

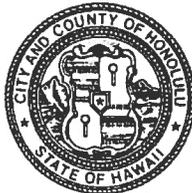
DEPARTMENT OF PLANNING AND PERMITTING  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 7<sup>TH</sup> FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 768-8000 • FAX: (808) 768-6041  
DEPT. WEB SITE: [www.honolulu.gov](http://www.honolulu.gov) • CITY WEB SITE: [www.honolulu.gov](http://www.honolulu.gov)

**FILE COPY**

**AUG 08 2014**

KIRK CALDWELL  
MAYOR



GEORGE I. ATTA, FAICP  
DIRECTOR

ARTHUR D. CHALLACOMBE  
DEPUTY DIRECTOR

2014/ED-6(MS)

July 25, 2014

Ms. Jessica Wooley  
Office of Environmental Quality Control  
Department of Health, State of Hawaii  
235 South Beretania Street, Room 702  
Honolulu, Hawaii 96813

Dear Ms. Wooley:

**SUBJECT:** Special Management Area Ordinance  
Chapter 25, Revised Ordinances of Honolulu  
Draft Environmental Assessment

**Project:** Renovations and New Construction of Dwellings on  
Evershine Property  
**Applicant/Landowner:** Evershine II, L.P.  
**Agent:** Kober Hanssen Mitchell Architects, Inc. (Kurt Mitchell)  
**Location:** 525, 555, 561, 567 Portlock Road – Maunaloa  
**Tax Map Keys:** 3-9-26: 44 through 48  
**Proposal:** Special Management Area Permit to allow renovation of  
two existing dwellings and construction of a new dwelling  
within the SMA.

The Department of Planning and Permitting, has reviewed the Draft Environmental Assessment (DEA) for the above project and anticipates a Finding of No Significant Impact (FONSI) determination. We respectfully request publication of the project summary of the DEA in the next edition of The Environmental Notice on August 8, 2014. Enclosed are one hard copy and one electronic copy of the DEA and the Publication Form. The Publication Form, including project summary, was also sent via electronic mail to your office.

Should you have any questions, please contact Malynne Simeon at 768-8023 or via email at [msimeon@honolulu.gov](mailto:msimeon@honolulu.gov).

Very truly yours,

A handwritten signature in black ink that reads "George I. Atta". The signature is written in a cursive style.

George I. Atta, FAICP  
Director

Enclosure: DEA, one hard copy and one disk  
One copy of OEQC Publication Form

OFFICE OF ENVIRONMENTAL QUALITY CONTROL  
14 JUL 29 13:48  
PENDING

AGENCY ACTIONS  
SECTION 343-5(B), HRS  
PUBLICATION FORM (FEBRUARY 2013 REVISION)

**Project Name:** Renovations and New Construction of Evershine Property  
**Island:** Oahu  
**District:** East Honolulu  
**TMK:** 3-9-0260: 044, 045, 046, 047, 048  
**Permits:** Special Management Area Use Permit (Major), Grubbing, Grading, Stock Piling, Building Permits for Building, Electrical, Plumbing, Sidewalk/Driveway and Demolition Work

**Proposing/  
Determination Agency:**  
Kurt Mitchell  
Kober Hanssen Mitchell Architects, Inc.  
77 Merchant St.  
Honolulu, HI 96813-4326  
Telephone: (808) 566-5408

**Accepting Authority:**  
George Atta, FAICP, Director  
City and County of Honolulu  
Department of Planning and Permitting  
650 S. King Street, 7<sup>th</sup> Floor  
Honolulu, HI 96813  
Phone: (808) 768-8000  
Fax: (808) 768-6041  
P.O.C. Malyne Simeon

**Consultant:**  
Kurt Mitchell  
Kober Hanssen Mitchell Architects, Inc.  
77 Merchant St.  
Honolulu, HI 96813-4326  
Telephone: (808) 566-5408

**Status (check one only):**

- DEA-AFNSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to [oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)); a 30-day comment period ensues upon publication in the periodic bulletin.
- FEA-FONSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to [oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)); no comment period ensues upon publication in the periodic bulletin.
- FEA-EISPN** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to [oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)); a 30-day consultation period ensues upon publication in the periodic bulletin.
- Act 172-12 EISPN** Submit the proposing agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to [oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)). NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.
- DEIS** The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to [oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)); a 45-day comment period ensues upon publication in the periodic bulletin.

- FEIS The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the FEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the FEIS (you may send both the summary and PDF to [oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)); no comment period ensues upon publication in the periodic bulletin.
- Section 11-200-23 Determination The accepting authority simultaneously transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the proposing agency. No comment period ensues upon publication in the periodic bulletin.
- Section 11-200-27 Determination The accepting authority simultaneously transmits its notice to both the proposing agency and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.
- Withdrawal (explain)

**Summary** (Provide proposed action and purpose/need in less than 200 words. Please keep the summary brief and on this one page):

This EA is being submitted with the anticipated finding of no significant impact. The intent of the submission is to provide the owner of the 525/567 Portlock Road properties the ability to renovate, update, and maintain the existing two dwellings on these parcels and construct a new two-story 3,280-square-foot dwelling on a portion of the site. The proposed project is planned to be completed by December 2016 and will have an estimated cost of \$16 million. Succeeding the findings of the EA the owner/consultant will pursue an SMA as required by the Office of Planning and determined by the project's location. Without approval from these agencies; progress on the proposed projects will not be allowed and the properties will remain in their current state – one of which is currently uninhabitable.

May 15, 2014

Mr. George I. Atta, FAICP  
Director  
Department of Planning and Permitting  
City and County of Honolulu  
650 S. King St., 7<sup>th</sup> Floor  
Honolulu, HI 96813  
Attn: Malynne Simeon

**RE: Draft Environmental Assessment Development of new single family dwellings 525, 555, 561, and 567 Portlock Road, Honolulu, Hawaii 96825  
TMK: 3-9-0260: 044, 045, 046, 047, 048**

Dear Mr. Atta,

Attached are 4 copies and a CD of the Draft Environmental Assessment (EA) for the development of the above property. An existing dwelling is currently under renovation, while a second existing dwelling will be renovated and a third dwelling will be constructed on a portion of the site.

All dwellings are over 7,500 sf. and the construction cost for each is over \$500,000.00. The project site is located within a Shoreline Management Area; based on site location, construction cost, and the size of the area of work, an Environmental Analysis and Shoreline Management Area Permit are required.

It is our understanding that the DPP shall be the accepting agency for this Draft EA. Should you have any questions please contact Kate Poland at [kpoland@rimarchitects.com](mailto:kpoland@rimarchitects.com), phone (808) 687-8878 or Kurt Mitchell at [khmitchell@khma.com](mailto:khmitchell@khma.com), phone (808) 566-5408.

Sincerely,  
Kober Hanssen Mitchell Architects

Kurt H. Mitchell AIA, NCARB, RDI  
President/CEO



**PRIVATE RESIDENCES  
AT  
525/567 PORTLOCK ROAD**

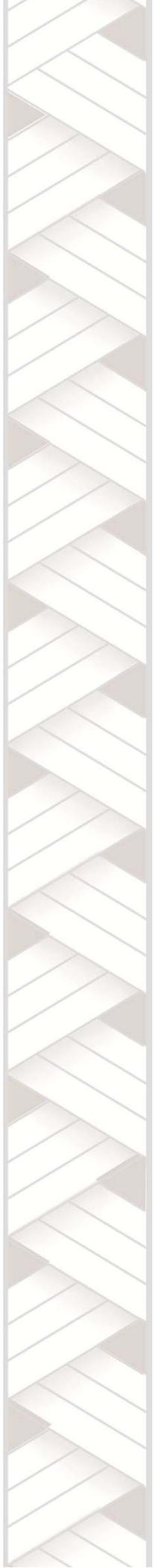
**RENOVATIONS AND NEW CONSTRUCTION**

Draft Environmental Assessment  
Anticipated Finding of No Significant Impact

Prepared For  
Evershine II, L.P.

Prepared By  
Kober Hanssen Mitchell Architects, Inc.

May 2014



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**525/567 PORTLOCK ROAD RESIDENCE**

**DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT**

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**AGENCIES AND ORGANIZATIONS CONSULTED IN THE PREPARATION OF THE EA PROCESS**

**FEDERAL**

- US Army Corp of Engineers
- US Fish and Wildlife Services

**STATE OF HAWAII**

- Department of Business, Economic Development & Tourism (DBEDT) – Office of State Planning
- Department of Education (DOE) – Facilities Development Branch

**525/567 PORTLOCK ROAD RESIDENCE**

DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT

STATE OF HAWAII (continued)

Department of Health (DOH) – Environmental Planning Office  
Department of Land and Natural Resources (DLNR)  
DLNR – Historic Preservation Division  
Department of Transportation (DOT) – Harbor’s Division  
Office of Hawaiian Affairs (OHA)  
Office of Environmental Quality Control (OEQC)  
Hawaii Kai Public Library

CITY AND COUNTY OF HONOLULU

Board of Water Supply (BWS)  
Honolulu Police Department (HPD)  
Honolulu Fire Department (HFD)  
Department of Environmental Services (DES)  
Department of Parks and Recreation (DPR)  
Department of Planning and Permitting (DPP)  
Department of Transportation Services (DTS)  
County Councilmember

PRIVATE ORGANIZATIONS and COMMUNITY

Hawaiian Electric Company (HECO)  
Hawaiian Telcom  
Oceanic Time Warner  
Hawaii Kai Neighborhood Board  
Maunalua Community Association

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**525/567 PORTLOCK ROAD RESIDENCE**

DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT

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Pre-consultation Letter to Agencies

Revised Pre-consultation Letter to Agencies

Agency Response Letters & Responses to Letters Received:

- Board of Water Supply
- Department of Transportation Services – City & County of Honolulu
- Department of Land and Natural Resources – Land Division
- Department of Planning and Permitting – City & County of Honolulu
- Department of Health – State of Hawaii
- Department of Parks & Recreation – City & County of Honolulu
- Hawaiian Electric Company (HECO)
- Department of Transportation – State of Hawaii
- Hawaiian Telecom
- Honolulu Fire Department – City & County of Honolulu
- Oceanic Time Warner Cable
- State of Hawaii Office of Environmental Quality Control (OEQC)
- Office of Planning – State of Hawaii
- Police Department – City & County of Honolulu

**LIST OF ACRONYMS AND ABBREVIATIONS**

ALISH	Agricultural Lands of Importance to the State of Hawai`i
ASL	Above mean sea level
BMP	Best Management Practices
BLDG	Building Department (City)
BWS	Board of Water Supply (City)
CCL	City Council
CWRM	State of Hawai`i Commission on Water Resource Management
CZM	Coastal Zone Management
DAGS	Department of Accounting and General Services (State)
DDC	Department of Design and Construction (City)
DGP	Department of General Planning (City)
DHCD	Department of Housing and Community Development (City)
DHHL	Department of Hawaiian Home Lands (State)
DHR	Department of Human Resources (City)
DLU	Department of Land Utilization (City)
DOE	Department of Education (State)
DOT	Department of Transportation (State)
DPP	Department of Planning and Permitting (City)
DPR	Department of Parks and Recreation (City)
DTS	Department of Transportation Services (City)
DWM	Department of Wastewater Management (City)
EA	Environmental Assessment
EIS	Environmental Impact Statement
EISPN	Environmental Impact Statement Preparation Notice
EPA	United States Environmental Protection Agency
FEMA	United States Federal Emergency Management Agency
FIRM	FEMA Flood Insurance Rate Map
GPD	Gallons per day
HAR	Hawai`i Administrative Rules
HECO	Hawaiian Electric Company
HFD	Honolulu Fire Department (City)
HPD	Honolulu Police Department (City)
HPTA	Honolulu Public Transit Authority (City)
HRS	Hawai`i Revised Statutes
HBWS	Honolulu Board of Water Supply
LSB	State of Hawai`i Land Study Bureau
LUC	State of Hawai`i Land Use Commission
LUO	Land Use Ordinance
MGD	Million Gallons Per Day

**525/567 PORTLOCK ROAD RESIDENCE**

**DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT**

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NEPA	National Environmental Protection Act
NOAA	United States National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
OEQC	State of Hawai`i Office of Environmental Quality Control
POC	Point of Contact
ROW	Right of Way
RHO	Revised Ordinances of Honolulu
SCS	United States Soil Conservation Service (now NRCS)
SHPD	State of Hawai`i Historic Preservation Division
SMA	Special Management Area
TMK	Tax Map Key
UBC	Uniform Building Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WGSL	Waimanalo Gulch Sanitary Landfill
WWTP	Wastewater Treatment Plant

## **1 INTRODUCTION AND SUMMARY**

This Environmental Assessment (EA) is prepared in accordance with the requirements of Chapter 205A-41, Hawai'i Revised Statutes (HRS), and the City and County of Honolulu ROH Chapter 25. The proposed action involves the requirement of a Shoreline Management Area Permit for the renovation and construction of a new private residence at 525/567 Portlock Road. In compliance with OEQC comments; relevant mitigation measures identified in this DEA or a better alternative shall be observed during all phases of the project.

### **1.1 PROJECT PROFILE**

Proposed Action:	525/567 Portlock Road – Kaiser Estate  Private Residence
Location:	Maunalua Triangle/Portlock, East Honolulu, Oahu, Hawai'i
Addresses:	567 Portlock Road, 561 Portlock Road, 555 Portlock Road, 525 Portlock Road, & parcel TMK (1) 3-9-026-048  Honolulu, HI 96825
Proposing/Determining Agency:	City and County of Honolulu, Department of Planning and Permitting (DPP)
Tax Map Key:	(1) 3-9-026: 044, 045, 046, 047, 048
Land Area:	5.397 acres
Landowner:	Evershine II LP (5.397 acres)
Existing Use:	Private Residence
State Land Use Designation:	Urban
Sustainable Communities Plan (SCP):	East Honolulu Sustainable Communities Plan
SCP Land Use Map:	Urban
Zoning:	R-10 Residential District
Special Management Area:	Within Special Management Area
FEMA Flood Designation:	VE / D

Tsunami Evacuation Zone: Yes

Need for Assessment: Chapter 205A-41, [HRS] Hawai`i Revised Statutes, Coastal Zone Management Law [CZM] §205A-5, 205A-2, 205A.25-1.3

Anticipated Determination: Finding of No Significant Impact (FONSI)

Owner: Evershine II LP  
19620 Stevensen Creek Blvd., Suite 200  
Cupertino, CA 95014

Contact Person: Kurt Mitchell  
Kober Hanssen Mitchell Architects, Inc.  
77 Merchant St.  
Honolulu, HI 96813-4326  
Telephone: (808) 566-5408

## 1.2 APPLICANT

The applicant/owner is Evershine II:

**Contact:** Annie Chan/Keith Cockett  
19620 Stevensen Creek Blvd., Suite 200  
Cupertino, CA 95014

### AGENT/CONSULTANT

The agent/consultant is Kober Hanssen Mitchell Architects, Inc.:

**Contact:** Kurt Mitchell, AIA, NCARB, RDI, President/CEO  
Kober Hanssen Mitchell Architects, Inc.  
77 Merchant Street  
Honolulu, HI 96813  
Phone: 808-566-5408  
Fax: 808-566-0122  
Email: [khmitchell@khma.com](mailto:khmitchell@khma.com)

### **1.3 APPROVING AGENCY**

The approving agency is Honolulu County’s Department of Planning and Permitting (DPP):

**Contact:** George Atta, FAICP, Director  
City and County of Honolulu  
Department of Planning and Permitting  
650 S. King Street, 7<sup>th</sup> Floor  
Honolulu, HI 96813  
Phone: (808) 768-8000  
Fax: (808) 768-6041  
P.O.C. Malynne Simeon

### **1.4 EA CONTRIBUTING TO THE STUDY**

The information contained in this report has been developed from site visits, generally available information regarding the characteristics of the site and surrounding areas, and technical studies from previously approved EAs and EISs prepared for projects in the area.

### **1.5 COMPLIANCE WITH STATE OF HAWAII ENVIRONMENTAL LAWS**

Preparation of this document is in accordance with the provisions of HRS Chapter 343 and Title 11, Chapter 200, Hawai`i Administrative Rules (HAR) pertaining to Environmental Impact Statements. Section 343-5, HRS established nine “triggers” that require an EA or an Environmental Impact Statement (EIS). One of those requirements is the proposed use within a shoreline area as defined in HRS Section 205A-41. Per the Revised Ordinance of Honolulu, Chapter 25 a Shoreline Management Area permit is required, which requires an Environmental Assessment (EA). Advisement from the reviewing department (DPP) was sought prior to the compilation and submittal of this draft EA; during this discussion it was determined that submittal of an EA and SMA is required for the proposed renovations.

## **2 PROJECT DESCRIPTION**

### **2.1 PURPOSE AND NEED**

The purpose of this project is to renovate the existing residences (main and boat house) and the construction of a new house (Bay Villa House). These renovations consist of exterior and interior upgrades and total rebuilding of those areas that have been left in an unsafe condition by the previous owners. The three major residences are designed for the Owner and the Owner's family. Along with the renovation, a new house will be constructed. In addition, the estate grounds will be upgraded with new landscaping and amenities for the family; including a new pool, outdoor seating areas, repairs to the existing saltwater pond, outdoor work out area, and repairs and upgrades to the land side of the harbor.

### **2.2 BACKGROUND INFORMATION**

#### **2.2.1 Location and Property Description**

The project property is located in East O`ahu, Honolulu District, Island of O`ahu, on the property formerly known as the Kaiser Estate, Hawai`i Tax Map Keys (TMK): (1) 3-9-026: 044, 045, 046, 047 and 048. (See figure 2.3 for TMK and Appendix D.2 for Plot Key Map) The project is subject to new State and City requirements that now require large residential developments that are located within the SMA zone to obtain an SMA permit. In the City and County of Honolulu, SMA permit applications require that an Environmental Assessment (EA) be prepared.

This property is located on the southern end of Portlock Road, between the road and the ocean. The project is located between Portlock road and the ocean and slopes downward from Portlock Road. (See Appendix D.1 for Survey) The combined TMK parcels represent approximately 5.4 acres. See Figure 2.1 for the location of the project area.

#### **2.2.2 Surrounding Land Uses**

The project site is surrounded by residences to the north, south and east. To the west is Maunalua Bay. The neighboring residences to the north and south of the project site have new homes that were constructed within the last 5-8 years.

Besides the State and City requirements, the surrounding properties are also subject to the guidelines of the Maunalua/Koko Kai Community Design Guidelines. This project site is not part of those guideline requirements.

#### **2.2.3 Regional Land Use History**

As pointed out in Cultural Survey Hawai`i's historical review, this project site is surrounded by large land features such as Maunalua Bay, Koko Crater, Koko Head and Kuapa Fishpond. In the 1960's Henry J. Kaiser developed the area now known as Hawai`i Kai. At that time the only

## 525/567 PORTLOCK ROAD RESIDENCE

### DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT

substantial development within the immediate area was the Maunaloa Triangle, with homes along Portlock Road.

At the end of Portlock Road, Henry Kaiser constructed his home on a seven acre property. This project area is part of that estate. Where farms once existed, today there are high end residential homes. The area is served by an elementary and high school, a library, churches, parks and several commercial areas that support a variety of housing developments.

### 2.3 EXISTING USES AND STRUCTURES

From the time Henry Kaiser bought this property from Kamehameha Schools/Bishop Estate, the project area has always been used as a large residential estate with several residential structures. Existing on the project area is the main house, the boat house, a guest house, caretaker's house, a private harbor, swimming pool, tennis courts and support structures including a gazebo and maintenance shed. The main house is currently undergoing a complete remodel/renovation and is about 70% complete. Although the house is being updated the original structure remains without additions. The Caretakers house was renovated in 1998 and will remain untouched. The Boat House is proposed to undergo extensive repair and remodel as it was demolished down to its structure by a previous owner which has left it exposed to the deteriorating effects of the elements. In addition to restoring the Boat House to a safe and usable structure the boat harbor shall undergo repairs to surrounding walkways and cleanup of the harbor area. The existing tennis courts were removed, the existing pool is to remain and be repaired, the existing covered lanai is proposed for demolition to allow for the construction of the future Bay Villa residence. The Bay Villa is not in construction and will only proceed with appropriate approvals and permits. This residence is intended for single family use as are all the existing houses included under this evaluation.

Located on the western slopes of Koko Head, the main house and boathouse will be undergoing major renovations to both the exterior and interior of the existing structures (see figure 2.2 for existing site conditions and figure B.22 for the proposed layout).

### 2.4 PROJECT DESCRIPTION

Building permit 670551 was issued to renovate the main (Kaiser) house, which is 12,155 sf. (completed renovation square footage – existing area is 12,350 sf.). Proposed plans are to renovate the existing 14,000 sf boathouse, which was partially demolished by the previous owners. The partial demolition of the Boat House has left its structure exposed to the harsh salt air, rains and winds that have extensively damaged the house.

A third residence for the family will be a new two story structure (the Bay Villa) of 3,280 sf. It will be located at the rear portion of the property. Because of the site topography, this house will be partially hidden from Portlock Road and large existing Banyan trees will block its view from the shoreline. (See Appendix B for plans and elevations)

Parking for the residences and the guests are designed to be accessed from the existing gated entry points. All parking required will be handled within the project area. Parking on the site has

## **525/567 PORTLOCK ROAD RESIDENCE**

### **DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT**

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been increased on the site to accommodate a minimum of 42 vehicles. LUO Table 21-6.1 indicates that detached dwelling units are required to have two parking spaces with an additional space for each 1,000 square feet of built area over 2,500 square feet. The LUO requirement for the Kaiser Residence is eleven spaces, Boat Harbor Villa is eleven spaces, Caretaker's house comes out to three spaces, the Bay Villa comes to seventeen spaces. For a total of thirty-nine spaces over the entire project scope.

Plans call for an extensive change to the landscaping for the entire project area. New walls with landscaping will be constructed along Portlock Road. The existing swimming pool will be updated and become an integral part of the main house design. In response to comments from the DLNR; no work is proposed for the private harbor. The most recent changes to the private harbor were completed under 1998/SV-501. Any future work to the harbor or adjacent public easement GL-5668 shall be subjected to the proper disposition, permitting and review processes.

Utilities improvements will be designed to support all the structures that either exist or are planned for the project area.

## **2.5 PROJECT COST AND SCHEDULE**

Construction is currently on going on the main house renovation. The main house received its Building Permit prior to the SMA requirement. Completion of the main house renovation is expected to be September 2014. The boathouse renovation, the third residence and the landscape improvement are planned to be started upon receiving all the required entitlements and permits.

The total estimated construction cost for all the improvements is 16 Million Dollars. The entire project is scheduled to be completed by December 2016.



**LEGEND**

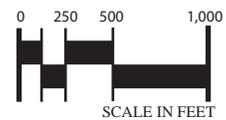
 Project Site

**FIGURE 2.1**

**SITE SURROUND MAP**

**PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD**

ISLAND OF OAHU



SOURCE: Honolulu GIS



LEGEND

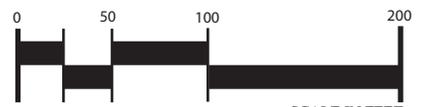
 Project Site

FIGURE 2.2

AERIAL SITE IMAGE

PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD

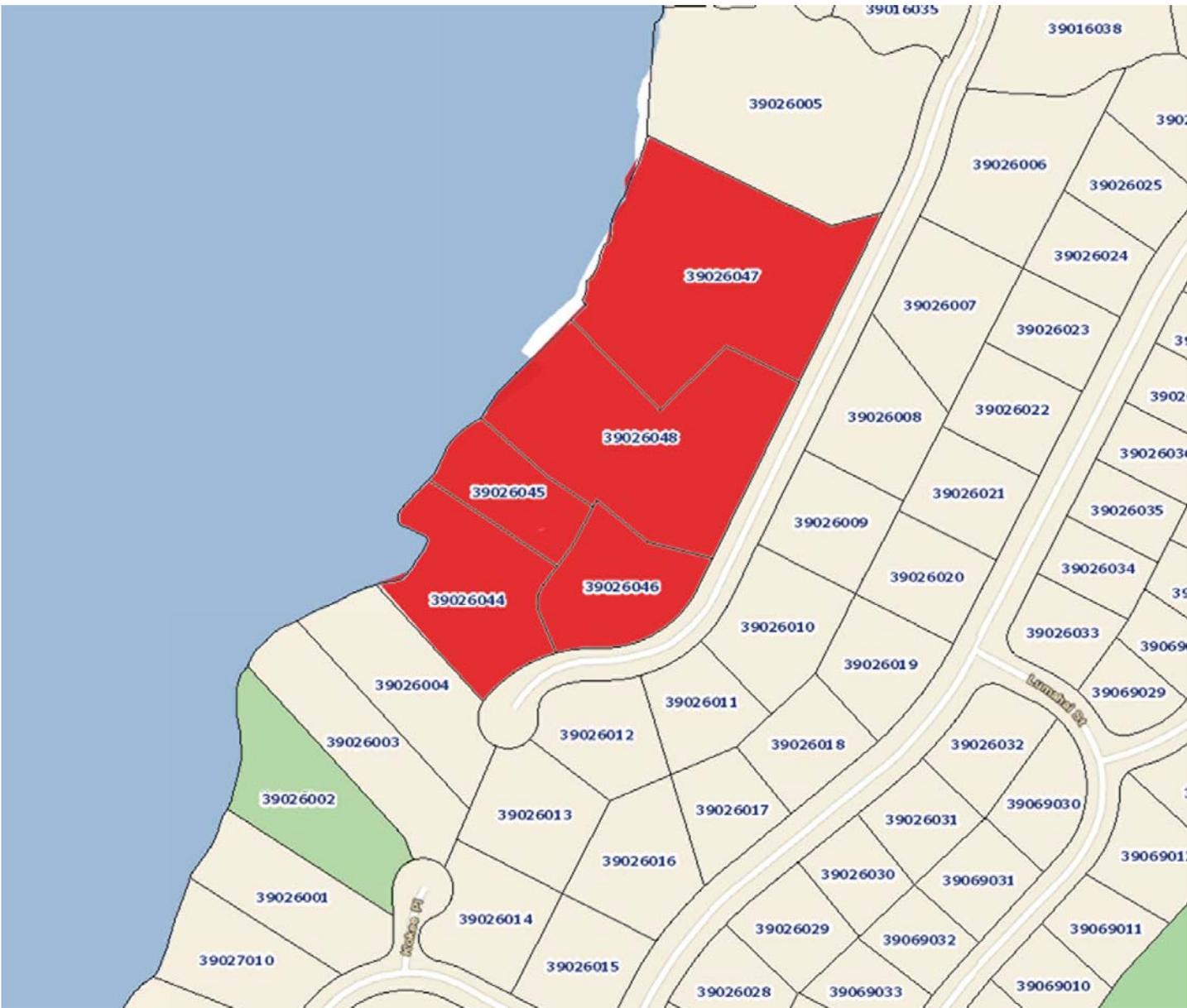
ISLAND OF OAHU



SCALE IN FEET

SOURCE: Google Maps





**LEGEND**

- C&C Zoning R-10
- Project Site (R-10)
- C&C Zoning P-2/P-1



**FIGURE 2.3**  
**TAX MAP KEY / C&C HONOLULU**  
**ZONING**  
**PRIVATE RESIDENCE**  
**525/567 PORTLOCK ROAD**

ISLAND OF OAHU



SOURCE: Honolulu GIS

### **3 DESCRIPTION OF NATURAL ENVIRONMENT POTENTIAL IMPACTS AND MITIGATION MEASURES**

This section describe existing conditions of the physical or natural environment, potential impacts related to the creation of the residences on the environment and mitigation measures to minimize impacts.

#### **3.1 CLIMATE**

The climate of O`ahu has low annual variability with temperature changes of only about 9°F at sea level. The Hawaiian Islands experience two seasons; summer and winter, with the summer months of May – September characterized by temperatures averaging 80°F to 90°F and winter temperatures dropping to the mid 60's with an increase in precipitation. Coastal regions of O`ahu average 20-30 inches of rainfall annually; however, rainfall can reach up to 280 inches annually in the higher elevations of the Kahana area on the windward side. The prevailing winds, as elsewhere in Hawai`i, are the northeast trade winds. 525/567 Portlock is located in a coastal area and experiences rainfall and temperatures similar to other low lying leeward locations. Typical annual rainfall is 30 inches per year, prevailing winds are from the northeast, and temperatures range from highs in the 90's during the summer months to lows in the 60's during the winter months. (Atlas of Hawaii, 1998)

Potential Impacts and Mitigation Measures:

The renovated and new houses are not expected to have an impact on the regions climate; therefore no mitigation measures are warranted. Currently the site includes many large shade trees and other landscape elements that will with keeping the micro-climate stable using sustainable methods.

#### **3.2 GEOLOGY AND TOPOGRAPHY**

O`ahu is comprised of two parallel mountain ranges; the Ko`olau and Wai`anae Mountains which were created by the erosion of two alkali basalt shield volcanoes. The project site at 525/567 Portlock Road is located on the western slope of Koko Head; an ancient tuff cone, and Hanauma Bay now a breached cone vent.

Potential Impacts and Mitigation Measures:

The proposed new house and existing houses that will be renovated will not adversely impact the topographic nature of the site relative to the surrounding lands. There will be minimal to no grading required since two of the houses are existing and being renovated, whereas the third house will be constructed on a relatively flat part of the site.

### **3.3 SOILS**

There is several soil studies prepared for lands in Hawaii. These studies principally focus on the physical attributes of land and the relative productive of different lands types for agricultural production. This site is situated in an urban area of Honolulu. According to the USDA Natural Resources Conservation Service the land area is part of a classification called Koko silt loam. Another study doesn't classify the soil since it is in an urban area. (See figures 3.3 and 3.4 for soils maps)

Potential Impacts and Mitigation Measures:

Proposed construction will not have any deleterious effect on the soils of the site. Since this is in an urban area no agricultural or preservation land will be impacted. Beyond fine grading of the sites for building leveling purposes; no excavation or fill is expected.

Impacts to the soils include potential for the generation of dust during grading and construction. Most of the site area is planted with existing vegetation and will minimize any potential soil erosion. During the construction of the new house to minimize any erosion due to wind will be handled through a proper watering program to control dust and wind erosion. Where appropriate silt fences, sediment traps and diversion swales, will be installed.

Construction activities will comply with all applicable Federal, State and County regulations and rules for erosion control. After construction, associated landscaping will provide long term erosion control.

### **3.4 FLOOD HAZARD**

The Federal Emergency Management Agency (FEMA) and The Flood Insurance Rate Map (FIRM) places the site in Flood Zone "VE/D" which it defines as "[a]reas subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. Base Flood Elevations (BFEs) derived from detailed hydraulic analyses are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply. (Federal Emergency Management Agency, 2012)". The site is also subject to high tides and strong waves during the winter months. Flood hazard areas and designations are shown in figure 3.1.

### **3.5 HURRICANE**

The site for 525/567 Portlock Road does fall within a Hurricane evacuation zone. In the instance of a hurricane, residents of 525/567 Portlock and the surrounding area are advised to seek shelter at Kokohead Elementary School.

Tsunami Evacuation Zone

525/567 Portlock Road is located in a tsunami evacuation zone. The designated tsunami refuge area for the neighborhood is Koko Head District Park

**525/567 PORTLOCK ROAD RESIDENCE**  
**DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT**

### 3.6 EARTHQUAKE

The residences of 525/567 Portlock Road are located in an earthquake zone. FEMA categorizes the site as a D0 meaning it could experience strong shaking with sustained damage to poorly designed or built structures. (see figure 3.2 for FEMA earthquake hazard assessment map)

### 3.7 FLORA

The project site has been landscaped with a variety of plants including naupaka, plumeria, coconut palms, loulou palms, areca palms, monkeypod trees, and coconuts. The proposed landscaping plan maintains and relocates the plants of the existing landscaping; filling in necessary areas with plants similar to those existing on the site. The site landscaping plans can be found in Figures B21.1 through B21.6. The types of irrigation used on the site are listed below.

**PROPOSED IRRIGATION LEGEND FOR CHAN RESIDENCE-525 PORTLOCK ROAD**

SYMBOL	DESCRIPTION					
	SHRUB SPRAY HEAD/VAR. ARC. NOZZLE 18" RISER	.20-.30	.72/1.7	6'-8'		RAINBIRD 8-VAN
	4" POP UP SPRAY HEAD/VAR. ARC. NOZZLE	.20-.30	.65/2.6	10'-12'		RAINBIRD 1804 SAM-12-VAN
	12" POP UP SPRAY HEAD/ VAR. ARC. NOZZLE	.20-.30	.65/2.6	10'-12'		RAINBIRD 1812 SAM-12-VAN
	SIDE/END STRIP SPRAY HEAD 18" RISER	.20-.30	1.5/.5	4' X 30' 4' X15'		RAINBIRD 1812 SAM 15SST 15EST
	SIDE/END STRIP SPRAY HEAD 4" POP UP	.20-.30	1.5/.5	4' X 30' 4' X15'		RAINBIRD 1812 SAM 15SST 15EST
	12" POP UP SIDE/END STRIP SPRAY HEAD	.20-.30	1.5/.5	4' X 30' 4' X15'		RAINBIRD 1812 SAM 15SST 15EST
	4" POP UP HALF CIRCLE STREAM BUBBLER NOZZLE	.15-.30	1.0	5'		RAINBIRD 5H-B-5'
	4" POP UP QUARTER CIRCLE STREAM BUBBLER NOZZLE	.15-.30	.50	5'		RAINBIRD 5Q-B-5'
	ADJUSTABLE GEAR ROTOR 18" RISER	30-50	.64-5.3	15'-37'		HUNTER PGJ
	4" POP UP ADJUSTABLE GEAR ROTOR	30-50	.64-5.3	15'-37'		HUNTER PGJ
	FLOOD BUBBLER - DEEP WATER FLOOD					RAINBOW RWS-M
	1" QUICK COUPLER VALVE					
	GATE VALVE					NIBCO T-113 ____" @ P.O.C., ____" @ ISOLATION VALVES (AS SHOWN)
	REDUCED PRESSURE BACKFLOW PREVENTER (RPBP)					WATTS OR EQUIVALENT
	PRESSURE REDUCING VALVE					WILKINS 600 - ____"
	LATERAL SCHEDULE 40					
	MAIN SCHEDULE 40					
	NETAFIM TECHLINE TUBING 1/2"					
	ELECTRIC VALVE ____1"					HUNTER ICV DIRTY WATER VALVE WITH HUNTER ACCU-SET PRESSURE REGULATOR
	RAINBIRD 4 STATION BASE + ____ MODULES				TOTAL ____ STATIONS	RAINBIRD ESP SERIES OR EQUIVALENT
	DRIP EMITTER W/ 1/4" TUBING & SINGLE BARB CAP ON 6" RISER				1 GPH	ANTELCO

The terrain of the site contains rocky outcrops by the shoreline and sloping lawn of finger grasses (*Chloris inflata*), Koa-haole (*Leucaena leucocephala*), and Indian Fleabane (*Pluchea indica*) as the site progresses Mauka.

### **3.8 FAUNA**

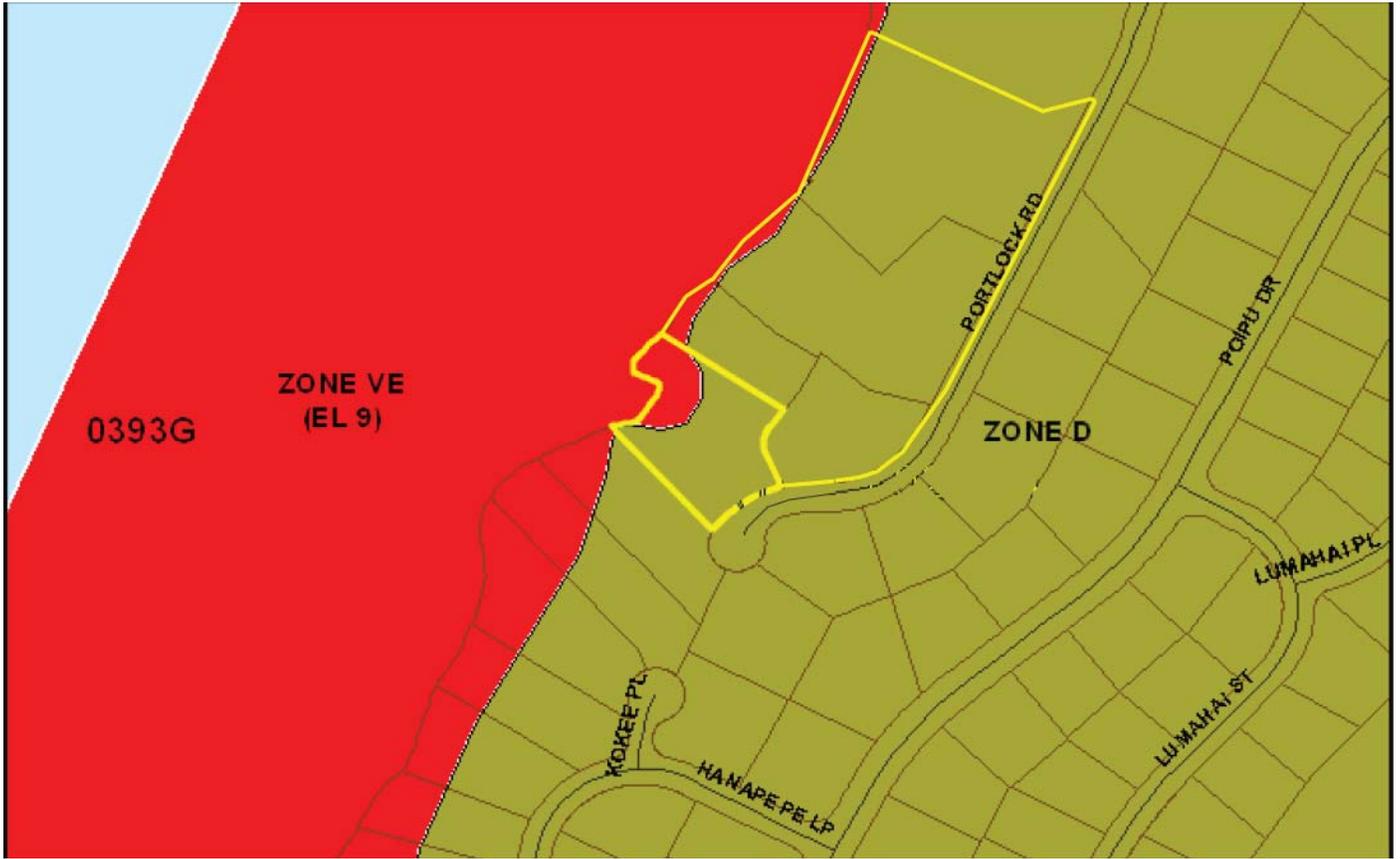
The fauna of the project site is typical of Hawai`i and includes many common exotic species. Animals which may inhabit the site include small mammals such as mice, rats, mongoose, and feral cats. Avifauna likely include myna, doves, sparrows, finches, cardinals, and egrets. The area is not observed to have any endangered species.

Potential Impacts and Mitigation Measures:

Construction of the houses will not impact and endangered plant species since none are known to be present. Similarly with any native fauna species any construction will not have any impact since no species have been identified. The site is already being used as a residence.

### **3.9 LAND TYPE/ALISH**

The site and surrounding area of area of Portlock fall under the State Land Use designation of 'urban'. The City and County of Honolulu classify the site as R-10 Residential. The area also falls under the City and County of Honolulu's East Honolulu development plan which focuses on the assurance of beach access in the area from Aina Koa Ridge to Makapu`u Point. Under ALISH the project site is not site suitable for agriculture and therefore does not have an ALISH designation. An ALISH map is not included in this package.



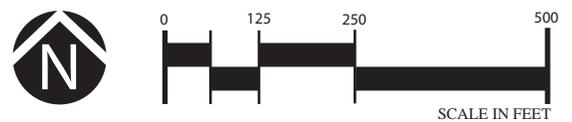
**LEGEND**

- Zone VE (EL 9)
- Zone D
- Project Site

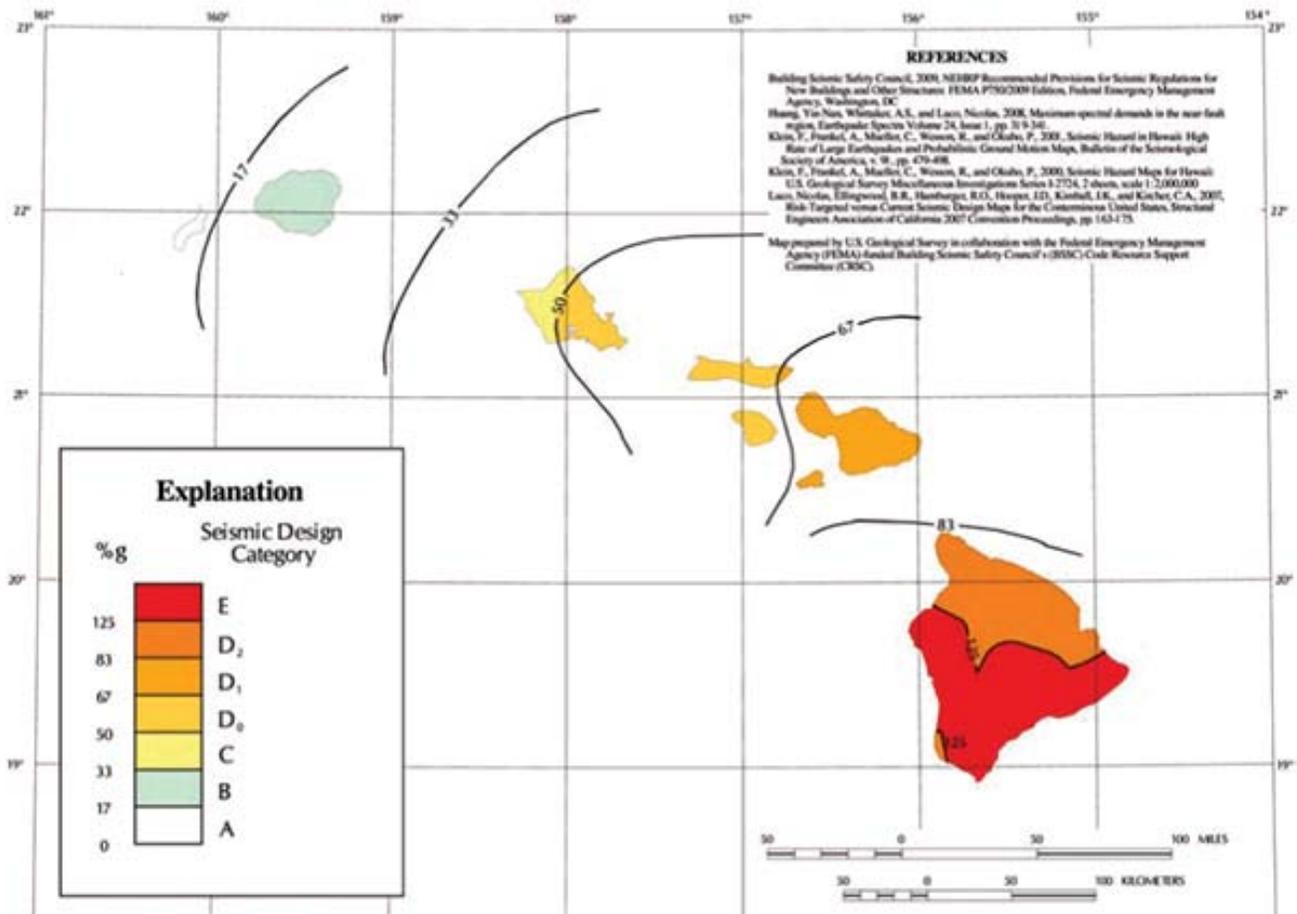


**FIGURE 3.1**  
**PROPOSED DEVELOPMENT PLAN**  
**FEMA FLOOD MAP**  
**PRIVATE RESIDENCE**  
**525/567 PORTLOCK ROAD**

ISLAND OF OAHU



SOURCE: Hawaii National Flood Insurance Program  
 Flood Hazard Assessment Tool



C	Yellow	Could experience strong shaking.	Strong shaking☑ Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built structures.
D <sub>0</sub>	Light brown	Could experience very strong shaking (the darker the color, the stronger the shaking).	Very strong shaking☑ Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures.
D <sub>1</sub>	Darker brown		
D <sub>2</sub>	Darkest brown		

FIGURE 3.2  
EARTHQUAKE HAZARD ASSESSMENT  
MAP  
PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD

ISLAND OF OAHU



K H M A

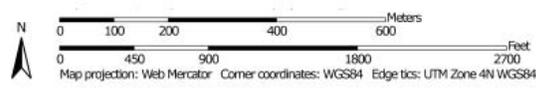


SEE IMAGE FOR SCALE

SOURCE: FEMA

## MAP UNIT LEGEND

Island of Oahu, Hawaii (HI990)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
JaC	Jaucas sand, 0 to 15 percent slopes	24.6	3.8%
KsB	Koko silt loam, 2 to 6 percent slopes	112.9	17.6%
KsC	Koko silt loam, 6 to 12 percent slopes	74.4	11.6%
rRK	Rock land	168.9	26.4%
rRO	Rock outcrop	0.9	0.1%
WkA	Waialua silty clay, 0 to 3 percent slopes	13.3	2.1%
<b>Subtotals for Soil Survey Area</b>		<b>395.0</b>	<b>61.7%</b>
<b>Totals for Area of Interest</b>		<b>640.4</b>	<b>100.0%</b>



**FIGURE 3.3**  
**SOIL SURVEY MAP**

**PRIVATE RESIDENCE**  
**525/567 PORTLOCK ROAD**

ISLAND OF OAHU

**SEE IMAGE FOR SCALE**

SOURCE: USDA  
NATURAL RESOURCES CONSERVATION SERVICE

■ Project Site





 E

Factor Y [E] accounts for rainfall and associated climatic feature. As a general rule, lands in the higher rainfall zones are cloudy and therefore lower in productivity; irrigated lands are rated 100 because the moisture requirement is adequately met. It is the general assumption that where irrigation is required, climate is usually satisfactory for the crop production.

 No factor assigned

 Site

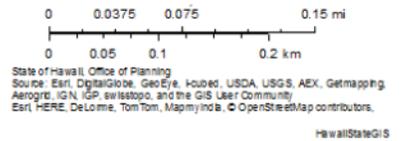


FIGURE 3.4

LAND STUDIES BUREAU -  
SOIL SURVEY MAP  
PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD

ISLAND OF OAHU

SEE IMAGE FOR SCALE  
SOURCE: LAND STUDIES BUREAU



## **4 DESCRIPTION OF HUMAN ENVIRONMENT POTENTIAL IMPACTS AND MITIGATION MEASURES**

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

### **4.1 ARCHAEOLOGICAL, HISTORICAL AND CULTURAL RESOURCES**

An Archaeological Inventory Survey (AIS) was prepared. A copy of the AIS is made a part of this assessment, see Appendix C. The AIS has been submitted to the State Historic Preservation Division for review and approval.

Potential Impacts and Mitigation Measures:

No adverse impacts to archaeological, historical or cultural resources are anticipated because no resources are present. This site has been a residence for more than 40 years. There will be no effect on any traditional cultural practices as none are known to be associated with this site.

### **4.2 ACCESS AND ROADWAYS**

The project site is accessed from Portlock Road, which serves as the only vehicle access. There are several accesses to Portlock Road from Kalaniana'ole Highway, the major regional access to East Oahu.

There are currently two vehicular accesses to the project site from Portlock Road. These accesses shall serve the various houses being renovated and constructed. All parking for these residences, both the residents and guests shall be accommodated on-site.

In response to comments from the Department of Transportation Services: street usage permits shall be acquired during construction prior to the commencement of any work which will impact the flow of vehicular traffic on City streets particularly that which would result in lane closure(s). The neighborhood board and area residents shall be kept informed of proposed project impacts to the surrounding streets.

The Department of Transportation requested in their response that a permit be acquired prior to the transportation of oversized and/or overweight materials on State highway facilities; although this type of transportation is not anticipated for the project permits will be acquired if necessary.

### **4.3 NOISE**

Existing noise levels in the vicinity of the project site are relatively lot consistent with the surrounding residential uses. After renovations are completed noise will primarily come from any vehicular traffic. Noise from the residences shall be typical to what occurs in a residence. Due to the properties size and setbacks, noise flowing from the property would be within the normal range of under 55 dBA during the daytime and under 45 dBA during the nighttime as specified by the Hawaii Administrative Rules Department of Health, Chapter 46, Community noise control (11-46-4).

Potential impacts:

Construction activities will generate temporary noise that will impact the neighborhood, the noise impacts are unavoidable and typical to residential construction; but will be temporary.

#### **4.4 AIR QUALITY**

Proposed changes to 525/567 Portlock Road have no anticipated effect on existing air quality conditions. The air quality around the site is generally excellent throughout the year. The prevailing northeasterly trade winds create on shore breezes. No man-made or natural pollutants will be pushed into the neighboring residencies.

Potential Impacts:

No Federal or State air quality standards will be violated during or after the construction of all the residences. Short term impacts from emissions of fugitive dust will likely occur during site preparation and construction. Overall, air quality impacts will be temporary and limited to the duration of construction.

#### **4.5 VISUAL RESOURCES**

The west side of the project site borders the ocean and Maunalua Bay. Beyond Maunalua Bay are views of Diamond Head and the communities of Aina Haina and Hawaii Kai. The view to the east includes Koko head. Due to the elevation and slope of the site; views of the residences will be blocked by landscaping and existing retaining walls without blocking the ocean views for the surrounding residences.

See Appendix A for photographs of the existing site.

Potential Impacts:

The proposed new house will not be noticeable from Portlock road and its scale and design shall be consistent with the surrounding architectures. The building scale of the existing houses shall remain the same and they will continue to be at most minimally visible from the street. See appendix B for plans and elevations. Landscaping such as palms will be used to improve the visual character and soften the impact of the buildings height and mass.

#### **4.6 INFRASTRUCTURE**

Potential Impacts:

This project site has existed in this neighborhood for over forty years. Current utilities and infrastructure that are provided to the site are adequate for both the renovation and new construction.

## **525/567 PORTLOCK ROAD RESIDENCE**

### **DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT**

Waterline, wastewater, and fire hydrant lines exist on Portlock Avenue and there will be no adverse or increased impacts to these systems. Construction plans will be submitted for all work and connections to these systems will be coordinated with the board of water supply the City's Environmental Services and the Honolulu Fire Department.

No major improvements to any drainage, solid waste and electrical systems will be required for the project site since the existing systems are adequate for any work planned.

#### **4.6.1 Water**

Water service for 525/567 Portlock Road and the surrounding area is provided by the [Oahu] Board of Water Supply (BWS). There are existing water meters that currently services the properties.

Per comments returned by the Board of Water Supply on January 31, 2014; during project design, design drawings will be submitted to BWS for review and approval to determine if the existing water laterals and meters are adequate for the proposed water demands. Request for new or upsized water meters will be submitted to BWS for review and approval for connection to the existing water system.

#### **Potential Impacts:**

The project site currently has all the necessary infrastructure and utilities. Existing utilities may need to be upgraded based on the new requirements for each house on the site. The construction plans will be submitted to the county for review and comments. Per the responses and based on the adequacy of the existing utilities, appropriate changes to the design will be made to ensure proper use of all the infrastructure work.

#### **4.6.2 Wastewater**

Wastewater treatment for 525/567 Portlock Road is serviced by Hawai'i American Water Company, East Honolulu. The Hawai'i American Water East Honolulu Facility processes and cleans 3.8 MGD on average. The facility is located on the Kaiwi Coast at 6700 Kalaniana'ole Highway, Honolulu Hawai'i.

Wastewater is collected through a network of sewer lines along Portlock Road. Wastewater for this area is processed at the Hawaii Kai Wastewater Treatment Plant.

During project design, a separate sewer connection application will be submitted to the City's Department of Planning and Permitting, Wastewater Branch (WWB) for each property to determine if the existing facilities can adequately handle the proposed flows. In addition, design drawings will be submitted to WWB and Hawai'i American Water Company for review and approval to connect to the existing wastewater system.

### **4.6.3 Drainage**

The existing site generally slopes from Portlock Road towards the ocean. Slopes vary widely from 1.0% to over 50%. The project site is lower than Portlock Road. Storm water runoff generated on-site will generally sheet flow towards the ocean. There is an existing 20 feet wide drainage easement that runs from Portlock Road to the ocean through the project site.

During the project design, hydrologic and hydraulic calculation will be done to determine the effect of the proposed improvements. The proposed drainage improvements will be designed to limit the storm water runoff exiting the project site to predevelopment storm water runoff quantities and to protect the near shore waters from silt and other pollutants. The proposed drainage improvements may include drain inlets, drain lines, underground detention system, and bioswales. During construction, the contractor is to follow the City's standards and requirements for Best Management Practices for grading operations.

### **4.6.4 Solid Waste**

The City and County of Honolulu – Department of Environmental Services is responsible for refuse pickup, hauling and disposal of solid waste along Portlock Road. Solid waste generated by 525/567 Portlock Road is disposed of at the city-owned Waimanalo Gulch Sanitary Landfill (WGSL). Some refuse from collection is burned by H-POWER for waste to energy production. The WGSL is located at 92-460 Farrington Highway in Kapolei, Hawai'i and H-POWER is at 91-174 Hanua Street in Kapolei, Hawai'i. WGSL accepts two types of refuse; municipal solid waste generated by residential, commercial, military, and agricultural activities; and H-POWER ash and residue generated as a by-product of incinerating waste.

Construction and demolition waste for Oahu is disposed of at the privately-owned PVT landfill located at 87-2020 Farrington Hwy. Wai`anae, Hawai`i.

### **4.6.5 Electrical**

The property obtains electrical service from Hawaiian Electrical Company, Inc. (HECO) through a network of underground ductlines and overhead power lines. HECO primarily generates electricity by burning residual low sulfur fuel oil. Supplementary sources include H-POWER, along with partnered private sector solar and wind energy generating sources.

Hawaiian Telecom provides telephone service. Existing underground and overhead lines are located along Portlock Road. Cable TV service in the area is provided by Oceanic Time Warner Cable (Oceanic). There currently is an existing electrical transformer on the project site.

During project design, design drawings will be submitted to HECO, Hawaiian Telcom and Oceanic Time Warner for review and approval for connection to the existing facilities and systems.

## **525/567 PORTLOCK ROAD RESIDENCE**

### **DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT**

#### **4.6.6 Gas**

Hawai`i Gas will provide gas service for this project from existing gas lines along Portlock Road. Hawai`i Gas provides service of synthetic Natural Gas produced in Campbell Industrial Park through underground pipelines. Where piped in gas is unavailable Hawai`i Gas also provides LP-Gas or Propane service.

During project design, design drawings will be submitted to Hawai`i Gas for review and approval for connection to the existing gas lines.

#### **4.7 SOCIO-ECONOMIC CHARACTERISTICS**

Potential Impacts:

The new work planned is for the owners of the property and their family. This family currently resides in Honolulu; they add to the economy and are enrolled in local schools. Therefore, no significant impacts to any existing facilities or services provided by the State and City are anticipated.

##### **4.7.1 Population**

According to the United States Census Bureau 2010 census poll the population of Hawai`i County is 953,207. The projected population for 2012 was 976,372; or a 2.4% population growth.

##### **4.7.2 Economy**

Honolulu; along with being the state capitol, is the civic-cultural-and financial center of both the island of O`ahu and the State of Hawai`i. The city and the county of Honolulu are considered the same area for government purposes; however the area between the H3 and east to Makapu`u Point is unconventionally recognized as metropolitan Honolulu. Portlock; a neighborhood of Honolulu, has comparatively higher income and education levels than the median of the surrounding city with residents primarily employed in executive, management, and professional occupations.

#### **4.8 PUBLIC SERVICES AND FACILITIES**

##### **4.8.1 Schools**

The property 525/567 Portlock Road is in the districts of Koko Head Elementary School located at 189 Lunalilo Home Road, Honolulu, HI 96825. The middle school servicing the area is Niu Valley Middle School - 310 Halemaumau St, Honolulu. Niu Valley Middle School feeds into Henry J Kaiser High School at 511 Lunalilo Home Rd, Honolulu. Oahu has many private schools; however none within the Hawaii Kai area.

#### **4.8.2 Police**

Portlock falls within the Honolulu Police Department's East Honolulu district 7; the district 7 substation is located by the Hawai'i Kai Satellite City Hall at Hawai'i Kai Towne Center 6600 Kalaniana'ole Hwy. The main Honolulu Police department headquarters are stationed at 801 South Beretania Street.

The Honolulu Police Department responded with no comments to the Pre-Consultation letter.

#### **4.8.3 Fire & EMS**

Fire prevention, protection, and suppression services for Hawai'i Kai are provided by the Honolulu Fire Department (HFD) Hawai'i Kai station; number 34. Fire Station 34 is located on the corner of Lunalilo Home Road and Kapaia Street. The main Honolulu Fire Department station is located at 636 South Street, Honolulu. The Hawai'i Kai Fire Station also houses the local EMS/EMT.

Per HFD and BWS comments request civil drawings for the project shall be submitted to HFD for review and approval. Also per HFD's request all buildings shall comply with National Fire Code [UFC] 2006 Ed. Section 18.2.3.2.2 and 18.2.3.2.1; meaning: the design of the buildings and site shall be such that either no first story exterior building walls will be more than 150 feet from fire access roads or on site fire hydrants and pails. All buildings part of this project shall have a minimum of one exterior door leading to the interior; operable from the exterior and within 50 feet of the fire access road. Civil drawings for the project shall be submitted to HFD for review and approval as part of the permitting process.

#### **4.8.4 Medical**

Hawai'i Kai is serviced by numerous privately owned medical and dental clinics. Major medical facility branches nearest to 525/567 Portlock Road include the Hawai'i Kai Queens Health Care Center at 377 Keahole St, Honolulu; Kaiser Permanente Hawai'i Kai at 6700 Kalaniana'ole Hwy #111, Honolulu; and Straub Clinic & Hospital at 7192 Kalaniana'ole Highway, A200, Honolulu.

#### **4.8.5 Recreational facilities**

The Site is in close proximity to parks, preserves, and nature facilities. These include: Koko Kai Beach Park, Koko Head Neighborhood Park, Koko Head District Park, Maunalaua Bay Beach Park, Hawai'i Kai Recreation Center, Hanauma Bay Nature Preserve. The local library is the Hawai'i Kai library located at 249 Lunalilo Home Rd.



**Map Number References:**

- 1. Koko Head Elementary School
  - 2. Niu Valley Middle School
  - 3. Henry J Kaiser High School
  - 4. Hawaii Kai Public Library
  - 5. Hawaii Kai Police & Hawaii Kai Satellite City Hall
  - 6. Hawaii Kai Fire Station 34 & EMS
  - 7. Hawaii Kai Queens Health Care Center
  - 8. Kaiser Permanente Hawaii Kai
  - 9. Straub Clinic & Hospital
- \*Parks are labeled on map

**LEGEND**

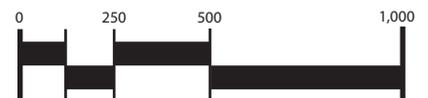
- Educational Facilities
- Emergency Facilities
- Parks & Recreation

**FIGURE 4.6**

**PUBLIC FACILITIES**

**PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD**

ISLAND OF OAHU



SCALE IN METERS

SOURCE: Map Background Credit to Google



## **5 LAND USE CONFORMANCE**

### **5.1 STATE LAND USE LAW, HRS CHAPTER 205**

The Hawai`i Land Use Law Chapter 205, Hawai`i Revised Statutes (HRS) establishes the State Land Use Commission (LUC) and authorizes this body to classify all lands into one of four districts: Urban, Rural, Agricultural and Conservation. (see figure 5.1)

This project is located within the State Land Use Urban District. The counties primarily have jurisdiction over urban lands through their land use ordinances and regulations. Private residence is a permitted use in the State Land Use Urban District and is therefore consistent with the existing State Land Use classification.

### **5.2 COASTAL ZONE MANAGEMENT ACT, CHAPTER 205A, HAWAII REVISED STATUTES**

The Coastal Zone Management (CZM) Program (Chapter 205A-2, HRS) was established to provide public recreational opportunities, protect coastal resources and ecosystems, reduce hazards, and manage development. 525/567 Portlock is located within the Special Management Area (SMA). Therefore, the proposed residences are subject to Chapter 205A-2, HRS.

The Office of State Planning identified in their response that work within a CZM is required to follow policies set forth in HRS 205A-2; the following explains intentions to comply with these requirements.

To maintain compliance with HRS 205A-2 the proposed residencies shall do the following: Maintain public access to costal recreational opportunities, preserve and restore natural and manmade historic and prehistoric resources both bordering and on the property. Protect and minimize effects on the costal ecosystem and costal hazards by making any necessary repairs to and maintaining the shoreline retaining wall. The project shall also comply with all other objectives and policies of HRS 205A-2 if found to be applicable to the property.

### **5.3 CITY AND COUNTY OF HONOLULU GENERAL PLAN**

The City and County of Honolulu General Plan is a statement of the long range social, economic, environmental and design objectives for the general welfare and prosperity of the people of O`ahu. The plan is a statement of broad policies that facilitate the attainment of the objective of the Plan.

A long range General Plan goal is to provide convenient access to all beaches and inland recreational areas. Another goal is to provide for safe and secure use of public parks, beaches and recreational activities. The proposed project supports these goals and is thus consistent with the General Plan. (see figure 5.2 for plan map)

#### **5.4 EAST HONOLULU DEVELOPMENT PLAN**

The City and County of Honolulu’s Development Plan (DP) program provides a framework for implementing objectives and policies of the General Plan on an area wide basis. The project site is located in the East Honolulu DP area which encompasses the area from Aina Koa Ridge to Makapu`u Point.

One of the development priorities of the East Honolulu DP is to assure beach access. The footbridge at the harbor will continue to assure residents and others with lateral access to the shoreline on either side of the bay.

#### **5.5 CITY AND COUNTY OF HONOLULU LAND USE ORDINANCE AND ZONING**

The City and County of Honolulu Land Use Ordinance (LUO) regulates land use in accordance with adopted land use policies, including the O`ahu General Plan and Development Plans. The provisions are also referred to as the zoning ordinance. Zoning designations are shown on the zoning map (see fig 2.3 for zoning related to the project). As stated in the Office of Environmental Quality Control (OEQC) the project is also subject to the Revised Ordinances of Honolulu (RHO) Chapter, 25 which is pursuant to HRS Chapter 25 and applies to lands within an SMA.

The property site is zoned R-10 Residential. The LUO states “[t]he intent of the R-20 and R-10 districts is to provide areas for large lot developments. These areas would be located typically at the outskirts of urban development...” [LUO Sec. 21-3.70] Also permitted in the R-10 district are non-dwelling uses which support and complement residential neighborhood activities. Per LUO Table 21-3.2 R-10 lots are only permitted for one-family detached dwellings and other uses with a minimum lot size of 10,000 square feet. On this estate the lots have been joined into two JDA’s, of the individual TMK’s composing the property the smallest lot area is 27,392sf upon which resides the caretaker’s house. The yard setbacks which apply to the R-10 zoning are the same as those for the other residential zones; 10 foot front and 5 foot side and rear. The maximum building area is 50 percent of the lot, max. height is 25-30 feet and height setbacks are the same as in all other residential districts (per sec. 21-3.70-1(c) of the LUO). The height and height setbacks for the residencies can be found in Appendix B of this document. The lot density or built area is seen in the table below; although, as previously stated these lots are part of a joint area development which alters the amount of land area available to the residencies by combining two or more parcels.

Lot	Residency	Lot Area	Building footprint	Built density
390260044	Boat House	34,543 sf	4,917 sf	14%
390260046	Caretaker’s House	27,392 sf	2,515 sf	9%
390260047	Kaiser House	81, 893 sf	12,350 sf	15%
390260048	Bay Villa	71, 918 sf	12,443 sf	17%

## **525/567 PORTLOCK ROAD RESIDENCE**

### **DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT**

Comments from the Department of Planning and permitting along with all other consulted agencies can be found in Appendix E. Responses to all agency comments are also documented in Appendix E.

#### **5.6 SPECIAL MANAGEMENT AREA**

525/567 Portlock is located within the island of O`ahu's Special Management Area (SMA) which extends from the shoreline Mauka to Portlock Road. Figure 5.3 illustrates the Special Management Area for Portlock Road and Hanauma Bay Nature Reserve.

The Office of State Planning identified in their response that work within a SMA requires an SMA permit. After proceeding with the Environmental Analysis a Special Management Area permit will be applied for. A shoreline certification is required for the SMA permit; the site was inspected September 30, 2013. The State of Hawaii Department of Accounting and General Services (DAGS) identified on November 8, 2013, encroachments present in the inspection. The applicant is working with the Oahu District Branch of the Department of Land and Natural Resources (ODLO-DLNR) to resolve this issue by either showing that the encroachments were indeed present on a previous site survey or requesting that the ODLO-DLNR grant an easement for the portions of encroachment.

## 5.7 APPROVALS AND PERMITS

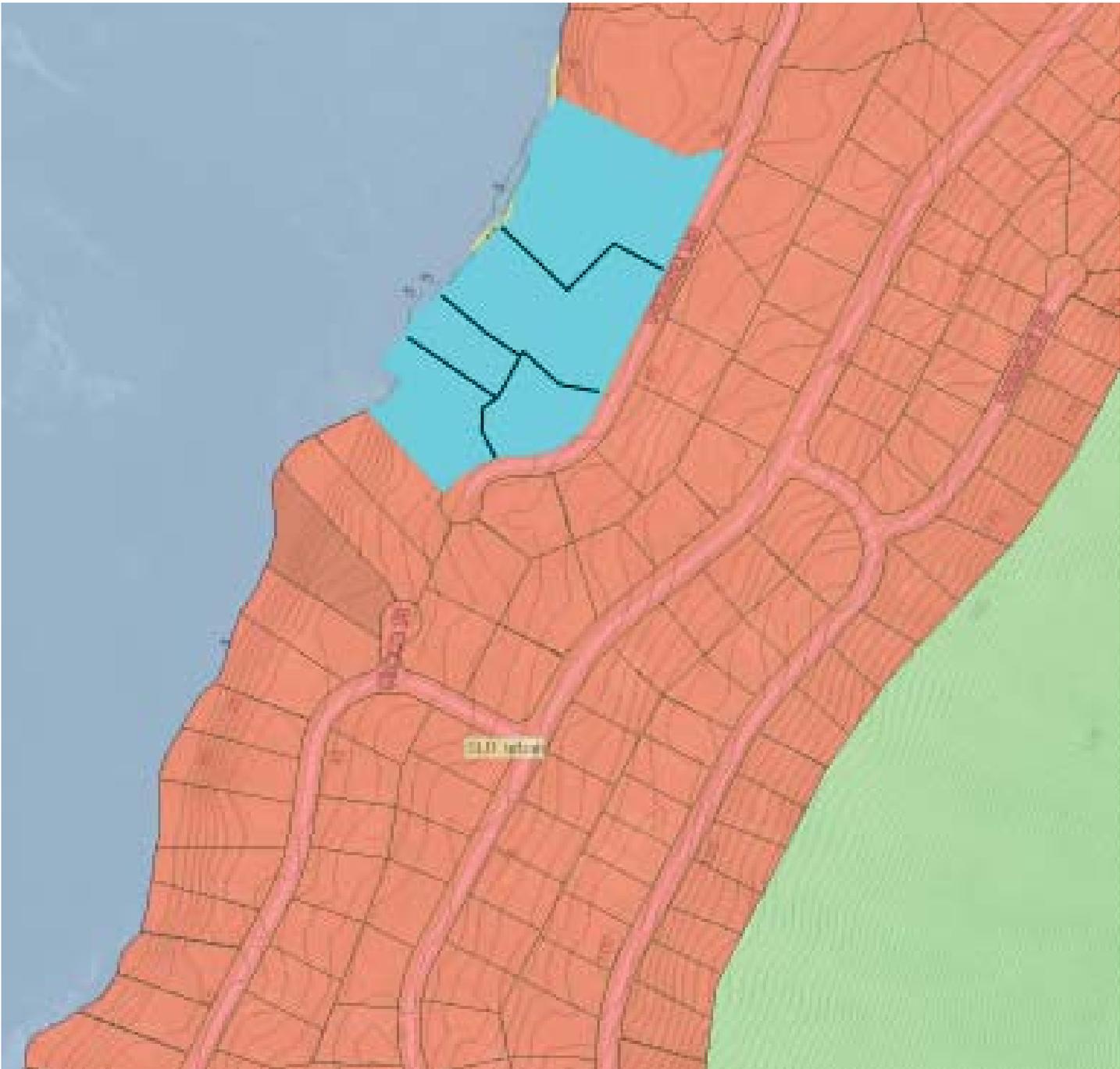
Permits required for the project and responsible authorities are identified below. Additional permits and approvals may be required depending on final construction plans.

### Previous Permits:

<i>Property TMK</i>	<i>Permit No.</i>	<i>Date</i>	<i>Type</i>	<i>Cost</i>
39026044	281048	02/16/1990	Addition	\$20,000
39026044	421612	09/01/1998	Partial Demo	\$30,000
39026044	424140	11/06/1998	Patio	\$7,000
39026044	428197	03/03/1999	Gate, fence, landscaping	\$30,000
39026045	428198	03/03/1999	Fence	\$1,000
39026046	254214	05/19/1998	Interior alterations to caretaker's house	\$115,000
39026046	424150	11/06/1998	Temporary fence	\$2,000
39026046	424148	11/06/1998	Fence	\$10,000
39026046	428196	03/03/1999	Fence	\$40,000
93026047	605160	11/22/2006	Demo and replace portion of existing sidewalk and curb ramp	\$8,000
93026047	660376	03/31/2011	Meter upgrade	\$5,000
93026047	670119	04/14/2011	Retaining Wall	\$15,000
93026047	670551	04/26/2011	Electric, plumbing and air condition alteration	\$3,000,000
93026047	700511	08/30/2012	Alteration	\$40,000
93026047	718423	03/07/2013	Retaining Wall	\$80,000
93026047	724068	05/23/2013	Alteration	\$40,000

### Anticipated Permits:

<i>AUTHORITY</i>	<i>PERMIT/APPROVAL</i>
City and County of Honolulu	
Department of Planning and Permitting	Chapter 343, HRS Compliance
Honolulu City Council	Special Management Area Use Permit (Major)
Department of Planning and Permitting	Grubbing, Grading and Stockpiling Permit
Department of Planning and Permitting	Building Permit for Building, Electrical, Plumbing Sidewalk/Driveway and Demolition Work



**LEGEND**

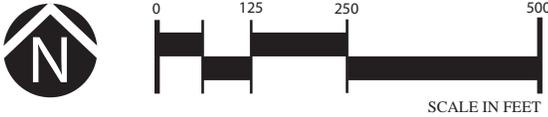
-  Urban
-  Rural
-  Site (Urban)



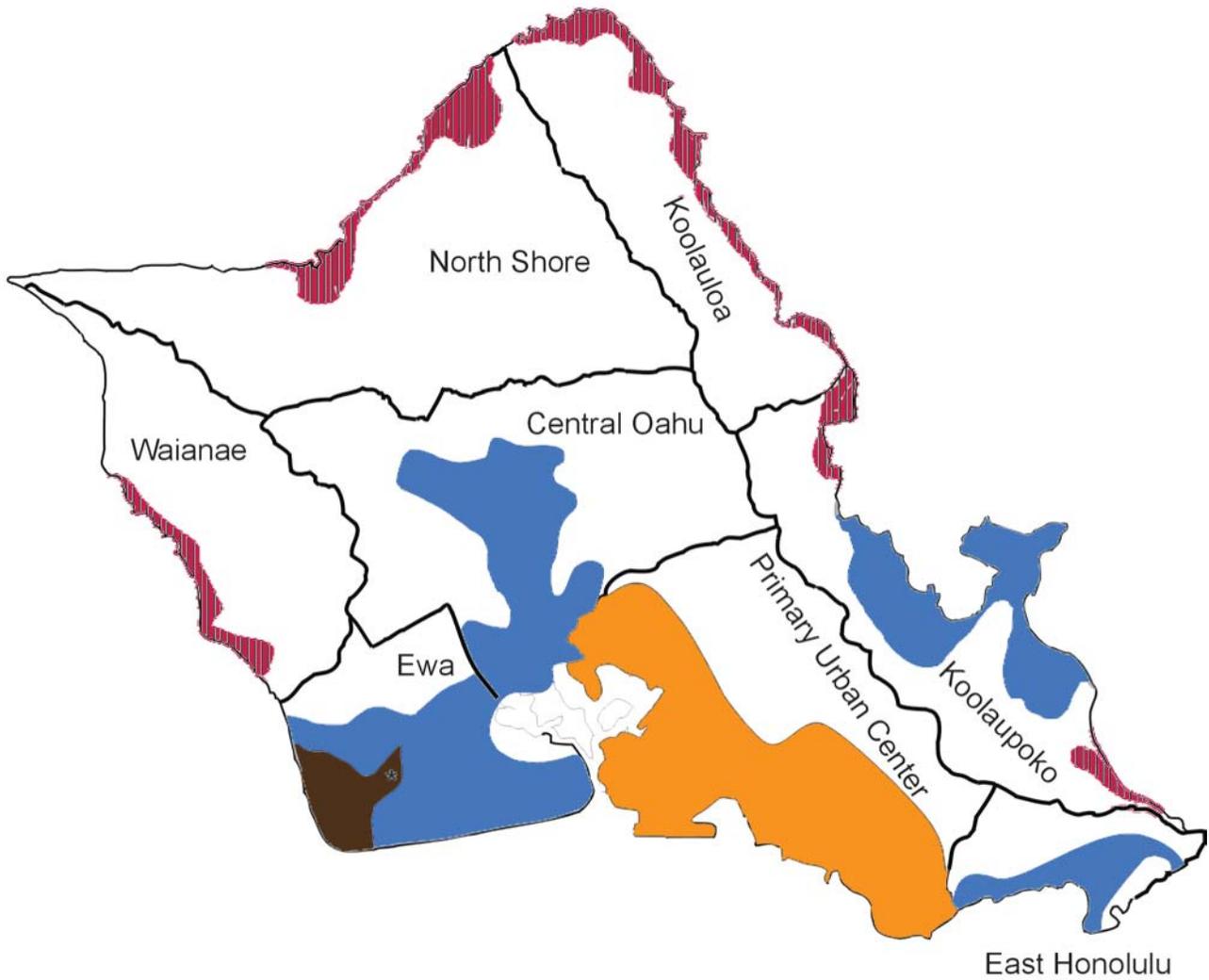
K H M A

**FIGURE 5.1**  
**STATE LAND USE DISTRICT**  
**PRIVATE RESIDENCE**  
**525/567 PORTLOCK ROAD**

ISLAND OF OAHU



SOURCE: Honolulu GIS



**LEGEND**

-  Primary Urban Center
-  Secondary Urban Center
-  Urban - Fringe
-  Rural

\* Site located in East Honolulu Region



K H M A

**FIGURE 5.2**

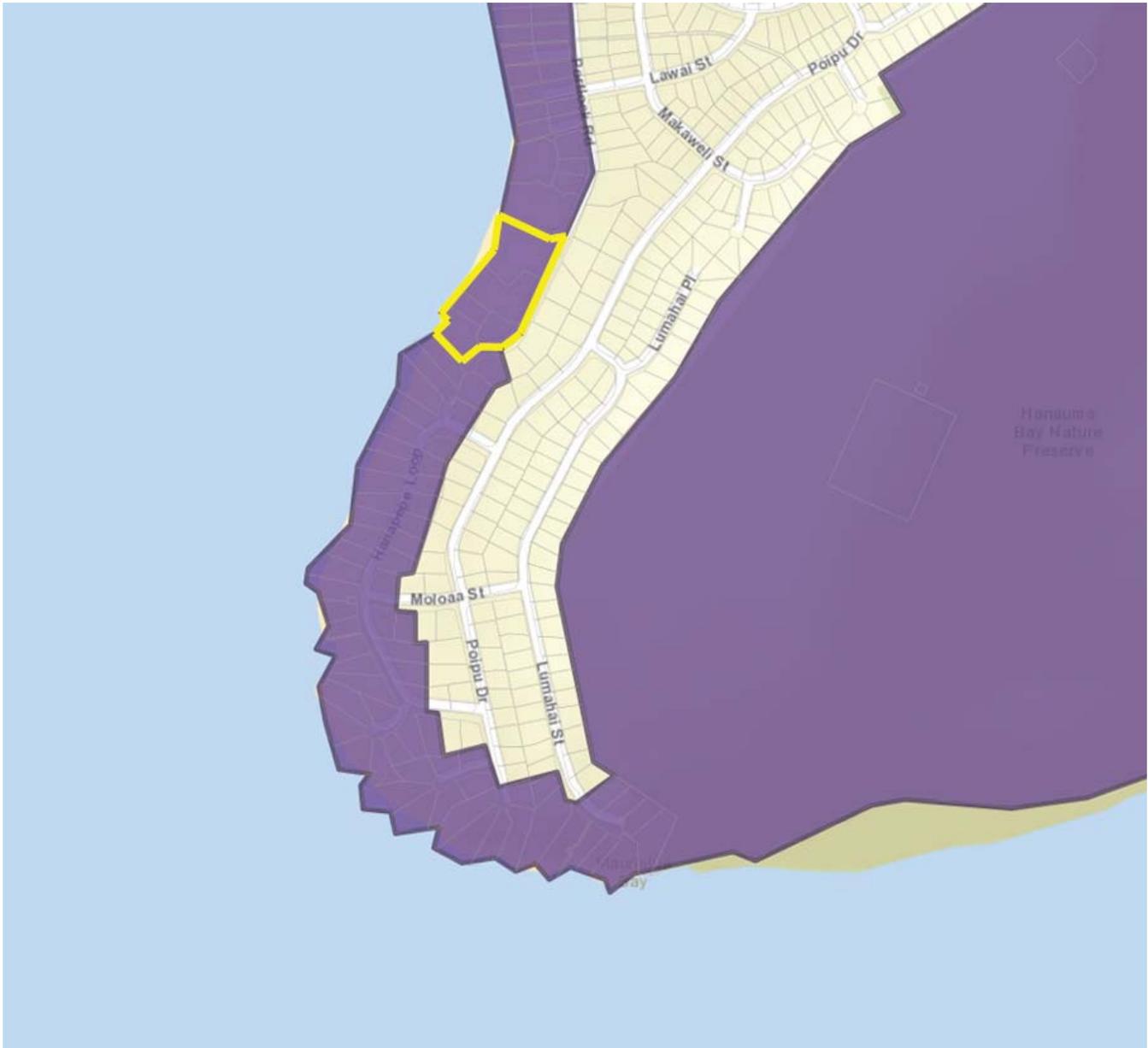
OAHU GENERAL PLAN &  
REGIONAL LOCATION MAP  
PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD

ISLAND OF OAHU



NOT TO SCALE

SOURCE: OAHU GENERAL PLANNING REPORT 2002



**LEGEND**

-  Shoreline Management Area (SMA)
-  Non-SMA
-  Site

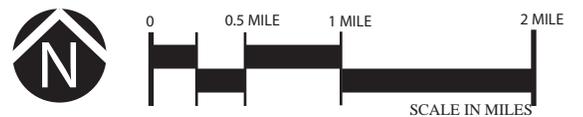


K H M A

**FIGURE 5.3**  
**SPECIAL MANAGEMENT AREA MAP**

**PRIVATE RESIDENCE**  
**525/567 PORTLOCK ROAD**

ISLAND OF OAHU



SOURCE: State of Hawaii CZM Program

## **6 LAND USE CONFORMANCE**

### **6.1 NO ACTION ALTERNATIVE**

A No Action alternative would maintain the status quo of the existing residences, the physical environment, and the current level of unfinished existing residences. Maintaining the status quo is not a desired option to the homeowner. A No Action alternative would preclude the occurrence of all short and long term beneficial and adverse impacts disclosed in this assessment. In short the no action alternative would put a stop to the proposed project and the existing structures remaining in their current; in the case of the Boat House unsafe, condition.

### **6.2 ALTERNATIVE LOCATION**

Two of the three residences already exist and the third residence is located to minimize the short and long term impacts on the physical conditions of the project site. Therefore, there is no alternative on site location.

## **7 SUMMARY OF ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS**

### **7.1 SUMMARY OF IMPACTS**

The scope of the project was discussed with the consulting architect and members of the design team. State and County agencies were contacted for information relative to their areas of expertise. Time was spent in the field noting current construction conditions.

Of the two existing residences the Main House is currently under renovation. Because two of the residences are already standing structures, short-term construction related actions and subsequent environmental impacts associated directly with its construction are considered moot.

Construction will temporarily affect ambient air quality. Site work activities will raise fugitive dust that can settle in adjoining areas. Site work will be limited to the area of the new construction. This should aid in mitigating dust generation and controlling dust. The general contractor will employ on and off site dust control measures to prevent the work site, construction equipment, and activities from becoming significant dust generators. Control measures shall comply with Chapter 60.1, Air Pollution Control, Title 11, State Department of Health (and revisions thereto).

Most construction equipment and vehicles are diesel powered and emit exhaust emissions that are typically high in nitrogen dioxide and low in carbon monoxide. The Federal and State nitrogen dioxide standard ---100mg/m<sup>3</sup> per annum --- which is an annual standard, is not likely to be exceeded during construction. Carbon dioxide emissions should be less than that generated by automobile traffic on adjoining streets. Aldehyde odors from diesel equipment may be detected but should be dispersed by the prevailing winds.

Like fugitive dust, construction noise cannot be avoided. Exposure to noise will vary by construction phase, the duration of each phase, and the type of equipment used during the different phases. Maximum sound levels in the range of 82-96 db(A) measured at 50 feet from the source would be generated by heavy machinery during the site work. After site work is completed, reductions in sound levels, frequency, and duration can be expected.

Community Noise Control regulations (Chapter 46 Noise Control for Oahu) establish maximum permissible sound levels for construction activities occurring within “acoustical” zoning districts. Based on the agricultural zoning for the site, the project is classified as a Class C zoning district for noise control purposes. The maximum permissible daytime (7a.m. to 10 p.m.) sound level in the district is 70 db(A) during day and night hours for stationary noise sources and equipment related to construction (Chapter 46, Community Noise Control, 1996). Any noise source that emits noise levels in excess of the maximum permissible sound levels cannot be operated without first obtaining a noise permit from the State Department of Health. Although the permit does not attenuate noise per se, it regulates the hours during which excessive noise is allowed.

**525/567 PORTLOCK ROAD RESIDENCE**

**DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT**

The contractor will be responsible for obtaining and complying with conditions attached to the permit.

Best Management Practices (BMPs) for erosion and drainage control during construction will be incorporated into grading plans. BMPs will include erecting silt fences around the work site to coincide with the limits of grading, grassing all exposed graded areas after grading work is completed, erecting gravel bag berms with absorbent socks at paved areas to minimize petroleum products from flowing offsite, and constructing stabilized construction access pads at the entrances to the building site to protect roads and driveways from mud, dirt and rocks. The contractor may implement other BMPs based on field conditions and their experience in working with similar work sites.

Best Management Practices also will be implemented pursuant to City and County of Honolulu Rules Relating to Storm Drainage Standards, Section II, Storm Water Quality.

Areas disturbed by construction will be restored to pre-construction conditions or better.

Energy costs may increase because the building will be air conditioned. In addition to providing for the comfort of the residents, air conditioning will dehumidify the building to reduce mold and mildew from forming, thus prolonging the life of the electrical and electronic equipment.

Increases in energy costs can be mitigated by incorporating natural lighting, energy efficient light fixtures, photo-voltaic panels, and high-efficiency air conditioning units into the design of the structure and its utility systems.

Water use will be reduced by installing low flow plumbing systems. An increase in average daily wastewater is not anticipated only the source of the flow.

## 8 DETERMINATION OF SIGNIFICANCE

Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, establishes criteria for determining whether an action may have significant effects on the environment (11-200-12). The relationship of the proposed project to these criteria discussed below.

**1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;**

Natural and cultural resources will not be lost as the site under evaluation was developed to its full capacity by previous owners. The complete development of the site was accomplished through the erection of three residencies (the Kaiser/main house, Boat House, and caretaker's house) and site regrading for landscaping along with the additions of site amenities such as a tennis court, salt water fountain, pool, gazebo, and lanais. The site disturbance generated by previous work resulted in no findings or destruction of cultural resources; therefore no future work will result in the disturbance or loss of these resources.

**2) Curtails the range of beneficial uses of the environment;**

This project does not curtail nor impact the beneficial uses of the environment.

**3) Conflicts with the State's long term environmental policies, goals and guidelines as expressed in HRS Chapter 344 and any revisions thereof and amendments thereto, court decisions or executive orders;**

This project does not conflict with long term environmental policies, goals, and guidelines of the State of Hawai'i.

**4) Substantially affects the economic or social welfare of the community or State;**

This project will not substantially affect the economic or social welfare of the State. In the near future this project will return the project site to the value of the surrounding neighborhood.

**5) Substantially affects public health;**

This project will not impact public health. During construction there may be short term environmental impacts in the form of fugitive dust and noise from construction equipment.

**6) Involves substantial secondary impacts, such as population changes or effects on public facilities;**

Population changes and effects on public facilities are not anticipated as a result of this project.

**7) Involves a substantial degradation of environmental quality;**

**525/567 PORTLOCK ROAD RESIDENCE**

**DRAFT ENVIRONMENTAL ASSESSMENT / ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT**

Because two of the three residences exist with renovation allowed on one of them, substantial degradation of environmental quality is not anticipated.

**8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;**

Construction and long term use of the residences will not result in significant adverse short and long term environmental impacts or involve a commitment for a larger action.

**9) Substantially affects a rare, threatened or endangered species, or its habitat;**

Rare, threatened or endangered flora and fauna are not found on the building site or on the school grounds.

**10) Detrimentially affects air or water quality or ambient noise levels;**

Ambient air quality will be affected for the short term due to fugitive dust and combustion emissions during construction but can be controlled by measures stipulated in this Assessment. There may be some construction noise during site preparation work but should diminish once the shell work is completed. All construction activities will comply with air quality and noise pollution regulations of the State Department of Health.

Any erosion control measures will be prescribed in grading plans for the new residence that is constructed and best management practices prepared for this project.

**11) Affects or is likely to suffer damage by being located in an environmentally sensitive area such as flood plain, tsunami zone, beach, erosion prone area, geologically hazardous land, estuary, fresh water or coastal waters.**

The estate although located along the coastline, the area is not considered environmentally sensitive.

**12) Substantially affects scenic vistas and view planes identified in county or state plans or studies or;**

The estate site is neither identified as a visual resource nor located within scenic vistas or view planes identified in county or state plans.

**13) Requires substantial energy consumption;**

Although the houses are designed to take advantage of the natural trade winds there will be a mechanical system as well as interior lighting.

**AGENCIES AND ORGANIZATIONS CONSULTED  
IN THE PREPARATION OF THE EA PROCESS**

**FEDERAL**

US ARMY CORP OF ENGINEERS  
US FISH AND WILDLIFE SERVICES

**STATE OF HAWAII**

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM  
(DBEDT) – OFFICE OF PLANNING  
DEPARTMENT OF EDUCATION (DOE) – FACILITIES DEVELOPMENT  
BRANCH  
DEPARTMENT OF HEALTH (DOH) – ENVIRONMENTAL PLANNING  
OFFICE  
DEPARTMENT OF LAND AND NATURAL RESOURCES (DLNR)  
DEPARTMENT OF LAND AND NATURAL RESOURCES (DLNR) –  
HISTORIC PRESERVATION DIVISION  
DEPARTMENT OF TRANSPORTATION (DOT) – HARBOR’S DIVISION  
OFFICE OF HAWAIIAN AFFAIRS (OHA)  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL (OEQC)  
HAWAII KAI PUBLIC LIBRARY  
CITY AND COUNTY OF HONOLULU  
BOARD OF WATER SUPPLY (BWS)  
HONOLULU POLICE DEPARTMENT (HPD)  
HONOLULU FIRE DEPARTMENT (HFD)  
DEPARTMENT OF ENVIRONMENTAL SERVICES (DES)  
DEPARTMENT OF PARKS AND RECREATION (DPR)  
DEPARTMENT OF PLANNING AND PERMITTING (DPP)  
DEPARTMENT OF TRANSPORTATION SERVICES (DTS)  
COUNTY COUNCILMEMBER

**PRIVATE ORGANIZATIONS AND COMMUNITY**

HAWAIIAN ELECTRIC COMPANY (HECO)  
HAWAIIAN TELCOM  
OCEANIC TIME WARNER  
HAWAII KAI NEIGHBORHOOD BOARD  
MAUNALUA COMMUNITY ASSOCIATION

# APPENDIX

# A

## PHOTOGRAPHS



PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD

ISLAND OF OAHU



FIGURE A.1  
PHOTOGRAPH: HARBOR VILLA (BOAT HOUSE) - MAUKA  
PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD

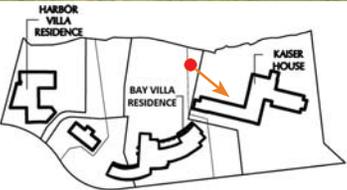
SOURCE: PHOTOS TAKEN JANUARY 21, 2014



ISLAND OF OAHU



MAIN HOUSE: LOOKING EAST



MAIN HOUSE: LOOKING SOUTH EAST / MAUKA

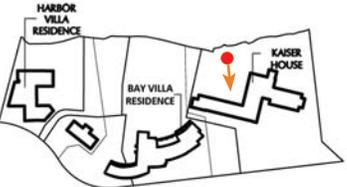


FIGURE A.2  
 PHOTOGRAPH: MAIN HOUSE  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD  
 SOURCE: PHOTOS TAKEN JANUARY 21, 2014



FIGURE A.3

PHOTOGRAPH: CARETAKER'S HOUSE - LOOKING MAKAI FROM ENTRANCE GATE  
PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD

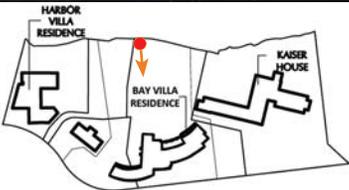
SOURCE: PHOTOS TAKEN JANUARY 21, 2014



ISLAND OF OAHU



SITE LOOKING MAUKA



MAIN HOUSE: LOOKING SOUTH EAST / MAUKA

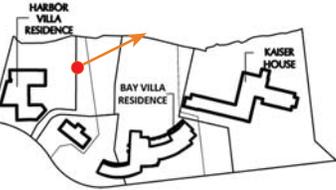
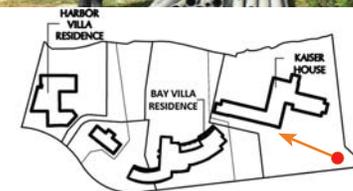


FIGURE A.4  
 PHOTOGRAPH: SITE  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD

SOURCE: PHOTOS TAKEN JANUARY 21, 2014



VIEW OF SITE & MAIN HOUSE - LOOKING MAKAI FROM MAIN ENTRANCE GATE



VIEW OF SITE FROM PORTLOCK ROAD - ACROSS FROM MAIN GATE AND MAIN HOUSE

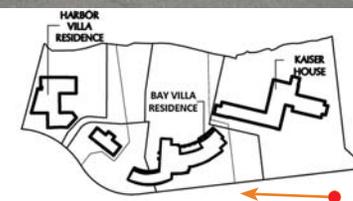


FIGURE A.5

PHOTOGRAPH: SITE AND STREET VIEWS  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD

SOURCE: PHOTOS TAKEN JANUARY 21, 2014



SITE BOUNDARY AT OCEAN



SITE BOUNDARY AT OCEAN



SITE BOUNDARY DRIVE LOOKING FROM CARETAKER'S HOUSE

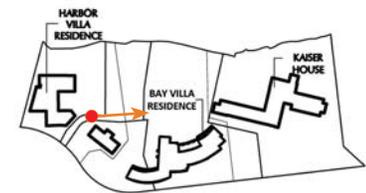
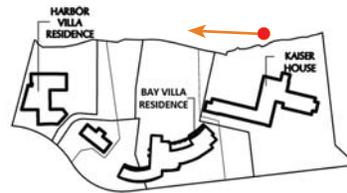
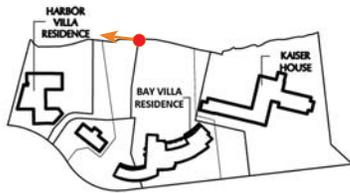


FIGURE A.6

PHOTOGRAPH: SITE BOUNDARY VIEWS

PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD

SOURCE: PHOTOS TAKEN JANUARY 21, 2014



# APPENDIX B

## ARCHITECTURAL DRAWINGS

PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD

ISLAND OF OAHU



K H M A

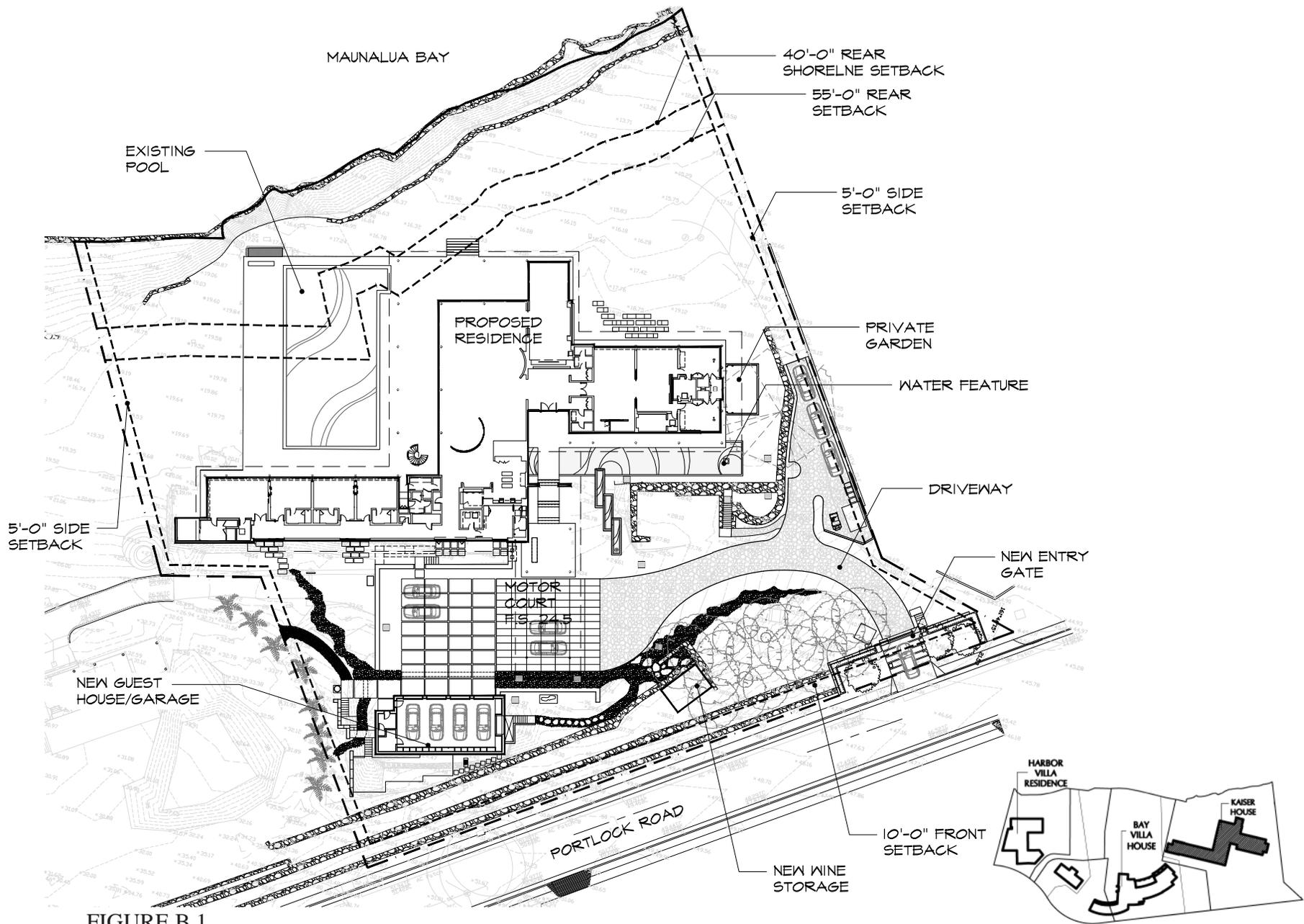


FIGURE B.1

PROPOSED DEVELOPMENT PLAN  
 MAIN HOUSE (KAISER RESIDENCE) - SITE PLAN  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



ISLAND OF OAHU



SCALE: 1/64"

SOURCE: RICHARD MANION ARCHITECTURE, INC

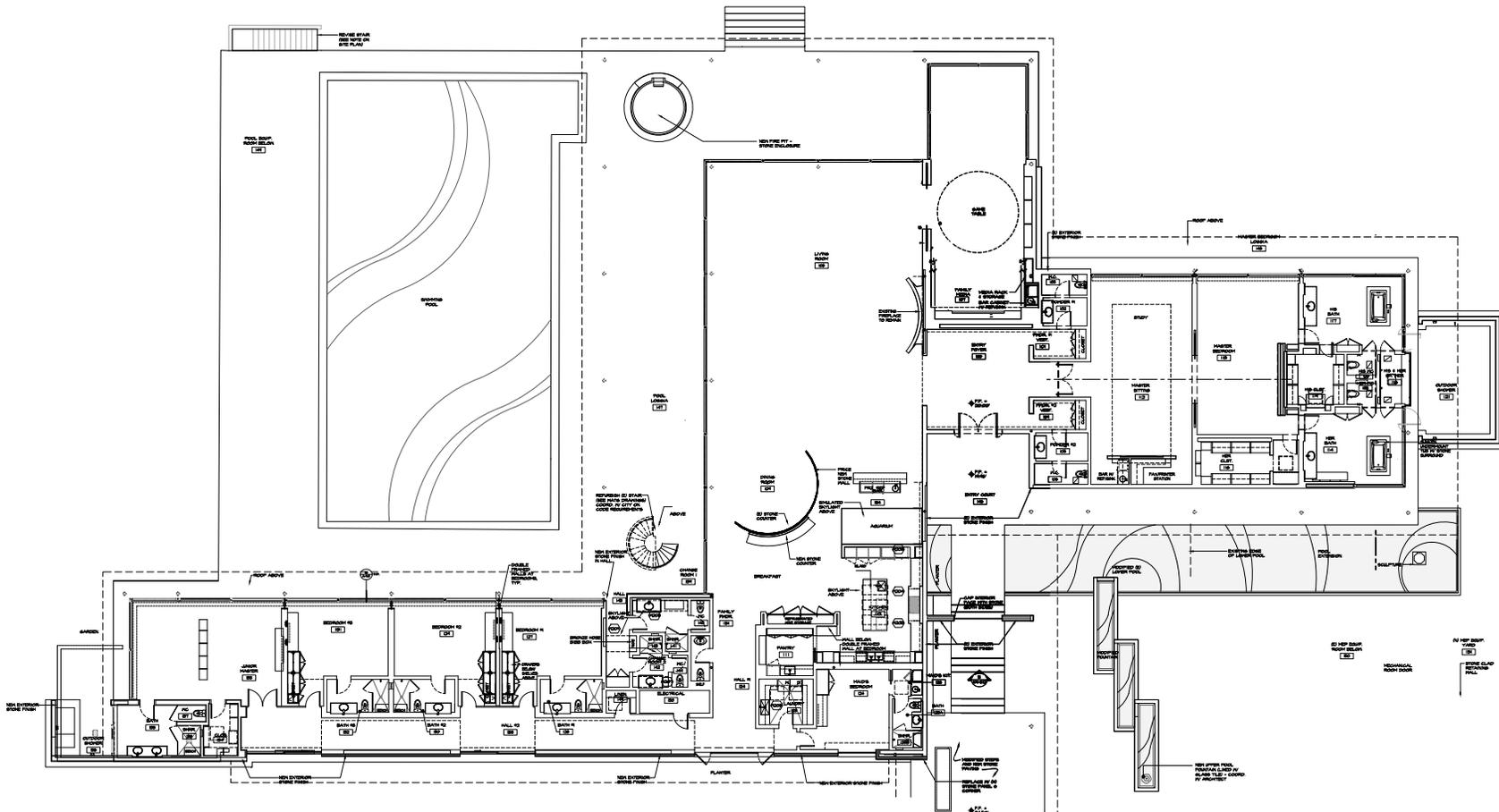


FIGURE B.2  
 PROPOSED DEVELOPMENT PLAN  
 MAIN HOUSE (KAISER RESIDENCE) - FLOOR PLAN  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD

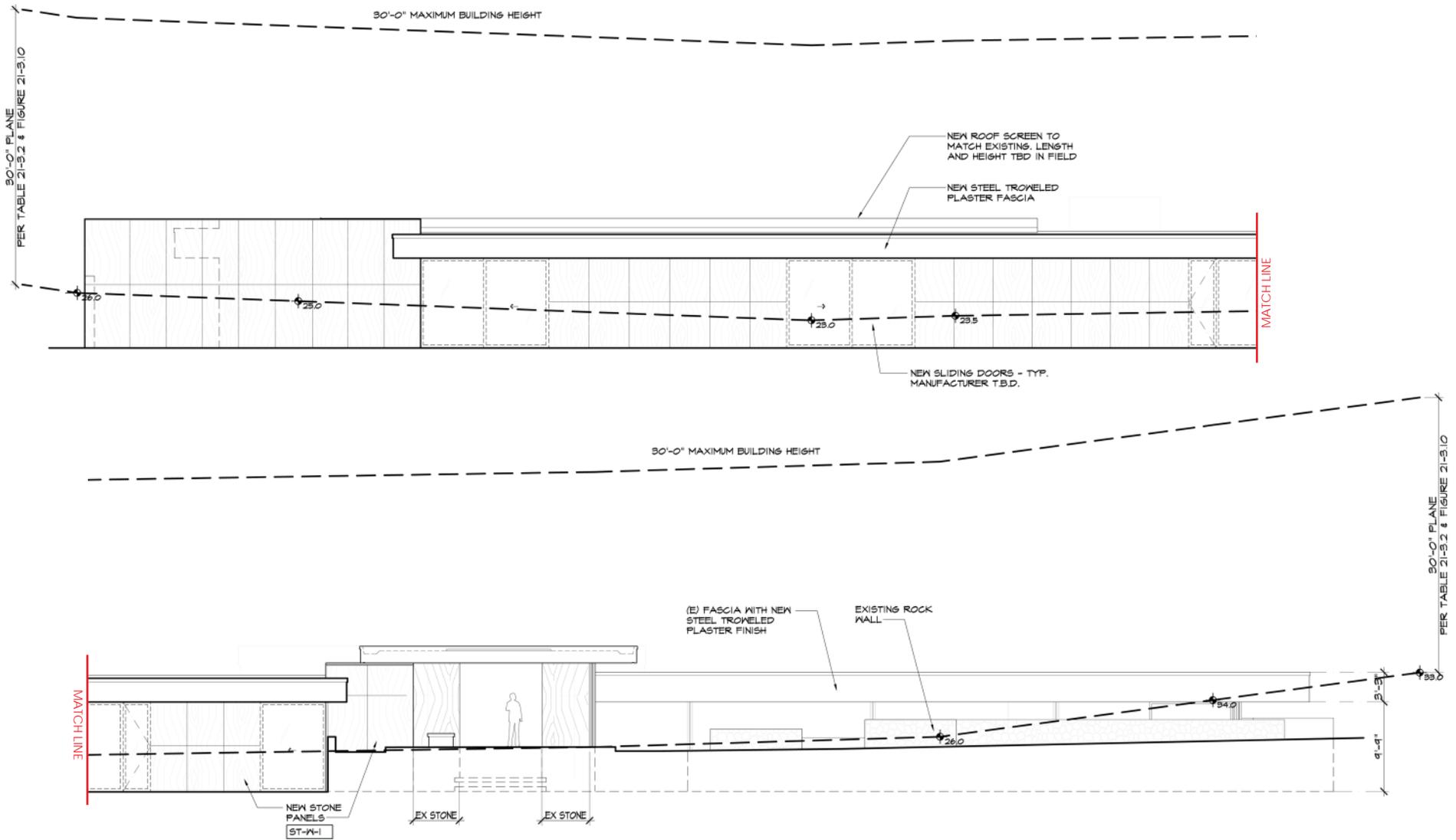


ISLAND OF OAHU



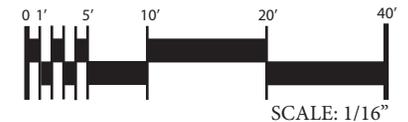
SOURCE: RICHARD MANION ARCHITECTURE, INC





PROPOSED ELEVATION AT DRIVE

FIGURE B.3  
 PROPOSED DEVELOPMENT PLAN  
 MAIN HOUSE (KAISER RESIDENCE) - EAST ELEVATIONS  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



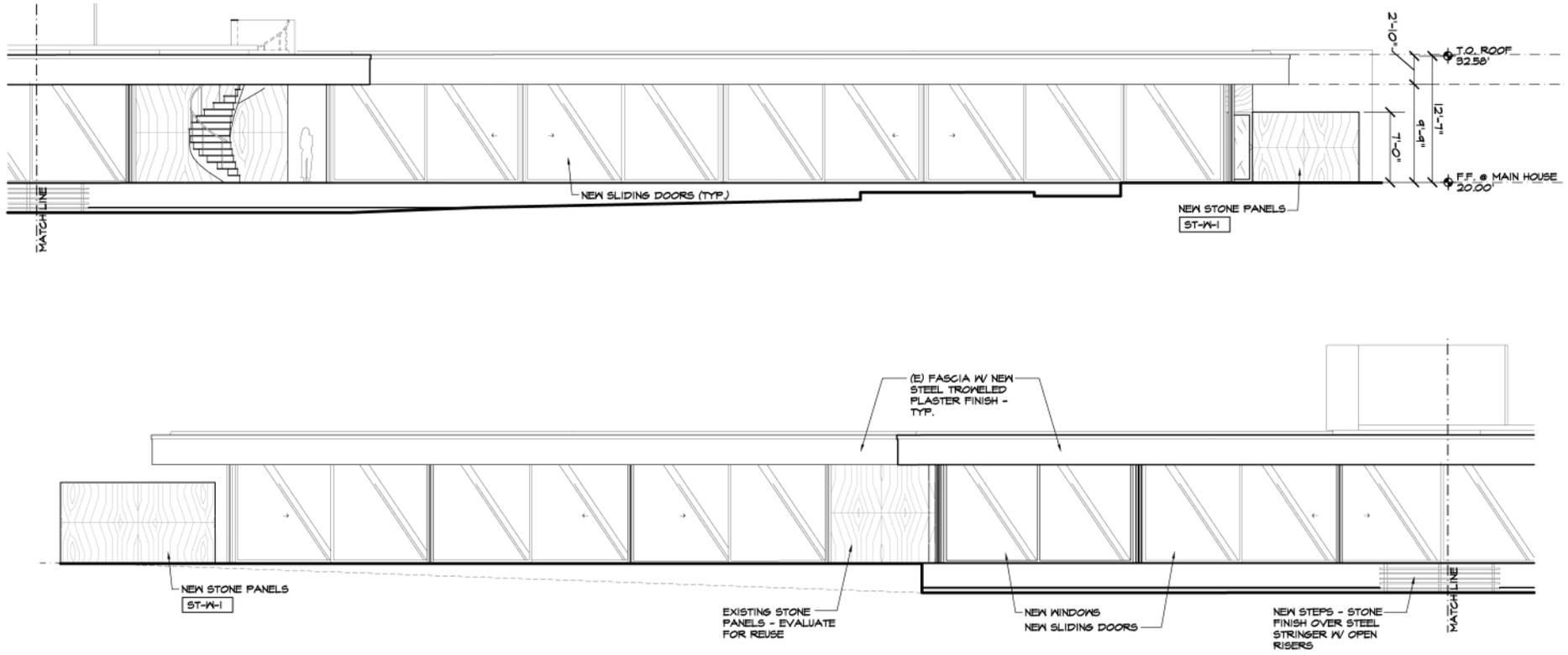


FIGURE B.4  
 PROPOSED DEVELOPMENT PLAN  
 MAIN HOUSE (KAISER RESIDENCE) - WEST ELEVATIONS  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



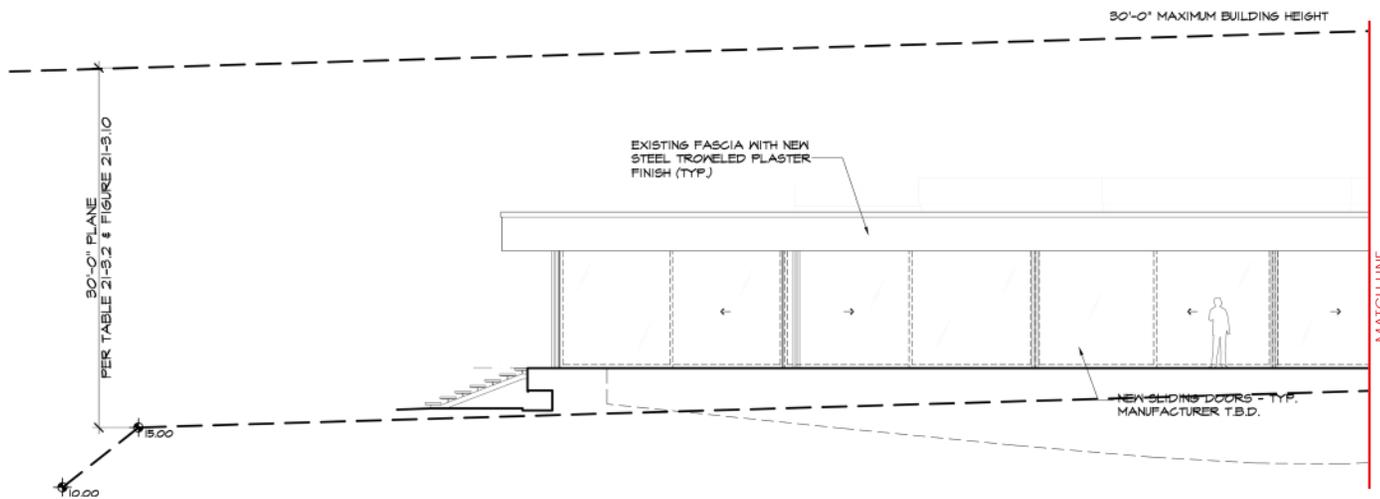
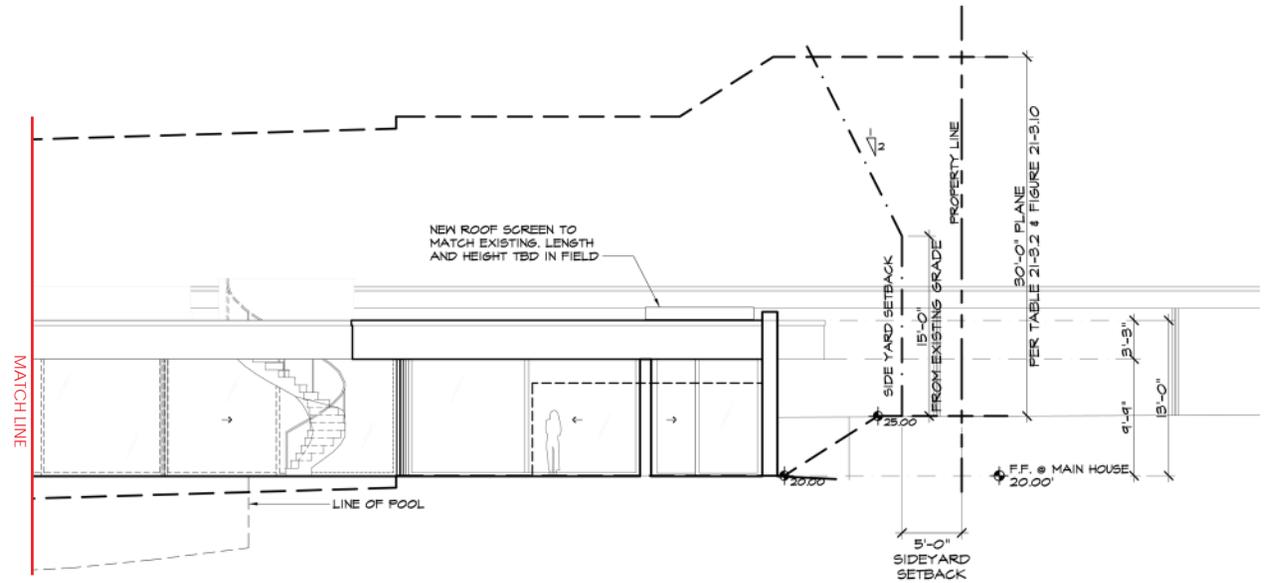
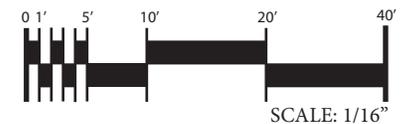


FIGURE B.5  
 PROPOSED DEVELOPMENT PLAN  
 MAIN HOUSE (KAISER RESIDENCE) - SOUTH ELEVATIONS  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD

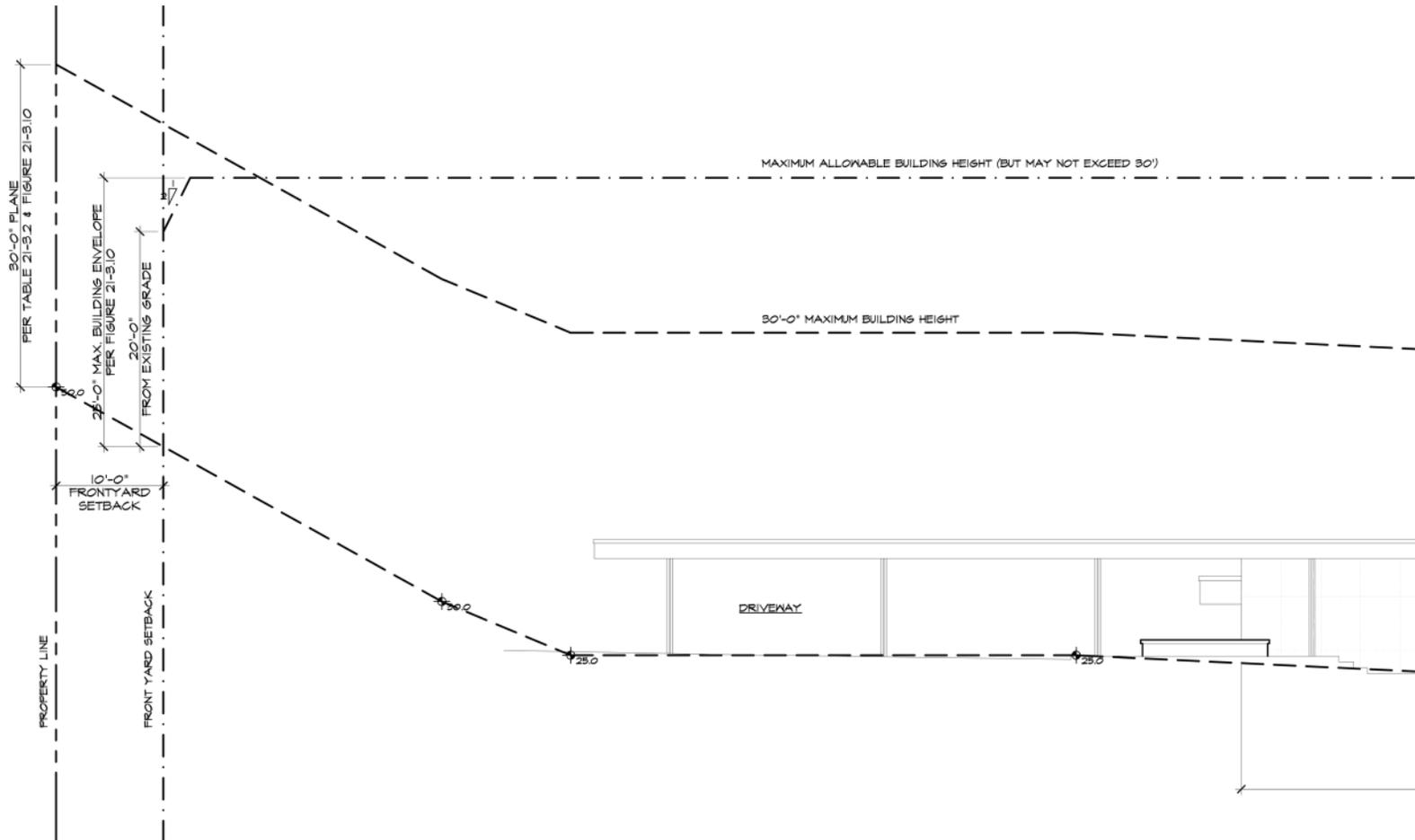


K H M A

ISLAND OF OAHU



SOURCE: RICHARD MANION ARCHITECTURE, INC



NORTH ELEVATION

FIGURE B.5.1  
 PROPOSED DEVELOPMENT PLAN  
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 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



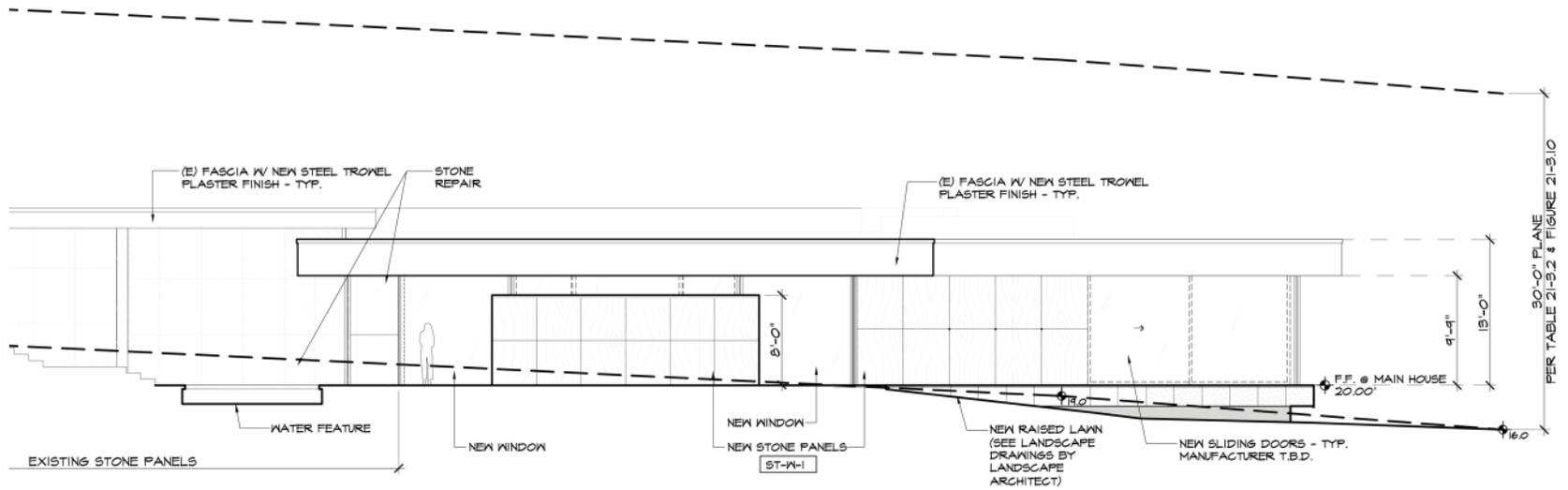
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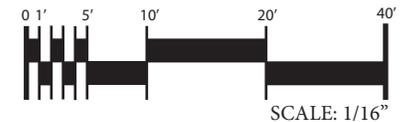
SCALE: 1/16"

SOURCE: RICHARD MANION ARCHITECTURE, INC



NORTH ELEVATION

FIGURE B.5.2  
 PROPOSED DEVELOPMENT PLAN  
 MAIN HOUSE (KAISER RESIDENCE) - NORTH ELEVATIONS  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



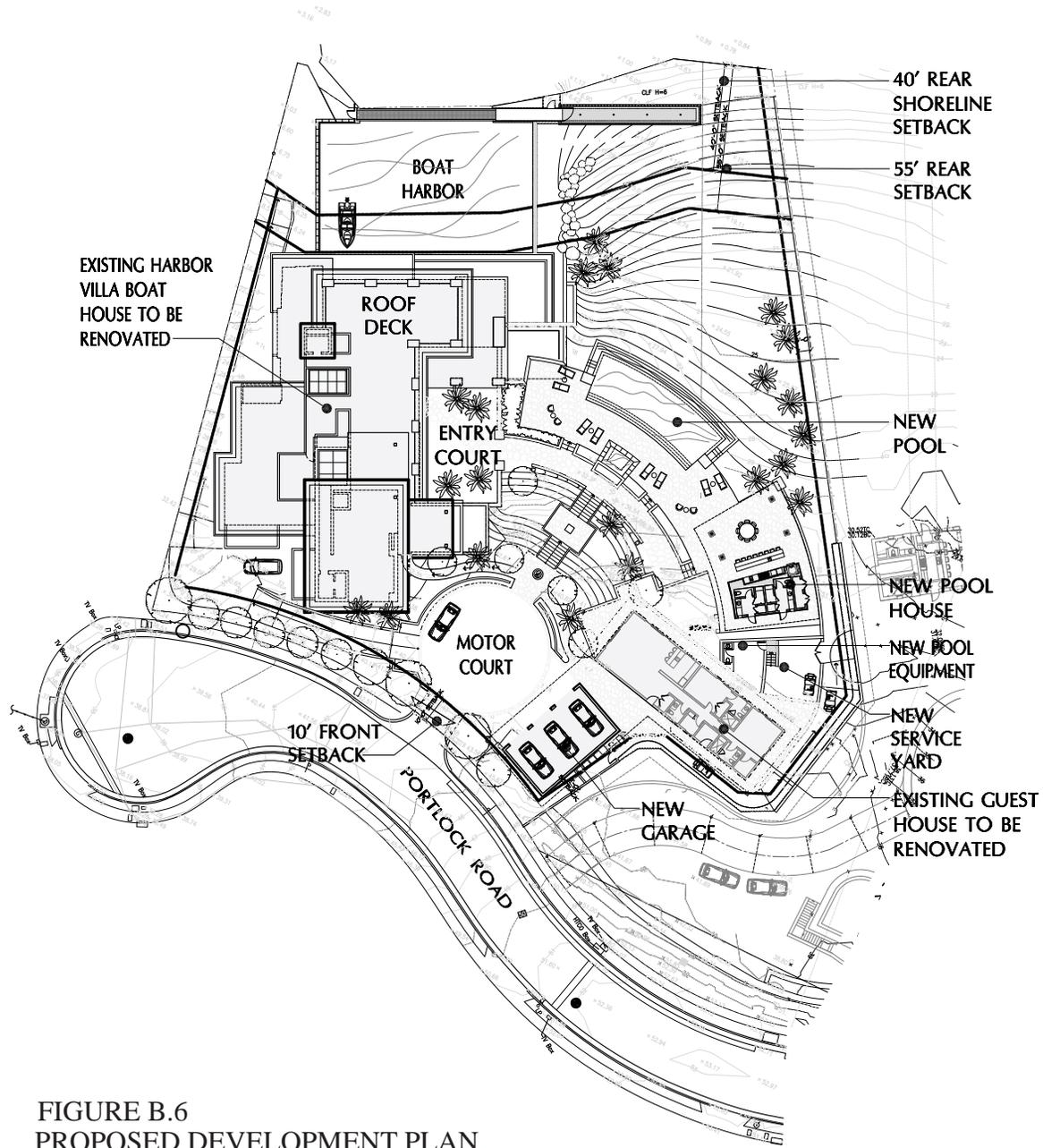
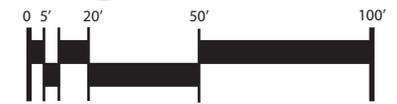
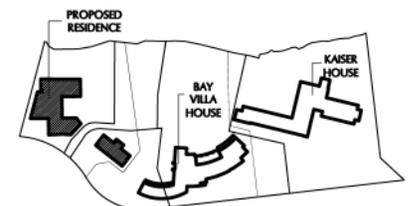


FIGURE B.6  
 PROPOSED DEVELOPMENT PLAN  
 HARBOR VILLA (BOAT HOUSE)- SITE PLAN  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



SCALE: 1/64"

SOURCE: RICHARD MANION ARCHITECTURE, INC



ISLAND OF OAHU

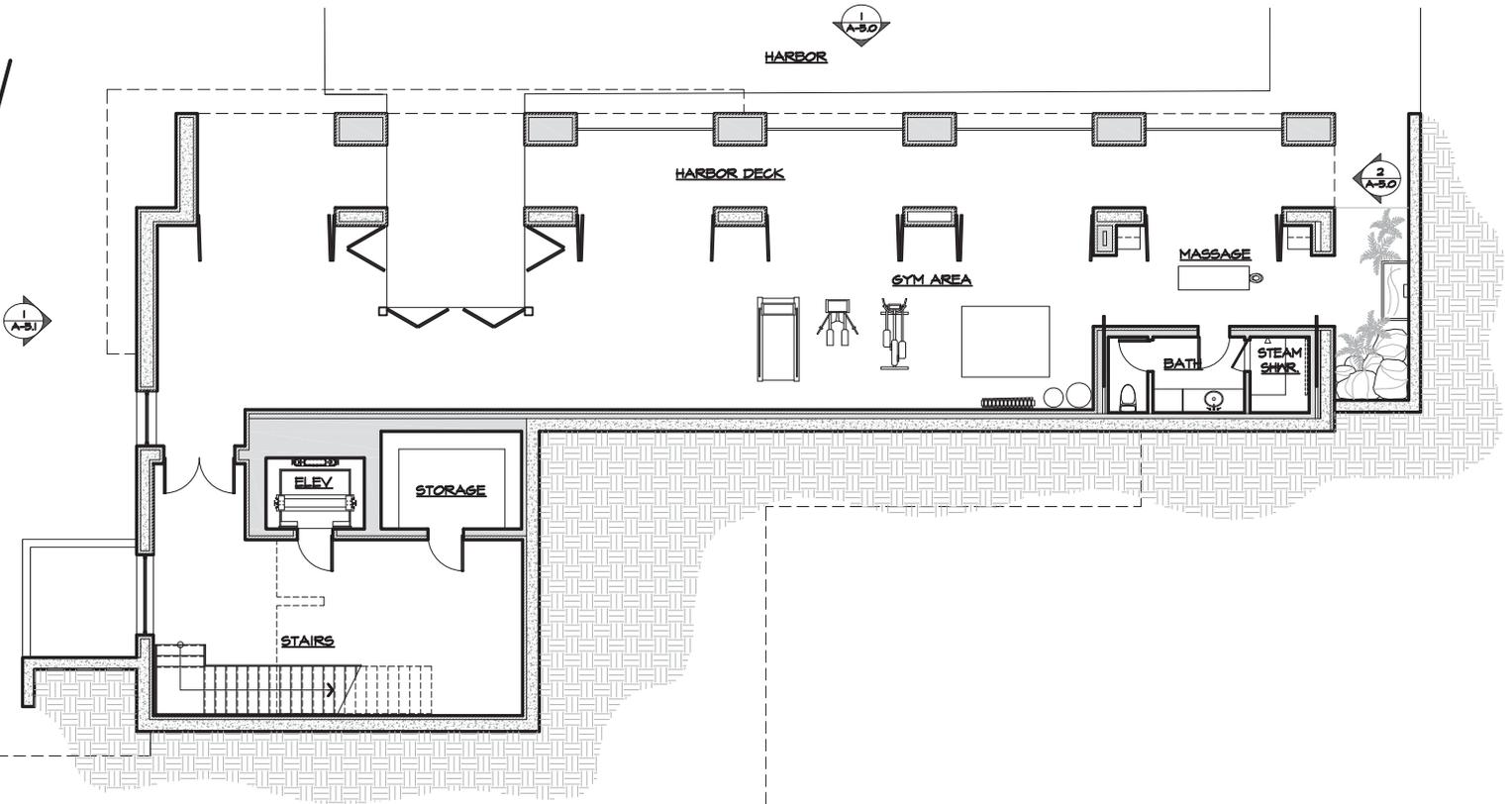
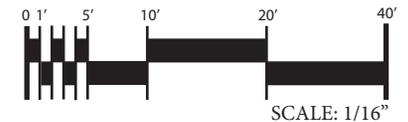


FIGURE B.7  
 PROPOSED DEVELOPMENT PLAN  
 HARBOR VILLA (BOAT HOUSE)- BOAT HARBOR LEVEL FLOOR PLAN  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



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SOURCE: RICHARD MANION ARCHITECTURE, INC

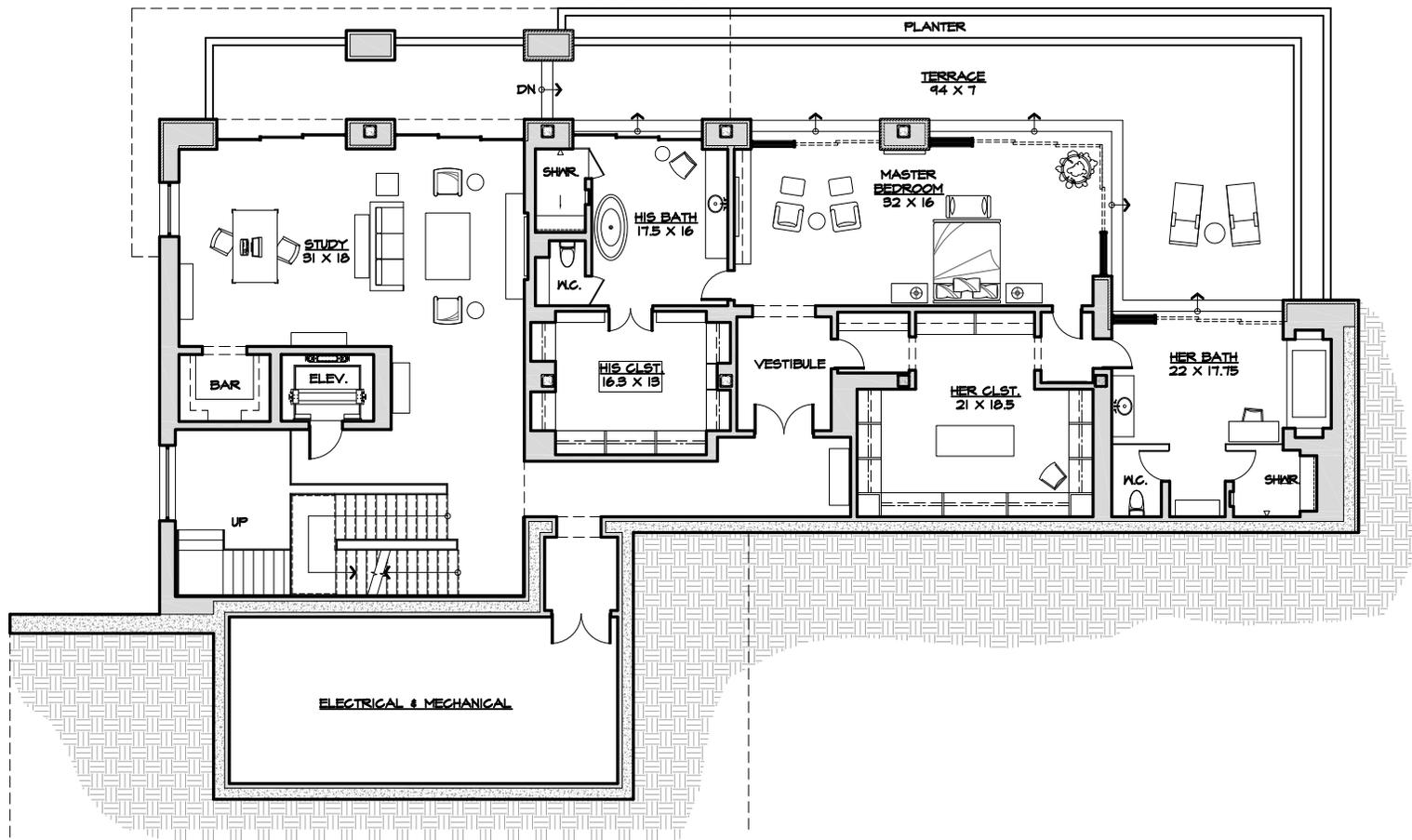
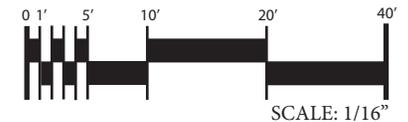


FIGURE B.8  
 PROPOSED DEVELOPMENT PLAN  
 HARBOR VILLA (BOAT HOUSE) - BEDROOM LEVEL FLOOR PLAN  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



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SOURCE: RICHARD MANION ARCHITECTURE, INC

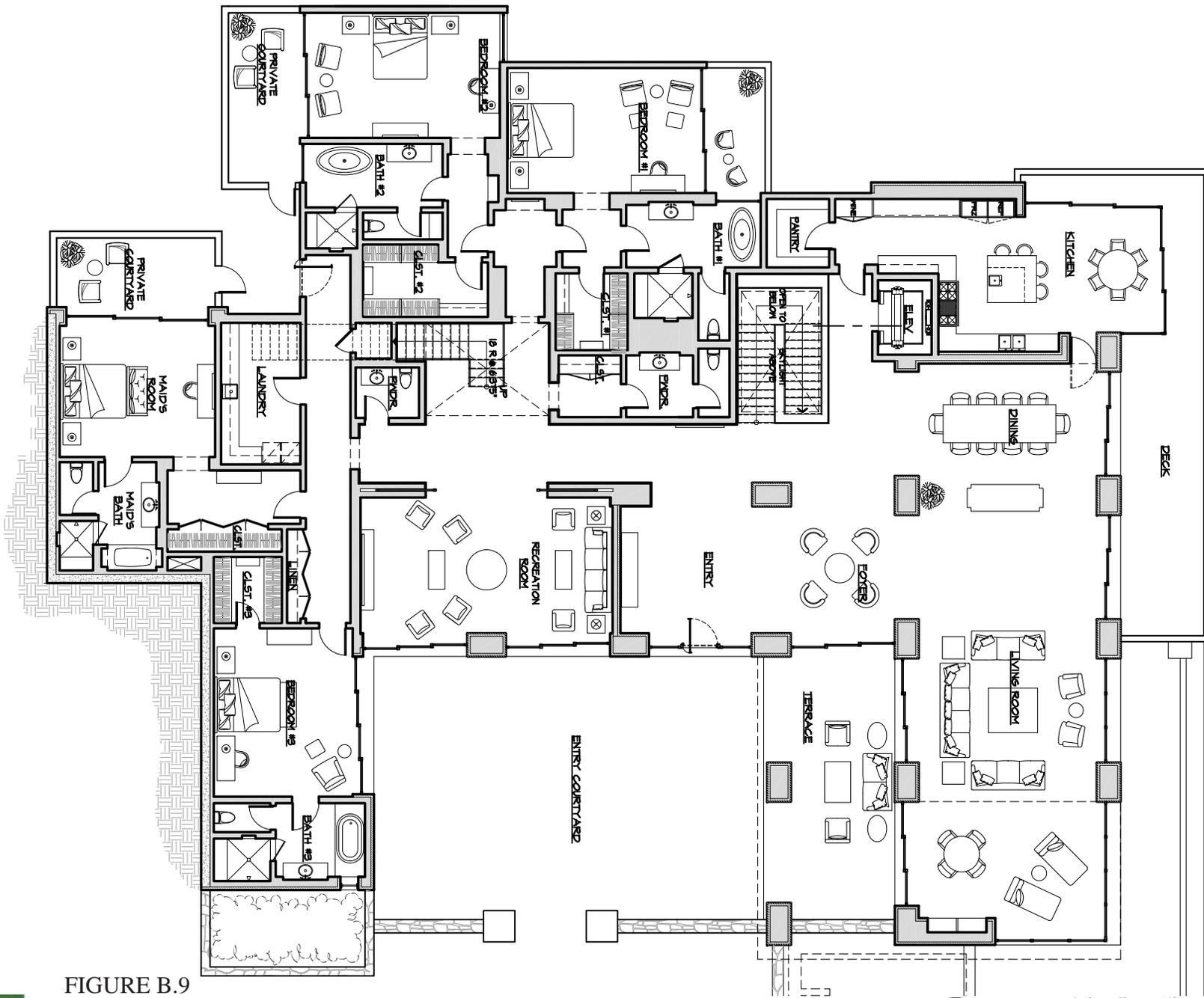
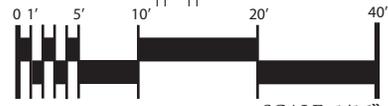


FIGURE B.9  
 PROPOSED DEVELOPMENT PLAN  
 HARBOR VILLA (BOAT HOUSE) - MAIN LEVEL FLOOR PLAN  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



SCALE: 1/16"



K H M A

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SOURCE: RICHARD MANION ARCHITECTURE, INC

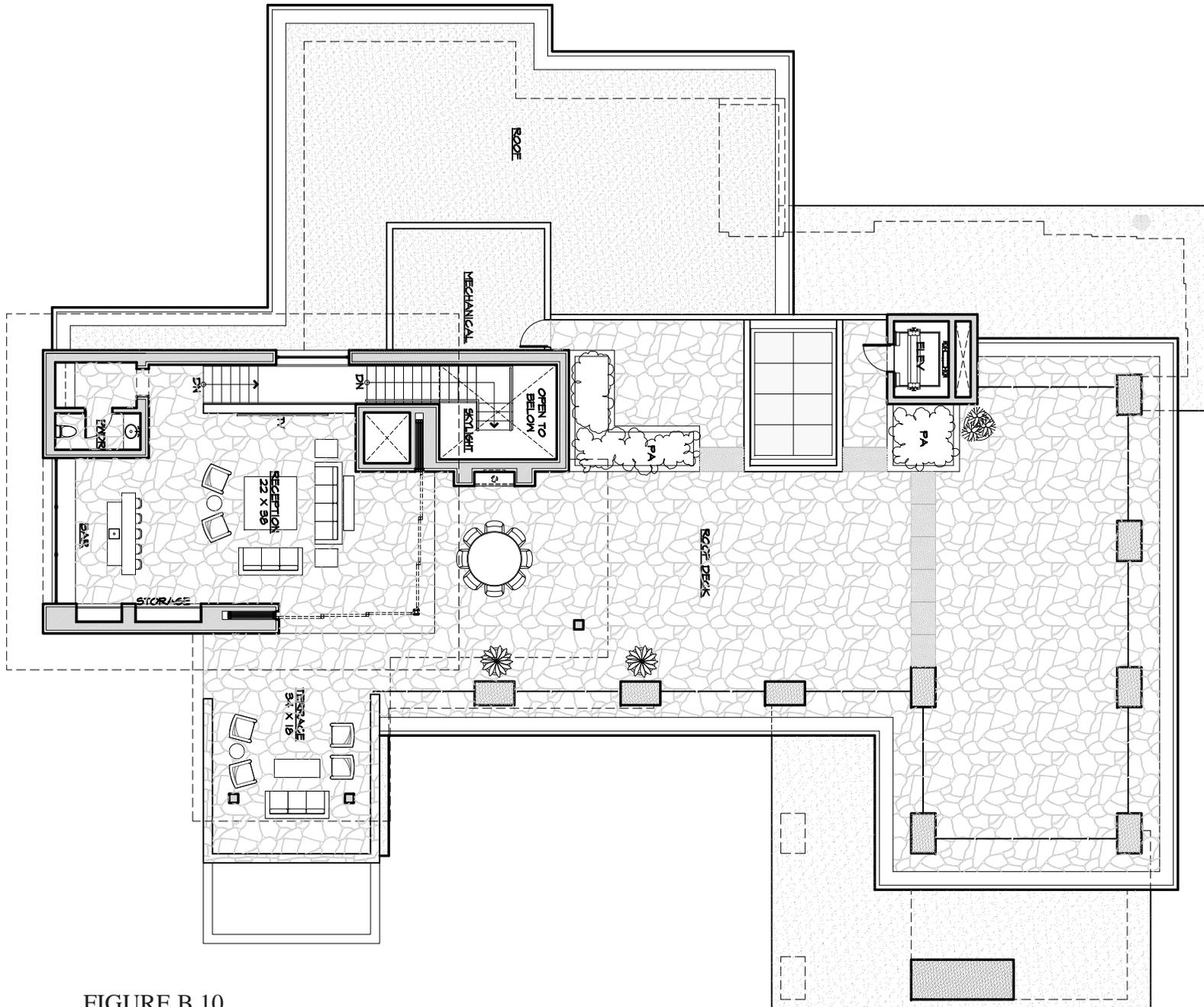
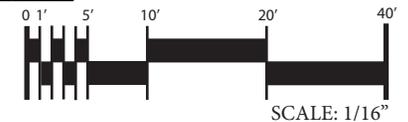


FIGURE B.10  
 PROPOSED DEVELOPMENT PLAN  
 HARBOR VILLA (BOAT HOUSE) - TERRACE LEVEL FLOOR PLAN  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



ISLAND OF OAHU



SOURCE: RICHARD MANION ARCHITECTURE, INC

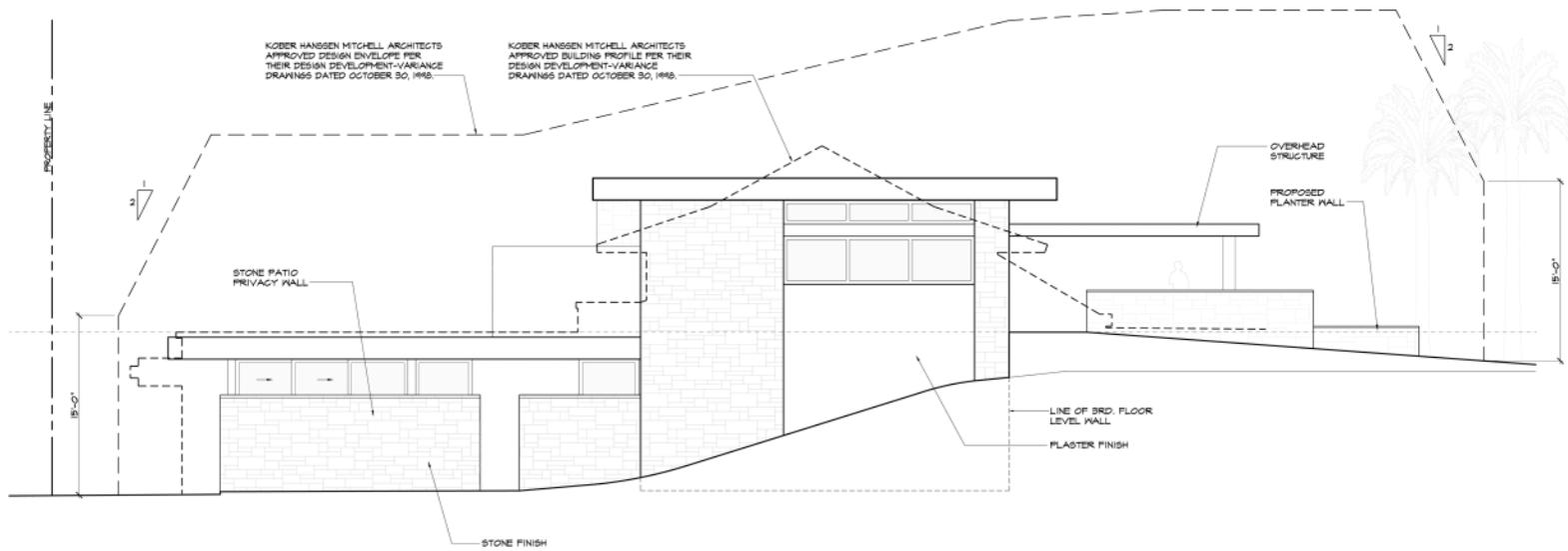
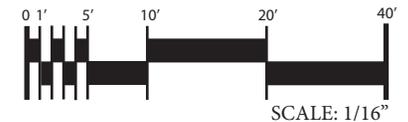


FIGURE B.11  
 PROPOSED DEVELOPMENT PLAN:  
 HARBOR VILLA (BOAT HOUSE) - EAST ELEVATION  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



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SOURCE: RICHARD MANION ARCHITECTURE, INC

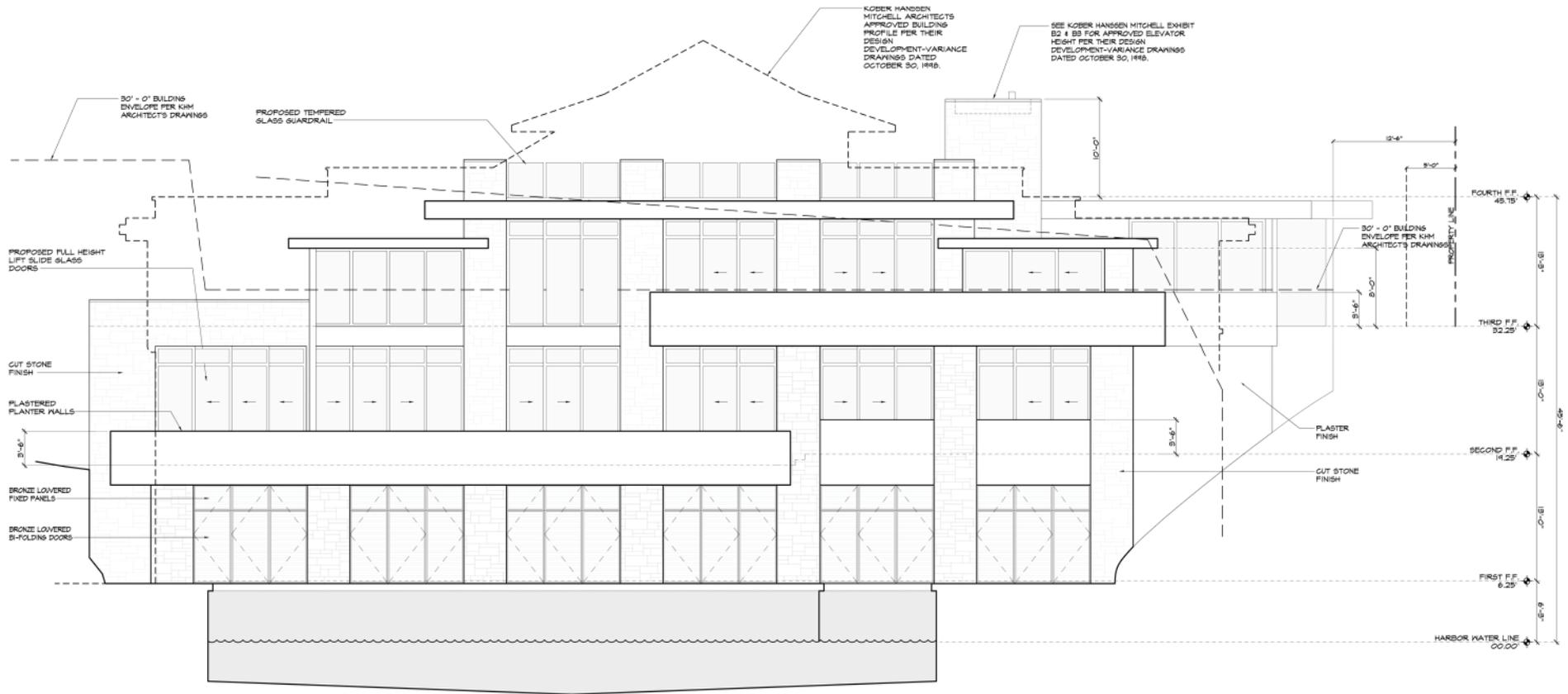
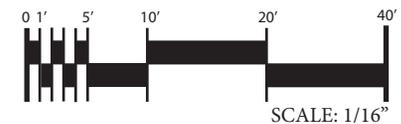


FIGURE B.12  
 PROPOSED DEVELOPMENT PLAN  
 HARBOR VILLA (BOAT HOUSE) - WEST ELEVATION  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



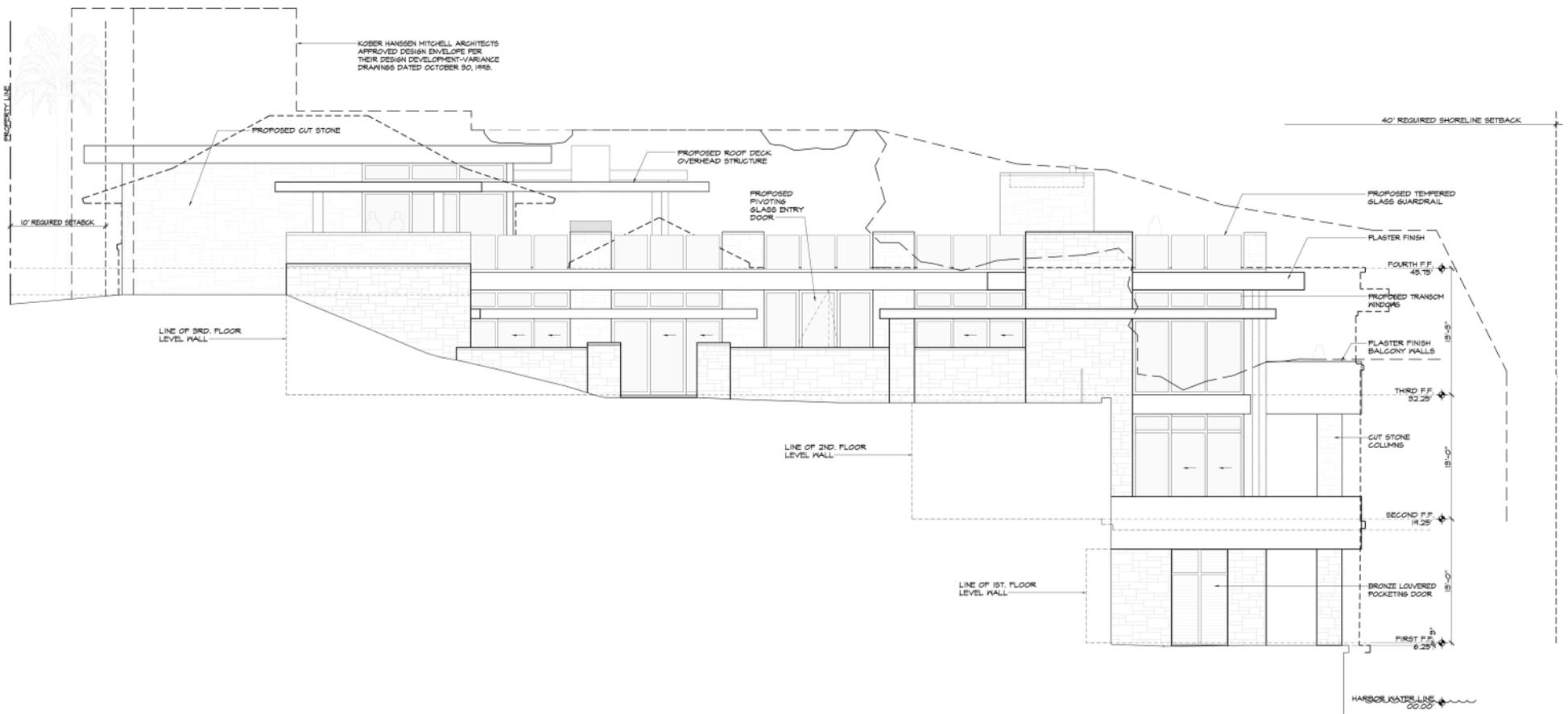
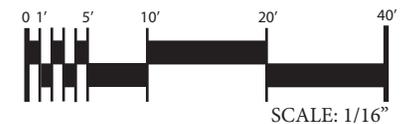


FIGURE B.13  
 PROPOSED DEVELOPMENT PLAN  
 HARBOR VILLA (BOAT HOUSE) - NORTH ELEVATION  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



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SOURCE: RICHARD MANION ARCHITECTURE, INC

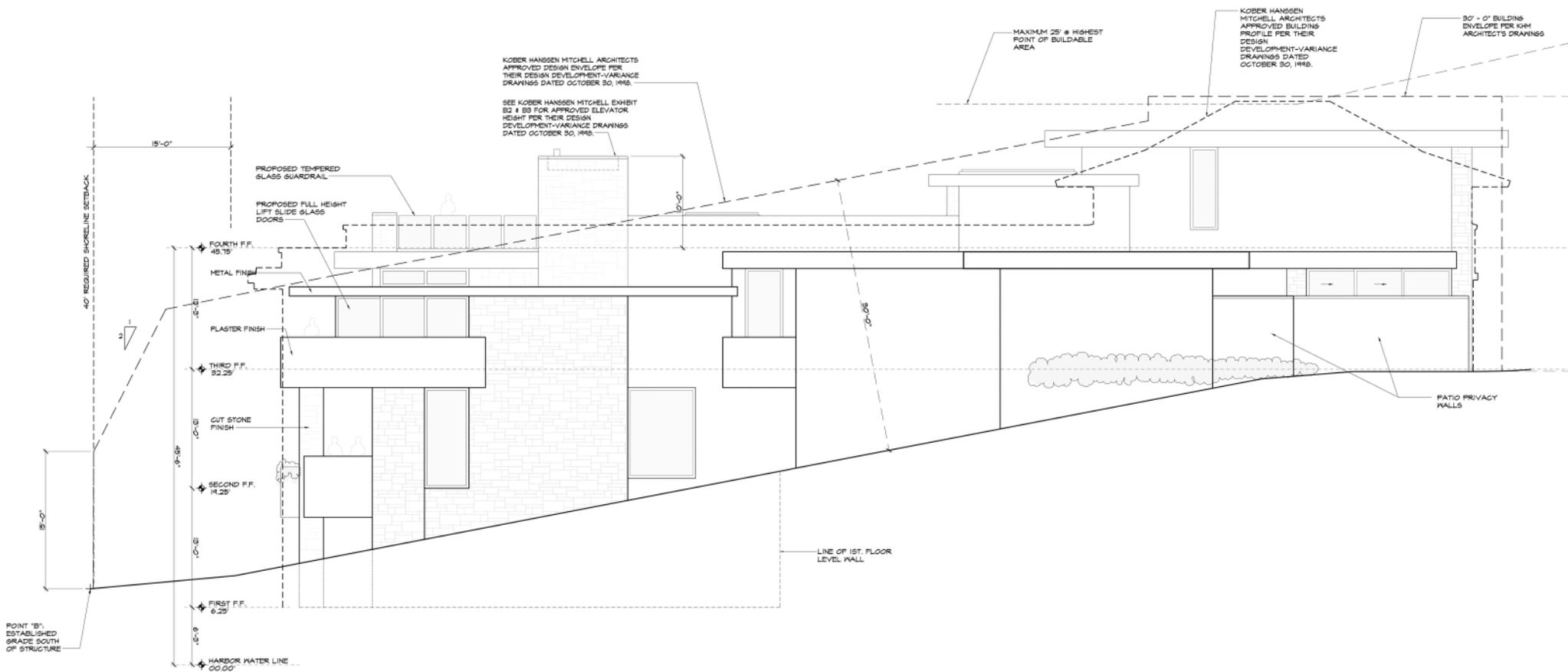
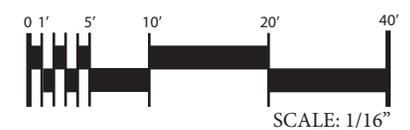
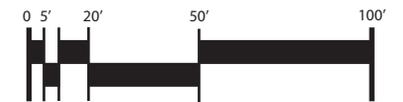
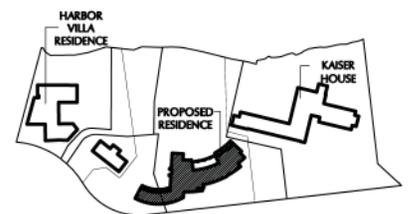
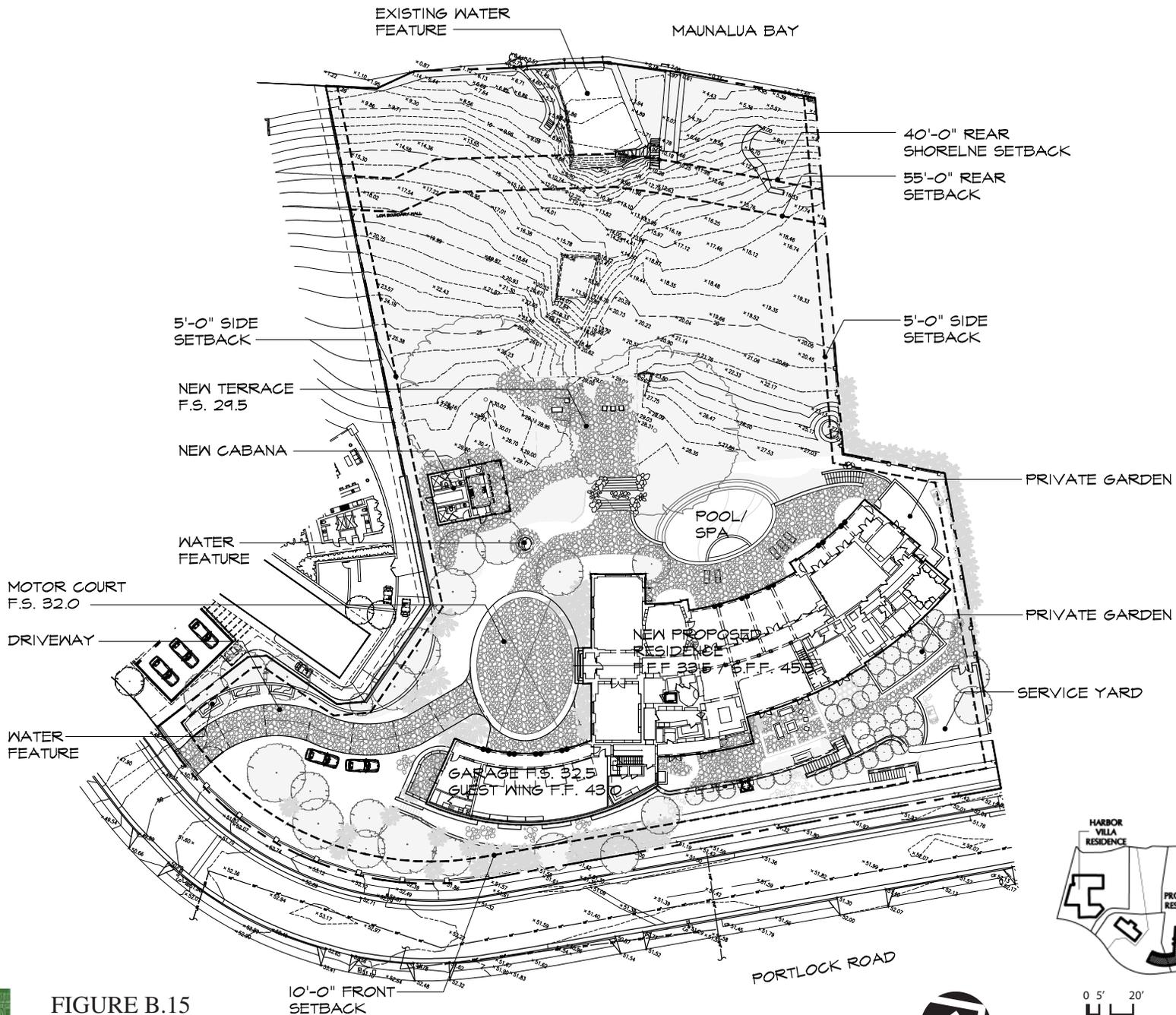


FIGURE B.14  
 PROPOSED DEVELOPMENT PLAN  
 HARBOR VILLA (BOAT HOUSE) - SOUTH ELEVATION  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



ISLAND OF OAHU

SOURCE: RICHARD MANION ARCHITECTURE, INC



SCALE: 1/64"

FIGURE B.15  
 PROPOSED DEVELOPMENT PLAN: BAY VILLA - SITE PLAN  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



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SOURCE: RICHARD MANION ARCHITECTURE, INC



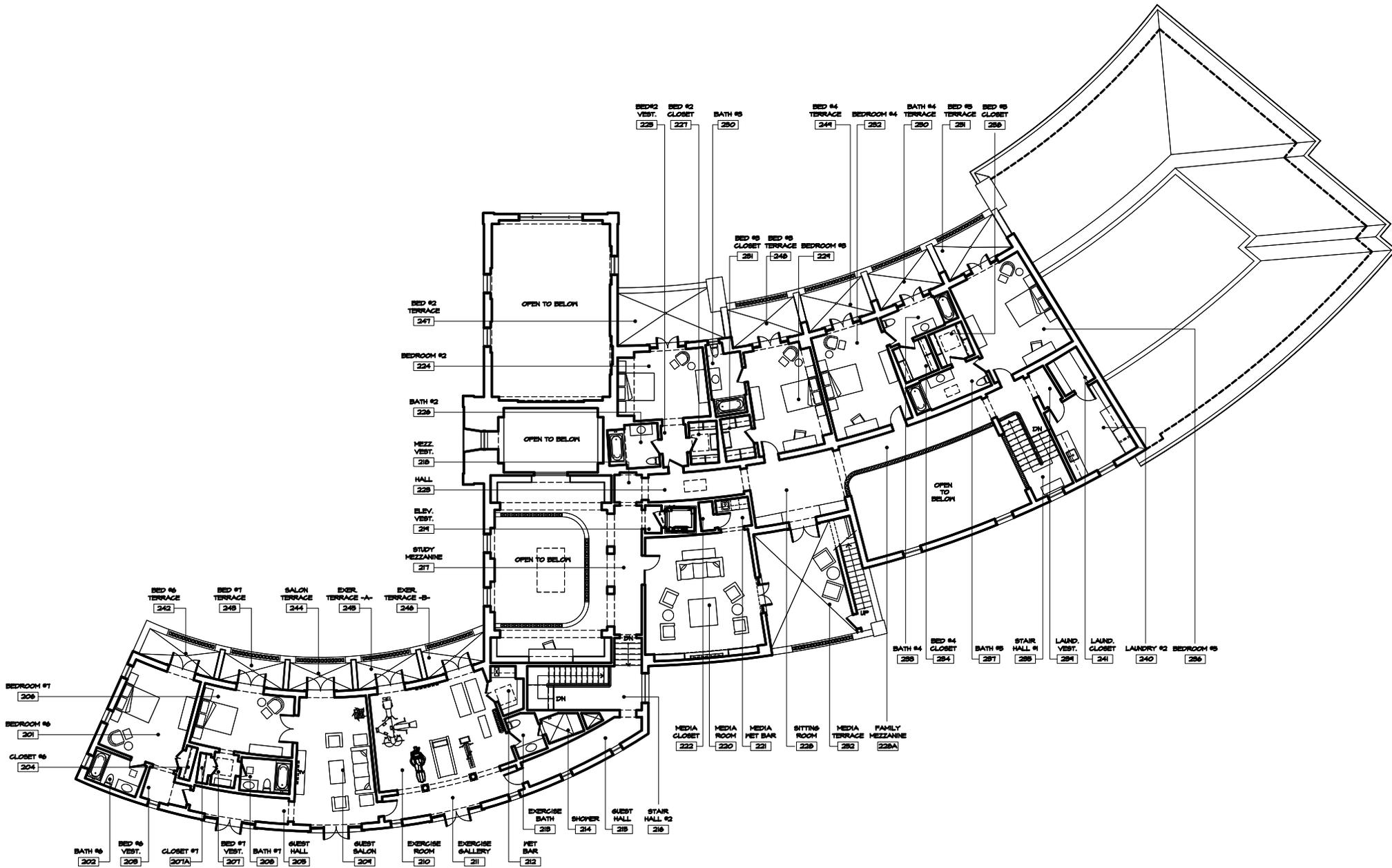
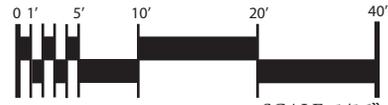


FIGURE B.17  
 PROPOSED DEVELOPMENT PLAN:  
 BAY VILLA - SECOND FLOOR PLAN  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



ISLAND OF OAHU

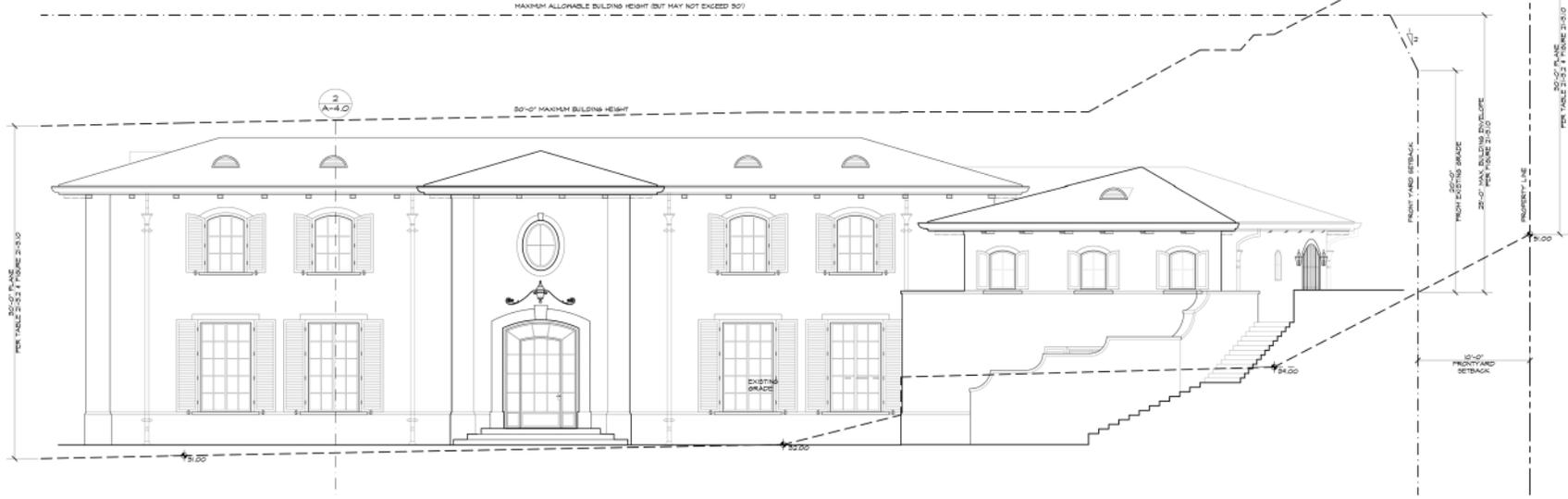


SCALE: 1/16"

SOURCE: RICHARD MANION ARCHITECTURE, INC



NORTH ELEVATION



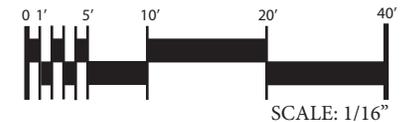
SOUTH ELEVATION

FIGURE B.18  
 PROPOSED DEVELOPMENT PLAN:  
 BAY VILLA - NORTH & SOUTH ELEVATIONS  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



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SOURCE: RICHARD MANION ARCHITECTURE, INC

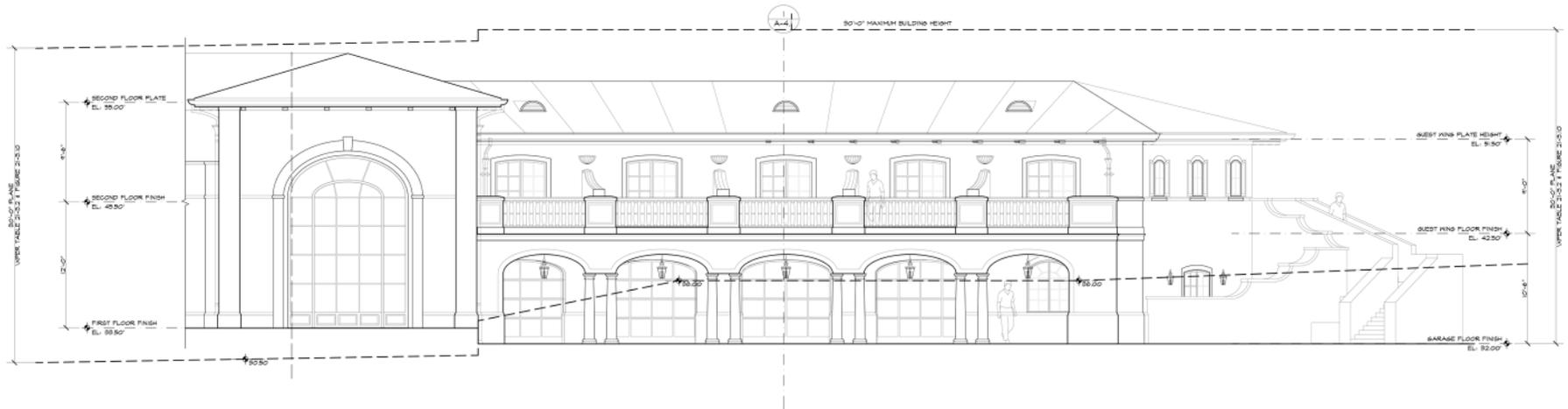
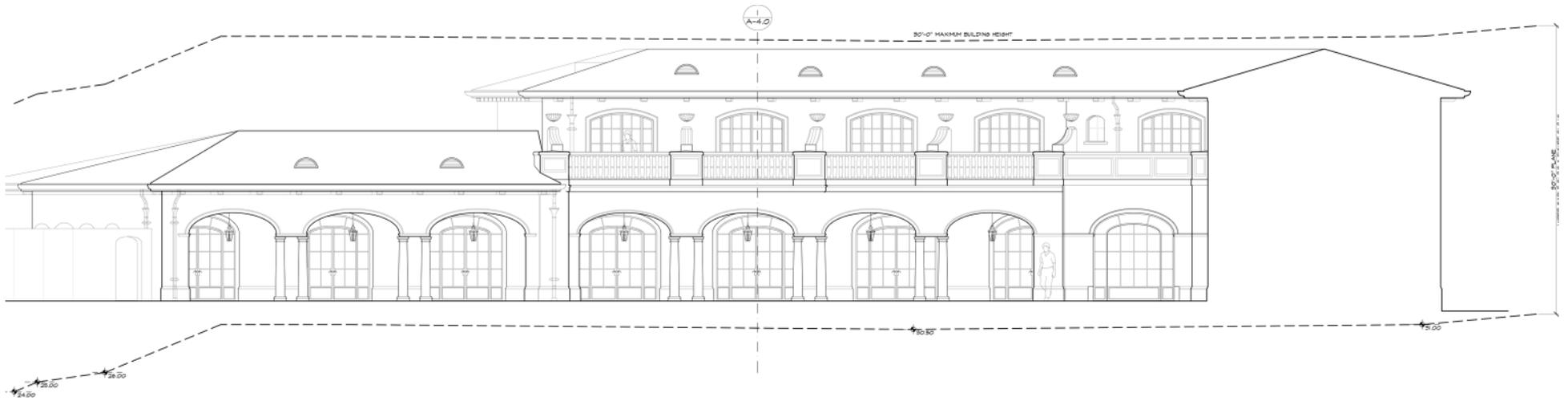
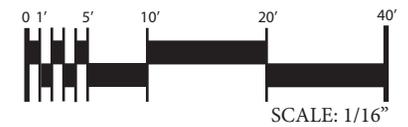


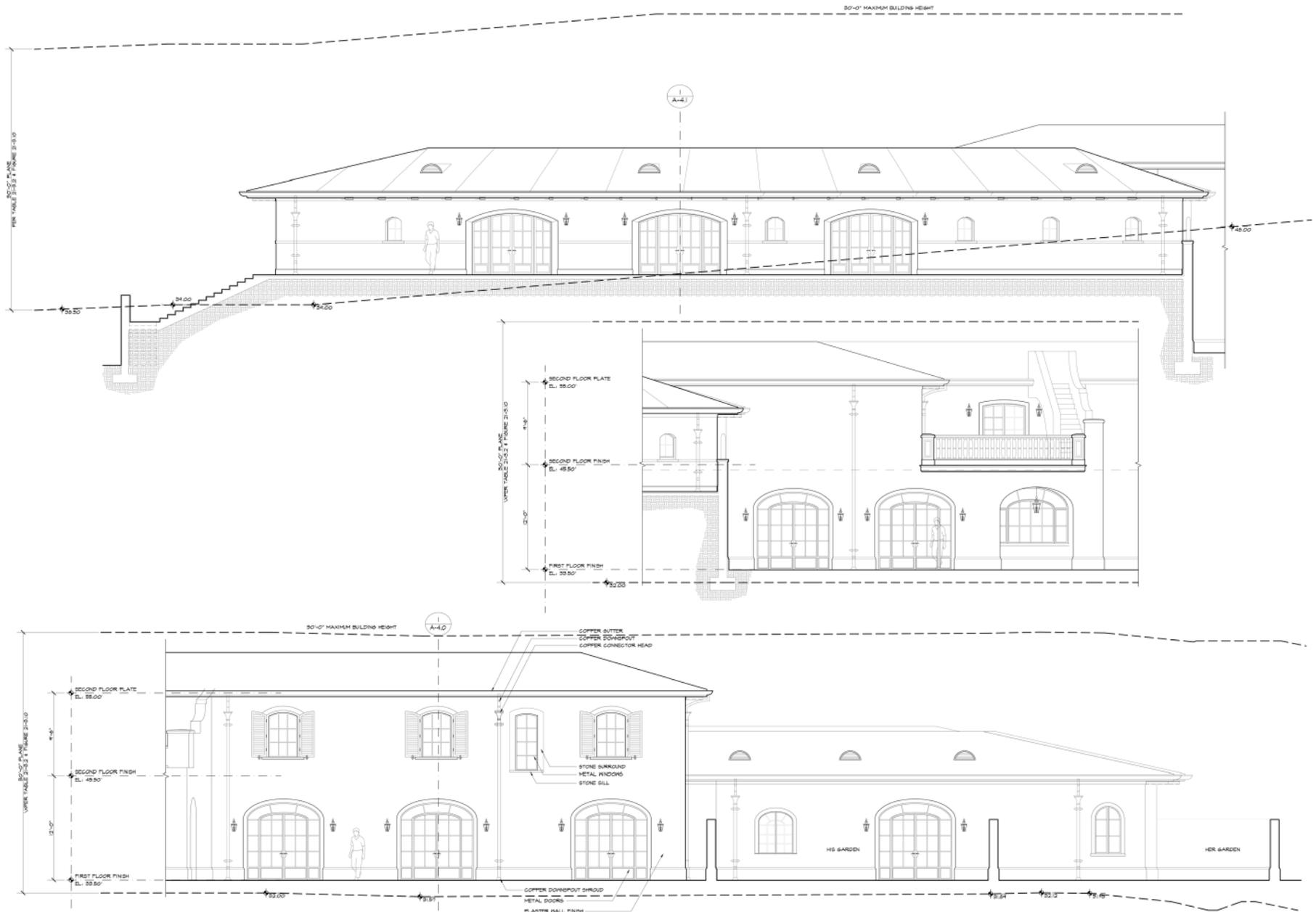
FIGURE B.19  
 PROPOSED DEVELOPMENT PLAN:  
 BAY VILLA - WEST ELEVATION  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



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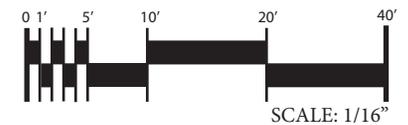
SOURCE: RICHARD MANION ARCHITECTURE, INC



**FIGURE B.20**  
**PROPOSED DEVELOPMENT PLAN:**  
**BAY VILLA - EAST ELEVATION**  
**PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD**



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SOURCE: RICHARD MANION ARCHITECTURE, INC

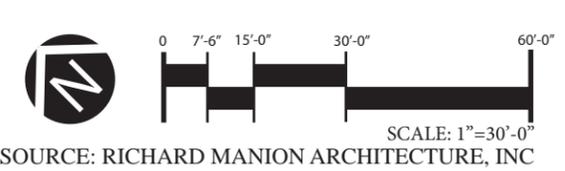
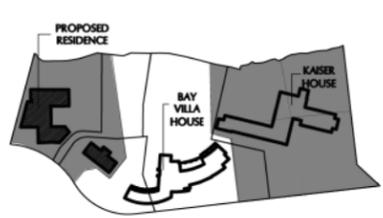
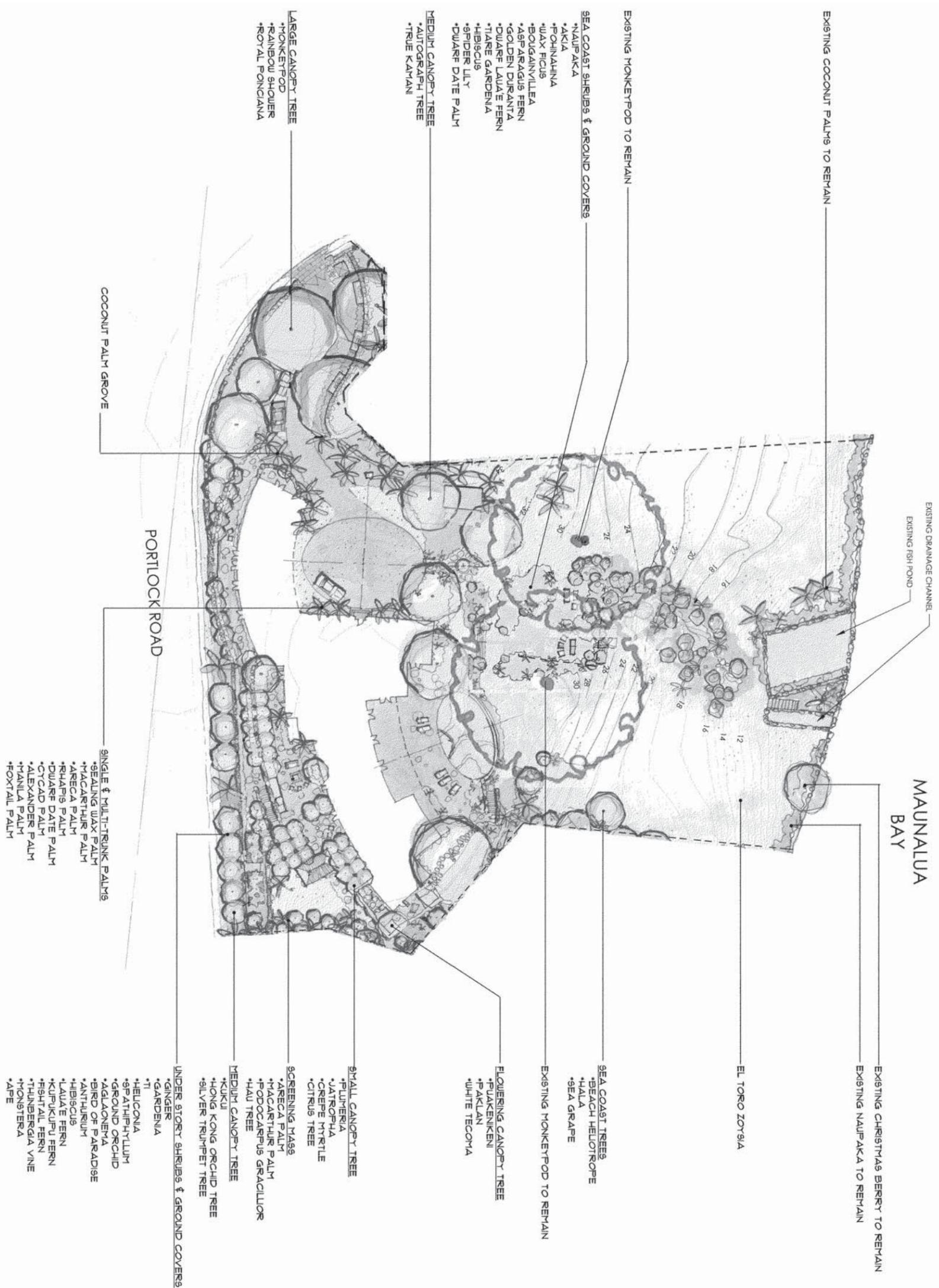
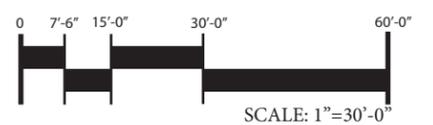
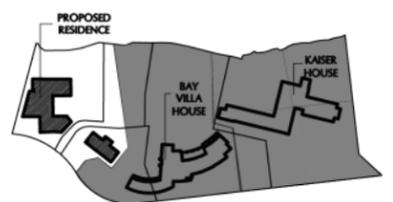
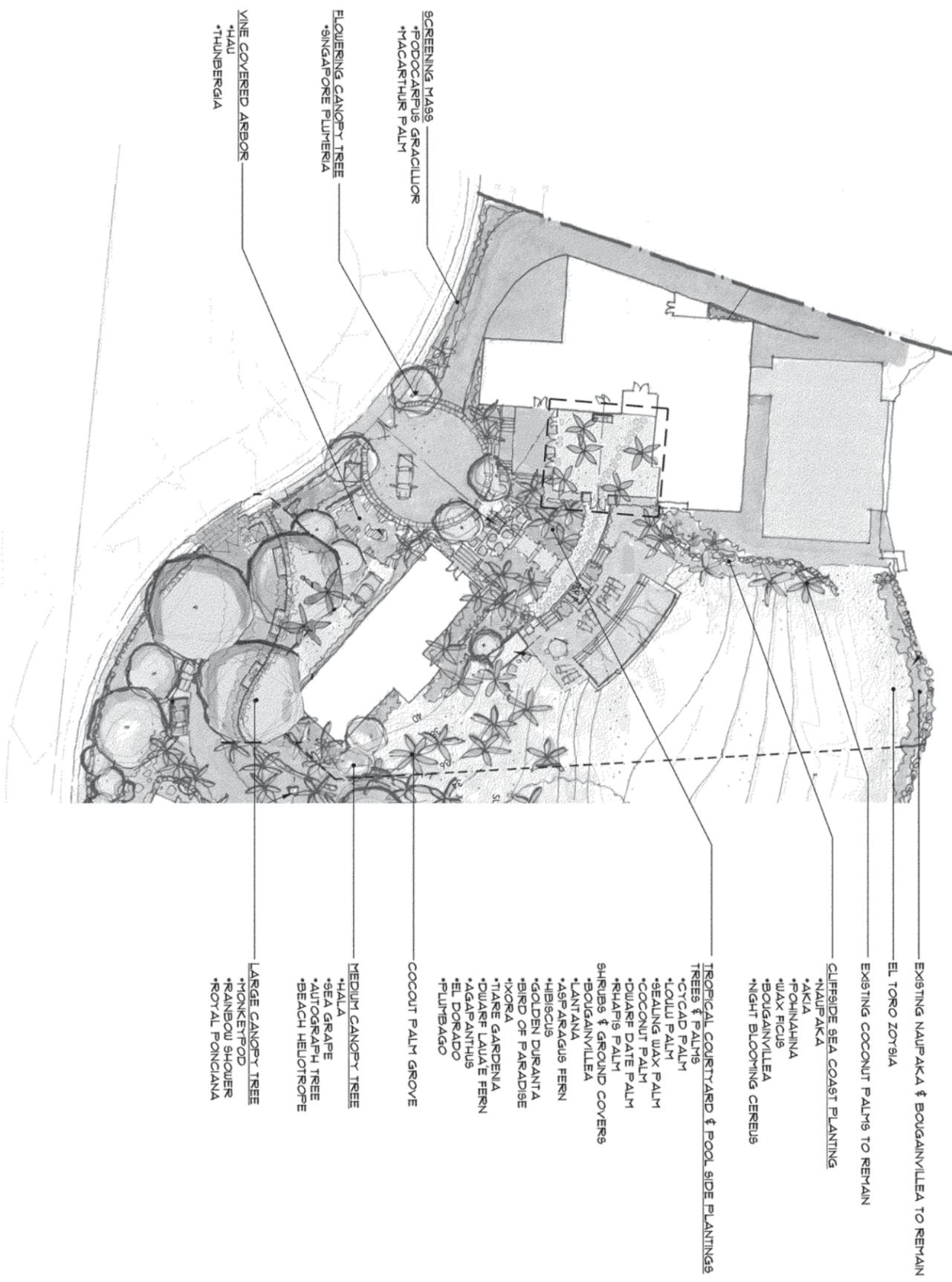


FIGURE B.21.1  
 PROPOSED DEVELOPMENT PLAN: SITE LANDSCAPE - BAY VILLA  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



SCALE: 1"=30'-0"

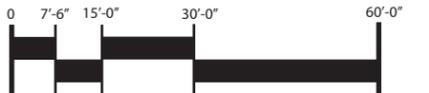
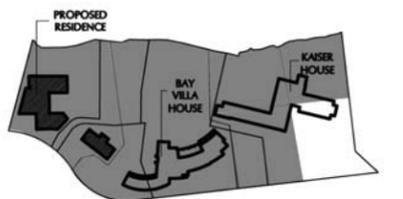
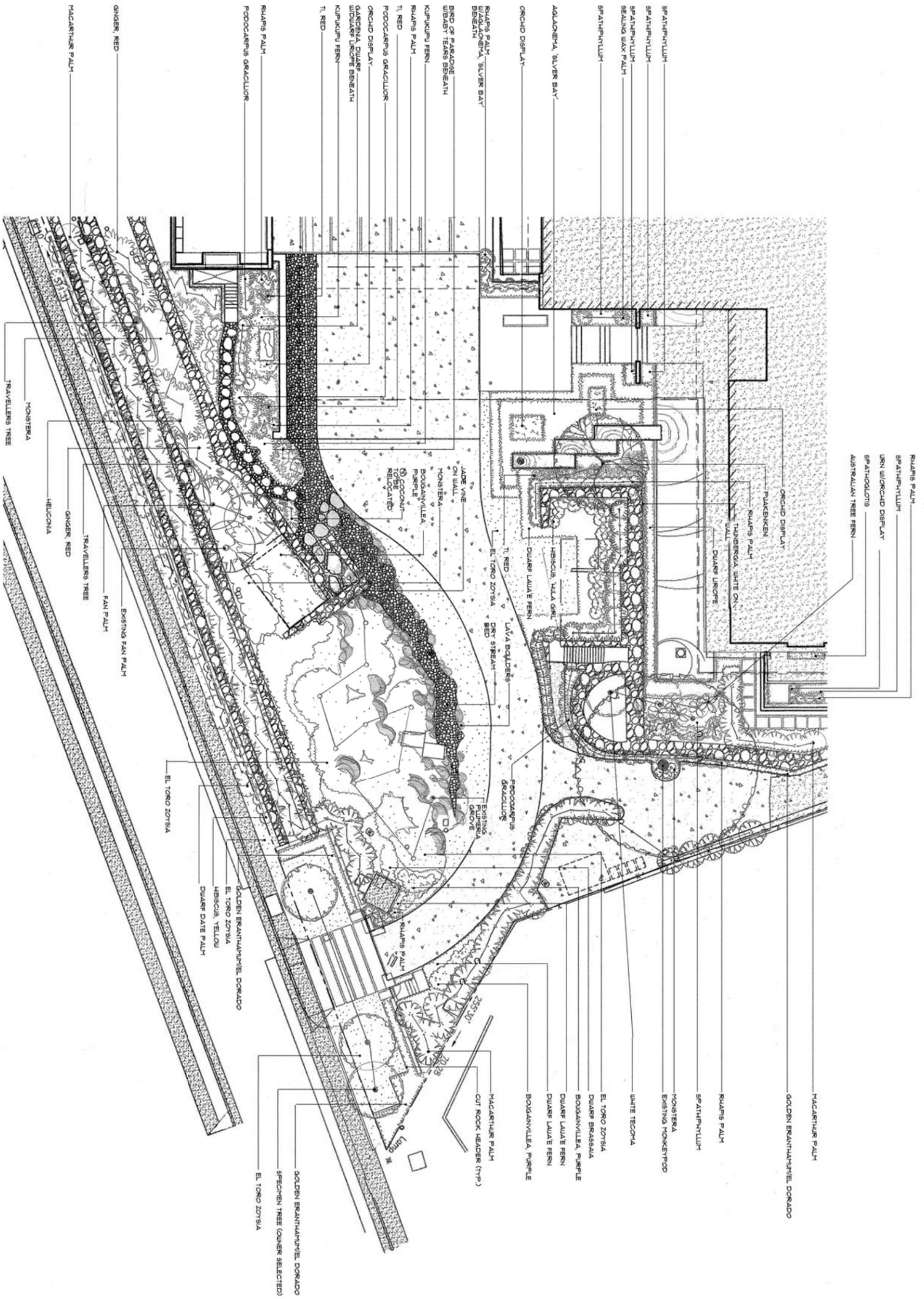
SOURCE: RICHARD MANION ARCHITECTURE, INC

FIGURE B.21.2  
 PROPOSED DEVELOPMENT PLAN: SITE LANDSCAPE - HARBOR VILLA  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



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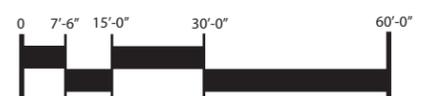
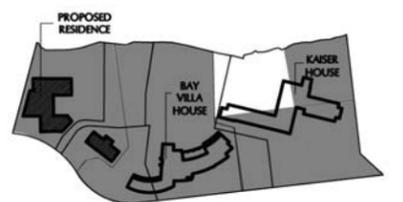
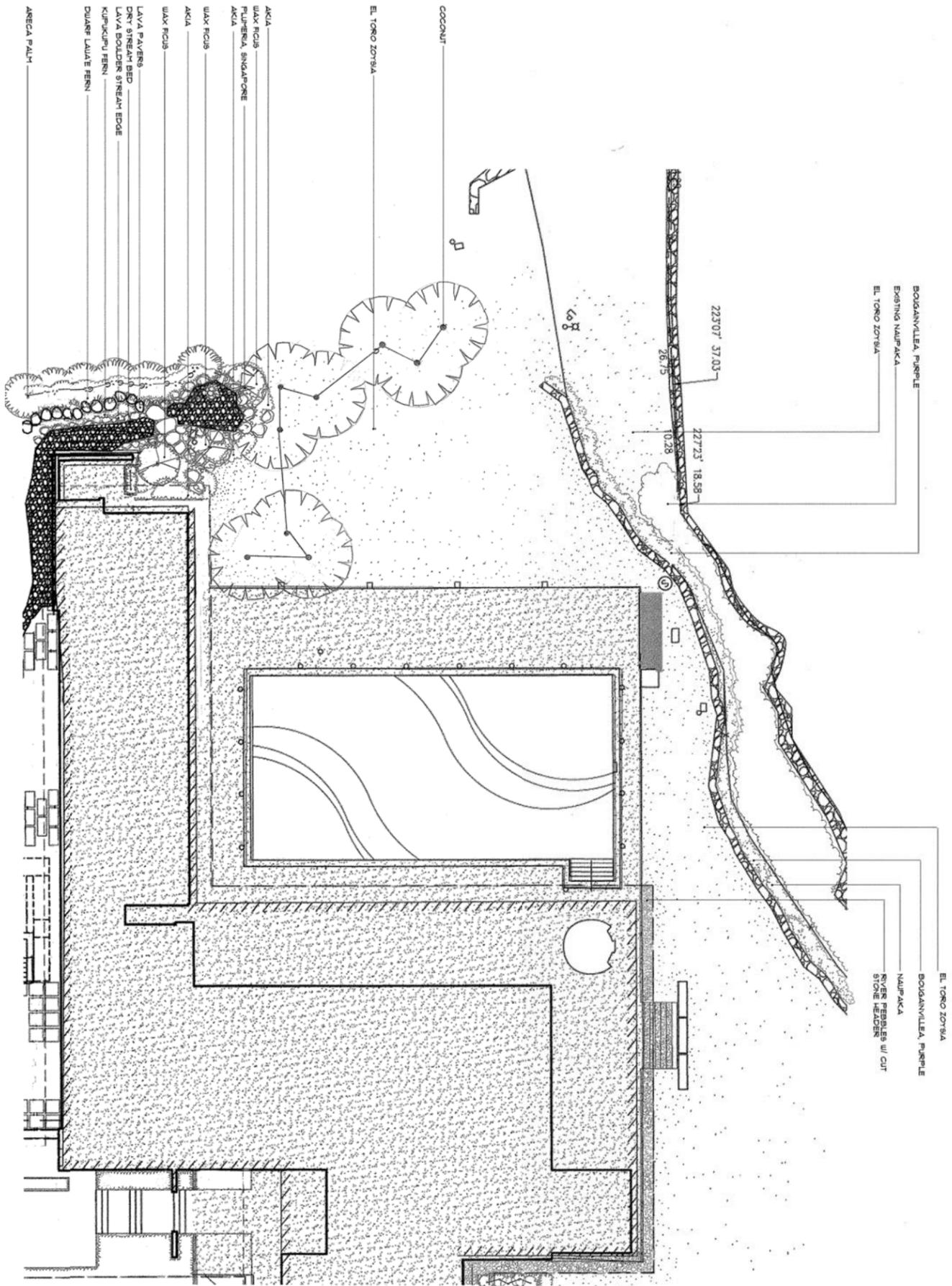


SCALE: 1"=30'-0"

SOURCE: RICHARD MANION ARCHITECTURE, INC

FIGURE B.21.4  
 PROPOSED DEVELOPMENT PLAN: SITE LANDSCAPE - MAIN HOUSE  
 (KAISER RESIDENCE)  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD

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SCALE: 1"=30'-0"

SOURCE: RICHARD MANION ARCHITECTURE, INC

FIGURE B.21.5  
 PROPOSED DEVELOPMENT PLAN: SITE LANDSCAPE - MAIN HOUSE  
 (KAISER RESIDENCE)  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD

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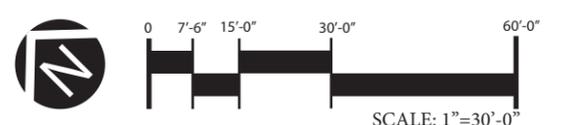
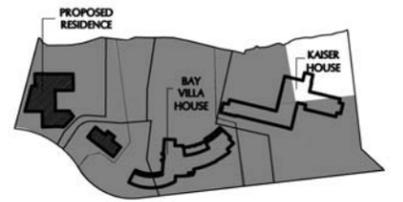
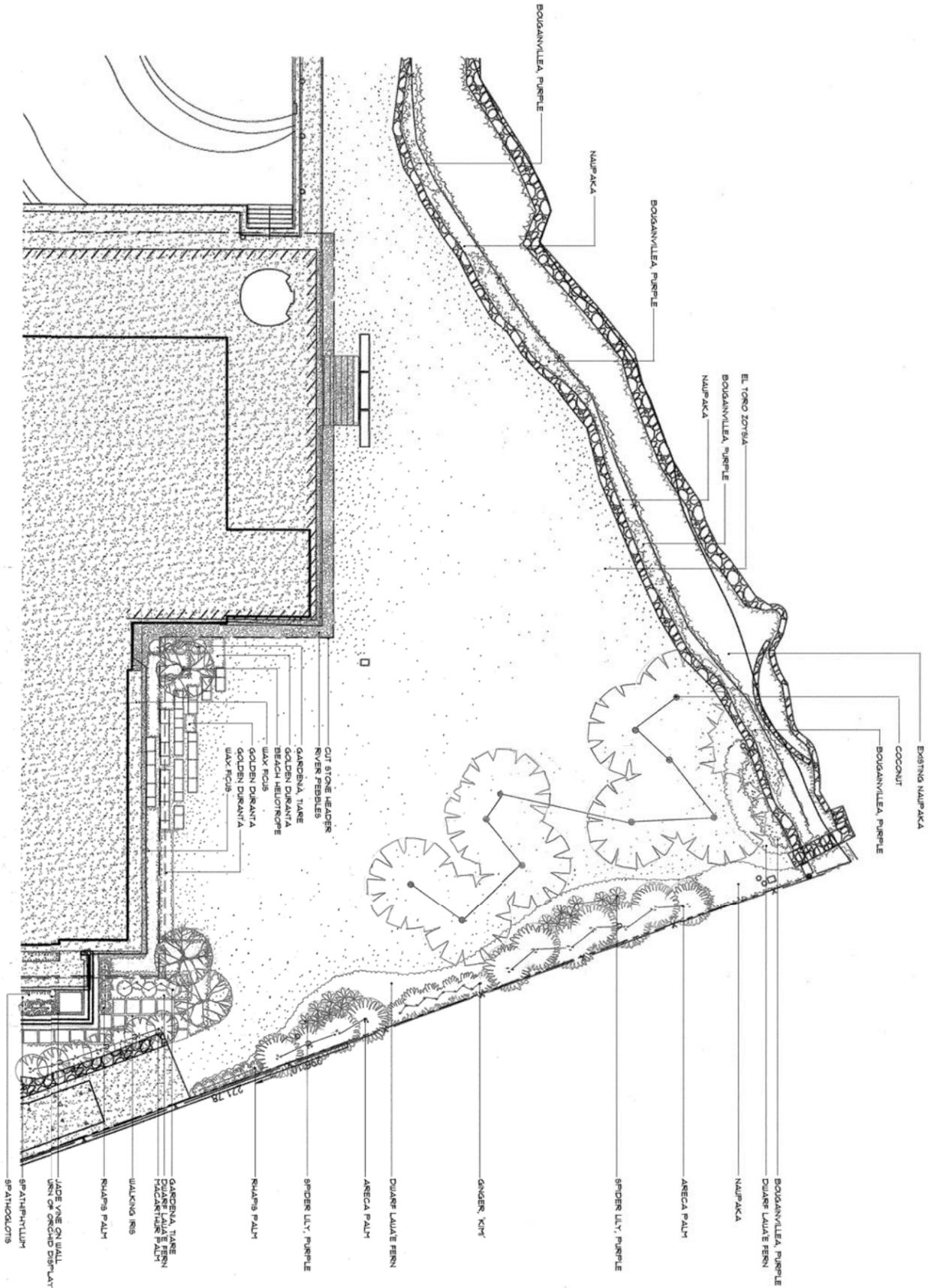


FIGURE B.21.6  
 PROPOSED DEVELOPMENT PLAN: SITE LANDSCAPE - MAIN HOUSE  
 (KAISER RESIDENCE)  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD





FIGURE B.22  
 PROPOSED DEVELOPMENT PLAN: OVERALL SITE PLAN  
 PRIVATE RESIDENCE: 525/567 PORTLOCK ROAD



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SCALE: 1/16"

SOURCE: RICHARD MANION ARCHITECTURE, INC

# APPENDIX C

## HISTORICAL REVIEW

PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD

ISLAND OF OAHU



K H M A



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**Draft**

**Archaeological Literature Review and Field Inspection for  
the 567 Portlock Road Renovations Project, Maunaloa  
Ahupua'a, Honolulu District, Island of O'ahu  
TMKs: (1) 3-9-026: 044, 045, 046, 047, and 048**

Prepared for  
**Kober Hanssen Mitchell Architects**

Prepared by

**Constance R. O'Hare, B.A.,  
David W. Shideler, M.A.,  
and  
Hallett H. Hammatt, Ph.D.**

**Cultural Surveys Hawai'i, Inc.  
Kailua, Hawai'i  
(Job Code: MAUNALUA 13)**

**September 2013**

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2N  
Wailuku, Hawai'i 96793  
Ph: (808) 242-9882  
Fax: (808) 244-1994**

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## Section 1 Management Summary

<b>Reference</b>	Archaeological Literature Review and Field Inspection for the 567 Portlock Road Renovations Project, Maunalua Ahupua'a, Honolulu District, Island of O'ahu, TMKs: (1) 3-9-026:044, 045, 046, 047, and 048 (O'Hare et al. 2013)
<b>Date</b>	September 2013
<b>Project Number (s)</b>	Cultural Surveys Hawai'i (CSH) Job Code MAUNALUA 13
<b>Investigation Permit Number</b>	CSH presently conducts archaeological studies under Hawai'i State Historic Preservation Division/Department of Land and Natural Resources (SHPD) permit No. 13-06 (for 2013), issued per Hawai'i Administrative Rules (HAR) §13-13-282.
<b>Project Location</b>	The Project area extends through five tax map parcels between the southern block of Portlock Road and the ocean. This area is depicted on the 1998 U.S. Geological Survey 7.5-minute topographic map, Honolulu quadrangle.
<b>Land Jurisdiction</b>	Private owner
<b>Agencies</b>	City and County of Honolulu (CCH); State Historic Preservation Division/Department of Land and Natural Resources (SHPD)
<b>Project Description</b>	The Project involves wastewater improvements from the Maunalua Beach Park comfort station to a connection manhole on the south side of Keāhole Street fronting the Hawai'i Kai Corporate Plaza.
<b>Project Acreage</b>	Approximately 5.4 acres
<b>Fieldwork</b>	A field inspection was conducted on September 5, 2013 by CSH archaeologists David W. Shideler and Constance R. O'Hare, under the general supervision of Dr. Hallett H. Hammatt.
<b>Historic Preservation Regulatory Context</b>	This investigation does not fulfill the requirements of an archaeological inventory survey per HAR §13-276. Rather, it serves as a document to facilitate the proposed project's planning, and it supports historic preservation review compliance by identifying any archaeological concerns within the study area. This document develops data on the likely general nature, density and distribution of archaeological resources as gleaned from available sources.
<b>Recommendations</b>	Based on this study's results, an archaeological inventory survey of the project area (per the requirements of HAR §13-276) does not appear warranted for development within the project area. Depending on the extent and location of ground disturbance during future proposed renovations in the project area, an on-call archaeological monitoring program might be appropriate for portions of the project area as an historic preservation mitigation measure.

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## Section 2 Introduction

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### 2.1 Project Background

At the request of Kober Hanssen Mitchell Architects (77 Merchant Street, Honolulu, Hawai'i 96813), Cultural Surveys Hawai'i, Inc. (CSH) has prepared this archaeological literature review and field inspection report to address proposed renovations at the property, formerly called the Kaiser Estate, at 567 Portlock Road in Maunaloa Ahupua'a, Honolulu District, Island of O'ahu, Hawai'i Tax Map Key (TMK) (1) 3-9-026, 044, 045, 056, 047, and 048. The approximately 5.4-acre property is located at the southern terminus of Portlock Road, between the road and the shore. The estate currently has the main house, a guest house, servants' quarters, a fishpond, a swimming pool, a tennis court, a boathouse, a private harbor, and several outbuildings. The project area is shown on a U.S. Geological Survey (USGS) 7.5-minute topographic map (Figure 1), on Hawai'i Tax Map Key (TMK) plat map (1) 3-9-026 (Figure 2), and on an aerial photograph (Figure 3).

The client plans to renovate the 14,000 square-foot boathouse adjacent to a private harbor in parcel TMK: (1) 3-9-026:044. The renovations consist of upgrades to the exterior and rebuilt interiors. This report includes background research into the entire Kaiser Estate, which includes five TMK parcels, TMKs: (1) 3-9-026, 044, 045, 056, 047, and 048. ~~There are no plans at this time for renovations in the other four parcels.~~

This project is subject to new requirements of the City and County of Honolulu and the Special Management Area (SMA) permitting process. SMA permits require an archaeological and cultural impact review. This Archaeological Literature Review and Field Inspection includes a limited cultural impact assessment section to inform the project's SMA permit/environmental assessment process.

This investigation does not fulfill the requirements of an archaeological inventory survey (AIS) (per Hawai'i Administrative Rules [HAR] §13-276). Rather, it serves as a document to facilitate the proposed project's planning and it supports historic preservation review compliance by identifying any archaeological concerns within the study area. This document develops data on the general nature, density, and distribution of archaeological resources as gleaned from available sources.

#### 2.1.1 Scope of Work

CSH's scope of work for this study includes:

- (1) Historical research including the study of archival sources, historic maps, Land Commission Awards, cultural activities/impacts, and previous archaeological reports to construct a history of land use and to determine if archaeological sites have been recorded on or near this property
- (2) Limited field inspection of the project area to identify any surface archaeological features and to investigate and assess the potential for impact to such sites. This assessment will identify any sensitive areas that may require further investigation or mitigation before the project proceeds.

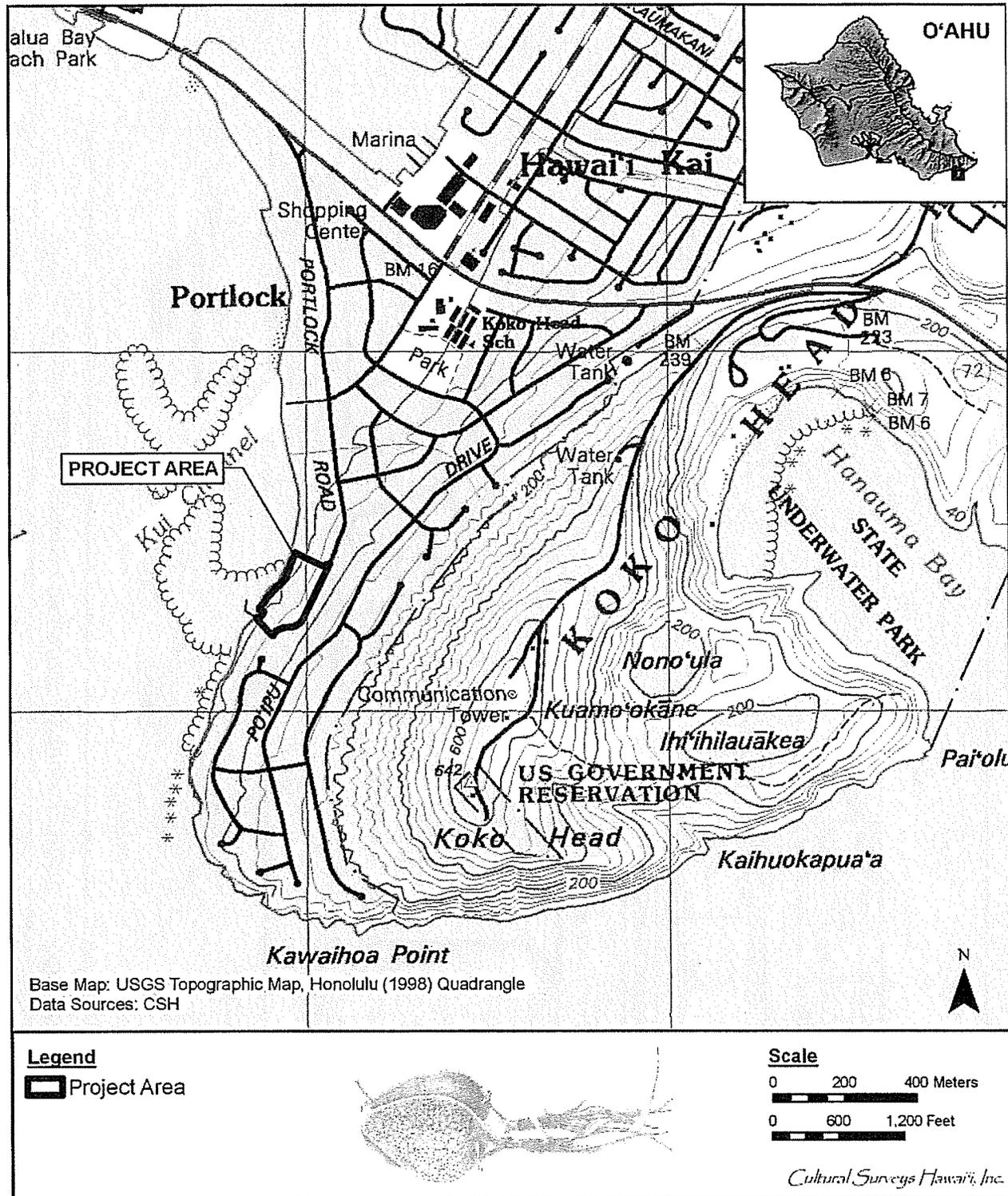


Figure 1. 1998 U.S. Geological Survey 7.5 Minute topographic map of O'ahu, Honolulu quadrangle, showing the project area

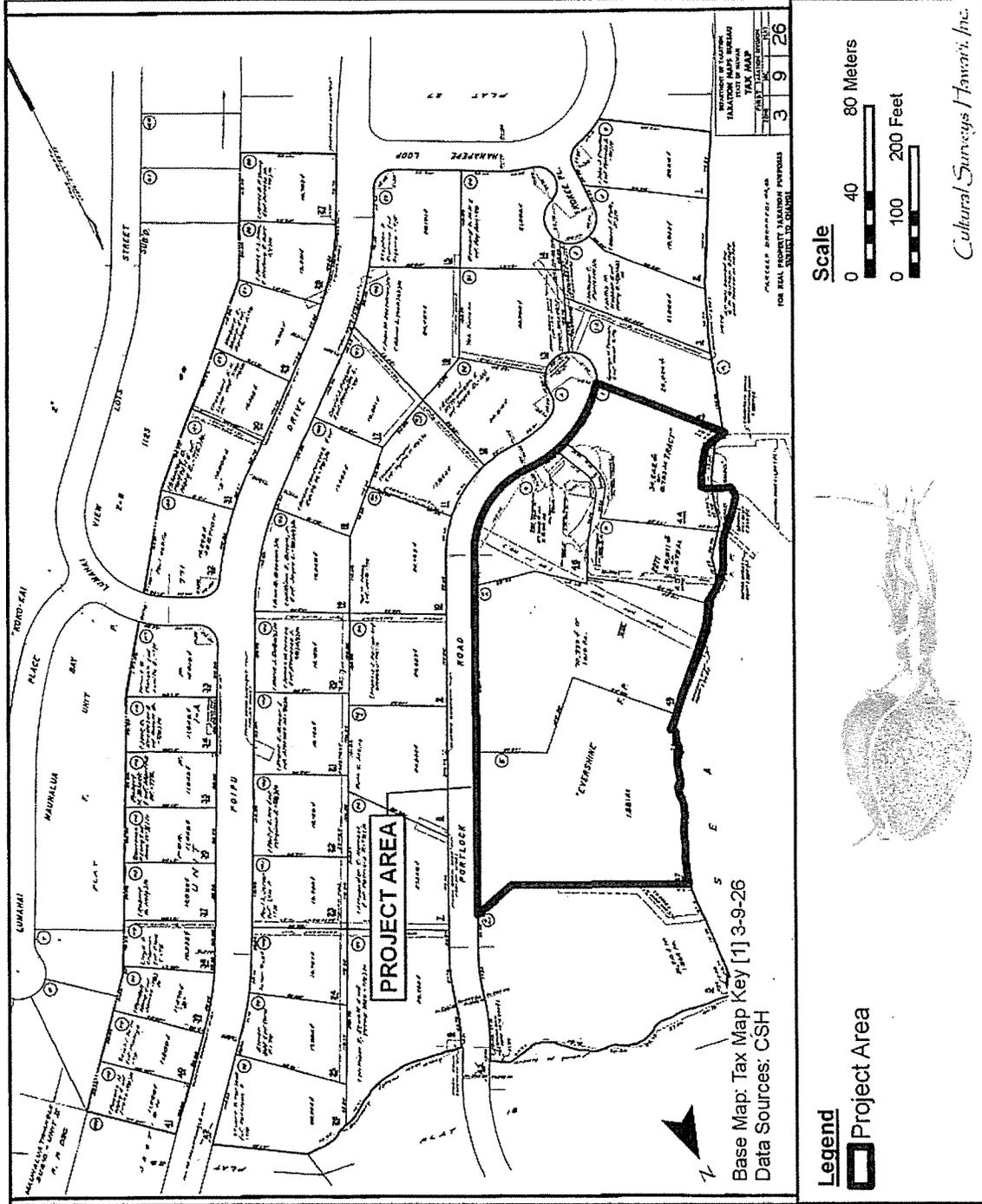


Figure 2. Tax Map Key (TMK) plat map (1) 3-9-026, showing the project area (Hawai'i TMK Service 2012)

Archaeological Literature Review and Field Inspection for 567 Portlock Rd. Renovation, Maunaloa, O'ahu

TMK: (1) 3-9-026: 044, 045, 046, 047, and 048

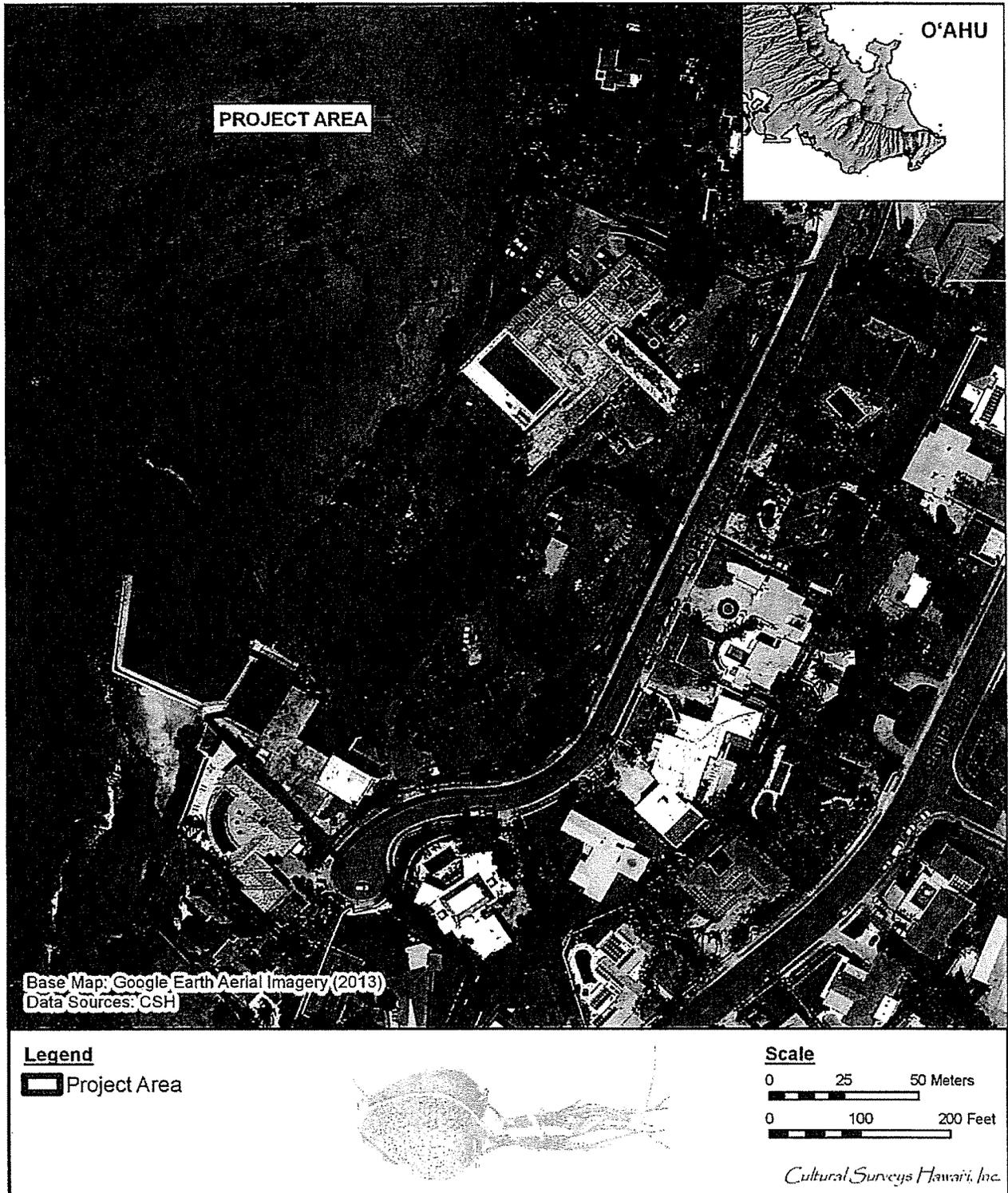


Figure 3. 2013 Google Earth aerial photograph, showing the project area

- (3) A report to include the results of the historical research and the limited fieldwork with an assessment of archaeological potential based on that research, with recommendations for further archaeological work, if appropriate. It also provides mitigation recommendations if there are archaeologically sensitive areas that need to be taken into consideration.

## 2.2 Environmental Setting

### 2.2.1 Natural Environment

According to the O'ahu soil survey (Foote et al. 1972), the present project area sits upon Koko silt loam (KsB) (Figure 4). The Koko soil series consists of well-drained soils formed in material weathered from cinders and tuff. These soils are found on alluvial fans and volcanic cones, such as Koko Head, located east of the project area. Natural Jaucus beach sand deposits occur only to the northwest near the border with Kuli'ou'ou Ahupua'a. Modern natural vegetation for areas with this soil series consists of *kiawe* (*Prosopis chilensis*), *klu* (*Acacia farnesiana*), *koa haole* (*Leucaena glauca*), fingergrass (*Chloris* spp.), and bristly foxtail (*Setaria verticillata*). The project area is within a residential neighborhood, with large estates and houses, many with landscaped yards with exotic bushes and trees. Annual rainfall in this area of O'ahu is less than 1,000 millimeters (40 inches) per year (Giambelluca et al. 1986), falling predominantly in the winter months.

### 2.2.2 Built Environment

The project area is in a densely inhabited residential neighborhood along Portlock Road, located approximately 200 feet (70 meters) south of Kōke'e Beach Park at the base of the western slope of Koko Head, part of Koko Head Regional Park. The property is approximately 175 meters southwest of Kōke'e Beach Park and inland from the Ku'i Channel. The reef fronting the project area to the south has been significantly modified by dredging activity.

## 2.3 Methods

### 2.4 Field Methods

The field inspection fieldwork was carried out September 5, 2013 by CSH archaeologists David W. Shideler and Constance R. O'Hare. One hour was required. All fieldwork was done under the general supervision of Hallett H. Hammatt, Ph.D. (principle investigator). CSH conducted the fieldwork component of this study under state archaeological fieldwork permit No. 13-06 issued by the State Historic Preservation Division (SHPD), per HAR §13-282. Representative photographs were taken of the project area.

### 2.5 Document Review

Background research included a review of previous archaeological studies on file at the State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources (DNLN). Archaeological reports, historic maps and photographs contained within the CSH library were also consulted.



Figure 4. Portion of the 2006 U.S. Geological Survey Orthoimagery, showing the project area with soil overlay (Foote et al. 1972)

## Section 3 Background Research

The present project area is located within Maunalua Ahupua'a in the traditional *moku* (District) of Kona (now Honolulu District). In traditional times Maunalua Valley was an *'ili* of Waimanalo Ahupua'a in Ko'olaupoko Moku. Others records put the dividing line between Kona and Ko'olaupoko at Koko Head, thus, dividing the *ahupua'a* between the two districts. A Hawaiian poetic saying, *'olelo no 'eau* (Pukui 1983:199), presents this claim:

*Kona, mai ka pu'u o Kapūkakī, a ka pu'u o Kawaihoa a ka pu'u o Kawaihoa.*

Kona, from Kapūkakī to Kawaihoa.

The extent of the Kona district on O'ahu is from Kapūkakī (now Red Hill) to Kawaihoa (now Koko Head.)

In 1859, Maunalua became part of the Kona District as an *'ili* of Waikīkī Ahupua'a (Takemoto et al. 1975:3). Subsequently, Maunalua was designated as an *ahupua'a* (Coulter 1935:223).

The project area is situated within the vicinity of several large topographic features, including Maunalua Bay, Koko Crater, Koko Head, and Kuapā Fishpond. Handy and Handy (1972) described the land:

Maunalua, the land area at the southeastern most tip of Oahu, marked by the two great barren mountain masses, Koko Head jutting seaward and Koko Crater. Maunalua (Two-Mountains) was notable for its great fishpond (*loko kuapa*) covering 523 acres. Actually this great pond, named Ke-ahu-pua-o Maunalua (the shrine of the baby mullet of Maunalua) was a broad shallow bay, walled off at the seaward side, with an inlet and a gate which was opened to let fish in as the tide came in and was closed when the tide began to run out. [Handy and Handy 1972:483–484]

The historical background of Maunalua has been well documented in the work of Marion Kelly (Kelly et al. 1984); E. S. Craighill and Elizabeth Handy (Handy and Handy 1972); William Kikuchi (1973), and Anne Takemoto (Takemoto et al. 1975). The following is a synopsis of the mythological accounts, oral traditions, and history of Maunalua.

### 3.1 Mythological and Traditional Accounts

“Mauna-lua”—literally “two mountains” (Pukui et. al. 1974:149)—probably refers to Koko Head and Koko Crater, the prominent volcano remnants that dominate the landscape. Mary Pukui (Pukui et al. 1974:115) states that “Koko was formerly the name of a small canoe landing at the Wai-'alae side of Koko Head, named for red earth, or for the blood (*koko*) of a man bitten by a shark.” One story says the place was named for a young girl who took some sugar cane from her parents' garden to eat. She then went for a swim in the Portlock Road area. Unknown to her, her parents had asked a shark god to protect their sugar cane from thieves. The shark attacked the girl and as she tried to reach shore the blood dripped. Thus Koko Head area was called “koko,” meaning blood (Stump 1981:44).

The project area is at the base of the western slope of Koko Head, north of the southernmost point, called Kawaihoa (“the companions’ water” [Pukui et al. 1974:98]). Koko Head was formerly called Kuamo’okāne (“Kāne backbone” [Pukui et al. 1974:119]) or Mo’okua o Kāne’āpua (“Backbone of Kāne’āpua” [Handy and Handy 1972:484]). All of these place names are explained in a legend concerning the Hawaiian god Kāne and his brother Kanaloa.

Kane and Kanaloa were travelling around the island of O’ahu near the shore at Kawaihoa Point. They told their brother, Kāne’āpua, to climb to the top of a hill (Koko Crater) and fetch them some water at a spring called Waiakaaiea. The gods told the brother that he must not urinate during the trip. He did, however, and when this happened his container filled but the spring dried up. When he returned, the brothers realized that he had disobeyed their orders and they could not drink the water in the container. Kanaloa thrust his spear into the ground and a spring of water gushed forward. The ashamed younger brother turned into the hill called after him, Mo’okua o Kāne’āpua, sometimes called Kuamo’okāne. The coastal point location of the spring was called Kawaihoa, “the companions’ water.” This spring later dried up, and the area is arid today (Mokumaia 1921, translation in Sterling and Summers 1978:268). Today the point is often called Portlock Point. Surfers refer to this area as China Walls, for the long length of the wave, which reminds one of the Great Wall of China (Clark 2002:46). The area between Kawaihoa Point and Kuapā Pond is called Portlock Beach, although there are only a few pockets of natural sand between long stretches of vertical seawalls. In the central section of the beach is a break in the reef called Ku’i (“to strike” [Clark 2002:201 ]) Channel. This may be near the canoe landing area called “Koko” (Soehren 2013).

It seems only fitting that the mythology of a region named after its two prominent volcanoes would contain references to the volcano goddess Pele. The mythical activities of Pele and her youngest sister Hi’iaka are the basis for many of the landmarks and place names in Maunaloa. According to tradition, Pele and her supernatural brothers and sisters came to Hawai’i and began searching for a home. After investigating all of the islands, Pele eventually settled at Kilauea on the island of Hawai’i. Being the goddess of fire and volcanoes, Pele was in constant strife with the god of forests and cultivation, Kamapua’a. Maunaloa, as a more arid region, would be the domain of Pele and the adjacent windward region of Ko’olau would be the domain of Kamapua’a (Kelly et. al 1984:23).

One mythical account of the inter-deity strife between Pele and Kamapua’a is tied to Koko Crater. Pele was once attacked by Kamapua’a near Kalapana, Hawai’i. The Hawaiian name of Koko Crater in Maunaloa was once Kohelepelepe, which literally translates as, “vagina labia minor” (Pukui et al. 1974:115). When the pig god, Kamapua’a, tried to rape Pele, the goddess Kohelepelepe sent her detachable vagina to lure him away. He followed it to “Koko Head on Oahu, where it rested upon the hill, leaving an impression to this day on the Makapu’u side” (Mary Pukui, in Beckwith 1970:187).

The other dominate feature of the landscape is Kuapā Fishpond, located northwest of the project area. It was originally known as Ke-ahu-pua-o Maunaloa. A study of Hawaiian fishponds carried out by Kikuchi (1973:21) classified Kuapā Fishpond as a *loko kuapā* (walled fishpond): “Loko kuapā is a fishpond whose main characteristic is a seawall (*kuapā*) as its artificial enclosing feature and in most cases contains one or more sluice gates (*mākāhā*)” (Kikuchi 1973:9). Kamakau (1976) describes the types of fish grown in the *loko kuapā*:

The usual fishes (*kama'aina*) in the ponds were the *awa*, *'anae*, *awa'aua*, *kaku*, *aholehole*, *'o'opu*, *'opae*, *puhi* and other fishes accustomed to living in ponds. But as a result of the prayers of the *kahuna*, some fishes that were not accustomed to living in ponds came in; such fishes as *'ulu*, *kahala*, *'o'io*, *palani*, *kumu*, *uhu*, *manini*, *puwalu*, and some other kinds. The *loko kuapa* would be filled with all kinds of fish. They would cause ripples against walls, like waves, and this made glad the 'hearts' (*na'au*) of the keepers of the ponds and the chiefs whose pond it was (*na li'i nona ka loko*). 'The land has life,' *Ola ka'aina*, the keepers would say to them, and they would be pleased as though they were victorious warriors. [Kamakau 1976:48]

Kuapā Fishpond and other *loko kuapā* were often home to *akua mo'o* (lizard water gods or goddesses). The gods in these ponds were believed to ensure the "health and welfare of the people, and to bring them fish" (Kamakau 1968:82). *Lakupuku* was the goddess for Maunalua ponds, and when people honored her "the ponds would fill with fish, and the fish would be fat" (Kamakau 1968:84).

According to Thrum (1906:45), Hāwea Heiau was also located in Maunalua. He describes it as being about 75 feet square, but "now all gone." *Mo'olelo* (oral traditions) relate that the *heiau* (ceremonial platform) was used as a house for a sacred drum called Hāwea. In the sixteenth century, a chief called Kūali'i unified all of O'ahu under his rule (Formander 1996:270–281). He was born at the *heiau* of Alala in 'Ewa, and for the occasion, the sacred drums of Opuku and Hāwea were brought to Alala. The *mo'olelo* of La'a-mai-kahiki, the adopted son of Moikeha, and the sacred drum, Hāwea, is important in understanding the significance of Hāwea Heiau. The *mo'olelo* states:

La'a sails with a company consisting of his *kahuna* Ku-kaikupolo, his astronomer Kukeao-ho'omihamiha, his diviner (Luhau-kapawa), his seer Maula, his drummer Kupa, and forty men to handle the canoes. They pass to the left of Hawaii and sail north past Maui and Molokai sounding the drum over the sea. A certain man named Haikamalama hears the strange sound from the Oahu coast at Hanauma bay and follows the canoe along the shore, beating out the notes on his breast to get the rhythm, and repeating the drummer's chant. When the canoe beaches at Ka-waha-o-ka-mano in Waihaukalua, he pretends, in order to get a good look at it, that the drum is well known on Oahu, and then makes an exact copy of his own. [Beckwith 1970:359]

Previous research suggests that the drum was probably kept at the *heiau* bearing the same name, Hawea (Takemoto et al. 1975; Carlson and Rosendahl 1990).

## 3.2 Early Historic Period

### 3.2.1 Western Discovery by Portlock and Dixon in the time of Kahekili

During the inter-island warfare that preceded Kamehameha's unification of the Hawaiian archipelago, Maunalua's natural harbors of Hanauma and Koko (Maunalua Bay) were considered vulnerable points in the defense of O'ahu. Alapai, the eighteenth century *ali'i nui* (paramount chief) of the island of Hawai'i attempted an attack of O'ahu. After his warriors were

driven back first at Waikīkī, then at Wai'ala'e, and then at Koko, Alapai's troops were beaten a final time at Hanauma Bay. Following this successful defense of O'ahu, O'ahu's *ali'i* maintained the rulership of their island for a number of years. However, in 1783 Kahekili, the *ali'i nui* of Maui, defeated the forces of O'ahu's ruler in a battle at Honolulu and took control of the island (Kamakau 1961:71).

It was during the rule of Kahekili that the first Europeans landed and traded at Maunaloa. On June 1st, 1786 the English ships *King George* and *Queen Charlotte* under the commands of captains Nathaniel Portlock and George Dixon, respectively, anchored in Maunaloa Bay. They named Maunaloa Bay King George's Bay for the English monarch. They named the east point of the bay Point Dick after their first patron. This is the south point of Koko Head that the Hawaiians called Kawaihoa. They named the west point of the bay, at Diamond Head, Point Rose, after another patron (Portlock 1789:69). The next day, in quest of water, Portlock and Dixon went ashore near Koko Head. They found a small, insufficient spring in the dry landscape 50 yards back from the coast, and were told that any substantial fresh water sources were a considerable distance westward. Traveling by boat northward from the first landing, Portlock and Dixon landed on a sand beach, where they were told that water sources were further to the west. Setting off on foot to the west along the beach with a guide, the landing party came up against a "salt water river" that stopped their progress along the coast. This salt water river is likely the waterway between Kuapā Fish Pond and Maunaloa Bay. Returning to the boats, the landing party experienced difficulty passing through the reef and had trouble with the waves. The captains realized too great an effort would be required to water at this location. Water was eventually purchased around Diamond Head in Honolulu. Informants told Portlock that Honolulu was a more populous, more productive place where plenty of hogs and vegetables could be obtained. However, because Portlock already had his needed supply of water the ships remained in Maunaloa until June 5 (Portlock 1789:70-72). Portlock described the Maunaloa landing site as follows: "The low land and valleys being in a high state of cultivation, and crowded with plantations of taro, sweet potatoes, sugar cane, &c. interspersed with a great number of cocoa-nut trees, which renders the prospect truly delightful" (Portlock 1789:74).

Portlock and Dixon returned to Maunaloa on November 30 of the same year and rounded Point Dick to anchor in King George's Bay (Maunaloa Bay) (Portlock 1789:154-167). According to Portlock, he anchored his ship in 12 fathoms of water and noted, "Port Dick bore East half South, one mile and a half; Point Rose West by South, six miles" (Portlock 1789:156). Although it is impossible to calculate the exact anchor spot, we do know the landing spot was 1.5 miles (2.4 km) northwest of Kawaihoa (south point of Koko Head) and six miles east of Diamond Head, which would place it somewhere near the eastern edge of the entrance to Kuapā Pond, possibly near the settlement later called Maunaloa. As the project area is approximately 1.5 km northwest of Kawaihoa, the landing place was still one km or more to the north along the coast towards Kuapā Pond.

Portlock and Dixon's second visit was much less hospitable than the first. Portlock notes:

Few canoes came along-side soon after our arrival in the bay, but they brought scarcely any thing to sell; indeed there seem to be but few inhabitants in this bay, and those few are of no great consequence. I gave them to understand that we wanted water, and directed them to bring it to us, as they formerly had done; they

would willingly have complied with my request, on account of the nails and beads which they were to have in exchange, but assured me that not only water, but every thing the island produced, was tabooed by the king's order. [Portlock 1789:156]

Until Kahekili's (the king mentioned above) official visit, the ships were placed under a *kapu* (restriction) and no commerce or visitors to the ships were allowed. The king visited the ship the next day. He was pleased with the gifts given to him, and told Portlock that he could return to trading with the natives. However, Portlock noticed a curious flurry of activity on December 12. A priest that Portlock had met on his first visit was a frequent visitor to the ships. On his visit that day, he warned Portlock that Kahekili and his warriors were "meditating some mischief" against the explorers.

. . . he pointed to a large house on the top of a hill [Koko Head] over the Eastern point of the bay which ascends from Point Dick: this house the old man assured me was building for a Eatooa [*akua*; god], or God's house, wherein they were going to make great offerings to their different Eatooas (for almost every chief has his separate one), and to consult them on the event of an attack, which he assured me they intended to make on us if their oracles gave them encouragement. . . . I had observed the natives building this house a day or two before the priest pointed it out to me, and had seen people constantly going up towards it loaded, probably with offerings to their different deities. Towards noon I could see, with the help of a glass [telescope], that the house was nearly finished, and the natives were covering it with red cloth. [Portlock 1789:163]

Portlock was not sure that the king actually meant him harm, but at his next visit on December 14, he took care to have several armed men on deck, which the king noted. Kahekili was curious about the firearms, so Portlock shot a hog on shore with his pistol, wounding it. The sound and effect of the firearm startled the king and his attendants and Portlock felt that they had been warned of the risks in attacking his ship. The next day, Portlock noted, "Not a single native came near the ships for two days and their canoes were hauled out of sight, but we could perceive vast numbers of the inhabitants about the house on the hill" (Portlock 1789:165).

Captain Dixon, in the *Queen Charlotte*, also noted the construction on Koko Head:

On the 14<sup>th</sup>, we perceived the natives were very busily employed on the hill, at the South East extreme of the island; and by noon on the 15<sup>th</sup>, their work was so far advanced, that we could plainly discern they were erecting a house, though the distance from us was very considerable. The same afternoon, all the canoes left both ships, and not one returned in the evening, which, till now, had never been the case; for, as an intercourse with women was allowed, (indeed it could not be prevented) our people never failed to have a number on board every night. This made us suspect, that the people were tabooed; and our conjectures proved to be right, for during the 16<sup>th</sup>, not a single canoe appeared in the bay; but the summit of the mountain round the new erected edifice, was perfectly crowded with people the whole day, and in the evening, a number of fires were lighted as near the place as the wind would permit. [Dixon 1789:104]

The next day, Dixon noted that natives returned to trading and told him that there had been “a solemn festival at the top of the mountain, and, if we understood right, a human sacrifice offered, but whether a man or a woman, we could not learn” (Dixon 1789:105).

On December 17, Portlock again looked up to the summit of Koko Head, and recorded:

Towards evening I observed the natives uncovering and pulling to pieces their new built house on the hill; and about eight o'clock several large houses were on fire along shore near the bay, but as we had no Indians on board, I could not learn whether they were set on fire by accident or design, till the next morning, when the old priest and our two passengers coming on board, I enquired the reason of the fires we had seen on shore the preceding evening; and was given to understand, that they were Eatooa's, or houses belonging to gods [*heiau*] with whom the chiefs were displeased; therefore out of revenge they had burnt gods and houses both together. [Portlock 1789:167]

The king made a last visit to the ship before it sailed for Kaua'i, and when asked about the “red house,” he seemed confused and changed the conversation to something else. This incident has been interpreted by historians as a thwarted attempt to attack the British ships, which was prevented either from the priest's warning, the display of firepower by Portlock, or by the guidance of the gods (Daws 2006:7). However, Dixon was told that the construction of the “house” on top of Koko Head was for a different reason, or had a secondary purpose:

Teereteere [Kahekili] had caused the house I have mentioned at the top of the hill, to be built as a kind of repository, or store-house, for such articles as the natives might obtain in the course of their traffic with our vessels: when this was completed, he caused the bay to be tabooed, and convened a general assembly of the inhabitants at the top of this mountain, directing them, at the same time, to bring whatever trade they had got, that it might be deposited in his new-erected edifice. This being effected, he found means, on some pretext or other, to approximate one-half of these stores to his own use. We now no longer wondered at the old priest venting his reproaches so very liberally, as it was pretty evident Teereteere had exerted his authority contrary to the rules of justice and equity. [Dixon 1789:107]

Valerio Valeri (1985), in a comprehensive study of Hawaiian ritual behavior and structures, confirms this latter purpose as the Hawaiian *ali'i* had a temporary structure that could be built on their command, called a *heiau ma'o* (Valeri 1985:181-182). The early Hawaiian ethnographer, David Malo, described this type as a “temporary structure of small size for the use of the *alii* only; and when its purpose was over, it was taken down. It was a slight structure covered with *tapa* cloth stained with *mao*, of a reddish color” (Malo 1951:158).

Valeri concludes that the *heiau ma'o* was a temporary *heiau* “built for the king each time he wishes to receive a *ho'okupu*, that is, gifts offered by his subordinates as a sign of homage and allegiance” (Valeri 1985:182). Valeri notes that there are other mentions of this type of *heiau* in the early literature. John Papa 'I'i recorded an early visit of Argentine mutineers to Nāpō'opo'o Hawai'i in 1817, when the king built two houses, and received as gifts from his people much of the money the mutineers were spreading around to the common people. “He received a heap of

money in that gift-giving, which was a customary thing. He was clever in getting money by such planning and through his hospitality to strangers” (Īī 1983:129). Valeri also notes two other accounts that assert this was an ancient custom that persisted into the early historic period (Valeri 1985:183).

The English missionary, William Ellis, who visited the islands in 1822 and 1823, remarked on a story in the time of Kamehameha II, before his voyage to England in 1824.

Another singular method of taxing the people, is by building a new house for the king, or some principal chief. . . . A short time before his embarkation for England, a large native house was built for Rihoriho [Liholiho, Kamehameha II], at Honoruru [Honolulu], in the island of Oahu. During three days after the king went into it, the people came with their gifts. [Ellis 1831:418-419]

An early missionary, Charles Stewart, notes that in the time that Kamehameha III ruled:

The king and highest chiefs had a singular mode of raising money, and one I presume entirely peculiar to themselves. It is by building a fine new house; and on taking possession of it, to refuse an entrance to any one without a present in cash, proportionate to the rank and property both of the giver and receiver. The kabu [tabu] on the house of the king at the time of our arrival [1823], was of this nature. [Stewart 1839:103]

Thus the *heiau* on the summit of Koko Head was probably built for the same reason, as a temporary religious structure where the people would offer gifts, thus assuring that Kahekili, the king, would be able to accumulate most of the Western goods given to the natives by Westerners for food, supplies, and services. Once the structure had served its purpose, it was destroyed. As this was an ancient custom and a prerogative of the high chiefs, the confusion Kahekili evidenced when Portlock asked him about it can simply be seen as the chief's belief that it was none of the Westerner's concern.

### 3.2.2 Kamehameha I at Maunalua

Kahekili died in 1794, splitting his kingdom between his sons Kalanikupule and Kaeo. Kalanikupule briefly ruled O'ahu and Moloka'i before being defeated by Kamehameha in 1795 at the battle of Nu'uuanu. Following this conquest, Kamehameha followed custom and made a tour of the island he had conquered. Concerned that the productivity of the land be restored rapidly after the disruption of war, Kamehameha is said to have worked on several fishponds during his tour, including Kuapā Fishpond at Maunalua. Kamehameha “. . . encouraged the chiefs and commoners to raise food and he went fishing and would work himself at carrying rock or timber. . . He worked at the fishponds at Kaiwai-nui, Ka-'ele-pulu, Uko'a, Mauna-lua, and all south O'ahu” (Kamakau 1961:192). Kamehameha demonstrated to his people the importance of hard work and productivity (Takemoto et al. 1975:16). One account describes the route that Kamehameha took during his work tour of O'ahu: “. . . Kamehameha and his followers left Kailua and proceeded on to Waimanalo. From Waimanalo they went to Makapu'u and from there to Honolulu” (Handy and Handy 1972:485).

Kamehameha I gave the land of Maunalua to Kuihelani, a steward of his, who he also made governor of O'ahu in 1796. Kuihelani was forced to forfeit the land later because of an offense of

his wife to Ka'ahumanu, wife of Kamehameha (Kamakau 1961:173, 389). Kamehameha next gave Maunalua to his father-in-law Ke'eaumoku (father of Ka'ahumanu). Ke'eaumoku died in an epidemic (thought to be cholera) that passed through Maunalua in 1804. The population of Maunalua, including the eastern coastal area of O'ahu, may have been reduced drastically during this epidemic (Schmitt 1968:24). Following Ke'eaumoku's death, the ownership of Maunalua passed on to Ka'ahumanu, his daughter. It was during this period that the land ownership of Maunalua became tied to the title of premier. Ka'ahumanu passed the land ownership and title of premier to Kīna'u, a daughter of Kamehameha. Kīna'u in turn passed on both the land of Maunalua and the title of premier to her daughter, Victoria Kamāmalu (Takemoto et al. 1975:20). It was Victoria Kamāmalu who secured the land title of the *'ili* of Maunalua during the Māhele.

John 'Ī'ī, a member of Kamehameha's court, visited Maunalua sometime around 1810. Traveling aboard the ship *Apuakehau* from Honolulu to the island of Hawai'i, 'Ī'ī stopped at Kawaihoa—the landing at Maunalua Bay that was a common stop-over point for inter-island and circle-island navigation at this time ('Ī'ī 1983:108). One informant says that Kamehameha I had a house, which, along with some nearby caves, he used for temporary residence (Kanaiku'ihonoināmoku 1865, translation at Hanauma Bay Place Names 2013).

'Ī'ī also discusses the old trail systems extant on O'ahu about the year 1810. Regarding the route to southeast O'ahu from Honolulu, 'Ī'ī notes several trails met at “the sand and go along Keahia and so on to Maunalua, to the sea of Koko, to Makapuu, and so on” ('Ī'ī 1983:94). Undoubtedly the route ran through Maunalua. There are several accounts of early missionaries taking this route in their tours of O'ahu.

### 3.2.3 Later Western Visitors

Gilbert Mathison (1825:386-387) most likely followed this same route during his excursion around the island of O'ahu in 1821. Within Maunalua he noted the large salt water lake (Kuapā Fishpond) around which he saw scattered approximately 100 huts. The people of the area were described as fisherman.

In July and August of 1826, Ka'ahumanu made a tour of the island of O'ahu to talk with her subjects and preach the new Christian religion. In her company was the missionary Hiram Bingham, along with 200–300 other people. Bingham described the journey as follows:

Availing myself of the facilities thus afforded for our work, I made the tour with them [Ka'ahumanu's entourage], employing a month to good advantage, giving my attention chiefly to preaching, and the care and establishment of schools, and reading the Scriptures . . . Several horses, two wagons, and two canoes, constituted the principal accommodations, as vehicles for parts of the company, much of the way. Most of the company traveled on foot, some making the whole circuit, of about one hundred and thirty miles, and some but smaller portions of it, as we passed round from Honolulu to the east, north, west, and south, then to the east again . . . [Bingham 1847:294–295]

From this account it is clear that Ka'ahumanu's party passed through Maunalua and continued on. Unfortunately, no mention was made of the settlement and population of Maunalua,

specifically the Portlock area. This testimony does indicate that this route around the southeast end of O'ahu was a commonly traveled one.

Levi Chamberlain visited the area in 1826 and 1828 to view the new language schools. He described Kuapā Fishpond:

Thence I walked on by the side of the pond in a southerly direction about a mile, having the eminences Moaulua (sic) on my left.--I then came to a narrow strip of land resembling a causeway partly natural and partly constructed extending in a North west direction across what appeared to be considerable of a bay forming a barrier between the sea and the pond. At the further end of this causeway sluices are constructed and the waters of the sea unite with the pond and at every flood tide replenish it with a fresh supply of water. [Chamberlain 1826:26]

Two years later, he wrote:

It was once a small estuary, narrow at its communication at the sea, and so shallow that a cossway (sic) could conveniently be built to a low, sandy point on one side of the little bay which is here made by the sea. On this point is built the settlement of Maunalua. Our path was wet and muddy till we reached the extremity of the pond. [Chamberlain 1828:29]

In 1826, Chamberlain counted 18 houses in this village, which was located on a causeway on the pond. This may mean there was a population of about 90 to 100 at this time. In 1828, he talked to a group of about 30 people in the village, perhaps suggesting that the population was about 60 or more at this time. In 1828, 65 students attended school in the area. Four years later, the number had dropped to only 19. This may be an indication of the rapid depopulation of the area.

Maunalua was not only known for its fish resources, but was also associated with agriculture. Economic activities of Hawaiian settlements focused on the cultivation of crops that could be exchanged with foreign sailing vessels, in particular those of the whaling industry, which had its boom period from 1820–1850 (Jones 1996:20; Takemoto et al. 1975:18). In 1940, Handy described sweet potato cultivation in Maunalua:

On the south side of the ridge at this end of the island, Maunalua and Hahaione districts were famous for their sweet potatoes. In this section there are various enclosures and walls which were thrown up around the old plantations before Hawaiians abandoned the land and it was utilized for ranching.

According to the last surviving *kamaaina* (commoner resident) of Maunalua, sweet potatoes were grown in the small valleys, such as Kamilonui, as well as on the coastal plain. The plain below Kamiloiki and Kealakupapa was known as Kekula-o-Kamua wa. This was the famous potato-planting place from which came the potatoes traded to ships that anchored off Hahaione in whaling days. The village at this place, traces of which may still be seen, was called Wawamalu. [Handy 1940:155]

In the early historic period, the trade of food provisions was the source of prosperity for many traditional Hawaiian settlements, including those at Maunalua. It maintained resident populations

in areas that would have otherwise become depopulated under the dual effects of epidemics and the relocation of inhabitants to growing towns such as Honolulu. When the victualing trade gave out, settlement in these regions declined. By the early 1850s, the peak of whaling was passing. In 1852, the Hawaiian government passed legislation requiring all foreign vessels to call at Honolulu where they could be taxed. This further reduced the number of ships anchoring at smaller landing sites such as those at Maunalua (Jones 1996:21; Takemoto 1975:20). "It is clear that Maunalua lost much of its population and economic independence as an agricultural ili with the end of the whaling ships" (Takemoto et al. 1975:25).

The depopulation of Maunalua by the mid-nineteenth century preceded and facilitated the replacement of traditional Hawaiian land use with ranching and commercial fishing. While the area of Maunalua was mentioned and described during the early historic period, there was no mention of the stretch of coast between Kui Channel and Kawaihoa Point from the mid-1800s to 1900.

### 3.2.4 The Māhele and the Mid- to Late 1800s

In 1845, the Board of Commissioners to Quiet Land Titles, also called the Land Commission, was established "for the investigation and final ascertainment or rejection of all claims of private individuals, whether natives or foreigners, to any landed property" (Chinen 1958:8). This led to the Māhele, the division of lands between the king of Hawai'i, the *ali'i*, and the common people, which introduced the concept of private property into Hawaiian society. Kamehameha III divided the land into four categories: certain lands to be reserved for the king and the royal house were known as Crown Lands; lands set aside to generate revenue for the government were known as Government Lands; lands claimed by *ali'i* and their *konohiki* (land managers) were called Konohiki Lands; and habitation and agricultural plots claimed by the common people were called *kuleana* (land rights) (Chinen 1958:8-15).

In 1848, the crown and the *ali'i* received their land titles, known as Land Commission Awards (LCA). Members of the royal family were awarded entire *ahupua'a*, while high-ranking *ali'i* were awarded entire *'ili* and lesser *konohiki* were awarded half of an *'ili* (Kame'elehiwa 1992:269, 279). The lands awarded as Crown Lands and Konohiki Lands, as well as lands designated as Government Lands, were "subject to the rights of native tenants." The Kuleana Act of 1850 "authorized the Land Commission to award fee simple titles to all native tenants who occupied and improved any portion of Crown, Government, or Konohiki Lands" (Chinen 1958:29).

Prior to the Māhele, the land of Maunalua was part of the lands held by the premier. Ka'ahumanu had passed the land and title to Kīna'u, who had in turn passed them on to Victoria Kamāmalu (Takemoto 1975:20). On April 7, 1854 Victoria Kamāmalu was granted Land Commission Award 7713, the land title to the *'ili* of Maunalua (Figure 5). No *kuleana* land grants were awarded within this overall land award—another indication that population may have declined drastically by the time of the Māhele.

In 1856, Victoria Kamāmalu leased all of Maunalua, except for Kuapā Fishpond, to William Webster, the government employee and land surveyor who had surveyed the region five years earlier. Webster used the land for ranching, adding it to the other lease hold land he used for ranching in Waimānalo. When Webster died in 1864, the remainder of his Maunalua lease was

taken over by Manuel Paikō, who was leasing the adjacent lands at Kuli'ou'ou. Victoria Kamāmalu mortgaged her lands in Maunaloa to Charles Bishop in order to pay off accumulated debts. When Kamāmalu died in 1866, it fell to her father, Kekuanāoa, to pay off the debts and the mortgage in order to be awarded the title to Maunaloa (Jones 1996:22–23; Takemoto et al. 1975:21). With the death of Kekuanāoa, the land of Maunaloa passed into the hands of Lot Kamehameha V. When Lot died without a will, the probate court decided that his half sister, Ruth Ke'elikolani, would inherit his entire land holdings. When Ruth died in 1883, Maunaloa was passed down to Bernice Pauahi Bishop. Bernice Pauahi Bishop was the last surviving Kamehameha and as a result inherited all of the Kamehameha lands, becoming the largest landholder in the Kingdom of Hawai'i. When Bernice Pauahi Bishop died in 1884, her husband Charles Bishop followed her will and set up the Bishop Estate Trust, of which Maunaloa became a part (Takemoto et al. 1975:21–23). Maunaloa continued to be used as ranch land throughout this period.

It was at this time that G. E. Gresley Jackson (1884) produced a map of Maunaloa (see Figure 6). This map shows roads circling Kuapā Fishpond. A road extends between Kamehame Ridge and Koko crater, crosses the coastal flat of Wawamalu, climbs Kealakipapa Valley to Waimanalo Gap and descends the gap into Waimanalo. No other indications of habitation are made on the map—suggesting that by 1884 habitation in eastern Maunaloa was slight to non-existent.

The fishing rights to Kuapā Fishpond and Maunaloa's offshore fishing grounds were important resources that were leased out to various parties from the time Victoria Kamāmalu obtained the land title to Maunaloa. Kuapā Fishpond was leased in 1856 at a high yearly sum. It is clear from the high lease rates for the time period that the fishing resources of Maunaloa were productive and highly valued (Takemoto et al. 1975:21–27). The offshore fishing rights were leased and sold to various individuals until 1900 when Territorial and United States legislation began deconstructing the legality of the traditional idea of ownership of offshore fishing rights.

The population of Maunaloa continued to decline during this period. Tax records show that in 1855 there were 38 households with 98 people living in Maunaloa. This fairly large population owned 68 houses as well as horses, mules, and dogs. In 1860, Maunaloa had lost over half its population and held only 16 households. By 1870 there were only six households and population bottomed out in 1880 with only four households. This depopulation is undoubtedly the result, at least in part, of resettlement of inhabitants in more economically viable areas. These decreases in the number of households were accompanied by reductions in the numbers of horses, mules, and dogs—indicating a relatively impoverished population compared to the 1855 inhabitants of Maunaloa. In 1900, population had risen once again; however, it is clear that traditional settlement and land use had been largely, if not entirely, replaced by ranching and commercial fishing activities (Takemoto et al. 1975:24–25). Takemoto et al. (1984) note:

By 1900, Maunaloa Ranch and Yit Lee Company, who owned a big fishing complex, employed most of the inhabitants. Maunaloa Ranch had over 1500 head of cattle, ten oxen, sixty-four horses, thirteen mules and six pigs roaming throughout Maunaloa. Five Chinese families were working for the Damons [who held the lease for Maunaloa at the time], probably as ranch hands. Five other Chinese families worked for Yit Lee. The eight Hawaiian families on the land,

including one blind man, were truck farmers of some sort since all but two owned carts used for bringing goods to Honolulu . . . Thus by the turn of the century most families in the ili were ranch hands, fishermen, or truck farmers living a relatively quiet life in an area which would be considered the country. [Takemoto et al. 1975:25]

Overall, from 1850 to 1900, Maunalua was characterized by a decline of traditional Hawaiian settlement, land use, and population, and a rise of commercial ranching and fishing.

### 3.3 Early 1900s to Present

#### 3.3.1 Ranching, Agriculture, and Residential Development

Maunalua became more closely tied to the modern world after 1900. In 1906, the luxury steamer *Manchuria* ran aground off Waimānalo. The result of the outcry that followed was the construction in 1909 of the Makapu'u lighthouse, which contained (and still contains) the largest magnifying lens of all U.S. lighthouses (Dean 1991:Part 14). In 1914, the Marconi Wireless Telegraph Company of America built a receiving station on the slopes of Koko Head on land that was leased from the Bishop Estate for 50 years. The station was built to receive messages 24-hours a day from San Francisco and was billed as the most powerful wireless station in the world. The station linked the Hawaiian Islands with the mainland and Asia on a 24-hour basis. Early in the 1920s the Marconi station was taken over by the Radio Corporation of America and was used for transmission (Takemoto et al. 1975:28).

Agriculture, in the form of truck farming and an agricultural school, increased in Maunalua after the turn of the century. The Kamehameha School for Boys ran an agricultural farm in Hahaione Valley with 45 acres for vegetables and 200 acres for livestock (Jones 1996:27). Truck farmers increased in number in the area as well, providing hogs, flowers, lettuce, and other vegetables for the growing population of Honolulu. Much of the area around Kuapā Fishpond was occupied by truck farmers by the 1930s and this type of farming would expand (Kelly et. al 1984:47). By 1959 this truck farming community of over 170 families was producing 60 percent of Oahu's hogs and a similar percentage of flowers and lettuce (Takemoto et al. 1975:28).

Maunalua Ranch controlled most of the land of Maunalua outside of Kuapā Pond. From its inception in 1900 until it closed in 1926, over 1,500 cattle made up the ranch's stock (Jones 1996:23). In 1920, the Maunalua Ranch sublet parcels to the Honolulu Honey Company, Ltd., which had eight apiaries. The ranch land also had charcoal makers harvesting *kiawe* (algaroba tree) during this time (Kelly et. al 1984:47).

The Maunalua Ranch Company closed in 1926 and their sub-lessees were given direct leases from the land owner, Bishop Estate. Alan Davis and others were given a ranching lease in 1932. They started the Wawamalu Ranch. The Davis home and swimming pool were constructed near the shore at Ka'ili'ili, while various ranch infrastructure, such as corrals, walls, and water tanks was situated at Kaloko, on the east side of Koko Head (Kelly et. al 1984).

The Alan Davis ranch house at Kaloko was the easternmost private residence on O'ahu during the 1930s and 1940s, until its destruction in the 1946 tsunami. Ranching didn't prove profitable enough, so the subleasing of Maunalua land for

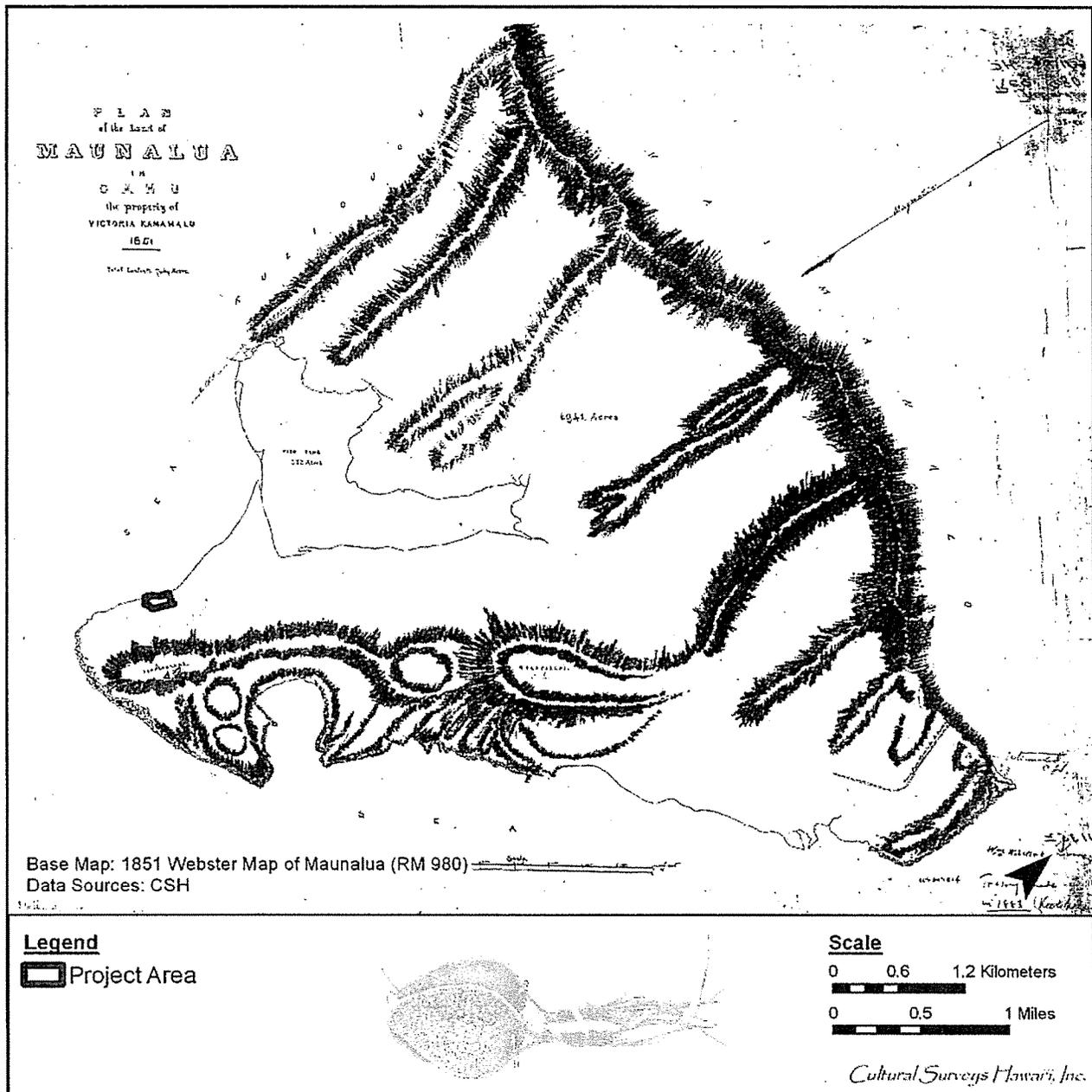


Figure 5. 1851 map of Maunaloa (Webster 1851; Registered Map No. 980), awarded to Victoria Kamāmalu as LCA 7713: 'Āpana (lot) 30

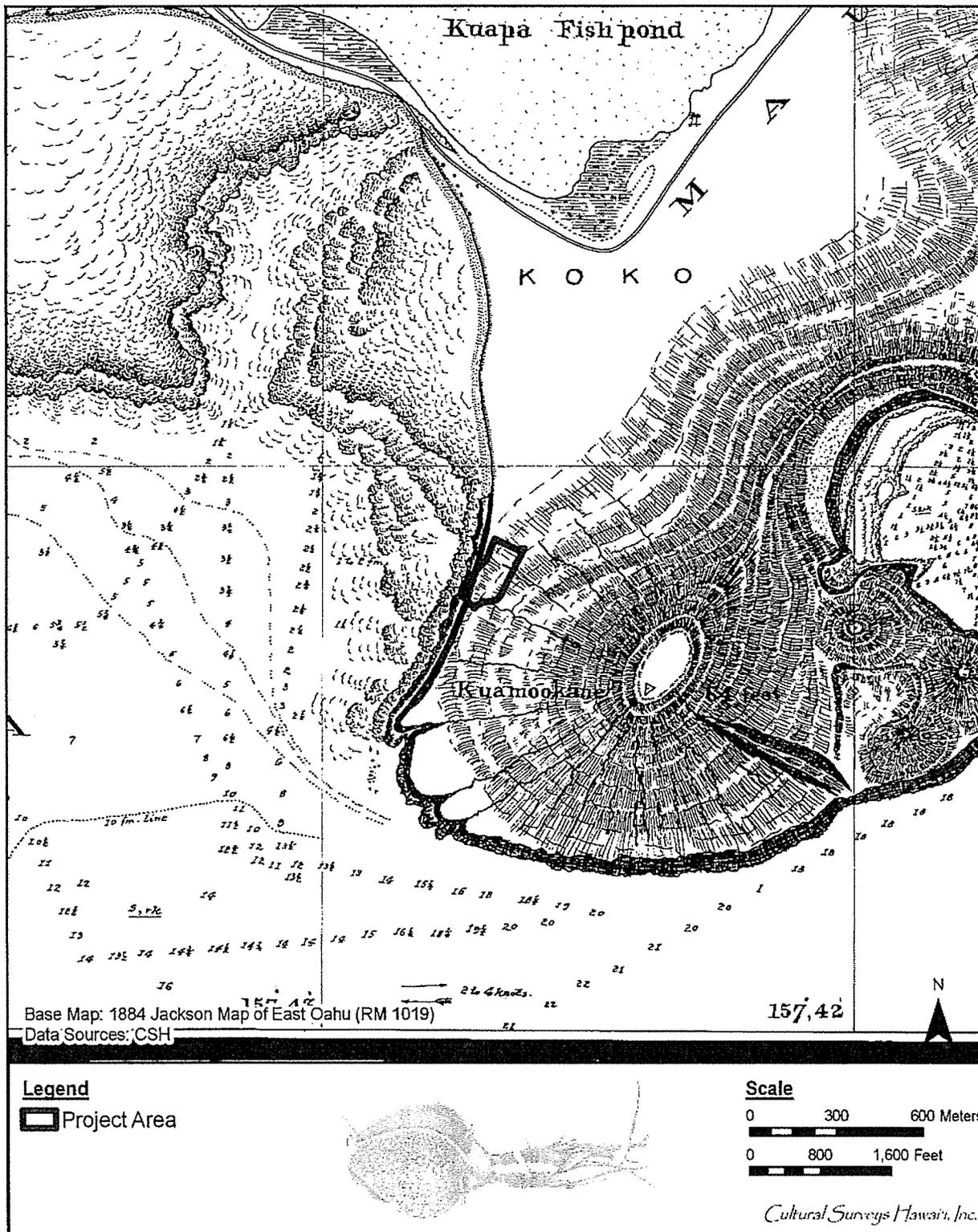


Figure 6. 1884 George E. Gresley Jackson map (Jackson 1884; Registered Map No. 1019) showing the project area as south of Kuapā Fishpond

truck and flower farms, chicken farms, and piggeries was expanded. Pig farmers and other were pushed out of the Hawai'i Kai area and moved over the hill back of Koko Crater and into Kalama and Wawamalu Valleys. As farmers were evicted from other communities, such as when Wai'alae-Kamala, Wailupe, and Niu were urbanized, more of them moved to Maunaloa with short-term leases. [Kelly et. al 1984:56]

The construction of Kalaniana'ole Highway between Kuli'ou'ou and Waimānalo was begun in the late 1920s and was finally completed in 1932, when the last stretch of road from Waimānalo to Wawamalu was completed. The bridge at Wawamalu was constructed in 1931. The coastal portions of this alignment of Kalaniana'ole Highway from Sandy Beach to Kaloko were washed out by the 1946 tsunami. The highway was reconstructed slightly further inland, with a new bridge at Wawamalu, between 1946 and 1948. The sequential development of the paved road across Kuapā Fishpond and the current project area, along with the development of residences, can be seen in a series of maps and aerial photographs between 1927 and 1954 (Figure 7 to Figure 12).

### 3.3.2 Modern Land Use and the Kaiser Estate

In 1959, there were 178 families in the area around Koko Head. The estimated population of Hawai'i Kai was 2,005 people in 1959, and increased dramatically to 27,000 by 1999 (Atkinson 2007:106). At this time, the Hawai'i Kai Development Corporation, a subsidiary of Kaiser Industries, received the development rights for Bishop Estate property in Maunaloa and the development of the planned community of Hawai'i Kai began (Kelly et. al 1984:vii). Kuapā Fishpond was dredged to a consistent depth of six feet and dredge material was used to fill the swampy lands on the north side to make a new residential area (Hancock 1983:4). Large portions of former fishpond and ranch land were graded and prepared for construction of housing developments, golf courses, and shopping centers.

However, even before the construction of the new residential development and marina began, Henry J. Kaiser had an interest in the Portlock area, at that time a rather remote, undeveloped area. One of his executives was building a large home in the area, and watching the progress of the construction, he decided that he too would build a home in the area. He purchased a seven-acre leasehold for a Bishop Estate property in 1958. It was in the discussions about the property that Bishop Estate officials brought up their problems with developing their 6,000 acres of land around Kuapā Pond. Kaiser had some ideas for how the area could be turned into a high-end residential neighborhood, which took place over the next twenty years. This not only included the construction of houses and roads, but bridges, highways, water and electrical utilities, and a sewage treatment plant, as well as major dredging and new land construction around Kuapā Pond and Maunaloa Bay (Hancock 1983:3-4).

Before development, there was only a small community called Portlock consisting of a small store, a tavern noted for its Saturday night fights, a Mormon Church, and an abandoned tavern. On the west slope of Koko Head there were truck farms and an old RCA communications antennae farm (Hancock 1983:6-7).

It is estimated that from 1959 to 1960 the Kaiser Estate was built at a cost of \$1 million. It included a large pink mansion, several guest houses, a greenhouse, a servants' quarters, pools

and other water features, and a large boathouse next to a private boat harbor (see Figure 3; Figure 13). After Henry Kaiser's death in 1967, the property was sold to the Goldman family, who extensively modified the interiors of some of the structures. In 1988, the entire parcel was purchased by the Japanese businessman Gensiro Kawamoto, who paid \$42.5 million for the property. He was unhappy with the \$1 million annual ground rent and surrendered the property back to the Bishop Estate in 1994. They put up the property for sale as three lots. In 1997 and 2000, the Chan family bought two of the parcels (middle and southern lots) for \$14.6 million. They made plans to make some badly needed renovations to the buildings and the boathouse, but ~~eventually sought to sell the property instead.~~ In 2008, one two-acre parcel of the property (the north lot) with the former large guest house was sold separately by the Bishop Estate as a private residence for \$15.9 million. ~~The remaining Chan property is now offered for sale at \$80 million dollars (Brass 2009; Quill 2010).~~

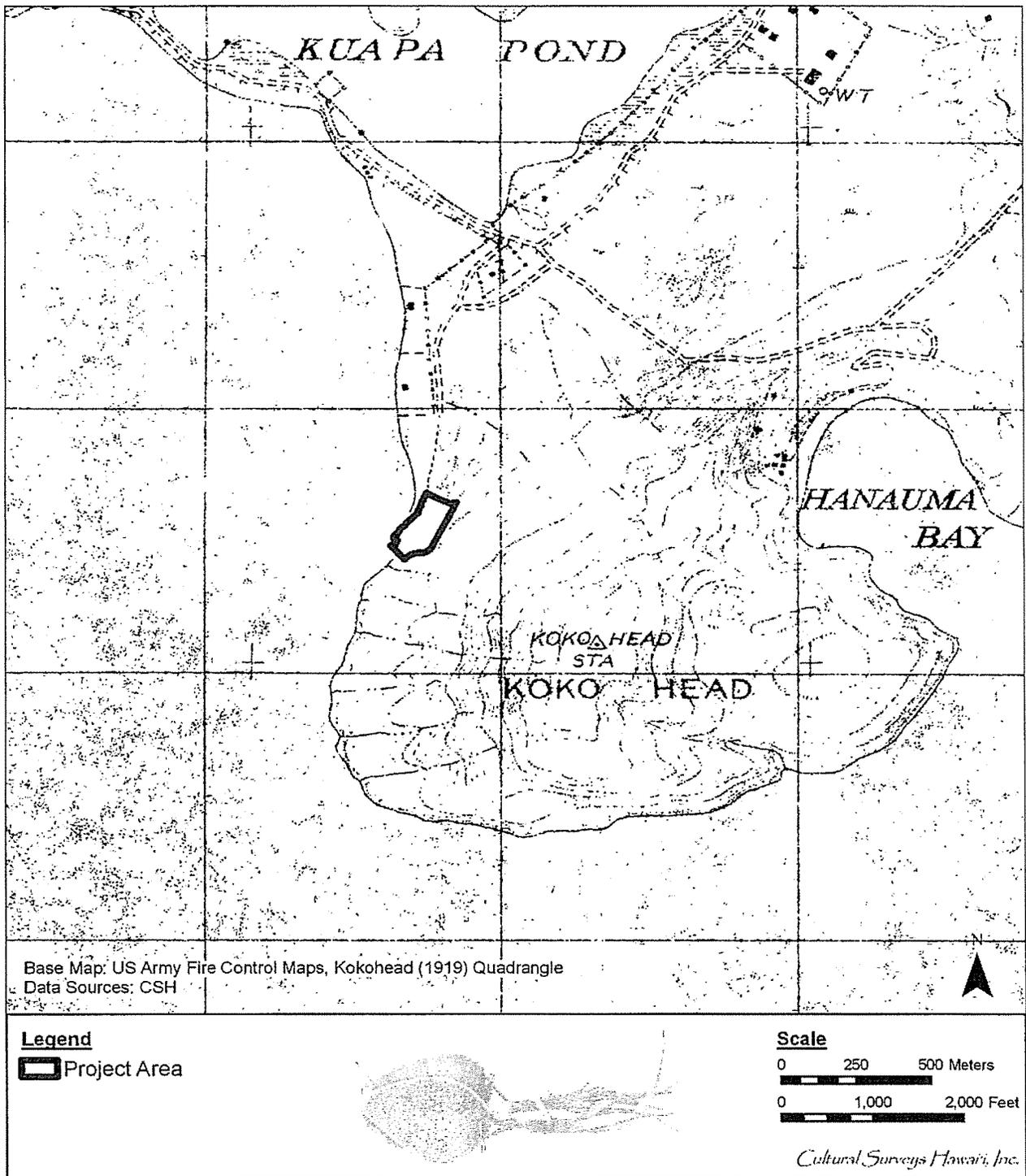


Figure 7. Portion of the 1919 U.S. Army Fire Control Map, Koko Head Quadrangle, showing the location of the current project area

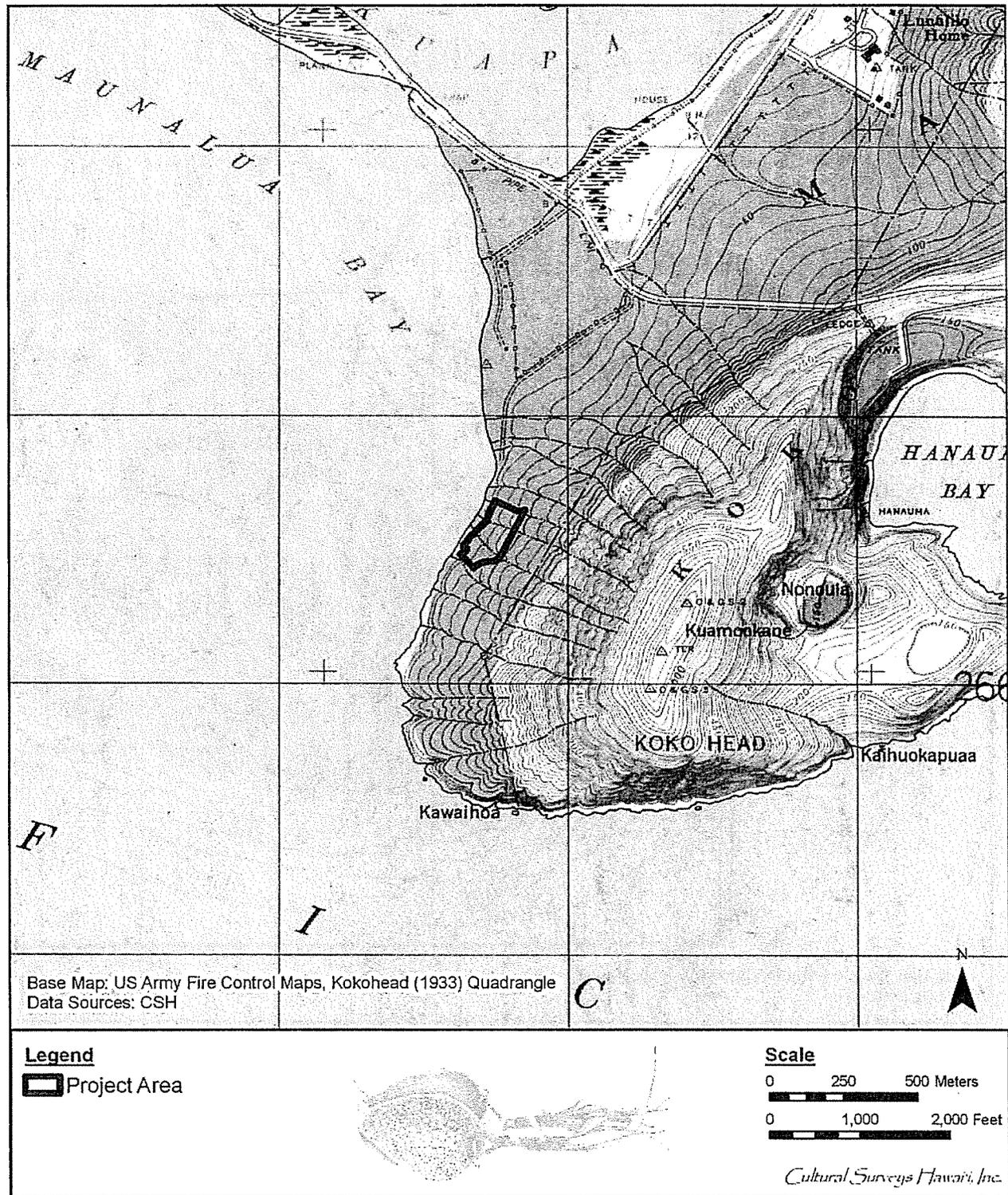


Figure 8. Portion of 1933 U. S. Army Fire Control Map, Koko Head Quadrangle, showing the project area

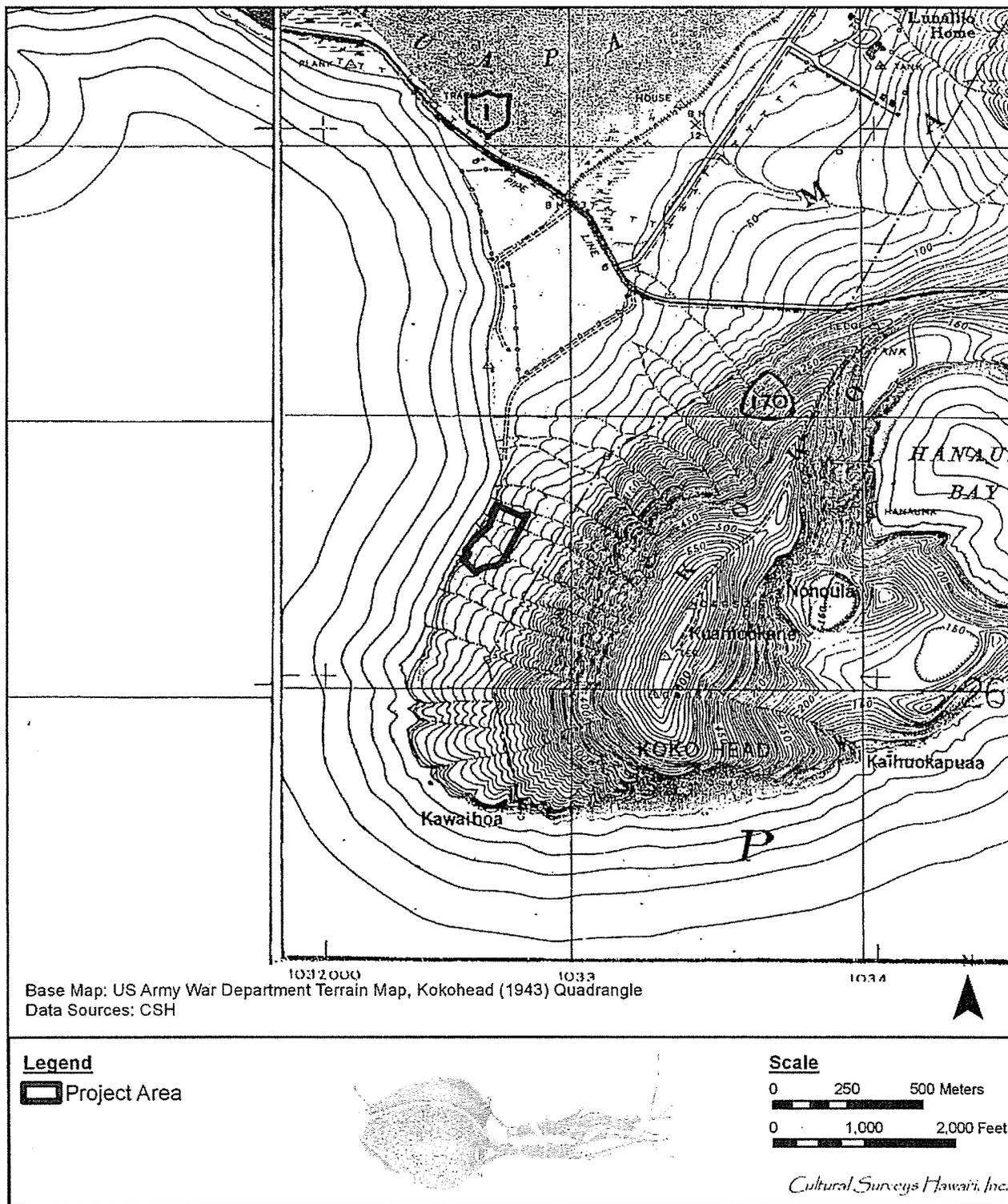


Figure 9. Portion of the 1943 U.S. Army War Department Map, Makapu‘u and Diamond Head Quadrangles, showing the project area

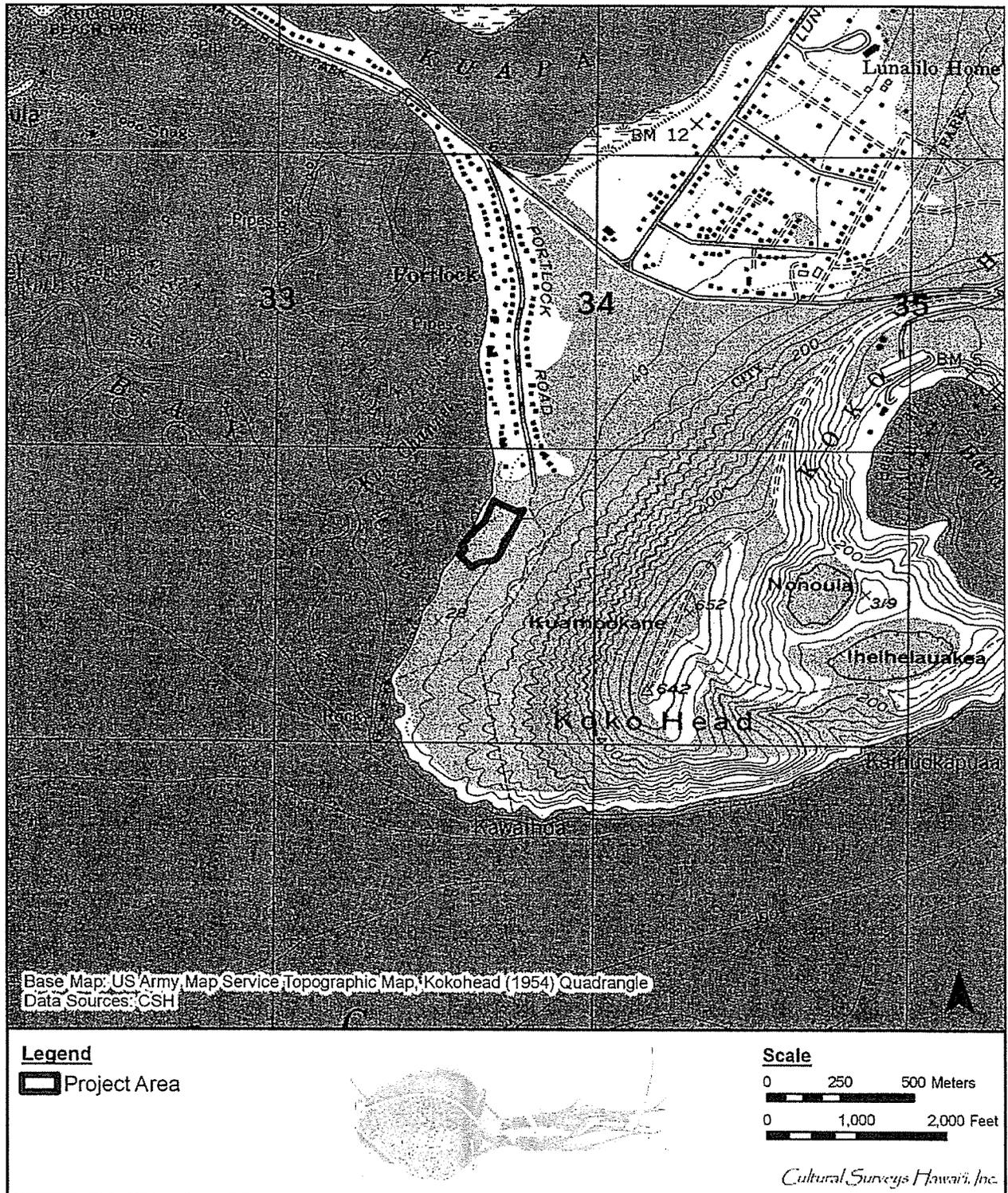


Figure 10. Portion of the 1954 U.S. Army Map Service (AMS) topographic map of O'ahu, Koko Head quadrangle, showing the project area

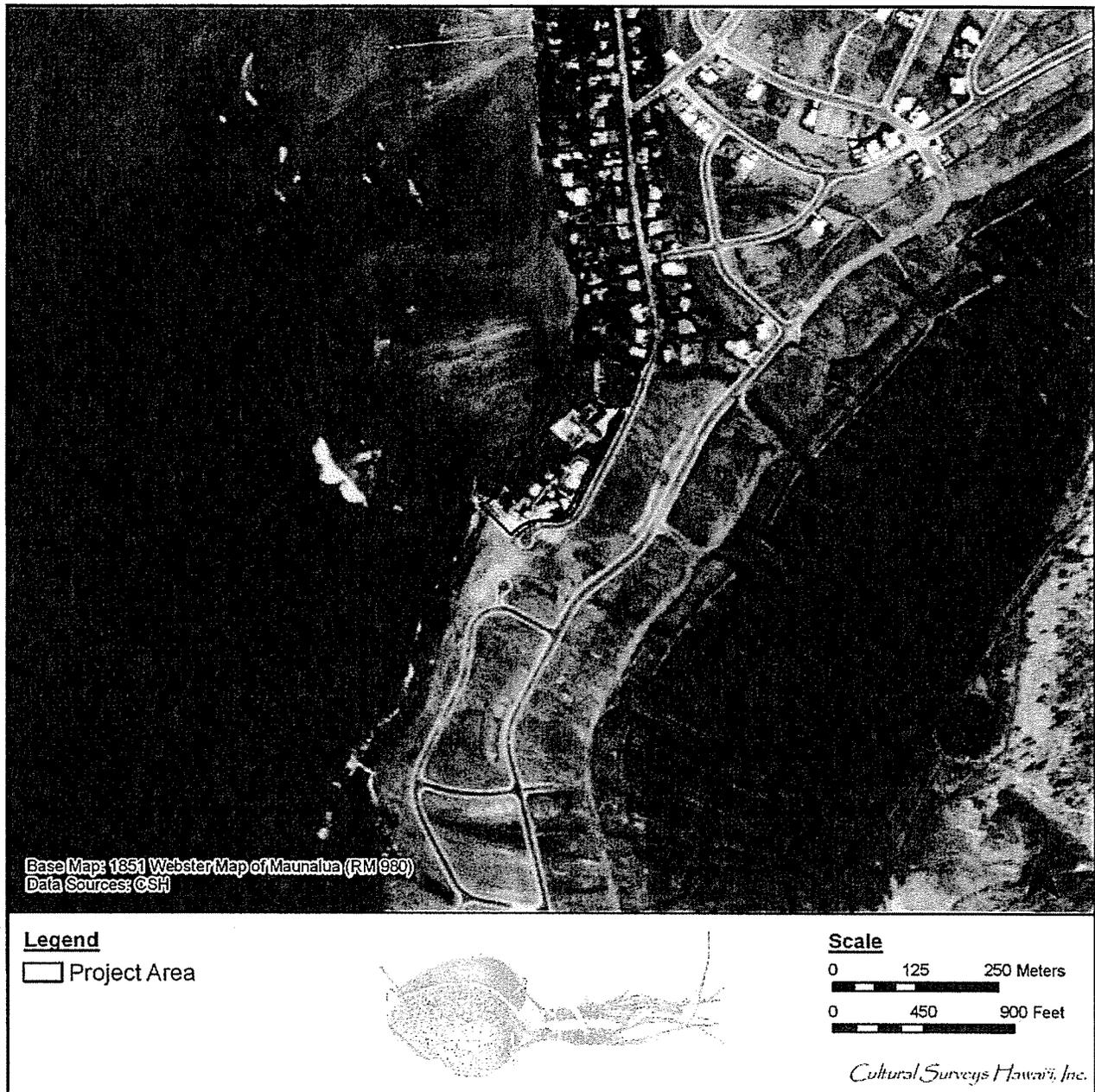


Figure 11. Portion of a 1963 high-altitude aerial photograph (U.S. Air Force 1963, Mission EKM-2CC-255), showing the project area (Kaiser Estate)

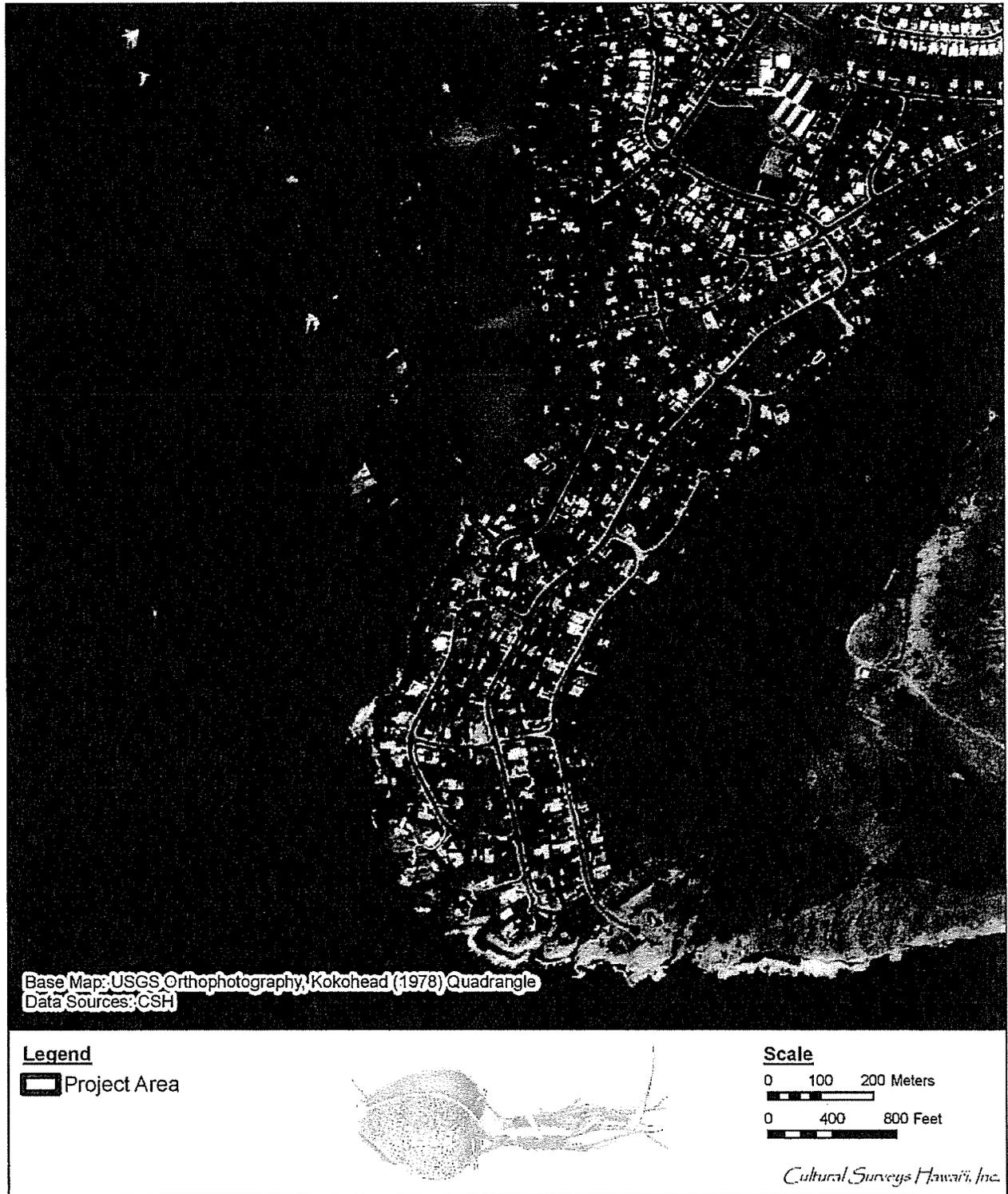


Figure 12. Portion of the 1977–78 U.S. Geological Survey Orthoimagery, Koko Head Quadrangle, showing project area



Figure 13. 1961 Aerial photograph of the development of the Maunaloa Triangle of Hawai'i Kai, showing initial construction of the marina lots and the Koko Marine Shopping Center; the Kaiser Estate can be seen at the extreme upper (south) end of the residential development area along the coast (below the white arrow) (Hancock 1983:28)

## Section 4 Previous Archaeological Research

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Several previous archaeological studies have been conducted in the coast areas of Maunaloa. These studies have documented habitation sites and other sites at the base of Kaluanui Ridge approximately 4,000 feet north of the project area, as well as numerous burial sites along Kalaniana'ole Highway about 1.8 kilometers northwest of the current project area. These studies have not documented any historic properties within or in the immediate vicinity of the project area. Previous archaeological studies conducted in the vicinity of the current study area are shown in Figure 14 and presented in Table 1. Previously identified historic properties located near the current project area are shown in Figure 15 and presented in Table 2. The following is a summary of these archaeological studies.

### 4.1 Early Archaeological Surveys

The first archaeological survey in Maunaloa was conducted by McAllister (1933) in 1930. As part of his nine-month, island-wide, archaeological survey of O'ahu, McAllister located, mapped, and described 49 archaeological sites in the Maunaloa region. Of these 49 sites, five sites are located in general proximity to the project area (Sites 42, 43, 47, 48 and 49).

#### Site 42. Hawea heiau, Hawea, Maunaloa

Only the western portion of the heiau remains, for stones were used in reconstructing the walls of the Maunaloa fishpond. Present remains indicate two or more terraces with low walls. A small stone-paved terrace on the southwest corner was 22 by 29 feet with a wall on the west side 3-5 feet high inside and 8 feet high outside and 4 feet wide. In the paving is a rectangular pit 31 by 24 inches by 33 inches deep. On the sea side of this terrace is a triangular step like area which has a paving of small stones superimposed upon larger stones. It is 2 feet above the ground and 2.5 feet lower than the terrace paving. Adjoining the land side of the terrace is a larger sloping dirt-paved terrace approximately 50 by 47 feet with a 2-foot stone facing to the lower terrace. On either side there are low stone walls 1 to 2 feet high. On the land side is a sharp ascent to the cliff. Throughout the walls and paving there is much old and weathered coral. Southeast of these two terraces are evidences of three narrow dirt terraces faced with stones to a height of 3 and 4 feet. Thrum says the heiau was 'about 75 feet square.' [McAllister 1933:66]

#### Site 43. Dwelling site at the mouth of Hahaione Valley, foot of Kaluanui

The portion of the house foundation which remains is 22 feet long, evenly edged with stones 1 to 2 feet long to a height of 1.5 feet. The width could not be determined, though two pits were dug into the garden which covers most of the platform. Ash, charcoal, broken glass, fish scales, decayed kukui shells, sea shells and a well-made top of a pounder were unearthed. According to Manuel Silva the grass hut was occupied by a Chinese 25 years ago, though the site is Hawaiian.

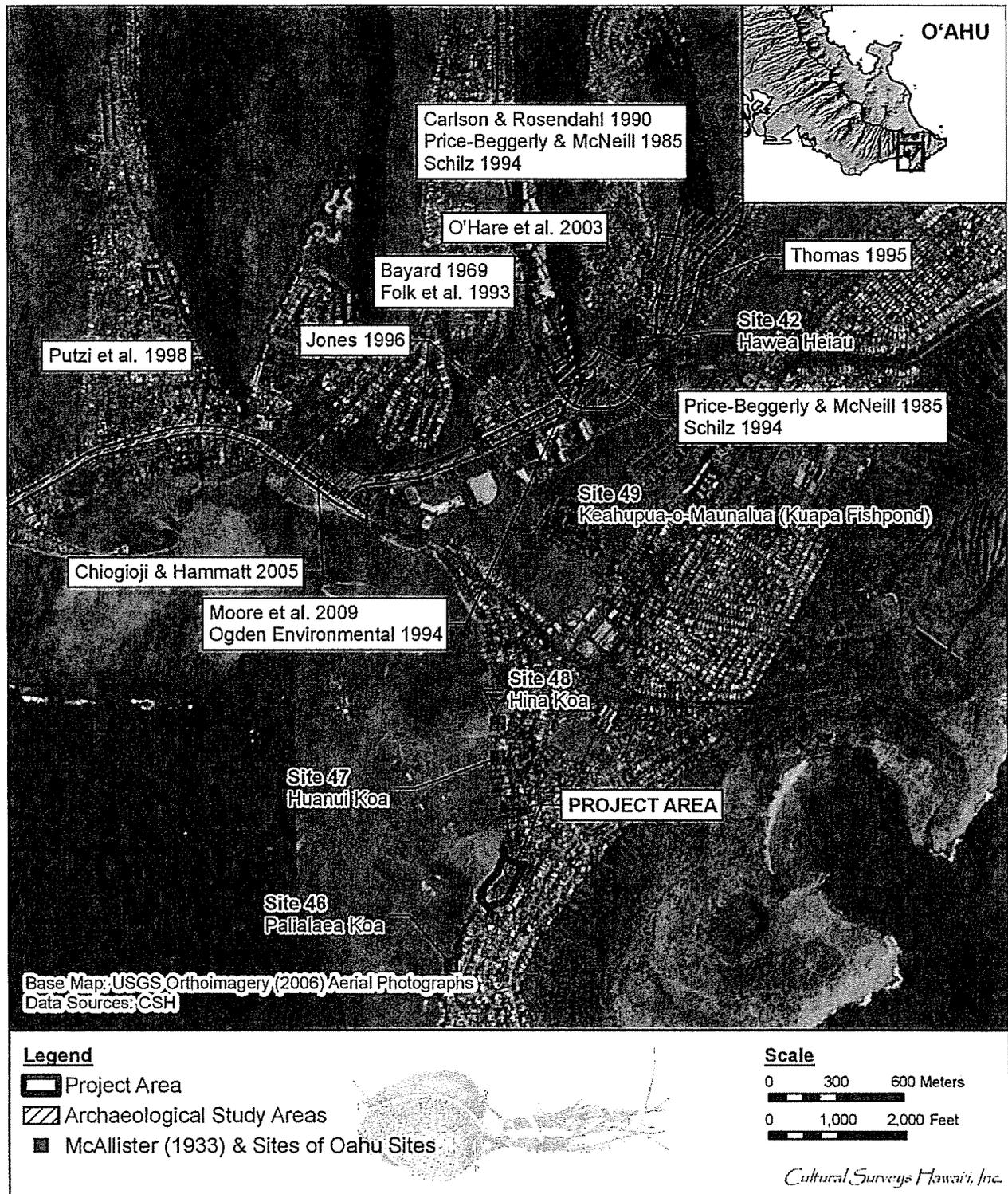


Figure 14. Previous archaeological studies in the vicinity of the project area

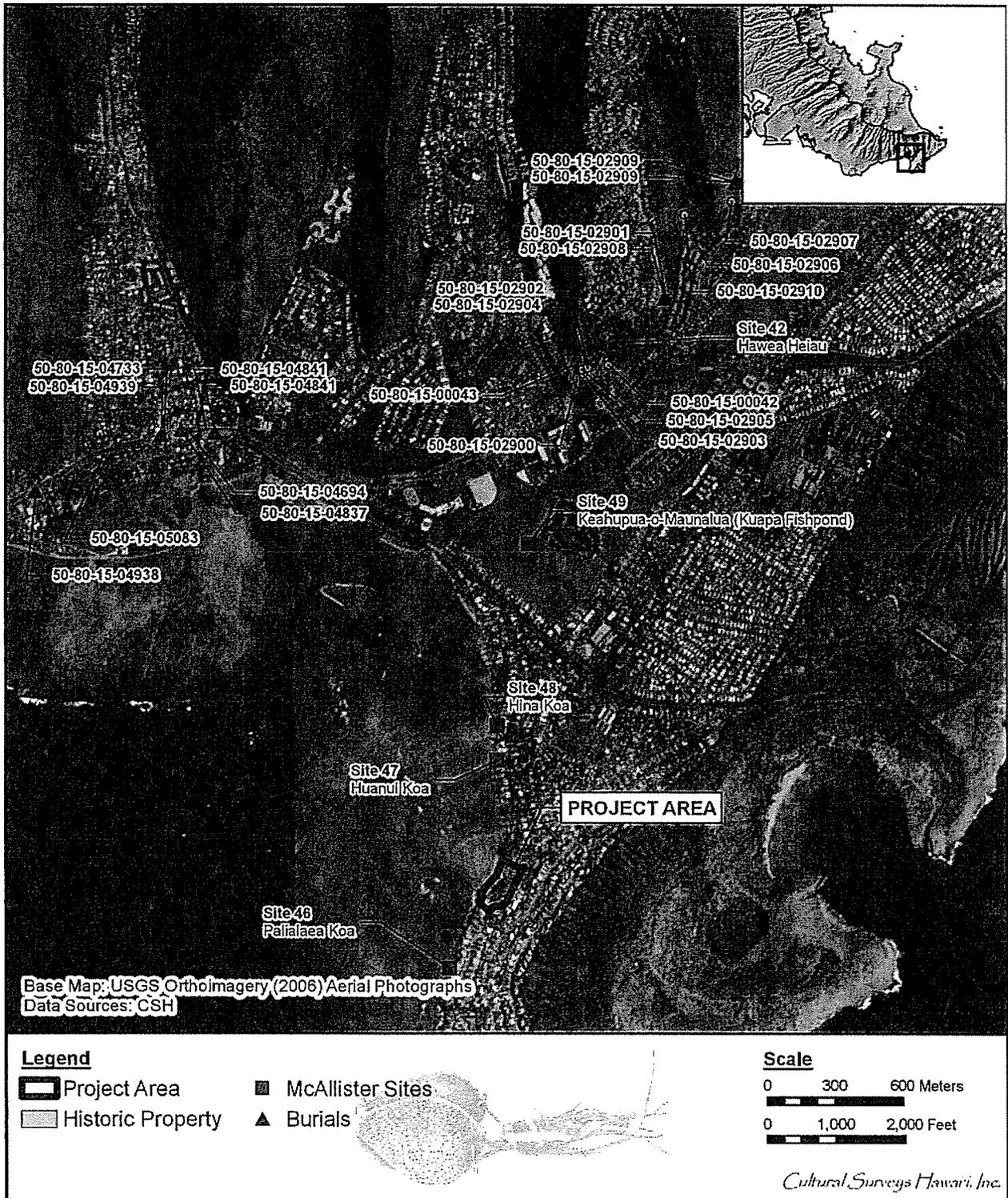


Figure 15. Archaeological sites in the vicinity of the project area

Table 1. Previous Archaeological Studies Located in the Vicinity of the Project Area

Reference	Type of Investigation	Location	Results
McAllister 1933	Island-wide Survey	O'ahu Island	Forty-nine sites were located within the Maunalua area; six sites were identified in proximity to the current study area: Site 42. Hawea Heiau Site 43. Dwelling site Site 46. Paliālaea Ko'a Site 47. Huanui Ko'a Site 48. Hina Ko'a Site 49. Keahupua-o-Maunalua Fishpond (Kuapā)
Bayard 1969	Limited Survey, Mapping, and Excavations	Kaluanui Ridge at the Mouth of Haha'ione Valley	Site O-16 (McAllister Site 43) identified as a complex consisting of five rock shelters, several platforms, one well, and one enclosure (interpreted as a historic pigpen).
Price-Beggerly and McNeill 1985	Archaeological Reconnaissance	Kaluanui Ridge at the Mouth of Haha'ione Valley	Twelve historic properties were identified: SIHP # -2900, terraced platform with 15 associated petroglyphs; SIHP # -2901, natural stone cavity complex; SIHP # -2902, large cave (may correlate with Bayard's (1969) Feature E; SIHP # -2903, wall and possibly associated platform; SIHP # -2904, platform; SIHP # -2905, natural stone cavity; SIHP # -2906, modern habitation area; SIHP # -2907, modified cave complex; SIHP # -2908 correlates with Thomas (1995) Site O-5, above; SIHP # 2909, natural stone cavity with one historic burial; SIHP # -2910, cavity/cave complex with basalt flakes; SIHP # -0042, possible remnant of McAllister's (1933) Site 42, Hawea Heiau, above.

Reference	Type of Investigation	Location	Results
Carlson and Rosendahl 1990	Supplemental Archaeological Inventory Survey	TMK: (1) 3-9-008:013 por.	Survey entailed reevaluation of historic properties encountered within the Kaluanui 1 parcel during the Price-Beggerly and McNeill (1985) reconnaissance survey.
Folk et al. 1993	Archaeological Inventory Survey	TMK: (1) 3-9-008:013 por.	Survey recommended changing the functional interpretation of SIHP # 50-80-15-2900 from habitation platform to a temporary, open air, multi-use ridge site.
Schilz 1994	Archaeological Assessment	TMKs: (1) 3-9-008:013 por. and :040 por.	Study produced a composite map showing the location of McAllister's (1933) Site 42, Hawea Heiau and Price-Beggerly and McNeill's (1985) SIHP # -0042; determined that 50-80-15-2900, -2903, -2904, and 0042 were impacted or completely destroyed by grubbing activities.
Ogden Environmental 1994	Data Recovery Plan and Limited Subsurface Testing	TMK: (1) 3-9-008:039	Concluded that grubbing activities partially destroyed SIHP # -2900 Features 1 and 2. Conducted vegetation clearance which exposed a stone wall and a surface artifact scatter. Excavation of two test units documented a rich traditional Hawaiian cultural deposit.
Thomas 1995	Excavation Report	Toe of Kaluanui Ridge	Recorded Site O-5, rock shelter with temporary habitation/burial function; four human burials identified and later designated SIHP # 50-80-15-2908.
Jones 1996	Archaeological Inventory Survey	TMKs: (1) 3-9-008:013 por. and 3-9-010:001 por.	Three historic properties were identified within Kamilonui 1 parcel: SIHP # -4946, rock pile; SIHP # -4947, bedrock cavity containing one human molar; SIHP # -4948, historic rock wall.
Putzi et al. 1998	Archaeology Monitoring Report	Kalaniana'ole Highway between East Halema'uma'u Road and Keahole Street	Ten sites were identified during monitoring; seven of these sites (SIHP # -4694, -4733, 4837, 4841, 4938, 4939, and -5083 were in the Kuli'ou'ou to Maunalua area, including three single-burial sites, one burial ground/cultural deposit, and three historic cultural deposits.

Reference	Type of Investigation	Location	Results
O'Hare et al. 2003	Archaeological Assessment	TMK: (1) 3-9-008:042	Determined that SIHP # -2908 was no longer significant and recommended no further work.
Chiogioji and Hammatt 2005	Archaeological Literature Review and Field Inspection	Between Keāhole Street and Hawai'i Kai Drive	It is unlikely any subsurface historic properties are present beneath the highway, particularly on its <i>mauka</i> side where the improvement project was planned. Additionally, in light of the extensive dredging within the pond itself during the Hawai'i Kai development, it is unlikely that any of the original pond deposits remain undisturbed beneath the project area.
Moore et al. 2009	Archaeological Inventory Survey	TMK: (1) 3-9-008:039	Reevaluated two previously identified historic properties: SIHP # -0043, habitation complex under Criterion D; recommend no further work; SIHP # -2900, agricultural/habitation complex under Criterion C,D, and E; recommended for data recovery and preservation.

Table 2. Archaeological Sites in the Vicinity of the Project Area

Site Number	Site Type/Name	Location	Reference
42	Hāwea Heiau	At the intersection of Hawai'i Kai Drive and Keāhole Street, at the base of Kaluanui Ridge (Mariner's Ridge)	McAllister 1933
50-80-15-0042	Possible remnant of McAllister's (1933) Site 42, Hāwea Heiau, above	At the intersection of Hawai'i Kai Drive and Keāhole Street, at the base of Kaluanui Ridge (Mariner's Ridge)	Price-Beggerly and McNeill 1985; McAllister 1933
50-80-15-0043 (Bayard Site O-16)	Dwelling site (McAllister 1933); Habitation complex (Moore et al. 2009)	Kaluanui Ridge at the mouth of Haha'ione Valley	McAllister 1933; Moore et al. 2009
50-80-15-0043	Habitation complex	Kaluanui Ridge at the mouth of Haha'ione Valley	Moore et al. 2009
46	Fishing shrine ( <i>ko'a</i> ) known as Palialaea	Portlock, western base of Koko Head	McAllister 1933

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TMK: (1) 3-9-026: 044, 045, 046, 047, and 048.

Site Number	Site Type/Name	Location	Reference
47	Fishing shrine ( <i>ko'a</i> ) known as Huanui	Portlock, western base of Koko Head	McAllister 1933
48	Fishing shrine ( <i>ko'a</i> ) known as Hina	Portlock, western base of Koko Head	McAllister 1933
49	Keahupua-o-Maunalua Fishpond (Kuapā)	Maunalua area, enclosed water inlet now referred to as Koko Marina	McAllister 1933
50-80-15-2900	Terraced platform with 15 associated petroglyphs (Price-Beggerly and McNeill 1985); Agricultural/habitation complex (Moore et al. 2009)	The southern terminus of Kaluanui Ridge	Moore et al. 2009; Price-Beggerly and McNeill 1985
50-80-15-2901	Natural stone cavity complex	The eastern slope of Kaluanui Ridge	Price-Beggerly and McNeill 1985
50-80-15-2902	Large cave (may correlate with Bayard's [1969] Feature E)	The southern terminus of Kaluanui Ridge	Price-Beggerly and McNeill 1985
50-80-15-2903	Wall and possibly associated platform	Kaluanui Ridge at the mouth of Haha'ione Valley	Price-Beggerly and McNeill 1985
50-80-15-2904	Platform	Kaluanui Ridge at the mouth of Haha'ione Valley	Price-Beggerly and McNeill 1985
50-80-15-2905	Natural stone cavity	The southern terminus of Kaluanui Ridge	Price-Beggerly and McNeill 1985
50-80-15-2906	Modern habitation site	The eastern slope of Kaluanui Ridge	Price-Beggerly and McNeill 1985
50-80-15-2907	Modified cave complex with basalt flakes	Kaluanui Ridge at the mouth of Haha'ione Valley	Price-Beggerly and McNeill 1985
50-80-15-2908 (initially Bayard Site O-5)	Habitation site; four human burials	Kaluanui Ridge at the mouth of Haha'ione Valley	Smart 1965; Bayard 1965; Thomas 1995
50-80-15-2909	Natural stone cavity with one historic burial	Kaluanui Ridge at the mouth of Haha'ione Valley	Price-Beggerly and McNeill 1985
50-80-15-2910	Cavity/cave complex with basalt flakes	The eastern slope of Kaluanui Ridge	Price-Beggerly and McNeill 1985
50-80-15-4694	Habitation – late pre-Contact to early historic	Kuli'ou'ou Ahupua'a, west of Kuli'ou'ou Stream	Putzi et al. 1998

Site Number	Site Type/Name	Location	Reference
50-80-15-4733	Historic trash pits	Kuli'ou'ou Ahupua'a, west of Kuli'ou'ou Road	Putzi et al. 1998
50-80-15-4837	Burial	Kuli'ou'ou Ahupua'a, west of Kuli'ou'ou Stream	Putzi et al. 1998
50-80-15-4841	Burials (30); pre-Contact to historic habitation site	Kuli'ou'ou Ahupua'a, between Kawaihae and Kuli'ou'ou Streets, east of Kuli'ou'ou Stream	Putzi et al. 1998
50-80-15-4938	Burial	Kuli'ou'ou Ahupua'a, west of Kuli'ou'ou Road	Putzi et al. 1998
50-80-15-4939	Burial	Kuli'ou'ou Ahupua'a, west of Kuli'ou'ou Road	Putzi et al. 1998
50-80-15-5083	Historic trash pit	Kuli'ou'ou Ahupua'a, west of Kuli'ou'ou Road	Putzi et al. 1998

Below the house foundation and on the edge of the former pond wall is an enclosure, possibly a pigpen, 17 by 30 feet with walls approximating 3.5 feet high. About 50 feet north of the pen is a brackish well 3 feet in diameter with 3 feet of water. The sides have been faced with stones. As this is a low marshy region almost any such depression would be filled with water. [McAllister 1933:67]

Site 46            Paliialaea

Fishing shrine (ko'a) known as Paliialaea, for mullet. The shrine was at the edge of the water.

Site 47.            Huanui

Fishing shrine (ko'a) known as Huanui, for mullet. The shrine is not far from the one described in Site 48 and is an exact duplicate, except that it is slightly larger.

Site 48.            Hina

Fishing shrine (ko'a) on the beach, Honolulu side of Kuamoekane, known as Hina and built for scad (*akule*). The shrine is roughly square in shape with the corners rounded, and measures 16.5 feet across. It is formed by coral walls 1 foot high and from 1 to 2 feet wide. Inside the walls is a paving of small bits of coral and sand which is about 6 inches higher than the outside. Facing the sea is an entrance 2.5 feet wide. Just within the entrance are six sharp lava stones forming an oval about 1 foot wide and 1.5 feet long. It was here that the offering of fish was placed. A foot from the wall opposite the entrance are two coral stones embedded in the paving. They protrude about 6 inches.

Site 49.            Keahupua-o-Maunaloa fishpond

According to the Webster map of 1851 the pond covered 523 acres. In 1921 the water area was 301 acres with a swamp land of 125 acres. The water is brackish.

The old wall of the pond was approximately 5000 feet long. It appears to have been a sand embankment, faced on the top and seaward side with lava and some coral stones...According to Makea Napahi, my informant, the pond was built by Mahoe, her great-grandmother. When the pond had been only partially completed, the menehune (mythological little people) came and in one night finished the construction. Mr. Moe of the Kamehameha schools is of the opinion that a large fishing village formerly existed in Hahaione Valley at the head of the pond, which according to him, was not a pond, but an arm of the sea. The people from this village fished off Maunalua in their canoes, and when the pond was built it cut off their access to the sea and the village declined . . . [McAllister 1933:69]

## 4.2 Recent Archaeological Surveys

### 4.2.1 Bayard 1969

Limited survey and excavations were conducted by Donn Bayard on the south and west slopes of Kaluanui Ridge including portions of the current study area (Bayard 1969). The fieldwork was conducted as part of a University of Hawai'i course in archaeological field methods. Bayard identified four caves (Features A to D) and one platform on the west slope, one cave on the south slope (Feature E), and a series of platforms and surface structures in Haha'ione Valley. He designated the entire site as O-16. Bayard also excavated one enclosure in Haha'ione Valley, within the current study area, and produced a map of the general vicinity. After excavation, Bayard determined that the feature was an historic pigpen, and was undoubtedly the same pigpen described by McAllister as part of Site 43. The Bayard map also depicts the location of a modern well, several rock piles or mounds, and the road that extended along the base of Kaluanui Ridge.

### 4.2.2 Price-Beggerly and McNeill 1985

Stephen J. Athens, Ph.D., Archaeological Consultant conducted an archaeological reconnaissance on a total of 12 sites within two distinct survey areas located along the eastern slope (Kaluanui 1) and southern terminus (Kaluanui 2/3) of Kaluanui Ridge (Price-Beggerly and McNeill 1985).

Six historic properties were identified along the eastern slope of Kaluanui Ridge. SIHP # 50-80-15-2901 is described as a modified natural stone cavity complex that was recommended for excavation in order to determine the presence of human burials and/or cultural material. SIHP # 50-80-15-2906 was interpreted as a modern habitation area with no further archaeological work recommended. SIHP # 50-8015-2907 was described as a modified cave complex and was recommended for additional archaeological fieldwork to include vegetation clearance, detailed mapping, and the preparation of a research design to address subsequent research and excavation. SIHP # 50-80-15-2908 (Site O-5 described above) was recommended for further archaeological research to include the collection of all previously uncollected artifacts from the 1960s excavations described in Thomas (1995). SIHP # 50-80-15-2909 was described as a natural stone cavity complex containing one historic human burial. The preparation of a research design to include the removal of 100 percent of the cultural material and the human burial by a qualified archaeologist was recommended for SIHP # 50-80-15-2909. SIHP # 50-80-15-2910

was described as a cavity/cave complex with basalt flakes present on the cave floor. Vegetation clearance, detailed mapping, and the preparation of a research design to address subsequent research and excavation was recommended for SIHP # 5080-15-2910.

Six additional historic properties were identified along the southern terminus along Kaluanui Ridge: SIHP # 50-80-15-2900, -2902 to -2905, and -042. SIHP # 50-80-15-2900 was described as a terraced platform consisting of four features, pre- and post-Contact artifacts, and 15 petroglyphs including traditional Hawaiian and post-Contact forms. SIHP # 50-80-15-2900 is not situated where W. P. Thompson and E. H. place the Hawea Heiau in their 1932 map. Additionally, the dimensions of this site do not correlate with McAllister's (n.d.) field drawing for a site he believed to be Hawea Heiau, nor does it contain elements which McAllister recorded as present on Hawea, i.e., a pit in the lower terrace and abundant coral within the walls and on the surface of the terraces (Price-Beggerly and McNeill 1985:12-13). Preservation was recommended for SIHP # 50-80-15-2900.

SIHP # 50-80-15-2902 was described as a large cave with a sectioned opening of unknown function. SIHP # 50-80-15-2902 was interpreted as correlating with Bayard's (1969) Feature E. Preliminary subsurface testing was recommended in order to identify any buried cultural deposits. SIHP # 50-80-15-2903 was described as a dry-stacked, free standing basalt stone wall with a possible associated platform and cultural material including wooden fence posts and barbed wire. SIHP # 50-80-15-2903 was interpreted as part of an historic boundary wall and recommended for subsurface testing within the platform and additional recordation and mapping of the wall segment. SIHP # 50-80-15-2904 was described as a basalt stone platform with a coil of barbed wire lying on its surface. SIHP # 50-80-15-2904 was interpreted as the possible remnant foundation of a field house and was recommended for vegetation clearance, further recordation and mapping, and subsurface testing. SIHP # 50-80-15-2905 was interpreted as a natural stone cavity with no observable cultural material present and recommended for further investigation in order to determine the presence/absence of human burial remains.

SIHP # 50-80-15-0042 was identified by Price-Beggerly and McNeill (1985) as the possible remnants of McAllister's Site 42, Hawea Heiau. Time constraints prohibited sufficient vegetation clearance, mapping, or recordation at SIHP # 50-80-15-0042 and a correlation to McAllister's Site 42 could not be confirmed. SIHP # 50-80-15-0042 was recommended for further archaeological investigation to include vegetation/rubbish clearance under the supervision of an archaeologist and detailed mapping of the site in order to draw comparisons to McAllister's Site 42 field notes and maps (Price-Beggerly and McNeill 1985:36).

#### **4.2.3 Carlson and Rosendahl 1990**

Paul H. Rosendahl, Ph.D., Inc. (PHRI) conducted a supplemental archaeological inventory survey (Carlson and Rosendahl 1990) within the Kaluanui 1 parcel on the east slope of Kaluanui Ridge that was originally surveyed by Price-Beggerly and McNeill (1985). Historic properties that were previously identified by Price-Beggerly and McNeill were reevaluated during the study. SIHP # 50-80-15-2901 (natural stone cavity complex) was determined to be non-cultural and assessed as not significant. SIHP # 5080-15-2906 (habitation area) was determined to date to the historic period prior to 1960 and functioned as an agricultural area. SIHP # 50-80-15-2907 (modified cave complex) could not be relocated within the study area and was recommended for

no further work. Extensive excavations were conducted within SIHP # 50-80-15-2908 (cave) yielding historic trash, volcanic glass flakes, and midden. No further work was recommended. The burial located within SIHP # 50-80-15-2909 (stone cavity complex) was observed to be intact and considered to be a child of historic age as evidenced by direct associations with cloth and metal fragments. SIHP # 50-80-15-2909 was recommended for no further work. The cultural material (basalt flakes) originally identified within SIHP # 50-80-15-2910 (cavity/cave complex) by Price-Beggerly and McNeill (1985) could not be located and no additional cultural material was observed. SIHP # 50-80-15-2910 was recommended for no further work.

#### **4.2.4 Folk, Borthwick and Hammatt 1993**

CSH conducted an archaeological inventory survey for the proposed five-acre Kaluanui Park Development at Maunaloa (Folk Borthwick and Hammatt 1993). Two previously identified historic properties, SIHP # 50-80-15-0043 and -2900, were documented. SIHP # 50-80-15-0043 (McAllister Site 43, Bayard Site O-16) was observed to have been severely impacted by bulldozing and thus was no longer recommended to be archaeologically significant. The only observable remnant of SIHP # 50-80-15-0043 was the well, which contained standing water. SIHP # 50-80-15-2900 was reassessed as a temporary multi-use, open air, ridge site on the basis of limited subsurface testing, sparse midden and artifact content, and background research. This site was recommended for preservation with no further research.

#### **4.2.5 Schilz 1994**

Ogden Environmental and Energy Services conducted an archaeological assessment and evaluation of Kaluanui 1 and Kaluanui 2/3, originally surveyed by Price-Beggerly and McNeill (1985), and an evaluation of the impact to previously recorded sites by grubbing in Kaluanui 2/3 (Schilz 1994). The composite map produced by Schilz (1994) in conjunction with site relocation efforts concluded that the location of McAllister's Site 42 (Haweia Heiau) is not the same site as documented by Price-Beggerly and McNeill in 1985. McAllister's Site 42 was located closer to the base of Kaluanui Ridge and was apparently destroyed during road construction of Kaluanui road. SIHP # 50-80-15-2900, -2903, -2904, and 0042 were determined to have been impacted or completely destroyed by grubbing.

#### **4.2.6 Ogden Environmental 1994**

Ogden Environmental also prepared a data recovery plan for SIHP # -2900 in July of 1994 (Ogden Environmental and Energy Services Company, Inc. 1994), which included an assessment of the damage caused by grubbing activities and limited subsurface testing. It was concluded that grubbing activities on May 4 and 5, 1994 had partially destroyed Features 1 and 2 at SIHP # -2900 (for feature description see Price-Beggerly and McNeill 1985). Limited subsurface testing was also conducted in order to determine the extent of the pre-Contact cultural deposit documented by Folk et al. (1993). Vegetation clearance exposed a larger area of deposit than previously documented as well as a stone wall on the west side and several artifacts scattered upon the surface, including three large volcanic glass flakes, a piece of branch coral, and a pounder preform. Two test units (Test Unit 3 and 4) were excavated in the vicinity of Folk et al.'s test unit. A cultural deposit was encountered at ten cm below surface containing abundant

charcoal, water-rounded coral and basalt pebbles, volcanic glass, basalt flakes, four basalt flakes with polish, a bone fishhook, and abundant midden.

#### 4.2.7 Thomas 1995

Beginning in 1962, excavations were conducted at a small overhang shelter or cave, designated Site O-5 on the east slope of Kaluanui Ridge as part of a University of Hawai'i archaeological field school led by Wilhelm Solheim. A draft excavation report (Smart 1965) was prepared but never finalized, and an artifact analysis was conducted (Bayard 1965). Eventually a short report was presented in the Society for Hawaiian Archaeology's journal *Hawaiian Archaeology* (Thomas 1995).

Excavation identified eight stratigraphic layers within the cave deposit, three of which predated AD 1450, three that spanned from AD 1450 to the post-Contact period (after AD 1798), and two in the post-Contact period. The entire soil deposit of the cave floor was excavated. The deposit contained food remains, traditional Hawaiian artifacts, and historic artifacts, suggesting that the cave was used for temporary habitation. Four burials were disinterred from the cave. The intrusive burial pits suggested that the last use of the cave was for burial internment.

#### 4.2.8 Jones 1996

Aki Sinoto Consulting conducted an archaeological inventory survey of nine parcels within Maunalua Ahupua'a, including one parcel that extended along the western side of Kuapa Pond (Jones 1996). No historic properties were identified in this parcel. The nearest historic properties are located in the Kamilonui 1 parcel, at the base of Kamilonui Ridge. The three historic properties include SIHP # 50-80-15-4946, -4947, and -4948. SIHP # 50-80-15-4946 was interpreted as an isolated rock pile built upon an outcrop exposure and was recommended for no further work. SIHP # 50-80-15-4947 was interpreted as a small bedrock cavity containing a single human molar and was recommended for inclusion in a project-specific burial treatment plan. SIHP # 50-80-15-4948 was interpreted as an historic core-filled basalt stone wall and was recommended for no further work.

#### 4.2.9 Putzi, Denham, Eblé, and Pantaleo 1998

Garcia and Associates (GANDA), was contracted by Engineers Surveyors Hawaii, Inc. (ESH) to provide archaeological monitoring services during construction activities for the Phase II Widening of Kalaniana'ole Highway. Phase II construction activities were undertaken within a 1.4-mile corridor of Kalaniana'ole Highway between East Halema'uma'u Road and Keahole Street in Kuli'ou'ou and Maunalua Ahupua'a. Archaeological monitoring of Phase II construction commenced on May 24, 1993 and terminated on July 21, 1995. Ten sites were identified in all. Three sites were identified in the Kuli'ou'ou to Maunalua area with one human burial each, SIHP # 50-80-15-4837, 4938, and -4939. One site in Maunalua, -4841 had 30 burials and a habitation cultural layer with artifacts dating from the pre-Contact period to the historic period. Three sites in the Kuli'ou'ou to Maunalua area, -4694, -4733, and -5083, had only historic habitation trash/cultural deposits. The report also includes information on SIHP -4838 (one human burial), -4840 (one human burial), and -5084 (one human burial), which are in the *ahupua'a* of Niu to the west of the Project area. These three Niu sites are not shown on Figure 15 or listed in Table 2.

Skeletal remains representing 40 human individuals interred within 29 discrete burial features (Numbered Burials 2–29) were encountered during monitoring activities in the ten sites. Burial site boundaries were determined according to spatial arrangements. SIHP # -4841 is interpreted as being a cemetery/burial-ground. This site exhibits a blending of traditional Hawaiian burial practices/methods with those of the historic period and the presence of both pre-Contact artifacts and historic period artifacts (e.g., the presence of both extended coffin burials and flexed sand burials containing no associated historic period artifacts). Remains from Burial 2, Burial 3 of SIHP # -4838, Burial 5 of SIHP # -4840, Burial 4, 6, 7, 8, 9, 10, 12, 13, 14, 19, 20, 21 of SIHP # -4841, Burial 18 of SIHP # -4939, Burial 22 of SIHP # -5084, and Burial 23 (no site designation) were recovered and later reinterred in two burial vaults adjacent and west of Kuli'ou'ou Stream. Burial 11 of SIHP # -4938 and Burials 15, 16, 17, 24, 25, 26, 27 and 29 of SIHP # -4841 are preserved in situ.

#### 4.2.10 O'Hare, Shideler and Hammatt 2003

CSH conducted an archaeological assessment in support of the proposed Lalea rockfall mitigation along the eastern slope of Kaluanui Ridge (O'Hare et al. 2003). The study revisited SIHP # 50-8015-2908, which was previously identified by Price-Beggerly and McNeill (1985). SIHP # 50-80-15-2908 was determined to be no longer significant and recommended for no further work.

#### 4.2.11 Chiogioji and Hammatt 2005

In 2005, CHS (Chiogioji and Hammatt 2005) conducted an archaeological literature review and field inspection and literature review for a highway improvement project on an approximately 305-meter (1,000 ft) long section on the *mauka* side of Kalaniana'ole Highway, between Keāhole Street and Hawai'i Kai Drive, in Maunaloa Ahupua'a.

The Kalaniana'ole Highway alignment between Keāhole Street and Hawai'i Kai Drive sits on landfill deposited within Kuapā Pond in the 1960s during the construction of the Hawai'i Kai development. It is thus unlikely that any subsurface historic properties are present beneath the highway, particularly on its *mauka* side where the improvement project was planned. Additionally, in light of the extensive dredging within the pond itself during the Hawai'i Kai development, it is unlikely that any of the original pond deposits remain undisturbed beneath the project area. All properties documented during that project—including human burials and non-burial sites—were encountered in Jaucus sand deposits beneath the highway corridor in Kuli'ou'ou Ahupua'a, to the northwest of the current project area.

#### 4.2.12 Moore, Liebhardt, Takahashi, and Kennedy 2009

Archaeological Consultants of the Pacific, Inc. (ACP) conducted an archaeological inventory survey at the base of Kaluanui Ridge (Moore et al. 2009). The study reassessed the function, significance evaluations, and recommendations for two previously identified historic properties, SIHP # 50-80-15-0043 and SIHP # 50-80-15-2900.

SIHP # 50-80-15-0043 was interpreted as a habitation complex consisting of five features and was evaluated as significant under Criterion D (may be likely to yield information important in prehistory or history). The five features of SIHP # 50-80-15-0043 included a crushed coral and

dirt roadway, a mortared stone well, a stone-ringed tree, one upright stone, and an area of cobble paving. SIHP # 50-80-15-0043 was recommended for no further work.

SIHP # 50-80-15-2900 was reinterpreted as an agricultural/habitation complex consisting of five features and was evaluated as significant under Criterion C (embodies the distinctive characteristics of a type, period, or method of construction), Criterion D (may be likely to yield information important in prehistory or history), and Criterion E (value to the Native Hawaiian people or to another ethnic group due to associations with cultural practices). The five features of SIHP # 50-80-15-2900 included remnant terracing and a stone wall (Feature 1 A-E), petroglyphs (Feature 2 A-D), a terrace (Feature 3), a U-shaped enclosure (Feature 4), and a modified outcrop (Feature 5). SIHP # 50-80-15-2900 was recommended for data recovery and preservation.

## Section 5 Field Inspection of Project Area

Cultural Surveys Hawai'i archaeologists David W. Shideler and Constance R. O'Hare, under the general supervision of Dr. Hallett H. Hammatt, made a field inspection of the 5.4-acre parcel on September 5, 2013 (Figure 16 to Figure 28). The archaeologists walked over all open areas. Both the former main house and the boat house were gutted and open. Most of the former landscaped areas, especially at the back of the lot (*mauka* side) had been cleared of vegetation, and are now covered with dirt roads and construction stockpile areas on bare dirt or concrete. All of the former pools and landscaping ponds had been drained. Thus, visibility for the field inspection was excellent. There are many rock walls and rock landscaping clusters on the property. These were visibly inspected to make sure they were not rock with petroglyphs that had been moved to the property. The archaeologists did not find any surface archaeological features. The structures on the Kaiser Estate, built between 1959 and 1960 and therefore more than 50 years old, are categorized as a historic property. However, as noted, the only remaining portions of the main house are a few support pillars, and the floors and wooden portions of the concrete boathouse are in poor condition. Most of the landscaped gardens have been bulldozed but many tall rock walls are intact. The servants' quarters house is the only intact large structure. Present views of the property are shown in the following field inspection photographs taken September 5, 2013.

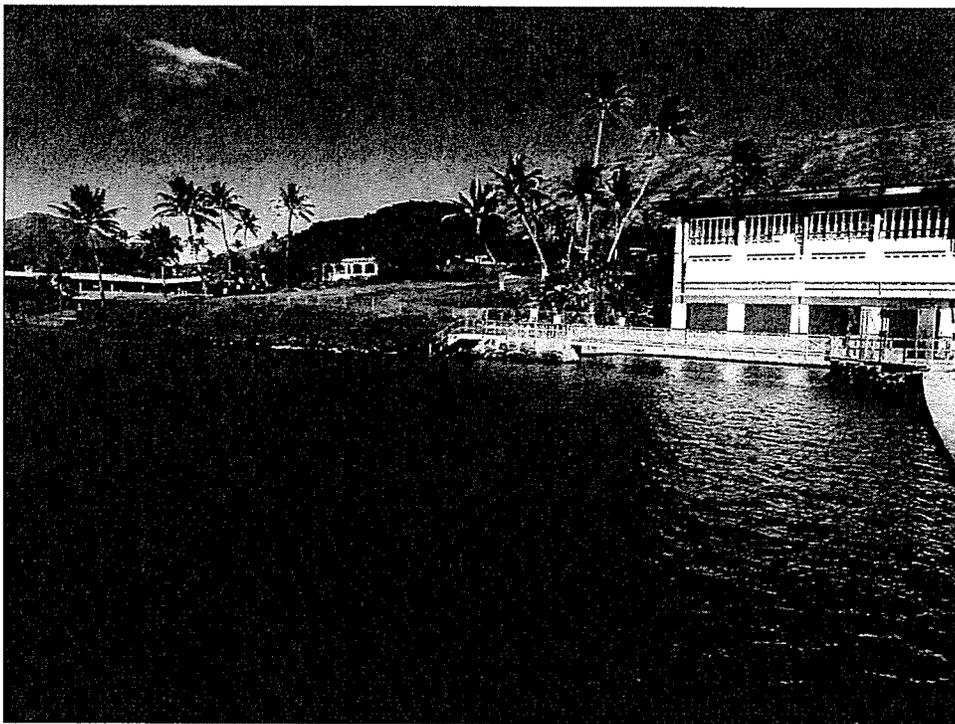


Figure 16. Property from boat harbor, view to the northeast; from right to left: boathouse, service quarters, pavilion above swimming pool, main house (CSH photo)

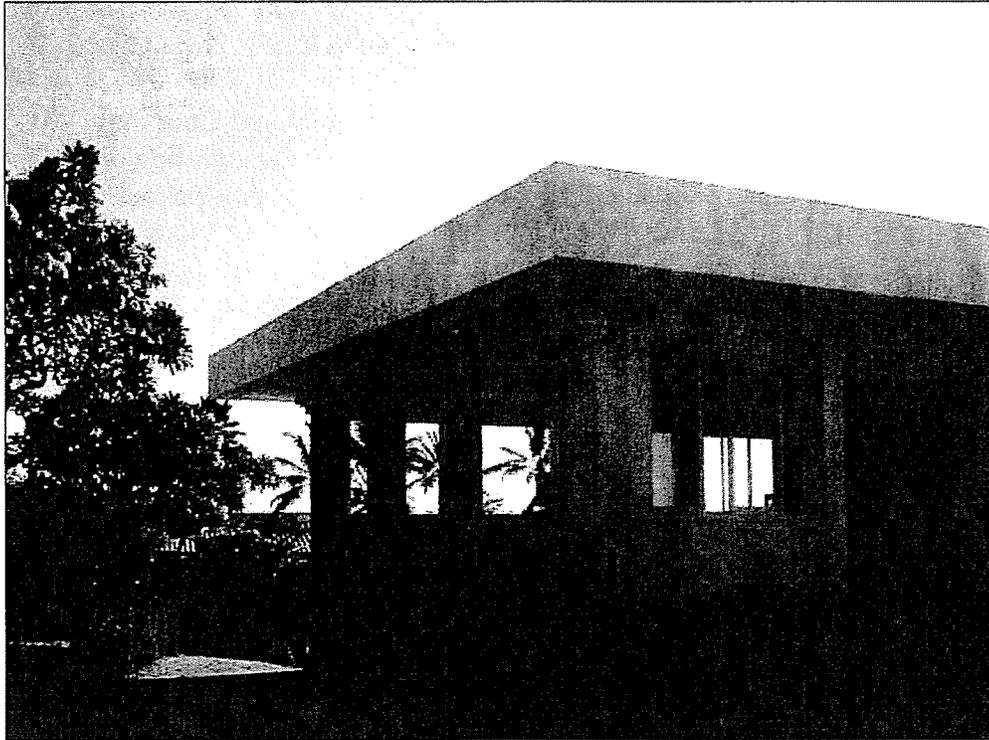


Figure 17. Harbor Villa and boathouse at south end of property, view to the northwest (*makai*) (CSH photo)

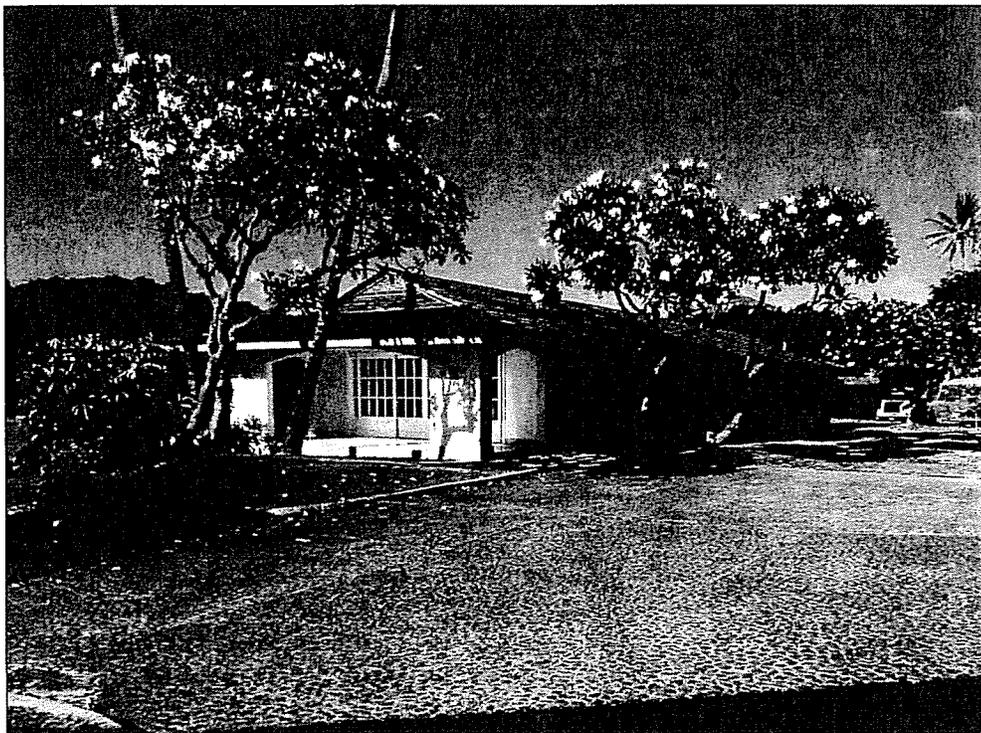


Figure 18. Service quarters, central section of property, view to the north (CSH photo)

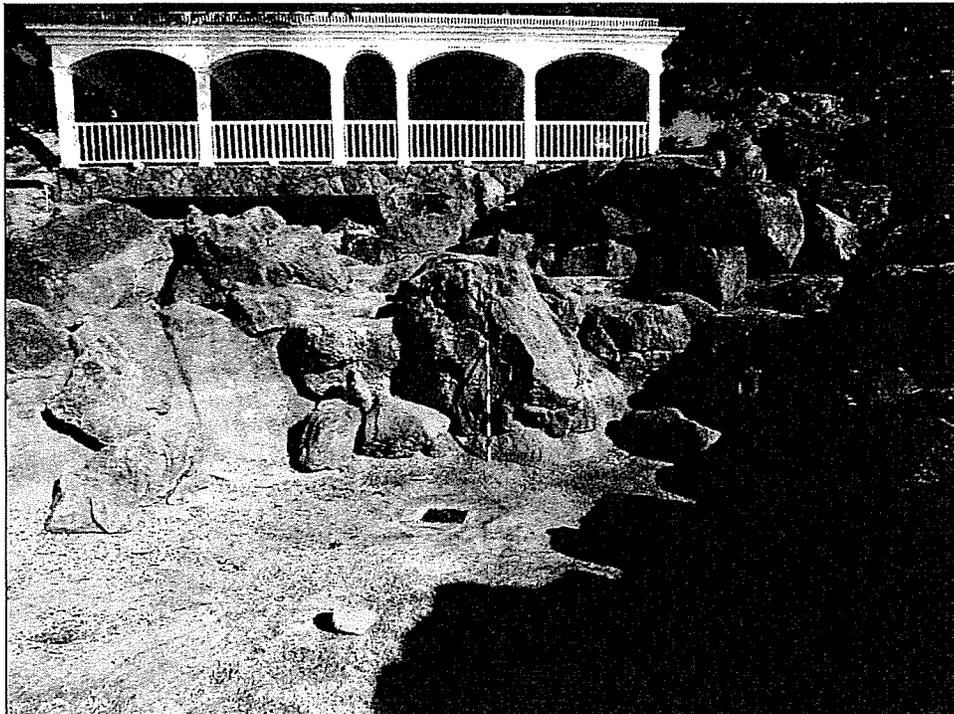


Figure 19. Pavilion above drained water feature with large boulders, view to southeast (CSH photo)

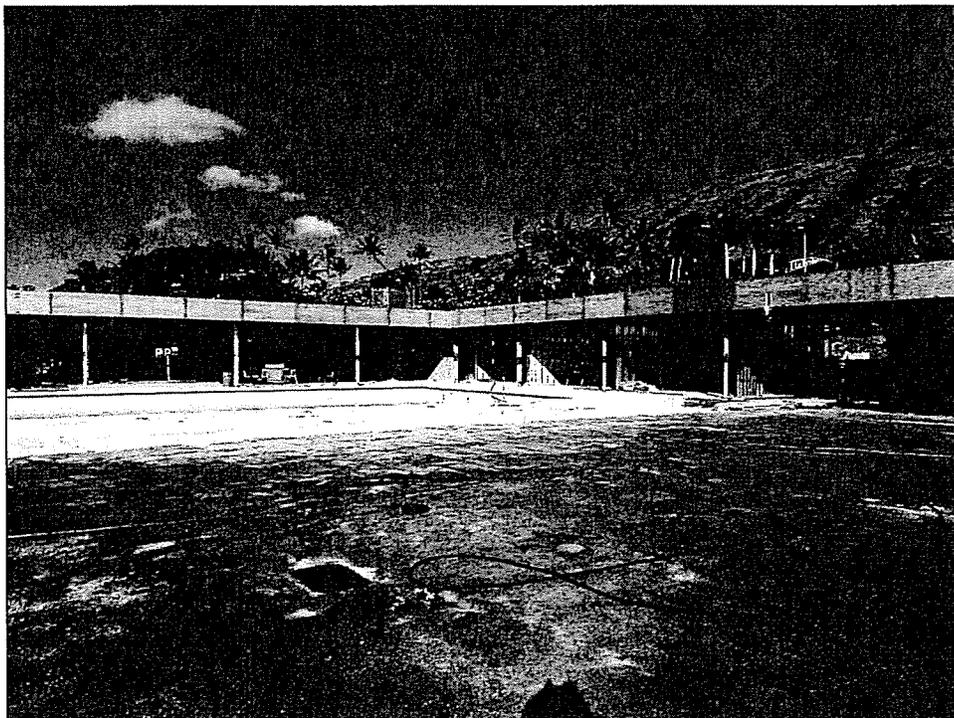


Figure 20, Main house at north end of property; roof supported with beams; no side walls, view to the northeast (CSH photo)



Figure 21. Harbor wall, view to the north (CSH photo)

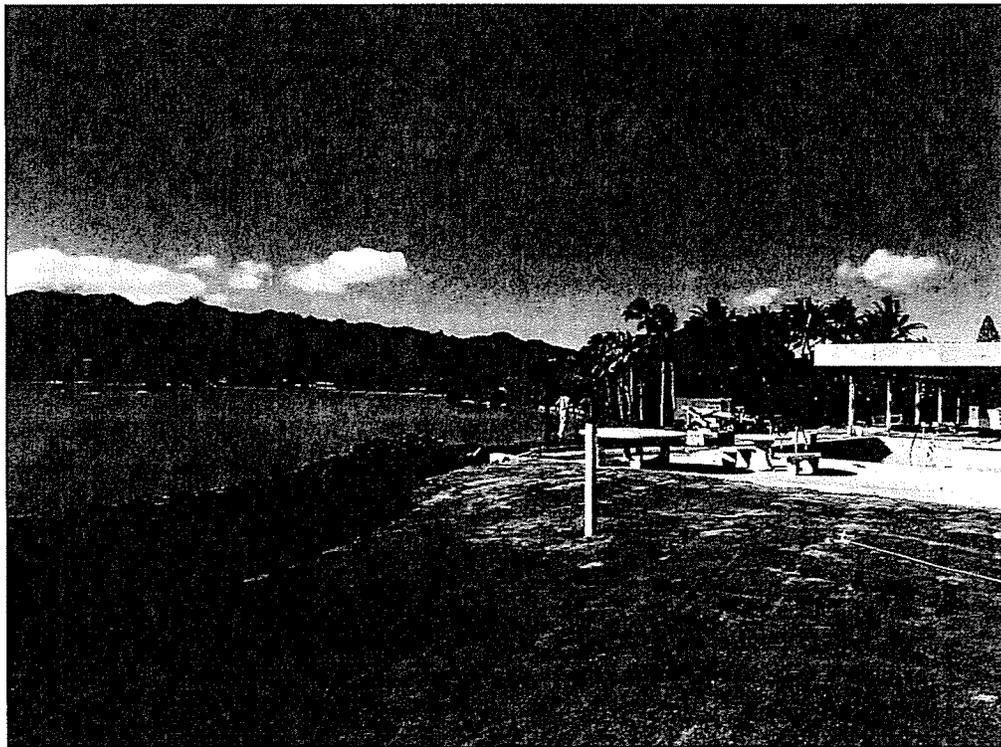


Figure 22. Central portion of shoreline rock wall, view to the northeast (CSH photo)

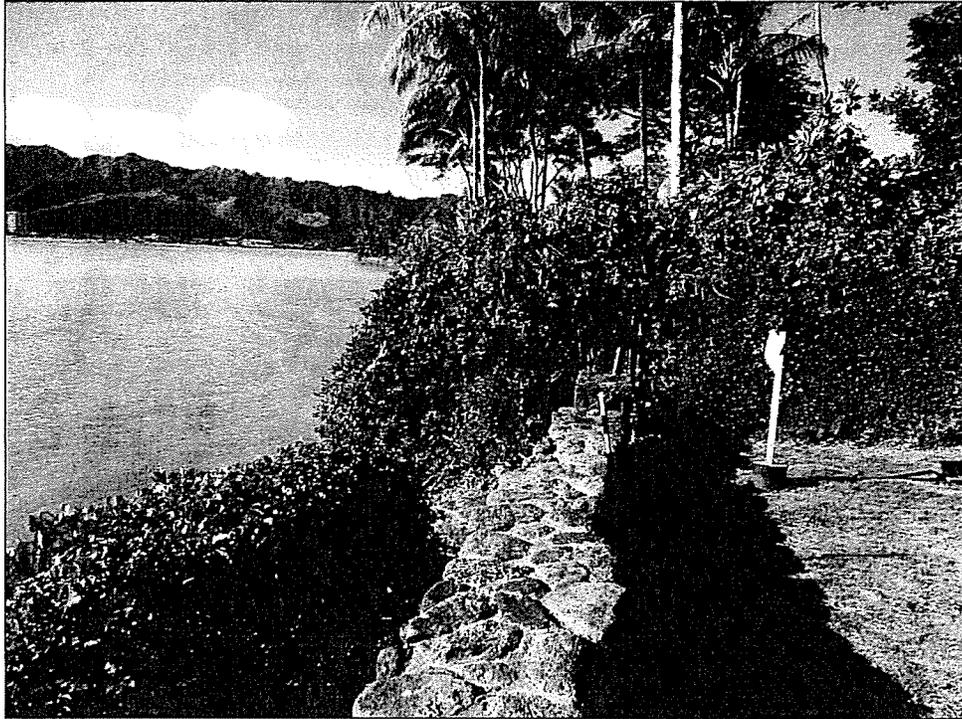


Figure 23. Rock wall along coast, northwest corner of property; wall has a small wooden gate to provide access to the water (CSH photo)

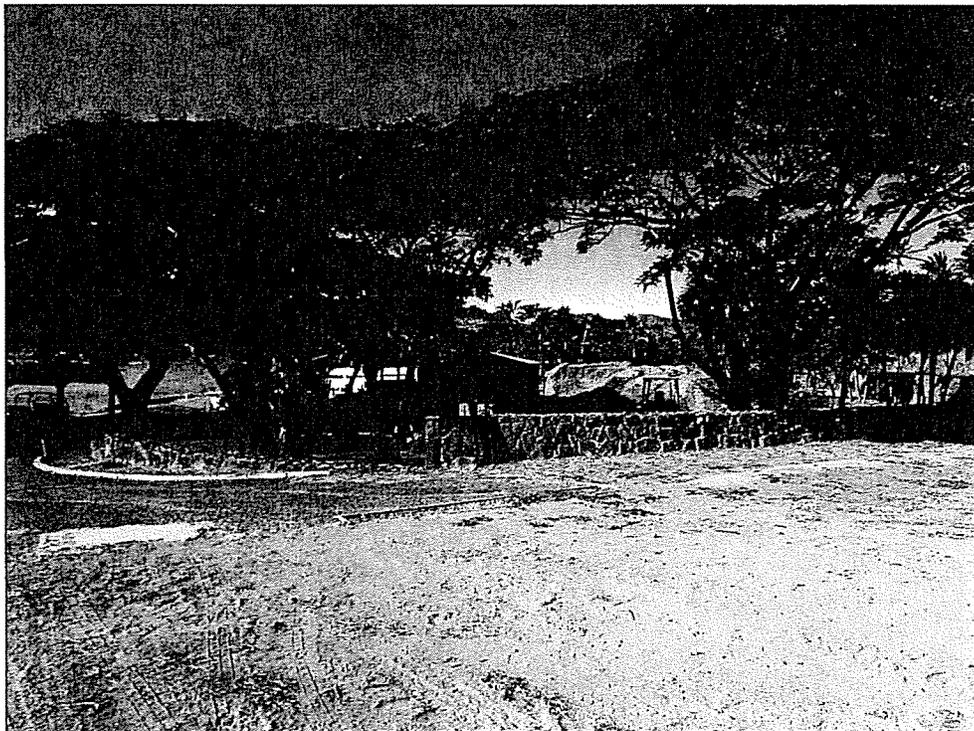


Figure 24. Central section of property area (between houses and the shore) showing graded open areas, view to the west (CSH photo)



Figure 25. Graded area behind main house, view to the northeast

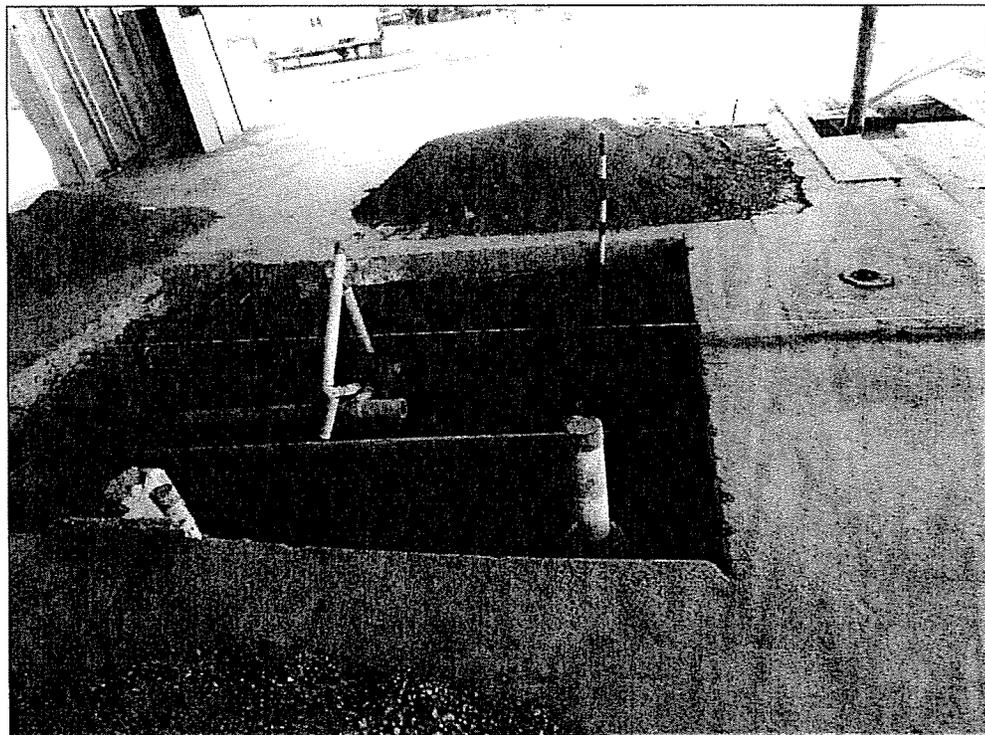


Figure 26. Excavated pit at north end of main house, view to the west, showing layer of fill material above gravel layer

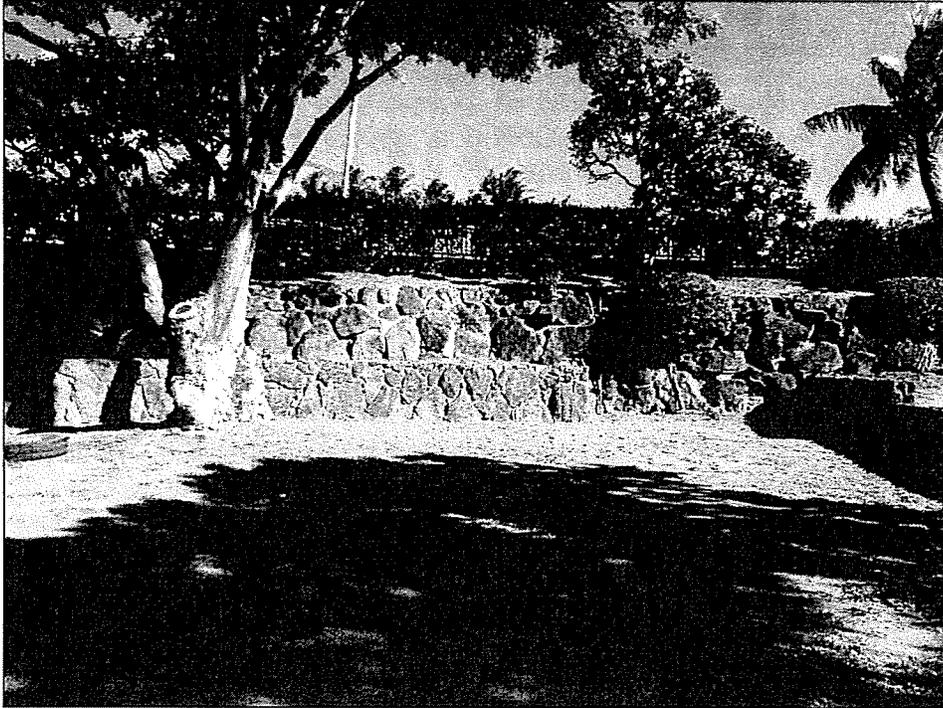


Figure 27. Low rock walls along *mauka* boundary of property adjacent to Portlock Road, southern section, view to the east (CSH photo)

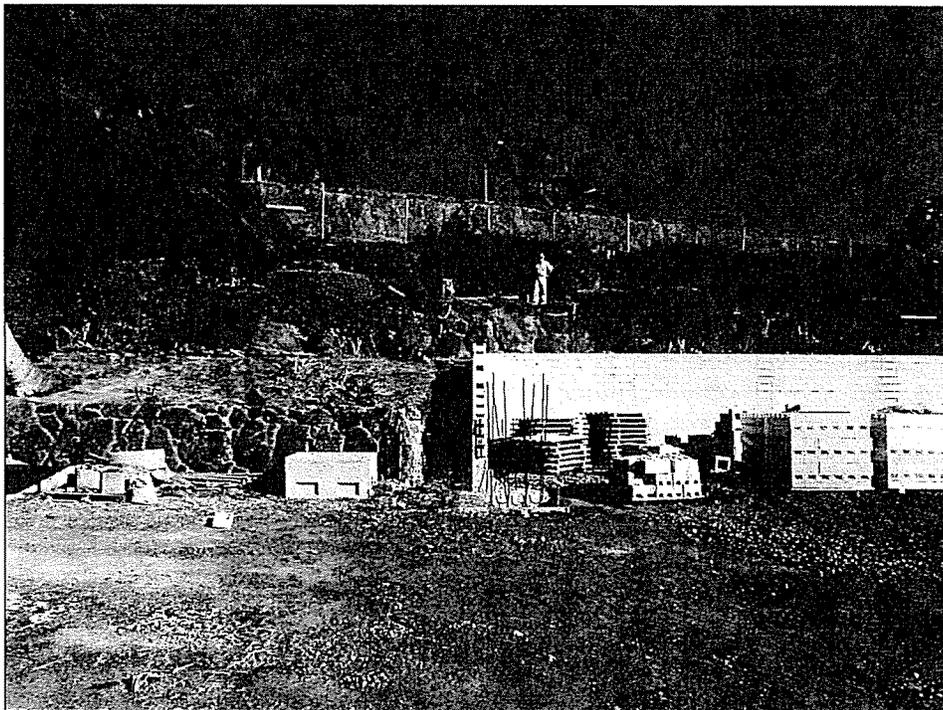


Figure 28. High rock walls along boundary of property adjacent to Portlock Road, northern section, view to the east; note large graded area with stockpiled construction material (CSH photo)

## Section 6 Summary and Recommendations

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At the request of Kober Hanssen Mitchell Architects (77 Merchant Street, Honolulu, Hawai'i 96813), Cultural Surveys Hawai'i, Inc. (CSH) has prepared this archaeological literature review and field inspection (LRFI) report to address proposed renovations at the property, formerly called the Kaiser Estate, at 567 Portlock Road in Maunaloa Ahupua'a, Honolulu District, Island of O'ahu, Hawai'i Tax Map Key (TMK) (1) 3-9-026, 044, 045, 056, 047, and 048. The LRFI scope of work included: 1) historical research to summarize past land use and the results of prior historic preservation investigations in the project area and its vicinity; 2) a limited field inspection of the project area; and, 3) preparation of this LRFI report.

Background research indicates the project area is located on the arid, western slopes of Koko Head. The nearest available water was a small spring once located at Kawaihoa (Portlock Point) to the south of the project area, and water near Kuapā Pond and inland streams northwest of the project area. Background research indicates that the immediate area was not an area of intense habitation or agriculture, although it is possible that there were once scattered fishermen's houses in the pre-Contact and early post-Contact periods. The area was also probably not used for burial. Caves on the top of Koko Head and Koko Crater were used for burial and burials have also been found in coastal areas with natural Jaucus sand; however, the project area does not have a sandy beach area so it is an unlikely burial place. In the post-1850 period, the project area was part of a large cattle ranch but again, the lack of water did not make the area useful for paddocks or ranch structures. A few homes were built in the area around a small community before 1960, but the main development of the area was begun in 1959 by Henry Kaiser who constructed the Hawai'i Kai Residential area and Koko Head Marina.

Henry Kaiser also constructed his own home on a seven-acre property at the end of Portlock Road, the present project area. There is no record of any cultural remains found at the site during the extensive development of the project area, the house construction, landscaping, or dredging of the oceanfront to construct a private harbor. No cultural properties were seen during the field inspection. The results of this field inspection cannot assess the presence or absence of subsurface archaeological deposits; however, based on available information the likelihood appears to be low.

CSH's investigation indicates that, due to extensive historic and modern land disturbance and development, the likelihood of significant historic properties and/or archaeological deposits within the project area is low. Following the requirements of Hawai'i State historic preservation review legislation (HRS §6E-42 and HAR §13-284), CSH recommends using this document to support consultation with the City and County of Honolulu and the SHPD regarding how best to fulfill the historic preservation review process for the proposed project area's development.

Based on this study's results, an archaeological inventory survey of the project area (per the requirements of HAR §13-276) does not appear warranted for development within the project area. Depending on the extent and location of ground disturbance during future proposed renovations in the project area, an on-call archaeological monitoring program might be appropriate for portions of the project area as a historic preservation mitigation measure.

## Section 7 References Cited

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### Atkinson, Anne

2007 *A Natural and Cultural History of Maunalua Bay and Its Watershed*. M.A. thesis, Department of Geography, San Francisco State University, San Francisco, California.

### Bayard, Donn T.

1965 *Hawai'i Kai: Artifacts (June, 1965)*. Ms. on file at the Department of Anthropology, University of Hawai'i at Mānoa, Honolulu.

1969 *Limited Survey and Excavation at Site O-16, Hawaii-Kai, Maunalua, Oahu*. Ms. on file at the Department of Land and Natural Resources, State Historic Preservation Division Library, Kapolei, Hawai'i.

### Beckwith, Martha

1970 *Hawaiian Mythology*. University of Hawai'i Press, Honolulu.

### Bingham, Hiram

1847 *A Residence of Twenty-One Years in the Sandwich Islands*. Huntington, Hartford Connecticut.

### Brass, Kevin

2009 Raising the Roof. Fabled Hawaii Estate Hits Market Priced at \$80 Million. *New York Times*, 1 January. Available online at <http://raisingtheroof.blogs.nytimes.com/2009/01/01/fabled-hawaii-estate-hits-market-priced-at-80-million/> (accessed May 15, 2013).

### Carlson, Arne K. and Paul H. Rosendahl

1990 *Supplemental Archaeological Inventory Survey, Kalanui-1 Subdivision, Land of Maunalua, Honolulu (Kona) District, Island of Oahu*. Paul H. Rosendahl Ph.D., Inc., Hilo, Hawai'i.

### Chamberlain, Levi

1826 *Diary Insert 1*. Manuscript filed in Hawaii Mission Children's Society Library.

1828 *Diary Insert 1*. Manuscript filed in Hawaii Mission Children's Society Library.

### Chinen, Jon J.

1958 *The Great Mahele: Hawaii's Land Division of 1848*. University of Hawai'i Press, Honolulu.

### Chiogioji, Rodney and Hallett H. Hammatt

2005 *Archaeological Literature Review and Field Inspection and Literature Review for a Highway Improvement Project on an Approximately 305-meter (1000 ft.) Long Section on the Mauka (East) Side of Kalaniana'ole Highway, between Keāhole Street and Hawai'i Kai Drive, Maunalua Ahupua'a, Kona District, O'ahu Island (TMK: [1] 3-9-17:20)*. Cultural Surveys Hawai'i, Kailua, Hawai'i.

### Clark, John R. K.

2002 *Hawai'i Place Names. Shores, Beaches, and Surf Sites*. University of Hawai'i Press, Honolulu.

**Coulter, John Wesley**

1935 *A Gazetteer of the Territory of Hawaii*. University of Hawai'i Research Publication No. 11. University of Hawai'i at Mānoa, Honolulu.

**Daws, Gavan**

2006 *Honolulu. The First Century*. Mutual Publishing, Honolulu.

**Dean, Love**

1991 *The Lighthouses of Hawai'i*. University of Hawai'i Press, Honolulu.

**Dixon, George**

1789 *A Voyage Round the World . . . performed in 1785, 1786, 1787 and 1788 in the "King George" and "Queen Charlotte."* George Goulding, London.

**Ellis, William**

1831 *Polynesian Researches, During a Residence of Nearly Eight Years in the Sandwich Islands*. Volume IV. Second Edition. Fisher, Son, and Jackson, London.

**Folk, William H., Douglas F. Borthwick, and Hallett H. Hammatt**

1993 *Archaeological Survey for the Proposed 5-Acre Kaluanui Park Development at Maunaloa, Kona District, O'ahu, (Revised October)*. Cultural Surveys Hawai'i, Kailua, Hawai'i.

**Foote, Donald E., E.L. Hill, S. Nakamura, and F. Stephens**

1972 *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii*. U.S. Department of Agriculture, U.S. Government Printing Office, Washington, D.C.

**Fornander, Abraham**

1996 *Ancient History of the Hawaiian People to the Times of Kamehameha I*. Mutual Publishing, Honolulu.

**Giambelluca, Thomas W., Michael A. Nullet, and Thomas A. Schroeder**

1986 *Rainfall Atlas of Hawai'i*. Department of Land and Natural Resources, Honolulu.

**Hanauma Bay Place Names**

2013 Kawaihoa. Electronic document at <http://placenamesofhanauma.weebly.com/kawaihoa.html> (accessed May 15, 2013).

**Hancock, Lambreth**

1983 *Hawai'i Kai. The First 20 Years*. Rotary Club of Hawai'i Kai, Honolulu.

**Handy, E.S. Craighill**

1940 *The Hawaiian Planter*, Volume 1. Bishop Museum Bulletin 161. Bishop Museum, Honolulu.

**Handy, E.S. Craighill, and Elizabeth G. Handy**

1972 *Native Planters in Old Hawaii: Their Life, Lore, and Environment*. Bishop Museum Bulletin 233. Bishop Museum, Honolulu.

**Hawai'i TMK Service**

2012 Tax Map Key (1) 3-9-026: 044, 045, 046, 047, and 048. On file at Hawai'i TMK Service, 222 Vineyard Street, Suite 401, Honolulu, Hawai'i.

**‘Īi, John Papa**

1983 *Fragments of Hawaiian History*. Revised Edition. Bishop Museum Press, Honolulu.

**Jackson, Geo E. Gresley**

1884 *East Coast of Oahu Including Waimanalo Hanauma and Maunalua Bays*. Surveyed and drawn by G.E.G. Jackson, Traced from Registered Map 1019 by A. Taqa, July 1958. On file at the State of Hawaii Department of Accounting and General Services Land Survey Division, Honolulu.

**Jones, Bruce A.**

1996 *Aspects of Inland Settlement in the Hawai'i Kai Region: Results of an Archaeological Inventory Survey of Nine Parcels, Ahupua'a of Maunalua, Honolulu District, Island of O'ahu, (TMKs: 3-9-8: Por. 13 and 3-9-10: Por. 1)*. Aki Sinoto Consulting, Honolulu.

**Kamakau, Samuel M.**

1961 *Ruling Chiefs of Hawai'i*. Kamehameha Schools Press, Honolulu.

1968 *Ka Po'e Kahiko: The People of Old*. Bishop Museum Special Publication 51. Bishop Museum, Honolulu.

1976 *Na Hana a ka Po'e Kahiko: The Works of the People of Old*. Bishop Museum Special Publication 61. Bishop Museum, Honolulu.

**Kame'elehiwa, Lilikalā**

1992 *Native Land and Foreign Desires. Pehea La E Pono Ai?* Bishop Museum Press, Honolulu.

**Kanaiku'ihonoināmoku, B. V.**

1865 Letter. *Ke Au Okoa* 31 July. Translation by Keao Nesmith.

**Kelly, Marion, Hiro Kurashina, and Aki Sinoto**

1984 *Cultural Resources Overview for The Queen's Beach Park Feasibility Study, Maunalua, Kona, O'ahu, Part I: Legends of Maunalua, O'ahu, Part II: Archaeological Assessment, and Part III: Historical Notes on Queen's Beach and Other Places in Maunalua, O'ahu*. Department of Anthropology, Bishop Museum, Honolulu.

**Kikuchi, William K.**

1973 *Hawaiian Aquaculture Systems*. Unpublished Ph.D. dissertation, Department of Anthropology, University of Arizona, Tucson, Arizona.

**McAllister, J. Gilbert.**

n.d. Unpublished written field notes, sketches, and annotated USGS map from original 1930-1931 survey of archaeological and cultural sites of O'ahu. Curated at the Bishop Museum Archives, Honolulu.

1933 *Archaeology of Oahu*. Bishop Museum Bulletin 104. Bernice Pauahi Bishop Museum, Honolulu.

**Malo, David**

1951 *Hawaiian Antiquities (Moolelo Hawaii)*, Second Edition. Bishop Museum Special Publication 2. Bishop Museum, Honolulu.

**Mathison, Gilbert Farquhar**

1825 *Narrative of a Visit to Brazil, Chile, Peru, and the Sandwich Islands, During the Years 1821 and 1822*. Charles Knight, London.

**Mokumaia, J. K.**

1921 Ke Aekai o Maunalua ame Kona Mau Kuhina. *Kuokoa*, 4 March.

**Moore, James R., Carly Liebhardt, Chie Takahashi, and Joseph Kennedy**

2009 *An Archaeological Inventory Survey Report for a Property Located at TMK: (1) 3-9-08: 039 in Maunalua Ahupua'a, Honolulu District, Island of O'ahu*. Archaeological Consultants of the Pacific, Inc., Haleiwa, Hawai'i.

**Ogden Environmental**

1994 *Revised Data Recovery Plan for Archaeological Excavation at Site 2900, Maunalua Ahupua'a, O'ahu Island (TMK: 3-9-08)*. Ogden Environmental and Energy Services Company, Inc., Honolulu.

**O'Hare, Constance R., David W. Shideler, and Hallett H. Hammatt**

2003 *Archaeological Assessment in Support of the Proposed Lalea Rockfall Mitigation, Phase II Project Hawai'i Kai, Maunalua Ahupua'a, O'ahu, Hawai'i (TMK: 3-9-08:42)*. Cultural Surveys Hawai'i, Kailua, Hawai'i.

**Portlock, Nathaniel.**

1798 *A Voyage Round the World*. De Capo Press, New York.

**Price-Beggerly, Patricia, and J. R. McNeill**

1985 *Archaeological Reconnaissance of the Proposed Marina Zoning Project, Kaluanui 1, 2, and 3 (Hawai'i Kai)*. J. Stephen Athens, Honolulu.

**Pukui, Mary**

1983 *'Ōlelo No'eau. Hawaiian Proverbs and Poetical Sayings*. Bishop Museum Press, Honolulu.

**Pukui, Mary K., Samuel H. Elbert, and Esther Mookini**

1974 *Place Names of Hawaii*, University of Hawai'i Press, Honolulu.

**Putzi, Jeffrey L., Tim Denham, Francis J. Eblé, and Jeffrey Pantaleo**

1998 *Archaeological Monitoring Report for Phase II Widening of Kalaniana'ole Highway, East Halema'uma'u Road to Keāhole Street, East Honolulu, O'ahu Island*. Garcia and Associates, Honolulu.

**Quill, Jenny**

2010 Honolulu's Kaiser Estate Still Seeks Buyer. *Honolulu, Real Estate*, 16 September. Electronic document, <http://www.honolulumagazine.com/Honolulu-Magazine/Real-Estate/September-2010/Honolulu-rsquo-Kaiser-Estate-Still-Seeks-Buyer/> (accessed May 15, 2013).

**Schilz, Alan**

- 1994 *Archaeological Assessment and Evaluation of Kaluanui Parcel 1 and Kaluanui Parcels 2 and 3, and an Evaluation of the Impact of Previously Recorded Archaeological Sites by Grubbing in Kaluanui Parcel 3, Hawai'i Kai, Oahu.* Ogden Environmental and Energy Services, Inc., Honolulu.

**Schmitt, Robert C.**

- 1968 *Demographic Statistics of Hawaii: 1778-1965.* University of Hawai'i Press, Honolulu.

**Smart, Colin**

- 1965 *Draft Excavation Report of Site 05 (50-80-15-2908), Hawai'i Kai Cave Shelter.* Vol. 1-2. Department of Anthropology, University of Hawai'i at Mānoa, Honolulu.

**Soehren, Lloyd**

- 2013 Hawaiian Place Names. Electronic database at <http://ulukau.org/cgi-bin/hpn?l=haw> (accessed May 15, 2013).

**Sterling, Elspeth and Catherine Summers**

- 1978 *Sites of Oahu.* Bishop Museum Press, Honolulu.

**Stewart, C. S.**

- 1839 *A Residence in the Sandwich Islands.* Fifth Edition. Weeks, Jordan and Company, Boston.

**Stump, Jane Barr**

- 1981 *Our Hawaii Kai. A History of Hawaii Kai and Maunalua.* Privately printed, Jane Barr Stump.

**Takemoto, Anne H., Pauline King Joerger, Merie-Ellen Fong Mitchell, and Cassandra E. Bareng**

- 1975 *Historical/Cultural Essay Report on the Kuapa Pond Area.* Joerger-Takemoto Historical Research Partnership, Honolulu. *On file at the State Historic Preservation Division, Honolulu.*

**Thrum, Thomas G.**

- 1906 Heiaus and Heiau Sites Throughout the Hawaiian Islands. *Hawaiian Almanac and Annual for 1907:*36-87. Thos. G. Thrum, Honolulu.

**Thomas, Frank R.**

- 1995 Excavations at Maunalua Cave, Hawai'i Kai, O'ahu. *Hawaiian Archaeology* 4:17-26.

**U.S. Air Force**

- 1963 High Altitude aerial photograph series for O'ahu, Mission Number EKM-2CC-255. *Copy available at Hawai'i State Archives, Aerial Photographs No. PPA-48-3, 364 S. King Street, Honolulu, Hawai'i.*

**U.S. Army**

- 1919 U.S. Army Fire Control Map of O'ahu, Koko Head Quadrangle. *On file at USGS Information Services, Box 25286, Denver, Colorado.*

- 1933 U.S. Army Fire Control Map of O'ahu, Koko Head Quadrangle. *On file at USGS Information Services, Box 25286, Denver, Colorado.*
- 1943 U.S. Army War Department Terrain Map of O'ahu, Makapu'u and Diamond Head Quadrangles. *On file at USGS Information Services, Box 25286, Denver, Colorado.*

**U.S. Army Map Service**

- 1954 U.S. Army Map, 7.5 Minute Series Topographic Map of O'ahu, Koko Head Quadrangle. *On file at USGS Information Services, Box 25286, Denver, Colorado.*

**U.S. Geological Survey**

- 1977–78 Orthoimagery of U.S. Geological Survey 7.5 Minute Series Topographic Map of O'ahu. *On file at USGS Information Services, Box 25286, Denver, Colorado.*
- 1998 U.S. Geological Survey 7.5 Minute Series Topographic Map of O'ahu, Honolulu Quadrangle. *On file at USGS Information Services, Box 25286, Denver, Colorado.*
- 2005 Orthoimagery of U.S. Geological Survey 7.5 Minute Series Topographic Map of O'ahu, Koko Head Quadrangles. *On file at USGS Information Services, Box 25286, Denver, Colorado.*

**Valeri, Valerio**

- 1985 *Kingship and Sacrifice. Ritual and Society in Ancient Hawaii.* The University of Chicago Press, Chicago and London.

**Webster, William**

- 1851 Plan of the Land of Maunalua, Oahu, the Property of Victoria Kamamalu. Surveyed by William Webster. Registered Map No. 980. *On file at the State of Hawai'i Department of Accounting and General Services Land Survey Division, Honolulu.*

# APPENDIX D

## TOPOGRAPHICAL MAP & SURVEY MAP



K H M A

PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD

ISLAND OF OAHU

ADVANCE PRINT AS OF 130709



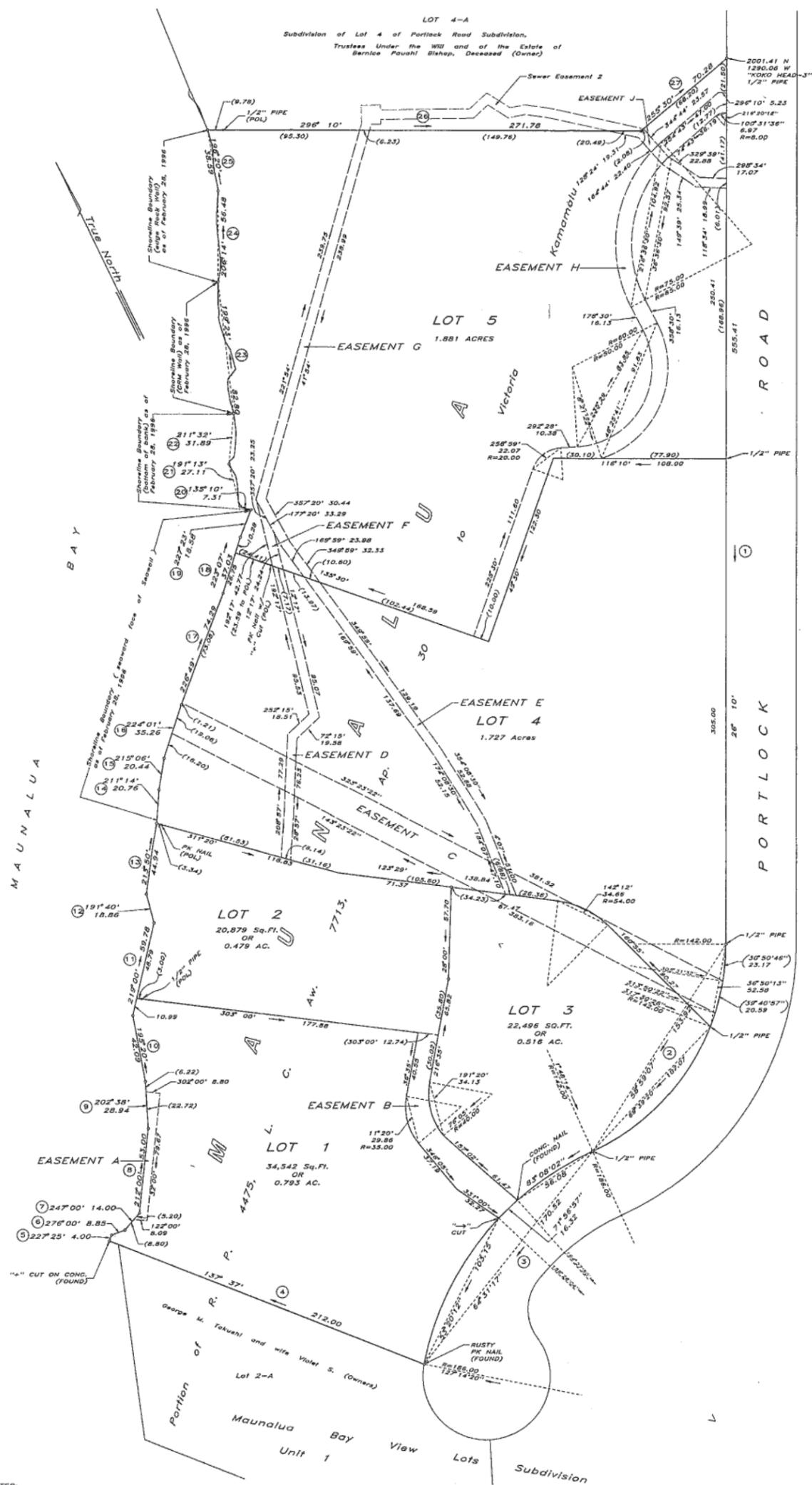
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## APPENDIX - D

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FIGURE D-1  
SITE SURVEY MAP - JULY 9, 2013  
PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD  
GRAPHIC SCALE: SEE MAP

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**PORTLOCK ROAD SUBDIVISION NO. 2**

LAND SITUATED ON THE NORTHWESTERLY SIDE OF PORTLOCK ROAD AT MAUNALUA, HONOLULU, OAHU, HAWAII

Being portion of Royal Patent 4475, Land Commission Award 7713, Apana 30 to Victoria Kamamalu

Being, also, all of Lots 1, 2 and 3 and portions of Lots 4-B and 4-C of the Subdivision of Lot 4, of Portlock Road Subdivision, (File Plan 1361)

Subdivided into Lots 1 to 5, inclusive, and the Designation of Easements A to H, inclusive and Easement J

Area = 5.396 Acres

Owner: Trustees Under the Will and of the Estate of Bernice Pauahi Bishop, Deceased

Address: 567 South King St., Suite 200 Honolulu, Hawaii 96813

This map was made from an actual survey on the ground made by or under the direct supervision of the undersigned between June 13, 1995 and August 2, 1995 and maybe checked by the State Surveyor with our Field Book and Calculation Folder filed under Job Nos. 950530 and 960450.

SAM O. HIROTA, INC  
864 S. BERTANIA ST.  
HONOLULU, HI 96813  
OCTOBER 21, 1996



This work was done by me or under my supervision  
*Kazutaka Sasaki*  
KAZUTAKA SAKI  
Licensed Professional Land Surveyor  
Certificate No. 740-5

I hereby certify that the description of survey and map hereon has been examined and checked as to form and mathematical correctness but not on the ground and the same is approved in accordance with Sections 502-17, 18 and 19 of the Hawaii Revised Statutes.  
Honolulu, Hawaii  
December 23, 1996 *Randall W. Hironaka*  
State Land Surveyor

State of Hawaii  
Office of  
Bureau of Conveyances  
Received for filing this 24th day of  
December A.D. 1996 at 3:20 P.M.  
and filed in File No. 2193  
*[Signature]*  
Registrar of Conveyances

METES AND BOUNDS DESCRIPTION RECORDED IN DOCUMENT NO. 96-181345

- NOTES:
- Easement A affecting Lot 1 for Shoreline Access purposes Area=454 Sq.Ft.
  - Easement B affecting Lot 2 for Access and Utility purposes Area=2090 Sq.Ft.
  - Easement C over and across Lots 3 and 4 for Storm Drain purposes Area=7654 Sq.Ft.
  - Easement D over and across Lot 4 for Sewer purposes Area=1145 Sq.Ft.
  - Easement E over and across Lot 4 for Sewer purposes Area=1408 Sq.Ft.
  - Easement F affecting Lot 5 for Sewer purposes Area=201 Sq.Ft.
  - Easement G over and across Lot 5 for Sewer purposes Area=1797 Sq.Ft.
  - Easement H over and across Lot 5 for Access purposes Area=423 Sq.Ft.
  - Easement J over and across Lot 5 for Sewer purposes Area=435 Sq.Ft.

NOTES:  
Figures shown thus ⑦ indicate number of courses in description.  
Owners of adjoining lands as shown on plan are from records filed at the Real Property Mapping Branch.

TMK: 1st Div. 3-9-26:44,45,46,47 and 48

30"X36"= 7.5 SQ.FT.

**APPENDIX - D**

FIGURE D-2  
PLOT KEY MAP  
PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD



GRAPHIC SCALE



# APPENDIX E

## CONSULTATION LETTERS & RESPONSES



PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD

ISLAND OF OAHU

# APPENDIX - E

## PRE-CONSULTATION LETTER TO AGENCIES

PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD

ISLAND OF OAHU



K H M A

November 15, 2013

\*Intended Recipient Contact Information

RE: PRE-CONSULTATION FOR THE RESIDENCES AT 525-567 PORTLOCK ROAD  
HONOLULU, HAWAII 96825  
TMK: [3-9-026]: 044, 045, 046, 047, 048

Dear \*Intended Recipient:

Kober Hanssen Mitchell Architects (KHMA) will be preparing an Environmental Assessment for the renovation and new construction of the residences at 525-567 Portlock Road, fka the Kaiser Estate. As part of the scoping process, we are writing to consult with your agency or organization.

Evershine II, the owner of the property is proposing to renovate the two existing houses and construct a third house for their family. The location of the residence at 525-567 Portlock is approximately 5.397 acres or 235,090 sq ft of land identified as Tax Map Key: 3-9-0260: 044, 045, 046, 047, and 048. A regional location map is attached.

The overall site includes two existing residences known as the Main House and the Boathouse, which includes a small boat harbor. There is also a caretaker house that was previously renovated. Proposed is a new residence that will be located between the main house and the caretaker's house. A site plan is attached for reference.

As of January 1, 2012, per HRS 205A and the City and County of Honolulu ROH Chapter 25, all major residential construction (renovation or new more than \$500,000.00 and larger than 7,500 sqft of floor area) that are located within the Shoreline Management Area are required to obtain a SMA. The SMA permit process within the City and County of Honolulu requires that EA be prepared.

With this letter, we seek your comments as to whether the proposed project may have an impact on any of your existing or proposed projects, plans, policies or progress. Please send us any comments you may have by January 15, 2014.



If you need any additional information or have any questions, please contact me by phone at 808.566-5408 or by email at [khmitchell@khma.com](mailto:khmitchell@khma.com).

Sincerely,

**KOBER, HANSEN MITCHELL ARCHITECTS, INC.**



Kurt H. Mitchell, AIA, RDI, NCARB  
President/CEO

Enclosure



EXCELLENCE AND INTEGRITY BY DESIGN

77 Merchant Street Honolulu, Hawaii 96813-4313 T: 808-528-5462 F: 808-566-0122 [www.khma.com](http://www.khma.com)

***\*This letter has been revised as of May 15, 2014 to reflect corrections requested by the consulted agencies DLNR and Office of Planning State of Hawaii . Corrections are bracketed below.***

November 15, 2013

\*Intended Recipient Contact Information

RE: PRE-CONSULTATION FOR THE RESIDENCES AT 525-567 PORTLOCK ROAD  
HONOLULU, HAWAII 96825  
TMK: [3-9-026]: 044, 045, 046, 047, 048

Dear \*Intended Recipient:

Kober Hanssen Mitchell Architects (KHMA) will be preparing an Environmental Assessment for the renovation and new construction of the residences at 525-567 Portlock Road, fka the Kaiser Estate. As part of the scoping process, we are writing to consult with your agency or organization.

Evershine II, the owner of the property is proposing to renovate the two existing houses and construct a third house for their family. The location of the residence at 525-567 Portlock is approximately 5.397 acres or 235,090 sq ft of land identified as Tax Map Key: 3-9-0260: 044, 045, 046, 047, and 048. A regional location map is attached.

The overall site includes two existing residences known as the Main House and the Boathouse, which includes a small boat harbor. There is also a caretaker house that was previously renovated. Proposed is a new residence that will be located between the main house and the caretaker's house. A site plan is attached for reference.

As of [July 1, 2011], per HRS 205A and the City and County of Honolulu ROH Chapter 25, all major residential construction (renovation or new more than \$500,000.00 [or] larger than 7,500 sqft of floor area) that are located within the Shoreline Management Area are required to obtain a SMA. The SMA permit process within the City and County of Honolulu requires that EA be prepared.

With this letter, we seek your comments as to whether the proposed project may have an impact on any of your existing or proposed projects, plans, policies or progress. Please send us any comments you may have by January 15, 2014.

If you need any additional information or have any questions, please contact me by phone at 808.566-5408 or by email at [khmitchell@khma.com](mailto:khmitchell@khma.com).



Name  
Date  
Page 2 of 2

Sincerely,  
**KOBER HANSEN MITCHELL ARCHITECTS, INC.**



Kurt H. Mitchell, AIA, RDI, NCARB  
President/CEO

Enclosure



# APPENDIX - E

## RESPONSE LETTERS FROM CONSULTED AGENCIES & RESPONSE LETTERS TO CONSULTED AGENCIES COMMENTS



PRIVATE RESIDENCE  
525/567 PORTLOCK ROAD

ISLAND OF OAHU

## BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843



January 31, 2014

KIRK CALDWELL, MAYOR

DUANE R. MIYASHIRO, Chairman  
MAHEALANI CYPHER, Vice Chair  
THERESIA C. McMURDO  
ADAM C. WONG  
DAVID C. HULIHEE

ROSS S. SASAMURA, Ex-Officio  
GLENN M. OKIMOTO, Ex-Officio

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

ELLEN E. KITAMURA, P.E.  
Deputy Manager and Chief Engineer 

Mr. Kurt H. Mitchell, AIA, RDI, NCARB  
President/CEO  
Kober Hanssen Mitchell Architects, Inc.  
77 Merchant Street  
Honolulu, Hawaii 96813

Dear Mr. Mitchell:

Subject: Your Letter Dated November 15, 2013 on the Environmental Assessment  
Pre-Consultation for the Residences at 525-567 Portlock Road Tax Map  
Key: 3-9-026: 044, 045, 046, 047, 048

Thank you for the opportunity to comment on the proposed renovation of the existing residences and new residence on Portlock Road.

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

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

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

If you have any questions, please contact Robert Chun at 748-5443.

Very truly yours,



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

DEPARTMENT OF TRANSPORTATION SERVICES  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 3RD FLOOR  
HONOLULU, HAWAII 96813  
Phone: (808) 768-8305 • Fax: (808) 768-4730 • Internet: www.honolulu.gov

KIRK CALDWELL  
MAYOR



MICHAEL D. FORMBY  
DIRECTOR  
MARK N. GARRITY, AICP  
DEPUTY DIRECTOR

TP12/13-542232R

January 9, 2014

Mr. Kurt H. Mitchell, AIA, RDI, NCARB  
President/CEO  
Kober Hanssen Mitchell Architects, Inc.  
77 Merchant Street  
Honolulu, Hawaii 96813

Dear Mr. Mitchell:

SUBJECT: Pre-Consultation for Draft Environmental Assessment (DEA)  
The Residences at 525-567 Portlock Road; Tax Map Key (TMK):  
3-9-0260: 044, 045, 046, 047, and 048; Honolulu, Oahu, Hawaii

In response to your letter dated November 15, 2013, we have the following comments:

1. The DEA should include a discussion of possible traffic impacts on the adjacent local streets. The discussion should address the traffic impacts on the surrounding City roadways as a result of the project, including short-term impacts during construction and any proposed traffic mitigating measures.
2. A street usage permit from the City's Department of Transportation Services (DTS) should be obtained prior to any work that impacts City streets, particularly construction which would cause street or lane closure.
3. The area Neighborhood Board, as well as the area residents, businesses, etc., should be kept apprised of the details of the proposed project and the impacts, particularly during construction, the project may have on the adjoining local street area network.

We reserve further comment pending submission of the DEA.

Mr. Kurt H. Mitchell, AIA, RDI, NCARB  
January 9, 2014  
Page 2

Thank you for the opportunity to review this matter. Should you have any further questions, please contact Michael Murphy of my staff at 768-8359.

Very truly yours,

  
Michael D. Formby  
Director

May 15, 2014

Mr. Michael D. Formby  
Director  
Department of Transportation Services  
City & County of Honolulu  
650 South King Street, 3<sup>rd</sup> Floor  
Honolulu, Hawai'i 96813  
Att: Mr. Michael Murphy

Dear Mr. Formby,

**SUBJECT: TP12/13-542232R**  
**Pre-Consultation for the Residence at 525-567 Portlock Road, Honolulu,**  
**Hawaii 96825 TMK: 3-9-0260: 044, 045, 046, 047, 048**

Thank you for taking the time to provide comments; they were reviewed along with additional suggested information sources. Responses are included in the draft environmental analysis being submitted for the subject property and will also be incorporated into the final document and Shoreline Management Application as applicable.

A discussion of traffic impacts both during and after construction on the neighborhood and surrounding city roadways will be included in the DEA. All required and appropriate permits shall be obtained prior to the commencement of any work which impacts the streets. During the construction process the area residents and neighborhood board shall be informed of the proposed project's impacts on the local street area network.

Per requirements of the Environmental Analysis Review Process; a copy of the draft will be available for public review and further comments for a period of 30 days – notification of its posting shall be available in the periodic bulletin issued by the Office of Environmental Quality Control [OEQC]. The OEQC also generates a list of reviewers; should you make this list you will receive a copy of this Draft Environmental Analysis for review.

Should you have further comments or questions please contact Kate Poland at kpoland@rimarchitects.com, phone (808)687-8878 or Kurt Mitchell at khmitchell@khma.com, phone (808) 566-5408.

Mahalo,

  
Kurt H. Mitchell AIA, NCARB, RDI



NEIL ABERCROMBIE  
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCES MANAGEMENT



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
**LAND DIVISION**

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

January 14, 2014

Kober Hanssen Mitchell Architects  
Attn: Kurt H. Mitchell, President/CEO  
77 Merchant Street  
Honolulu, Hawaii 96813

via email: [khmitchell@khma.com](mailto:khmitchell@khma.com)

Dear Mr. Mitchell,

**SUBJECT:** Pre-Consultation for the Residences at 525-567 Portlock Road, Honolulu, Hawai'i 96825; TMK: 3-9-0260: 044, 045, 046, 047, 048

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

At this time, enclosed are comments from (1) Land Division – Oahu District; and (2) Division of Forestry & Wildlife. No other comments were received as of our suspense date. Should you have any questions, please feel free to call Supervising Land Agent Steve Molmen at 587-0439. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Y. Tsuji".

Russell Y. Tsuji  
Land Administrator

Enclosure(s)



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

December 17, 2013

MEMORANDUM

TO: *JK*

- DLNR Agencies:**
- Div. of Aquatic Resources
  - Div. of Boating & Ocean Recreation
  - Engineering Division
  - Div. of Forestry & Wildlife
  - Div. of State Parks
  - Commission on Water Resource Management
  - Office of Conservation & Coastal Lands
  - Land Division – Oahu District
  - Historic Preservation

FROM: *AS*

Russell Y. Tsuji, Land Administrator *[Signature]*

SUBJECT:

Pre-Consultation for the Residences at 525-567 Portlock Road, Honolulu, Hawai'i 96825; TMK: 3-9-0260: 044, 045, 046, 047, 048

LOCATION:

525-567 Portlock Road, Honolulu, TMK: 3-9-0260: 044, 045, 046, 047, 048

APPLICANT:

Evershine II by Kober Hanssen Mitchell Architects (KHMA)

Transmitted for your review and comment on the above-referenced document.

We would appreciate your comments on this document. Please submit any comments by January 14, 2014. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *[Signature]*

Print Name: *Russell Y. Tsuji*

Date: *12/20/13*

cc: Central Files

*Comments:*  
 The correct plot number is 26, NOT 260. TMK (1) 3-9-026: seaward of 44 is numbered by 61-5668 for; non-exclusive channel easement, concrete surge break/breakpoint easement, and seawall and fill easement to Evershine II. Any further improvements on State land proposed for the new residence requires a disposition from the Board.



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

December 17, 2013

MEMORANDUM

RECEIVED  
LAND DIVISION  
2013 DEC 19 PM 3:00  
DEPT. OF LAND &  
NATURAL RESOURCES  
STATE OF HAWAII

From: TO:

**DLNR Agencies:**

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division – Oahu District
- Historic Preservation

**To:** FROM: Russell Y. Tsuji, Land Administrator

**SUBJECT:** Pre-Consultation for the Residences at 525-567 Portlock Road, Honolulu, Hawai'i 96825; TMK: 3-9-0260: 044, 045, 046, 047, 048

**LOCATION:** 525-567 Portlock Road, Honolulu, TMK: 3-9-0260: 044, 045, 046, 047, 048

**APPLICANT:** Evershine II by Kober Hanssen Mitchell Architects (KHMA)

Transmitted for your review and comment on the above-referenced document.

We would appreciate your comments on this document. Please submit any comments by January 14, 2014. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

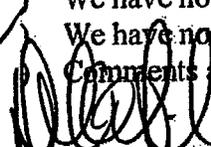
Attachments

RECEIVED

13 DEC 18 PM 2:26

FORESTRY & WILDLIFE  
STATE OF HAWAII

- ( ) We have no objections.
- ( ) We have no comments.
- ( ) Comments are attached.

Signed: 

Print Name: David G. Smith for Ret

Date: 12/18/13

cc: Central Files

May 15, 2014

Mr. Russel Y. Tsuji  
State of Hawaii Department of Land  
and Natural Resources – Land Division  
Land Administrator  
(808) 587-0439  
P.O. Box 621  
Honolulu, HI 96809  
Att: Mr. Steve Molmen

Dear Mr. Tsuji,

**SUBJECT: Pre-Consultation for the Residence at 525-567 Portlock Road, Honolulu,  
Hawaii 96825 TMK: 3-9-0260: 044, 045, 046, 047, 048**

Thank you for taking the time to provide comments and routing our letter to the Land Division – Oahu District and Division of Forestry & Wildlife. Comments included in your response were reviewed and corrections are included in the draft environmental analysis.

Additionally; although none are anticipated at this time, any further improvements to State easement GL-5668 will be submitted to the appropriate reviews and disposition from the Board.

Per requirements of the Environmental Analysis Review Process; a copy of the draft will be available for public review and further comments for a period of 30 days – notification of its posting can be found in the periodic bulletin issued by the Office of Environmental Quality Control [OEQC]. The OEQC also generates a list of reviewers; should you make this list you will receive a copy of this Draft Environmental Analysis for review.

Should you have further comments or questions please contact Kate Poland at [kpoland@rimarchitects.com](mailto:kpoland@rimarchitects.com), phone (808)687-8878 or Kurt Mitchell at [khmitchell@khma.com](mailto:khmitchell@khma.com), phone (808) 566-5408.

Sincerely,



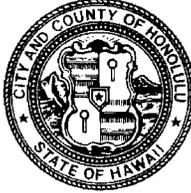
Kurt H. Mitchell AIA, NCARB, RDI



DEPARTMENT OF PLANNING AND PERMITTING  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 7<sup>TH</sup> FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 768-8000 • FAX: (808) 768-6041  
DEPT. WEB SITE: [www.honolulu.gov](http://www.honolulu.gov) • CITY WEB SITE: [www.honolulu.gov](http://www.honolulu.gov)

KIRK CALDWELL  
MAYOR



GEORGE I. ATTA, FAICP  
DIRECTOR

ARTHUR D. CHALLACOMBE  
DEPUTY DIRECTOR

2013/ELOG-2363 (MS)

January 28, 2013

Mr. Kurt H. Mitchell  
Kober, Hanssen, Mitchell Architects, Inc.  
77 Merchant Street  
Honolulu, Hawaii 96813

Dear Mr. Mitchell:

**SUBJECT:** Pre-Assessment Consultation for Environmental Assessment  
Development of New Single-Family Dwelling  
525, 555, 561, and 567 Portlock Road - Maunaloa  
Tax Map Key 3-9-26: 44 through 48

This is in response to your letter received December 13, 2013, requesting comments regarding the preparation of the Draft Environmental Assessment (EA) for development of the above property. A new single-family dwelling will be greater than 7,500 square feet and will be constructed on a portion of the above site. Based on the summary information and location map you submitted, we offer the following preliminary comments:

1. The Draft EA should include a discussion on relevant plans and policies, including but not limited to the City's General and Development Plans. Also, discuss how the project conforms or is consistent with the Land Use Ordinance, specifically the R-10 Residential District Development Standards.
2. A preliminary site plan was provided with the letter. The Draft EA should include a site plan (drawn to scale) showing the property lines, and identifying the existing and proposed structures. The site plan should also identify the required yard setbacks, easements, landscaping, off-street parking and site access.
3. Provide information on the Flood Insurance Rate Map (FIRM) flood districts and base flood elevations. On a map of the site, show the floodway boundaries and corresponding actual heights above MSL.
4. Provide information on grading, describing the area and volume of excavation or fill.
5. A current certified shoreline survey will be required if there will be any work seaward of the 55-foot waiver line.

Mr. Kurt H. Mitchell  
January 7, 2014  
Page 2

6. If you have not already done so, please include the Department of Land and Natural Resources (DLNR) State Historic Preservation Division (SHPD) to your list of consulted government agencies.
7. The Draft EA should discuss the continued maintenance of a safe lateral pedestrian access along the existing pedestrian easement, as required by Condition 2 in the approved Shoreline Setback Variance (File No. 1998/SV-501). This condition states the following:

*"The Applicant shall maintain the footbridge in the closed position allowing pedestrian access, at all times except during the ingress or egress of watercraft. Prolonged retraction of the footbridge beyond a reasonable period, determined to be a maximum of 20 minutes under normal conditions (i.e., not during storm conditions or due to mechanical failure), shall be constructed as a violation of this approval and may constitute grounds for the revocation of this approval."*

8. The Draft EA should list previously approved permits and necessary permits for the proposed development. Any joint development issues (if any) should also be addressed.

The project will include Parcels 44 through 48, however, two existing joint development agreement (JDA), approved under Conditional Use Permit (CUP) Nos. 98/CUP1-38 and 98/CUP1-38, have been executed between Parcels 44 through 46 and the other between Parcels 47 and 48. If the proposed structure will straddle multiple parcels that are part of two separate JDA, then those joint developments must be dissolved first and a new CUP application must be submitted.

9. The Draft Ea should identify the statutory requirement it's intended to fulfill.

If you have any questions, please contact Malynne Simeon of our staff at 768-8023.

Very truly yours,

  
George I. Atta, FAICP  
Director

GIA:nw

May 15, 2014

Mr. George I. Atta, FAICP, Director  
Department of Planning and Permitting  
City and County of Honolulu  
650 South King Street, 7<sup>th</sup> Floor  
Honolulu, Hawaii 96813  
Att. Ms. Malynne Siemeon

Dear Mr. Atta,

**SUBJECT: 2013/ELOG-2363 (MS)**  
**Pre-Consultation for the Residence at 525-567 Portlock Road, Honolulu,**  
**Hawaii 96825 TMK: 3-9-0260: 044, 045, 046, 047, 048**

Thank you for taking the time to provide comments; they were reviewed along with additional suggested information sources. Responses are included in the draft environmental analysis being submitted for the subject property and will also be incorporated into the final document and Shoreline Management Application as applicable. Additionally, organizations cited in your response whom we feel may have direct comments applicable to this project have been contacted.

In response to comments identified in your letter please see below:

1. The Draft EA includes a section discussing the project's conformance to city, county, and state regulations regarding land use. This is not limited to; but does include conformance to the Land Use Ordinance, the C & C of Honolulu General Plan, the Revised Ordinances of Honolulu, and Chapter 205A-2 of the Hawaii Revised Statutes.
2. Provided in the Draft EA submission are to scale existing and new site plans which identify the existing and proposed structures on the site, easements, landscape elements, off street parking and site access. However; the site plan does not include yard setbacks as the subject properties are part of two Joint Area Developments [JDA]. These JDA are in the process of being resolved into one JDA including all five properties. A current certified shoreline survey is in progress and therefore not included in the DEA; it will be included in the SMA and if available in the Final EA.
3. A FIRM is included with the Draft EA; base flood elevations are indicated along with floodway boundaries and corresponding actual heights above MSL.
4. Information on grading, excavation and fill is provided under the soils section of the Draft EA.

Page 1 of 2

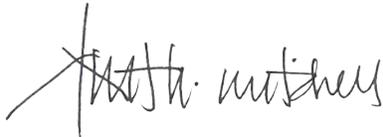


5. The property owner is working on obtaining a certified shoreline survey at this time. The site was inspected September 30, 2013. The State of Hawaii Department of Accounting and General Services (DAGS) identified on November 8, 2013, encroachments present in the inspection. The applicant is working with the Oahu District Branch of the Department of Land and Natural Resources (ODLO-DLNR) to resolve this issue by either showing that the encroachments were indeed present on a previous site survey or requesting that the ODLO-DLNR grant an easement for the portions of encroachment.

Per requirements of the Environmental Analysis Review Process; a copy of the draft will be available for public review and further comments for a period of 30 days – notification of its posting shall be available in the periodic bulletin issued by the Office of Environmental Quality Control [OEQC]. The OEQC also generates a list of reviewers; should you make this list you will receive a copy of this Draft Environmental Analysis for review.

Should you have further comments or questions please contact Kate Poland at [kpoland@rimarchitects.com](mailto:kpoland@rimarchitects.com), phone (808)687-8878 or Kurt Mitchell at [khmitchell@khma.com](mailto:khmitchell@khma.com), phone (808) 566-5408.

Mahalo,



Kurt H. Mitchell AIA, NCARB, RDI





STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. BOX 3378  
HONOLULU, HI 96801-3378

In reply, please refer to:  
File:  
13-236  
Portlock Road

December 20, 2013

Mr. Kurt H. Mitchell, AIA, RDI, NCARB  
President/CEO  
Kober Hanssen Mitchell Architects  
77 Merchant Street  
Honolulu, Hawaii 96813



Dear Mr. Mitchell:

**SUBJECT: Pre-Consultation for the Residences at 525-567 Portlock Road, Honolulu, Hawaii 96825  
TMK: 3-9-0260: 044, 045, 046, 047, 048**

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your letter dated November 15, 2013. Thank you for allowing us to review and comment on the subject document. We routed your document to the Clean Water Branch and the Indoor & Radiological Health Branch due to the proposed renovations. They will provide specific comments to you if necessary. EPO recommends that you review the standard comments at:

<http://health.hawaii.gov/epo/home/landuse-planning-review-program>

You are required to adhere to all standard comments specifically applicable to this application.

EPO suggests the applicant examine the many sources available on strategies to support the sustainable design of communities, including the:

State of Hawaii, Office of Planning: [www.planning.hawaii.gov](http://www.planning.hawaii.gov) and the new 2013 ORMP;  
U.H., School of Ocean and Earth Science and Technology: [www.soest.hawaii.edu](http://www.soest.hawaii.edu);  
U.S. Department of Health and Human Services: <http://www.hhs.gov/about/sustainability>;  
U.S. Environmental Protection Agency's sustainability programs: [www.epa.gov/sustainability](http://www.epa.gov/sustainability); and  
U.S. Green Building Council's LEED program: [www.usgbc.org/leed](http://www.usgbc.org/leed).

DOH encourages everyone to apply these sustainability strategies and principles early in the planning and review of projects. We also request that for future projects you consider conducting a Health Impact Assessment (HIA). More information is available at: [www.cdc.gov/healthyplaces/hia.htm](http://www.cdc.gov/healthyplaces/hia.htm). We request you share all of this information with others to increase community awareness on sustainable, innovative, inspirational, and healthy community design.

We require a written response confirming receipt of this letter and any other letters you receive from DOH in regards to this submission. You may mail your response to 919 Ala Moana Blvd., Ste. 312, Honolulu, Hawaii 96814. However, we would prefer an email submission to: [epo@doh.hawaii.gov](mailto:epo@doh.hawaii.gov). We anticipate that our letter(s) and your response(s) will be included in the final document. If you have any questions, please contact me at (808) 586-4337.

Mahalo,

Laura Leialoha Phillips McIntyre, AICP  
Manager, Environmental Planning Office

May 15, 2014

Ms. Laura Leialoha Phillips McIntyre, AICP  
Manager, Environmental Planning Office  
State of Hawaii Department of Health  
919 Ala Moana Blvd., Ste. 312  
Honolulu, HI 96814  
epo@doh.hawaii.gov

Dear Ms. Phillips McIntyre,

**SUBJECT: File 13-236 Portlock Road  
Pre-Consultation for the Residence at 525-567 Portlock Road, Honolulu,  
Hawaii 96825 TMK: 3-9-0260: 044, 045, 046, 047, 048**

Thank you for taking the time to provide comments; they were reviewed along with additional suggested information sources. Responses are included in the draft environmental analysis being submitted for the subject property and will also be incorporated into the final document and Shoreline Management Application as applicable. Additionally, organizations cited in your response whom we feel may have direct comments applicable to this project have been contacted; including OSP, Department of Planning and Permitting, and OEQC.

Per requirements of the Environmental Analysis Review Process; a copy of the draft will be available for public review and further comments for a period of 30 days – notification of its posting shall be available in the periodic bulletin issued by the Office of Environmental Quality Control [OEQC]. The OEQC also generates a list of reviewers; should you make this list you will receive a copy of this Draft Environmental Analysis for review.

Should you have further comments or questions please contact Kate Poland at kpoland@rimarchitects.com, phone (808)687-8878 or Kurt Mitchell at khmitchell@khma.com, phone (808) 566-5408.

Mahalo,



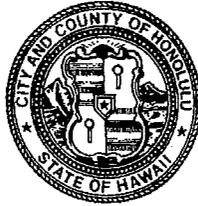
Kurt H. Mitchell AIA, NCARB, RDI



DEPARTMENT OF PARKS & RECREATION  
**CITY AND COUNTY OF HONOLULU**

1000 Uluohia Street, Suite 309, Kapolei, Hawaii 96707  
Phone: (808) 768-3003 • Fax: (808) 768-3053  
Website: www.honolulu.gov

KIRK CALDWELL  
MAYOR



TONI P. ROBINSON  
DIRECTOR

JEANNE C. ISHIKAWA  
DEPUTY DIRECTOR

December 27, 2013

Mr. Kurt H. Mitchell, AIA, RDI, NCARB  
President/CEO  
Kober Hanssen Mitchell Architects, Inc.  
77 Merchant Street  
Honolulu, Hawaii 96813

Dear Mr. Mitchell:

**SUBJECT:** Pre-Consultation for Residences at 515-567 Portlock Road, Honolulu  
Hawaii 96825; Tax Map Key: 3-9-0260: 044, 045, 046, 048

Thank you for the opportunity to review and comment at the pre-consultation stage of the environmental assessment for the renovation of two existing houses and construction of a third one on the subject property.

The Department of Parks and Recreation has no comment. As the proposed project will have no impact on any program or facility of the department, you may remove us as a consulted party to the balance of the EIS process.

Should you have any questions, please contact Mr. John Reid, Planner at 768-3017.

Sincerely,

A handwritten signature in black ink that reads "Toni P. Robinson".

Toni P. Robinson  
Director

TPR:jr  
(541992)





January



Mr. Kurt H. Mitchell  
Kober Hanssen Mitchell Architects, Inc.  
77 Merchant Street  
Honolulu, Hawaii 96813

Dear Mr. Mitchell:

Subject       **Pre-consultation for the Residences at 525-567 Portlock Road TMK  
3-9-0260:044, 045, 046, 047, 048.**

Thank you for the opportunity to comment on the subject project. Hawaiian Electric Company has no objections to the project. Should HECO have existing easements and facilities on the subject property, we will need continued access for maintenance of our facilities.

We appreciate your efforts to keep us apprised of the subject project in the planning process. As the private residences at 525-567 Portlock Road come to fruition, please continue to keep us informed. Further along in the design, we will be better able to evaluate the effects on our system facilities.

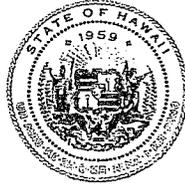
If you have any questions, please call me at 543-7245.

Sincerely,

Rouen Q. W. Liu  
Permits Engineer

CC: Mark Shimabukuro (Manager, HECO Customer Installations Dept.)

NEIL ABERCROMBIE  
GOVERNOR



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

January 31, 2014

Mr. Kurt H. Mitchell  
Kober Hanssen Mitchell Architects  
77 Merchant Street  
Honolulu, Hawaii 96813

Dear Mr. Mitchell:

Subject: Pre-Consultation for Residences at 525-567 Portlock Road  
TMK: 3-9-026: 044 to 048

The subject project is not expected to significantly impact the State highway facility. However, a permit from the DOT Highways Division is required for the transport of oversized and/or overweight materials and equipment on State highway facilities.

If there are any questions, please contact Mr. Norren Kato of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Glenn M. Okimoto".

GLENN M. OKIMOTO, Ph.D.  
Director of Transportation

May 15, 2014

Mr. Glenn M. Okimoto, Ph.D.  
Director of Transportation  
State of Hawaii Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawai'i 96813  
Att: Mr. Norren Kato

Dear Mr. Okimoto,

**SUBJECT: Pre-Consultation for the Residence at 525-567 Portlock Road, Honolulu,  
Hawaii 96825 TMK: 3-9-0260: 044, 045, 046, 047, 048**

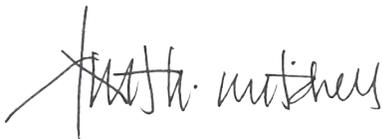
Thank you for taking the time to provide comments; they were reviewed along with additional suggested information sources. Responses are included in the draft environmental analysis being submitted for the subject property and will also be incorporated into the final document and Shoreline Management Application as applicable.

During construction a DOT Highways permit will be obtained for any transportation of oversized and/or overweight materials and equipment on State highway facilities required for this project.

Per requirements of the Environmental Analysis Review Process; a copy of the draft will be available for public review and further comments for a period of 30 days – notification of its posting shall be available in the periodic bulletin issued by the Office of Environmental Quality Control [OEQC]. The OEQC also generates a list of reviewers; should you make this list you will receive a copy of this Draft Environmental Analysis for review.

Should you have further comments or questions please contact Kate Poland at kpoland@rimarchitects.com, phone (808)687-8878 or Kurt Mitchell at khmitchell@khma.com, phone (808) 566-5408.

Sincerely,



Kurt H. Mitchell AIA, NCARB, RDI





January 13, 2014

Kober Hansen Mitchell Architects, Inc.  
77 Merchant Street  
Honolulu, Hawaii 96813  
Attention: Mr. Kurt H. Mitchell, AIA, RDI, NCARB



Dear Mr. Mitchell:

Subject: **Pre-Consultation for the Residences at 525-567 Portlock Road  
Honolulu, Hawaii 96825  
TMK: 3-9-0260, 044, 045, 046, 047, 048**

In response to your letter dated November 15, 2013, we have determined that Hawaiian Telcom serves the subject site from its Koko Head Central Office located on Hawaii Kai Drive.

The current service connection point to the development is from a pullbox located at the Northeast corner of the property. However, depending on the design of the project, Hawaiian Telcom may choose to provide service from different points of entry along the underground system on Portlock Road.

Hawaiian Telcom records indicate there are underground facilities into the property that maybe impacted by the proposed renovation. Please be aware that field locating of these facilities should be done prior to any excavation work commencing. To assist with the process, please have your Electrical Consultant submit drawings for review and comment.

The area is provisioned with copper facilities and, if an upgrade to the existing service is considered, fiber optic cable is available. The number of fiber optic strands provided will be dependent upon the customer's service requirements.

If you have any questions or require assistance in the future on this project, please call me at 546-7761.

Sincerely,

Les Loo  
Network Engineer - Outside Plant Engineering  
Network Engineering & Planning

cc: File [Koko Head]

HONOLULU FIRE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**

636 South Street  
Honolulu, Hawaii 96813-5007  
Phone: 808-723-7139 Fax: 808-723-7111 Internet: www.honolulu.gov/hfd

KIRK CALDWELL  
MAYOR



MANUEL P. NEVES  
FIRE CHIEF

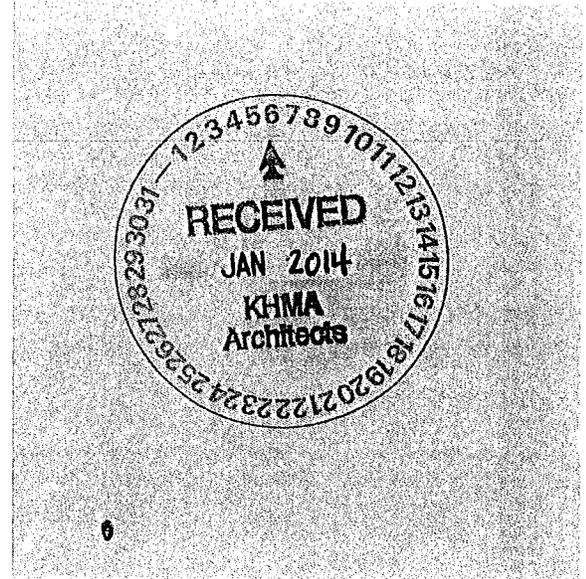
LIONEL CAMARA JR.  
DEPUTY FIRE CHIEF

December 30, 2013

Mr. Kurt Mitchell, AIA, RDI, NCARB  
President/CEO  
Kober Hanssen Mitchell Architects  
77 Merchant Street  
Honolulu, Hawaii 96813

Dear Mr. Mitchell:

Subject: Preconsultation  
Residences at 525-567 Portlock Road  
Honolulu, Hawaii 96825  
Tax Map Keys: 3-9-260: 044, 045, 046, 047, 048



In response to your letter of November 15, 2013, regarding the above-mentioned subject, the Honolulu Fire Department (HFD) requires that the following be complied with:

1. Fire department 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 m) from fire department access roads as measured by an approved route around the exterior of the building or facility. (National Fire Protection Association [NFPA] 1; Uniform Fire Code [UFC]<sup>TM</sup>, 2006 Edition, Section 18.2.3.2.2.)

A fire department access road shall extend to within 50 ft (15 m) 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; UFC<sup>TM</sup>, 2006 Edition, Section 18.2.3.2.1.)

2. A water supply approved by the county, capable of supplying the required fire flow for fire protection, shall be provided to all premises upon which facilities or buildings, or portions thereof, are hereafter

Mr. Kurt Miller, AIA, RDI, NCARB  
Page 2  
December 30, 2013

constructed, or moved into or within the county. When any portion of the facility or building is in excess of 150 feet (45 720 mm) from a water supply on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains capable of supplying the required fire flow shall be provided when required by the AHJ [Authority Having Jurisdiction]. (NFPA 1; UFC™, 2006 Edition, Section 18.3.1, as amended.)

3. Submit civil drawings to the HFD for review and approval.

Should you have questions, please call Battalion Chief Socrates Bratakos of our Fire Prevention Bureau at 723-7151 or [sbratakos@honolulu.gov](mailto:sbratakos@honolulu.gov).

Sincerely,



ROLLAND J. HARVEST  
Assistant Chief

RJH/SB/bh

May 15, 2014

Mr. Socrates Bartakos  
Battalion Chief  
Honolulu Fire Department Fire Prevention Bureau  
636 South Street  
Honolulu, Hawaii 96813

Dear Mr. Bartakos,

**SUBJECT: Pre-Consultation for the Residence at 525-567 Portlock Road, Honolulu,  
Hawaii 96825 TMK: 3-9-0260: 044, 045, 046, 047, 048**

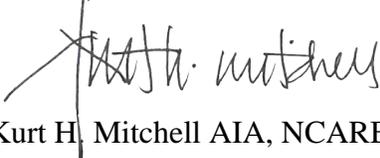
Thank you for taking the time to provide comments; they were reviewed along with additional suggested information sources. Responses are included in the draft environmental analysis being submitted for the subject property and will also be incorporated into the final document and Shoreline Management Application as applicable.

In response to your comments; the design of the buildings and site shall be such that either no first story exterior building walls will be more than 150 feet from fire access roads or on site fire hydrants and pails. All buildings part of this project shall have a minimum of one exterior door leading to the interior; operable from the exterior and within 50 feet of the fire access road. Civil drawings for the project shall be submitted to HFD for review and approval as part of the permitting process.

Per requirements of the Environmental Analysis Review Process; a copy of the draft will be available for public review and further comments for a period of 30 days – notification of its posting shall be available in the periodic bulletin issued by the Office of Environmental Quality Control [OEQC]. The OEQC also generates a list of reviewers; should you make this list you will receive a copy of this Draft Environmental Analysis for review.

Should you have further comments or questions please contact Kate Poland at [kpoland@rimarchitects.com](mailto:kpoland@rimarchitects.com), phone (808)687-8878 or Kurt Mitchell at [khmitchell@khma.com](mailto:khmitchell@khma.com), phone (808) 566-5408.

Mahalo,



Kurt H. Mitchell AIA, NCARB, RDI





January 10, 2014

Kober, Hanssen, Mitchell Architects  
77 Merchant Street  
Honolulu, Hawaii 96813

Attn: Mr. Kurt H. Mitchell  
President/CEO

**Subject: 525 – 567 Portlock Road**

Dear Mr. Mitchell,

Thank you for the opportunity to respond to the proposed work at 525-567 Portlock Road. Oceanic Time Warner cable does not keep records of the cable design within private property. We have no comment and should not be impacted by the proposed work. Should you want Oceanic to review and comment on the cable design for the new and renovated houses please send us a copy of the proposed electrical drawings to our Engineering Dept. at 200 Akamainui Street, Mililani, Hawaii 96789.

Sincerely,

A handwritten signature in cursive script that reads "Randy Makizuru".

Randy Makizuru  
OSP Engineer

NEIL ABERCROMBIE  
GOVERNOR



HERMAN TUIOLOSEGA  
ACTING DIRECTOR

**STATE OF HAWAII**  
**OFFICE OF ENVIRONMENTAL QUALITY CONTROL**

**Department of Health**  
235 South Beretania Street, Suite 702  
Honolulu, Hawaii'i 96813  
Telephone (808) 586-4185  
Facsimile (808) 586-4186  
Email: oeqchawaii@doh.hawaii.gov

December 23, 2013



Mr. Kurt H. Mitchell, President/CEO  
KOBBER HANSEN MITCHELL ARCHITECTS, INC.  
77 Merchant Street  
Honolulu, Hawaii'i 96813

RE: Pre-consultation for residences at 525-567 Portlock Road, Honolulu, Hawaii'i  
96825

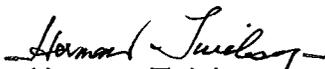
Dear Mr. Mitchell:

The Office of Environmental Quality Control is in receipt of your November 15, 2013, letter for pre-consultation about the 525-567 Portlock Road Residences. After review of the proposed activities, OEQC offers these comments:

1. The proposed project is subject to the City and County of Honolulu Revised Ordinances of Honolulu (ROH) Chapter 25, pursuant to Hawaii'i Revised Statutes Chapter 205A.
2. Please consult with the Department of Health, Environmental Planning Office for water quality requirements, noise, fugitive dust, hazardous materials management, and best management practices to mitigate environmental impacts from the project.
3. Please observe relevant mitigation measures identified in the draft environmental assessment (DEA) or a better alternative during all phases of the project.

Thank you very much for the opportunity to review and comment on proposed project. Please feel free to contact me at (808) 586-4185 if you have further questions.

Sincerely,

  
Herman Tuiolosega  
Acting Director

May 15, 2014

Mr. Herman Tuiolosega  
Acting Director  
State of Hawaii Office of Environmental  
Quality Control – Department of Health  
235 South Beretania Street, Suite 702  
Honolulu, Hawai'i 96813  
Ph: (808) 586-4185

Dear Mr. Tuiolosega,

**SUBJECT: Pre-Consultation for the Residence at 525-567 Portlock Road, Honolulu,  
Hawaii 96825 TMK: 3-9-0260: 044, 045, 046, 047, 048**

Thank you for taking the time to provide comments; they were reviewed along with additional suggested information sources. Responses are included in the draft environmental analysis being submitted for the subject property and will also be incorporated into the final document and Shoreline Management Application as applicable. Additionally, organizations cited in your response whom we feel may have direct comments applicable to this project have been contacted.

The proposed project shall maintain compliance with the ROH Chapter 25 and HRS Chapter 205A throughout the EA process and construction. During construction all mitigation processes identified in the Environmental Analysis will be observed.

Per requirements of the Environmental Analysis Review Process; a copy of the draft will be available for public review and further comments for a period of 30 days – notification of its posting shall be available in the periodic bulletin issued by the Office of Environmental Quality Control [OEQC]. The OEQC also generates a list of reviewers; should you make this list you will receive a copy of this Draft Environmental Analysis for review.

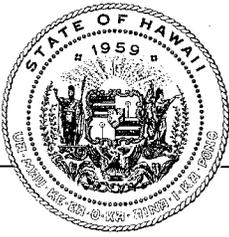
Should you have further comments or questions please contact Kate Poland at kpoland@rimarchitects.com, phone (808)687-8878 or Kurt Mitchell at khmitchell@khma.com, phone (808) 566-5408.

Mahalo,



Kurt H. Mitchell AIA, NCARB, RDI





# OFFICE OF PLANNING STATE OF HAWAII

NEIL ABERCROMBIE  
GOVERNOR

JESSE K. SOUKI  
DIRECTOR  
OFFICE OF PLANNING

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

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

Ref. No. P-14229

December 31, 2013

Mr. Kurt H. Mitchell, President/CEO  
Kober Hanssen Mitchell Architects  
77 Merchant Street  
Honolulu, Hawaii 96813

Dear Mr. Mitchell:

Subject: Environmental Assessment Pre-Consultation for the Residences at 525-567  
Portlock Road, Honolulu, Hawaii, Tax Map Key: (1)3-9-026: 044, 045, 046,  
047 and 048

Thank you for the Environmental Assessment (EA) pre-consultation opportunity for the  
subject renovation and construction of the residences.

Your request letter, dated November 15, 2013, states that:

As of January 1, 2012, per HRS 205A and the City and County of  
Honolulu ROH Chapter 25, all major residential construction  
(renovation or new more than \$500,000.00 and larger than 7,500  
sqft of floor area) that are located within the Shoreline Management  
Area are required to obtain a SMA. The SMA permit process  
within the City and County of Honolulu requires that EA be  
prepared.

The Office of Planning has reviewed the subject EA pre-consultation package and has the  
following comments.

1. Act 153, Session Laws of Hawaii 2011, Relating to Special Management Areas,  
became effective on July 1, 2011, rather than January 1, 2012 as indicated in your  
letter.
2. Pursuant to Hawaii Revised Statutes (HRS) §205A-22, regardless of the valuation  
threshold of \$500,000, construction or reconstruction of a single-family residence that  
is more than 7,500 square feet of floor area or is part of a larger development is a  
“development” and requires SMA permitting.



Mr. Kurt H. Mitchell

Page 2

December 31, 2013

3. Revised Ordinances of Honolulu (ROH) §25-3.3 requires that any proposed development within the special management area requiring a *special management area use permit* shall be subject to an assessment by the agency in accordance with the procedural steps set forth in HRS Chapter 343. Please contact the Department of Planning and Permitting (DPP), City and County of Honolulu, for DPP's determination on the requirement of an EA for the subject project.

HRS Chapter 205A requires all State and county agencies to enforce the coastal zone management (CZM) objectives and policies. If an EA is required, the subject EA shall include an assessment as to how the proposed action conforms to CZM objectives and their supporting policies set forth in HRS §205A-2.

If you have any questions, please contact Leo Asuncion, Coastal Zone Management Program Manager, at 587-2846.

Sincerely,



for Jesse K. Souki  
Director

May 15, 2014

Mr. Jesse K. Souki  
Director  
Coastal Zone Management  
Program Manager  
(808) 587-2846  
P.O. Box 2359  
Honolulu, HI 96804  
Att: Mr. Leo Asuncion

Dear Mr. Souki,

**SUBJECT: Pre-Consultation for the Residence at 525-567 Portlock Road, Honolulu, Hawaii 96825 TMK: 3-9-0260: 044, 045, 046, 047, 048**

Thank you for taking the time to provide comments; they were reviewed along with additional suggested information sources. Responses are included in the draft environmental analysis being submitted for the subject property and will also be incorporated into the final document and Shoreline Management Application as applicable. Additionally, organizations cited in your response whom we feel may have direct comments applicable to this project have been contacted.

Prior to engaging in an environmental analysis for the property; the Department of Planning and Permitting, City and County of Honolulu [DPP] was contacted and it was determined that an EA and SMA are necessary for this project. The DPP will also be involved in the review and submission of the EA.

Per requirements of the Environmental Analysis Review Process; a copy of the draft will be available for public review and further comments for a period of 30 days – notification of its posting shall be available in the periodic bulletin issued by the Office of Environmental Quality Control [OEQC]. The OEQC also generates a list of reviewers; should you make this list you will receive a copy of this Draft Environmental Analysis for review.

Should you have further comments or questions please contact Kate Poland at kpoland@rimarchitects.com, phone (808)687-8878 or Kurt Mitchell at khmitchell@khma.com, phone (808) 566-5408.

Mahalo,

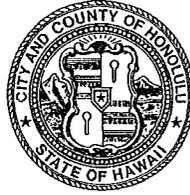


Kurt H. Mitchell AIA, NCARB, RDI



POLICE DEPARTMENT  
CITY AND COUNTY OF HONOLULU

801 SOUTH BERETANIA STREET · HONOLULU, HAWAII 96813  
TELEPHONE: (808) 529-3111 · INTERNET: www.honolulu.org



KIRK CALDWELL  
MAYOR

OUR REFERENCE EO-WS

December 31, 2013

Mr. Kurt H. Mitchell, AIA, RDI, NCARB  
President/CEO  
Kober Hanssen Mitchell Architects, Inc.  
77 Merchant Street  
Honolulu, Hawaii 96813

Dear Mr. Mitchell:

This is in response to your letter dated November 15, 2013, requesting comments on the Pre-Consultation, Environmental Assessment, for the proposed renovation and new construction of residences on Portlock Road.

The Honolulu Police Department has no concerns regarding the project at this time.

If there are any questions, please call Major Raymond Ancheta of District 7 (East Honolulu) at 723-3369 or via e-mail at [rancheta@honolulu.gov](mailto:rancheta@honolulu.gov).

Sincerely,

LOUIS M. KEALOHA  
Chief of Police

By   
RANDAL K. MACADANGDANG  
Assistant Chief  
Support Services Bureau

