

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

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October 29, 2025

2025/ED-2(CK)

Ms. Mary Alice Evans
Director
Office of Planning and Sustainable Development
Environmental Review Program
State of Hawai'i
235 South Beretania Street, Room 702
Honolulu, Hawai'i 96813

Dear Ms. Evans:

SUBJECT: Revised Ordinances of Honolulu (ROH) Chapter 25
Final Environmental Assessment (EA)
Project: Libby Single-Family Dwellings Project
Applicant: John A. and Kathleen H. Libby Trust
Agent: Planning Solutions, Inc. (Makena White)
Location: 68-631 and 68-623 Crozier Drive - Waialua
Tax Map Keys: Tax Map Keys 6-8-004: 003 and 004
Determination: Finding of No Significant Impact (FONSI)

We have reviewed the Final EA for the subject Project, which was received on October 21, 2025. Based on the requirements of ROH Chapter 25 and Hawai'i Revised Statutes Chapter 343, we have determined that preparation of an Environmental Impact Statement is not required, and hereby issued a FONSI.

With this letter, the Department of Planning and Permitting transmits the Final EA and FONSI for the Libby Single-Family Dwellings Project, located at 68-631 and 68-623 Crozier Drive in Waialua, Oahu, for publication in the November 8, 2025 edition of *The Environmental Notice*. The Final EA includes copies of public comments received and the corresponding responses from the Applicant that were received during the 30-day public comment period on the Draft EA and Anticipated FONSI.

Ms. Mary Alice Evans
October 29, 2025
Page 2

Due to issues with Americans with Disabilities Act portable document format (pdf) compliance for attachments to the Final EA, we have requested that the agent upload an electronic copy of the Final EA and FONSI to your online submittal site. Should you have any questions, please contact Christi Keller, of our Land Use Approval Branch, at (808) 768-8087 or via email at c.keller@honolulu.gov.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'Dawn', with a stylized flourish extending to the right.

Dawn Takeuchi Apuna
Director

From: dbedt.opsd.erp@hawaii.gov
To: [DBEDT OPSD Environmental Review Program](#)
Subject: New online submission for The Environmental Notice
Date: Friday, October 31, 2025 9:49:44 AM

Action Name

Libby Single-Family Dwellings

Type of Document/Determination

ROH Ch 25 Final EA and FONSI

Judicial district

Waialua, O'ahu

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

(1) 6-8-004:003; (1) 6-8-004:004

Action type

Applicant

Other required permits and approvals

Minor Shoreline Structure Permit; Building Permit; Individual Wastewater System

Discretionary consent required

Special Management Area Major Permit

Agency jurisdiction

City and County of Honolulu

Approving agency

Department of Planning and Permitting

Agency contact name

Christi Keller

Agency contact email (for info about the action)

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[Map It](#)

Applicant

John Libby

Applicant contact name

John Libby

Applicant contact email

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Applicant contact phone

(714) 797-2596

Applicant address

440 Exchange
Suite 100
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[Map It](#)

Is there a consultant for this action?

Yes

Consultant

Planning Solutions, Inc.

Consultant contact name

Jim Hayes

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Consultant contact phone

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Action summary

The applicant will be seeking a Special Management Area Major permit from the Honolulu City Council for a development that will result in four single-family dwellings, two on each of the subject TMK parcels. The development will comply with applicable sections of the Land Use Ordinance (ROH Chapter 21) and Shoreline Setback Ordinance (ROH Chapter 26); no waivers or exceptions are being sought. Archaeological subsurface testing was performed and no human skeletal remains were encountered. The project will continue to consult with SHPD to complete the HRS Chapter 6E review prior to construction. The project will implement best management practices to protect natural, cultural, and historic resources.

Attached documents (signed agency letter & EA/EIS)

- [2025-10-29_DPPToERP-LibbyResFONSI1.pdf](#)

- [2025-11-08-OA-ROH-Chapter-25-FEA-LibbyRes1.pdf](#)

ADA Compliance certification (HRS §368-1.5):

The authorized individual listed below acknowledges that they retain the responsibility for ADA compliance and are knowingly submitting documents that are unlocked, searchable, and may not be in an ADA compliant format for publication. Audio files do not include transcripts, captions, or alternative descriptions. The project files will be published without further ADA compliance changes from ERP, with the following statement included below the project summary in The Environmental Notice: "If you are experiencing any ADA compliance issues with the above project, please contact (authorized individual submitting the project at email)."

Action location map

- [LibbyResidence1.zip](#)

Authorized individual

Jim Hayes

Authorized individual email

jim@psi-hi.com

Authorized individual phone

(808) 550-4559

Authorization

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

FINAL ENVIRONMENTAL ASSESSMENT & FINDING OF NO SIGNIFICANT IMPACT, LIBBY SINGLE-FAMILY DWELLINGS, 68-623 & 631 CROZIER DRIVE



Substantive changes between the Draft Environmental Assessment and this Final Environmental Assessment are indicated as ~~strike throughs~~ and double underlines.

PREPARED FOR:
**The Libby Family
&
Peter Vincent Architects**



PREPARED BY:
**P L A N N I N G
S O L U T I O N S**

NOVEMBER 2025

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LIST OF ACRONYMS

AFONSI	Anticipated Finding of No Significant Impact
AIS	Archaeological Inventory Survey
AMP	Archaeological Monitoring Plan
BFE	Base Flood Elevation
BMP	Best Management Practice
CCH	City and County of Honolulu
CIA	Cultural Impact Assessment
CZM	Coastal Zone Management
DEA	Draft Environmental Assessment
DLNR	Department of Land and Natural Resources
DPP	Department of Planning and Permitting
EA	Environmental Assessment
EHSCP	East Honolulu Sustainable Community Plan
EIS	Environmental Impact Statement
FEA	Final Environmental Assessment
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
HAR	Hawai‘i Administrative Rules
HCC	Honolulu City Council
HDOH	State of Hawai‘i, Department of Health
HEPA	Hawai‘i Environmental Policy Act
HPD	Honolulu Police Department
HRS	Hawai‘i Revised Statutes
IBC	International Building Code
IPCC	Intergovernmental Panel on Climate Change

IRC	International Residential Code
LUO	Land Use Ordinance
MSL	Mean Sea Level
NOAA	National Oceanographic and Atmospheric Agency
OISC	O‘ahu Invasive Species Committee
OR&L	O‘ahu Railway and Land Company
PSI	Planning Solutions, Inc.
ROH	Revised Ordinances of Honolulu
SHPD	State Historic Preservation Division
SIHP	State Inventory of Historic Places
SLR	Sea Level Rise
SLR-XA	Seal Level Rise Exposure Area
SMA	Special Management Area
SMP	Special Management Area Permit
TMK	Tax Map Key
UBC	Uniform Building Code
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

1.0 INTRODUCTION

1.1 Purpose and Need

The purpose of the Proposed Action is to use the subject parcels in a manner consistent with their zoning, R-7.5 Residential, and other applicable land use rules and regulations, including the Land Use Ordinance (LUO) and Shoreline Setback Ordinance, so that multiple families can live on each parcel. The subject parcels are:

- Parcel 3, which is TMK No. (1) 6-8-004:003 at 68-631 Crozier Drive.
- Parcel 4, which is TMK No. (1) 6-8-004:004 at 68-623 Crozier Drive.

The subject parcels are identified on Figure 1-1.

The Proposed Action is needed because, although parcel 3 has been used in a manner consistent with its zoning in the past, there is no residential structure on the parcel currently, and the residential structures on parcel 4 need repair or replacement.

1.2 Environmental Assessment Trigger

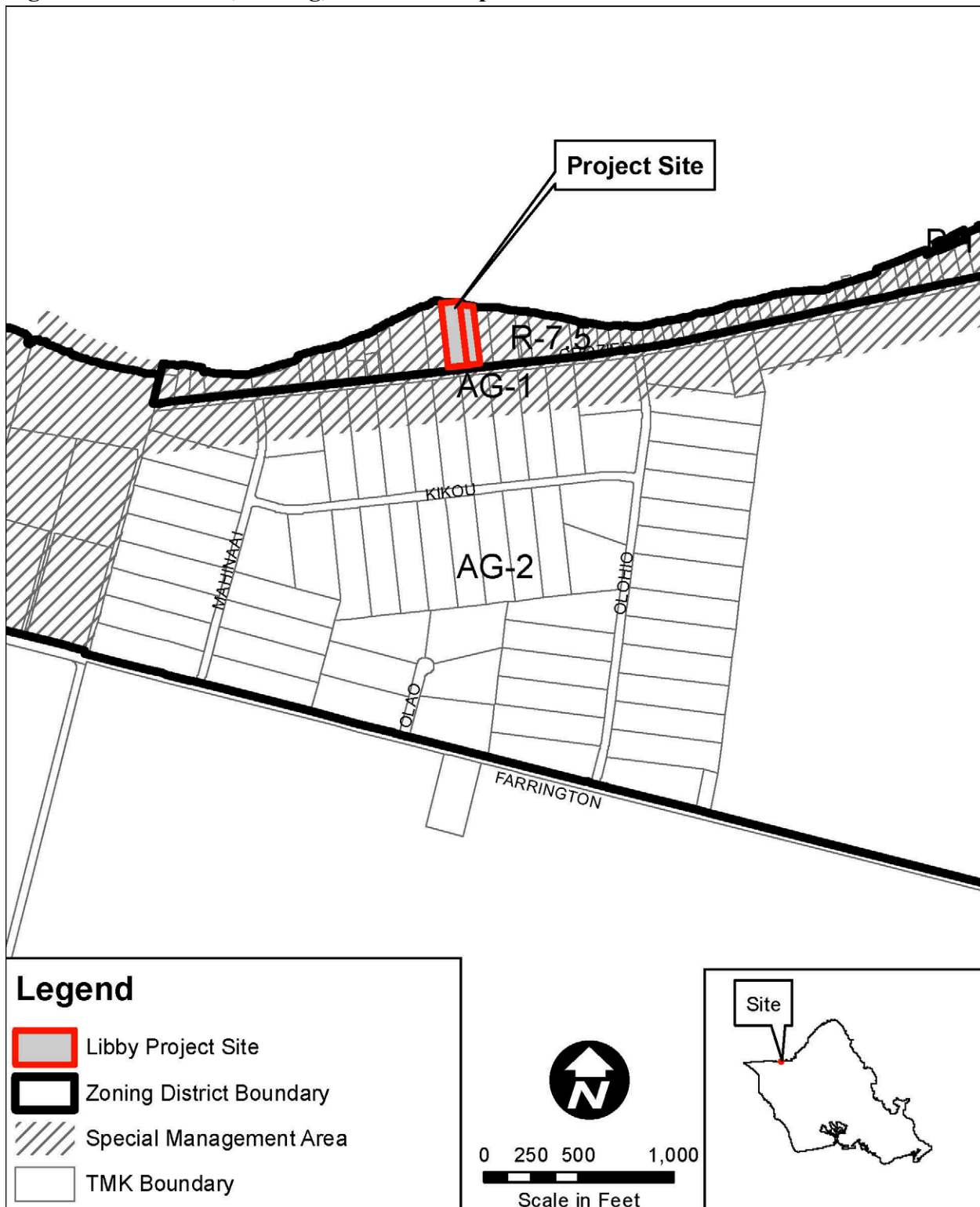
The subject parcels are entirely within the Special Management Area (SMA) (Figure 1-1) and, because the value of the proposed development is greater than \$500,000, the Proposed Action requires an SMA Major permit, pursuant to Revised Ordinances of Honolulu (ROH), Chapter 25. ROH Chapter 25 (§ 23-5.3(a)) states projects that involve the development of more than two dwelling units must prepare an Environmental Assessment (EA) prior to applying for an SMA Major permit. This EA is intended to satisfy that requirement. This EA has been prepared in accordance with the requirements of ROH Chapter 25, as well as Hawai‘i Revised Statutes (HRS) Chapter 343 and its implementing regulations contained in Hawai‘i Administrative Rules (HAR) Title 11, Chapter 200.1.

1.3 Early Consultation

Pursuant to HAR § 11-200.1-18(a), the applicant has sought to:

“conduct early consultation seeking, at the earliest practicable time, the advice and input of the county agency responsible for implementing the county’s general plan for each county in which the Proposed Action is to occur, and consult with other agencies having jurisdiction or expertise as well as those citizen groups and individuals that the proposing agency or approving agency reasonably believes may be affected.”

Figure 1-1: Location, Zoning, and SMA Map



Source: Planning Solutions, Inc.

On January 30, 2025, Planning Solutions, Inc. (PSI), acting on behalf of the Applicant, sent letters to the agencies and individuals identified in Table 1-1. All responses received were carefully

considered during preparation of this EA. The early consultation letters and all responses are contained in Appendix A. PSI contacted all those who responded to confirm that their input had been received, and substantive comments would be addressed in the Draft EA (DEA).

Table 1-1: Early Consultation Letters

Level	Department	Division	Recipient	Response
State of Hawai'i	Department of Business, Economic Development and Tourism (DEBDT)	Office of Planning and Sustainable Development (OPSD)	Mary Alice Evans, Director	Yes
State of Hawai'i	Office of Hawaiian Affairs (OHA)		Stacy Kealohalani Ferreira, CEO	No
CCH	DPP	--	Dawn Takeuchi Apuna, Director	Yes
Private (neighbor)	--	--	Lucy and John Gospodnetich	No
Private (neighbor)	--	--	Peter How	No
Private (neighbor)	--	--	Hello Easy Street	No
Kawaihapai Ohana			Thomas Shirai, Jr., Po'o	No
Mahu Ohana			Keona Mark	No
'Ohana Keaweamahi			Carolyn Keala	No
Aha Moku			Kawika Au	No
Waialua Hawaiian Civic Club				No

1.4 Environmental Assessment Process

This EA has been prepared as an applicant action with the Department of Planning and Permitting (DPP) acting as the approving agency. The Office of Planning and Sustainable Development, Environmental Review Program's (ERP) announced the DEA's availability in its bi-monthly bulletin, The Environmental Notice, on May 23, 2025, which initiated a 30-day public review period. This FEA reflects revisions based upon substantive comments received during the public review period and will be announced in an upcoming edition of The Environmental Notice. The FEA and Finding of No Significant Impact (FONSI) complete the EA process.

1.5 Permits and Approvals

The permits and approvals required to construct the proposed development are identified in Table 1-2.

Table 1-2: Permits and Approvals

Permit	Issuing Authority
ROH § 25 Environmental Review	Department of Planning and Permitting
HRS Chapter 6E-42 Review	State Historic Preservation Division
Certified Shoreline	Department of Land and Natural Resources
Special Management Area, Major	City and County of Honolulu, County Council
Minor Shoreline Structure Permit	Department of Planning and Permitting
Building Permit	Department of Planning and Permitting
Individual Wastewater System	Department of Health

2.0 PROPOSED PROJECT AND ALTERNATIVES

The proposed project involves the following:

- Developing two new single-family dwellings on parcel 3 at 68-631 Crozier Drive.
- Developing two new single-family dwellings ~~and relocating and remodeling an existing dwelling~~ on parcel 4 at 68-623 Crozier Drive.

The proposed development is designed to be consistent with the parcels' R-7.5 Residential zoning (Figure 1-1) and other applicable land use rules and regulations, including the LUO and Shoreline Setback Ordinance.

Parcels 3 and 4 are owned by the same family and will be developed in a similar style and manner. However, the two parcels will remain separate; the proposed development does not require a joint development agreement.

2.1 Project Site Descriptions

The subject parcels are in the SMA (Figure 1-1) and are shoreline parcels. The characteristics of the subject parcels are summarized below in Table 2-1.

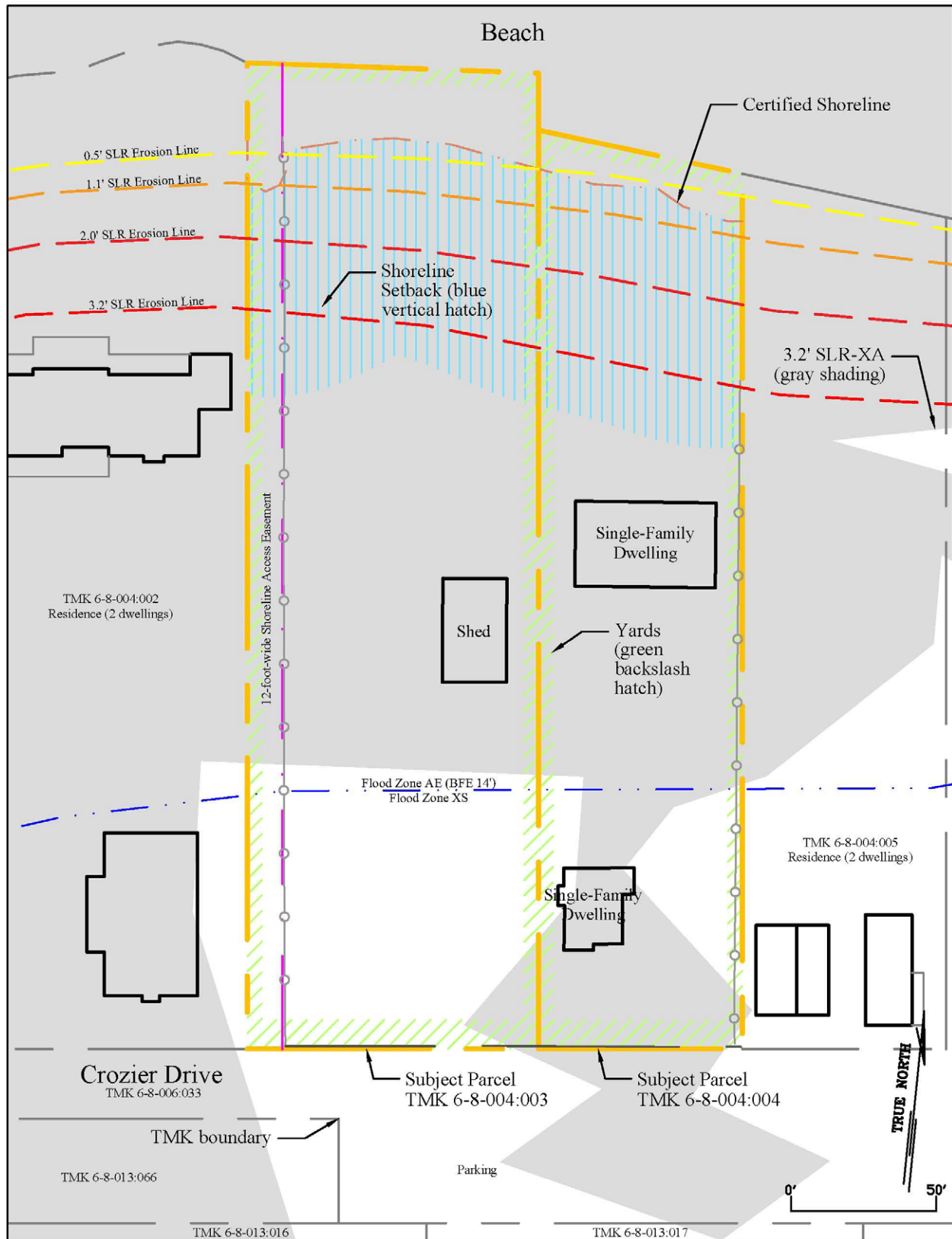
Table 2-1: Characteristics of the Project Parcels

TMK	(1) 6-8-004:003	(1) 6-8-004:004
Lot Area	• Record: 33,739 square feet/0.7746-acre • Erosion Area: 2,856 square feet • Current Area: 30,883 square feet/0.7090 acre	• Record: 21,595 square feet/0.4958-acre • Erosion Area: 997 square feet • Current Area: 20,598 square feet/0.4728 acre
Zoning	R-7.5 Residential, SLU Urban District	R-7.5 Residential, SLU Urban District
Easements	Easement A-1: a 12-foot-wide access easement	None
Lot Shape	Rectangular	Rectangular
Topography	Flat, elevation is roughly 12 feet.	Flat, elevation is roughly 12 feet.
Current Development	One shed in the middle of the parcel. A rock wall with a wood gate is present along Crozier Drive. A chain-link fence and a wood fence are present along the access easement.	Two, one-story, single-family dwellings, one in the middle portion and one on the mauka portion of the parcel. A rock wall with a wood gate is present along Crozier Drive. A wire fence and a wood fence are on the eastern side of the parcel.

TMK	(1) 6-8-004:003	(1) 6-8-004:004
Surrounding Uses	• To the north – Mokulē‘ia Beach/Pacific Ocean. • To the east and west – two single-family dwellings per R-7.5 parcel. • To the south – Crozier Drive and farm dwellings on 2-acre parcels in the AG-2 zone.	Same as parcel 3.
Nearest Bodies of Water	Pacific Ocean/Mokulē‘ia Beach – adjacent to the lot, designated as an estuarine and marine wetland.	Same as parcel 3.
Certified Shoreline Survey	DLNR certified the shoreline survey on September 29, 2025; a copy is provided in Appendix B.	Same as parcel 3.
Soil Classifications	The entire site is mapped as Jaucas sand (JaC), 0 to 15 percent slopes.	Same as parcel 3.
Vegetation	Fruit and palm trees, ornamental shrubs, and grass dominate. The site is routinely maintained by a landscaping service.	Same as parcel 3.
Flood Zone	Flood Zone AE in northern portion (with a base flood elevation of 14 feet) and Flood Zone XS in the southern portion (Figure 2-1).	Same as parcel 3.
Erosion Rate	-0.18 feet/year based on average of transects 439 and 440 (Figure 3-13).	-0.27 feet/year based on transect 441 (Figure 3-13).
Shoreline Setback	72.6 feet	78.9 feet
Tsunami	Tsunami Evacuation Zone.	Same as parcel 3.

The recorded owners of the parcels are the John A. Libby Trust and the Kathleen H. Libby Trust with an address of 4263 Kaimanahila Street, Honolulu, HI 96816. The parcels are accessed via a driveway directly off Crozier Drive, which is to the south. Recent site conditions are illustrated on Figure 2-1, Figure 2-2, Figure 2-3, and Figure 2-4.

Figure 2-1: Site Plan, Existing Conditions



Source: PSI

Figure 2-2: Aerial Photograph (2021) of Recent Site Conditions



Source: Google Earth; satellite photo dated April 2021.

Figure 2-3: Ground-Level Photographs of Existing Site Conditions

a. Parcel 3 site viewed from entrance gate towards shoreline. The proposed garage/caretaker house will be developed on the left side of the photograph. Further makai, the main house will be built in the middle portion of the parcel.



b. Parcel 3 site viewed from near shoreline toward Crozier Drive. The proposed main house will be developed in the middle of the parcel.



c. Parcel 4 site viewed from entrance gate towards shoreline. The proposed dwellings will be developed in the vicinity of the existing dwellings.



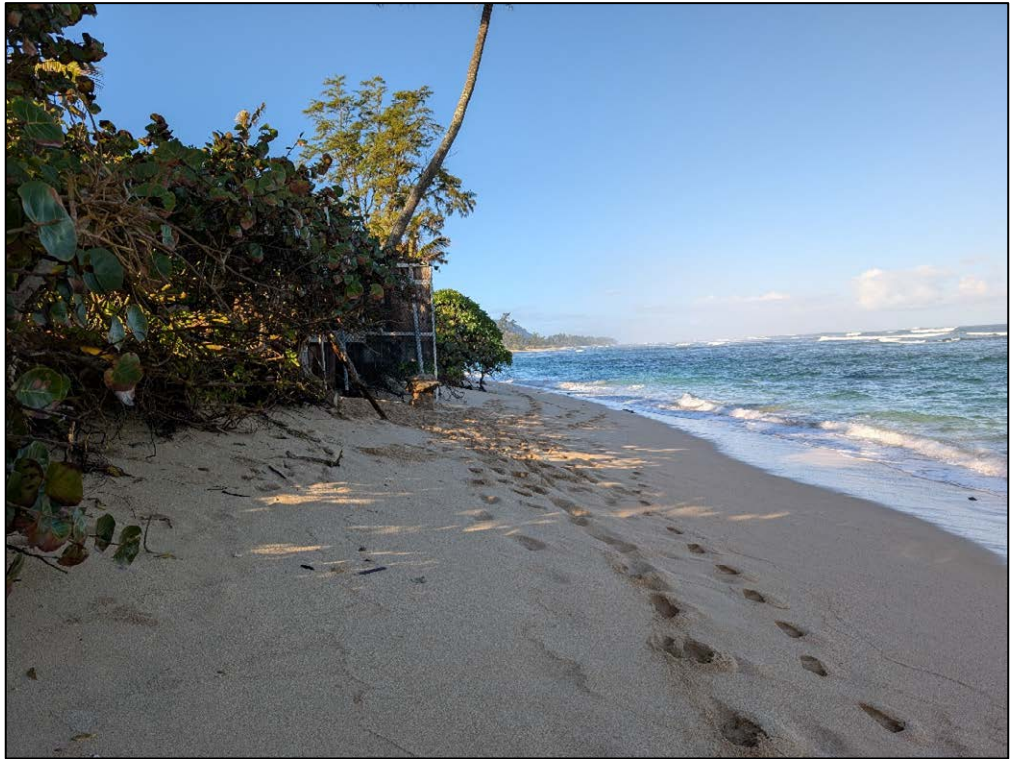
b. Parcel 4 site viewed from near the shoreline toward Crozier Drive. A new dwelling built in roughly the same location as the existing dwelling visible in this photograph.



Source: Planning Solutions, Inc.; photos dated January 15, 2025.

Figure 2-4: Ground-Level Photograph of Shoreline Conditions at Parcels 3 & 4

a. Shoreline conditions north of subject parcels, viewing to the west. [The chain-link fence visible in this photo has been removed at the direction of the DLNR, Land Division.](#)



b. Shoreline conditions north of subject parcels, viewing to the east.



Source: Planning Solutions, Inc.; photo dated January 15, 2025.

2.2 Project Description

At this stage of project planning the design is conceptual. The large-scale elements of the project, such as the number of dwelling units and their general location on the site, are unlikely to change as the design progresses from the concept presented in this section. Other elements, such as the internal floor plan, are likely to be modified somewhat as the design progresses. Modifications to the project as the design progresses will not change the fact that the project is consistent with applicable plans, policies, or controls, nor will the modifications cause a change in the impact assessment in Chapter 3.0.

2.2.1 Description of Activities and Development Proposed

Generally, the proposed project will advance through the following stages once all necessary permits and approvals are obtained:

- Establish temporary Best Management Practices (BMPs).
- Demolish and remove certain existing developments.
- Construct developments:
 - On parcel 3, build two new single-family residences, a swimming pool and spa, and other accessories.
 - On parcel 4, build two new single-family residences, ~~relocate and remodel one existing single-family dwelling~~, and build other accessories.
- Landscape disturbed areas and remove the temporary BMPs.

All proposed project developments will be confined to the project parcels (TMK Nos. 6-8-004:003 and 004). No development is proposed in the shoreline area, except for 50 percent open work fences, irrigation, and other minor elements that qualify for a Minor Shoreline Structure Permit. All developments will conform to applicable regulations and standards. The BMPs and proposed development are discussed in the sections below. Once construction activities have been completed, the development will be used as single-family dwellings. The dwellings will not be short-term rentals. Figure 2-5 and Figure 2-6 illustrate the project plans; more detailed design drawings are provided in Appendix C.

Figure 2-5: Conceptual Site Plan



Source: PSI and Peter Vincent Architects

Figure 2-6: Conceptual Rendering



Note: View is from Crozier Drive toward the ocean. Both parcels are illustrated.
Source: Peter Vincent Architects

Construction Best Management Practices

Temporary BMPs will be implemented throughout the entire construction process from mobilization to site stabilization. The BMPs will be employed to manage fugitive dust, storm water runoff, solid waste, and address other topics.

Physical BMPs will be established prior to ground-disturbing activities and will include the use of silt fences and/or silt socks to manage storm water runoff and a stabilized construction site ingress and egress. The plans submitted to obtain building permits will detail the erosion and sediment control BMPs.

Throughout the construction period other administrative BMPs will be implemented, including:

- Conduct construction activities in compliance with (i) Honolulu's *Rules Relating Storm Drainage Standards*, (ii) ROH Chapter 14 regarding Public Works Infrastructure Requirements, (iii) HAR § 11-54 *Water Quality Standards*, and (iv) HAR § 11-55 *Water Pollution Controls*. Typical measures will include establishing and maintaining appropriate construction BMPs until the parcels have been stabilized, appropriately stockpiling materials on-site to prevent runoff, limiting the total area of exposed earth, and establishing landscaping as early as possible on disturbed areas.
- Materials will be delivered in phases, as needed, as the construction progresses so that all construction staging can and will occur on-site.
- All work will be carried out during standard work hours: Monday through Friday (excluding holidays) from 7 a.m. to 6 p.m. and Saturday from 9 a.m. to 6 p.m. and comply with all applicable provisions of HAR § 11-46 *Community Noise Control*. No

work will be conducted between sunset and sunrise that will require exterior lighting. If any powered impact tools need to be used (e.g., jackhammer), they will be used after 9 a.m. to reduce potential impacts.

- Maintaining all construction equipment in proper tune according to manufacturer's specifications and further minimize noise by properly maintaining mufflers and other noise-attenuating equipment.
- Fueling all off-road vehicles and equipment, including but not limited to backhoes, tractors, generator sets, and compressors, in a designated location with sufficient spill response equipment and materials.
- Providing notifications periodically to nearby residents.
- Coordinating worker travel and parking to manage the number of vehicle trips and to conduct parking either on-site or in appropriate nearby areas.
- Reusing all excavated material on-site to fill trenches or grade the landscaped areas. No soil will be imported to the parcels that has properties inconsistent with the native soil.¹

Proposed Developments

The proposed developments will conform to all applicable regulations and standards. For example, the structure will be outside of all yards and setbacks, including the shoreline setback, be less than the applicable height limit of 25 feet; and not exceed the allowable building area (Table 3-2 and Table 3-3).

Parcel 3

As shown on Figure 2-5 and Figure 2-6 (and detailed in Appendix C), the developments for parcel 3 will include two, two-level, single-family dwellings. Important aspects of the design include:

- *Main house.* A first floor with a great room, laundry room, four bedrooms, three bathrooms, ~~one-half bathroom~~, and five covered lanais. A second level with one bedroom, one bathroom, office, family room, and covered lanai. The first-floor elevation will be roughly 14 feet.
- *Garage/Caretaker house.* The first level will consist of a three-car garage. The second level will have two bedrooms, bathroom, living room, and kitchen.

In addition to the primary project components mentioned above, the proposal includes the following accessory components, all on parcel 3:

- *Pool Pavilion.* This small building, between the garage and pool, will consist of one full bathroom and one-half bath.
- *Outdoor Accessories:*

¹ Structural fill material will be required for foundation elements. This material will be limited to the volumes and locations specified by geotechnical and structural engineers and likely limited to areas under foundation and slab elements of the proposed development. In addition, engineered fill will be required for IWS leach fields.

- Pool, spa, and reflecting pool. The main portion of the pool will have a water depth of 4.5 feet; the “wings” of the pool will be stairs or a “Baja ledge” with a water depth of roughly 1 foot. The reflecting pool, around the BBQ pavilion, will have a water depth of roughly 2 feet.
- Entry pavilion.
- BBQ pavilion.
- *Auto Court and walkways*. The auto court will consist of concrete slabs of various sizes with 4-inch-wide gaps between them with grass. A covered walkway will connect the garage/caretaker residence to the main house. Other grasscrete-style walkways will be provided to provide connectivity between the dwellings and accessories.
- *Boundary wall*. A CMU wall will replace the fence currently along the access easement from Crozier Drive to the shoreline setback. The CMU wall will be six feet tall in the front yard; it will be seven and a half feet tall where it is outside the front yard.

Parcel 4

As shown in Figure 2-5 and Figure 2-6 (and detailed in Appendix C), the developments for parcel 4 will include two, one-story, single-family dwellings. Important aspects of the design include:

- *Mauka guest house*. A single-level, single-family dwelling (~~relocated from the makai portion of the parcel~~) with three bedrooms, two bathrooms, great room, laundry room, and two covered lanais. The mauka guest house is in flood zone X and, therefore, does not need to be elevated above a BFE; the floor elevation will be roughly 12.5 feet.
- *Makai guest house*. A single-level, single-family dwelling with four bedrooms, two bathrooms, great room, and two covered lanais. The floor elevation will be roughly 14 feet.
- *Basketball half-court/Auto Court*. A basketball half-court and auto court will be located on the mauka side of the parcel along Crozier Drive. The auto court area will consist of concrete slabs of various sizes with 4-inch-wide gaps between them with grass.

Both Parcels

The proposal includes the following accessory components:

- *Landscaping*. The existing landscape, including mature trees, will be retained to the extent possible and desired. Additional landscaping will be added. Landscaping will generally be drought and salt-tolerant and be naturally hardy or endemic to the shoreline area. A sprinkler system will be installed to provide irrigation for the landscaping; the irrigation system will be designed in a manner that prevents water from traversing makai of the shoreline or facilitating growth of vegetation makai of the shoreline.
- *Utility Connections*. See Section 2.2.3 regarding utilities. Utilities will be connected to the development using aboveground and/or underground connections. An area on the southern side of the entry area will be developed with a concrete pad and used to support utility-related (e.g., electrical, natural gas, etc.) equipment.

The proposed construction can be accomplished with standard construction equipment; no novel equipment or techniques are required to complete the project. Limited excavations will be necessary for building foundation elements and utility trenches (e.g., water, sewer, and irrigation). All excavated material will be reused on-site to fill trenches or used to generate the desired ground level in landscaped areas and other portions of the parcels.

2.2.2 Excavation, Fill, and Foundations

Excavations will be necessary for building foundation elements, the pool/spa, and utilities. The typical foundation footing depths will be 2 feet below existing grade and follow the perimeter of the dwelling footprints with several footings and piers in the interior portions of the dwelling footprints. The structure foundations excavations will result in roughly 420 cubic yards of sand being excavated.

Portions of the pool, spa, and reflecting pool will require excavation into the existing sand. Only a portion of the pool's depth will require excavation because the pool's water level elevation will be roughly 13 feet and existing ground elevation is roughly 10.5 feet. It is excavated that 102 cubic yards of sand will be excavated for the pool.

The IWS systems will require excavations for the tanks and leach fields. The septic tanks will require excavations roughly 6 feet deep and the leach fields will require excavations roughly 4 feet deep. It is estimated 460 cubic yards of sand will be excavated for the IWS. Utility trenches for water, sewer, electrical, and communication services will be 24 to 30 inches deep extending to and from the proposed dwellings. The volume of material excavated for utilizes will be minor.

It is estimated that 982 cubic yards of sand will be excavated for the proposed development. The excavated sand will be reused on site to fill trenches and excavations and to generate the desired grade in the areas to be landscaped. It is estimated that roughly 1,000 cubic yards of engineers and structural fill will be imported to the site. The imported material will include structural fill to be placed under foundations and engineered fill that meet the design specifications for the IWS absorption beds.

2.2.3 Utilities Requirements

The proposed development on both parcels will require potable water, electricity, communication, sewer, and solid waste services. The previous residential use of the parcels relied on these utilities and consequently, these services are readily available, as follows:

- Hawaiian Electric power is available from overhead lines on Crozier Drive.
- Hawaiian Telcom and/or Spectrum communication is available from overhead lines on Crozier Drive.
- The Board of Water Supply has a water line under Crozier Drive and there is an existing service line and water meter to the project parcels.
- Permits for IWS will be obtained from HDOH for the management of wastewater from the proposed development. There will be two IWS per parcel with each system consisting of a septic tank and a leach field/absorption bed. The IWS absorption beds will be at least 150 feet from the shoreline.

- Honolulu Department of Environmental Services, Refuse Division provides curbside solid waste, green waste, and recycling services in the Mokulē‘ia area, including the project parcels.

2.2.4 Project Schedule and Value

It is anticipated, once all necessary permits have been obtained, it will take roughly two years to build the proposed development.

The total value of the proposed development is estimated to be roughly \$4,000,000.

2.3 Alternatives

2.3.1 Framework for Consideration of Alternatives

Title 11, Chapter 200.1, HAR contains the State of Hawai‘i, Department of Health (HDOH) environmental review rules. HAR, § 11-200.1-9 deals with applicant actions such as the proposed project. It requires that, for actions not exempt, the applicant must consider the environmental factors and available alternatives and disclose those in an EA or Environmental Impact Statement (EIS). HAR § 11-200.1-18 establishes the process for the preparation and content of an EA. Among the requirements listed, HAR § 11-200.1-18(d)(7) requires the identification and analysis of impacts of alternatives considered during project planning.

In accordance with those requirements, the Applicant has considered several alternatives before determining that the Proposed Action and project described above is its preferred alternative. The process consisted of formally defining the purpose and need for the project (Section 1.1), identifying other ways in which those objectives might be achieved (i.e., alternatives, including those specifically recommended by HRS, Chapter 343 and HAR § 11-200.1), and evaluating each alternative with respect to the project’s objectives. Possibilities considered included the “No Action Alternative,” alternative locations, alternative configurations for the project, alternative scales for the proposed project, and alternative timing (i.e., delayed action).

2.3.2 Alternatives for Detailed Consideration

The Applicant has concluded that the only alternatives that merit detailed consideration in this EA are:

- The Proposed Action Alternative. This alternative is described previously in this chapter (Section 1.2 and Section 2.2). The Applicant has concluded that constructing and occupying facilities at the project parcel on its present timeline will enable it to best meet its purpose and need, as described in Section 1.1. Thus, the Proposed Action represents its preferred alternative.
- The No Action Alternative. Under the No Action Alternative, existing conditions on the project parcel would not be changed. No attempts would be made to build any residences on either of the two subject lots. While the No Action Alternative does not meet the project’s purpose and need as defined in Section 1.1, it is considered here pursuant to the recommendations of HRS, Chapter 343 and HAR § 11-200.1, and to

provide a baseline for comparison and contrast with the action alternative (i.e., the Proposed Action).

Only these two alternatives are analyzed in Chapter 3.0.

2.3.3 Alternatives Considered but Rejected

The following subsections briefly describe the other alternatives considered and the factors that were used to decide they should be excluded from detailed consideration.

Alternative Scale

In considering the residential needs of the project, the Applicant considered constructing a residence at the same location, but with an alternative scale. The scale could be larger or smaller than project outlined in Section 2.2. The subject site could host fewer/smaller or more/larger residences. Having evaluated the larger scale possibility, it was determined it would exceed the Applicant's residential needs, reduce the outdoor space that has value for the family, and be inconsistent with the surrounding neighborhood. A smaller scale development was determined to be less attractive because it would not provide sufficient space for the family's needs. Therefore, the Applicant eliminated these scale alternatives from further consideration.

Delayed Action Alternative

As noted previously, HAR § 11-200.1 recommends the consideration of a variety of alternatives, including those of a substantially different nature than the Proposed Action, to include alternative timing (i.e., delayed action). The Applicant's Proposed Action is for the sole purpose of developing residences at 68-623 and 631 Crozier Drive, meeting the purpose and need identified in Section 1.1. As such, a delayed action alternative would neither address the Applicant's purpose nor needs. Further, to prolong development of the residences would offer no countervailing advantages. For these reasons, the Applicant has determined a delayed action alternative is not a viable option and eliminated it from further consideration in this EA.

Alternative Location

HAR § 11-200.1 also recommends the consideration of alternative locations for a proposed action. Effectively, the siting determination was made when the Applicant acquired parcels 3 and 4. The Applicant believes the parcels possess all the characteristics which make it a desirable location for the proposed project, and that other available sites did not possess the same combination of characteristics which make the current location ideal for the proposed use. Owning the parcels, which possesses the appropriate underlying zoning, and other characteristics, the Applicant can see no advantage to further investigating alternative locations. For these reasons, the Applicant has determined that an alternative location is not a reasonable option and eliminated it from further consideration in this EA.

Locating Development Further Mauka

The DPP scoping letter (Appendix A) states DPP recommends "the proposed development be sited as far mauka on the property as practicable, and designed to minimize potential risk of loss to the structures." The Applicant considered designs that sited the structures and amenities further

mauka than the Proposed Action's design. While the parcels allow for the structures being sited further mauka, the Applicant determined that such designs (i) did not provide the amenities they desire, (ii) were inconsistent with nearby existing and permitted development, and (iii) did not eliminate development within the SLR-XA at 3.2 feet of sea level rise. Furthermore, the Proposed Action sufficiently minimizes the risk of structure loss by siting all proposed structures mauka of the shoreline setback area. For these reasons, the Applicant has determined siting the structures further mauka is not a desirable option and eliminated it from further consideration in this EA.

3.0 EXISTING ENVIRONMENT, PROJECT EFFECTS, AND SMA/CZM CONSISTENCY

This chapter describes the potential environmental effects of the Proposed Action as described in Chapter 2.0. The discussion in Sections 3.1 through 3.9 address the development proposed on the two parcels as one project. This chapter is organized by SMA/CZM resource category (e.g., recreational resources, historic and cultural resources, etc.). The discussion under each topic includes: (i) an overview of existing conditions on the project site; (ii) the applicable ROH Chapter 25 SMA and HRS Chapter 205A CZM objectives, policies, and guidelines; (iii) the potential environmental impacts that may occur as a result of implementation of one of the alternatives considered in this EA; and, where appropriate, (iv) any measures that will be employed to avoid, minimize, or mitigate potential adverse effects.

The scale of the discussion is commensurate with the potential for impacts. Where appropriate, the larger environmental context (e.g., the North Shore) is discussed, and in other cases the focus is narrower (e.g., the project site). The discussion of impacts also distinguishes between short-term impacts (i.e., those occurring when construction equipment and personnel are actively implementing demolition and construction processes) and those that may result over the long-term because of the project.

Table 3-1 provides an overview of the resources and SMA/CZM topics discussed in this chapter. The three right columns provide a quick reference regarding the impact or consistency assessment.

Table 3-1: Summary of Impact Assessment

SMA/CZM Resource	Less Than Significant with Measures	Less than Significant Impact	No Impact/ Is Consistent
A. Recreational Resources (Section 3.1)			
Access to Beaches, Coastal Dunes, Recreational Areas, and Natural Reserves		X	
Preserves Recreation Areas and Wildlife Preserves			X
B. Historic and Cultural Resources (Section 3.2)			
Historic Archaeological Resources	X (Section 3.2.5)		
Historic Architectural Resources			X
Cultural Resources			X
C. Scenic and Open Space Resources (Section 3.3)			
Coastal Scenic and Open Space			X
Alterations to Landforms/Vegetation			X
Scenic or Recreational Amenities			X
D. Coastal Ecosystems (Section 3.4)			
Critical Habitat			X
Protected Flora			X
Protected Fauna	X (Section 3.4.4)		
Invasive Species	X (Section 3.4.4)		
Solid and Liquid Waste Treatment			X

SMA/CZM Resource	Less Than Significant with Measures	Less than Significant Impact	No Impact/ Is Consistent
E. Economic Uses (Section 3.5)			
Facilities and Development Important to State's Economy			X
Consistent with Minimizing Exposure to Coastal Hazards			Consistent
Consistent with Minimizing Adverse Social, Visual, and Environmental Impacts			Consistent
F. Coastal Hazards (Section 3.6)			
Reduces Risks of Coastal Hazards on Life and Property	X (Section 3.6.4)		
Designed to Minimize Impacts From:			
Landslides			X
Erosion			X
Sea Level Rise	X (Section 3.6.4)		
Siltation			X
Failure in Event of Earthquake	X (Section 3.6.4)		
Flood / Storm Surge / Tsunami	X (Section 3.6.4)		
G. Managing Development (Section 3.7)			
Consistent with HRS Chapter 205A CZM			Consistent
Consistent with HRS Chapter 205 Agricultural Lands			Consistent
Compliant with HRS Chapter 6E Historic Preservation			Consistent
Consistent with O'ahu General Plan			Consistent
Consistent with North Shore Sustainable Communities Plan			Consistent
Consistent with ROH Chapter 21 Land Use Ordinance			Consistent
Consistent with ROH Chapter 26 Shoreline Setback Ordinance			Consistent
Consistent with ROH Chapter 25 Special Management Area Ordinance			Consistent
Consistent with Provided Opportunity for Public Input			Consistent
H. Beach and Coastal Dune Protection (Section 3.8)			
Beaches and Coastal Dunes			X
Natural Shoreline Processes			X
Loss Due to Erosion			X
I. Marine and Coastal Resources (Section 3.9)			
Water Resources (surface and ground)			X
Scenic and Recreational Amenities			X
Wetlands (Section 3.4)			X
J. Cumulative Impact or Significant Effect and Compelling Public Interest (Section 3.10)			
Cumulative Impact or Significant Effect			X
Public Health, Safety, or Compelling Public Interest			X

3.1 Recreational Resources

3.1.1 Existing Conditions

Parcels 3 and 4 are not public recreational resources. The 12-foot-wide access easement on the western side of parcel 3 provides public access from Crozier Drive to the shoreline. Other portions of parcels 3 and 4 do not provide access to public recreational resources. The nearest public recreational resources are:

- Parks. The proposed project is in the CCH Department of Parks and Recreation's District IV, which encompasses 17 parks on the North Shore of O'ahu from Mokulē'ia to Makapu'u. These include: (i) beach parks, (ii) community parks, (iii) regional parks, (iv) senior centers, and (v) community centers. The District IV administrative office is located at 45-660 Kea'ahala Road in Kāne'ohe. The nearest CCH parks to the project parcels are 'Āweoweo Beach Park approximately 0.9 mile to the east, and Waialua District Park 2.1 miles to the east.
- Shoreline Access. Parcel 3 includes a 12-foot-wide access easement for public shoreline access that runs along the entire western side of the parcel. Identified as Shoreline Access 257A, it runs north from Crozier Drive. The easement is flanked on both sides with a chain-link fence and a wood fence. There is no public shoreline access through other parts of parcel 3 or parcel 4.
- Marine-based Recreational Resources. Narrow beaches and wide fringing reefs line Mokulē'ia and Hale'iwa coastal areas. Mokulē'ia Beach and the Pacific Ocean, behind parcels 3 and 4, provide public recreation opportunities, including surfing, boating, paddling, fishing, snorkeling, swimming, sunning, and relaxation. During the winter surf season, the access easement on parcel 3 is consistently used by surfers to access Silva Channels, Rodger's, Glass Doors, and other surf spots.
- Lateral Shoreline Movement. The nearshore area behind the subject parcels is a narrow sandy beach with a fringing reef. The sandy beach is wide enough to allow for both recreational activity (e.g., sunning and relaxation) and lateral movement along the shoreline for extended distances in both directions. It is very typical to see people moving laterally along the shoreline in the area and there are no unnatural impediments to doing so behind parcels 3 and 4. Additional movement along the shoreline occurs beyond the fringing reef and is facilitated by boat, kayak, or paddle board.

3.1.2 SMA and CZM Objectives, Policies, and Guidelines

Development within the SMA should provide coastal recreational opportunities to the public. Adequate access, by dedication or other means, to beaches, coastal dunes, recreation areas, and natural reserves must be provided to the extent consistent with sound conservation principles. Adequate and properly located public recreation areas and wildlife preserves must be preserved. The Council shall seek to minimize, where reasonable: 1) Any development which would reduce the size of any beach or other areas usable for public recreation; and 2) Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the SMA, and the mean high tide line where there is no beach.

The recreational objective of the CZM program is to provide coastal recreational opportunities accessible to the public. Its policies are to:

- A) Improve coordination and funding of coastal recreational planning and management; and
- B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:
 - i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
 - ii) Requiring restoration of coastal resources that have significant recreational value, including but not limited to coral reefs, surfing sites, fishponds, sand beaches, and coastal dunes, when these resources will be unavoidably damaged by development; or requiring monetary compensation to the State for recreation when restoration is not feasible or desirable;
 - iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
 - iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
 - v) Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;
 - vi) Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;
 - vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and
 - viii) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of section 46-6.

3.1.3 Potential Impacts and SMA/CZM Consistency

The proposed development will have no effect on coastal access or recreational resources. The 12-foot-wide access easement on parcel 3 will not be affected by the development. The public will have access to the shoreline via the access easement throughout the construction period and after construction is complete. All development will take place entirely within parcel 3 (excluding the easement) and parcel 4, which are not accessible to the public. The proposed development does include a gate in the fence between the access easement and the private portion of parcel 3. That gate provides for future equipment access to the rear of the property should it be needed, for

example, to respond to storm damage. Care will be taken to limit the duration and frequency of equipment in the easement in the rare instances the gate is used.

The proposed development will not result in any change to public open spaces or recreational opportunities over the existing conditions. No development is proposed in the shoreline setback area, except for 50 percent open work fences, irrigation, and other minor elements that qualify for a Minor Shoreline Structure Permit. No development or activity is proposed within the State's Conservation Land Use District. Therefore, the proposed project is unlikely to have any adverse impact on publicly accessible recreational resources and is consistent with the SMA/CZM objectives, policies, and guidelines presented in Section 3.1.2.

3.1.4 Avoidance, Minimization, or Mitigation Measures

No adverse effects to recreational resources are anticipated. The Applicant will implement the following measures to further reduce the potential for adverse effects:

- No development is proposed or will occur within the access easement or the State's Conservation Land Use District. Furthermore, no development is proposed in the shoreline setback area, except for 50 percent open work fences, irrigation, and other minor elements that qualify for a Minor Shoreline Structure Permit.
- Construction staging will occur on the project parcels.
- The irrigation system will be designed and operated in a manner that does not facilitate vegetation grown in the access easement area of parcel 3.

3.2 Historic and Cultural Resources

3.2.1 Existing Conditions

In addition to standard references, the following documents were reviewed to inform the analysis presented in this section:

- ASM Affiliates, 2024. *Archaeological Subsurface Testing Plan for the AIS of the Proposed Replacement of Residence at 68-623A & 68-631 Crozier Drive, Mokulē'ia 2 Ahupua'a, Waialua District, Island of O'ahu, TMKs: (1) 6-8-004:003 & 004*. This archaeological inventory survey (AIS) plan was prepared by ASM for the proposed project and is included as Appendix D.
- ASM Affiliates, 2023. *Draft Cultural Impact Assessment for the Waialua Mill Camp Restoration*. Prepared for Mill Camp Development Group, LLC.
- Cultural Surveys Hawai'i, Inc., 2017. *Summary of Archaeological Studies, Historic Properties, and Hawai'i State Historic Preservation Division Review for the Dillingham Ranch Agricultural Subdivision Project, Mokulē'ia 2, Auku'u, Kikahi, and Kawaihīpai Ahupua'a, Waialua District, O'ahu TMKs: [1] 6-8-002:006 por.; 6-8-003:005 por., 006 por., 015, 019, 030, 031, 033, 035, and 040*. Prepared for Dillingham Ranch Aina, LLC.

- HHF Planners, 2018. *Dillingham Ranch Agricultural Subdivision Final Environmental Impact Statement, Mokulē‘ia, O‘ahu, Hawai‘i, December 2018*. Prepared for Dillingham Ranch Aina, LLC.
- R.M. Towill Corporation, 1993. *Final Environmental Impact Statement Waialua-Kuilima 46kV Subtransmission Line Project, North Shore, Oahu, Hawai‘i*. Prepared for Hawaiian Electric Company, Inc.
- Cultural Surveys Hawai‘i, 1992. *Archaeological Study, Waialua to Kahulu Power Line*. Prepared for R.M. Towill.
- William E. Wanket, Inc., 1987. *Final Environmental Impact Statement Mokuleia Development Proposal, Mokuleia, Oahu, Tax Map Key: 1st Division, 6-8-02: Parcels 1, 6, 10 and 14; 6-8-03: Parcels, 5, 6, 11, 15, 16, 17, 19, 20, 30, 31, 33, 34, 35, 38, 39 and 40; 6-8-08: Parcel 22*.

Historical Context

The project parcels are in the Mokulē‘ia 2 Ahupua‘a, which are part of the Waialua Moku of O‘ahu Island, on the Waialua coastline. The name Waialua, in ‘ōlelo Hawai‘i is interpreted as “two waters,” which may refer to the two large stream drainages (Anahulu and Helemano-Poamoho-Kaukonahua) once used to irrigate extensive taro fields in the ahupua‘a of Kamananui, Pa‘ala‘a, and Kawaihoa, the more populous ahupua‘a in the moku. The ahupua‘a of Keālia, Kawaihīpai, and Mokulē‘ia were not as well-watered as the three eastern ahupua‘a but were famed for their warm climate, cooling breezes, plant resources, and especially marine resources.

Alternatively, according to the *Hawaiian Almanac and Annual for 1902*, Thrum states:

Waialua district, Oahu, is said by natives to take its name lo‘i a loi (taro patch) situate [sic] near the former Halstead residence, and not from its twin streams as is generally supposed; the natural definition of the name being two waters. It was an ancient saying of the people that if one visited and traveled through the district and did not see this identical loi, he had not seen Waialua. (Thrum 1901:8)

Numerous ko‘a (fishing shrines and fishing grounds), including Keauau Shrine, Kōlea Shrine, Kuakea Shrine, Pu‘u o Hekili Shrine, and Mokupaoa were known to exist along the Waialua coastline and just offshore; they have been lost over the years. These ko‘a not only represented places of worship but were also physical fishing grounds known for their abundance of i‘a (fish), lobster, and limu (seaweed).

Prior to Western Contact, the population for the whole of Waialua Moku (including the ahupua‘a of Mokulē‘ia) had been estimated at 6,000 to 8,000 people (Sahlins 1992:20). The first missionary census of Waialua Moku in 1831-1832 recorded 2,640 people in Waialua, representing a decline of about 20-30 percent from the first decade of the 19th century. By 1848, the population for Waialua Moku was reduced to 1,616 persons. The steep population decline was attributed to a high death rate from newly introduced diseases such as smallpox, typhus, and venereal diseases.

Following the initiation of the Māhele and Kuleana Act in 1845, many of the Native Hawaiians living within Waialua Moku bought the lands they lived and worked on through the Waialua land agent and missionary John Emerson. A total of 27 land grants were purchased in the ahupua‘a of Mokulē‘ia. In 1850, a law passed that allowed foreigners to buy land fee simple. Two descendants

of missionaries, William Emerson and John T. Gulick, were the first foreigners to buy land in Mokulē‘ia.

Beginning in the late 1800s, land use in Waialua was transformed by the introduction of commercial agriculture to the region, with sugarcane being the most prominent industry. By the early 1900s, sugarcane plantations and large ranches came to dominate the lands of western Waialua. In particular, the Waialua Sugar Company, built by Castle and Cooke, became the major employer in the area from the early 1900s until 1997. Throughout much of the 20th century, Waialua Sugar Company was a major contributor to the state’s economy through sales of sugar and electricity. Part of its success was due to their ability to find and keep farm laborers for their operations by providing low-cost housing. The low turnover of employees resulted in a stable, highly trained workforce for Waialua Sugar Company. These employees and their service providers created the towns of Waialua and Hale‘iwa. The residents of Mill Camp and the other plantation camps created the unique character of the North Shore of O‘ahu.

More recently, the immediate vicinity of the proposed project has been urbanized and developed as part of the residential community of Waialua. A shed on parcel 3 was built in 1946 according to DPP online records; on parcel 4 a single-family dwelling was built in 1935 and a second dwelling was built in 1943. Aerial photographs and records for nearby properties indicate that homes in the neighborhood were first built in the 1940s and infill development occurred through the 1970s. Based on historic aerial photographs, from the 1940s until the early 1990s, there was a dwelling makai of the shed on parcel 3. The photograph from 1967 in Figure 3-1 shows the development present at that time, including the dwelling on parcel 3 and the two dwellings on parcel 4.

Complete construction records for former and existing developments are not available. Site visits and photography during preliminary planning for the project have not resulted in the observation of any traditional or customary practices on or near the parcels, and no resources critical to them are known to be present on the project parcel. Furthermore, there are no native or uncommon species known to be present that are associated with traditional or customary native Hawaiian practices or beliefs.

Figure 3-1: Historical Aerial Photograph (1967)



Source: Hawai'i Shoreline Study web map.

Previous Archaeological Studies in Project Vicinity

Several previous archaeological studies have been conducted within the vicinity of the project parcels along the Mokulē‘ia coast, the majority of which have either involved inadvertently discovered human remains or produced results of “no findings.” Studies conducted in the area have encountered and documented extant Precontact and Historic sites above the coastal plain, but there are no remaining aboveground Precontact sites in the coastal plain; this includes coastal sites discussed in McAllister (1933). The few historic sites located in the coastal plain tend to be associated with plantation activity, particularly with irrigation and animal husbandry. While it is assumed that physical evidence associated Hawaiian settlement activities did previously exist in coastal portions of Mokulē‘ia, it is expected that centuries of Historic period land use, such as agriculture, ranching, and the construction of residential communities along the coast in the early twentieth century has destroyed most surface archaeology.

Any extant remains likely consist of buried human skeletal remains or subsurface cultural layers. The long history of agriculture, ranching, and residential development within the immediate vicinity of the project parcels has erased any surface architecture and artifacts pertaining to plantation activity, such as concrete pads, irrigation infrastructure, or rock walls. Given the proximity of the project parcels to the former O‘ahu Railway and Land Company (OR&L) railway line, which historically ran adjacent to the property’s southern boundary, it is possible soil disturbance from grading and construction activities and/or archaeological features and artifacts associated with the development and use of the railway may be present in the subsurface.

The presence of Jaucus sand on the project parcels and the numerous discoveries of human skeletal remains in coastal areas in and around Mokulē‘ia 1 and 2 Ahupua‘a make it likely that remains may be present in the sites’ subsurface. Discoveries of human skeletal remains in the area include the following:

- A few meters to the west of the project parcels, Kapeliela (1998), Elmore and Kennedy (1998), and Pietrusewsky (1998) detail one site (State Inventory of Historic Places (SIHP) Site #50-80-03-05599) containing seven Precontact to early Historic-era human burials, six of which were accompanied by glass trade beads.
- A few meters to the east of the project parcels, Ryder & Belluzzo (2023, Draft) encountered a single intact burial at 68-617 Crozier Drive; the burial was within a sand matrix and lacked any associated goods, suggesting the burial is traditional in nature.
- Kennedy and Pietrusewsky (1991) encountered two intact Precontact-era burials (SIHP Site #50-80-04-04451) during monitoring approximately 550 meters east of the project parcels.
- Kapeliela (1996) documented the iwi of a single individual (SIHP Site #50-80-03-05467) exposed in beach sands by wave action approximately 300 meters west of the project parcels.
- Yucha and Hammatt (2008) identified a single intact human burial (SIHP Site #50-80-12-09714), along with another reburial location with no known site number, during a literature review and field inspection of a Castle & Cooke-owned parcel approximately 500 meters west of the project parcels.

- Kennedy and Pietruszewsky (1991) published a treatment plan for two heavily disturbed burials encountered during installation of a septic pit at 68-421 Crozier Drive, approximately 550 meters east of the project parcels.
- Archaeological Consultants of the Pacific (ACP) responded to an inadvertently discovered burial (SIHP Site #50-80-03-06708) at 68-681 Farrington Highway, approximately 2.5 kilometers to the west of the project parcels. Approximately seven grams of human remains were collected during the repair of a seawall. Due to the low volume of total remains, none of which were in situ, and previous construction surrounding the seawall, it is likely the burial was previously disturbed before discovery. ACP hypothesizes the burial is of Hawaiian ethnicity dating to the Precontact period due to its location within a sand matrix (Gregg & Kennedy 2004).

Kennedy (1990) conducted extensive subsurface testing in Lot 2C to the south of (mauka of) Crozier Drive, approximately 450 meters east of the project parcels. The lot was reported to have been previously mined for sand and no evidence of past human activity was identified. Similarly, approximately 300 meters to the east of the project parcels, McElroy and Duhaylonsod (2015) conducted an inventory survey on coastal portions of Mokulē‘ia 2, but identified no historic properties.

Carlson and Cleghorn (1993) conducted a surface survey and 28 auger excavations at the then proposed ‘Aweoweo Beach Park, approximately 1.5 kilometers east of the current project area. No surface features were identified, but one auger test resulted in the identification of a cultural layer, SIHP Site #50-80-04-04657. The cultural layer included marine shell, fish scales, a single basalt flake, and charcoal.

In 2007, ACP completed an archaeological assessment of a parcel approximately 2.5 kilometers to the east of the project parcels including subsurface testing in the form of three eight-meter trenches (Monahan et al. 2007). Although faunal remains and isolated historic bottle fragments were found, no intact archaeological features were identified. Similarly, ASM conducted an archaeological assessment of a former sand-mine approximately 600 meters east of the project parcels that did not identify any archaeological features (Belluzzo & Ishihara 2022).

Historic Sites in HICRIS

There are three historic sites within 1 mile of the project parcels according to records available via the Hawai‘i Cultural Resources Information System (HICRIS). The nearest resources are two historic buildings on adjoining parcels roughly 0.35 miles east of the project parcels. The first is identified as the Dyer Beach House built in 1933 (SIHP No. 50-80-04-08960) and the second is the Luther and Addies Hough Beach Cottage built in 1924 (SIHP No. 50-80-14-09147). The only other historic site within a mile of the project parcels is the Makalena Stream Bridge on Farrington Highway, which is roughly 0.75 mile to the west.

Project-Specific Archaeological Inventory Survey

ASM Affiliates prepared and implemented the AIS Plan in Appendix D. The surface investigation involved 17, 1 by 4 meter (3 by 13 foot) trenches in the portion of the site where ground disturbance is proposed. It included trenches in the areas where future dwellings will be built and in the proposed pool area. After SHPD approved the AIS Plan, the trenches were dug. The trenches

were advanced using a flat-blade bucket attachment until groundwater was encountered (approximately 2 meters or 6.5 feet). Human skeletal remains were not encountered in any of the trenches. ASM Affiliates is preparing a report documenting the subsurface testing. The report will be submitted to SHPD for review.

3.2.2 SMA and CZM Objectives, Policies, and Guidelines

Development in the SMA should protect, preserve, and restore natural or human-made historical and cultural resources.

The CZM's policies are to:

- A) Identify and analyze significant archaeological resources;
- B) Maximize information retention through preservation of remains and artifacts or salvage operations; and
- C) Support state goals for protection, restoration, interpretation, and display of historic resources.

3.2.3 Cultural Impact Assessment and Ka Pa'a Kai Analysis

Articles IX and XII of the Constitution of the State of Hawai'i impose on government agencies a duty to promote and protect the cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups when discharging their respective mandates, including issuing permits and approvals such as a SMA permit. To clarify the State's obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private interests, the Hawai'i Supreme Court provided the following analytical framework as an outcome of Ka Pa'akai O Ka 'Aina v. Land Use Commission (94 Hawai'i 31, 7 P.3d 1068, September 11, 2000). This framework is referred to as "Ka Pa'akai Analysis" and consists of a three-part assessment of:

1. "Valued cultural, historical, or natural resources" in the project area, including the extent to which traditional and customary native Hawaiian rights are exercised in the project area;
2. The extent to which those resources—including traditional and customary native Hawaiian rights—will be affected or impaired by the proposed action; and
3. The feasible action(s), if any, to be taken to reasonably protect native Hawaiian rights if they are found to exist.

The Proposed Action is in the Special Management Area and is subject to the requirements of ROH, § 25; HRS, § 343, and HAR, § 11-200.1. As such, the project is also subject to the requirement for a Ka Pa'a Kai analysis of the: (i) possible existence of, (ii) impacts to, and (iii) potential mitigation for, adverse effects on traditional and customary native Hawaiian rights and practices which may result from the proposed course of action.

Identification of Traditional and Customary Practices in Project Area

The project parcels are private property; there is a rock wall and gate fronting Crozier Drive and access to the parcels is restricted. The project parcels have been used for residential purposes for decades. There is no evidence of aboveground historic or cultural resources on the parcels. To

the knowledge of the landowner and site caretaker, cultural practices or resources are not known to occur on the subject parcels, nor do they provide access to other areas where practices or resources are known to occur.

To identify the potential presence of any traditional and customary practices in the project area, on January 30, 2025, the Applicant sent scoping letters to a variety of agencies, organizations, and individuals, including Native Hawaiian Organizations (NHOs) identified on the U.S. Department of Interior, Office of Native Hawaiian Relations' Native Hawaiian Organization Notification List. These NHOs included: (i) the 'Aha Moku representative for Waialua Moku; (ii) the Kawaihāpai 'Ohana; (iii) the Mahu 'Ohana; (iv) 'Ohana Keaweamahi, represented by Keala Norman; and (v) 'Ahahui Kiwila Hawai'i O Waialua (the Hawaiian Civic Club of Waialua). The intent of this outreach was to identify kūpuna who might have substantial knowledge of the project site and surrounding region for cultural-historical interviews and concerns regarding the project.

In addition, and as part of the HRS, Chapter 343 environmental review process, the DEA was provided to the following NHOs and agencies for comment: (i) Department of Hawaiian Home Lands; (ii) Office of Hawaiian Affairs (OHA); (iii) 'Aha Moku representative for Waialua Moku; (iv) Kawaihāpai 'Ohana; (v) Mahu 'Ohana; (vi) 'Ohana Keaweamahi; and (vii) 'Ahahui Kiwila Hawai'i O Waialua (the Hawaiian Civic Club of Waialua).

None of the NHOs contacted provided comments during the scoping process. Comments on the DEA were received from Keala Norman of 'Ohana Keaweamahi and OHA (Chapter 5).

Based on owner/applicant knowledge, studies conducted, and responses from NHOs, there are no known valued cultural, historical, or natural resources in or traditional and customary native Hawaiian practices being exercised in the project area.

Impact Determination

Because no known cultural practices or resources occur on the project site, the Applicant has concluded the proposed single-family residences will not affect the rights customarily and traditionally exercised for subsistence, nor affect cultural and religious purposes possessed by ahupua'a tenants who are descendants of native Hawaiians. In addition, the proposed project does not affect or impair any Hawai'i State Constitution, Article XII, Section 7 uses, or the feasibility of protection of those uses. The potential for impact to historic properties is discussed in Section 3.2.4.

Feasible Actions to Reasonably Protect Native Hawaiian Rights

Because no Native Hawaiian rights will be affected by the proposed project no action are needed to protect those rights. The access easement that allows public access to the shoreline will continue to be available to all.

3.2.4 Potential Impacts and SMA/CZM Consistency

As discussed in Sections 3.2.1 and 3.2.3, there are no above ground historic or cultural resources on the project site or nearby. Therefore, no impact to any above ground historic resources are anticipated.

As discussed above, no human skeletal remains were encountered in the AIS trenches. Excavations, which are detailed in Section 2.2.2, will be necessary for building foundation elements, the pool/spa, and utilities. The AIS trenches are considered representative of on-site subsurface conditions but did not survey all areas to be disturbed during project implementation. Given the history of encountering human skeletal remains and artifacts in the sandy subsurface along the Mokulē‘ia coastline, it is considered possible cultural or historic resources may be encountered during the excavation required. For this reason, the project will continue to consult with SHPD and implement appropriate measures.

The project will ensure consistency with the SMA/CZM objectives through the implementation of the measures outlined in Section 3.2.5 and compliance with SMA permit conditions.

3.2.5 Avoidance, Minimization, or Mitigation Measures

It is anticipated SHPD will request, and the SMA permit conditions will require the Applicant comply with SHPD’s request, that an archaeological monitor be present during ground-disturbing activities. If this is the case, monitoring will be performed in accordance with an SHPD-approved Archaeological Monitoring Plan (AMP).

Prior to the issuance of construction permits or building permits for the project, the Applicant will submit to DPP a copy of the written SHPD HRS § 6E-42 determination and statement that the permitting process may proceed.

In addition to following the AMP, the following measures will also be implemented during construction:

- Brief project construction workers on the history of the area and inform them of the possibility of inadvertently encountering unknown historic/cultural resources, including human remains.
- Cease all activities if historic/cultural resources (such as artifacts; shell, bone, or charcoal deposits; rock or coral alignments; pavings; or walls) are inadvertently encountered during construction activities and notify SHPD pursuant to HAR § 13-280-3. If iwi kūpuna (i.e., ancestral remains) are identified, all earth moving activities in the area would stop, the area would be cordoned off, and SHPD, the medical examiner, and the Honolulu Police Department would be notified pursuant to HAR § 13-300-40.

3.3 Scenic and Open Space Resources

3.3.1 Existing Conditions

The objective of CCH’s *O‘ahu General Plan* (2021), regarding aesthetic and scenic resources (Chapter III. Natural Environment and Resource Stewardship, Objective B) is to:

preserve and enhance natural landmarks and scenic views of O‘ahu for the benefit of both residents and visitors as well as future generations.

CCH’s *North Shore Sustainable Communities Plan* (NSSCP) reaffirms North Shore’s role in O‘ahu’s development patterns as intended in the *O‘ahu General Plan*, by establishing policies and

Figure 3-2: NSSCP Open Space and Significant Views in North Shore Region



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Figure 3-3: Seaward Views of Project Parcels from Crozier Drive



Parcel 3



Parcel 4

Note: Because the Google camera is mounted on a rooftop, it can see over the 6-foot-tall rock walls. Pedestrians are unable to see over the walls. Source: Google Streetview accessed on January 17, 2025; image capture: July 2019).

3.3.2 SMA and CZM Objectives, Policies, and Guidelines

Development within the SMA should protect, preserve, and whenever desirable, restore or improve the quality of coastal scenic and open space resources. Alterations to existing land forms and vegetation, other than for the cultivation of coastal dependent crops, must be limited so they result in minimum adverse impacts on water resources, beaches, coastal dunes, and scenic or recreational amenities. Development that is not dependent on the coast is encouraged to locate mauka of the SMA.

CZM policies related to scenic and open space are:

- A) Identify valued scenic resources in the coastal zone management area;
- B) Ensure that new developments are compatible with their visual environment by designing and locating those developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;
- C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and
- D) Encourage those developments that are not coastal dependent to locate in inland areas.

3.3.3 Potential Impacts and SMA/CZM Consistency

During construction of the proposed project, activities, equipment, material, vehicles, and workers will be at least partially visible to nearby residents along Crozier Drive, and will contribute to a temporary and minor visual impact. These impacts will be most visible from Crozier Drive and the shoreline.

Once built, the proposed project does not have the potential to meaningfully affect any scenic views, panoramas, or valued scenic resources identified in any State or CCH report, including the *O‘ahu General Plan* or the NSSCP (Figure 3-2), relative to existing conditions. The residential structures proposed will not substantially alter or be inconsistent with the areas’ existing visual environment, nor will they significantly alter natural landforms or existing views to or along the shoreline. As a result, the visual impact of the proposed project will be negligible and the project is consistent with SMA/CZM objectives.

3.3.4 Avoidance, Minimization, and Mitigation Measures

The proposed development is designed to comply with applicable rules and regulations, including height limits.

3.4 Coastal Ecosystems

3.4.1 Existing Conditions

The following ecosystems are present on or near the project parcels:

- Wetlands. There are two wetlands in the region:

- The area immediately north of the parcels is Mokulē‘ia Beach/Pacific Ocean which is classified as estuarine and marine wetland. On-site vegetation between the developed portion of the parcels and the shoreline buffers the wetland.
 - Roughly 0.37 miles east of the project parcels lies a 4.36 acre freshwater forested/shrub wetland with trees, shrubs, woody vegetation including broad-leave evergreen that is seasonally flooded.
- Beaches and Coastal Dunes. See discussion in Section 3.8.
 - Flora. Existing vegetation on the project parcels include ornamental grasses, shrubs, and fruit trees, including mango, coconut, and citrus. None of the flora is listed as threatened or endangered and none is known to be considered invasive.
 - Fauna. The only fauna observed on the project parcels during a recent visit was introduced perching birds that are common in the area. Although not observed, it is likely that other introduced species are occasionally or chronically present, including rats, mice, cats, dogs, and mongoose. [Based on the USFWS’ Information for Planning and Consultation website and consultation with DLNR-DOFAW \(Section 5.5\)](#) several federally and state-listed species (e.g., Hawaiian hoary bat, green sea turtle, Hawksbill sea turtle, Band-rumped Storm-Petrel, Hawaiian Petrel, and Newell's Shearwater) may appear in the project’s vicinity; however, none have been observed on the project parcels. There is currently no designated critical habitat for them in the project area, but the sandy beach area makai of Crozier Drive has been proposed as critical habitat for the green sea turtle.

3.4.2 SMA and CZM Objectives, Policies, and Guidelines

Development within the SMA should protect valuable coastal ecosystems, including reefs, beaches, and coastal dunes from disruption, and minimize adverse impacts on all coastal ecosystems. Solid and liquid waste treatment and disposition must be managed to minimize adverse impacts on SMA resources.

CZM policies related to coastal ecosystems are:

- A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
- B) Improve the technical basis for natural resource management;
- C) Preserve valuable coastal ecosystems of significant biological or economic importance, including reefs, beaches, and dunes;
- D) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
- E) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

3.4.3 Potential Impacts and SMA/CZM Consistency

During the construction phase, a substantial quantity of the existing landscaping mauka of the shoreline setback area will be removed to make way for the proposed dwellings and amenities. Some woody plants exceeding 15 feet in height will likely be removed or trimmed to make way for the proposed development. Woody plants greater than 15 feet tall will not be disturbed, removed, or trimmed during the bat birth and pup rearing season from June 1 through September 15. Construction phase activities can also disturb marine species that may loaf on the nearby beach during the day, including Hawaiian monk seal, green sea turtle, or hawksbill turtles. Therefore, all construction activities will cease if a protected species is within 150 feet of the work area. If a monk seal pup is present, a 300-foot buffer will be observed. Construction activities would only recommence after the animal voluntarily leaves the area. In addition, construction debris that may pose an entanglement threat to protected marine species will be removed from the work area at the end of each day.

The only fill material imported to the project parcels will consist of structural fill placed under foundations and engineered fill required for the IWSs. Roughly 1,000 cubic yards of material will be imported. The structural and engineered fill material will be obtained from a commercial quarry operation. Due to the source of the structural fill, it is not anticipated that invasive species will be present in the material.

Liquid wastes will be managed through a Hawai'i Department of Health (HDOH) Wastewater Branch-permitted IWS. The IWS will prevent adverse effects associated with wastewater. Solid waste will be collected in receptacles and picked up by CCH's Environmental Services Division.

New landscaping will be established as construction is being wrapped up. The new landscaping will be drought and salt-tolerant and be naturally hardy or endemic to the shoreline area. A sprinkler system will be installed to provide irrigation for the landscaping. The irrigation system will be designed in a manner that prevents water from traversing makai of the shoreline or facilitates growth of vegetation makai of the shoreline into the State's Conservation Land Use District and proposed critical habitat. The irrigation system will also be designed so that it does not facilitate vegetation growth in the access easement area adjacent to parcel 3. Vegetation in the shoreline setback area between the proposed dwellings and shoreline will provide a roughly 80-foot-wide buffer for the beach and marine wetland.

Artificial lighting used during construction or over the long-term can be disruptive to protected avifauna and marine life in their navigation, nesting, and reproductive cycles. Therefore, all installed outdoor lighting will be fully shielded, and no nighttime work (from sunset to sunrise) will occur during construction. In addition, all outdoor light fixtures or bulbs will not exceed a color temperature of 3,000 degrees Kelvin.

No significant impacts to coastal ecosystems are expected because the project parcels do not harbor any unusual ecosystems or species and all proposed development is mauka of the shoreline setback area. In addition, the avoidance and minimization measures listed in Section 3.4.4 will be implemented. Consequently, the coastal ecosystem will be protected and the potential for adverse impact is negligible. The project is also consistent with the SMA/CZM objectives, policies, and guidelines.

3.4.4 Avoidance, Minimization, and Mitigation Measures

The following avoidance and minimization measures related to coastal ecosystems will be employed:

- Exterior light fixtures will be fully shielded using full cutoff fixtures with the light directed downward so that the light bulb is only visible from below the light fixture. Exterior light fixtures will not directly illuminate the shoreline, sandy beach, or ocean waters. All outdoor artificial light sources will not exceed a color temperature of 3,000 degrees Kelvin.
- If a downed seabird is detected, please follow DOFAW's recommended response protocol by visiting <https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/>
- Construction activities will be limited to daylight hours (sunrise to sunset).
- Woody plants greater than 15 feet in height will not be disturbed, removed, or trimmed during the Hawaiian hoary bat birthing and pup rearing season (June 1 through September 15).
- All construction activities will cease if a protect species, including a sea turtle or monk seal on the nearby beach, is within 100 feet of the work area; the buffer will be 300 feet if a monk seal pup is present. Construction activities would only recommence after the animal voluntarily leaves the area. In addition, construction debris that may pose an entanglement threat to protected marine species will be removed from the work area at the end of each day.
- When engaging in activities that have a high risk of starting a wildfire—like wielding in/near tall grass, the contractor will (i) wet down the area before starting the task, (ii) continuously wet down the area as needed, (iii) have a fire extinguisher on hand, and (iv) in the event that the employees' vision is impaired, (i.e. welding goggles), a spotter will watch for fire ignitions. Additionally, vehicles will not be parked in or near tall grass as heat from the engine/exhaust may ignite dry vegetation.
- The project will comply with CCH's *Rules Relating to Water Quality*.
- The irrigation system will be designed and operated in a manner that prevents water from traversing makai of the shoreline or facilitates growth of vegetation makai of the shoreline into the State's Conservation Land Use District and proposed critical habitat.
- The importation of fill material will be minimized and limited to structural fill obtained from a commercial quarry.
- Prior to and during construction activities, when personnel, materials, vehicles, or equipment are being relocated from one location to another, and when construction activities have concluded, materials, vehicles, and equipment will be cleaned of excess soil and debris to minimize the risk of spreading invasive species using the current recommendations from the O'ahu Invasive Species Committee (OISC).
- The Applicant (or their representative) will distribute a copy of the most recently updated OISC "Decontamination Protocols for Prevention of Invasive Species" (Protocols) to all workers and/or post the Protocols in a visible location accessible to

workers and delivery/haul-out contractors. The current contact email and phone number for the OISC will also be visibly posted at the project site during pre-construction and construction activities. All on-site workers will be instructed to review the species photos and inspection/cleaning protocols prior to commencing work.

- If species on the OISC invasive species target list are encountered on the site, at any time, the Applicant will immediately contact the OISC to report the species found. The Applicant will implement measures recommended by the OISC and/or the responsible State or Federal agency in charge of eradication of the invasive species.

3.5 Economic Uses

3.5.1 Existing Conditions

There are no non-residential land uses at the project parcels or nearby areas, nor are there any regulated fishing areas near the project site. The closest regulated fishing area is Waialua Bay (Hale‘iwa Harbor) located about 3.2 miles northeast of the project site. There are no economic uses of the marine resources near the project site.

There are no designated “fishing grounds” in Hawai‘i. There are areas where larger fish (marlin, ahi, mahi, etc.) and bottom fish (onaga, ‘ehu, opakapaka, etc.) are generally pursued; those areas tend to be where fish aggregating devices (FAD) and artificial reefs have been established or the water depth and natural habitat are favorable (e.g., Penguin Banks or Pinnacle). The nearest such fishing area to the project site is the Wai‘anae Artificial Reef and offshore FADs, which are miles from the project site.

3.5.1 SMA and CZM Objectives, Policies, and Guidelines

Development within the SMA should consist of facilities and improvements important to the State’s economy, and ensure that coastal-dependent development and coastal-related development are located, designed, and constructed to minimize exposure to coastal hazards and adverse social, visual, and environmental impacts within the SMA.

CZM policies related to economic uses are:

- A) Concentrate coastal dependent development in appropriate areas;
- B) Ensure that coastal dependent development and coastal related development are located, designed, and constructed to minimize exposure to coastal hazards and adverse social, visual, and environmental impacts in the coastal zone management area; and
- C) Direct the location and expansion of coastal development to areas designated and used for that development and permit reasonable long-term growth at those areas, and permit coastal development outside of designated areas when:
 - i) Use of designated locations is not feasible;
 - ii) Adverse environmental effects and risks from coastal hazards are minimized; and

- iii) The development is important to the State's economy.

3.5.2 Potential Impacts and SMA/CZM Consistency

The proposed residences are located on residential parcels in the long-standing Waialua residential community and is appropriate to the area, which is in the urban R-7.5 zone. The project does not involve the development of a previously undeveloped shoreline area, nor will it have an impact on coastal dependent/related development. Its design is intended to minimize the potential for adverse social, visual, or environmental impacts on the coastal zone. Therefore, the project is not anticipated to result in a change to the economic use of the parcels or surrounding area and is consistent with SMA/CZM objectives, policies, and guidelines.

Further, the proposed project is consistent with applicable land use rules and will not require or promote additional growth or development in its vicinity, such as through the expansion of public utilities or roadways. It will constitute residential use of a residential-zoned parcels in an existing residential community. The necessary public infrastructure (e.g., roads and utilities) are already present in the area and expansion of these services will not be required to support the project. Surrounding lands have already been developed for many years at the intensity proposed by this project.

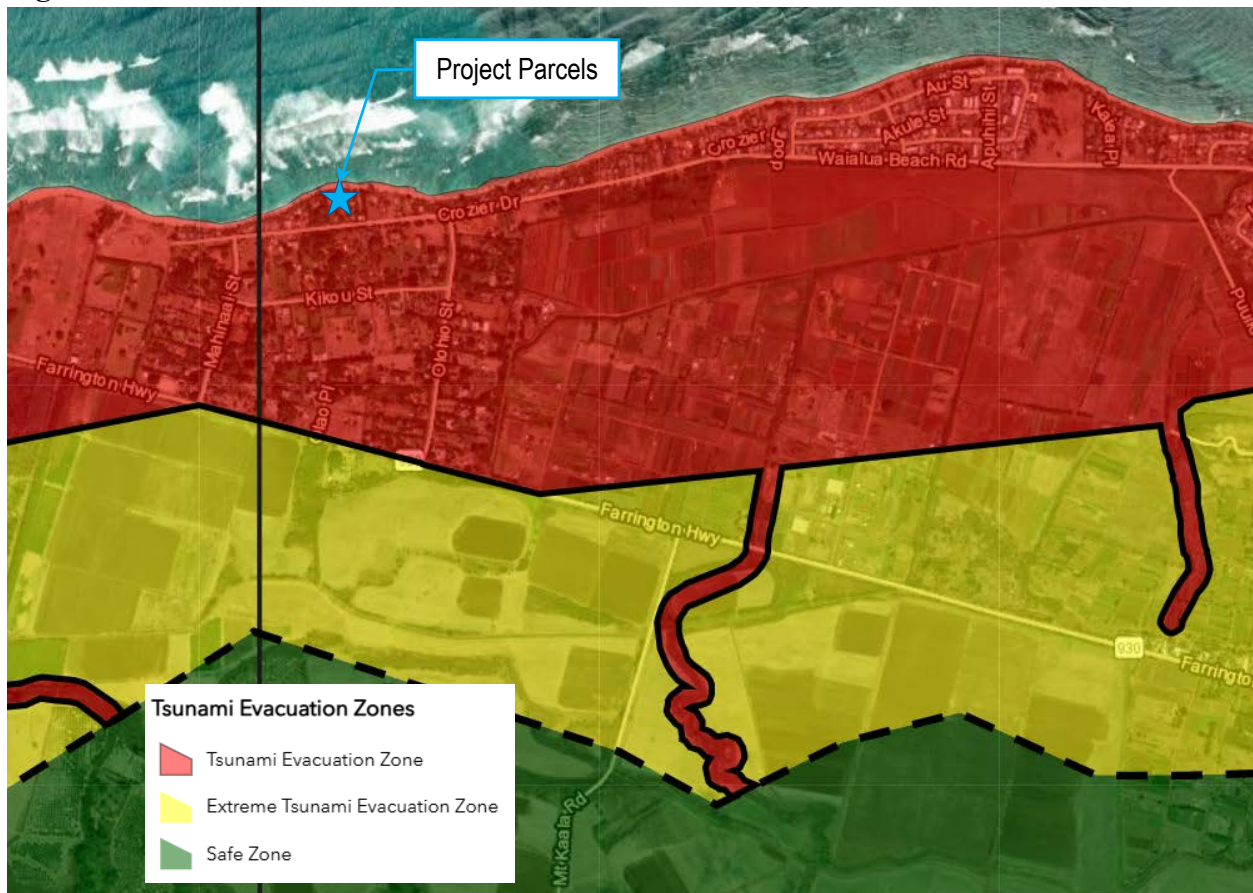
3.6 Coastal Hazards Analysis

3.6.1 Existing Conditions

Tsunami Hazard

The subject site is within the tsunami evacuation zone (Figure 3-4).

Figure 3-4: Tsunami Evacuation Zones

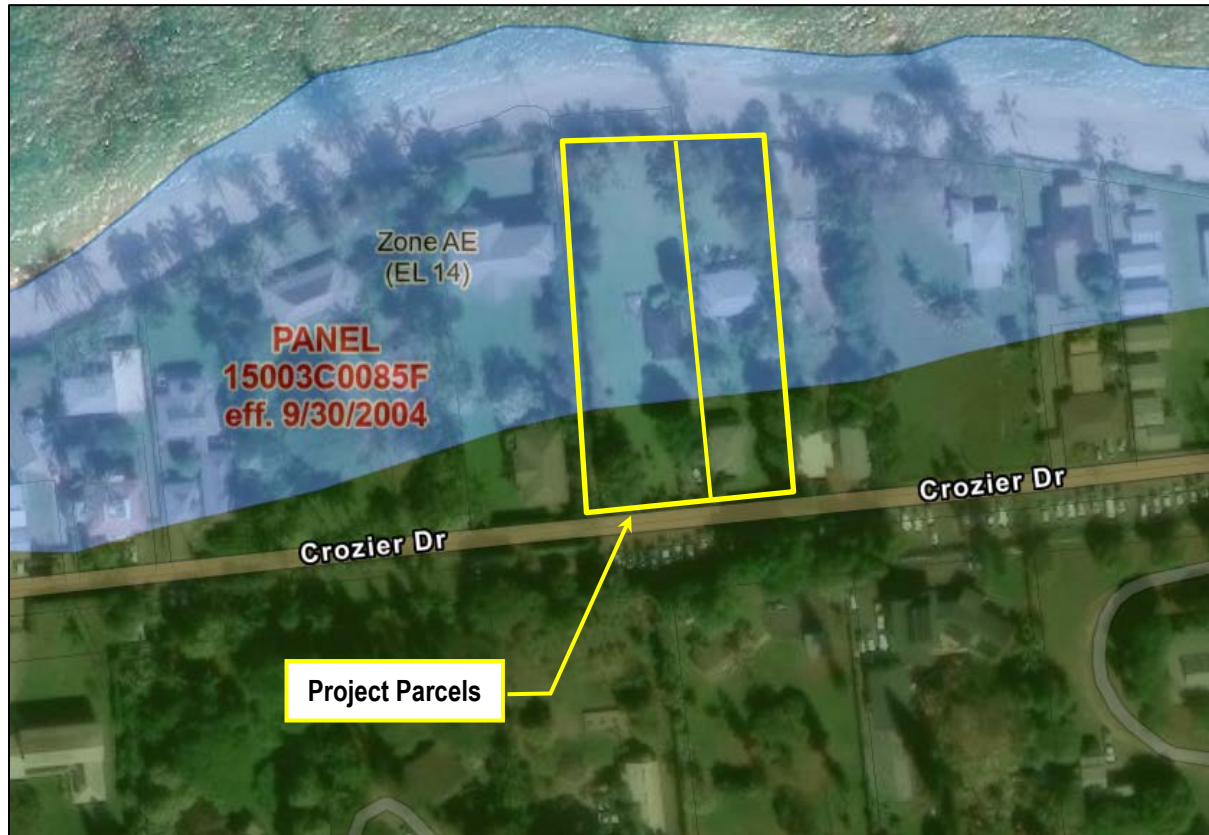


Source: City and County of Honolulu website.

Flooding Hazards and Storm Surge

The National Flood Insurance Program, administered by the FEMA, maintains floodplain and flood hazard maps for use in determining a reference height that allows property insurance companies to assess flood risk. FEMA has designated approximately the makai two-thirds of the project parcels as being in Flood Zone AE, and the mauka third as being in Flood Zone XS (Figure 3-5 and Figure 2-1). Flood Zone AE is the flood insurance rate zone that corresponds to inundation by the 1-percent-annual-chance flood event determined by detailed methods; the base flood elevation in this portion of the two parcels is 14 feet. Flood Zone XS corresponds to areas of moderate flood hazard that is determined to be outside the Special Flood Hazard Area between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood.

Figure 3-5: Flood Zone Map



Source: State of Hawai'i, Department of Land and Natural Resources, Flood Hazard Assessment Tool, <https://fhat.hawaii.gov/> (Accessed January 22, 2025).

The nearest perennial stream to the project is the Makaleha Stream roughly 0.78 miles to the west. The runoff flowing down it, even during high flow, is not expected to affect the project parcels, which is approximately 12 feet above mean sea level (+MSL).

According to the National Oceanographic and Atmospheric Agency (NOAA) National Storm Surge Hazard Maps (Figure 3-6), during a Category 4 storm a storm surge of less than 3 feet would affect the sandy beach makai of the project parcels and a small portion of the project parcels nearest the shoreline. The storm surge is anticipated to be below the base flood elevation (BFE) at the parcels (see below for further discussion of storm hazards).

Figure 3-6: Storm Surge Hazard, Category 4 Hurricane

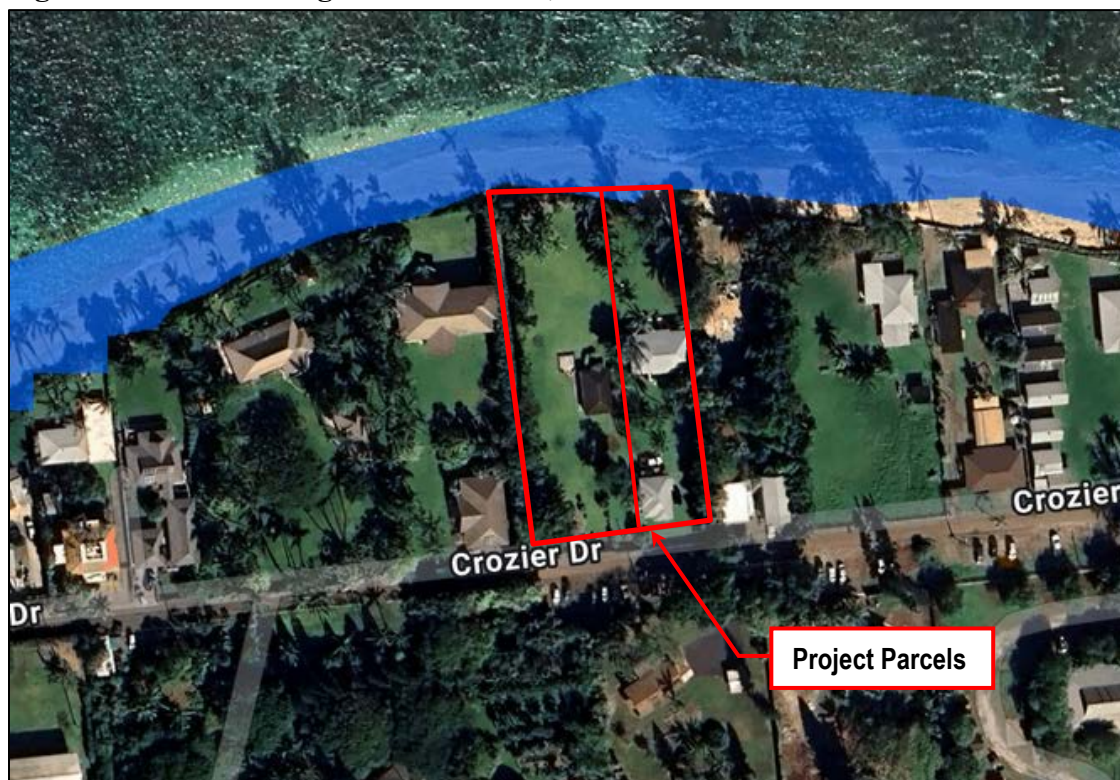


Source: <http://coast.noaa.gov/floodexposure/> (downloaded January 22, 2025).

Annual High Waves Hazard

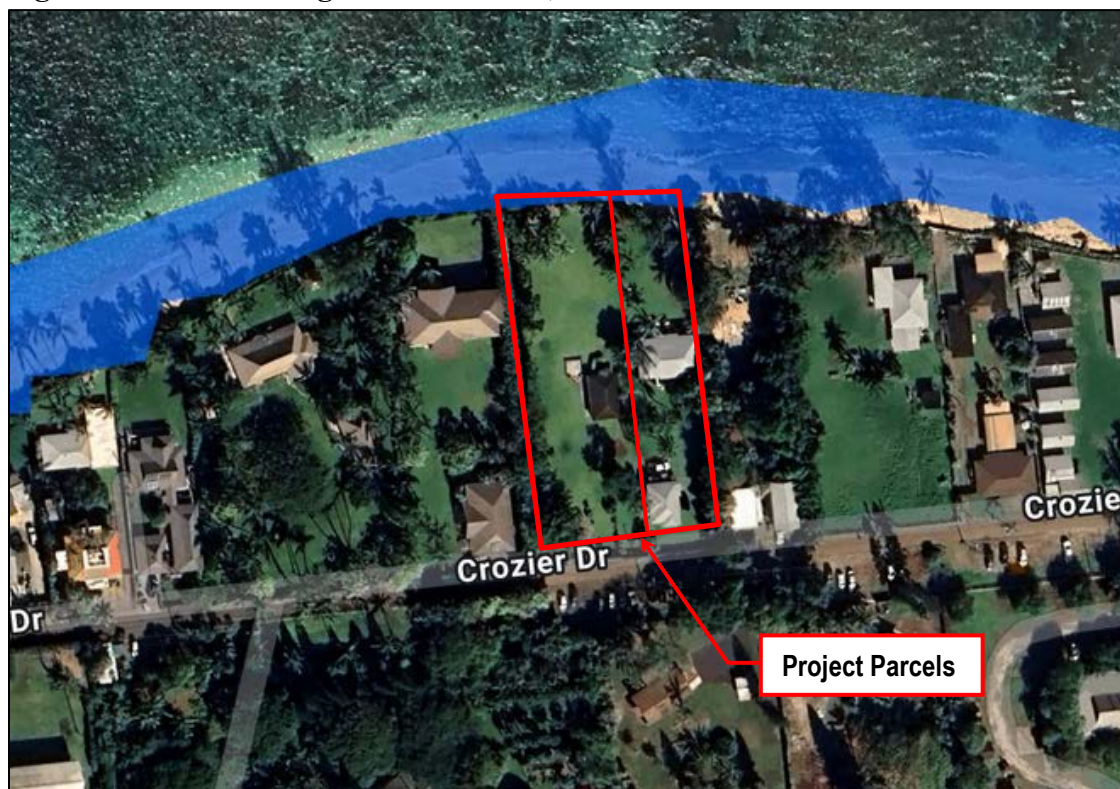
The Hawai'i Sea Level Rise Vulnerability and Adaptation Report (Hawai'i Climate Change Mitigation and Adaptation Commission (HCCMAC), 2017) included numerical modeling to estimate the potential impacts that a 0.5, 1.1, 2.0, and 3.2-foot rise in sea level would have on coastal hazards, including annual high wave flooding. The results are shown in Figure 3-7, Figure 3-8, Figure 3-9, and Figure 3-10, respectively. As these graphics indicate, a gradually increasing portion of the project parcels is modeled to be affected by annual high wave flooding between now and roughly 2100, as sea level gradually rises 3.2 feet.

Figure 3-7: Annual High Wave Hazard, Sea Level Rise of 0.5 feet



Source: <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> (downloaded January 22, 2025).

Figure 3-8: Annual High Wave Hazard, Sea Level Rise of 1.1 feet



Source: <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> (downloaded January 22, 2025).

Figure 3-9: Annual High Wave Hazard, Sea Level Rise of 2.0 feet



Source: <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> (downloaded January 22, 2025).

Figure 3-10: Annual High Wave Hazard, Sea Level Rise of 3.2 feet



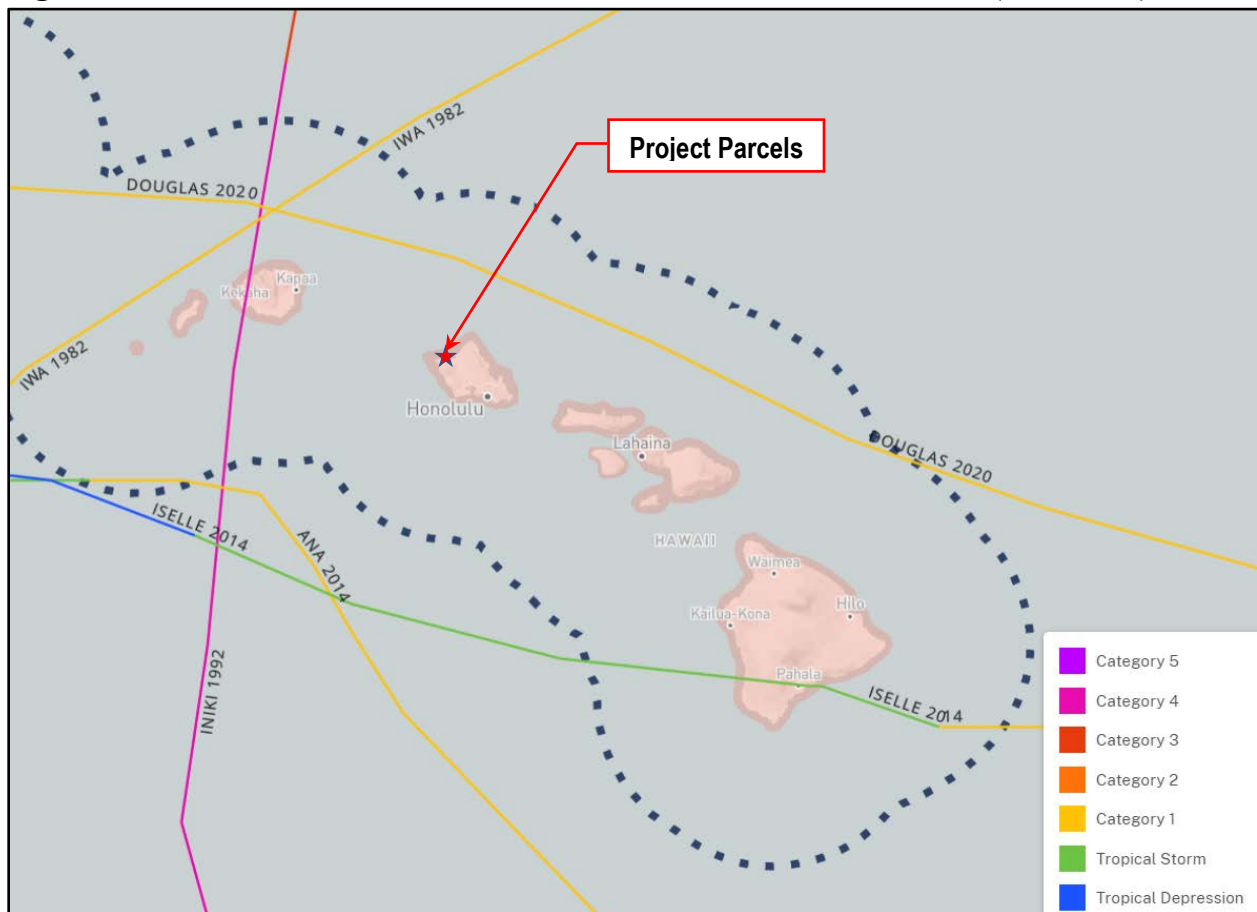
Source: <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> (downloaded January 22, 2025).

Storm Hazard

The official Central Pacific Hurricane Season runs from June 1 through November 30; the primary hurricane season in Hawai'i is considered July through September. During this period, tropical storms generally form off the west coast of Mexico and move westward across the Central Pacific. These storms typically pass south of the Hawaiian Islands and sometimes have a northward curvature near the islands. Late season tropical storms follow a somewhat different track, forming south of Hawai'i and moving north toward the islands. When these storms generate sustained wind speeds over 64 knots (74 mph) they are hurricanes. A handful of hurricanes have passed within 60 miles of the main Hawaiian Islands since 1980 (Figure 3-11):

- 'Iwa in November 1982 (Category 1)
- 'Iniki in September 1992 (Category 4)
- Iselle in August 2014 (Category 1)
- Ana in October 2014 (Category 1)
- Douglas in July 2020 (Category 1)

Figure 3-11: Hurricanes Within 60 Miles of the Main Hawaiian Islands (1980-2023)



Source: <https://coast.noaa.gov/hurricanes/#map=4/32/-80> (accessed September 16, 2021).

The damage and injury associated with these meteorological phenomena is the result of high winds, marine overwash (a.k.a., storm surge, discussed above), heavy rains, tornadoes, and other

intense small-scale winds and high waves. The intensity of the hazard is typically proportional to the proximity (distance) from the storm and the intensity (category) of the storm. The nearest storm to the site over the last 40 years was Hurricane Douglas, a Category 1 storm roughly 30 miles to the north in 2020. Douglas did not cause major damage on O‘ahu.

Erosion Hazard

The causes of coastal erosion and beach loss in Hawai‘i are numerous. Factors that contribute to coastal erosion and beach loss include:

- Construction of shoreline hardening structures, which, while limiting coastal land loss landward of the structure, does not alleviate beach loss and may accelerate erosion on the seaward side of the structures by reducing sediment deposition.
- Reduced sediment supply either from landward or seaward (primarily reef) sources. Obvious causes, such as beach sand mining and structures that prevent natural access to back-beach deposits, remove sediment from the active littoral system. More complex issues may be related to reef health and carbonate production which, in turn, may be linked to changes in water quality.
- Large storms, which can transport sediment beyond the littoral system.²
- Sea level rise, which leads to a landward migration of the shoreline.

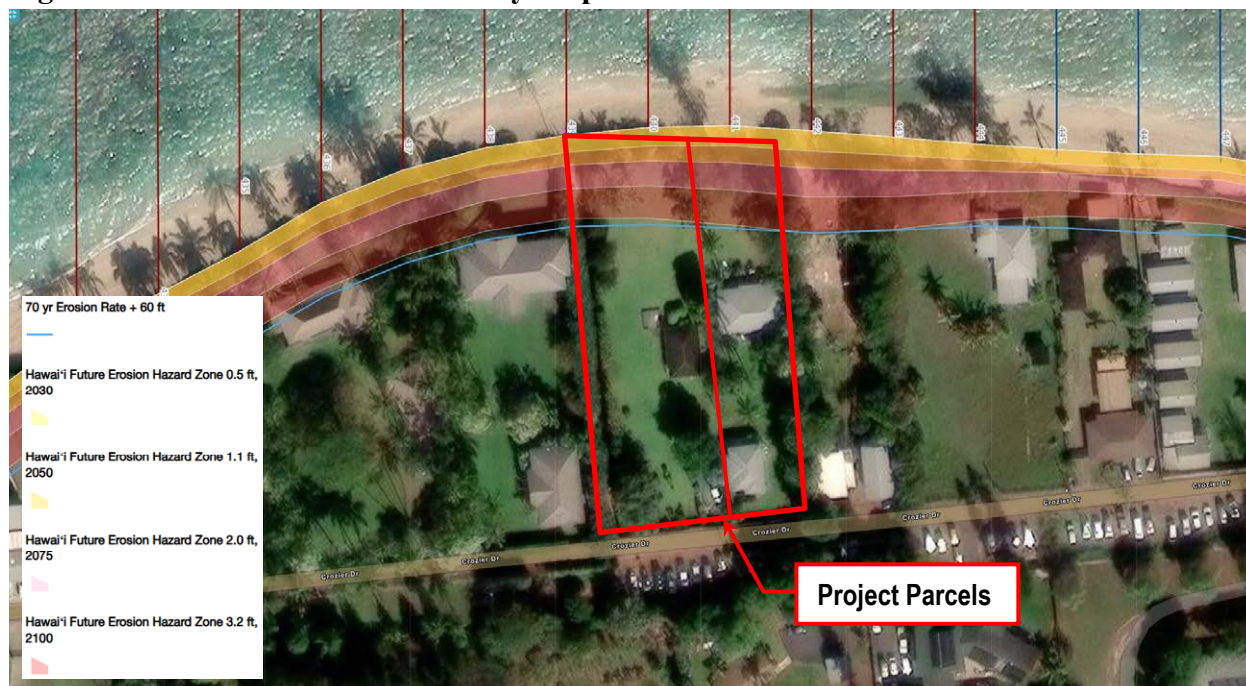
The Coastal Geology Group in the School of Ocean and Earth Science and Technology at the University of Hawai‘i developed a web map that provides information from their Hawai‘i Shoreline Study. As part of the study, they developed “Future Erosion Hazard Zones,” which are lands that are projected to be vulnerable to coastal erosion by a specified year and associated height of sea level rise. The hazard zone is not meant to be a prediction of the exact lands that will be eroded in the future, nor a prediction of where the shoreline will be in the future. Rather, the erosion hazard zone represents lands that fall within a zone with a certain likelihood of exposure to erosion, according to probabilistic modeling.

The Climate Resilience Collaborative website indicates that shoreline erosion may occur at the project parcels (Figure 3-12)³; the erosion hazard lines are also shown on Figure 2-1 and Figure 2-5. Transect 439, which is on the west side of parcel 3, indicates an erosion rate of -0.15 feet/year or a “smoothed rate” of -0.1 ± 0.2 feet/year (Figure 3-13). Transect 440, which is near the boundary of parcels 3 and 4, indicates an erosion rate of -0.21 feet/year or a “smoothed rate” of -0.2 ± 0.2 feet/year (Figure 3-13). Transect 441, which is near the middle of parcel 4, indicates an erosion rate of -0.27 feet/year or a “smoothed rate” of -0.3 ± 0.3 feet/year (Figure 3-13). It is worth noting that the shoreline at the three transects has been relatively stable since 1950. The surrounding transects indicate similar rates of erosion, except for transects 445 through 447 to the east that show no change or beach accretion.

² The littoral system is the area from the landward edge of the coastal upland (e.g., the certified shoreline) to the seaward edge of the nearshore zone (e.g., the edge of the shallow fringing reef).

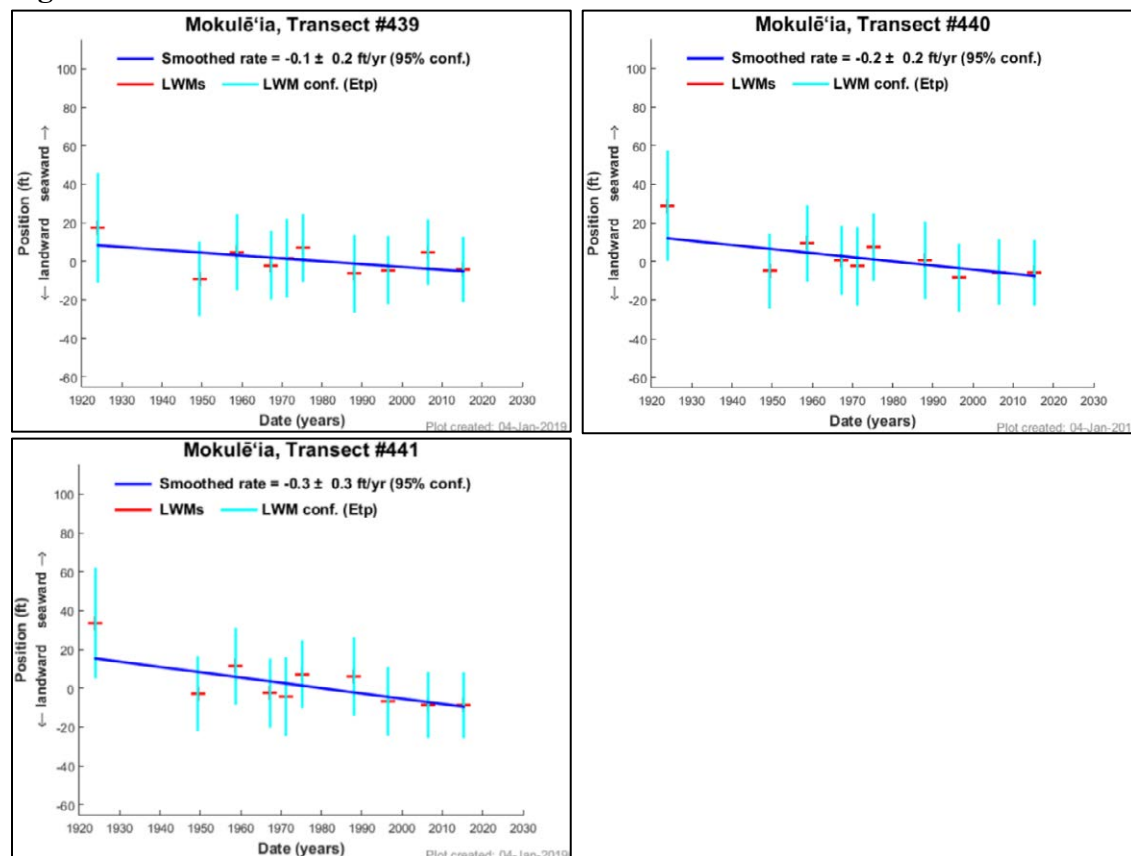
³ Available on the web at: <https://www.soest.hawaii.edu/crc/index.php/hawaii-shoreline-study-web-map/>

Figure 3-12: Hawai‘i Shoreline Study Map



Source: <https://www.soest.hawaii.edu/crc/index.php/hawaii-shoreline-study-web-map/> (accessed March 5, 2025).

Figure 3-13: Mokulē‘ia Transection #439-441



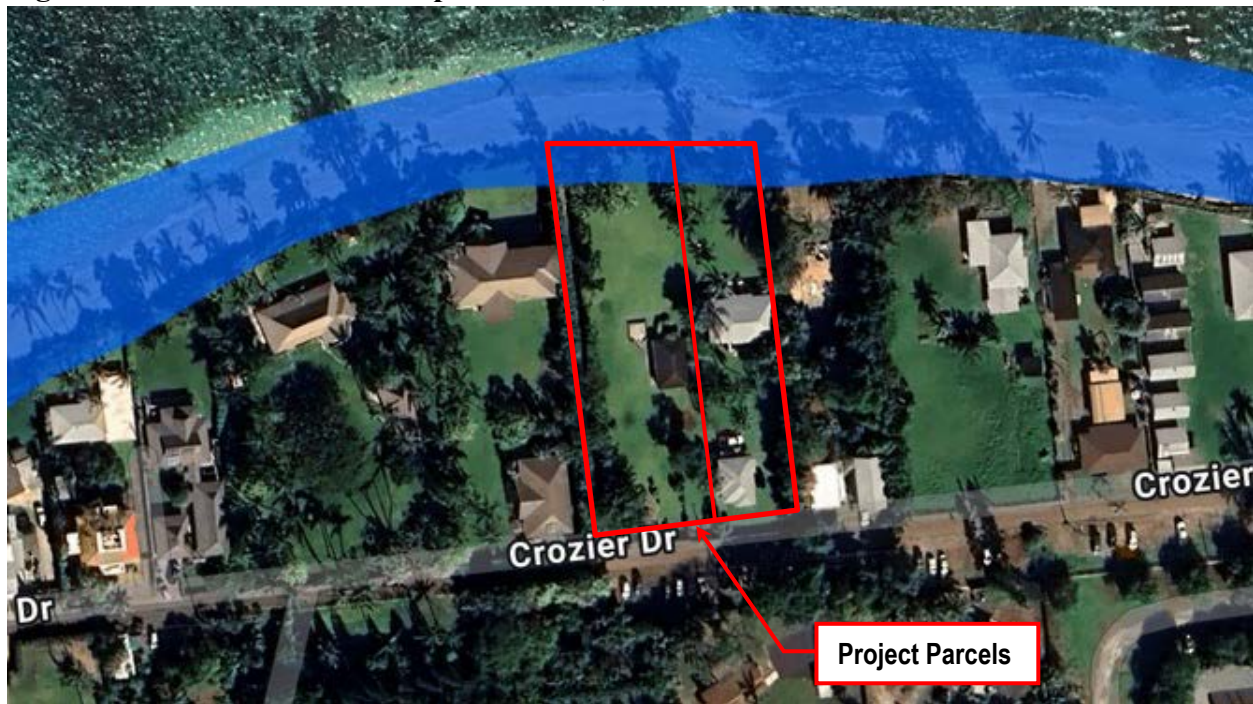
Source: https://www.soest.hawaii.edu/crc/ArcOnline/Oahu/TransectPlots/FEET/CrozierDrive_FEET_505.png

Sea Level Rise Hazard

The global community of climate scientists has concluded that sea levels are currently rising and that this trend is expected to continue for the foreseeable future. The Intergovernmental Panel on Climate Change (IPCC) has predicted (IPCC, 2013) that the average temperature in the Hawaiian Islands is likely to increase by 0.9° F to 1.7° F (0.5° to 1.5 C°) by 2100, rainfall is likely to decrease by, at most, 10 percent, and sea level could rise between 0.85 to 3.2 feet (0.26 to 0.98 meter). Given that likelihood, it is incumbent upon planners to look at the potential effects this trend could have on development and examine ways in which project designs can accommodate these changes.

The Hawai'i Sea Level Rise Vulnerability and Adaptation Report (HCCMAC, 2017) modeled the three chronic flood hazards associated with SLR: (i) passive flooding; (ii) annual high wave flooding; and (iii) coastal erosion. The combined footprint of these three hazards defines what the report terms the “Sea Level Rise Exposure Area” (SLR-XA) and indicates flooding in the area will be associated with “long-term, chronic hazards punctuated by annual or more frequent flooding events.” Figure 3-14, Figure 3-15, Figure 3-16, and Figure 3-17 show the SLR-XA in the vicinity of the project area at 0.5, 1.1, 2.0, and 3.2 feet of sea level rise, respectively. The 3.2-foot SLR-XA is also shown on Figure 2-1 and Figure 2-5.

Figure 3-14: Sea Level Rise Exposure Area, Sea Level Rise of 0.5 feet



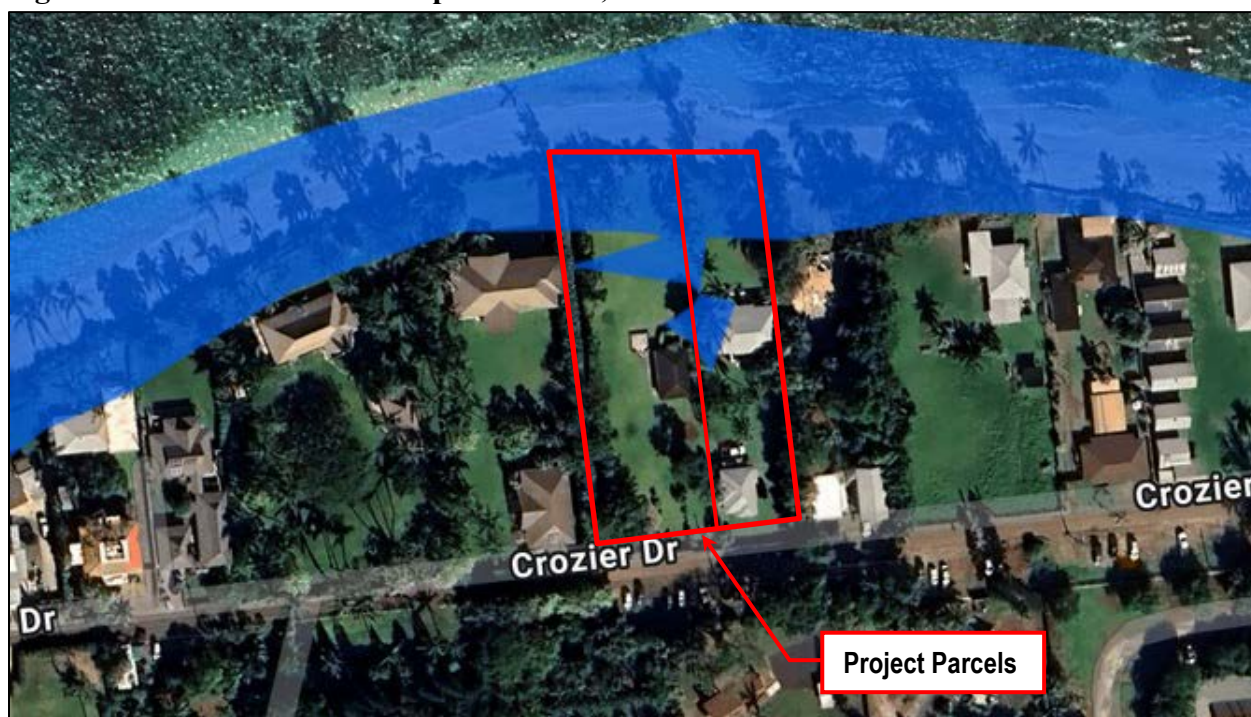
Source: <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> (downloaded January 23, 2025).

Figure 3-15: Sea Level Rise Exposure Area, Sea Level Rise of 1.1 feet



Source: <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> (downloaded January 23, 2025).

Figure 3-16: Sea Level Rise Exposure Area, Sea Level Rise of 2.0 feet



Source: <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> (downloaded January 23, 2025).

Figure 3-17: Sea Level Rise Exposure Area, Sea Level Rise of 3.2 feet



Source: <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> (downloaded January 23, 2025).

As these figures illustrate, as sea level rises the SLR-XA will advance across the parcels. Once sea level rise reaches 3.2 feet, roughly 80 percent of the project parcels are within the SLR-XA. The 0.5-foot and 1.1-foot SLR-XA resembles the erosion hazard lines in Figure 3-12 because the erosion hazard extends the furthest inland at those levels of sea level rise. The 2.0-foot and 3.2-foot SLR-XA resembles the annual high wave flooding hazard (Figure 3-9 and Figure 3-10) because the high wave flooding hazard extends the furthest inland at those levels of sea level rise.

DPP also requests that, as part of the SMA permit process, that planners consider 6 feet of sea level rise. To partially illustrate the impact of Sea Level Rise (SLR) on the project vicinity, Figure 3-18 depicts passive flooding associated with 6 feet of sea level rise, which was generated by NOAA. Per the SLR Viewer, the project parcels, which has an elevation of roughly 12 feet, will not be subject to passive flooding in a 6-foot SLR scenario.

Figure 3-18: Passive Flooding with Six Feet of Sea Level Rise



Source: Sea Level Rise : State of Hawai'i Sea Level Rise Viewer, An Interactive Mapping Tool in Support of the State of Hawai'i Sea Level Rise Vulnerability and Adaptation Report. <http://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> (accessed January 23, 2025).

Volcanic/Seismic Hazard

Like all O‘ahu, the project site is designated by the UBC as Seismic Zone 2a. Current building codes, including the International Building Code (IBC), include minimum design criteria for structures to address the potential for damage due to seismic disturbances specific to each seismic zone. There is no threat of volcanic eruptions directly affecting the project area.

3.6.2 SMA and CZM Objectives, Policies, and Guidelines

Development within the SMA should reduce impacts of coastal hazards on life and property, and must be designed to minimize impacts from landslides, erosion, sea level rise, siltation, or failure in the event of earthquake.

CZM policies related to coastal hazards are:

- A) Develop and communicate adequate information about the risks of coastal hazards;
- B) Control development, including planning and zoning control, in areas subject to coastal hazards;
- C) Ensure that developments comply with requirements of the National Flood Insurance Program; and
- D) Prevent coastal flooding from inland projects.

3.6.3 Potential Impacts and SMA/CZM Consistency

The proposed project is consistent with the SMA/CZM policies because (i) no development is proposed in the shoreline setback area, except for 50 percent open work fences, irrigation, and other minor elements that qualify for a Minor Shoreline Structure Permit; (ii) the portion of the development in the 3.2-foot SLR-XA will incorporate measures to minimize the potential for adverse effects associated with high wave flooding; and (iii) the development will comply with applicable flood zone requirements.

The proposed project will not have a discernable impact on the susceptibility of the area to coastal zone hazards (e.g., tsunami, flooding, high waves, storms, erosion, sea level rise, or seismicity).

The range of coastal hazards may episodically or chronically impact the project parcels and any improvements upon it, including the proposed project. There are several factors that temper the scale of impact associated with the coastal hazards; these include, (i) development is not proposed in the shoreline setback area or erosion hazard areas; (ii) the project parcels are not anticipated to be affected by hurricane storm surges; and (iii) the ground level has an elevation of roughly 12 feet above MSL, which is only 2 feet below the flood zone BFE. Hazards with the potential to directly impact the portion of the parcels where development is proposed over the design life of those developments are:

- Tsunamis may occur and have the potential to directly impact the entire parcels. Impacts to the ground-level improvements would not be expected to threaten human health and safety because residents would comply with tsunami evacuations.
- Storms (high wind) may occur but would be unlikely to have a substantial adverse effect on the proposed residences since they will be required to be designed to withstand high winds.
- Flooding may occur in the vicinity of the two proposed makai residences. In compliance with applicable flood zone rules the floor level of the residences will be higher than the 14-foot elevation BFE.
- As sea level rises, high wave flooding is predicted to gradually affect a larger portion of the parcels, eventually affecting the portions of the parcels where the two proposed makai residences and the proposed mauka residence on parcel 4 are located. The impact of the high wave flooding will be minimized by placing the living area floor level above the 14-foot elevation BFE. The annual high wave flooding is not likely to exceed a depth of 2 feet at that distance from the shoreline.
- Earthquakes may occur. The potential for adverse effect associated with earthquakes will be minimized by building the proposed dwellings in compliance with applicable codes that address Seismic Zone 2a hazards.

The level of impact associated with these hazards is anticipated to be less than significant.

3.6.4 Avoidance, Minimization, or Mitigation Measures

In general, the proposed project will address coastal hazards and their associated potential impacts in a similar manner as existing residences have for years, and new residences will in the future. This will include:

- Meeting or exceeding IBC's minimum design standards for Seismic Zone 2a.
- Conforming to the 2012 International Residential Code and Hawai'i State Building Code (HRS Chapter 107), as amended by CCH.
- Implementing select design and construction measures outlined in FEMA's *Coastal Construction Manual* to reduce hurricane risk.
- Not placing structures in the shoreline setback.
- Complying with flood zone requirements, including elevating living areas above the BFE.
- Maintaining the property in a way that minimizes the potential for the coastal zone hazards to cause property damage or undo risk to human health and safety, such as keeping the property reasonably clear of debris and maintaining easy ingress and egress.
- Landscaping in a manner consistent with applicable guidance such that it does not affect littoral processes and is tolerant of salt and wind.

The site owner and Applicant understand the City and County of Honolulu will, through the SMA permitting process, require they acknowledge the following:

- That the project parcels are susceptible to coastal hazards, which may result in harm to or loss of life and property.
- A majority of the project parcels are projected to be impacted by 3.2 feet of sea level rise by the year 2100, and that a majority of the proposed project is located within the 3.2-foot SLR-XA. The landowner agrees to assume all risk and liability for any harm to or loss of life and property due to development within the SLR-XA. The landowner further agrees to accept all responsibility for the cost and physical removal of materials and structures lost or damaged because of coastal hazards, including the cleanup and restoration of the project parcels.
- That land makai of the regulatory shoreline is State public land, falls within the State Land Use Conservation District, and must remain available for public use and recreational activities.
- That should any portion of a structure encroach into State public land, the State Board of Land and Natural Resources may require the removal of the structure or a lease for the encroachments extending into the State public land.
- That no claim of hardship due to erosion, sea level rise, or any other coastal hazard may be asserted in order to obtain approval for a Shoreline Setback Variance for a new shoreline protection structure.
- The owner/applicant, successor owners, and interested parties shall hold harmless and indemnify the City for any responsibility that may result from adverse impacts associated with sea level rise and coastal erosion.

3.7 Managing Development and Public Participation

3.7.1 Existing Conditions

The *O‘ahu General Plan* (General Plan), the NSSCP, and ROH Chapter 21 LUO inform, guide, managed, and regulate development in the CCH. ROH Chapter 26 Shoreline Setback Ordinance governs shoreline aspects of development near the shoreline.

As discussed in Section 1.3, on January 30, 2025, Planning Solutions, Inc. (PSI), acting on behalf of the Applicant, sent letters to the agencies and individuals identified in Table 1-1. All responses received were carefully considered during preparation of this EA. The early consultation letters and all responses are contained in Appendix A.

This FEA has been prepared to: (i) communicate the potential short- and long-term impacts of the proposed action; (ii) provide management agencies with the necessary information and analysis to make informed decisions; and (iii) afford the public an opportunity to review and comment on it.

3.7.2 SMA and CZM Objectives, Policies, and Guidelines

The development review process should stimulate public awareness, education, and participation in coastal management.

CZM policies related to managing development are:

- A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;
- B) Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and
- C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

CZM policies related to public participation are:

- A) Promote public involvement in coastal zone management processes;
- B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and
- C) Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.

3.7.3 Consistency with Land Use Plans, Policies, and Controls

O‘ahu General Plan

The *O‘ahu General Plan* was adopted by the City Council on December 1, 2021. The *O‘ahu General Plan* is a comprehensive statement of objectives and policies which sets forth the long-

range aspirations of O‘ahu’s residents and the strategies of actions to achieve them. It is the focal point of a comprehensive planning process that addresses physical, social, economic and environmental concerns affecting the City and County of Honolulu (CCH). This planning process serves as the means of coordination by which the CCH government provides for the future growth of the metropolitan area of Honolulu.

The *O‘ahu General Plan* poses several objectives related to housing. Section I, Population, Objective B, proposes: “To establish a pattern of population distribution that will allow the people of Oahu to live, work and play in harmony.” Further developing this theme, Section I, Objective B, Policy 3 states:

Policy 3

Manage land use and development in the urban-fringe and rural areas so that:

- a. Development is contained within growth boundaries; and*
- b. Population densities in all areas remain consistent with the character, culture, and environmental qualities desired for each community.*

Discussion: A shed is currently located on parcel 3 and two single-level family dwellings are present on parcel 4 (Figure 2-1). The project will avoid any undesirable spread of development because the subject site is designated, and currently or previously used, for residential purposes. The proposed development is consistent with the character of development and environmental qualities of the surrounding Waialua community in both nature and scope.

The *O‘ahu General Plan* further devotes an entire chapter to the subject of housing. Section IV, Housing and Communities, Objective A states the CCH’s policy, “To ensure a balanced mix of housing opportunities and choices for all residents at prices they can afford.” Specific policies follow from that, including:

Policy 4

Support and encourage programs to maintain and improve the condition of existing housing.

Policy 11

Encourage the construction of affordable homes within established low-density and rural communities by such means as ‘ohana units, duplex dwellings, and cluster development that embraces the ‘ohana concept by maintaining multi-generational proximity for local families.

Discussion: The proposed project intends to develop the project parcels in a manner/density consistent with nearby shoreline parcels on Crozier Drive. The proposed development will allow for its continued use for years to come, consistent with the policy of maintaining and improving the existing housing stock on O‘ahu. The Proposed Action complies with the housing policies of the *O‘ahu General Plan*.

The O‘ahu General Plan’s also contains policies related to SLR and its impact on infrastructure including the project’s IWS. Specifically, Section IV.C., Policy 6 states:

“Discourage residential development in areas where the topography makes construction difficult or hazardous, where sea level rise and flooding are a hazard, and where providing and maintaining roads, utilities, and other facilities would be extremely costly or environmentally damaging;”

Section V.D., Policy 5 of the O‘ahu General Plan also states:

“Evaluate impacts of sea level rise on existing public infrastructure, especially sewage treatment plants, roads, and other public and private utilities located along or near O‘ahu’s coastal areas, and avoid the placement of future public infrastructure in threatened areas.”

Discussion: Section 3.6 addresses SLR and other coastal hazards in a manner consistent with these policies. The project site is not an area where these factors make construction difficult or hazardous or roads and utilities are not present. The proposed IWS (Section 2.2.2), will be designed, installed, and operated in compliance with HDOH regulations and the terms of the project-specific IWS permit. The permit will be obtained prior to construction of the proposed development. Over time SLR will lead to rising groundwater levels that could place additional stress on subterranean infrastructure. If groundwater enters the leach field, it could reduce its effectiveness and require more frequent inspections or modification. It is considered unlikely that the groundwater will enter the leach field because the 3-foot-thick leach fields will be at elevation of roughly 6 to 9 feet. Alternatively, the City or community may install a central wastewater system in the area by the time groundwater reaches an elevation that may affect the IWS.

North Shore Sustainable Communities Plan

The NSSCP (DPP, 2011) summarizes the role of North Shore in O‘ahu’s development pattern as follows:

...maintain the rural character, agricultural lands, open space, natural environment, recreational resources and scenic beauty of O‘ahu’s northern coast...

... to preserve the open space and country atmosphere of the rural areas, growth is limited to “infill” areas within or adjacent to built-up areas to accommodate existing and future housing and employment needs.

The NSSCP’s proposed land use policies are intended to provide guidance for future actions and agency decision-making. General policies are broad statements of intent that express the CCH’s overall philosophy toward particular land uses and their effective management. Planning principles and guidelines provide more specific guidance in terms of planning, design, and implementation of projects and programs. The overarching theme of the NSSCP is that the North Shore region should remain relatively stable, and oriented toward maintaining and enhancing the region’s ability to sustain its safe, clean, and diverse character and the relaxed lifestyle that flows from it.

In Section 3.5 Residential Use, the plan states that (DPP, 2011):

The Community Growth Boundary is intended to contain the spread of development away from significant agriculture and preservation areas. The need for additional

housing on the North Shore will be met primarily by “infill” development of existing vacant lands within the Community Growth Boundary.

New residential single-family development may occur through infill development on existing residential-zoned vacant lots and larger residential-zoned parcels that can be subdivided, or in areas designated for new residential development contiguous to Waialua and Hale‘iwa Towns.

Discussion: The proposed project and all the nearby area makai of Crozier Drive are within the Community Growth Boundary and are areas appropriate for residential use. The proposal to redevelop the two parcels is consistent with this directive and does not represent encroachment onto agriculture and/or preservation areas.

Section 3.5 of the NSSCP discusses residential communities in the plan area, defining appropriate elements which aid and enhance the overall quality of life in the community. The project parcels are in a “rural residential” area per the NSSCP. Pursuant to Section 3.5.2 of the NSSCP, residential development in rural residential neighborhoods should consist of residences with minimal impervious surfaces and that generally: (i) do not exceed two-story building heights (i.e., not over 25 feet), (ii) do not exceed 5-8 units per acre, and (iii) are compatible with the predominant form and character of existing homes on adjacent properties and with the neighborhood as a whole. The design of the proposed residences generally complies with these stipulations of the NSSCP; the combination of the makai and mauka dwelling units on each parcel represents roughly 4 units per acre. The proposed structures on parcel 3 will be two levels, and the dwellings on parcel 4 will be one level. All the proposed structures will be less than 25 feet tall and have been designed to be compatible with the predominant form of homes in the neighborhood.

Land Use Ordinance

The purpose of the CCH’s LUO, contained in ROH Chapter 21 is to regulate land use in a manner that will encourage orderly development in accordance with adopted land use policies, including the *O‘ahu General Plan* and the NSSCP. These standards govern the location, height, area, and site of structures, yard areas, off-street parking facilities, and open spaces, and the use of structures and land for agriculture, industry, business, residences, and other purposes.

LUO Article 3

The action is in the CCH’s R-7.5 Residential District. The intent of the R-7.5 Residential District is to allow for urban residential development. Because the proposed project consists of construction of two single-family residences on each site designated for residential purposes, it is an allowable use per the CCH’s LUO. In addition, the proposed development will meet all applicable design standards including maximum building area, height, and other factors, as summarized in Table 3-2 and Table 3-3, which address parcels 3 and 4, respectively.

Table 3-2: Summary of LUO Compliance for Parcel 3 (TMK 6-8-004:003)

LUO Standard	R-7.5 Zone	Existing Conditions	Proposed Project
Minimum Lot Area	7,500 square feet	33,739 square feet -2, <u>856</u> square feet erosion area <u>30,883</u> square feet	33,739 square feet -2, <u>856</u> square feet erosion area <u>30,883</u> square feet
Minimum Lot Width and Depth	35 feet	100 feet	100 feet
Front Yard	10 feet	126	10 feet
Side Yard	5 feet	11 feet	5 feet
Rear Yard	5 feet	141 feet from certified shoreline	<u>73</u> feet from certified shoreline
Maximum Building Area	50%	3%	<u>30</u> %
Maximum Density Floor Area Ratio	0.6 (0.7 with adjusted setbacks)	0.00	0.2 <u>5</u>
Maximum Impervious Surface	75% of total zoning lot area	4%	<u>44.5</u> %
Maximum Height	25-30 feet	~15 feet	<u>27.67</u> feet
Height Setbacks	2:1 over 15' on side/rear 2:1 over 20' on front	Complies	Complies (See Appendix C, Sheets A101, A201, & A202)
Maximum Number of Wet Bars/Dwelling	1	0	1 (at BBQ area)
Maximum Number of Laundry Rooms/Dwelling	1	0	1
Maximum Number of Bathrooms/Dwelling (based on lot size exceeding 10,000 square feet)	8 if one dwelling/lot 4 per dwelling unit if two or more dwellings/lot	0	4 in main dwelling 1 in caretaker dwelling

Source: LUO Standard and R-7.5 Zone columns: Land Use Ordinance, Department of Planning and Permitting, City and County of Honolulu, Revise February 6, 2023 (https://www.honolulu.gov/rep/site/dpp/dpp_docs/land-use-ordinance.pdf). Action column: Planning Solutions, Inc. and Peter Vincent Architects.

Table 3-3: Summary of LUO Compliance for Parcel 4 (TMK 6-8-004:004)

LUO Standard	R-7.5 Zone	Existing Conditions	Proposed Project
Minimum Lot Area	7,500 square feet	21,595 square feet -997 square feet erosion area 20,598 square feet	21,595 square feet -997 square feet erosion area 20,598 square feet
Minimum Lot Width and Depth	35 feet	70 feet	70 feet
Front Yard	10 feet	34 feet	34 feet
Side Yard	5 feet	6 feet	9 feet
Rear Yard	5 feet	97 feet from certified shoreline	85 feet from certified shoreline
Maximum Building Area	50%	10%	27%
Maximum Density Floor Area Ratio	0.6 (0.7 with adjusted setbacks)	0.10	0.20
Maximum Impervious Surface	75% of total zoning lot area	15%	39%
Maximum Height	25-30 feet	~15 feet	22.75 feet
Height Setbacks	2:1 over 15' on side/rear 2:1 over 20' on front	Complies	Complies (See Appendix C, Sheets A101, A201, & A202)
Maximum Number of Wet Bars/Dwelling	1	0	0
Maximum Number of Laundry Rooms/Dwelling	1	0	1
Maximum Number of Bathrooms/Dwelling (based on lot size exceeding 10,000 square feet)	8 if one dwelling/lot 4 per dwelling unit if two or more dwellings/lot	2	2 in each dwelling

Note: The existing condition represents the site condition when the makai house is complete (it is currently under construction).

Source: LUO Standard and R-7.5 Zone columns: Land Use Ordinance, Department of Planning and Permitting, City and County of Honolulu, Revise February, 2025). Action column: Planning Solutions, Inc. and Peter Vincent Architects.

LUO Article 4

The parcels are not flag lots, they are accessed directly from Crozier Drive. The roof overhangs will not extend more than 30 inches into yard areas, including the yards between the parcels. The parcels will not be utilized as a transient vacation rental or bed and breakfast homes.

LUO Article 5

There are no specific use development standards that are applicable to the parcels or project.

LUO Article 6

The project will provide the required off-street parking. Article 6 requires 1 off-street parking spot for every 1,000 square feet of living space. With roughly 7,623 square feet of living area on parcel 3, 8 off-street parking spots are required on it. The three-car garage and auto court provide ample space for more than 8 parking spots on parcel 3. With roughly 4,140 square feet of living area on parcel 4, 4 off-street parking spots are required on it. The half-court basketball court and auto court provide ample space for more than 4 parking spots on parcel 4 (Sheet A100, Appendix C).

Shoreline Setback Ordinance

ROH Chapter 26 Shoreline Setback Ordinance establishes the shoreline setback line at “Sixty feet plus 70 times that annual coastal erosion rate, up to a maximum setback of 130 feet.” Section 3.6.1 includes an Erosion Hazard section that discusses the annual coastal erosion rate. The average erosion rate of the two transects at parcel 3 is -0.18 feet per year and the only transect at parcel 4 has an erosion rate of -0.27 feet per year. Therefore, the parcel 3 shoreline setback is 72.6 feet and the parcel 4 shoreline setback is 78.9 feet. The proposed development is outside of the shoreline setback (see back yard row of Table 3-2 and Table 3-3)

The current shoreline certification is provided in Appendix B. The shoreline and the shoreline setback are illustrated on Figure 2-1, Figure 2-5, and some of the drawings in Appendix C. As those figures and drawings demonstrate, no development is proposed within the shoreline setback area, except for 50 percent open work fences, irrigation, and other minor elements that qualify for a Minor Shoreline Structure Permit. Therefore, the proposed development complies with the Shoreline Setback Ordinance.

3.7.4 Potential Impacts and SMA/CZM Consistency

The proposed project is complying with applicable plans, policies, and controls regarding coastal development and development in the R-7.5 zone. No variances will be requested. As such, the project will have a negligible impact on existing development. The Applicant will continue to work cooperatively with all government agencies with oversight responsibilities to facilitate efficient processing of permits and informed decision-making by the responsible parties.

A presentation regarding the project will be made to the North Shore Neighborhood Board No. 27 prior to submitting an SMA Major application to DPP. DPP will hold a public hearing in support of the SMA Major application, providing the public with an additional opportunity for participation. Finally, the City Council will consider a resolution during which the public can provide testimony at a Zoning Committee hearing and a full council hearing.

Through the completed and upcoming public outreach events and project consistency with applicable plans and policies, the proposed project will be consistent with the SMA/CZM objectives.

3.7.5 Avoidance, Minimization, or Mitigation Measures

The site owner and Applicant understand the CCH will, through the SMA permitting process, require they acknowledge the following:

- That bed and breakfast homes and transient vacation units, as those terms are defined in ROH Chapter 21, the Land Use Ordinance, are not allowed on the project parcels.

3.8 Beach and Coastal Dune Protection

3.8.1 Existing Conditions

According to the Hawai'i SLR Viewer, Parcels 3 and 4, as well as the surrounding community, are mapped as beach deposits per U.S. Geological Survey (USGS) records, which correspond to areas mapped by the U.S Department of Agriculture Natural Resources Conservation Service as

“dunes and marine sands.” Therefore, regardless of the relatively flat nature of the project site, the project site is part of a coastal dune system.

The subsurface of the project parcels consists of Jaucus sand (JaC) exhibiting 0 to 15 percent slopes. There is a sandy beach seaward of the parcels (Figure 2-4). There are no geomorphic dunes at the project site; the site is essentially flat. There are fences in the shoreline area along the access easement. The shoreline area on the project site is landscaped, irrigated, and maintained; the landscaping consists of salt-tolerant species including sea grape, naupaka, coconut palm, ironwood, and grass.

3.8.2 SMA and CZM Objectives, Policies, and Guidelines

Development within the SMA should facilitate beach management and protection by safeguarding beaches and coastal dunes for public use and recreation, the benefit of ecosystems, and use as natural buffers against coastal hazards. New structures should be located mauka of the shoreline setback line to conserve open space, minimize interference with natural shoreline processes, and minimize the loss of improvements due to erosion.

CZM policies related to beaches and coastal dunes are:

- A) Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;
- B) Prohibit construction of private shoreline hardening structures, including seawalls and revetments, at sites having sand beaches and at sites where shoreline hardening structures interfere with existing recreational and waterline activities;
- C) Minimize the construction of public shoreline hardening structures, including seawalls and revetments, at sites having sand beaches and at sites where shoreline hardening structures interfere with existing recreational and waterline activities;
- D) Minimize grading of and damage to coastal dunes;
- E) Prohibit private property owners from creating a public nuisance by inducing or cultivating the private property owner's vegetation in a beach transit corridor; and
- F) Prohibit private property owners from creating a public nuisance by allowing the private property owner's unmaintained vegetation to interfere or encroach upon a beach transit corridor.

3.8.3 Potential Impacts and SMA/CZM Consistency

The Proposed Action will not substantially modify site topography. The project does not involve the establishment of shoreline hardening structures and does not involve any development within the shoreline setback. Only minor grading mauka of the shoreline setback area is proposed. Sand excavated for foundations, pools, and utilities/IWS will be used to create the desired ground surface in the mauka portions of the parcels so that no sand is removed from the site or the dune system. Structural and engineered fill will also be imported as described in Section 2.2.2; no fill will be placed in the shoreline setback area or erosion hazard zones. No impacts to beaches or

coastal geomorphic dunes are anticipated. No interactions with littoral processes are anticipated; the Applicant's proposal will not interrupt or alter any natural shoreline process.

As discussed in Section 3.4.4, the Applicant will design their landscaping and irrigation to be consistent with SMA policy and not create a public nuisance by planting or encouraging unnatural vegetation growth in a beach transit corridor or the access easement.

The development will not have an adverse effect on the beach or coastal dune and is consistent with the SMA/CZM policies.

3.8.4 Avoidance, Minimization, or Mitigation Measures

The project will implement BMPs (Section 2.2.1) to avoid and minimize potential construction-phase impacts. The measures outlined in Section 3.4.4 regarding landscaping and irrigation will be implemented.

3.9 Marine and Coastal Resources

3.9.1 Existing Conditions

There are no wetlands, bays, estuaries, or other water features on the project parcels. However, Mokulē'ia Beach/Pacific Ocean, which is designated as an estuarine and marine wetland, is directly north of the project parcels. There are no unusual marine or coastal resources in the project area. No research, study, or use (other than recreational discussed in Section 3.1) of the marine or coastal resources is known to occur in the project area.

3.9.2 SMA and CZM Objectives, Policies, and Guidelines

Development within the SMA should promote the protection, use, and development of marine and coastal resources to ensure that these resources are ecologically and environmentally sound and economically beneficial. Impacts on water resources, beaches, coastal dunes, and scenic or recreational amenities resulting from the construction of structures must be minimized. Development within wetland areas should be limited to activities that are dependent on or enhance wetlands or are otherwise approved by appropriate State and federal agencies. Examples include traditional Hawaiian agricultural uses such as wetland taro production, aquaculture, and fishpond management, as well as activities that clean and restore traditional wetland areas or create new wetlands in appropriate areas.

CZM policies related to marine resources are:

- A) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;
- B) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;
- C) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;

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

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

3.9.3 Potential Impacts and SMA/CZM Consistency

The proposed project will not involve work that affects any bays, estuaries, or water features. The proposed development will not occur in Mokulēʻia Beach/Pacific Ocean and the development is not expected to have an adverse impact on water quality. Due to the size of the project's disturbance area (< 1 acre), it will not trigger the requirement for a National Pollutant Discharge Elimination System, Notice of Intent – Construction (NPDES NOI-C). Nevertheless, during construction, BMPs relating to storm water management that comply with CCH's *Rules Relating to Stormwater Quality* will be implemented. Storm water from the hardscape areas of the development, which account for 47 percent of parcel 3 and 37 percent of parcel 4, will be directed to landscaped areas where it will percolate into the very permeable sandy soil.

No adverse impacts to marine and coastal resources are anticipated and the proposed development is consistent with SMA/CZM policies.

3.9.4 Avoidance, Minimization, and Mitigation Measures

Storm water will be managed on-site, and construction-related activities will employ standard BMPs relating to storm water management and will comply with CCH's *Rules Relating to Stormwater Quality*.

3.10 Cumulative Impact or Significant Effect and Compelling Public Interest

Cumulative effects are impacts which result from the incremental effects of an activity when added to other related past, present, and reasonably foreseeable future action, regardless of which agency, organization, or individual undertakes such action(s). Cumulative impacts may result from individually minor but collectively significant actions taking place over time.

3.10.1 Existing Conditions

The parcels makai of Crozier Drive in this area have been developed and used for residential purposes for decades. The project site is like other parcels on the makai side of Crozier Drive. The existing and proposed development is consistent with the O'ahu General Plan and the NSSCP (Section 3.7.3).

3.10.2 SMA and CZM Objectives, Policies, and Guidelines

Development within the SMA should not have any cumulative impact or significant effect, unless minimized to the extent practicable and clearly outweighed by public health, safety, or other compelling public interest.

3.10.3 Potential Impacts and SMA/CZM Consistency

The proposed project involves the redevelopment of two residential parcels which are or have been developed for similar uses and which do not harbor any important recreational, ecological, or cultural resources. The discussion in Sections 3.1 through 3.9 address the development proposed on the two parcels as one project. The impact associated with the development on parcel 3 and parcel 4 considered individually would essentially be identical and not be substantially different than the impact of the cumulative project.

Similar redevelopment projects have occurred or have been proposed on other residential parcels on the makai side of Crozier Drive. This includes a redevelopment project known as the How Residence on neighboring parcel 6-8-004:005 (68-615 Crozier Drive) that involves two new single-family dwellings. The How Residential project was awarded SMA permit 2023/SMA-90. Similar redevelopment projects are likely to occur due to the advancing age of the dwellings along Crozier Drive.

With construction occurring on the two project parcels at the same time and potentially overlapping with a portion of the neighboring How Residence construction phase, the short-term impacts may be perceived by members of the community to be greater than if construction occurred on one parcel at a time. The construction phase impacts, such as noise and dust, typically impact a small area near the work site, primarily the neighboring parcels. By overlapping the construction phases, the area of impact is not increased, and the duration of impact is reduced relative to performing the construction in series. Therefore, these impacts will be less than significant.

Adverse impacts to traffic and parking during construction are, unlike noise and dust, are more additive. The potential for adverse impacts will be minimized by employing the Construction Best Management Practices outlined in Section 2.2.1. With those measures in place, the short-term cumulative impact to traffic and parking will be less than significant.

The proposed development and other nearby redevelopment projects are consistent with applicable plans, policies, and land use controls for the project site. In addition, the proposed project is not contingent on any other action, public or private, and will not individually cause future actions to be taken by any public or private entities. Because the proposed project will not result in any significant effects individually, nor is there compelling public interest in it, it also does not have the potential to contribute to secondary or cumulative impacts either and is wholly consistent with SMA/CZM policies related to cumulative and/or secondary impacts.

4.0 DETERMINATION

4.1 Significance Criteria Findings

Hawai‘i Administrative Rule §11-200.1-14 establishes procedures for determining if an EIS should be prepared or if a FONSI is warranted. HAR §11-200.1-14(d) provides that proposing agencies should issue an environmental impact statement preparation notice for actions that it determines may have a significant effect on the environment. HAR §11-200.1-13(b) lists the following criteria to be used in making that determination. After each significance criteria is a brief description of why the proposed project will not have a significant impact.

1. *Irrevocably commit a natural, cultural, or historic resource;*

No unusual, rare, or protected natural or cultural resources or historic resources are known to be present on the project. It does not involve the loss of any significant or valuable natural, cultural, or historic resources. Measures outlined in Section 3.2.5 address the potential for the presence of unknown subsurface cultural and historic sites.

2. *Curtail the range of beneficial uses of the environment;*

The proposed project involves continued residential use of parcels zoned for residential use. The project is consistent with applicable plans, policies, and controls (Section 3.7.3). Continued residential use of the site is considered a beneficial use and will not curtail other beneficial uses in the region.

3. *Conflict with the State’s environmental policies or long-term environmental goals established by law;*

As discussed in Section 3.7.3, the Proposed Action is consistent with all applicable plans, policies, and controls. Further, the Proposed Action is consistent with the State of Hawai‘i’s long-term environmental policies and goals, as expressed in HRS Chapter 344 and elsewhere in state law.

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

The Proposed Action is small in scale and will not have substantial effects on the economic welfare, social welfare, or cultural practices of the community. Its purpose is solely to continue residential use of parcels designated for residential use.

5. *Have a substantial adverse effect on public health;*

The potential temporary construction-phase impacts related to noise, air quality, and water quality will be addressed through construction management practices outlined in Section 2.2.1 and will not adversely affect public health. The project site is not near and will not impact hospitals or medical centers.

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

The Proposed Action will not produce substantial secondary impacts, nor will it foster population growth, promote economic development, or stress public facilities or

services. Instead, to redevelop a residential site in a manner consistent with its existing or previous use and consistent with neighboring properties.

7. *Involve a substantial degradation of environmental quality;*

The Proposed Action will not have substantial long-term environmental effects. The project will temporarily elevate noise levels and generate limited nuisance airborne dust during construction, but these impacts will be localized and of limited duration. Adequate measures (Section 2.2.1) will be taken to control the intensity of construction noise and dust, and the effects will be brief and minimal.

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

The Proposed Action does not require a commitment to a larger action or any action beyond the limited project site and is not intended to facilitate substantial economic or population growth.

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

As discussed in Section 3.4, no rare, threatened, or endangered species are known to utilize the project site, and no activities are contemplated that will pose a threat to rare, threatened, or endangered species, or their habitat. In addition, the Proposed Action will not utilize any resource or habitat needed for the protection of rare, threatened, or endangered species.

10. *Have a substantial adverse effect on air or water quality or ambient noise levels;*

Noise levels and airborne emissions will temporarily increase during construction activities. BMPs (Section 2.2.1) will be implemented and any effects will be brief, relatively minor, and restricted to the immediate vicinity of the project site. Once construction is completed, the proposed project will not produce airborne emissions, waterborne pollution, or noise.

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

As discussed in Section 3.6, and due to its proximity to the shoreline, the project site is in a Tsunami Inundation Zone and Flood Zone AE or XS, and partially within the SLR-XA at 3.2 feet of sea level rise and an area modeled to be prone to coastal erosion. The proposed continued use of the parcels for residential purposes is consistent with applicable plans, policies, and controls, indicating that state and local governments consider the site appropriate for residential development. The measures outlined in Section 3.6.4 will result in the proposed project having a less than significant effect.

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

As discussed in Section 3.3, the proposed project is not visible from scenic vistas identified in county or state plans or studies and will not obstruct or curtail viewplanes

identified in county or state plans or studies; therefore, it will not substantially affect them.

13. *Require substantial energy consumption or emit substantial greenhouse gases.*

The proposed project will require the use of modest amounts of energy. However, once the relatively brief construction phase is complete, the proposed project will require only as much energy as is typical of residences of similar size. The project will not emit substantial quantities of greenhouse gases.

4.2 Determination

In view of the foregoing, the Applicant's assessment is that the Proposed Action will not have a significant adverse impact on the environment. Consequently, DPP has issued a FONSI for the Proposed Action.

5.0 CONSULTATION AND DISTRIBUTION

5.1 Early Consultation

A critical component of the planning effort for the Proposed Action was developing and implementing an early consultation program to inform public agencies and adjacent landowners and obtain their input regarding the project's purpose, scope, potential impacts, and recommended mitigation measures. This is discussed in Section 1.3 and Table 1-1 identifies the agencies and individuals that were sent early consultation letters. The complete text of the scoping letter and all responses are provided in Appendix A.

5.2 Distribution of the DEA

The Applicant has provided the DEA to the parties listed in Table 5-1 with a request for review and comment.

Table 5-1: DEA Distribution List

State Agencies

Department of Business, Economic Development, and Tourism (DBEDT), Office of Planning and Sustainable Development

Department of Hawaiian Home Lands

HDOH, Environmental Management Division

Department of Land and Natural Resources (DLNR)

Office of Hawaiian Affairs

City and County of Honolulu

Department of Planning and Permitting

Board of Water Supply

Department of Design and Construction

Department of Environmental Services

Department of Parks and Recreation

Department of Transportation Services

Honolulu Fire Department

Honolulu Police Department

Elected Officials

Councilmember Matt Weyer

North Shore Neighborhood Board No. 27

Neighbors

Lucy and John Gospodnetich

Peter How

Hello Easy Street

Libraries and Depositories

Hawai'i State Library Documents Center

Waialua Public Library

Utilities

Hawaiian Electric Co., Inc.

Hawaiian Telcom

Organizations

Mahu Ohana

'Ohana Keaweamahi

Aha Moku

Waialua Hawaiian Civic Club

Waialua Community Association

5.3 Neighborhood Board Meeting

PSI made a presentation to the North Shore Neighborhood Board on May 27, 2025. The presentation involved a summary of the project and information about how to review and comment on the DEA. The following questions and issues were brought up by the board members and community members attending the meeting:

- Assurances were sought that the proposed development would not be used for short-term rentals. Mr. Libby, the Applicant, replied that short-term rentals will not occur and PSI informed the board that the SMA permit will include a condition that clearly prohibits short-term rentals.

- Concerns regarding cultural resources were expressed. PSI replied that an AIS plan had been prepared and submitted to SHPD. Furthermore, the SMA permit will include conditions that require SHPD approval prior to the development being implemented.
- There were questions regarding the depth of the pool and the IWS. PSI indicated that this information would be added to the FEA (see Sections 2.2.1 and 2.2.2).

5.4 DEA/AFONSI Comments

Written submissions concerning the DEA/AFONSI were received during the 30-day comment period from the agencies, organizations, and individuals listed in Table 5-2. Substantive comments in those submissions were carefully considered during preparation of this FEA/FONSI. The full set of written submissions and all responses are included in Section 5.5.

Table 5-2: Comments Received on the DEA/AFONSI

Agency/Organization	Individual
Hawai'i Department of Health, Clean Air Branch	Lisa Kitahara
Hawaiian Telcom	Naomi Pacheco
'Ohana Keaweamahi	Keala Norman
Honolulu Fire Department	Craig Uchimura
Office of Hawaiian Affairs	Kaweni Ibarra
Honolulu Police Department	Glenn Hayashi
Department of Land and Natural Resources, Division of Forestry and Wildlife	Jason Omick
Department of Planning and Permitting	Dawn Apuna
Hawai'i Department of Health, Wastewater Branch	Jonathan Nagato

5.5 Responses to DEA/AFONSI Comments

All written submissions received and response to substantive comments are provided below.

From: [DOH.CABPASS](#)
To: [Makena White](#)
Subject: Libby Single-Family Dwelling Project
Date: Friday, May 23, 2025 9:17:43 AM

Hello Makena White,
Planning Solutions, Inc.

Thank you for the opportunity to review Revised Ordinance of Honolulu Chapter 25 Draft Environmental Assessment of Libby Single-Family Dwelling Project published in the May 23, 2025 edition of the TENs. Please go to the Clean Air Branch (CAB) website to download and utilize our Standard Comments for Land Use Reviews. The link is included below.

<https://health.hawaii.gov/cab/clean-air-branch/standard-comments-for-land-use-reviews/>

Thank you,

Lisa Kitahara
Planning & Administrative Support Staff Supervisor | Clean Air Branch
Hawai'i State Department of Health | Ka 'Oihana Olakino
2827 Waimano Home Road #130 | Pearl City, Hawaii 96782
Office: (808) 586-4200

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November 8, 2025

Lisa Kitahara
Planning & Administrative Support Staff Supervisor
State of Hawai'i, Department of Health, Clean Air Branch
Via Email: DOH.CABPASS@doh.hawaii.gov

Subject: Response to Comment on Draft Environmental Assessment for the Libby Single-Family Dwellings Project

Dear Ms. Kitahara:

Thank you for your May 23, 2025, email concerning the *Draft Environmental Assessment for the Libby Single-Family Dwellings Project* (DEA). We appreciate the time you spent reviewing the DEA and preparing your response.

Thank you for providing us your department's "Standard Comments for Land Use Reviews." The applicant understands the project must comply with all applicable rules, regulations, and statutes, including those associated with clean air. The proposed project does not include a component that would require an air pollution control permit. The project will implement best management practices (BMPs) to manage fugitive dust.

You may download a copy of the Final Environmental Assessment at the Environment Review Program's website (<https://planning.hawaii.gov/erp/>) once its availability is announced in *The Environmental Notice*.

If you have any questions or concerns regarding this project, please contact me at (808) 550-4559.

Mahalo,

James Hayes
Planner

JOSH GREEN, M.D.
GOVERNOR OF HAWAII
KE KIA'ĀINA O KA MOKU'ĀINA 'O HAWAII



KENNETH S. FINK, MD, MGA, MPH
DIRECTOR OF HEALTH
KA LUNA HO'OKOLE

STATE OF HAWAII
DEPARTMENT OF HEALTH
KA 'OIHANA OLAKINO
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

6957 – 1 6 8 004 003 & 004
68-631 & 68-623 Crozier Drive

July 2, 2025

Dawn Takeuchi Apuna, Director
Department of Planning & Permitting
City & County of Honolulu
650 South King Street 7th Floor
Honolulu, Hawaii 96813
Email c.keller@honolulu.gov

Dear Director Takeuchi Apuna:

Subject: Revised Ordinances of Honolulu Chapter 25
Draft Environmental Assessment
Libby Single-Family Dwellings Project
68-631 and 68-623 Crozier Drive, Waialua, Hawaii 96791
TMK: (1) 6-8-004: 003 and 004

We have reviewed the above subject project and have the following comments.

The subject project is located in the critical wastewater disposal area as determined by the Oahu Wastewater Advisory Committee. We have a Sanitary Inspector's Report of Cesspools (cesspool cards) for the following TMKs: (1) 6-8-004: 004 at 68-623 Crozier Drive dated May 8, 1973.

Presently, there is no City & County of Honolulu Sanitary Sewer Service located within the vicinity of the property. Because the subject properties are adjacent to and near the ocean the wastewater generated from the proposed project apparently may require the use of an Individual Wastewater System (IWS) comprised of an NSF/ANSI 40 or 245 certified aerobic treatment unit (ATU) system with an absorption bed. The IWS plans shall be submitted to the Wastewater Branch for review and approval for both properties separately. The installation of the IWS shall conform to requirements of HAR, Chapter 11-62, Title 11, "Wastewater Systems." In addition, the IWS shall be approved in writing before it may be used. An IWS shall serve up to five (5) bedrooms, whether they are in one (1) dwelling unit or two (2).

Please be informed that the proposed wastewater systems for the development may have to include design considerations to address any effects associated with the construction of and/or discharges from the wastewater systems to any public trust, Native Hawaiian resources or the exercise of traditional cultural practices. In addition, all wastewater plans must conform to

Dawn Takeuchi Apuna, Director
July 2, 2025
Page 2 of 2

applicable provisions of the Hawaii Administrative Rules, Chapter 11-62, "Wastewater Systems."

Should you have any questions, please contact Mark Tomomitsu at (808) 586-4294.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Jonathan Nagato', is written over the printed name.

JONATHAN NAGATO, P.E., CHIEF
Wastewater Branch

LM/MST:jn/ct

c: Makena White via email makena@psi-hi.com



November 8, 2025

Jonathan Nagato, Chief
State of Hawai'i, Department of Health, Wastewater Branch
P.O. Box 3378
Honolulu, Hawai'i 96801-3378

Subject: Response to Comment on Draft Environmental Assessment for the Libby Single-Family Dwellings Project

Dear Mr. Nagato:

Thank you for your July 2, 2025, letter (File No. 6957 – 1 6 8 004 003 & 004) concerning the *Draft Environmental Assessment for the Libby Single-Family Dwellings Project* (DEA). We appreciate the time you spent reviewing the DEA and preparing your response.

To simplify your review, we have reproduced your substantive comments below in italics, followed by our response:

Comment 1

The subject project is located in the critical wastewater disposal area as determined by the Oahu Wastewater Advisory Committee. We have a Sanitary Inspector's Report of Cesspools (cesspool cards) for the following TMKs: (1) 6-8-004: 004 at 68-623 Crozier Drive dated May 8, 1973.

Response

The Applicant acknowledges the project site is in the critical wastewater disposal area designated by the O'ahu Wastewater Advisory Committee. The Applicant understands that cesspools exist on the project site. Those cesspools will be closed as part of the proposed project.

Comment 2

Presently, there is no City & County of Honolulu Sanitary Sewer Service located within the vicinity of the property. Because the subject properties are adjacent to and near the ocean the wastewater generated from the proposed project apparently may require the use of an Individual Wastewater System (IWS) comprised of an NSF/ANSI 40 or 245 certified aerobic treatment unit (ATU) system with an absorption bed. The IWS plans shall be submitted to the Wastewater Branch for review and approval for both properties separately.

The installation of the IWS shall conform to requirements of HAR, Chapter 11-62, Title 11, "Wastewater Systems." In addition, the IWS shall be approved in writing before it may be used. An IWS shall serve up to five (5) bedrooms, whether they are in one (1) dwelling unit or two (2).

Response

The Applicant will submit its IWS plans to the State of Hawai'i Department of Health (HDOH) Wastewater Branch for review and approval, with the IWS for each property reviewed and approved separately. Each IWS will be designed and located per statutory requirements and not serve more than 5 bedrooms.

Comment 3

Please be informed that the proposed wastewater systems for the development may have to include design considerations to address any effects associated with the construction of and/or discharges from the wastewater systems to any public trust, Native Hawaiian resources or the exercise of traditional cultural practices. In addition, all wastewater plans must conform to applicable provisions of the Hawaii Administrative Rules, Chapter 11-62, "Wastewater Systems."

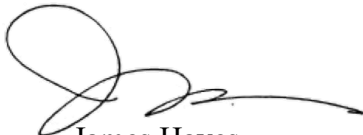
Response

Thank you for this information. The Applicant understands it may have to consider the potential for impacts to public trust resources, Native Hawaiian resources, or the exercise of traditional cultural practices in the design, installation, and operation of their IWS. Native Hawaiian resources are discussed in Section 3.2 of the Environmental Assessment. The Applicant further acknowledges it must comply with applicable provisions of Hawai'i Administrative Rules § 11-62 Wastewater Systems.

You may download a copy of the FEA at the Environment Review Program's website (<https://planning.hawaii.gov/erp/>) once its availability is announced in *The Environmental Notice*.

If you have any questions or concerns regarding this project, please contact me at (808) 550-4559.

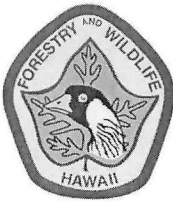
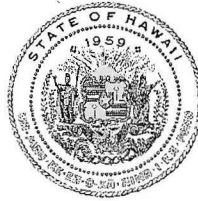
Sincerely,



James Hayes
Planner

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

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



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

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

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

RYAN K.P. KANAKA'OLE
FIRST DEPUTY

CIARA W.K. KAHAHANE
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
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CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

June 18, 2025

Log no. 5051

Makena White
Senior Planner & GIS Specialist
Planning Solutions
711 Kapiolani Boulevard, Suite 950
Honolulu, Hawaii 96813

Dear Makena White,

The Department of Land and Natural Resources—Division of Forestry and Wildlife (DOFAW) has received a communication from Planning Solutions regarding comment on a Draft Environmental Assessment (DEA) for the Libby Single-Family Dwellings Project at 68-631 & 68-623 Crozier Drive, Waialua, O'ahu; impacting TMKs (1) 6-8-004:003 and 004. The proposed project consists of **1)** the construction of three new single-family dwellings, and **2)** the relocation of an existing dwelling.

DOFAW has concluded that the project site is within Federally designated critical habitat for honu or green sea turtles (*Chelonia mydas*); however, it is not near any Federal administrated lands. The worksite is ca. 2.7 miles of the State administrated Pahole Natural Area Reserve and Mokulē'ia Forest Reserve. These areas protect unique botanical assets that provide habitat for a variety of native wildlife species. Therefore, DOFAW requests that special attention is paid to the recommendations made at the end of this letter regarding fire planning and prevention, and invasive species.

The Division notes that there is potential for several State listed species, protected under HRS § 195D, to found within the proposed project area. These include: **1)** 'ōpe'ape'a, or Hawaiian Hoary Bat (*Lasiurus semotus*); **2)** several species of seabirds; **3)** honu or green sea turtle (*Chelonia mydas*); and **4)** 'Īlio holo i ka uaua or Hawaiian monk seal (*Monachus schauinslandi*). Guidance to reduce negative impacts on this species has been included in this letter.

The State listed 'ōpe'ape'a or Hawaiian hoary bat (*Lasiurus semotus*) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup

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

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

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

Permanent lighting found at facilities also poses a risk of seabird attraction, and as such should be eliminated or minimized to the greatest extent possible to protect seabird flyways and preserve the night sky. If lighting is needed please review <https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf> for illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai'i.

The State endangered 'Īlio holo i ka uaua or Hawaiian monk seal (*Monachus schauinslandi*) and threatened honu or green sea turtle (*Chelonia mydas*) could potentially occur or haul out onshore within the vicinity of the proposed project site. Nesting season for honu is April through December and 'Īlio holo i ka uaua can give birth to pups all year round. If either species is detected within 100 feet (30 meters) of the project area, all nearby construction operations should cease and not continue until the focal animal has departed the area on its own accord.

Due to the arid climate, high fine fuel load (grasses) surrounding the worksite, and risks of wildfire to listed species and native habitats, we recommend coordinating with the **Hawai'i Wildfire Management Organization at (808)-850-0900 or admin@hawaiiwildfire.org**, on how wildfire prevention can be addressed in the project area. When engaging in activities that have a high risk of starting a wildfire—like wielding in/near tall grass, it is recommended that you: **1)** wet down the area before starting your task, **2)** continuously wet down the area as needed, **3)** have a fire extinguisher on hand, and **4)** in the event that your vision is impaired, (i.e. welding goggles) have a spotter to watch for fire ignitions. Additionally, do not park any vehicles in or near tall grass as heat from the engine/exhaust may ignite dry vegetation.

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

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

Sincerely,



JASON D. OMICK
Wildlife Program Manager



November 8, 2025

Mr. Jason D. Omick, Wildlife Program Manager
State of Hawai'i, Department of Land and Natural Resources, Division of Forestry and Wildlife

By Electronic Mail: jesse.w.adams.researcher@hawaii.gov

Subject: Response to Comment on Draft Environmental Assessment for the Libby Single-Family Dwellings Project

Dear Mr. Omick:

Thank you for your June 18, 2025, letter (Log No. 5051) concerning the *Draft Environmental Assessment for the Libby Single-Family Dwellings Project* (DEA). We appreciate the time you spent reviewing the DEA and preparing your response.

To simplify your review, we have reproduced your substantive comments below in italics, followed by our response. Avoidance, minimization, and mitigation measures associated with biological resources are provided in Section 3.4.4 of the DEA and FEA.

Comment 1

The State listed 'ōpe'ape'a or Hawaiian hoary bat (Lasiurus semotus) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup rearing season (June 1 through September 15). During this period woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed. Barbed wire should also be avoided in any construction as bats can become ensnared and killed by such fencing material during flight.

Response

To avoid potential impacts to roosting native Hawaiian hoary bats or 'ōpe'ape'a, contractor(s) will avoid disturbing, removing, or trimming any woody vegetation 15 feet or higher between June 1 and September 15. Barbed wire fencing will not be employed or installed.

Comment 2

Artificial lighting can adversely impact seabirds that may pass through the area at night by causing them to become disoriented. This disorientation can result in their collision with manmade structures or the grounding of birds. For

nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledgling season, from September 15 through December 15, when young seabirds make their maiden voyage to sea.

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

Permanent lighting found at facilities also poses a risk of seabird attraction, and as such should be eliminated or minimized to the greatest extent possible to protect seabird flyways and preserve the night sky. If lighting is needed please review <https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf> for illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai'i.

Response

Thank you for this information. All work will be conducted during typical work hours, which are daylight hours; no night work is anticipated. All artificial lighting, temporary or permanent, will be fully shielded using full cutoff fixtures with the light directed downward so that the light bulb is only visible from below the light fixture. Exterior light fixtures will not directly illuminate the shoreline, sandy beach, or ocean waters. All outdoor artificial light sources will not exceed a color temperature of 3,000 degrees Kelvin. Consequently, the project will comply with your division's referenced *Seabird Friendly Lighting Solutions* brochure and the Applicant does not anticipate adverse impacts to seabirds that may pass through the area.

Comment 3

The State endangered 'ilio holo i ka uaua or Hawaiian monk seal (Monachus schauinslandi) and threatened honu or green sea turtle (Chelonia mydas) could potentially occur or haul out onshore within the vicinity of the proposed project site. Nesting season for honu is April through December and 'ilio holo i ka uaua can give birth to pups all year round. If either species is detected within 100 feet (30 meters) of the project area, all nearby construction operations should cease and not continue until the focal animal has departed the area on its own accord.

Response

The Applicant acknowledges the native Hawaiian monk seal and green sea turtle may both be present in the nearshore environment adjacent to the proposed project. To avoid any potential

for harmful interactions between these species and the proposed project, all nearby construction activity will cease and a 100-foot buffer zone will be established until the focal animal has departed the area on its own accord.

Comment 4

Due to the arid climate, high fine fuel load (grasses) surrounding the worksite, and risks of wildfire to listed species and native habitats, we recommend coordinating with the Hawai'i Wildfire Management Organization at (808)-850-0900 or admin@hawaiiwildfire.org, on how wildfire prevention can be addressed in the project area. When engaging in activities that have a high risk of starting a wildfire—like wielding in/near tall grass, it is recommended that you: 1) wet down the area before starting your task, 2) continuously wet down the area as needed, 3) have a fire extinguisher on hand, and 4) in the event that your vision is impaired, (i.e. welding goggles) have a spotter to watch for fire ignitions. Additionally, do not park any vehicles in or near tall grass as heat from the engine/exhaust may ignite dry vegetation.

Response

The proposed project is for residential use of previously developed residential lots with low potential for wildfire. However, the Applicant will work with its contractors to ensure all activities with the potential to start a fire, including construction-related work and parking, are conducted in a safe manner consistent with DOFAW's guidance.

Comment 5

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

Response

The Applicant will work with its contactors to take appropriate steps to minimize the risk of spreading invasive species. As stated in Section 3.4.4 of the DEA, contractors will implement the following measures to reduce the potential for the spread of invasive species (i) fill material will be obtained from a commercial quarry; (ii) all equipment, material, and personnel will be cleaned of excess soil and debris prior to arrival and before departure at the site; (iii) the most recently updated OISC “Decontamination Protocols for Prevention of Invasive Species” will be provided to all workers and/or posted in a visible location accessible to workers and delivery/haul-out contractors; and (iv) contact OISC if invasive species are encountered on the site.

You may download a copy of the FEA at the Environment Review Program’s website (<https://planning.hawaii.gov/erp/>) once its availability is announced in *The Environmental Notice*.

If you have any questions or concerns in the future regarding this project, please contact me at (808) 550-4559.

Mahalo,



James Hayes
Planner

From: [Kaweni Ibarra](#)
To: [Keller, Christina K](#)
Cc: [Makena White](#); [Kamakana Ferreira](#); [Kai Markell](#)
Subject: OHA Comment Re: DEA for Libby Residence at 68-631 and 68-623 Crozier Drive, Waialua
Date: Tuesday, June 3, 2025 7:35:59 AM
Attachments: [Outlook-0nuxxlhc.png](#)

Aloha e Christi,

The Office of Hawaiian Affairs (OHA) is in receipt of your letter dated May 20, 2025 initiating consultation for a Draft Environmental Assessment (DEA) for the Libby Residence at 68-631 and 68-623 Crozier Drive, Waialua [TMK (1)6-8-004: 003 & 004], Oahu Island.

OHA is pleased that an Archaeological Inventory Survey Plan (AISP) was prepared and implemented given the high sensitivity and presence of Jaucas sands in the area.

Once available, OHA requests that we be provided with a copy of the draft Archaeological Inventory Survey (AIS) for review, and afforded an opportunity to comment.

Mahalo for your time. We look forward to receiving the requested information and continuing consultation. Please feel free to contact me should you have any questions.

Mahalo,

Kaweni Ibarra

Kaweni Ibarra

Compliance Advocate
Office of Hawaiian Affairs





November 8, 2025

Kaweni Ibarra, Compliance Advocate
State of Hawai'i, Office of Hawaiian Affairs
Via Email: kawenii@oha.org

**Subject: Response to Comment on Draft Environmental Assessment for the Libby
Single-Family Dwellings Project**

Dear Mr. Ibarra:

Thank you for your June 3, 2025, email concerning the *Draft Environmental Assessment for the Libby Single-Family Dwellings Project* (DEA). We appreciate the time you spent reviewing the DEA and preparing your response.

As you note, an Archaeological Inventory Survey (AIS) Plan was prepared (it was appended to the DEA). The AIS Plan was submitted to the State Historic Preservation Division (SHPD). SHPD approved the plan. The plan was implemented and no historic resources were encountered at the site. An Archaeological Assessment (AA) is being prepared and will be submitted to SHPD for review as part of the HRS Chapter 6E review process.

Once the EA process is complete, Planning Solutions, Inc. will no longer be involved with the project or have access to SHPD correspondence regarding the project. Your office will need to correspond with SHPD to obtain their future correspondence regarding this project.

You may download a copy of the Final Environmental Assessment at the Environment Review Program's website (<https://planning.hawaii.gov/erp/>) once its availability is announced in *The Environmental Notice*.

If you have any questions or concerns regarding this project, please contact me at (808) 550-4559.

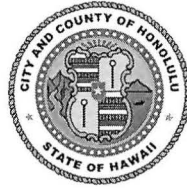
Mahalo,

James Hayes
Planner

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

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

RICK BLANGIARDI
MAYOR
MEIA



DAWN TAKEUCHI APUNA
DIRECTOR
PO'O

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

REGINA MALEPEAI
2ND DEPUTY DIRECTOR
HOPE PO'O KUALUA

June 12, 2025

2025/ED-2(CK)

Mr. Makena White
Planning Solutions, Inc.
711 Kapiolani Boulevard, Suite 950
Honolulu, Hawaii 96813

Dear Mr. White:

SUBJECT: Comments
Draft Environmental Assessment (DEA)
Libby Single-Family Dwellings Project
68-631 and 68-623 Crozier Drive - Waialua
Tax Map Keys 6-8-004: 003 and 004 (Parcels 3 and 4)

We have reviewed the above DEA, received April 11, 2025, which is required under Revised Ordinances of Honolulu (ROH) Chapter 25, the Special Management Area (SMA) Ordinance. We understand that the Project proposes the construction of three new single-family dwellings and the relocation of a fourth, existing dwelling on two adjacent, shoreline zoning lots under the same ownership in the SMA in Waialua (Project). Because the Project is located in the SMA, and has an estimated cost of greater than \$500,000, it will require approval of an SMA Major Permit by Resolution of the City Council prior to implementation. Our comments are as follows:

1. *Certified Shoreline Survey*

According to the DEA, an uncertified shoreline survey, mapped on September 19, 2024, is currently under review by the State Department of Land and Natural Resources (DLNR) Land Division. The Certified Shoreline Survey must be included in the Final Environment Assessment (FEA), and the discussion updated accordingly as appropriate.

2. *Effective Shoreline Setback*

In Table 2-1, or elsewhere in the introductory sections as appropriate, the FEA must disclose the effective minimum shoreline setback for Parcels 3 and 4, based on the formula presented in ROH Section 26-1.4(a)(1). We note that the erosion rate should be based on the annual historic shoreline change transects shown on the Oahu Shoreline Change Mapper that is available on the DPP's website as follows (scroll down to maps):

<https://www.honolulu.gov/dpp/resources/>

3. *Existing Shoreline Structures*

Figure 2-4a shows a segment of chain-link fencing that appears to extend from Parcel 3 onto the beach. The FEA should explain the status of this fence, including whether it is located on the subject property, whether it extends into the State Land Use Conservation District, whether it will remain in place upon Project implementation, and how it complies with ROH Chapter 26, the Shoreline Setback Ordinance.

4. *Section 3.2.1 – Historic and Cultural Resources*

Disclose and explain if the archaeological survey, monitoring plan, and burial treatment plan prepared by ASM Affiliates, Inc. (Ryder and Belluzo 2023) for the adjacent parcel (68-617 Crozier Drive; How Property) were reviewed during preparation of the DEA. These documents are currently under review by the State Historic Preservation Division, Office of Hawaiian Affairs, and the Oahu Island Burial Council due to the discovery of a likely traditional burial on the site.

Include a specific Ka Paakai analysis disclosing the Project's potential impacts to Native Hawaiian cultural practices. While a statement in this regard is included in Section 3.2.3, the DEA does not include any reference to outreach conducted to lineal descendants or other appropriate parties. While this DEA and FEA are being prepared as a precursor to an SMA Major Permit under ROH Chapter 25, the contents should still include the required components of an Environmental Assessment under Hawaii Revised Statutes Chapter 343.

5. *Section 3.4.1 – Fauna*

The waters offshore of the site are considered marine critical habitat for the Hawaiian Monk Seal. The FEA should disclose the resources reviewed in determining State and Federally-listed resources with potential to occur on the site. For example, the species listed in the DEA appear to reflect Federally-protected species that are listed on the United States Fish and Wildlife Service's Information for Planning and Consultation database. Describe any consultation and outreach efforts with the DLNR Division of Forestry and Wildlife who administers the State Endangered Species Act, and frequently provide comments regarding the potential for State-protected species to occur in various areas of Oahu. Include in the FEA any potential impacts and recommended mitigation measures to avoid impacts to State-listed threatened or endangered species or other State species of concern.

6. *Section 3.7.3 - General Plan Consistency*

The FEA should acknowledge the Oahu General Plan's policies on sea level rise (SLR). Specifically, Section IV.C., Policy 6 states:

"Discourage residential development in areas where the topography makes construction difficult or hazardous, where sea level rise and flooding are a hazard, and where providing and maintaining roads, utilities, and other facilities would be extremely costly or environmentally damaging;" and

Section V.D., Policy 5 states:

"Evaluate impacts of sea level rise on existing public infrastructure, especially sewage treatment plants, roads, and other public and private utilities located along or near O'ahu's coastal areas, and avoid the placement of future public infrastructure in threatened areas."

The FEA should disclose the projected impacts of SLR on the proposed Individual Wastewater System (IWS), and how the IWS will be constructed to account for these impacts. This discussion should also be included in other relevant sections relating to utilities and coastal waters/ecosystems.

Mr. Makena White
June 12, 2025
Page 4

7. *Section 3.8 - Beach and Coastal Dune Protection*

The FEA should disclose that according to the Hawaii SLR Viewer, Parcels 3 and 4 as well as the surrounding community are all mapped as beach deposits (U.S. Geological Survey), which correspond to areas mapped by the U.S Department of Agriculture Natural Resources Conservation Service as “dunes and marine sands.” Therefore, regardless of a relatively flat nature of the subject properties, the subject properties are considered to be part of a coastal dune system. If necessary, an updated discussion of related impacts and/or mitigation measures should be provided.

Thank you for the opportunity to comment on this proposal. Should you have any questions, please contact Christi Keller, of our Land Use Approval Branch, at (808) 768-8087 or via email at c.keller@honolulu.gov.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'Dawn Takeuchi Apuna', with a stylized 'for' written to the left.

Dawn Takeuchi Apuna
Director



November 8, 2025

Dawn Takeuchi Apuna, Director
Attn: Christi Keller, Planner
City and County of Honolulu, Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawai'i 96813
By Electronic Mail: ckeller@honolulu.gov

Subject: Response to Comment on Draft Environmental Assessment for the Libby Single-Family Dwellings Project

Dear Director Apuna:

Thank you for your June 12, 2025, letter (Log No. 2025/ED-2(CK)) concerning the *Draft Environmental Assessment for the Libby Single-Family Dwellings Project* (DEA). We appreciate the time you spent reviewing the DEA and preparing your response.

To simplify your review, we have reproduced your substantive comments below in italics, followed by our response:

Comment 1

Certified Shoreline Survey

According to the DEA, an uncertified shoreline survey, mapped on September 19, 2024, is currently under review by the State Department of Land and Natural Resources (DLNR) Land Division. The Certified Shoreline Survey must be included in the Final Environment Assessment (FEA), and the discussion updated accordingly as appropriate.

Response

Section 2.1, Table 2-1 of the Final Environmental Assessment and Finding of No Significant Impacts (FEA-FONSI) has been edited to reference the updated shoreline certification, which was incomplete at the time the DEA was published. The now certified shoreline survey is included in Appendix B of the FEA-FONSI.

Comment 2

Effective Shoreline Setback

In Table 2-1, or elsewhere in the introductory sections as appropriate, the FEA must disclose the effective minimum shoreline setback for Parcels 3 and 4, based on the formula presented in ROH Section 26-1.4(a)(1). We note that the erosion rate should be based on the annual historic shoreline change transects shown on the Oahu Shoreline Change Mapper that is available on the DPP's website as follows (scroll down to maps): <https://www.honolulu.gov/dpp/resources/>

Response

According to the City and County of Honolulu's O'ahu Shoreline Change Mapper, the coastal erosion transects adjacent the project parcels are Nos. 439, 440, and 441. The resulting shoreline setback, based on 60 feet plus 70 times the erosion rate, has been added to Table 2-1 in the FEA.

Comment 3

Existing Shoreline Structures

Figure 2-4a shows a segment of chain-link fencing that appears to extend from Parcel 3 onto the beach. The FEA should explain the status of this fence, including whether it is located on the subject property, whether it extends into the State Land Use Conservation District, whether it will remain in place upon Project implementation, and how it complies with ROH Chapter 26, the Shoreline Setback Ordinance.

Response

The segment of the chain-link fence shown in Figure 2-4a has been removed by the Applicant at the direction of the Department of Land and Natural Resources (DLNR), Land Division during the shoreline certification process. Figure 2-4a of the FEA-FONSI has been revised to clarify the visible portion of the fence has been removed at the direction of the DLNR Land Division.

Comment 4

Section 3.2.1 – Historic and Cultural Resources

Disclose and explain if the archaeological survey, monitoring plan, and burial treatment plan prepared by ASM Affiliates, Inc. (Ryder and Belluzo 2023) for the adjacent parcel (68-617 Crozier Drive; How Property) were reviewed during preparation of the DEA. These documents are currently under review by the State Historic Preservation Division, Office of Hawaiian Affairs, and the

Oahu Island Burial Council due to the discovery of a likely traditional burial on the site.

Include a specific Ka Paakai analysis disclosing the Project's potential impacts to Native Hawaiian cultural practices. While a statement in this regard is included in Section 3.2.3, the DEA does not include any reference to outreach conducted to lineal descendants or other appropriate parties. While this DEA and FEA are being prepared as a precursor to an SMA Major Permit under ROH Chapter 25, the contents should still include the required components of an Environmental Assessment under Hawaii Revised Statutes Chapter 343.

Response

The archaeological survey, monitoring plan, and burial treatment plan for the adjacent parcel, 68-617 Crozier Drive, was prepared by the same archaeologists (ASM Affiliates) which prepared the Archaeological Inventory Survey Plan (AISP) for the subject project and those materials were taken into consideration during preparation of the AISP. Section 3.2.3 has been added to the FEA-FONSI with a project-specific Cultural Impact Assessment and Ka Pa'a Kai analysis disclosing the project's potential for impacts to Native Hawaiian cultural practices.

Comment 5

Section 3.4.1 – Fauna

The waters offshore of the site are considered marine critical habitat for the Hawaiian Monk Seal. The FEA should disclose the resources reviewed in determining State and Federally-listed resources with potential to occur on the site. For example, the species listed in the DEA appear to reflect Federally-protected species that are listed on the United States Fish and Wildlife Service's Information for Planning and Consultation database. Describe any consultation and outreach efforts with the DLNR Division of Forestry and Wildlife who administers the State Endangered Species Act, and frequently provide comments regarding the potential for State-protected species to occur in various areas of Oahu. Include in the FEA any potential impacts and recommended mitigation measures to avoid impacts to State-listed threatened or endangered species or other State species of concern.

Response

To understand and assess the potential for biological impacts, project planners consulted the USFWS' Information for Planning and Consultation (IPaC) assessment tool, this fact has been added to the FEA. In addition, a scoping letter and the DEA were provided to the DLNR, Division of Forestry and Wildlife (DOFAW) with a request for review and comment. DOFAW did not provide input during the scoping permit but did comment on the DEA. Both DOFAW's comments and the Applicant's response are included in Chapter 5 of the FEA-FONSI.

Comment 6

Section 3.7.3 – General Plan Consistency

The FEA should acknowledge the Oahu General Plan's policies on sea level rise (SLR). Specifically, Section IV.C., Policy 6 states:

"Discourage residential development in areas where the topography makes construction difficult or hazardous, where sea level rise and flooding are a hazard, and where providing and maintaining roads, utilities, and other facilities would be extremely costly or environmentally damaging;" and

Section V.D., Policy 5 states:

“Evaluate impacts of sea level rise on existing public infrastructure, especially sewage treatment plants, roads, and other public and private utilities located along or near O‘ahu’s coastal areas, and avoid the placement of future public infrastructure in threatened areas.”

The FEA should disclose the projected impacts of SLR on the proposed Individual Wastewater System (IWS), and how the IWS will be constructed to account for these impacts. This discussion should also be included in other relevant sections relating to utilities and coastal waters/ecosystems.

Response

Section 3.7.3 of the FEA-FONSI has been expanded to include the sections of the *O‘ahu General Plan* you cite in your comments, along with a discussion of the project’s consistency with them.

Comment 7

Section 3.8 – Beach and Coastal Dune Protection

The FEA should disclose that according to the Hawaii SLR Viewer, Parcels 3 and 4 as well as the surrounding community are all mapped as beach deposits (U.S. Geological Survey), which correspond to areas mapped by the U.S. Department of Agriculture Natural Resources Conservation Service as “dunes and marine sands.” Therefore, regardless of a relatively flat nature of the subject properties, the subject properties are considered to be part of a coastal dune system. If necessary, an updated discussion of related impacts and/or mitigation measures should be provided.

Response

Section 3.8.1 and 3.8.3 of the FEA-FONSI have been updated to reflect the USGS classification of the area as being part of a coastal dune system.

You may download a copy of the FEA at the Environment Review Program's website (<https://planning.hawaii.gov/erp/>) once its availability is announced in *The Environmental Notice*.

If you have any questions or concerns regarding this project, please contact me at (808) 550-4559.

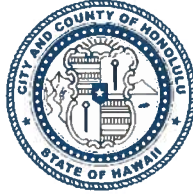
Mahalo,

A handwritten signature in black ink, appearing to read 'James Hayes', with a large loop at the start and a long horizontal stroke extending to the right.

James Hayes
Planner

HONOLULU POLICE DEPARTMENT
KA 'OIHANA MĀKA'I O HONOLULU
CITY AND COUNTY OF HONOLULU

801 SOUTH BERETANIA STREET • HONOLULU, HAWAII 96813
TELEPHONE: (808) 529-3111 • WEBSITE: www.honoluluupd.org



RICK BLANGIARDI
MAYOR
MEIA

ARTHUR J. LOGAN
CHIEF
KAHU MĀKA'I

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

OUR REFERENCE EO-SH

June 9, 2025

SENT VIA EMAIL

Mr. Makena White
makena@psi-hi.com

Dear Mr. White:

This is in response to the correspondence from the Department of Planning and Permitting of May 20, 2025, requesting input for the Draft Environmental Assessment for the proposed Libby Single-Family Dwellings project in Waialua.

The Honolulu Police Department (HPD) recommends adequate notification be made to neighboring residents to help facilitate the communication of information regarding possible road closures, alternate routes, and other issues that would affect vehicular and pedestrian traffic, as the roadway is narrow and in a rural area. The HPD also recommends all necessary lights signs, barricades, and other safety equipment be installed and maintained by the contractor during the relocation and construction phases of the project.

If there are any questions, please call Major Robert Towne of District 2 (Wahiawā) at (808) 723-8700.

Sincerely,

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

GLENN HAYASHI
Assistant Chief of Police
Support Services Bureau



November 8, 2025

Acting Assistant Chief Glenn Hayashi
Support Services Bureau
City and County of Honolulu, Honolulu Police Department
By Electronic Mail: lstone@honolulu.gov

Subject: Response to Comment on Draft Environmental Assessment for the Libby Single-Family Dwellings Project

Dear Assistant Chief Hayashi:

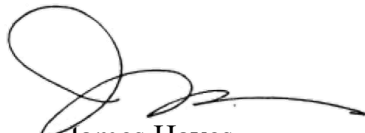
Thank you for your June 9, 2025, letter (reference: EO-SH) concerning the *Draft Environmental Assessment for the Libby Single-Family Dwellings Project* (DEA). We appreciate the time you spent reviewing the DEA and preparing your response.

The Applicant will work with its contractors to ensure neighboring residents are notified in advance of any potential road closures, alternate routes, or other issues that may affect vehicular and pedestrian traffic in the area. The dwelling relocation is no longer part of the proposed project; therefore, road closures and other impacts are not anticipated. The Applicant will also ensure all required safety equipment be installed and maintained during the construction phase of the proposed project.

You may download a copy of the Final Environmental Assessment at the Environment Review Program's website (<https://planning.hawaii.gov/erp/>) once its availability is announced in *The Environmental Notice*.

If you have any questions or concerns regarding this project, please contact me at (808) 550-4559.

Mahalo,

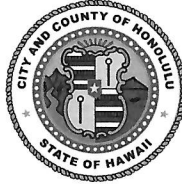


James Hayes
Planner

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

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

RICK BLANGIARDI
MAYOR
MEIA



SHELDON K. HAO
FIRE CHIEF
LUNA NUI KINAI AHI

JASON SAMALA
DEPUTY FIRE CHIEF
HOPE LUNA NUI KINAI AHI

May 29, 2025

Mr. Makena White, Senior Planner
Planning Solutions, Inc.
711 Kapi'olani Boulevard, Suite 950
Honolulu, Hawaii 96813

Dear Mr. White:

Subject: Draft Environmental Assessment
Libby Single-Family Dwellings Project
68-631 and 68-623 Crozier Drive - Waialua
Tax Map Keys: 6-8-004: 003 and 004

In response to a letter dated May 20, 2025, received from the City and County of Honolulu's Department of Planning and Permitting (DPP) regarding the abovementioned subject, the Honolulu Fire Department (HFD) reviewed the submitted information and requires that this project follow all applicable codes in the Revised Ordinances of Honolulu Chapter 20 regarding Flammable and Combustible Liquid Storage Tanks.

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

Should you have questions, please contact Battalion Chief Pao-Chi Hwang of our Fire Prevention Bureau at 808-723-7151 or hdfpb1@honolulu.gov.

Sincerely,

A blue ink signature of Craig Uchimura, consisting of a stylized 'C' followed by a horizontal line.

CRAIG UCHIMURA
Assistant Chief

CU/MD:sk

cc: Ms. Dawn Takeuchi Apuna, Director, DPP



November 8, 2025

Craig Uchimura, Assistant Chief
City and County of Honolulu, Honolulu Fire Department
By Electronic Mail: hfdfpb1@honolulu.gov

**Subject: Response to Comment on Draft Environmental Assessment for the Libby
Single-Family Dwellings Project**

Dear Assistant Chief Uchimura:

Thank you for your May 29, 2025, letter concerning the *Draft Environmental Assessment for the Libby Single-Family Dwellings Project* (DEA). We appreciate the time you spent reviewing the DEA and preparing your response.

The Applicant acknowledges it must comply with all applicable codes in Revised Ordinances of Honolulu, Chapter 20 regarding flammable and combustible liquid storage tanks. The Applicant further understands the aforementioned provisions are required by the Honolulu Fire Department and may necessitate additional requirements be met as determined by other agencies.

You may download a copy of the Final Environmental Assessment at the Environment Review Program's website (<https://planning.hawaii.gov/erp/>) once its availability is announced in *The Environmental Notice*.

If you have any questions or concerns regarding this project, please contact me at (808) 550-4559.

Mahalo,



James Hayes
Planner

From: [Keala Norman](#)
To: [Julia Ham Tashima](#); [Ted Jr](#); [Kepo'o Keli"ipa"akaua](#); [Kai Keli"ipa"akaua](#); [Kaleo Norman](#); [Keli"iui Norman](#); [Cara Arcalas-Rabang](#); [Ilikea Suzuki](#); [Calpito, Jordan V](#); [Puff, Jessica L](#); [Lebo, Susan A](#); [Nick Belluzzo](#)
Cc: [Iaukea, Lesley](#)
Subject: Re: Draft EA: Libby Single-Family Dwellings
Date: Saturday, May 24, 2025 10:34:38 AM

Aloha Julia a me kakou,

Mahalo nui for reaching out for mana'o.

The current AIS plan is insufficient for this highly culturally sensitive area with numerous iwi kupuna findings. The homes to be demolished were built before any burial laws existed, making it highly likely that iwi kupuna may have been disturbed during construction from the early to mid-1900s.

I respectfully propose that the developer do a 100% AIS, testing the entire project by using an excavator or excavators with a flat-edged, screening bucket (please see attachment) to remove layers of dirt or in this case jaucus 4 inches at a time all the way down to the bedrock or coral shelf. I also propose that the landowner hires cultural monitors as there have been issues with dishonest archaeological firms.

If iwi kupuna and/or coffin burials are found, they should be preserved in place, and the developer should redesign the entire project, homes, swimming pools and utilities around iwi kupuna with a 20-foot buffer.

Using this methodology and testing strategy will inform developers, archaeologists, and descendants of the locations of iwi kupuna, allowing iwi kupuna to be preserved in place. This approach avoids inadvertent findings and enables developers to build in a culturally sensitive way, treating iwi kupuna with dignity and respect that they deserve.

Doing a 100% AIS in the beginning will avoid work stoppage in the middle of construction to investigate inadvertent findings, will eliminate the need for archaeological monitors for the entire duration of the project.

I appreciate your attention to this matter. Working together, we can ensure a respectful and thorough approach. I would be happy to discuss this further if needed. Thank you for your consideration.

Mahalo nui,

Keala



November 8, 2025

Keala Norman

Via Email: ckeala@hotmail.com

Subject: Response to Comment on Draft Environmental Assessment for the Libby Single-Family Dwellings Project

Dear Ms. Norman:

Thank you for your May 4, 2025, email concerning the *Draft Environmental Assessment for the Libby Single-Family Dwellings Project* (DEA). We appreciate the time you spent reviewing the DEA and preparing your response.

The Applicant shares your concern for iwi kūpuna and initiated consultation with the State Historic Preservation Division (SHPD) early in the planning process. SHPD approved the project's Archaeological Inventory Survey (AIS) Plan. The plan was implemented in compliance with standard AIS methods, which include some of the practices you outlined in your email. No historic resources were encountered during implementation of the AIS Plan. An Archaeological Assessment (AA) summarizing the results of the study is being prepared and will be submitted to SHPD for review. It is anticipated that the SMA permit will require that building permits not be issued until SHPD has provided a letter indicating that the Hawai'i Revised Statutes (HRS) Chapter 6E process has been completed and permitting may proceed.

You may download a copy of the Final Environmental Assessment at the Environment Review Program's website (<https://planning.hawaii.gov/erp/>) once its availability is announced in *The Environmental Notice*.

If you have any questions or concerns regarding this project, please contact me at (808) 550-4559.

Mahalo,

James Hayes
Planner

From: Naomi Pacheco <naomi.pacheco@hawaiiantel.com>
Sent: Friday, June 13, 2025 4:52 PM
To: Julia Ham Tashima <julia@psi-hi.com>
Cc: Jon Lui-Kwan <Jon.Lui-Kwan@hawaiiantel.com>; Stephen Tercino <Stephen.Tercino@hawaiiantel.com>; Naomi Pacheco <naomi.pacheco@hawaiiantel.com>; HT-Plan Reviews <HT-PlanReviews@hawaiiantel.com>
Subject: RE: Draft EA: Libby Single-Family Dwellings

Aloha Julia,

Mahalo for letting us review [Draft EA: Libby Single-Family Dwellings](#)

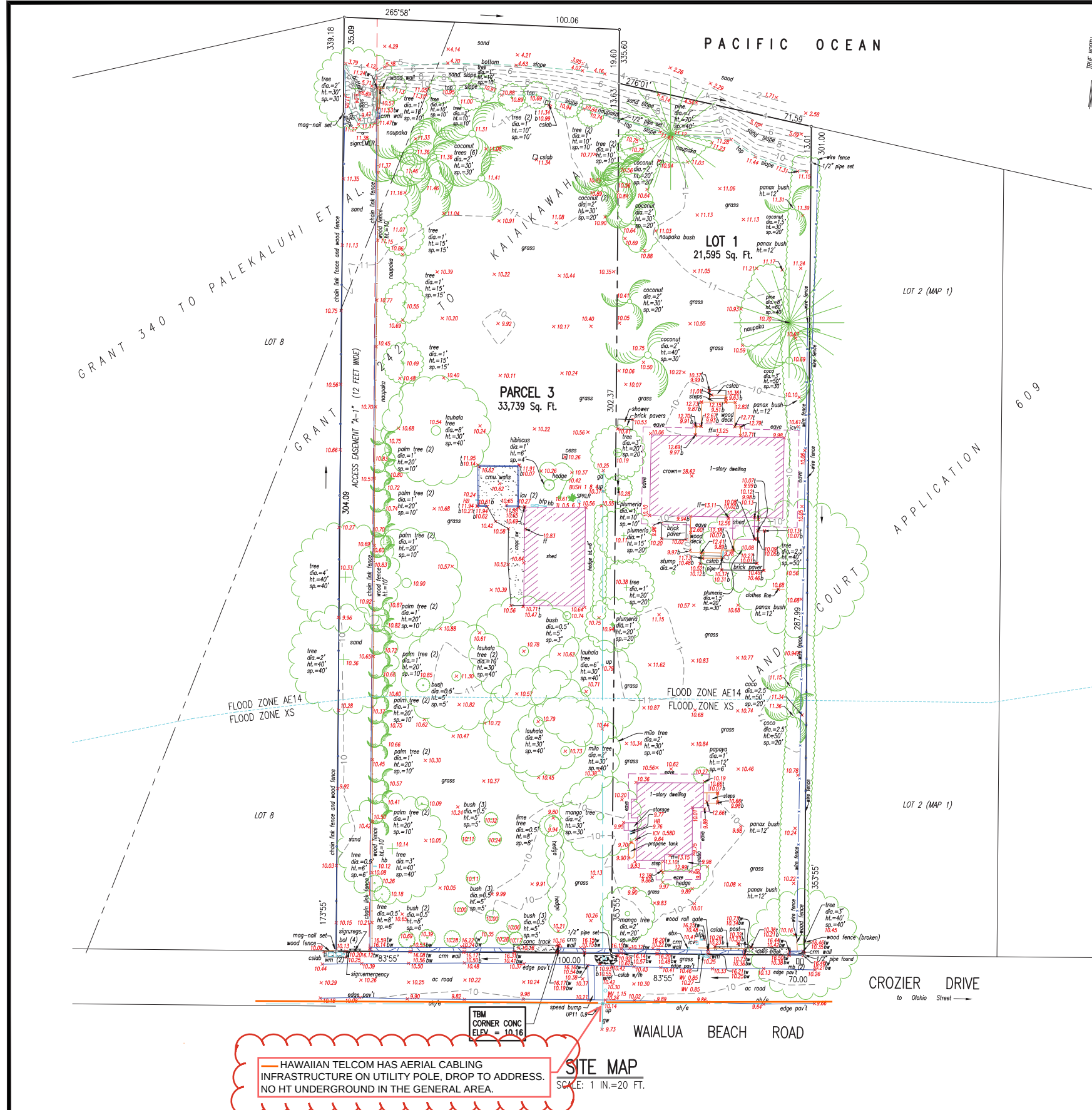
After reviewing, PAGE A003, I pointed out [Hawaiian Telcom Aerial Cabling And NO Underground Infrastructure](#).

No other engineering comments at this time.

Mahalo,
Naomi Pacheco
C: 808.501.3838
OSP Engineer | Hawaiian Telcom
Naomi.Pacheco@hawaiiantel.com



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TOPOGRAPHIC SURVEY MAP
LOT 1 (MAP 1)
LAND COURT APPLICATION 60
PARCEL 3

LEGEND:

ac	asphalt concrete
b	bottom
bfp	backflow preventer
bol	bollard
bw	bottom wall
cmu	concrete masonry unit
col	column
cmc	concrete
cr	concrete rubble masonry
cslab	concrete slab
dia	diameter
ebx	electric box
elev	elevation
emer	emergency
ep	electrical pole
ff	finished floor
fh	fire hydrant
ga	guy wire & anchor
gw	guy wire
hb	hose bibb
ht	height
icv	irrigation control valve
mb	mail box
oh/e	overhead electric
pav't	pavement
ref	reflector
sp	spread
spklr	sprinkler
sw	sidewalk
t	top
tbm	temporary bench mark
tw	top wall
up	utility pole
wh	water heater
wm	water meter
wv	water valve

NOTE: Elevations established from GPS-RTK derived orthometric heights, applying GEOID09 separations, constraining to NGS Control Station H 15 (TU0544). Elevation = 9.11 feet LMSL.



This map was prepared by me or
under my direct supervision.

Art J. Torcato

LICENSED PROFESSIONAL LAND SURVEYOR
CERTIFICATE NUMBER 10257 - Exp. 4/30/2026

LEAPS & BOUNDARIES, INC.
2016 WATERHOUSE ST., STE. 101 PH. (808) 484-5701
HONOLULU, HI 96819 EMAIL: SURVEYS@LEAPSANDBOUNDARIES.COM

IVA
petervincentarchitects

Harbor Court
55 Merchant Street, Suite 1430
Honolulu Hawai'i 96813
808.524.8255 | info@pva.com

Libby Residence

New Two Single Family Dwellings

TMK: 6-8-004 : 003 & 004

68-631 & 68-623 Crozier Drive , Waialua, Hawaii 96791

Project 20-026

Date March 14, 2025

Drawing Site Survey

Scale As Noted

Drawn By _____

Revisions:



SMA Major Application

This work was prepared by me or under my supervision and construction of this project will be under my observation. Observation of construction to be as defined in Section 16-82-2 Department of Regulatory Agencies, State of Hawaii, Rules relating to Engineers, Architects, Land Surveyors and Landscape Architects.

Signature _____ Expiration Date of License 4/30/2024

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November 8, 2025

Naomi Pacheco, OSP Engineer
Hawaiian Telcom
Via Email: naomi.pacheco@hawaiiantel.com

**Subject: Response to Comment on Draft Environmental Assessment for the Libby
Single-Family Dwellings Project**

Dear Ms. Pacheco:

Thank you for your June 13, 2025, email concerning the *Draft Environmental Assessment for the Libby Single-Family Dwellings Project* (DEA). We appreciate the time you spent reviewing the DEA and preparing your response.

We appreciate your confirmation of the presence of Hawaiian Telcom aerial cabling and the absence of underground infrastructure in the vicinity of the project and understand that you have no further comments to offer currently.

You may download a copy of the Final Environmental Assessment at the Environment Review Program's website (<https://planning.hawaii.gov/erp/>) once its availability is announced in *The Environmental Notice*.

If you have any questions or concerns regarding this project, please contact me at (808) 550-4559.

Mahalo,



James Hayes
Planner

6.0 REFERENCES

- ASM Affiliates, 2024. *Archaeological Subsurface Testing Plan for the AIS of the Proposed Replacement of Residence at 68-623A & 68-631 Crozier Drive, Mokulē‘ia 2 Ahupua‘a, Waialua District, Island of O‘ahu, TMKs: (1) 6-8-004:003 & 004.*
- ASM Affiliates, 2023. *Draft Cultural Impact Assessment for the Waialua Mill Camp Restoration.* Prepared for Mill Camp Development Group, LLC.
- City and County of Honolulu, 1992, amended 2002. *General Plan for the City and County of Honolulu.* Amended October 3, 2002, by CCH Resolution 02-205, CD1.
- City and County of Honolulu, Department of Planning and Permitting, 2021. *North Shore Sustainable Communities Plan.* May 2011. Adopted by CCH Ordinance 11-3, Bill 61 (2010, CD2).
- Cultural Surveys Hawai‘i, 1992. *Archaeological Study, Waialua to Kahulu Power Line.* Prepared for R.M. Towill.
- Cultural Surveys Hawai‘i, Inc., 2017. *Summary of Archaeological Studies, Historic Properties, and Hawai‘i State Historic Preservation Division Review for the Dillingham Ranch Agricultural Subdivision Project, Mokulē‘ia 2, Auku‘u, Kikahi, and Kawaihīpai Ahupua‘a, Waialua District, O‘ahu TMKs: [1] 6-8-002:006 por.; 6-8-003:005 por., 006 por., 015, 019, 030, 031, 033, 035, and 040.* Prepared for Dillingham Ranch Aina, LLC.
- HCCMAC, 2017. *Hawaii Sea Level Rise Vulnerability and Adaptation Report.* Prepared by Tetra Tech, Inc. and the State of Hawai‘i, Department of Land and Natural Resources, Office of Conservation and Coastal Lands.
- HHF Planners, 2018. *Dillingham Ranch Agricultural Subdivision Final Environmental Impact Statement, Mokulē‘ia, O‘ahu, Hawai‘i, December 2018.* Prepared for Dillingham Ranch Aina, LLC.
- IPCC, 2013. *Climate Change 2013: The Physical Science Basis.* Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. 1535 pp.
- R.M. Towill Corporation, 1993. *Final Environmental Impact Statement Waialua-Kuilima 46kV Subtransmission Line Project, North Shore, Oahu, Hawai‘i.* Prepared for Hawaiian Electric Company, Inc.
- USGS, 2002. *Atlas of Natural Hazards in the Hawaiian Coastal Zone.* By: Charles H. Fletcher III, Eric E. Grossman, Bruce M. Richmond, and Ann E. Gibbs. Series I-2761. <https://pubs.usgs.gov/imap/i2761/>
- William E. Wanket, Inc., 1987. *Final Environmental Impact Statement Mokuleia Development Proposal, Mokuleia, Oahu, Tax Map Key: 1st Division, 6-8-02: Parcels 1, 6, 10 and 14; 6-8-03: Parcels, 5, 6, 11, 15, 16, 17, 19, 20, 30, 31, 33, 34, 35, 38, 39 and 40; 6-8-08: Parcel 22.*

Appendix A. Scoping Letter and Responses



January 30, 2025

Subject: Scoping Request for Proposed Libby Residence
68-631 and 68-623 Crozier Drive
Waialua, O'ahu, Hawai'i 96712
TMKs (1) 6-8-004:003 and 004

Dear Madam or Sir,

The Libby Family, owner of the above-referenced adjoining shoreline parcels (Figure 1), proposes to develop two single-family dwellings on both subject parcels for a total of four single-family dwellings. Parcel 003 is roughly 33,739 square feet (0.7746 acres) and parcel 004 is roughly 21,595 square feet (0.4958 acres). The existing structures consist of a shed and two single-family dwellings (Figure 2). One of the existing dwellings will be retained as one of the four proposed dwellings, but it will be moved and remodeled. The other existing structures, built in the 1940s, will be demolished. The proposed residences will comply with the shoreline setback, yard requirements, height limits, and other applicable development standards.

The proposed development will not affect access to the shoreline. The primary route of shoreline access in the neighborhood is via an access easement on parcel 003. That easement, and the parking area mauka of the project site along Crozier Drive, will not be affected by the proposed project.

The subject parcels are in the State of Hawai'i's Urban Land Use District, the City and County of Honolulu's R-7.5 Residential District, and the Special Management Area (SMA). The proposal requires a SMA Major permit because it is considered "development" and its value will exceed \$500,000. An Environmental Assessment is being prepared because the proposed development involves more than two dwelling units.

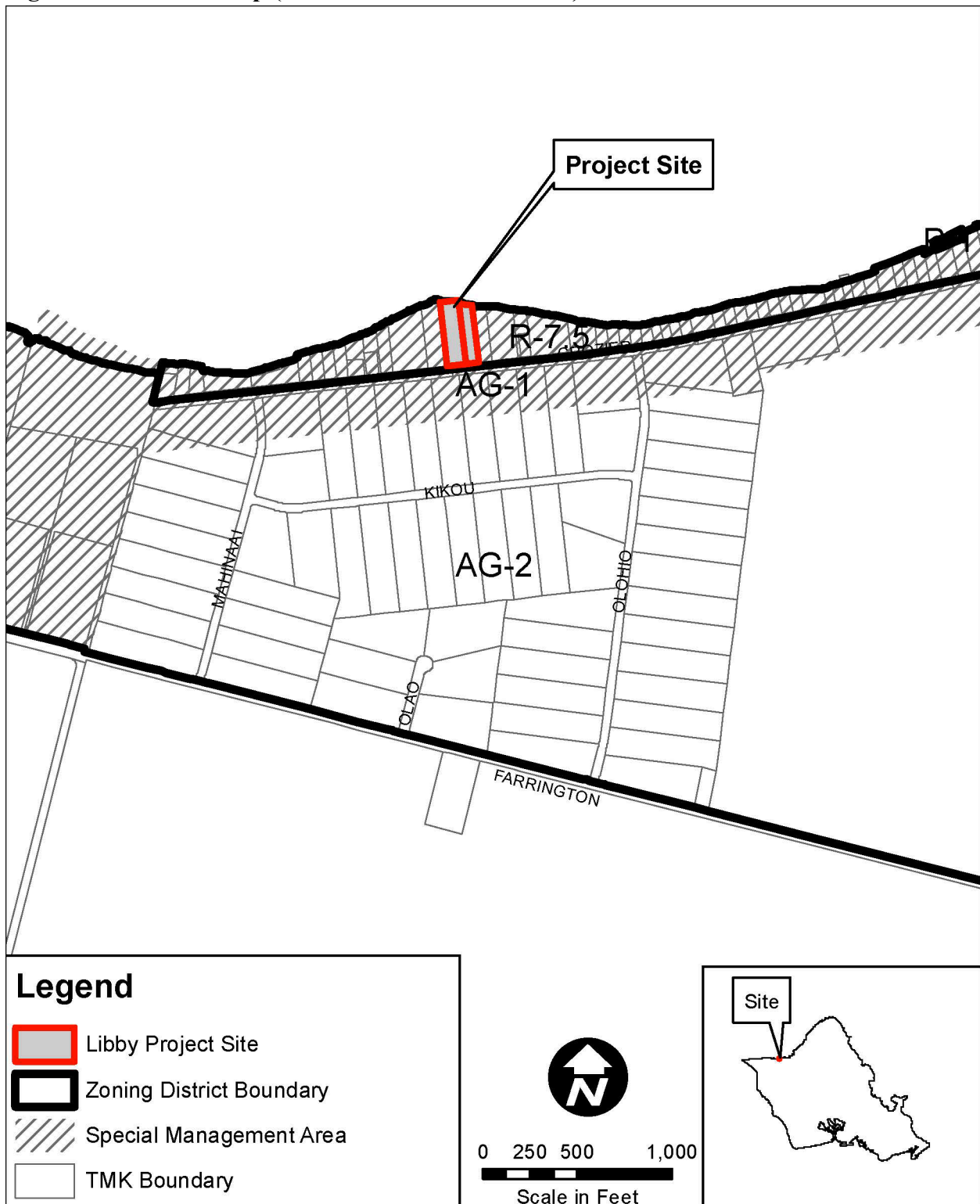
To better address the potential concerns of interested agencies, organizations, and individuals in the EA, PSI has prepared this information and the attached figures for your review. We are seeking input regarding the proposed project's nature, scope, potential alternatives, or any permits or approvals that may be required. We are interested in hearing about any resources, projects, or plans in the area that could be affected by the proposed project and any information you feel should be discussed and evaluated in the EA.

We would appreciate your response by March 3, 2025. Please respond either by regular mail to 711 Kapiolani Boulevard, Suite 950, Honolulu, HI 96813 or by email at makena@psi-hi.com. If you have any questions or concerns, please contact me at (808) 550-4538.

Sincerely,

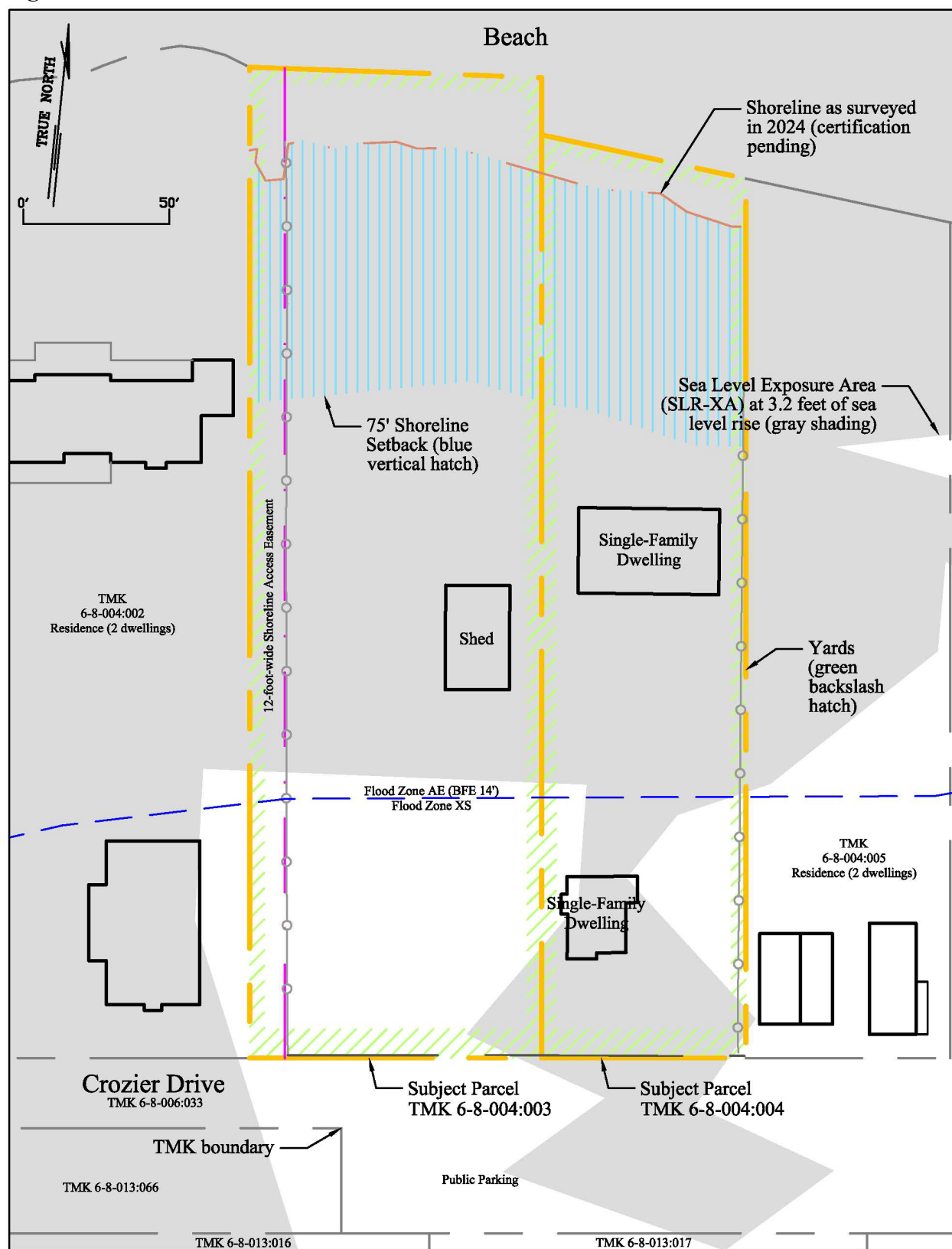
Mākena White, AICP

Figure 1: Location Map (TMKs 6-8-004:003 and 004)

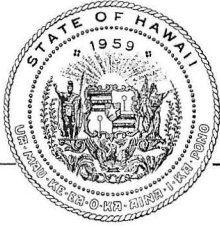


Source: Planning Solutions, Inc., City and County of Honolulu GIS shapefiles.

Figure 2: Site Plan



Source: Planning Solutions, Inc., Leaps & Boundaries, Inc., State of Hawai'i GIS shapefiles, and City and County of Honolulu records.



**STATE OF HAWAII
OFFICE OF PLANNING
& SUSTAINABLE DEVELOPMENT**

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARY ALICE EVANS
DIRECTOR

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

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

DTS202501301540HE

Coastal Zone
Management
Program

Environmental Review
Program

Land Use Commission

Land Use Division

Special Plans Branch

State Transit-Oriented
Development

Statewide Geographic
Information System

Statewide
Sustainability Branch

February 19, 2025

Mr. Mākena White, AICP
Planning Solutions
711 Kapiolani Boulevard, Suite 950
Honolulu, Hawai'i 96813

Dear Mr. White:

Subject: Scoping Request for Proposed Libby Residence 68-631 and 68-623
Crozier Drive, Waialua, O'ahu, Hawai'i; Tax Map Key: (1) 6-8-004:
003 and 004

The Office of Planning and Sustainable Development (OPSD) is in receipt of your scoping request, received January 30, 2025, on the preparation of an Environmental Assessment (EA), for the proposed two single-family dwellings on two adjoining shoreline parcels with a total of four single-family dwellings at 68-631 and 68-623 Crozier Drive, Waialua, O'ahu.

According to the scoping request, the subject parcels are in the State of Hawai'i's Urban Land Use District, the City and County of Honolulu's R-7.5 Residential District, and the Special Management Area (SMA). The proposed residence development requires a SMA use permit, and an EA is being prepared.

The OPSD has reviewed the EA early consultation request, and has the following comments to offer:

1. The EA should discuss the triggers of preparation for an EA set forth in Hawai'i Revised Statutes (HRS) Chapter 343 or City and County's Ordinances, and list all required permits and approvals for the proposed action.
2. The Hawai'i Coastal Zone Management (CZM) Law, HRS Chapter 205A, requires all state and county agencies to enforce the CZM objectives and policies. The subject EA should include an assessment with mitigation measures as to how the proposed action conforms to each of the CZM objectives and supporting policies set forth in HRS Chapter 205A-2, as amended.

3. The subject EA will serve as the supporting document for the SMA use permit application. The OPSD recommends that the EA specifically discuss the compliance with the requirements of Revised Ordinances of Honolulu Chapter 25 and Chapter 26 by consulting with the Department of Planning and Permitting, City and County of Honolulu.

Please note that the shoreline setback line, which may be more than a minimum 40 feet inland from the certified shoreline on the subject site, shall be determined by the Department of Planning and Permitting, City and County of Honolulu. Except as provided in HRS § 205A-44(b), without a variance, structures shall be prohibited within the shoreline area as defined in HRS § 205A-41. Shoreline hardening structures shall be prohibited in areas with sand beaches unless the granting of the variance is clearly demonstrated to be in the interest of the public. The interest of the public includes a) public safety and/or public health; b) protection of public infrastructure in response to risk of coastal hazards; and c) beach protection and sand retention for public use and recreation or coastal ecosystems.

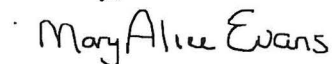
4. Pursuant to HRS § 205A-2(c)(9), as amended, enacted by Act 160, Session Laws of Hawaii (SLH) 2010 and Act 120, SLH 2013, the subject EA should discuss the current situation of vegetation along the shoreline, with site-specific measures as to how to prevent a public nuisance from inducing or cultivating vegetation along the beach transit corridor, and maintain vegetation at the property site to avoid interference or encroachment upon the beach transit corridor.
5. To assess potential impacts of sea level rise on the property, OPSD suggests the EA refer to the findings of the Hawaii Sea Level Rise Vulnerability and Adaptation Report 2017 and its 2022 update, accepted by the Hawaii Climate Change Mitigation and Adaptation Commission. The Report, and Hawaii Sea Level Rise Viewer at <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> particularly identifies a 3.2-foot sea level rise exposure area across the main Hawaiian Islands which may occur in the mid to latter half of the 21st century. The EA should provide a map of the 3.2-foot sea level rise exposure area, from coastal erosion, high wave flooding, and passive flooding in relation to the subject parcels, and discuss potential impacts of coastal erosion, high wave flooding, and passive flooding and other coastal hazards on the properties with site-specific mitigation measures to mitigate these coastal hazard impacts.
6. As there are four single-family dwellings located on the two adjoining shoreline parcels, the subject EA shall assess potential cumulative impacts as defined in Hawai'i Administrative Rules (HAR) Chapter 11-200.1 on the SMA from the proposed development. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Mr. Mākena White
February 19, 2025
Page 3

7. The OPSD recommends that the EA assess and provide site-specific mitigation measures, including building height and design, building color and landscaping, to minimize the alteration of natural landforms and existing public views to and along the coast, and ensure the proposed residential building is compatible with the existing visual environment.
8. The site-specific Best Management Practices (BMPs) shall be prepared and implemented to prevent any runoff, sediment, soil and debris potentially resulting from associated construction activities from adversely impacting the coastal ecosystems and the State waters as specified in HAR Chapter 11-54. The EA should assess 50-year storm runoff from the proposed dwelling development, and provide site-specific mitigation measures as to how to retain and convey onsite runoff to an onsite surface drainage system to minimize storm runoff from the project site into the ocean.
9. In enacting Act 224, SLH 2005, the legislature found that light pollution in Hawaii's coastal areas and artificial lighting illuminating the shoreline and ocean waters can be disruptive to avian and marine life. All exterior lighting and lamp posts associated with the proposed residential development shall be cut-off luminaries to provide the necessary shielding to mitigate potential light pollution in the coastal areas, and lessen possible seabird strikes. No artificial light, except as provided in HRS §§ 205A-30.5(b) and 205A-71(b), shall be directed to travel across the property boundaries toward the shoreline and ocean.

If you respond to this comment letter, please include DTS202501301540HE in the subject line. For any questions regarding this letter, please contact Shichao Li of our office at (808) 587-2841 or by email at shichao.li@hawaii.gov.

Sincerely,

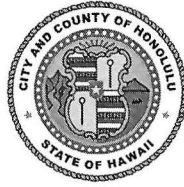


Mary Alice Evans
Director

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

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

RICK BLANGIARDI
MAYOR
MEIA



DAWN TAKEUCHI APUNA
DIRECTOR
PO'O

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

REGINA MALEPEAI
2ND DEPUTY DIRECTOR
HOPE PO'O KUALUA

March 3, 2025

2025/ELOG-218(SF)

Mr. Makena White, AICP
Planning Solutions
Pacific Park Plaza
711 Kapiolani Boulevard, Suite 950
Honolulu, Hawaii 96813

Dear Mr. White:

SUBJECT: Scoping Request
Draft Environmental Assessment (EA)
Proposed Libby Residence
68-631, 68-623, and 68-623 (Unit A) Crozier Drive – Waialua
Tax Map Keys 6-8-004: 003 (Parcel 3) and 004 (Parcel 4)

This letter responds to your request, received on February 4, 2024, for scoping comments regarding the forthcoming Draft EA, as required under Hawaii Revised Statutes (HRS) Chapter 343 and Revised Ordinances of Honolulu (ROH) Chapter 25, for the proposed Libby Residence. Parcels 3 and 4 are adjacent lots; Parcel 3 is currently developed with a shed and Parcel 4 is currently developed with two single-family dwellings. The proposed work includes demolishing the existing shed and one of the single-family dwellings, relocating and reconstructing the other existing single-family dwelling, and developing three new single-family dwellings (Project); two single-family dwellings are proposed on each parcel.

Considering that the Applicant is proposing a collective four units on two adjacent lots, for the purposes on ROH Chapter 25, the Project must be reviewed as a "larger development." While the definition of "larger development" is based on a single zoning lot, the proposed activities must be evaluated on the greater, combined Project site as provided in ROH Section 25-1.3(3), related to "Cumulative Impacts." As such, in addition to an SMA Major Permit, an EA must be prepared. The Draft EA must disclose and evaluate any substantial or negative "cumulative impacts" associated with the implementation of the entire Project, inclusive of both parcels, along with other past, present, and reasonably foreseeable projects in the Project vicinity. Please note that the Draft EA should still describe the proposed development features on each lot

separately for project description and Land Use Ordinance (LUO) compliance purposes, and so that they are separately represented for future reference.

Parcels 3 and 4 are 33,739 square feet (0.775 acres) and 21,595 square feet (0.496 acres) in area, respectively. Both parcels are located within the R-7.5 Residential District, State Land Use Urban District, and Special Management Area (SMA).

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

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

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

1. Consistency with Long-Range Plans: Describe the Project's consistency with the Oahu General Plan and North Shore Sustainable Communities Plan. The Draft EA should address how the proposed Project is consistent, inconsistent, or implements each of the relevant statements from the respective plans.
2. Compliance with City and County of Honolulu Land Use Regulations: Discuss compliance with ROH Chapter 21, the LUO. The Draft EA should identify the Project's consistency with the development standards of the R-7.5 Residential District and other applicable LUO regulations, including but not limited to maximum allowable heights, building area, and density, as well as required yards and height setbacks. The LUO is available online at:

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

3. Compliance with HRS Chapter 205A and ROH Chapter 25: Describe compliance with the objectives and policies of HRS Chapter 205A, Coastal Zone Management, and ROH Chapter 25, the SMA Ordinance. HRS Chapter 205A and ROH Chapter 25 are available at:

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

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

4. Shoreline Setbacks Ordinance: The properties are subject to yearly shoreline erosion. Describe how the Project complies with ROH Chapter 26 (Shoreline Setbacks). ROH Chapter 26 is available online at:

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

5. Coastal Hazards: The Project site is susceptible to coastal hazards, such as sea-level rise (SLR), storm surge, flooding, wave action, tsunamis, and coastal erosion. Therefore, proposed development activities must be evaluated not only for potential impacts to sensitive SMA resources, but also for current and future susceptibility to these coastal hazards. According to the State of Hawaii SLR Viewer, the subject properties may be affected by 3.2 feet of SLR by 2100, therefore, we recommend the proposed development be sited as far mauka on the properties as practicable, and designed to minimize potential risk of loss to the structures. The analysis in the Draft EA should evaluate the site's existing topographic, geologic, and shoreline environment, and propose mitigation measures, as appropriate, to reduce potential impacts related to coastal hazards.
6. Flood Zones: The subject properties are located within Flood Zones AE and XS, as mapped by the Federal Emergency Management Agency. Flood Zone XS corresponds with areas of moderate flood hazard that are determined to be outside the Special Flood Hazard Area between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood. Flood Zone AE corresponds with areas subject to inundation by the one-percent-annual-chance flood event. Properties within Flood Zone AE are subject to compliance with ROH Chapter 21A, the Flood Hazards Area Ordinance, which is available online at:

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

7. Sensitive Species: Identify the presence or potential presence of any sensitive habitat, flora, or fauna. The DPP recommends reaching out to the U.S. Fish and Wildlife Service to obtain a list of species that are known to occur or may potentially occur in the Project vicinity.
8. Historic and Cultural Resources: The site is underlain with Jaucas Sand soils, which are known to contain native Hawaiian burials (iwi kupuna). The Draft EA must discuss the presence and/or potential impacts to cultural, historic, or archaeological resources, identify any related research conducted within the Project site and outlying areas, and propose mitigation measures, as necessary, to reduce potential impacts to these resources.
9. Early Public Outreach: In order to facilitate understanding of the current Project proposal within the surrounding community, the Applicant should contact the North Shore Neighborhood Board No. 27, as well as any relevant neighborhood associations or commissions to request an opportunity to present the Project

Mr. Makena White
March 3, 2025
Page 4

proposal at the board and association meeting(s). A summary of the outreach efforts and actions taken to address any community concerns should be included in the Draft EA.

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

Very truly yours,


for  Dawn Takeuchi Apuna
Director

Appendix B. Shoreline Certification

PHOTO INDEX

TMK (1) 6-8-004: 003 & 004
LOT 1 (MAP 1)
LAND COURT APPLICATION 609
PARCEL 3
BEING A PORTION OF R.P. GR 340 TO PALEKALUHI ET AL.
AND R.P. GR. 242 TO KAIAIKAWAHA

#1

4/11/2025

1:42 P.M.



#2

4/11/2025

1:43 P.M.



#3

4/11/2025

1:45 P.M.



#4

4/11/2025

1:45 P.M.



#5

4/11/2025

1:47 P.M.



Appendix C. Preliminary Project Drawings



LIBBY RESIDENCE

68-631 Crozier Drive &
68-623 Crozier Drive
Waialua, HI 96791

SMA Major Application



Harbor Court
55 Merchant Street, Suite 1430
Honolulu Hawaii 96813
808.524.8255 | info@pva.com

KEY PLAN

Libby Residence

New Two Single Family Dwellings
TMK: 6-8-004 : 003 & 004
68-631 & 68-623 Crozier Drive , Waialua, Hawaii 96791

Project	20-026
Date	October 3, 2025
Drawing	Title Sheet
Scale	As Noted

Revisions:	
△	
△	
△	
△	
△	
△	

SMA



This work was prepared by me or under my supervision and construction of this project will be under my observation. Observation of construction to be as defined in Section 16-82-2 Department of Regulatory Agencies, State of Hawaii, Rules relating to Engineers, Architects, Land Surveyors and Landscape Architects.

Signature _____ 4/30/2026
Expiration Date of License

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ABBREVIATIONS				LEGEND		GENERAL NOTES		DRAWING INDEX		PROJECT INFORMATION	
∠	And	MAX	Maximum		SECTION SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN	1. ALL WORK SHALL CONFORM TO THE 2018 INTERNATIONAL RESIDENTIAL CODE (IRC), AS AMENDED BY THE CITY AND COUNTY OF HONOLULU, AND ALL OTHER APPLICABLE CODES AND REGULATIONS. 2. STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION OPERATIONS, INCLUDING THOSE IN UNDERGROUND LOCATIONS, SHALL COMPLY WITH NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS, AND THIS CHAPTER, 2018 NFPA 1. 4. THE GENERAL CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UTILITIES WITH THE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. 5. PRIOR TO CONSTRUCTION, THE GENERAL CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS. THE GENERAL CONTRACTOR SHALL REVIEW AND UNDERSTAND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS PRIOR TO BEGINNING ANY WORK AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCY. 6. THE GENERAL CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS AND COMPLY WITH SAFETY REGULATIONS AS REQUIRED FOR WORKERS AND PEDESTRIAN PROTECTION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. PROVIDE PROTECTION AS NECESSARY TO PREVENT ANY DAMAGE TO THE EXISTING CONSTRUCTION WITHIN AND ADJACENT TO THE JOB SITE. SHOULD DAMAGE OCCUR, THE GENERAL CONTRACTOR SHALL REPAIR OR REPLACE THE DAMAGED AREA AS REQUIRED TO THE OWNER'S APPROVAL AT NO ADDITIONAL COST. 7. THE GENERAL CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT. 8. THE GENERAL CONTRACTOR SHALL KEEP THE AREA INSIDE CONSTRUCTION LIMITS CLEAN AND FREE OF ASSOCIATED CONSTRUCTION DEBRIS, AT ALL TIMES. 9. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, UTILITIES AND OTHER SERVICES NECESSARY FOR THE PROPER EXECUTION OF THE CONSTRUCTION AS REQUIRED, WHETHER INDICATED OR NOT IN THE CONSTRUCTION DOCUMENTS. 10. ANY REVISION OR ADDITIONAL WORK REQUIRED BY FIELD CONDITIONS OR LOCAL GOVERNING AUTHORITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING. 11. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL REQUIRED PERMITS, LICENSES, FEES, INSPECTIONS, AND TESTING. 12. NO STRUCTURAL MEMBER SHALL BE CUT FOR PIPES, DUCTS, ETC. WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER. 13. INSTALL ALL MATERIALS IN ACCORDANCE WITH THEIR RESPECTIVE MANUFACTURER'S INSTRUCTIONS AND PER ALL APPLICABLE GOVERNING CODES. 14. ALL INSTRUCTIONS AND WARRANTIES OF ALL MATERIALS AND EQUIPMENT TO BE DELIVERED TO THE OWNER AT COMPLETION OF CONSTRUCTION. 15. IT IS RECOGNIZED THAT THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC IN SHOWING CERTAIN PHYSICAL RELATIONSHIPS OF THE VARIOUS ELEMENTS AND SYSTEMS AND THEIR INTERFACING WITH OTHER ELEMENTS AND SYSTEMS. ESTABLISHMENT AND COORDINATION OF THESE RELATIONSHIPS IS THE EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR. IN CASE OF CONFLICT OR LOCATIONS NOT DIMENSIONED, VERIFY REQUIRED POSITIONING WITH ARCHITECT. 16. THE GENERAL CONTRACTOR TO PROVIDE SUBMITTALS AND SHOP DRAWINGS FOR ALL MATERIALS, FINISHES AND ASSEMBLIES FOR ARCHITECT'S APPROVAL PRIOR TO ORDER, FABRICATION OR INSTALLATION.	GENERAL CIVIL LANDSCAPE ARCHITECTURAL	SHEET	DRAWING NAME	OWNER:	JOHN LIBBY
↗	Angle	MECH	Mechanical	PROJECT LOCATION:	68-631 CROZIER DRIVE 68-623 CROZIER DRIVE WAIALUA, HAWAII 96791						
@	At	MET	Metal	TMK:	TMK: 6-8-004 : 003 & 004						
⊕	Centerline	MFR	Manufacturer	ZONING:	R-7.5 RESIDENTIAL DISTRICT						
⊔	Channel	MIN	Minimum	STATE LAND USE:	URBAN DISTRICT						
⌀	Diameter	MIR	Mirror	FLOOD ZONES:	AE, X						
⊔	Foot, Feet	MISC	Miscellaneous	HISTORIC SITE REGISTER:	N/A						
⊔	Inch	MLDG	Moulding	HEIGHT LIMIT:	25' PER LUO SEC 21-3.70-1(c)						
%	Percent	MTD	Mounted	SHORELINE SETBACK:	SHORELINE SETBACK						
#	Pound; Number	MTG	Mounting	SMA:	In SMA.						
⊔	Square Foot	MTL	Material	OCCUPANCY GROUP:	R-3						
		MUL	Mullion	TYPE OF CONSTRUCTION:	TYPE V						
A/C	Air Conditioning	NIC	Not In Contract	LOT AREA:	33,739 SF (.7745 ACRES) 21,595 SF (.4957 ACRES)						
AB	Anchor Bolt	NO or #	Number	NUMBER OF STORIES:	1 STORY & 2 STORIES						
ADJ	Adjustable	NOM	Nominal								
AFF	Above Finished Floor	NTS	Not to Scale								
ALUM	Aluminum										
ALT	Alternate	OA	Overall								
ANOD	Anodized	OC	On Center								
APPROX	Approximate	OCFI	Owner Furnished - Contractor Installed								
ARCH	Architectural	OFOI	Owner Furnished - Owner Installed								
BD	Board	OFC	Office								
BTUM	Bituminous	OPP	Opposite								
BLK	Block	OVHD	Overhead								
BLKG	Blocking										
BLDG	Building	PL	Plate or Property Line								
BM	Beam	PLAM	Plastic Laminate								
BOT	Bottom	PLAS	Plaster								
BR	Bedroom	PLYWD	Plywood								
BTWN	Between	PNL	Panel								
BW	Bottom of Wall	PR	Pair								
		PREFAB	Prefabricate								
CAB	Cabinet	CEM	Cement								
CBB	Cement Backer Bd.	CJ	Control Joint								
CBU	Cement Backer Unit	CLG	Clear								
CEM	Cement	CLR	Clear								
CJ	Control Joint	CMU	Concrete Masonry Units								
CLG	Clear	COL	Column								
CLR	Clear	CONC	Concrete								
CMU	Concrete Masonry Units	COND	Condition								
COL	Column	CONN	Connection								
CONC	Concrete	CONSTR	Construction								
COND	Condition	CONT	Continuous								
CONN	Connection	COORD	Coordinate								
CONSTR	Construction	CONTR	Contractor								
CONT	Continuous	CTR	Center								
COORD	Coordinate										
CONTR	Contractor										
CTR	Center										
D	Deep or Depth										
DBL	Double										
DEMO	Demolition										
DEPT	Department										
DET	Detail										
DIA	Diameter										
DIM	Dimension										
DN	Down										
DR	Door										
DWG	Drawing										
DWR	Drawer										
EA	Each										
EFS	Exterior Finish System										
EJ	Expansion Joint										
EL	Elevation										
ELEC	Electrical										
EQ	Equal										
EQPT	Equipment										
EW	Each way										
EXP	Expansion										
EXST	Existing										
EXT	Exterior										
FCU	Fan Coil Unit										
FIN	Finish										
FIXT	Fixture										
FL	Floor										
FLASH	Flashing										
FLUOR	Fluorescent										
FOF	Face of Finish										
FOS	Face of Stud										
FT	Foot or Feet										
FURR	Furring or Furred										
GA	Gauge										
GALV	Galvanized										
GL	Glass										
GMU	Glassmesh Mortar Unit										
GWB	Gypsum Wall Board										
GYP	Gypsum										
H	High or Height										
HC	Hollow Core										
HD	Head										
HDWE	Hardware										
HWD	Hardwood										
HORIZ	Horizontal										
HR	Hour										
IMP PLAS	Imperial Plaster										
IN	Inch										
INCL	Inclusive, Included or Including										
INSUL	Insulation										
INT	Interior										
JB	Junction Box										
JST	Joist										
JT	Joint										
L	Length or Long										
LAM	Laminate or Laminated										
LAV	Lavatory										
LB	Pound										
LF	Linear Foot										

LEGEND	
	SECTION SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN
	DETAIL DETAIL IDENTIFICATION SHEET WHERE DETAIL IS DRAWN
	SHEET REVISION CLOUD AROUND REVISION
	INTERIOR ELEVATION KEY ELEVATIONS UNFOLD CLOCKWISE
	ELEVATION LEVEL +0.00"
	WALL OR PARTITION 4" TO DOOR SIDE OF JAMB, UON DOOR NUMBER OR MARK
	WINDOW MARK - SEE SCHEDULE
	NEW CONSTRUCTION
	EXISTING CONSTRUCTION TO REMAIN
	EXISTING CONSTRUCTION TO BE REMOVED
	DIMENSION TO FACE OF FINISH, TYPICAL (WALL, PARTITION, ETC.)
	DIMENSION TO FACE OF FACE OF FRAMING (FACE OF STUD, CONCRETE OR MASONRY WHERE OCCURS)
	HOSE BIBB
	HB

LOCATION MAP	

VICINITY MAP	

SPECIAL INSPECTIONS	
THIS PROJECT IS SUBJECT TO THE FOLLOWING SPECIAL INSPECTIONS: (16) SHEATHED SHEAR WALLS AND DIAPHRAGMS (17) COMPLETE LOAD PATH AND UPLIFT TIES (18) TERMITE PROTECTION SAFEROOM	

WIND BORNE DEBRIS REGION	
BUILDING WITH OPENINGS - PROTECTION OF OPENINGS R301.2.1.2 PER HNL IBC AMENDMENTS 1609.1.2.1 - THIS PROJECT HAS BEEN DESIGNATED AS A PARTIALLY ENCLOSED STRUCTURE (INCLUDING COMPONENTS AND CLADDING) IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF ASCE 7 AND ALSO INCLUDES A RESIDENTIAL SAFE PER ARTICLE 13, HAWAII RESIDENTIAL SAFE ROOM. SEE ROOM 121 ON A101	

DRAWING INDEX	
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ARCHITECTURAL	

PROJECT TEAM	
ARCHITECT:	PETER VINCENT ARCHITECTS HARBOR COURT, 55 MERCHANT ST. #1430 HONOLULU, HAWAII 96813 (T) 808.524.8255 CONTACT: TODD HASSLER, KASIA KOCIUBA
GEOTECHNICAL ENGINEER:	ADVANCED GEOTECHNICAL ENGINEERING, LLC 790 PUU KALA STREET PEARL CITY, HI 96782 (T) 808.218.2401 CONTACT: SHENTANG WANG
STRUCTURAL ENGINEER:	WILLIAM BLAKENEY, INC. 810 N. KALAHEO AVE. SUITE F KAILUA, HI 96734 (T) 808.261.4900 CONTACT: BILL BLAKENEY
SURVEYOR & SHORELINE CERTIFICATION:	LEAPS & BOUNDARIES, INC 2016 WATERHOUSE ST. SUITE 101 HONOLULU, HI 96819 (T) 808.484.5701 CONTACT: ARDEN J. TORCUATO
LANDSCAPE ARCHITECT:	WOLF LANDSCAPE ARCHITECT, LLC P.O. BOX 11625 HONOLULU, HI 96828 (T) 856.261.0134 CONTACT: BRIAN WOLF
CIVIL ENGINEER:	DEMPSEY PACIFIC PO BOX 10384 HONOLULU, HI 96816 (T) 808.277.2043 CONTACT: TY DEMPSEY
EA CONSULTANT:	PLANNING SOLUTIONS 771 KAPIOLANI BLVD. SUITE 950 HONOLULU, HI 96813 (T) 808.550.4483 CONTACT: JAMES T. HAYES
ARCHAEOLOGY:	ASM AFFILIATES 820 MILILANI ST. SUITE 700 HONOLULU, HI 96813 (O): 808.439.8089 (T) 808.636.6674 CONTACT: NICK BELLUZZO

CITY AND COUNTY OF HONOLULU REVISED ORDINANCES OF HONOLULU 2021 CHAPTER 16B	
To the best of my knowledge, this project's design substantially conforms to the Building Energy Conservation Code for:	
Building Component Systems	
Signature:	
Name:	Peter N. Vincent
Title:	Managing Partner
License No:	7456

SPECIAL INSPECTIONS

THIS PROJECT IS SUBJECT TO THE FOLLOWING SPECIAL INSPECTIONS:

(16) SHEATHED SHEAR WALLS AND DIAPHRAGMS

(17) COMPLETE LOAD PATH AND UPLIFT TIES

(18) TERMITE PROTECTION SAFEROOM

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GENERAL

CIVIL

LANDSCAPE

ARCHITECTURAL



Harbor Court
55 Merchant Street, Suite 1430
Honolulu, Hawaii 96813
808.524.8255 | info@pva.com

Libby Residence

New Two Single Family Dwellings

TMK: 6-8-004 : 003 & 004
68-631 & 68-623 Crozier Drive , Waiialua, Hawaii 96791

Project 20-026
Date October 3, 2025
Drawing Project Information
Scale As Noted



SMA

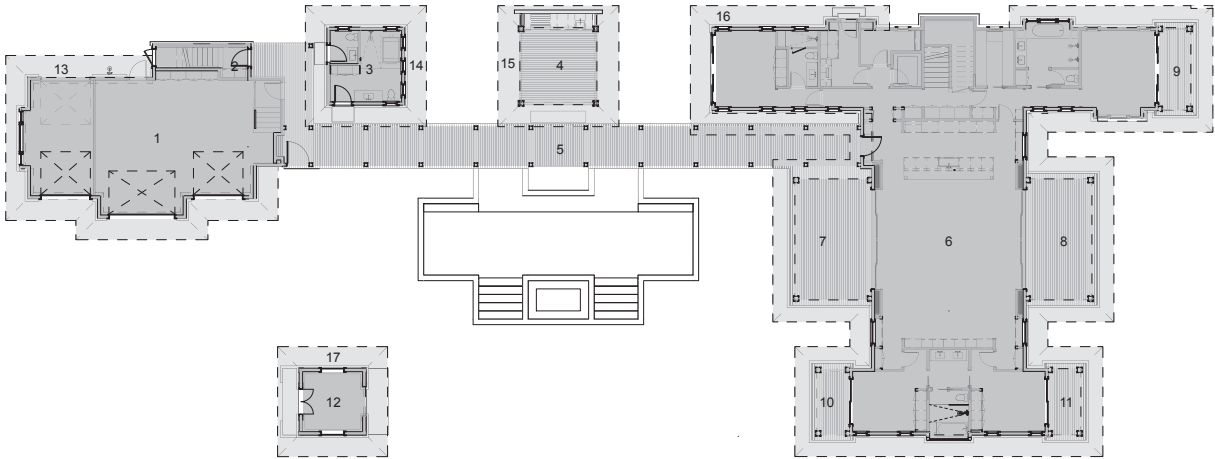


This work was prepared by me or under my supervision and construction of this project will be under my observation. Observation of construction to be as defined in Section 16-82-2 Department of Regulatory Agencies, State of Hawaii, Rules relating to Engineers, Architects, Land Surveyors and Landscape Architects.

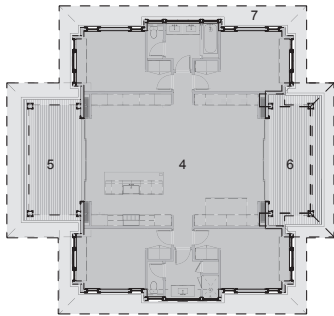
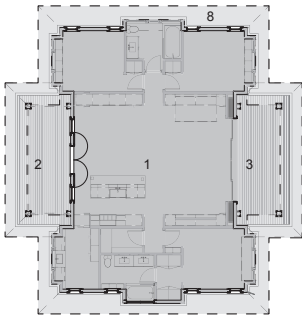
Signature: _____ Date: 10/03/2025
Expiration Date of License: _____

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A001

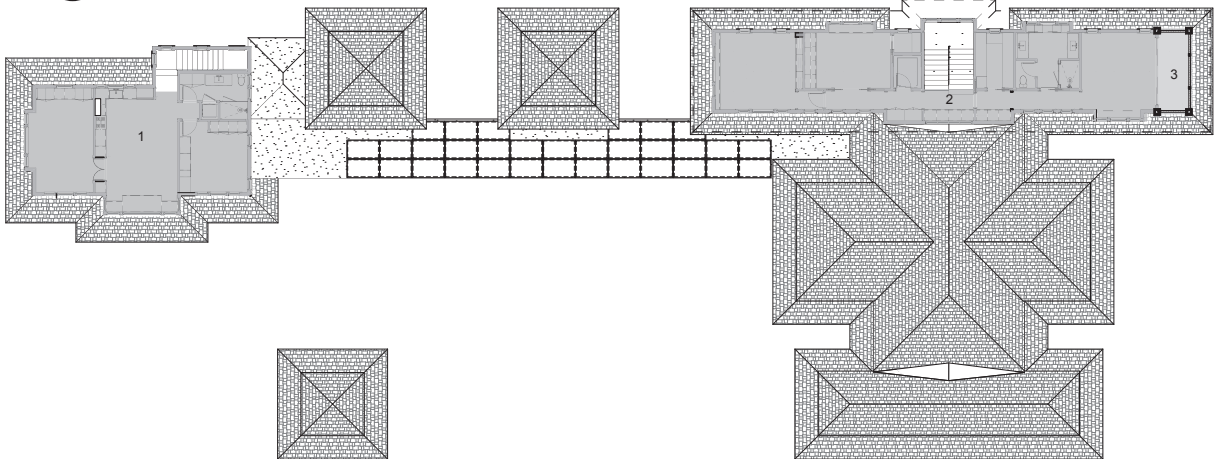


TMK: 1-6-8-004:003

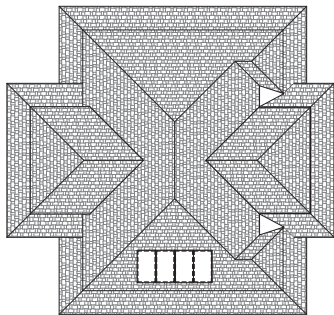
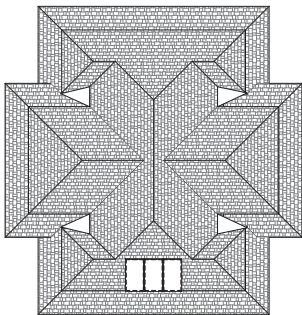


TMK: 1-6-8-004:004

1 FIRST FLOOR PLAN
SCALE: 1/16" = 1'-0"



TMK: 1-6-8-004:003



TMK: 1-6-8-004:004

2 SECOND FLOOR PLAN
SCALE: 1/16" = 1'-0"

BUILDING AREA CALCULATIONS

TMK: 1-6-8-004:003		
LOT AREA:	33,739 SF	
EROSION AREA:	2,782 SF	30,957 SF
MAX BUILDING AREA:	50% OF ZONING LOT	15,479 SF
PROPOSED BLDG AREA:	1. GARAGE	1,095.75 sq ft
	2. DWELLING 2	82.53 sq ft
	3. POOL PAVILION	198.34 sq ft
	4. BBQ PAVILION	207.89 sq ft
	5. COVERED WALKWAY	869.76 sq ft
	6. DWELLING 1	3,066.82 sq ft
	7. MAUKA LANAI	311.67 sq ft
	8. MAKAI LANAI	272.77 sq ft
	9. PRIMARY LANAI 1	95.13 sq ft
	10. BED 2 LANAI	71.50 sq ft
	11. BED 3 LANAI	76.63 sq ft
	12. ENTRY PAVILION	146.01 sq ft
	13. ROOF EAVE 1	427.02 sq ft
	14. ROOF EAVE 2	288.00 sq ft
	15. ROOF EAVE 3	288.00 sq ft
	16. ROOF EAVE 4	1,587.37 sq ft
	17. ROOF EAVE 5	256.00 sq ft
	TOTAL PROPOSED BUILDING AREA	9,342 SF
		(30.1% OF ZONING LOT)

TMK: 1-6-8-004:004		
LOT AREA:	21,595 SF	
EROSION AREA:	997 SF	20,598 SF
MAX BUILDING AREA:	50% OF ZONING LOT	10,299 SF
PROPOSED BLDG AREA:	1. DWELLING 2	1,636.34 sq ft
	2. MAUKA LANAI 2	167.07 sq ft
	3. MAKAI LANAI 2	166.66 sq ft
	4. DWELLING 1	1,808.22 sq ft
	5. MAUKA LANAI 1	189.17 sq ft
	6. MAKAI LANAI 1	172.86 sq ft
	7. ROOF EAVE 1	763.07 sq ft
	8. ROOF EAVE 2	723.50 sq ft
	TOTAL PROPOSED BUILDING AREA	5,627 SF
		(27.3% OF ZONING LOT)

DEFINITION OF BUILDING AREA PER LUO: THE TOTAL AREA OF A ZONING LOT COVERED BY STRUCTURES AND COVERED OPEN AREAS. THE FOLLOWING ARE NOT CONSIDERED BUILDING AREA: (1) OPEN AREAS COVERED BY EAVES AND NORMAL OVERHANG OF ROOFS (2) UNCOVERED ENTRANCE PLATFORMS, UNCOVERED TERRACES AND UNCOVERED STEPS WHEN THESE FEATURES DO NOT THEMSELVES CONSTITUTE ENCLOSURES FOR BUILDING AREAS BELOW THEM, AND DO NOT EXCEED 30 INCHES IN HEIGHT (3) ALL WEATHER SURFACES

DEFINITION OF FLOOR AREA PER LUO: THE AREA OF ALL FLOORS OF STRUCTURE EXCLUDING UNROOFED AREAS, MEASURED FROM THE EXTERIOR FACES OF THE EXTERIOR WALLS OR FROM THE CENTERLINE OF PARTY WALLS DIVIDING A STRUCTURE. THE FLOOR AREA OF A STRUCTURE, OR PORTION THEREOF, WHICH IS NOT ENCLOSED BY EXTERIOR WALLS SHALL BE THE AREA UNDER THE COVERING, ROOF, OR FLOOR ABOVE THAT IS SUPPORTED BY POSTS, COLUMNS, PARTIAL WALLS, OR SIMILAR STRUCTURAL MEMBERS, WHICH DEFINE THE WALL LINE. EXCLUDED FROM FLOOR AREA ARE: (1) PARKING STRUCTURES, INCLUDING COVERED DRIVEWAYS AND ACCESSWAYS, PORTE COCHERES, AND PARKING ATTENDANT BOOTHS; (2) ATTIC AREAS WITH HEAD ROOM LESS THAN 7 FEET; (3) BASEMENTS, (4) LANAIS; (5) PROJECTIONS SUCH AS SUNSHADE DEVICES AND ARCHITECTURAL EMBELLISHMENTS WHICH ARE DECORATIVE ONLY; (6) AREAS COVERED BY ROOFING TREATMENT TO SCREEN ROOF TOP MACHINERY ONLY; (7) AREAS UNDERNEATH UNSUPPORTED BUILDING OVERHANGS, PROVIDED THE AREA IS NOT OTHERWISE ENCLOSED.

FLOOR AREA & PARKING CALCULATIONS

TMK: 1-6-8-004:003		
PROPOSED FLOOR AREA:	2. DWELLING 2	82.53 sq ft
	3. POOL PAVILION	198.34 sq ft
	4. BBQ PAVILION	207.89 sq ft
	5. COVERED WALKWAY	869.76 sq ft
	6. DWELLING 1	3,066.82 sq ft
	7. MAUKA LANAI	311.67 sq ft
	8. MAKAI LANAI	272.77 sq ft
	9. PRIMARY LANAI 1	95.13 sq ft
	10. BED 2 LANAI	71.50 sq ft
	11. BED 3 LANAI	76.63 sq ft
	12. ENTRY PAVILION	146.01 sq ft
	TOTAL PROPOSED LOWER FLOOR AREA	5,399.05 SF
	1. DWELLING 2	909.25 sq ft
	2. DWELLING 1	1,219.57 sq ft
	3. PRIMARY LANAI 2	94.93 sq ft
	TOTAL PROPOSED UPPER FLOOR AREA	2,223.75 SF
	TOTAL PROPOSED FLOOR AREA	7,622.8 SF

REQUIRED OFF-STREET PARKING:	1 PER 1,000 SF (LUO SEC 21-6.20)
PROPOSED OFF-STREET PARKING:	8 SPACES SEE 1/A100
FAR:	0.25

TMK: 1-6-8-004:004		
PROPOSED FLOOR AREA:	1. DWELLING 2	1,636.34 sq ft
	2. MAUKA LANAI 2	167.07 sq ft
	3. MAKAI LANAI 2	166.66 sq ft
	4. DWELLING 1	1,808.22 sq ft
	5. MAUKA LANAI 1	189.17 sq ft
	6. MAKAI LANAI 1	172.86 sq ft
	TOTAL FLOOR AREA	4,140.32 SF

REQUIRED OFF-STREET PARKING:	1 PER 1,000 SF (LUO SEC 21-6.20)
PROPOSED OFF-STREET PARKING:	5 SPACES SEE 1/A100
FAR:	0.2



Harbor Court
55 Merchant Street, Suite 1430
Honolulu Hawai'i 96813
808.524.8255 | info@pva.com

KEY PLAN

Libby Residence

New Two Single Family Dwellings

TMK: 6-8-004 : 003 & 004
68-631 & 68-623 Crozier Drive , Waialua, Hawaii 96791

Project 20-026
Date October 3, 2025
Drawing Area Calculations
Scale As Noted

Revisions:

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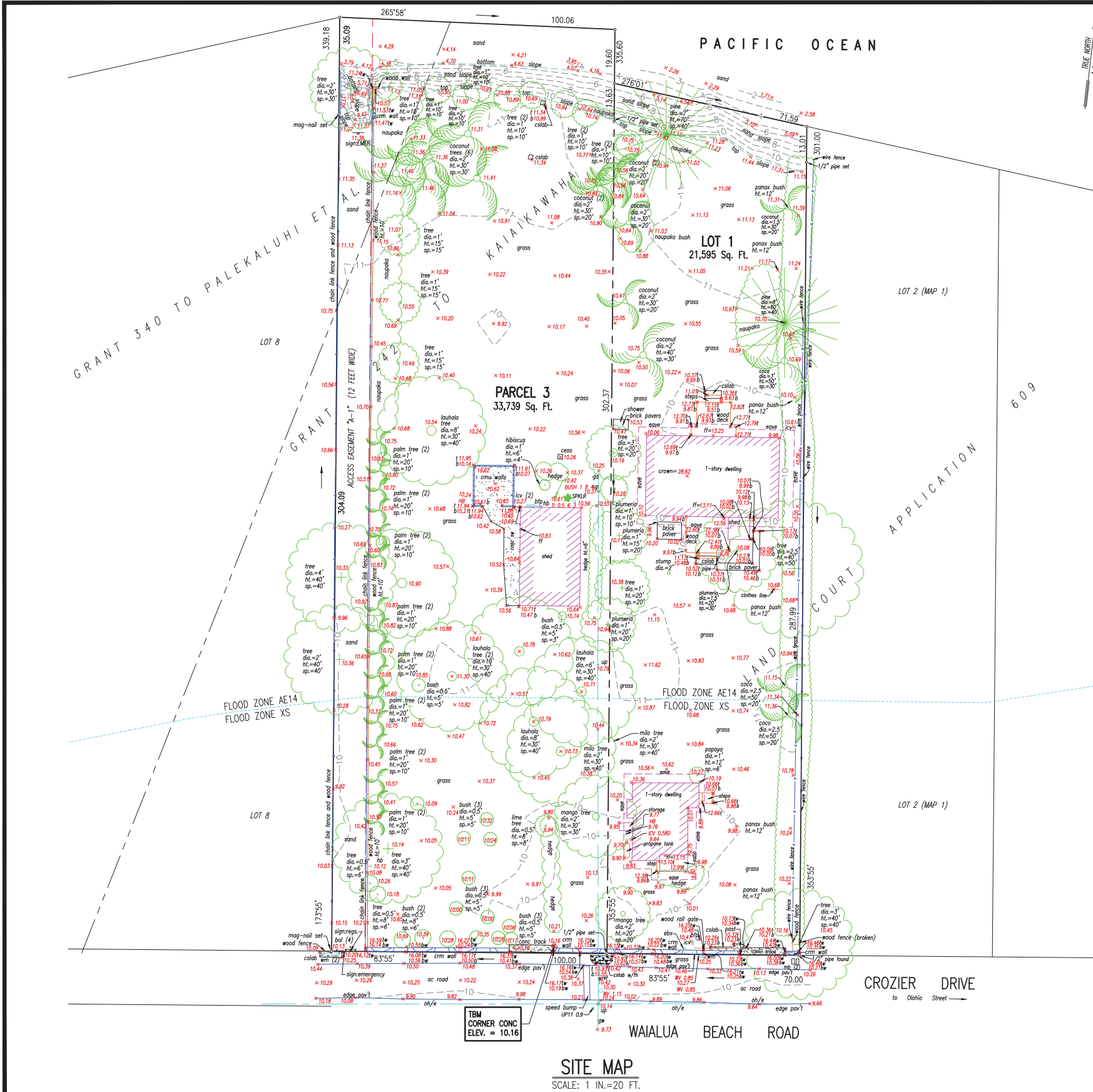
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A002

Plotted on 10/13/25 at 2:28 PM



68-631 Crozier Drive & 68-623 Crozier Drive Unit A, Waialua

F.B. 109:67



VICINITY MAP
NOT TO SCALE

TOPOGRAPHIC SURVEY MAP
LOT 1 (MAP 1)
LAND COURT APPLICATION 609
PARCEL 3
BEING A PORTION OF R. P. GR. 340 TO PALEKALUHI ET AL.,
AND R. P. GR. 242 TO KAIKAWAHA
DATE: AUGUST 29, 2024
TAX MAP KEY: (1) 6-8-004: 003 & (1) 6-8-004: 004

LEGEND:

ac	asphalt concrete
b	bottom
bfp	backflow preventer
bol	bollard
bw	bottom wall
cmu	concrete masonry unit
col	column
conc	concrete
concr	concrete rubble masonry
cslab	concrete slab
dia	diameter
ebx	electric box
elev	elevation
emer	emergency
ep	electrical pole
ff	finished floor
fh	fire hydrant
ga	guy wire & anchor
gw	guy wire
ht	hose bibb
h	height
icv	irrigation control valve
mb	mail box
oh/e	overhead electric
pav't	pavement
ref	reflector
sp	spread
spktr	sprinkler
sw	sidewalk
t	top
tbm	temporary bench mark
tw	top wall
up	utility pole
wh	water heater
wm	water meter
wv	water valve

NOTE: Elevations established from GPS-RTK derived orthometric heights, applying GEOID09 separations, constraining to NGS Control Station H 15 (TU0544). Elevation = 9.11 feet LMSL.



This map was prepared by me or under my direct supervision
Peter N. Vincent

LICENSED PROFESSIONAL LAND SURVEYOR
CERTIFICATE NUMBER 10257 - Exp. 4/30/2026

LEAPS & BOUNDARIES, INC.
2016 WATERHOUSE ST., STE. 101 PH. (808) 484-5701
HONOLULU, HI 96819 EMAIL: SURVEYS@LEAPSANDBOUNDARIES.COM

PVA
petervincentarchitects

Harbor Court
55 Merchant Street, Suite 1430
Honolulu Hawai'i 96813
808.524.8255 | info@pva.com

KEY PLAN

Libby Residence

New Two Single Family Dwellings

TMK: 6-8-004 : 003 & 004

68-631 & 68-623 Crozier Drive , Waialua, Hawaii 96791

Project 20-026
Date October 3, 2025
Drawing Site Survey
Scale As Noted

Revisions:

1	
2	
3	
4	
5	
6	
7	

SMA



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A003

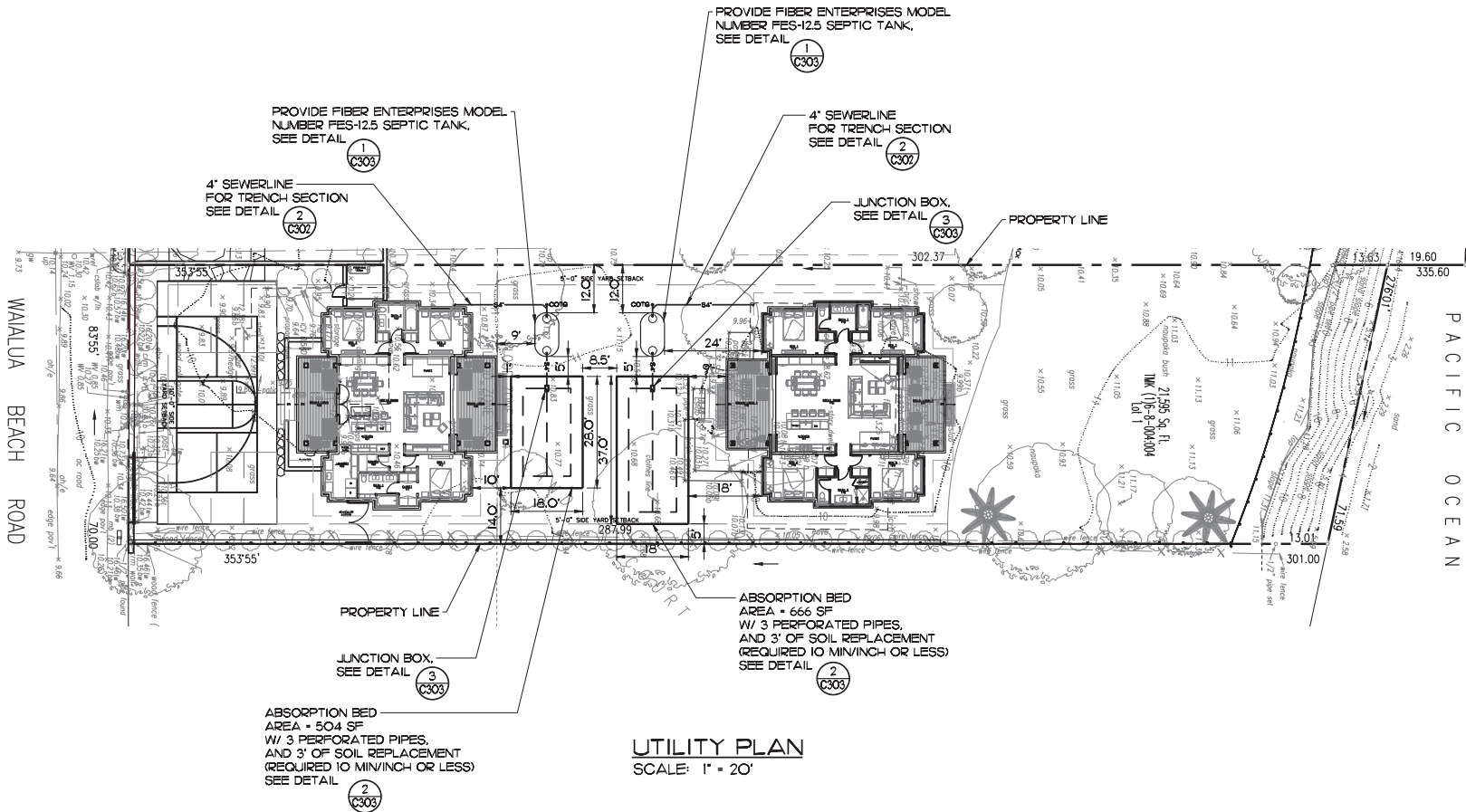
22" x 34"

ClO_4



LEGEND:

PROPERTY LINE	---
SEWERLINE (SOLID WALL) W/ SIZE	----- S4" -----
SEWERLINE (PERFORATED) W/ SIZE	----- S4" -----
EXIST. SEWERLINE W/ SIZE	----- S4" -----



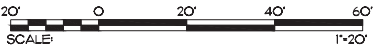
UTILITY PLAN
SCALE: 1" = 20'

NOTE:
CONTRACTOR TO CONDUCT PERCOLATION TESTING ON THE 3' OF SOIL REPLACEMENT ON PLACED ON-SITE UNDER OBSERVATION OF THE ENGINEER TO CONFIRM ACTUAL PERCOLATION RATE FOR THE FINAL LEACH FIELD DESIGN. CONFIRMATION: PERCOLATION RATE FOR THE 3' OF SOIL REPLACEMENT MUST BE CONFIRMED PRIOR TO PLACING LEACH FIELD GRAVEL AND PIPES ONTO SOIL REPLACEMENT AREA. THE SOIL REPLACEMENT REQUIRES A PERCOLATION RATE OF 10 MIN/INCH OR LESS.

NOTE:

1. THE CONTRACTOR IS TO VERIFY IN FIELD THE EXISTING UTILITY AND LATERAL LOCATIONS PRIOR TO INSTALLING NEW UTILITY CONNECTIONS.

GRAPHICAL SCALE:



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PALEKANA PERMITS THIRD PARTY CERTIFICATION	
☐ BUILDING CODE	☐ ELECTRICAL CODE
☐ MECHANICAL CODE	☒ RESIDENTIAL CODE
☐ STRUCTURAL (NON-SINGLE/FAMILY DWELLINGS)	

Dempsey Pacific Inc.
Civil Engineering Design and Consulting Services

Libby Residence

TMK: (1) 6-8-004:004

68-623 & 68-623A Crozier Drive
Waialua, Hawaii 96791

Project J24.65

Date October 1, 2025

Drawing UTILITY PLAN

Scale As Noted

Drawn By KA

Revisions:



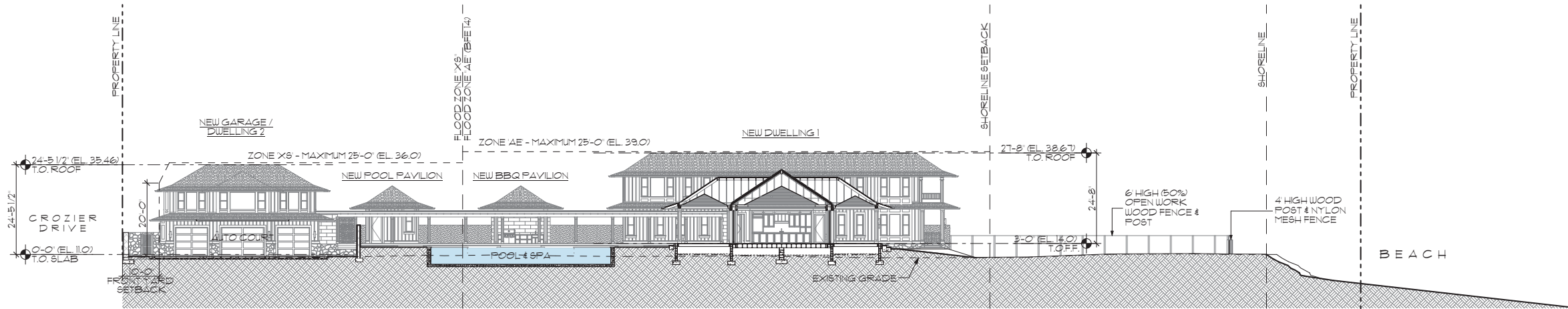
Permit Documents



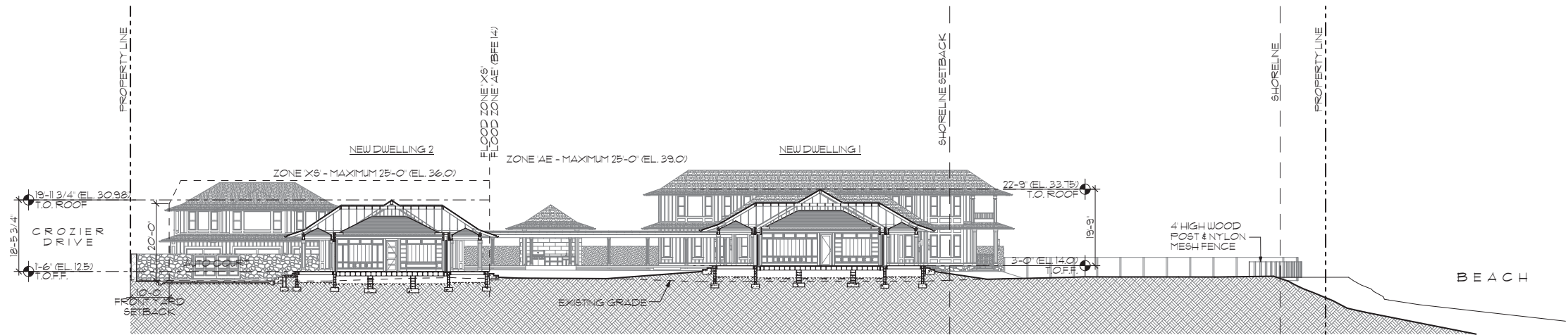
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4/30/2026
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1 SITE SECTION
SCALE: 1/16" = 1'-0"



2 SITE SECTION
SCALE: 1/16" = 1'-0"



KEY PLAN

Libby Residence

New Two Single Family Dwellings

TMK: 6-8-004 : 003 & 004

68-631 & 68-623 Crozier Drive , Waialua, Hawaii 96791

Project 20-026
Date October 3, 2025
Drawing Site Sections
Scale As Noted

Revisions:

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SMA

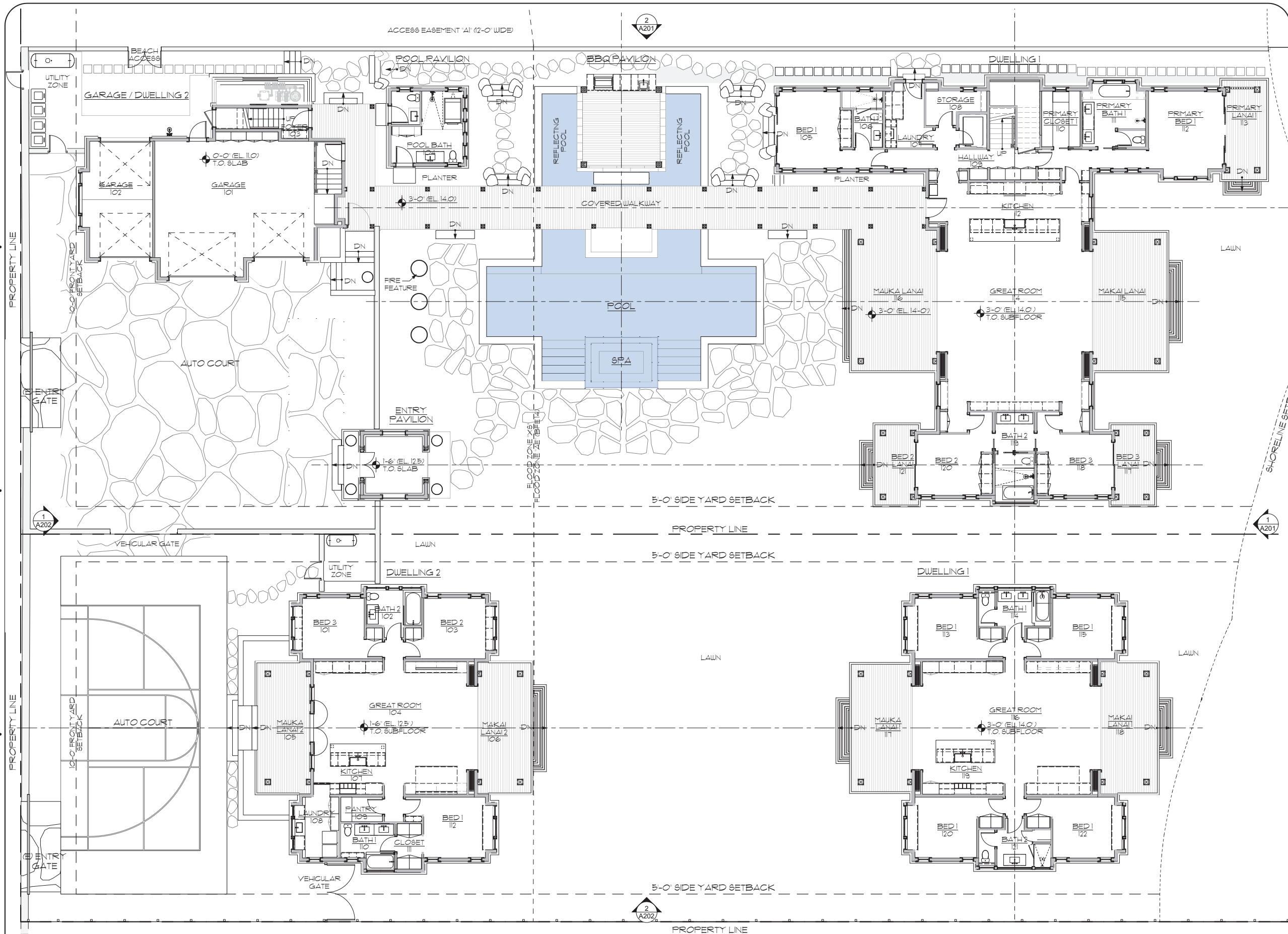


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Plotted on 10/17/25 at 3:40 PM



1 FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

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Honolulu Hawaii 96813
808.524.8255 | info@pva.com

KEY PLAN

Libby Residence

New Two Single Family Dwellings

TMK: 6-8-004 : 003 & 004
68-631 & 68-623 Crozier Drive , Waiialua, Hawaii 96791

Project 20-026
Date October 3, 2025
Drawing First Floor Plan
Scale As Noted

Revisions:

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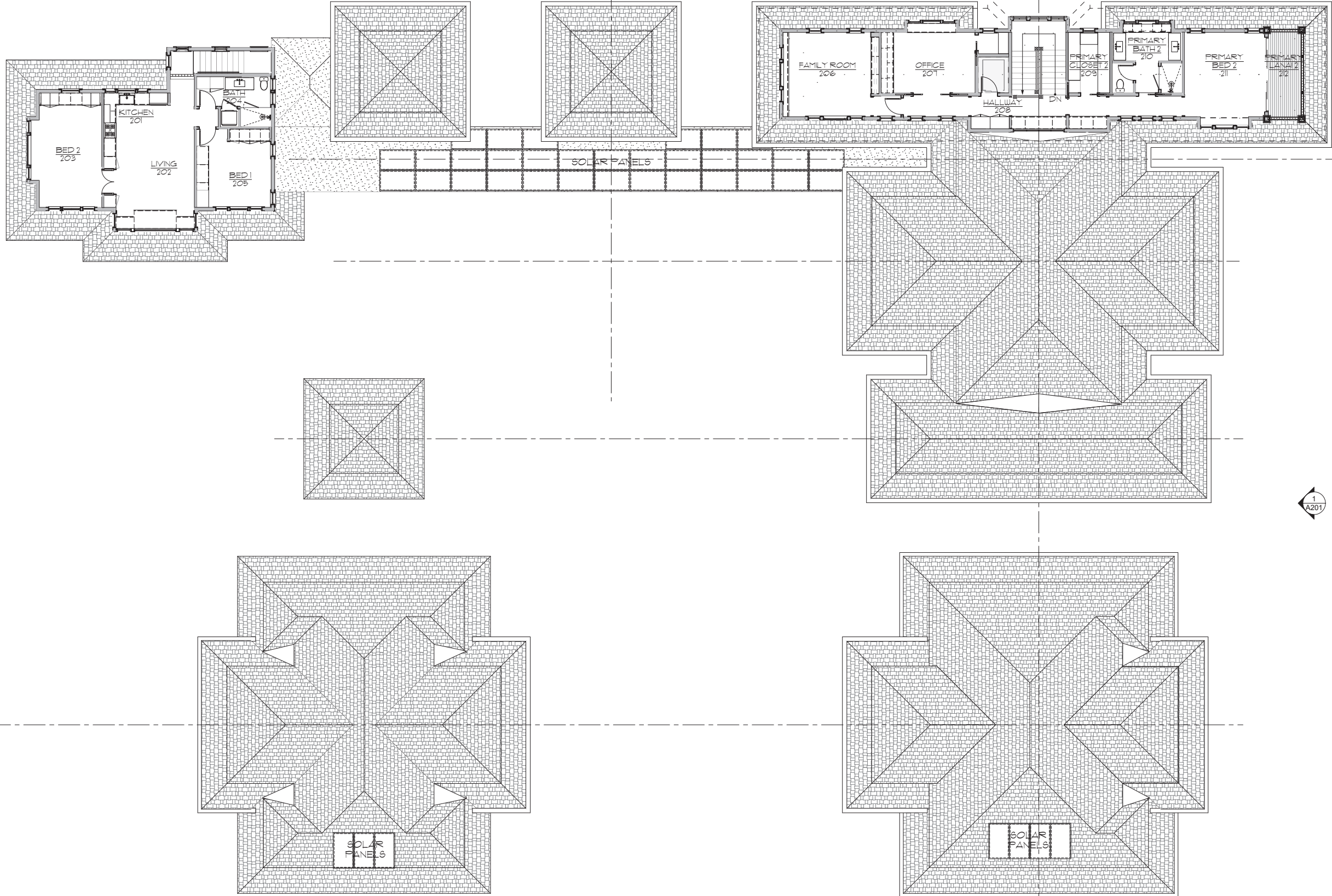


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A102



IIVA
petervincentarchitects

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KEY PLAN

Libby Residence

New Two Single Family Dwellings

TMK: 6-8-004 : 003 & 004
68-631 & 68-623 Crozier Drive , Waiialua, Hawaii 96791

Project 20-026
Date October 3, 2025
Drawing Second Floor Plan
Scale As Noted

Revisions:	

SMA



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A103

1 SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

0 4 8 16





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KEY PLAN

Libby Residence

New Two Single Family Dwellings

TMK: 6-8-004 : 003 & 004
68-631 & 68-623 Crozier Drive , Waialua, Hawaii 96791

Project 20-026
Date October 3, 2025
Drawing Roof Plan
Scale As Noted

Revisions:	
	
	
	
	
	
	

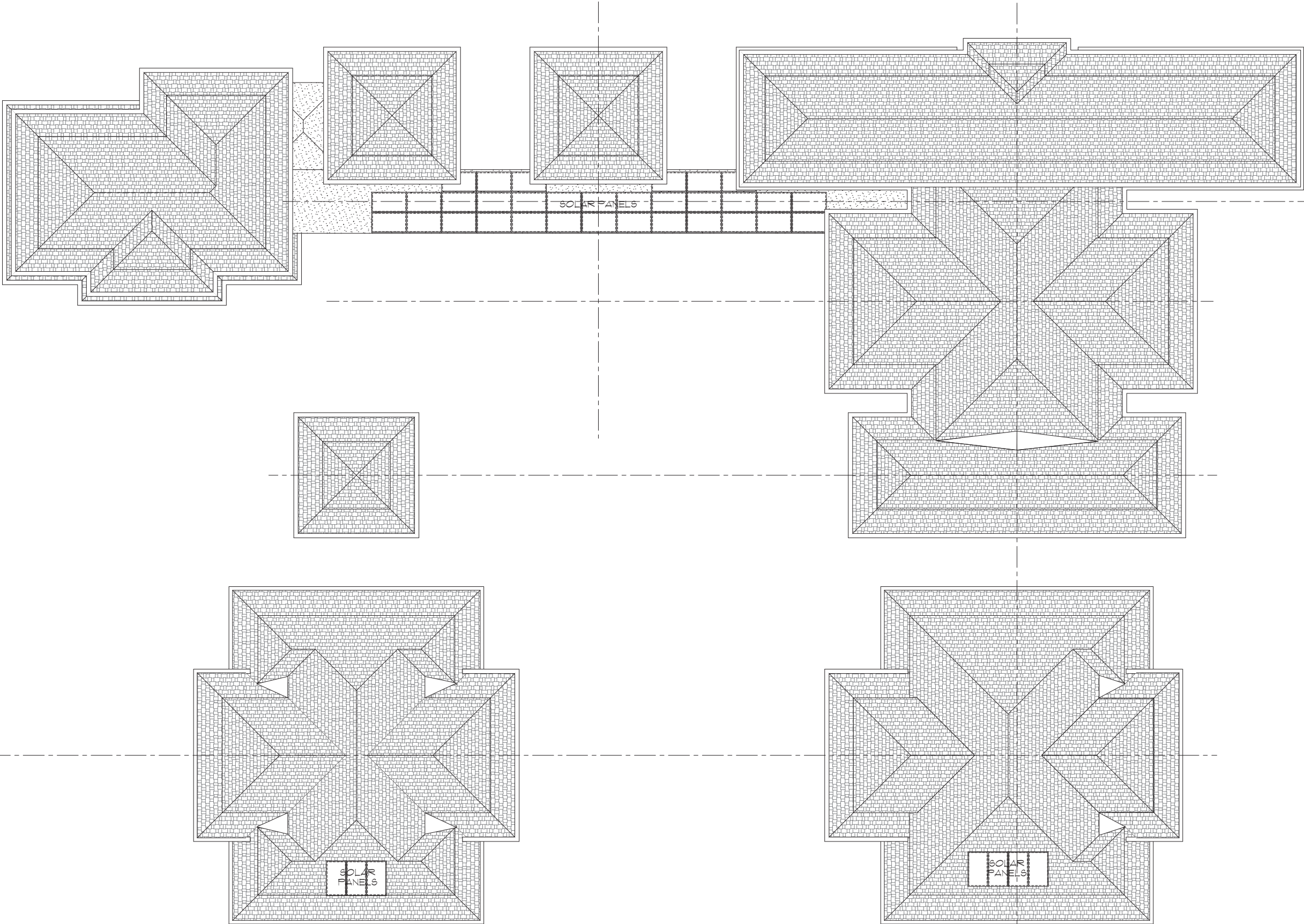
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1 ROOF PLAN
SCALE: 1/8" = 1'-0"



EXTERIOR MATERIAL LEGEND

- 1 CEDAR SHINGLE ROOF

2 EXPOSED RAFTERS

3 WOOD BOARD AND BATTEN @ 12' O.C.
- 4 WOOD PANELING AND TRIM

5 COLUMN W/ WOOD TRIM

6 MOSS ROCK VENEER W/ STONE CAP
- 7 BASALT STONE VENEER

8 CMU WALL W/ MOSS ROCK VENEER

9 CMU WALL W/ CEMENT WASH FINISH
- 10 EXTERIOR LIGHT FIXTURE

11 EXTERIOR GATE

12 DECORATIVE SCREEN / GATE
- 13 WOOD RAILING, 36" HIGH

14 TPO ROOF ASSEMBLY

15 SOLAR PANELS
- 16 PREFINISHED PERIMETER GUTTER & DOWNSPOUT

17 NOT USED

18 NOT USED
- 19 6'-0" CM WALL



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KEY PLAN

Libby Residence

New Two Single Family Dwellings

TMK: 6-8-004 : 003 & 004
68-631 & 68-623 Crozier Drive , Waialua, Hawaii 96791

Project 20-026
Date October 3, 2025
Drawing Exterior Elevations
Scale As Noted

- Revisions:
-

SMA

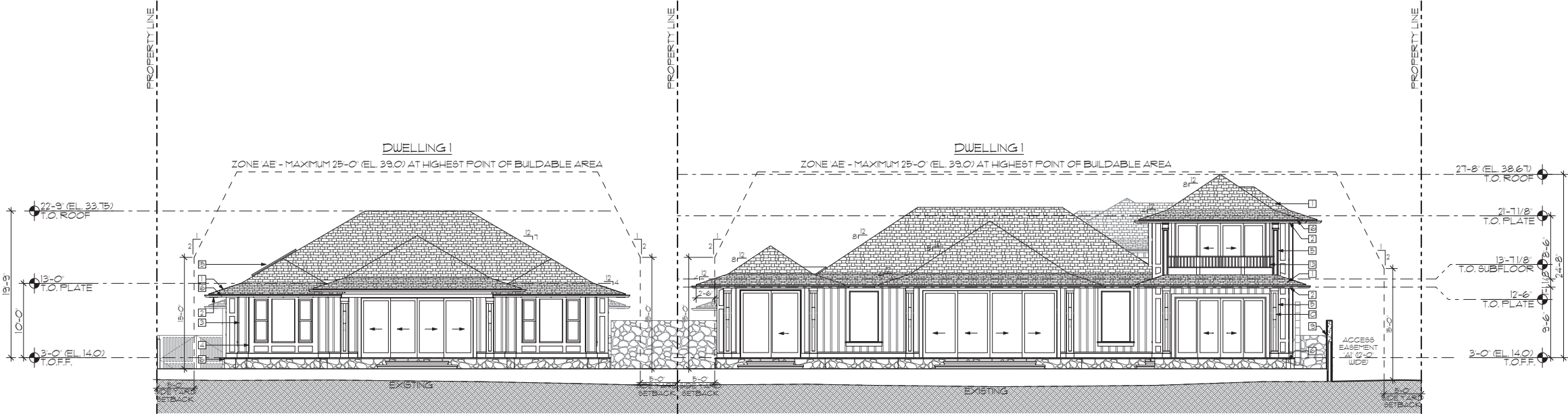


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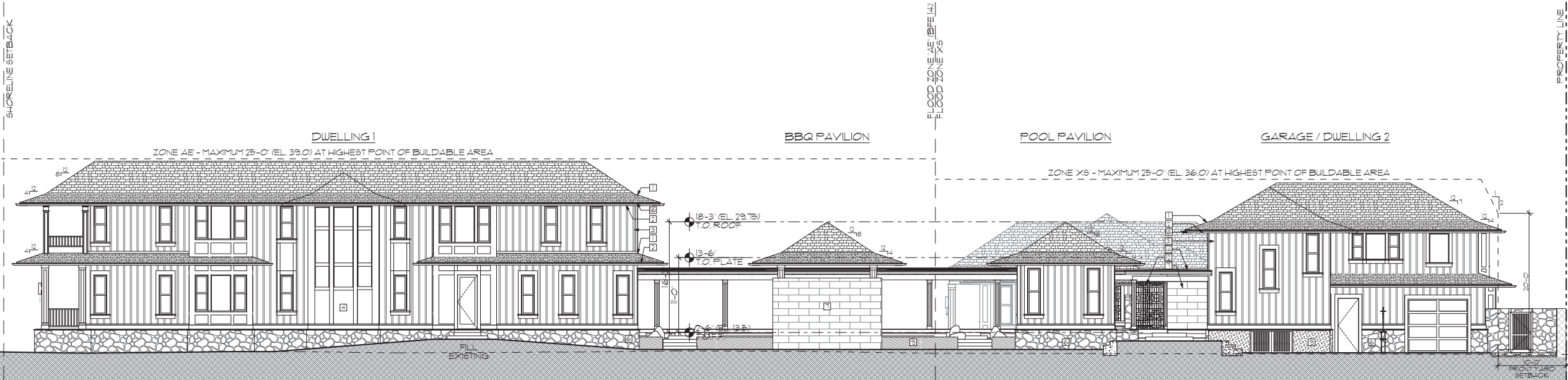
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A201



1 MAKAI ELEVATION
SCALE: 1/8" = 1'-0"



2 KAENA ELEVATION
SCALE: 1/8" = 1'-0"



EXTERIOR MATERIAL LEGEND

- 1 CEDAR SHINGLE ROOF

2 EXPOSED RAFTERS

3 WOOD BOARD AND BATTEN @ 12" O.C.
- 4 WOOD PANELING AND TRIM

5 COLUMN W/ WOOD TRIM

6 MOSS ROCK VENEER W/ STONE CAP
- 7 BASALT STONE VENEER

8 CMU WALL W/ MOSS ROCK VENEER

9 CMU WALL W/ CEMENT WASH FINISH
- 10 EXTERIOR LIGHT FIXTURE

11 EXTERIOR GATE

12 DECORATIVE SCREEN / GATE
- 13 WOOD RAILING, 36" HIGH

14 TPO ROOF ASSEMBLY

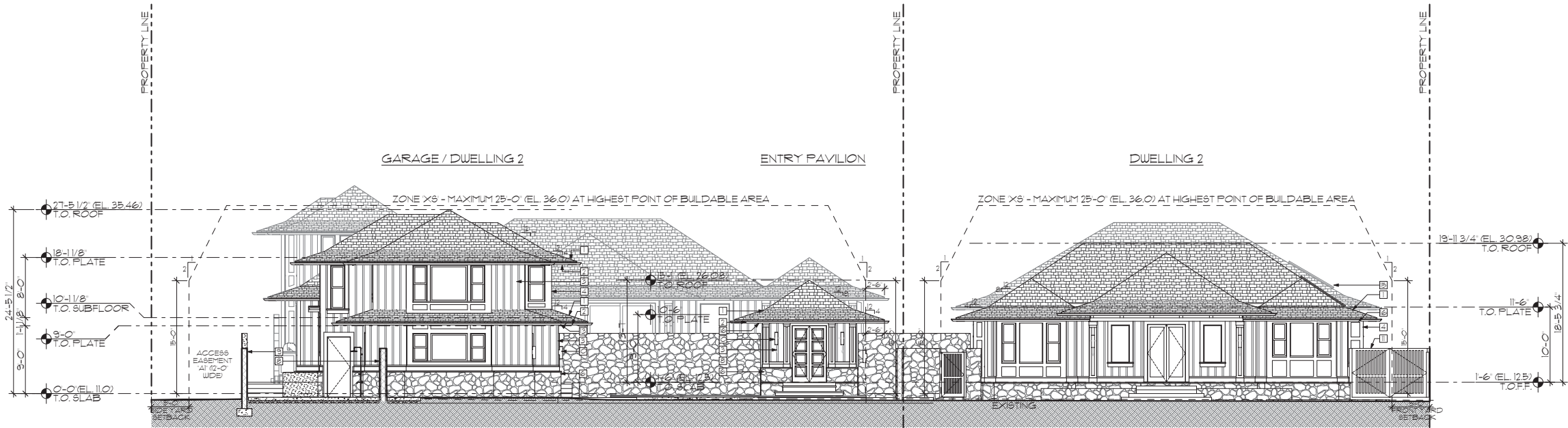
15 SOLAR PANELS
- 16 PREFINISHED PERIMETER GUTTER & DOWNSPOUT

17 NOT USED

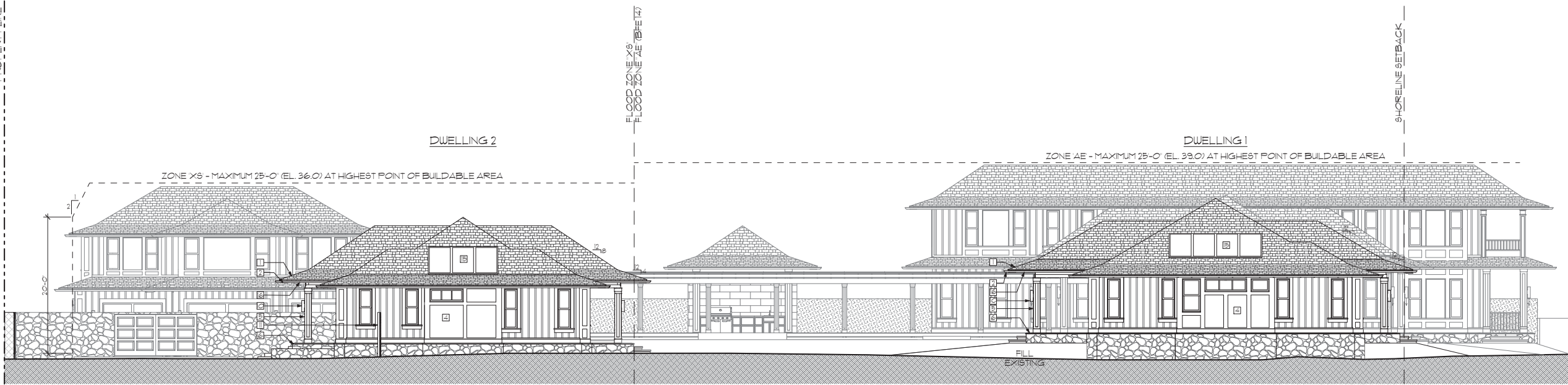
18 NOT USED
- 19 6'-0" CM WALL



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Honolulu Hawai'i 96813
808.524.8255 | info@pva.com



1 MAUKA ELEVATION
SCALE: 1/8" = 1'-0"



2 HALEIWA ELEVATION
SCALE: 1/8" = 1'-0"



KEY PLAN

Libby Residence

New Two Single Family Dwellings
TMK: 6-8-004 : 003 & 004
68-631 & 68-623 Crozier Drive , Waialua, Hawaii 96791

Project 20-026
Date October 3, 2025
Drawing Exterior Elevations
Scale As Noted

- Revisions:
- -
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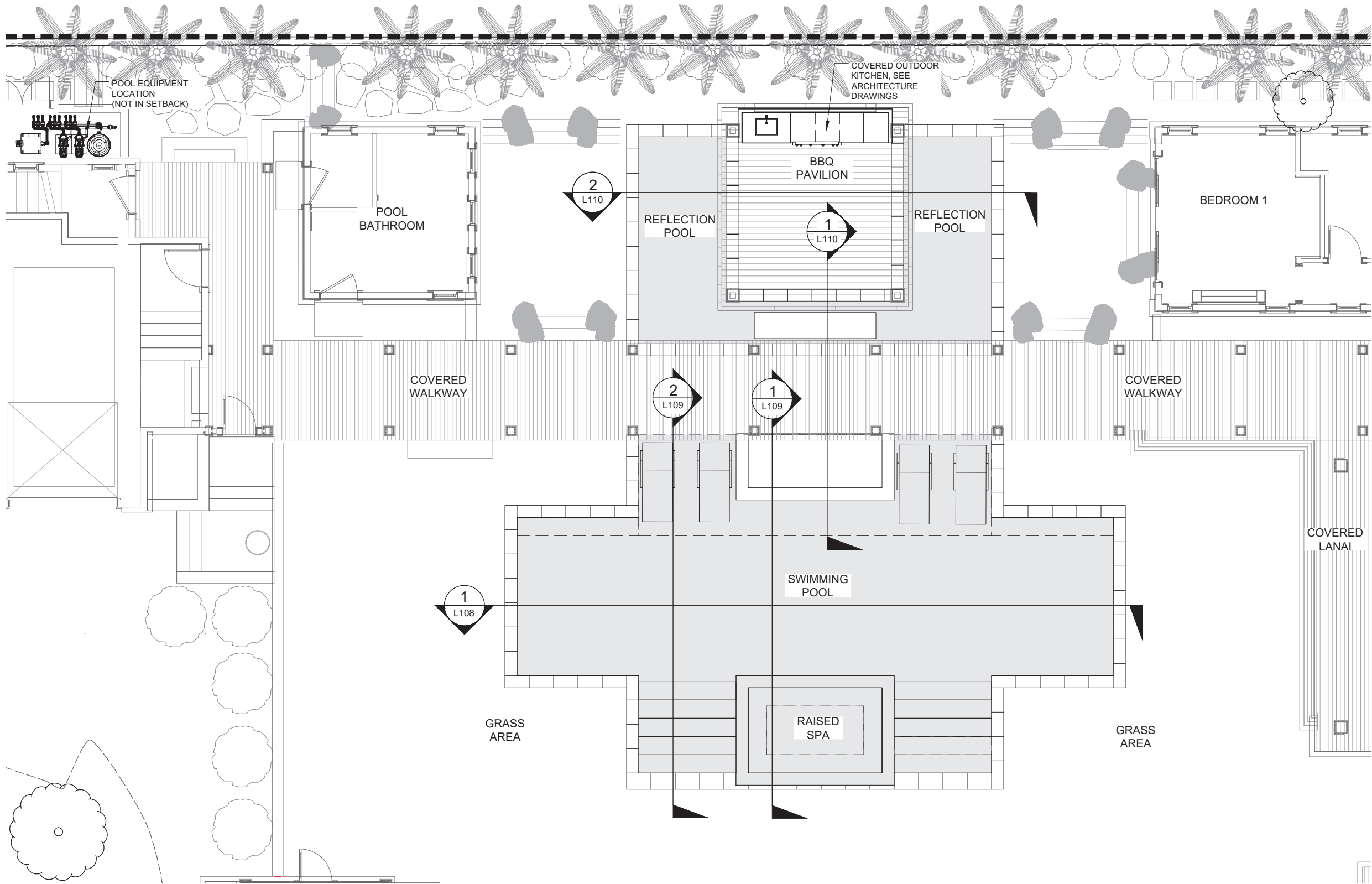
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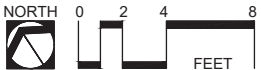
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1 OVERALL POOL PLAN
SCALE: 1/4" = 1'-0"



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PALEKANA PERMITS
THIRD PARTY CERTIFICATION
☐ BUILDING CODE ☐ ELECTRICAL CODE
☐ MECHANICAL CODE ☒ RESIDENTIAL CODE
☐ STRUCTURAL (NON-SINGLE-FAMILY DWELLINGS)

WLA

WOLF LANDSCAPE ARCHITECTS
P.O. BOX 11625, HONOLULU, HAWAII 96828
e: studio@wla.design m: 856-261-0134

Libby Residence

NEW TWO SINGLE FAMILY DWELLINGS

TMK: 6-8-004 : 003 & 004

68-631 & 68-623 Crozier Drive, Waialua, Hawaii 96791

Project 20-026
Date August 25, 2025
Drawing Overall Pool Plan
Scale As Noted

Revisions:

△	
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△	

Permit



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L100



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☐ MECHANICAL CODE	☒ RESIDENTIAL CODE
☐ STRUCTURAL (NON-SINGLE-FAMILY DWELLINGS)	



WOLF LANDSCAPE ARCHITECTS
P.O. BOX 11625, HONOLULU, HAWAII 96828
e: studio@wla.design m: 856-261-0134

Libby Residence

NEW TWO SINGLE FAMILY DWELLINGS

TMK: 6-8-004 : 003 & 004
68-631 & 68-623 Crozier Drive , Waialua, Hawaii 96791

Project	20-026
Date	August 25, 2025
Drawing	Swimming Pool Section - 1
Scale	As Noted

Revisions:	
△	
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△	
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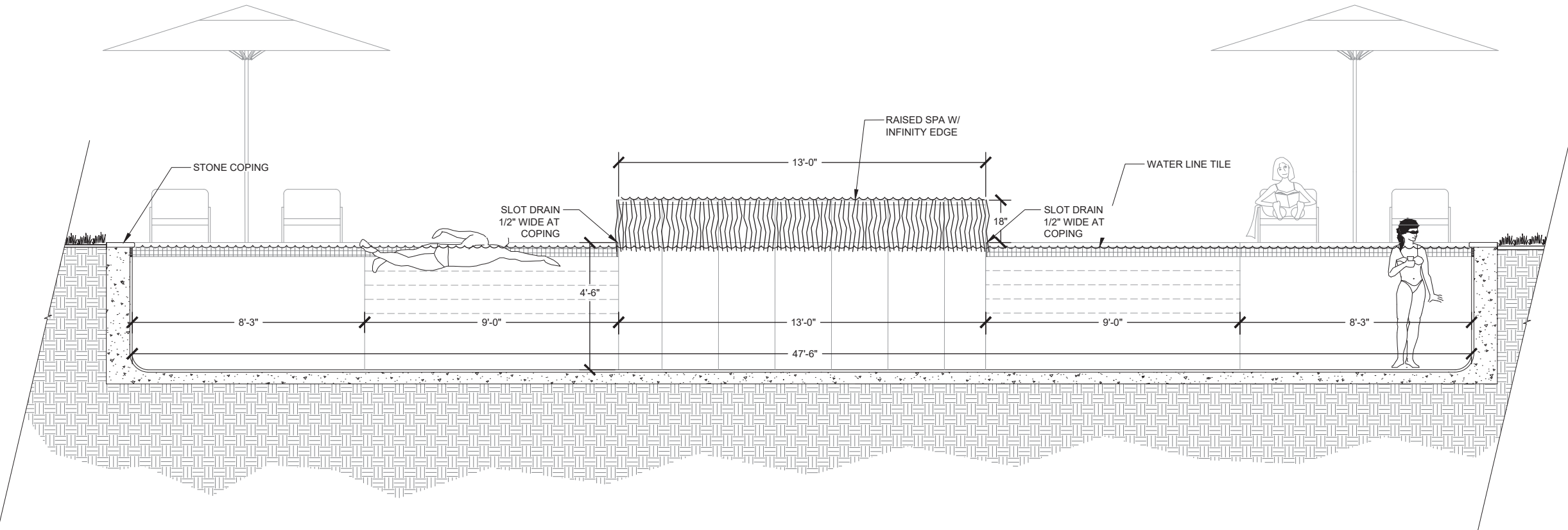
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4/30/2026

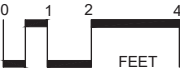
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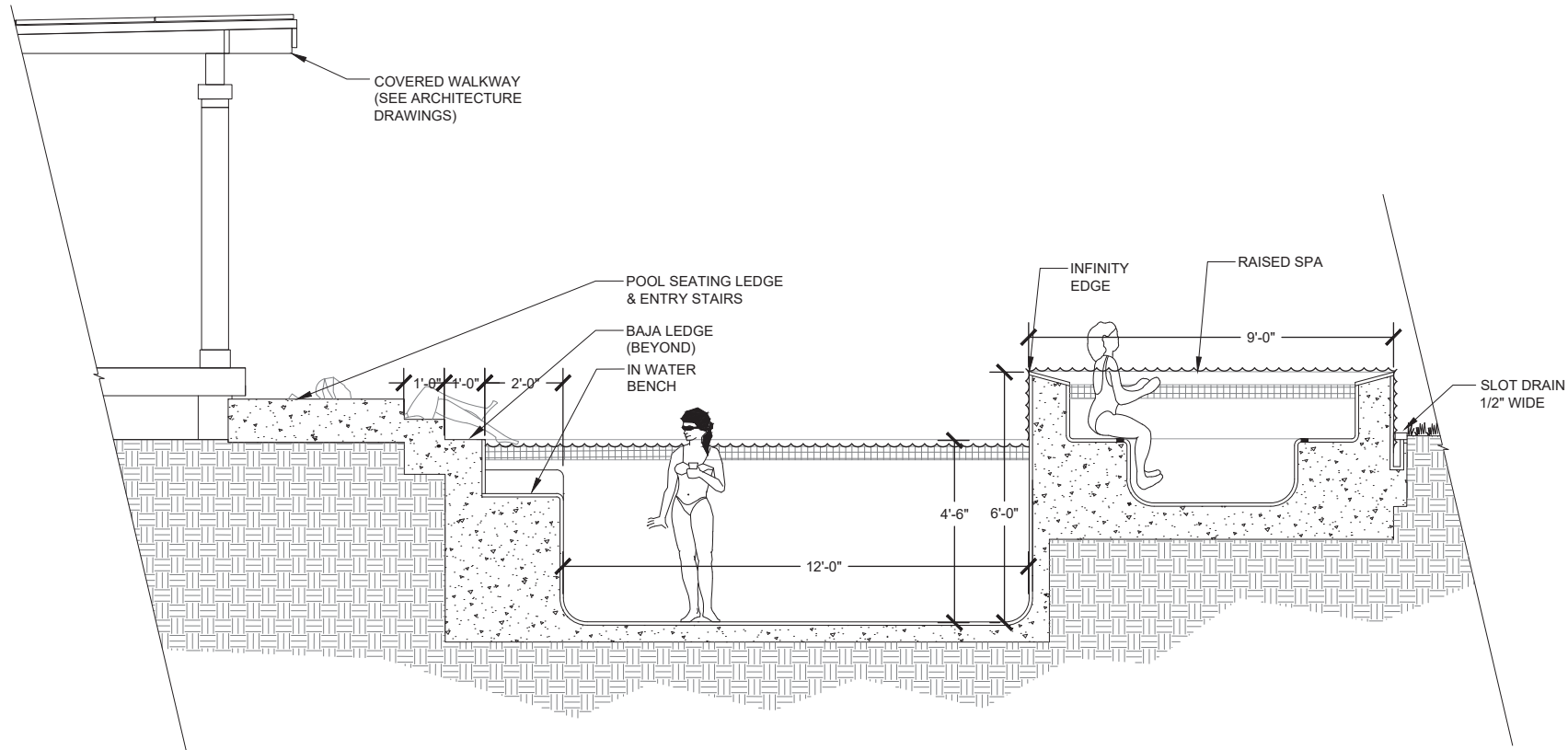
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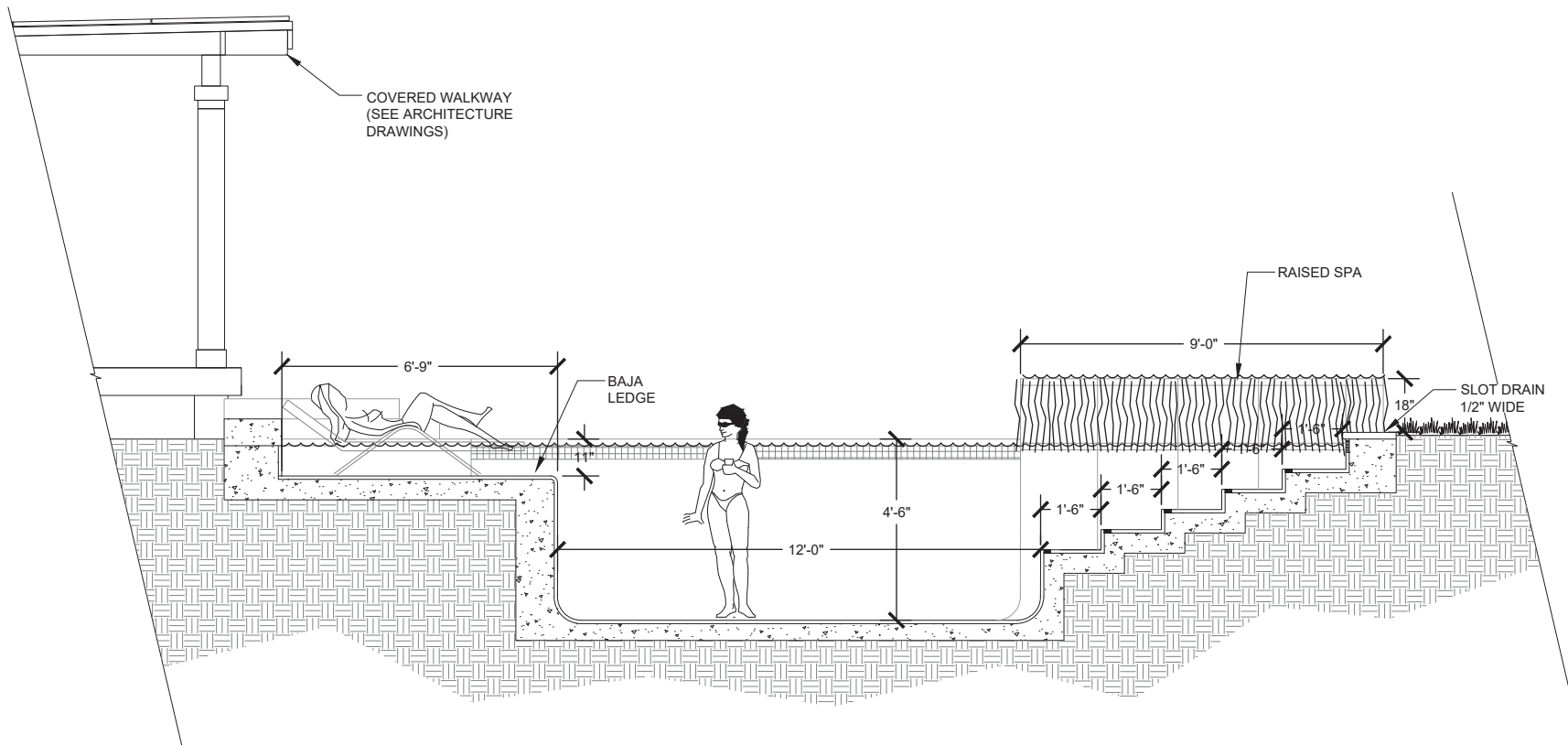


1 SWIMMING POOL SECTION - 1
SCALE: 1/2" = 1'-0"

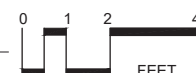




1 SWIMMING POOL SECTION - 1
SCALE: 1/2" = 1'-0"



2 SWIMMING POOL SECTION - 2
SCALE: 1/2" = 1'-0"



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WOLF LANDSCAPE ARCHITECTS
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e: studio@wla.design m: 856-261-0134

Libby Residence

NEW TWO SINGLE FAMILY DWELLINGS

TMK: 6-8-004 : 003 & 004

68-631 & 68-623 Crozier Drive, Waialua, Hawaii 96791

Project	20-026
Date	August 25, 2025
Drawing	Swimming Pool Sections - 2
Scale	As Noted

Revisions:	
△	
△	
△	
△	
△	
△	

Permit



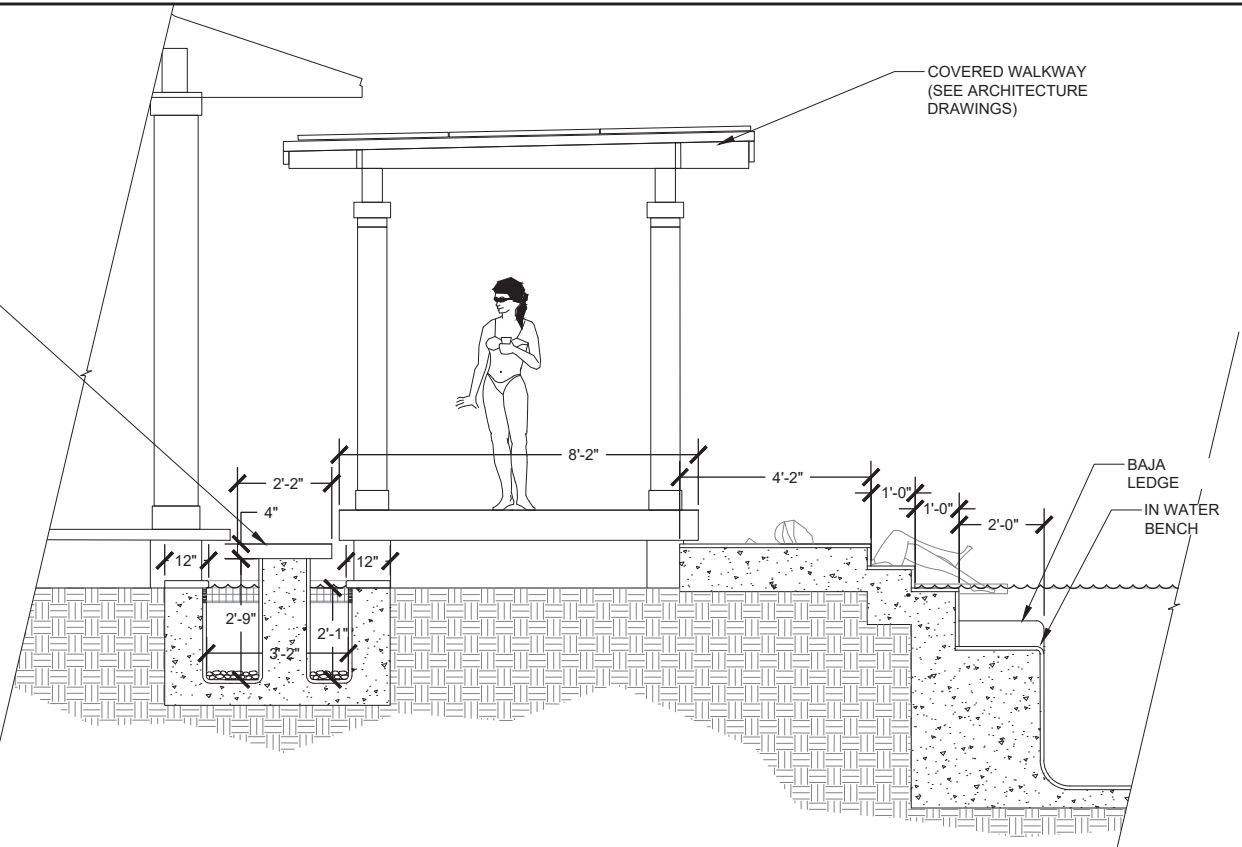
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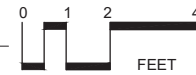
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"FLOATING"
STONE PAVER
(TRAVERTINE TO
MATCH POOL
COPING, OR
APPROVED EQUAL)

COVERED WALKWAY
(SEE ARCHITECTURE
DRAWINGS)



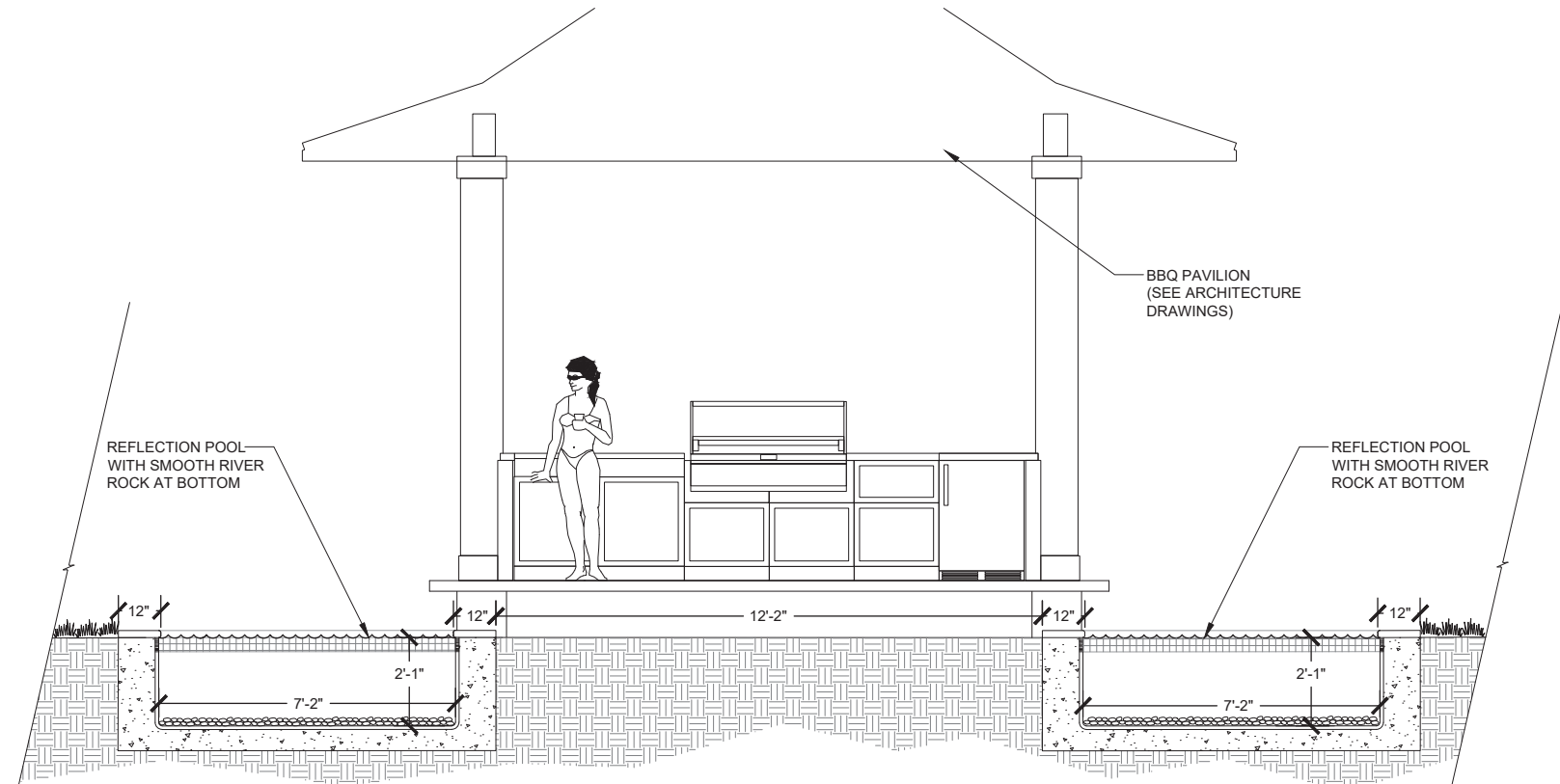
1 REFLECTION POOL SECTION - 1
SCALE: 1/2" = 1'-0"



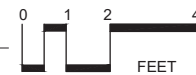
REFLECTION POOL
WITH SMOOTH RIVER
ROCK AT BOTTOM

BBQ PAVILION
(SEE ARCHITECTURE
DRAWINGS)

REFLECTION POOL
WITH SMOOTH RIVER
ROCK AT BOTTOM



2 REFLECTION POOL SECTION - 2
SCALE: 1/2" = 1'-0"



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Libby Residence

NEW TWO SINGLE FAMILY DWELLINGS

TMK: 6-8-004 : 003 & 004

68-631 & 68-623 Crozier Drive, Waialua, Hawaii 96791

Project	20-026
Date	August 25, 2025
Drawing	Reflection Pool Sections
Scale	As Noted

Revisions:	
△	
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△	

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Appendix D. Archaeological Subsurface Testing Plan



Archaeological Subsurface Testing Plan for the AIS of the
Proposed Replacement of Residence at 68-623A & 68-631
Crozier Drive, Mokulē‘ia 2 Ahupua‘a, Waialua District, Island
of O‘ahu

TMKs: (1) 6-8-004:003 & 004

(January 31, 2025)

INTRODUCTION

ASM Affiliates (ASM) is pleased to present this Archaeological Subsurface Testing Plan to support the Archaeological Inventory Survey (AIS) for the proposed re-development of 68-623A & 68-631 Crozier Drive at Tax Map Keys (TMKs): (1) 6-8-004:003 & 004 located in Mokulē‘ia 2 Ahupua‘a, Waialua District, Island of O‘ahu. The project area is comprised of approximately 1.27-acres of residential-zoned land located within a larger residential neighborhood along the coast of O‘ahu’s North Shore. Peter Vincent Architects (PVA) proposes the removal of two existing residences and one existing masonry shed followed by the construction of a two-story main residence, two-story garage/caretaker house, two single-story guest houses, entry pavilion, pool and spa, pool bathhouse, auto court, and multi-sport game court. The proposed structures are connected via covered and uncovered walkways and surrounded by ornamental lawns, vegetation, and other landscaping elements.

The subsurface testing proposed in this plan is intended to provide additional information regarding the likelihood of encountering buried cultural deposits and/or sites at the locations proposed for ground disturbing development activities as part of the implementation of the 68-623A & 68-631 Crozier Drive AIS; and, if subsurface cultural deposits or sites are encountered, to determine the nature and depth of those deposits. The data collected through the subsurface testing will be used to inform the treatment recommendations and project effect determination presented in the AIS currently being prepared by ASM. Once completed, the AIS will be submitted to the State Historic Preservation Division (SHPD) as part of the in-progress 6E review for the 68-623A & 68-631 Crozier Drive AIS.

This plan presents the scope of work proposed for subsurface testing within the Crozier Drive AIS project area by ASM. The scope of work presented in this plan is intended for SHPD review and approval prior to conducting the subsurface testing fieldwork.

SUBSURFACE TESTING PROPOSED FOR THE 68-617 CROZIER DRIVE AIS

Potential ground disturbance during the proposed project will be limited primarily to the areas shown in yellow in Figures 1 and 2. These areas include the proposed locations of the main residential dwelling, two guest residential dwellings, a pool & spa, a garage & caretaker dwelling, entry pavilion, and interconnected covered walkways. To ascertain whether the proposed project will affect buried cultural deposits or sites, targeted subsurface testing is proposed for those areas. Within these areas, trenches are targeted at bathrooms, kitchens, and laundry rooms where buried utilities and connections are most likely to occur. Three geotechnical samples collected from the neighboring parcel to the east (68-617 Crozier Drive) in October 2022 by Shinsato Engineering, Inc., show only sand and silty sand soil layers above a limestone bedrock layer. The depths of this bedrock layer vary between approximately five to six meters and are assumed to be consistent within the current parcels. As two existing residential structures and a masonry shed currently occupy portions of the proposed development area, no subsurface testing is proposed in these locations. Trenches are instead placed around these structures avoid previous disturbance and streamline the AIS fieldwork. Goals of the proposed subsurface testing are to determine presence of subsurface deposits in proposed ground disturbance locations, and if subsurface deposits are present, to characterize the vertical extent, cultural constituents, and if possible preliminary age, function, and degree of stratigraphic integrity of the deposits. Field methods and expectations for the proposed subsurface testing are presented below.



Figure 1. Locations of existing structures, proposed areas of significant disturbance, and proposed test trenches within the project area.

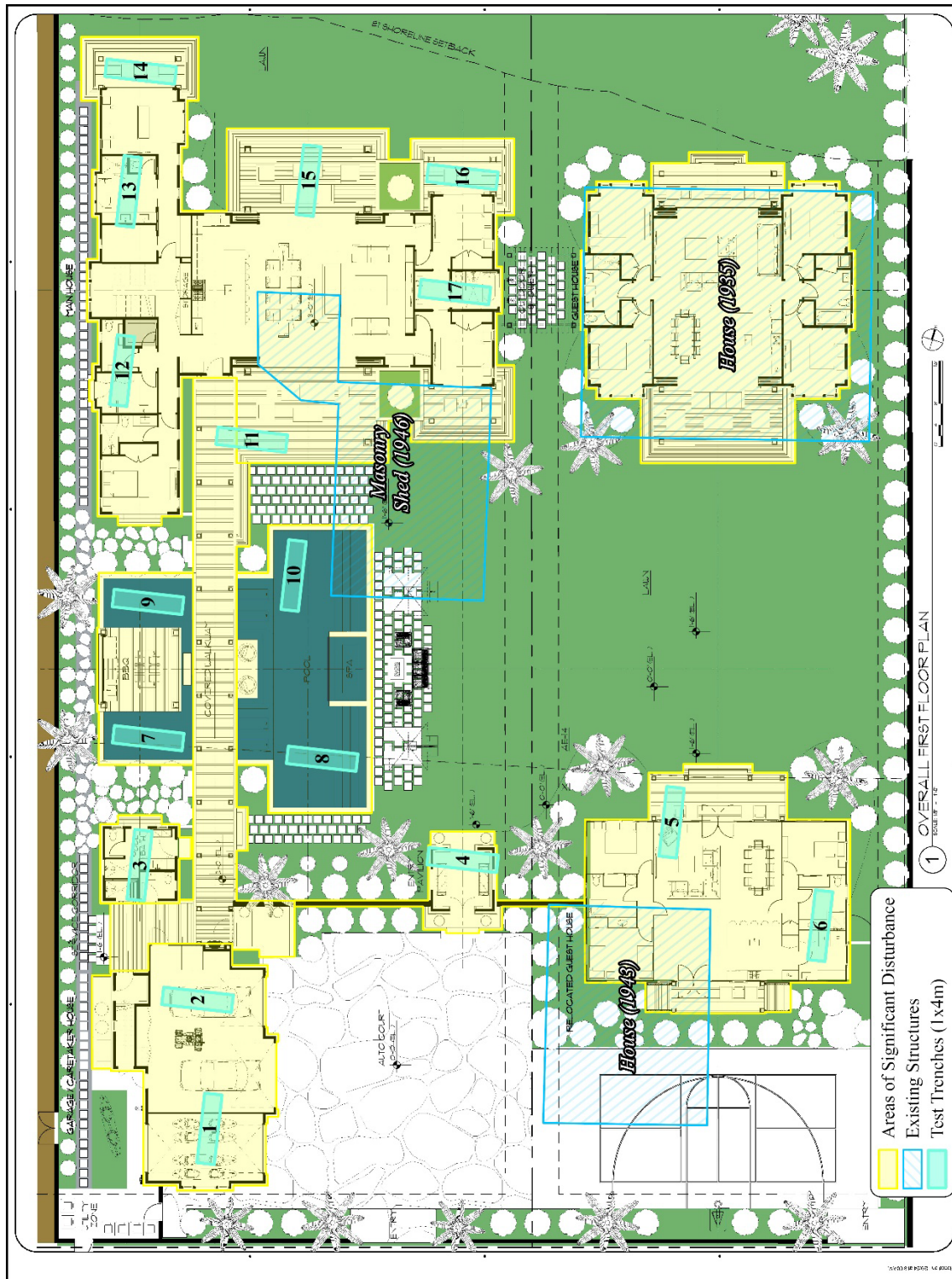


Figure 2. Locations of existing structures, proposed areas of significant disturbance, and proposed test trenches shown atop proposed first floor construction plans.

SUBSURFACE TESTING EXPECTATIONS

A number of previous archaeological studies have been conducted within the vicinity of the project area along the Mokulē‘ia coast, the majority of which have either involved inadvertently discovered human remains or produced results of “no findings”.

Numerous discoveries of human skeletal remains in coastal areas in and around Mokulē‘ia 1 & 2 Ahupua‘a have been made, several of which are in the vicinity of Crozier Drive. Precontact-era burials have been documented within parcels neighboring the east and west of the current project area. Only a few meters to the west, Kapeliela (1998), Elmore and Kennedy (1998), and Pietrusewsky (1998) detail one site (SIHP Site #50-80-03-05599) containing seven Precontact to early Historic-era human burials, six of which were accompanied by glass trade beads. Additionally, only a few meters to the east, ASM encountered a single intact burial at 68-617 Crozier Drive (Ryder & Belluzzo 2023, Draft). The location of the burial within a sand matrix and lack of any associated goods suggest the burial is traditional in nature.

Kennedy and Pietrusewsky (1991) encountered two intact Precontact-era burials (SIHP Site #50-80-04-04451) during monitoring approximately 550 meters east of the current project area, while Kapeliela (1996) documented a single individual exposed in beach sands by wave action approximately 300 meters west of the current project area (SIHP Site #50-80-03-05467). In addition to remnants of the O. R. & L. Railroad (SIHP Site #50-80-12-09714), Yucha and Hammatt (2008) identified a single intact human burial location, along with another reburial location with no known site number, during a literature review and field inspection of a Castle & Cooke-owned parcel approximately 500 meters west of the project area. Kennedy and Pietrusewsky (1991) published a treatment plan for two heavily disturbed burials encountered during installation of a septic pit at 68-421 Crozier Drive, approximately 550 meters east of the project area. Archaeological Consultants of the Pacific (ACP) responded to an inadvertently discovered burial at 68-681 Farrington Highway, approximately 2.5 kilometers to the west of the current project area, as described in Gregg and Kennedy’s 2004 report. Approximately seven grams of human remains were collected during the repair of an existing seawall on the property and granted SIHP Site #50-80-03-06708. Due to the low volume of total remains, none of which were *in situ*, and previous construction surrounding the sea wall, it is likely the burial was previously disturbed before discovery. ACP hypothesizes that the burial is of Hawaiian ethnicity dating to the pre-contact period due to its location within a sand matrix (Gregg & Kennedy 2004).

Kennedy (1990) conducted extensive subsurface testing in a lot to the south of Crozier Drive, approximately 450 meters east of the current project area. Kennedy performed nine backhoe-assisted excavations targeting burials, midden deposits, or other evidence of human occupation. This lot, Lot 2C, was reported to have been previously mined for sand and, at the time, the property owner intended to remove all sand down to the coral limestone aggregate layer. Trenches were approximately 7 meters long by 0.75 meters wide by roughly 2.5 meters deep. Deposits mostly consisted of agricultural fills overlying coarse sand deposits incorporated with intermittent shell and transitioning to a sterile sand layer of mostly sand and broken coral and shell. The presence of shell was interpreted as naturally occurring. No evidence of past human activity was identified. Similarly, approximately 300 meters to the east of the current project area, McElroy and Duhaylonsod (2015) conducted an inventory survey on coastal portions of Mokulē‘ia 2, but identified no historic properties.

In 2007, ACP completed an archaeological assessment of a parcel approximately 2.5 kilometers to the east of the project area including subsurface testing in the form of three eight-meter trenches (Monahan et al. 2007). Although faunal remains and isolated historic bottle fragments were found, no intact archaeological features were identified. Similarly, ASM conducted an archaeological assessment of a former sand-mine approximately 600 meters east of the project area, though no archaeological features were encountered within the 100% pedestrian survey (Belluzzo & Ishihara 2022).

In 1992, on behalf of the Mokuleia Land Company, ERC Environmental and Energy Services Co. (ERCE) completed an archaeological inventory survey and evaluation of lands within Mokulē‘ia Ahupua‘a, reaching within one kilometer to the southwest of the current project area (Drolet and Schilz 1992). This investigation evaluated a subset of the previous survey areas from Barrera (1986) and Kennedy (1986).

Their study area totaled 840 acres *mauka* (inland) and to the west of the current project area. The majority of sites were located in the upper foothills and included three settlement site clusters composed of habitation and agricultural features, likely from the late Precontact or early Historic Period (SIHP Sites #50-80-03-04772 through 04780 and -04782).

On behalf of the U.S. Army, a survey of a Historic Period roadway with bridge spans was conducted through TMK: (1) 6-8-003:009 and into adjacent parcels (Buffum et al. 2004), approximately one kilometer south of the current project area. The road extends through the current project area. The roadway and concrete bridge spans were constructed ca. 1952 and are part of a former military vehicle trail extending between Dillingham Training Area and Schofield Barracks. Buffum et al. (2004) evaluated the bridge spans as not eligible for the National Register of Historic Properties, and no SIHP number was assigned.

Carlson and Cleghorn (1993) conducted a surface survey and twenty-eight auger excavations at the proposed 'Āweoweo Beach Park, approximately 1.5 kilometers east of the current project area. No surface features were identified, but one auger test resulted in the identification of a cultural layer, SIHP Site #50-80-04-04657. The cultural layer included marine shell, fish scales, a single basalt flake, and charcoal. A *kukui* endocarp was obtained and sent for radiocarbon dating (Beta-62524) rendering an uncalibrated age of 250 ± 80 BP.

Projects in the greater project vicinity (Drolet and Schilz 1992) indicate extant Precontact and Historic sites above the coastal plain, but no remaining Precontact sites in the coastal plain. The few historic sites located in the coastal plain tend to be associated with plantation activity, particularly with irrigation and animal husbandry. This pattern is so prevalent that Kirch's research design for Anahulu focused on the upper valleys "owing to the obliteration of most of the surface archaeological landscape at coastal Waialua" (Kirch 1992:19). Following from this, while it is assumed that physical evidence associated Hawaiian settlement activities did previously exist in coastal portions of Mokulē'ia, it is expected that centuries of Historic Period land-use, such as agriculture, ranching, and the construction of residential communities along the coast in the early twentieth century will have destroyed most surface archaeology. Given how few Precontact sites have been identified in the coastal plain, it is difficult to predict what site types may be present. Though traditional models of Hawaiian settlement (e.g., Hommon 1986 and 2013, Kirch 1985 and 1992) suggest that these coastal portions would have been settled first, prior to expanding settlement into inland valleys.

Any extant remains likely consist of buried human skeletal remains or subsurface cultural layers, as a long history of agriculture, ranching, and residential development within the immediate vicinity of the parcels will likely have erased any surface architecture and artifacts pertaining to plantation activity, such as concrete pads, irrigation infrastructure, or rock walls. Given the proximity of the parcels to the O.R. & L. Railway line, which historically ran adjacent to the property's southern boundary, it is possible soil disturbance from grading and construction activities and/or archaeological features and artifacts associated with the development and use of the railway may be encountered. As traditional Hawaiian burials have been identified in both neighboring parcels (SIHP Sites #50-80-03-05599 & -09346) within a deposit of Jaucas sand that continues beneath the current project area, it is highly likely that additional human remains will be encountered during test excavations.

FIELD AND LABORATORY METHODS

The field methods proposed for the subsurface testing within the 68-617 Crozier Drive project area are described below.

Pre-fieldwork SHPD Consultation

Prior to undertaking the subsurface testing fieldwork, ASM's Principal Investigator will initiate consultation with SHPD Archaeology Branch via virtual meeting to discuss the field and laboratory methods proposed below for the subsurface testing within the 68-623A & 68-631 Crozier Drive project area.

Subsurface Testing

As shown in Figures 1 and 2, seventeen test trenches are proposed for the 68-623 & 68-631 Crozier Drive AIS. All test trenches will be four meters long, one meter wide, and excavated to the maximum depth possible using an excavator (approximately two meters) or to the depth of the water table. The excavator will be equipped with a flat-blade bucket attachment.

All test trenches will be photographed before and after excavation and additional photographs may be taken to document the progress of the excavation and any features that may be encountered. Scaled profile drawings will be prepared for each excavation and observed soils will be described in detail, using standard USDA soil descriptions referencing Munsell color notations. The results of the subsurface testing will include a discussion of the stratigraphy encountered in the excavated trenches. The precise location of each test trench will be selected in the field and recorded using a GPS receiver with sub-meter accuracy. ASM's Field Supervisor will be present in the field for all the subsurface testing.

If during the subsurface investigation human skeletal remains are encountered, excavation of the test trench will immediately stop, the Honolulu Police Department will be notified, and the SHPD will be contacted for guidance on how to proceed with the discovery.

Cultural Material Analyses

All recovered cultural material, with the exception of human remains (which will not be collected or analyzed), will be processed in the ASM Affiliates laboratory facility in Honolulu. Items will be cleaned, weighed, counted, described, and entered into a master project catalog. Where appropriate, artifacts will be drawn, photographed, and subject to further detailed analyses as may be necessary for addressing the specific research questions. Faunal remains will be tabulated and identified to the lowest taxonomic level possible. Where applicable, the Number of Identified Specimens (NISP) and the Minimum Number of Individuals (MNI) will be determined.

Radiocarbon Samples

If suitable wood charcoal and other organic samples are recovered, up to two samples will be prepared for possible radiocarbon assay. This will include taxonomic identification prior to selection for submittal. The radiocarbon samples collected during fieldwork will be prioritized based on size, provenience and integrity of association. Priority will be given to single-piece samples from short-lived, native plants recovered in-situ from a clear stratigraphic context.

EDXRF Analysis of Basalt and Volcanic Glass

Energy Dispersive X-ray Florescence (EDXRF) analysis will be conducted to ascertain the sources of basalt and volcanic glass artifacts. A maximum of five samples for stone sourcing will be submitted to the UH Hilo Geoarchaeology Laboratory for analysis.

Reporting

The findings of the subsurface testing will be incorporated into the AIS report in preparation by ASM for the 68-623A & 68-631 Crozier Drive project area.

Curation of Recovered Archaeological Material

All cultural material recovered during the AIS will be placed in labeled archival quality bags/containers and returned to the property owner along with an inventory sheet listing the contents of each bag/container. Should you have any questions, or if you would like further information, please feel free to contact me directly. Sincerely,



Nick Belluzzo, M.A.
Director, ASM Honolulu

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