The proposed Project has no direct relation to the State's objectives and policies for the information industry.			
HRS § 226-11: Objectives and policies for the physical environment – land-based, shoreline, and marine resources.			
(a) Objectives: *Planning for the State's physical environment with regard to land-based, shoreline, and marine resources shall be directed towards achievement of the following objectives:*			
(1) Prudent use of Hawai'i's land-based, shoreline, and marine resources.	X		
(2) Effective protection of Hawai'i's unique and fragile environmental resources.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(b) Policies:			
(1) Exercise an overall conservation ethic in the use of Hawai'i's natural resources.			X
(2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.			X
(3) Take into account the physical attributes of areas when planning and designing activities and facilities.			X
(4) Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.			X
(5) Consider multiple uses in watershed areas, provided such uses do not detrimentally affect water quality and recharge functions.			X
(6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawai'i.			X
(7) Provide public incentives that encourage private actions to protect significant natural resources from degradation or unnecessary depletion.			X
(8) Pursue compatible relationships among activities, facilities, and natural resources.			X
(9) Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes.			X
Discussion: The proposed Project represents a prudent use a shoreline park by improving park facilities while maintaining a significant setback from the shoreline and marine resources.			
HRS § 226-12: Objective and policies for the physical environment – scenic, natural beauty, and historic resources.			
(a) Objective: *Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawai'i's scenic assets, natural beauty, and multi-cultural/historical resources.*			
(b) Policies:			
(1) Promote the preservation and restoration of significant natural and historic resources.			X
(2) Provide incentives to maintain and enhance historic, cultural, and scenic amenities.			X
(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.	X		
(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawai'i's ethnic and cultural heritage.			X
(5) Encourage the design of developments and activities that complement the natural beauty of the islands.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
Discussion: In general, it is anticipated that the new comfort stations will be a similar height to the existing structures and will not obstruct views towards the ocean. The proposed Maintenance Facility Building will be setback approximately 1,000 feet from the shoreline and should not adversely obstruct views of the Park from the ocean.			
HRS § 226-13: Objectives and policies for the physical environment – land, air, and water quality.			
(a) Objectives: *Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives:*			
(1) Maintenance and pursuit of improved quality in Hawai'i's land, air, and water resources.			X
(2) Greater public awareness and appreciation of Hawai'i's environmental resources.			X
(b) Policies:			
(1) Foster educational activities that promote a better understanding of Hawai'i's limited environmental resources.			X
(2) Promote the proper management of Hawai'i's land and water resources.			X
(3) Promote effective measures to achieve desired quality in Hawai'i's surface, ground, and coastal waters.			X
(4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawai'i's people.			X
(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.			X
(6) Encourage design and construction practices that enhance the physical qualities of Hawai'i's communities.			X
(7) Encourage urban developments in close proximity to existing services and facilities.			X
(8) Foster recognition of the importance and value of the land, air, and water resources to Hawai'i's people, their cultures and visitors.			X
Discussion: The proposed Project represents a prudent use of a shoreline park by improving park facilities while maintaining a significant setback from the shoreline and marine resources.			
HRS § 226-14: Objective and policies for facility systems – in general.			
(a) Objective: *Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.*			

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(b) Policies:			
(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.			X
(2) Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.			X
(3) Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.			X
(4) Pursue alternative methods of financing programs and projects and cost-saving techniques in the planning, construction, and maintenance of facility systems.			X
Discussion: The proposed Project has no direct relation to the State's objective and policies for facility systems (water, transportation, waste disposal, and energy and telecommunication systems).			
HRS § 226-15: Objectives and policies for facility systems – solid and liquid wastes.			
(a) Objectives: *Planning for the State's facility systems with regard to solid and liquid wastes shall be directed towards the achievement of the following objectives:*			
(1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.			X
(2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility, and other areas.			X
(b) Policies:			
(1) Encourage the adequate development of sewerage facilities that complement planned growth.			X
(2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic.			X
(3) Promote research to develop more efficient and economical treatment and disposal of solid and liquid wastes.			X
Discussion: The proposed Project has no direct relation to the State's objective and policies for solid and liquid wastes facility systems.			
HRS § 226-16: Objective and policies for facility systems – water.			
(a) Objective: *Planning for the State's facility systems with regard to water shall be directed towards achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational, and other needs within resource capacities.*			
(b) Policies:			
(1) Coordinate development of land use activities with existing and potential water supply.	X		

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(2) Support research and development of alternative methods to meet future water requirements well in advance of anticipated needs.			X
(3) Reclaim and encourage the productive use of runoff water and wastewater discharges.			X
(4) Assist in improving the quality, efficiency, service, and storage capabilities of water systems for domestic and agricultural use.			X
(5) Support water supply services to areas experiencing critical water problems.			X
(6) Promote water conservation programs and practices in government, private industry, and the general public to help ensure adequate water to meet long-term needs.			X
Discussion: On behalf of DPR, DDC will coordinate with the BWS regarding the conversion of the Ke'ehi Lagoon Park irrigation system to the BWS Kalauao Spring non-potable system.			
HRS § 226-17: Objectives and policies for facility systems – transportation.			
(a) Objective: *Planning for the State's facility systems with regard to transportation shall be directed toward the achievement of the following objectives:*			
(1) An integrated multi-modal transportation system that services statewide needs and promotes the efficient, economical, safe, and convenient movement of people and goods.			X
(2) A statewide transportation system that is consistent with and will accommodate planned growth objectives throughout the State.			X
(b) Policies:			
(1) Design, program, and develop a multi-modal system in conformance with desired growth and physical development as stated in this chapter;			X
(2) Coordinate state, county, federal, and private transportation activities and programs toward the achievement of statewide objectives;			X
(3) Encourage a reasonable distribution of financial responsibilities for transportation among participating governmental and private parties;			X
(4) Provide for improved accessibility to shipping, docking, and storage facilities;			X
(5) Promote a reasonable level and variety of mass transportation services that adequately meet statewide and community needs;			X
(6) Encourage transportation systems that serve to accommodate present and future development needs of communities;			X
(7) Encourage a variety of carriers to offer increased opportunities and advantages to interisland movement of people and goods;			X
(8) Increase the capacities of airport and harbor systems and support facilities to effectively accommodate transshipment and storage needs;			X
(9) Encourage the development of transportation systems and programs which would assist statewide economic growth and diversification;			X

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(10) Encourage the design and development of transportation systems sensitive to the needs of affected communities and the quality of Hawai'i's natural environment;			X
(11) Encourage safe and convenient use of low-cost, energy-efficient, non-polluting means of transportation;			X
(12) Coordinate intergovernmental land use and transportation planning activities to ensure the timely delivery of supporting transportation infrastructure in order to accommodate planned growth objectives; and			X
(13) Encourage diversification of transportation modes and infrastructure to promote alternate fuels and energy efficiency.			X
Discussion: The proposed Project has no direct relation to the State's objective and policies for transportation facility systems.			
HRS § 226-18: Objectives and policies for facility systems – energy.			
(a) Objectives: *Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all:*			
(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;			X
(2) Increased energy security and self-sufficiency through the reduction and ultimate elimination of Hawai'i's dependence on imported fuels for electrical generation and ground transportation;			X
(3) Greater diversification of energy generation in the face of threats to Hawai'i's energy supplies and systems;			X
(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use; and			X
(5) Utility models that make the social and financial interests of Hawai'i's utility customers a priority.			X
(b) *To achieve the energy objectives, it shall be the policy of this State to ensure the short- and long-term provision of adequate, reasonably priced, and dependable energy services to accommodate demand.*			
(c) Other Policies:			
(1) Support research and development as well as promote the use of renewable energy sources;			X
(2) Ensure that the combination of energy supplies and energy-saving systems is sufficient to support the demands of growth;			X
(3) Base decisions of least-cost supply-side and demand-side energy resource options on a comparison of their total costs and benefits when a least-cost is determined by a reasonably comprehensive, quantitative, and qualitative accounting of their long-term, direct and indirect economic, environmental, social, cultural, and public health costs and benefits;			X

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(4) Promote all cost-effective conservation of power and fuel supplies through measures including:			
(A) Development of cost-effective demand-side management programs;			X
(B) Education;			X
(C) Adoption of energy-efficient practices and technologies; and			X
(D) Increasing energy efficiency and decreasing energy use in public infrastructure;			X
(5) Ensure, to the extent that new supply-side resources are needed, that the development or expansion of energy systems uses the least-cost energy supply option and maximizes efficient technologies;			X
(6) Support research, development, demonstration, and use of energy efficiency, load management, and other demand-side management programs, practices, and technologies;			X
(7) Promote alternate fuels and transportation energy efficiency;			X
(8) Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications;			X
(9) Support actions that reduce, avoid, or sequester Hawai'i's greenhouse gas emissions through agriculture and forestry initiatives.			X
(10) Provide priority handling and processing for all state and county permits required for renewable energy projects;			X
(11) Ensure that liquefied natural gas is used only as a cost-effective transitional, limited-term replacement of petroleum for electricity generation and does not impede the development and use of other cost-effective renewable energy sources; and			X
(12) Promote the development of indigenous geothermal energy resources that are located on public trust land as an affordable and reliable source of firm power for Hawai'i.			X
Discussion: The proposed Project has no direct relation to the State's objectives and policies for energy facility systems.			
HRS § 226-18.5: Objectives and policies for facility systems – telecommunications.			
(a) Objective: *Planning for the State's telecommunications facility systems shall be directed towards the achievement of dependable, efficient, and economical statewide telecommunications systems capable of supporting the needs of the people.*			
(b) To achieve the telecommunications objective, it shall be the policy of this State to ensure the provision of adequate, reasonably priced, and dependable telecommunications services to accommodate demand.			
(c) Other Policies:			
(1) Facilitate research and development of telecommunications systems and resources;			X

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(2) Encourage public and private sector efforts to develop means for adequate, ongoing telecommunications planning;			X
(3) Promote efficient management and use of existing telecommunications systems and services; and			X
(4) Facilitate the development of education and training of telecommunications personnel.			X
Discussion: The proposed Project has no direct relation to the State's objectives and policies for telecommunications facility systems.			
HRS § 226-19: Objectives and policies for socio-cultural advancement – housing.			
(a) Objectives: *Planning for the State's socio-cultural advancement with regard to housing shall be directed toward the achievement of the following objectives:*			
(1) Greater opportunities for Hawai'i's people to secure reasonably priced, safe, sanitary, and livable homes, located in suitable environments that satisfactorily accommodate the needs and desires of families and individuals, through collaboration and cooperation between government and nonprofit and for-profit developers to ensure that more affordable housing is made available to very low-, low- and moderate-income segments of Hawai'i's population.			X
(2) The orderly development of residential areas sensitive to community needs and other land uses.			X
(3) The development and provision of affordable rental housing by the State to meet the housing needs of Hawai'i's people.			X
(b) Policies:			
(1) Effectively accommodate the housing needs of Hawai'i's people.			X
(2) Stimulate and promote feasible approaches that increase housing choices for low-income, moderate-income, and gap-group households.			X
(3) Increase homeownership and rental opportunities and choices in terms of quality, location, cost, densities, style, and size of housing.			X
(4) Promote appropriate improvement, rehabilitation, and maintenance of existing housing units and residential areas.			X
(5) Promote design and location of housing developments taking into account the physical setting, accessibility to public facilities and services, and other concerns of existing communities and surrounding areas.			X
(6) Facilitate the use of available vacant, developable, and underutilized urban lands for housing.			X
(7) Foster a variety of lifestyles traditional to Hawai'i through the design and maintenance of neighborhoods that reflect the culture and values of the community.			X
(8) Promote research and development of methods to reduce the cost of housing construction in Hawai'i.			X
Discussion: The proposed Project has no direct relationship to the State's objectives and policies regarding housing.			

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
HRS § 226-20: Objectives and policies for socio-cultural advancement – health			
(a) Objectives: *Planning for the State's socio-cultural advancement with regard to health shall be directed towards achievement of the following objectives:*			
(1) Fulfillment of basic individual health needs of the general public.			X
(2) Maintenance of sanitary and environmentally healthful conditions in Hawai'i's communities.	X		
(3) Elimination of health disparities by identifying and addressing social determinants of health.			X
(b) Policies:			
(1) Provide adequate and accessible services and facilities for prevention and treatment of physical and mental health problems, including substance abuse.			X
(2) Encourage improved cooperation among public and private sectors in the provision of health care to accommodate the total health needs of individuals throughout the State.			X
(3) Encourage public and private efforts to develop and promote statewide and local strategies to reduce health care and related insurance costs.			X
(4) Foster an awareness of the need for personal health maintenance and preventive health care through education and other measures.			X
(5) Provide programs, services, and activities that ensure environmentally healthful and sanitary conditions.			X
(6) Improve the State's capabilities in preventing contamination by pesticides and other potentially hazardous substances through increased coordination, education, monitoring, and enforcement.			X
(7) Prioritize programs, services, interventions, and activities that address identified social determinants of health to improve native Hawaiian health and well-being consistent with the United States Congress' declaration of policy as codified in title 42 United States Code section 11702, and to reduce health disparities of disproportionately affected demographics, including native Hawaiians, other Pacific Islanders, and Filipinos. The prioritization of affected demographic groups other than native Hawaiians may be reviewed every ten years and revised based on the best available epidemiological and public health data.			X
Discussion: The proposed comfort stations address sanitary and environmentally healthful conditions at Ke'ehi Lagoon Beach Park.			
HRS § 226-21: Objective and policies for socio-cultural advancement – education.			
(a) Objectives: *Planning for the State's socio-cultural advancement with regard to education shall be directed towards achievement of the objective of the provision of a variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations.*			

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(b) Policies:			
(1) Support educational programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.			X
(2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.			X
(3) Provide appropriate educational opportunities for groups with special needs.			X
(4) Promote educational programs which enhance understanding of Hawai'i's cultural heritage.			X
(5) Provide higher educational opportunities that enable Hawai'i's people to adapt to changing employment demands.			X
(6) Assist individuals, especially those experiencing critical employment problems or barriers, or undergoing employment transitions, by providing appropriate employment training programs and other related educational opportunities.			X
(7) Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking, and reasoning.			X
(8) Emphasize quality educational programs in Hawai'i's institutions to promote academic excellence.			X
(9) Support research programs and activities that enhance the education programs of the State.			X
Discussion: The Proposed Project has no direct relation to the State's objective and policies for socio-cultural advancement – education.			
HRS § 226-22: Objective and policies for socio-cultural advancement – social services.			
(a) Objective: *Planning for the State's socio-cultural advancement with regard to social services shall be directed towards the achievement of the objective of improved public and private social services and activities that enable individuals, families, and groups to become more self-reliant and confident to improve their well-being.*			
(b) Policies:			
(1) Assist individuals, especially those in need of attaining a minimally adequate standard of living and those confronted by social and economic hardship conditions, through social services and activities within the State's fiscal capacities.			X
(2) Promote coordination and integrative approaches among public and private agencies and programs to jointly address social problems that will enable individuals, families, and groups to deal effectively with social problems and to enhance their participation in society.			X
(3) Facilitate the adjustment of new residents, especially recently arrived immigrants, into Hawai'i's communities.			X
(4) Promote alternatives to institutional care in the provision of long-term care for elder and disabled populations.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(5) Support public and private efforts to prevent domestic abuse and child molestation, and assist victims of abuse and neglect.			X
(6) Promote programs which assist people in need of family planning services to enable them to meet their needs.			X
Discussion: The proposed Project has no direct relation to the State's objective and policies for socio-cultural advancement – social services.			
HRS § 226-23: Objective and policies for socio-cultural advancement – leisure.			
(a) Objective: *Planning for the State's socio-cultural advancement with regard to leisure shall be directed towards the achievement of the objective of the adequate provision of resources to accommodate diverse cultural, artistic, and recreational needs for present and future generations.*			
(b) Policies:			
(1) Foster and preserve Hawai'i's multi-cultural heritage through supportive cultural, artistic, recreational, and humanities-oriented programs and activities.			X
(2) Provide a wide range of activities and facilities to fulfill the cultural, artistic, and recreational needs of all diverse and special groups effectively and efficiently.			X
(3) Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance.	X		
(4) Promote the recreational and educational potential of natural resources having scenic, open space, cultural, historical, geological, or biological values while ensuring that their inherent values are preserved.			X
(5) Ensure opportunities for everyone to use and enjoy Hawai'i's recreational resources.			X
(6) Assure the availability of sufficient resources to provide for future cultural, artistic, and recreational needs.			X
(7) Provide adequate and accessible physical fitness programs to promote the physical and mental well-being of Hawai'i's people.			X
(8) Increase opportunities for appreciation and participation in the creative arts, including the literary, theatrical, visual, musical, folk, and traditional art forms.			X
(9) Encourage the development of creative expression in the artistic disciplines to enable all segments of Hawai'i's population to participate in the creative arts.			X
(10) Assure adequate access to significant natural and cultural resources in public ownership.			X
Discussion: The proposed Project will enhance the enjoyment of recreational experiences at the Park through improved facility design (proposed comfort stations) and maintenance (proposed maintenance facility building).			

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
HRS § 226-24: Objective and policies for socio-cultural advancement – individual rights and personal well-being.			
(a) Objective: *Planning for the State's socio-cultural advancement with regard to individual rights and personal well-being shall be directed towards achievement of the objective of increased opportunities and protection of individual rights to enable individuals to fulfill their socio-economic needs and aspirations.*			
(b) Policies:			
(1) Provide effective services and activities that protect individuals from criminal acts and unfair practices and that alleviate the consequences of criminal acts in order to foster a safe and secure environment.			X
(2) Uphold and protect the national and state constitutional rights of every individual.			X
(3) Assure access to, and availability of, legal assistance, consumer protection, and other public services which strive to attain social justice.			X
(4) Ensure equal opportunities for individual participation in society.			X
Discussion: The proposed Project has no direct relation to the State's objective and policies for socio-cultural advancement – individual rights and personal well-being.			
HRS § 226-25: Objective and policies for socio-cultural advancement – culture.			
(a) Objective: *Planning for the State's socio-cultural advancement with regard to culture shall be directed toward the achievement of the objective of enhancement of cultural identities, traditions, values, customs, and arts of Hawai'i's people.*			
(b) Policies:			
(1) Foster increased knowledge and understanding of Hawai'i's ethnic and cultural heritages and the history of Hawai'i.			X
(2) Support activities and conditions that promote cultural values, customs, and arts that enrich the lifestyles of Hawai'i's people and which are sensitive and responsive to family and community needs.			X
(3) Encourage increased awareness of the effects of proposed public and private actions on the integrity and quality of cultural and community lifestyles in Hawai'i.			X
(4) Encourage the essence of the aloha spirit in people's daily activities to promote harmonious relationships among Hawai'i's people and visitors.			X
Discussion: The proposed Project has an indirect impact on the State's objective and policies for socio-cultural advancement – culture; Ke'ehi Lagoon Beach Park is the site of the annual Samoa Flag Day on O'ahu.			
HRS § 226-26: Objectives and policies for socio-cultural advancement – public safety.			
Objectives: *Planning for the State's socio-cultural advancement with regard to public safety shall be directed towards the achievement of the following objectives:*			
(1) Assurance of public safety and adequate protection of life and property for all people.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(2) Optimum organizational readiness and capability in all phases of emergency management to maintain the strength, resources, and social and economic well-being of the community in the event of civil disruptions, wars, natural disasters, and other major disturbances.			X
(3) Promotion of a sense of community responsibility for the welfare and safety of Hawai'i's people.			X
(b) Policies related to public safety:			
(1) Ensure that public safety programs are effective and responsive to community needs.			X
(2) Encourage increased community awareness and participation in public safety programs.			X
(c) Policies related to criminal justice:			
(1) Support criminal justice programs aimed at preventing and curtailing criminal activities.			X
(2) Develop a coordinated, systematic approach to criminal justice administration among all criminal justice agencies.			X
(3) Provide a range of correctional resources which may include facilities and alternatives to traditional incarceration in order to address the varied security needs of the community and successfully reintegrate offenders into the community.			X
(d) Policies related to emergency management:			
(1) Ensure that responsible organizations are in a proper state of readiness to respond to major war-related, natural, or technological disasters and civil disturbances at all times.			X
(2) Enhance the coordination between emergency management programs throughout the State.			X
Discussion: The proposed Project has no direct relation to the State's objective and policies for socio-cultural advancement – public safety.			
HRS § 226-27: Objectives and policies for socio-cultural advancement – government.			
(a) Objectives: *Planning the State's socio-cultural advancement with regard to government shall be directed towards the achievement of the following objectives:*			
(1) Efficient, effective, and responsive government services at all levels in the State.			X
(2) Fiscal integrity, responsibility, and efficiency in the state government and county governments.			X
(b) Policies:			
(1) Provide for necessary public goods and services not assumed by the private sector.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(2) Pursue an openness and responsiveness in government that permits the flow of public information, interaction, and response.			X
(3) Minimize the size of government to that necessary to be effective.			X
(4) Stimulate the responsibility in citizens to productively participate in government for a better Hawai'i.			X
(5) Assure that government attitudes, actions, and services are sensitive to community needs and concerns.			X
(6) Provide for a balanced fiscal budget.			X
(7) Improve the fiscal budgeting and management system of the State.			X
(8) Promote the consolidation of state and county governmental functions to increase the effective and efficient delivery of government programs and services and to eliminate duplicative services wherever feasible.			X
Discussion: The proposed Project has no direct relation to the State's objective and policies for socio-cultural advancement – government.			

5.1.3.2 Hawai'i State Plan, Part II: *Planning Coordination and Implementation*

Part II of the State Plan establishes a statewide planning system to coordinate and guide all major state and county activities and to implement the overall theme, goals, objectives, policies, and priority guidelines. The system implements the State Plan through the development of functional plans and county general plans. Functional plans, general plans, and the formulation, administration, and implementation of state programs must be in conformance with the State Plan.

- State Functional Plans

State Functional Plans (SFPs) set forth the policies, statewide guidelines, and priorities within a specific field of activity, when such activity or program is proposed, administered, or funded by any agency of the state. Functional plans are developed by the state agency primarily responsible for a given functional area, which include: Agriculture, Conservation Lands, Education, Employment, Energy, Health, Higher Education, Historic Preservation, Housing, Human Services, Recreation, Tourism, and Transportation. Functional plans must identify priority issues in the functional area and contain objectives, policies, and implementing actions to address those priority issues. Actions may include organizational or management initiatives, facility or physical infrastructure development initiatives, initiatives for programs and services, or legislative proposals. Functional plans are approved by the governor and serve as guidelines for funding and implementation by state and county agencies. In addition, functional plans shall be used to guide the allocation of resources for the implementation of state policies adopted by the legislature.

- County General Plan

As established in Part II of the State Plan, a statewide planning system implements the State Plan through the development of SFPs and county general plans. The applicable county general plan is the CCH General Plan, which is discussed in Section 5.2.1 of this EA below.

5.1.3.3 Hawai'i State Plan, Part III: *Priority Guidelines*

Table 5: Hawai'i State Plan HRS Chapter 226 – Part III

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
HRS § 226-101: Purpose. *The purpose of this part is to establish overall priority guidelines to address areas of statewide concern.*			
HRS § 226-102: Overall direction. *The State shall strive to improve the quality of life for Hawai'i's present and future present and future population through the pursuit of desirable courses of action in five major areas of statewide concern which merit priority attention: economic development, population growth and land resource management, affordable housing, crime and criminal justice, quality education, principles of sustainability, and climate change adaptation.*			
HRS § 226-103: Economic priority guidelines.			
(a) Priority guidelines to stimulate economic growth and encourage business expansion and development to provide needed jobs for Hawai'i's people and achieve a stable and diversified economy:			
(1) Seek a variety of means to increase the availability of investment capital for new and expanding enterprises.			X
(A) Encourage investments which:			
(i) Reflect long term commitments to the State;			X
(ii) Rely on economic linkages within the local economy;			X
(iii) Diversify the economy;			X
(iv) Reinvest in the local economy;			X
(v) Are sensitive to community needs and priorities; and			X
(vi) Demonstrate a commitment to provide management opportunities to Hawai'i residents; and			X
(B) Encourage investments in innovative activities that have a nexus to the State, such as:			
(i) Present or former residents acting as entrepreneurs or principals;			X
(ii) Academic support from an institution of higher education in Hawai'i;			X
(iii) Investment interest from Hawai'i residents;			X
(iv) Resources unique to Hawai'i that are required for innovative activity; and			X
(v) Complementary or supportive industries or government programs or projects.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(2) Encourage the expansion of technological research to assist industry development and support the development and commercialization of technological advancements.			X
(3) Improve the quality, accessibility, and range of services provided by government to business, including data and reference services and assistance in complying with governmental regulations.			X
(4) Seek to ensure that state business tax and labor laws and administrative policies are equitable, rational, and predictable.			X
(5) Streamline the processes for building and development permit and review and telecommunication infrastructure installation approval and eliminate or consolidate other burdensome or duplicative governmental requirements imposed on business, where scientific evidence indicates that public health, safety, and welfare would not be adversely affected.			X
(6) Encourage the formation of cooperatives and other favorable marketing or distribution arrangements at the regional or local level to assist Hawai'i's small-scale producers, manufacturers, and distributors.			X
(7) Continue to seek legislation to protect Hawai'i from transportation interruptions between Hawai'i and the continental United States.			X
(8) Provide public incentives and encourage private initiative to develop and attract industries which promise long-term growth potentials and which have the following characteristics:			
(A) An industry that can take advantage of Hawai'i's unique location and available physical and human resources.			X
(B) A clean industry that would have minimal adverse effects on Hawai'i's environment.			X
(C) An industry that is willing to hire and train Hawai'i's people to meet the industry's labor needs at all levels of employment.			X
(D) An industry that would provide reasonable income and steady employment.			X
(9) Support and encourage, through educational and technical assistance programs and other means, expanded opportunities for employee ownership and participation in Hawai'i business.			X
(10) Enhance the quality of Hawai'i's labor force and develop and maintain career opportunities for Hawai'i's people through the following actions:			
(A) Expand vocational training in diversified agriculture, aquaculture, information industry, and other areas where growth is desired and feasible.			X
(B) Encourage more effective career counseling and guidance in high schools and post-secondary institutions to inform students of present and future career opportunities.			X
(C) Allocate educational resources to career areas where high employment is expected and where growth of new industries is desired.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(D) Promote career opportunities in all industries for Hawai'i's people by encouraging firms doing business in the State to hire residents.			X
(E) Promote greater public and private sector cooperation in determining industrial training needs and in developing relevant curricula and on-the-job training opportunities.			X
(F) Provide retraining programs and other support services to assist entry of displaced workers into alternative employment.			X
(b) Priority guidelines to promote the economic health and quality of the visitor industry:			
(1) Promote visitor satisfaction by fostering an environment which enhances the Aloha Spirit and minimizes inconveniences to Hawai'i's residents and visitors.			X
(2) Encourage the development and maintenance of well-designed, adequately serviced hotels and resort destination areas which are sensitive to neighboring communities and activities and which provide for adequate shoreline setbacks and beach access.			X
(3) Support appropriate capital improvements to enhance the quality of existing resort destination areas and provide incentives to encourage investment in upgrading, repair, and maintenance of visitor facilities.			X
(4) Encourage visitor industry practices and activities which respect, preserve, and enhance Hawai'i's significant natural, scenic, historic, and cultural resources.			X
(5) Develop and maintain career opportunities in the visitor industry for Hawai'i's people, with emphasis on managerial positions.			X
(6) Support and coordinate tourism promotion abroad to enhance Hawai'i's share of existing and potential visitor markets.			X
(7) Maintain and encourage a more favorable resort investment climate consistent with the objectives of this chapter.			X
(8) Support law enforcement activities that provide a safer environment for both visitors and residents alike.			X
(9) Coordinate visitor industry activities and promotions to business visitors through the state network of advanced data communication techniques.			X
(c) Priority guidelines to promote the continued viability of the sugar and pineapple industries:			
(1) Provide adequate agricultural lands to support the economic viability of the sugar and pineapple industries.			X
(2) Continue efforts to maintain federal support to provide stable sugar prices high enough to allow profitable operations in Hawai'i.			X
(3) Support research and development, as appropriate, to improve the quality and production of sugar and pineapple crops.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(d) Priority guidelines to promote the growth and development of diversified agriculture and aquaculture:			
(1) Identify, conserve, and protect agricultural and aquacultural lands of importance and initiate affirmative and comprehensive programs to promote economically productive agricultural and aquacultural uses of such lands.			X
(2) Assist in providing adequate, reasonably priced water for agricultural activities.			X
(3) Encourage public and private investment to increase water supply and to improve transmission, storage, and irrigation facilities in support of diversified agriculture and aquaculture.			X
(4) Assist in the formation and operation of production and marketing associations and cooperatives to reduce production and marketing costs.			X
(5) Encourage and assist with the development of a waterborne and airborne freight and cargo system capable of meeting the needs of Hawai'i's agricultural community.			X
(6) Seek favorable freight rates for Hawai'i's agricultural products from interisland and overseas transportation operators.			X
(7) Encourage the development and expansion of agricultural and aquacultural activities which offer long-term economic growth potential and employment opportunities.			X
(8) Continue the development of agricultural parks and other programs to assist small independent farmers in securing agricultural lands and loans.			X
(9) Require agricultural uses in agricultural subdivisions and closely monitor the uses in these subdivisions.			X
(10) Support the continuation of land currently in use for diversified agriculture.			X
(11) Encourage residents and visitors to support Hawai'i's farmers by purchasing locally grown food and food products.			X
(e) Priority guidelines for water use and development:			
(1) Maintain and improve water conservation programs to reduce the overall water consumption rate.			X
(2) Encourage the improvement of irrigation technology and promote the use of nonpotable water for agricultural and landscaping purposes.			X
(3) Increase the support for research and development of economically feasible alternative water sources.			X
(4) Explore alternative funding sources and approaches to support future water development programs and water system improvements.			X
(f) Priority guidelines for energy use and development:			
(1) Encourage the development, demonstration, and commercialization of renewable energy sources.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(2) Initiate, maintain, and improve energy conservation programs aimed at reducing energy waste and increasing public awareness of the need to conserve energy.			X
(3) Provide incentives to encourage the use of energy conserving technology in residential, industrial, and other buildings.			X
(4) Encourage the development and use of energy conserving and cost-efficient transportation systems.			X
(g) Priority guidelines to promote the development of the information industry:			
(1) Establish an information network, with an emphasis on broadband and wireless infrastructure and capability, that will serve as the foundation of and catalyst for overall economic growth and diversification in Hawai'i.			X
(2) Encourage the development of services such as financial data processing, a products and services exchange, foreign language translations, telemarketing, teleconferencing, a twenty-four-hour international stock exchange, international banking, and a Pacific Rim management center.			X
(3) Encourage the development of small businesses in the information field such as software development, the development of new information systems, peripherals, and applications; data conversion and data entry services; and home or cottage services such as computer programming, secretarial, and accounting services.			X
(4) Encourage the development or expansion of educational and training opportunities for residents in the information and telecommunications fields.			X
(5) Encourage research activities, including legal research in the information and telecommunications fields.			X
(6) Support promotional activities to market Hawai'i's information industry services.			X
(7) Encourage the location or co-location of telecommunication or wireless information relay facilities in the community, including public areas, where scientific evidence indicates that the public health, safety, and welfare would not be adversely affected.			X
Discussion: The proposed Project is not directly related to the State's economic priority guidelines.			
HRS § 226-104: Population growth and land resources priority guidelines.			
(a) Priority guidelines to effect desired statewide growth and distribution:			
(1) Encourage planning and resource management to insure that population growth rates throughout the State are consistent with available and planned resource capacities and reflect the needs and desires of Hawai'i's people.			X
(2) Manage a growth rate for Hawai'i's economy that will parallel future employment needs for Hawai'i's people.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(3) Ensure that adequate support services and facilities are provided to accommodate the desired distribution of future growth throughout the State.			X
(4) Encourage major state and federal investments and services to promote economic development and private investment to the neighbor islands, as appropriate.			X
(5) Explore the possibility of making available urban land, low-interest loans, and housing subsidies to encourage the provision of housing to support selective economic and population growth on the neighbor islands.			X
(6) Seek federal funds and other funding sources outside the State for research, program development, and training to provide future employment opportunities on the neighbor islands.			X
(7) Support the development of high technology parks on the neighbor islands.			X
(b) Priority guidelines for regional growth distribution and land resource utilization:			
(1) Encourage urban growth primarily to existing urban areas where adequate public facilities are already available or can be provided with reasonable public expenditures, and away from areas where other important benefits are present, such as protection of important agricultural land or preservation of lifestyles.			X
(2) Make available marginal or nonessential agricultural lands for appropriate urban uses while maintaining agricultural lands of importance in the agricultural district.			X
(3) Restrict development when drafting of water would result in exceeding the sustainable yield or in significantly diminishing the recharge capacity of any groundwater area.			X
(4) Encourage restriction of new urban development in areas where water is insufficient from any source for both agricultural and domestic use.			X
(5) In order to preserve green belts, give priority to state capital-improvement funds which encourage location of urban development within existing urban areas except where compelling public interest dictates development of a noncontiguous new urban core.			X
(6) Seek participation from the private sector for the cost of building infrastructure and utilities, and maintaining open spaces.			X
(7) Pursue rehabilitation of appropriate urban areas.			X
(8) Support the redevelopment of Kaka'ako into a viable residential, industrial, and commercial community.			X
(9) Direct future urban development away from critical environmental areas or impose mitigating measures so that negative impacts on the environment would be minimized.			X
(10) Identify critical environmental areas in Hawai'i to include but not be limited to the following: watershed and recharge areas; wildlife habitats (on land and in the ocean); areas with endangered species of plants and wildlife;			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
natural streams and water bodies; scenic and recreational shoreline resources; open space and natural areas; historic and cultural sites; areas particularly sensitive to reduction in water and air quality; and scenic resources.			
(11) Identify all areas where priority should be given to preserving rural character and lifestyle.			X
(12) Utilize Hawai'i's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, conservation lands, and other limited resources for future generations.	X		
(13) Protect and enhance Hawai'i's shoreline, open spaces, and scenic resources.	X		
Discussion: The proposed Project is not directly related to priority guidelines affecting desired statewide growth and distribution, or regional growth distribution and land resource utilization, however, the proposed Project is related to land resource utilization is located within the State Land Use Urban District. The proposed Project involves improvement to Ke'ehi Lagoon Beach Park. These facilities will support recreational use of this portion of the shoreline.			
HRS § 226-105: Crime and criminal justice.			
Priority guidelines in the area of crime and criminal justice:			
(1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.			X
(2) Target state and local resources on efforts to reduce the incidence of violent crime and on programs relating to the apprehension and prosecution of repeat offenders.			X
(3) Support community and neighborhood program initiatives that enable residents to assist law enforcement agencies in preventing criminal activities.			X
(4) Reduce overcrowding or substandard conditions in correctional facilities through a comprehensive approach among all criminal justice agencies which may include sentencing law revisions and use of alternative sanctions other than incarceration for persons who pose no danger to their community.			X
(5) Provide a range of appropriate sanctions for juvenile offenders, including community-based programs and other alternative sanctions.			X
(6) Increase public and private efforts to assist witnesses and victims of crimes and to minimize the costs of victimization.			X
Discussion: The proposed Project has no direct relation to the State's priority guidelines for crime and criminal justice.			

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
HRS § 226-106: Affordable housing.			
Priority guidelines for the provision of affordable housing:			
(1) Seek to use marginal or nonessential agricultural land and public land to meet housing needs of low- and moderate-income and gap-group households.			X
(2) Encourage the use of alternative construction and development methods as a means of reducing production costs.			X
(3) Improve information and analysis relative to land availability and suitability for housing.			X
(4) Create incentives for development which would increase home ownership and rental opportunities for Hawai'i's low- and moderate-income households, gap-group households, and residents with special needs.			X
(5) Encourage continued support for government or private housing programs that provide low interest mortgages to Hawai'i's people for the purchase of initial owner- occupied housing.			X
(6) Encourage public and private sector cooperation in the development of rental housing alternatives.			X
(7) Encourage improved coordination between various agencies and levels of government to deal with housing policies and regulations.			X
(8) Give higher priority to the provision of quality housing that is affordable for Hawai'i's residents and less priority to development of housing intended primarily for individuals outside of Hawai'i.			X
Discussion: The proposed Project has no direct relation to the State's priority guidelines for the provision of affordable housing.			
HRS § 226-107: Quality education.			
Priority guidelines to promote quality education:			
(1) Pursue effective programs which reflect the varied district, school, and student needs to strengthen basic skills achievement;			X
(2) Continue emphasis on general education "core" requirements to provide common background to students and essential support to other university programs;			X
(3) Initiate efforts to improve the quality of education by improving the capabilities of the education work force;			X
(4) Promote increased opportunities for greater autonomy and flexibility of educational institutions in their decision-making responsibilities;			X
(5) Increase and improve the use of information technology in education by the availability of telecommunications equipment for:			
(A) The electronic exchange of information;			X
(B) Statewide electronic mail; and			X
(C) Access to the Internet.			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
Encourage programs that increase the public's awareness and understanding of the impact of information technologies on our lives;			X
(6) Pursue the establishment of Hawai'i's public and private universities and colleges as research and training centers of the Pacific;			X
(7) Develop resources and programs for early childhood education;			X
(8) Explore alternatives for funding and delivery of educational services to improve the overall quality of education; and			X
(9) Strengthen and expand educational programs and services for students with special needs.			X
Discussion: The proposed Project has no direct relation to the State's priority guidelines to promote quality education.			
HRS § 226-108: Sustainability.			
Priority guidelines and principles to promote sustainability shall include:			
(1) Encouraging balanced economic, social, community, and environmental priorities;			X
(2) Encouraging planning that respects and promotes living within the natural resources and limits of the State;	X		
(3) Promoting a diversified and dynamic economy;			X
(4) Encouraging respect for the host culture;			X
(5) Promoting decisions based on meeting the needs of the present without compromising the needs of future generations			X
(6) Considering the principles of the ahupua'a system; and			X
(7) Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawai'i.			X
Discussion: The proposed Project will promote sustainable building strategies such as daylighting, natural ventilation, and LED lighting.			
HRS § 226-109: Climate change adaptation priority guidelines.			
Priority guidelines to prepare the State to address the impacts of climate change, including impacts to the areas of agriculture; conservation lands; coastal and nearshore marine areas; natural and cultural resources; education; energy; higher education; health; historic preservation; water resources; the built environment, such as housing, recreation, transportation; and the economy shall:			
(1) Ensure that Hawai'i's people are educated, informed, and aware of the impacts climate change may have on their communities;			X
(2) Encourage community stewardship groups and local stakeholders to participate in planning and implementation of climate change policies;			X
(3) Invest in continued monitoring and research of Hawai'i's climate and the impacts of climate change on the State;			X

HAWAI'I STATE PLAN, HRS CHAPTER 226 – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(4) Consider native Hawaiian traditional knowledge and practices in planning for the impacts of climate change;			X
(5) Encourage the preservation and restoration of natural landscape features, such as coral reefs, beaches and dunes, forests, streams, floodplains, and wetlands, that have the inherent capacity to avoid, minimize, or mitigate the impacts of climate change;			X
(6) Explore adaptation strategies that moderate harm or exploit beneficial opportunities in response to actual or expected climate change impacts to the natural and built environments;	X		
(7) Promote sector resilience in areas such as water, roads, airports, and public health, by encouraging the identification of climate change threats, assessment of potential consequences, and evaluation of adaptation options;			X
(8) Foster cross-jurisdictional collaboration between county, state, and federal agencies and partnerships between government and private entities and other nongovernmental entities, including nonprofit entities;			X
(9) Use management and implementation approaches that encourage the continual collection, evaluation, and integration of new information and strategies into new and existing practices, policies, and plans; and			X
(10) Encourage planning and management of the natural and built environments that effectively integrate climate change policy.			X
Discussion: The proposed comfort stations and maintenance facility building will be sited to avoid 3.2 feet SLR, and where possible, the proposed buildings will incorporate sustainable building strategies such as daylighting, natural ventilation, and LED lighting.			

5.1.4 State Environmental Policy, Hawai'i Revised Statutes, Chapter 344

The State Environmental Policy, as defined in HRS Chapter 344, establishes the policy of the State of Hawai'i on natural resource conservation and the environment. The Project's consistency with the State Environmental Policy is outlined in Table 6 below:

Table 6: State Environmental Policy, HRS Chapter 344

STATE ENVIRONMENTAL POLICY, CHAPTER 344, HAWAI'I REVISED STATUTES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
State Environmental Policy			
§344-3 Environmental policy. *It shall be the policy of the State, through its programs, authorities, and resources to:*			
(1) Conserve the natural resources, so that land, water, mineral, visual, air and other natural resources are protected by controlling pollution, by preserving or augmenting natural resources, and by safeguarding the State's unique natural environmental characteristics in a manner which will foster and promote the general welfare, create and maintain conditions under which humanity and			X

STATE ENVIRONMENTAL POLICY, CHAPTER 344, HAWAI'I REVISED STATUTES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
nature can exist in productive harmony, and fulfill the social, economic, and other requirements of the people of Hawai'i.			
(2) Enhance the quality of life by:			
(A) Setting population limits so that the interaction between the natural and artificial environments and the population is mutually beneficial;			X
(B) Creating opportunities for the residents of Hawai'i to improve their quality of life through diverse economic activities which are stable and in balance with the physical and social environments;			X
(C) Establishing communities which provide a sense of identity, wise use of land, efficient transportation, and aesthetic and social satisfaction in harmony with the natural environment which is uniquely Hawaiian; and			X
(D) Establishing a commitment on the part of each person to protect and enhance Hawai'i's environment and reduce the drain on nonrenewable resources.			X
Discussion: The proposed Project is planned in an urban area and will not involve State Conservation lands or cause an increase in population.			
Guidelines			
§344-4 Guidelines. *In pursuance of the state policy to conserve the natural resources and enhance the quality of life, all agencies, in the development of programs, shall, insofar as practicable, consider the following guidelines:*			
(1) Population.			
(A) Recognize population impact as a major factor in environmental degradation and adopt guidelines to alleviate this impact and minimize future degradation;			X
(B) Recognize optimum population levels for counties and districts within the State, keeping in mind that these will change with technology and circumstance, and adopt guidelines to limit population to the levels determined.			X
Discussion: The proposed Project will not generate an increase in population.			
(2) Land, water, mineral, visual, air, and other natural resources.			
(A) Encourage management practices which conserve and fully utilize all natural resources;			X
(B) Promote irrigation and waste water management practices which conserve and fully utilize vital water resources;			X
(C) Promote the recycling of waste water;			X
(D) Encourage management practices which conserve and protect watersheds and water sources, forest, and open space areas;			X
(E) Establish and maintain natural area preserves, wildlife preserves, forest reserves, marine preserves, and unique ecological preserves;			X
(F) Maintain an integrated system of state land use planning which coordinates the state and county general plans;			X

STATE ENVIRONMENTAL POLICY, CHAPTER 344, HAWAI'I REVISED STATUTES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(G) Promote the optimal use of solid wastes through programs of waste prevention, energy resource recovery, and recycling so that all our wastes become utilized.			X
Discussion: The proposed Project has no direct relationship to the management of land, water, mineral, visual, air, and other natural resources, other than that the location of the comfort stations and facility maintenance building are proposed on the mauka portions of the Park to lessen proximity to the shoreline and to reduce the visual impact of new buildings.			
(3) Flora and fauna.			
(A) Protect endangered species of indigenous plants and animals and introduce new plants or animals only upon assurance of negligible ecological hazard;			X
(B) Foster the planting of native as well as other trees, shrubs, and flowering plants compatible to the enhancement of our environment.			X
Discussion: The proposed Project will not harm endangered species of indigenous plants and animals.			
(4) Parks, recreation, and open space.			
(A) Establish, preserve and maintain scenic, historic, cultural, park and recreation areas, including the shorelines, for public recreational, educational, and scientific uses;	X		
(B) Protect the shorelines of the State from encroachment of artificial improvements, structures, and activities;			X
(C) Promote open space in view of its natural beauty not only as a natural resource but as an ennobling, living environment for its people.			X
Discussion: The proposed comfort stations and maintenance facility building will provide improvements to Ke'ehi Lagoon Beach Park, for the benefit of its users, without detracting from the existing scenic value of this Park.			
(5) Economic development.			
(A) Encourage industries in Hawai'i which would be in harmony with our environment;			X
(B) Promote and foster the agricultural industry of the State; and preserve and conserve productive agricultural lands;			X
(C) Encourage federal activities in Hawai'i to protect the environment;			X
(D) Encourage all industries including the fishing, aquaculture, oceanography, recreation, and forest products industries to protect the environment;			X
(E) Establish visitor destination areas with planning controls which shall include but not be limited to the number of rooms;			X
(F) Promote and foster the aquaculture industry of the State; and preserve and conserve productive aquacultural lands.			X
Discussion: The proposed Project is not related to the State's policies for economic development.			

STATE ENVIRONMENTAL POLICY, CHAPTER 344, HAWAI‘I REVISED STATUTES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
(6) Transportation.			
(A) Encourage transportation systems in harmony with the lifestyle of the people and environment of the State;			X
(B) Adopt guidelines to alleviate environmental degradation caused by motor vehicles;			X
(C) Encourage public and private vehicles and transportation systems to conserve energy, reduce pollution emission, including noise, and provide safe and convenient accommodations for their users.			X
Discussion: The proposed Project is not directly related to the State’s policies for transportation.			
(7) Energy.			
(A) Encourage the efficient use of energy resources.	X		
Discussion: The design of the new comfort stations and maintenance facility building will incorporate LED luminaires.			
(8) Community life and housing.			
(A) Foster lifestyles compatible with the environment; preserve the variety of lifestyles traditional to Hawai‘i through the design and maintenance of neighborhoods which reflect the culture and mores of the community;			X
(B) Develop communities which provide a sense of identity and social satisfaction in harmony with the environment and provide internal opportunities for shopping, employment, education, and recreation;			X
(C) Encourage the reduction of environmental pollution which may degrade a community;			X
(D) Foster safe, sanitary, and decent homes;			X
(E) Recognize community appearances as major economic and aesthetic assets of the counties and the State; encourage green belts, plantings, and landscape plans and designs in urban areas; and preserve and promote mountain-to-ocean vistas.			X
Discussion: The proposed Project is not directly related to the State’s policies for community life and housing, other than Ke‘ehi Lagoon Beach Park provides a place for users to recreate and gather with others who enjoy common pastimes (tennis, pickleball, canoe paddling, etc.), and the proposed comfort stations would support Park users. In addition, Ke‘ehi Lagoon Beach Park is the site of the annual Samoa Flag Day on O‘ahu.			
(9) Education and culture.			
(A) Foster culture and the arts and promote their linkage to the enhancement of the environment;			X
(B) Encourage both formal and informal environmental education to all age groups.			X

STATE ENVIRONMENTAL POLICY, CHAPTER 344, HAWAI'I REVISED STATUTES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	**S**	**N/S**	**N/A**
Discussion: The proposed Project is not directly related to the State's policies on education and culture.			
(10) Citizen participation.			
(A) Encourage all individuals in the State to adopt a moral ethic to respect the natural environment; to reduce waste and excessive consumption; and to fulfill the responsibility as trustees of the environment for the present and succeeding generations; and			X
(B) Provide for expanding citizen participation in the decision making process so it continually embraces more citizens and more issues.	X		
Discussion: This EA discusses potential impacts and mitigation measures of the proposed Project and provides an opportunity for citizen participation during the Draft EA Public Comment period.			

5.2 CITY AND COUNTY OF HONOLULU

During the pre-assessment consultation process, the DPP wrote:

> *"Regarding compliance with applicable long-term plans, the Draft EA should describe the Project's consistency with the Oahu General Plan, and Primary Urban Center Development Plan."* (Appendix A)

5.2.1 O'ahu General Plan

The O'ahu General Plan is a comprehensive statement of objectives and policies, and a requirement of the City Charter. It sets forth the long-range aspirations of O'ahu's residents and the strategies to achieve them. It lays the foundation for the CCH's comprehensive planning process that addresses physical, social, cultural, economic, environmental and design objectives to be achieved for the general welfare and prosperity of the people of O'ahu. It identifies the most desirable population distribution and regional development pattern for the island. In January 2021, the Honolulu City Council approved an updated General Plan (Resolution 21-23, CD1).

The most relevant objectives and policies of the General Plan regarding the proposed comfort station rebuild come from the "Natural Environment and Resource Stewardship" section, which is in Table 7.

Table 7: O'ahu General Plan

CITY AND COUNTY OF HONOLULU O'AHU GENERAL PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)		S	N/S	N/A
III. NATURAL ENVIRONMENT AND RESOURCE STEWARDSHIP				
OBJECTIVE A				
Objective A:	To protect and preserve the natural environment.			
Policy 1:	Protect O'ahu's natural environment, especially the shoreline, valleys, ridges, watershed areas, and wetlands from incompatible development.	X		
Policy 2:	Seek the restoration of environmentally damaged areas and natural resources.			X
Policy 3:	Preserve, protect, and restore stream flows and stream habitats to support aquatic and environmental processes and riparian, scenic, recreational, and Native Hawaiian cultural resources.			X
Policy 4:	Require development projects to give due consideration to natural features and hazards such as slope, inland and coastal erosion, flood hazards, water-recharge areas, and existing vegetation, as well as to plan for coastal hazards that threaten life and property.			X
Policy 5:	Require sufficient setbacks from O'ahu's shorelines to protect life and property, preserve natural shoreline areas and sandy beaches, and minimize the future need for protective structures or relocation of structures.	X		
Policy 6:	Design and maintain surface drainage and flood-control systems in a manner which will help preserve natural and cultural resources.			X
Policy 7:	Protect the natural environment from damaging levels of air, water, carbon, and noise pollution.			X
Policy 8:	Protect plants, birds, and other animals that are unique to the State of Hawai'i and O'ahu, and protect their habitats.			X
Policy 9:	Increase tree canopy and ensure its integration into new developments, and protect significant trees on public and private lands.			X
Policy 10:	Increase public awareness, appreciation, and protection of O'ahu's land, air, and water resources.			X
Policy 11:	Support the State and federal governments in the protection of the unique environmental, marine, cultural and wildlife assets of the Northwestern Hawaiian Islands.			X
Policy 12:	Plan, prepare for, and mitigate the impacts of climate change on the natural environment, including strategies of adaptation.			X
Discussion: The proposed comfort stations and maintenance facility building will be sited to avoid 3.2 feet SLR. The proposed Project buildings are not expected to directly impact coastal ecosystems as they will be setback from the nearest shoreline by a minimum of approximately 300 feet. BMPs will be implemented during construction to prevent erosion and stormwater runoff during the construction phase.				

CITY AND COUNTY OF HONOLULU O‘AHU GENERAL PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)		S	N/S	N/A
III. NATURAL ENVIRONMENT AND RESOURCE STEWARDSHIP				
The park designation of this land is appropriate to preserve the shoreline and maintain an appropriate use of this land.				
OBJECTIVE B				
Objective B:	To preserve and enhance natural landmarks and scenic views of O‘ahu for the benefit of both residents and visitors as well as future generations.			
Policy 1:	Protect the Island’s significant natural resources: its mountains and craters; forests and watershed areas; wetlands, rivers, and streams; shorelines, fishponds, and bays; and reefs and offshore islands.			X
Policy 2:	Protect O‘ahu’s scenic views, especially those seen from highly developed and heavily traveled areas.			X
Policy 3:	Locate and design public facilities, infrastructure and utilities to minimize the obstruction of scenic views.	X		
Policy 4:	Protect and expand public access to the natural and coastal environment for recreational, educational, and cultural purposes, and maintain access in a way that does not damage natural, historic, or cultural resources.	X		
Discussion: The proposed comfort stations and maintenance facility building will provide improvements to Ke‘ehi Lagoon Beach Park, for the benefit of its users, without detracting from the existing scenic value of this Park.				

5.2.2 Primary Urban Center Development Plan

The CCH’s eight Development Plans/Sustainable Communities Plans set forth a planning framework to implement and accomplish the objectives and policies of the O‘ahu General Plan. Only the plans for the Primary Urban Center and ‘Ewa are designated “Development Plans,” with the remainder designated “Sustainable Community Plans,” reflecting the role of the PUC and ‘Ewa DP areas to accommodate the majority of O‘ahu’s future growth.

In 2025, the CCH adopted the updated PUC DP as one of eight community-oriented plans to guide public policy, investment and decision making through the 2040 planning horizon. Ke‘ehi Lagoon Beach Park is located within the PUC DP area. The PUC DP presents a vision for the region’s future, presenting policies, guidelines and conceptual schemes intended to guide policy for the preparation of more detailed zoning maps, land use regulations, and public and private sector investment decisions. The document serves as a guide to land use, and all development projects should be based on the extent to which the Project supports, conforms to, and carries out the purposes of the vision and respective policies and guidelines of the plan. These policies, principles, and guidelines are then implemented through ordinances such as the Land Use Ordinance (LUO) (zoning code).

According to the PUC DP, the region’s role and identity within the overall framework of island-wide planning and land management is defined as a region with major economic activity hubs (Downtown, Civic Center, Waikīkī), and a variety of old and new neighborhoods, with a beautiful

natural setting (landmarks such as Diamond Head and Punchbowl). There are also a large number of well-loved parks, beaches, and cultural, educational, and governmental institutions.

The vision for the PUC DP includes providing an adequate supply of housing, connecting people to parks, developing solutions to traffic congestion and providing greater mode choice. The vision also calls for creating complete neighborhoods, growing a diverse economy, supporting healthy communities, responding to SLR, and integrating watershed management. Some key elements to implement this vision include: investing in functional, well-maintained infrastructure; providing public gathering spaces; increasing intergovernmental collaboration; retaining sufficient industrial land and office uses; encouraging the use of universal design principles; mitigating root causes of climate change; protecting pre-contact sites and monuments to preserve Native Hawaiian culture; improving quality and safety of the pedestrian environment; advancing the ecological value of parks by providing stormwater sequestration opportunities and migratory habitat.

According to the PUC DP, areas around rail stations (TOD neighborhoods) will be targeted for intense growth; particularly affordable housing and mixed-use redevelopment. However, the area around the ‘Āhua (Lagoon Drive) Skyline Station is not considered to be a focus area in the plan.

Ke‘ehi Lagoon Beach Park is designated as a preservation area in the PUC DP. According to Figure 2.5 of the PUC DP, there is a “significant public view” of Punchbowl from the shoreline of Ke‘ehi Lagoon Beach Park. The proposed Project aligns with polices in the PUC DP:

> *“Policy PPOS-3.2: Support park revitalization with additional park maintenance funding, partnerships, and staff.”*

Discussion: The proposed Project represents revitalization of Ke‘ehi Lagoon Beach Park, but it is acknowledged that it does not address park maintenance funding, partnerships, staffing or the chronically unhoused in County parks.

5.2.3 Land Use Ordinance

During the pre-assessment consultation process, the DPP wrote:

> *“Regarding compliance with ROH Chapter 21, the Draft EA must describe the Project's consistency with the development standards of the P-2 General Preservation District and other applicable LUO regulations. The analysis should include a comparison of the existing structures in relation to the proposed structures.”* (Appendix A)

The Land Use Ordinance, or LUO (ROH Chapter 21), is the CCH’s zoning ordinance. The LUO regulates land use in accordance with adopted land use policies, including the General Plan and Development/Sustainable Communities Plans. The LUO seeks to encourage orderly development and promote and protect public health, safety and welfare through the establishment of land use regulation and zoning districts. As shown on Figure 13, the Project Area is currently zoned P-2 (General Preservation District). The purpose of General Preservation zoning is to preserve and manage natural resources in the area. Examples of permitted uses include golf course, nature-based recreation, zoo, general marine (minor), and waste disposal and processing, among others.

Discussion: The proposed Project is consistent with the LUO in that “Park” is a permitted use in the P-2 zoning district. The scope of the proposed Project does not require rezoning the underlying property.

Per Section 21-3.110-1 of the LUO, within the P-2 General Preservation (zoning) District, the development standards are enumerated in Table 21-3.1 of the LUO. Under Table 21-3.1, the current height limit under P-2 zoning is shown on the zoning map (15-25 feet). Since the proposed comfort stations are designed to be 24 feet 6 inches high, the building heights of the comfort stations will be within the current height limit. Though the exact height of the proposed maintenance building is unknown at this time, it will be less than 25 feet.

The minimum lot area for parcels with P-2 zoning is 5 acres or more (the Project area is nearly 72 acres).

Under Table 21-3.1, the minimum lot width and depth is 200 feet. While the Project area is not a uniformly shaped polygon, the Project site exceeds the minimum lot width and depth development standards for the P-2 zoning district. Midway on the site from the northwest to the southeast, the lot width is approximately 900 feet. In the northeast to southwest direction, the lot depth is approximately 2,000 feet.

Within the P-2 zoning district, the minimum front yard setback is 30 feet, and the side yard setback is 15 feet. Assuming that Lagoon Drive entry can be considered the front yard, the closest facility to Lagoon Drive is the site for the replacement of Comfort Station 1 (which exceeds the minimum front yard setback of 30 feet by 770 feet). Comfort Station 2 is setback from the side yard by over 100 feet. The proposed maintenance facility building may be setback from the mauka side yard by 15 to 200 feet depending on where building is sited.

The maximum building area within the P-2 zoning district is 5 percent (approximately 156,751 SF on the Ke‘ehi Lagoon Beach Park site). It is presumed the total square footage of the existing Park buildings and the proposed comfort stations, and new maintenance facility building would not exceed the maximum build area of the Park property.

5.2.4 Special Management Area

During the pre-assessment consultation process, the OPSD wrote:

> *“If the subject EA serves as the supporting document for a Special Management Area (SMA) Use Permit application, the OPSD recommends that the EA specifically discuss the compliance with the requirements of SMA use and shoreline setbacks by consulting with the Department of Planning and Permitting, City and County of Honolulu.”* (Appendix A)

The CCH has designated the shoreline and certain inland areas of O‘ahu as being within the Special Management Area (SMA). The SMA areas are designated sensitive environments that are protected in accordance with the State’s CZM policies, as set forth in ROH Chapter 25. As shown in Figure 14, the Project is located entirely in the SMA and is subject to the provisions of ROH Chapter 25.

According to ROH §25-3.1, the objectives, policies, and guidelines of Chapter 25 are those of the CZM Program (HRS §205A-2), which is discussed in Section 5.1.2 of this EA. Discussion of how

the proposed Project meets the SMA objectives, policies, and guidelines (as summarized in ROH §25-3.1) is provided in Table 8 below.

Table 8: Special Management Area, ROH Chapter 25, Article 3

SPECIAL MANAGEMENT AREA, ROH CHAPTER, ROH, ARTICLE 3	
§ 25-3.1 Objectives, Policies, and Guidelines	**Discussion:**
(a) Recreational Resources *Development within the SMA should provide coastal recreational opportunities to the public. Adequate access, by dedication or other means, to beaches, coastal dunes, recreation areas, and natural reserves must be provided to the extent consistent with sound conservation principles. Adequate and properly located public recreation areas and wildlife preserves must be preserved.*	Ke'ehi Lagoon Beach Park provides coastal recreation opportunities for the public, such as paddling, fishing, and swimming. The proposed comfort stations will reduce the improper disposal of human waste around the Park. The proposed maintenance facility building will help to consolidate maintenance facilities that would benefit not only Ke'ehi Lagoon Beach Park but also other CCH parks in the area.
(b) Historic and Cultural Resources *Development in the SMA should protect, preserve, and restore natural or human-made historical and cultural resources.*	Given the extensive historic and modern development within the Project area, and the preparation of an archaeological LRFI report, the author, Keala Pono, concluded that it is unlikely that traditional surface features remain intact. The extensive land filling of the coastal region makes the survival of subsurface traditional features unlikely. Subsurface or submerged historic features may remain, considering the historic designation of the park and the features observed on the site. Therefore, archaeological monitoring is recommended for all ground disturbance. An archaeological monitoring plan will be prepared and accepted by the SHPD before any ground disturbing activities.
(c) Scenic and Open Space Resources *Development in the SMA should protect, preserve, and whenever desirable, restore or improve the quality of coastal scenic and open space resources. Alterations to existing land forms and vegetation, other than for the cultivation of coastal dependent crops, must be limited so they result in minimum adverse impacts on water resources, beaches, coastal dunes, and scenic or recreational amenities. Development that is not dependent on the coast is encouraged to locate mauka of the SMA.*	In general, it is anticipated that the reconstructed comfort stations will be a similar height to existing Comfort Station 2 and will not obstruct views. The proposed Maintenance Facility Building will be setback approximately 1,000 feet from the shoreline and mauka of the Skyline columns and track (which is the predominant vertical feature in the mauka portion of the Park).
(d) Coastal Ecosystems *Development in the SMA should protect valuable coastal ecosystems, including reefs, beaches, and coastal dunes from disruption, and minimize adverse impacts on all coastal ecosystems. Solid*	The proposed Project will not significantly impact coastal ecosystems such as reefs, beaches and coastal dunes, as the closest comfort station will be setback from the nearest shoreline by approximately 300 feet. BMPs will be

SPECIAL MANAGEMENT AREA, ROH CHAPTER, ROH, ARTICLE 3	
§ 25-3.1 Objectives, Policies, and Guidelines	**Discussion:**
and liquid waste treatment and disposition must be managed to minimize adverse impacts on SMA resources.	implemented during construction to prevent erosion and stormwater runoff during the construction phase. The amount of solid waste generated by park visitors is not expected to increase with the implementation of the proposed Project. The proposed Project buildings will be serviced from existing sewer laterals connected to the municipal wastewater system.
(e) Economic Uses *Development in the SMA should consist of facilities and improvements important to the State's economy, and 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 within the SMA.*	While Ke‘ehi Lagoon Beach Park is located on the coastline, it is not important to the State's economy. Locating the two reconstructed comfort stations and maintenance facility improvements in the mauka portion of the Park minimizes adverse environmental effects to the coastline.
(f) Coastal Hazards *Development in the SMA should reduce impacts of coastal hazards on life and property, and must be designed to minimize impacts from landslides, erosion, sea level rise, siltation, or failure in the event of earthquake.*	The proposed Project will not present coastal hazards to life and property. The Project site is not subject to landslides, erosion, or siltation. The proposed Project buildings will be elevated to minimize impacts of SLR and flooding. The buildings will also be designed to minimize failure in the event of earthquake.
(g) Managing Development and Public Participation *The review process should stimulate public awareness, education, and participation in coastal management.*	Early consultation (scoping) comments have been obtained, incorporated into this Draft EA and reproduced in Appendix A. There will be further opportunity for public input during the Draft EA Public Comment period, as well during SMA review.
(h) Beach and Dune Protection *Development in the SMA should facilitate beach management and protection by safeguarding beaches and coastal dunes for public use and recreation, the benefit of ecosystems, and use as natural buffers against coastal hazards. New structures should be located mauka of the shoreline setback line to conserve open space, minimize interference with natural shoreline processes, and minimize the loss of improvements due to erosion.*	The proposed Project will not destroy any naturally occurring beaches or sand dunes. The *Natural Resources Conservation Service, Soil Survey for the Island of O‘ahu* classifies the soil underlying most of the Ke‘ehi Lagoon Beach Park as Fill land, mixed (FL) - not naturally occurring sandy beach or sand dune. In general, the fill under the Park consists of materials dredged to create Honolulu Harbor and adjoining waterways, such as earthen material hauled from nearby areas, garbage, and other general material from inland sources (Soil Conservation Service, 1972).

SPECIAL MANAGEMENT AREA, ROH CHAPTER, ROH, ARTICLE 3	
§ 25-3.1 Objectives, Policies, and Guidelines	**Discussion:**
(i) Marine and Coastal Resources *Development within the SMA should promote the protection, use, and development of marine and coastal resources to ensure that these resources are ecologically and environmentally sound and economically beneficial. Impacts on water resources, beaches, coastal dunes, and scenic or recreational amenities resulting from the construction of structures must be minimized. Development within wetland areas should be limited to activities that are dependent on or enhance wetlands, or are otherwise approved by appropriate State and federal agencies. Examples include traditional Hawaiian agricultural uses such as wetland taro production, aquaculture, and fishpond management, as well as activities that clean and restore traditional wetland areas or create new wetlands in appropriate areas.*	As previously noted, the Ke'ehi Lagoon Beach Park is built on fill from materials dredged to create Honolulu Harbor and adjoining waterways. The proposed Project will not significantly impact coastal ecosystems such as water resources, beaches, and scenic or recreational resources, as the closest comfort station will be setback from the nearest shoreline by approximately 300 feet. BMPs will be implemented during construction to prevent erosion and stormwater runoff during the construction phase. There are no wetland areas within the Park boundaries other than a portion of the waters of Ke'ehi Lagoon.
(j) Cumulative Impact or Significant Effect and Compelling Public Interest *Development in the SMA should not have any cumulative impact or significant effect, unless minimized to the extent practicable and clearly outweighed by public health, safety, or other compelling public interest.*	Cumulatively, the proposed Project will not have a significant effect as the proposed comfort stations and maintenance facility improvements will benefit existing and future park users and public health. The proposed maintenance facility building will serve to facilitate maintenance of Ke'ehi Lagoon Beach Park and other parks. Since the proposed comfort stations will replace an existing and a demolished comfort station, and the proposed maintenance facility will be located within a portion of the Park not used by Park users, there will be no cumulative negative impacts on park usage.
(k) Consistency with Plans and Regulations *Development within the SMA must be consistent with the general plan, development plans and sustainable communities plans, and zoning ordinances; provided that a finding of inconsistency does not preclude concurrent processing of amendments to applicable plans or a zone change.*	Consistency of the Ke'ehi Lagoon Beach Park improvements with the O'ahu General Plan, Primary Urban Center Development Plan, and the LUO (zoning ordinance) is addressed in Sections 5.2.1, 5.2.2, and 5.2.3 of this EA.

5.2.5 CCH Administrative Rules Title 20 DPP Chapter 31 Shoreline Setbacks and the Special Management Area

Title 20, Chapter 31 of the CCH Administrative Rules implements HRS Chapter 205A and ROH Chapters 25 and 26, regulating development near the shoreline to protect coastal resources, public

safety, and beach access. The rules were formally adopted in July 2024 and took effect on July 25, 2024, replacing the former DPP "Part 2" shoreline rules.

As stated in Section 20-31-9, a., "Shoreline zoning lots in Primary Urban Center Development area are subject to a 60-foot shoreline setback." The proposed Project involves two reconstructed comfort stations and a maintenance facility building. Of the three buildings, the closest building to the shoreline being proposed is the replacement of Comfort Station 1, which will be setback from the nearest shoreline by approximately 300 feet. Therefore, all of the proposed buildings will be setback at least an additional 240 feet inland from the mandated 60-foot shoreline setback.

5.3 LIST OF REQUIRED PERMITS AND APPROVALS

During the pre-Assessment consultation process, the OPSD wrote:

> *"The EA should discuss… a list of all required permits and approvals."* (Appendix A)

Anticipated permits and approvals that may be required are outlined in Table 9 below.

Table 9: Required Permits and Approvals

AGENCY	PERMIT/APPROVAL
Federal	
Federal Aviation Administration	• Form 7460-1 (Notice of Proposed Construction or Alteration)
State of Hawai'i	
Department of Health	• Dust Control Plan • Noise Permit (if necessary) • Disability and Communication Access Board (DCAB) Review and Approval
Department of Land and Natural Resources, State Historic Preservation Division	• HRS Section 6E Review
City and County of Honolulu	
Board of Water Supply	• BWS Review and Approval
Department of Environmental Services	• Industrial Wastewater Discharge Permit (application submitted)
Department of Planning and Permitting	• ROH Chapter 25 Compliance • SMA Use Permit – Major • Grading Permit • Building Permit (electrical, plumbing, civil) • Occupancy Permit • Site Development Master Application for Sewer Connection • Storm Drain Connection License (if necessary) • Storm Water Quality Permit • Rules Relating to Water Quality and Storm Drainage Standards Compliance • Flood Certification

6.0 ALTERNATIVES

In compliance with the provisions of HAR Section 11-200.1-18(d)(7) relating to Environmental Assessments, an environmental assessment must discuss potential alternatives to the proposed action which could attain the objectives of the action in sufficient detail to explain why they were rejected. Two alternatives were considered: using the existing comfort station locations and pursuing no action.

6.1 PREFERED LOCATIONS

The preferred locations for the reconstructed comfort stations are shown in Figure 5. These locations were selected based on park use and operational needs, and also to place the comfort stations outside of the 6-foot AMSL SLR exposure area to ensure continued use of the structures. Comfort Station 1 would be reconstructed northwest of the previous site and Comfort Station 2 would be moved about 500 feet west, towards the center of the beach park. The Maintenance Facility would be improved on the existing site. Refer to Figure 12: Sea Level Rise.

6.2 EXISTING LOCATIONS

This alternative would involve the reconstruction of the comfort stations on the existing site of Comfort Station 2 and the previous site of Comfort Station 1. The Maintenance Facility would be improved on its existing site. Under this alternative, disturbance to the beach park would be limited but the replacement comfort stations would be built within the 6-foot AMSL SLR exposure area, leaving these structures vulnerable to future SLR and flood damage. This alternative was rejected because it would not support long-term use of the beach park.

6.3 NO ACTION

The no action alternative would involve no change to the existing site. Under this alternative, the comfort stations would not be reconstructed, and the maintenance facility site would not be improved. This would involve continuing to utilize the "operational" Comfort Station 2. While this alternative could avoid any adverse impacts (such as construction noise), it would not meet the objective of the Project as stated in Section 2.2 of this EA:

> *"The CCH's objective is ensure that Ke'ehi Lagoon Beach Park is well-maintained and fully operational. While the Park has two operational comfort stations, it plans improvements to yield three operational comfort stations, improving the health and safety of park users. To support maintenance of Ke'ehi Lagoon Beach Park and surrounding parks, the CCH also plans to improve the existing onsite maintenance facility."*

Since Comfort Station 2 has floor elevations below the BFE (9 feet) and is subject to flooding and has substantial termite damage, the objective of the proposed Project will not be met. Two reconstructed comfort stations, designed and constructed to specifically meet the needs and unique requirements of a modern-day comfort station were determined to be the best solution to maximize both long-term use and safety. Therefore, the "No Action" alternative was rejected.

(This page is intentionally left blank.)

7.0 FINDINGS, SUPPORTING REASONS, AND ANTICIPATED DETERMINATION

To determine whether the proposed Project may have a significant impact on the physical and human environment, all phases and expected consequences of the proposed Project have been evaluated, including potential primary, secondary, short-range, long-range, and cumulative impacts. Based on this evaluation, the Approving Agency (DDC) anticipates issuing a FONSI for the Project. The supporting rationale for this finding is presented in this chapter.

7.1 PROBABLE IMPACT, INCLUDING CUMULATIVE IMPACTS

Cumulative impacts are impacts on the environment that result from the action when added to other past, present, and foreseeable future actions by other agencies or persons. Examples of possible cumulative impacts of a proposed action could be those related to increased noise and disruption of recreational activities.

The proposed Project will consist of three major elements: installation of two new comfort stations, demolition of the existing comfort station, and the construction of a new maintenance facility building in a future phase.

The proposed Project will not result in an increase in the number of new residents living in the area. Therefore, the Project will not significantly contribute to impacts resulting from an increase in resident (or park user) population, such as increased demand on infrastructure, increased peak-hour traffic in the area, increased demand on public services or facilities, or an increased demand on natural resources in the vicinity of the Project site. Economic impacts resulting from the proposed Project are anticipated to be beneficial and immediate, but of a short-term nature, as construction will generate excise taxes, employment, and income taxes. Once the proposed improvements are in operation, social benefits will be positive as future park users will have a total of three comfort stations to use (including existing Comfort Station 3), and DPR will have better park maintenance facilities (not subject to potential flooding) to maintain Ke‘ehi Lagoon Beach Park and other nearby parks.

7.2 SIGNIFICANCE CRITERIA

Based upon the previous information presented in this document the proposed permitting and construction of the Project will likely have no significant environmental impacts, either during its construction or operation. This determination is based upon the 13 Significance Criteria outlined in HRS Chapter 343, as amended and HAR Title 11 Chapter 200.1-131996, discussed below.

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

Since the proposed comfort stations and maintenance facility building are sited on a park created by fill and in operation since the mid-1960’s, it will not irrevocably commit a natural, cultural or historic resource.

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

The proposed Project will not curtail the range of beneficial uses of the environment as the Site is currently used as County beach park and will not hinder access to the ocean or permanently disrupt users access to recreational facilities (such as canoe paddling, tennis or pickleball).

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

The Environmental Policies enumerated in HRS Chapter 344 promote conservation of natural resources, and an enhanced quality of life for all citizens. As detailed in Section 5.1.4 above, the proposed Project does not conflict with the State's long-term environmental policies, goals, or guidelines as expressed in HRS Chapter 344, and will not significantly impact natural resources due to the fact that the Project site is already developed as public park and has been subject to intense human utilization since the mid-1960s.

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

The relatively small scale of the proposed Project should not have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State. Once the proposed improvements are in operation, social benefits will be positive as future park users will have a total of three comfort stations to use (including existing Comfort Station 3), and DPR will have better park maintenance facilities (not subject to potential flooding) to maintain Ke‘ehi Lagoon Beach Park and other nearby parks.

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

The potential temporary impacts related to noise, air or water quality during construction will be addressed through construction management practices in compliance with State and County requirements. The Project site does not abut residential areas, public schools, hospitals or medical centers.

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

The proposed Project does not involve residential use and will not generate new permanent population on-site or cause population change, and as a result, the proposed Project will have no effect on public facilities.

(7) Involve a substantial degradation of environmental quality;

No substantial environmental degradation is anticipated. The proposed Project will not result in an increase in the number of new residents living in the area. Therefore, the Project will not significantly contribute to impacts resulting from an increase in resident (or park user) population, such as increased demand on infrastructure, increased peak-hour traffic in the area, increased demand on public services or facilities, or an increased demand on natural resources in the vicinity of the Project site.

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

The proposed Project involves relatively modest improvements to Ke‘ehi Lagoon Beach Park. Since the State (landowner) and CCH are committed to beach park use of the property, there is no commitment for larger actions, such waterfront industrial and/or commercial use. Such uses would generate more economic benefits, but would also generate more runoff, traffic, air pollution, noise, visual impacts, wastewater and solid waste.

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

The site contains no habitat for rare, threatened or endangered plant or animal species or their respective habitats. The proposed Project will involve changes and/or improvements to existing built, paved and landscaped areas, which will not attract or provide a feeding or nesting habitat. Due to the history of human utilization of the park, the proposed Project is not anticipated to have any impact on protected or endangered floral or faunal species habitat or ecosystems. The only potential exception is the ‘ōpe‘ape‘a. However, there are no plans to clear woody vegetation taller than 15 feet between June and September (during pupping season) or used barbed wire for fencing. Therefore, there will be no negative impacts on the ‘ōpe‘ape‘a population.

BMPs will be used to avoid dust or runoff that could potentially harm honu and monk seal populations. Due to the distance the proposed facilities are setback from the shoreline, it is highly unlikely construction areas will encounter nesting honu or resting monk seals.

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

Air Quality: It is anticipated that no State or Federal air quality standards will be violated during or after the construction of the proposed Project.

Water Quality: It is also anticipated that no State water quality standards should be violated during or after the construction of the Project.

Ambient Noise Levels: Construction activities for the proposed Project will inevitably create temporary noise impacts. The Proposing Agency’s contractor may employ mitigation measures to minimize those temporary noise impacts including the use of mufflers and implementing construction curfew periods. Pursuant to HAR Chapter 11-46, the Project contractors will need to comply with all community noise controls.

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

The Project site does not lie in an environmentally sensitive area such as a beach, erosion-prone area, geologically hazardous land, estuary, freshwater or coastal waters. The Project site is located within Flood Hazard Zone AE (BFE 9 feet). The proposed comfort stations and maintenance facility building are planned to have floor elevations at 9 feet AMSL, or higher, to be above the Federal Emergency Management Agency BFE and meet the CCH’s floodplain management ordinance. The 9-foot floor elevation is also above the potential 3.2-foot and 6-foot SLR scenarios.

The Project site (and many areas mauka and to the west) are in the tsunami and extreme tsunami evacuation zone. The nearby ‘Āhua (Lagoon Drive) Skyline Station may provide adequate vertical evacuation from tsunami inundation.

(12) Have a substantial adverse effect on scenic vistas and viewplanes, during day or night, identified in county or state plans or studies; or,

The proposed Project will not have a substantial adverse effect on scenic vistas and viewplanes identified in CCH plans. According to Figure 2.5 of the PUC DP, there is a “significant public view” of Punchbowl from the shoreline of Ke‘ehi Lagoon Beach Park. It is anticipated that the new comfort stations will be a similar height to Comfort Station 2 and will not obstruct views from the shoreline towards Punchbowl. The proposed maintenance facility building will be setback approximately 1,000 feet from the shoreline and mauka of the Skyline columns and track (which is the predominant vertical feature in the mauka portion of the Park).

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

The construction and operation of the proposed Project will not require substantial energy consumption nor produce substantial greenhouse gases.

7.3 ANTICIPATED DETERMINATION

On the basis of impacts and mitigation measures examined in this document and analyzed under the above criteria, it is anticipated that the proposed Project will not have a significant effect on the physical or human environments. Pursuant to ROH Chapter 25, and HRS Chapter 205A, the approving agency, DDC anticipates issuing a FONSI.

8.0 REFERENCES

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Appendix A

Pre-Assessment Consultation Comments and Responses

STATE OF HAWAI'I
OFFICE OF PLANNING
& SUSTAINABLE DEVELOPMENT

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

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Coastal Zone Management Program

Environmental Review Program

Land Use Commission

Land Use Division

Special Plans Branch

State Transit-Oriented Development

Statewide Geographic Information System

Statewide Sustainability Branch

DTS202601021613MO

January 26, 2026

Mr. Greg Nakai
PBR Hawai'i & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, HI 96813

Dear Mr. Nakai:

Subject: Pre-Assessment Consultation for a Hawai'i Revised Statutes Chapter 343 Environmental Assessment in Support of a Special Management Area Use Permit Application, for Proposed Improvements at Ke'ehi Lagoon Beach Park, O'ahu; Tax Map Key: (1) 1-1-003: 239

The Office of Planning and Sustainable Development (OPSD) is in receipt of your early consultation request, received January 2, 2026, on the preparation of an Environmental Assessment (EA), for the proposed improvements at Ke'ehi Lagoon Beach Park, O'ahu.

According to the request, the improvements to Ke'ehi Lagoon Beach Park proposed by the City and County of Honolulu Department of Design and Construction, will involve: a) the demolition of one existing comfort station; b) the construction of two new comfort stations within the Park; and c) the construction of a maintenance facility building in the mauka corner of the Park in a future phase.

The OPSD has reviewed the pre-assessment consultation request, and has the following comments to offer:

1. The EA should discuss the triggers for the preparation of an EA set forth in Hawai'i Revised Statutes (HRS) Chapter 343, as well as a list of all required permits and approvals. Furthermore, the EA should contain the project location maps, including the regional location on the Island of O'ahu, and provide schematic plans or drawing indicating the scope of the project.

2. The Hawai'i CZM Law requires all state and county agencies to comply with the CZM objectives and policies. Pursuant to HRS § 205A-4, in implementing the objectives of the CZM Program, the agencies shall give full consideration to ecological, cultural, historic, esthetic, recreational,

scenic, and open space values, and coastal hazards, as well as to needs for economic development. For information disclosure, the subject EA should include an assessment with mitigation measures, if needed, as to how the proposed project conforms to applicable CZM objectives and policies set forth in HRS § 205A-2, as amended.

3. If the subject EA serves as the supporting document for a Special Management Area (SMA) Use Permit application, the OPSD recommends that the EA specifically discuss the compliance with the requirements of SMA use and shoreline setbacks by consulting with the Department of Planning and Permitting, City and County of Honolulu.

4. To assess potential impacts of sea level rise on the property area, the OPSD suggests the EA refer to the findings of the Hawaii Sea Level Rise Vulnerability and Adaptation Report 2017 and its 2022 update, accepted by the Hawaii Climate Change Mitigation and Adaptation Commission. The Report, and Hawaii Sea Level Rise Viewer at https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/ particularly identifies a 3.2-foot sea level rise exposure area across the main Hawaiian Islands which may occur in the mid to latter half of the 21st century. The EA should provide a map of the 3.2-foot sea level rise exposure area, especially from passive (high-tide) flooding, in relation to the project area, and assess the potential impacts of sea level rise, including inundation of saltwater on the proposed ground and underground infrastructure and facilities.

5. In enacting Act 224, Session Laws of Hawai'i 2005, the legislature found that light pollution in Hawai'i's coastal areas and artificial lighting illuminating the shoreline and ocean waters can be disruptive to avian and marine life. Pursuant to HRS §§ 205A-30.5(b) and 205A-71(b), for artificial lighting provided by a government agency or its authorized users for government operations, security, public safety, or navigational needs, a government agency or its authorized users shall make reasonable efforts to properly position or shield lights to minimize adverse impacts of lighting.

If you respond to this comment letter, please include DTS202601021613MO in the subject line. For any questions regarding this letter, please contact Shichao Li of our office at (808) 587-2841 or by email at shichao.li@hawaii.gov.

Sincerely,

Mary Alice Evans

Mary Alice Evans
Director

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& ASSOCIATES, INC.

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June 30, 2026

Ms. Mary Alice Evans, Director
State of Hawaiʻi
Office of Planning & Sustainable Development
P.O. Box 2359
Honolulu, HI 96804

Attn: Shichao Li, OPSD

SUBJECT: DTS202601021613MO
PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT (EA) IN SUPPORT OF A SPECIAL MANAGEMENT AREA (SMA) MAJOR PERMIT APPLICATION, FOR PROPOSED IMPROVEMENTS AT KEʻEHI LAGOON BEACH PARK, OʻAHU, TMK (1) 1-1-003:239

Dear Ms. Evans:

Thank you for the Office of Planning & Sustainable Development's (OPSD's) letter (reference # DTS202601021613MO) dated January 26, 2026, regarding the subject Project. As the planning subconsultant to the City and County of Honolulu (CCH) Department of Design and Construction, we appreciate your comments and offer the following responses:

1. The Draft Environmental Assessment (EA) will include discussions regarding the triggers for the preparation of an EA set forth in Hawaiʻi Revised Statutes (HRS) Chapter 343, a list of all required permits and approvals, project location maps, and plans/drawings indicating the scope of the project.
2. The Draft EA will address the project's conformance with applicable Coastal Zone Management (CZM) objectives and policies pursuant to HRS Chapter 205A.
3. The EA will serve as a supporting document for a SMA Major Use application and the Draft EA will discuss the compliance with the requirements of SMA use and shoreline setbacks. As recommended, the CCH Department of Planning and Permitting will also be consulted regarding SMA and shoreline setback requirements.
4. The Draft EA will refer to the findings of the Hawaiʻi Sea Level Rise Vulnerability and Adaptation Report 2017 and its 2022 update, provide a map of the 3.2-foot sea level rise exposure area in relation to the project area, and assess potential impacts of sea level rise.
5. The Draft EA will include a discussion of potential impacts of light pollution on avian and marine life and how the project will comply with HRS §§ 205A-30.5(b) and 205A-71(b).

We value your participation in the environmental review process. Your letter and our response will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai
Senior Associate

cc: Department of Design and Construction
RMA Architects, Inc.

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STATE OF HAWAIʻI | KA MOKUʻĀINA ʻO HAWAIʻI
DEPARTMENT OF TRANSPORTATION | KA ʻOIHANA ALAKAU
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO

STP 00991.26
STP 8.4025

January 29, 2026

VIA EMAIL: gnakai@pbrhawaii.com

Mr. Greg Nakai
Senior Associate / Planner
PBR Hawaii & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaii 96813-3484

Dear Mr. Nakai:

Subject: Pre-Assessment Consultation for an Environmental Assessment in Support of a Special Management Area Major Permit
Keehi Lagoon Beach Park Improvements
Honolulu, Oahu, Hawaii
Tax Map Key: (1) 1-1-003: 239

Thank you for your letter, dated December 29, 2025, requesting the Hawaii Department of Transportation's (HDOT) review and comments on the subject project. The HDOT understands the City and County of Honolulu, Department of Design and Construction is proposing the following improvements at Keehi Lagoon Beach Park: 1) the demolition of one existing comfort station, 2) the construction of two new comfort stations within the park, and 3) the construction of a maintenance facility building in the mauka corner of the park in a future phase.

The HDOT has the following comments:

1. The proposed project is adjacent to Daniel K. Inouye International Airport (HNL). All projects within five miles from Hawaii State airports are advised to read the Technical Assistance Memorandum (TAM) for guidance with development and activities that may require further review and permits. The TAM can be viewed at this link: http://files.hawaii.gov/dbedt/op/docs/TAM-FAA-DOT-Airports_08-01-2016.pdf.

2. The project site is approximately 1,562 feet from the end of Runway 4R/22L at HNL. Federal Aviation Administration (FAA) regulations require the submittal of the FAA Form 7460-1 Notice of Proposed Construction or Alteration pursuant to the Code of Federal Regulations, Title 14, Part 77.9, if the construction or alteration is within 20,000 feet of a public use or military airport, which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 feet.

Construction equipment and staging area heights, including temporary construction cranes, shall be included in the submittal. The form and submission criteria can be found at the following website: https://oeaaa.faa.gov/oeaaa/external/portal.jsp. Please provide a copy of the FAA response to the Part 77 analysis to the HDOT Airports Planning Section.

3. The project site is within the 60-75 DNL (Day Night Level) noise contours on the attached 2008 HNL Noise Exposure Map. The HDOT recommends reviewing the attached State of Hawaii Land Use Compatibility Guidelines to ensure the project can include mitigations, dependent on the proposed uses.

4. Due to the project's proximity to HNL, the applicant and future users should be aware of potential single-event noise from aircraft operations. There is also potential for fumes, smoke, vibrations, odors, etc., resulting from occasional aircraft flight operations over or near the project. These incidences may increase or decrease over time and are dependent on airport operations.

Please submit any subsequent land use entitlement-related requests for review or correspondence to the HDOT Land Use Intake email address at DOT.LandUse@hawaii.gov.

If there are any questions, please contact Mr. Blayne Nikaido, Planner, Land Use Section of the HDOT Statewide Transportation Planning Office at (808) 831-7979 or via email at blayne.h.nikaido@hawaii.gov.

Sincerely,

EDWIN H. SNIFFEN
Director of Transportation

Attachments

Reference: U.S.G.S. Drg File from Charttiff Data, Image
Peak Systems Corporation
Survey Dates 4/1997, 7/2000, 1/2001



AIRPORTS DIVISION DEPARTMENT OF TRANSPORTATION STATE OF HAWAII	HONOLULU INTERNATIONAL AIRPORT MASTER PLAN UPDATE AND N0ISE COMPATIBILITY PROGRAM	Edward K. Noda and Associates,Inc	2008 (FORECAST) FIVE YEAR NOISE EXPOSURE MAP NO MITIGATION SCENARIO	FIGURE 5 –1

Table 2-3
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION
LAND USE COMPATIBILITY
WITH YEARLY DAY-NIGHT AVERAGE SOUND LEVELS

LAND USE	YEARLY DAY-NIGHT AVERAGE SOUND LEVEL					
	<60	60-65	65-70	70-75	75-80	80-85
Residential						
Low density residential, resorts, and hotels with extensive outdoor use	Y(a)	N(b)	N	N	N	N
Low density apartment with moderate outdoor use	Y	N(b)	N	N	N	N
High density apartment with limited outdoor use	Y	N(b)	N(b)	N	N	N
Transient lodgings with limited outdoor use	Y	N(b)	N(b)	N	N	N
Public Use						
Schools, day-care centers, libraries, and churches	Y	N(c)	N(c)	N(c)	N	N
Hospitals, nursing homes, clinics, and health facilities	Y	Y(d)	Y(d)	Y(d)	N	N
Indoor auditoriums and concert halls	Y(c)	Y(c)	N	N	N	N
Government service and office buildings serving the general public	Y	Y	Y(d)	Y(d)	N	N
Transportation and parking	Y	Y	Y(d)	Y(d)	Y(d)	Y(d)
Commercial and Government Use						
Offices - government, business, and professional	Y	Y	Y(d)	Y(d)	N	N
Wholesale and retail - building materials, hardware and heavy equip.	Y	Y	Y(d)	Y(d)	Y(d)	Y(d)
Airport businesses - car rental, tours, lei stands, ticket offices, etc.	Y(c)	Y(c)	N	N	N	N
Retail trade, restaurants, shopping centers, financial institutions, etc.	Y	Y	Y(d)	Y(d)	N	N
Power plants, sewage treatment plants, and base yards	Y	Y	Y(d)	Y(d)	N	N
Studios without outdoor sets, broadcasting, production facilities, etc.	Y	Y	Y(d)	Y(d)	Y(d)	N
Manufacturing, Production and Storage						
Manufacturing, general	Y	Y	Y(d)	Y(d)	Y(d)	N
Photographic and optical	Y	Y	Y(d)	Y(d)	N	N
Agriculture (except livestock) and forestry	Y	Y(e)	Y(e)	Y(e)	Y(e)	Y(e)
Livestock farming and breeding	Y	Y(e)	Y(e)	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor sports arenas and spectator sports	Y	Y(f)	Y(f)	N	N	N
Outdoor music shells, amphitheaters	Y(f)	N	N	N	N	N
Nature exhibits and zoos, neighborhood parks	Y	Y	Y	N	N	N
Amusements, beach parks, active playground, etc.	Y	Y	Y	Y	N	N
Public golf courses, riding stables, cemeteries, gardens, etc.	Y	Y	N	N	N	N
Professional/resort sport facilities, locations of media events, etc.	Y(f)	N	N	N	N	N
Extensive natural wildlife and recreation areas	Y(f)	N	N	N	N	N

Key to Table 2-3

Y (Yes) Land Use and related structures compatible without restrictions.
N (No) Land Use and related structures are not compatible and should be prohibited.

(a) A noise level of 60 DNL does not eliminate all risks of adverse noise impacts from aircraft noise. However, the 60 DNL planning level has been selected by the State Airports Division as an appropriate compromise between the minimal risk level of 55 DNL and the significant risk level of 65 DNL.

(b) Where the community determines that these uses must be allowed, Noise Level Reduction (NLR) measures to achieve interior levels of 45 DNL or less should be incorporated into building codes and be considered in individual approvals. Normal local construction employing natural ventilation can be expected to provide an average NLR of approximately 9 dB. Total closure plus air conditioning may be required to provide additional outdoor to indoor NLR, and will not eliminate outdoor noise problems.

(c) Because the DNL noise descriptor system represents a 24-hour average of individual aircraft noise events, each of which can be unique in respect to amplitude, duration, and tonal content, the NLR requirements should be evaluated for the specific land use, interior acoustical requirements, and properties of the aircraft noise events. NLR requirements should not be based solely upon the exterior DNL exposure level.

(d) Measures to achieve required NLR must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.

(e) Residential buildings require NLR. Residential buildings should not be located where noise is greater than 65 DNL.

(f) Impact of amplitude, duration, frequency, and tonal content of aircraft noise events should be evaluated.

This table has been adapted from the Federal Aviation Administration Land Use Compatibility Table, Advisory Circular 150/5020-1 (dated August 5, 1983). This table is for land use planning purposes only.

Fair disclosure of aviation noise impacts for real estate transactions are required for properties within the boundaries of the noise exposure area shown on maps prepared by DOT (Hawaii Revised Statutes, 508D-15).

4. The State elected to recommend a 60 DNL cutoff level, for residential single-family housing, instead of a 55 DNL. The 60 DNL level with the nominal NLR of 10 decibels results in an interior noise level of 45 DNL. It was felt that the reduction of the exterior sound level from 65 to 60 DNL would compensate, to some extent, for the interior noise level being 5 decibels above the 45 DNL goal.

The State has applied this 5 DNL criteria to all noise sensitive land uses and has reconstructed the land use guideline table to reflect these changes (see Table 2-4). This new land use guideline was presented to the FAA to determine if federal funding would be available for noise mitigation projects between the 60 and 65 DNL contours. The FAA's reply to the State (Reference 2) states that a case-by-case review of each recommended noise mitigation measure will be required prior to any federal funding for proposed measures within the 60 and 65 DNL noise contours.

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June 30, 2026

Mr. Edwin H. Sniffen
Director
State of Hawai'i
Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813-5097

Attn: Blayne Nikaido, HDOT Statewide Transportation Planning Office

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT (EA) IN SUPPORT OF A SPECIAL MANAGEMENT AREA (SMA) MAJOR PERMIT APPLICATION, FOR PROPOSED IMPROVEMENTS AT KE'EHI LAGOON BEACH PARK, O'AHU, TMK (1) 1-1-003:239

Dear Mr. Sniffen:

Thank you for the Hawai'i Department of Transportation's (HDOT's) letter (your reference # STP 00991.26, STP 8.4025) dated January 29, 2026, regarding the subject Project. As the planning subconsultant to the City and County of Honolulu Department of Design and Construction, we appreciate your comments and the materials you provided, and offer the following responses:

1. We appreciate your comment that the proposed Project is adjacent to the Daniel K. Inouye International Airport (HNL) and that all projects within five miles from Hawai'i State airports are advised to read the Technical Assistance Memorandum (TAM) for guidance with development and activities that may require further review and permits. The Draft Environmental Assessment (EA) will include discussion of any applicable required permits as outlined in the TAM.

2. We acknowledge your comment regarding the Project's proximity to the nearest HNL runway and that Federal Aviation Administration (FAA) regulations require the submittal of the FAA Form 7460-1 Notice of Proposed Construction or Alteration pursuant to the Code of Federal Regulations, Title 14, Part 77.9, if the construction or alteration is within 20,000 feet of a public use (or military) airport, which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 feet. The Project Proponent has confirmed with the HDOT planning office that FAA Form 7460-1 will be submitted for the comfort stations and the maintenance facility, and FAA Form 7460-1 will be added to the list of necessary approvals in the Draft EA.

3. We acknowledge your comment that the Project site is located within the 60-75 day-night average sound level (DNL) noise contours on the 2008 HNL Noise Exposure Map. We also understand that the land use compatibility table classifies beach parks as compatible at any sound level under the 75-80 DNL range. This information will be included in the Draft EA.

4. The Draft EA will include a discussion regarding the Project's proximity to HNL and the potential for single-event noise, fumes, smoke, vibrations, odors, etc., resulting from occasional aircraft flight operations over or near the Project. The potential for these instances will be mentioned in the Draft EA.

We value your participation in the environmental review process. Your letter, attachments, and our response will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai
Senior Associate

cc: Department of Design and Construction
RMA Architects, Inc.

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

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January 28, 2026

Mr. Greg Nakai
PBR Hawaiʻi & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawaiʻi 96813-3484

Dear Mr. Nakai:

Subject: Your Letter Dated December 29, 2025, Requesting Comments on the Environmental Assessment Pre-Consultation of a Special Management Area Major Permit for Proposed Improvements at Keʻehi Lagoon Beach Park off Lagoon Drive – Tax Map Key: 1-1-003: 239

Thank you for your letter regarding the proposed comfort park improvement project involving the demolition of one comfort station, construction of two new comfort stations, and construction of a maintenance facility.

The existing water system is currently adequate to accommodate the proposed development. However, please be advised that the existing Honolulu water system capacity has been reduced due to the shut-down of the Hālawa Shaft station as a proactive measure to prevent fuel contamination from the Navy's Red Hill Bulk Storage Tank fuel releases. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval, pending evaluation of the water system conditions at that time on a first-come, first-served basis. 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.

We continue to request 10% voluntary water conservation of all customers until new sources are completed and require water conservation measures in all new developments. If water consumption significantly increases, progressively restrictive conservation measures may be required to avoid low water pressures and disruptions of water service.

Presently, there is no moratorium on the issuance of new and additional water services. Water distributed via the BWS water systems remains safe for consumption. The BWS is closely monitoring water usage and will keep the public informed with the latest findings. Please visit our website at www.boardofwatersupply.com and www.protectoahuwater.org for the latest updates and water conservation tips.

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 on-site greywater reuse in accordance with Hawai'i State Department of Health guidelines, rain catchment for nonpotable uses, stormwater capture, and the use of Water Sense labeled ultra-low-flow water fixtures and toilets. Landscape elements should incorporate green infrastructure design, drought tolerant plants, xeriscaping, rain catchment, efficient irrigation systems such as a drip system and moisture sensors, and other Water Sense labeled fixtures and devices.

Consistent with Act 170, 2016 (H.B. 1749), Chapter 174C-31(g)(6), Hawai'i Revised Statutes, all City-owned and/or managed projects are required to utilize reclaimed water for uses other than drinking and potable water demands of the proposed project. The developer should investigate the feasibility of using reclaimed water and submit a report of the investigation to the BWS for our review.

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.

The BWS requests an update of the conversion of the Ke'ehi Lagoon Park irrigation system to the BWS Kalauao Spring nonpotable system, which fronts the park's entrance road. We understand the Department of Parks and Recreation requested the conversion in coordination with the BWS.

If you have any questions, please contact Barry Usagawa, Water Resources Division, at (808) 748-5900

Very truly yours,

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

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& ASSOCIATES, INC.

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June 30, 2026

Mr. Ernest Y.W. Lau, P.E.
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, HI 96843

Attn: Barry Usagawa, Water Resources Division

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT (EA) IN SUPPORT OF A SPECIAL MANAGEMENT AREA (SMA) MAJOR PERMIT APPLICATION, FOR PROPOSED IMPROVEMENTS AT KE'EHI LAGOON BEACH PARK, O'AHU, TMK (1) 1-1-003:239

Dear Mr. Lau:

Thank you for the Board of Water Supply's (BWS's) letter dated January 28, 2026, regarding the subject Project. As the planning subconsultant to the City and County of Honolulu Department of Design and Construction, we appreciate your comments. The information you provided regarding water availability, Water System Facilities Charges, water conservation measures, utilization of reclaimed water, BWS Cross-Connection Control and Backflow Prevention requirements, construction drawing review, and on-site fire protection requirements will be included in the Draft Environmental Assessment (EA). The Department of Parks and Recreation will continue to coordinate with the BWS regarding the conversion of the Ke'ehi Lagoon Park irrigation system to the BWS Kalauao Spring non-potable system.

We value your participation in the environmental review process. Your letter and our response will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai
Senior Associate

cc: Department of Design and Construction
RMA Architects, Inc.

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DEPARTMENT OF ENVIRONMENTAL SERVICES
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HOPE PO'O

IN REPLY REFER TO
PRO 26-006

February 2, 2026

SENT VIA EMAIL

Mr. Greg Nakai, Senior Associate/Planner
PBR HAWAII & Associates, Inc.
gnakai@pbrhawaii.com

Dear Mr. Nakai:

SUBJECT: Pre-assessment Consultation for Hawai'i Revised Statutes Chapter 343 Environmental Assessment (EA) in Support of a Special Management Area (SMA) Major Permit Application, for Proposed Improvements at Ke'ehi Lagoon Beach Park, O'ahu, TMK (1) 1-1-003:239

We have reviewed your letter dated December 29, 2025. The Department of Environmental Services has no comment. You may remove us as a consulted party for the balance of the EA process.

Should you have any questions, please contact Nannette Tong, Engineering Support Technician, at (808) 768-3465.

Sincerely,

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

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June 30, 2026

Mr. Roger Babcock, Jr., Ph.D., P.E.
Director
Department of Environmental Services
City and County of Honolulu
1000 Ulu‘ōhi‘a Street, Suite 308
Kapolei, HI 96707

Attn: Nannette Tong, Engineering Support Technician

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT (EA) IN SUPPORT OF A SPECIAL MANAGEMENT AREA (SMA) MAJOR PERMIT APPLICATION, FOR PROPOSED IMPROVEMENTS AT KE‘EHI LAGOON BEACH PARK, O‘AHU, TMK (1) 1-1-003:239

Dear Mr. Babcock:

Thank you for your letter dated February 2, 2026 (PRO 26-006), regarding the subject Project. As the planning subconsultant to the City and County of Honolulu Department of Design and Construction, we acknowledge that your agency has no comments at this time. As requested, we will remove the Department of Environmental Services as a consulted party for the balance of the EA process.

We value your participation in the environmental review process. Your letter and our response will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai
Senior Associate

cc: Department of Design and Construction
RMA Architects, Inc.

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WARREN K. MAMIZUKA
DEPUTY DIRECTOR
HOPE PO'O

IN REPLY REFER TO:
DRM 26-026

January 28, 2026

Mr. Greg Nakai
PBR HAWAII & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawai'i 96813-3484

Dear Mr. Nakai:

Subject: Pre-Assessment Consultation for a Hawai'i Revised Statutes (HRS) Chapter 343, Environmental Assessment (EA) in support of a Special Management Area (SMA) Major Permit Application, for Proposed Improvements at Ke'ehi Lagoon Beach Park, TMK: (1) 1-1-003:239

Thank you for the opportunity to review and comment on the subject project.

Since Ke'ehi Lagoon Beach Park is under the jurisdiction of the City and County of Honolulu, Department of Parks and Recreation. We have no comments at this time, as we do not have any existing or proposed projects that should be considered in the EA.

If you have any questions, please call Mr. Ray Jyo of the Division of Road Maintenance at (808) 768-3697.

Sincerely,

Gene C. Albano, P.E.
Director and Chief Engineer

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June 30, 2026

Mr. Gene C. Albano, P.E.
Director and Chief Engineer
Department of Facility Maintenance
City and County of Honolulu
1000 Ulu‘ōhi‘a Street, Suite 215
Kapolei, HI 96707

Attn: Ray Jyo, Division of Road Maintenance

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT (EA) IN SUPPORT OF A SPECIAL MANAGEMENT AREA (SMA) MAJOR PERMIT APPLICATION, FOR PROPOSED IMPROVEMENTS AT KE‘EHI LAGOON BEACH PARK, O‘AHU, TMK (1) 1-1-003:239

Dear Mr. Albano:

Thank you for the Department of Facility Maintenance’s (DFM’s) letter dated January 28, 2026 (Reference No. DRM 26-026), regarding the subject Project. As the planning subconsultant to the City and County of Honolulu Department of Design and Construction, we acknowledge that your agency has no comments at this time, as DFM does not have any existing or proposed projects that should be considered in the EA.

We value your participation in the environmental review process. Your letter and our response will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai
Senior Associate

cc: Department of Design and Construction
RMA Architects, Inc.

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2ND DEPUTY DIRECTOR
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January 27, 2026

GEN-2026-3(MM)

SENT VIA EMAIL

Mr. Greg Nakai
gnakai@pbrhawaii.com

Dear Mr. Nakai:

SUBJECT: Pre-Draft Environmental Assessment (EA) Comments
Keehi Lagoon Beach Park Improvements Project
465 Lagoon Drive – Honolulu
Tax Map Key 1-1-003: 239

This is in response to your letter, received January 5, 2026, for early consultation comments on an upcoming EA to be prepared by the City and County of Honolulu (City), Department of Design and Construction, for proposed improvements to Keehi Lagoon Beach Park (Project). The proposed Project includes the demolition of the existing comfort stations, the construction of two new comfort stations, and the future construction of a new maintenance facility building, within the Keehi Lagoon Beach Park.

The Project site consists of 71.95 acres of land area, and is located within the P-2 General Preservation District, and the Special Management Area (SMA). The Department of Planning and Permitting (DPP) has the following early consultation comments. The Draft should address:

1. Existing and Proposed Structures: The Draft EA should describe all existing and proposed structures, including when the existing structures were built, and identify any associated building permits or other land use approvals.

2. Compliance with State of Hawaii (State) and City Land Use Regulations: The Draft EA should describe compliance with all of the relevant State and City land use regulations, including but not limited to the following:

- Revised Ordinances of Honolulu (ROH) Chapter 21 (the Land Use Ordinance), Chapter 21A (the Flood Hazard Areas Ordinance), Chapter 25 (the SMA Ordinance), and Chapter 26 (the Shoreline Setback Ordinance);
- The DPP's Title 20, Chapter 31 Rules Relating Shoreline Setbacks and the SMA (DPP Rules);
- Hawaii Revised Statutes (HRS) Chapter 205A (the Coastal Zone Management Act);
- HRS Chapter 343; and
- Hawaii Administrative Rules (HAR) Section 11.200.1 and Sections 11.200.10 and 11.200.16 through 18.

ROH Chapters 21 through 26 are available online at:

honolulu.gov/dpp/resources/ordinances/

The DPP Rules Relating to Shoreline Setbacks and the SMA are available online at:

https://www.honolulu.gov/dpp/resources/rules/

Regarding compliance with applicable long-term plans, the Draft EA should describe the Project's consistency with the Oahu General Plan, and Primary Urban Center Development Plan.

Regarding compliance with ROH Chapter 21, the Draft EA must describe the Project's consistency with the development standards of the P-2 General Preservation District and other applicable LUO regulations. The analysis should include a comparison of the existing structures in relation to the proposed structures.

Regarding compliance with ROH Chapter 21A, the portions of the subject property are located within Flood Zone VE with a Base Flood Elevation (BFE) of 13 feet, Flood Zone AE with a BFE of nine to 10 feet, and Flood Zones D, XS, and X, as mapped by the Federal Emergency Management Agency. Flood Zone VE is a coastal flood hazard zone with a one percent annual chance of flooding and additional hazards due to high-velocity storm waves. Flood Zone AE is a coastal flood hazard zone (flood fringe area) subject to inundation by a one-percent

annual chance floodplain. Flood Zone D is unmapped, and therefore the status of the flood zone has not been determined.

Regarding compliance with ROH Chapter 25, the proposed Project meets the ROH Chapter 25 definition of "development," which requires an SMA Permit. If the cost valuation is less than $500,000, an SMA Minor Permit is required. If the cost valuation meets 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 EA is being prepared pursuant to both ROH Chapter 25 and HRS Chapter 343.

Regarding compliance with ROH Chapter 26, the Draft EA should review the proposed Project in reference to the location of the certified shoreline and the applicable shoreline setback line to determine the extent to which this Project is related to and complies with this statute. The Project site is within the Primary Urban Center; therefore, the applicable shoreline setback for the site is 60 feet.

3. Coastal Hazards: The Project site is susceptible to coastal hazards associated with sea level rise (SLR), wave action, flooding, tsunamis, erosion, and storm surge. Therefore, proposed development activities must be evaluated not only for potential impacts to sensitive SMA resources, but also for current and future susceptibility to these coastal hazards. According to the State of Hawaii Sea Level Rise Viewer, the makai (seaward) portion of the Project site is projected to be impacted by 2.0-feet of SLR and annual high wave flooding by 2075. By 2100, the makai and southern portions of the Project site are projected to be impacted by annual high wave action under a scenario of 3.2-feet of SLR. As it is likely that SLR will increase the risk of structure and electrical or other utility damage, the Draft EA should discuss how the design of the Project and proposed future renovations will avoid or minimize these impacts.

   The analysis in the Draft EA should evaluate the site's existing topographic, geologic, and shoreline environment, and explain how a proposed development can safely be located outside of the 3.2-foot SLR-Exposure Area, and avoid impacts associated with other coastal hazards. The Draft EA should also explore project alternatives, site design (siting and configuring the proposed building as far from the shoreline as possible), project design features (elevated structures, alternative foundations, etc.), Best Management Practices, and appropriate mitigation measures to reduce potential impacts related to coastal hazards to the extent practicable.

4. Sensitive Species: The Draft EA should identify the presence or potential presence of any sensitive habitat(s), flora, or fauna. The DPP recommends

reviewing the U.S. Fish and Wildlife Service *Information for Planning and Consultation* database, and reaching out to the National Oceanic and Atmospheric Administration Fisheries, the State of Hawaii Division of Aquatic Resources, and the State of Hawaii Division of Forestry and Wildlife to obtain lists of State or Federally-listed protected species that are known or may potentially occur in the Project vicinity. Such outreach should also include any recommended mitigation measures to avoid or minimize impacts to protected flora and fauna species, wetlands, and critical habitat. The discussion should also identify the potential for invasive species in the Project area, and the Oahu Invasive Species Council Protocols developed to address them.

5. Archaeological and Historic Resources: The Project site is underlain with Ewa silty clay loam and mixed Fill land, soil types area not generally known for the discovery of historic or cultural resources. Nonetheless, the Draft EA must include an analysis and discussion identifying archaeological resources and historic properties within the Project area. If potential impacts are anticipated as a result of the Project, describe the appropriate mitigation to be implemented.

6. Cultural Impact Assessment (CIA): The Draft EA must include a discussion analyzing the impact of the proposed Project on Native Hawaiian cultural practices and features associated within the Project area (Ka Paakai analysis). The content requirements for a CIA are detailed in HAR Sections 11-200-10 and 11-200-16 through 18.

Thank you for the opportunity to comment on this proposal. The DPP may have further comments regarding the Draft EA when more detailed plans and information are provided.

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

Very truly yours,

for: Dawn Takeuchi Apuna
Director

PBR HAWAII
& ASSOCIATES, INC.

KIMI MIKAMI YUEN, LEED® AP BD+C
President / Chairperson

VINCENT SHIGEKUNI
Executive Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED® AP BD+C
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June 30, 2026

Ms. Dawn Takeuchi Apuna
Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, HI 96813

Attn: Molly Murai, Land Use Approval Branch

SUBJECT: GEN-2026-3(MM)

PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT (EA) IN SUPPORT OF A SPECIAL MANAGEMENT AREA (SMA) MAJOR PERMIT APPLICATION, FOR PROPOSED IMPROVEMENTS AT KE'EHI LAGOON BEACH PARK, O'AHU, TMK (1) 1-1-003:239

Dear Ms. Apuna:

Thank you for the Department of Planning and Permitting's (DPP's) letter dated January 27, 2026 (your reference number GEN-2026-3(MM)), regarding the subject Project. As the planning subconsultant to the City and County of Honolulu Department of Design and Construction, we appreciate your comments and offer the following responses:

1. Existing and Proposed Structures: As recommended, the Draft EA will describe existing and proposed structures, including when existing structures were built, and any associated permits or land use approvals.

2. Compliance with State and City Land Use Regulations: The Draft EA will describe compliance with all relevant State and City land-use regulations, including but not limited to those listed in your comment letter:

    a. Revised Ordinances of Honolulu (ROH) Chapter 21 (Land Use Ordinance); Chapter 21A (Flood Hazard Areas Ordinance); Chapter 25 (SMA Ordinance); and Chapter 26 (Shoreline Setback Ordinance);

    b. DPP's Rules Relating to Shoreline Setbacks and the SMA;

    c. Hawai'i Revised Statutes (HRS) Chapter 205A (Coastal Zone Management Act);

    d. HRS Chapter 343 (Hawai'i EIS Law); and

    e. Hawai'i Administrative Rules (HAR) Section 11-200.1 (EIS Rules).

    Regarding compliance with ROH Chapter 25, the Draft EA will note that an SMA Major Permit is required and that the EA is being prepared pursuant to both ROH Chapter 25 and HRS Chapter 343.

    The Draft EA will also describe the Project's consistency with applicable long-range plans, such as the O'ahu General Plan and the Primary Urban Center Development Plan.

3. Coastal Hazards: Section 3.5 of the Draft EA will evaluate the Project site in relation to coastal hazards associated with flooding, tsunami, hurricanes, storm surge, and sea level rise (SLR), and will discuss how the proposed Project will incorporate site design (siting of the proposed reconstructed comfort stations and maintenance facility) as well as project design features (elevated building pads) to reduce potential impacts related to coastal hazards to the extent practicable.

4. Sensitive Species: The Draft EA will include a flora and fauna report prepared by AECOS that addresses the presence or potential presence of any sensitive habitats, flora, or fauna, and consider the potential for invasive species in the Project Area.

   AECOS's field surveys did not find any endemic plant species. One indigenous species (*milo*) and two Early Polynesian-introduced species (*kou* and *kamani*) occur within the Project area. While culturally significant, these are common species whose respective populations are abundant outside of the Project area. The remainder of the plants within the Project area are common naturalized species, and their respective populations are also abundant outside of the Project area. No plants proposed or listed as threatened or endangered species as set forth in the Endangered Species Act of 1973 as amended (16 U.S.C. 1531-1543; USFWS, n.d.-a; HDLNR, 1998) were seen in the Project area. For plants, state listing follows the federal listing.

   According to AECOS's field surveys, no suitable nesting habitat exists within or close to the Project area for any of the protected Hawaiian seabirds, although it is possible that they may overfly the Project areas in small numbers between April and the middle of December each year. Protected seabirds in Hawai'i include Wedge-tailed Shearwater (*Ardenna pacifica*), Hawaiian Petrel (*Pterodroma sandwichensis*), Newell's Shearwater (*Puffinus newelli*), and Band-rumped Storm-Petrel (*Hydrobates castro*).

   AECOS's report noted that all mammalian species that were encountered during the field survey are introduced and deleterious to native ecosystems and native fauna. Federally delineated Critical Habitat is not present in the Project area (USFWS, n.d.-b). No equivalent designation exists under state law.

5. Archaeological and Historic Resources: The Draft EA will include an archaeological literature review and field inspection (LRFI) report that identifies archaeological resources and historic properties, if any, within the Project Area. The LRFI will address any potential impacts and recommended mitigation measures.

6. Cultural Impact Assessment (CIA): The Draft EA will include a Cultural Impact Assessment (CIA)/Ka Pa'akai Analysis addressing the potential impacts, if any, of the proposed project on Native Hawaiian cultural practices and features associated within the Project area.

We value your participation in the environmental review process. Your letter and our response will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai
Senior Associate

cc: Department of Design and Construction
RMA Architects, Inc.

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

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

RICK BLANGIARDI
MAYOR
MEIA

SHELDON K. HAO
FIRE CHIEF
LUNA NUI KINAI AHI

JASON SAMALA
DEPUTY FIRE CHIEF
HOPE LUNA NUI KINAI AHI

January 8, 2026

Mr. Greg Nakai, Senior Associate, Planner
PBR Hawaii & Associates, Inc.
1001 Bishop Street, Suite 650
Honolulu, Hawai'i 96813-3484

Dear Mr. Nakai:

Subject: Pre-Assessment Consultation for Environmental Assessment in Support of a Special Management Area Major Permit Application, for Proposed Improvements at Ke'ehi Lagoon Beach Park, O'ahu
Tax Map Key: 1-1-003: 239

In response to your letter received on December 31, 2025, regarding the abovementioned subject, the Honolulu Fire Department (HFD) reviewed the submitted information and requires the following be complied with:

1. Fire apparatus access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet (46 meters) from fire apparatus access roads as measured by an approved route around the exterior of the building or facility. (National Fire Protection Association [NFPA] 1; 2021 Edition, Section 18.2.3.2.2)

   A fire apparatus access road shall extend to within 50 feet (15 meters) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. (NFPA 1; 2021 Edition, Section 18.2.3.2.1)

2. Fire apparatus access roads shall be in accordance with NFPA 1; 2021 Edition, Section 18.2.3.

3. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1; 2021 Edition, Sections 18.3 and 18.4.

4. Civil drawings submitted to your department shall be routed to the HFD for review and approval.

The abovementioned provisions are required by the HFD and may have additional requirements to be met as determined by other agencies.

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

Sincerely,

REID YOSHIDA
Assistant Chief

RY/MD:sk

PBR HAWAII
& ASSOCIATES, INC.

KIMI MIKAMI YUEN, LEED® AP BD+C
President / Chairperson

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W. FRANK BRANDT, FASLA
Founding Partner

June 30, 2026

Mr. Reid Yoshida
Assistant Chief
Honolulu Fire Department
City and County of Honolulu
636 South Street
Honolulu, HI 96813

Attn: Battalion Chief Pao-Chi Hwang, Fire Prevention Bureau

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT (EA) IN SUPPORT OF A SPECIAL MANAGEMENT AREA (SMA) MAJOR PERMIT APPLICATION, FOR PROPOSED IMPROVEMENTS AT KE'EHI LAGOON BEACH PARK, O'AHU, TMK (1) 1-1-003:239

Dear Assistant Chief Yoshida:

Thank you for the Honolulu Fire Department's (HFD's) letter dated January 8, 2026, regarding the subject Project. As the planning subconsultant to the City and County of Honolulu Department of Design and Construction, we appreciate your comments. The information you provided regarding fire apparatus access roads, and regarding the required water supply capable of supplying the required fire flow for fire protection, will be included in the Draft Environmental Assessment (EA). As requested, civil drawings will be routed to the HFD for review and approval.

We value your participation in the environmental review process. Your letter and our response will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai
Senior Associate

cc: Department of Design and Construction
RMA Architects, Inc.

1001 Bishop Street, Suite 650
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Tel: (808) 521-5631
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HONOLULU POLICE DEPARTMENT
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INTERIM CHIEF
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RYAN T. NISHIBUN
AARON TAKASAKI-YOUNG
INTERIM DEPUTY CHIEFS
NĀ HOPE LUNA NUI MĀKA'I KŪIKAWĀ

OUR REFERENCE EO-SH

January 29, 2026

SENT VIA EMAIL

Mr. Greg Nakai
gnakai@pbrhawaii.com

Dear Mr. Nakai:

This is in response to your correspondence of December 29, 2025, requesting input for the proposed improvements to Ke'ehi Lagoon Beach Park in Honolulu.

Based on the information provided, the Honolulu Police Department (HPD) recommends providing adequate notice to the public prior to any road closures as impacts to park visitors could lead to complaints. Additionally, the HPD recommends due to the frequent presence of residents and visitors to the park, enhanced security, and monitoring of the construction site is recommended during site work and after hours.

If there are any questions, please call Acting Major Garret Nishikawa of District 5 (Kalihi) at (808) 723-8208.

Sincerely,

CARLENE LAU
Acting Assistant Chief of Police
Support Services Bureau

PBR HAWAII
& ASSOCIATES, INC.

KIMI MIKAMI YUEN, LEED® AP BD+C
President / Chairperson

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Principal Emeritus

W. FRANK BRANDT, FASLA
Founding Partner

June 30, 2026

Ms. Carlene Lau
Acting Assistant Chief of Police
Honolulu Police Department
City and County of Honolulu
801 South Beretania Street
Honolulu, HI 96813

Attn: Acting Major Garret Nishikawa, District 5 (Kalihi)

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT (EA) IN SUPPORT OF A SPECIAL MANAGEMENT AREA (SMA) MAJOR PERMIT APPLICATION, FOR PROPOSED IMPROVEMENTS AT KE'EHI LAGOON BEACH PARK, O'AHU, TMK (1) 1-1-003:239

Dear Acting Assistant Chief Lau:

Thank you for the Honolulu Police Department's letter dated January 29, 2026 (your reference EO-SH), regarding the subject Project. As the planning subconsultant to the City and County of Honolulu Department of Design and Construction, we appreciate your comments. Your recommendations regarding providing adequate notice to the public prior to road closures and enhancing security and monitoring of the construction site during site work and after hours, are noted and will be performed/implemented as needed.

We value your participation in the environmental review process. Your letter and our response will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai
Senior Associate

cc: Department of Design and Construction
RMA Architects, Inc.

1001 Bishop Street, Suite 650
Honolulu, Hawai'i 96813-3484
Tel: (808) 521-5631
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E-mail: sysadmin@pbrhawaii.com

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Appendix B

Natural Resources Assessment

AECOS No. 1920

A natural resources assessment for Ke'ehi Lagoon Park in Moanalua, O'ahu



AECOS Inc.
45-939 Kamehameha Highway
Suite 104
Kāneʻohe, Hawaiʻi 96744

May 21, 2026

A natural resources assessment for Ke'ehi Lagoon Park in Moanalua, O'ahu

May 21, 2026 **DRAFT** *AECOS* No. 1920[1]

Anne Lee and Colleen Lawlor
AECOS Inc.
45-939 Kamehameha Highway Suite 104
Kāneʻohe, Hawaiʻi 96744
Phone: (808) 234-7770 Fax: (808) 234-7775 Email: annelee@aecos.com

Introduction

The City and County of Honolulu's Department of Design and Construction, on behalf of the Department of Parks and Recreation, has proposed to replace two comfort stations and provide improvements to the maintenance facility at Ke'ehi Lagoon Park in Honolulu, Oʻahu (the "Project"; Figure 1). Located on the west side of Ke'ehi Lagoon Park, Comfort Station 1 was damaged by a fire in 2015 and has since been demolished. A replacement for the comfort station will be built in the vicinity. Comfort Station 2 is currently located at the east end of the park and will remain in operation until the replacement is completed. The new Comfort Station 2 will be built to the west of the existing comfort station and will adjoin the main parking area near the middle of the park. PBR Hawaiʻi contracted *AECOS,* Inc. to conduct a terrestrial flora and fauna assessment of the areas in which the planned improvements will occur at Ke'ehi Lagoon Park.

Site Description

Located on the south shore of Oʻahu, Ke'ehi Lagoon Park is situated on Tax Map Key (TMK 1-1-003:239). The north side of the park is adjacent to industrial and commercial developments; the southwest side borders Daniel K. Inouye International Airport; the Ke'ehi Lagoon Memorial lies to the east side; and the south side is the shore of Keʻehi Lagoon (Figure 2). The park is utilized for a variety of recreational activities and includes two comfort stations as well as a maintenance facility on the north side. Various recreational ocean activities,

[1] ADA Compliant version.

such as competitive canoe racing and regattas, occur in the relatively calm waters of Ke‘ehi Lagoon adjacent on the south.

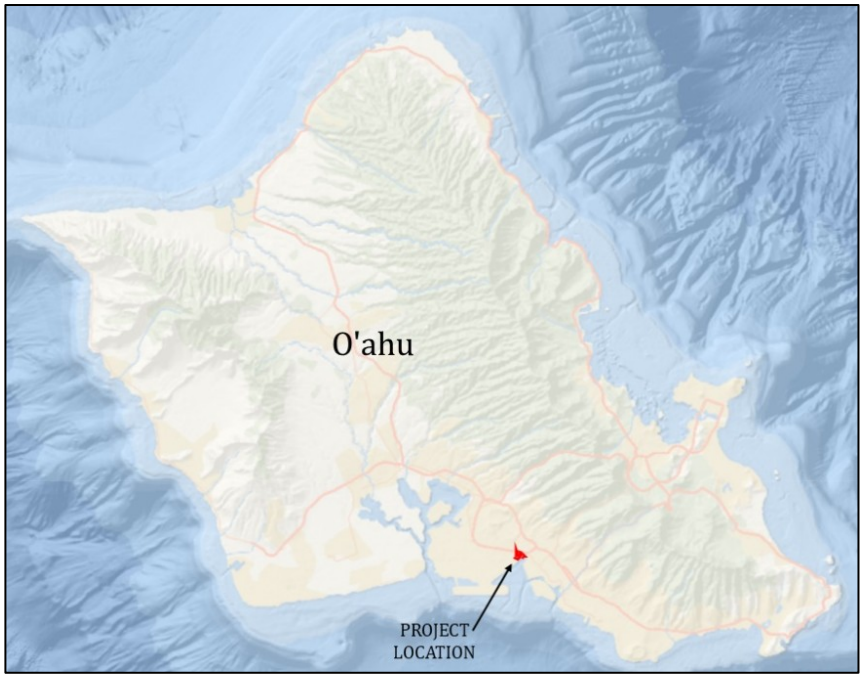


Figure 1. Project location on O‘ahu.



Figure 2. Survey areas (outlined in red) and Project property (outlined in yellow) in Ke'ehi Lagoon Park.

Methods

Botanical Survey

AECOS biologists, Anne Lee and Colleen Lawlor, conducted a botanical survey on January 22, 2026. Plant species were identified as they were encountered during wandering transects that covered the survey area. Any plant not immediately recognized during the survey was photographed and/or a representative feature (fruit, flower, branch with leaves) was collected for later identification at the laboratory. Species names follow *Manual of the Flowering Plants of Hawai'i* (Wagner, Herbst, & Sohmer, 1990; Wagner & Herbst, 1999) for native and naturalized flowering plants and *A Tropical Garden Flora* (Staples & Herbst, 2005) for ornamental and agricultural plants. More recent name changes for naturalized plant species follow Imada et al. (2025).

Terrestrial Vertebrates Survey

Avian Survey

A survey of extant birds was conducted by *AECOS* biologists in the morning hours of January 22, 2026. Birds were identified to species by visual observation, aided by Leica 8 X 42 binoculars, and by listening for vocalizations. Weather conditions were ideal for avian observations, with unlimited visibility, no precipitation, and light wind. The avian phylogenetic order and nomenclature used in this report follows the American Ornithologists' Union (AOU) *Check-List of North and Middle American Birds 2024* (Chesser et al., 2024) and the 66th supplement to this checklist (Chesser et al., 2025).

Mammalian Survey

AECOS biologists recorded all mammals encountered during the survey. Mammalian phylogenetic order and nomenclature follow Pinzari et al. (2020) for Hawaiian hoary bat and *Mammal Species of the World* (Wilson & Reeder, 2005) for all other mammal species.

Results

Vegetation

The vegetation in the survey area is dominated by mowed and maintained Bermuda grass (*Cynodon dactylon*), with various other herbaceous weedy species

scattered throughout. Trees, such as autograph (*Clusia rosea*), *kou* (*Cordia subcordata*), and *kamani* (*Calophyllum inophyllum*), are planted near Comfort Station 1. Native *milo* (*Thesipia pulpulnea*), African sausage (*Kigelia africana*), and tropical almond (*Terminalia catappa*) are present on the south side of the park along the park road.

Flora

A listing of all plant taxa encountered in the survey is presented in Table 1. Entries are arranged alphabetically under family names and include scientific name, common name, status (i.e., native or non-native; see legend at end of table). "Status" reflects the state-wide distribution of the species.

A total of 44 plant taxa were recorded during the survey. Among them, one is a native indigenous species (2% of the total), two (5% of the total) are Early Polynesian introductions, and five (11% of the total) are ornamental plants that are not naturalized or well-established outside of cultivation. The remaining 36 taxa (82% of the total) are naturalized plants (i.e., grow naturally in the wild) that were introduced to the Hawaiian Islands after 1778. No endemic native plant species were recorded.

Table 1. Plant species observed in the survey area.

FLOWERING PLANTS – MONOCOTS

FAMILY *Species*	Common name	Status	Abundance	Notes
ARECACEAE				
Adonidia merrillii (Becc.) Becc.	Manila palm	Orn	R	
POACEAE				
Bothriochloa pertusa (L.) A. Camus	pitted beardgrass	Nat	U	
Chloris barbata (L.) Sw.	swollen fingergrass	Nat	O	
Cynodon dactylon (L.) Pers.	Bermuda grass	Nat	AA	
Eleusine indica (L.) Gaertn.	wiregrass	Nat	O	
Eragrostis pectinacea (Michx.) Nees	Carolina lovegrass	Nat	O	
Megathyrsus maximus (Jacq.) B.K. Simon & W.L. Jacobs	Guinea grass	Nat	U	
Paspalum dilatatum Poir.	Dallis grass	Nat	U	

Table 1 (continued).

FLOWERING PLANTS – EUDICOTS

FAMILY *Species*	Common name	Status	Abundance	Notes
ACANTHACEAE				
Asystasia gangetica (L.) T. Anderson	Chinese violet	Nat	O	
AMARANTHACEAE				
Alternanthera pungens Kunth	khaki weed	Nat	C	
Amaranthus viridus L.	slender amaranth	Nat	U	
Amaranthus polygonoides L.	---	Nat	U	
ASTERACEAE				
Bidens alba (L.) DC.	---	Nat	O	
Calyptocarpus vialis Less.	---	Nat	C	
Flaveria trinerva (Spreng.) C. Mohr	---	Nat	U	
Tridax procumbens L.	coat buttons	Nat	U	
BORAGINACEAE				
Cordia subcordata Lam.	*kou*	**Pol**	R	
BIGNONIACEAE				
Kigelia africana (Lam.) Benth.	sausage tree	Orn	O	
BRASSICACEAE				
Lepidium didymum L.	swinecress	Nat	C	
Lepidium virginicum L.	pepperwort	Nat	O	
CLUSIACEAE				
Calophyllum inophyllum L.	*kamani*	**Pol**	R	
Clusia rosea Jacq.	autograph tree	Nat	U	
COMBRETACEAE				
Conocarpus erectus L.	button mangrove	Orn	U	
Terminalia catappa L.	tropical almond	Nat	U	
Terminalia sp.	---	Nat	R	
Euphorbia albomarginata Torr. & A. Gray	rattlesnake weed	Nat	U	
Euphorbia hirta L.	garden spurge	Nat	O	
CONVOLVULACEAE				
Ipomoea obscura (L.) Ker Gawl.	obscure morning glory	Nat	R	
Ipomoea triloba L.	little bell	Nat	R	
FABACEAE				
Alysicarpus vaginalis (L.) DC.	Alyce clover	Nat	U	
Cassia sp.	shower tree	Orn	R	
Indigofera hendecaphyla (Forssk.)	creeping indigo	Nat	U	

Table 1 (continued).

FAMILY *Species*	Common name	Status	Abundance	Notes
FABACEAE (cont.)				
Leucaena leucocephala (Lam.) deWit	*koa haole*	Nat	R	
Macroptilium lathyroides (L.) Urb.	cow pea	Nat	U	
Pithecelobium dulce (Roxb.) Benth.	*ʻopiuma*	Nat	R	
HELIOTROPIACEAE				
Euploca procumbens (Mill.) Diane & Hilger	fourspike heliotrope	Nat	O	
MALVACEAE				
Malvastrum coromandelianum (L.) Garcke	false mallow	Nat	O	
Sida ciliaris L.	---	Nat	A	
Thespesia populnea (L.) Sol ex Corrêa	*milo*	**Ind**	R	
NYCTAGINACEAE				
Boerhavia coccinea Mill.	false *alena*	Nat	O	
PASSIFLORACEAE				
Passiflora foetida L.	love-in-a-mist	Nat	R	
VERBENACEAE				
Citharexylum caudatum L.	fiddlewood	Nat	R	
UNKNOWN				
Indet. ornamental tree	---	Orn	R	

Legend to Table 1

STATUS = distributional status for the Hawaiian Islands:

End = endemic; native uniquely to the Hawaiian Islands.

Ind = indigenous; native to Hawaii, but not unique to the Hawaiian Islands.

Nat = naturalized, exotic, plant introduced to the Hawaiian Islands since the arrival of Cook Expedition in 1778, and well-established outside of cultivation.

Orn = A cultivated plant; a species not known to be naturalized (spreading on its own) in Hawaiʻi.

Pol = An early Polynesian introduction, introduced before 1778.

ABUNDANCE = occurrence ratings for plant species:

R – Rare	seen in only one or perhaps two locations.
U - Uncommon	seen at most in several locations
O - Occasional	seen with some regularity
C - Common	observed numerous times during the survey
A - Abundant	found in large numbers; may be locally dominant.
AA - Very abundant	abundant and dominant; defining vegetation type.

Avian Fauna

A total of 13 bird species, representing 9 separate families, were encountered across the survey area (Table 2). Most of the species recorded are non-native introductions that have become naturalized in Hawai'i. One exception is the Pacific Golden-Plover (*Pluvialis fulva*). The Pacific Golden-Plover is an indigenous migratory shorebird species that nests in the high Arctic during the late spring and summer months, returning to Hawai'i and the Tropical Pacific to spend the fall and winter months each year. We observed a Black-crowned Night Heron (*Nycticorax nycticorax hoactli*) flying over the Project area; this heron is an indigenous resident breeding species seen around just about any wetland, stream, or pond across the state.

Table 2. Avian species detected in Ke'ehi Lagoon Park.

Common Name	**ORDER** FAMILY *Species*	**Status**
	GALLIFORMES PHASIANIDAE - Pheasants & Partridges Phasianinae - Pheasants & Allies	
Red Junglefowl	*Gallus gallus*	A
	COLUMBIFORMES COLUMBIDAE - Pigeons & Doves Columbinae - Typical Pigeons and Doves	
Spotted Dove	*Streptopelia chinensis*	A
Zebra Dove	*Geopelia striata*	A
	CHARADRIIFORMES CHARADRIIDAE - Golden-Plovers, Lapwings & Plovers Pluvialinae - Golden-Plovers	
Pacific Golden-Plover	*Pluvialis fulva*	IM
	PELECANIFORMES ARDEIDAE - Herons, Bitterns & Allies	
Black-crowned Night Heron	*Nycticorax nycticorax*	I
Western Cattle-Egret	*Ardea ibis*	A

Table 2 (continued).

Common Name	**ORDER** FAMILY *Species*	Status
	PASSERIFORMES	
	PYCNONOTIDAE - Bulbuls	
Red-vented Bulbul	*Pycnonotus cafer*	A
	STURNIDAE - Starlings	
Common Myna	*Acridotheres tristis*	A
	ESTRILDIDAE - Estrildid Finches	
Java Sparrow	*Padda oryzivora*	A
Common Waxbill	*Estrilda astrild*	A
	PASSERIDAE	
House Sparrow	*Passer domesticus*	A
	THRAUPIDAE - Tanagers	
	Thraupinae - Core Tanagers	
Red-crested Cardinal	*Paroaria coronata*	A
Saffron Finch	*Sicalis flaveola*	A

Key to Table 2.

Status:

A = Alien; naturalized, introduced to Hawaiian Islands by humans.
I = Indigenous to the Hawaiian Islands.
IM = Indigenous, migratory species.

Mammals

The only mammals we encountered during our survey were domestic dog (*Canis lupus familiaris*), small Indian mongoose (*Herpestes javanicus*), and cat (*Felis catus*). Although we did not see any rodents (Family Muridae), it is probable that rodents frequent the Project area and use resources within the area.

Discussion and Recommendations

Recommendations are partly based on U.S. Fish and Wildlife Service Animal Avoidance and Minimization Measures (USFWS-PIFWO, 2023). Implementation of the recommendations (provided below as bulleted items) by the Project contractor will minimize impacts to the environment and to protected species to the maximum extent practicable.

Floral Resources

One indigenous species (*milo*) and two Early Polynesian-introduced species (*kou* and *kamani*) occur within the survey area. While culturally significant, these are common species whose respective populations are abundant outside of the Project area. The remainder of the plants within the survey area are common naturalized species, and their respective populations are also abundant outside of the survey area. No plants proposed or listed as threatened or endangered species as set forth in the Endangered Species Act of 1973 as amended (16 U.S.C. 1531-1543; USFWS, n.d.-a; HDLNR, 1998) were seen in the survey area. For plants, state listing follows the federal listing.

Avian Resources

Seabirds

No suitable nesting habitat exists within or close to the Project area for any of the protected Hawaiian seabirds, although it is possible that they may overfly the Project areas in small numbers between April and the middle of December each year. Protected seabirds in Hawai'i include Wedge-tailed Shearwater (*Ardenna pacifica*), Hawaiian Petrel (*Pterodroma sandwichensis*), Newell's Shearwater (*Puffinus newelli*), and Band-rumped Storm-Petrel (*Hydrobates castro*). Nocturnally-flying seabirds, especially fledglings on their way to sea in the summer and fall, can become disoriented by exterior lighting. Disoriented seabirds may collide with man-made structures or the ground. If not killed outright, dazed or injured birds become targets of opportunity for feral mammals (Podolsky et al., 1998; Ainley et al., 2001; Day et al., 2003). The primary cause of mortality in these seabird species is predation by alien mammalian species at nesting colonies (USFWS, 1983; Ainley et al., 2001), and collision with man-made structures is considered the second most significant cause of mortality for these seabird species in Hawai'i.

- The project can minimize or avoid risks to protected night-flying seabirds by not conducting night-time construction and ensuring that any installed outdoor lighting is fully shielded (dark sky compliant; see HDLNR-DOFAW, 2016).

Terrestrial Mammalian Resources

All mammalian species we encountered are introduced and deleterious to native ecosystems and native fauna.

Hawaiian Hoary Bat

The endangered Hawaiian hoary bat (*Lasiurus semotus*) may use resources in the area. This bat species is solitary and rare but has a widespread distribution in Hawai'i. The removal of trees can temporarily displace individual bats using those trees for roosting. The Hawaiian hoary bat uses multiple roosts within a home territory (Bonaccorso, 2015), so the potential disturbance resulting from the removal of vegetation is likely to be minimal. An exception would be during the pupping season, when females carrying their pups may be less able to vacate a roost site if the tree is felled. Further, adult female bats sometimes leave their pups in the roost tree while they forage. Very small pups may be unable to flee a tree that is being felled.

- Potential adverse impacts to Hawaiian hoary bat can be avoided or minimized by not clearing woody vegetation taller than 4.6 m (15 ft) between June 1 and September 15, the bat pupping season, and by avoiding the use of barbed wire for fencing (USFWS-PIFWO, 2023).

Other Resources of Potential Concern

Critical Habitat

Federally delineated Critical Habitat is not present in the Project area (USFWS, n.d.-b). No equivalent designation exists under state law.

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Appendix C

Archaeological Literature Review & Field Inspection

DRAFT—Archaeological Literature Review and Field Inspection for Proposed Improvements at Keʻehi Lagoon Beach Park, Moanalua Ahupuaʻa, Kona District, Island of Oʻahu, Hawaiʻi

TMK: (1) 1-1-003:239



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DRAFT—Archaeological Literature Review and Field Inspection for Proposed Improvements at Keʻehi Lagoon Beach Park, Moanalua Ahupuaʻa, Kona District, Island of Oʻahu, Hawaiʻi

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MANAGEMENT SUMMARY

Keala Pono Archaeological Consulting conducted an archaeological literature review and field inspection for proposed improvements at Keʻehi Lagoon Beach Park on TMK: (1) 1-1-003:239 in Moanalua Ahupuaʻa, Kona District, Oʻahu Island, Hawaiʻi. The project area is located at 465 Lagoon Drive and includes a range of existing park facilities including paved parking areas, a large open grass field, concrete pathways, public restrooms, a playground, comfort stations, a baseball diamond, tennis and pickleball courts, landscaped areas, supporting utility infrastructure, and a pavilion for judging canoe races.

The purpose of this work is to identify any archaeological, historical, or cultural properties within the project area in anticipation of the proposed improvements at Keʻehi Lagoon Beach Park. The literature review, which consisted of archival research, identified the project area itself to be a historic property containing examples of mid-20th century public park architecture (SIHP 50-80-14-09216). A traditional Hawaiian fishpond, Kaloaloa Fishpond (SIHP 50-80-13-00080), was historically located west of the project area. The project area is situated within LCA 7715, which comprises the entirety of Moanalua Ahupuaʻa.

The fieldwork documented several historic and possibly historic features within the project area within SIHP 09216, including a relocated and repurposed plantation-era residence (Feature 1); previously documented historic tennis courts that are now pickleball courts (Feature 3) and mortared basalt pillar-framed concrete benches (Feature 4); two concrete footings (Features 2 and 5); the previously documented Comfort Stations No. 2 and 3 (Features 6 and 7); a Tiki Modern grandstand and signage (Feature 8); a canoe storage structure with decorative basalt stairs (Feature 9); a rock jetty (Feature 10); coral aggregate concrete shoreline revetments (Features 11a, and 11b) with two associated corroded stormwater outfall pipes (Features 12 and 13); and several other possibly historic recreational and architectural features including a scorekeeper's booth and bleachers (Feature 14a); a cinderblock dugout (Feature 14b); additional tennis courts (Feature 15); a coral and mortar wall (Feature 16); and concrete stairs with an associated metal railing (Feature 17). The project area has undergone substantial dredging, filling, and shoreline modification associated with mid-20th century park and airport development; however, the presence of multiple historic architectural and infrastructural features indicates continued potential for additional surface or subsurface historic resources within the project area.

Due to extensive landfilling and redevelopment associated with the creation of Keʻehi Lagoon Beach Park (SIHP 09216) and the surrounding region, it is unlikely that intact traditional surface or subsurface features remain within the project area; however, the potential for encountering additional historic surface or subsurface features remains possible. Archaeological monitoring is recommended for all ground-disturbing activities within the project area. An archaeological monitoring plan should be prepared and submitted to the State Historic Preservation Division (SHPD) for review and acceptance prior to the initiation of ground-disturbing activities.

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INTRODUCTION

At the request of PBR Hawai‘i & Associates, Inc., on behalf of the City and County of Honolulu Department of Design and Construction (DDC), Keala Pono Archaeological Consulting conducted an archaeological literature review and field inspection (LRFI) for proposed improvements at Ke‘ehi Lagoon Beach Park, on TMK: (1) 1-1-003:239 in Moanalua Ahupua‘a, Kona District, on the island of O‘ahu. This work was designed to identify any archaeological, historical, or cultural properties that may be located in the project area in anticipation of the proposed work.

The report begins with a description of the project area, followed by a traditional and historical overview of land use and archaeology in the vicinity. Results of the LRFI are then summarized and recommendations are made in the final section. Hawaiian words, flora and fauna, and technical terms are defined in a glossary, and Māhele data is provided in an appendix at the end of the document.

Project Location and Natural Environment

The project area is located in Moanalua Ahupua‘a, Kona District, on the island of O‘ahu, Hawai‘i on TMK: (1) 1-1-003:239, which encompasses the entirety of Ke‘ehi Lagoon Beach Park as well as a portion of the water offshore (Figures 1 and 2). The parcel is a total of 29.07 hectares (ha) [71.85 acres (ac.)] and is owned by the Hawai‘i Department of Land and Natural Resources (DLNR), State Parks Division. The project area is bounded by commercial development to the northwest and southwest, North Nimitz Highway to the north, Ke‘ehi Lagoon Memorial Park to the east, The Daniel K. Inouye International Airport (HNL) to the west, and the ocean to the south and southeast. The study parcel contains a variety of existing structures, including a modular office lot, paved parking areas along a loop park access road which wraps around the park, concrete pathways which transect the park, two public restrooms (Comfort Stations No. 2 and 3), a playground, a baseball diamond and associated recreational infrastructure, tennis and pickleball courts, a canoe storage facility, and a grandstand.

The project area is situated inland of Māmala Bay, at the northern shore of Ke‘ehi Lagoon. Its elevation is roughly 1–5 meters (m) [3–16 feet (ft.)] above mean sea level (amsl). Rainfall averages 59.8 centimeters (cm) [23.5 inches (in.)] per year with May through July as the driest months and October through March accumulating the most rainfall (Giambelluca et al. 2013). The closest fresh water sources are Moanalua Stream, located approximately 150 m (492 ft.) east of the project area, and Kalihi Stream, located roughly 350 m (1148 ft.) east of the project area. Both streams empty into Ke‘ehi Lagoon. Topography is flat and what little vegetation is present consists of short grass, kiawe, koa haole, palms, and ornamental trees.

The subject property is situated within the Hālawa-Moanalua Plain located south of Salt Lake (Āliapa‘akai) Crater, which was formed along with Diamond Head, Koko Head, Hanauma Bay, Punchbowl, and Tantalus during the Honolulu Volcanic Series (Macdonald et al. 1983:434). This occurred roughly two million years after the Ko‘olau volcano became dormant. Of the three overlapping tuff cones in the area, ‘Āliamanu is the oldest with the Āliapa‘akai and Makalapa eruptions happening roughly around the same time (Macdonald et al. 1983:445–446). According to Macdonald et al. (1983:325), “lavas of both the late phase of the principal period of volcanism and of the rejuvenated period have brought up from depth inclusions of peridotite, and at Salt Lake Crater on Oahu nephelinite of the rejuvenated period contains inclusions of garnet-pyroxene rock (eclogite).” Eclogite is created only at very high pressures such as those found at least 55 kilometers (km) [34.2 miles (mi.)] or more below the Earth’s crust; thus, the inclusions found at Salt Lake probably came from the mantle (Macdonald et al. 1983:133).

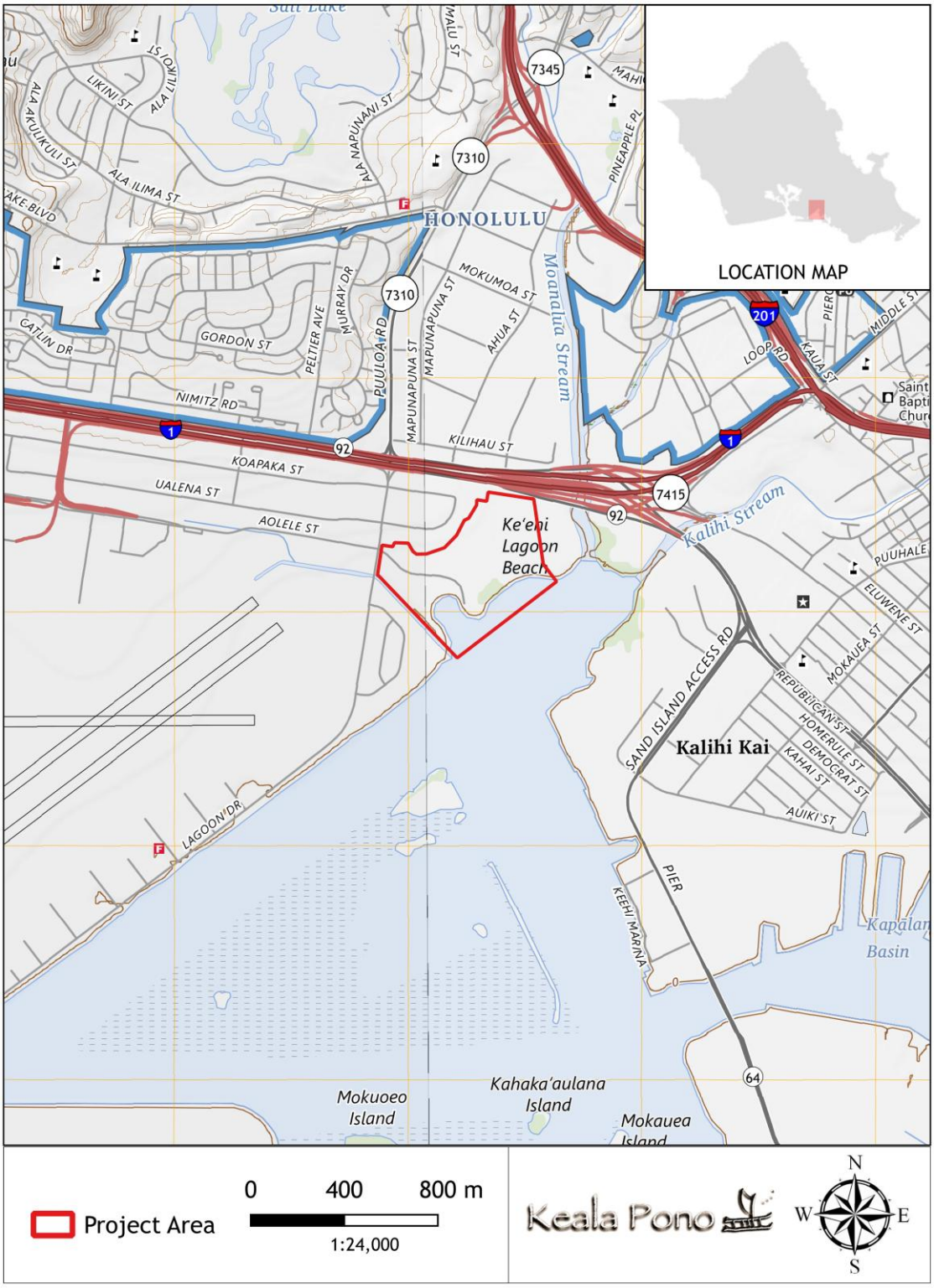


Figure 1. Project area on 7.5-minute map, Pearl Harbor quadrangle map (USGS 2023).

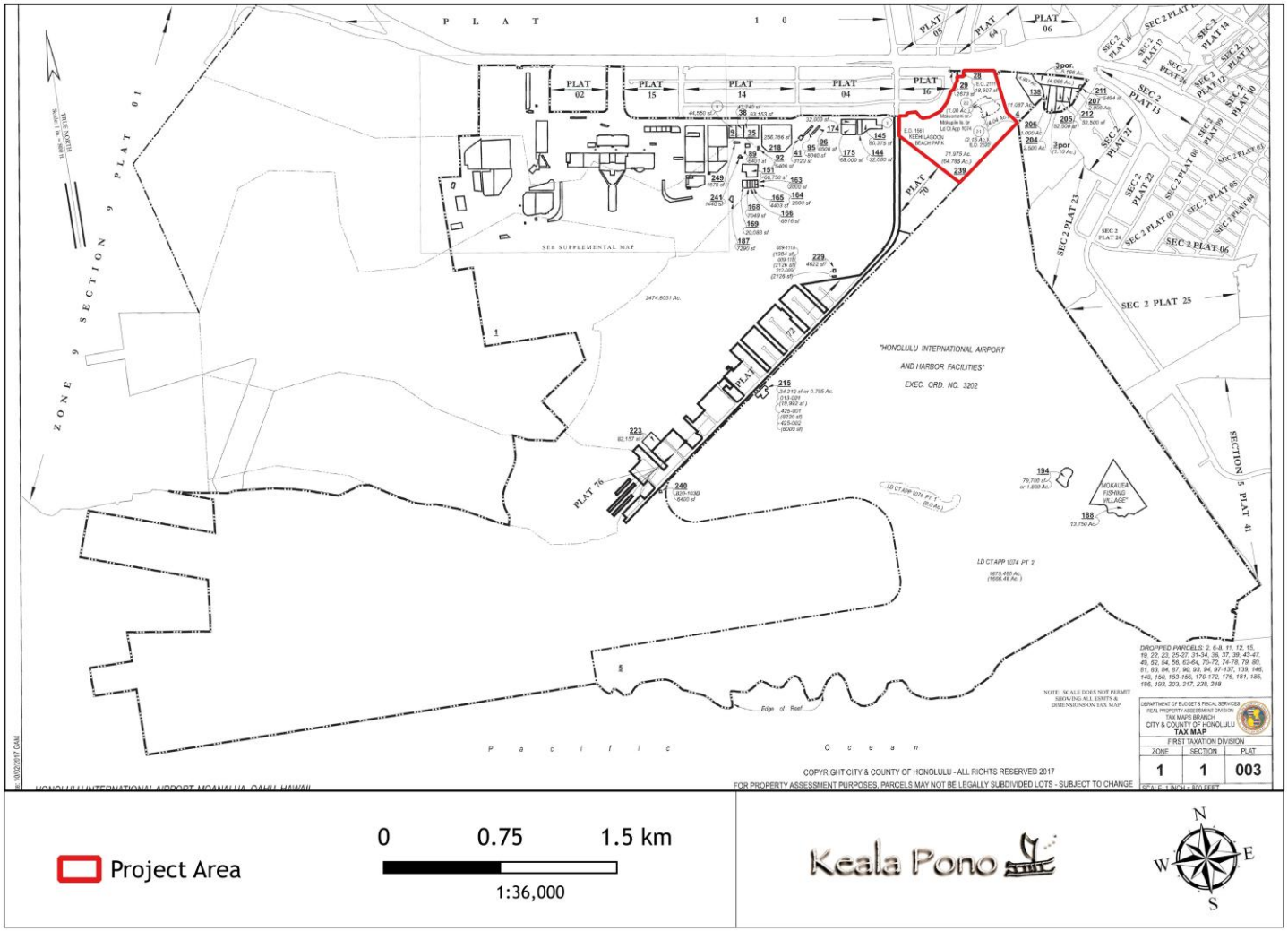


Figure 2. Project area on a TMK 1-1-003 plat map (State of Hawai‘i 2017).

During the eruption of tuff cones, a potentially deadly phenomenon called base surge occurs where rings of steam and ash radiate outward from the base of the eruption, moving parallel to the ground (Macdonald et al. 1983:85). The force of a base surge can be so strong that bark is sand-blasted off of trees. This may be the reason why the same tuff that forms the ʻĀliamanu Crater rim is found on the eastern portion of Hālawa Valley (Macdonald et al. 1983:445). Above this layer is "thick red transported soil," overlain by tuff traced to Salt Lake Crater which was deposited by air (Macdonald et al. 1983:445). Imprints of leaves, log molds, and semi-petrified wood fragments occur within the ʻĀliamanu tuff. While tuff has been found some distance away from the cone, ʻĀliamanu had no lava flow outside the cone itself.

The Salt Lake tuff was also deposited via air and contains several tree molds. Analysis of these tree molds identified various tree ferns and loulu palms (*Pritchardia* sp.), which suggests the region was much wetter than the climate of the area today (Macdonald et al. 1983:446). When the three tuff cones were formed, they blocked the direct path of Hālawa and Moanalua Streams, the latter of which was forced to flow further to the east (Macdonald et al. 1983:445). Salt Lake Crater originally had a 1.5-km (0.9-mi.) diameter and was watered in part by springs. The project area is located within the Hālawa-Moanalua Plain below Salt Lake Crater at the coast. The plain was formed via a raised limestone reef shelf and was formerly at sea level prior to the region being filled during the first half of the 20th century.

The project area is predominantly underlain by fill land, mixed (FL), which is believed to have originated from marine dredging at Keʻehi Lagoon and the Pearl Harbor entrance during large-scale infilling projects undertaken by the U.S. military between ca. 1931 and 1943. This soil type is also present to the northeast and southwest of the project area. ʻEwa silty clay loam, moderately shallow, 0–2% slopes (EmA), occurs along the northwest boundary of the subject parcel and extends into areas northwest of the project, while Water (W) is present along the southwest project boundary as the Kaloaloa Canal (Figure 3). The United States Department of Agriculture Soil Conservation Service Soil Survey of the State of Hawaiʻi describes these soils as follows:

> **Fill land, mixed (FL)**
>
> This land type occurs mostly near Pearl Harbor and in Honolulu, adjacent to the ocean. It consists of areas filled with material dredged from the ocean or hauled from nearby areas, garbage, and general material from other sources…This land type is used for urban development including airports, housing areas, and industrial facilities. (Foote et al. 1972:31)
>
> **Ewa Series**
>
> This series consists of well-drained soils in basins and on alluvial fans on the islands of Maui and Oʻahu. These soils developed in alluvium derived from basic igneous rock. They are nearly level to moderately sloping. Elevations range from near sea level to 150 feet. These soils are used for sugarcane, truck crops, and pasture. (Foote et al. 1972:29)

Project Description

The project is a DDC initiative to improve public facilities within Keʻehi Lagoon Beach Park. The proposed improvements focus on upgrading park infrastructure to better serve public use and park operations. The project consists of three phases including the construction of two new comfort stations, demolition of one existing comfort station, and in a future phase, the construction of a maintenance facility building located in the mauka (northern) corner of the park.

The current comfort stations (Comfort Station No. 2 and 3) are single-story structures of similar design, with minor variations attributable to past repairs or alterations. In 2015, Comfort Station No. 1 was severely vandalized and damaged by fire, resulting in unsafe conditions; the structure was barricaded and closed to the public and later demolished. Both existing comfort stations have a rectangular footprint with a slab-on-grade



Figure 3. Soils in the vicinity of the project area (SSURGO 2019).

foundation that measures approximately 1,485 square feet, and includes men's and women's restrooms, a storage area, and an open-air lanai under a combination of flat and A-frame roofing.

The proposed comfort station improvements are intended to replace the remaining Comfort Station No. 2 and provide two new comfort stations within the park, while maintaining continuity of park use and public access. The new Comfort Station No. 1 will be located southeast of the existing tennis courts on the west side of the project area, and the new Comfort Station No. 2 will be located across the parking lot on the makai side of the existing pickleball courts on the north side of the project area. The maintenance facility building, planned for the mauka portion of the park, would support park operations and maintenance functions. Development of this facility would occur in a later phase and is intended to enhance long-term park management without expanding the overall developed footprint of the park.

TRADITIONAL CULTURAL AND HISTORIC BACKGROUND

This section of the report presents background information that provides context through which one can examine the cultural and historical significance of the project lands. In the attempt to record and preserve both the tangible (e.g., traditional and historic archaeological sites) and intangible (e.g., moʻolelo, ʻōlelo noʻeau) culture, this research assists in the discussion of anticipated finds. Research was conducted at the Hawaiʻi State Library, the University of Hawaiʻi at Mānoa libraries, the State Historic Preservation Division (SHPD) library, and online on the Waihona ʻAina database and the State of Hawaiʻi Department of Accounting and General Services (DAGS) and Ulukau websites. Historical maps, archaeological reports, Māhele data, and historical reference books were among the materials examined.

Moanalua in Traditional Times

The study area is situated at the coast of Moanalua Ahupuaʻa on the island's south shore. Moanalua is the westernmost ahupuaʻa of Kona Moku and is between Kahauiki Ahupuaʻa to the east and Hālawa Ahupuaʻa in ʻEwa Moku to the west. Moanalua stretches from the Koʻolau ridge to the ocean with two valleys, Kamananui and Kamanaiki, dissecting the uplands.

Place names

Place names often shed light on traditional views of an area and can provide important contextual information. Hawaiian place names "usually have understandable meanings, and the stories illustrating many of the place names are well known and appreciated...The place names provide a living and largely intelligible history" (Pukui et al. 1974:xii).

Moanalua "is said to be named for two encampments at taro patches where travelers bound for Honolulu from ʻEwa rested" (Pukui et al. 1974:152). Moana can mean ocean or a "broad expanse" of sea or land, while lua means two, thus an alternative meaning for the ahupuaʻa is "the great expanse of level land and reef" (Handy et al. 1991:474). The name Keʻehi translates to "tread upon" (Pukui et al. 1974:105). These and many additional place names in the project vicinity are listed in the book *Place Names of Hawaii* (Pukui et al. 1974), along with the meanings of the names and/or comments about the specific locales:

> Āliamanu. Schools, playground, and crater near Salt Lake, Honolulu. *Lit*., bird salt-pond. (The goddess Pele and her family lived here once. When they left, Pele dropped some salt, and the pet bird of Hiʻiaka, Pele's favorite sister, escaped. Birds gathered here.) (Pukui et al. 1974:11)
>
> Āliapaʻakai. Salt Lake, Oʻahu, said to have been dug by Pele on her first circuit of the islands. Some of the viscid matter from her eyes dropped to form salt. Hawaiians believed that the lake was connected to the sea by a hole in the center of the lake. *Lit*., salt pond. (Pukui et al. 1974:11)
>
> ʻAwaʻawaloa. Pond near Moanalua, Honolulu, and street named for it... *Lit*. too salty. Pukui et al. 1974:14)
>
> Kahauiki… Land section and stream west of Kalihi Valley, Oʻahu, that formerly irrigated extensive taro terraces. *Lit*., the small hau tree. (Pukui et al. 1974:63)
>
> Kaʻihikapu. Street, Moana-lua, Honolulu, and name of a fishpond at Māpunapuna... *Lit*. the taboo sacredness. (Pukui et al. 1974:68)
>
> Ka-lihi… Land section, channel, stream, valley, elementary school, field, street, and shopping center, Honolulu, said to have been named by Prince Lot (afterwards Ka-mehameha V) in 1856. (Pukui et al. 1974:77)

> Keʻehi. Lagoon and beach park east of Honolulu International Airport. *Lit*., tread upon. (Pukui et al. 1974:105)
>
> Lelepaua. Inland fishpond at Moanalua, Oʻahu, said to have been built by chief Ka-ʻihi-kapu-a-Manuia. (Pukui et al. 1974:132)
>
> Māpunapuna. Place, road, and spring-fed fishpond formerly at Moanalua, Honolulu. *Lit*., bubbling. (Pukui et al. 1974:147)
>
> Moanalua. Land division, park, playground, golf course, residential area, shopping center, schools, and stream near Fort Shafter, Honolulu…Said to be named for two encampments (*moana lua)* at taro patches, where travelers bound for Honolulu from ʻEwa rested. The site contains extensive gardens that are maintained as a public park. The buildings here are Kamehameha V cottage, a summer house built in 1867 and given to Samuel Damon in the 1880s, and the great hall built in 1906 by Samuel Damon; many parts of the great hall, including carvings, were sent from China. An ancient maika field near here was called Pueo-hulu-nui (much-feathered owl) because owls from Kauaʻi and Niʻihau were said to meet here to participate in the battle of the owls. In another story, a young chief, Kūlaʻi-i-ʻAiea, fell in love with a girl bathing in ʻĪ-emi pool. He cried out *Moana kā hoʻi ka wai o kēnā lua wai*, how wide the water of that water hole. She accepted his offer of love…(Pukui et al. 1974:152–153)
>
> Puʻuloa... Land section, camp, salt works, station, street, playground, beach park, village, area east of Pearl Harbor and old name for Pearl Harbor, Oʻahu; it is said that breadfruit were brought here from Samoa... *Lit*. long hill. (Pukui et al. 1974:200–201)

Subsistence and Traditional Land Use

In pre-contact times, Moanalua was a land rich in natural resources with access to fresh water, two lush valleys, salt flats, and plentiful marine resources. The ahupuaʻa had five fishponds that dotted the coastline: Moanalua Fishpond known for mullet [State Inventory of Historic Places (SIHP) 50-80-13-00078], Awaʻawaloa (SIHP 50-80-13-00079), Kaloaloa (SIHP 50-80-13-00080) used for raising awa, Kaʻihikapu (SIHP 50-80-13-00081) for collecting crabs, and Lelepaua (SIHP 50-80-13-00082) (McAllister 1933:93; Sterling and Summers 1978:330). None of these fishponds are located within the boundaries of the current project area, however Kaloaloa Fishpond (SIHP 00080) was the closest, situated approximately 145 m (476 ft.) to the west. Āliapaʻakai (Salt Lake), located about 1.5 km (0.9 mi.) inland of the subject property, was traditionally used as a source of salt for medicinal purposes, ceremonial practices, seasoning, and food preservation. During the hottest time of the year, the water would dry up, and the lakebed would be left with a deep crust of salt (Alexander in Sterling and Summers 1978:331).

The fertile watered lands along the streams were traditionally planted in kalo, with loʻi concentrated in two main areas. One system was irrigated by the smaller Kalou Stream near Moanalua Park, while the other comprised a broad expanse along lower Moanalua Stream, where terraces extended continuously down to the ocean (Handy et al. 1991:474). The makai region around Āliapaʻakai was cultivated with niu, wetland kalo, ʻulu, and maiʻa, while the upper reaches of Moanalua Valley supported uhi, wauke, semi-wild kalo, and olonā. The kalo of Moanalua is said to be "so large that the keepers groped in the dark [beneath them] for taro for the chiefs" (Handy et al. 1991:474). Around Āliapaʻakai were "…several tapa plantations; a tree, the bark of which the cloth of this country is manufactured" (McAllister in Sterling and Summers 1978:330).

Moanalua was also a place with religious and spiritual significance. Several heiau are noted for the ahupuaʻa; however, none are located in the coastal region makai (south) of Āliapaʻakai. An unnamed possible heiau (SIHP 50-80-14-00086) and Puʻu Kapu are both located along the ahupuaʻa border between Moanalua and Kahauiki (Sterling and Summers 1978:334). Puʻu Kapu is described as a place "where the chiefs and commoners met to

discuss matters of importance. It is very close to the place where travellers [sic] were robbed" (Manu in Sterling and Summers 1978:334).

The notable historian John Papa ʻĪʻī reminds us that there was a well-known, well-traveled network of trails that crisscrossed Oʻahu connecting east to west and north to south. The project area is located south of a main trail that passes through Moanalua Ahupuaʻa connecting ʻEwa Moku to Honolulu (see Figure 5). This trail passes through Moanalua, mauka of the two tuff cones and next to the famous "house of bones" further elaborated in the following moʻolelo section. The portion of the trail system that crossed Moanalua was known to have robbers, and it is said that people traveling "from Ewa came as far as the wall of human bones and vanished" (Mokumaia in Sterling and Summers 1978:335). Of the main trail which traversed Moanalua, ʻĪʻī elucidates:

> Let us turn to look at the trail going to Ewa from Kikihale. It led up to Leleo, to Koʻiuʻiu and on to Keoneʻula. There were no houses there, only a barren plain. It was there that the boy (John Iʻi) met with his attendants who came from Ewa with the god Kaʻili. He accompanied them on the way to Hoʻaeʻae and when the prostrating kapu was called, they all prostrated themselves on the plain until the others passed along. When they reached a bridge, the trail led along the banks of taro patches up to the other side of Kapalama, to the plain of Kaiwiʻula; on to the taro patches of Kalihi; down to a stream; up to the other side; down into Kahauiki; up to the other side; turned left to the houses of the Portuguese people; along the plain to Kauwalua, Kalaikoa's house of bones; down to a coconut grove; along the taro patches of Kahohonu; over to the other side and from there to a forded stream and up to Kapapakolea a resting place for travellers [sic] coming this way or going that way. (ʻĪʻī 1959:95)

Moʻolelo

As mentioned earlier, Hawaiian place names were connected to traditional stories by which the history of the places were preserved. These stories were referred to as moʻolelo:

> …a term embracing many kinds of recounted knowledge, including history, legend, and myth. It included stories of every kind, whether factual or fabulous, lyrical or prosaic. Moʻolelo were repositories of cultural insight and a foundation for understanding history and origins, often presented as allegories to interpret or illuminate contemporary life… Certainly many such [oral] accounts were lost in the sweep of time, especially with the decline of the Hawaiian population and native language. (Nogelmeier 2006:429, 430)

Still, many traditional stories managed to be recorded as Hawaiian society transitioned from an oral culture to a written one, and among those chronicled were several moʻolelo connected to Moanalua, particularly Āliapaʻakai. Several of these legends connect Moanalua Ahupuaʻa with deities and aliʻi, demonstrating the region's significance in traditional times. One moʻolelo recounts where the gods Kū and Lono landed when they first arrived to Hawaiʻi:

> Kū and Lono are spoken of in the moʻolelo of the lono-pūhā practitioners and of the medical kahuna as having come from Kahiki [Tahiti]. They landed first on Kauaʻi, and from there they spread forth.
>
> In the moʻolelo of Pele mā, it says that they first landed at Kalihi on Kauaʻi and from there went to Kaʻena Point on Oʻahu and at Moanalua left the salt pond. Then they went to Kauhakō on Molokaʻi, to ʻAleamai in Hāna, Maui, and then went to live at Kīlauea in Puna and Kaʻū on Hawaiʻi. (Kamakau 1991:112)

Other accounts credit the creation of Āliapaʻakai to the volcano goddess Pele (note that Āliapaʻakai is approximately 1.5 km north of the project area):

> …[Pele] left Kauaʻi and went to Oʻahu, to a place near Honolulu, to Moanalua, a beautiful suburb. There she dug a fire pit. The earth, or rather the eruption of lava, was forced up into a hill which later bore the name Kealiamanu (The Bird White Like a Salt Bed or The White Bird). The crater which she

> dug filled up with salt water and was named Kealiapaakai (The White Bed of Salt, or Salt Lake). (Westervelt 1987:40)

Pele and her youngest sister, Hiʻiaka, were also said to have resided at Āliapaʻakai and ʻĀliamanu for some time before moving on:

> Upon their arrival at Oahu, Pele and Hiiaka took up their abode in Kealiapaakai, at Moanalua, where they dug down into the ground and made a home. On coming from Kauai they brought some red dirt and some salt with them and deposited these things in their new home. Because of this fact these places were given the names of Kealiapaakai and Kealiamanu. Upon finding the place too shallow they went to settle at Leahi [Diamond Head]. (Fornander in Sterling and Summers 1978:331)

It is said that near these two craters was a flat area of pāhoehoe lava off of the old trail that contained a place called Leilono, an entrance to the "other world" known as Pō. It is said to be located somewhere along ʻĀliamanu crater's rim.

> Leilono at Moanalua, Oahu, was close to the rock Kapukaki and easterly of it (a ma ka naʻe aku), directly in line with the burial mound of Aliamanu and facing toward the right side of the north Star (a huli i ka ʻaoʻao ʻaku o ka Hokupaʻa). On the bank of the old trail there was a flat bed of Pahoehoe lava, and on it there was a circular place about two feet in circumference. This was the entrance to go down (ka puka o Leilono). (Kamakau 1964:48)

> It was a place said to be the opening, on the island of Oahu, for mankind to enter eternal night…This place is on the northern side of the famous Kapukaki (now Red Hill), at the boundary of Kona and Ewa, right in line with the burial hill of Aliamanu, on the upper side of the old road. It is said that this place [Leilono] is round, about two feet or more in circumference. This is the hole through which the ghosts of people slipped through to go down and this was the strata of Papa-ia-Laka. Through this opening appeared the supernatural branches of the breadfruit of Leiwalo. If a ghost who lacked an aumakua to save him climbed on a branch of the western side of the breadfruit tree, the branch withered at once and broke off, thus plunging the ghost down to the pit of darkness. The boundaries of this place, so the ancients said, were these: Papakolea which was guarded by a plover; Koleana whose guard was a big caterpillar and Napeha, the western boundary which was guarded by a lizard. (Kamakau 1899 in Sterling and Summers 1978:9)

He Moʻolelo Kaʻao Hawaiʻi no Laukaʻieʻie tells of Makanikeʻoe's voyage to Moanalua and his discovery of a cave or crevasse that connected the ocean to Āliapaʻakai. This legend was translated into English in Maly and Maly's (2003) *He Moʻolelo ʻĀina*:

> Having landed on the shores of Mamala, he then traveled to Kahakaaulana and the landing at Kalihi. He then looked down along the glistening sands and waters where the mullet are found, outside of Keahua, at the place called Keawakalai. There he saw a crevasse open in the sea. In this place, were sleeping many sharks and turtles, almost as if under the sand. Makanikeoe quickly entered into the cave with the turtles and sharks, to see them more closely. Because of his great speed, they didn't know that he had entered their house. It is true that Makanikeoe crawled along one of the crevasses in the sea, and going beneath the land, he exited out at Aliapaakai, at the place called Manawainuikeoo. That is the entrance of the sea into the great salt water pond of Moanalua…Let the author explain here, that this channel was first made when Pele traveled along the islands making craters here and there. This crater is something like the crater of Kauhako, at Kalaupapa, Molokai. By this little explanation my readers, you may also know that the remaining crater is there above Aliamanu, hiding cave of the chief Kahahana, his companion Alapai, and his beautiful wife, Kekuapoi. (Maly and Maly 2003:100)

An apparition called Poki is said to have been seen by many at various locations throughout Oʻahu, though one of the best descriptions was recounted by a European who lived in Moanalua:

> He saw Poki and, as he told me of the vision, I had not the slightest doubt, but that he had seen it. It happened many years ago as he was returning from Honolulu on horseback. The moon had just risen, flooding the tops of the ridges with light, which emphasized the blackness of the valleys. He had just passed Fort Shafter and was beginning the descent into Moanalua when, with a sudden jerk, his horse stopped and stood trembling. In the distance arose the wailing of dogs. Glancing about, the rider saw coming off the ridge to his right a pale form. As he watched, it left the ridge and passed over the dark valley. It was a shapeless, white form, a mist, convulsed with movement, but slowly and stately moving over the invisible treetops, clear and distinct against the black silhouette of the Koolau Range. As the apparition passed over the settlement, there preceded it the whimpering and wailing dogs, but in its path there followed a deathly stillness. Even after it was lost to sight, its presence could be followed by the ever attendant wailing. (McAllister 1933:92)

Mauka of the vicinity where Poki was seen was a small land segment called Namakalele, which translates to "flying eyes." The location is named after a story about a woman named Keanahaki who lived in the area (McAllister 1933:94–95). One day, Keanahaki went fishing while her husband journeyed into the mountains. Standing at the shore, she chanted, sending one eye in one direction to search for a particular fish and the other eye in another direction to catch whatever else it might find. At day's end, when she called her eyes back, they returned with an abundance of fish. She divided the catch, but in the end ate everything herself, bringing home only a single fish for her husband and children. When her husband asked if that was truly all she had caught, she lied. This pattern continued, with Keanahaki always returning home with just one fish for her family to share. Growing suspicious, her husband thought it unlikely that she could be so unlucky every day. A friend finally revealed to him that Keanahaki possessed unusual powers: she could chant at the shoreline and send her eyes into the sea to catch fish. To expose her secret, the husband was instructed to gather leaves of the ipu ʻawaʻawa plant and use them to capture her eyes. The next time Keanahaki went fishing, her husband followed. He watched as she chanted, releasing her eyes into the ocean. While she stood blind on the shore, he waited beside her. When she called her eyes back, he caught them, wrapped them in the ipu ʻawaʻawa leaves, took the fish, and returned home. Keanahaki, left sightless on the beach, wondered why her eyes had not returned as they always had. When her husband arrived home, he hid the eyes on a high ledge, believing no one had seen his hiding place. Later, Keanahaki made her way home without her sight and asked the children if their father had returned and whether he had brought anything with him. Only the youngest child had noticed where the eyes were hidden and led her to the spot, allowing Keanahaki to restore her vision.

There are several stories that connect aliʻi with Moanalua. One of these, which has many versions, is about a Maui chief named Kalaikoa who moved to Moanalua and constructed a "house of bones." One version is as follows:

> …Kalaikoa who lived at Moanalua built a long house and named it Kauwalua and, perhaps in order to make his name famous, had it filled with the bones of persons stripped, bound, and set up inside the house and all around the outside enclosure of the house. The bones of Elani, Konamanu, and Kalakioʻonui were bundled up and placed beside the entrance. The house stood at Lapakea on the slope into Moanalua on the upper side of the old road. Eyewitnesses said, 'it was a terrible and gruesome sight. The bones were stripped, bundled together, and the skulls set upon each bundle so that, seen from a distance, it looked like a company of living men.' (Kamakau 1961:138–139)

An article from 1911, published in *Ka Hoʻokumu ʻana o nā Paemoku, Ke Au Hau,* describes where Chief Kahahana hid upon Oʻahu's defeat by Kahekili before he was captured and subsequently killed by Kamehameha's forces. Other versions of the story say that he was sacrificed at Puʻu Kapu Heiau at the boundary of Moanalua and Kahauiki Ahupuaʻa.

> When Kahekili defeated Oahu, Kahahana, his wife and friend fled to Moanalua where he lived with his servant. From there he moved to Kinimakalehua at Aliamanu below Kapukaki, a place facing Leilono. There was a lehua and a hau tree where they stayed for a few days. From there they went to Keanaapuaa and from thence to Kepaakaea, then to Waipio and on to Kahaone. They remained there until they

> thought it better to go up to Oahunui at Wahiawa and so they went to the forest of Halemano. They were there a short time and moved to Leilehua. After living there for a time they went to stay at Poʻohilo in Honouliuli and there they hid until, weary with life in the forest, they showed themselves to the commoners. (Sterling and Summers 1978:6–7)

An imu located in Moanalua Gardens is associated with a chief of the area named Kamahalolaniali‘i (Beckwith in Sterling and Summers 1978:329). Out of jealousy, he challenged Chief Keli‘ikanakaole to a riddle contest, with the condition that the loser would be roasted in the imu. Kamahalolaniali‘i recanted a riddle taught to him by Paeli, a man from the uplands of Moanalua, which described the stages of human life from pregnancy to childhood. Feeling compassion for Keli‘ikanakaole, Paeli revealed the answer to him. After acting out the answer, Keli‘ikanakaole fled and never returned to Moanalua, remaining in hiding until Kamahalolaniali‘i’s death.

‘Ōlelo No‘eau, Winds, and Rains

With their lives closely connected to the natural environment and physical surroundings, Hawaiian winds and rains were individually named and associated with a specific place, region, or island. In *Hānau Ka Ua*, Akana and Gonzales (2015:xv) explain that kūpuna “knew when a particular rain would fall, its color, duration, intensity, the path it would take, the sound it made on the trees, the scent it carried, and the effect it had on people.”

In 1983, Mary Kawena Pukui published a volume of close to 3,000 ‘ōlelo no‘eau that she collected throughout the islands. The introductory chapter reminds us that if we know these proverbs and wise sayings well, then we will know Hawai‘i well (Pukui 1983). A single ‘ōlelo no‘eau was found specifically mentioning Moanalua and naming its wind:

> (1460) Ka makani Hoʻeo o Moanalua.
> *The Hoʻeo, whistling wind of Moanalua.*
> Moanalua is on Oʻahu. (Pukui 1983:158)

The rain name connected to the project region provides valuable insight into kūpuna perspectives of the landscape. One such name associated with Moanalua, recorded in *Hānau Ka Ua* (Akana and Gonzales 2015), is Kinimakalehua, meaning “countless lehua blossoms.” This term is not only a rain name but also a place name within the ahupuaʻa (Akana and Gonzales 2015:84).

Moanalua in the Historic Era

When the first Westerners arrived in the Hawaiian archipelago in 1778, the islands were not yet united under one sovereign. At that time, Moanalua and the entire island of Oʻahu was under the rule of Chief Kahahana. In 1783, Chief Kahahana’s reign ended with the invasion and victory of Chief Kahekili of Maui. This would forever be the end of Oʻahu’s independence as a separate island kingdom. When Chief Kahekili died in 1794, control of Oʻahu went to his son Kalanikūpule. The following year, Chief Kamehameha of Hawai‘i Island invaded Oʻahu to engage Kalanikūpule in battle. Kamehameha overwhelmed Kalanikūpule’s warriors, effectively gaining control of all the islands from Hawai‘i to Oʻahu. Eventually, Kamehameha would make a peaceful agreement with Chief Kaumuali‘i of Kauaʻi, bringing that island and Ni‘ihau into the fold and thereby uniting the Hawaiian archipelago under one rule (Kamakau 1991; Kanahele 1995).

Early Historic Accounts of Moanalua

Early Western accounts of coastal Moanalua describe the ahupuaʻa as initially having a substantial Native Hawaiian population. The resources available were utilized to their fullest with a shallow lagoon constructed

into fishponds and rich alluvial areas formed by streams of which a system of irrigated, terraced loʻi were built. Surrounding the loʻi were maiʻa and kō. Otto Von Kotzebue, a navigator of the Russian Navy described Moanalua during his visit in 1816:

> On our way, we met now sugar plantations, now taro fields, now scattered huts; and so, without noticing it, we covered the five miles to the large village of Mauna-Roa [Moanalua], situated in a delightful valley on a mountain slope. From here the winds to the sea a fast-flowing river of the same name…In front of the village, consisting of pretty little reed huts, one encounters two groves, one of coconut palms, the other of breadfruit. We passed through these little groves, to take a rest on the hill lying immediately behind. (Barratt 1988:232)

> Our way led us through a romantic valley where we seated ourselves under shady breadfruit trees, on the banks of a salt lake…We again ascended a high mountain and were, soon afterwards in a beautifully cultivated plain, among taro fields, sugar plantations, and banana trees. (Kotzebue 1821 in Handy et al. 1991:474)

Just a decade after Kotzebue described the "large village" of Moanalua, a naval officer named Hiram Paulding traveled along the same trail through the region in 1826 but documented in his journals that "the country was thinly inhabited. We met with no considerable village or rich valley" (Paulding 1971:205). It is likely that this change in population was for the most part the result of widespread decimation of the Native Hawaiian population, which occurred after Western contact due to the introduction of foreign diseases. The first census of Hawaiʻi was taken in 1835–1836 by missionaries. At this time Moanalua had a total population of 625, with 486 adults (234 females and 252 males) and 139 children (48 females and 91 males) (Schmitt 1973:19).

The coconut grove mentioned by Kotzebue was referenced again in the 1830s and seemed to have an unusual look possibly due to strong winds:

> But to return to the little valley, about three miles from Honolulu on the road to Ewa over...On looking down, you behold a large grove of cocoanut [sic] trees, some of which give evidence of having been blown upon with no ordinary breath; appearing to have been nearly prostrated when about twenty feet high, they again shot up in a perpendicular direction and now present the curious phenomenon of living trees, the upper half of whose trunks are almost at right angles from the lower. It is a little remarkable that the surrounding trees on every side are perfectly straight. (Hall 1839:97)

Āliapaʻakai continued to be utilized for its salt resources until around the mid-1800s, when it was said to have "disappeared" (Bates 1854:102). In the 1820s, a missionary named William Ellis described Salt Lake and the process of harvesting the salt in his journals:

> About six miles to the west of Honoruru, and nearly as far from the village of Eva, on the Pearl River, there is a singular natural curiosity – a small circular lake, situated at a short distance from the sea shore, so impregnated with salt, that twice in the year the natives take out between two and three hundred barrels of fine clear, hard, crystalized salt: this lake is not only an interesting natural curiosity, but an important appendage to the island. It belongs to the king, and is not only useful in curing large quantities of fish, but furnishes a valuable article of commerce; quantities of it having been sent for sale to Kamtschatka, and used in curing seal skins at the different islands to which the natives have sent their vessels for that purpose, or sold in the islands to Russian vessels, from the settlements on the north-west coast of America. (Ellis 1969:18–19)

Early settlements in the coastal region of Moanalua Ahupuaʻa were contained to two areas, likely two traditional Hawaiian fishing villages (Anderson and Bouthillier 1996:26). West of the current project area, southwest of the settlement later known as Watertown, was a small, unnamed community referred to as Settlement 1840. Poi Village was located southwest of the current study area, along the former coastline within the airport taxiway near today's Honeymoon Beach. It is assumed that the shoreline in this region was very low-lying and marshy, making it unsuitable for habitation; thus, few settlements are known in the area.

Māhele and Changes in Land Tenure

The change in the traditional land tenure system in Hawai‘i began with the appointment of the Board of Commissioners to Quiet Land Titles by Kamehameha III in 1845. The Great Māhele took place during the first few months of 1848, when Kamehameha III and more than 240 of his chiefs worked out their interests in the lands of the Kingdom. This division of land was recorded in the Māhele Book. The King retained roughly a million acres as his own as Crown Lands, while approximately a million and a half acres were designated as Government Lands. The Konohiki Awards amounted to about a million and a half acres; however, title was not awarded until the konohiki presented the claim before the Land Commission.

In the fall of 1850, legislation was passed allowing citizens to present claims before the Land Commission for parcels that they were cultivating within the Crown, Government, or Konohiki lands. By 1855, the Land Commission had made visits to all of the islands and had received testimony for about 12,000 land claims. Ultimately, between 9,000 and 11,000 kuleana land claims were awarded to kama‘āina, totaling only about 30,000 acres and recorded in ten large volumes.

It was customary for ali‘i to redistribute lands won in significant battles, as was the case with Moanalua when Maui chief Kahekili conquered O‘ahu and subsequently, when Kamehameha I came out victorious at the Battle of Nu‘uanu. Moanalua Ahupua‘a changed hands many times during this period between the late-1700s and early-1800s:

> Much later when Kahekili of Maui conquered O‘ahu he placed his son, Kalanikūpule, in charge of Moanalua. After the battle of Nu‘uanu, Kalanikūpule fled but was finally caught and sacrificed on an altar, probably at Pu‘ukapu [in Moanalua]. Kamehameha gave Moanalua to Kame‘eiamoku. Next the valley passed to his son, [Ulumāheihei] Hoapili, then to Hoapili’s adopted son Lot (afterwards Kamehameha V), to Ruth Ke‘elikōlani, and then to Bernice Pauahi Bishop, who willed the entire ahupua‘a to Samuel M. Damon in 1884. At the present time [1974] the Damon family is offering the entire valley, including Kamana Nui and Kamana Iki, to the people of Hawai‘i as a park of more than 3,000 acres for preservation of native Hawaiian flora and historic sites. (Beckwith 1970:124–125)

Lot Kapuāiwa (Kamehameha V) received Moanalua in its entirety during the Māhele as LCA 7715. At this time, there were also approximately 101 LCAs granted within the ahupua‘a. Nearly all of these kuleana awards are located in cultivated areas near the end of Moanalua Stream and its tributaries, located roughly 1 km (0.6 mi.) to the northeast of the current study area. No other LCA awards have been identified within the project area or its immediate vicinity. Kapuāiwa died in 1872 and the ahupua‘a of Moanalua was passed to his heir and half-sister, Princess Ruth Ke‘elikōlani. Upon her passing in 1883, all of her land holdings, including the lands of Moanalua, were willed to Princess Bernice Pauahi Bishop, who was the last heir of Kamehameha I (Pukui et al. 1974:152). Bishop died in 1884, leaving Moanalua Ahupua‘a and the Kaliawa Fishery to her husband’s business partner, Samuel M. Damon (Pukui et al. 1974:152). Damon “subsequently purchased…the Sumner heirs’ title to the ahupua‘a and began his purchase of 89 of the remaining kuleana titles” (Ayers 1970:65). Bishop’s will, dated October 31, 1883, stated:

> I give, devise and bequeath unto my friend, Samuel M. Damon of said Honolulu, all of that tract of land known as the Ahupuaa of Moanalua, situated in the district of Honolulu, Island of Oahu; and also the fishery of Kaliawa, to have and to hold with the appurtenances to him, his heirs and assigns for ever [sic]. (Sterling and Summers 1978:329)

Damon utilized his Moanalua lands as pasture and also leased areas to plant sugarcane, banana, and rice (Anderson and Bouthiller 1996). He and his heirs would later purchase many of the kuleana lots in Moanalua.

Historic Maps

Two maps from 1881 depict coastal Moanalua, identifying the names and extents of the fishponds along Keʻehi Lagoon, as well as nearby fisheries, reefs, and islets. The first, produced by Covington (1881; Figure 4), shows the current project area almost entirely within the ocean. Its surroundings are largely undeveloped, though several possible loʻi terraces are illustrated north of the project parcel. A grove, likely the coconut grove described by Kotzebue, is depicted along the only regional trail, which turns mauka behind Āliapaʻakai. Numerous fishponds are depicted along the coastline. In the vicinity of the current project, Kaloaloa Fishpond is shown to the west. Awaʻawaloa and Mapunapuna Fishponds are labeled to the north of the project area, while Kaʻikikapu and Weli Fishponds are illustrated to the northeast across the lagoon. Kaʻikikapu Fishpond is incorrectly labeled here as "Kaihikapu" which is the name of a fishpond located southwest of the project and also labeled on this map. Apili, Pāhounui, and Pāhouiki Fishponds are located across the lagoon to the project's southeast. Notably, Pāhounui Fishpond is labeled as "Pahou," suggesting a possible historic variant of the pond's name. The map also depicts ʻŌnini Island in a region of the fishery waters now filled in and within the boundaries of the current project area. Along the border of Kalihi and Kahauiki Ahupuaʻa, south of Weli Fishpond, a "leper asylum" is also illustrated.

The second map, prepared by Lyons (1881; Figure 5), depicts similar features, including ahupuaʻa and fishery boundaries. The Keʻehi Fishery is situated south of the current project area and is annotated with "About 1,000 Acres," along with a note from the cartographer indicating that the fishery was originally attached to Kalihi Ahupuaʻa. In contrast, Kaiki Fishery is shown as part of Moanalua Ahupuaʻa. Kaloaloa Fishpond near the project area is illustrated with a mud bank along its mauka side. Mokumoa and Ilinui Fisheries divide the upper limits of the lagoon in the waters off the coast of the current project area. Kaʻikikapu Fishpond is notably still incorrectly labeled "Kaihikapu" as is Pāhounui Fishpond, still labeled as simply "Pahou." Moku Moa Island, labeled "Moku Maa" is situated between Kaʻikikapu and Weli Fishponds. The "leper asylum" across the fishery waters is still shown.

A map from ca. 1890 shows early signs of development emerging in coastal Moanalua (Monsarrat ca. 1890; Figure 6). Most significantly, there is a road that runs along the slopes of Āliapaʻakai to the north. The current project area is located near the label for LCA 7715, which encompassed the entirety of Moanalua Ahupuaʻa and was awarded to Lot Kapuāiwa (Kamehameha V). Ahua Fishery is now shown to the north of the current project location, while Moku Moa Fishery is not illustrated at all. Kaʻikikapu Fishpond is now correctly labeled and "Mokuonioni" remains visible. "Old Salt Pans" are to the north of Apili Fishpond, a mud flat is now north of the current project area, and the area which the previous maps labeled a leper asylum is now depicted as "LCA 10498" in Kalihi Ahupuaʻa and awarded to "Nahinu."

Moanalua in the Late Historic Era to Modern Times

Moanalua continued to develop from the late historic period into the modern era, shaped by agricultural activity, military expansion, and the eventual establishment of Oʻahu's primary airport.

Agriculture

The close of the 1800s and beginning of the 20th century saw an increase in sugarcane cultivation across the island chain. Large areas of Moanalua were leased to the Honolulu Sugar Company, which would later be known as the Honolulu Plantation Company (HPC). A large swath of the coastal plain was used by HPC for sugar cultivation, which also occurred across the majority of coastal ʻEwa. Inland areas of Moanalua were used for grazing land and pasture, while wetlands with rice and taro cultivation still occurred along streams. According to a 1902 map (Wall 1902; Figure 7), the current project area is situated just east of the HPC cane fields (outlined in red) and a small area of cultivated wetlands located between the cane fields and the current project location

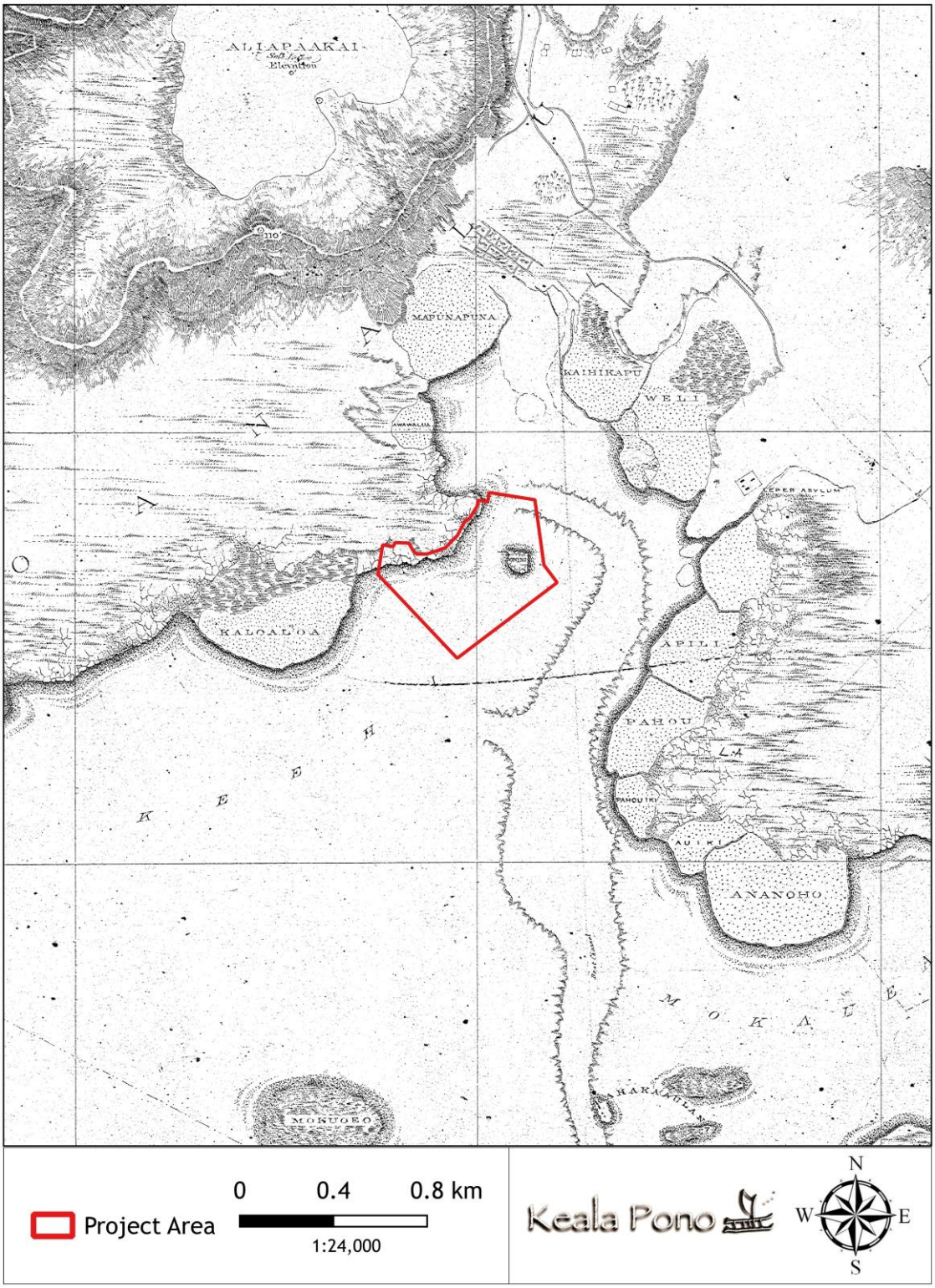


Figure 4. Portion of a Hawaii Government Survey map of the "Main Part of the Kona District, Oahu" (Covington 1881).

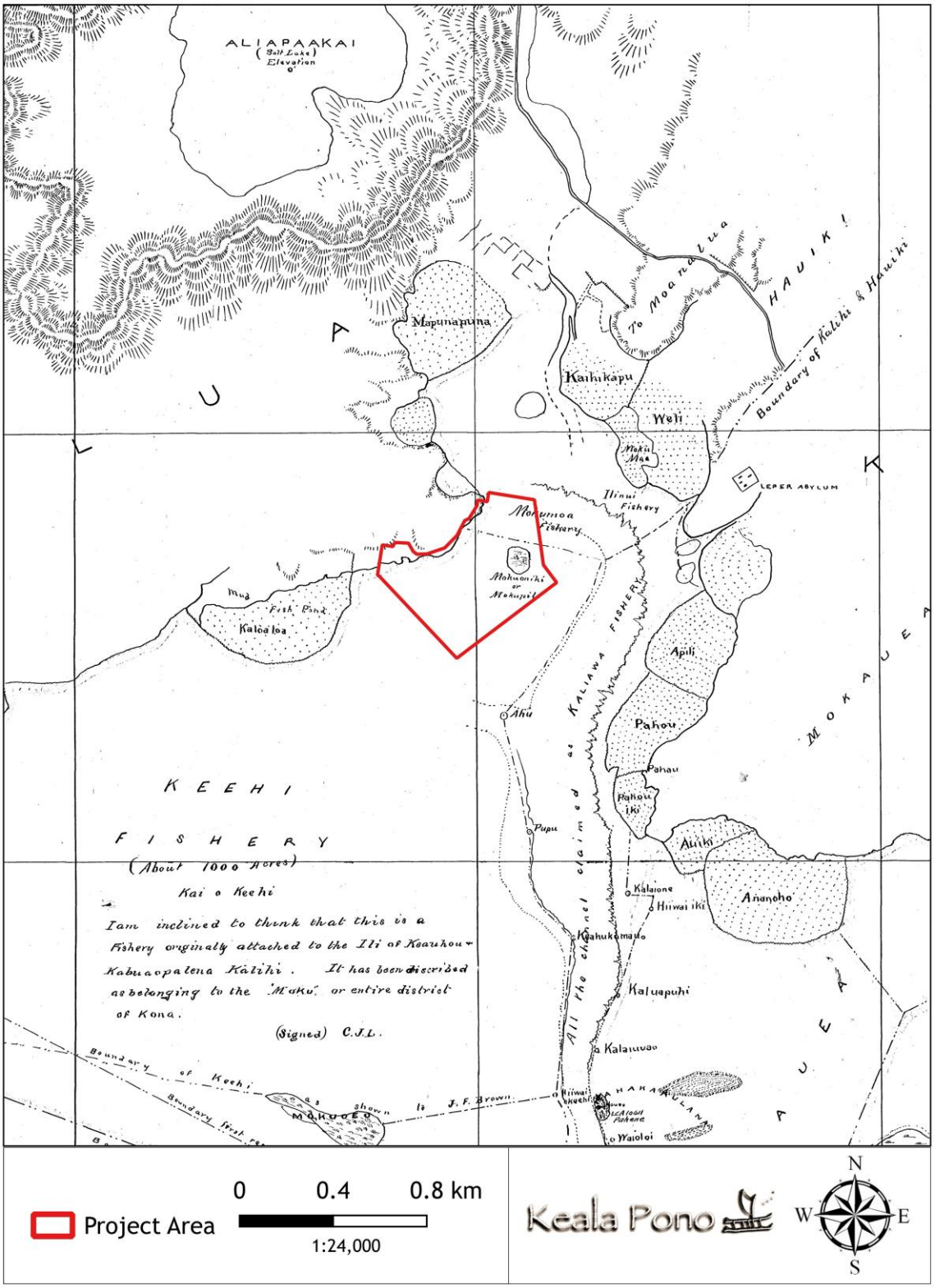


Figure 5. Portion of a map showing the reef titles of Kalihi (Lyons 1881). Note that this map is contextual and does not imply reef titles within the project area or LRFI scope.

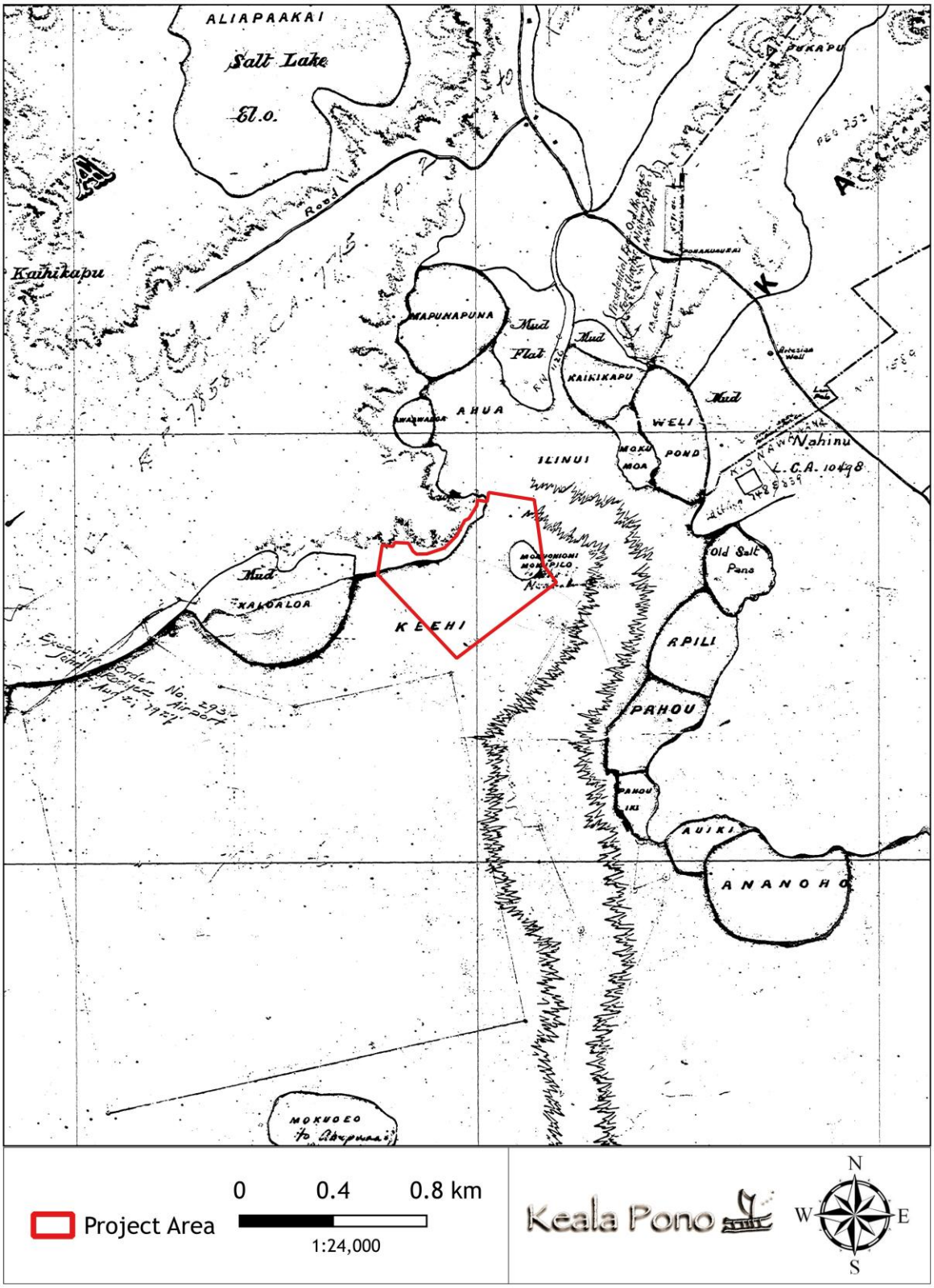


Figure 6. Portion of a map of Moanalua and Kahauiki (Monsarrat ca. 1890).

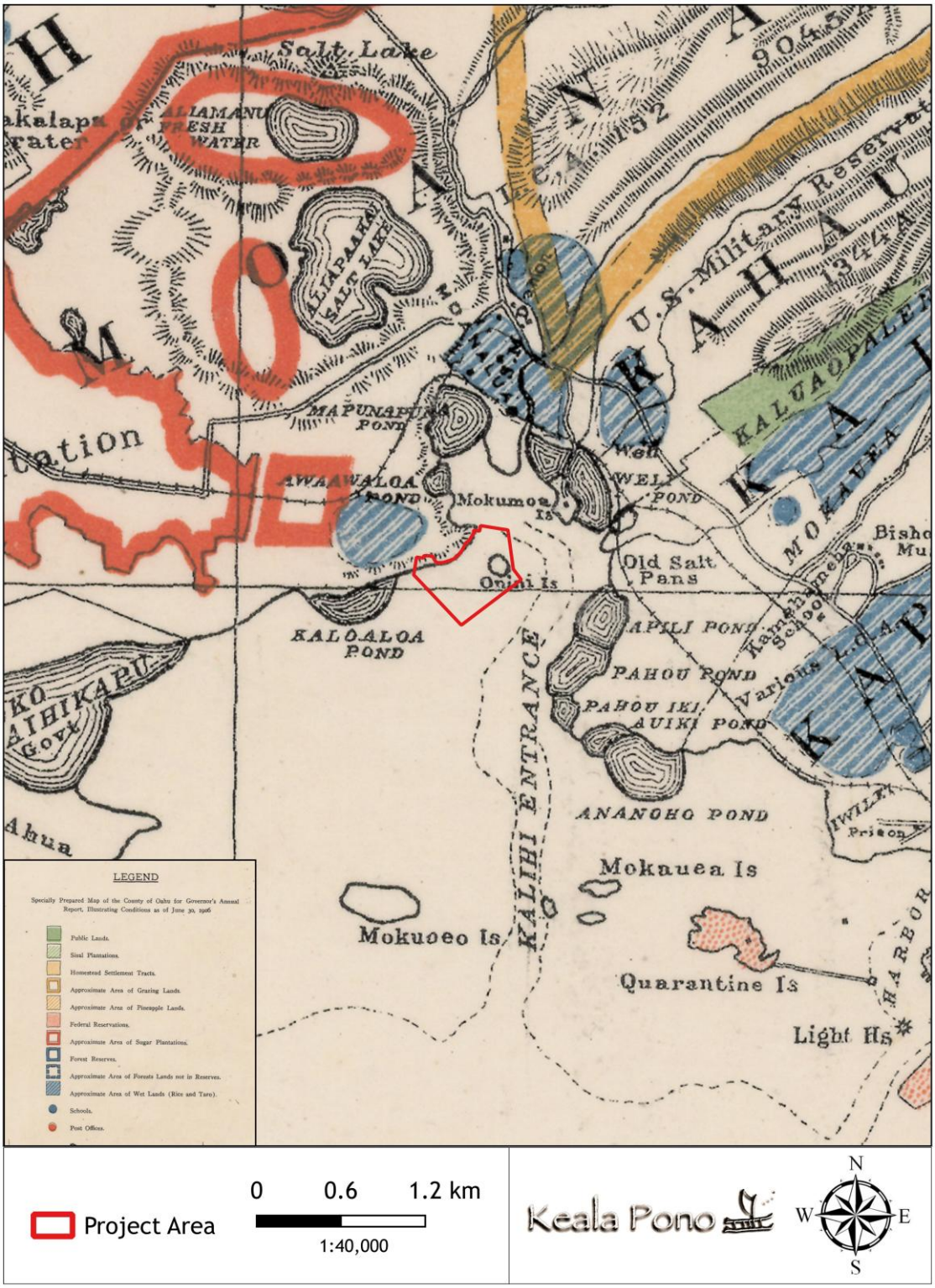


Figure 7. Portion of a Hawaii Territory Survey map of O‘ahu depicting land use (Wall 1902). Note the location of the sugar plantations (red outline) and wetlands with rice and taro cultivation (blue diagonal shading).

(blue striped region). Wetlands are also depicted nearby to the north of the current project. By this time, the HPC plantation had lands within ʻĀliamanu Crater and its slopes, as well as a section just to the west of Āliapaʻakai. The area around the mouth of Moanalua Stream remained a wetland where kalo and rice were farmed. During this period, infrastructure was developed to support commercial cultivation. A railroad is illustrated in the 1902 map meandering along the coast and running inland of the current project area (see Figure 7).

The main railroad on the island, the Oahu Railway and Land Company (OR&L), was constructed from 1889–1899 by businessman Benjamin Dillingham, mainly for the transportation of sugarcane; however, the HPC also had railroad lines of their own. Both rail lines traversed Moanalua Ahupuaʻa along the corridor of today's Nimitz Highway, cutting through the wetlands near the stream mouth (see Figure 7). The OR&L line was constructed in stages, beginning with the route from Honolulu to ʻEwa, later extending north along the coast to Waiʻanae, and eventually around Kaʻena Point to reach plantations as far as Kahuku. With the growing dominance of trucks and automobiles, rail service declined, and the OR&L line was permanently shut down in the late 1940s.

In the mid-1930s, the Hawaiian Pineapple Company (HPC) leased more than 23,000 acres in Moanalua. During this period, the Puʻuloa Camp and Watertown plantation settlements were established northwest of the project area to accommodate plantation laborers. A 1927 U.S. Geological Survey map (USGS 1927; Figure 8) further documents the region's fishponds, marshlands, and the early configuration of Rodgers Airport to the southwest of the project area. The map also illustrates substantial infrastructure development in the surrounding region, including buildings, roads, and a pipeline depicted northeast of the current project. At this time, Pāhounui Fishpond continues to be labeled simply as "Pahou."

Military

The 19th century closed with the overthrow of the Hawaiian monarchy by foreigners backed by the United States and the annexation of Hawaiʻi into an American territory. Upon the annexation of Hawaiʻi in 1898, Pearl Harbor became the main focal point of U.S. interests. The U.S. Navy dredged the Pearl Harbor channel a decade later, filling in former low-lying areas, and the military presence throughout the region grew, permanently changing the nature of Moanalua's landscape. To the northeast of the current project, Fort Shafter was established in 1907, followed by Hickam Field (Hickam Air Force Base) to the west in 1938. By 1953, large portions of land in the region were developed into naval reservations, including the Makalapa Crater, ʻĀliamanu Crater, Fort Kamehameha Military Reservation, and Camp Catlin (located to the northwest of the current project), as well as military housing neighborhoods along Nimitz Highway and adjacent to the subject property. At this time many residential and industrial areas were also developed, such as Kamehameha/Nimitz Highway and the neighborhood of Damon Tract, which occupied the area immediately west of the study parcel, in addition to roads still in place today, such as Puʻuloa Road and Lagoon Drive (USGS 1953; Figure 9).

Airport Development and Modification of the Keʻehi Lagoon Coastline

In 1925, 48.27 ha (119.3 ac.) of land in coastal Moanalua and 309.98 ha (766.00 ac.) offshore were purchased from Samuel Mills Damon for $27,410.00 to construct an airport on Oʻahu (Hawaii Aviation n.d.; Figure 10). Named after a World War I Naval Commander, the John Rodgers Airport was inaugurated on March 21, 1927, and was the first airport in the Territory of Hawaiʻi (Figure 11). It would later become the Honolulu International Airport, subsequently renamed the Daniel K. Inouye International Airport. Low-lying areas were filled in to support warehouses, roads, and further airport infrastructure, but the fishponds were not initially filled. John Rodgers Airport had two runways with additional graded coral runways added in 1930–1931 (Hawaii Aviation n.d.). A few months prior to the attack on Pearl Harbor in 1941, offshore dredging began for a seaplane runway in Keʻehi Lagoon; however, the military took control of all airports following the attack and "extensive improvements were made at John Rodgers Airport" during the war (Hawaii Aviation n.d.).

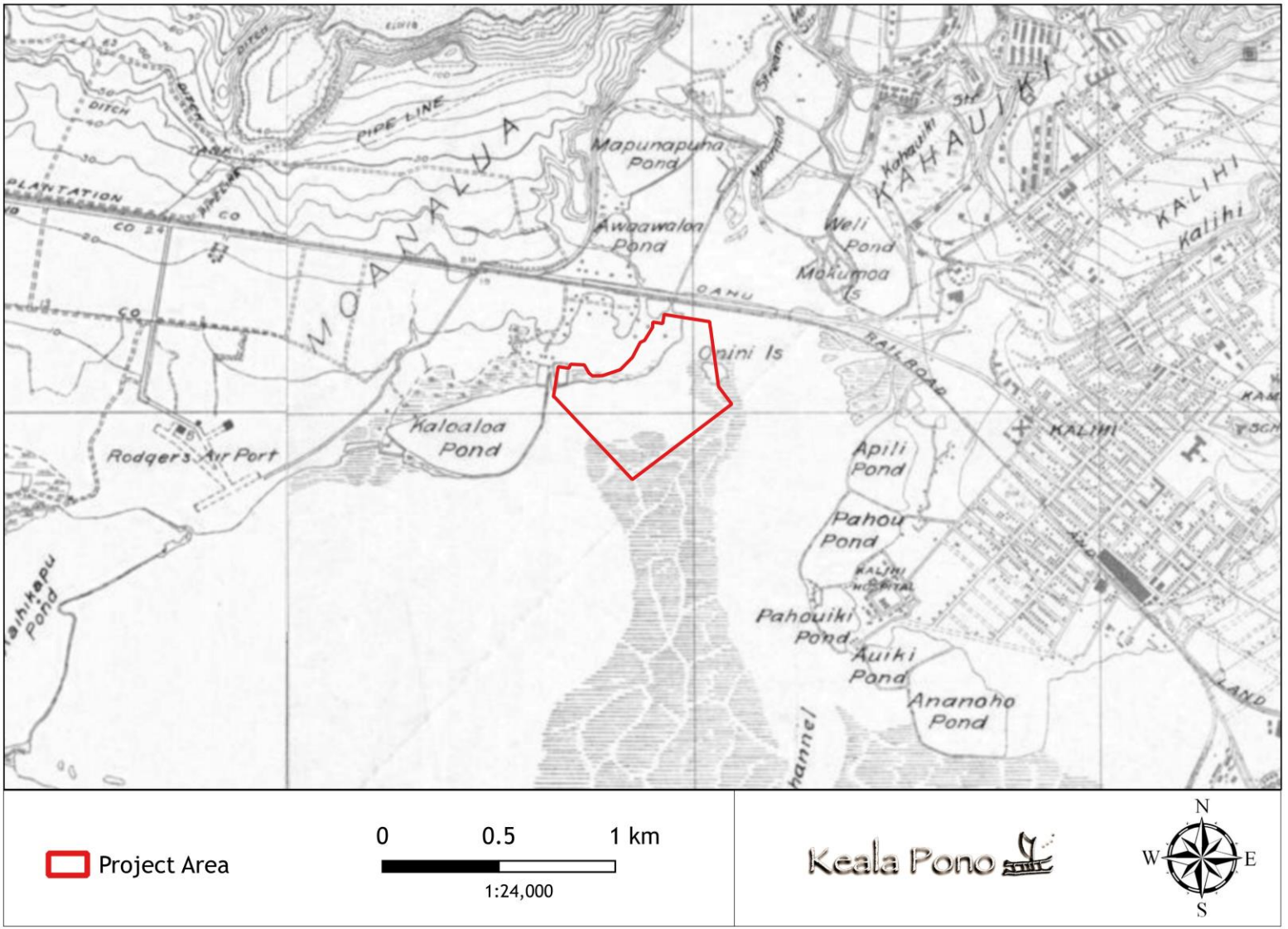


Figure 8. Portion of a 1927 USGS Pu‘uloa Quadrangle map showing the project area (USGS 1927).

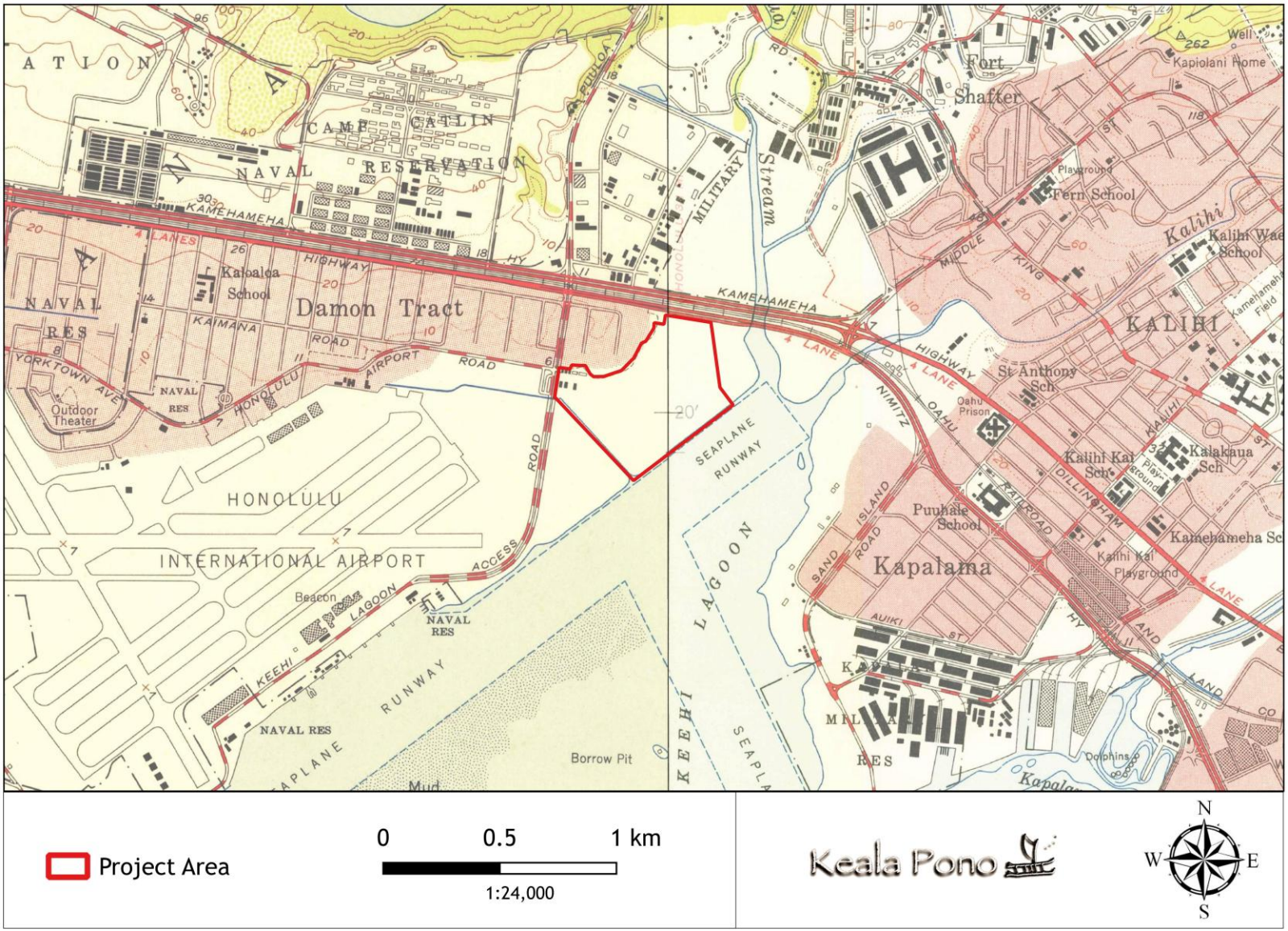


Figure 9. Portion of USGS Pu‘uloa Quadrangle map showing the project area (USGS 1953).



Figure 10. Aerial photograph of John Rodgers Field a year after construction in 1928 (Hawaii Aviation n.d.).



Figure 11. Aerial photograph of John Rodgers Field in 1929. Note that the fishponds have not been filled yet (Hawaii Aviation n.d.).

Substantial filling of the land, including the fishponds, occurred ca. 1942–1943. The coastal fishponds surrounding the airport as well as those surrounding Keʻehi Lagoon were filled in during war time airport improvements. Aerial photographs of the airport from 1941 (Figure 12) and 1947 (Figure 13) show before and after infilling of the fishponds while photographs of Keʻehi Lagoon from 1928 (Figure 14) and 1952 (Figure 15) illustrate the fishpond infilling that took place in the vicinity of the current project. It is unknown if the rocks that made up the fishpond walls were utilized in construction activities, destroyed, or left in place during infilling. Approximately 1,000 m of new land was created due to these filling activities that extended along the coastline. Infilling significantly reduced the size of the lagoon, reshaped it into its present triangular form, and created the landmass that now supports Keʻehi Lagoon Beach Park. By 1946, these wartime alterations to the coast turned the existing airport and surrounding area into one of the largest in the United States (Hawaii Aviation n.d.).

Following the war in 1947, the Territory of Hawaii regained control of John Rodgers Airport, renaming it the Honolulu Airport. With increased usage, expansion continued and by 1950 "the boundaries of Honolulu Airport, including the Seadrome channels, comprised an area of 1,019.476 acres" (Hawaii Aviation n.d.). Additional terminals were built and a runway was constructed to connect HNL to the Hickam Air Force Base, now Joint Base Pearl Harbor Hickam (JBPHH). In the early 1950s, this was one of the longest runways in the world (Hawaii Aviation n.d.).

Also during this time, federal oversight of the airport gradually diminished. In 1946, operational control of John Rodgers Airport was restored to the Territorial Government, although the U.S. Navy continued to conduct limited activities at the facility until approximately 1949. In April 1950, further tracts of land in the vicinity of the airport were conveyed back to the Territory. These consisted of areas created through the reclamation of formerly submerged lands associated with construction of Keʻehi Lagoon (United States 1950). This area likely included the project area at present day Keʻehi Lagoon Beach Park.

Plans to establish a public recreational area, then known as "Kalihi Playground," on the land between Keʻehi Lagoon and the airport began to take shape in 1951 (*Honolulu Advertiser* 1953). The proposal faced opposition from the Aeronautics Commission, which instead advocated for a golf course at the location and argued that the land might be required for future airport expansion. The Commission also raised safety concerns, asserting that a park would lie too close to active flight paths used by aircraft during approach and landing. Despite these objections, the Public Parks and Recreation (Parks Board) moved forward with project planning (*Honolulu Advertiser* 1953).

Today, coastal Moanalua remains centered around HNL and the adjacent JBPHH. The area surrounding the project property continues to house a mix of commercial lots and industrial zones. Further north is the 9.71 ha (24 ac.) privately owned Moanalua Gardens along the bank of Moanalua Stream. After acquiring Moanalua Ahupuaʻa from Princess Bernice Pauahi Bishop, S.M. Damon relocated from Honolulu to the former summer residence of Kamehameha V. He subsequently undertook extensive landscape modifications, converting the surrounding rice fields and loʻi into formal gardens, inspired by those he had encountered during travels in Britain (Moanalua Gardens n.d.). These landscaped grounds eventually formed the basis for what is now the Māpunapuna industrial subdivision. Damon preserved the Kamehameha summer cottage and built a Japanese garden and tea houses, as well as a Chinese Hall, which were later moved to its current location at the Moanalua Gardens when lands were sold off and consolidated. After the dissolution of the Damon Estate, Damon's great grandson, John Philip Damon, purchased the gardens and created the Moanalua Gardens Foundation to perpetuate his great-grandfather's vision (Moanalua Gardens n.d.). Each year, the Prince Lot Hula Festival honoring Prince Lot Kapuāiwa is held at the gardens.



Figure 12. Aerial photograph of the airport from 1941 prior to fishpond infilling (left foreground) (Hawaii Aviation n.d.).



Figure 13. Aerial photograph from 1947 showing runways and infilling (Hawaii Aviation n.d.).



Figure 14. Aerial photograph of Keʻehi Lagoon from 1928 prior to fishpond infilling (UH Mānoa n.d.).



Figure 15. Aerial photograph of Keʻehi Lagoon from 1952 showing regional development after infilling (UH Mānoa n.d).

Previous Archaeology

The following discussion provides information on archaeological investigations that have been carried out within 0.25 km (0.16 mi.) of the project area, based on reports found in the SHPD library in Kapolei, Hawai‘i. Previous archaeological studies are shown in Figure 16 and Table 1, while recorded archaeological sites are displayed in Figure 17 and Table 2.

The earliest archaeological survey on O‘ahu was completed by J.G. McAllister in his published work, *Archaeology of Oahu* (1933). This study documented many important Hawaiian cultural sites, including heiau, at a time before many were destroyed. There are 21 sites documented by McAllister (1933) within Moanalua Ahupua‘a, 11 of which are in the coastal region. None are located within the current project area; however, one fishpond, Kaloaloa (SIHP 00080), was located just west of the project area. McAllister describes the fishpond as follows (1933:93, 101):

> **Kaloaloa Fishpond, Moanalua (Site 80)**
>
> The pond is 36 acres in area, with a semicircular wall 2700 feet long. The walls are of coral, 6 feet wide and 3 feet high. There are three outlets (makaha).

In 2012, an archaeological assessment was completed for ground-disturbing activities at HNL’s Runway Safety Areas 22R and 22L to the west of the current project area (Athens 2012). The study found that intact, undisturbed fishpond deposits associated with Kaloaloa (SIHP 00080) may be encountered and recommended an archaeological inventory survey with soil coring to determine the presence and location of the former fishpond. The survey was completed the following year (Athens and Ward 2013) with five core samples. The results were similar to other coring studies of the airport area. “The radiocarbon dates were stratigraphically inverted. Also, plentiful historically introduced pollen was present in the possible fishpond layer as well as the underlying marine layer” (Athens and Ward 2013:vii). No intact fishpond sediments or historic properties were observed, and it was concluded that any fishpond deposits have been compromised by historic infilling.

Also in 2013, in anticipation of construction associated with Section 3 (Airport Section) of the Honolulu High-Capacity Transit Corridor Project, an archaeological inventory survey was conducted along a corridor that extends through the northern boundary of the current project area and continues both eastward and westward beyond it (Hammatt et al. 2013). A total of 47 test excavations were dug within the airport section, which spans 7.7 km (4.8 mi.) from Aloha Stadium to the Middle Street Interchange. No historic properties were documented in the vicinity of the current project area.

In 2017, an archaeological literature review and field inspection was carried out for the Kamehameha Highway Force Main Project located within the limits of the northernmost portion of the current project area and extending westward (Hammatt et al. 2017). The field inspection identified an enclosed complex of 12 tennis courts located within the current project area. Although the courts themselves appeared utilitarian in design, they were notably accompanied by a nearby seating area composed of two sets of three concrete benches, each ensconced by eight basalt and mortar pillars. The study interpreted the architectural features as possibly historic. No SIHP number was assigned at the time of the initial study, however, the entirety of Ke‘ehi Lagoon Beach Park was subsequently designated as SIHP 50-80-14-09216, as the park contains architectural features distinctive of O‘ahu park development during the 1950s.

A Historic American Buildings Survey (HABS) was completed within the project area which documented additional architectural features associated with SIHP 09216 (HABS 2024). The survey documented Comfort Station No. 1 and 2 at Ke‘ehi Lagoon Beach Park prior to demolition. The two comfort stations, constructed in 1960 and designed by architect John H. McAuliffe, Jr., were found to be examples of mid-century public park architecture incorporating regional materials and Tiki Modern design features. Both

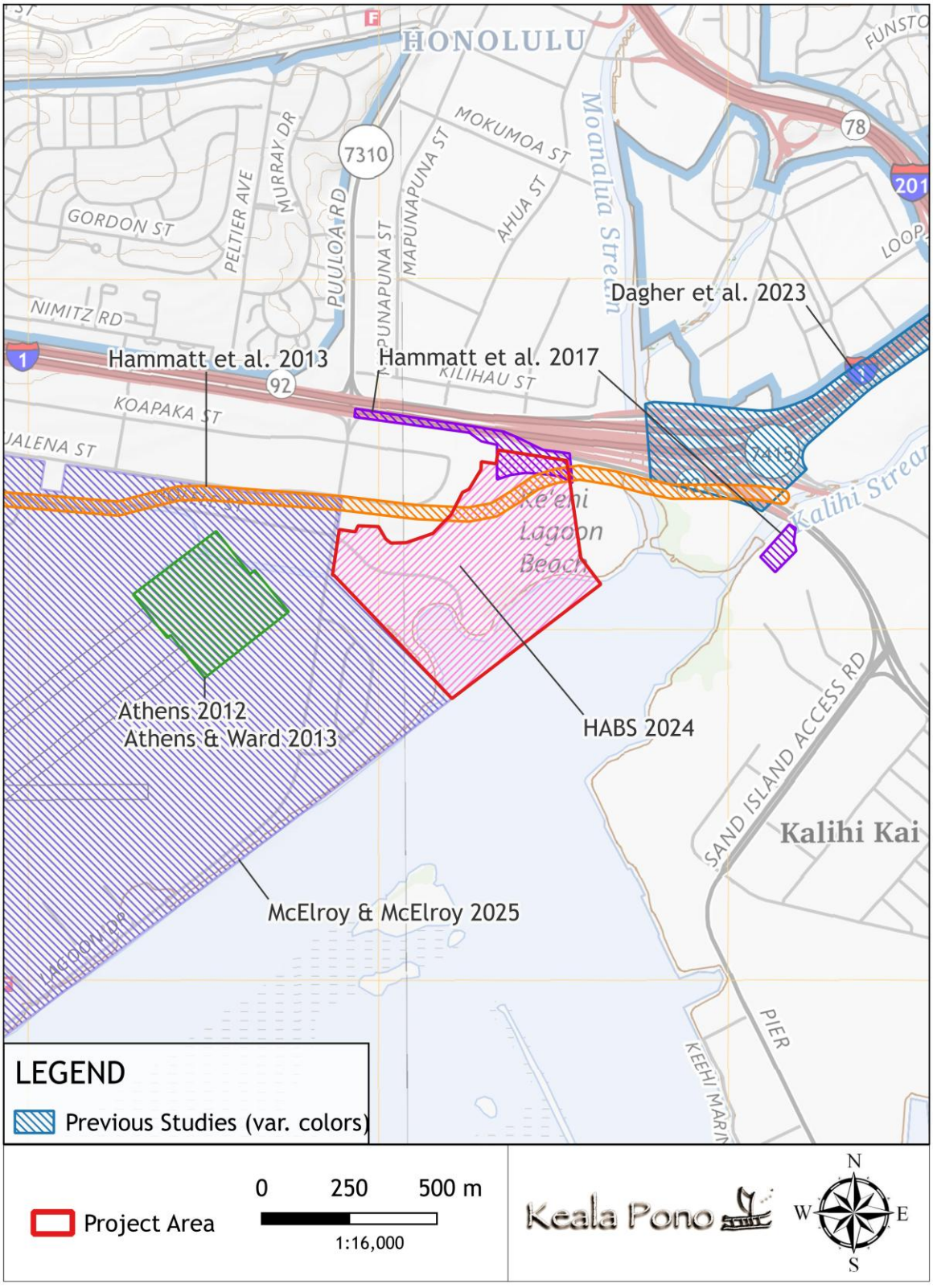


Figure 16. Previous archaeological studies in the vicinity of the project area.

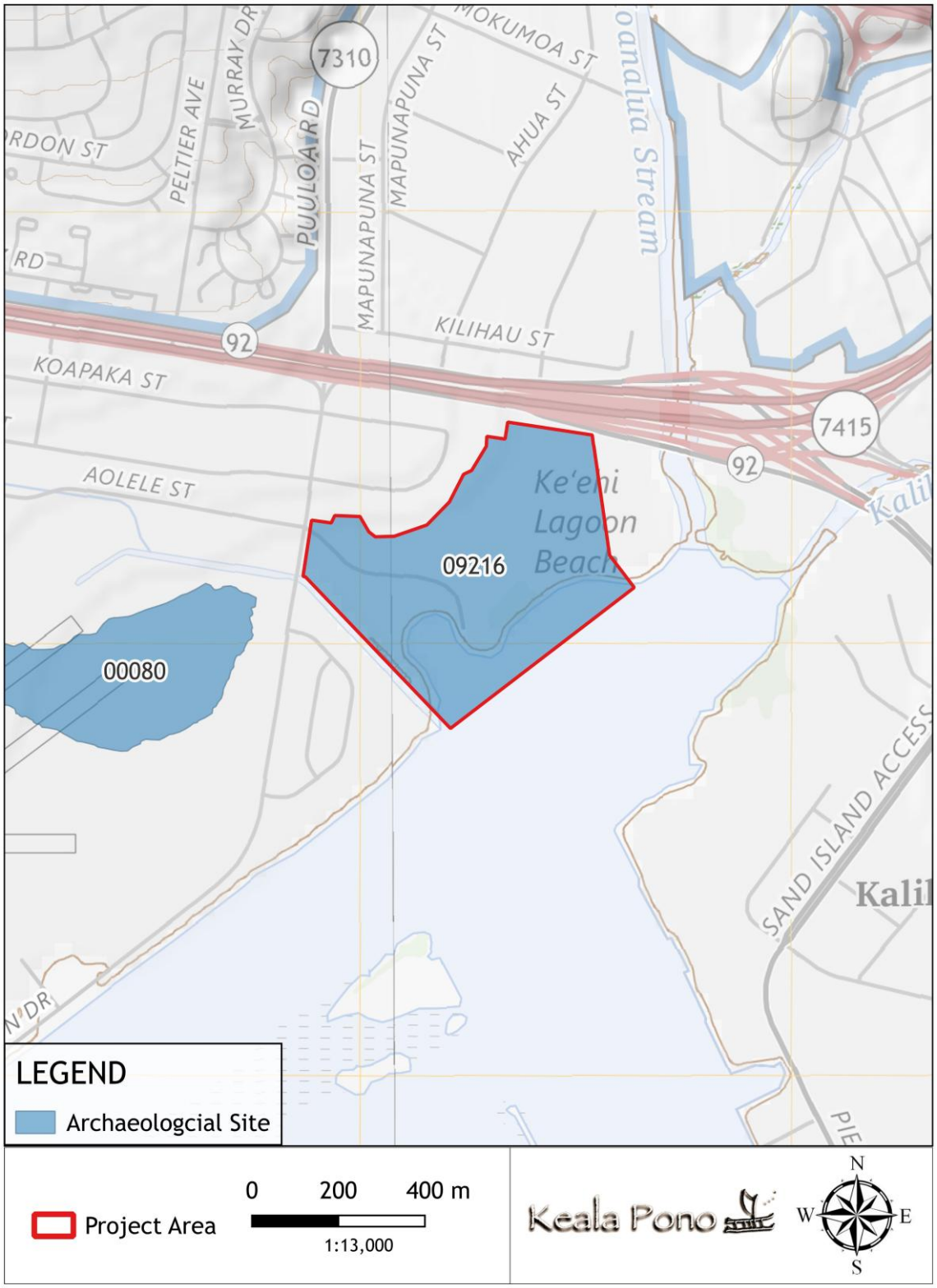


Figure 17. Archaeological sites with known locations in the project vicinity. SIHP numbers are prefaced by 50-80-13.

Table 1. Previous Archaeological Work in the Project Vicinity

Summary: This data table contains chronological columns listing archaeological studies. The four column headers read from left to right: Author(s) and Date, Location, Study Type, and Findings. Each row represents a specific archaeological report, its geographic focus area, and the corresponding cultural or site discoveries.

Author/Year	Location	Work Completed	Results
McAllister 1933	Island-Wide	Survey	Recorded 21 archaeological sites within Moanalua Ahupua‘a. There are 11 in the coastal region, with Kaloaloa Fishpond (SIHP 00080) located near the current project area.
Athens 2012	HNL	Archaeological Assessment	Noted that the project could possibly encounter sediments from Kaloaloa Fishpond (SIHP 00080).
Athens and Ward 2013	HNL	Archaeological Inventory Survey	No intact sediments from Kaloaloa Fishpond (SIHP 00080) or historic properties recorded.
Hammatt et al. 2013	HNL	Archaeological Inventory Survey	No historic properties recorded near the current project area.
Hammatt et al. 2017	Kamehameha Hwy. From Lagoon Dr. To Alahao Pl.	Archaeological Literature Review and Field Inspection	Recorded possible historic architectural features at Ke‘ehi Lagoon Beach Park including tennis courts and basalt and concrete benches ensconced in basalt and mortar pillars (SIHP 09216).
Dagher et al. 2023	Ke‘ehi Interchange to Middle St., intersection of the H-1 Freeway and North King St.	Archaeological Monitoring	No historic properties observed.
HABS 2024	Ke‘ehi Lagoon Park	Historic American Buildings Survey	Comfort Station No. 1 and 2 were determined to be historical examples of mid-20th century public park architecture and recorded prior to demolition (SIHP 09216).
McElroy and McElroy 2025	HNL	Archaeological Literature Review	Noted the previously recorded Kaloaloa Fishpond (SIHP 00080). No additional archaeological properties recorded near the project area.

Table 2. Known Archaeological Sites in the Project Vicinity

Summary: This data table identifies archaeological resources by location. The three column headers read from left to right: State Inventory of Historic Places (SIHP) Number, Site Description, and Author(s) and Date. Each row details a single site, its formal designation code, and the corresponding report where it was documented.

SIHP	Description	Authors
50-80-13-00080	Kaloaloa Fishpond	McAllister 1933
50-80-14-09216	Ke‘ehi Lagoon Park	Hammatt et al. 2017; HABS 2024

structures are associated with the City and County of Honolulu's postwar park development program and the broader transformation of Keʻehi Lagoon through mid-20th century dredging, filling, and shoreline modification. The documentation concluded that the comfort stations constitute historic properties, and the HABS record was prepared to mitigate adverse effects resulting from their demolition.

Archaeological monitoring was conducted in 2023 during construction related ground-disturbing activities associated with Federal Aid Project No. NH-0300(152), Freeway Management System Phase 3, Unit 1 (Dagher et al. 2023). The undertaking consisted of ground alterations associated with the installation of conduits and pull-box cabinets. No historic properties were documented and stratigraphy within the limited APE consisted of a single fill layer.

Most recently, a literature review was conducted for the Diamond Head Extension Development Program at HNL to the immediate west of the current project area (McElroy and McElroy 2025). Archival research identified three traditional Hawaiian fishponds, including the previously discussed Kaloaloa, Kaʻihikapu, and Lelepaua, along with historic features such as early airport hangars and roadways. Only Kaloaloa Fishpond (SIHP 00080) is within the vicinity of the current project area.

Summary of Background Research

In the pre-contact era, Moanalua Ahupuaʻa was abundant in natural resources, with access to fresh water, fertile valleys, salt, and rich marine life supported by five coastal fishponds. These resources likely sustained a sizeable population, as noted by early Western visitors. Kalo was grown along the streams, within two main loʻi systems: one irrigated by the smaller Kalou Stream near Moanalua Park, and another extending along lower Moanalua Stream where terraces reached the ocean. Āliapaʻakai (Salt Lake), located not far mauka of the project area was a vital source of salt that was utilized in medicine, ceremony, and food preservation; during the hottest months, the lake dried to reveal a deep crust of salt. The Moanalua region is rooted in tradition and is referenced in ʻōlelo noʻeau and moʻolelo that speak of goddesses, chiefs, and supernatural beings. One moʻolelo describes how the volcano goddess Pele created Āliapaʻakai, a tradition that highlights the landform's spiritual significance.

The Māhele of the mid-1800s and subsequent legislation allowed citizens to claim cultivated lands, resulting in roughly 9,000 to 11,000 kuleana awards across Hawaiʻi. Following major battles, land ownership in Moanalua underwent many transitions, from Kahekili of Maui to Kamehameha I, then through successive aliʻi, including Hoapili, Kamehameha V (LCA 7715), and Princess Ruth Keʻelikōlani. Upon her death, Moanalua passed to Princess Bernice Pauahi Bishop, and subsequently to Samuel M. Damon in 1884. By acquiring the remaining kuleana lots, Damon unified the estate and utilized the land for various agricultural purposes, including livestock grazing and the farming of sugarcane, rice, and bananas.

During the late-19th and early-20th centuries, sugarcane cultivation was the main industry in the region and an extensive network of rail lines, irrigation ditches, and processing mills were constructed. Wetland areas adjacent to the plantations continued to support kalo and rice farming during this time. Military expansion in the early-20th century included the construction of Fort Shafter, Hickam Field, and other nearby bases, further transforming the landscape. Between 1925 and 1927, property was acquired from Samuel Damon to construct John Rodgers Airport, the first airport in the Territory of Hawaii. Major expansion took place during World War II, when extensive dredging and land reclamation filled former fishponds and wetlands to build new runways and military facilities. In the early 1950s, plans began to take shape to establish a public recreational area just east of the airport, then known as "Kalihi Playground," on the land between Keʻehi Lagoon and the airport. The park remains today as Keʻehi Lagoon Beach Park (SIHP 09216), with multiple original mid-century elements still intact within the current project area.

Two prior archaeological investigations conducted within the subject property recorded architectural features associated with the park. An enclosed tennis court complex and associated seating features consisting of concrete benches framed by basalt and mortar pillars were recorded prior to the conversion to pickleball courts (Hammatt et al. 2017). A subsequent Historic American Buildings Survey (2024) documented Comfort Station No. 1 and 2 prior to their demolition and determined them to be examples of mid-20th century public park architecture associated with postwar shoreline modification and park development. The earliest investigation carried out in the vicinity of the current project however, recorded Kaloaloa Fishpond (SIHP 00080), historically located at the adjacent airport just west of the project area (McAllister 1933).

FIELD INSPECTION

A field visit was conducted on February 5, 2026, by Keala Pono archaeologists Tiffany Brown, BA and Jacob Flores, BA. The 29.07 ha (71.85 ac.) project area was visually inspected to determine if any surface cultural resources may be present, and to assess the potential likelihood for subsurface cultural resources to exist. Several possible historic archaeological features were encountered (Figure 18; Table 3). The project area is located at 465 Lagoon Drive and includes the entirety of the historic Keʻehi Lagoon Beach Park (SIHP 09216) and extends into the lagoon waters. The property primarily consists of short grass open lawns (Figure 19) and recreational fields (Figure 20) with intersecting concrete walking paths and ornamental trees. The park is encircled by a paved asphalt access road (Figure 21) with parking lots located along the northern, southeastern, and western portions of the loop. A sandy beach extends along the southeastern side of the project area (Figure 22). The features noted below may all be considered part of SIHP 09216, as they are part of the Keʻehi Lagoon Beach Park.

The northern portion of the project area contains a modular office complex situated on a grass and gravel lot (Figure 23). This area is the proposed location for construction of the new maintenance facility building. A historic plantation house was observed among the modular offices within this lot (Feature 1; Figure 24). During the field visit, a maintenance worker stated that the structure was relocated from Wahiawā Botanical Garden in the 1980s and reportedly dates to approximately the 1930s. The building has since been repurposed for use as a storage facility for tools and maintenance equipment. A single concrete footing with a circular posthole was also documented near the northeastern entrance to the modular office complex (Feature 2; Figure 25), potentially indicating the former presence of historic infrastructure that has since been removed.

Just northeast of the modular office lot, the previously identified historic tennis courts which have been converted to pickleball courts (Feature 3; Figure 26), along with the adjacent mid-20th century concrete benches framed by basalt and mortar pillars (Feature 4; Figure 27), were observed. Another single concrete footing, this time with a square-shaped posthole, is in the northeastern corner of the large central field of the project area (Feature 5; Figure 28) near the northern parking lot. This second footing again indicates the former presence of potentially historic infrastructure. Just east of this footing, the previously recorded historic Tiki Modern Comfort Station No. 2 was observed (Feature 6; Figure 29). Across the large central field to the southwest near the shoreline, the historic Comfort Station No. 3 was likewise observed (Feature 7; Figure 30). As noted previously, both comfort stations have been determined to be historic examples of mid-20th century Tiki Modern public park architecture associated with SIHP 09216.

To the east, in the southeast corner of the project area, a possibly historic, open-air Tiki Modern grandstand (Feature 8; Figure 31) with tiered concrete seating overlooks the lagoon in an area designated to the Kalihi Kai Canoe Club. The grandstand is marked by a sign of similar architectural construction on its southwest side which reads “Ka Papahele O Pakaʻa” (Feature 8; Figure 32) which translates to “The Deck of Pakaʻa.” A possibly historic canoe storage structure exhibiting a similar Tiki Modern design (Feature 9; Figure 33) is located immediately southwest of Comfort Station No. 3 (Feature 7). The structure features decorative basalt stairs wrapping along its eastern side (Feature 9; Figure 34) and is situated atop a berm that separates the main park area from the sandy shoreline.

At the center-south peninsula of the project area, a possibly historic basalt jetty blanketed in pickleweed was documented (Feature 10; Figures 35 and 36). Immediately southwest of the jetty, possibly mid-20th century coral aggregate concrete frames the peninsula as a shoreline revetment (Feature 11a; Figure 37). Both the jetty and the coral inclusions in the revetment are likely from the previously discussed mid-20th century dredging, filling, and shoreline modification documented at Keʻehi Lagoon. Two heavily corroded stormwater outfall pipes protrude from the revetment. The larger of the two is near the eastern end of the

revetment (Feature 12; Figure 38) while the smaller pipe is located approximately at its center (Feature 13; Figure 39). Both pipes appear to have been intentionally installed to discharge directly into the lagoon waters. Across the basin to the west of the peninsula, a canal jetty was identified, exhibiting another segment of the possibly historic coral aggregate concrete shoreline revetment (Feature 11b; Figure 40).

Located in the western corner of the project area is a baseball field (Figure 41). Several possibly historic architectural features were documented in the southern corner behind home plate: a blue wooden two-story scorekeeper's booth and wooden bleachers (Feature 14a; Figures 42 and 43) as well as a navy blue-painted cinderblock dugout with a corrugated sheet metal roof (Feature 14b; Figures 44 and 45). Two sets of four possibly historic tennis courts were also observed in the western corner of the project area (Feature 15; Figures 46 and 47). These tennis courts showed structural similarities to the previously recorded historic courts present near the northern project boundary. A possibly historic coral and mortar wall is just northwest of the tennis courts, on the north side of the park access road (Feature 16; Figure 48). The wall is oriented perpendicular to the northern project boundary. Additionally, possibly historic concrete stairs with an associated metal railing are along the center-northwestern project boundary, providing access to the adjacent parcel (Feature 17; Figure 49).

In sum, the project area is predominantly characterized by open short grass fields and ornamental trees, intersecting walking paths, and a modular office complex occupying the northern portion of the project area. A paved access road and associated parking lots encircle much of the park, while a sandy beach lines the southeastern project boundary. The project area also extends into the lagoon waters along the southern and southeastern boundaries.

In addition to the broader park landscape, several previously documented historic features were observed during the field visit as well as multiple possibly historic features. They are all part of SIHP 09216, Keʻehi Lagoon Beach Park. These include a relocated 1930s plantation house (Feature 1) situated within the modular office complex and a possibly historic concrete footing with a circular posthole (Feature 2) near its northeastern entrance. Previously identified historic tennis courts (Feature 3) and adjacent mid-20th century concrete benches framed by basalt and mortar pillars (Feature 4) were redocumented. A second possibly historic concrete footing with a square-shaped posthole (Feature 5) was recorded in the northeastern corner of the large central field. The historic Comfort Station No. 2 (Feature 6) and historic Comfort Station No. 3 (Feature 7) were also redocumented. The grandstand and "Ka Papahele O Pakaʻa" sign (Feature 8) and a possibly historic canoe storage structure exhibiting a similar Tiki Modern design (Feature 9) were also observed. Within the southern portion of the project area, a possibly historic basalt rock jetty (Feature 10) and associated coral aggregate concrete shoreline revetment segments (Features 11a and 11b) were observed. Two corroded stormwater outfall pipes (Features 12 and 13) protrude through the revetment (Feature 11a) and discharge directly into the lagoon waters. These features are possibly associated with the previously discussed mid-20th century dredging, filling, and shoreline modification associated with Keʻehi Lagoon. In the western portion of the park, a scorekeeper's booth and associated bleachers (Feature 14a) and a cinderblock dugout (Feature 14b) are at the baseball field. Two sets of four possibly historic tennis courts (Feature 15) are also located in the western portion of the project area. These courts appear to have similar construction to the historic northern tennis courts (Feature 3) and may have been constructed during the same time period. A possibly historic coral and mortar wall (Feature 16) is just northwest of the tennis courts, and concrete stairs with an associated metal railing (Feature 17) are located along the northwestern project boundary, providing access to the adjacent parcel.

Despite historic use, infilling, and modification of the lagoon and beach park region, historic surface features remain. Extensive modification of the project area makes the survival of intact traditional surface features unlikely, but subsurface or submerged historic features may still be found. The extensive land filling associated with the development of Keʻehi Lagoon Beach Park reduces the likelihood that intact traditional subsurface deposits exist.

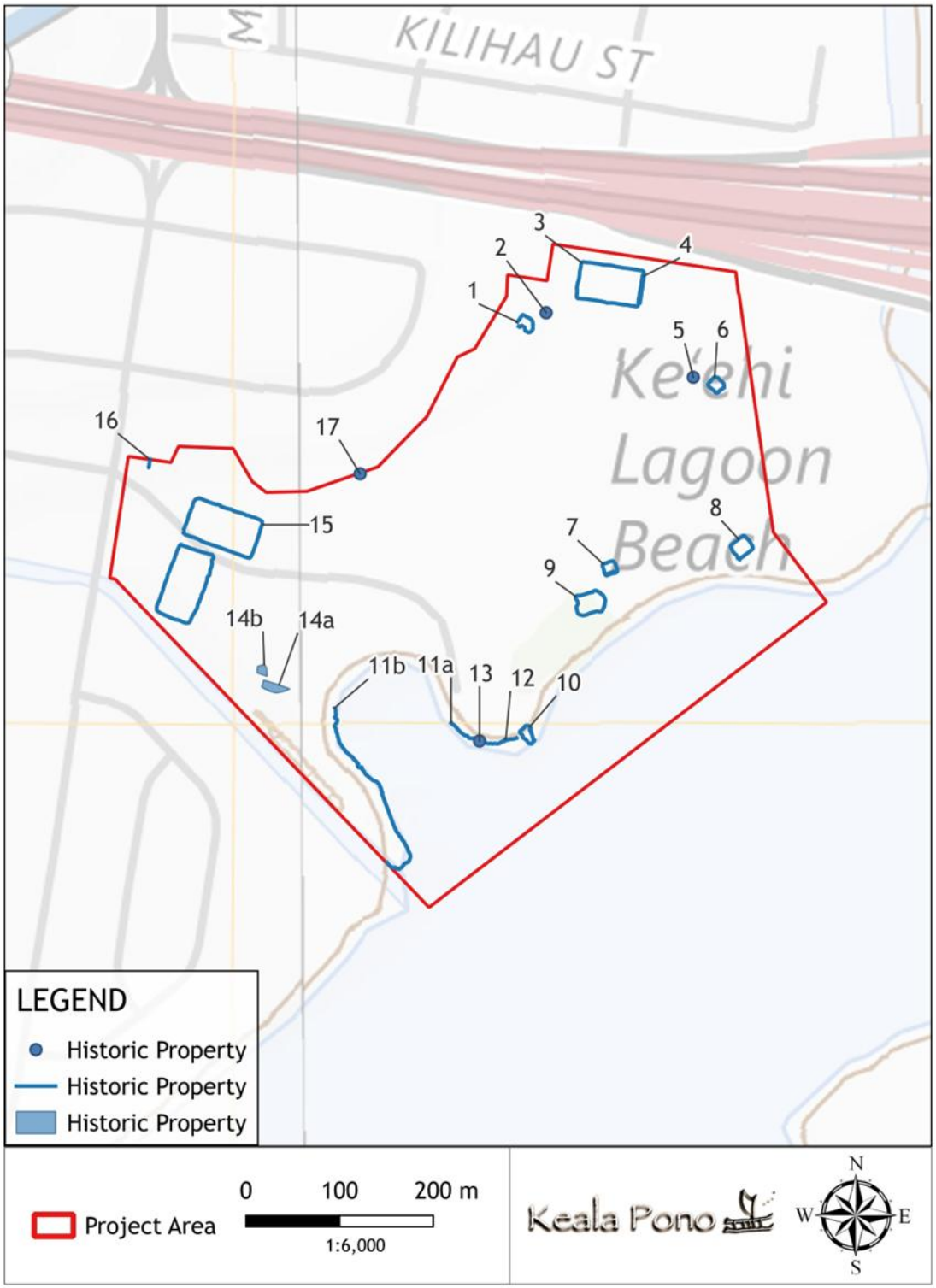


Figure 18. Location of possible historic features within the project area.

Table 3. Features of SIHP 09216 Documented During the Field Visit

Summary: This data table shows potential archaeological resources by location. The four column headers read from left to right: Temporary Feature Number, Description, Location, and Interpretation. Each row details a temporary feature number, a description of the feature, the location of the feature, and an interpretation of the feature.

Temporary Feature #	Description	Location	Interpretation
1	Relocated historic plantation house	Within modular office complex (northern corner of the project area)	Reportedly relocated from Wahiawā Botanical Garden in the 1980s with construction dating to the 1930s.
2	Single concrete footing with circular posthole	Near northeastern entrance to modular office complex	Possibly indicates former historic infrastructure.
3	Historic mid-20th century tennis courts (now pickleball courts)	Northeast of modular office lot	Previously recorded and redocumented feature associated with SIHP 09216. Features determined to be distinctive of Oʻahu park development during the 1950s.
4	Historic mid-20th century concrete benches framed by basalt and mortar pillars	East side of Feature 3	Previously recorded and redocumented feature associated with SIHP 09216. Features determined to be distinctive of Oʻahu park development during the 1950s.
5	Single concrete footing with square posthole	Northeastern corner of large central field	Possibly indicates former historic infrastructure.
6	Historic Comfort Station No. 2	East of Feature 5	Previously recorded and redocumented feature associated with SIHP 09216. Historic mid-20th century Tiki Modern architecture.
7	Historic Comfort Station No. 3	Near the center-southeast of the project area	Previously recorded and redocumented feature associated with SIHP 09216. Historic mid-20th century Tiki Modern architecture.
8	Open-air Tiki Modern grandstand	Southeast corner of the project area (Kalihi Kai Canoe Club area)	Possibly historic Tiki Modern architecture.
9	Tiki Modern canoe storage structure	Southwest of Feature 7 atop a berm	Possibly historic Tiki Modern architecture.
10	Basalt rock jetty	Center-south peninsula	Possibly historic construction during mid-20th century dredging, filling, and shoreline modification.
11a	Coral aggregate concrete shoreline revetment segment	Center-south peninsula immediately southwest of Feature 10	Possibly historic construction during mid-20th century dredging, filling, and shoreline modification.
11b	Coral aggregate concrete shoreline revetment segment	Across basin west of center-south peninsula	Possibly historic construction during mid-20th century dredging, filling, and shoreline modification.

Table 3. (continued)

Temporary Feature #	Description	Location	Interpretation
12	Larger corroded stormwater outfall pipe	Eastern end of peninsula revetment	Possibly historic construction during mid-20th century dredging, filling, and shoreline modification.
13	Smaller corroded stormwater outfall pipe	Center of peninsula revetment	Possibly historic construction during mid-20th century dredging, filling, and shoreline modification.
14a	Two-story wooden scorekeeper's booth and wooden bleachers	South corner of the baseball field	Possibly historic construction during mid-20th century O'ahu park development.
14b	Cinder block and corroded metal roof dugout	South corner of the baseball field	Possibly historic construction during mid-20th century O'ahu park development.
15	Two sets of four tennis courts	West corner of project area	Possibly historic construction associated with Feature 3.
16	Coral and mortar wall	Northwestern corner of project area	Possibly historic construction during mid-20th century O'ahu park development.
17	Concrete stairs with metal railing	Center-northwestern project boundary	Possibly historic construction during mid-20th century O'ahu park development.



Figure 19. Overview of smaller short grass open lawn and trees, facing northwest.



Figure 20. Softball field located within the large center field of the project area, facing southwest.



Figure 21. Paved asphalt park loop access road, facing north.



Figure 22. Sandy beach along the southeastern side of the project area, facing northeast.



Figure 23. Modular office complex on a grass and gravel lot, facing south. Note that this is the proposed location for the new maintenance facility building.



Figure 24. Historic plantation house (Feature 1) among the modular offices, facing west.



Figure 25. Single concrete footing with a circular posthole (Feature 2), facing northeast.



Figure 26. Previously documented historic northern tennis courts which are now pickleball courts (Feature 3), facing northeast.



Figure 27. Previously documented historic concrete benches framed by basalt and mortar pillars carrying beams that served as a support for a former (missing) trellis system (Feature 4), facing northwest.



Figure 28. Single concrete footing with a square-shaped posthole (Feature 5), facing east.



Figure 29. Previously documented historic Tiki Modern Comfort Station No. 2 (Feature 6), facing east.



Figure 30. Previously documented historic Comfort Station No. 3 (Feature 7), facing south.



Figure 31. Open-air Tiki Modern grandstand (Feature 8), facing east.



Figure 32. Grandstand sign which reads "Ka Papahele O Paka'a" (Feature 8), facing northeast.



Figure 33. Tiki Modern canoe storage structure (Feature 9), facing west.



Figure 34. Basalt stairs along the eastern side of the canoe storage structure (Feature 9), facing south.



Figure 35. Basalt jetty (Feature 10) blanketed in pickleweed, facing southwest.



Figure 36. Possible mid-20th century basalt jetty (Feature 10) blanketed in pickleweed, facing northeast.



Figure 37. Peninsula segment of a possible mid-20th century coral aggregate concrete shoreline revetment (Feature 11a), facing northeast.



Figure 38. Larger corroded stormwater outfall pipe (Feature 12) protruding from the revetment, facing northeast.



Figure 39. Smaller corroded stormwater outfall pipe (Feature 13) protruding from the revetment, facing northeast.



Figure 40. Peninsula segment of a possible mid-20th century coral aggregate concrete shoreline revetment (Feature 11b), facing southeast.



Figure 41. Baseball field in the western corner of the project area, facing southeast.



Figure 42. Blue wooden two-story scorekeeper's booth (Feature 14a), facing southeast.



Figure 43. Wooden bleachers (Feature 14a) near scorekeeper's booth, facing south.



Figure 44. Navy blue-painted cinderblock dugout with a corrugated sheet metal roof (Feature 14b), facing southwest.



Figure 45. Navy blue-painted cinderblock dugout with a corrugated sheet metal roof (Feature 14b), facing north.



Figure 46. First set of four tennis courts (Feature 15) in the western corner of the project area, facing southwest.



Figure 47. Second set of four tennis courts (Feature 15) in the western corner of the project area, facing southwest.



Figure 48. Coral and mortar wall (Feature 16), facing northwest.



Figure 49. Concrete stairs with a metal railing (Feature 17) providing access to the adjacent northwest parcel, facing northeast.

ASSESSMENT AND RECOMMENDATIONS

An archaeological literature review and field inspection was conducted for proposed improvements at Keʻehi Lagoon Beach Park on TMK: (1) 1-1-003:239 in Moanalua Ahupuaʻa, Kona District, on the island of Oʻahu. Several implications pertaining to the project area have been made based on the literature review presented above. Key data include information concerning land use, historic maps, LCA records, and the results of previous archaeological work. Archival research determined that the boundaries of the current project area are the same as the previously documented boundaries for the archaeological site Keʻehi Lagoon Park (SIHP 09216). The project area was also determined to be located east of the historic Kaloaloa Fishpond (SIHP 00080). A brief field inspection identified numerous historic features within the project area associated with SIHP 09216, including sites reflecting mid-20th century park development and shoreline modification activities. Documented resources include a relocated plantation-era structure, previously and newly documented historic tennis courts, previously recorded basalt pillar framed concrete benches, and the previously recorded historic Comfort Stations No. 2 and 3. Newly identified features include an open-air Tiki Modern-style grandstand with architecturally similar signage, a Tiki Modern-style canoe storage structure with adjoining basalt stairs, a basalt jetty, coral aggregate concrete shoreline revetments, and two stormwater outfall pipes. A coral and mortar wall was also documented as well as concrete stairs with a metal railing. Two isolated concrete footings were also found, suggesting the former presence of infrastructure such as fencing or ancillary park facilities that have since been removed. Key data summarized below include information concerning traditional and historic land use, LCA records, historic maps, the results of previous archaeological work, and the results of the field inspection.

Results of Historical Research on Land Use

Moanalua Ahupuaʻa was abundant with natural resources in traditional times, with fishponds along the coast and cultivated fields inland and along streams. The nearby Āliapaʻakai was used as a source of salt until the mid-1800s, and a salt pan was once located within the study area. A notable trail system crossed the region, with the main trail passing inland to the northwest of the project area. Moanalua contained several heiau, which were situated in the uplands. Kaloaloa Fishpond, known for awa (*Chanos chanos*), was historically located not far to the west of the current project area. In the late-19th century and early-20th century, the subject parcel was situated just east of the HPC cane fields and in 1925, and the John Rodgers Airport was constructed to the west. The area around the mouth of Moanalua Stream remained a wetland during this time where kalo and rice were farmed. Substantial dredging and filling of low-lying areas within and surrounding the project area, including nearby fishponds, occurred ca. 1942–1943 as new dry land was needed for the expanding airport facilities.

Results of Land Commission Awards Search

Lot Kapuāiwa (Kamehameha V) received Moanalua Ahupuaʻa in its entirety during the Māhele as LCA 7715. Approximately 101 kuleana awards were issued, primarily concentrated in cultivated areas along Moanalua Stream northeast of the current study area. No LCA have been identified within the project area or its immediate vicinity.

Results of Historic Maps Research

Historic maps indicate that the project area was formerly low-lying, marshy, and situated within an extensive complex of fishponds, fisheries, reefs, and wetlands fringing Keʻehi Lagoon. The 1881 maps prepared by Covington and Lyons depict the area as largely undeveloped, bordered by numerous named fishponds, including Kaloaloa to the west, Awaʻawaloa and Māpunapuna to the north, and Kaʻikikapu and Weli across the lagoon to the northeast. Additional fishponds, including

Apili, Pāhounui, and Pāhouiki, were located to the southeast. ʻŌnini Island was situated within the current project area in what are now filled lands.

By the turn of the 20th century, the project area was just east of extensive cane fields and near cultivated wetlands, with railroad infrastructure traversing the coastal plain signaling intensified agricultural cultivation. By the 1920s and 1930s, regional infrastructure expanded further with the development of John Rodgers Airport, plantation camps, and associated roads and pipelines. Following annexation and the rise of U.S. military presence, large-scale dredging, filling, and shoreline modification permanently altered the lagoon landscape and study lands. Mid-20th century maps illustrate extensive military reservations, residential neighborhoods such as Damon Tract, and roadway networks surrounding the project area. Today, the former fishponds, wetlands, and agricultural lands have been fully replaced by a built environment associated with HNL and adjacent urban development.

Knowledge from Previous Archaeological Studies

Multiple archaeological studies have been conducted within and surrounding the project area. The earliest investigation by McAllister (1933) documented several coastal fishponds in Moanalua, including the nearby Kaloaloa Fishpond (SIHP 00080), historically located just west of the project area. Later coring investigations associated with airport improvements yielded stratigraphically inverted radiocarbon dates and historically introduced pollen within suspected pond layers, leading researchers to conclude that intact fishpond deposits have likely been compromised by historic infilling (Athens 2012; Athens and Ward 2013). Within the project area, investigations documented architectural features associated with Keʻehi Lagoon Beach Park (SIHP 09216), including a historic tennis court complex and basalt stone pillars ensconcing concrete seating elements (Hammatt et al. 2017), as well as two historic comfort stations, recognized as examples of mid-20th century Tiki Modern public park architecture (HABS 2024).

Results of the Field Inspection

The field inspection identified numerous historic architectural and infrastructural features within the project area, which encompasses the entirety of the historic Keʻehi Lagoon Beach Park (SIHP 09216). In the northern portion of the project area, a relocated and repurposed plantation-era residence (Feature 1), reportedly dating to the 1930s, was documented along with a nearby isolated concrete footing exhibiting a circular posthole (Feature 2), likely representing the remnants of former infrastructure. The previously recorded historic tennis courts that are now pickleball courts (Feature 3) and associated mortared basalt pillar-framed concrete benches (Feature 4) associated with SIHP 09216 were redocumented. An additional isolated concrete footing with a square posthole (Feature 5) was identified. The previously documented Comfort Stations No. 2 and 3 (Features 6 and 7), recognized as mid-20th century Tiki Modern public park architecture, were also observed.

A possibly historic open-air grandstand with a sign bearing the inscription “Ka Papahele O Pakaʻa” (Feature 8) and a similarly styled canoe storage structure with decorative basalt stairs (Feature 9) were observed. At the center-south peninsula, a basalt jetty (Feature 10) and adjacent coral aggregate concrete shoreline revetments (Features 11a and 11b) were recorded, along with two corroded stormwater outfall pipes oriented to discharge into the lagoon (Features 12 and 13).

In the western portion of the project area, a baseball field with possibly historic features including a two-story wooden scorekeeper’s booth and wooden bleachers (Feature 14a) and a cinderblock dugout (Feature 14b) are adjacent to two sets of four possibly historic tennis courts (Feature 15). Additional features observed include a coral and mortar wall (Feature 16) and concrete stairs with a metal railing providing access along the northwestern boundary (Feature 17).

Summary and Recommendations

The project region has a long and important history, for its post-contact military use and as the location for mid-20th century park development, as well as much earlier utilization for traditional aquaculture and salt gathering. Kaloaloa Fishpond was once located in proximity to the subject parcel. Within the project area, several previously documented features associated with the historic Keʻehi Lagoon Beach Park (SIHP 09216) including the northern tennis courts which are now pickleball courts and adjacent concrete benches ensconced in stone pillars, and Comfort Stations No. 2 and 3 were observed. Multiple other possibly historic architectural features were documented including a Tiki Modern grandstand and canoe storage facility, eight additional tennis courts, a coral and mortar wall, and concrete stairs. Several possibly historic infrastructure features were also recorded including two concrete footings, a rock jetty, two segments of coral aggregate concrete shoreline revetment, and two associated corroded stormwater outfall pipes.

Given the extensive historic and modern development within the project area, it is unlikely that traditional surface features remain intact. The extensive land filling associated with the beach park and greater coastal region makes the survival of subsurface traditional features unlikely. Despite these disturbances, subsurface or submerged historic features may still remain considering the historic designation of the park (SIHP 09216) and the multitude of potentially historic architectural and infrastructural features identified within the project area during the brief field visit. For these reasons, archaeological monitoring is recommended for all ground disturbance within the project area. An archaeological monitoring plan should be prepared and accepted by the SHPD before ground-disturbing activities relating to the project are initiated.

GLOSSARY

ahupua‘a Traditional Hawaiian land division usually extending from the uplands to the sea.

ali‘i Chief, chiefess, monarch.

awa The milkfish, or *Chanos chanos*, often raised in fishponds in ancient times.

hau The indigenous tree *Hibiscus tiliaceous*, which had many uses in traditional Hawai‘i. Sandals were fashioned from the bark and cordage was made from fibers. Wood was shaped into net floats, canoe booms, and various sports equipment and flowers were used medicinally.

heiau Place of worship and ritual in traditional Hawai‘i.

Hi‘iaka Most commonly refers to Hi‘iakaikapoliopele, the youngest sister of the goddess Pele, although all twelve of Pele’s younger sisters have Hi‘iaka as the first part of their names.

imu Underground pit or oven used for cooking.

ipu ‘awa‘awa The gourd *Lagenaria siceraria* that has a bitter-tasting pulp and was traditionally used as medicine. Once soaked in sea water, the strong smell is eliminated.

Kahiki A far away land, sometimes refers to Tahiti.

kahuna An expert in any profession, often referring to a priest, sorcerer, or magician.

kalo The Polynesian-introduced *Colocasia esculenta*, or taro, the staple of the traditional Hawaiian diet.

kama‘āina Native-born.

kapu Taboo, prohibited, forbidden.

kiawe The algaroba tree, *Prosopis* sp., a legume from tropical America, first planted in 1828 in Hawai‘i.

kō The Polynesian introduced *Saccharum officinarum*, or sugarcane, a large grass traditionally used as a sweetener and for black dye.

koa haole The small tree *Leucaena glauca*, historically introduced to Hawai‘i.

konohiki The overseer of an ahupua‘a ranked below a chief; land or fishing rights under control of the konohiki; such rights are sometimes called konohiki rights.

Kū The Hawaiian god of war.

kuleana Right, title, property, portion, responsibility, jurisdiction, authority, interest, claim, ownership.

kupuna Grandparent, ancestor; kūpuna is the plural form.

lehua The native tree *Metrosideros polymorpha*, the wood of which was utilized for carving images, as temple posts and palisades, for canoe spreaders and gunwales, and in musical instruments; a taro variety that makes red poi.

lo‘i, lo‘i kalo An irrigated terrace or set of terraces for the cultivation of taro.

Lono The Hawaiian god associated with such things as agriculture, rain, and the makahiki, a time of peace.

loulu The fan palm (*Pritchardia* spp.), endemic to Hawai‘i.

Māhele The 1848 division of land.

mai‘a Banana.

maika Ancient Hawaiian game suggesting bowling.

mākāhā A fish pond sluice gate.

makai Toward the sea.

mauka Toward the mountains.

moku District, island.

mo‘olelo A story, myth, history, tradition, legend, or record.

mullet *Mugil cephalus*, or ‘ama‘ama, a very choice indigenous fish.

niu The Polynesian-introduced tree *Cocos nucifera*, or coconut.

‘ōlelo no‘eau Proverb, wise saying, traditional saying.

olonā The native plant *Touchardia latifolia*, traditionally used for making cordage.

pāhoehoe Smooth lava; surface unbroken.

Paka‘a The Hawaiian god of the wind.

papahele Floor, deck. *Lit.*, walking board.

Pele The Hawaiian goddess of volcanoes and fire.

pō Night, darkness, the realm of gods.

poi A staple of traditional Hawai‘i, made of cooked and pounded taro mixed with water to form a paste.

post-contact After A.D. 1778 and the first written records of the Hawaiian Islands made by Captain James Cook and his crew.

pre-contact Prior to A.D. 1778 and the first written records of the Hawaiian Islands made by Captain James Cook and his crew.

sugarcane The Polynesian-introduced *Saccharum officinarum*, or kō, a large grass traditionally used as a sweetener and for black dye.

tuff Rock formed of compacted volcanic fragments, generally smaller than 4 mm in diameter.

uhi The yam *Dioscorea alata*, commonly grown for food.

‘ulu The Polynesian-introduced tree *Artocarpus altilis*, or breadfruit.

wauke The paper mulberry, or *Broussonetia papyrifera*, which was made into tapa cloth in traditional Hawai‘i.

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APPENDIX: MĀHELE DATA FOR LCA 7715

7715 Lota Kamehameha

Apana 2.

Ua koi mai oia no kona aina o Maunalua he Ahupuaa ma Kona Mokupuni o Oahu, no ka mea, ua loaa ia ia no ka Moi Kamehameha III mai i ka M. H. 1848 i ka wa o ka Mahele aina ana, a ua noho keakea oleia a hiki i keia manawa.

Oia ka makou e hooko nei no Lota Kamehameha, he kuleana hoi kona malalo iho o ke Ano Alodio. Ina uku mai oia i ko ke Aupuni hapa, alaila; kupono ia ia ka Palapala Sila Nui Ano Alodio. Aka; koe nae na kuleana o Kanaka maloko.

Pono ia ia ke uku mai no ka hookolokolo a me ka hooholo ana i ka olelo.

		Penei	
	No ka rumi a me ke pai ana i ka olelo ma ka Nupepea		
G. M. Robertson	No ke kope ana i ka olelo koina		
J.H. Smith	No ka palapala kii		
J. Kekaulahao	No ka hana ana		
	No ke kope ana i na olelo a na hoike		
	No ka hooholo ana i ka olelo ma ka la 19 o Maraki 1855.		
	$	4	00

Ua hooko aku makou i keia mau kuleana mamuli o na olelo o na Kanawai i hooholoia ma ka la 19 o June 1852, i pili i na Konohiki.



Appendix D

Cultural Impact Assessment/ Ka Paʻakai Analysis

REVISED DRAFT—Cultural Impact Assessment and Ka Paʻakai Analysis for Proposed Improvements at Keʻehi Lagoon Beach Park, Moanalua Ahupuaʻa, Kona District, Island of Oʻahu, Hawaiʻi

TMK: (1) 1-1-003:239



Prepared For:

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May 2026

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REVISED DRAFT—Cultural Impact Assessment and Ka Paʻakai Analysis for Proposed Improvements at Keʻehi Lagoon Beach Park, Moanalua Ahupuaʻa, Kona District, Island of Oʻahu, Hawaiʻi

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MANAGEMENT SUMMARY

Keala Pono Archaeological Consulting has prepared a Cultural Impact Assessment (CIA) and Ka Paʻakai Analysis for proposed improvements at Keʻehi Lagoon Beach Park on TMK: (1) 1-1-003:239 in Moanalua Ahupuaʻa, Kona District, Oʻahu Island, Hawaiʻi. The project area is located at 465 Lagoon Drive and includes a range of existing park facilities including paved parking areas, a large open grass field, concrete pathways, public restrooms, a playground, comfort stations, a baseball diamond, tennis and pickleball courts, landscaped areas, supporting utility infrastructure, and a pavilion for judging canoe races.

The purpose of this study is to assess any potential impacts caused by the proposed project on cultural resources, practices, beliefs, and Native Hawaiian Rights in anticipation of the proposed improvements at Keʻehi Lagoon Beach Park. The background study, which consisted of archival research, identified the project area itself to be a historic property containing examples of mid-20th century public park architecture [State Inventory of Historic Places (SIHP) 50-80-14-09216]. A traditional Hawaiian fishpond, Kaloaloa Fishpond (SIHP 50-80-13-00080), was historically located west of the project area. The project area is situated within LCA 7715, which comprises the entirety of Moanalua Ahupuaʻa.

Consultations with individuals knowledgeable about Keʻehi Lagoon produced information on its rich cultural history and modern use. Cultural practices within the project area mentioned by the interviewees are associated with hele waʻa, shark-related practices, cultural stewardship (cleaning and caretaking of the park), and fishing. Waʻa practices at Keʻehi consist of modern paddling water sport and traditional waʻa ceremonies and sailing. Shark-related practices include shark riding and racing, breastfeeding of shark pups, a guardian or protector shark that burrows under one of the islands, shapeshifting shark people, and ʻaumakua-based relationships. Given the long histories of land use change at Keʻehi Lagoon Beach Park, many of the cultural resources and dependent lifeways at Keʻehi have been diminished. These include use of traditional freshwater springs associated with mermaid movement, fishery resources, fishponds in the surrounding area, limu gathering, loss of sand along the shoreline, inability to gather shellfish, and traditional paʻakai beds.

There was a general consensus of support for the proposed improvements from the interviewees dependent on ongoing conversation with community and an increase in shower facilities at the proposed central comfort station. The interviewees recommended the following for the project:

- increase cultural thinking and cultural visioning in the management of Keʻehi Lagoon Beach Park
- include an understanding of the reverence of the ʻāina of Moanalua and of Keʻehi, for the plants and pōhaku
- actively involve the community in future planning and maintain transparent communication throughout the project process and future park endeavors
- conduct cultural protocol prior to commencing work on the project
- keep the bathroom slated to be demolished in place until the new comfort stations are constructed
- do not remove historic pine trees near the official's stand
- increase management of the feral cat population
- maintain the area as a recreational space for the public and do not pursue commercialization of the space

- ensure that there are individuals who have relationship to Keʻehi and/or Moanalua included in the team working on the comfort stations project to ensure intuition-based and feelings-grounded attention to place as well as awareness of spiritual boundaries
- take care of current native trees at the park (e.g., the niu trees) and restore native vegetation to the beach park including species such as wiliwili, naupaka, and pāʻū o Hiʻiaka
- use traditional Hawaiian name(s) for the beach park and Hawaiian signage on the comfort stations
- provide historic displays to educate park users on the rich history and moʻolelo of Keʻehi
- increase the number of shower stations
- ensure that there is monitoring and maintenance of the comfort stations; one recommendation to accomplish this is to increase the number of staff assigned to Keʻehi Lagoon Beach Park

The results of the Ka Paʻakai Analysis show that Keʻehi Lagoon Beach Park remains a site of ongoing Native Hawaiian cultural rights and resources despite significant historical damages. The area maintains active cultural resources and rights, particularly within hele waʻa, fishing, cultural stewardship, and shark relationships. There is also potential for encountering iwi kūpuna and other cultural resources during project-related ground disturbance. The addition of comfort stations to Keʻehi Lagoon Beach Park during the proposed project may positively affect the hele waʻa community by providing needed additional restroom and shower facilities. Cultural access (for voyaging, hele waʻa, fishing, and visiting offshore islands) will not be affected by the proposed project.

Feasible actions to protect Native Hawaiian rights include routing work through pre-disturbed areas as much as possible, having archaeological and/or cultural monitors present during ground disturbance, continuing to have transparent conversations with community members throughout the project, ensuring that any material excavated during ground disturbance is placed in an appropriate location, working with cultural practitioners to remediate harm done to the paʻakai beds, and providing historical signage and/or displays to provide education regarding Native Hawaiian histories within Keʻehi. As pollution and sewage influx are some of the primary concerns of park users (as it greatly affects cultural and natural resource health) every effort should be made to ensure that the added comfort stations have high quality waste management, plans for leakage, and ongoing maintenance. Security of comfort stations should also be maintained so that park users can use them safely.

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INTRODUCTION

At the request of PBR Hawai‘i & Associates, Inc., on behalf of the City and County of Honolulu Department of Design and Construction (DDC), Keala Pono Archaeological Consulting conducted a Cultural Impact Assessment (CIA) and Ka Pa‘akai Analysis (KPA) for proposed improvements at Ke‘ehi Lagoon Beach Park, on TMK: (1) 1-1-003:239 in Moanalua Ahupua‘a, Kona District, on the island of O‘ahu. This work was designed to assess any potential impacts caused by the proposed project on cultural resources, practices, beliefs, and rights in anticipation of the proposed improvements at Ke‘ehi Lagoon Beach Park.

The report begins with a description of the study area and a historical overview of land use and archaeology in the area. The next chapter presents ethnographic methods and results of the CIA, while the KPA is in the final chapter. Hawaiian words, flora and fauna, and technical terms are defined in a glossary. Also included are appendices with documents relevant to the ethnographic survey including Māhele information and full transcripts of the interviews.

Project Location and Natural Environment

The project area is located in Moanalua Ahupua‘a, Kona District, on the island of O‘ahu, Hawai‘i on TMK: (1) 1-1-003:239, which encompasses the entirety of Ke‘ehi Lagoon Beach Park as well as a portion of the water offshore (Figures 1 and 2). The parcel is a total of 29.07 hectares (ha) [71.85 acres (ac.)] and is owned by the Hawai‘i Department of Land and Natural Resources (DLNR), State Parks Division. The project area is bounded by commercial development to the northwest and southwest, North Nimitz Highway to the north, Ke‘ehi Lagoon Memorial Park to the east, The Daniel K. Inouye International Airport (HNL) to the west, and the ocean to the south and southeast. The study parcel contains a variety of existing structures, including a modular office lot, paved parking areas along a loop park access road which wraps around the park, concrete pathways which transect the park, two public restrooms (Comfort Stations No. 2 and 3), a playground, a baseball diamond and associated recreational infrastructure, tennis and pickleball courts, a canoe storage facility, and a grandstand.

The project area is situated inland of Māmala Bay, at the northern shore of Ke‘ehi Lagoon. Its elevation is roughly 1–5 meters (m) [3–16 feet (ft.)] above mean sea level (amsl). Rainfall averages 59.8 centimeters (cm) [23.5 inches (in.)] per year with May through July as the driest months and October through March accumulating the most rainfall (Giambelluca et al. 2013). The closest fresh water sources are Moanalua Stream, located approximately 150 m (492 ft.) east of the project area, and Kalihi Stream, located roughly 350 m (1148 ft.) east of the project area. Both streams empty into Ke‘ehi Lagoon. Topography is flat and what little vegetation is present consists of short grass, kiawe, koa haole, palms, and ornamental trees.

The subject property is situated within the Hālawa-Moanalua Plain located south of Salt Lake (Āliapa‘akai) Crater, which was formed along with Diamond Head, Koko Head, Hanauma Bay, Punchbowl, and Tantalus during the Honolulu Volcanic Series (Macdonald et al. 1983:434). This occurred roughly two million years after the Ko‘olau volcano became dormant. Of the three overlapping tuff cones in the area, ‘Āliamanu is the oldest with the Āliapa‘akai and Makalapa eruptions happening roughly around the same time (Macdonald et al. 1983:445–446). According to Macdonald et al. (1983:325), “lavas of both the late phase of the principal period of volcanism and of the rejuvenated period have brought up from depth inclusions of peridotite, and at Salt Lake Crater on Oahu nephelinite of the rejuvenated period contains inclusions of garnet-pyroxene rock (eclogite).” Eclogite is created only at very high pressures such as those found at least 55 kilometers (km) [34.2 miles (mi.)] or more below the Earth’s crust; thus, the inclusions found at Salt Lake probably came from the mantle (Macdonald et al. 1983:133).

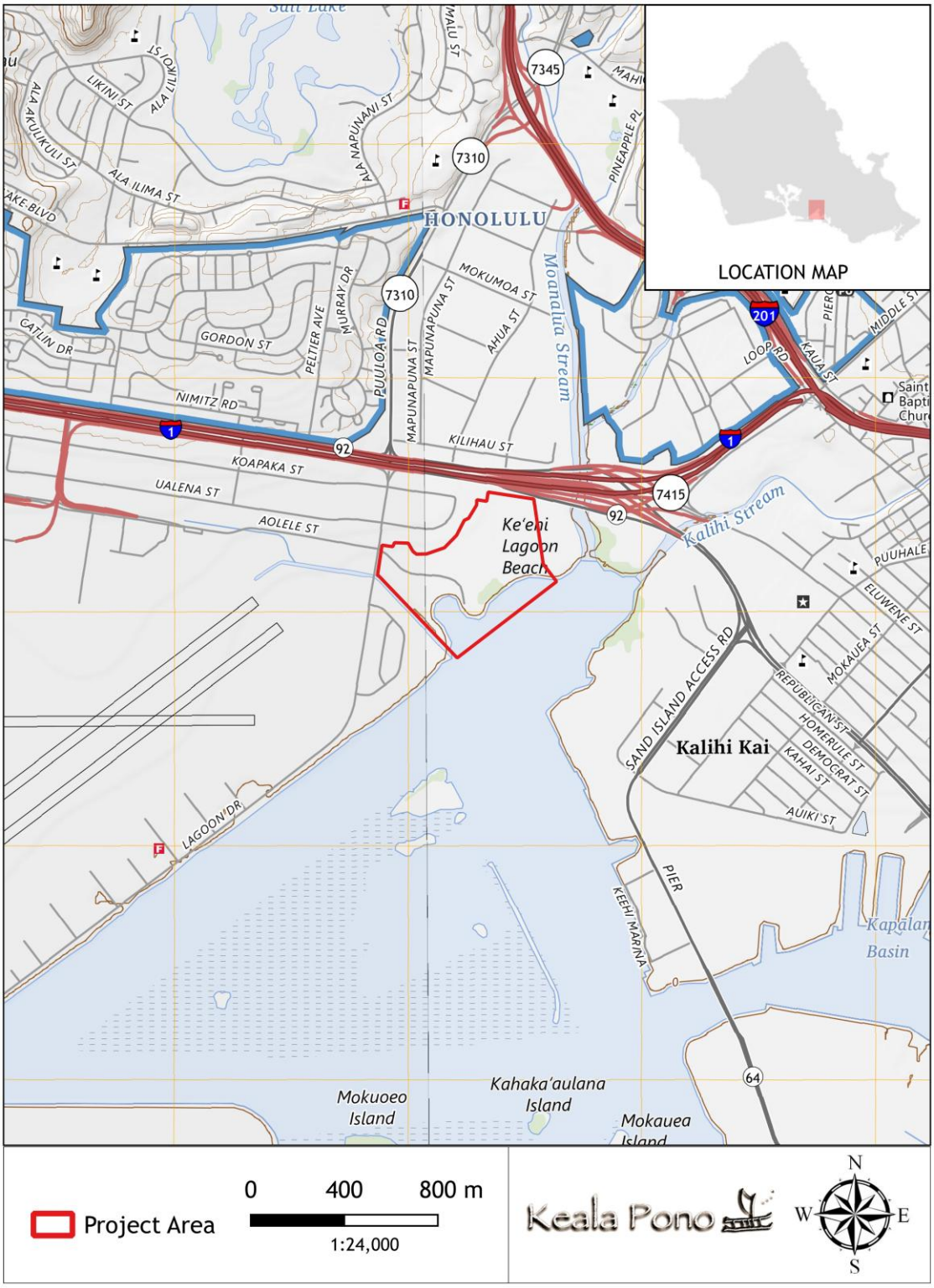


Figure 1. Project area on 7.5-minute map, Pearl Harbor quadrangle map (USGS 2023).

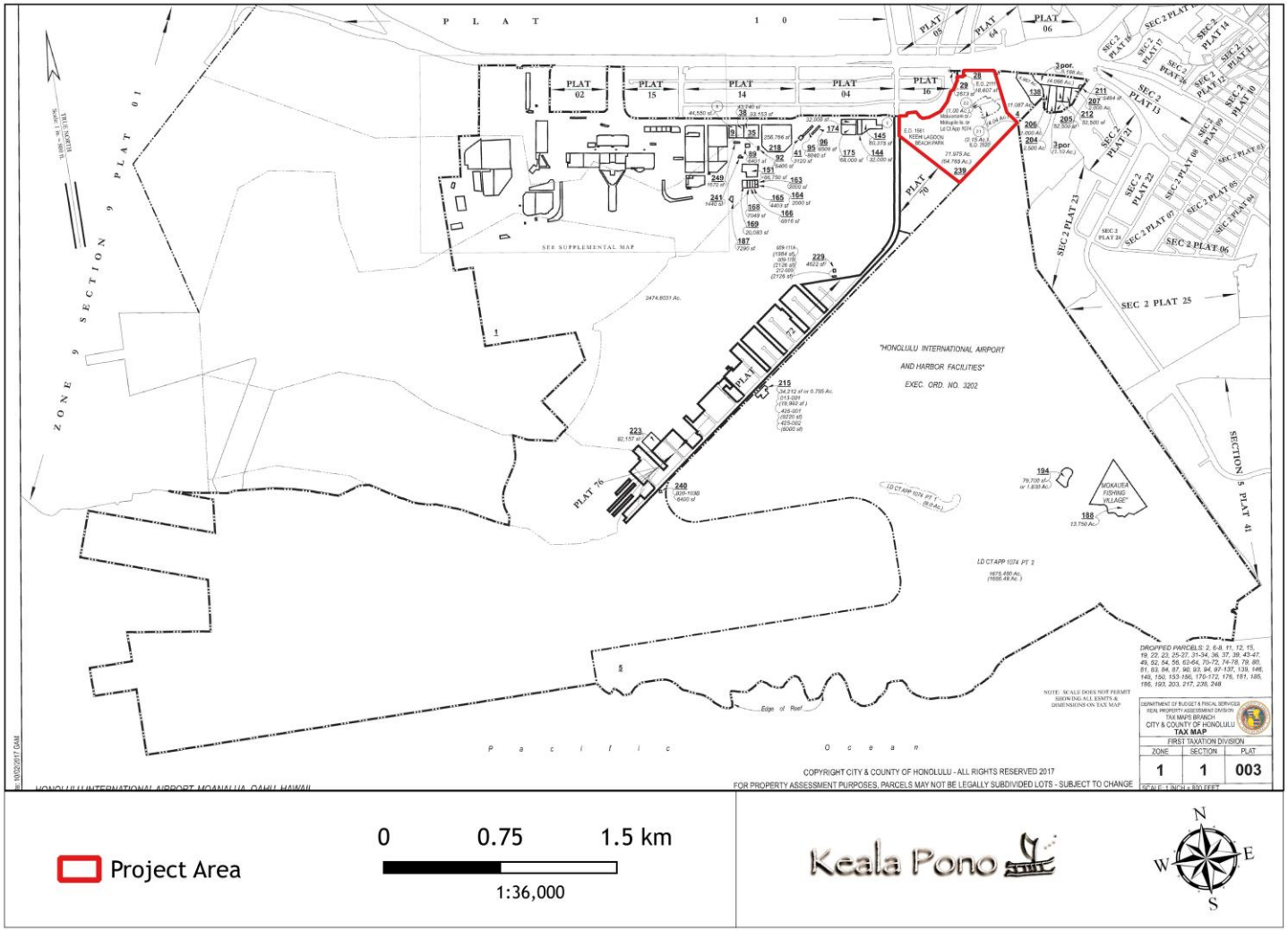


Figure 2. Project area on a TMK 1-1-003 plat map (State of Hawai‘i 2017).

During the eruption of tuff cones, a potentially deadly phenomenon called base surge occurs where rings of steam and ash radiate outward from the base of the eruption, moving parallel to the ground (Macdonald et al. 1983:85). The force of a base surge can be so strong that bark is sand-blasted off of trees. This may be the reason why the same tuff that forms the ʻĀliamanu Crater rim is found on the eastern portion of Hālawa Valley (Macdonald et al. 1983:445). Above this layer is "thick red transported soil," overlain by tuff traced to Salt Lake Crater which was deposited by air (Macdonald et al. 1983:445). Imprints of leaves, log molds, and semi-petrified wood fragments occur within the ʻĀliamanu tuff. While tuff has been found some distance away from the cone, ʻĀliamanu had no lava flow outside the cone itself.

The Salt Lake tuff was also deposited via air and contains several tree molds. Analysis of these tree molds identified various tree ferns and loulu palms (*Pritchardia* sp.), which suggests the region was much wetter than the climate of the area today (Macdonald et al. 1983:446). When the three tuff cones were formed, they blocked the direct path of Hālawa and Moanalua Streams, the latter of which was forced to flow further to the east (Macdonald et al. 1983:445). Salt Lake Crater originally had a 1.5-km (0.9-mi.) diameter and was watered in part by springs. The project area is located within the Hālawa-Moanalua Plain below Salt Lake Crater at the coast. The plain was formed via a raised limestone reef shelf and was formerly at sea level prior to the region being filled during the first half of the 20th century.

The project area is predominantly underlain by fill land, mixed (FL), which is believed to have originated from marine dredging at Keʻehi Lagoon and the Pearl Harbor entrance during large-scale infilling projects undertaken by the U.S. military between ca. 1931 and 1943. This soil type is also present to the northeast and southwest of the project area. ʻEwa silty clay loam, moderately shallow, 0–2% slopes (EmA), occurs along the northwest boundary of the subject parcel and extends into areas northwest of the project, while Water (W) is present along the southwest project boundary as the Kaloaloa Canal (Figure 3). The United States Department of Agriculture Soil Conservation Service Soil Survey of the State of Hawaiʻi describes these soils as follows:

> **Fill land, mixed (FL)**
>
> This land type occurs mostly near Pearl Harbor and in Honolulu, adjacent to the ocean. It consists of areas filled with material dredged from the ocean or hauled from nearby areas, garbage, and general material from other sources…This land type is used for urban development including airports, housing areas, and industrial facilities. (Foote et al. 1972:31)
>
> **Ewa Series**
>
> This series consists of well-drained soils in basins and on alluvial fans on the islands of Maui and Oʻahu. These soils developed in alluvium derived from basic igneous rock. They are nearly level to moderately sloping. Elevations range from near sea level to 150 feet. These soils are used for sugarcane, truck crops, and pasture. (Foote et al. 1972:29)

Project Description

The project is a DDC initiative to improve public facilities within Keʻehi Lagoon Beach Park. The proposed improvements focus on upgrading park infrastructure to better serve public use and park operations. The project consists of three phases including the construction of two new comfort stations, demolition of one existing comfort station, and in a future phase, the construction of a maintenance facility building located in the mauka (northern) corner of the park.

The current comfort stations (Comfort Station No. 2 and 3) are single-story structures of similar design, with minor variations attributable to past repairs or alterations. In 2015, Comfort Station No. 1 was severely vandalized and damaged by fire, resulting in unsafe conditions; the structure was barricaded and closed to the public and later demolished. Both existing comfort stations have a rectangular footprint with a slab-on-grade



Figure 3. Soils in the vicinity of the project area (SSURGO 2019).

foundation that measures approximately 1,485 square feet, and includes men's and women's restrooms, a storage area.

The proposed comfort station improvements are intended to replace the remaining Comfort Station No. 2 and provide two new comfort stations within the park, while maintaining continuity of park use and public access. The new Comfort Station No. 1 will be located southeast of the existing tennis courts on the west side of the project area, and the new Comfort Station No. 2 will be located across from the pickleball courts, just makai of the main parking lot. The maintenance facility building, planned for the mauka portion of the park, would support park operations and maintenance functions. Development of this facility would occur in a later phase and is intended to enhance long-term park management without expanding the overall developed footprint of the park. No improvements are currently proposed for existing Comfort Station No. 3, which is located near the canoe hālau in the makai portion of the park.

TRADITIONAL CULTURAL AND HISTORIC BACKGROUND

This section of the report presents background information that provides context through which one can examine the cultural and historical significance of the project lands. In the attempt to record and preserve both the tangible (e.g., traditional and historic archaeological sites) and intangible (e.g., moʻolelo, ʻōlelo noʻeau) culture, this research assists in the discussion of anticipated finds. Research was conducted at the Hawaiʻi State Library, the University of Hawaiʻi at Mānoa libraries, the State Historic Preservation Division (SHPD) library, and online on the Waihona ʻAina database and the State of Hawaiʻi Department of Accounting and General Services (DAGS) and Ulukau websites. Historical maps, archaeological reports, Māhele data, and historical reference books were among the materials examined.

Moanalua in Traditional Times

The study area is situated at the coast of Moanalua Ahupuaʻa on the island's south shore. Moanalua is the westernmost ahupuaʻa of Kona Moku and is between Kahauiki Ahupuaʻa to the east and Hālawa Ahupuaʻa in ʻEwa Moku to the west. Moanalua stretches from the Koʻolau ridge to the ocean with two valleys, Kamananui and Kamanaiki, dissecting the uplands.

Place names

Place names often shed light on traditional views of an area and can provide important contextual information. Hawaiian place names "usually have understandable meanings, and the stories illustrating many of the place names are well known and appreciated...The place names provide a living and largely intelligible history" (Pukui et al. 1974:xii).

Moanalua "is said to be named for two encampments at taro patches where travelers bound for Honolulu from ʻEwa rested" (Pukui et al. 1974:152). Moana can mean ocean or a "broad expanse" of sea or land, while lua means two, thus an alternative meaning for the ahupuaʻa is "the great expanse of level land and reef" (Handy et al. 1991:474). The name Keʻehi translates to "tread upon" (Pukui et al. 1974:105). These and many additional place names in the project vicinity are listed in the book *Place Names of Hawaii* (Pukui et al. 1974), along with the meanings of the names and/or comments about the specific locales:

> Āliamanu. Schools, playground, and crater near Salt Lake, Honolulu. *Lit*., bird salt-pond. (The goddess Pele and her family lived here once. When they left, Pele dropped some salt, and the pet bird of Hiʻiaka, Pele's favorite sister, escaped. Birds gathered here.) (Pukui et al. 1974:11)
>
> Āliapaʻakai. Salt Lake, Oʻahu, said to have been dug by Pele on her first circuit of the islands. Some of the viscid matter from her eyes dropped to form salt. Hawaiians believed that the lake was connected to the sea by a hole in the center of the lake. *Lit*., salt pond. (Pukui et al. 1974:11)
>
> ʻAwaʻawaloa. Pond near Moanalua, Honolulu, and street named for it... *Lit*. too salty. Pukui et al. 1974:14)
>
> Kahauiki… Land section and stream west of Kalihi Valley, Oʻahu, that formerly irrigated extensive taro terraces. *Lit*., the small hau tree. (Pukui et al. 1974:63)
>
> Kaʻihikapu. Street, Moana-lua, Honolulu, and name of a fishpond at Māpunapuna... *Lit*. the taboo sacredness. (Pukui et al. 1974:68)
>
> Ka-lihi… Land section, channel, stream, valley, elementary school, field, street, and shopping center, Honolulu, said to have been named by Prince Lot (afterwards Ka-mehameha V) in 1856. (Pukui et al. 1974:77)

> Keʻehi. Lagoon and beach park east of Honolulu International Airport. *Lit*., tread upon. (Pukui et al. 1974:105)
>
> Lelepaua. Inland fishpond at Moanalua, Oʻahu, said to have been built by chief Ka-ʻihi-kapu-a-Manuia. (Pukui et al. 1974:132)
>
> Māpunapuna. Place, road, and spring-fed fishpond formerly at Moanalua, Honolulu. *Lit*., bubbling. (Pukui et al. 1974:147)
>
> Moanalua. Land division, park, playground, golf course, residential area, shopping center, schools, and stream near Fort Shafter, Honolulu…Said to be named for two encampments (*moana lua)* at taro patches, where travelers bound for Honolulu from ʻEwa rested. The site contains extensive gardens that are maintained as a public park. The buildings here are Kamehameha V cottage, a summer house built in 1867 and given to Samuel Damon in the 1880s, and the great hall built in 1906 by Samuel Damon; many parts of the great hall, including carvings, were sent from China. An ancient maika field near here was called Pueo-hulu-nui (much-feathered owl) because owls from Kauaʻi and Niʻihau were said to meet here to participate in the battle of the owls. In another story, a young chief, Kūlaʻi-i-ʻAiea, fell in love with a girl bathing in ʻĪ-emi pool. He cried out *Moana kā hoʻi ka wai o kēnā lua wai*, how wide the water of that water hole. She accepted his offer of love…(Pukui et al. 1974:152–153)
>
> Puʻuloa... Land section, camp, salt works, station, street, playground, beach park, village, area east of Pearl Harbor and old name for Pearl Harbor, Oʻahu; it is said that breadfruit were brought here from Samoa... *Lit*. long hill. (Pukui et al. 1974:200–201)

Subsistence and Traditional Land Use

In pre-contact times, Moanalua was a land rich in natural resources with access to fresh water, two lush valleys, salt flats, and plentiful marine resources. The ahupuaʻa had five fishponds that dotted the coastline: Moanalua Fishpond known for mullet [State Inventory of Historic Places (SIHP) 50-80-13-00078], Awaʻawaloa (SIHP 50-80-13-00079), Kaloaloa (SIHP 50-80-13-00080) used for raising awa, Kaʻihikapu (SIHP 50-80-13-00081) for collecting crabs, and Lelepaua (SIHP 50-80-13-00082) (McAllister 1933:93; Sterling and Summers 1978:330). None of these fishponds are located within the boundaries of the current project area, however Kaloaloa Fishpond (SIHP 00080) was the closest, situated approximately 145 m (476 ft.) to the west. Āliapaʻakai (Salt Lake), located about 1.5 km (0.9 mi.) inland of the subject property, was traditionally used as a source of salt for medicinal purposes, ceremonial practices, seasoning, and food preservation. During the hottest time of the year, the water would dry up, and the lakebed would be left with a deep crust of salt (Alexander in Sterling and Summers 1978:331).

The fertile watered lands along the streams were traditionally planted in kalo, with loʻi concentrated in two main areas. One system was irrigated by the smaller Kalou Stream near Moanalua Park, while the other comprised a broad expanse along lower Moanalua Stream, where terraces extended continuously down to the ocean (Handy et al. 1991:474). The makai region around Āliapaʻakai was cultivated with niu, wetland kalo, ʻulu, and maiʻa, while the upper reaches of Moanalua Valley supported uhi, wauke, semi-wild kalo, and olonā. The kalo of Moanalua is said to be "so large that the keepers groped in the dark [beneath them] for taro for the chiefs" (Handy et al. 1991:474). Around Āliapaʻakai were "…several tapa plantations; a tree, the bark of which the cloth of this country is manufactured" (McAllister in Sterling and Summers 1978:330).

Moanalua was also a place with religious and spiritual significance. Several heiau are noted for the ahupuaʻa; however, none are located in the coastal region makai (south) of Āliapaʻakai. An unnamed possible heiau (SIHP 50-80-14-00086) and Puʻu Kapu are both located along the ahupuaʻa border between Moanalua and Kahauiki (Sterling and Summers 1978:334). Puʻu Kapu is described as a place "where the chiefs and commoners met to

discuss matters of importance. It is very close to the place where travellers [sic] were robbed" (Manu in Sterling and Summers 1978:334).

The notable historian John Papa ʻĪʻī reminds us that there was a well-known, well-traveled network of trails that crisscrossed Oʻahu connecting east to west and north to south. The project area is located south of a main trail that passes through Moanalua Ahupuaʻa connecting ʻEwa Moku to Honolulu (see Figure 5). This trail passes through Moanalua, mauka of the two tuff cones and next to the famous "house of bones" further elaborated in the following moʻolelo section. The portion of the trail system that crossed Moanalua was known to have robbers, and it is said that people traveling "from Ewa came as far as the wall of human bones and vanished" (Mokumaia in Sterling and Summers 1978:335). Of the main trail which traversed Moanalua, ʻĪʻī elucidates:

> Let us turn to look at the trail going to Ewa from Kikihale. It led up to Leleo, to Koʻiuʻiu and on to Keoneʻula. There were no houses there, only a barren plain. It was there that the boy (John Iʻi) met with his attendants who came from Ewa with the god Kaʻili. He accompanied them on the way to Hoʻaeʻae and when the prostrating kapu was called, they all prostrated themselves on the plain until the others passed along. When they reached a bridge, the trail led along the banks of taro patches up to the other side of Kapalama, to the plain of Kaiwiʻula; on to the taro patches of Kalihi; down to a stream; up to the other side; down into Kahauiki; up to the other side; turned left to the houses of the Portuguese people; along the plain to Kauwalua, Kalaikoa's house of bones; down to a coconut grove; along the taro patches of Kahohonu; over to the other side and from there to a forded stream and up to Kapapakolea a resting place for travellers [sic] coming this way or going that way. (ʻĪʻī 1959:95)

Moʻolelo

As mentioned earlier, Hawaiian place names were connected to traditional stories by which the history of the places were preserved. These stories were referred to as moʻolelo:

> …a term embracing many kinds of recounted knowledge, including history, legend, and myth. It included stories of every kind, whether factual or fabulous, lyrical or prosaic. Moʻolelo were repositories of cultural insight and a foundation for understanding history and origins, often presented as allegories to interpret or illuminate contemporary life… Certainly many such [oral] accounts were lost in the sweep of time, especially with the decline of the Hawaiian population and native language. (Nogelmeier 2006:429, 430)

Still, many traditional stories managed to be recorded as Hawaiian society transitioned from an oral culture to a written one, and among those chronicled were several moʻolelo connected to Moanalua, particularly Āliapaʻakai. Several of these legends connect Moanalua Ahupuaʻa with deities and aliʻi, demonstrating the region's significance in traditional times. One moʻolelo recounts where the gods Kū and Lono landed when they first arrived to Hawaiʻi:

> Kū and Lono are spoken of in the moʻolelo of the lono-pūhā practitioners and of the medical kahuna as having come from Kahiki [Tahiti]. They landed first on Kauaʻi, and from there they spread forth.
>
> In the moʻolelo of Pele mā, it says that they first landed at Kalihi on Kauaʻi and from there went to Kaʻena Point on Oʻahu and at Moanalua left the salt pond. Then they went to Kauhakō on Molokaʻi, to ʻAleamai in Hāna, Maui, and then went to live at Kīlauea in Puna and Kaʻū on Hawaiʻi. (Kamakau 1991:112)

Other accounts credit the creation of Āliapaʻakai to the volcano goddess Pele (note that Āliapaʻakai is approximately 1.5 km north of the project area):

> …[Pele] left Kauaʻi and went to Oʻahu, to a place near Honolulu, to Moanalua, a beautiful suburb. There she dug a fire pit. The earth, or rather the eruption of lava, was forced up into a hill which later bore the name Kealiamanu (The Bird White Like a Salt Bed or The White Bird). The crater which she

> dug filled up with salt water and was named Kealiapaakai (The White Bed of Salt, or Salt Lake). (Westervelt 1987:40)

Pele and her youngest sister, Hiʻiaka, were also said to have resided at Āliapaʻakai and ʻĀliamanu for some time before moving on:

> Upon their arrival at Oahu, Pele and Hiiaka took up their abode in Kealiapaakai, at Moanalua, where they dug down into the ground and made a home. On coming from Kauai they brought some red dirt and some salt with them and deposited these things in their new home. Because of this fact these places were given the names of Kealiapaakai and Kealiamanu. Upon finding the place too shallow they went to settle at Leahi [Diamond Head]. (Fornander in Sterling and Summers 1978:331)

It is said that near these two craters was a flat area of pāhoehoe lava off of the old trail that contained a place called Leilono, an entrance to the "other world" known as Pō. It is said to be located somewhere along ʻĀliamanu crater's rim.

> Leilono at Moanalua, Oahu, was close to the rock Kapukaki and easterly of it (a ma ka naʻe aku), directly in line with the burial mound of Aliamanu and facing toward the right side of the north Star (a huli i ka ʻaoʻao ʻaku o ka Hokupaʻa). On the bank of the old trail there was a flat bed of Pahoehoe lava, and on it there was a circular place about two feet in circumference. This was the entrance to go down (ka puka o Leilono). (Kamakau 1964:48)

> It was a place said to be the opening, on the island of Oahu, for mankind to enter eternal night…This place is on the northern side of the famous Kapukaki (now Red Hill), at the boundary of Kona and Ewa, right in line with the burial hill of Aliamanu, on the upper side of the old road. It is said that this place [Leilono] is round, about two feet or more in circumference. This is the hole through which the ghosts of people slipped through to go down and this was the strata of Papa-ia-Laka. Through this opening appeared the supernatural branches of the breadfruit of Leiwalo. If a ghost who lacked an aumakua to save him climbed on a branch of the western side of the breadfruit tree, the branch withered at once and broke off, thus plunging the ghost down to the pit of darkness. The boundaries of this place, so the ancients said, were these: Papakolea which was guarded by a plover; Koleana whose guard was a big caterpillar and Napeha, the western boundary which was guarded by a lizard. (Kamakau 1899 in Sterling and Summers 1978:9)

He Moʻolelo Kaʻao Hawaiʻi no Laukaʻieʻie tells of Makanikeʻoe's voyage to Moanalua and his discovery of a cave or crevasse that connected the ocean to Āliapaʻakai. This legend was translated into English in Maly and Maly's (2003) *He Moʻolelo ʻĀina*:

> Having landed on the shores of Mamala, he then traveled to Kahakaaulana and the landing at Kalihi. He then looked down along the glistening sands and waters where the mullet are found, outside of Keahua, at the place called Keawakalai. There he saw a crevasse open in the sea. In this place, were sleeping many sharks and turtles, almost as if under the sand. Makanikeoe quickly entered into the cave with the turtles and sharks, to see them more closely. Because of his great speed, they didn't know that he had entered their house. It is true that Makanikeoe crawled along one of the crevasses in the sea, and going beneath the land, he exited out at Aliapaakai, at the place called Manawainuikeoo. That is the entrance of the sea into the great salt water pond of Moanalua…Let the author explain here, that this channel was first made when Pele traveled along the islands making craters here and there. This crater is something like the crater of Kauhako, at Kalaupapa, Molokai. By this little explanation my readers, you may also know that the remaining crater is there above Aliamanu, hiding cave of the chief Kahahana, his companion Alapai, and his beautiful wife, Kekuapoi. (Maly and Maly 2003:100)

An apparition called Poki is said to have been seen by many at various locations throughout Oʻahu, though one of the best descriptions was recounted by a European who lived in Moanalua:

> He saw Poki and, as he told me of the vision, I had not the slightest doubt, but that he had seen it. It happened many years ago as he was returning from Honolulu on horseback. The moon had just risen, flooding the tops of the ridges with light, which emphasized the blackness of the valleys. He had just passed Fort Shafter and was beginning the descent into Moanalua when, with a sudden jerk, his horse stopped and stood trembling. In the distance arose the wailing of dogs. Glancing about, the rider saw coming off the ridge to his right a pale form. As he watched, it left the ridge and passed over the dark valley. It was a shapeless, white form, a mist, convulsed with movement, but slowly and stately moving over the invisible treetops, clear and distinct against the black silhouette of the Koolau Range. As the apparition passed over the settlement, there preceded it the whimpering and wailing dogs, but in its path there followed a deathly stillness. Even after it was lost to sight, its presence could be followed by the ever attendant wailing. (McAllister 1933:92)

Mauka of the vicinity where Poki was seen was a small land segment called Namakalele, which translates to "flying eyes." The location is named after a story about a woman named Keanahaki who lived in the area (McAllister 1933:94–95). One day, Keanahaki went fishing while her husband journeyed into the mountains. Standing at the shore, she chanted, sending one eye in one direction to search for a particular fish and the other eye in another direction to catch whatever else it might find. At day's end, when she called her eyes back, they returned with an abundance of fish. She divided the catch, but in the end ate everything herself, bringing home only a single fish for her husband and children. When her husband asked if that was truly all she had caught, she lied. This pattern continued, with Keanahaki always returning home with just one fish for her family to share. Growing suspicious, her husband thought it unlikely that she could be so unlucky every day. A friend finally revealed to him that Keanahaki possessed unusual powers: she could chant at the shoreline and send her eyes into the sea to catch fish. To expose her secret, the husband was instructed to gather leaves of the ipu ʻawaʻawa plant and use them to capture her eyes. The next time Keanahaki went fishing, her husband followed. He watched as she chanted, releasing her eyes into the ocean. While she stood blind on the shore, he waited beside her. When she called her eyes back, he caught them, wrapped them in the ipu ʻawaʻawa leaves, took the fish, and returned home. Keanahaki, left sightless on the beach, wondered why her eyes had not returned as they always had. When her husband arrived home, he hid the eyes on a high ledge, believing no one had seen his hiding place. Later, Keanahaki made her way home without her sight and asked the children if their father had returned and whether he had brought anything with him. Only the youngest child had noticed where the eyes were hidden and led her to the spot, allowing Keanahaki to restore her vision.

There are several stories that connect aliʻi with Moanalua. One of these, which has many versions, is about a Maui chief named Kalaikoa who moved to Moanalua and constructed a "house of bones." One version is as follows:

> …Kalaikoa who lived at Moanalua built a long house and named it Kauwalua and, perhaps in order to make his name famous, had it filled with the bones of persons stripped, bound, and set up inside the house and all around the outside enclosure of the house. The bones of Elani, Konamanu, and Kalakioʻonui were bundled up and placed beside the entrance. The house stood at Lapakea on the slope into Moanalua on the upper side of the old road. Eyewitnesses said, 'it was a terrible and gruesome sight. The bones were stripped, bundled together, and the skulls set upon each bundle so that, seen from a distance, it looked like a company of living men.' (Kamakau 1961:138–139)

An article from 1911, published in *Ka Hoʻokumu ʻana o nā Paemoku, Ke Au Hau,* describes where Chief Kahahana hid upon Oʻahu's defeat by Kahekili before he was captured and subsequently killed by Kamehameha's forces. Other versions of the story say that he was sacrificed at Puʻu Kapu Heiau at the boundary of Moanalua and Kahauiki Ahupuaʻa.

> When Kahekili defeated Oahu, Kahahana, his wife and friend fled to Moanalua where he lived with his servant. From there he moved to Kinimakalehua at Aliamanu below Kapukaki, a place facing Leilono. There was a lehua and a hau tree where they stayed for a few days. From there they went to Keanaapuaa and from thence to Kepaakaea, then to Waipio and on to Kahaone. They remained there until they

> thought it better to go up to Oahunui at Wahiawa and so they went to the forest of Halemano. They were there a short time and moved to Leilehua. After living there for a time they went to stay at Poʻohilo in Honouliuli and there they hid until, weary with life in the forest, they showed themselves to the commoners. (Sterling and Summers 1978:6–7)

An imu located in Moanalua Gardens is associated with a chief of the area named Kamahalolaniali‘i (Beckwith in Sterling and Summers 1978:329). Out of jealousy, he challenged Chief Keli‘ikanakaole to a riddle contest, with the condition that the loser would be roasted in the imu. Kamahalolaniali‘i recanted a riddle taught to him by Paeli, a man from the uplands of Moanalua, which described the stages of human life from pregnancy to childhood. Feeling compassion for Keli‘ikanakaole, Paeli revealed the answer to him. After acting out the answer, Keli‘ikanakaole fled and never returned to Moanalua, remaining in hiding until Kamahalolaniali‘i’s death.

‘Ōlelo No‘eau, Winds, and Rains

With their lives closely connected to the natural environment and physical surroundings, Hawaiian winds and rains were individually named and associated with a specific place, region, or island. In *Hānau Ka Ua*, Akana and Gonzales (2015:xv) explain that kūpuna “knew when a particular rain would fall, its color, duration, intensity, the path it would take, the sound it made on the trees, the scent it carried, and the effect it had on people.”

In 1983, Mary Kawena Pukui published a volume of close to 3,000 ‘ōlelo no‘eau that she collected throughout the islands. The introductory chapter reminds us that if we know these proverbs and wise sayings well, then we will know Hawai‘i well (Pukui 1983). A single ‘ōlelo no‘eau was found specifically mentioning Moanalua and naming its wind:

> (1460) Ka makani Hoʻeo o Moanalua.
> *The Hoʻeo, whistling wind of Moanalua.*
> Moanalua is on Oʻahu. (Pukui 1983:158)

The rain name connected to the project region provides valuable insight into kūpuna perspectives of the landscape. One such name associated with Moanalua, recorded in *Hānau Ka Ua* (Akana and Gonzales 2015), is Kinimakalehua, meaning “countless lehua blossoms.” This term is not only a rain name but also a place name within the ahupuaʻa (Akana and Gonzales 2015:84).

Moanalua in the Historic Era

When the first Westerners arrived in the Hawaiian archipelago in 1778, the islands were not yet united under one sovereign. At that time, Moanalua and the entire island of Oʻahu was under the rule of Chief Kahahana. In 1783, Chief Kahahana’s reign ended with the invasion and victory of Chief Kahekili of Maui. This would forever be the end of Oʻahu’s independence as a separate island kingdom. When Chief Kahekili died in 1794, control of Oʻahu went to his son Kalanikūpule. The following year, Chief Kamehameha of Hawai‘i Island invaded Oʻahu to engage Kalanikūpule in battle. Kamehameha overwhelmed Kalanikūpule’s warriors, effectively gaining control of all the islands from Hawai‘i to Oʻahu. Eventually, Kamehameha would make a peaceful agreement with Chief Kaumuali‘i of Kauaʻi, bringing that island and Ni‘ihau into the fold and thereby uniting the Hawaiian archipelago under one rule (Kamakau 1991; Kanahele 1995).

Early Historic Accounts of Moanalua

Early Western accounts of coastal Moanalua describe the ahupuaʻa as initially having a substantial Native Hawaiian population. The resources available were utilized to their fullest with a shallow lagoon constructed

into fishponds and rich alluvial areas formed by streams of which a system of irrigated, terraced loʻi were built. Surrounding the loʻi were maiʻa and kō. Otto Von Kotzebue, a navigator of the Russian Navy described Moanalua during his visit in 1816:

> On our way, we met now sugar plantations, now taro fields, now scattered huts; and so, without noticing it, we covered the five miles to the large village of Mauna-Roa [Moanalua], situated in a delightful valley on a mountain slope. From here the winds to the sea a fast-flowing river of the same name…In front of the village, consisting of pretty little reed huts, one encounters two groves, one of coconut palms, the other of breadfruit. We passed through these little groves, to take a rest on the hill lying immediately behind. (Barratt 1988:232)

> Our way led us through a romantic valley where we seated ourselves under shady breadfruit trees, on the banks of a salt lake…We again ascended a high mountain and were, soon afterwards in a beautifully cultivated plain, among taro fields, sugar plantations, and banana trees. (Kotzebue 1821 in Handy et al. 1991:474)

Just a decade after Kotzebue described the "large village" of Moanalua, a naval officer named Hiram Paulding traveled along the same trail through the region in 1826 but documented in his journals that "the country was thinly inhabited. We met with no considerable village or rich valley" (Paulding 1971:205). It is likely that this change in population was for the most part the result of widespread decimation of the Native Hawaiian population, which occurred after Western contact due to the introduction of foreign diseases. The first census of Hawaiʻi was taken in 1835–1836 by missionaries. At this time Moanalua had a total population of 625, with 486 adults (234 females and 252 males) and 139 children (48 females and 91 males) (Schmitt 1973:19).

The coconut grove mentioned by Kotzebue was referenced again in the 1830s and seemed to have an unusual look possibly due to strong winds:

> But to return to the little valley, about three miles from Honolulu on the road to Ewa over...On looking down, you behold a large grove of cocoanut [sic] trees, some of which give evidence of having been blown upon with no ordinary breath; appearing to have been nearly prostrated when about twenty feet high, they again shot up in a perpendicular direction and now present the curious phenomenon of living trees, the upper half of whose trunks are almost at right angles from the lower. It is a little remarkable that the surrounding trees on every side are perfectly straight. (Hall 1839:97)

Āliapaʻakai continued to be utilized for its salt resources until around the mid-1800s, when it was said to have "disappeared" (Bates 1854:102). In the 1820s, a missionary named William Ellis described Salt Lake and the process of harvesting the salt in his journals:

> About six miles to the west of Honoruru, and nearly as far from the village of Eva, on the Pearl River, there is a singular natural curiosity – a small circular lake, situated at a short distance from the sea shore, so impregnated with salt, that twice in the year the natives take out between two and three hundred barrels of fine clear, hard, crystalized salt: this lake is not only an interesting natural curiosity, but an important appendage to the island. It belongs to the king, and is not only useful in curing large quantities of fish, but furnishes a valuable article of commerce; quantities of it having been sent for sale to Kamtschatka, and used in curing seal skins at the different islands to which the natives have sent their vessels for that purpose, or sold in the islands to Russian vessels, from the settlements on the north-west coast of America. (Ellis 1969:18–19)

Early settlements in the coastal region of Moanalua Ahupuaʻa were contained to two areas, likely two traditional Hawaiian fishing villages (Anderson and Bouthillier 1996:26). West of the current project area, southwest of the settlement later known as Watertown, was a small, unnamed community referred to as Settlement 1840. Poi Village was located southwest of the current study area, along the former coastline within the airport taxiway near today's Honeymoon Beach. It is assumed that the shoreline in this region was very low-lying and marshy, making it unsuitable for habitation; thus, few settlements are known in the area.

Māhele and Changes in Land Tenure

The change in the traditional land tenure system in Hawai‘i began with the appointment of the Board of Commissioners to Quiet Land Titles by Kamehameha III in 1845. The Great Māhele took place during the first few months of 1848, when Kamehameha III and more than 240 of his chiefs worked out their interests in the lands of the Kingdom. This division of land was recorded in the Māhele Book. The King retained roughly a million acres as his own as Crown Lands, while approximately a million and a half acres were designated as Government Lands. The Konohiki Awards amounted to about a million and a half acres; however, title was not awarded until the konohiki presented the claim before the Land Commission.

In the fall of 1850, legislation was passed allowing citizens to present claims before the Land Commission for parcels that they were cultivating within the Crown, Government, or Konohiki lands. By 1855, the Land Commission had made visits to all of the islands and had received testimony for about 12,000 land claims. Ultimately, between 9,000 and 11,000 kuleana land claims were awarded to kama‘āina, totaling only about 30,000 acres and recorded in ten large volumes.

It was customary for ali‘i to redistribute lands won in significant battles, as was the case with Moanalua when Maui chief Kahekili conquered O‘ahu and subsequently, when Kamehameha I came out victorious at the Battle of Nu‘uanu. Moanalua Ahupua‘a changed hands many times during this period between the late-1700s and early-1800s:

> Much later when Kahekili of Maui conquered O‘ahu he placed his son, Kalanikūpule, in charge of Moanalua. After the battle of Nu‘uanu, Kalanikūpule fled but was finally caught and sacrificed on an altar, probably at Pu‘ukapu [in Moanalua]. Kamehameha gave Moanalua to Kame‘eiamoku. Next the valley passed to his son, [Ulumāheihei] Hoapili, then to Hoapili’s adopted son Lot (afterwards Kamehameha V), to Ruth Ke‘elikōlani, and then to Bernice Pauahi Bishop, who willed the entire ahupua‘a to Samuel M. Damon in 1884. At the present time [1974] the Damon family is offering the entire valley, including Kamana Nui and Kamana Iki, to the people of Hawai‘i as a park of more than 3,000 acres for preservation of native Hawaiian flora and historic sites. (Beckwith 1970:124–125)

Lot Kapuāiwa (Kamehameha V) received Moanalua in its entirety during the Māhele as LCA 7715 (Appendix H). At this time, there were also approximately 101 LCAs granted within the ahupua‘a. Nearly all of these kuleana awards are located in cultivated areas near the end of Moanalua Stream and its tributaries, located roughly 1 km (0.6 mi.) to the northeast of the current study area. No other LCA awards have been identified within the project area or its immediate vicinity. Kapuāiwa died in 1872 and the ahupua‘a of Moanalua was passed to his heir and half-sister, Princess Ruth Ke‘elikōlani. Upon her passing in 1883, all of her land holdings, including the lands of Moanalua, were willed to Princess Bernice Pauahi Bishop, who was the last heir of Kamehameha I (Pukui et al. 1974:152). Bishop died in 1884, leaving Moanalua Ahupua‘a and the Kaliawa Fishery to her husband’s business partner, Samuel M. Damon (Pukui et al. 1974:152). Damon “subsequently purchased…the Sumner heirs’ title to the ahupua‘a and began his purchase of 89 of the remaining kuleana titles” (Ayers 1970:65). Bishop’s will, dated October 31, 1883, stated:

> I give, devise and bequeath unto my friend, Samuel M. Damon of said Honolulu, all of that tract of land known as the Ahupuaa of Moanalua, situated in the district of Honolulu, Island of Oahu; and also the fishery of Kaliawa, to have and to hold with the appurtenances to him, his heirs and assigns for ever [sic]. (Sterling and Summers 1978:329)

Damon utilized his Moanalua lands as pasture and also leased areas to plant sugarcane, banana, and rice (Anderson and Bouthiller 1996). He and his heirs would later purchase many of the kuleana lots in Moanalua.

Historic Maps

Two maps from 1881 depict coastal Moanalua, identifying the names and extents of the fishponds along Keʻehi Lagoon, as well as nearby fisheries, reefs, and islets. The first, produced by Covington (1881; Figure 4), shows the current project area almost entirely within the ocean. Its surroundings are largely undeveloped, though several possible loʻi terraces are illustrated north of the project parcel. A grove, likely the coconut grove described by Kotzebue, is depicted along the only regional trail, which turns mauka behind Āliapaʻakai. Numerous fishponds are depicted along the coastline. In the vicinity of the current project, Kaloaloa Fishpond is shown to the west. Awaʻawaloa and Mapunapuna Fishponds are labeled to the north of the project area, while Kaʻikikapu and Weli Fishponds are illustrated to the northeast across the lagoon. Kaʻikikapu Fishpond is incorrectly labeled here as "Kaihikapu" which is the name of a fishpond located southwest of the project and also labeled on this map. Apili, Pāhounui, and Pāhouiki Fishponds are located across the lagoon to the project's southeast. Notably, Pāhounui Fishpond is labeled as "Pahou," suggesting a possible historic variant of the pond's name. The map also depicts ʻŌnini Island in a region of the fishery waters now filled in and within the boundaries of the current project area. Along the border of Kalihi and Kahauiki Ahupuaʻa, south of Weli Fishpond, a "leper asylum" is also illustrated.

The second map, prepared by Lyons (1881; Figure 5), depicts similar features, including ahupuaʻa and fishery boundaries. The Keʻehi Fishery is situated south of the current project area and is annotated with "About 1,000 Acres," along with a note from the cartographer indicating that the fishery was originally attached to Kalihi Ahupuaʻa. In contrast, Kaiki Fishery is shown as part of Moanalua Ahupuaʻa. Kaloaloa Fishpond near the project area is illustrated with a mud bank along its mauka side. Mokumoa and Ilinui Fisheries divide the upper limits of the lagoon in the waters off the coast of the current project area. Kaʻikikapu Fishpond is notably still incorrectly labeled "Kaihikapu" as is Pāhounui Fishpond, still labeled as simply "Pahou." Moku Moa Island, labeled "Moku Maa" is situated between Kaʻikikapu and Weli Fishponds. The "leper asylum" across the fishery waters is still shown.

A map from ca. 1890 shows early signs of development emerging in coastal Moanalua (Monsarrat ca. 1890; Figure 6). Most significantly, there is a road that runs along the slopes of Āliapaʻakai to the north. The current project area is located near the label for LCA 7715, which encompassed the entirety of Moanalua Ahupuaʻa and was awarded to Lot Kapuāiwa (Kamehameha V). Ahua Fishery is now shown to the north of the current project location, while Moku Moa Fishery is not illustrated at all. Kaʻikikapu Fishpond is now correctly labeled and "Mokuonioni" remains visible. "Old Salt Pans" are to the north of Apili Fishpond, a mud flat is now north of the current project area, and the area which the previous maps labeled a leper asylum is now depicted as "LCA 10498" in Kalihi Ahupuaʻa and awarded to "Nahinu."

Moanalua in the Late Historic Era to Modern Times

Moanalua continued to develop from the late historic period into the modern era, shaped by agricultural activity, military expansion, and the eventual establishment of Oʻahu's primary airport.

Agriculture

The close of the 1800s and beginning of the 20th century saw an increase in sugarcane cultivation across the island chain. Large areas of Moanalua were leased to the Honolulu Sugar Company, which would later be known as the Honolulu Plantation Company (HPC). A large swath of the coastal plain was used by HPC for sugar cultivation, which also occurred across the majority of coastal ʻEwa. Inland areas of Moanalua were used for grazing land and pasture, while wetlands with rice and taro cultivation still occurred along streams. According to a 1902 map (Wall 1902; Figure 7), the current project area is situated just east of the HPC cane fields (outlined in red) and a small area of cultivated wetlands located between the cane fields and the current project location

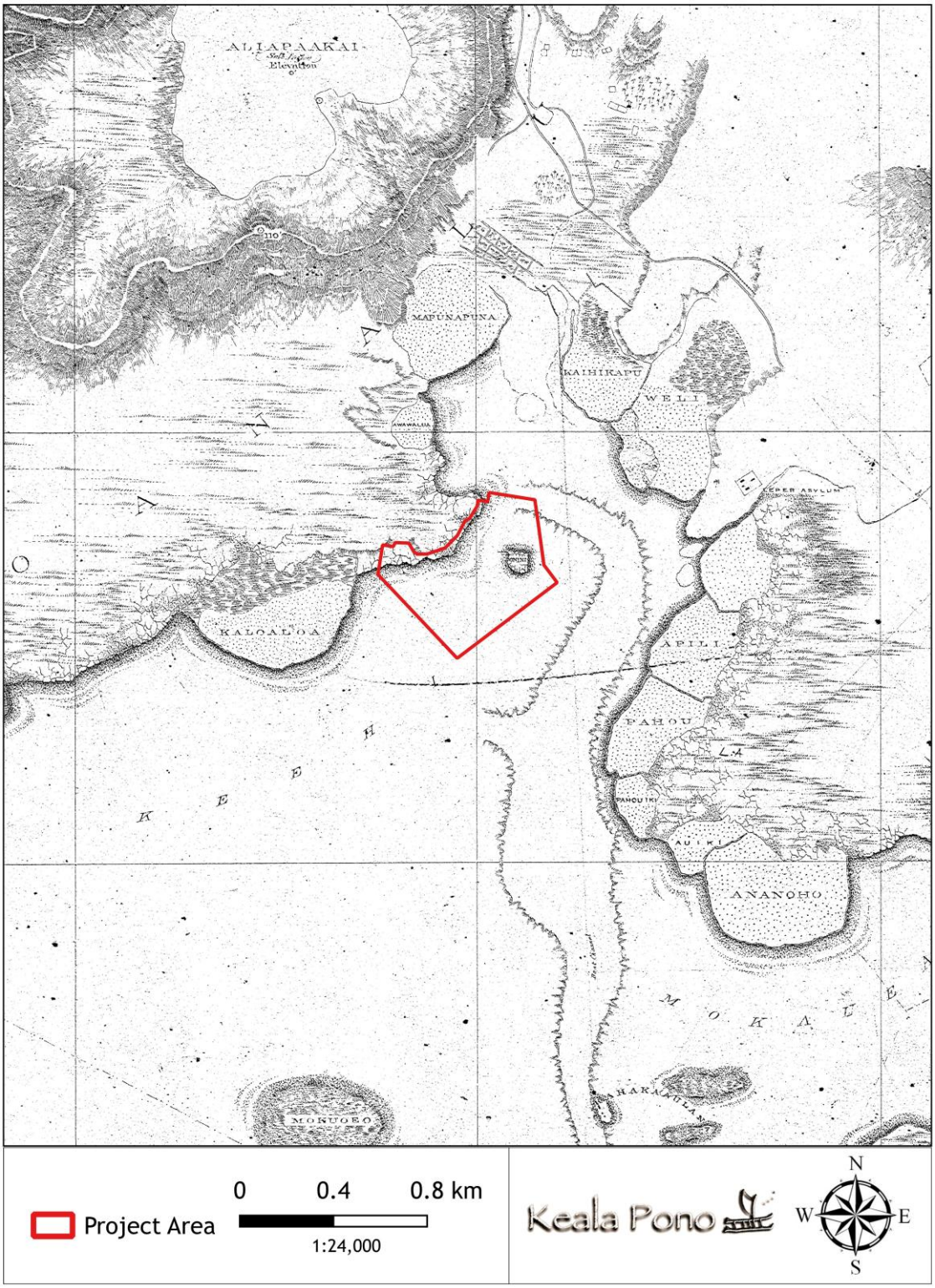


Figure 4. Portion of a Hawaii Government Survey map of the "Main Part of the Kona District, Oahu" (Covington 1881).

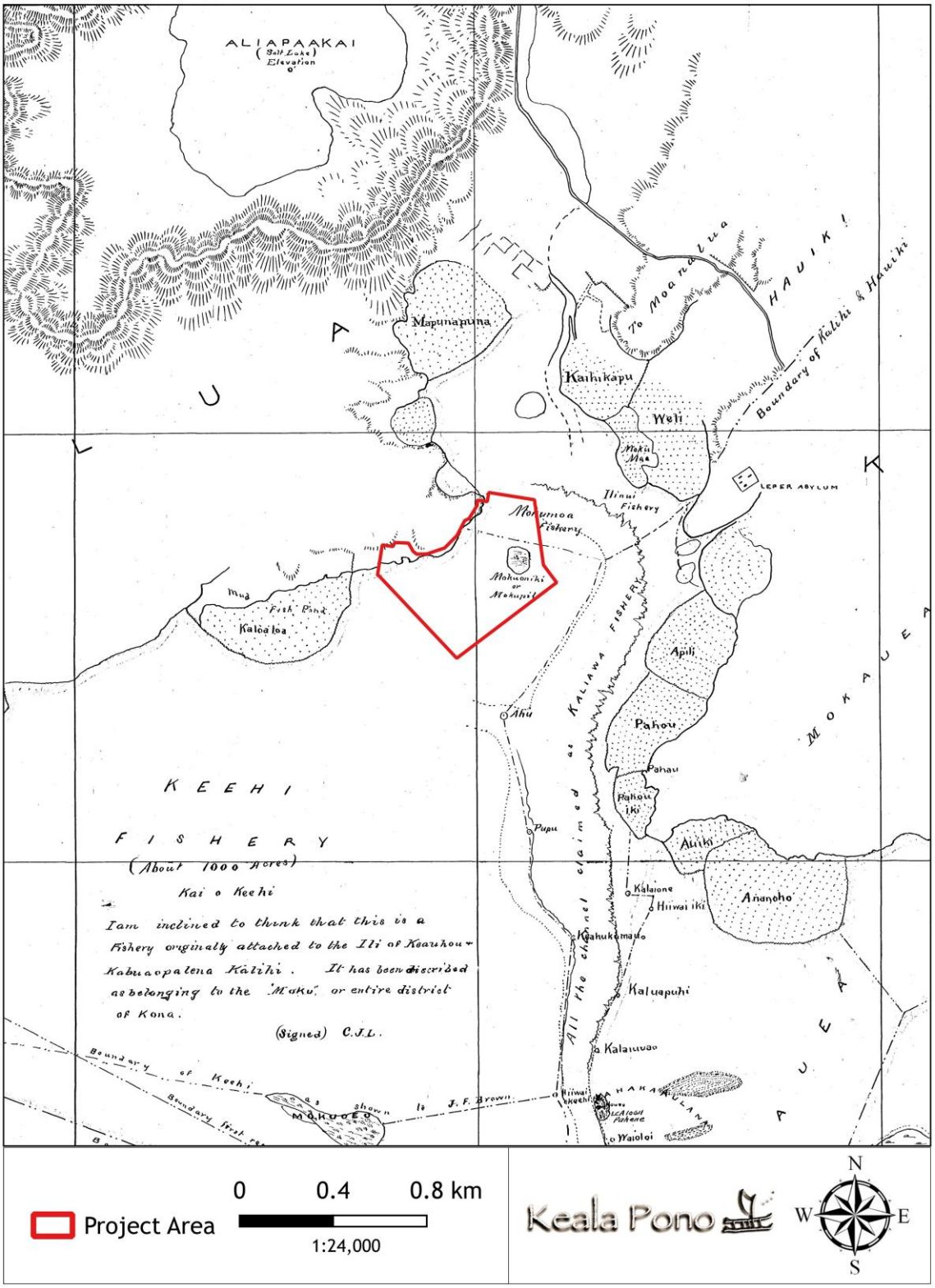


Figure 5. Portion of a map showing the reef titles of Kalihi (Lyons 1881). Note that this map is contextual and does not imply reef titles within the project area or LRFI scope.

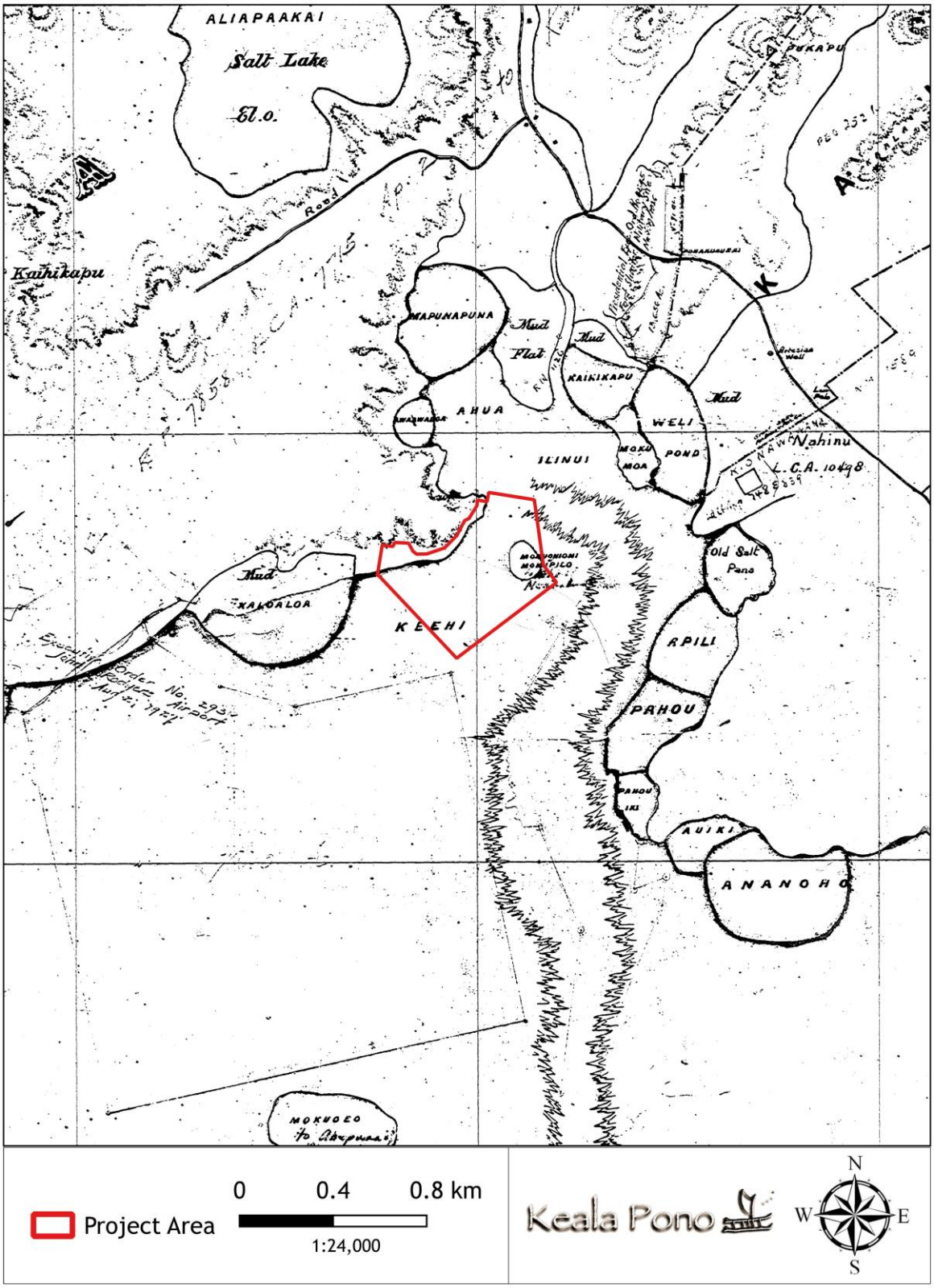


Figure 6. Portion of a map of Moanalua and Kahauiki (Monsarrat ca. 1890).

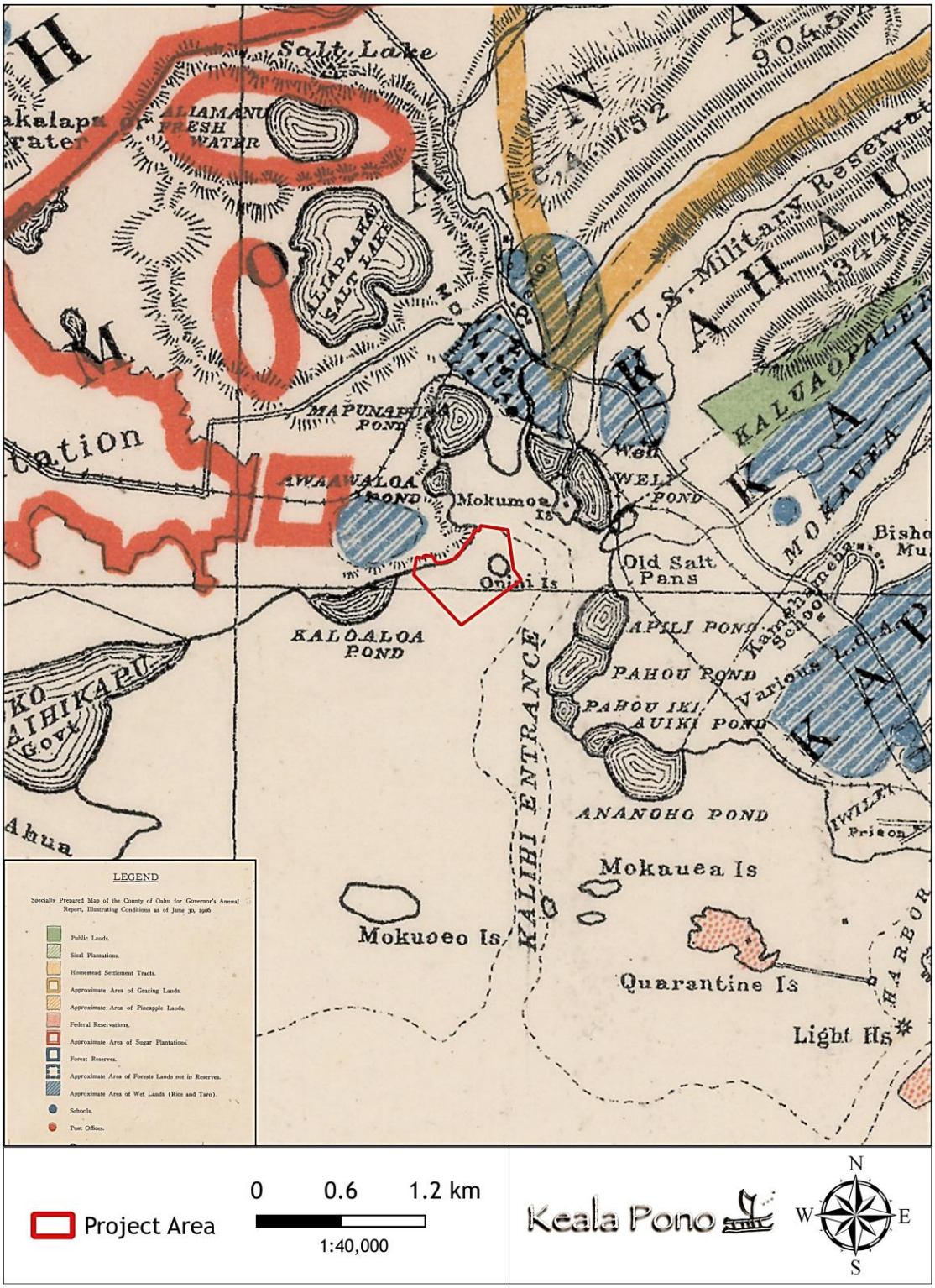


Figure 7. Portion of a Hawaii Territory Survey map of O‘ahu depicting land use (Wall 1902). Note the location of the sugar plantations (red outline) and wetlands with rice and taro cultivation (blue diagonal shading).

(blue striped region). Wetlands are also depicted nearby to the north of the current project. By this time, the HPC plantation had lands within ʻĀliamanu Crater and its slopes, as well as a section just to the west of Āliapaʻakai. The area around the mouth of Moanalua Stream remained a wetland where kalo and rice were farmed. During this period, infrastructure was developed to support commercial cultivation. A railroad is illustrated in the 1902 map meandering along the coast and running inland of the current project area (see Figure 7).

The main railroad on the island, the Oahu Railway and Land Company (OR&L), was constructed from 1889–1899 by businessman Benjamin Dillingham, mainly for the transportation of sugarcane; however, the HPC also had railroad lines of their own. Both rail lines traversed Moanalua Ahupuaʻa along the corridor of today's Nimitz Highway, cutting through the wetlands near the stream mouth (see Figure 7). The OR&L line was constructed in stages, beginning with the route from Honolulu to ʻEwa, later extending north along the coast to Waiʻanae, and eventually around Kaʻena Point to reach plantations as far as Kahuku. With the growing dominance of trucks and automobiles, rail service declined, and the OR&L line was permanently shut down in the late 1940s.

In the mid-1930s, the Hawaiian Pineapple Company (HPC) leased more than 23,000 acres in Moanalua. During this period, the Puʻuloa Camp and Watertown plantation settlements were established northwest of the project area to accommodate plantation laborers. A 1927 U.S. Geological Survey map (USGS 1927; Figure 8) further documents the region's fishponds, marshlands, and the early configuration of Rodgers Airport to the southwest of the project area. The map also illustrates substantial infrastructure development in the surrounding region, including buildings, roads, and a pipeline depicted northeast of the current project. At this time, Pāhounui Fishpond continues to be labeled simply as "Pahou."

Military

The 19th century closed with the overthrow of the Hawaiian monarchy by foreigners backed by the United States and the annexation of Hawaiʻi into an American territory. Upon the annexation of Hawaiʻi in 1898, Pearl Harbor became the main focal point of U.S. interests. The U.S. Navy dredged the Pearl Harbor channel a decade later, filling in former low-lying areas, and the military presence throughout the region grew, permanently changing the nature of Moanalua's landscape. To the northeast of the current project, Fort Shafter was established in 1907, followed by Hickam Field (Hickam Air Force Base) to the west in 1938. By 1953, large portions of land in the region were developed into naval reservations, including the Makalapa Crater, ʻĀliamanu Crater, Fort Kamehameha Military Reservation, and Camp Catlin (located to the northwest of the current project), as well as military housing neighborhoods along Nimitz Highway and adjacent to the subject property. At this time many residential and industrial areas were also developed, such as Kamehameha/Nimitz Highway and the neighborhood of Damon Tract, which occupied the area immediately west of the study parcel, in addition to roads still in place today, such as Puʻuloa Road and Lagoon Drive (USGS 1953; Figure 9).

Airport Development and Modification of the Keʻehi Lagoon Coastline

In 1925, 48.27 ha (119.3 ac.) of land in coastal Moanalua and 309.98 ha (766.00 ac.) offshore were purchased from Samuel Mills Damon for $27,410.00 to construct an airport on Oʻahu (Hawaii Aviation n.d.; Figure 10). Named after a World War I Naval Commander, the John Rodgers Airport was inaugurated on March 21, 1927, and was the first airport in the Territory of Hawaiʻi (Figure 11). It would later become the Honolulu International Airport, subsequently renamed the Daniel K. Inouye International Airport. Low-lying areas were filled in to support warehouses, roads, and further airport infrastructure, but the fishponds were not initially filled. John Rodgers Airport had two runways with additional graded coral runways added in 1930–1931 (Hawaii Aviation n.d.). A few months prior to the attack on Pearl Harbor in 1941, offshore dredging began for a seaplane runway in Keʻehi Lagoon; however, the military took control of all airports following the attack and "extensive improvements were made at John Rodgers Airport" during the war (Hawaii Aviation n.d.).

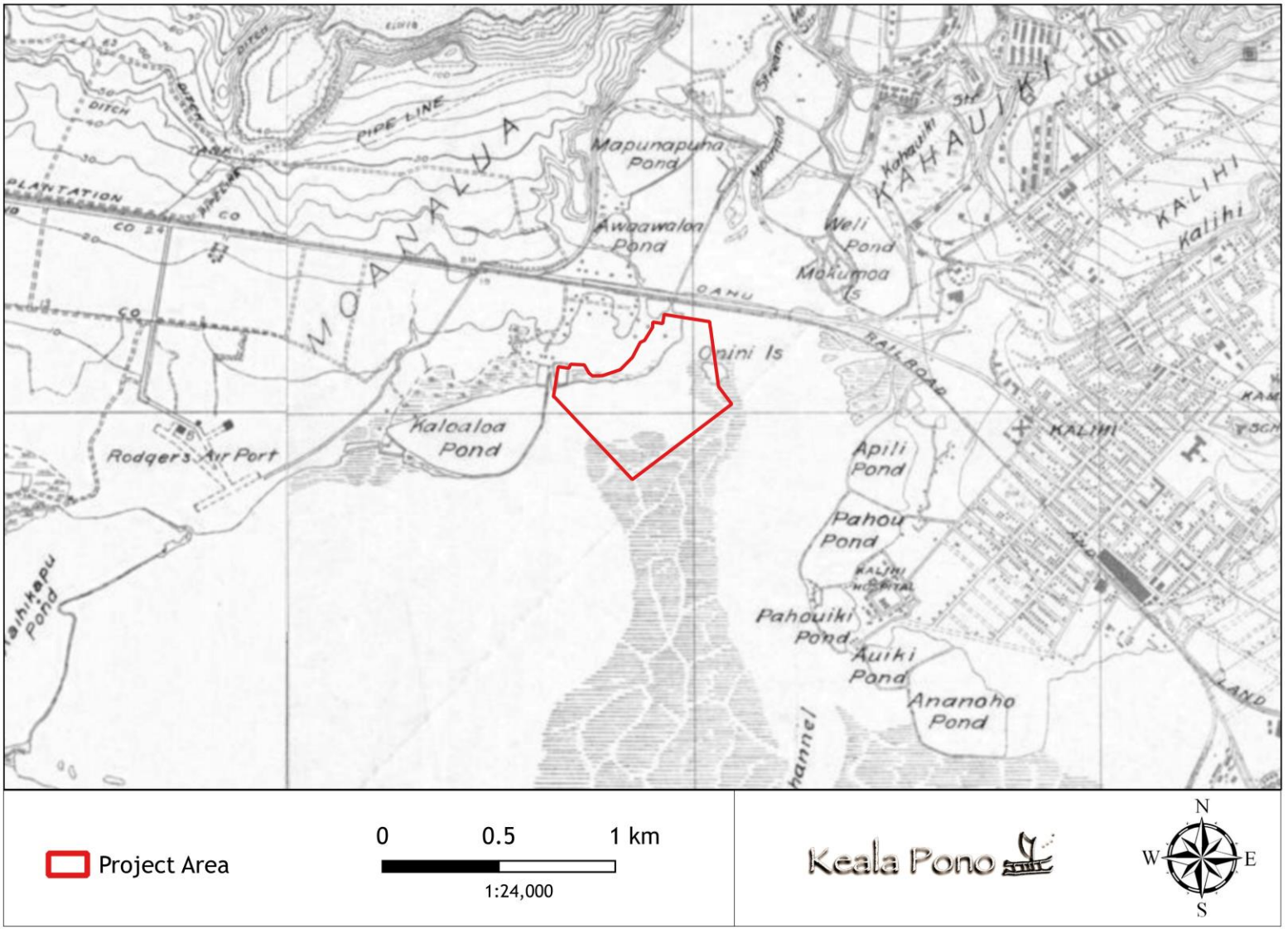


Figure 8. Portion of a 1927 USGS Pu‘uloa Quadrangle map showing the project area (USGS 1927).

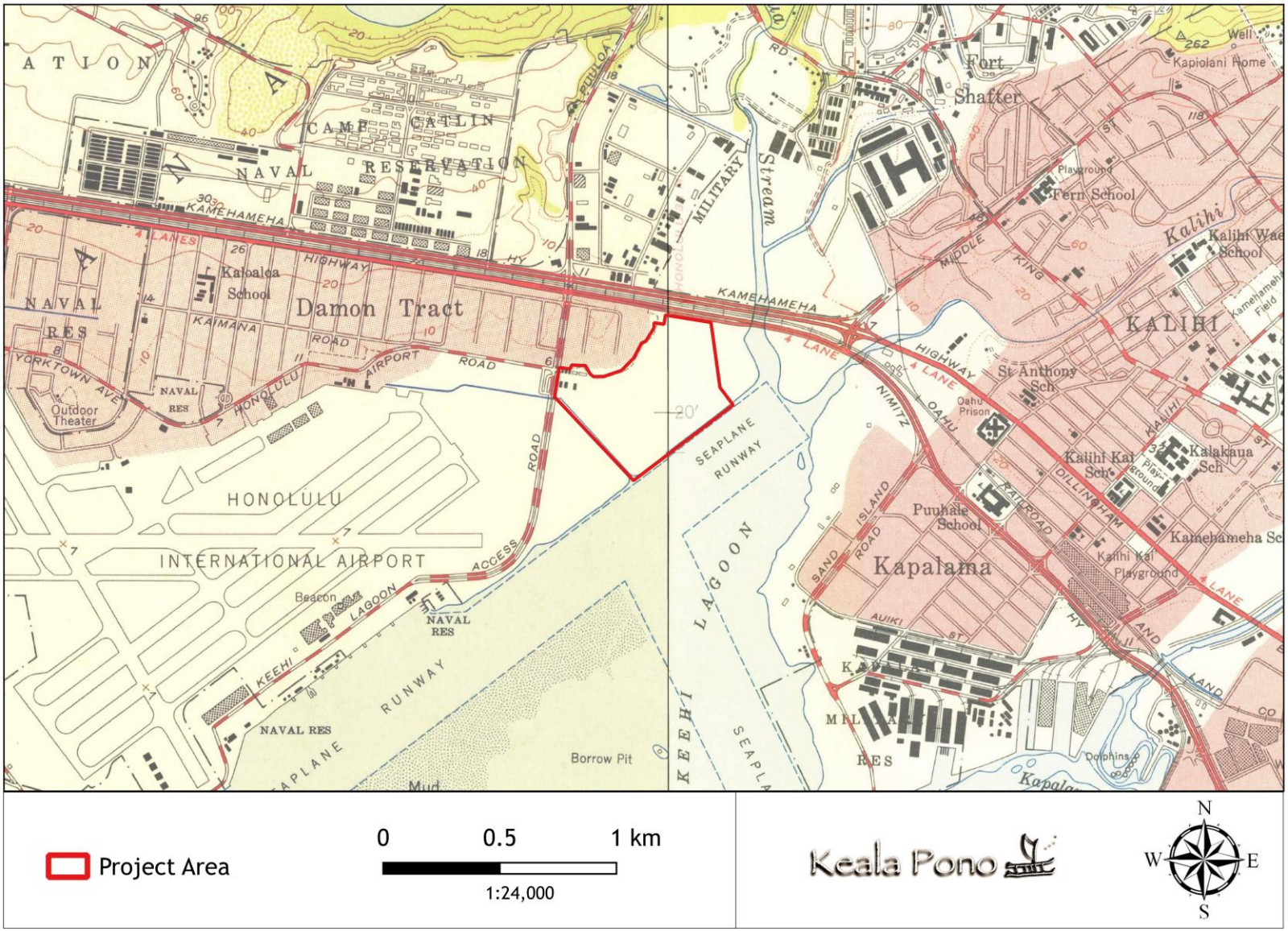


Figure 9. Portion of a 1953 USGS Pu‘uloa Quadrangle map showing the project area (USGS 1953).



Figure 10. Aerial photograph of John Rodgers Field a year after construction in 1928 (Hawaii Aviation n.d.).



Figure 11. Aerial photograph of John Rodgers Field in 1929. Note that the fishponds have not been filled yet (Hawaii Aviation n.d.).

Substantial filling of the land, including the fishponds, occurred ca. 1942–1943. The coastal fishponds surrounding the airport as well as those surrounding Keʻehi Lagoon were filled in during war time airport improvements. Aerial photographs of the airport from 1941 (Figure 12) and 1947 (Figure 13) show before and after infilling of the fishponds while photographs of Keʻehi Lagoon from 1928 (Figure 14) and 1952 (Figure 15) illustrate the fishpond infilling that took place in the vicinity of the current project. It is unknown if the rocks that made up the fishpond walls were utilized in construction activities, destroyed, or left in place during infilling. Approximately 1,000 m of new land was created due to these filling activities that extended along the coastline. Infilling significantly reduced the size of the lagoon, reshaped it into its present triangular form, and created the landmass that now supports Keʻehi Lagoon Beach Park. By 1946, these wartime alterations to the coast turned the existing airport and surrounding area into one of the largest in the United States (Hawaii Aviation n.d.).

Following the war in 1947, the Territory of Hawaii regained control of John Rodgers Airport, renaming it the Honolulu Airport. With increased usage, expansion continued and by 1950 "the boundaries of Honolulu Airport, including the Seadrome channels, comprised an area of 1,019.476 acres" (Hawaii Aviation n.d.). Additional terminals were built and a runway was constructed to connect HNL to the Hickam Air Force Base, now Joint Base Pearl Harbor Hickam (JBPHH). In the early 1950s, this was one of the longest runways in the world (Hawaii Aviation n.d.).

Also during this time, federal oversight of the airport gradually diminished. In 1946, operational control of John Rodgers Airport was restored to the Territorial Government, although the U.S. Navy continued to conduct limited activities at the facility until approximately 1949. In April 1950, further tracts of land in the vicinity of the airport were conveyed back to the Territory. These consisted of areas created through the reclamation of formerly submerged lands associated with construction of Keʻehi Lagoon (United States 1950). This area likely included the project area at present day Keʻehi Lagoon Beach Park.

Plans to establish a public recreational area, then known as "Kalihi Playground," on the land between Keʻehi Lagoon and the airport began to take shape in 1951 (*Honolulu Advertiser* 1953). The proposal faced opposition from the Aeronautics Commission, which instead advocated for a golf course at the location and argued that the land might be required for future airport expansion. The Commission also raised safety concerns, asserting that a park would lie too close to active flight paths used by aircraft during approach and landing. Despite these objections, the Public Parks and Recreation (Parks Board) moved forward with project planning (*Honolulu Advertiser* 1953).

Today, coastal Moanalua remains centered around HNL and the adjacent JBPHH. The area surrounding the project property continues to house a mix of commercial lots and industrial zones. Further north is the 9.71 ha (24 ac.) privately owned Moanalua Gardens along the bank of Moanalua Stream. After acquiring Moanalua Ahupuaʻa from Princess Bernice Pauahi Bishop, S.M. Damon relocated from Honolulu to the former summer residence of Kamehameha V. He subsequently undertook extensive landscape modifications, converting the surrounding rice fields and loʻi into formal gardens, inspired by those he had encountered during travels in Britain (Moanalua Gardens n.d.). These landscaped grounds eventually formed the basis for what is now the Māpunapuna industrial subdivision. Damon preserved the Kamehameha summer cottage and built a Japanese garden and tea houses, as well as a Chinese Hall, which were later moved to its current location at the Moanalua Gardens when lands were sold off and consolidated. After the dissolution of the Damon Estate, Damon's great grandson, John Philip Damon, purchased the gardens and created the Moanalua Gardens Foundation to perpetuate his great-grandfather's vision (Moanalua Gardens n.d.). Each year, the Prince Lot Hula Festival honoring Prince Lot Kapuāiwa is held at the gardens.



Figure 12. Aerial photograph of the airport from 1941 prior to fishpond infilling (left foreground) (Hawaii Aviation n.d.).



Figure 13. Aerial photograph from 1947 showing runways and infilling (Hawaii Aviation n.d.).



Figure 14. Aerial photograph of Keʻehi Lagoon from 1928 prior to fishpond infilling (UH Mānoa n.d.).



Figure 15. Aerial photograph of Keʻehi Lagoon from 1952 showing regional development after infilling (UH Mānoa n.d).

Previous Archaeology

The following discussion provides information on archaeological investigations that have been carried out within 0.25 km (0.16 mi.) of the project area, based on reports found in the SHPD library in Kapolei, Hawai‘i. Previous archaeological studies are shown in Figure 16 and Table 1, while recorded archaeological sites are displayed in Figure 17 and Table 2.

The earliest archaeological survey on O‘ahu was completed by J.G. McAllister in his published work, *Archaeology of Oahu* (1933). This study documented many important Hawaiian cultural sites, including heiau, at a time before many were destroyed. There are 21 sites documented by McAllister (1933) within Moanalua Ahupua‘a, 11 of which are in the coastal region. None are located within the current project area; however, one fishpond, Kaloaloa (SIHP 00080), was located just west of the project area. McAllister describes the fishpond as follows (1933:93, 101):

> **Kaloaloa Fishpond, Moanalua (Site 80)**
>
> The pond is 36 acres in area, with a semicircular wall 2700 feet long. The walls are of coral, 6 feet wide and 3 feet high. There are three outlets (makaha).

In 2012, an archaeological assessment was completed for ground-disturbing activities at HNL’s Runway Safety Areas 22R and 22L to the west of the current project area (Athens 2012). The study found that intact, undisturbed fishpond deposits associated with Kaloaloa (SIHP 00080) may be encountered and recommended an archaeological inventory survey with soil coring to determine the presence and location of the former fishpond. The survey was completed the following year (Athens and Ward 2013) with five core samples. The results were similar to other coring studies of the airport area. “The radiocarbon dates were stratigraphically inverted. Also, plentiful historically introduced pollen was present in the possible fishpond layer as well as the underlying marine layer” (Athens and Ward 2013:vii). No intact fishpond sediments or historic properties were observed, and it was concluded that any fishpond deposits have been compromised by historic infilling.

Also in 2013, in anticipation of construction associated with Section 3 (Airport Section) of the Honolulu High-Capacity Transit Corridor Project, an archaeological inventory survey was conducted along a corridor that extends through the northern boundary of the current project area and continues both eastward and westward beyond it (Hammatt et al. 2013). A total of 47 test excavations were dug within the airport section, which spans 7.7 km (4.8 mi.) from Aloha Stadium to the Middle Street Interchange. No historic properties were documented in the vicinity of the current project area.

In 2017, an archaeological literature review and field inspection was carried out for the Kamehameha Highway Force Main Project located within the limits of the northernmost portion of the current project area and extending westward (Hammatt et al. 2017). The field inspection identified an enclosed complex of 12 tennis courts located within the current project area. Although the courts themselves appeared utilitarian in design, they were notably accompanied by a nearby seating area composed of two sets of three concrete benches, each ensconced by eight basalt and mortar pillars. The study interpreted the architectural features as possibly historic. No SIHP number was assigned at the time of the initial study, however, the entirety of Ke‘ehi Lagoon Beach Park was subsequently designated as SIHP 50-80-14-09216, as the park contains architectural features distinctive of O‘ahu park development during the 1950s.

A Historic American Buildings Survey (HABS) was completed within the project area which documented additional architectural features associated with SIHP 09216 (HABS 2024). The survey documented Comfort Station No. 1 and 2 at Ke‘ehi Lagoon Beach Park prior to demolition of Comfort Station 1. The two comfort stations, constructed in 1960 and designed by architect John H. McAuliffe, Jr., were found to be examples of mid-century public park architecture incorporating regional materials and Tiki Modern

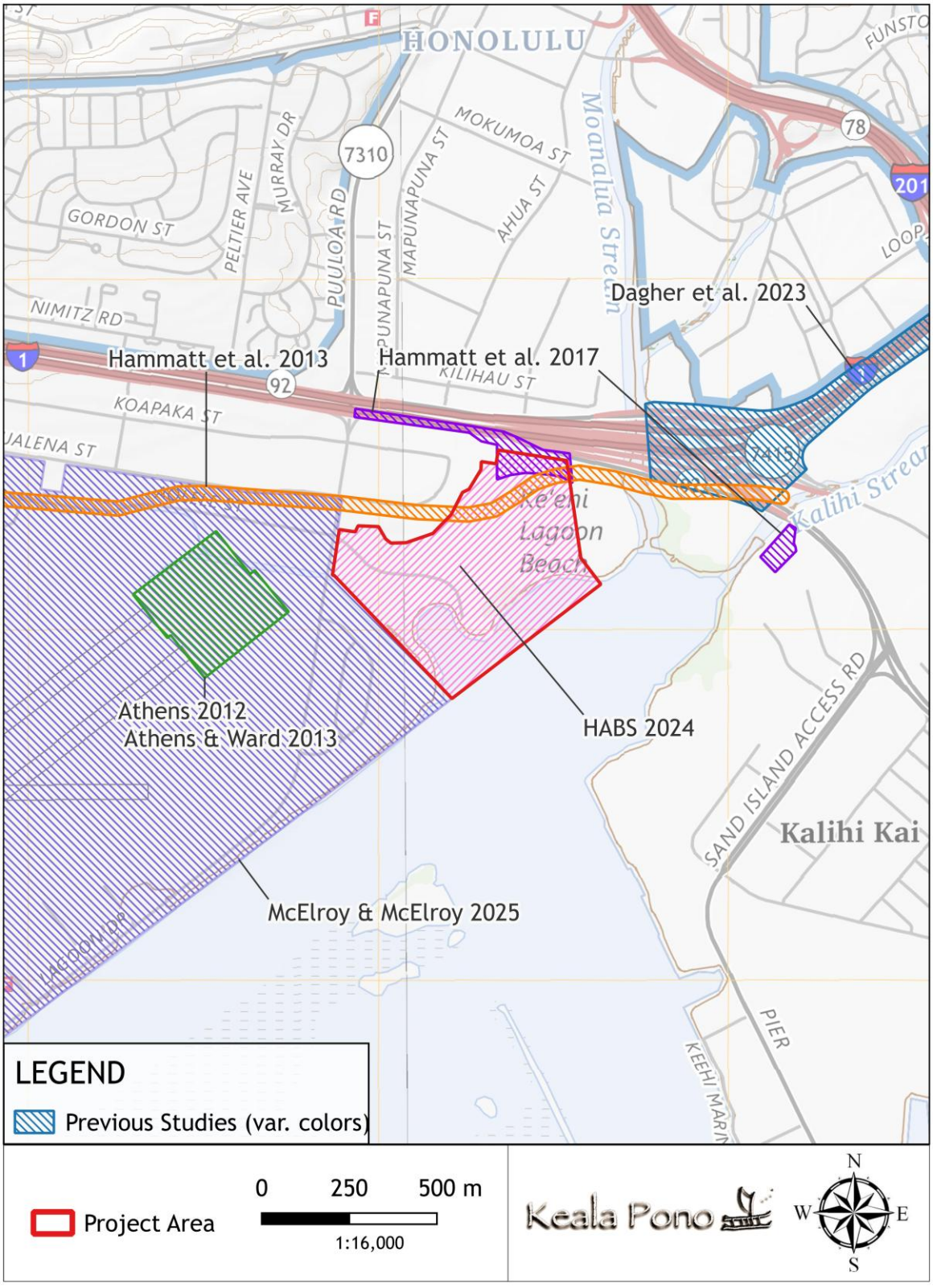


Figure 16. Previous archaeological studies in the vicinity of the project area.

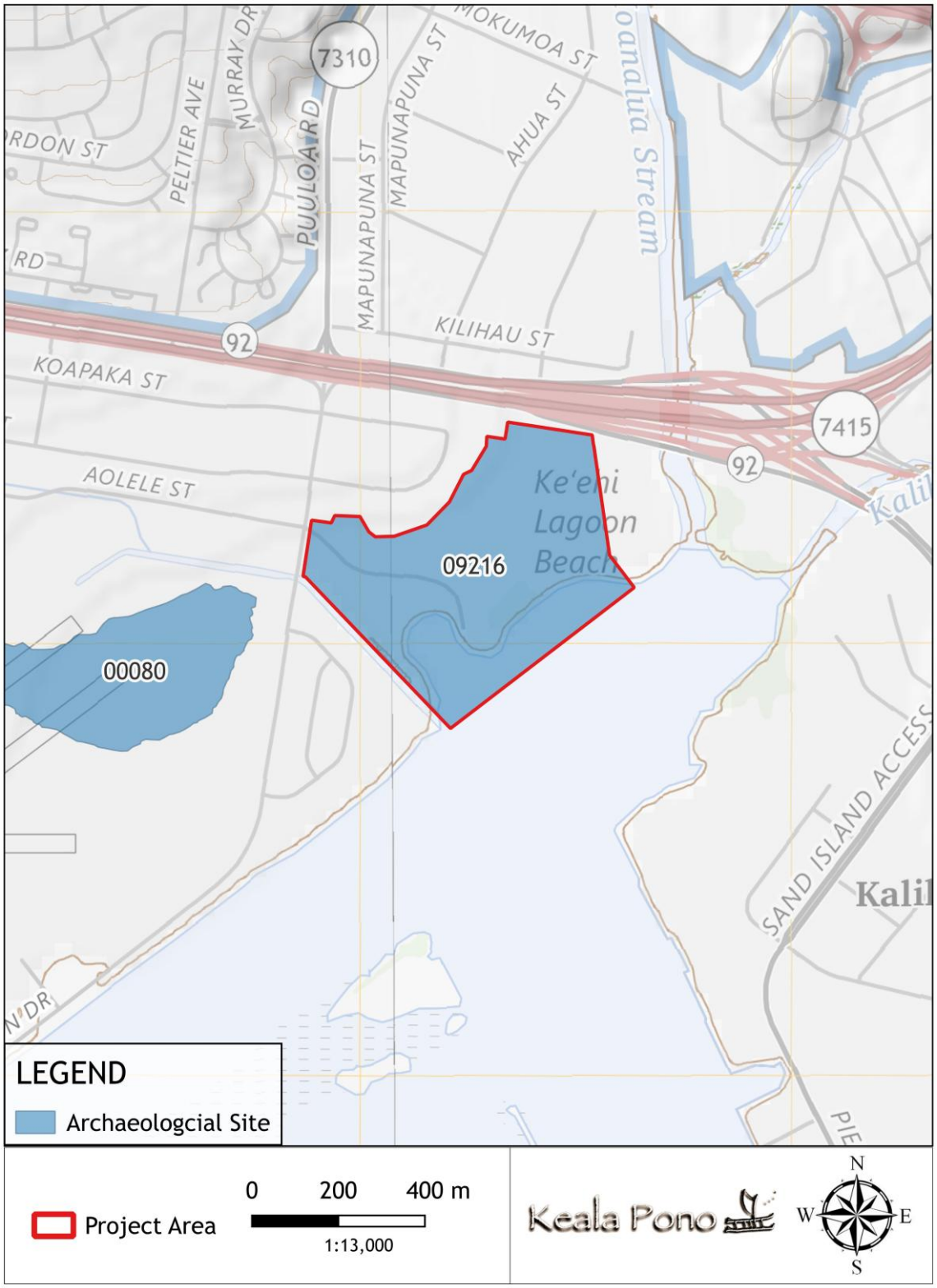


Figure 17. Archaeological sites with known locations in the project vicinity. SIHP numbers are prefaced by 50-80-13.

Table 1. Previous Archaeological Work in the Project Vicinity

Summary: This data table contains chronological columns listing archaeological studies. The four column headers read from left to right: Author(s) and Date, Location, Work Completed, and Results. Each row represents a specific archaeological report, its geographic focus area, and the corresponding cultural or site discoveries.

Author/Year	Location	Work Completed	Results
McAllister 1933	Island-Wide	Survey	Recorded 21 archaeological sites within Moanalua Ahupuaʻa. There are 11 in the coastal region, with Kaloaloa Fishpond (SIHP 00080) located near the current project area.
Athens 2012	HNL	Archaeological Assessment	Noted that the project could possibly encounter sediments from Kaloaloa Fishpond (SIHP 00080).
Athens and Ward 2013	HNL	Archaeological Inventory Survey	No intact sediments from Kaloaloa Fishpond (SIHP 00080) or historic properties recorded.
Hammatt et al. 2013	HNL	Archaeological Inventory Survey	No historic properties recorded near the current project area.
Hammatt et al. 2017	Kamehameha Hwy. From Lagoon Dr. To Alahao Pl.	Archaeological Literature Review and Field Inspection	Recorded possible historic architectural features at Keʻehi Lagoon Beach Park including tennis courts and basalt and concrete benches ensconced in basalt and mortar pillars (SIHP 09216).
Dagher et al. 2023	Keʻehi Interchange to Middle St., intersection of the H-1 Freeway and North King St.	Archaeological Monitoring	No historic properties observed.
HABS 2024	Keʻehi Lagoon Park	Historic American Buildings Survey	Comfort Station No. 1 and 2 were determined to be historical examples of mid-20th century public park architecture and recorded prior to demolition (SIHP 09216).
McElroy and McElroy 2025	HNL	Archaeological Literature Review	Noted the previously recorded Kaloaloa Fishpond (SIHP 00080). No additional archaeological properties recorded near the project area.

Table 2. Known Archaeological Sites in the Project Vicinity

Summary: This data table identifies archaeological resources by location. The three column headers read from left to right: State Inventory of Historic Places (SIHP) Number, Site Description, and Author(s) and Date. Each row details a single site, its formal designation code, and the corresponding report where it was documented.

SIHP	Description	Authors
50-80-13-00080	Kaloaloa Fishpond	McAllister 1933
50-80-14-09216	Keʻehi Lagoon Park	Hammatt et al. 2017; HABS 2024

design features. Both structures are associated with the City and County of Honolulu's postwar park development program and the broader transformation of Keʻehi Lagoon through mid-20th century dredging, filling, and shoreline modification. The documentation concluded that the comfort stations constitute historic properties, and the HABS record was prepared to mitigate adverse effects resulting from their demolition.

Archaeological monitoring was conducted in 2023 during construction related ground-disturbing activities associated with Federal Aid Project No. NH-0300(152), Freeway Management System Phase 3, Unit 1 (Dagher et al. 2023). The undertaking consisted of ground alterations associated with the installation of conduits and pull-box cabinets. No historic properties were documented and stratigraphy within the limited APE consisted of a single fill layer.

Most recently, a literature review was conducted for the Diamond Head Extension Development Program at HNL to the immediate west of the current project area (McElroy and McElroy 2025). Archival research identified three traditional Hawaiian fishponds, including the previously discussed Kaloaloa, Kaʻihikapu, and Lelepaua, along with historic features such as early airport hangars and roadways. Only Kaloaloa Fishpond (SIHP 00080) is within the vicinity of the current project area.

Summary of Background Research

In the pre-contact era, Moanalua Ahupuaʻa was abundant in natural resources, with access to fresh water, fertile valleys, salt, and rich marine life supported by five coastal fishponds. These resources likely sustained a sizeable population, as noted by early Western visitors. Kalo was grown along the streams, within two main loʻi systems: one irrigated by the smaller Kalou Stream near Moanalua Park, and another extending along lower Moanalua Stream where terraces reached the ocean. Āliapaʻakai (Salt Lake), located not far mauka of the project area was a vital source of salt that was utilized in medicine, ceremony, and food preservation; during the hottest months, the lake dried to reveal a deep crust of salt. The Moanalua region is rooted in tradition and is referenced in ʻōlelo noʻeau and moʻolelo that speak of goddesses, chiefs, and supernatural beings. One moʻolelo describes how the volcano goddess Pele created Āliapaʻakai, a tradition that highlights the landform's spiritual significance.

The Māhele of the mid-1800s and subsequent legislation allowed citizens to claim cultivated lands, resulting in roughly 9,000 to 11,000 kuleana awards across Hawaiʻi. Following major battles, land ownership in Moanalua underwent many transitions, from Kahekili of Maui to Kamehameha I, then through successive aliʻi, including Hoapili, Kamehameha V (LCA 7715), and Princess Ruth Keʻelikōlani. Upon her death, Moanalua passed to Princess Bernice Pauahi Bishop, and subsequently to Samuel M. Damon in 1884. By acquiring the remaining kuleana lots, Damon unified the estate and utilized the land for various agricultural purposes, including livestock grazing and the farming of sugarcane, rice, and bananas.

During the late-19th and early-20th centuries, sugarcane cultivation was the main industry in the region and an extensive network of rail lines, irrigation ditches, and processing mills were constructed. Wetland areas adjacent to the plantations continued to support kalo and rice farming during this time. Military expansion in the early-20th century included the construction of Fort Shafter, Hickam Field, and other nearby bases, further transforming the landscape. Between 1925 and 1927, property was acquired from Samuel Damon to construct John Rodgers Airport, the first airport in the Territory of Hawaii. Major expansion took place during World War II, when extensive dredging and land reclamation filled former fishponds and wetlands to build new runways and military facilities. In the early 1950s, plans began to take shape to establish a public recreational area just east of the airport, then known as "Kalihi Playground," on the land between Keʻehi Lagoon and the airport. The park remains today as Keʻehi Lagoon Beach Park (SIHP 09216), with multiple original mid-century elements still intact within the current project area.

Two prior archaeological investigations conducted within the subject property recorded architectural features associated with the park. An enclosed tennis court complex and associated seating features consisting of concrete benches framed by basalt and mortar pillars were recorded prior to the conversion to pickleball courts (Hammatt et al. 2017). A subsequent Historic American Buildings Survey (2024) documented Comfort Station No. 1 and 2 (prior to the demolition of Comfort Station No. 1) and determined them to be examples of mid-20th century public park architecture associated with postwar shoreline modification and park development. The earliest investigation carried out in the vicinity of the current project however, recorded Kaloaloa Fishpond (SIHP 00080), historically located at the adjacent airport just west of the project area (McAllister 1933).

CULTURAL IMPACT ASSESSMENT

The goal of this CIA is to assess any impacts caused by the proposed project on cultural practices and beliefs. Table 5 near the end of this chapter lists each cultural resource, practice, and belief identified during the CIA along with where it was mentioned (ethnographic survey or background research). Also included are effects of the proposed project on the resource, practice, or belief, and recommendations for the project. These are discussed further in the following sections.

Ethnographic Survey

Not all information can be found in the archives, in textbooks, or at the library. Rather, it is through the stories, knowledge and experiences of our kamaʻāina and kūpuna, that unwritten information is found. Through them we are able to better understand the past and plan for our future. With the goal to identify and understand the importance of, and potential impacts to, traditional Hawaiian and/or historic cultural resources and traditional cultural practices of the project area in Moanalua, ethnographic interviews were conducted with community members who are knowledgeable about the region.

Methods for the Ethnographic Survey

This CIA was conducted between January and April 2026. Guiding documents for this work include The Hawaiʻi Environmental Council's Guidelines for Assessing Cultural Impacts (2012), A Bill for Environmental Impact Statements, and Act 50 (State of Hawaiʻi). Key personnel involved with this study include Windy McElroy, PhD, Principal Investigator of Keala Pono Archaeological Consulting and Gina McGuire, PhD, Ethnographer.

Interviewees were selected because they met one or more of the following criteria: 1) had/has ties to the project area or vicinity; 2) has expertise concerning the types of cultural resources, practices and beliefs found within the Moanalua region; 3) has knowledge of the potentially affected area; or 4) was referred by other cultural resource professionals. While several individuals were contacted for interviews, nine participated in the current study. Manaʻo and ʻike shared during these interviews are included in this report.

Interviews were conducted in person and by telephone. The interviews were taped using a digital recorder. During the interviews, each participant was provided with a map or aerial photograph of the subject property, the Agreement to Participate (Appendix A), and Consent Form (Appendix B), and briefed on the purpose of the CIA. Research categories were addressed in the form of open questions which allowed the interviewee to answer in the manner that they are most comfortable. Follow-up questions were asked based on the interviewee's responses or to clarify what was said.

Transcription was completed by listening to recordings and typing what was said. A copy of the edited transcript was sent to each interviewee for review, along with the Transcript Release Form. The Transcript Release Form provided space for clarifications, corrections, additions, or deletions to the transcript, as well as an opportunity to address any objections to the release of the document (Appendix C). When the forms were returned, transcripts were corrected to reflect any changes made by the interviewee.

A total of 24 individuals and organizations were contacted, resulting in four interviews with nine knowledge holders. The ethnographic analysis process consisted of examining each transcript and organizing information into research themes, or categories. Research topics include connections to the project lands; land use and archaeological sites; the natural environment and traditional cultural practices; moʻolelo, mele, and place names; changes over time; and concerns and recommendations for the project. Edited transcripts

Table 3. List of Individuals and Organizations Contacted

Summary: This four-column data table tracks community outreach and cultural consultation efforts. The column headers read from left to right: Name, Affiliation, Method of Contact, and Result of Contact. Each horizontal row details a single individual or group contacted, their organization, how they were reached, and the final outcome of the outreach.

Name	Affiliation	Method of Contact	Result of Contact
Kahu Roddy Akau	Hālau o Huluena, Kahu, Lāʻau Lapaʻau	Email	Interviewed In Person
Isaiah Burch	Hale and pōhaku master	Email, Phone	Interviewed In Person
Brad Corbin	Oʻahu Water Ski Club	Email	No Response
Leimana DaMate	Aha Moku State Advisory	Email, Phone	Recommended Knowledge Holders
Gino Dayton	Ke Ola O Ke Kai Canoe Club	Via Lei Endo	Interviewed In Person
Cedric Duarte	Kalihi Pālama Hawaiian Civic Club	Email, Phone	Shared Request with Civic Club Members, Recommended Knowledge Holders
Edwin Endo	Pukana o Ke Kai Canoe Club	Email	Interviewed In Person
Lei Endo	Pukana o Ke Kai Canoe Club	Email	Interviewed In Person
Anuhea Fox	Kalihi Kai Canoe Club	Email	No Response
Kaweni Ibarra	Office of Hawaiian Affairs	Email	Requested Opportunity to Review and Comment
Lola Ito	Kai Poha Canoe Club	Email	No Response
Lee Kalama	Paddler, kupuna	Email	Interviewed by Phone
Leialoha “Rocky” Kaluhiwa	Hawaiʻi State Aha Moku Advisory Committee, Moku o Kakuhihewa, Oʻahu	Email	No Response
Charles Kapua	Kupuna, Pearl Harbor Hawaiian Civic Club	Phone	No Response
Kēhaulani Kupihea	Founder & Executive Director, Mauliola Keʻehi, Program Director, Mokauea Fishermen’s Association	Email, Phone	Unable to Schedule
Kaʻimo Muhlestein	Moanalua resident, cultural practitioner	Email	Interviewed by Phone
Tay Perry	Koa canoe carver, kupuna	Email	Declined
Daniel Sanford	Ālapa Hoe Canoe Club, kupuna	Via Lei Endo	Interviewed In Person
Sheila Sanford	Ālapa Hoe Canoe Club	Email	Unable to Schedule
Shanan Seamster	Team ʻŌlelo Canoe Club	Email	No Response
Kauʻi Serrao	Kupuna, knowledge holder	Email, Phone	Declined, Recommended Knowledge Holders
Kaʻāhiki Solis	Cultural Historian, SHPD	Email	No Response
Scott Thompson	Paddler, lineal descendant, kupuna	Via Lei Endo	Interviewed In Person

Table 4. (Continued)

Name	Affiliation	Method of Contact	Result of Contact
Jackie Whelen	Ka Māmalahoe Canoe Club	Email	Unable to Schedule

of the four interviews are presented in their entirety, in Appendices D through G. A list of those who consented to be interviewed and those who assisted in the consultation process are presented in Table 3.

Consultant Background

The following section presents background information for each interviewee, in their own words. This includes information on the interviewee's ʻohana and where the interviewee was born and raised. The participants are Kahu Roddy Akau, Isaiah Burch, Gino Dayton, Edwin Endo, Lucille Leilani Endo, Lee Kalama, Kaʻimo Muhlestein, Daniel Poepoe Sanford III, and Scott Thompson.

Kahu Roddy Akau

> My name is Rod Akau, I grew up in Kalihi. Uh, lived Kalihi all my life. Went, graduated from Farrington. Yeah. Lived here all my life…My family were first inhabitants for Moanalua, yeah? Dating back to the sixth century, you know, through the years. I didn't know I was going to be involved in all this [gestures]. You get a calling, yeah? It's the greatest gift you can ever receive, is to honor your calling. Yeah. 32 years ago things started shifting, a lot of things were happening. Started to find out about the moʻokūʻauhau and who they were and what they was. And this whole place and the, that's what makes it so interesting. And the people went back in those days and figured it out. High ranking, they made the laws, how to live and everything, how to manage this whole area. Just this ahupuaʻa. So. Like I said, was the breadbasket and all the people involved were, they had stature... My mom is from the Big Island, we have extensive family up there. So that's my second home there.
>
> So that's why I'm a practicing lāʻau lapaʻau. That's what helps me consciously get through this times, save your life, you know what I mean? Lāʻau lapaʻau shapes you, gives you that sixth sense sight for everything. You always goin' know before. What happens, whatever it is... I spent five years with him [Papa Henry Auwae]. Learned a lot. He was the last traditional guy. My family were all practitioners too so I'm glad I have the support. We're working with the military now up there [points]… my purpose is the culture and bringing people together... Because lāʻau lapaʻau is 80 percent spiritual, 20 percent lāʻau. But, yeah, well my role is, we're the only lāʻau lapaʻau school in the Hawaiian Islands.
>
> I have a role, which became major. You know? We have kuleana, you know? Once you take that spiritual on, your whole life, and it comes with a price. Different kind of lifestyle, you cannot, you answer only to one person, yeah? You meet people, you get, I gotta unload. Sometimes you carry too much. But uh, yeah, you gotta know who you are, lotta people they don't know who they are. The foundation gotta be strong, yeah? Like I watch a lot of our haumana grow and families heal. You change people. People change. Just being around. You gotta be ready. Gotta have structure. "Oh, what you going do today?"... "I don't know." No, no. So I spend a lot of time by myself, in solitude. God takes care of me. Got a lot of land that I can work. Go in the water, the spring, and cleanse. The plants. And that's what sustains me. That's the instructions, you gotta have the instructions, then the ingredients come. The instructions involve people, materials... you cannot forget prayer. You gotta pray every morning. You gotta know how to listen, to pay attention, yeah? All this stuff. But my role—I love what I do. But it's all God's work. Humanity, mankind.

Lāʻau lapaʻau. That's what gives me... you know. When I lost my parents, my brothers, I never grieved. Lāʻau lapaʻau. Amazing what lāʻau lapaʻau did, all the facets and all the connections. And people change, the results, the people I've helped.

Isaiah Burch

I'm Isaiah Burch. I'm from Nānākuli.... I went to school in ʻAiea, I wen' ʻAiea High School... [M]y dad's side, is from Kapō, Maui. And then, my mom's side dem is from ʻAiea.

[Y]ou just watch how, the lifestyle in Nānākuli and what we known for, and whatever that is, that's what most Hawaiians are going tru. You know, Nānākuli is known for the poverty, the fighting, the crime, right, you know so, there's a lot of work to try and change that now. And I saw lāʻau as being able to do my part for my community. And then I came and met him [Kahu Roddy] and became so much more than that. Even though that sounds like it's a big thing, yeah? But I mean, it's, that's only 10 percent of the whole thing. You know?

Gino Dayton

I'm Gino Dayton and [this is] Jen Romano. We are the founders of Ke Ola O Ke Kai Canoe Club here at Keʻehi Lagoon. We are a member of OHCRA, Oʻahu Hawaiian Canoe Racing Association. I come from Kalihi, born and raised in Kalihi. I guess in between the ahupuaʻa of Nuʻuanu and Kalihi Valley.

We are also a branch off of, I came from Uncle Daniel and his canoe club. I started paddling in 1994. It was just, we're sitting behind, hanging out with friends and the house that we were at got a phone call and it was like, "Hey, you guys like paddle canoe?" And then we all looked at her, we all looked at her and was like, "What is that?" You know, something we never heard of. So a bunch of us housing kids grew up in the housing, got in a van, came to first practice, and there she wrote. Everything was set in stone already. I fell in love with the sport. I enjoyed it. I fell in love with his family. They took me in at one time. How we're connected with Aunty Lei is, her daughter is my best friend. So the paddling community played a big part, a big role in my life. So I used to live with them, their daughter was my best friend. Growing up, you know, I loved the sport so much. My goal and dream was to, I was like, oh, one day I'm going to own my own canoe club. I started, he allowed me, he blessed me and allowed me to start coaching at the age of 17... So while I was going to McKinley, I used to help him coach the Moanalua High School kids, catch the bus, coach the Moanalua High School kids. They had no idea I was only 17. I was another student teaching students. They thought I was older. But from there, that's what gave me the drive to start working with kids or with students. You know, it played such a big role that I'm a teacher now. My whole lifestyle just became about mentoring the next generation and teaching them Hawaiian culture. And my subject is Hawaiian studies, Hawaiian history. So, you know, that's the blessing part about it or the reward.

Edwin Endo

I'm Edwin Endo. I'm with Pukana O Ke Kai. I started off with Kai Poha when we were at Haleʻiwa. And then, because a lot of us was working in the shipyard, we, this guy Raymond Arankin... he worked with us in a shipyard and he put on our time clock, "If you think you're bad, join this canoe club." So me and my other friends, we all joined the paddling. But we were driving all the way to Haleʻiwa. So he got us a site over here and that way we all could make it, yeah, from Pearl Harbor. And when we were here, only had us, only had Kai Poha. Before that, it was years before that, was Royal Order of Kamehameha. They used to paddle over there. And then when they started to get sovereign, they when open up Kamehameha Canoe Club, and they paddled off of Ala Moana. So we're here then, yeah, Fox 'dem was here, you know, Kalihikai and Daniel. And then had Scottie. Then Gino 'dem came too.

So in the beginning when we had the hālaus, it was made for three clubs. And then we said, and, you know, Ka Mamalahoe, they just joined our association. So we said, "Hey, wait a minute. What about Ka Mamalahoe?" So they said, "Okay, four other clubs could go there." And then it was kind of divvied up. But luckily, the people that took over, they allowed us also to go into the hālau, you know. So, it would be Gino, 'dem, and us, for the kūpuna races. And when we built this, after we built it, I think I was the first liaison for Ke'ehi Lagoon. And my task was simple because everybody followed the rules. I put in a petition to name this hālau after Gardner Brown because he used to be a good advocate in sports itself. His daughter was an all-star volleyball player for UH, Nahaku. And then Paul Brown was a pitcher for UH. So I used to be, because I used to coach baseball also, and I watched him, the way he was coaching. I wanted to be like him and be as calm as him. So when we put the petition in, all them signed the petition and we got it. We got it named after Uncle Gardner Brown. This hālau.

Lucille Leilani Endo

My name is Lei Endo. The name of my club is Pukana O Ke Kai. We're 20 years old this year. Long time, yeah? Originally, I used to be with Reggie down on Kai Poha side. But when we first were with Kai Poha, this was barren land. My upbringing, I live Hālawa Heights. I've always paddled here at Ke'ehi since 1986. And then I think one year it was with Gino, because we had adults. Because it was the other associations. But my background, the name of my club is Pukana O Ke Kai, it means "descendants of the sea." When I came to have my own club, I based it on my mom's Hawaiian side genealogy, where my great-great-great-grandfather came from Tahiti, landed in Kīlauea, in Kaua'i. That's where my mom's side is all, they're all there. Her maiden name is Chandler. And her mom's name was Gooman. So that's how I base it on, because he traveled from Tahiti and brought, on a canoe. So that's what I try to base it on, on that kind of stuff. So originally, we had another, he and I owned a club. My cousin was one of the founders of the past. So pretty much my boat is named after the one that came from Tahiti. His name is Kaniolama.

Lee Kalama

Okay, my name is Melita Miller Kalama, but everyone calls me Lee Kalama. I grew up in Kailua. And. I have a kind of a background of water sports. Did a lot of kayaking, canoe paddling, body surfing. And my father was a musician. My mother was a hula dancer. And I went to Kailua High School. I had several different type of jobs in my life. And, you know, all over the spectrum. And I'm happily retired now... And I still am doing water sports, canoe paddling, and I play pickleball. And I play soccer on occasion.

[M]y father was a musician back in the '60s who played at the Hilton Hawaiian at Tapa Tower. He was Charles Kaipo Miller, and he made several albums that are still widely used today for hula teachers… Yeah, and his music's still being heard. You know, when I walk through airports, sometimes I'll hear his music, but we kind of grew up watching him in Waikīkī. He was at, you know, he was at Queen's Surf, he was at the Ilikai, at the Royal Hawaiian. He did Waikīkī, I mean, Hawai'i Calls for 25 years. So he was of that era of the hapa haole music. And his parents were also musicians. My mother was from the Philippines, but she... was here at, she graduated from school here and she became a hula dancer. Her teacher was Bella Richards. And then she became, when she was of college age, she went to New York to attend Columbia, but she never graduated because she started working at the Hawaiian Room at the Lexington Hotel in New York, which was the, like the place to be, was very, you know, sought after to be at the Hawaiian Room, 'cause at that time, the Hawaiian shows were very exotic. So she was performing there. That's where she met my dad. And then they moved back to Hawai'i in the '50s, yeah, I think '55. And that's where we come in, all the kids.

Kaʻimo Muhlestein

O Kaʻimo Muhlestein koʻu inoa. Ka ʻohana inoa Piʻikoi uh, Paoa ka inoa o koʻu ʻohana. O koʻu wau kūpuna no Kālia mai. Hānau au ma Honolulu me Oʻahu ua. Honolulu au ma hulu lei, Moanalua, Waikīkī nei a me Kaimukī uka. Koʻu ʻohana.

My name is Kaʻimo Muhlestein. My family name on my dad's side is, I come from the Paoa Piʻikoi ʻohana of Kālia. I was born here in Honolulu, never left the islands, and still here, the same place. [Laughter] I don't know if my life's gonna, you know, I try to holoholo here and there, but I live here. I grew up, I, it's funny how you asked me the question, where did I grow up? I actually, you know, my grandmother on my mom's side, she was, she married a boy, Lifty, she, her later name is Lifty, but growing up here in the Salt Lake area, she actually worked for the Damien Estate, but at the time growing up, my parents invested in the home where we called Salt Lake back in the '60s, and that's when it was first being developed. And that's where I got to have the experience of, as a kid, riding my bike in the natural lake, Salt Lake, known as Salt Lake, and where there was only dirt back in the days.

Yeah, so we were able to experience the natural lake, which was, is now covered up, mostly covered up. But I do have memories of there, I have memories. Even today, even after Āliapaʻakai going back in the, you know, to Moanalua, uh valley side. That was one enclosed crater. It was all dirt before it was fully developed. So I had time to get raised over there, but mostly Kaimukī area. At some point in time, I was, for some reason, I also was able to go to Maui, stay with my grandparents in my youth too, in my upper elementary years, and I came back and settled in Honolulu and remained here, of which, I'm still here.

Where did I go to school? From fifth grade, I finished school at Sacred Hearts Academy in Kaimukī. So that's where my hometown, grew up with. I also was going to Sacred Heart while living in Salt Lake area. I'm a 1976 graduate back in the, yeah, so, I had time to live—but in my years with my father's ʻohana, grew up Waikīkī, Kālia, back in the days where it was residential time and so forth. Lots of limu on the ocean, you really smelled it back then. Yeah, so that's about my family, the Paoa, Piʻikoi, Harbottle ʻohana, very prominent people going back in the days of aliʻi time. Yeah, they have a strong Hawaiian heritage background. I'm from my father's side, the Piʻikoi ʻohana, Paoa ʻohana. And we're still pretty strong and I learned, um, you know, all the traditions have passed on to the generations of today and tomorrow. So hopefully I can be a, you know, one of those that pass it on to my kids, nieces, our ʻohana, and as time goes forward. So, but it comes from our tūpuna, from time of beginning, all of my ʻike and knowledge.

The twinkle, ʻimo is twinkles. In fact, that name was given to my grandmother's grandmother from Queen Emma's mother. So uh, my grandmother got that name, her mother got that name. Yeah, so that's a very special name to us… Our heritage basically comes from my paternal grandmother's side of my life because they were very deep and connected to aliʻi and practitioners and deep, very strong and knowledgeable people. So I don't know why I was, out of my family, that, four of us, I'm the only one that continues, that took the time to really make it a part of my life… So that's part of my genealogy, heritage coming from the Paoa lineage, which is a common fact. The Paoa is a family from Kālia, and they have three children. I come from the Harbottle. Harbottle married into the Paoa lineage. So there was two daughters and one son and they lived right at the shore of Kālia Beach. Right now— and that's where Waikīkī, Waikikian between Hilton and Ilikai is, that was their kuleana parcel property.

Daniel Poepoe Sanford III

I am Daniel Sanford, the owner of ʻĀlapa Hoe Canoe Club. Started, well, I was a branch off from Walter Fox. He had a canoe club there at Sand Island maybe back in the ʻ80s, 1980s. And I wasn't paddling, always doing other sports stuff, you know, high school, college stuff. And my brother Ben was talking to Walter Fox who was the owner, it's Kalihikai now, but before that, Walter took over Wainani Canoe Club, was out at Punchy's, out at Ala Wai. My brother Ben went to practice

with him, and he said, "Hey, Dan, he's getting this other canoe club. I like practice right there in Ala Wai." And at the time, I lived in Pālolo Valley, and that's where I'm from. So I paddled with my brother Ben, and this was in '86, 1986, with Walter.

But at that time, Punchy from Ala Wai, that club, we was paddling for, is Wainani Canoe Club. In 1986, the guy Punchy decided to sell the club to my friend Walter. And he gave us two years to purchase the club with the equipment and the trailer. So in 1989, we had all the money that Punchy wanted for the equipment. And after that, in 1989, we changed the club to Kalihikai. And I stayed with Walter and Kalihikai, and my wife, she was born and raised in Kalihi Valley, and that's what my connection is from my wife, where she was born and raised. She also paddled for Kalihikai back then. And like anything, my wife was saying, in 1989, we was talking about, you know, making our own club. We stayed with Walter another five years with Kalihikai.

In 1992, I submitted my application to Hui Waʻa, 1992, and we were short for one vote. Back then we only had 12 clubs. But we had eight votes and two-thirds. But it was, I mean, it's hard to say. I mean, I was a new kid on the block. And I guess I felt at the time the kūpunas wasn't ready to welcome in, which was fine. In 1993, I was accepted into Hui Waʻa Canoe Association, October 26th, 1993.

And my wife is from Kalihi. And it kind of worked out too, because my wife was also a teacher at Kamehameha School, right above it. And she learned a lot of the land and the mountain and the ocean side of Kapālama. She learned a lot. This, you know, teaching Kamehameha School, and the proper Hawaiian names and all the areas up in the valley and the ocean side. So, I wish she was here, but she has another engagement, but I'm representing ʻĀlapa Hoe.

Scott Thompson

Okay, my name's Scott Thompson I grew up here on Oʻahu. I have, my family has connections to Keʻehi Lagoon. My great-great-great-grandfather, my grandmother's grandfather had gotten his, the Great Māhele, his strip ran from there and ended here in Keʻehi Lagoon. So my grandmother remembers as small baby time and stuff like that, coming down getting in the canoe with her grandfather. And then they would go out and they'd paddle around. As far as my grandmother could remember, they'd end up with, this was Makapuu. And then they would go and, because they had caves in those days, so they would go and she would spend the summer in the caves with her grandfather. And then she would come back and stuff. So that was the connection.

Topical Breakouts

The following sections are direct quotations from the interviews, organized by topic. Interviewees provided information on connections to the project lands, land use and archaeological sites, the natural environment and traditional cultural practices, moʻolelo, mele, and place names, and changes over time. They also shared their concerns and recommendations for the proposed project.

Connections to the Project Lands

Like me, before used to come down here pick limu, catch fish, everything, now grab your shopping cart. [Laughter] You know what I mean? I mean, that's the reality, yeah? Yeah, man, hard to accept change. This whole area. My family, they were lords of the land. From way back... we have that blood, we have that vibration, that you know, that care. [Kahu Roddy Akau]

And I'm here for that, you know, for this. And I like to attend meetings like this, so as a community, I know where we go forward from here, what we can do, because like Gino said, we're here for, we'll be here for a long time. And we're setting this for the next generation. And if we can plan and protect and build something we have here better, I'm all for it. And that's why we all here. Because we have our own ambitions, we have our own desires, and we have our own way teaching the culture. And that's why, fortunately, my sons, I blessed my two sons carrying

that on. And it's like, at least I can say that I retired and now I can watch the young people, the young ones come up and carry on what we're doing here. [Daniel Sanford]

And then some years later, you know, when the State took all of this and they were trying to get reparations for the families and stuff, my grandmother and her siblings, some attorney contacted them. Said, "I got a deal for you. We're gonna go sue the Feds and we're gonna get money for you guys." So they did. And there was a good settlement. And my understanding is the lawyers did very well. [Laughs] The family, not so much. But there was seven of them, six of them. So there was a settlement. You know, the Federal government did recognize all the families and stuff. They had claims and stuff. So they all got something. The attorneys did well, you know. It was a field day for them. But all the families and stuff involved, I don't think they did real well, you know? Some kind of spiritual satisfaction or something. But so anyway, that's my connection to this area and stuff. [Scott Thompson]

Just ahupuaʻa, mountain to the ocean and hope for the best and past, present, and future, and look for you folks to keep the traditions alive... I would end, ua mau, e mau ka ʻāina i ka pono o ahupuaʻa o Moanalua nei. Mauka i makai. [Kaʻimo Muhlestein]

I mean, my relationship with Moanalua is, I really just discovered it through him [referring to Kahu Roddy], by following him. Came to him to learn lāʻau. And then ended up learning so much more. I thought I was going learn like, you know, my dad had just gotten diagnosed with diabetes and he had aneurysms in the back of his eyes, yeah? And then... that was spooky because everyone thought he was gonna die, like next week kine. And then so I thought that's why I went into lāʻau, yeah? And then it became about more than just him, yeah? Nānākuli is the highest population of Hawaiians anywhere in the world. The highest density. And everybody's sick. You know what I mean? My next door neighbor all grew up without dads. [Isaiah Burch]

I just have personal... growing up here, but with knowledge of what I've learned on how to be Hawaiian in this ahupuaʻa, from hula, ʻōlelo, and whatever I can I use to build my ʻike of this place to make me a better person... I'm, you know, my lineal descendancy is more of the Kālia area from generations back. Because Moanalua, back in my kūpuna, when my, in the 1800s, we were people of the shoreline of Kālia, not of Keʻehi. Or part of the of ahupuaʻa of Moanalua. We were more of the Kālia Ahupuaʻa in my grandmother's going back, generations back. I'm a new tenant of this wahi pana or this ahupuaʻa. I don't have any going generations back, only of my own lifetime, from my parents' time when development housing became available, employment became available. But I studied. Because of my interest of who I am and took time to learn the language through all the stories written in Hawaiian language. And then having the respect, so I do my protocols of entering and saying mahalo. [Kaʻimo Muhlestein]

I just got reconnected, I didn't, I wasn't in this area when I was growing up. I knew the stories and stuff. But I didn't get reconnected until I paddled with Daniel. That was probably back in 2001, I think, yeah. So I came down here and then I came back and then, yeah. [Scott Thompson]

My connection to Keʻehi Lagoon started when I was a little kid. My dad used to be the caretaker here. He worked for City and County. His bathroom or section was the one that got burned down but he was, he already retired before that happened but I remember coming over here when I was little and had the baseball fields was all red dirt and none of this existed and we saw, we witnessed this being all built because he worked here and who would have known that Keʻehi Lagoon will become my second home because I spend majority most of my time here versus being in my own home but that's our connection and we always felt that because this is our home, we always try to take care of it. We do as much as we can, and we fight for it. Like the beach erosion, we've fought for that on the State level. Still, the City and the State still going back and forth about it's an ecological thing, and oh, who's responsible? All the way to our homeless situation and problems. We try to take care of our place as much as we can, and we try to do as much as we can. [Gino Dayton]

Okay, in, let's see, 1999 or 2000, New Hope Canoe Club was born and we didn't start at Keʻehi Mauliola just then, we were in Kailua for a while but then the site switched over to Keʻehi Mauliola actually we call it, which is, Sand Island, and we started, my husband and Charlie Thurston Kimo Taylor started a canoe club there. And at the time I think we were the first club down there. And uh, so, New Hope started there in like 1999, 2000, something like that and then I was paddling on the windward side um with Kailua and Lanikai Canoe Club but my husband since he became the head coach at New Hope eventually then I, he asked me to steer the uh women across the Molokaʻi channel in the year 2000 or so... You know, and they were novice women, but they were all older. They were master's aged. They were over 50. And I was kind of hesitant at first, but I paddled a qualifying race with them before the channel and decided that they were good to go. So ever since then, I paddled down at, we call it Mauliola now. That's the general name, not Keʻehi anymore for us. We're not at that site. There are canoe clubs up at Keʻehi, but we're at Sand Island. It's called Mauliola... So from there, I mean, it was just at the time when we started there, it was just kind of a wasteland, you know, it wasn't much down there. There wasn't many canoe clubs and it wasn't manicured. It was pretty rough. But over time, you know, our canoe club started working on it and then other clubs joined us down there because they got kicked out of the Ala Wai at one point. There were a lot of clubs, a lot more clubs on the Ala Wai, but they, they got kicked out at one point and then they started to come, uh, over to Sand Island to our area to paddle. So there are quite a few clubs there now. For example, Healani is there. Keahiakahoe is there. Um, ʻŌlelo is there, Na Hoapili o Kekai is there, uh Hawaiian Connection is there, Hawaiian Connection is there, yeah. And there's several more but there are further, you know there's, as more clubs come the further down to the left they go. [Lee Kalama]

But for Moanalua? My beginning times is when we actually moved back in the, when, um, in my father's generation when he was employed. So that's where we had to live in the Salt Lake area. But I went to University of Hilo and I become very, uh, it became my life to live my life and know who I am as a Hawaiian. And so I took the time to really become in love with who I am as a Hawaiian, knowing the moʻolelo, the ʻōlelo traditions, and uh, it's part of me. It is who I am. And so I studied, you know, I took hula here and there, and I got involved in hula. And it's funny, it happened to be at Āliamanu Elementary, where I joined my hālau. So it's, you know, this place is very special, the ahupuaʻa of Moanalaua. And deep, deep spirit, heritage, cultural knowledge... [Kaʻimo Muhlestein]

I'm here for the long haul, for the long haul, and the changes, gotta get changes. Maybe the changes, we want, maybe some things we thought would make benefit for the clubs and the community, but, you know, the City and the State always do things other than making us aware, but then we find out after the structure is built, put in. And, you know, I don't know how to say it, but it's like, we gotta do what we gotta do for us here. And the planners are, out of our control, they can do what they gotta do. But I know Gino is here for his kids, his club, I'm here the same way, Lei and Ed started down here. Scottie's all here paddling, you know? [Daniel Sanford]

Land Use and Archaeological Sites

Well, I know that the island of Mokauea, we unearthed an ancient canoe there... So, you know, they have some historical, historical evidence that that area was an old, you know, used in traditional ways. [Lee Kalama]

[T]here's so much cultural significance about this area, and there's just small groups of people trying to keep it together. You know, just little things like that stretch out there, right into the runaway as you're going out, that island over there, that's sacred land, you know, that's why the iwi is all coming up and stuff so they're gonna rebury the iwi now and stuff so and there's a small group up that's working on that and they're working on it and they still have ceremonies. [Scott Thompson]

Yeah, they used to come out from the mountainside like that. Would come out right out hea and then back in. This was all fishponds [pointing]. They couldn't, the Hawaiians couldn't fish from the fishponds. [Kahu Roddy Akau]

This area, they would designate this area for like, more control boating and stuff like back in the day. And then right here, back here, that piece of land right there... but at the end of it, it had salt ponds. So the remnants of the salt ponds are still there. You can see still, you can see there are three dips with rocks around. There are three dips all over there. And it was all, it was filled in because like dirt or whatever was all dry and stuff like that. But when they brought in those guys that dig the rail for the column, they bring all their rubble over there and they sift them. They sift out all the big rocks, whatever, to make it dirt again, and then they truck them back over there. When they did that, they covered the salt ponds. The remnants of the salt ponds over there. We were looking into building a Hawaiian culture center on that side. We want the, that piece of property. We've been pushing hard. We had renderings and everything. [Gino Dayton]

From when they did that official stand, there was one, when we, go through Kehau, don't get rid of the pine trees. That's a historical thing they told us because they wanted to cut it down. [Lei Endo]

They would bury 'em out here. That's why I say when they break all the rocks and damage 'em. Was old cemetery. Everybody wen' look the other way, you know what I mean? But archaeologists go out there and look at all this kind of stuff. It's important, you know what I mean? You gotta take care your kuleana. But, nobody see it. There's a huge graveyard out there. You know? [Kahu Roddy Akau]

So this historical site, but up front where the project is, you know, it's water filled in, I believe. Yeah, it's a fishing village. A fishing area. So, I don't know. We are a...any time where filling in is a general practice. [Ka'imo Muhlestein]

I guarantee there's burials underneath here. I guarantee you. Yeah. But it's all covered. [Kahu Roddy Akau]

I don't believe, I haven't found, if I knew I would be up and I would be up and like, ah, I wouldn't even go there. Nobody would be going there and there would have been heiau. All of the community would have marked it if there were signs of any. So I don't believe there are any because it was not an original land. It's all water of where this area is located. And you can tell because it's below sea level. Below sea level. In traditional times, burials, it's very not, it's not known to have burials below sea level. Yeah. It's not known to be of that nature. [Ka'imo Muhlestein]

Well, like, you know, when the rail came right on the boundary, soon as they came, I goin' tell you something, something had to. The pillars. How high you see 'em, that's how far it is underground. And they had to, you know, they had to went over something. Because lots of the fishponds there were people living around 'em, the caretakers. And they buried there... But I goin' tell you something. Eh, there's a lot of, I mean, because they used to live along the shoreline, you know what I mean? [Kahu Roddy Akau]

Damon. And um... House over there by the...You remember... the house over there? Was a princess or king, that was the summer house. Oh, and they moved 'em to over there. It was over here... Kalākaua's. [Edwin Endo]... What is now, that's not the way it was back then. The pictures are different, but it was in that area where they built the mall and stuff out there. That's my understanding of that, that that's where it was. It was just here, that's where you could just, it was just, yeah. Yeah, just over there. [Scott Thompson]

I guarantee you, I guarantee you. A lot of this area, these people came from a certain class. There were people living around, so they buried right there. So that's one thing you cannot ignore. That's what it is. [Kahu Roddy Akau]

The Natural Environment and Traditional Cultural Practices

Think about Mokauea Island. There's a spring that connects up there to that valley. There's a spring up there. [Kahu Roddy Akau]

So it's supposed to, be a place to land your canoes and go out and fish. That's what the moʻolelos have. Besides Pele's stories, but for daily life, it was a place to land your canoe there and to go out and gather your subsidence. That's what Moanalua was about, feeding people. [Kaʻimo Muhlestein]

[T]his is a breeding ground. Yeah. Lot of hammerhead pups... They're safe, you know? But yeah, this is an ancient breeding ground. When a long time ago, it's probably been, I think, story as I get it. It's Kalākaua's time, and the villages were here. The kids all grew up racing sharks. Just like, you see them, they go race the sharks. And that was the game over here... Yeah, they ride them. They just ride them, they just play with the sharks, right? So, there's a difference in how the shark wasn't bad. For a lot of families that's their ʻaumakua. Things change and then it gets lost. [Scott Thompson]

Yeah, so you know that there are several islands off the coast, I mean off of our shores, which Mokauea Island and there are several more. Kehau could tell you more of the island names. I know there's Kahakaʻaulana or something but you'll have to ask her. And Mokauea is supposed to be the last fishing village in Oʻahu, so that's what people would do there now there's very few residents left there. But it's still a, you know, an island that is held by leaseholders. [Lee Kalama]

Everybody do workshops but the schools were here, for hula, lua, for everything. This [referring to Moanalua] was the center on Oʻahu, people came here. And my family were a part of the whole structure from the beginning. The prayers, and all this... sacred stuff. [Kahu Roddy Akau]

Pāpio, ʻōʻio. I had a lot of mullet. [Edwin Endo]

Had all the red dirt, ʻalaea, like how Hawaiʻi Island had. [Gino Dayton]

You know. But we, New Hope Canoe Club, did a lot of work every year on that island to clean the shores, you know, because there's a lot of debris that drifts over there. And, you know, we still help with many projects with Mokauea. They do a lot of, now they're doing a lot of educational programs for children. And they have, you know, when there's low tide, there's a very good, like, reef that the kids can walk out on, and they find a lot of different sea creatures out there. Some that I had never seen before. [Lee Kalama]

This was all, people used to live on the islands. They was their fish. The supermarket was right there. So you change that, everything... You know where certain fish was so you go different seasons, you go, the kiawe, kauila. Had names for everything. Had the pāpio, had the red fish. You respect when they're spawning. [Kahu Roddy Akau]

Kehau Kupihea does a lot of the canoes. She takes the canoes and there are some canoes, her association, her group owns, and some canoes are our canoes from New Hope. And she takes these groups of kids, they're usually high schoolers, and they'll go out for a couple of hours or half a day to work on the island and do, you know, clean up. They do, study the marine life there. And it's a really good educational program the kids really love. So the canoe clubs there in the area support all of that too. You know, mostly New Hope, but the other canoe clubs also support and we try to help Kehau's program to educate, you know, the kids and give them kind of an outdoor experience. [Lee Kalama]

I think that's why we're still here. We love the sport. I think we love working with the people that we have. And he's right. We're practically here more than we at home. Because paddling for us, we all do schools, and then we go right into our regatta season. So we're here pretty much, I think the only time we rest is like September, October, and we're back again. [Lei Endo]

People don't realize that back then, me and Walter used to paddle canoes around the reef runway, and they get those crackerjacks hiding along the edges. You imagine how many of those have now? Garans get millions. Back then we used to pick ʻopihi... [Daniel Sanford]

[T]his is the most fairest, even playing field for our state tournament. And when I see people come, when we have States here, there's 10,000 people... this is the best place to accommodate them, accommodate everybody because of hotels and things like that and the size of our park. [Gino Dayton]

And they had to launch their canoes there. So, you know, that's what, that's why recollection understanding of this ahupuaʻa. You know, today it's amazing. And I tell people, you know, I live in this ahupuaʻa. It has education. It has culture. It has health care. It has economic development. It has transportation of the air, the land, the ocean. I don't know what kind of ahupuaʻa incorporates everything in life other than outside of Moanalua. It's amazing. And we still have cultural eminence, like the springs, even up to the ocean. [Kaʻimo Muhlestein]

Right now, it's only, it's waʻa. That's basically what this place is for. We try, between our separate programs, I don't speak for nobody else, but we try to implement Hawaiian cooking and other things within our program to the best we can. But we ain't doing an imu over here, that's for sure. [Gino Dayton]

And this was all tidepools, where we sitting. We used to go... I mean the limus and everything. This whole shoreline, trade with the mountain, the water come down. [Kahu Roddy Akau]

I guess you can say it's our cultural sport, but for us it's our lifestyle. We're very passionate about what we do and what we want to fight for. [Gino Dayton]

So it's kind of it's a rich, it's rich in history, though many people don't know the history there yeah, and um, that site provides our canoe club kind of a safe haven because it's sheltered from the outside you know, uh, the outside waves and wind and currents, it's a bit sheltered. So it's a very good place to launch canoes out of there. [Lee Kalama]

Okay, so when I speak of hula, it's not only about dance, but it's reverence of hula, reverence of the ʻāina, of the plants that come from the ʻāina, specifically of Moanalua Ahupuaʻa. So there's always a reverence of what is growing upon this ahupuaʻa. Whether it's for hula or any cultural practice. It could be for housing, it could be for like wood, pōhaku. And you gotta be very careful. And you've gotta ask permission and do all the traditional protocols when you step into this ahupuaʻa. Truly, you've gotta ask for permission when you step into this ahupuaʻa. And that kind of practice has been, kind of, forgotten. Yeah, and that's, you know, I'm trying to kind of let people know, hey, we think of this as an ahupuaʻa, not a town. You know, it's an ahupuaʻa. And when you come into an ahupuaʻa, you ask for the deities for your, for their permission to enter. Like, when I go to the makai, down at the oceanfront of where this project is, you do cultural protocol. When I go up the valley, into the valley, I do cultural protocol, ask for permission. That's a standard practice for me. [Kaʻimo Muhlestein]

And they, you know, every time they [referring to Polynesian Voyaging Society] go on one of their journeys, there's all the canoe clubs will gather and we'll send off, paddle out with them and, but yeah, they do programs there too. And that, Hikianalia is docked there as well. [Lee Kalama]

Oh, all kine limu. Ogo limu and wāwaeʻiole, and all that, manauea. Ho, now get beeveedees or one diaper. [Laughter] You know what I mean? It's so hurtful but it's past that. You know, you just gotta wing it. Gotta move, keep going. [Kahu Roddy Akau]

You know, they are working hard to maintain that tradition, fishing village. And that's part of Keʻehi too, you know, that linked...that's all of their landscape right there. Mokauea, Alaukeʻehi, that's all one ʻohana [laughter], basically, all the fishing, traditional time. [Kaʻimo Muhlestein]

[Regarding fishing in the area] Like pāpio. Other fish too, but you know, pāpio comes to my mind. [Lee Kalama]

Well, the only cultural thing that has been of modern times is our hoe waʻa competition. I don't know why they chose that place, you know, because of what the ocean there, the water is, you know, it needs cleaning up, but it's been a traditional hoe waʻa place and you know we open it with our traditions and for some reason it's been the chosen place and when we do gather there for that event, oh wow, it's awesome. I had my kids go there for school and hoe waʻa, put their involvement in paddling. So yeah, that goes for hoe waʻa practices, which is very important to keep that tradition alive. [Kaʻimo Muhlestein]

Traditional practices. Well, just, I would say, you know, it's just canoe paddling. [Lee Kalama]

[W]hen I looked at the maps, when it's all, it's all, you know, the reefs, shallow waters. It's not the deep ocean to get further out. But that's the place where that was their ice box, their ice box of kahiko times. It was a necessity of life. [Kaʻimo Muhlestein]

Yeah, and one more thing I forgot to say is, you know the area because it is sheltered, we do have a lot of sea turtles that are, you know, in our lagoon area, and we also have Hawaiian monk seals. [Lee Kalama]

Moʻolelo, Mele, Place Names

Traditionally, I don't know, you know, before Dillingham's time in the natural state when Moanalua, the islands was untouched, where the watermark is, traditionally through stories, understanding Pele stories, and all the moʻolelo, the, that whole landscape of Oʻahu, it was a pit stop. And what do you call it? The deities, stories. [Kaʻimo Muhlestein]

It's quite rich in history, you know, because it was King Kalākaua's summer place that he used to stay. And they had a lot of fishponds in the area, but when World War II came along, a lot of the fishponds got covered over and dredged, all kinds of things. But there's still a fishpond there on Mokauea Island. So, you know, the history with King Kalākaua, that was his summer place. And, you know, it was considered kind of a sacred ground for him. And they used to have shark races, they're shark riders that Kehau can tell you that story. [Lee Kalama]

The islands are all feminine. From Pele to Poliʻahu, the islands, it's all feminine. You gotta take accountability, you gotta take care of the land. She reacted. And people not paying attention because a lot of them they nevah of the ʻāina. You gotta come from the ʻāina. You gotta feel it, you cannot come here live 30, 40 years, it doesn't... cannot. You gotta grow up. That's what it's all about. [Kahu Roddy Akau]

The other one, you know the other channel I forget what the name, yeah, the last channel as you go out up there there's a small island over there. It's the home of the shark, where the shark, the guardian for this area. He still cruises over there. And I understand that when Kehau has done some of the services and prayers and things out there, the shark will come by, come up and then go down again. And nobody knows how long their shark's been there, but the shark's still there. Big buggah. And so there's a lot of stuff like that, but still, this is history, this is cultural history that could be fairy tales, but it's still alive. You can still participate in it, you know? But there's links. [Scott Thompson]

But this is all God's... there's other things underneath this. We're made of volcanic lava tubes, we're different than other states. The way it came up, how it was created. We got things underneath this island, would be a whole different scene. So many stories. [Kahu Roddy Akau]

Well, there are many [moʻolelo and place names]. And there is an old map of the area that has all the names and what it used to look like prior to the dredging of World War II... and that map, uh again, Kehau has that map. I am aware, I've seen that map and there's that area had, I don't know, 19 fishponds and you know, islands that were inhabited but like I say, the area has changed a lot now but I would get those names and that map from Kehau so people could visualize. It has the old names on it too. [Lee Kalama]

They did the Aʻa [referring to the koa canoe, the Aʻa, launch] over here... Yeah that was, that was interesting. [Lei Endo]

Yeah, that's a very, and what makes me feel, is the history of the, because it's a, the ocean is basically part of Keʻehi and the whole landscape of the island. Yeah. And, you know, moana, moana, they say it's two moanas. Now, I'm still kind of researching the real moʻolelo moana. I haven't gone deep enough to understand the Moanalua, the two oceans. I don't know. I'm still trying to figure that out. The locations, the locations, you know. You might have the answer. I don't know. I don't know. I'm not an expert with that interpretation of moana lua. And Keʻehi. Ke. ʻEhi. Yeah. But all I know is the moʻolelos that go way back from, you know, the authors, the storytellers, the hula, the chants, you know, that is where the real cultural knowledge exists. And for my life, that's what I observed in my lifetime as a Hawaiian, person of Hawaiian ancestry, and having a relationship to my culture as a resident of this ahupuaʻa. [Kaʻimo Muhlestein]

Lot of the people, the families that came out of here, they had a lot of birthmarks on their bodies. Lot of them had relationship with the sharks. My father, my grandmother. My father, my siblings, they all had the mark of the shark, yeah? [Kahu Roddy Akau]

What does this name mean, Keʻehi, does that mean, like stamped down or something? [Isaiah Burch]

Well, I go and tell everybody that you see you get a lot of shark packs in here and there like that. I asked him did you ever hear about one canoe paddler being bitten or a shark? Nobody could say anything. It's like, it's a protective shark. [Edwin Endo]

So many stories out of this place. The families. And all the supernatural things that get. Beyond the imagination. All the 13 springs they have up here, this area. All mermaids. All that kind of stuff. [Kahu Roddy Akau]

What makes it [Moanalua] special is from the time beginning. All of it, from the time it was created, the deities, the, to survival of change from wā kahiko, because every century, people have evolved. Different leadership comes in, but our language prevails, our way of life prevails, and most of all, the natural elements sustains the kānaka way of life, and as well as the birds and the living elements of what makes Hawaiʻi Hawaiʻi. All the native plants, trees, animals, birds. This is our home, whether you're human or otherwise. And it was meant to be as if you could feel it and you can smell it in the dirt, the lepo. And if you go to the oceanfront, you get a special feeling, even though it is what it is today, I still see it. And when I jogged along the pathway, oh my gosh, you can see the springs, springs popping up. And that has been here from day one. You know, the natural elements of this ahupuaʻa, the makai, you know, it's still here. You know, so more names, you know, of this place, the more respect you get of it. Yeah, I'm not too, you know, there's too many names for me to remember, but I would love to know every name, but I'm not that kind of retainer of inoa. [Kaʻimo Muhlestein]

This ahupuaʻa is special. We right on the boundary of Kahauiki. We right inside. [Kahu Roddy Akau]

Yeah, this was the, like the channel, Kahikilaulani kēia. The first migration she came up here. She when ask the Makaliʻi. For permission to enter. Then she came inside because ah the blue, black mountains. She was on Kauaʻi, she seen ʻem, that's why she came here. So she went up there. So all the names of the mountains up there, that's all my genealogy. That's all the children. But yeah, I tell you, there's a lot of them here because they used to live along the coast. Everything had balance, yeah? Everything was good, pure, and true. [Kahu Roddy Akau]

Yeah, but every name, once it pops up, and you can find it in the chants and so forth. But yeah, but when you find it, you go, "Wow." And then you know that you're in a very special place that is of reverence. [Kaʻimo Muhlestein]

Yeah there was oli for everything. For when you have your maʻi, you have your, you know da kine, it's amazing that the channels here, the event, when was happening, then boom they do one oli. You know, the spirit, yeah. That's how everything was, the balance. The spirit. [Kahu Roddy Akau]

You'll have to look at the resources of, I know there's, I can't remember her name, but we do have our kupuna, that is the one that we look to, for the kumu hula. I believe she has, she's been buried at the Moanalua grave site up on the other side. I would defer to that chanter for all of the... chants. Okay. Yeah, 'cause I, to my hālau, we weren't able to learn those particular chants of this ahupuaʻa, this valley, which, yeah, so we have yet to learn of that. But I, you know, when I get, I feel like it calls you. I don't reach out to it. A chant will call you, and you'll know when it, will call you to become a part of it. And it hasn't called my name out yet. So that's probably why I haven't embraced it in full knowledge to, of the ʻike and manaʻo behind it, because it hasn't reached out to me. [Kaʻimo Muhlestein]

Yeah, the Makaliʻi, he was a guardian shark. From Diamond Head to Waiʻanae but this was his home. You got Mokauea Island and Mokueo Island, you got Kahakaʻaulana Island in-between. But they when break that island so the ships can come in. But that island there used to be one huge sand dune and the Makaliʻi shark used to go underneath it. And the sand dune used to come up like that so the people used to see it go down, he'd go out and he used to help. Used to take care of the people. My great-great-grand uncle used to ride him at the time. And that was his and then Justin's great-great grandfather. They feed him, they do everything. That was the supernatural. I mean, it was happening out there. There's a huge story about the people that used to live out there, they used to see, "Oh, the Makaliʻi is gone now," in the morning you see the big sand dune ʻcause he'd wedge himself in the sand, sticks out of the sand. Used to protect the people. Waiʻanae to Maunalua Bay. Used to live here, outside here. [Kahu Roddy Akau]

What I was taught and the research, when I did research about the area, was that this was the first settlement for people when they came in. Keʻehi Lagoon was the waterway when the first settlers for Oʻahu came here. It was this area. And I tell my kids that all the time, this holds sacred significance to our culture. It's a place where the population came in. [Gino Dayton]

I don't know the name, but I read a couple of interesting legends of famous fishermen traveling along the shores of Moanalua, Keʻehi, all the way to Mākaha from Lēʻahi and the fish galore would just be a part of life for them. And that's why I have a lot of respect for that makai. It was, once upon a time, before the changing of time. And the villagers that would, and you know, the ahupuaʻa system allowed not only fishing, but also kalo, because the wai that would flow all the way down. And the puna wai, oh my god, the puna wai is abundant. [Inaudible] is also puna wai. And the brackish water in the lake, the Āliamanu, and the stories of Pele jumping with Hiʻiaka and all those stories, yeah. Just interesting, yeah? So I come to respect all that past and live in a way where you have to kind of, you have to know this to, to feel the mana, the spirit, the ʻuhane, feel the makani, the ua of Moanalua, and it's from the past, present, and the future. That's why I'm blessed to have, to be a part of this ahupuaʻa. [Kaʻimo Muhlestein]

Not too many elders left, yeah? They were the ones, had the stories of the supernatural. My grand aunt used to breastfeed the manō over here. The shark used to turn around, you can see the two legs, was transfiguring from ʻem. The shark, yeah? All this stuff, was crazy. [Kahu Roddy Akau]

[T]here's also... where the spirits lift off... leilono, I think. It's near the Salt Lake area, a mountain. There's a pivot where the spirits fly, leave, yeah? Leilono, something like that is the name. You'll find it in the... It's a common name... It's a leina. It's close to the lake, the pond. [Kaʻimo Muhlestein]

You know the interesting thing about that story too that always tripped me out? Was the... you know you talk about how the dune raise up and the sharks there and then when dune come down the shark stay out... it's also, it's seasonal. [Isaiah Burch]

Change Through Time

But it's a lot bigger now. It wasn't like this back then. I mean, if you see the pictures of what it was, it was a really thriving fishing village. You know, with the lady, you should get it, if you haven't, you should get in touch with Kehau, Kupihea. You know, she's the cultural anthropologist in all this stuff. And so she found everything, she's got a wealth of information. [Scott Thompson]

Because when we first started, it was barren over here. You didn't have trees. Everything was gravel. Hardly any grass. It was just super flat. But this, they built for paddling. So I think even when you did your light stuff, it was first over here, and they used the hill like a tier thing so you can watch. [Lei Endo]

This is where all the paddling races happen. So it's pretty cool to hear him talk about like, I didn't know how special this place was, yeah? Like high school we used to drink beer right there yeah? You know what I mean? And growing up like that, you know, it was interesting, growing up with Hawaiians, but no one had any thoughts about how special this place is. This all looks exactly how it looked when I was in high school. They had to shut down a race every once in a while 'cause it had sewage inside of 'em. Things like that. Looking at that and then making it a part of the story of the continuum of this place. Like, how bad does it have to get for us to not even be able to go in the water? The amount of change that happened just within a few decades, right? Went from one of the most abundant places, you know the 'opihi and the he'e and the hammerhead sharks and you know, the fishponds over there, the family going up and down the river to now we cannot even go inside because of sewage in the water. [Isaiah Burch]

Yeah, all the canals. Yeah, Waikīkī, when they dredged out, that was the biggest mistake. Was 58 fishponds, Waikīkī. Like Moanalua. Coconut groves, that's why a lot of people wanted to come here. Paradise. Here, Kaliawa'a was the sacred gardens of Hi'iaka. [Kahu Roddy Akau]

I don't know how contaminated everything stay, but you know, the one thing I can say, the water quality got better ever since they did the first relocation of the homeless because on those jetties [points] get oysters now growing... So, you know, life comes back when you let them sit a little while, the seals, there's a couple seals that came in that play around... The turtles puff their heads up. [Gino Dayton]

So, you know, so they've done things there at our area. They've dredged, you know, the water. They've, jet ski company came in, you know, so now they've moved them somewhere else. But there's um, there's a fair amount of activity that goes on there, you know, canoe paddling, They have, like, stage a jet ski out there. They have people doing that surfing the, you know, with the fin hydrofoiling. That's hydrofoiling. [Lee Kalama]

Yeah, 'cause the shoreline was, but we had another, 10, 15 feet out from where we are now before. But we had, well, we had carpet on top of the sands. It's another issue, but you know, I know. But it's kept the sand in place. [Scott Thompson]

We were gonna bring back the salt ponds. It's all... The whole site is contaminated now. They brought in all the asphalt that they dug up. There was a big pile over there. [Gino Dayton]

I come here, I see everything the way it was when I was younger, could see right across. Now you cannot see nothing. You know what I mean? Hard to accept change. All the people that used to live here that... We're so excited when all the stories growing up like that. And this was the main area, this was, Moanalua was a central gathering place. The population was there back in the 14th century, was over 5 million and they knew how to live, the mountain, the ocean, was a system, yeah? That's what made it so... the hospital up there, that was the seat of orchestration. Manage everything, Kona District, 'Ewa District. This area here was Costco, they had 'em all man. Yeah. And there's so much, there's so much information. This is just information here. There's so much up there, just focusing right here. [Kahu Roddy Akau]

And, you know, the old pictures you can see, they used to be able to walk, huh? And all, there was little, like, islands, like these little islands like that. But there was a whole bunch, so when it was low tide, you were able to, you could go visit, and you could just walk between them and go. [Scott Thompson]

Now that area, back in the ’90s and prior was, you know, they had the island that had the houses, more houses on it, but it got burned. They burned, the State, burned them down so they would not be occupied anymore. So that was a big protest back in the ’90s. I think that was. And that was before I got there. [Lee Kalama]

And then another change was they added a chain fence that I had told you about earlier... That took a lot of parking away. [Gino Dayton]

But in the beginning when they were building this place, like he was saying, had red dirt. Before that it was gravel. It was not gravel, but coral. The whole place was coral. And I used to go fishing over here and ‘tro net. [Edwin Endo]

So that’s why they build the bridges— there’s bridges that go from Ke‘ehi Lagoon. Well, the first bridge, and then there’s a bridge that goes over that side. So that ova ‘dea, all that bushes ova ‘dea was supposed to be Kalihikai Park... It’s mangroves. But behind that, there’s the ponds, and then there’s like a industrial area, but they were supposed to build that as Kalihikai Park. And then you come over the bridge to the culture center, the Wa‘a Cultural Center that’s in the middle, and you come across the other bridge to come over here to do paddling races. Everything was supposed to tie in to that middle. [Gino Dayton]

Plenty of sand. A lot of things changed. So that’s, the dredging came and the developments came because the water didn’t come all the way up before like this. It ended back here and then it was something else. But things change. Tides change, things change. But it would be nice if the State would be a little more aware of things like that and preserving things. You know, how many times we go down and we sit in at down at the legislature, and all we’re hearing about is some lōlō has a plan to put warehouses in the middle of this, or go do something over here. Oh, we could put a hotel out there on that little island, what a place for a bar or something. It’s easy, come on. [Scott Thompson]

All these trees was in here a long time ago, yeah. Never had no trees, it was just coral all the way. [Edwin Endo]

I used to swim in that water. [Scott Thompson]

No, from my lifetime, it’s just seeing the rail going up... It’s kind of strange. It’s on the park land. Yeah, it’s on the edge of the boundary. [Ka‘imo Muhlestein]

Yeah, had all that [referring to he‘e]. We had all the flounders and the mollusks, we had everything. Nowadays, you can’t even go over here and catch one mosquito fish, you know what I mean?... You cannot catch anything! Yeah, there’s a lot of hammerheads inside. [Kahu Roddy Akau]

You know, a lot of the problems we’re having here is because of up there [points upriver]. The drain is coming down. Reason is the sewage levels are so high in this place is because of that, that sewage pipe has been broken for at least the 20 years or so or more and they never would fix it. They just go, “Oh well,” you know, I guess it’s a battle between, is it the military’s problem or is it the State’s problem or is it City County problem so they argue about this problem but it becomes our problem, you know? So that is a major contributing. All the slugs that comes down and all the garbage that comes out, it’s from top. [Scott Thompson]

Yeah, so, you know, and there are people come for picnics, class reunions, all kinds of activities down there now. So it’s quite, you know, quite well used. And then on the other side, you have Polynesian Voyaging Society. And there’s other businesses down there too. I think a UH extension or something. But there’s, you know, there’s a fair amount of activities there. There’s a boat ramp

that people go and launch their boat from. They can launch from the boat ramp there in Sand Island and go out. There is also, you know, just for your knowledge, there's Sand Island Beach at the very end of Sand Island Access Road, but we are, our site is before that. We are just over the bridge. [Lee Kalama]

But this is just this area, because this is the richest, was the richest, and still the richest ahupuaʻa. You got four military bases, you got Air Force, Coast Guard, this is all in the ahupuaʻa. Because of water. 16 million gallons of water come out of that valley to serve every day. 75 percent of the ahupuaʻa of Moanalua is all military. Because of the water. Pōhakuloa. Water. You know? This was the, this was essential right here. [Kahu Roddy Akau]

But far cry from the way it looks now. I mean, looks way better than before. Like in the cove, they built a cove. And I asked questions because we wanted to put our canoes over there. And they said, no, it's for, you know, those miniature boats? That's what that cove was made for. And some of my friends used to come here and race boats. But now nobody comes, so you can put your boats over there. [Edwin Endo]

Yeah right inside here, yeah. Because of that mangrove, yeah? Yeah, I mean, this is really bad ʻcause you got it all along the water, all the bushes. It's not sand it's all silt. All sludge in this water. It's getting a lot worse because of all the gasoline, oil. It's all a commercial area, the military, you know but that's a reality today. [Kahu Roddy Akau]

There's another site over there that used to be the BMX sandbox. It was a BMX track... Which was, the guy was super nice and wanted to give the kids something to do it and the kids loved it. But again, with the people there, I think homeless people, kind of broke in many times and, you know, sabotaged his equipment and he just got so discouraged. He just gave up. [Lee Kalama]

This was all, this was all tide pools... Would cover all this, all the way down to the post office. At the airport, you know when your plane came in? Right there [slaps hands together]. All of that was all... [Kahu Roddy Akau]

Because it was, our ocean was so abundant. It's like, "Oh no fish, man. Damn." [Kaʻimo Muhlestein]

Okay, before, before, you had baseball, you had soccer. On the weekends used to have one game down there, one game over here. Picnicking, used to be choke people. There's no parking in here. And even today. There's no parking. They ticket, that's how they get their money back. No that's how it works. ʻCause the weekdays you see the school bus bussing the kids. Just us giving this place action. [Kahu Roddy Akau]

Yeah, crushed coral. Then, of course, the rail came and that's a major change. They took away parking. So not enough parking. [Gino Dayton]

I know at one time there was a talk of them putting in a marina there... And putting, you know, that they would be, it would become like a, you know, Ala Wai Yacht Harbor or one of those. And I would hate to see that happen, but that I have, I heard, you know, that that was one of the plans that was, the State wanted to do... I would hope that they would not do that and not commercialize everything. You know, and leave it for the people. [Lee Kalama]

When bury some of the islands. [Isaiah Burch] Just the way they removed the people, just the way they got them out. They had… they was just, you know… my dad was part of that generation. [Kahu Roddy Akau]

So when they built this place for paddling, it was in, I think it was written somewhere in the law or whatever, they were supposed to dredge every 20 years. It never got dredged since its creation... Yeah, so it's, we don't have a Lane 12 anymore. It's, the sediment is... Yeah, yeah. I don't even remember. They never come in. They came and dredged the first time. I remember we had to... [Gino Dayton]

The military, that's why they wanted Hawai'i. Because strategically, the ocean. It's like Pearl Harbor had oysters and clams. Now it's all sludge and, you know? Just gotta eat it, there were times they went through a lot. The Damons thought nobody was goin' know about this place. Everything coming out now. [Kahu Roddy Akau]

Oh for sure. Makali'i. You know, my family been here for 2,000 years. Now I live this time. The Damons hoped that nobody was going to, they wanted to get rid of everything. Can you imagine, when I was little boy they used to have the trains, the little ones go by. Used to wait, the thing comes by, like ch...ch...ch. The choo choo train, the guys running trying for catch one ride. They fall down [laughter]. You see all the pineapple, used to be what... everything was simple. We can fill our gut for one dollar. Now no more nothing cost one dollar. [Kahu Roddy Akau]

Concerns and Recommendations

They had a disease [referring to wiliwili trees]. They saved the seeds. They were supposed to bring them back. I don't know if there's any burials and stuff over there, but it would be nice if they... used the Hawaiian name of the park, yeah? Hawaiian words on the bathrooms. [Gino Dayton]

I think it depends where they're going to put them. And how big they are. Right now, currently, the bathroom, you know, there is a, you know, typical City & County bathroom there that unfortunately, they don't open it up too much because of that has been kind of a traditionally, you know, there's been homeless people living there in the area, and they made, you know, those container homes right across from the beach. And so there's a lot of homeless people that come. And unfortunately, you know, I can't say who it is, but the bathrooms you know, are a constant problem. So a lot of times they don't open the bathrooms or they're, you know, you can't, there's like no running water or, you know, there's, it's problematic like that... You know, there'd have to be some kind of, somebody taking care of it. [Lee Kalama]

We need more showers. You have, our race alone is 1,500 people on this beach with three showers, sometimes only two, and a little spout. So, that would be good if you had more showers... Either that, we're using hoses. [Lei Endo]

And you know, they could put better trees. See that's where it starts. When you do land, you no just bring in bougainvillea, I mean, you cannot. Like I said, Hawai'i, it's alive. You gotta give 'em respect. You gotta plan. All this gotta go. I can see the coconut tree with no nuts. That's why, you know, it's getting all skinny and goin' die. You gotta have nuts ontop there... you gotta bring something that is connected. Respect the land. They put monkeypod trees, you know, you gotta... so when people, the energy. See everything has life, energy, like medicinal plants. Energy. Your spirit. That's how you connect. You gotta, you look around here. You know, I mean, you gotta give the land, you gotta aloha the land. Respect. [Kahu Roddy Akau]

That's why, you have the sprawling springs and the river, uh, the streamways it provided. And that's the story that we're trying to keep within our ahupua'a. And hopefully we can learn from it so that we can, you know, somehow incorporate it into our ahupua'a system. I would love to see Ke'ehi add some kind of remnants or some kind of, besides hoe wa'a, let's turn it into a hālau i'a, fishing for fishermen, where they can make nets and stuff and go out, park the canoes there and go out not for competition, but to launch their communities, to go out to catch fish. That would bring back the traditional ways of our shoreline... You know, they try to cover it up, but the springs are more powerful than the cover ups. [Ka'imo Muhlestein]

[Talking about the tennis courts] You're looking at less, at least, less than 20 people always are like over there and sometimes they're not even there. If anything, that [pointing], the pickleball is used more heavy now. That's more of a popular thing now. So, it would be right to put that one there. It's just you would take, you take away, you goin' take away, so, we already seen this so you know they're gonna put that one across over there. You goin' take away field, field, space but I know they goin' get rid of some stalls because now you're gonna have to make handicap stalls so it's usually like what for every five, uh, five stalls is like two handicap stalls or whatever or two

handicap stalls can equal up to four regular stalls but I mean makes sense over there because this is where it's heavily used. But to have that bathroom all the way, that's far. That's far for the least amount of people that goin' have. [Gino Dayton]

I just remember, what you said. Whoever's working on this place, just remember you gotta have pili. So as they building the place you helping to take care the place. [Isaiah Burch] You gotta have that. You cannot just any Joe Blow guy, you need someone from the area. You know what I mean? You cannot just. And it's real important. But anyway, this place has so much. Just this area. [Kahu Roddy Akau]

Unfortunately, you know, that's, I don't think it's unique to just that area. It's, you know, anywhere that people that don't have another bathroom to use, have to go to. Yeah, and that's the only bathroom there, unless there's a porta potty on occasion. Sometimes when we have canoe races down there and there's going to be more people coming down, you know, we, we do definitely get a porta potty. But for that area, there's just one. One area, one by the pavilion and that's where the bathroom, that's where the only bathroom is for that area. [Lee Kalama]

Yeah, but it's supposed to have canoe clubs. We're supposed to go there, and the City has some other plans ova 'dea. So they forget all of the plans of it. But I still got the drawings. [Daniel Sanford]

But, you know, I understand the City, they manage a property or it's their property, they own the land and stuff like that, but when they do stuff, they don't, like when they even put up the chains, they never consult with us on what impact that would cause, and so much headache just by putting those chains up... They didn't consult with us by building that thing over there, or moving them from that corner, 'cause it used to be over there, on that piece of land, if we brought it back here, what problems that would cause. They don't ask, they just do, and then we find out and we figure out what can we do now? But if you're going cultural, they messed up. They messed up over there big time. [Gino Dayton]

I get up, there's always something that keeps you in check. Because of the spiritual boundary. Spirituality. I come ova hea, I see money. [Kahu Roddy Akau]

There are other places that have canoe hālaus for their canoes but we do not have any down there, that would be nice, you know that a sheltered area that we could shelter our canoes in because it is a cultural thing... and it's very healthy for, you know our community to be paddling. We have a lot of kūpunas that do it out there... I would think that in an unused, maybe, I don't know where the best place would be, but maybe a hālau, canoe hālau, would be nice. [Lee Kalama]

I mean, they already bulldozed everything out, you know, and so things change, but you can still keep a sense of culture. Even though it's evolving, you know, it's not the same as what it was, but it should evolve along those lines. You know, it shouldn't be given up. And, you know, we're all fighting for space. This park, since the time I've been here, that park is so damn busy. It's got to be one of the busiest parks on the island. It's got to be, because all the small parks, I guess, closed up, so that's why all the kids are here now, huh? So it's jamming in there and then they took away the parking which was really lōlō but you can see how much everybody's paying attention to the no parking signs right, you know? They park underneath the no parking signs. [Scott Thompson]

Floating docks. Yeah, that would be a good idea. [Edwin Endo]

But honestly too, I've been around so long paddling, like the kūpunas passing on. What the kūpunas told me when I started my club, what they told me back then, "Oh, the club is run this way, then people think this way, know we're about paddling, the thing, it could be okay." But back then was, culturally was okay. The thing was, everything was 100% the culture. What I see too is now, is like, I'm not saying we're not a back burner, but we gotta take, it takes more for us to ask, we want to do something for our culture, which I think, I don't understand because, you know, it's like, our grandparents, our great-grand-grands left something for us to strive on. And back then it was easier because culturally it was, it was done. No exception. This is, we culturally

binded, we go do this because it's our culture. Now it's like, when I think of something, maybe I want to plan something, it's like, you know, it ain't obstacles, but it's, it takes longer to get response, but I was taught from the kūpunas, how easier it was back then. [Daniel Sanford]

Well, the last thing we heard, or I heard, was they were gonna tear down, they were gonna break down that first before they start construction on the new one. And I was like, that makes no sense because that one still works. [Gino Dayton]

So on the rail, have some stories about Keʻehi, you know? Yeah, you can have like a, what do you call, when you come into, that whole landscape of that, all the Pele stories, you can do stories on the rail, because they traverse through the ahupuaʻas, and then when you sit on the ocean side, makai window, on the rail, you're gonna feel the mana of Keʻehi. [Kaʻimo Muhlestein]

You cannot go. We couldn't even go to the end. Everything in 9/11 is done. That's what I'm saying. So, culturally, we used to go out, we used to go out there and pick ʻopihi, and I can imagine plenty ʻopihi... Yeah, it's airport, but before 9/11 we used to go... I mean, like five-gallon buckets, full. Like four five-gallon buckets. Me and Walter. That's how, we used to have ʻopihi over there. And at 9/11, they tell you guys, "No go ova ʻdea." [Daniel Sanford]

And, you know, we're all fighting for space. This park, since the time I've been here, that park is so damn busy. It's got to be one of the busiest parks on the island. It's got to be, because all the small parks, I guess, closed up, so that's why all the kids are here now, huh? So it's jamming in there and then they took away the parking which was really lōlō but you can see how much everybody's paying attention to the no parking signs right, you know? They park underneath the no parking signs. [Scott Thompson]

They used to have a big cement log and they took it out and put the link fence. They moved that link fence more out. So the football guys are always parking. They don't care about the signs. So when we finish our paddling, it's really, really, really hard for us to come out of our spot because they're all over there. So I think we need parking. Really. It's hard when it's all taken and we have to park way out there and some of us, we carry equipment and also the parking. [Lei Endo]

But all of that history, it'd be, you know, it'd really be nice... [Scott Thompson]... Like a plaque or something. Like when you go up to the volcano. [Edwin Endo]... Yeah, go up to that small center. That would be pretty nice, about Keʻehi Lagoon. [Scott Thompson]... I like to put more stuff like that. Like have the board you know, how when you go hiking you get the information, they should do that to the whatever by the officials stand, I think. [Gino Dayton]

I like them da kine, go down here, like build a hut or whatever and where they can do canoe building down here... We're supposed to build a hālau, if we get the homeless shelter. There's supposed to be one museum. The hālau is all over there. [Daniel Sanford]

You're talking about in the middle ova ʻdea where you get the transition house. Yeah, there's supposed to be one culture center ova ʻdea. [Gino Dayton]

It's still, this is a unique spot. This is a really cool spot. If it was clean, it'd be really good. It'd be awesome. [Scott Thompson]

Look the homeless just got up. People come here they cannot use that [points to the pavilion]. People sleeping inside there. You walk in the bathroom you get someone lying down there. Scared use the bathroom. That's why you should always bring your own toilet paper. ʻCause you don't know what they... you know, that's how we gotta think nowadays. You gotta watch when you walk back to your car. It's just, all in fear today. And it's not right. ʻCause those guys are not taught. Too many guys sit in that office. You go down there for pay your parking ticket, the City and County, you go up there. Get 20 windows, one guy working. And everybody waiting. [Kahu Roddy Akau]

You want to know the attitude with that, with all of this stuff? So when we as clubs decide we're going to clean up our sites, and we bring all of this stuff up, the City gets mad because we making

more work for them. They'd rather have us leave 'em in the water and let the water take it away and be somebody else's problem. They told us straight up. [Gino Dayton]

I want to see sand again. [Daniel Sanford]

We'd love to see sand... That's the difficult part, trying to keep the sand in place because I understand the carpets are not the most sanitary thing, but somehow there's got to be some way of getting the shoreline back again, making it safe. Same thing with Sand Island. They're eroding, you know, out there. So they're losing everything, you know. They got cliffs now off in front of them. [Scott Thompson]

You know, they just gotta communicate with us more. They decide to do something without our input. They've been doing stuff that without our info or with our knowledge and then we're like, "Great. Now, there goes that. Oh, they put up the chain. Great. There goes the parking." [Gino Dayton]

When we get the canoes in the water, they drop the canoe, they're dropping them on rocks. And you know, you get little kids here, they gotta lift the canoes, and they constantly drop them on the rocks. So, if it's sand, you know, they drop them... Especially the ama, like the thing crack. [Edwin Endo]

And I hope that they honor the people, the canoe paddlers out there, that have worked on that area and you know, done the lands, you know, trimming and cutting trees and bushes and weed whacking it. My husband does it almost every weekend down there. [Lee Kalama]

That's before I started then. Because I know they did it when they first built the place. They took out all the barges that was along the reef runway because that was built for... military. Then the beach was nice because when I was a kid, we used to run on the beach and you could run all the way around the rocks had all sand. So the erosion is so bad that this is all the original coral that is coming up. And every day you get kids cut their feet. Yeah, every day and staph infection. So that's a major, major change. Environmental change. [Gino Dayton]

You know to just keep the area nicer, you know, and cleaner. And I would hope that the State would honor the canoe padders and you know, the recreational area is needed for our people, not… you can't put buildings everywhere and commercialized everything, this and that, you know. Our folks need to have some recreational space... And just giving the community a place to go to that they're safe, to get out in the water, and do something that we love doing. And it is cultural. [Lee Kalama]

Just make it more aware look at all these kids and stuff they're out there, they don't know anything about this area and they're part of it so all that stuff goes up, they're gonna take the story. [Scott Thompson]

Just broader community concerns is just know Keʻehi. Culturally, the moʻolelo, just not to see it as a open space in a Western sense, but in a Hawaiian sense of place. That's my biggest hope for Keʻehi. [Kaʻimo Muhlestein]

And we can't develop everything and always be looking to be commercialized, everything. We need to give our folks a place to go to that they can have safe recreation and, you know, just enjoy. And like I say, we have lots of kūpunas down there that paddle and it offers them a safe haven. It does. You know, whether you have to put them out at other beaches that have swell and surf coming up on the sand, this offers a safe, a safe entry into the water in and out. Because of the layout. You know, we're inside. We're inside in calm, like a calm lagoon or whatever you call it. [Lee Kalama]

About 10 years ago, they came down here to survey how they can put sand again, and then they never came back. [Daniel Sanford]

It'd just be nice if they [the bathrooms] were clean and working... That'd be good. They tore one down. We could never figure out why they tore that one down. And they left that one. Should be bigger. Oh, it should be big. And the problem that they're having now, though, in all fairness to the City and County guys, they had a huge staff here before. They had lots of workers. We got two guys doing all of this now and they used to have teams, I mean they had like 10 people, the guys that did the graph the guys that just did the bathroom. Used to have the DUI guys come on Saturdays. The park was, you know, this was the really nice, the cleanest facility, you know? And the guy, he was so proud of it, the guy that was... did good work here. I see him, I still see him. He lives in Waimānalo now, so he's happy. He's happy on that side. But you know, that was his thing. And you know, if you're gonna have bathrooms, goin' need to be cleaned. I used to come early in the morning. And he'd be here, open up, he's cleaning it. And he used to scrub it out. I used to, well, you had the room, never mind the floors. [Scott Thompson]

There's always, you know, things you can improve. But you no see the City and County workers, you don't see nobody. Oh yeah, they work 'til 11. They got off at 3:30 so they drive around. [Kahu Roddy Akau]

Yeah, put a comfort station over there. Yeah, right here, should make it bigger with two showers like because we all finish the same time, yeah, and get like a couple hundred plus people showering and the bathroom is so small and when we have races... Just have any long lines and you have to paddle. You know, they want to do the station over there [pointing to second comfort station location]. It's good for the football field. It's not good for the paddlers. I think if they build that, they might move on that side. [Edwin Endo]

But, you know, to try to talk as a community, in advance if there is something going to happen in the area that's going to affect. The people that use that area, you know, 'cause all of a sudden sometimes. You know government entities go, "okay, no, this is, we're doing this," but no discussion, no input from the community. Yeah, you know, but they need to hopefully involve us. [Lee Kalama]

I like to just see people use it, you know, keep upholding traditional ways. You know, it has, you know, we use it for multiple recreation purposes, like hoe waʻa. And I know the tennis courts are there. That's important to use. That's why I'm saying Moanalua is a healthy, provides health consciousness. You know, it has everything that you need to. Now there's a pickle ball court over there. There's a field where baseball and all the physical activities occur over there. So it plays a major part in wellness, you know, of that particular area. But when they go there, there's no connection of the once-upon-a-time memories. [Kaʻimo Muhlestein]

They come over here because this is the only bathroom that pretty much is in good operation. The one over there, no more doors. So not good for the kids. They usually get homeless over there. So this is why they hover all over here. It's because this is the one better bathroom. [Gino Dayton]

Now you get oil and sludge. That's the reality. We gotta do the best we can in these times. But it's good you get information, you know? So they gotta have feelings, yeah? One thing about Hawaiʻi, whenever you do something, you gotta have feelings. I know a lotta guys in the state, that's all they do, 'cause it's their job. Hawaiʻi is different. You gotta have feelings when you do stuff. It's like when you cook. When you prepare medicine, you gotta have feelings... [Kahu Roddy Akau]

The only thing I want to say is, you know, before I knew the area, before I went down to the area, I really knew nothing about it. And I was very unaware of all the history and what used to go on down there. And I was, you know, and I'm not the first, and I'm not the last, but all I can say is people, if they're educated about this area, Mauliola, I think they would be so interested in its history and the resources that it has. [Lee Kalama]

Well, right now what is good, it's, culturally speaking, it's the waʻa here. That's important. This is what it's supposed to be. That's the best today, is seeing canoes. You see culture. Before, they used to park 'em outside the, you know, people used to. Sad. I hope they build one 'nother hale

ova hea for. One hale waʻa. That's what I mean. I mean goin' cost $150,000. That simple. This is all I can see right now, is something that people, but other than that, I'm not sure... they have one place where they can teach something. Where people can go and gather instead of putting in these small things. If you ask me. Someplace where they can do lāʻau, weaving. ʻCause hula attracts, so that's why I say if they let the Hawaiian, if they let the reigns down, try watch out. You start one culture center, you watch how much people it's gonna attract. It's gonna become one trend. You can bring back to the ʻāina. [Kahu Roddy Akau]

The attitude I get, like the vibe I get from, you know, when we go to other countries and we travel, is they love Hawaiʻi. They love Hawaiʻi. They love coming over here. But I feel embarrassed that they come here and we give them ʻdis. It's sad... We understand wear and tear and things change, but the upkeep is not there. Like they sacrifice the upkeep. Like this is the people's park, I'm gonna tell you right now. There's so much people that use this place. So much usage. [Gino Dayton]

And we used to have some little baby Hawaiian monk seals, but the cats. The cats down there, which are wild cats, we used to have like 300 of them. There are people that do come and feed them, but it's very, to me, it's very dirty because when they, you know, their feces or their urine goes into the water, that has killed some of those Hawaiian monk seal babies... Yeah, they did a autopsy on, there was at least one that always was by our site, and then he died from that, I think it's toxoplasmosis, something like that... And it's caused by the cats. And so wild cats down there in that area is, to me, no good. Dirty and it's dangerous to our marine life and we wish people would stop feeding them. [Lee Kalama]

But with all the dredging the whole formation wen' change, yeah? ʻCause when you go down Lagoon Drive, you drive here, my dad dem said used to drive the car, at low tide used to drive across the reef. The tide come up you have to stay on the islands. But they would dredge that for the seaplane. Come to find out was too short so the barges used to come in, use that. So when you go on a plane, when you go home, get one window seat, you can see where, you know. But, yeah, ʻcause I've accumulated so much information through the years. Now, people no even go library, stuff like that now. Everybody is home. The ones you go see inside is all homeless... [Kahu Roddy Akau]

I forgot that's a biggie because also, too, we had people down there that had maybe cracks in their feet, or they had a sore, and that makes it very dangerous. And they got, what do you call that, MRSA? [Lee Kalama]

You notice that the light hasn't been fixed for years. [Lei Endo]

That's what they need on the beach. They need beach lāʻau but naupaka, pāʻū o Hiʻiaka, naupaka not goin' grow ʻcause you got dirt, no more sand. It's all sand! Go plant sugarcane. But um, put one mango tree or something. See, they would fill in over there, so through the rain and stuff, you know, after 30 years, it creeps to the front, the dirt. [Kahu Roddy Akau]

But it comes back to, what can you make of it? Gotta be culture. You need cultural thinking. Cultural vision. [Kahu Roddy Akau]

We sat in a meeting and that's what they told us. We sat in a meeting and we told them everything that's wrong with this place. And they said electricity is not a priority. Until the contractor pau with the rail. It's not a priority. [Gino Dayton]

I don't know how, unless people engaged have events there that reflects the cultural practices, that's the only way to keep that kind of um, traditions alive. Use the ʻāina. Yeah, use it for good reasons, you know? That's the only way. [Kaʻimo Muhlestein]

You gotta put a lock on it. Look at the bathrooms, you see one wagon outside, so you say, "Okay, I can use the bathroom later." There's no safety anymore. And I don't see any City people here... Gotta have more of a presence. Nowadays it's serious. It's so serious nowadays. Look at this

rubbish, look at all this kine stuff and everybody looking the other way... They gotta be monitored, that's the number one thing. Anything you goin' do, you gonna attract, it has to be monitored. It's so sensitive nowadays. It's a sensitive issue nowadays. [Kahu Roddy Akau]

Then I asked my partner that plays tennis with, "Guys, oh, look, they're gonna build one right at the end of the tennis court." It's fine. That's good, maikaʻi. Since I noticed that, you know, people when I, because I go there in the early morning, like when the, before the sun is out, I like to play before the hot sun rises over the tennis courts. So having a station over there, as long as it is safe and I don't want it to be a place where it attracts the unwanted activities. That's the only, my concern, is that kind of activities. I don't know how to control that. You know, that's the only concern. Keʻehi is, I don't know, but I'm okay with the stations, one over there and the one by the, oh, the parking lot, the one in the middle, that's gonna replace the other one, right? And towards closer to the older one. The one that's up. That's gonna be demolished? Okay, that kind of makes sense. But I wonder if that station, the one in the middle of that big parking lot, it's kind of, that middle space is so open and it's important to have it open in my opinion... And it's going to be too close to, the one to the tennis court. I think it's too close. If you're gonna knock down the original one at the other end. I would rather keep it there because the one in the middle is gonna be too close to the tennis courts station one. Yeah, and then, and it's gonna, I don't know, it's just gonna block the uh, I don't, so, yeah. You need to keep the pathway open of Keʻehi with Kahauiki. Yeah, it's kind of an awkward location to be culturally, I think... Yeah, the two stations, I'm good with the one close to the tennis court one, that station. That's appropriate over there, 'cause it acts like the welcoming station as you enter into the park, Keʻehi entrance. So, and then the second one that's in the middle of the biggest parking structure on the park, the big park ground to me that's kind of um, blocks the wind to me. I don't want the wind to be kind of, divided from the mountains oh interesting because it does get windy over there. I'd rather see it close to where the original one is closer to the Keʻehi side. No, no, Kahauiki side... Because when you have the canoe guys come, the canoe events, well, they get some, I can't remember where the bathrooms are. But, yeah, I'd rather have, only because of the wind patterns, I would prefer having it close to the Kahauiki boundary. And then the other one close to the roadway, the tennis court. That way it makes, you don't want to block the makani. [Kaʻimo Muhlestein]

Yeah, 'cause even our makani has ʻuhane in it. They speak to us, you gotta let them take the lead... As coming from a cultural sense of place. That's why I don't want it to...I prefer it to be more separated than what it's planned... So, starting with those two stations, yep, I'm okay with it. But I would ask if we can relocate that one that's kind of in the middle of that bigger parking lot, move it closer to Kahauiki boundary... That comes from my valley now, all the way down to over there. Yeah, and then when it comes, give it its space to do its thing. That's all I ask. [Kaʻimo Muhlestein]

Summary of Ethnographic Survey

A total of nine knowledge holders for the project area were engaged through ethnographic interviews: Kahu Roddy Akau, Isaiah Burch, Gino Dayton, Edwin Endo, Lucille Leilani Endo, Lee Kalama, Kaʻimo Muhlestein, Daniel Poepoe Sanford III, and Scott Thompson. The interviewees have diverse relationships to Moanalua Ahupuaʻa and Keʻehi Lagoon Beach Park and associated knowledges of cultural resources and traditional practices and beliefs, and the history associated with the study area. Six of the interviewees: Gino Dayton, Edwin Endo, Lei Endo, Lee Kalama, Daniel Sanford, and Scott Thompson hold strong relationships to Keʻehi Lagoon Beach Park through the waʻa community as paddlers and/or canoe club owners. Gino Dayton is a Hawaiian history teacher. Kahu Roddy Akau and Isaiah Burch are land stewards within the Moanalua-based lāʻau lapaʻau community of practitioners. Kahu Roddy Akau is a descendant of many generations of Moanalua-tied ancestors and Scott Thompson has ancestral ties to Keʻehi. Scott Thompson's family has received reparations for their traditional lands within the project area. Kaʻimo Muhlestein is a Moanalua resident and cultural knowledge holder with ties to hula hālau and the Kalihi Pālama Hawaiian Civic Club. She also frequents Keʻehi Lagoon Beach Park to play tennis. The

interviewees retain a diversity of connections to the project area, most of all expressing a love for Keʻehi and the need for the project bathrooms to be clean and well maintained.

The interviewees identified a variety of cultural sites and practices and natural resources at Keʻehi and within Moanalua. The main cultural practices at Keʻehi, continuing to today, are hele waʻa due to the sheltered nature of the lagoon. Several interviewees storied Keʻehi as the first site of settlement on Oʻahu. Waʻa practices at Keʻehi include modern paddling water sport and traditional waʻa ceremonies and sailing, including use by the Polynesian Voyaging Society and the launching of the koa canoe Aʻa. Keʻehi Lagoon provides one of the main waʻa racing grounds in the State. There are many natural resources and related cultural practices and beliefs noted for Keʻehi. These include freshwater springs that connect the uplands and are associated with a mermaid of the area. Keʻehi is also a known breeding ground and nursery for hammerhead sharks. Sacred relationships to sharks within Keʻehi waters were shared by interviewees, including shark riding and racing, breastfeeding of shark pups, a guardian or protector shark that burrows under one of the islands, shapeshifting shark people, and ʻaumakua-based relationships. The guardian shark's name is Makaliʻi, protecting those in the water from Waiʻanae to Maunalua Bay. His movements are linked to seasonals shifts and the shape and size of a sand dune within Keʻehi. Kahu Roddy Akau mentioned a birth mark within his family linked to these sharks and his great-great-grand uncle riding and feeding Makaliʻi. Scott Thompson shared that Makaliʻi is still present in Keʻehi and is responsive to ceremonies and prayers. Other notable marine life include sea turtles, heʻe, and the Hawaiian monk seal (ʻīlio holo i ka uaua). Several interviewees discussed fishing at Keʻehi for pāpio, ʻōʻio, flounder, and mullet. Kahu Roddy Akau remembered that limu growing there when he was younger included ogo, wāwaeʻiole, and manauea. Kaʻimo Muhlestein distinguished Moanalua as an area dedicated for canoe landing, for fishing, and for feeding people. Kahu Roddy Akau also shared that Moanalua was (and continues to be) a central gathering place of abundant freshwater resources and a central site for training in cultural arts such as lua, hula, and lāʻau lapaʻau. Interviewees passionately discussed the role in community-based and cultural stewardship that continues at Keʻehi with debris cleanup, educational programs, and sharing of moʻolelo. Moʻolelo speak of Moanalua as a "pit stop" for akua including Pele and Hiʻiaka during their travels. Stories of Pele and Hiʻiaka at ʻĀliamanu and a leina near Salt Lake were mentioned by Kaʻimo Muhlestein. Kahu Roddy Akau shared that the names of the Moanalua mountains are tied to his genealogy and noted that Kaliawaʻa was the sacred gardens of Hiʻiaka.

Several important place names within the surrounding area were shared: Mokauea Island, Mokueo Island, Kahakaʻaulana Island, Kahauiki, Mauliola, and Kaliawaʻa. Mokauea is significant as the last fishing village on Oʻahu and was notable for important archaeological sites including an ancient canoe and burials. King Kalākaua's summer house was originally located at Keʻehi before being moved to the Damon Estate. Scott Thompson remarked on the burial sites that are now being exposed along the reef runway and the continued care needed for these sites. There was discussion of burial sites associated with the historic fishing village being covered and destroyed during land use changes in the surrounding area. No known burial sites were shared to be located directly within the proposed comfort station sites.

Once a thriving fishing village and abundant tide pool system, Keʻehi Lagoon Beach Park has been filled in and altered tremendously following the removal of fishing village residents. Given the significant changes in land use, several cultural and natural resources have been lost at Keʻehi Lagoon Beach Park. These include the loss of ʻalaea and paʻakai beds (three salt ponds were described explicitly) and the neglect of fishponds, overrun by mangroves. The paʻakai beds of Keʻehi were remembered by Gino Dayton to have been covered by material dumped from the rail project. Kahu Roddy Akau remarked on the increase in trash in the water and contaminants such as gasoline and oil, preventing limu gathering. Isaiah Burch noted a decreased in subsistence resources such as ʻopihi and heʻe due to sewage levels in the water. Lee Kalama mentioned the prevalence of feral cats at the park and their effect of toxoplasmosis on monk seal populations. Several interviewees remarked on the decrease in fish populations of the area. Daniel Sanford recalled picking ʻopihi along the reef runway. This is no longer permitted due to airport access restrictions.

Waʻa users documented a variety of changes that have been made to Keʻehi in the last 30 years. These include transformation from a barren area with coral to the current landscape of grass and scattered trees. Interviewees describe persistent low water quality that prevents paddling practices, causes infections on open sores for those in the water, and prevents locals from swimming there. They documented that there have been times when the water quality has improved. At these times marine life is observed to thrive, including oyster populations, monk seals, and turtles. There have been a variety of recreational activities that have occurred and/or continue to occur at Keʻehi. These include canoe paddline, BMX biking at a track no longer in operation, baseball, soccer, picnicking, tennis, pickleball, and non-traditional miniature boating from the cove. Recent changes include construction of the rail on the boundary of the park. In his childhood days Kahu Roddy Akau remembered the presence of trains in Moanalua. Recent changes in how the parking boundaries are positioned have resulted in less parking availability at the project area. Interviewees discussed the loss of sand along the shoreline and repeated requests for the State to address shoreline erosion which makes paddling more dangerous for both paddlers and waʻa. Sand was once so abundant in the area that at low tide one could walk across the lagoon to visit the sandbars and islands.

Interviewees lamented a series of broken commitments by various government institutions at Keʻehi including 1) inconsistent dredging which has resulted in increased sedimentation of the lagoon, 2) continued sewage runoff with little or no accountability across government institutions for the problem, 3) lack of consultation with community and cultural users prior to past projects such as installation of the parking barriers, 4) lags in response time from government agencies to cultural concerns and requests, 5) insufficient upkeep of the park given the extensive public wear and tear, and 6) continued lack of electrical infrastructure. The interviewees also had specific concerns and recommendations for the comfort stations. Kaʻimo Muhlestein expressed concern that the proposed central comfort station could block wind flow of the Hoʻeo makani coming from inland Moanalua, suggesting this comfort station be moved towards the Kahauiki boundary near or at the location of the comfort station proposed to be demolished. Gino Dayton remarked that the proposed comfort station near the tennis courts would service a smaller number of park users than the one located near the waʻa launching area. The key concern for the current proposed comfort stations project is the ability to maintain the cleanliness and safety of the bathrooms given the pervasive houseless presence at the beach park.

There was general support from the interviewees for the proposed project because of the need for clean, well-maintained bathrooms and a call for more showers to support the paddling community. The interviewees recommended the following:

- increase cultural thinking and cultural visioning in the management of Keʻehi Lagoon Beach Park
- include an understanding of the reverence of the ʻāina of Moanalua and of Keʻehi, for the plants and pōhaku
- actively involve the community in future planning and maintain transparent communication throughout the project process and future park endeavors
- conduct cultural protocol prior to commencing work on the project
- keep the bathroom slated to be demolished in place until the new comfort stations are constructed
- do not remove historic pine trees near the official's stand
- increase management of the feral cat population
- maintain the area as a recreational space for the public and do not pursue commercialization of the space

- ensure that there are individuals who have relationship to Keʻehi and/or Moanalua included in the team working on the comfort stations project to ensure intuition-based and feelings-grounded attention to place as well as awareness of spiritual boundaries
- take care of current native trees at the park (e.g., the niu trees) and restore native vegetation to the beach park including species such as wiliwili, naupaka, and pāʻū o Hiʻiaka
- use traditional Hawaiian name(s) for the beach park and Hawaiian signage on the comfort stations
- provide historic displays to educate park users on the rich history and moʻolelo of Keʻehi
- increase the number of shower stations
- ensure that there is monitoring and maintenance of the comfort stations; one recommendation to accomplish this is to increase the number of staff assigned to Keʻehi Lagoon Beach Park
- ensure that there is monitoring and maintenance of the comfort stations. One recommendation to accomplish this is to increase the number of staff assigned to Keʻehi Lagoon Beach Park

Interviewees also shared recommendations for future projects at Keʻehi:

- consider expanding the parking space in future projects
- explore the potential for sand replenishment, particularly along the stretch actively used by the waʻa community
- share moʻolelo of Keʻehi and the surrounding area to rail users
- explore the potential for floating docks for waʻa
- partner with Ke Ola O Ke Kai to restore the paʻakai beds of Keʻehi and support the development of a Hawaiian cultural center
- support the hele waʻa community through the addition of a waʻa cultural center that had previously been discussed and planned for the park and/or the addition of another hālau waʻa
- diversify cultural activities held at Keʻehi Lagoon Beach Park, such as the addition of a hālau iʻa (a space for waʻa-based lawaiʻa practitioners to sustain their communities with fish) and/or a space for weaving

Cultural Resources, Practices, and Beliefs Identified

The interviewees identified a rich myriad of cultural practices, archaeological sites, and vibrant landscape of moʻolelo in the surrounding area (see Table 5). Cultural practices that are currently conducted at the proposed project area include hele waʻa, shark-related practices, cultural stewardship (cleaning and caretaking of the park), and fishing. Waʻa practices at Keʻehi include modern paddling water sport and traditional waʻa ceremonies and sailing. Shark-related practices and beliefs consist of shark riding and racing, breastfeeding of shark pups, a guardian or protector shark that burrows under one of the islands, shapeshifting shark people, and ʻaumakua-based relationships. Relationships to the guardian shark Makaliʻi continue today. Given the long histories of land use change at Keʻehi Lagoon Beach Park, many of the cultural resources and dependent lifeways at Keʻehi have been diminished or are no longer present. These include use of traditional freshwater springs associated with mermaid movement, diminished fishery resources (main fish caught at Keʻehi include pāpio, ʻōʻio, flounder, and mullet), diminished fishponds in the surrounding area (due to land use change and invasive mangrove encroachment), diminished limu

gathering (ogo, wāwaeʻiole, and manauea) due to pollution, loss of sand due to land use and tidal shifts, inability to gather shellfish such as ʻopihi and oysters due to pollution levels and areas of restricted access, and burial of traditional paʻakai beds. Interviewees shared the potential for revival and strengthening of several cultural practices such as moʻolelo, native plant restoration, and fishing, with more support for the park.

Potential Effects of the Proposed Project on Cultural Resources, Practices, and Beliefs

Interviewees generally agreed that the proposed comfort stations may have a positive impact for the hele waʻa community as there are currently a shortage of showers and bathroom facilities during race days. It

Table 5. Cultural Resources, Practices, and Beliefs Identified, Effects of the Proposed Project, and Proposed Mitigation Actions

Summary: This three-column matrix assesses project impacts on local heritage. The columns read from left to right: Cultural Resource, Practice, or Belief; Effects of the Proposed Project; and Proposed Mitigation Action. The rows are organized sequentially under three thematic category header blocks: Cultural Resources, Cultural Practices, and Cultural Beliefs. Each row details an identified asset, how it is affected by the project, and the corresponding mitigation or recommendation.

	Cultural Resource, Practice, or Belief	Effects of the Proposed Project	Recommendation
Cultural Resources	Shoreline Resources (e.g., fish, limu, shellfish) [Background Research and Ethnographic Interviews]	The proposed project may affect the integrity of shoreline resources depending on ongoing waste management infrastructure maintenance.	Ensure ongoing waste management infrastructure maintenance for comfort station facilities.
	Paʻakai beds [Ethnographic Interviews]	Harmed during previous endeavors, the resource could be further affected if continued to be used as a site for materials dumping during the proposed project.	Communicate with key knowledge holders such as Gino Dayton to ensure that the paʻakai beds are not further damaged by material dumping that may occur during ground disturbance activities.
	Springs, groundwater lens [Ethnographic Interviews]	The proposed project may affect the integrity of freshwater resources depending on ongoing waste management infrastructure maintenance.	Ensure ongoing waste management infrastructure maintenance for comfort station facilities.
	Iwi kūpuna	Project-related ground disturbance has the potential to encounter iwi kūpuna.	Have an archaeological and/or cultural monitor present during ground-disturbing activities; route work through pre-disturbed areas as much as possible

Table 4. (continued)

	Cultural Resource, Practice, or Belief	Effects of the Proposed Project	Recommendation
Cultural Practices	Shoreline and waʻa-based fishing [Background Research and Ethnographic Interviews]	The proposed project will not affect access to the neighboring shoreline.	None; the proposed project will not affect this practice.
	Traditional and contemporary waʻa practices [Background Research and Ethnographic Interviews]	The proposed project may support waʻa practices by providing needed bathroom and shower facilities.	Ensure the addition of several shower spigots at the central comfort station.
	Limu gathering [Ethnographic Interviews]	The proposed project may affect the integrity of coastal resources depending on ongoing waste management infrastructure maintenance.	Ensure ongoing waste management infrastructure maintenance for comfort station facilities.
	Shark-related practices (e.g., shark riding, feeding, rituals) [Ethnographic Interviews]	The proposed project will not affect traditional shark-related practices.	None; the proposed project will not affect this practice.
	Cultural stewardship of the park [Ethnographic Interviews]	The proposed has the potential to support ongoing community stewardship of the park.	Provide regular maintenance/cleaning of comfort stations to ensure clean, safe facilities for park users.

was unknown amongst the interviewees if there are any iwi kūpuna located directly within the proposed comfort station sites although interviewees stated that burials that were interred around the fishing village and fishpond caretaker residences. One interviewee discussed the potential for the central comfort station to affect the Hoʻeo wind that comes down to Keʻehi from upland Moanalua.

Confidential Information Withheld

No sensitive or confidential information was withheld during the course of researching the current report or conducting the ethnographic survey.

Conflicting Information

No conflicting information was obvious in analyzing the ethnographic interviews. On the contrary, a number of themes were repeated and information was generally confirmed by independent sources.

Recommendations

There was general support for the proposed improvements to Keʻehi Lagoon Beach Park, particularly for the addition of the proposed comfort stations near the hālau waʻa. Several interviewees were tentative about the project, however, given a previous lack of communication from government institutions prior to project implementation (e.g., parking barriers). Thus, transparent and continuous conversation with community, particularly with the hele waʻa community, is recommended moving forward. The primary concern of the

interviewees was that the comfort stations will require regular maintenance and attention to maintain them as safe and clean facilities given the houseless population at Keʻehi Lagoon Beach Park.

The interviewees recommended the following for the project:

- increase cultural thinking and cultural visioning in the management of Keʻehi Lagoon Beach Park
- include an understanding of the reverence of the ʻāina of Moanalua and of Keʻehi, for the plants and pōhaku
- actively involve the community in future planning and maintain transparent communication throughout the project process and future park endeavors
- conduct cultural protocol prior to commencing work on the project
- keep the bathroom slated to be demolished in place until the new comfort stations are constructed
- do not remove historic pine trees near the official's stand
- increase management of the feral cat population
- maintain the area as a recreational space for the public and do not pursue commercialization of the space
- ensure that there are individuals who have relationship to Keʻehi and/or Moanalua included in the team working on the comfort stations project to ensure intuition-based and feelings-grounded attention to place as well as awareness of spiritual boundaries
- take care of current native trees at the park (e.g., the niu trees) and restore native vegetation to the beach park including species such as wiliwili, naupaka, and pāʻū o Hiʻiaka
- use traditional Hawaiian name(s) for the beach park and Hawaiian signage on the comfort stations
- provide historic displays to educate park users on the rich history and moʻolelo of Keʻehi
- increase the number of shower stations
- ensure that there is monitoring and maintenance of the comfort stations; one recommendation to accomplish this is to increase the number of staff assigned to Keʻehi Lagoon Beach Park

KA PA‘AKAI ANALYSIS

The objective of a Ka Pa‘akai analysis is to protect traditional and customarily exercised Native Hawaiian rights. This chapter begins with a brief history of Ka Pa‘akai analyses in Hawai‘i, and then addresses these three topics:

1. What and where are the valued cultural, historical, or natural resources within the project area and to what extent are traditional and customary Native Hawaiian rights exercised in the project area
2. The extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the Proposed Action
3. What feasible action, if any, could be taken to reasonably protect Native Hawaiian rights

History of Ka Pa‘akai Analyses

The Hawai‘i State Constitution (Art. XII §7) maintains that:

> The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua‘a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights.

Several fundamental court cases inform on the history of the Ka Pa‘akai Analysis. The first of these occurred in 1982 with *Kalipi v. Hawaiian Trust Company, Ltd.* in which a Native Hawaiian landowner on Moloka‘i (Kalipi) required access to undeveloped land for gathering rights. Kalipi claimed that because he owned land in the ahupua‘a, he should be allowed access for gathering in that ahupua‘a, as was customary in pre-contact Hawai‘i. The Court determined that “lawful occupants of an ahupua‘a may, for the purposes of practicing Native Hawaiian customs and traditions, enter undeveloped lands within the ahupua‘a to gather those items.” The Court recognized that allowing access to private property for gathering purposes might conflict with the modern concept of fee simple land ownership and recommended that this issue should be determined on a case-by-case basis (Jarman and Verchick 2003:208).

A key term in *Kalipi v. Hawaiian Trust Company, Ltd.* is “undeveloped,” as this prevents occupants from accessing developed property for gathering purposes. In a discussion of this and other relevant legal proceedings, Jarman and Verchick 2003:209 state that:

> In the case of “fully developed” land, the court suggested that the burden of providing cultural access might prove unreasonable. But where a project was still in the planning stage, that is, “less than fully developed,” a planning commission might be required to forge a compromise in which both native Hawaiians and resort guests could happily share the land.

A decade after *Kalipi v. Hawaiian Trust Company, Ltd.*, in 1992 *Pele Defense Fund v. Paty* was initiated for entry into the Wao Kele ‘O Puna Forest Reserve by tenants of the neighboring ahupua‘a to “exercise traditional and customary rights” in the reserve. This tested the statement in *Kalipi v. Hawaiian Trust Company, Ltd.* that specifically limited access to “lawful occupants” of the ahupua‘a. In *Pele Defense Fund v. Paty*, the Court rejected the idea that traditional gathering rights are limited to the ahupua‘a by the lawful occupants of that ahupua‘a and affirmed that these rights derive not solely from land ownership but also from the established customs observed by Native Hawaiians.

In 2000, Ka Pa‘akai O Ka ‘Aina v. Land Use Commission laid the framework for the Ka Pa‘akai Analysis by determining “what analysis state and county agencies [must] undertake to ensure they adequately balance private property rights with Native Hawaiian gathering rights” (Jarman and Verchick 2003:210).

This case originated over the dispute of a Land Use Commission (LUC) determination to reclassify 1,000 acres on Hawai‘i Island from a Conservation District to an Urban District, in response to expansion of a resort. This expansion was in direct conflict with Native Hawaiian practices that were taking place on the land, and the LUC made a general statement that the developer should “preserve and protect any gathering and access rights of Native Hawaiians.” It was argued that these minimal initiatives were insufficient, resulting in the Ka Pa‘akai O Ka ‘Aina v. Land Use Commission case. The Court did find that the statement made by the LUC was insufficient, and they established a standard for the LUC to adhere to when cultural land-use rights were in question. The Court delineated three points that the LUC is required to consider when formulating their findings and conclusions:

> (1) the identity and scope of “valued cultural, historical, or natural resources” in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area; (2) the extent to which those resources -- including traditional and customary native Hawaiian rights -- will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the LUC to reasonably protect native Hawaiian rights if they are found to exist.

In other words, the Ka Pa‘akai Analysis was designed to identify any cultural resources or practices that occur in the project area, determine if the proposed project will affect the resources or practices, and offer recommendations to protect Native Hawaiian rights if the project moves forward. A cultural practice is considered a traditional and customary Native Hawaiian right if it is rooted in a traditional (pre-1778) Hawaiian custom and carried out for subsistence, cultural, or religious purposes. The practice must also be connected to the ‘āina and its resources. Native Hawaiian cultural and spiritual identity are inextricably intertwined with the ‘āina, and traditional Hawaiian customs and practices emphasize its respect and care. Plant gathering, coastal access, and water use are examples of traditional and customary Native Hawaiian rights.

In addition, Sea Grant notes the following regarding traditional gathering rights:

> Native Hawaiian gathering rights are addressed in HRS §§1-1 and 7-1, and in Article 12 §7 of the Constitution of the State of Hawai‘i. In order to legally exercise these constitutionally protected native Hawaiian rights of gathering, a person must establish the following three factors.
>
> > (1) He or she must qualify as “native Hawaiian” within the guidelines set out in Public Access Shoreline Hawaii (PASH) v. Hawai’i County Planning Com’n, 903 P.2d 1246, 1270…
> >
> > (2) Once qualified as a native Hawaiian, he or she must then establish that his or her claimed right is constitutionally protected as a customary or traditional native Hawaiian practice…
> >
> > (3) He or she must also prove that the exercise of the right will occur on undeveloped or “less than fully developed property…” (Sea Grant 2018)

Ka Pa‘akai Analysis Topics

As noted above, this Ka Pa‘akai analysis aims to protect traditional and customarily exercised Native Hawaiian rights. The three Ka Pa‘akai Analysis topics delineated at the beginning of this chapter are addressed below.

1. What and where are the valued cultural, historical, or natural resources within the project area and to what extent are traditional and customary Native Hawaiian rights exercised in the project area

Several cultural and natural resources were identified within the project area through background research, past archaeological studies, and the ethnographic study. These traditionally included tidepools and lagoons

used for subsistence gathering of resources such as limu, fish, and shellfish, as well as ʻalaea and paʻakai beds. Kaloaloa Fishpond (SIHP 50-80-13-00080) is located immediately to the west of the project area. Sharks may be considered a natural resource, as a myriad of shark-related beliefs and practices were shared as ongoing within Keʻehi. Several of the interviewees discussed the potential for iwi kūpuna to be found within the project area and there was uncertainty if there could be iwi subsurface of the proposed comfort station locations.

Ethnographic interviews identified several cultural rights that continue to be exercised within Keʻehi Lagoon Beach Park. These include hele waʻa (both contemporary and traditional waʻa), access of nearby fishponds (e.g., the fishpond at Mokauea Island), engaging in shark relationships, fishing (primarily of pāpio, ʻōʻio, mullet, and flounder), and cultural stewardship (cleaning and caretaking of the park).

2. The extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the Proposed Action

A general sense of loss and diminishment of cultural and natural resources was shared for Keʻehi. Interviewees remarked on declining abundances of subsistence resources in recent years and increasing levels of pollution (sewage and other contaminants). Extensive dredging and land reclamation filled former fishponds and wetlands to build new runways and military facilities has transformed the cultural and natural resources of the project area that existed prior to the 1930s. Any subsurface resources would most likely have been overlaid by fill land, believed to have originated from marine dredging at Keʻehi Lagoon and the Pearl Harbor entrance during large-scale infilling projects undertaken by the U.S. military between ca. 1931 and 1943.

Specific past harms include diminished cultural access due to decreased parking spaces [within the project area], burying of traditional paʻakai beds [within the project area], diminishment of subsistence and swimming uses of Keʻehi Lagoon due to high levels of pollution [within the project area], and loss of access to gather shellfish (ʻopihi and oysters) for subsistence due to pollution [within the project area] and FAA (Federal Aviation Administration) access limitations outside the reef runway [outside of the immediate project area]. The proposed project may contribute to some of these past harms, depending on ongoing waste management infrastructure maintenance and where project-related materials are dumped.

The addition of comfort stations to Keʻehi Lagoon Beach Park during the proposed project may positively affect the hele waʻa community by providing needed additional restroom and shower facilities. Cultural access (for voyaging, hele waʻa, and fishing) will not be affected by the proposed project. Access to visit other islands in Keʻehi including Mokauea, Kahakaʻulana, and Mokueo likewise will not be affected by the proposed project.

3. What feasible action, if any, could be taken to reasonably protect Native Hawaiian rights

Feasible actions to protect Native Hawaiian rights include routing work through pre-disturbed areas as much as possible, having archaeological and/or cultural monitors present during ground disturbance, continuing to have open and transparent conversations with community members, particularly the hele waʻa community, providing additional parking in future projects to rectify recent losses in parking that hinder cultural access, ensuring that any material that is excavated during ground disturbance is not then placed upon a cultural resource such as was done with the paʻakai beds, working with Gino Dayton and other practitioners to remediate harm done to the paʻakai beds, and providing historical signage and/or displays to provide education regarding Native Hawaiian histories within Keʻehi. As pollution and sewage influx are some of the primary concerns of park users (as it greatly affects cultural and natural resource health) every effort should be made to ensure that the added comfort stations have high quality waste management,

plans for leakage, and ongoing maintenance. Security of comfort stations should also be maintained so that park users can use them safely without worries about the houseless population.

Conclusion

The results of the Ka Paʻakai Analysis show that Keʻehi Lagoon Beach Park remains a site of ongoing Native Hawaiian cultural rights and resource persistence despite significant historical change. The area supports active cultural resources and rights, particularly within the realms of hele waʻa, fishing, cultural stewardship, and shark relationships. The scope of the proposed project's impacts on Native Hawaiian rights will depend on the quality of waste management systems installed and continued maintenance and security of these systems, if subsurface cultural resources or iwi kūpuna are encountered during ground disturbance, and sensitivity to community needs and cultural resources such as the paʻakai beds that were harmed in the past. Because cultural resources at Keʻehi have already been heavily diminished, even small additional impacts could further restrict access and cultural rights. Therefore, strong protections, community involvement, and careful environmental management are essential to prevent further harm and to sustain Native Hawaiian rights in the project area.

GLOSSARY

ahupua‘a Traditional Hawaiian land division usually extending from the uplands to the sea.

‘āina Land.

akua God, goddess, spirit, ghost, devil, image.

‘alaea Red ocher.

ali‘i Chief, chiefess, monarch.

aloha Love, affection, compassion, sympathy, kindness, greeting.

‘aumakua Family or personal gods. The plural form of the word is ‘aumākua.

awa The milkfish, or *Chanos chanos*, often raised in fishponds in ancient times.

banana The mai‘a, or *Musa* sp., whose fruit was eaten and leaves used traditionally as a wrapping for cooking food in earth ovens.

basalt Volcanic rock.

brah Pidgin (Hawaiian Creole English) for brother, friend, man.

breadfruit The Polynesian-introduced tree *Artocarpus altilis*, or ‘ulu.

bougainvillea The popular ornamental plant *Bougainvillea spp.* with colorful blooms, native to Brazil.

choke Pidgin for plenty, a lot.

coconut The palm tree *Cocos nucifera*, or niu in Hawaiian.

Diamond Head Place name east of Honolulu, used as a directional term.

false kamani The tropical almond tree, or *Terminalia catappa*, a post-Contact introduction to Hawai‘i.

going, goin’ Pidgin for will.

hala The indigenous pandanus tree, or *Pandanus odoratissimus*, which had many uses in traditional Hawai‘i. Leaves were used in mats, house thatch, and basketry; flowers were used for their perfume; keys were utilized in lei and as brushes; roots and leaf buds were used medicinally; and wood was fashioned into bowls and other items.

hālau Meeting house for hula instruction or long house for canoes.

hale House.

hānau To give birth.

hapa haole A person who is of diverse ethnic makeup; often part Caucasian.

hau The indigenous tree *Hibiscus tiliaceous*, which had many uses in traditional Hawai‘i. Sandals were fashioned from the bark and cordage was made from fibers. Wood was shaped into net floats, canoe booms, and various sports equipment and flowers were used medicinally.

haumana Student, apprentice.

hea Pidgin for here.

he‘e Octopus (*Polypus* sp.).

hele wa‘a Refers to the movement of canoes, paddling, racing.

heiau Place of worship and ritual in traditional Hawai‘i.

Hi‘iaka Most commonly refers to Hi‘iakaikapoliopele, the youngest sister of the goddess Pele, although all twelve of Pele’s younger sisters have Hi‘iaka as the first part of their names.

hīna‘i Basket or container made of the ‘ie vine or hala leaves.

hoe Paddle; to paddle.

holoholo To go out or go for a walk or ride.

hui A club, association, society, company, or partnership; to join, or combine.

hula The hula (traditional Hawaiian dance), a hula dancer; to dance the hula.

i‘a Fish or other marine animal.

‘ike To see, know, feel; knowledge, awareness, understanding.

imu Underground pit or oven used for cooking.

inoa Name, title, or namesake.

ipu ‘awa‘awa The gourd *Lagenaria siceraria* that has a bitter-tasting pulp and was traditionally used as medicine. Once soaked in sea water, the strong smell is eliminated.

iwi Bone.

Kahiki A far away land, sometimes refers to Tahiti.

kahiko Ancient, old, long ago; an aged person.

kahu Honored attendant, guardian, nurse, keeper, administrator, pastor.

kahuna An expert in any profession, often referring to a priest, sorcerer, or magician.

kai Sea, sea water; area near the sea, seaside, lowlands; tide, current in the sea; insipid, brackish, tasteless.

kalo The Polynesian-introduced *Colocasia esculenta*, or taro, the staple of the traditional Hawaiian diet.

kama‘āina Native-born.

kamani The Polynesian-introduced tree, *Calophyllum inophyllum*, that had many uses in ancient Hawai‘i. Nuts were fashioned into whistles, nut oil was used as a polish for wooden containers and as a fuel for lamps. Flowers were used for scenting kapa, fruit husks were made into a brownish mauve dye, and wood was manufactured into bowls.

kanaka Human, person, man, Hawaiian. Plural: kānaka.

kāne Man, husband, male.

kapu Taboo, prohibited, forbidden.

kaua War, battle; to fight; army.

kauila The name for two types of buckthorn trees native to Hawai‘i (*Alphitonia ponderosa* and *Colubrina oppositifola)*. Produced a hard wood prized for spear and a variety of other tool making.

kaumaha Heavy, heaviness. Fig., sad, troubled.

keia This, this person, this thing, the latter.

keiki Child.

kiawe The algaroba tree, *Prosopis* sp., a legume from tropical America, first planted in 1828 in Hawai‘i.

kine Pidgin for kind; type.

kō The Polynesian introduced *Saccharum officinarum*, or sugarcane, a large grass traditionally used as a sweetener and for black dye.

koa *Acacia koa*, the largest of the native forest trees, prized for its wood, traditionally fashioned into canoes, surfboards, and calabashes.

koa haole The small tree *Leucaena glauca*, historically introduced to Hawai‘i.

konohiki The overseer of an ahupua‘a ranked below a chief; land or fishing rights under control of the konohiki; such rights are sometimes called konohiki rights.

koko Blood.

Kū The Hawaiian god of war.

kuleana Right, title, property, portion, responsibility, jurisdiction, authority, interest, claim, ownership.

kumu Teacher.

kumu hula Hula teacher/master.

kupua Demigod, hero, or supernatural being below the level of a full-fledged deity.

kupuna Grandparent, ancestor; kūpuna is the plural form.

lā‘au Medicine, medical, trees, plants.

lā‘au lapa‘au Medicine.

lanai Porch, veranda.

lauhala Leaf of the hala, or pandanus tree (*Pandanus odoratissimus*), used for matting and basketry.

lawai‘a Fisherman; to catch fish.

lehua The native tree *Metrosideros polymorpha*, the wood of which was utilized for carving images, as temple posts and palisades, for canoe spreaders and gunwales, and in musical instruments; a taro variety that makes red poi.

leina To leap or spring. Leina ka ‘uhane or leina a ke akua were places where spirits leapt into the nether world.

lepo Dirt, earth; dirty.

limu Refers to all sea plants, such as algae and edible seaweed.

lo‘i, lo‘i kalo An irrigated terrace or set of terraces for the cultivation of taro.

lōlō Crazy.

Lono The Hawaiian god associated with such things as agriculture, rain, and the makahiki, a time of peace.

loulu The fan palm (*Pritchardia* spp.), endemic to Hawai‘i.

lua The ancient style of fighting involving the breaking of bones, dislocation of joints, and inflicting pain by applying pressure to nerve centers. Also means two.

mahalo Thank you.

Māhele The 1848 division of land.

maʻi Sickness; sick; menstruating.

maiʻa Banana.

maika Ancient Hawaiian game suggesting bowling.

maikaʻi Good, well, fine, beautiful, good health.

mākāhā A fish pond sluice gate.

makahiki A traditional Hawaiian festival starting in mid-October. The festival lasted for approximately four months, during which time there was a kapu on war.

makai Toward the sea.

makani Wind, breeze.

manaʻo Thoughts, opinions, ideas.

manauea A small red seaweed (*Gracilaria coronopifolia*).

mango Trees of the genus *Mangifera*, introduced to Hawaiʻi in the 19th Century and well known for their edible fruit.

mangrove The tree *Rhizophora mangle*, brought to Hawaiʻi in the early 20th Century, known to infest coastal marshes and streams.

manō Shark.

mauka Toward the mountains.

mele Song, poetic composition.

moana Open sea.

moena Mat.

moku District, island.

monk seal The Hawaiian monk seal or ʻīlioholoikauaua, *Neomonachus schauinslandi*, an endangered species endemic to the Hawaiian Islands.

monkeypod A large tree, *Samanea saman*, introduced to Hawaiʻi from tropical America.

moʻo Lizard, dragon, water spirit.

moʻokūʻauhau Genealogy.

moʻolelo A story, myth, history, tradition, legend, or record.

mullet *Mugil cephalus*, or ʻamaʻama, a very choice indigenous fish.

naupaka The native shrub *Scaevola* sp., varieties of which are found both in the uplands and by the sea.

niu The Polynesian-introduced tree *Cocos nucifera*, or coconut.

ogo The edible seaweed *Coronapifolia* or *Gracilaria bursapastoris*, native to Hawaiʻi.

ʻohana Family.

ʻōʻio Ladyfish, bonefish (*Albula vulpes*).

ʻōlelo Speech, language, word; to speak, to tell.

ʻōlelo noʻeau Proverb, wise saying, traditional saying.

oli Chant.

olonā The native plant *Touchardia latifolia*, traditionally used for making cordage.

ʻopihi Limpets, four types of which are endemic to Hawaiʻi: *Cellana exarata* (ʻopihi makaiauli), *C. sandwicensis* (ʻopihi alinalina), *C. talcosa* (ʻopihi koʻele), and *C. melanostoma* (no Hawaiian name). ʻOpihi are a prized food in Hawaiʻi and considered a rare treat today.

paʻakai Salt.

pāhoehoe Smooth lava; surface unbroken.

Pakaʻa The Hawaiian god of the wind.

pakalolo Marijuana (*Cannabis*).

pau Done, finished.

papahele Floor, deck. *Lit.*, walking board.

pāpio A growth stage of various Carangid fishes.

pau Finished.

pāʻū o Hiʻiaka Endemic Hawaiian sprawling vine (*Jacquemontia sandwicensis*).

Pele The Hawaiian goddess of volcanoes and fire.

pili To cling, adhere, touch, join, associate with, be with, be close or adjacent.

pine Trees of the genus *Pinus*, historically introduced to Hawaiʻi.

pō Night, darkness, the realm of gods.

pōhaku Rock, stone.

poi A staple of traditional Hawaiʻi, made of cooked and pounded taro mixed with water to form a paste.

Poliʻahu Snow goddess.

pre-contact Prior to A.D. 1778 and the first written records of the Hawaiian Islands made by Captain James Cook and his crew.

puna wai Spring, fresh water.

puka Hole, void, space, entrance.

sugarcane The Polynesian-introduced *Saccharum officinarum*, or kō, a large grass traditionally used as a sweetener and for black dye.

talk story Pidgin for conversing, discussing; discussion.

tuff Rock formed of compacted volcanic fragments, generally smaller than 4 mm in diameter.

tūpuna Grandparent, ancestors.

ua Rain.

‘uhane Spirit.

uhi The yam *Dioscorea alata*, commonly grown for food.

uka See mauka.

‘ulu The Polynesian-introduced tree *Artocarpus altilis*, or breadfruit.

wa‘a Canoe, paddlers.

wahi pana Sacred places or legendary places that may or may not be kapu, or taboo.

wā kahiko Days of old, traditional times.

wai Water or liquid other than salt water.

wauke The paper mulberry, or *Broussonetia papyrifera*, which was made into tapa cloth in traditional Hawai‘i.

wāwae‘iole The edible seaweed *Codium edule*, or antler seaweed.

wiliwili The tree *Erythrina sandwicensis*, whose light weight wood was used for surfboards, canoe outriggers, and net floats in ancient times.

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APPENDIX A: AGREEMENT TO PARTICIPATE

Proposed Improvements at Keʻehi Lagoon Beach Park Project

Gina McGuire, Ethnographer, Keala Pono Archaeological Consulting

You are invited to participate in a Cultural Impact Assessment (CIA) and Ka Paʻakai Analysis for the Proposed Improvements at Keʻehi Lagoon Beach Park Project in Moanalua Ahupuaʻa, ʻEwa Moku, Island of Oʻahu (herein referred to as "the Project"). The Assessment is being conducted by Keala Pono Archaeological Consulting (Keala Pono), a cultural resource management firm, at the request of PBR Hawaii & Associates. The ethnographer will explain the purpose of the Assessment, the procedures that will be followed, and the potential benefits and risks of participating. A brief description of the Assessment is written below. Feel free to ask the ethnographer questions if the procedures need further clarification. If you decide to participate, please sign the attached Consent Form. A copy of this form will be provided for you to keep.

Description of the Project

This CIA and Ka Paʻakai Analysis is being conducted to collect information about the Project in in Moanalua Ahupuaʻa, ʻEwa District, through interviews with individuals who are knowledgeable about this area, and/or about information including (but not limited to) cultural practices and beliefs, moʻolelo, mele, or oli associated with this area. The goal of this Assessment is to identify and understand the importance of any traditional Hawaiian and/or historic cultural resources, or traditional cultural practices within the Project. This Assessment will also attempt to identify any effects that the proposed development may have on cultural resources present, or once present within the Project area.

Procedures

After agreeing to participate in the Assessment and signing the Consent Form, the ethnographer will digitally record your interview and it may be transcribed in part or in full. The transcript may be sent to you for editing and final approval. Data from the interview will be used as part of the ethno-historical report for this project and transcripts may be included in part or in full as an appendix to the report. The ethnographer may take notes and photographs and ask you to spell out names or unfamiliar words.

Discomforts and Risks

Possible risks and/or discomforts resulting from participation in this Assessment may include, but are not limited to the following: being interviewed and recorded; having to speak loudly for the recorder; providing information for reports which may be used in the future as a public reference; your uncompensated dedication of time; possible misunderstanding in the transcribing of information; loss of privacy; and worry that your comments may not be understood in the same way you understand them. It is not possible to identify all potential risks, although reasonable safeguards have been taken to minimize them.

Benefits

This Assessment will give you the opportunity to express your thoughts and opinions and share your knowledge, which will be considered, shared, and documented for future generations. Your sharing of knowledge may be instrumental in the preservation of cultural resources, practices, and information.

Confidentiality

Your rights of privacy, confidentiality and/or anonymity will be protected upon request. You may request, for example, that your name and/or sex not be mentioned in the Assessment material, such as in written notes, on tape, and in reports; or you may request that some of the information you provide remain off-the-record and not be recorded in any way. To ensure protection of your privacy, confidentiality and/or

anonymity, you should immediately inform the ethnographer of your requests. The ethnographer will ask you to specify the method of protection and note it on the attached Consent Form.

Refusal/Withdrawal

At any time during the interview process, you may choose to not participate any further and ask ethnographer for the tape and/or notes. If the transcription of your interview is to be included in the report, you will be given an opportunity to review your transcript, and to revise or delete any part of the interview.

APPENDIX B: CONSENT FORM

Consent Form

I, _____, am a participant in the Cultural Impact Assessment (Assessment) and Ka Paʻakai Analysis for the Proposed Improvements at Keʻehi Lagoon Beach Park (herein referred to as "the Project"). I understand that the purpose of the Assessment is to conduct oral history interviews with individuals knowledgeable about the Project and the surrounding ahupuaʻa in an effort to identify and protect traditional cultural practices and cultural resources.

_____ I understand that Keala Pono Archaeological Consulting (Keala Pono) and/or PBR Hawaii Associates (the client) will retain the product of my participation (digital recording, transcripts of interviews, etc.) as part of their permanent collection and that these materials will only be used for scholarly, educational, and/or land management purposes.

_____ I hereby grant to Keala Pono and the client the right to use the property that is the product of my participation (e.g., my interview, written materials, and any other materials I provide) for the Assessment as stated above. By giving permission, I understand that I do not give up any copyright or performance rights that I may hold.

_____ I also grant to Keala Pono and the client my consent for any photographs provided by me or taken of me in the course of my participation in the Assessment to be used, published, and copied by Keala Pono and/or the client and its assignees in any medium for purposes of the Assessment.

_____ I agree that Keala Pono and the client may use my name, photographic image, biographical information, statements, and voice reproduction for this Assessment without further approval on my part.

_____ If transcriptions are to be included in the report, I understand that I will have the opportunity to review and edit my transcripts to ensure that they accurately depict what I meant to convey. I understand I have the power to delete any information I deem too sensitive and/or too personal for publication from the transcript. I also understand that if I do not return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the draft Assessment, although I will still have the opportunity to make revisions during the draft review process.

_____ I further understand that not giving my consent to any portion of the above listed items will not prevent my manaʻo being included in the Assessment. For example, I may decline Keala Pono or their client permission to use my photographic image or biographical information but by signing this Consent Form, still grant my permission for my manaʻo to be included in the text of the Assessment.

By signing this consent form, I am acknowledging that I have been informed about the purpose of this Assessment, the procedure, how the data will be gathered, and how the data will be used. I understand that my participation is strictly voluntary, and that I may withdraw from participation at any time without consequence.

Consultant Signature **Date**

Print Name **Phone**

Address

Thank you for participating in this valuable study.

APPENDIX C: TRANSCRIPT RELEASE FORM

Transcript Release

I, _____, am a participant in the Cultural Impact Assessment and Ka Paʻakai Analysis for the Proposed Improvements at Keʻehi Lagoon Beach Park (herein referred to as "the Project") and was interviewed for the Assessment. I have reviewed the transcripts of the interview and agree that the transcript is complete and accurate except for those matters delineated below under the heading "CLARIFICATION, CORRECTIONS, ADDITIONS, DELETIONS."

I agree that Keala Pono Archaeological Consulting and/or PBR Hawaii Associates, may use and release my identity, biographical information, and other interview information, for the purpose of including such information in a report to be made public, subject to my specific objections, to release as set forth below under the heading "OBJECTIONS TO RELEASE OF INTERVIEW MATERIALS."

CLARIFICATION, CORRECTIONS, ADDITIONS, DELETIONS:

OBJECTIONS TO RELEASE OF INTERVIEW MATERIALS:

_____

Participant Signature **Date**

_____

Print Name **Phone**

_____

Address

APPENDIX D: INTERVIEW WITH RODDY AKAU & ISAIAH BURCH

TALKING STORY WITH
KAHU RODDY AKAU (RA) & ISAIAH BURCH (IB)
Oral History for the Keʻehi Lagoon Beach Park Improvements Project by Gina McGuire (GM)
For Keala Pono [March 4, 2026]

[Recording starts]

GM: If you guys want to start, introduce yourself, where you grew up and little bit background.

IB: Okay, um, I'm Isaiah Burch. I'm from Nānākuli....

GM: Where did you go to school?

IB: I went to school in ʻAiea, I wen' ʻAiea High School. Yeah. Kay.

RA: My name is Rod Akau, I grew up in Kalihi. Uh, lived Kalihi all my life. Went, graduated from Farrington. Yeah. Lived here all my life.

GM: Are you by any chance related to Uncle Adrian Akau, lives out in Kaʻū now?

RA: Yeah, I, I know some of them from Kawaihae, all of ʻem. In Kona, right across, yeah?

GM: Oh, okay. Kohala side.

RA: Yeah, that's why, when you rent car you get discount, yeah?

GM: [Laughter]

RA: But, you know what I mean? Yeah, I heard of dem. I heard of dem. I don't know them in person. But uh, like everything else, yeah, nowadays. [Laughter]

GM: Um, and then can you guys share anything about your ʻohana background, moʻokūʻauhau, anything you want to share about that?

IB: Um, so my, my dad's side, is from Kapō, Maui. And then, my mom's side dem is from ʻAiea. Is that enough?

GM: Yeah.

RA: Ho, yeah. My family were first inhabitants for Moanalua, yeah? Dating back to the sixth century, you know, through the years. I didn't know I was going to be involved in all this [gestures]. You get a calling, yeah? It's the greatest gift you can ever receive, is to honor your calling. Yeah. 32 years ago things started shifting, a lot of things were happening. Started to find out about the moʻokūʻauhau and who they were and what they was. And this whole place and the, that's what makes it so interesting. And the people went back in those days and figured it out. High ranking, they made the laws, how to live and everything, how to manage this whole area. Just this ahupuaʻa. So. Like I said, was the breadbasket and all the people involved were, they had stature.

My mom is from the Big Island, we have extensive family up there. So that's my second home there. Yeah, I get to go back and forth. I do so much, I get so much on my plate, this is like my right hand [points to Isaiah]. I have so much on my plate, I mean it's a lot, the military, the State, as a consultant. I mean, this is great. I look at this as a spiritual. I wouldn't have come here, I had no thought of coming here. I come here, I see everything the way it was when I was younger, could see right across. Now you cannot see nothing. You know what I mean? Hard to accept change. All the people that used to live here that... We're so excited when all the stories growing up like that. And this was the main area, this was, Moanalua was a central gathering place. The population was there back in the 14th century, was over 5 million and they knew how to live, the mountain, the ocean, was a system, yeah? That's what made it so... the hospital up there, that was the seat of orchestration. Manage everything, Kona District, ʻEwa District. This area here was Costco, they had ʻem all man. Yeah. And there's so much, there's so much information. This is just information here. There's so much up there, just focusing right here.

GM: I know we were talking about, when we first got here, about all of the different, heʻe and different things...

RA: Yeah, had all that. We had all the flounders and the mollusks, we had everything. Nowadays, you can't even go over here and catch one mosquito fish, you know what I mean?

GM: [Laughter]

RA: You cannot catch anything! Yeah, there's a lot of hammerheads inside.

GM: Mmmm.

RA: But they're safe, you know? Hammerheads, the big ones, but the small ones, they alright.

GM: And it's like a nursery?

RA: Yeah right inside here, yeah. Because of that mangrove, yeah? Yeah, I mean, this is really bad ʻcause you got it all along the water, all the bushes. It's not sand it's all silt. All sludge in this water. It's getting a lot worse because of all the gasoline, oil. It's all a commercial area, the military, you know but that's a reality today. So that's why I'm a practicing lāʻau lapaʻau. That's what helps me consciously get through this times, save your life, you know what I mean? Lāʻau lapaʻau shapes you, gives you that sixth sense sight for everything. You always goin' know before. What happens, whatever it is.

GM: You learned from Papa Henry?

RA: Yeah, the old man, yeah. I spent five years with him. Learned a lot. He was the last traditional guy. My family were all practitioners too so I'm glad I have the support. We're working with the military now up there [points].

GM: Up by Tripler kine? Or?

RA: Yeah, that's called the hill of strangulation, that. Mōkapu, Kāneʻohe yeah? Mōkapu, a dangerous place traditionally. If you do stuff like that, you gotta look at the islands, yeah? The islands are all feminine. From Pele to Poliʻahu, the islands, it's all feminine. You gotta take accountability, you gotta take care of the land. She reacted. And people not paying attention because a lot of them they nevah of the ʻāina. You gotta come from the ʻāina. You gotta feel it, you cannot come here live 30, 40 years, it doesn't... cannot. You gotta grow up. That's what it's all about.

Like me, before used to come down here pick limu, catch fish, everything, now grab your shopping cart. [Laughter] You know what I mean? I mean, that's the reality, yeah? Yeah, man, hard to accept change. This whole area. My family, they were lords of the land. From way back. Um, but, we have that blood, we have that vibration, that you know, that care. You know, it's amazing. Every day you get up, something has to happen. Something. [Helicopter flies overhead, inaudible] I consult with lot of people, you're the next one, and it's that person, it's not like, I gotta pick and choose. You know, today, this is the story. This is today's story, you.

GM: Oh well, I'm very lucky to be here with you both.

RA: This is all, this is today's story, you know, you come with this vibration, this intention. And how I feel, that's what's gonna come out. Because tomorrow, with somebody else it'd be a whole different vibration. You know, I not going joke, [laughter] it all depends on the situation, you know? But the State, the city, always has something. You know, you gotta really look at it nowadays. Really gotta look at it, a lot of questions. And you know, so, as an archaeologist, always know, you know what their motto is?

GM: No.

RA: Archaeologists, their motto is, "Never stop digging."

IB: Oh yeah, yeah, yeah.

RA: And you know, they could put better trees. See that's where it starts. When you do land, you no just bring in bougainvillea, I mean, you cannot. Like I said, Hawai'i, it's alive. You gotta give 'em respect. You gotta plan. All this gotta go. I can see the coconut tree with no nuts. That's why, you know, it's getting all skinny and goin' die. You gotta have nuts ontop there.

GM: Not taking care of what they already have?

RA: Well they don't have the 'ike. I mean, this a kamani yeah? [Points at the tree that they were sitting under]

IB: This one? This the false, yeah? False kamani.

RA: See. False kamani. Where from, Somalia?

IB: [Laughter]

RA: You know? Um, you know, you gotta bring something that is connected. Respect the land. They put monkeypod trees, you know, you gotta... so when people, the energy. See everything has life, energy, like medicinal plants. Energy. Your spirit. That's how you connect. You gotta, you look around here. You know, I mean, you gotta give the land, you gotta aloha the land. Respect. But, you know?

GM: You remember what kine trees? What the area looked like when you were keiki?

RA: This was all, this was all tide pools.

GM: This was all water?

RA: Yeah. Would cover all this, all the way down to the post office. At the airport, you know when your plane came in? Right there [slaps hands together]. All of that was all...

IB: When bury some of the islands.

RA: Just the way they removed the people, just the way they got them out. They had… they was just, you know… my dad was part of that generation.

IB: Said you used to paddle the river over here too, yeah?

RA: Yeah, they used to come out from the mountainside like that. Would come out right out hea and then back in. This was all fishponds [pointing]. They couldn't, the Hawaiians couldn't fish from the fishponds.

IB: Cause the Damons?

RA: Yeah, they take you to court. I mean, you couldn't, you know.

IB: You get the letter from them too, yeah? That said they was the konohiki and they got...

RA: Yeah I got all that. But they was tryin' to... they wanted to buy all, they wanted all the fishing rights. They wanted to get 'em all out. But this is just this area, because this is the richest, was the richest, and still the richest ahupua'a. You got four military bases, you got Air Force, Coast Guard, this is all in the ahupua'a. Because of water. 16 million gallons of water come out of that valley to serve every day. 75 percent of the ahupua'a of Moanalua is all military. Because of the water. Pōhakuloa. Water. You know? This was the, this was essential right here.

GM: Can you both speak a little bit to your relationship with Moanalua?

IB: Okay. Yeah, so, um, I mean, my relationship with Moanalua is, I really just discovered it through him [referring to Kahu Roddy], by following him. Came to him to learn lā'au. And then ended up learning so much more. I thought I was going learn like, you know, my dad had just gotten diagnosed with diabetes and he had aneurysms in the back of his eyes, yeah? And then um, that was spooky because everyone thought he was gonna die, like next week kine. And then so I thought that's why I went into lā'au, yeah? And then it became about more than just him, yeah? Nānākuli is the highest population of Hawaiians anywhere in the world. The highest density. And everybody's sick. You know what I mean? My next door neighbor all grew up without dads.

RA: Because of the military.

IB: And then um, you just watch how, the lifestyle in Nānākuli and what we known for, and whatever that is, that's what most Hawaiians are going tru. You know, Nānākuli is known for the poverty, the fighting, the crime, right, you know so, there's a lot of work to try and change that now. And I saw lā'au as being able to do my part for my community. And then I came and met him and became so much more than that. Even though that sounds like it's a big thing, yeah? But I mean, it's, that's only 10 percent of the whole thing. You know?

[They talk about the rail as it goes by]

RA: But yeah, my purpose is the culture and bringing people together. Because, when we started? In 2019?

IB: Yeah.

RA: 'Cause bringing them together, 'cause nowadays, you know, majority is all women in the class. You look back, from way back in the day, the women were the healers, they were the ones. Having the women,

mostly, for someplace to come. And learn and be with this hui. It's powerful, I see their lifestyles change, I see his lifestyle change.

IB: Oh yeah.

RA: Because lāʻau lapaʻau is 80 percent spiritual, 20 percent lāʻau. But, yeah, well my role is, we're the only lāʻau lapaʻau school in the Hawaiian Islands. Everybody do workshops but the schools were here, for hula, lua, for everything. This was the center on Oʻahu, people came here. And my family were a part of the whole structure from the beginning. The prayers, and all this... sacred stuff. And if they give us Hawaiians a goal, you watch how many people we would attract. But it can create a threat. The ʻike. You know what I mean?

People, we don't have a Hawaiian cultural center. The Japanese, Chinese, Korean does. It's the feel—it's spiritual. You know? I studied Buddhism, stuff like that. Japanese culture. The Japanese, they got the ki. Aloha is more peace. It's the presence of god. My ancestors gave me all this. I didn't go to UH for all this. It just came. Either you got it or you don't. We all born with gifts, you know what I mean, certain gifts and if you don't know what you're supposed to do in this lifetime, you end up hanging around the wrong people. You get two types of walks, right or wrong, choose the right one. Every thought is like a sacred prayer, that's what you gotta choose. How you get up in the morning, how you set your day. You gotta multitask. What do you do? Beside your job?

GM: I weave lauhala... sails.

RA: [To Isaiah] Oh we're gonna sail, where we going, Tangaroa? [Laughter] I tell you something. When you weave, yeah, I tell my students. When you weave, patience, humility. Your whole mind, body, spirit. And when you're done, he's done what, three, four mats? His first one...

IB: My first one, was like… [laughter]

RA: And it tells you a lot what was going. Your whole body. It's humility. Humility is so prized a virtue in Hawaiian culture. You can master humility... when you make lauhala mat, all of you is humility. You look at it, it's so special. It's a special thing. When you started?

GM: I went Molokai with, I don't know if you know Uncle Kaʻohu Seto but we were making hīnaʻi, burial baskets.

RA: Oh yeah? Okay.

GM: And then a moena for lāʻau. Do you know Kumu Keoki Baclayon?

RA: I heard of him.

IB: Oh yeah, yeah, yeah.

GM: And then he had us make a moena and then the sail. Two years?

RA: So you born and raised?

GM: Big Island, yeah.

RA: Where you went, Hilo High?

GM: Uh, I went Kamehameha in Kea‘au.

RA: Oh, oh. That’s when they first opened. What year was that?

GM: ‘02.

RA: And it’s in a nice area. But um, yeah, yeah, I have a role, which became major. You know? We have kuleana, you know? Once you take that spiritual on, your whole life, and it comes with a price. Different kind of lifestyle, you cannot, you answer only to one person, yeah? You meet people, you get, I gotta unload. Sometimes you carry too much. But uh, yeah, you gotta know who you are, lotta people they don’t know who they are. The foundation gotta be strong, yeah? Like I watch a lot of our haumana grow and families heal. You change people. People change. Just being around. You gotta be ready. Gotta have structure. “Oh, what you going do today?”... “I don’t know.” No, no. So I spend a lot of time by myself, in solitude. God takes care of me. Got a lot of land that I can work. Go in the water, the spring, and cleanse. The plants. And that’s what sustains me. That’s the instructions, you gotta have the instructions, then the ingredients come. The instructions involve people, materials... you cannot forget prayer. You gotta pray every morning. You gotta know how to listen, to pay attention, yeah? All this stuff. But my role—I love what I do. But it’s all God’s work. Humanity, mankind. You have kids?

GM: No, I have a horse. [Laughs]

RA: See! Right there. It’s a good feeling when you have support. You gotta have support. Um, yeah, it’s exciting. Every day there’s something new.

GM: You paddled here in high school?

IB: Yeah. [Laughter] This is where all the paddling races happen. So it’s pretty cool to hear him talk about like, I didn’t know how special this place was, yeah? Like high school we used to drink beer right there yeah? You know what I mean? And growing up like that, you know, it was interesting, growing up with Hawaiians, but no one had any thoughts about how special this place is. This all looks exactly how it looked when I was in high school. They had to shut down a race every once in a while ‘cause it had sewage inside of ‘em. Things like that. Looking at that and then making it a part of the story of the continuum of this place. Like, how bad does it have to get for us to not even be able to go in the water? The amount of change that happened just within a few decades, right? Went from one of the most abundant places, you know the ‘opihi and the he‘e and the hammerhead sharks and you know, the fishponds over there, the family going up and down the river to now we cannot even go inside because of sewage in the water.

RA: Lot of the people, the families that came out of here, they had a lot of birthmarks on their bodies. Lot of them had relationship with the sharks. My father, my grandmother. My father, my siblings, they all had the mark of the shark, yeah? They would bury ‘em out here. That’s why I say when they break all the rocks and damage ‘em. Was old cemetery. Everybody wen’ look the other way, you know what I mean? But archaeologists go out there and look at all this kind of stuff. It’s important, you know what I mean? You gotta take care your kuleana. But, nobody see it. There’s a huge graveyard out there. You know?

And it’s about respect, yeah? It’s the only place that there’s no book that got everything. You have one book come out of here, try watch how everybody’s gonna gravitate. So many stories out of this place. The families. And all the supernatural things that get. Beyond the imagination. All the 13 springs they have up here, this area. All mermaids. All that kind of stuff. Think about Mokauea Island. There’s a spring that connects up there to that valley. There’s a spring up there.

GM: You were saying about the connection between the mo‘o and the spring?

RA: So she can travel, yeah. I mean, you, you know, I cannot say, can you imagine? But this is all God's... there's other things underneath this. We're made of volcanic lava tubes, we're different than other states. The way it came up, how it was created. We got things underneath this island, would be a whole different scene. So many stories. With my family being involved, all this kine stuff. You know? The women had the, they had it, was the women. The king cannot rule without the queen. The queens was the one, the females was the ones that um, yeah, every day I get up, there's always something that keeps you in check. Because of the spiritual boundary. Spirituality. I come ova hea, I see money. You know? Everybody gotta fill their pockets. Look at those potted plants down the airport. You know how much a potted plant, wherever you see, dropped off? $16,000 one pot.

IB: Get pakalolo inside those pots? [Laughter]

RA: Get dirt. Look at all those plants. Concrete potted plants when you driving. 16 grand one.

IB: That's what it's all about. You know, they create problems and then they make money off of solving the problems.

RA: Then they all retire! They retire, they no remember what they... you know what I mean?

IB: Like this dredge thing that they did. How much people made money?

RA: This was all, people used to live on the islands. They was their fish. The supermarket was right there. So you change that, everything. Now, today...

IB: There was something about how they had the fish houses out here too.

RA: You know where certain fish was so you go different seasons, you go, the kiawe, kauila. Had names for everything. Had the pāpio, had the red fish. You respect when they're spawning. On this side, then underneath it was organized. The military, that's why they wanted Hawai‘i. Because strategically, the ocean. It's like Pearl Harbor had oysters and clams. Now it's all sludge and, you know? Just gotta eat it, there were times they went through a lot. The Damons thought nobody was goin' know about this place. Everything coming out now. You know what I mean? That's when I write this book I gotta be gone, man. Take off.

IB: No say where you're going now. [Laughter]

RA: No, no but I tell you. There's so much about this place. You know? I did couple podcasts and stuff and they came here with something, it's like, "Wow." But I never know how I going do, you know when you perform, you go on stage? Going be different. What comes out. Like today, I never imagine I was goin' come here. And like, "Oh my god."

GM: I'm curious, what to do they use this area for [pointing at open lawn area]? Or is it just empty?

RA: See, right there! Look at that.

GM: I'm actually curious.

RA: Okay, before, before, you had baseball, you had soccer. On the weekends used to have one game down there, one game over here. Picnicking, used to be choke people. There's no parking in here. And even today. There's no parking. They ticket, that's how they get their money back. No that's how it works. 'Cause the weekdays you see the school bus bussing the kids. Just us giving this place action. Look the homeless just got up. People come here they cannot use that [points to the pavilion]. People sleeping inside there. You

walk in the bathroom you get someone lying down there. Scared use the bathroom. That's why you should always bring your own toilet paper. 'Cause you don't know what they... you know, that's how we gotta think nowadays. You gotta watch when you walk back to your car. It's just, all in fear today. And it's not right. 'Cause those guys are not taught. Too many guys sit in that office. You go down there for pay your parking ticket, the City and County, you go up there. Get 20 windows, one guy working. And everybody waiting.

IB: That's why I no pay my parking tickets.

RA: I know, they looking for you. [Laughter] You just gotta move with it. So you know, getting back to this place, ah. There's always, you know, things you can improve. But you no see the City and County workers, you don't see nobody. Oh yeah, they work 'til 11. They got off at 3:30 so they drive around.

IB: Oh yeah that's my schedule now. [Laughter]

RA: Oh, sorry ah. You get your blue uniform.

IB: [Laughter]

GM: You work at Kamehameha Schools?

IB: Yeah.

RA: Once you get in Kamehameha... You know the alma mater. He just started, I'm happy for him, man. That's like I say, a lot of the students, being in this cohort, I see a lot of them change, brah. That's a gift. Because of the vibration, the energy. There's a time to be serious, there's a time to be joking and stuff but the practice is a serious practice. Involves lifestyles. Life and death. So it makes it good, yeah? It keeps everything going... This ahupua'a is special. We right on the boundary of Kahauiki. We right inside.

GM: I know you mentioned fishing, the fishponds... are there any other gathering practices here that we should be aware of? Or cultural rights we should have on record?

RA: Oh! Oh yeah. You know? Gotta have cultural rights but what is there to? What kine culture you going have ova hea?

IB: Paddle canoes.

RA: I guarantee there's burials underneath here. I guarantee you. Yeah. But it's all covered.

GM: But if they dig?

RA: Well, like, you know, when the rail came right on the boundary, soon as they came, I goin' tell you something, something had to. The pillars. How high you see 'em, that's how far it is underground. And they had to, you know, they had to went over something. Because lots of the fishponds there were people living around 'em, the caretakers. And they buried there... But I goin' tell you something. Eh, there's a lot of, I mean, because they used to live along the shoreline, you know what I mean? And this was all tidepools, where we sitting. We used to go... I mean the limus and everything. This whole shoreline, trade with the mountain, the water come down. Now you get oil and sludge. That's the reality. We gotta do the best we can in these times. But it's good you get information, you know? So they gotta have feelings, yeah? One thing about Hawai'i, whenever you do something, you gotta have feelings. I know a lotta guys in the state, that's all they do, 'cause it's their job. Hawai'i is different. You gotta have feelings when you do stuff. It's like when you cook. When you prepare medicine, you gotta have feelings...

[They talk about education and trade schools]

RA: I guarantee you, I guarantee you. A lot of this area, these people came from a certain class. There were people living around, so they buried right there. So that's one thing you cannot ignore. That's what it is.

IB: I just remember, what you said. Whoever's working on this place, just remember you gotta have pili. So as they building the place you helping to take care the place.

RA: Yeah, you gotta. You gotta have that. You cannot just any Joe Blow guy, you need someone from the area. You know what I mean? You cannot just. And it's real important. But anyway, this place has so much. Just this area.

IB: What does this name mean, Keʻehi, does that mean, like stamped down or something?

RA: Yeah, this was the, like the channel, Kahikilaulani kēia. The first migration she came up here. She when ask the Makaliʻi. For permission to enter. Then she came inside because ah the blue, black mountains. She was on Kauaʻi, she seen ʻem, that's why she came here. So she went up there. So all the names of the mountains up there, that's all my genealogy. That's all the children. But yeah, I tell you, there's a lot of them here because they used to live along the coast. Everything had balance, yeah? Everything was good, pure, and true.

GM: I know you mentioned earlier had place names for each area of it. [Pointing across beach park].

RA: Yeah, yeah.

GM: Is there anything you want to share or comes to mind?

RA: Shoot, I gotta think on it tonight.

GM: Yeah, you can let me know later. Or any mele or oli that we should know for the area?

RA: Yeah there was oli for everything. For when you have your maʻi, you have your, you know da kine, it's amazing that the channels here, the event, when was happening, then boom they do one oli. You know, the spirit, yeah. That's how everything was, the balance. The spirit.

GM: I know you mentioned sharks. Is there a specific one you can share about?

RA: Yeah, the Makaliʻi, he was a guardian shark. From Diamond Head to Waiʻanae but this was his home. You got Mokauea Island and Mokueo Island, you got Kahakaʻaulana Island in-between. But they when break that island so the ships can come in. But that island there used to be one huge sand dune and the Makaliʻi shark used to go underneath it. And the sand dune used to come up like that so the people used to see it go down, he'd go out and he used to help. Used to take care of the people. My great-great-grand uncle used to ride him at the time. And that was his and then Justin's great-great grandfather. They feed him, they do everything. That was the supernatural. I mean, it was happening out there. There's a huge story about the people that used to live out there, they used to see, "Oh, the Makaliʻi is gone now," in the morning you see the big sand dune ʻcause he'd wedge himself in the sand, sticks out of the sand. Used to protect the people. Waiʻanae to Maunalua Bay. Used to live here, outside here.

But with all the dredging the whole formation wen' change, yeah? ʻCause when you go down Lagoon Drive, you drive here, my dad dem said used to drive the car, at low tide used to drive across the reef. The tide come up you have to stay on the islands. But they would dredge that for the seaplane. Come to find out was too short so the barges used to come in, use that. So when you go on a plane, when you go home, get

one window seat, you can see where, you know. But, yeah, ‘cause I’ve accumulated so much information through the years. Now, people no even go library, stuff like that now. Everybody is home. The ones you go see inside is all homeless... Not too many elders left, yeah? They were the ones, had the stories of the supernatural. My grand aunt used to breastfeed the manō over here. The shark used to turn around, you can see the two legs, was transfiguring from ‘em. The shark, yeah? All this stuff, was crazy.

IB: You know the interesting thing about that story too that always tripped me out? Was the... you know you talk about how the dune raise up and the sharks there and then when dune come down the shark stay out... it’s also, it’s seasonal.

RA: Oh for sure. Makali‘i. You know, my family been here for 2,000 years. Now I live this time. The Damons hoped that nobody was going to, they wanted to get rid of everything. Can you imagine, when I was little boy they used to have the trains, the little ones go by. Used to wait, the thing comes by, like ch...ch...ch. The choo choo train, the guys running trying for catch one ride. They fall down [laughter]. You see all the pineapple, used to be what... everything was simple. We can fill our gut for one dollar. Now no more nothing cost one dollar. But um, you know, um, everybody I talk to, is always a different story. I can talk to all the people, goin’ be something much more extreme. But with this [gesturing towards the cookies] you when throw me off. It’s good though.

GM: [Laughter] The cookies threw you off?

RA: Every time is different.

GM: I guess, this isn’t one of the questions specifically, but what is your vision or ideal future for this space, if anything could happen?

RA: Well, right now what is good, it’s, culturally speaking, it’s the wa‘a here. That’s important. This is what it’s supposed to be. That’s the best today, is seeing canoes. You see culture. Before, they used to park ‘em outside the, you know, people used to. Sad. I hope they build one ‘nother hale ova hea for. One hale wa‘a. That’s what I mean. I mean goin’ cost $150,000. That simple. This is all I can see right now, is something that people, but other than that, I’m not sure... they have one place where they can teach something. Where people can go and gather instead of putting in these small things. If you ask me. Someplace where they can do lā‘au, weaving. ‘Cause hula attracts, so that’s why I say if they let the Hawaiian, if they let the reigns down, try watch out. You start one culture center, you watch how much people it’s gonna attract. It’s gonna become one trend. You can bring back to the ‘āina.

GM: I know you mentioned earlier that they need to do a better job of what’s landscaped—what would ideally be growing here, I’m curious, like naupaka...

RA: That’s what they need on the beach. They need beach lā‘au but naupaka, pā‘ū o Hi‘iaka, naupaka not goin’ grow ‘cause you got dirt, no more sand. It’s all sand! Go plant sugarcane. But um, put one mango tree or something. See, they would fill in over there, so through the rain and stuff, you know, after 30 years, it creeps to the front, the dirt.

GM: Where did all this material come from?

IB: They dredged out all the canals. The Ala Wai.

RA: Yeah, all the canals. Yeah, Waikīkī, when they dredged out, that was the biggest mistake. Was 58 fishponds, Waikīkī. Like Moanalua. Coconut groves, that’s why a lot of people wanted to come here. Paradise. Here, Kaliawa‘a was the sacred gardens of Hi‘iaka. But it comes back to, what can you make of it? Gotta be culture. You need cultural thinking. Cultural vision.

GM: I know you mentioned several things already, but is there anything you want to see them do to mitigate any harm or anything they can do to give back in this project?

RA: You gotta put a lock on it. Look at the bathrooms, you see one wagon outside, so you say, "Okay, I can use the bathroom later." There's no safety anymore. And I don't see any City people here.

GM: So having more of a presence?

RA: Gotta have more of a presence. Nowadays it's serious. It's so serious nowadays. Look at this rubbish, look at all this kine stuff and everybody looking the other way. I mean, everyday get something. And it starts from the top 'cause they don't have the instructions. Look at the Capital. Get crackheads inside there. That's why I never did vote, 'cause I never did believe in the system. It's hard. You say, "No grumble if you no vote." I can grumble all I like.

GM: Are there any community or cultural concerns that we should know of?

RA: Well, it's gonna. Well, like I said. They gotta be monitored, that's the number one thing. Anything you goin' do, you gonna attract, it has to be monitored. It's so sensitive nowadays. It's a sensitive issue nowadays. So important. Like in Hawai'i you have 25 percent Hawaiians all incarcerated. So how can you do a culture thing. Yeah, they goin' come from Wai'anae, come over but, you know, it's hard because the access and necessities we need. Cannot say, "Oh go catch some fish and come bring 'em home, go grab some limu." Cannot do that.

GM: What kine limu was over here?

RA: Oh, all kine limu. Ogo limu and wāwae'iole, and all that, manauea. Ho, now get beeveedees or one diaper. [Laughter] You know what I mean? It's so hurtful but it's past that. You know, you just gotta wing it. Gotta move, keep going.

GM: How do you look at a place like this and the kaumaha and how do you...

RA: Lā'au lapa'au. That's what gives me... you know. When I lost my parents, my brothers, I never grieved. Lā'au lapa'au. Amazing what lā'au lapa'au did, all the facets and all the connections. And people change, the results, the people I've helped. And when I look at you, the eyes.... So number one, gotta have monitor, no matter what. Bathrooms, I mean, so much fear today. Even something good, you know, it's the young generation. Like Papa said, 20 years after I go out... and that's when everything started, after his death. It's hard to get the Hawaiians together because they're so worried about their job or their need and you know, for me that's what I tell a lot of people. At least I can go one place and be one Hawaiian. You know what I mean? Hard to be one Hawaiian nowadays.

[Conversation continues, recording stops]

APPENDIX E: INTERVIEW WITH GINO DAYTON, LEI ENDO, EDWIN ENDO, DANIEL SANFORD, AND SCOTT THOMPSON

TALKING STORY WITH
GINO DAYTON (GD), LUCILLE LEILANI ENDO (LE), EDWIN ENDO (EE), DANIEL POEPOE SANFORD III (DS), AND SCOTT THOMPSON (ST)
Oral History for the Ke‘ehi Lagoon Beach Park Improvements Project by Gina McGuire (GM)
For Keala Pono [March 25, 2026]

[Recording starts]

GD: [Talking about the tennis courts] You’re looking at less, at least, less than 20 people always are like over there and sometimes they’re not even there. If anything, that [pointing], the pickleball is used more heavy now. That’s more of a popular thing now. So, it would be right to put that one there. It’s just you would take, you take away, you goin’ take away, so, we already seen this so you know they’re gonna put that one across over there. You goin’ take away field, field, space but I know they goin’ get rid of some stalls because now you’re gonna have to make handicap stalls so it’s usually like what for every five, uh, five stalls is like two handicap stalls or whatever or two handicap stalls can equal up to four regular stalls but I mean makes sense over there because this is where it’s heavily used. But to have that bathroom all the way, that’s far. That’s far for the least amount of people that goin’ have. [Shows map to Uncle Daniel]

DS: This is by the tennis court.

GD: Yeah, I know, but you know what I see—that would be benefiting HPU, baseball games.

DS: And that’s during, and I think it’s about a year. Year round, ’cause you get off season, you got...

GM: So, I mean, if you were going to move it, where would you, where would you want to put it?

GD: It was right next to the playground, that was the original location. So they goin’ get rid of this one over there, the one on the corner, the circle.

GM: And what you were saying earlier, to keep it up until it’s pau, right?

GD: Well, the last thing we heard, or I heard, was they were gonna tear down, they were gonna break down that first before they start construction on the new one. And I was like, that makes no sense because that one still works.

GM: Yeah, yeah.

GD: I can understand why they took down that one. That one wasn’t working, it was burned.

LE: I didn’t know that one burned down.

GD: Yeah, it burned. And it’s been sitting like that for a good ten years.

DS: They could’ve quickly repaired that, within a month.

GD: Yeah, they could have.

DS: The sewer line, the wall line was all operational.

GD: They wasn’t gonna do anything to the park until HART was done.

[Chatter amongst the group passing the map around]

GM: Maybe what I'll do is, I'll start. What I usually start with is, we do oral history style, so have everybody introduce themselves. So maybe we'll go around. I don't know which direction you guys can choose to start, but if you want to say your name, where you're born, grew up, ʻohana background, and then your relationship to Keʻehi.

LE: Okay. My name is Lei Endo. The name of my club is Pukana O Ke Kai. We're 20 years old this year. Long time, yeah? Originally, I used to be with Reggie down on Kai Poha side. But when we first were with Kai Poha, this was barren land. My upbringing, I live Hālawa Heights. I've always paddled here at Keʻehi since 1986. And then I think one year it was with Gino, because we had adults. Because it was the other associations. But my background, the name of my club is Pukana O Ke Kai, it means "descendants of the sea." When I came to have my own club, I based it on my mom's Hawaiian side genealogy, where my great-great-great-grandfather came from Tahiti, landed in Kīlauea, in Kauaʻi. That's where my mom's side is all, they're all there. Her maiden name is Chandler. And her mom's name was Gooman. So that's how I base it on, because he traveled from Tahiti and brought, on a canoe. So that's what I try to base it on, on that kind of stuff. So originally, we had another, he and I owned a club. My cousin was one of the founders of the past. So pretty much my boat is named after the one that came from Tahiti. His name is Kaniolama. [Plane goes overhead] Get a lot of those. Our red racer is named after our founder that passed, Mason Mamahoe. His middle name was Kawai. And I don't know what your last question was, what do we have to talk about?

GM: Um, relationship to Keʻehi, ʻohana, you covered most of it.

LE: Because when we first started, it was barren over here. You didn't have trees. Everything was gravel. Hardly any grass. It was just super flat. But this, they built for paddling. So I think even when you did your light stuff, it was first over here, and they used the hill like a tier thing so you can watch.

DS: I am Daniel Sanford, the owner of ʻĀlapa Hoe Canoe Club. Started, well, I was a branch off from Walter Fox. He had a canoe club there at Sand Island maybe back in the ʻ80s, 1980s. And I wasn't paddling, always doing other sports stuff, you know, high school, college stuff. And my brother Ben was talking to Walter Fox who was the owner, it's Kalihikai now, but before that, Walter took over Wainani Canoe Club, was out at Punchy's, out at Ala Wai. My brother Ben went to practice with him, and he said, "Hey, Dan, he's getting this other canoe club. I like practice right there in Ala Wai." And at the time, I lived in Pālolo Valley, and that's where I'm from. So I paddled with my brother Ben, and this was in ʻ86, 1986, with Walter.

But at that time, Punchy from Ala Wai, that club, we was paddling for, is Wainani Canoe Club. In 1986, the guy Punchy decided to sell the club to my friend Walter. And he gave us two years to purchase the club with the equipment and the trailer. So in 1989, we had all the money that Punchy wanted for the equipment. And after that, in 1989, we changed the club to Kalihikai. And I stayed with Walter and Kalihikai, and my wife, she was born and raised in Kalihi Valley, and that's what my connection is from my wife, where she was born and raised. She also paddled for Kalihikai back then. And like anything, my wife was saying, in 1989, we was talking about, you know, making our own club. We stayed with Walter another five years with Kalihikai.

In 1992, I submitted my application to Hui Waʻa, 1992, and we were short for one vote. Back then we only had 12 clubs. But we had eight votes and two-thirds. But it was, I mean, it's hard to say. I mean, I was a new kid on the block. And I guess I felt at the time the kūpunas wasn't ready to welcome in, which was fine. In 1993, I was accepted into Hui Waʻa Canoe Association, October 26th, 1993. We had a meeting at the [Name inaudible] Heart Foundation and right across [Name inaudible] Housing, that church. I was accepted there and I became a Hui Waʻa member and was able to have a practice site here in 1993. Like they were saying too, back then, it didn't happen on this. It was just... But it's a growing process. I mean, I love what I do. I like to give back to the culture.

And my wife is from Kalihi. And it kind of worked out too, because my wife was also a teacher at Kamehameha School, right above it. And she learned a lot of the land and the mountain and the ocean side of Kapālama. She learned a lot. This, you know, teaching Kamehameha School, and the proper Hawaiian names and all the areas up in the valley and the ocean side. So, I wish she was here, but she has another engagement, but I'm representing ʻĀlapa Hoe. And I'm here for that, you know, for this. And I like to attend meetings like this, so as a community, I know where we go forward from here, what we can do, because like Gino said, we're here for, we'll be here for a long time. And we're setting this for the next generation. And if we can plan and protect and build something we have here better, I'm all for it. And that's why we all here. Because we have our own ambitions, we have our own desires, and we have our own way teaching the culture. And that's why, fortunately, my sons, I blessed my two sons carrying that on. And it's like, at least I can say that I retired and now I can watch the young people, the young ones come up and carry on what we're doing here. And that's it. Thank you. Your turn.

GD: Alright! That was good. I'm Gino Dayton and Jen Romano. We are the founders of Ke Ola O Ke Kai Canoe Club here at Keʻehi Lagoon. We are a member of OHCRA, Oʻahu Hawaiian Canoe Racing Association. I come from Kalihi, born and raised in Kalihi. I guess in between the ahupuaʻa of Nuʻuanu and Kalihi Valley…

[Talks about the debris cleaning that was happening behind the interviewees]

GD: We are also a branch off of, I came from Uncle Daniel and his canoe club. I started paddling in 1994. It was just, we're sitting behind, hanging out with friends and the house that we were at got a phone call and it was like, "Hey, you guys like paddle canoe?" And then we all looked at her, we all looked at her and was like, "What is that?" You know, something we never heard of. So a bunch of us housing kids grew up in the housing, got in a van, came to first practice, and there she wrote. Everything was set in stone already. I fell in love with the sport. I enjoyed it. I fell in love with his family. They took me in at one time. How we're connected with Aunty Lei is, her daughter is my best friend. So the paddling community played a big part, a big role in my life. So I used to live with them, their daughter was my best friend. Growing up, you know, I loved the sport so much. My goal and dream was to, I was like, oh, one day I'm going to own my own canoe club. I started, he allowed me, he blessed me and allowed me to start coaching at the age of 17.

GM: Wow.

GD: So while I was going to McKinley, I used to help him coach the Moanalua High School kids, catch the bus, coach the Moanalua High School kids. They had no idea I was only 17. I was another student teaching students. They thought I was older. But from there, that's what gave me the drive to start working with kids or with students. You know, it played such a big role that I'm a teacher now. My whole lifestyle just became about mentoring the next generation and teaching them Hawaiian culture. And my subject is Hawaiian studies, Hawaiian history. So, you know, that's the blessing part about it or the reward.

My wife, she played a big impact. She backed me up on all of this, because this wasn't cheap. A lot of this stuff, we raise money, but we pay for equipment and things out of our own pocket. We buy it ourselves. We're the sole owners. So nobody can take that away. All the fundraisers that we do through our program, our non-profit, it goes back to our kids for their registrations or paying for stuff that they want to do and things that they're interested in. If they want to do a race, any 18 and under crews, we pay. If we have adult crews, they gotta pay. We only pay for juniors. So things like that is when we fundraise.

My connection to Keʻehi Lagoon started when I was a little kid. My dad used to be the caretaker here. He worked for City and County. His bathroom or section was the one that got burned down but he was, he already retired before that happened but I remember coming over here when I was little and had the baseball fields was all red dirt and none of this existed and we saw, we witnessed this being all built because he

worked here and who would have known that Keʻehi Lagoon will become my second home because I spend majority most of my time here versus being in my own home but that's our connection and we always felt that because this is our home, we always try to take care of it. We do as much as we can, and we fight for it. Like the beach erosion, we've fought for that on the State level. Still, the City and the State still going back and forth about it's an ecological thing, and oh, who's responsible? All the way to our homeless situation and problems. We try to take care of our place as much as we can, and we try to do as much as we can. That's pretty much my history.

GM: You guys are making me want to paddle, actually.

GD: You should. It's fun.

LE: I think that's why we're still here. We love the sport. I think we love working with the people that we have. And he's right. We're practically here more than we at home. Because paddling for us, we all do schools, and then we go right into our regatta season. So we're here pretty much, I think the only time we rest is like September, October, and we're back again.

GD: I guess you can say it's our cultural sport, but for us it's our lifestyle. We're very passionate about what we do and what we want to fight for. Our disagreements, we agree to disagree at times. We argued amongst each other and because we had different agreements and then there's, I can say there's more times that we agreed and our goals are all the same. And what we fight for and what we believe in. Come to this, we want to make sure is here for the next generation. And I'm trying to get my son into, he's now getting the responsible role of coaching at the age of 20, you know, but he just gotta, he just don't understand the dollar amount because he comes home and broke it, he breaks the equipment, and then he goes [makes hand gesture]. Until he buys stuff on his own, he's not going realize it.

GM: [Laughs] Yeah. I don't know, Uncle, if you want to introduce yourself.

EE: Oh, I'm Edwin Endo. I'm with Pukana O Ke Kai. I started off with Kai Poha when we were at Haleʻiwa. And then, because a lot of us was working in the shipyard, we, this guy Raymond Arankin, he was our [plane flies overhead, inaudible]. Raymond Arankin, he worked with us in a shipyard and he put on our time clock, "If you think you're bad, join this canoe club." So me and my other friends, we all joined the paddling. But we were driving all the way to Haleʻiwa. So he got us a site over here and that way we all could make it, yeah, from Pearl Harbor. And when we were here, only had us, only had Kai Poha. Before that, it was years before that, was Royal Order of Kamehameha. They used to paddle over there. And then when they started to get sovereign, they when open up Kamehameha Canoe Club, and they paddled off of Ala Moana. So we're here then, yeah, Fox ʻdem was here, you know, Kalihikai and Daniel. And then had Scottie. Then Gino ʻdem came too.

So in the beginning when we had the hālaus, it was made for three clubs. And then we said, and, you know, Ka Mamalahoe, they just joined our association. So we said, "Hey, wait a minute. What about Ka Mamalahoe?" So they said, "Okay, four other clubs could go there." And then it was kind of divvied up. But luckily, the people that took over, they allowed us also to go into the hālau, you know. So, it would be Gino, ʻdem, and us, for the kūpuna races. And when we built this, after we built it, I think I was the first liaison for Keʻehi Lagoon. And my task was simple because everybody followed the rules. I put in a petition to name this hālau after Gardner Brown because he used to be a good advocate in sports itself. His daughter was an all-star volleyball player for UH, Nahaku. And then Paul Brown was a pitcher for UH. So I used to be, because I used to coach baseball also, and I watched him, the way he was coaching. I wanted to be like him and be as calm as him. So when we put the petition in, all them signed the petition and we got it. We got it named after Uncle Gardner Brown. This hālau. But in the beginning when they were building this place, like he was saying, had red dirt. Before that it was gravel. It was not gravel, but coral. The whole place was coral. And I used to go fishing over here and ʻtro net.

GM: What kind of fish did you catch?

EE: Pāpio, ʻōʻio. I had a lot of mullet. But far cry from the way it looks now. I mean, looks way better than before. Like in the cove, they built a cove. And I asked questions because we wanted to put our canoes over there. And they said, no, it's for, you know, those miniature boats? That's what that cove was made for. And some of my friends used to come here and race boats. But now nobody comes, so you can put your boats over there. Nobody grumbles. But that's about it.

GM: Okay, thank you guys. My next question, since you guys have all kind of, I mean, long histories with Keʻehi, but how you've seen it change in your lifetime or in your time here?

GD: Yeah. To the lagoon itself, or? We can start with the water.

GM: We can start with the water. Let's go there.

GD: So when they built this place for paddling, it was in, I think it was written somewhere in the law or whatever, they were supposed to dredge every 20 years. It never got dredged since its creation. So the... No, oh, they, when they did that, that end. When, no, when they created it, right? Did they come back and dredge again?

LE: Yeah.

GD: Oh, so they only did it once? They never do ʻem again. Yeah, so it's, we don't have a Lane 12 anymore. It's, the sediment is... Yeah, yeah. I don't even remember. They never come in. They came and dredged the first time. I remember we had to...

LE: That's before ʻĀlapa Hoe came in.

GD: Oh, okay, okay. That's before I started then. Because I know they did it when they first built the place. They took out all the barges that was along the reef runway because that was built for... military. Then the beach was nice because when I was a kid, we used to run on the beach and you could run all the way around the rocks had all sand. So the erosion is so bad that this is all the original coral that is coming up. And every day you get kids cut their feet. Yeah, every day and staph infection. So that's a major, major change. Environmental change.

GM: No more sand?

GD: No, it's gone now. It's gone. Yeah, gone. After the rain, gone.

LE: This is pulverized coral.

GD: Yeah, crushed coral. Then, of course, the rail came and that's a major change. They took away parking. So not enough parking.

DS: About... maybe 10 years ago. About 10 years ago, they came down here to survey how they can put sand again, and then they never came back.

GD: Yeah, I went all the way to the State Capitol to testify when they had the hearings. It passed to go to Ways and Means and then we never hear nothing. They thought it costs too much money. I don't know. To fix the beach yeah, so went to Ways and Means and then it never, and then we never hear anything of that.

LE: It is possible right? ʻCause they have man-made beaches.

GM: Waikīkī [laughs].

GD: Is possible, but they don't like, spend the money. 'Cause they have to take all this, they have to grade 'em.

LE: So, I don't know if you guys are talking, but when you do this... I'm talking about that. It comes with showers?

GM: I gotta double check that. I can get back to you.

LE: We need more showers. You have, our race alone is 1,500 people on this beach with three showers, sometimes only two, and a little spout. So, that would be good if you had more showers.

GM: Yeah, more showers.

LE: Either that, we're using hoses.

GM: Oh, okay. Because this is the only showers right now? [Points]

LE: Yeah.

GM: Okay.

GD: And then another change was they added a chain fence that I had told you about earlier.

GM: Yeah.

GD: That took a lot of parking away.

LE: You know what's really bad? This is our season already. Yeah, so all of us park this way, but we're not supposed to even park on this side because it's a fire lane or something like that.

GD: Yeah, it's a fire lane.

LE: Yeah. Or in the roundabout. But when they did that, they used to have a big cement log and they took it out and put the link fence. They moved that link fence more out. So the football guys are always parking. They don't care about the signs. So when we finish our paddling, it's really, really, really hard for us to come out of our spot because they're all over there. So I think we need parking. Really. It's hard when it's all taken and we have to park way out there and some of us, we carry equipment and also the parking.

EE: The football people be on the other side so had, you know, had no problem, but now they they're having the little kids practice on this side and a lot of the little kids, their parents have big trucks so just block our way and it's kind of um, rough, yeah for the paddlers.

GM: So more people using the space and crowded, more showers, parking.

GD: I mean the use of the park is a good thing. It shows that this park is, has value, not like if all the money into Ala Moana and you get only tourists go over there. That's what people do or into Kapiolani because it's in the eyes of the tourists but we're telling them that, "Hey parks like these that are around the island take a beating because the way a lot of people... this is where we put in the money to the taxes like this is where it should come."

EE: Yeah, put a comfort station over there. Yeah, right here, should make it bigger with two showers like because we all finish the same time, yeah, and get like a couple hundred plus people showering and the bathroom is so small and when we have races.

GM: Long line.

EE: Just have any long lines and you have to paddle. You know, they want to do the station over there [pointing to second comfort station location]. It's good for the football field. It's not good for the paddlers. I think if they build that, they might move on that side.

GD: They come over here because this is the only bathroom that pretty much is in good operation. The one over there, no more doors. So not good for the kids. They usually get homeless over there. So this is why they hover all over here. It's because this is the one better bathroom.

DS: The only one.

LE: You notice that the light hasn't been fixed for years.

GD: Oh yeah, electricity is a big thing. No more electricity.

LE: They said it's gonna cost thousands of dollars.

GD: They said they'll get to it when Rail's pau. Rail's been operating a while.

GM: [Laughter] Sorry. I remember when I was in high school, I think it started, so...

LE: It must be 2009.

GD: We sat in a meeting and that's what they told us. We sat in a meeting and we told them everything that's wrong with this place. And they said electricity is not a priority. Until the contractor pau with the rail. It's not a priority.

EE: You know, I talked to the representative over here a long time ago. He said they were thinking about putting on photovoltaics on the roof for the bathroom, but they said people were gonna steal it.

GM: What are they putting on the roofs?

DG: Solar.

GM: Oh, that'd be cool.

EE: They wanted, for the lighting. But they said people, they're gonna just come up there, steal the panels.

GM: Take the solar, yeah.

EE: And one example is that two-story building had over here, you know, you don't know where they got the photovoltaics from.

GM: It had solar on it?! Sophisticated, wow. [Uncle Daniel returns to the group] Was there anything you wanted to add?

DS: No. A good person to talk to would be Walter Fox. He couldn't make it. Son playing basketball. That person would know a lot of history about Keʻehi Lagoon.

LE: Yeah, because that's why I wanted him to come because when they were talking and Reggie... Damon Tract?

DS: Yeah.

LE: He was telling me stories about this. All these fishing and all. I mean, that's the business from way back.

DS: And he would, his history goes way back in this area.

GD: So the other one was, the other changes, that area back there, if you look in your map, oh, it's the one, the other one, that one. So you see that pond in the back? See this pond in the back?

GM: Yeah.

GD: This area, they would designate this area for like, more control boating and stuff like back in the day. And then right here, back here, that piece of land right there... but at the end of it, it had salt ponds. So the remnants of the salt ponds are still there. You can see still, you can see there are three dips with rocks around. There are three dips all over there. And it was all, it was filled in because like dirt or whatever was all dry and stuff like that. But when they brought in those guys that dig the rail for the column, they bring all their rubble over there and they sift them. They sift out all the big rocks, whatever, to make it dirt again, and then they truck them back over there. When they did that, they covered the salt ponds. The remnants of the salt ponds over there. We were looking into building a Hawaiian culture center on that side. We want the, that piece of property. We've been pushing hard. We had renderings and everything.

GM: Oh, that's cool.

GD: We want that property. We were gonna bring back the salt ponds. It's all... The whole site is contaminated now. They brought in all the asphalt that they dug up. There was a big pile over there.

GM: That's one of the questions, because it's both the cultural impact assessment and then Ka Paʻakai Analysis so cultural rights in this area. So thinking about that, fishing, the paʻakai...

GD: Yeah, there are all ponds on that side too. Walter would tell you that there are all ponds on that side.

GD: But, you know, I understand the City, they manage a property or it's their property, they own the land and stuff like that, but when they do stuff, they don't, like when they even put up the chains, they never consult with us on what impact that would cause, and so much headache just by putting those chains up.

GM: Yeah, sounds like they just went in there.

GD: They didn't consult with us by building that thing over there, or moving them from that corner, 'cause it used to be over there, on that piece of land, if we brought it back here, what problems that would cause. They don't ask, they just do, and then we find out and we figure out what can we do now? But if you're going cultural, they messed up. They messed up over there big time.

LE: Now it's too late for me to go look, right?

GD: And the dirt over there, that's why, you remember the red dirt man that used to go? He had the grass slippers, and he was all right there. He used for lie over there. Had all the red dirt, ʻalaea, like how Hawaiʻi Island had.

GM: What?!

GD: Yeah. So you guys like the grass or don't like the grass?

DS: Grass is good because it's erosion control. So that sand wouldn't look like this, you know, mud.

GM: Yeah. What did they make the mounds out of?

GD: Big boulders. Big boulders under the end there.

GM: My next question, kind of going off of that, um, but any traditional gathering practices or just cultural practices that can include the waʻa but things like the paʻakai gathering, fishing, anything like that that you guys know of either current or historic in this area?

LE: They did the Aʻa over here.

GM: The koa canoe?

LE: Yeah that was, that was interesting.

GD: Right now, it's only, it's waʻa. That's basically what this place is for. We try, between our separate programs, I don't speak for nobody else, but we try to implement Hawaiian cooking and other things within our program to the best we can. But we ain't doing an imu over here, that's for sure. No way.

GM: Wait, why?

GD: I don't know how contaminated everything stay, but you know, the one thing I can say, the water quality got better ever since they did the first relocation of the homeless because on those jetties [points] get oysters now growing.

GM: Oh, wow.

GD: So, you know, life comes back when you let them sit a little while, the seals, there's a couple seals that came in that play around.

GM: Oh, wow.

GD: The turtles puff their heads up.

GM: That's good.

DS: Can bring back, but you doing this environmental and cultural thing?

GM: Yeah.

DS: People don't realize that back then, me and Walter used to paddle canoes around the reef runway, and they get those crackerjacks hiding along the edges. You imagine how many of those have now? Garans get millions. Back then we used to pick ʻopihi.

GD: Oh, you're talking about on the outside, huh? Outside.

DS: Ever since 9/11.

GM: You cannot go?

DS: You cannot go. We couldn't even go to the end. Everything in 9/11 is done. That's what I'm saying. So, culturally, we used to go out, we used to go out there and pick ʻopihi, and I can imagine plenty ʻopihi.

GM: So that's a Federal, is that the airport?

DS: Yeah, it's airport, but before 9/11 we used to go.

GM: You could just go, yeah.

DS: I mean, like five-gallon buckets, full. Like four five-gallon buckets. Me and Walter. That's how, we used to have ʻopihi over there. And at 9/11, they tell you guys, "No go ova ʻdea."

GD: Oh yeah, you cannot go ova ʻdea. I go in with the boat sometimes ova ʻdea, but you take your chances with that. They come around. They going come around.

GM: [Laughter]

LE: They're right there, waiting. Yeah. "Turn around." We couldn't go all the way down. We had to turn around and just stay right there.

DS: Back then, before 9/11, we used to pick ʻopihis. I can't imagine how much stuff get now.

LE: You can go to jail.

DS: I like them da kine, go down here, like build a hut or whatever and where they can do canoe building down here.

GM: That would be cool.

GD: Because the builders that like, you know where uncle can bring something and do work on ʻem. Walter does his one at his house.

LE: You know right here was the purpose for that.

DS: You're supposed to build.

LE: So you can repair your canoe too. Now obviously you're repairing it, it's like...

GD: Oh yeah, like you parked your trailer. That's supposed to be trailer parking. They said, "No, that's not." You parked your trailer. So they tell us park the trailer by the baseball field, now they're telling me I gotta move my trailer. My trailer is parked ova ʻdea.

LE: So there's purposes of all that. When somebody else takes over...

GD: No, it's the same guy, the same guy, Madeiros.

DS: We've been here a long time. We're supposed to build a hālau, if we get the homeless shelter. There's supposed to be one museum. The hālau is all over there. Uncle Gardner was kind of pushing it with...

GD: Or... You're talking about in the middle ova ʻdea where you get the transition house. Yeah, there's supposed to be one culture center ova ʻdea.

DS: Restaurant ova ʻdea too overlooking the, and was Cayetano because the son was running the paintball thing.

GD: Corruption, corruption.

DS: I plead the fifth.

GD: Yeah that was that was all in the plan. We get the plans yeah? Oh Walter is, well I saw Walter with the plan.

DS: I have the plan.

GD: So that's why they build the bridges— there's bridges that go from Keʻehi Lagoon. Well, the first bridge, and then there's a bridge that goes over that side. So that ova ʻdea, all that bushes ova ʻdea was supposed to be Kalihikai Park.

GM: Is that mangroves?

GD: It's mangroves. But behind that, there's the ponds, and then there's like a industrial area, but they were supposed to build that as Kalihikai Park. And then you come over the bridge to the culture center, the Waʻa Cultural Center that's in the middle, and you come across the other bridge to come over here to do paddling races. Everything was supposed to tie in to that middle.

DS: And then I still get the drawings.

GD: I seen that. And in the front is where the canoe launches, right here where I got the platform. You see the bushes back there, you get the platform floating? Yeah, if you cut all that, then you can see the land. Ova ʻdea, it's supposed to have all the canoe launch.

DS: Yeah, but it's supposed to have canoe clubs. We're supposed to go there, and the City has some other plans ova ʻdea. So they forget all of the plans of it. But I still got the drawings.

EE: You know, the only holdout was launching the canoes. I said, wouldn't you make them like Ala Wai?

GD: Like Ala Wai, the floating ones.

EE: Floating docks. Yeah, that would be a good idea. I don't know what happened.

GD: You could have built a brick wall or stone wall to hold back the land and build the floating docks.

DS: That's true. Back then, we had a lot of projects that's supposed to continue from Magic Island. Because when I was superintendent way back, I was with [name inaudible] City Construction. So, you know, Kakaʻako Park used to be one of the scenarios right ova ʻdea. So we developed it. It was Cayetano in it. Well, Waiheʻe's, when I was superintendent back then, we developed that part and I got drawings on that project and it was supposed to be one 10-to-15-year ʻkine and that thing was supposed to continue all the way back to Keʻehi Lagoon. And I still have those drawings, like there's canoe sites ova ʻdea and we was,

we had the contract all the way then. But the eighth year in Pan Pacific, Japan, the company that we was working for a lot, they bankrupt so we stopped. But I still got the drawings, you know, for me to, you know, this is what it will be the next phase... I don't know.

EE: I don't know where it was, Damon Estate, the park, is a old building ova 'dea yeah? I don't know was it king's one or the princess one that used to be around here.

[Scott Thompson joins the group]

GD: [Looking at the houseless cleanup happening further down the beach]. You want to know the attitude with that, with all of this stuff? So when we as clubs decide we're going to clean up our sites, and we bring all of this stuff up, the City gets mad because we making more work for them. They'd rather have us leave 'em in the water and let the water take it away and be somebody else's problem. They told us straight up.

ST: Well, because shoreline is State. State, right. And this side of the... They don't work well together. That's right, the last time we all did it ourselves. It took us a while, but you know. We did everything. They came and told us they're gonna arrest us for doing that, this and that. It was classic. It was leading up to the State race.

[Talking about fast cleanup of the homeless house that had washed down river]

GM: Okay, Uncle [talking to Scott Thompson], just so you know, everything, um, it's being recorded just so you know... no, you're good, no I just want to make sure you know and then if I can have you introduce yourself I'll put this next to you [referring to recorder] but, uh, your name, where you grew up, and your relationship to Keʻehi.

ST: Family history. Okay, my name's Scott Thompson I grew up here on Oʻahu. I have, my family has connections to Keʻehi Lagoon. My great-great-great-grandfather, my grandmother's grandfather had gotten his, the Great Māhele, his strip ran from there and ended here in Keʻehi Lagoon. So my grandmother remembers as small baby time and stuff like that, coming down getting in the canoe with her grandfather. And then they would go out and they'd paddle around. As far as my grandmother could remember, they'd end up with, this was Makapuu. And then they would go and, because they had caves in those days, so they would go and she would spend the summer in the caves with her grandfather. And then she would come back and stuff. So that was the connection.

And then some years later, you know, when the State took all of this and they were trying to get reparations for the families and stuff, my grandmother and her siblings, some attorney contacted them. Said, "I got a deal for you. We're gonna go sue the Feds and we're gonna get money for you guys." So they did. And there was a good settlement. And my understanding is the lawyers did very well. [Laughs] The family, not so much. But there was seven of them, six of them. So there was a settlement. You know, the Federal government did recognize all the families and stuff. They had claims and stuff. So they all got something. The attorneys did well, you know. It was a field day for them. But all the families and stuff involved, I don't think they did real well, you know? Some kind of spiritual satisfaction or something. But so anyway, that's my connection to this area and stuff. But it's a lot bigger now. It wasn't like this back then. I mean, if you see the pictures of what it was, it was a really thriving fishing village. You know, with the lady, you should get it, if you haven't, you should get in touch with Kehau, Kupihea. You know, she's the cultural anthropologist in all this stuff. And so she found everything, she's got a wealth of information.

GM: That's one of our questions I ask about the area is moʻolelo, place names, oli, mele...

ST: I just got reconnected, I didn't, I wasn't in this area when I was growing up. I knew the stories and stuff. But I didn't get reconnected until I paddled with Daniel. That was probably back in 2001, I think, yeah. So I came down here and then I came back and then, yeah.

DS: You was with Elks too, yeah?

ST: Yeah, I was with the Elks. But that's when I got thrown out then I came over here. [Laughs]

DS: Like Scottie said, they learn a lot from this. And my goal was to, these guys can start their own club and experience what I go through. You know, paddling, especially when you own a canoe club, your wife or your partner has to be on board.

GD and GM: [Laughs]

DS: No, seriously, I know that 'cause my friend Walter, when he was with Wainani Canoe Club and Kalihikai... My friend had a hard time, but his ex-wife didn't help. It was hard, I mean, not help, but it, you know, I saw that when I met my wife, she was really into paddling. And for a successful club to be successful, your husband and your wife has to be in it. It cannot go one way, it's hard. The interest has to be both ways. And I can see it in Gino and Jen. And it's true. I mean, Gino would say the same thing. It's hard, but if Gino wanted the club, and his wife get other interests, it's gonna be hard. Yeah.

GD: So, my wife, paddles. Yeah.

DS: And we all, you know, somehow connected at Keʻehi, which makes us here, bonded more.

LE: We are very bonded with the clubs that's here.

GM: I can tell. I love it.

DS: But, like, it's, you know, I'm here for the long haul, for the long haul, and the changes, gotta get changes. Maybe the changes, we want, maybe some things we thought would make benefit for the clubs and the community, but, you know, the City and the State always do things other than making us aware, but then we find out after the structure is built, put in. And, you know, I don't know how to say it, but it's like, we gotta do what we gotta do for us here. And the planners are, out of our control, they can do what they gotta do. But I know Gino is here for his kids, his club, I'm here the same way, Lei and Ed started down here. Scottie's all here paddling, you know?

ST: It's the culture. The culture.

DS: But honestly too, I've been around so long paddling, like the kūpunas passing on. What the kūpunas told me when I started my club, what they told me back then, "Oh, the club is run this way, then people think this way, know we're about paddling, the thing, it could be okay." But back then was, culturally was okay. The thing was, everything was 100% the culture. What I see too is now, is like, I'm not saying we're not a back burner, but we gotta take, it takes more for us to ask, we want to do something for our culture, which I think, I don't understand because, you know, it's like, our grandparents, our great-grand-grands left something for us to strive on. And back then it was easier because culturally it was, it was done. No exception. This is, we culturally binded, we go do this because it's our culture. Now it's like, when I think of something, maybe I want to plan something, it's like, you know, it ain't obstacles, but it's, it takes longer to get response, but I was taught from the kūpunas, how easier it was back then.

GM: Politics.

DS: Yeah.

DS: And you know, like Lei said, but it's like... Like, we've all been around a long time, and Scottie got struggles with certain things he wanted, Gino wants, he got struggles with, he wants certain things he wanted to do, but, you know. Maybe you can be our voice. You know, what we tryna do here. Gino and Lei goin' keep me informed. Scott, hey, you know, we'll do something like this meeting. They called me, "Hey, this meeting's gonna..." That was good. At least I can tell you, you know, culturally, this is what I expect from somebody like you, your education, your ties to political entities. You know what I'm saying? You know what I'm saying? So it's like, yeah, you know, it's like maybe you can make a change.

GM: Well we write this all down and get it to them but up to them what they do with it, yeah? One of the questions is what would, like, we've already, I mean, we've talked parking, a canoe building space, trailer parking, maybe a wa'a center, but this is kind of your opportunity to say what they could do to give back or mitigate their harm as they're putting in the bathrooms. But yeah, anything you want to see the City to do here to give back to the space. That is one of the questions is what they can do.

DS: I want to see sand again.

ST: We'd love to see sand.

EE: You know why, too? When we get the canoes in the water, they drop the canoe, they're dropping them on rocks. And you know, you get little kids here, they gotta lift the canoes, and they constantly drop them on the rocks. So, if it's sand, you know, they drop them... Especially the ama, like the thing crack.

ST: Yeah, 'cause the shoreline was, but we had another, 10, 15 feet out from where we are now before. But we had, well, we had carpet on top of the sands. It's another issue, but you know, I know. But it's kept the sand in place.

DS: Yeah, that's the difficult part.

ST: That's the difficult part, trying to keep the sand in place because I understand the carpets are not the most sanitary thing, but somehow there's got to be some way of getting the shoreline back again, making it safe. Same thing with Sand Island. They're eroding, you know, out there. So they're losing everything, you know. They got cliffs now off in front of them. But there is, there's so much cultural significance about this area, and there's just small groups of people trying to keep it together. You know, just little things like that stretch out there, right into the runaway as you're going out, that island over there, that's sacred land, you know, that's why the iwi is all coming up and stuff so they're gonna rebury the iwi now and stuff so and there's a small group up that's working on that and they're working on it and they still have ceremonies.

GM: On Mokauea?

ST: The other one, you know the other channel I forget what the name, yeah, the last channel as you go out up there there's a small island over there. It's the home of the shark, where the shark, the guardian for this area. He still cruises over there. And I understand that when Kehau has done some of the services and prayers and things out there, the shark will come by, come up and then go down again. And nobody knows how long their shark's been there, but the shark's still there. Big buggah. And so there's a lot of stuff like that, but still, this is history, this is cultural history that could be fairy tales, but it's still alive. You can still participate in it, you know? But there's links. And, you know, the old pictures you can see, they used to be able to walk, huh? And all, there was little, like, islands, like these little islands like that. But there was a whole bunch, so when it was low tide, you were able to, you could go visit, and you could just walk between them and go. Yeah.

EE: Plenty of sand.

ST: Plenty of sand. A lot of things changed. So that's, the dredging came and the developments came because the water didn't come all the way up before like this. It ended back here and then it was something else. But things change. Tides change, things change. But it would be nice if the State would be a little more aware of things like that and preserving things. You know, how many times we go down and we sit in at down at the legislature, and all we're hearing about is some lōlō has a plan to put warehouses in the middle of this, or go do something over here. Oh, we could put a hotel out there on that little island, what a place for a bar or something. It's easy, come on. I mean, they already bulldozed everything out, you know, and so things change, but you can still keep a sense of culture. Even though it's evolving, you know, it's not the same as what it was, but it should evolve along those lines. You know, it shouldn't be given up. And, you know, we're all fighting for space. This park, since the time I've been here, that park is so damn busy. It's got to be one of the busiest parks on the island. It's got to be, because all the small parks, I guess, closed up, so that's why all the kids are here now, huh? So it's jamming in there and then they took away the parking which was really lōlō but you can see how much everybody's paying attention to the no parking signs right, you know? They park underneath the no parking signs.

GM: They give tickets or?

ST: No.

LE: Only the paddlers get tickets.

DS: Yeah, we got tickets!

ST: I know we all got tickets, we got an event, when there's an event then they come in, they know it's us and then we get tickets We've all had one or two towed away. But it's a big park, and we all got to play together, I guess, in the sandbox here. But it needs—we can't do it. It's the people in charge that have got to have a sense of what's going on here. You cannot look at this and just look at your balance sheet. Accountants, they're getting tired of accountants telling us what we can and cannot do because, well, according to this, you have to do this, this, this. No. It's the wrong focus. It's still, this is a unique spot. This is a really cool spot. If it was clean, it'd be really good. It'd be awesome.

GD: The thing that blows my mind is this is the most fairest, even playing field for our state tournament. And when I see people come, when we have States here, there's 10,000 people. We can't even... this is the best place to accommodate them, accommodate everybody because of hotels and things like that and the size of our park. Because we go to Maui, there's no parking and the beach is like literally small and next to a hotel. You go to Kauaʻi, big beach, no parking at all. Hotels are farther and you stay in B&Bs. You go to Big Island, the beach at Hilo Bay, but sometimes you get the river that affects you and then they get parking. But you gotta figure that out, right? So this is the...

GM: How often is States here?

GD: Every other year. It's here this year, but it's been in this condition too long. Yeah. Like, this is our state sport. And it's supposed to be like, it's supposed to be highlighted. In Tahiti, it's blasted all over the place. They make money off of paddling, with sponsorships, things like that. And they adopted it from us. [Laughter]

GM: And then they elevated.

ST: Yeah. The different states and different countries are doing with the sport. It's amazing.

GD: The attitude I get, like the vibe I get from, you know, when we go to other countries and we travel, is they love Hawai‘i. They love Hawai‘i. They love coming over here. But I feel embarrassed that they come here and we give them ‘dis. It’s sad.

GM: Like the paddling community?

EE: You know what used to look like right here? When you used to have the world sprint, the first one? That’s what it look like now. I mean, you know, from that time on, it started to look nice and then now it’s starting to look like...

GD: We understand wear and tear and things change, but the upkeep is not there. Like they sacrifice the upkeep. Like this is the people’s park, I’m gonna tell you right now. There’s so much people that use this place. So much usage. But they turn to, like I said, they turn to fund more money to Waikīkī.

ST: You know, a lot of the problems we’re having here is because of up there [points upriver]. The drain is coming down. Reason is the sewage levels are so high in this place is because of that, that sewage pipe has been broken for at least the 20 years or so or more and they never would fix it. They just go, “Oh well,” you know, I guess it’s a battle between, is it the military’s problem or is it the State’s problem or is it City County problem so they argue about this problem but it becomes our problem, you know? So that is a major contributing. All the slugs that comes down and all the garbage that comes out, it’s from top.

GM: One of the questions is community or cultural concerns. So I’ve heard the sand and parking, maintaining, sewage. Are there any other concerns that you guys have? Maybe for those areas where the bathrooms are proposed?

ST: It’d just be nice if they were clean and working.

GM: Yeah.

ST: That’d be good. They tore one down. We could never figure out why they tore that one down. And they left that one. Should be bigger. Oh, it should be big. And the problem that they’re having now, though, in all fairness to the City and County guys, they had a huge staff here before. They had lots of workers. We got two guys doing all of this now and they used to have teams, I mean they had like 10 people, the guys that did the graph the guys that just did the bathroom. Used to have the DUI guys come on Saturdays. The park was, you know, this was the really nice, the cleanest facility, you know? And the guy, he was so proud of it, the guy that was... did good work here. I see him, I still see him. He lives in Waimānalo now, so he’s happy. He’s happy on that side. But you know, that was his thing. And you know, if you’re gonna have bathrooms, goin’ need to be cleaned. I used to come early in the morning. And he’d be here, open up, he’s cleaning it. And he used to scrub it out. I used to, well, you had the room, never mind the floors.

GD: You’re like when the last time this park actually looked like, just nice, when Obama came and did his speech. They went, they went like overnight, rehauled this park, paint the curbs, everything. And he was the only one candidate. They filled the holes. He was only one candidate. He did his speech right over here, right there. When he came, we made the park with the guys.

GM: Okay. So taking care of the bathrooms for sure. And bigger than what you have now with showers. And then my last couple questions all have to do with the cultural side of things. So, mo‘olelo, mele, oli, place names, but then also any... like if they’re going to break ground, if there might be any burials, archaeological sites. So going into that realm. So that’s my question, is any mana‘o you guys want to share?

LE: From when they did that official stand, there was one, when we, go through Kehau, don’t get rid of the pine trees. That’s a historical thing they told us because they wanted to cut it down.

DS: Oh, the ones over there in the back?

LE: Yeah, by the official stands, I said don't cut it down, that's a start.

EE: All these trees was in here a long time ago, yeah. Never had no trees, it was just coral all the way.

GD: I miss the hau trees.

ST: To a certain extent.

GD: Oh, was it the... No, wiliwili trees.

GM: Wiliwili trees. They died off or they cut them?

GD: Yeah, they got sick.

ST: Yeah them and the coconut trees.

GD: They had a disease. They saved the seeds. They were supposed to bring them back. I don't know if there's any burials and stuff over there, but it would be nice if they... used the Hawaiian name of the park, yeah? Hawaiian words on the bathrooms.

ST: It's the State's advantage too, because they don't realize a lot of tourists do come and walk down here, you know. They're waiting for a plane or whatever, they come look and stuff.

GD: We gotta stop people from swimming. This is the first beach they see. They fly over, it's the first thing they see there. Well, besides, they come from that way to the other side.

LE: You know what they say, sometimes they stop. This is cleaner than what they have in the mainland.

DS: Yeah, it's funny you say that, Gino. I mean, it looks good. You go on the website on the Marina Hotel right there. So they said on the website, "Walking distance to a sandy beach with sand." They said too, where they came from the water is way worse.

GM: Well, that's sad.

ST: I used to swim in that water.

GD: I mean, we still swim in there because we have no choice. We have to go boat. We have to hold our canoes on the line. We're immune to it. We don't get sick anymore.

EE: Well, I go and tell everybody that you see you get a lot of shark packs in here and there like that. I asked him did you ever hear about one canoe paddler being bitten or a shark? Nobody could say anything. It's like, it's a protective shark.

GM: [To Uncle Scott] You mentioned a shark in the area...

ST: Yeah. Oh, that one. That's a whole different—but this is a breeding ground. Yeah. Lot of hammerhead pups.

EE: A lot of hammerheads and stuff.

GD: So that's when you're holding boats, something's banging your leg when you're holding boats, you don't worry 'cause they're vegetarian.

ST: They're safe, you know? But yeah, this is an ancient breeding ground. When a long time ago, it's probably been, I think, story as I get it. It's Kalākaua's time, and the villages were here. The kids all grew up racing sharks. Just like, you see them, they go race the sharks. And that was the game over here.

GM: Like riding them?

ST: Yeah, they ride them. They just ride them, they just play with the sharks, right? So, there's a difference in how the shark wasn't bad. For a lot of families that's their 'aumakua. Things change and then it gets lost. It gets covered over by other things. But all of that history, it'd be, you know, it'd really be nice if it was...

EE: Like a plaque or something. Like when you go up to the volcano.

ST: Yeah, go up to that small center. That would be pretty nice, about Keʻehi Lagoon.

LE: You know that our picture of our boat is on the rail.

ST: Is it?

GM: Oh, that's cool.

LE: Yeah, but the rail, my, it's our boat that's in the picture.

GD: Oh, that's good. Because when I went to the meeting, I said, I asked them, and they were before they break down the stuff, you get the community input. I asked, will this rail station reflect the area? Because Keʻehi Lagoon is a cultural practice spot for waʻa paddling. I never ever walked in there to like find out, I don't know what was the attention of the shape of how they built it, but I, we made it a point to tell that person that was in charge of that. I hope this rail station reflects Keʻehi Lagoon. That's good. There's a picture of canoe in it.

EE: We had a postcard with our canoe on top. Inside the postcard, the friend would show me. A long time ago, he go, "Hey, look at this." I go, "Hey, that's our canoe." It was Kai Poha one, the yellow one.

GD: That's good, I like to put more stuff like that. Like have the board you know, how when you go hiking you get the information, they should do that to the whatever by the officials stand, I think.

ST: Just make it more aware look at all these kids and stuff they're out there, they don't know anything about this area and they're part of it so all that stuff goes up, they're gonna take the story. That's kind of like our job, all of us little clubs we've got to pass this on, it's like, it's not like, I don't think I have a choice, but I have to do that, you know?

GD: What I was taught and the research, when I did research about the area, was that this was the first settlement for people when they came in. Keʻehi Lagoon was the waterway when the first settlers for Oʻahu came here. It was this area. And I tell my kids that all the time, this holds sacred significance to our culture. It's a place where the population came in.

EE: Damon. And um... House over there by the...You remember... the house over there? Was a princess or king, that was the summer house. Oh, and they moved 'em to over there. It was over here.

GD: Yeah, that's Kalākaua's.

EE: Oh, Kalākaua's.

ST: What is now, that's not the way it was back then. The pictures are different, but it was in that area where they built the mall and stuff out there. That's my understanding of that, that that's where it was. It was just here, that's where you could just, it was just, yeah. Yeah, just over there.

DS: You might know his [referring to Uncle Scott] cousin, Nainoa. And his brother, Kirk, from Kalapana.

GM: Oh yeah?

DS: You know him?

GM: No, no, no. I don't know them, but... I did my PhD research down in Kalapana, so...

DS: Oh, you did?

GM: Yeah, I spent time down there.

DS: Brother was the original Kalapana...

GM: 'Ohana?

DS: Yeah.

ST: But I know she's too young to remember that.

GM: So I guess my last question is, I think it sounds like the bathrooms are a good thing, but wanting to prevent what you're talking about with like the pa'akai beds, like something like that from happening again. But is there anything that... would the project inhibit any cultural access or rights or anything like that in those areas?

ST: There's more development in each schedule.

GM: Just the bathrooms for this project. But if they have another one, they'll probably have to do the same process again.

ST: Cultural ceremonies and prayers?

GM: Yeah, anything that is like, "Oh, don't put it there. There's a..." Anything like that. Trying to do a better job than they have, I think, in the past, but.

GD: You know, they just gotta communicate with us more. They decide to do something without our input. They've been doing stuff that without our info or with our knowledge and then we're like, "Great. Now, there goes that. Oh, they put up the chain. Great. There goes the parking."

EE: Maybe she should talk to... Kehau.

GM: I reached out to her.

EE: Because she would know what had over here, because she handled the fishing village.

ST: Her mother still lives out there. Aunty Nani is the last of the original.

LE: That’s her mother? Stepmother.

ST: That’s her stepmom. Stepmom.

GD: Was her mother-in-law. Yeah, BJ is the one. That’s BJ’s mom.

LE: So is that the last of the... She’s the last of the...

ST: She’s the only...

LE: So what do they do with the home?

ST: The last of the association in the village.

[Conversation continues about Mokauea, the interviewees leave one by one]

APPENDIX F: INTERVIEW WITH LEE KALAMA

TALKING STORY WITH
LEE KALAMA (LK)
Oral History for the Keʻehi Lagoon Beach Park Improvements Project by Gina McGuire (GM)
For Keala Pono [February 19, 2026]

[Recording starts]

GM: Is it okay if I audio record you?

LK: Yes, it's fine.

GM: Okay, and then what I would do is I would type it up and then I can send it back to you and you can take out whatever you want or leave it or add anything, so you have the final say on it.

LK: Yeah, no worries. And I can give you my e-mail.

GM: That would be great.

LK: [Shares email address]

GM: Okay, awesome. So just to start, if you want to introduce yourself, your name, where you grew up, just a little bit of background information.

LK: Okay, my name is Melita Miller Kalama, but everyone calls me Lee Kalama. I grew up in Kailua. And. I have a kind of a background of water sports. Did a lot of kayaking, canoe paddling, body surfing. And my father was a musician. My mother was a hula dancer. And I went to Kailua High School. I had several different type of jobs in my life. And, you know, all over the spectrum. And I'm happily retired now.

GM: That's awesome.

LK: And I still am doing water sports, canoe paddling, and I play pickleball. And I play soccer on occasion.

GM: That's cool. I've never tried pickleball, but it seems like it's on the rise. It's getting more popular.

LK: Yeah. Really fun. Really fun. It's a great sport.

GM: Yeah. Do you want to share a little bit more about your ʻohana background?

LK: Sure. Um, well, my father was a musician back in the '60s who played at the Hilton Hawaiian at Tapa Tower. He was Charles Kaipo Miller, and he made several albums that are still widely used today for hula teachers.

GM: Oh, that's super cool.

LK: Yeah, and his music's still being heard. You know, when I walk through airports, sometimes I'll hear his music, but we kind of grew up watching him in Waikīkī. He was at, you know, he was at Queen's Surf, he was at the Ilikai, at the Royal Hawaiian. He did Waikīkī, I mean, Hawaiʻi Calls for 25 years. So he was of that era of the hapa haole music. And his parents were also musicians. My mother was from the Philippines, but she... was here at, she graduated from school here and she became a hula dancer. Her teacher was Bella Richards. And then she became, when she was of college age, she went to New York to attend Columbia, but she never graduated because she started working at the Hawaiian Room at the Lexington Hotel in New York, which was the, like the place to be, was very, you know, sought after to be

at the Hawaiian Room, ‘cause at that time, the Hawaiian shows were very exotic. So she was performing there. That’s where she met my dad. And then they moved back to Hawai‘i in the ‘50s, yeah, I think ‘55. And that’s where we come in, all the kids.

GM: Wow. Wow, thank you for sharing that. Could you share a little bit about your relationship to Ke‘ehi Lagoon and any ways you’ve gained knowledge of that space?

LK: Okay, in, let’s see, 1999 or 2000, New Hope Canoe Club was born and we didn’t start at Ke‘ehi Mauliola just then, we were in Kailua for a while but then the site switched over to Ke‘ehi Mauliola actually we call it, which is, Sand Island, and we started, my husband and Charlie Thurston Kimo Taylor started a canoe club there. And at the time I think we were the first club down there. And uh, so, New Hope started there in like 1999, 2000, something like that and then I was paddling on the windward side um with Kailua and Lanikai Canoe Club but my husband since he became the head coach at New Hope eventually then I, he asked me to steer the uh women across the Moloka‘i channel in the year 2000 or so.

GM: Wow.

LK: You know, and they were novice women, but they were all older. They were master’s aged. They were over 50. And I was kind of hesitant at first, but I paddled a qualifying race with them before the channel and decided that they were good to go. So ever since then, I paddled down at, we call it Mauliola now. That’s the general name, not Ke‘ehi anymore for us. We’re not at that site. There are canoe clubs up at Ke‘ehi, but we’re at Sand Island. It’s called Mauliola.

GM: Mauliola.

LK: Yeah, M-A-U-L-I-O-L-A. One word. So from there, I mean, it was just at the time when we started there, it was just kind of a wasteland, you know, it wasn’t much down there. There wasn’t many canoe clubs and it wasn’t manicured. It was pretty rough. But over time, you know, our canoe club started working on it and then other clubs joined us down there because they got kicked out of the Ala Wai at one point. There were a lot of clubs, a lot more clubs on the Ala Wai, but they, they got kicked out at one point and then they started to come, uh, over to Sand Island to our area to paddle. So there are quite a few clubs there now. For example, Healani is there. Keahiakahoe is there. Um, ‘Ōlelo is there, Na Hoapili o Kekai is there, uh Hawaiian Connection is there, Hawaiian Connection is there, yeah. And there’s several more but there are further, you know there’s, as more clubs come the further down to the left they go. Now that area, back in the ’90s and prior was, you know, they had the island that had the houses, more houses on it, but it got burned. They burned, the State, burned them down so they would not be occupied anymore. So that was a big protest back in the ’90s. I think that was. And that was before I got there.

GM: Oh wow.

LK: And that has a whole history. Kehau knows all that history very well.

GM: Okay.

LK: So, you know, so they’ve done things there at our area. They’ve dredged, you know, the water. They’ve, jet ski company came in, you know, so now they’ve moved them somewhere else. But there’s um, there’s a fair amount of activity that goes on there, you know, canoe paddling, They have, like, stage a jet ski out there. They have people doing that surfing the, you know, with the fin hydrofoiling. That’s hydrofoiling.

GM: Oh, wow.

LK: Yeah, so, you know, and there are people come for picnics, class reunions, all kinds of activities down there now. So it's quite, you know, quite well used. And then on the other side, you have Polynesian Voyaging Society. And there's other businesses down there too. I think a UH extension or something. But there's, you know, there's a fair amount of activities there. There's a boat ramp that people go and launch their boat from. They can launch from the boat ramp there in Sand Island and go out. There is also, you know, just for your knowledge, there's Sand Island Beach at the very end of Sand Island Access Road, but we are, our site is before that. We are just over the bridge.

GM: Okay.

LK: But there's, we have a boat ramp at our place, Sand Island Boat Ramp, yeah.

GM: That's helpful because I'm not super familiar with the area yet.

LK: Yeah, so you know that there are several islands off the coast, I mean off of our shores, which Mokauea Island and there are several more. Kehau could tell you more of the island names. I know there's Kahakaʻaulana or something but you'll have to ask her. And Mokauea is supposed to be the last fishing village in Oʻahu, so that's what people would do there now there's very few residents left there. But it's still a, you know, an island that is held by leaseholders.

GM: Oh, wow.

LK: You know. But we, New Hope Canoe Club, did a lot of work every year on that island to clean the shores, you know, because there's a lot of debris that drifts over there. And, you know, we still help with many projects with Mokauea. They do a lot of, now they're doing a lot of educational programs for children. And they have, you know, when there's low tide, there's a very good, like, reef that the kids can walk out on, and they find a lot of different sea creatures out there. Some that I had never seen before.

GM: Oh, cool.

LK: Yeah. And so Kehau Kupihea does a lot of the canoes. She takes the canoes and there are some canoes, her association, her group owns, and some canoes are our canoes from New Hope. And she takes these groups of kids, they're usually high schoolers, and they'll go out for a couple of hours or half a day to work on the island and do, you know, clean up. They do, study the marine life there. And it's a really good educational program the kids really love. So the canoe clubs there in the area support all of that too. You know, mostly New Hope, but the other canoe clubs also support and we try to help Kehau's program to educate, you know, the kids and give them kind of an outdoor experience.

GM: About the history of the area...

LK: Yeah. It's quite rich in history, you know, because it was King Kalākaua's summer place that he used to stay. And they had a lot of fishponds in the area, but when World War II came along, a lot of the fishponds got covered over and dredged, all kinds of things. But there's still a fishpond there on Mokauea Island. So, you know, the history with King Kalākaua, that was his summer place. And, you know, it was considered kind of a sacred ground for him. And they used to have shark races, they're shark riders that Kehau can tell you that story.

GM: Oh wow.

LK: So it's kind of it's a rich, it's rich in history, though many people don't know the history there yeah, and um, that site provides our canoe club kind of a safe haven because it's sheltered from the outside you

know, uh, the outside waves and wind and currents, it's a bit sheltered. So it's a very good place to launch canoes out of there.

GM: Yeah, I know you mentioned Polynesian Voyaging Society. So are they doing like traditional sailing in the area as well?

LK: Yes, they do.

GM: That's cool.

LK: And they, you know, every time they go on one of their journeys, there's all the canoe clubs will gather and we'll send off, paddle out with them and, but yeah, they do programs there too. And that, Hikianalia is docked there as well.

GM: Wow. And then, so I know you mentioned the historic fishing village and fishponds, but is there active gathering or fishing, anything like that still happening in the area?

LK: Yes.

GM: Yeah... Do you know what kind of, like, fish people are going for over there?

LK: Like pāpio. Other fish too, but you know, pāpio comes to my mind.

GM: Okay. And then on the like beach side, is there any traditional practices that are occurring.

LK: On our side? Traditional practices. Well, just, I would say, you know, it's just canoe paddling.

GM: Okay.

LK: Races, that's traditional. Yeah, there's other things too, but I cannot think of them all.

GM: Yeah, yeah, no, are there any, so for this particular— the proposed improvements are to add two new comfort stations at Keʻehi Beach Park and so one of the questions I have to ask is if you know of any cultural sites or archaeological sites or burials that might be in the area?

LK: Well, I know that the island of Mokauea, we unearthed an ancient canoe there.

GM: Oh, wow.

LK: So, you know, they have some historical, historical evidence that that area was an old, you know, used in traditional ways.

GM: Yeah. So if they, they break ground, they might encounter things like that?

LK: Right.

GM: Okay. That's good to know. Do you think, you know, adding two new comfort stations, and I can e-mail you the map of where they're supposed to be, but do you think that would affect a place of cultural significance or access to a place of cultural significance?

LK: Now, when you say comfort stations, what exactly are you meaning? Like a pavilion or?

GM: I believe they're like bathrooms, like showers. Stuff like that.

LK: I think it depends where they're going to put them. And how big they are. Right now, currently, the bathroom, you know, there is a, you know, typical City & County bathroom there that unfortunately, they don't open it up too much because of that has been kind of a traditionally, you know, there's been homeless people living there in the area, and they made, you know, those container homes right across from the beach. And so there's a lot of homeless people that come. And unfortunately, you know, I can't say who it is, but the bathrooms you know, are a constant problem. So a lot of times they don't open the bathrooms or they're, you know, you can't, there's like no running water or, you know, there's, it's problematic like that.

GM: Yeah.

LK: You never know.

GM: Yeah, so if they're adding new, new bathrooms, there's got to be some kind of, I don't want to say like monitoring, but presence. Or something might keep them from the same thing happening to them.

LK: Yeah, right. You know, there'd have to be some kind of, somebody taking care of it.

GM: Yeah.

LK: Unfortunately, you know, that's, I don't think it's unique to just that area. It's, you know, anywhere that people that don't have another bathroom to use, have to go to. Yeah, and that's the only bathroom there, unless there's a porta potty on occasion. Sometimes when we have canoe races down there and there's going to be more people coming down, you know, we, we do definitely get a porta potty. But for that area, there's just one. One area, one by the pavilion and that's where the bathroom, that's where the only bathroom is for that area. There's another site over there that used to be the BMX sandbox. It was a BMX track.

GM: Oh wow.

LK: Which was, the guy was super nice and wanted to give the kids something to do it and the kids loved it. But again, with the people there, I think homeless people, kind of broke in many times and, you know, sabotaged his equipment and he just got so discouraged. He just gave up.

GM: Yeah.

LK: Uh huh. But you know, if it, I don't know what they're going to do with that area. I don't. I don't know what the State will do. But yeah.

GM: With that in mind, I know. So it's two comfort stations, which I will ask specifically what's planned, but they're also planning to add a maintenance building. I think they are planning to have someone more on-site. But as they come in and they're doing this construction and stuff like that for this project is there anything you would recommend they do to, I don't want to say reduce their, their impact or you know be friendly to the paddlers in the area. Is there anything you, you would want to see them do?

LK: Well, um, you know there are other places that have canoe hālaus for their canoes but we do not have any down there, that would be nice, you know that a sheltered area that we could shelter our canoes in because it is a cultural thing, you know um and it's very healthy for, you know our community to be paddling. We have a lot of kūpunas that do it out there. Um, so I would think that in an unused, maybe, I don't know where the best place would be, but maybe a hālau, canoe hālau, would be nice. And I hope that they honor the people, the canoe paddlers out there, that have worked on that area and you know, done the

lands, you know, trimming and cutting trees and bushes and weed whacking it. My husband does it almost every weekend down there.

GM: Oh wow.

LK: You know to just keep the area nicer, you know, and cleaner. And I would hope that the State would honor the canoe padders and you know, the recreational area is needed for our people, not… you can't put buildings everywhere and commercialized everything, this and that, you know. Our folks need to have some recreational space.

GM: Yeah. That's a great suggestion.

LK: Yeah. To keep that.

GM: Especially since you guys have done so much work over the years.

LK: And just giving the community a place to go to that they're safe, to get out in the water, and do something that we love doing. And it is cultural.

GM: It's very positive.

LK: Yeah. Yeah. And we can't develop everything and always be looking to be commercialized, everything. We need to give our folks a place to go to that they can have safe recreation and, you know, just enjoy. And like I say, we have lots of kūpunas down there that paddle and it offers them a safe haven. It does. You know, whether you have to put them out at other beaches that have swell and surf coming up on the sand, this offers a safe, a safe entry into the water in and out. Because of the layout. You know, we're inside. We're inside in calm, like a calm lagoon or whatever you call it.

GM: Yeah. So I know you've kind of detailed this already when you talked about, you know, from the '90s onwards, but is there anything you want to add about how the area has changed? In your time there?

LK: Well, you know, there's more, more other activities that more operators that have come, like say, you know, to do things in the area. And I think that, you know, it's kind of, I think if everybody can kind of work together and we can talk and we can, you know, as a community, we can talk about things that are coming in before it gets there. That would be good. You know, not just all of a sudden, boom, you know, this helicopter company is here or whatever.

GM: Oh my gosh.

LK: It is. I mean, I'm just using that as an example.

GM: Yeah.

LK: But, you know, to try to talk as a community, in advance if there is something going to happen in the area that's going to affect. The people that use that area, you know, 'cause all of a sudden sometimes. You know government entities go, "okay, no, this is, we're doing this," but no discussion, no input from the community. Yeah, you know, but they need to hopefully involve us.

GM: Yeah, for sure. You've mentioned several moʻolelo already about Kalākaua and the fishing village. But are there any other moʻolelo or mele, oli, place names, anything like that that we should know of?

LK: Well, there are many. And there is an old map of the area that has all the names and what it used to look like prior to the dredging of World War II. Um, and that map, uh again, Kehau has that map. I am aware, I've seen that map and there's that area had, I don't know, 19 fishponds and you know, islands that were inhabited but like I say, the area has changed a lot now but I would get those names and that map from Kehau so people could visualize. It has the old names on it too.

GM: That's super special.

LK: Yeah, because we, nowadays nobody knows the history out there, but it, like I say, that area does have a rich history.

GM: And then my last question, other than if you can recommend, if there's anyone else you recommend talking story to, but any community concerns or cultural concerns that we should be aware of? Especially for that Keʻehi Beach Park area.

LK: Well, I know at one time there was a talk of them putting in a marina there.

GM: Oh wow.

LK: And putting, you know, that they would be, it would become like a, you know, Ala Wai Yacht Harbor or one of those. And I would hate to see that happen, but that I have, I heard, you know, that that was one of the plans that was, the State wanted to do.

GM: Yeah.

LK: I, that would be of concern. And I, again, I would hope that they would not do that and not commercialize everything. You know, and leave it for the people.

GM: Yeah, that would be a big change. Those are all my questions other than is there anyone else you recommend I talk story to?

LK: Well, you've got Kehau's number, right?

GM: I have her e-mail, but I don't have her number.

LK: Oh, I have her number, and she's a good friend of mine. She would be great to get in touch with. Hold on a minute, and I will get it for you, okay? Hold on. And if for some reason we get disconnected, just call me back. Okay. Okay, so hold on. What's your first name again?

[Sharing contact information]

GM: Okay, sounds good. Thank you. And then is there anything you want to add that I didn't ask?

LK: The only thing I want to say is, you know, before I knew the area, before I went down to the area, I really knew nothing about it. And I was very unaware of all the history and what used to go on down there. And I was, you know, and I'm not the first, and I'm not the last, but all I can say is people, if they're educated about this area, Mauliola, I think they would be so interested in its history and the resources that it has.

GM: Well, I'll make sure you guys get copies of the cultural impact, the report that we put together. And we try to do, I mean, we do archival research and we do look at historical maps. So that'll be maybe a nice give back of, of that information compiled.

LK: Yeah, and one more thing I forgot to say is, you know the area because it is sheltered, we do have a lot of sea turtles that are, you know, in our lagoon area, and we also have Hawaiian monk seals.

GM: Oh, wow.

LK: And we used to have some little baby Hawaiian monk seals, but the cats. The cats down there, which are wild cats, we used to have like 300 of them. There are people that do come and feed them, but it's very, to me, it's very dirty because when they, you know, their feces or their urine goes into the water, that has killed some of those Hawaiian monk seal babies.

GM: Oh, no.

LK: Yeah, they did a autopsy on, there was at least one that always was by our site, and then he died from that, I think it's toxoplasmosis, something like that.

GM: Oh, yeah.

LK: And it's caused by the cats. And so wild cats down there in that area is, to me, no good. Dirty and it's dangerous to our marine life and we wish people would stop feeding them.

GM: Yeah, so maybe part of what they can do is, I don't know, be more engaged in that management of that down there.

LK: Yeah. Try to neuter those cats or...

GM: Yeah. Population control.

LK: I forgot that's a biggie because also, too, we had people down there that had maybe cracks in their feet, or they had a sore, and that makes it very dangerous. And they got, what do you call that, MRSA?

GM: MRSA, you can get infections.

LK: Mm-hmm. Yeah.

GM: Well, that's a good point. Keeping the water clean.

LK: Keeping the water and the sand clean. Mm-hmm.

GM: Okay. Well, thank you so much for your time.

LK: And Gina, you'll love Kehau too. She's very, she will talk with you.

GM: Okay, that's good.

LK: Okay.

GM: Okay. Well, thank you so much. It's so nice to meet you. I know it's over the phone, but I hope I get to meet you in person one day.

LK: Me too. Thank you so much.

APPENDIX G: INTERVIEW WITH KA‘IMO MUHLESTEIN

TALKING STORY WITH
KA‘IMO MUHLESTEIN (KM)
Oral History for the Ke‘ehi Lagoon Beach Park Improvements Project by Gina McGuire (GM)
For Keala Pono [February 24, 2026]

GM: I just started the recorder and so if we can just start with a little bit of background information, your name, where you grew up, and went to school.

KM: Okay, in Hawaiian or English? [Laughter]

GM: Whichever one you like better.

KM: O Ka‘imo Muhlestein ko‘u inoa. Ka ‘ohana inoa Pi‘ikoi uh, Paoa ka inoa o ko‘u ‘ohana. O ko‘u wau kūpuna no Kālia mai. Hānau au ma Honolulu me O‘ahu ua. Honolulu au ma hulu lei, Moanalua, Waikīkī nei a me Kaimukī uka. Ko‘u ‘ohana.

My name is Ka‘imo Muhlestein. My family name on my dad’s side is, I come from the Paoa Pi‘ikoi ‘ohana of Kālia. I was born here in Honolulu, never left the islands, and still here, the same place. [Laughter] I don’t know if my life’s gonna, you know, I try to holoholo here and there, but I live here. I grew up, I, it’s funny how you asked me the question, where did I grow up? I actually, you know, my grandmother on my mom’s side, she was, she married a boy, Lifty, she, her later name is Lifty, but growing up here in the Salt Lake area, she actually worked for the Damien Estate, but at the time growing up, my parents invested in the home where we called Salt Lake back in the ’60s, and that’s when it was first being developed. And that’s where I got to have the experience of, as a kid, riding my bike in the natural lake, Salt Lake, known as Salt Lake, and where there was only dirt back in the days.

GM: Oh, wow.

KM: Yeah, so we were able to experience the natural lake, which was, is now covered up, mostly covered up. But I do have memories of there, I have memories. Even today, even after Āliapa‘akai going back in the, you know, to Moanalua, uh valley side. That was one enclosed crater. It was all dirt before it was fully developed. So I had time to get raised over there, but mostly Kaimukī area. At some point in time, I was, for some reason, I also was able to go to Maui, stay with my grandparents in my youth too, in my upper elementary years, and I came back and settled in Honolulu and remained here, of which, I’m still here.

Where did I go to school? From fifth grade, I finished school at Sacred Hearts Academy in Kaimukī. So that’s where my hometown, grew up with. I also was going to Sacred Heart while living in Salt Lake area. I’m a 1976 graduate back in the, yeah, so, I had time to live—but in my years with my father’s ‘ohana, grew up Waikīkī, Kālia, back in the days where it was residential time and so forth. Lots of limu on the ocean, you really smelled it back then. Yeah, so that’s about my family, the Paoa, Pi‘ikoi, Harbottle ‘ohana, very prominent people going back in the days of ali‘i time. Yeah, they have a strong Hawaiian heritage background. I’m from my father’s side, the Pi‘ikoi ‘ohana, Paoa ‘ohana. And we’re still pretty strong and I learned, um, you know, all the traditions have passed on to the generations of today and tomorrow. So hopefully I can be a, you know, one of those that pass it on to my kids, nieces, our ‘ohana, and as time goes forward. So, but it comes from our tūpuna, from time of beginning, all of my ‘ike and knowledge.

But for Moanalua? My beginning times is when we actually moved back in the, when, um, in my father’s generation when he was employed. So that’s where we had to live in the Salt Lake area. But I went to University of Hilo and I become very, uh, it became my life to live my life and know who

I am as a Hawaiian. And so I took the time to really become in love with who I am as a Hawaiian, knowing the moʻolelo, the ʻōlelo traditions, and uh, it's part of me. It is who I am. And so I studied, you know, I took hula here and there, and I got involved in hula. And it's funny, it happened to be at Āliamanu Elementary, where I joined my hālau. So it's, you know, this place is very special, the ahupuaʻa of Moanalaua. And deep, deep spirit, heritage, cultural knowledge... [sirens going off in the background]. Sorry for the background noise I have the ambulance.

GM: Yeah, let's wait ʻtil the ambulance goes past. I want to apologize. I mispronounced your name. I didn't know there was an ʻokina in the...

KM: The twinkle, ʻimo is twinkles. In fact, that name was given to my grandmother's grandmother from Queen Emma's mother. So uh, my grandmother got that name, her mother got that name. Yeah, so that's a very special name to us.

GM: That is special.

KM: Yeah, yeah.

GM: I know you [speaking at the same time]. Oh, sorry.

KM: No, no, no, go.

GM: No, I was going to say, I know you shared a little bit about your ʻohana already, but I don't know if there's anything you want to add about your ʻohana.

KM: No, not really. Just. That's the nutshell of it as briefly as I could share. Our heritage basically comes from my paternal grandmother's side of my life because they were very deep and connected to aliʻi and practitioners and deep, very strong and knowledgeable people. So I don't know why I was, out of my family, that, four of us, I'm the only one that continues, that took the time to really make it a part of my life. My other siblings, um, not really. [Laughter]

GM: Yeah.

KM: Yeah. I don't know why. It was meant to be, I suppose. So that's part of my genealogy, heritage coming from the Paoa lineage, which is a common fact. The Paoa is a family from Kālia, and they have three children. I come from the Harbottle. Harbottle married into the Paoa lineage. So there was two daughters and one son and they lived right at the shore of Kālia Beach. Right now— and that's where Waikīkī, Waikikian between Hilton and Ilikai is, that was their kuleana parcel property.

GM: That's so interesting. I'm not remembering, but I have a Harbottle in my genealogy. So I'm like, I don't know the whole thing very well, but I know that name. So I'm like, oh, that's super cool.

KM: Yeah. So Harbottle married into the Paoa. I have to put it that way. And the Tahana Moku married the daughter of a Paoa. Yeah. We have to put it that way, because it's really the Paoa and lineal descendants that are of Kālia. Not the kānes that married the two wāhines. But they all had keikis. Hah! And they were truly natives of Kālia. Yeah.

GM: Wow. So I know you mentioned doing like hula hālau, but other ways that you've gained knowledge of Moanalua Ahupuaʻa, or of Keʻehi in particular?

KM: Okay, so when I speak of hula, it's not only about dance, but it's reverence of hula, reverence of the ʻāina, of the plants that come from the ʻāina, specifically of Moanalua Ahupuaʻa. So there's

always a reverence of what is growing upon this ahupuaʻa. Whether it's for hula or any cultural practice. It could be for housing, it could be for like wood, pōhaku. And you gotta be very careful. And you've gotta ask permission and do all the traditional protocols when you step into this ahupuaʻa. Truly, you've gotta ask for permission when you step into this ahupuaʻa. And that kind of practice has been, kind of, forgotten. Yeah, and that's, you know, I'm trying to kind of let people know, hey, we think of this as an ahupuaʻa, not a town. You know, it's an ahupuaʻa. And when you come into an ahupuaʻa, you ask for the deities for your, for their permission to enter. Like, when I go to the makai, down at the oceanfront of where this project is, you do cultural protocol. When I go up the valley, into the valley, I do cultural protocol, ask for permission. That's a standard practice for me.

GM: I'm going to, I'm just interested in the way that you're saying Moanalua Ahupuaʻa specifically, and having not spent much time in Moanalua, I was wondering if you can speak to what makes Moanalua special, or that ahupuaʻa unique or special.

MK: What makes it special is from the time beginning. All of it, from the time it was created, the deities, the, to survival of change from wā kahiko, because every century, people have evolved. Different leadership comes in, but our language prevails, our way of life prevails, and most of all, the natural elements sustains the kānaka way of life, and as well as the birds and the living elements of what makes Hawaiʻi Hawaiʻi. All the native plants, trees, animals, birds. This is our home, whether you're human or otherwise. And it was meant to be as if you could feel it and you can smell it in the dirt, the lepo. And if you go to the oceanfront, you get a special feeling, even though it is what it is today, I still see it. And when I jogged along the pathway, oh my gosh, you can see the springs, springs popping up. And that has been here from day one. You know, the natural elements of this ahupuaʻa, the makai, you know, it's still here. You know, so more names, you know, of this place, the more respect you get of it. Yeah, I'm not too, you know, there's too many names for me to remember, but I would love to know every name, but I'm not that kind of retainer of inoa. [Laughter]

GM: Neither am I.

KM: Yeah, but every name, once it pops up, and you can find it in the chants and so forth. But yeah, but when you find it, you go, "Wow." And then you know that you're in a very special place that is of reverence. Yeah.

GM: Speaking of that, are there any mele or oli that we should know of for that area?

KM: Um...You'll have to look at the resources of, I know there's, I can't remember her name, but we do have our kupuna, that is the one that we look to, for the kumu hula. I believe she has, she's been buried at the Moanalua grave site up on the other side. I would defer to that chanter for all of the um, chants. Okay. Yeah, 'cause I, to my hālau, we weren't able to learn those particular chants of this ahupuaʻa, this valley, which, yeah, so we have yet to learn of that. But I, you know, when I get, I feel like it calls you. I don't reach out to it. A chant will call you, and you'll know when it, will call you to become a part of it. And it hasn't called my name out yet. So that's probably why I haven't embraced it in full knowledge to, of the ʻike and manaʻo behind it, because it hasn't reached out to me.

GM: Would you be able to share that kūpuna's name?

KM: Ah, I would have to search it. Yeah. It's a long name, but she could be found at, I think, the Moanalua Gardens Foundation.

GM: Oh, okay.

KM: Yeah, they're great, excellent. I defer to their knowledge of the kūpuna with the deep knowledge of this Moanalua.

GM: Okay.

KM: Yeah. Yeah, I would look to them, not me.

GM: Okay, that sounds great.

KM: Yeah, I just have personal, um, growing up here, but with knowledge of what I've learned on how to be Hawaiian in this ahupuaʻa, from hula, ʻōlelo, and whatever I can I use to build my ʻike of this place to make me a better person.

GM: Yeah. I guess I'm curious, so thinking about... it's okay if you don't want to mention anything specifically because sometimes people are sensitive, but if you're aware of any traditional practices or cultural rights that happen at Keʻehi Beach Park in particular or in the wider area.

KM: Well, the only cultural thing that has been of modern times is our hoe waʻa competition. I don't know why they chose that place, you know, because of what the ocean there, the water is, you know, it needs cleaning up, but it's been a traditional hoe waʻa place and you know we open it with our traditions and for some reason it's been the chosen place and when we do gather there for that event, oh wow, it's awesome. I had my kids go there for school and hoe waʻa, put their involvement in paddling. So yeah, that goes for hoe waʻa practices, which is very important to keep that tradition alive. Traditionally, I don't know, you know, before Dillingham's time in the natural state when Moanalua, the islands was untouched, where the watermark is, traditionally through stories, understanding Pele stories, and all the moʻolelo, the, that whole landscape of Oʻahu, it was a pit stop. And what do you call it? The deities, stories.

I don't know the name, but I read a couple of interesting legends of famous fishermen traveling along the shores of Moanalua, Keʻehi, all the way to Mākaha from Lēʻahi and the fish galore would just be a part of life for them. And that's why I have a lot of respect for that makai. It was, once upon a time, before the changing of time. And the villagers that would, and you know, the ahupuaʻa system allowed not only fishing, but also kalo, because the wai that would flow all the way down. And the puna wai, oh my god, the puna wai is abundant. [Inaudible] is also puna wai. And the brackish water in the lake, the Āliamanu, and the stories of Pele jumping with Hiʻiaka and all those stories, yeah. Just interesting, yeah? So I come to respect all that past and live in a way where you have to kind of, you have to know this to, to feel the mana, the spirit, the ʻuhane, feel the makani, the ua of Moanalua, and it's from the past, present, and the future. That's why I'm blessed to have, to be a part of this ahupuaʻa.

GM: I love the mentioning, the lawaiʻa and then the moʻolelo of Pele.

KM: It was a pit stop for all of them.

GM: Sounds like it was an abundant, like a bountiful area.

KM: Yeah, and then there's also, whadda you call that? Ah! I'm going blank right now, where the spirits lift off... leilono, I think. It's near the Salt Lake area, a mountain. There's a pivot where the spirits fly, leave, yeah? Leilono, something like that is the name. You'll find it in the... It's a common name.

GM: It's a leina?

KM: Yeah, yeah, a leina. It's a leina. It's close to the lake, the pond.

GM: Wow.

KM: So this historical site, but up front where the project is, you know, it's water filled in, I believe. Yeah, it's a fishing village. A fishing area. So, I don't know. We are a...any time where filling in is a general practice.

GM: Yeah. So I know, thinking about that fishing village, but do you know of any cultural sites like burials or archaeological sites that might be in that area?

KM: No, I don't believe, I haven't found, if I knew I would be up and I would be up and like, ah, I wouldn't even go there. Nobody would be going there and there would have been heiau. All of the community would have marked it if there were signs of any. So I don't believe there are any because it was not an original land. It's all water of where this area is located. And you can tell because it's below sea level. Below sea level. In traditional times, burials, it's very not, it's not known to have burials below sea level. Yeah. It's not known to be of that nature. Yeah. So it's supposed to, be a place to land your canoes and go out and fish. That's what the moʻolelos have. Besides Pele's stories, but for daily life, it was a place to land your canoe there and to go out and gather your subsidence. That's what Moanalua was about, feeding people.

That's why, you have the sprawling springs and the river, uh, the streamways it provided. And that's the story that we're trying to keep within our ahupuaʻa. And hopefully we can learn from it so that we can, you know, somehow incorporate it into our ahupuaʻa system. I would love to see Keʻehi add some kind of remnants or some kind of, besides hoe waʻa, let's turn it into a hālau iʻa, fishing for fishermen, where they can make nets and stuff and go out, park the canoes there and go out not for competition, but to launch their communities, to go out to catch fish. That would bring back the traditional ways of our shoreline. Yeah, you know Mokauea Island?

GM: Yeah.

KM: Oh my god, yeah. You know, they are working hard to maintain that tradition, fishing village. And that's part of Keʻehi too, you know, that linked...that's all of their landscape right there. Mokauea, Alaukeʻehi, that's all one ʻohana [laughter], basically, all the fishing, traditional time. Because it was, our ocean was so abundant. It's like, "Oh no fish, man. Damn." Yeah. And they had to launch their canoes there. So, you know, that's what, that's why recollection understanding of this ahupuaʻa. You know, today it's amazing. And I tell people, you know, I live in this ahupuaʻa. It has education. It has culture. It has health care. It has economic development. It has transportation of the air, the land, the ocean. I don't know what kind of ahupuaʻa incorporates everything in life other than outside of Moanalua. It's amazing. And we still have cultural eminence, like the springs, even up to the ocean.

GM: Yeah.

KM: You know, they try to cover it up, but the springs are more powerful than the cover ups.

GM: Yeah, maybe that's something they could do is try and, well, I don't know if they could actually do this, but, reinvigorate some of those springs or caretake any springs that are on the...

KM: Yeah, uh-huh. I, you know, there may be, I don't know, but that is a landfill in my, so when you, when I looked at the maps, when it's all, it's all, you know, the reefs, shallow waters. It's not the deep ocean to get further out. But that's the place where that was their ice box, their ice box of kahiko times. It was a necessity of life.

GM: Yeah. Is there anything—kind of going off of that question, you've had a couple of really good suggestions already, but anything you would like to see them do to give back or reduce their impact or anything like that.

KM: Um, you know, okay, so it is, I like to just see people use it, you know, keep upholding traditional ways. You know, it has, you know, we use it for multiple recreation purposes, like hoe waʻa. And I know the tennis courts are there. That's important to use. That's why I'm saying Moanalua is a healthy, provides health consciousness. You know, it has everything that you need to. Now there's a pickle ball court over there. There's a field where baseball and all the physical activities occur over there. So it plays a major part in wellness, you know, of that particular area. But when they go there, there's no connection of the once-upon-a-time memories.

GM: Yeah.

KM: And I don't know how, unless people engaged have events there that reflects the cultural practices, that's the only way to keep that kind of um, traditions alive. Use the ʻāina. Yeah, use it for good reasons, you know? That's the only way. Yeah.

GM: So I know you saw that map with the, where they're planning to put in the two new bathrooms. And they're planning to put in a maintenance shed. But do you think that those areas are sensitive or would affect cultural rights or cultural access in any way?

KM: Um, I play tennis over there at the tennis courts right there. And I saw where that one cultural setting is. Then I asked my partner that plays tennis with, "Guys, oh, look, they're gonna build one right at the end of the tennis court." It's fine. That's good, maikaʻi. Since I noticed that, you know, people when I, because I go there in the early morning, like when the, before the sun is out, I like to play before the hot sun rises over the tennis courts. So having a station over there, as long as it is safe and I don't want it to be a place where it attracts the unwanted activities. That's the only, my concern, is that kind of activities. I don't know how to control that. You know, that's the only concern. Keʻehi is, I don't know, but I'm okay with the stations, one over there and the one by the, oh, the parking lot, the one in the middle, that's gonna replace the other one, right? And towards closer to the older one. The one that's up. That's gonna be demolished? Okay, that kind of makes sense. But I wonder if that station, the one in the middle of that big parking lot, it's kind of, that middle space is so open and it's important to have it open in my opinion.

GM: Can you talk about that more?

KM: And it's going to be too close to, the one to the tennis court. I think it's too close. If you're gonna knock down the original one at the other end. I would rather keep it there because the one in the middle is gonna be too close to the tennis courts station one. Yeah, and then, and it's gonna, I don't know, it's just gonna block the uh, I don't, so, yeah. You need to keep the pathway open of Keʻehi with Kahauiki. Yeah, it's kind of an awkward location to be culturally, I think.

GM: Uh-huh. Hold on one second I dropped the recorder. Okay, we're good.

KM: Yeah, the two stations, I'm good with the one close to the tennis court one, that station. That's appropriate over there, 'cause it acts like the welcoming station as you enter into the park, Keʻehi

entrance. So, and then the second one that's in the middle of the biggest parking structure on the park, the big park ground to me that's kind of um, blocks the wind to me. I don't want the wind to be kind of, divided from the mountains oh interesting because it does get windy over there. I'd rather see it close to where the original one is closer to the Keʻehi side. No, no, Kahauiki side.

GM: Okay.

KM: Yeah, yeah. Because when you have the canoe guys come, the canoe events, well, they get some, I can't remember where the bathrooms are. But, yeah, I'd rather have, only because of the wind patterns, I would prefer having it close to the Kahauiki boundary. And then the other one close to the roadway, the tennis court. That way it makes, you don't want to block the makani.

GM: Okay.

KM: That structure, yeah. Yeah. Yeah, 'cause even our makani has ʻuhane in it. They speak to us, you gotta let them take the lead. [Laughter] As coming from a cultural sense of place. That's why I don't want it to...I prefer it to be more separated than what it's planned.

GM: That kind of brings up the next question, but...thinking about things like the wind movement through the area, but any other cultural concerns for that area? It could be cultural practices, cultural rights, or just broader community concerns for that area.

KM: Just broader community concerns is just know Keʻehi. Culturally, the moʻolelo, just not to see it as a open space in a Western sense, but in a Hawaiian sense of place. That's my biggest hope for Keʻehi.

GM: Okay. Having the moʻolelo be more...

KM: In the hearts, yeah, in the hearts of those that do visit and use it. That it's a wahi pana.

GM: That makes sense. My um, my last question before I ask you who else you would recommend is, you kind of mentioned already how Āliamanu or Āliapaʻakai, the Salt Lake area has changed. But any other changes you've seen in your lifetime, either in Moanalua in general or in Keʻehi? But yeah, anything you might have noticed?

KM: No, from my lifetime, it's just seeing the rail going up. [Laughter] It's kind of strange. It's on the park land. Yeah, it's on the edge of the boundary. I don't know, it's kind of, you know, it is what it is. But it's kind of, you're above ground and if you were to take a tour on that, you go, "Wow, okay, you can see it better." So on the rail, have some stories about Keʻehi, you know? Yeah, you can have like a, what do you call, when you come into, that whole landscape of that, all the Pele stories, you can do stories on the rail, because they traverse through the ahupuaʻas, and then when you sit on the ocean side, makai window, on the rail, you're gonna feel the mana of Keʻehi. Yeah, that's a very, and what makes me feel, is the history of the, because it's a, the ocean is basically part of Keʻehi and the whole landscape of the island. Yeah. And, you know, moana, moana, they say it's two moanas. Now, I'm still kind of researching the real moʻolelo moana. I haven't gone deep enough to understand the Moanalua, the two oceans. I don't know. I'm still trying to figure that out. The locations, the locations, you know. You might have the answer. I don't know. I don't know. I'm not an expert with that interpretation of moana lua. And Keʻehi. Ke. ʻEhi. Yeah. But all I know is the moʻolelos that go way back from, you know, the authors, the storytellers, the hula, the chants, you know, that is where the real cultural knowledge exists. And for my life, that's what I observed in my lifetime as a Hawaiian, person of Hawaiian ancestry, and having a relationship to my culture as a resident of this ahupuaʻa.

GM: Thank you so much for sharing that. Is there anything you want to add that I haven't asked about Keʻehi or Moanalua?

KM: No, I guess that's my, what I shared is how I truly feel about it. Just ahupuaʻa, mountain to the ocean and hope for the best and past, present, and future, and look for you folks to keep the traditions alive. So mahalo iā ʻoe and you folks for doing this. I would end, ua mau, e mau ka ʻāina i ka pono o ahupuaʻa o Moanalua nei. Mauka i makai. How you end your moʻolelo. [Laughter]

GM: Is there anyone else you recommend talking story to?

KM: ʻAe. I would call Moanalua Gardens Foundation. They are the resource for which they will go even further than I can. Because they have the deep, the story behind it. And yeah, they are, I look to them to understand because I'm, you know, my lineal descendancy is more of the Kālia area from generations back. Because Moanalua, back in my kūpuna, when my, in the 1800s, we were people of the shoreline of Kālia, not of Keʻehi. Or part of the of ahupuaʻa of Moanalua. We were more of the Kālia Ahupuaʻa in my grandmother's going back, generations back. I'm a new tenant of this wahi pana or this ahupuaʻa. I don't have any going generations back, only of my own lifetime, from my parents' time when development housing became available, employment became available. But I studied. Because of my interest of who I am and took time to learn the language through all the stories written in Hawaiian language. And then having the respect, so I do my protocols of entering and saying mahalo.

GM: Super important.

KM: Yeah, that's very important. So I don't know how you can say that in sharing it with others, but that's what we do.

GM: That might be a recommendation, like before they start work, that there's a blessing or a protocol?

KM: Yeah, exactly. Protocol is part of the tradition of our culture here in Hawaiʻi and across other Indigenous Polynesia, Oceanic peoples, as well as the protocols, yeah. Yeah. So, starting with those two stations, yep, I'm okay with it. But I would ask if we can relocate that one that's kind of in the middle of that bigger parking lot, move it closer to Kahauiki boundary.

GM: Okay, I'll make note of that.

KM: Yeah, only because I'm concerned about the makani.

GM: Okay. Do you know the name of that makani? I can go and look it up, but...

KM: Yeah, look it up, look it up.

GM: Okay.

KM: Hoʻea. Something like that, but look it up, yeah. Okay, okay. That comes from my valley now, all the way down to over there. Yeah, and then when it comes, give it its space to do its thing. That's all I ask. [Laughter]

GM: Okay, and then your mailing address is on the consent form?

[Recording ends]

APPENDIX H: MĀHELE DATA FOR LCA 7715

7715 Lota Kamehameha

Apana 2.

Ua koi mai oia no kona aina o Maunalua he Ahupuaa ma Kona Mokupuni o Oahu, no ka mea, ua loaa ia ia no ka Moi Kamehameha III mai i ka M. H. 1848 i ka wa o ka Mahele aina ana, a ua noho keakea oleia a hiki i keia manawa.

Oia ka makou e hooko nei no Lota Kamehameha, he kuleana hoi kona malalo iho o ke Ano Alodio. Ina uku mai oia i ko ke Aupuni hapa, alaila; kupono ia ia ka Palapala Sila Nui Ano Alodio. Aka; koe nae na kuleana o Kanaka maloko.

Pono ia ia ke uku mai no ka hookolokolo a me ka hooholo ana i ka olelo.

		Penei	
	No ka rumi a me ke pai ana i ka olelo ma ka Nupepea		
G. M. Robertson	No ke kope ana i ka olelo koina		
J.H. Smith	No ka palapala kii		
J. Kekaulahao	No ka hana ana		
	No ke kope ana i na olelo a na hoike		
	No ka hooholo ana i ka olelo ma ka la 19 o Maraki 1855.		
	$	4	00

Ua hooko aku makou i keia mau kuleana mamuli o na olelo o na Kanawai i hooholoia ma ka la 19 o June 1852, i pili i na Konohiki.



Appendix E

Figures



PDF - Q:\Oahu\Keehi Lagoon Beach Park\PDF\20251223 Location Map - Ltr.pdf
Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\20251223 Location Map - Ltr\20251223 Location Map - Ltr.aprx

DATE: 12/23/2025

LEGEND

Project Area

FIGURE 1
Location Map

Ke'ehi Lagoon Beach Park Improvements

RMA Architects
Island of O'ahu

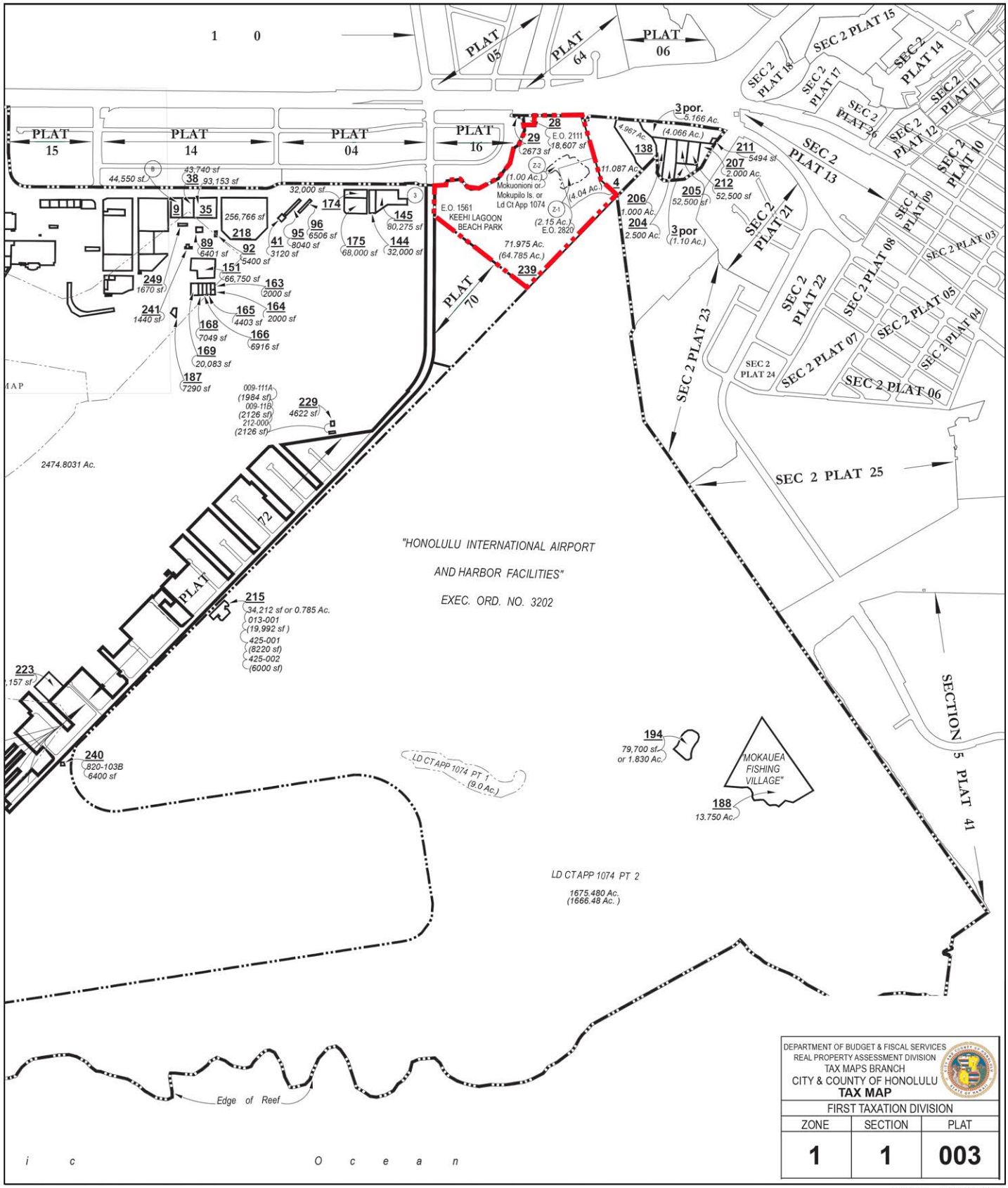
North

Linear Scale (feet)
0 150 300 600

PBR HAWAII & ASSOCIATES, INC.

Source: City & County of Honolulu, 2025.

Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.



DATE: 1/13/2026

LEGEND

Project Area

TMK Parcels

FIGURE 2

Tax Map Key

Ke‘ehi Lagoon Beach Park Improvements

RMA Architects

Island of O‘ahu

North

Not to Scale

PBR HAWAII & ASSOCIATES, INC.

Source: City & County of Honolulu, 2025. .

Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.



Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\Park Facilities Existing Site Plan aprx

DATE: 6/12/2026

LEGEND

Project Area

TMK Parcels

FIGURE 3
Existing Park Facilities
Ke'ehi Lagoon Beach Park Improvements

RMA Architects
Island of O'ahu

North

Linear Scale (feet)
0 100 200 400

PBR HAWAII & ASSOCIATES, INC.

Source: City & County of Honolulu, 2025. ESRI Basemap.

Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.



1. Site Access - Entrance Gate



2. Site Uses - Maintenance Facility Entrance



3. Site Uses - Maintenance Facility Office

DATE: 2/10/2026



Figure 4:
Site Photos (page 1 of 3)
Ke'ehi Lagoon Beach Park Improvements

Island of O'ahu

PBR HAWAII & ASSOCIATES, INC.



4. Proposed Site - Comfort Station 1



5. Proposed Site - Comfort Station 1



6. Proposed Site - Comfort Station 2



7. Proposed Site - Comfort Station 2

DATE: 2/10/2026



Figure 4:
Site Photos (page 2 of 3)
Ke'ehi Lagoon Beach Park Improvements

Island of O'ahu

PBR HAWAII & ASSOCIATES, INC.



8. Existing Use - Comfort Station 2



9. Site Uses - Skyline Track Facing HNL Airport



10. Adjoining Use - Harry & Jeanette Weinberg Memorial Hall



11. Site Access - Driveway to Ke‘ehi Lagoon Memorial State Park

DATE: 2/10/2026



Figure 4:
Site Photos (page 3 of 3)
Ke‘ehi Lagoon Beach Park Improvements

Island of O‘ahu

PBR HAWAII & ASSOCIATES, INC.



Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\Site Plan.aprx

DATE: 6/12/2026

LEGEND

- Project Area
- TMK Parcels
- Proposed Structures
- Surveyed Shoreline (2026)

FIGURE 5
Proposed Site Plan
Ke‘ehi Lagoon Beach Park Improvements

RMA Architects
Island of O'ahu

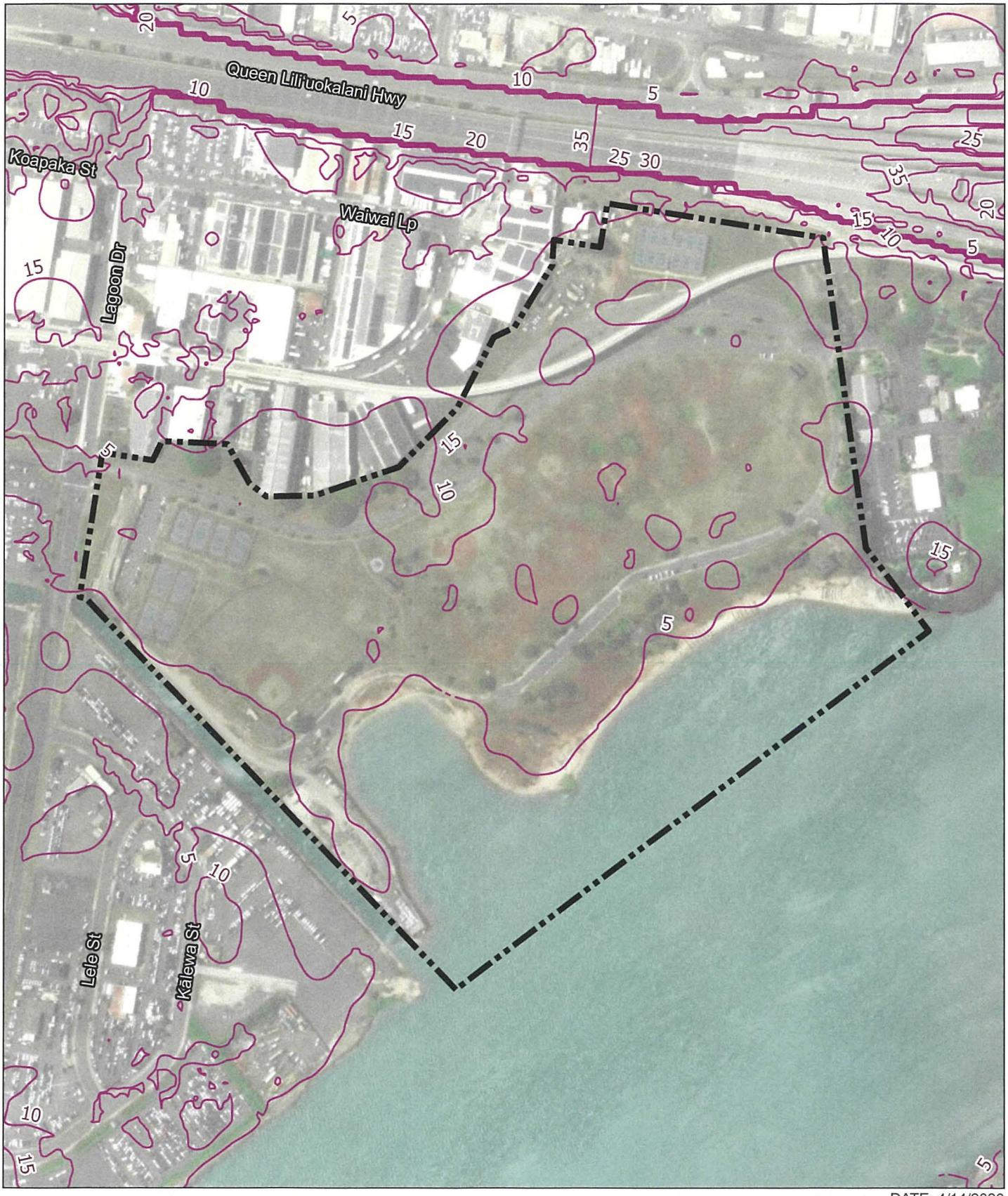
North

Linear Scale (feet)
0 100 200 400

PBR HAWAII & ASSOCIATES, INC.

Sources: City & County of Honolulu, 2025. ESRI Basemap. Controlpoint Surveying, Inc., April 16, 2026

Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.



Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\Topography.aprx

DATE: 4/14/2026

LEGEND

Project Area

5ft Contour

FIGURE 6
Topography

Keʻehi Lagoon Beach Park Improvements

RMA Architects

Island of Oʻahu

North

Linear Scale (feet)

0 100 200 400

PBR HAWAII & ASSOCIATES, INC.

Source: City & County of Honolulu, 2025. NOAA, 2019. ESRI Basemap.

Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.



Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\NRCS Soil.aprx

DATE: 4/14/2026

LEGEND

Project Area

NRCS Soil Classification

- EmA: Ewa silty clay loam, moderately shallow, 0 to 2 percent slopes
- FL: Fill land, mixed
- KmaB: Keaau stony clay, 2 to 6 percent slopes
- W: Water > 40 acres

FIGURE 7
NRCS Soil Survey
Ke'ehi Lagoon Beach Park Improvements

RMA Architects — Island of O'ahu

North

Linear Scale (feet)
0 100 200 400

PBR HAWAII & ASSOCIATES, INC.

Source: City & County of Honolulu, 2025. USDA NRCS, 2020. ESRI Basemap.

Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.



Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\Wetlands.aprx

DATE: 4/14/2026

LEGEND

Project Area

Wetlands

- Freshwater Pond
- Estuarine and Marine Wetland
- Riverine
- Estuarine and Marine Deepwater

FIGURE 8
National Wetlands Inventory
Ke'ehi Lagoon Beach Park Improvements

RMA Architects — Island of O'ahu

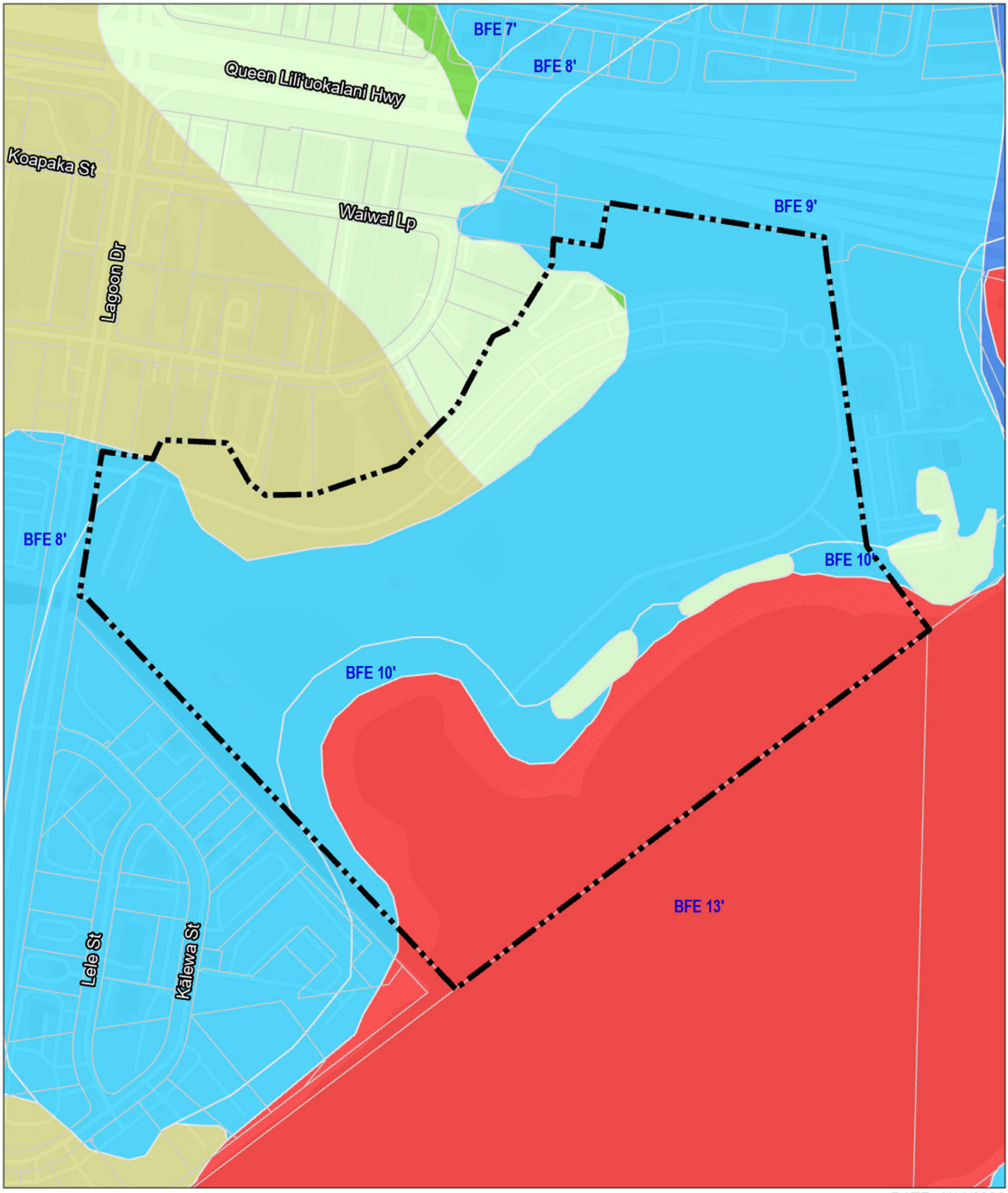
North

Linear Scale (feet)
0 100 200 400

PBR HAWAII & ASSOCIATES, INC.

Source: City & County of Honolulu, 2025. USFWS National Wetland Inventory, 2024. ESRI Basemap.

Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.



Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\FIRM.aprx

DATE: 1/14/2026

LEGEND

- Project Area

Flood Hazard Areas

- AE: 1%-Annual-Chance Flood, with BFE
- VE: 1%-Annual-Chance Coastal Flood, with BFE
- AEF: Floodway Areas in AE
- XS: 0.2%-Annual-Chance Flood
- X: Outside 0.2%-Annual-Chance Floodplain
- D: Unstudied Areas

FIGURE 9
Flood Insurance Rate Map
Ke'ehi Lagoon Beach Park Improvements

RMA Architects

Island of O'ahu

North

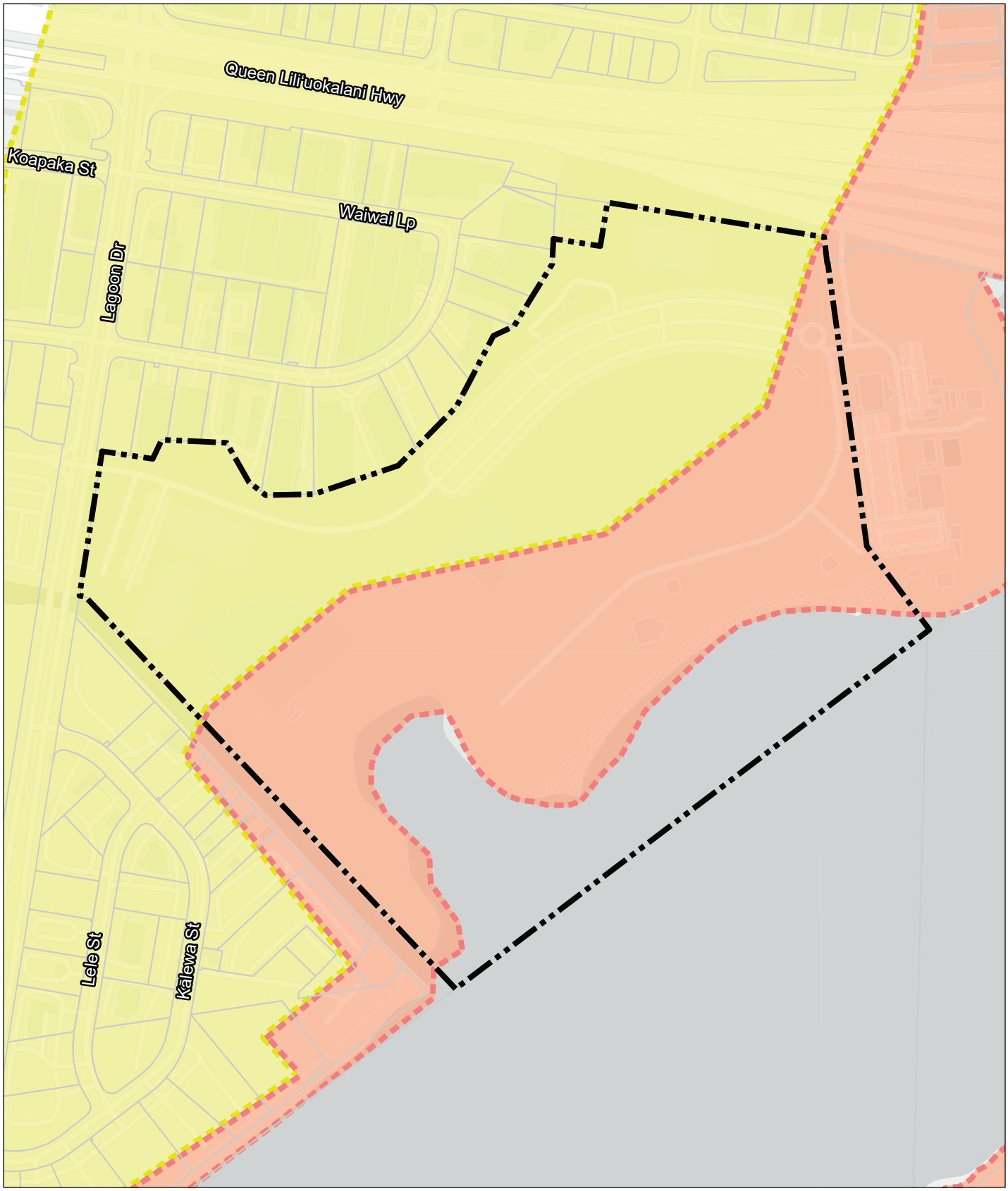
Linear Scale (feet)

0 100 200 400

PBR HAWAII & ASSOCIATES, INC.

Source: City & County of Honolulu, 2025. FEMA Flood Map Service Center, 2024. ESRI Basemap.

Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.



Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\Tsunami.aprx

DATE: 4/14/2026

LEGEND

- Project Area
- Tsunami Evacuation Zone
- Extreme Tsunami Evacuation Zone

FIGURE 10
Tsunami Evacuation Zones
Ke‘ehi Lagoon Beach Park Improvements

RMA Architects
Island of O'ahu

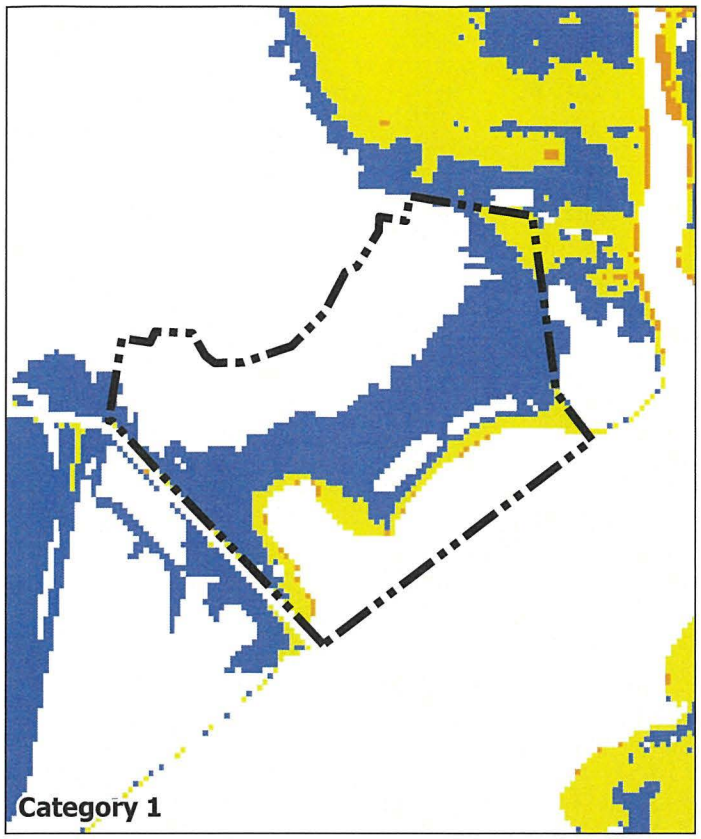
North

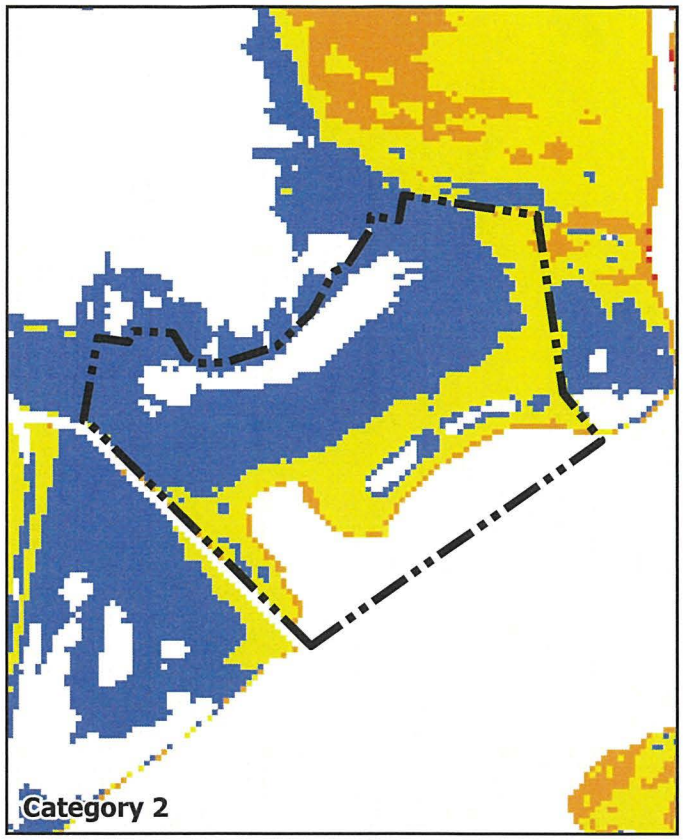
Linear Scale feet)
0 100 200 400

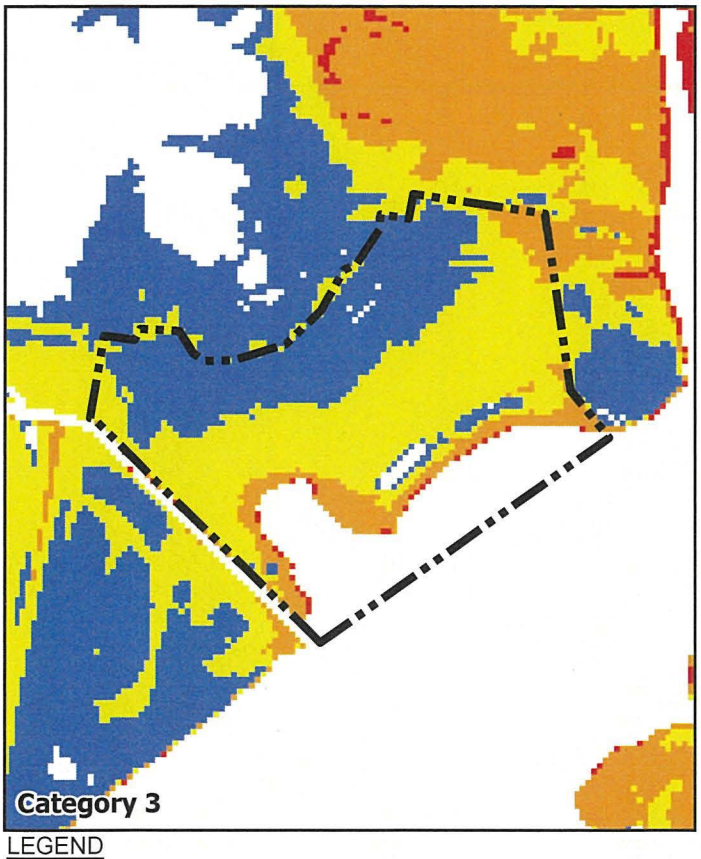
PBR HAWAII & ASSOCIATES, INC.

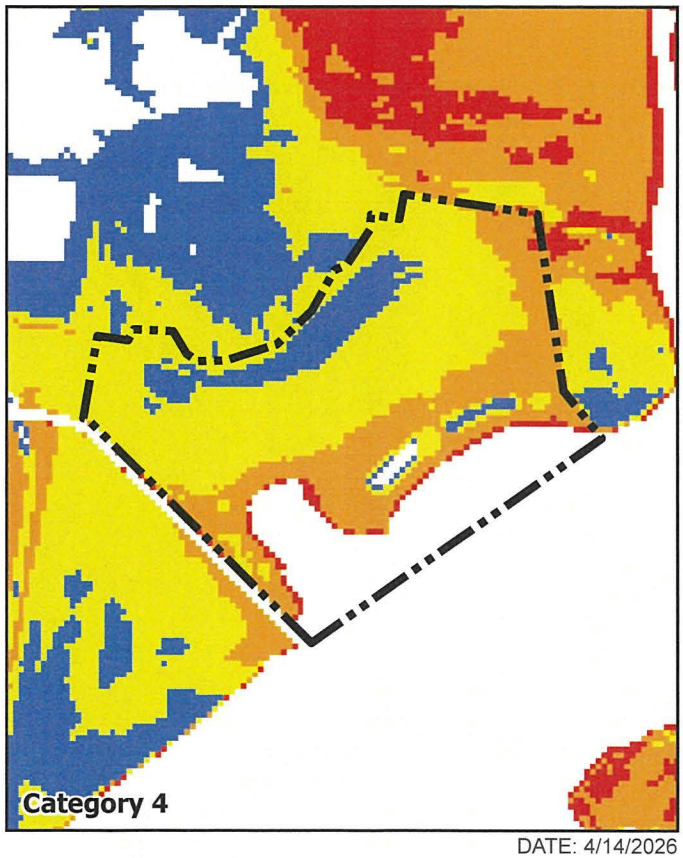
Source: City & County of Honolulu, 2025. ESRI Basemap.

Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.









Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\Storm Surge.aprx

DATE: 4/14/2026

LEGEND

Project Area

Inundation Height* (High Tide Scenario)

- Up to 3 Feet above Ground
- Greater than 3 Feet above Ground
- Greater than 6 Feet above Ground
- Greater than 9 Feet above Ground

Hurricane Category	Wind Speed (miles per hour)
1	74-95
2	96-110
3	111-129
4	130-156

* Not accounting for erosion, subsidence, sea-level change, or future constructions.

Source: City & County of Honolulu, 2025. NOAA National Hurricane Center, 2018. ESRI Basemap.

Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.

FIGURE 11

National Hurricane Storm Surge

Ke'ehi Lagoon Beach Park Improvements

RMA Architects

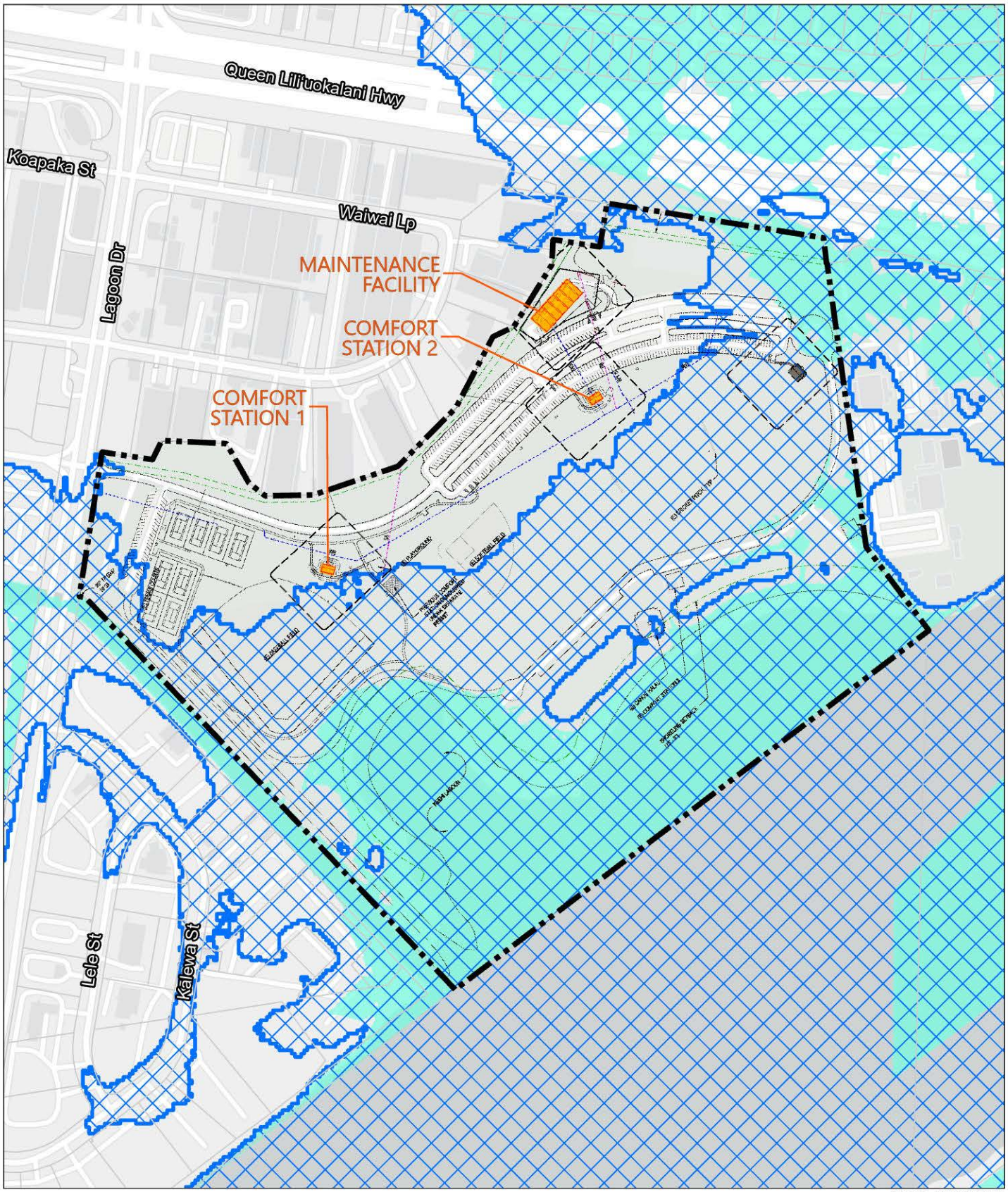
Island of O'ahu

North

Linear Scale (feet)

0 250 500 1000

PBR HAWAII & ASSOCIATES, INC.



Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\SLR-Site Plan.aprx

DATE: 6/26/2026

LEGEND

- Project Area
- 3.2ft Sea Level Rise Exposure Area
- 6ft Sea Level Rise Exposure Area

Figure 12
Sea Level Rise
Ke'ehi Lagoon Beach Park Improvements

RMA Architects | Island of O'ahu

North

Linear Scale (feet)
0 100 200 400

PBR HAWAII & ASSOCIATES, INC.

Source: City & County of Honolulu, 2025.University of Hawaii Coastal Geology Group & Tetra Tech, Inc., 2017. NOAA, 2022. ESRI Basemap.
Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.



Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\Zoning.aprx

DATE: 4/14/2026

LEGEND

Project Area

Zoning

- P-1
- P-2
- R-5
- I-2
- IMX-1

FIGURE 13
Zoning

Ke'ehi Lagoon Beach Park Improvements

RMA Architects

Island of O'ahu

North

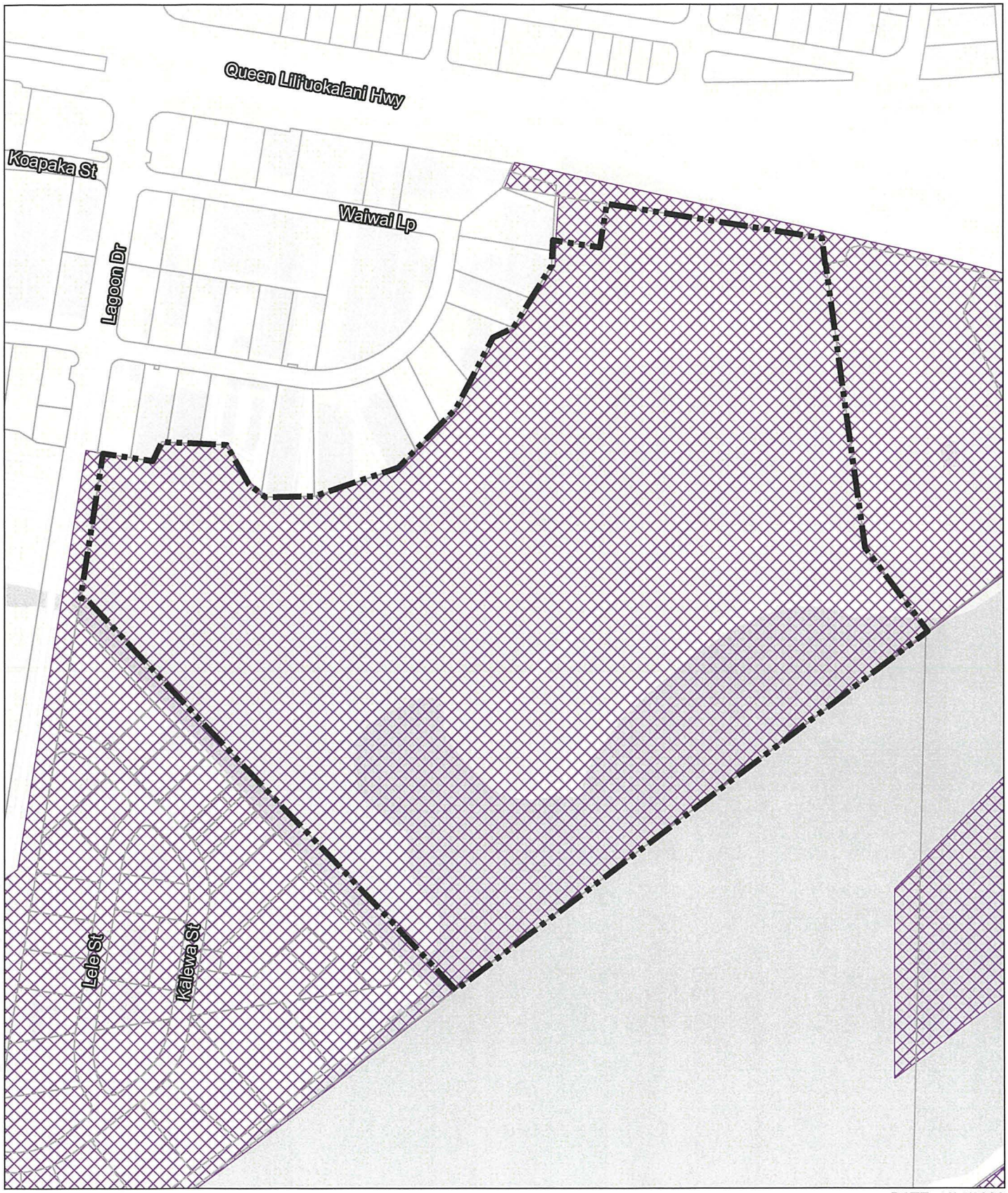
Linear Scale (feet)

0 100 200 400

PBR HAWAII & ASSOCIATES, INC.

Source: City & County of Honolulu, 2024 & 2025. ESRI Basemap.

Disclaimer: This Graphic has been prepared for general planning purposes only and should not be used for boundary Interpretations or other spatial analysis.



Path: Q:\Oahu\Keehi Lagoon Beach Park\GIS\Project\SMA.aprx

DATE: 4/14/2026

LEGEND

Project Area

Special Management Area

FIGURE 14
Special Management Area
Ke‘ehi Lagoon Beach Park Improvements

RMA Architects

Island of O'ahu

North

Linear Scale (feet)

0 100 200 400

PBR HAWAII & ASSOCIATES, INC.

Source: City & County of Honolulu, 2022 & 2025. ESRI Basemap.

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