

DAVID Y. IGE
GOVERNOR OF
HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

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

October 14, 2022

Ms. Mary Alice Evans, Director
Office of Planning and Sustainable Development
c/o Environmental Review Program
235 South Beretania Street, Room 702
Honolulu, Hawaii 96813

SUBJECT: Environmental Impact Statement Preparation Notice (EISPN) for the Proposed Department of Land and Natural Resources (DLNR) East Kapolei Transit-Oriented Development Project Located in 'Ewa, O'ahu, Hawai'i
Tax Map Keys: (1) 9-1-016:008; 9-1-017:097, 193 (por.), and 163; and 9-1-018:008 and 014

Dear Ms. Evans:

With this letter, we hereby submit the Environmental Impact Statement Preparation Notice (EISPN) for the Proposed Department of Land and Natural Resources (DLNR) East Kapolei Transit-Oriented Development Project situated at Tax Map Keys (TMKs) (1) 9-1-016:008; 9-1-017:097, 193 (por.), and 163; and 9-1-018:008 and 014 in the 'Ewa District on the island of O'ahu for publication in the next available edition of *The Environmental Notice*.

We are providing this EISPN electronically via the "*Submittal Form for HRS Chapter 343 Publications in the Periodic Bulletin*." This submittal includes a searchable Adobe Acrobat pdf file of the EISPN and a .zip file containing a shapefile of the action location boundary.

Should you have any questions please contact Lauren Yasaka at (808) 587-0431 or lauren.e.yasaka@hawaii.gov.

Sincerely,

A handwritten signature in black ink that reads "Suzanne D. Case".

Suzanne D. Case, Chairperson RT

From: webmaster@hawaii.gov
To: [DBEDT OPSD Environmental Review Program](#)
Subject: New online submission for The Environmental Notice
Date: Monday, October 17, 2022 4:29:15 PM

Action Name

East Kapolei Transit-Oriented Development Project

Type of Document/Determination

Environmental impact statement preparation notice (EISPN)

HRS §343-5(a) Trigger(s)

- (1) Propose the use of state or county lands or the use of state or county funds

Judicial district

‘Ewa, O‘ahu

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

(1) 9-1-016:008; (1) 9-1-017:097; (1) 9-1-017:163; (1) 9-1-017:193(por.); (1) 9-1-018:008; and (1) 9-1-018:014)

Action type

Agency

Other required permits and approvals

See Chapter VII of EISPN

Proposing/determining agency

Department of Land and Natural Resources

Agency contact name

Russell Tsuji

Agency contact email (for info about the action)

Russell.Y.Tsuji@hawaii.gov

Email address or URL for receiving comments

dlnrkapolei@munekiyohiraga.com

Agency contact phone

(808) 587-0419

Agency address

1151 Punchbowl Street
Honolulu, Hawai‘i 96813
United States
[Map It](#)

Public Scoping Meeting information

November 14, 2022, 5:30 p.m. Salvation Army Kroc Center

Accepting authority

State of Hawai'i, Governor

Accepting authority contact name

David Ige

Accepting authority contact email or URL

<https://governor.hawaii.gov/contact-us/contact-the-governor>

Accepting authority contact phone

(808) 586-0034

Accepting authority address

415 South Beretania Street
Honolulu, Hawai'i 96813
United States
[Map It](#)

Was this submittal prepared by a consultant?

Yes

Consultant

Munekiyo Hiraga

Consultant contact name

Tessa Munekiyo Ng

Consultant contact email

dlnrkapolei@munekiyohiraga.com

Consultant contact phone

(808) 983-1233

Consultant address

305 High Street
Suite 104
Wailuku, Hawai'i 96793
United States
[Map It](#)

Action summary

The proposed action involves the development of the East Kapolei Transit-Oriented Development (TOD) Plan which will include the development of a transit-oriented, mixed-use hub with commercial, retail, hotel, medical, and affordable, workforce, and market rental housing along with light industrial uses in the East Kapolei TOD area in 'Ewa, O'ahu, Hawai'i. The project area totals approximately 170 acres of land adjacent to or in proximity of the Keone'ae Rail Station, the University of Hawai'i West O'ahu (UHWO) and the Ho'opili master planned community.

Attached documents (signed agency letter & EA/EIS)

- [SOH-DLNR-EKapolei_SOH-DLNR-FONSI-Letter.pdf](#)
- [SOH-DLNR-E_Kapolei_MP_EISPN-Oct-2022.pdf](#)

Action location map

- [Shapefile.zip](#)

Authorized individual

Tessa Munekiyo Ng

Authorization

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

Environmental Impact Statement Preparation Notice

PROPOSED DLNR EAST KAPOLEI TRANSIT-ORIENTED DEVELOPMENT PLAN

**(TMK Nos. (1) 9-1-016:008; (1) 9-1-017:097;
(1) 9-1-017:163; (1) 9-1-017:193(por.);
(1) 9-1-018:008; and (1) 9-1-018:014)**

Prepared for:

**The State of Hawai'i,
Department of Land and Natural Resources**

Accepting Authority:

Governor, State of Hawai'i

October 2022

**Copyright © 2022
by Munekiyo Hiraga**



MUNEKIYO HIRAGA

Planning. Project Management. Sustainable Solutions.

Environmental Impact Statement Preparation Notice

PROPOSED DLNR EAST KAPOLEI TRANSIT-ORIENTED DEVELOPMENT PLAN

**(TMK Nos. (1) 9-1-016:008; (1) 9-1-017:097;
(1) 9-1-017:163; (1) 9-1-017:193(por.);
(1) 9-1-018:008; and (1) 9-1-018:014)**

Prepared for:

**The State of Hawai'i,
Department of Land and Natural Resources**

Accepting Authority:

Governor, State of Hawai'i

October 2022

**Copyright © 2022
by Munekiyo Hiraga**



CONTENTS

	<u>Page</u>
List of Acronyms.....	iv
Executive Summary.....	v
I. PROJECT OVERVIEW	1
A. PROJECT BACKGROUND, VISION, AND GOALS	1
B. PURPOSE AND NEED	2
C. PROJECT LOCATION, LANDOWNERSHIP, AND EXISTING USES	4
1. Keone‘ae Station Area.....	4
2. Kualaka‘i Parkway East.....	4
3. Kualaka‘i Parkway West.....	4
D. PROPOSED LAND DEVELOPMENT COMPONENTS	6
1. Keone‘ae Station Area.....	6
2. Kualaka‘i Parkway East.....	6
3. Kualaka‘i Parkway West.....	7
4. Other Land Plan-Related Improvements.....	7
E. CHAPTER 343, HAWAI‘I REVISED STATUTES COMPLIANCE	7
F. LAND USE ENTITLEMENTS REQUIRED	10
1. City and County of Honolulu, Land Use Ordinance, Zoning.....	10
G. PROJECT COST AND IMPLEMENTATION SCHEDULE.....	11
II. DESCRIPTION OF THE EXISTING ENVIRONMENT AND SCOPING OF POTENTIAL IMPACTS.....	12
A. PHYSICAL SETTING.....	12
1. Existing and Surrounding Land Uses.....	12
2. Climate.....	12
3. Topography and Soil Characteristics.....	13
4. Agriculture.....	17
5. Streams and Wetlands.....	19
6. Flood and Tsunami Hazards	22
7. Sea Level Rise	22
8. Flora and Fauna	25
9. Air Quality.....	25
10. Greenhouse Gas Emissions.....	25
11. Noise.....	25
12. Scenic and Open Space Resources.....	25
13. Archaeological and Historic Resources	26
14. Cultural Resources	26
15. Environmental Contaminants and Hazardous Materials.....	26
B. SOCIO-ECONOMIC ENVIRONMENT	27
1. Regional Setting	27
2. Population, Demography, and Social Impacts.....	28
3. Housing.....	28
4. Economy and Labor Force.....	28
C. PUBLIC SERVICES	29
1. Police and Fire Protection.....	29
2. Medical Facilities.....	29

3.	Education Facilities.....	29
4.	Recreational Facilities.....	30
5.	Solid Waste Collection.....	30
D.	INFRASTRUCTURE	31
1.	Roadways	31
2.	Water System.....	31
3.	Wastewater System.....	32
4.	Drainage System.....	32
5.	Electrical, Telephone, and Cable Television	32
E.	CUMULATIVE AND SECONDARY IMPACTS	33
III.	RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS.....	34
A.	STATE LAND USE DISTRICTS	34
B.	HAWAI'I STATE PLAN.....	34
C.	STATE FUNCTIONAL PLANS	34
D.	O'AHU GENERAL PLAN.....	36
E.	'EWA DEVELOPMENT PLAN	36
F.	EAST KAPOLEI NEIGHBORHOOD TRANSIT-ORIENTED DEVELOPMENT PLAN.....	39
G.	LAND USE ORDINANCE OF THE CITY AND COUNTY OF HONOLULU	39
H.	COASTAL ZONE MANAGEMENT AREA	41
IV.	ALTERNATIVES TO THE PROPOSED ACTION	43
A.	FORMULATION OF THE PREFERRED ALTERNATIVE FRAMEWORK.....	43
1.	Alternative 1	44
2.	Alternative 2	44
3.	Alternative 3	44
B.	OTHER DESIGN ALTERNATIVES.....	45
1.	No Land Exchange	45
2.	Increased Housing Density	45
C.	NO-ACTION ALTERNATIVE AND DEFERRAL OF ACTION ALTERNATIVE ...	46
V.	SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES	47
VI.	SIGNIFICANCE CRITERIA ASSESSMENT	48
VII.	LIST OF PERMITS AND APPROVALS.....	51
VIII.	PUBLIC MEETING	52
IX.	OTHER ELEMENTS TO BE ADDRESSED IN THE DRAFT ENVIRONMENTAL IMPACT STATEMENT	53
X.	STUDIES ANTICIPATED TO BE INCLUDED IN THE DRAFT ENVIRONMENTAL IMPACT STATEMENT	54
XI.	EARLY CONSULTATION WITH AGENCIES IN PREPARATION OF THE ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE	55
XII.	PARTIES TO BE CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT.....	56
XIII.	REFERENCES	i

K:\DATA\SOH DLNR\IE KAPOLEI MP EIS 2337\APPLICATIONS\EISP\NEISP\N.RPT.DOCX

List of Figures

	<u>Page</u>
Figure 1. Regional Location Map	3
Figure 2. Project Location Map	5
Figure 3. Conceptual Site Plan.....	8
Figure 4. Soil Association Map.....	14
Figure 5. Soil Classification Map.....	16
Figure 6. Agricultural Lands of Importance to the State of Hawai'i Map	18
Figure 7. Land Study Bureau	20
Figure 8. Streams and Wetlands Map.....	21
Figure 9. Flood Hazard Zones Map.....	23
Figure 10. Tsunami Evacuation Zones Map	24
Figure 11. State Land Use Districts Map.....	35
Figure 12. 'Ewa Development Plan Urban Land Use Map.....	38
Figure 13. East Kapolei Transit Oriented Development Plan Map	40
Figure 14. Land Use Ordinance Zoning Map.....	42

List of Tables

	<u>Page</u>
Table 1. Summary of Master Plan Areas.....	6
Table 2. Potential Master Plan Uses by Development Area.....	7
Table 3. Soil Classification	15
Table 4. Enrollments at Department of Education Schools Serving Kapolei Residents.....	30

List of Acronyms

ALISH	Agricultural Lands of Importance to the State of Hawai'i
BLNR	Board of Land and Natural Resources
BMP	Best Management Practices
BWS	Board of Water Supply
CIA	Cultural Impact Assessment
CZM	Coastal Zone Management
DA	Department of the Army
DEM	Department of Environmental Management
DHHL	Department of Hawaiian Home Lands
DLNR	Department of Land and Natural Resources
DOE	Department of Education
DOH	Department of Health
DPP	Department of Planning and Permitting
EIS	Environmental Impact Statement
EISPN	Environmental Impact Statement Preparation Notice
ERP	Environmental Review Program
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GHG	Greenhouse Gases
HAR	Hawai'i Administrative Rules
HART	Honolulu Authority for Rapid Transit
HCZMP	Hawai'i Coastal Zone Management Program
HHFDC	Hawai'i Housing Financing and Development Company
HPD	Honolulu Police Department
HRS	Hawai'i Revised Statutes
IAL	Important Agricultural Lands
LSB	Land Study Bureau
LUC	Land Use Commission
LUO	Land Use Ordinance
MG	Million Gallon
NPDES	National Pollutant Discharge Elimination System
OHA	Office of Hawaiian Affairs
PEDR	Preliminary Engineering and Drainage Report
ROH	Revised Ordinances of Honolulu
SHPD	State Historic Preservation Division
SMA	Special Management Area
SUC	Secondary Urban Center
TIAR	Traffic Impact Assessment Report
TMK	Tax Map Key
TOD	Transit-Oriented Development
UHWO	University of Hawai'i West O'ahu
USACE	U.S. Army Corps of Engineers
WGSL	Waimānalo Gulch Sanitary Landfill

Executive Summary

Project Name:	Proposed Department of Land and Natural Resources East Kapolei Transit-Oriented Development Plan
Type of Document:	Environmental Impact Statement (EIS) Preparation Notice
Legal Authority:	Chapter 343, Hawai'i Revised Statutes Title 11, Chapter 200.1, Hawai'i Administrative Rules
Determination:	EIS to be prepared
Applicable Chapter 343, HRS "Triggers":	Use of State Lands Use of State Funds
Location:	Honouliuli, 'Ewa, O'ahu
Tax Map Keys:	(1) 9-1-016:008; (1) 9-1-017:097; (1) 9-1-017:163; (1) 9- 1-017:193(por.); (1) 9-1-018:008; and (1) 9-1-018:014
Landowners:	State of Hawai'i D.R. Horton-Schuler Homes, LLC
Applicant:	State of Hawai'i Department of Land and Natural Resources 1151 Punchbowl Street Honolulu, Hawai'i 96813 Contact: Russell Tsuji, Administrator Telephone No.: (808) 587-0419
Accepting Authority:	Governor David Ige State of Hawai'i Executive Chamber, State Capitol 415 South Beretania Street Honolulu, Hawai'i 96813 Telephone No.: (808) 586-0034
Consultant:	Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawai'i 96793 Contact: Tessa Munekiyo Ng, AICP, Vice President Phone: (808) 983-1233 Email: dlnrkapolei@munekiyohiraga.com

Project Summary:

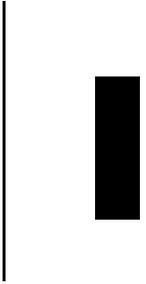
The Applicant, the State of Hawai'i, Department of Land and Natural Resources (DLNR), proposes the development of the East Kapolei Transit-Oriented Development (TOD) Plan which will include the development of a transit-oriented, mixed-use hub with commercial, retail, hotel, medical, affordable, workforce, and market rate multi-family rental housing and light industrial uses in the East Kapolei TOD area in Kapolei, O'ahu, Hawai'i.

The project area totals approximately 170 acres of land adjacent to or in proximity of the Keone'ae Rail Station, the University of Hawai'i West O'ahu (UHWO) and the Ho'opili master planned community.

Due to the potential for significant environmental impacts, the DLNR has determined that an Environmental Impact Statement (EIS) is likely to be required, and has initiated its environmental review through the preparation of an EIS Preparation Notice (EISPN). This EISPN has been prepared in accordance with Chapter 343, Hawai'i Revised Statutes and Chapter 200.1 of Title 11, Hawai'i Administrative Rules (HAR) for the Department of Health. Pursuant to 11-220.1-7(c), HAR, it has been determined that the Governor of the State of Hawai'i shall have final authority to accept the EIS.



PROJECT OVERVIEW



I. PROJECT OVERVIEW

A. PROJECT BACKGROUND, VISION, AND GOALS

The State of Hawai'i, Department of Land and Natural Resources (DLNR) proposes the development of the East Kapolei Transit-Oriented Development (TOD) Plan (referred to herein as “the project”, “the proposed project”, and “the master plan”) which will implement the vision and objectives of the *O‘ahu General Plan and the ‘Ewa Development Plan to create consistency with the East Kapolei Neighborhood TOD Plan* (Resolution 20-222, CD1).

In formulating the master plan proposed herein, the DLNR first assembled a comprehensive team of TOD experts and design, planning, and technical professionals to allow for extensive baseline research including the preparation of industrial and commercial market assessments, economic impact analyses, hotel market assessments, and affordable housing market assessments to evaluate the project’s need, guide the project’s TOD-related planning, and assess design alternatives. The master plan and related studies were guided by the following objectives listed below:

1. Variety of new land uses to generate revenue
2. Creation of affordable rental housing opportunities
3. Improve access to public agencies and services
4. Incorporate alternative modes of transportation to reduce reliance on automobiles

Through the planning process, the DLNR and its master planning consultant developed various iterations of the master plan. Three (3) alternatives were prepared and were discussed in a report entitled *East Kapolei Strategic Development Plan (Plan)*, prepared in October 2020 by R.M. Towill. On October 23, 2020, the Board of Land and Natural Resources (BLNR) reviewed the Plan and subsequently approved it along with an action to authorize the DLNR Chairperson to contract a consultant to prepare a Chapter 343, Hawai'i Revised Statutes (HRS) Environmental Impact Statement (EIS) to implement the Plan.

The master plan presented in this Environmental Impact Statement Preparation Notice (EISPN) represents the DLNR’s initial vision for the property that will be presented to the community for input and evaluated as part of the Chapter 343, HRS EIS process.

The proposed master plan consists of the development of a transit-oriented, mixed-use hub with commercial, retail, hotel, and medical spaces along with development for multi-family rental housing and light industrial uses in the East Kapolei TOD area in East

Kapolei, O'ahu, Hawai'i. See **Figure 1**. The proposed project represents the preferred alternative and is a land plan that the DLNR believes best meets the aforementioned objectives, responds to projected market conditions, and is suitable for the properties based upon its location. The proposed project will be implemented within an area that has been designated for mixed-use, TOD related development.

B. PURPOSE AND NEED

The DLNR is responsible for managing approximately 1.3 million acres of public lands, including sensitive natural, cultural, and recreational resource areas. The Department's responsibilities include managing and maintaining the State's coastal lands and waters, water resources, conservation and forestry lands, historic sites, small boat harbors, parks, and recreational facilities. DLNR also performs public safety duties (e.g., flood and rockfall prevention), issues and manages leases of public lands (agricultural, pasture, commercial, industrial, and resort leases), maintains unencumbered public lands, and enforces the Department's rules and regulations. This is embodied in DLNR's mission statement to:

Enhance, protect, conserve and manage Hawai'i's unique and limited natural, cultural and historic resources held in public trust for current and future generations of the people of Hawaii nei, and its visitors, in partnership with others from the public and private sectors.

DLNR lands not directly protected or utilized for conservation may be made available for market uses if consistent with the mission of the Department. Income generated from these uses could be used for public benefit by helping to support DLNR's primary mission of protecting natural, cultural, and historic resources.

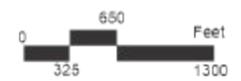
The proposed East Kapolei TOD Plan is an opportunity for the DLNR to generate ongoing lease revenue to support operations and management of public lands and programs. More importantly, the project is an opportunity to optimize the use of State lands to generate economic development and job opportunities for O'ahu residents in an area identified for future growth and meet the demand for affordable housing and light industrial space. The proposed project is located in the growing Kapolei area, ideal for expansion of the island's affordable housing and industrial land use needs. These uses are consistent with demands that were identified in the market study prepared as part of the earlier plan. An updated market study on which the refined master plan has been based will be provided and discussed in the Draft EIS.

In addition to meeting market demands, the proposed development makes prudent use of an area adjacent to a rail station which supports identified TOD planning principles.



Figure 1

DLNR East Kapolei TOD Plan Regional Location Map



Prepared for: State of Hawai'i, Department of Land and Natural Resources



C. **PROJECT LOCATION, LANDOWNERSHIP, AND EXISTING USES**

The project lands are mostly vacant and undeveloped non-contiguous lands formerly used for agricultural cultivation in East Kapolei. It is noted that portions of the Keone'ae Station Area and Kualaka'i Parkway East project area are being used for limited crop cultivation-related agricultural activities. The users of these areas are aware of the proposed redevelopment of the area. In addition, a portion of the Keone'ae Station Area was also recently used for a construction staging area for nearby construction projects. However, a recent site visit of the area conducted by DLNR staff revealed multiple unauthorized uses. The DLNR will work on resolving the unauthorized uses.

The master plan can be categorized into three (3) distinct areas as described below and shown in **Figure 2**.

1. **Keone'ae Station Area**

This area is bordered by Farrington Highway to the north, Kualaka'i Parkway to the south, and D.R. Horton's Ho'opili master-planned community to the east and southeast. A small portion of the Kalo'i Gulch bisects the northern corner. Also within the immediate vicinity is the Keone'ae Rail Station located to the southwest and adjacent to the University of Hawai'i West Oahu (UHWO).

2. **Kualaka'i Parkway East**

This area is bordered by Queen Lili'uokalani (H-1) Freeway to the north, Farrington Highway to the south, Kualaka'i Parkway to the west, and Ho'opili to the east and southeast. This area is bisected by Kalo'i Gulch.

3. **Kualaka'i Parkway West**

This area is bordered by the H-1 Freeway and a Board of Water Supply (BWS) water tank to the north. Farrington Highway, open land, Tokai International University and UHWO to the south and southwest, and open land to the west and east, respectively. Hunehune Gulch bisects this area on the northwest side.

The project area is comprised of six (6) tax map key (TMK) parcels. Refer to **Figure 2**. TMKs (1) 9-1-016:008, (1) 9-1-017:097, (1) 9-1-018:008, and (1) 9-1-018:014 are owned by the DLNR, while TMKs (1) 9-1-017:163 and (1) 9-1-017:193 are owned by D.R. Horton.

As part of the proposed master plan, the DLNR is negotiating a land exchange with D.R. Horton to extend the developable land of the area closest to the Keone'ae Rail Station. In exchange for a portion of TMK (1) 9-1-017:193 next to the Keone'ae Station Area, the Applicant would give D.R. Horton approximately 11.9 acres of land from Kualaka'i

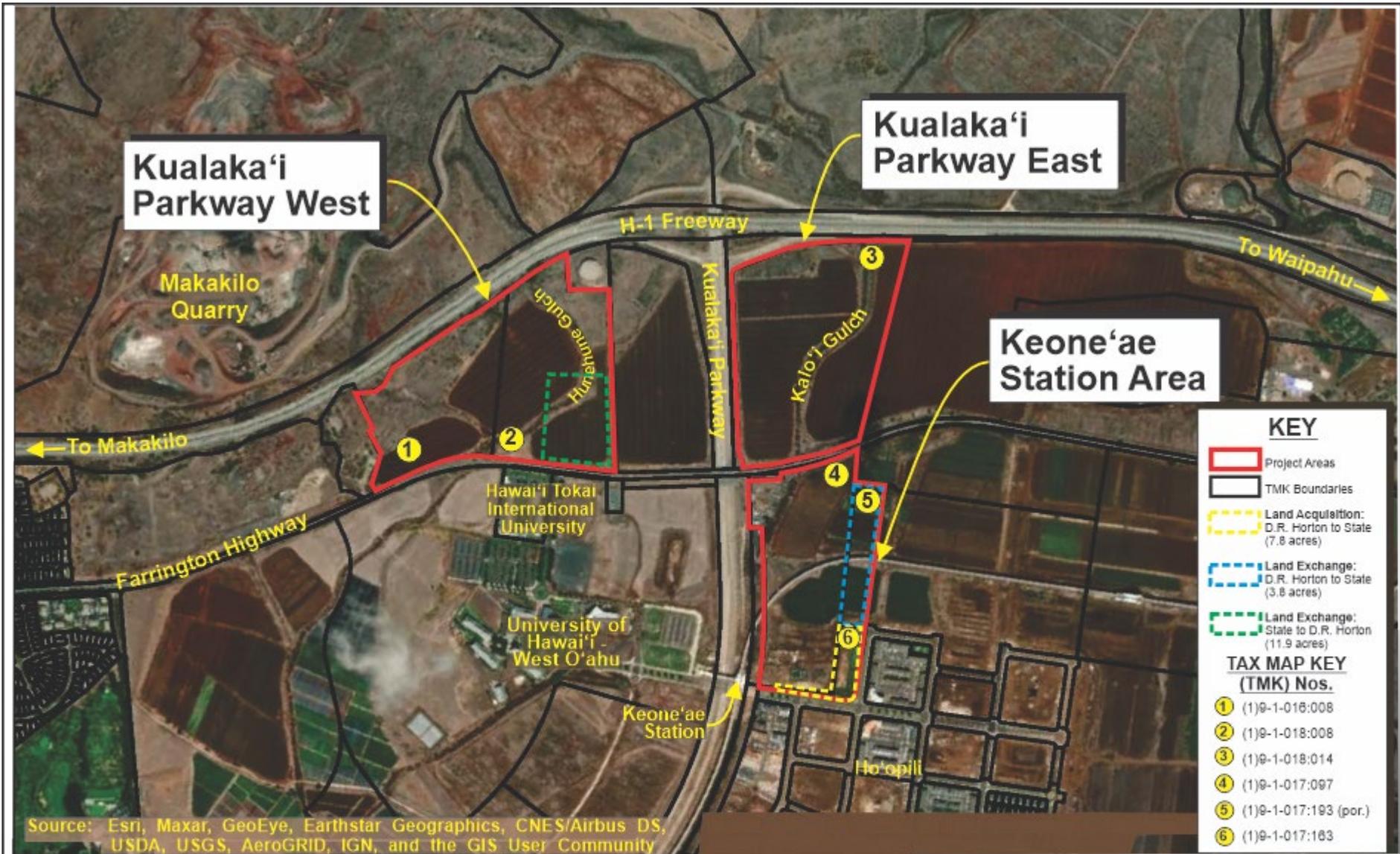
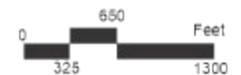


Figure 2

DLNR East Kapolei TOD Plan Project Location Map



Parkway West. D.R. Horton is also donating TMK (1) 9-1-017:063 to the DLNR for development of a Park and Ride facility for the Keone‘ae Rail Station. Refer to **Figure 2**.

The parcels comprising the master plan with and without the land exchange are presented in **Table 1** below.

Table 1. Summary of Master Plan Areas

	Keone‘ae Station Area	Kualaka‘i Parkway East	Kualaka‘i Parkway West	Total
TMKs Before Land Exchange	(1) 9-1-017:097 and (1) 9-1-017:163	(1) 9-1-018-014	(1) 9-1-016:008 and (1) 9-1-018:008	---
Area Before Land Exchange	40.2 Acres	59.2 Acres	72.6 Acres	172 acres
TMKs After Land Exchange	(1) 9-1-017:097, (1) 9-1-017:163, and (1) 9-1-017:193(por.)	(1) 9-1-018-014	(1) 9-1-016:008 and (1) 9-1-018:008(por.)	---
Area After Land Exchange	48 Acres	59.2 Acres	61.1 Acres	168.3 acres

D. PROPOSED LAND DEVELOPMENT COMPONENTS

The proposed development actions for the three (3) areas are described below. Conceptual site plans for the proposed project will be discussed further in the Draft EIS.

1. Keone‘ae Station Area

The proposed Keone‘ae Station Area will connect to the Keone‘ae Rail Station and will contain a 1,000 stall park-and-ride facility for the Honolulu Authority for Rapid Transportation (HART). This area will include mixed-use spaces for commercial, retail, office, and medical office spaces along with a 180-room hotel and affordable rental units. A multi-story housing development is being considered for a mix of approximately 750 workforce and market rate rental units. Additionally, 124,000 sq. ft. would be planned for retail, office, and medical office use.

2. Kualaka‘i Parkway East

The proposed Kualaka‘i Parkway East area is bisected by Kalo‘i Gulch and is adjacent to D.R. Horton’s Ho‘opili master-planned community, which is located to the east. Land to the west of of Kalo‘i Gulch will be used for light-industrial, and land to the east would contain an affordable housing development with approximately 250 multi-family rental units.

3. Kualaka'i Parkway West

The proposed Kualaka'i Parkway West area will be designated for light industrial use. Hunehune Gulch divides the area and may be re-aligned. In addition, as mentioned previously, a portion of this area is planned to be conveyed to D.R. Horton in exchange for lands to be used for the extension of the Keone'ae Station Area.

4. Other Land Plan-Related Improvements

Implementation of the land plan will involve development and installation of infrastructure to support the proposed uses. This will include, but not be limited to, access, utility, and public parking improvements. The Applicant intends to coordinate with the State TOD Council, Office of Planning and Sustainable Development (OPSD), and the Hawai'i Housing Finance and Development Corporation (HHFDC) to assist with funding infrastructure costs. Another necessary improvement currently underway is the widening of the Farrington Highway, which will allow access to the project parcels. Additional information and analysis of the projected infrastructure demands and system improvements will be discussed in the Draft EIS.

The conceptual land plan is provided as **Figure 3**. A summary of potential master plan uses by development area is provided in **Table 2** below.

Table 2. Potential Master Plan Uses by Development Area

Land Use	Developable Area/Gross Floor Area			Total
	Keone'ae Station Area	Kualaka'i Parkway East	Kualaka'i Parkway West	
Multi-Family Rental	750 Units	250 Units	----	1,000 Units
Retail and Office	124,000 s.f.	----	----	68,000 s.f.
Industrial	----	25 Acres	31.1 Acres	56.1 Acres
Hotel	180 Rooms	----	----	180 Rooms

E. CHAPTER 343, HAWAI'I REVISED STATUTES COMPLIANCE

The use of State lands and funds triggers compliance with Chapter 343, HRS. Due to the potential for significant environmental impacts, including those that may arise from the potential use of State lands, the DLNR has determined that an EIS is likely to be required, and has initiated its environmental review through the preparation of an EISPN. This EISPN has been prepared in accordance with Chapter 343, HRS and Chapter 200.1 of Title 11, Hawai'i Administrative Rules (HAR). Pursuant to §11-200.1-7(a)(1), HAR, it has been determined that the Governor of the State of Hawai'i shall have final authority to accept the EIS.

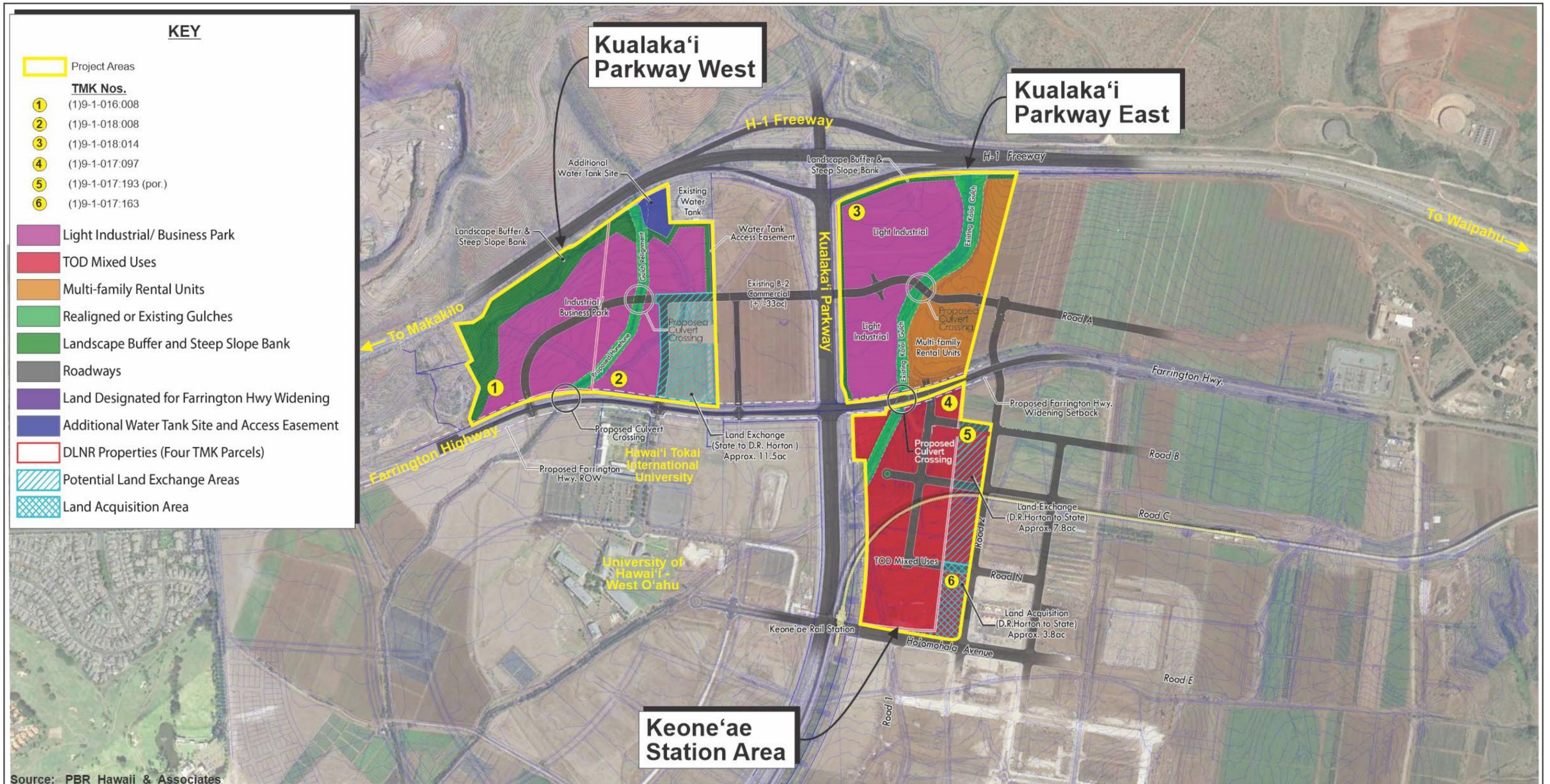


Figure 3

DLNR East Kapolei TOD Plan
Conceptual Site Plan

NOT TO SCALE



This EISPN provides public notification of the proposed project. One of the purposes of this EISPN is to solicit public comments on the scope of impacts to be addressed in the Draft EIS. Community input on the contents of the Draft EIS will be sought through this EISPN and a public scoping meeting. As per §11-200.1-2, HAR, the term “EIS public scoping meeting” is defined as “a meeting in which agencies, citizen groups, and the general public assist the proposing agency or applicant in determining the range of actions, alternatives, impacts, and proposed mitigation measures to be considered in the draft EIS and the significant issues to be analyzed in depth in the draft EIS.” The details regarding the public scoping meeting are provided in Chapter VIII.

The Draft EIS will provide information describing the purpose and need for the project, a more refined and detailed description of the proposed project, an analysis of the potential environmental consequences of the proposed project, and a discussion of alternatives considered. The Draft EIS will disclose significant short-term, long-term, and cumulative impacts on the human, natural, and built environment. The following resource categories have been tentatively identified for consideration in the Draft EIS:

- Existing and Surrounding Land Uses
- Climate
- Topography and Soil Characteristics
- Agriculture
- Streams and Wetlands
- Flood and Tsunami Hazards
- Sea Level Rise
- Flora and Fauna
- Air Quality
- Greenhouse Gas Emissions
- Noise
- Scenic and Open Space Resources
- Archaeological and Historic Resources
- Cultural Resources
- Environmental Contaminants and Hazardous Materials
- Regional Setting
- Population, Demography, and Social Impacts
- Economy and Labor Force
- Police and Fire Protection
- Medical Facilities
- Educational Facilities
- Recreational Facilities
- Solid Waste Collection
- Roadways
- Water System

- Wastewater System
- Drainage System
- Electrical, Telephone, and Cable Television Systems
- Cumulative and Secondary Impacts

At this stage, it is anticipated that the following site-specific environmental studies and analyses for the proposed project will be discussed in and appended to the Draft EIS, as appropriate:

- Conceptual Landscape Plan
- Design Guidelines
- View Analysis
- Sustainability Plan
- Preliminary Engineering and Drainage Report
- Traffic Impact Analysis Report
- Flora and Fauna Survey Report
- Jurisdictional Waters Delineation
- Archaeological Consultation and Documentation
- Cultural Impact Analysis
- Air Quality and Greenhouse Gas Emissions Study
- Noise Study
- Phase 1 Environmental Site Assessment
- Market Study
- Economic and Fiscal Impact

The Draft EIS document will be published in the OPSD, Environmental Review Program's (ERP) Environmental Notice bulletin and made available for a 45-day public review and comment period. Following this review process, the Applicant will prepare a Final EIS document responding to comments received on the Draft EIS. In addition to the public scoping meeting related to this EISPN (see Chapter VIII) and the public comment period, the Applicant intends to solicit community input through additional public meetings to be held throughout the project planning process.

F. LAND USE ENTITLEMENTS REQUIRED

1. City and County of Honolulu, Land Use Ordinance, Zoning

The majority of the project area is located within the "AG-1, Restricted Agriculture" zoning district according to the City and County of Honolulu's Land Use Ordinance (LUO), while TMK (1) 9-1-017:163 is primarily zoned "AMX-2, Apartment Mixed-Use Medium-Density", with a small portion zoned "BMX-3, Community Business Mixed-Use". The portion of TMK (1) 9-1-017:193 within the project area is zoned

“R-3.5, Residential”. The project parcels have been identified within the *East Kapolei Neighborhood TOD Plan* for mixed-use light industrial, mixed-use residential and commercial, and multi-family uses by the Department of Planning and Permitting (DPP) which allows for the project’s proposed commercial and residential uses. It is anticipated that TOD-specific zoning designations in line with the uses specified by the *East Kapolei Neighborhood TOD Plan* will be adopted.

Further information regarding the proposed land use entitlement changes for the project will be provided in the Draft EIS.

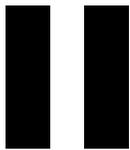
G. PROJECT COST AND IMPLEMENTATION SCHEDULE

The proposed land plan will be developed over a multi-phased time horizon. All major backbone infrastructure requirements will be completed prior to development of the related individual project components.

A project phasing plan and estimated project construction cost will be presented in the Draft EIS.



**DESCRIPTION OF THE EXISTING
ENVIRONMENT AND SCOPING OF
POTENTIAL IMPACTS**



II. DESCRIPTION OF THE EXISTING ENVIRONMENT AND SCOPING OF POTENTIAL IMPACTS

A. PHYSICAL SETTING

1. Existing and Surrounding Land Uses

The proposed project is located in East Kapolei in the 'Ewa District on the west side of the island of O'ahu. The city of Kapolei was designated as the "Secondary Urban Center" in the 1977 *O'ahu General Plan* and has since been developed to contain a variety of uses which include residential communities, commercial and retail centers, resorts, industrial spaces, and the University of Hawai'i West O'ahu (UHWO). Prior to this designation as an urban center, the Kapolei region was primarily used for agricultural activity.

The proposed project's parcels are currently vacant former agricultural lands surrounded by major roadways including Farrington Highway and the Queen Lili'uokalani Freeway (H-1). Kualaka'i Parkway bisects the project area and connects Kapolei Parkway to the H-1 which provides access to the island's primary urban center of Honolulu. It is noted that portions of the Kualaka'i Parkway West and Kualaka'i Parkway East project areas are being used for limited crop cultivation and related agricultural activities. The Keone'ae Station Area was also recently used for a construction staging area for nearby construction projects. A recent site visit of the area conducted by DLNR staff revealed multiple unauthorized uses. The DLNR has been in contact with the unauthorized users regarding the proposed project.

The proposed project's relationship to existing and surrounding land uses will be further assessed in the Draft EIS.

2. Climate

O'ahu is characterized by a fairly stable, semi-tropical climate containing a multitude of individual microclimates due to its diverse mountainous terrain and consistent tradewinds. The mean annual temperature of the island near sea level is approximately 78.9 degrees Fahrenheit. A high proportion of the rainfall that O'ahu receives each year falls on the northeast facing shores on the Windward coast and at higher elevations leaving the south and southwest Leeward coastal areas relatively dry.

The project site is located within one of these drier areas of the Leeward coast. The Leeward coast is generally sunny, warm, and dry throughout the entire year.

Similar to the rest of the State, July through September are historically the warmer months of the year, while the cooler months are December through February. Temperatures throughout the year range from an average low of 74.9 degrees Fahrenheit to an average high of 83.1 degrees Fahrenheit (Hawai'i State Data Book, 2020).

Average rainfall distribution in the Kapolei area is relatively low and on average receives approximately under an inch of rain per month to approximately 10 inches per month. Rainfall is highly seasonal, with most of the precipitation occurring in the winter months (Online Rainfall Atlas of Hawai'i, 2013).

Northeast tradewinds prevail approximately 73 percent of the time. Tradewinds originating from the northeast average 10.13 miles per hour. Between October and April, the southerly winds of Kona storms may be experienced (Hawai'i State Data Book, 2020).

From an environmental standpoint, replacement of vegetative surfaces with hardscapes associated with roadways, paved parking areas, and buildings may yield a tendency towards slightly increasing ambient air temperatures. To address this "heat island" effect, proposed landscaping and landscaped buffers will be proposed for integration into the project. Additional information regarding the proposed landscaping plan for the project will be included in the Draft EIS.

3. Topography and Soil Characteristics

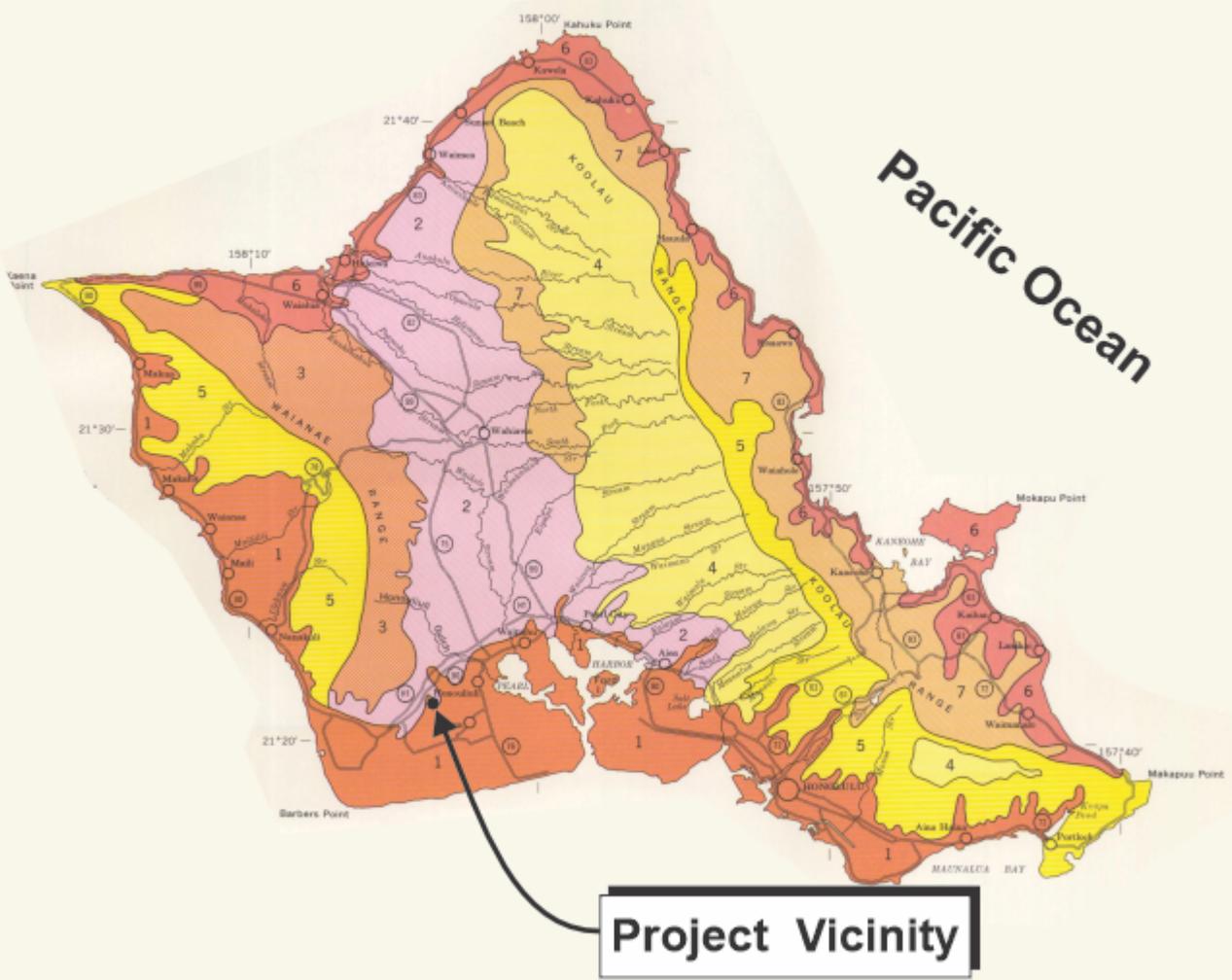
The project area is generally flat or very gently sloping.

Underlying the project area are the Lualualei-Fill land-Ewa and Helemano-Wahiawa soil associations. See **Figure 4**. The Soil Survey of the Islands of Kaua'i, O'ahu, Maui, Moloka'i and Lāna'i, State of Hawai'i characterizes these soil associations as deep, nearly level to moderately sloping. The Lualualei-Fill land-Ewa association has well-drained, fine to moderately fine textured soils, elevation levels ranging from sea level to 400 feet and is most suitable for sugar cane, truck crops, pasture, and urban development. Fill land is used for airports, industrial, and homesites. The Helemano-Wahiawa soil association has well-drained, fine to moderately fine textured soils, elevation levels ranging from 100 to 1,200 feet, and occurs in expansive areas dissected by gulches. These soil associations have been used for pasture and sugar cane and pineapple cultivation.

The specific soil types underlying the project area are described in **Table 3** below. See **Figure 5** for Soil Classification Map.

SOIL ASSOCIATIONS

- | | |
|---|--|
| <p>1 Lualualei-Fill land-Ewa association: Deep, nearly level to moderately sloping, well-drained soils that have a fine textured or moderately fine textured subsoil or underlying material, and areas of fill land; on coastal plains</p> <p>2 Helemano-Wahiawa association: Deep, nearly level to moderately sloping, well drained soils that have a fine-textured subsoil; on uplands</p> <p>3 Tropohumults-Dystrandpts association: Gently sloping to very steep, well-drained soils that are underlain by soft weathered rock, volcanic ash, or colluvium; on narrow ridges and side slopes</p> | <p>4 Rough mountainous land-Kapaa association: Very steep land broken by numerous drainageways and deep, well-drained soils that a fine textured or moderately fine textured subsoil; in gulches and on narrow ridges</p> <p>5 Rock Land-Stony steep land association: Steep to precipitous, well drained to excessively drained, rocky and stony land</p> <p>6 Kaena-Waialua association: Deep, mainly nearly level and gently sloping, poorly drained to excessively drained soils that have a fine-textured to coarse-textured subsoil or underlying material; on coastal plains and talus slopes and in drainageways</p> <p>7 Lolekoa-Waikane association: Deep, nearly level to very steep, well-drained soils that have a dominantly fine-textured subsoil; on fans, terraces, and uplands</p> |
|---|--|



Source: USDA, Soil Conservation Service

Figure 4 DLNR East Kapolei TOD Plan Soil Association Map NOT TO SCALE



Prepared for: State of Hawai'i, Department of Land and Natural Resources



Table 3. Soil Classifications

Soil Symbol	Soil Name	Description
EaB	Ewa silty clay loam, 3 to 6 percent slopes	EaB soil is found on alluvial fans and is characterized as having moderate permeability, slow runoff and a slight erosion hazard.
EwC	Ewa stony silty clay, 6 to 12 percent slopes	EwC soil is similar to EaB soil but contains stones in the surface layer. Runoff is slow to medium and the erosion hazard is slight to moderate.
HxA	Honouliuli clay, 0 to 2 percent slopes	HxA soil occurs in the coastal plains lowlands and has moderately slow permeability, slow runoff with a no more than slight erosion hazard.
HxB	Honouliuli clay, 2 to 6 percent slopes	HxB soil is similar to HxA soils but has a slight erosion hazard.
KlaB	Kawaihapai stony clay loam, 2 to 6 percent slopes	KlaB soil is found on smooth slopes in drainageways and on coastal plains. This soil is described as having slow runoff and a slight erosion hazard. Stones are present throughout the KlaB which may hinder cultivation.
KlBc	Kawaihapai very stony clay loam, 0 to 15 percent slopes	KlBc soils are similar to KlaB soils but contains enough stones that prevent cultivation. Runoff is medium with a moderate erosion hazard.
KyA	Kunia silty clay, 0 to 3 percent slopes	KyA occupies broad, smooth slopes on the island of O'ahu and has moderate permeability, slow runoff and a no more than slight erosion hazard.
MuB	Molokai silty clay loam, 3 to 7 percent slopes	MuB is found on the uplands of the islands of Maui, Lāna'i, Moloka'i and O'ahu. MuB is classified as having moderate permeability, slow to medium runoff with a slight to moderate erosion hazard.
MuC	Molokai silty clay loam, 7 to 15 percent slopes	MuC soil is found on knolls and sharp slope breaks and is similar to MuB soil but has medium runoff and a moderate erosion hazard.
rSY	Stony Steep Land	rSY is made up of a mass of boulders and stones which have been deposited on the side slopes of drainageways from water and gravity. Rock outcrops are common and soil is minimal but can be found among the stones.
WkA	Waialua silty clay 0 to 3 percent slopes	WkA soil occurs on smooth coastal plains and is characterized as having moderate permeability, slow runoff and a no more than slight erosion hazard.
WzA	Waipahu silty clay 0 to 2 percent slopes	WzA soil is found on dissected marine terraces and has moderately low permeability, slow to very slow runoff and none to slight erosion hazard.

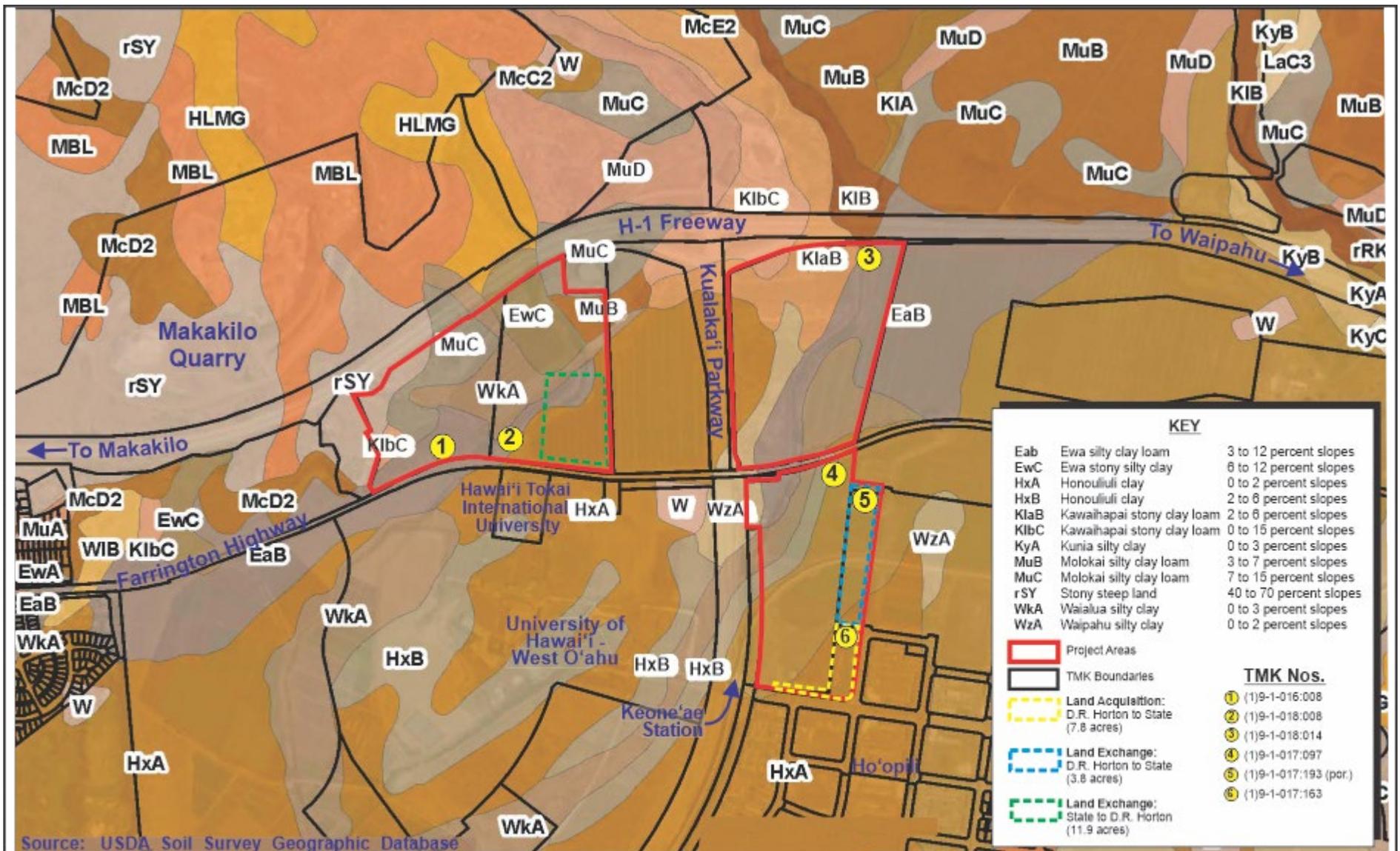


Figure 5

DLNR East Kapolei TOD Plan Soil Classification Map



Grading work will be undertaken to set roadway grades and adjacent grades for developable lands. All grading work will comply with applicable requirements of Chapter 14, Article 14, Permits, Bonds and Inspection for Grading, Soil Erosion and Sediment Control of the Revised Ordinances of Honolulu (ROH), 1990. A Preliminary Engineering and Drainage Report (PEDR) will be prepared for the project by a licensed civil engineer, which will be included in the Draft EIS and present additional information on the grading concept.

4. Agriculture

Historical agricultural activity in the project area has been dominated by sugar cultivation. There were several major sugar plantations in the 'Ewa region including the Ewa Plantation Company. The specific project parcels were in cultivation by the Oahu Sugar Company in the early to mid 20th century. Currently, portions of the Keone'ae Station Area, Kualaka'i Parkway East, and Kualaka'i Parkway West project areas are being used for limited crop cultivation and related agricultural activities.

On the Island of O'ahu approximately 127,698 acres have been designated as "Agricultural" by the State Land Use Commission (LUC), representing approximately 33 percent of the island.

In 1977, the State Department of Agriculture developed a classification system to identify Agricultural Lands of Importance to the State of Hawai'i (ALISH). The classification system is based primarily, though not exclusively, upon the soil characteristics of the lands. The three (3) classes of ALISH lands are: "Prime", "Unique", and "Other Important" agricultural land, with all remaining lands termed "Unclassified".

When utilized with modern farming methods, "Prime" agricultural lands have a soil quality, growing season, and moisture supply necessary to produce sustained crop yields economically. "Unique" agricultural lands possess a combination of soil quality, growing season, and moisture supply to produce sustained high yields of a specific crop. "Other Important" agricultural lands include those that have not been rated as "Prime" or "Unique" but are of state-wide or local importance for agricultural use.

A majority of the project area is classified as "Prime" lands by the ALISH system with portions classified as "Other Important" agricultural lands and a portion of the area unclassified. See **Figure 6**.

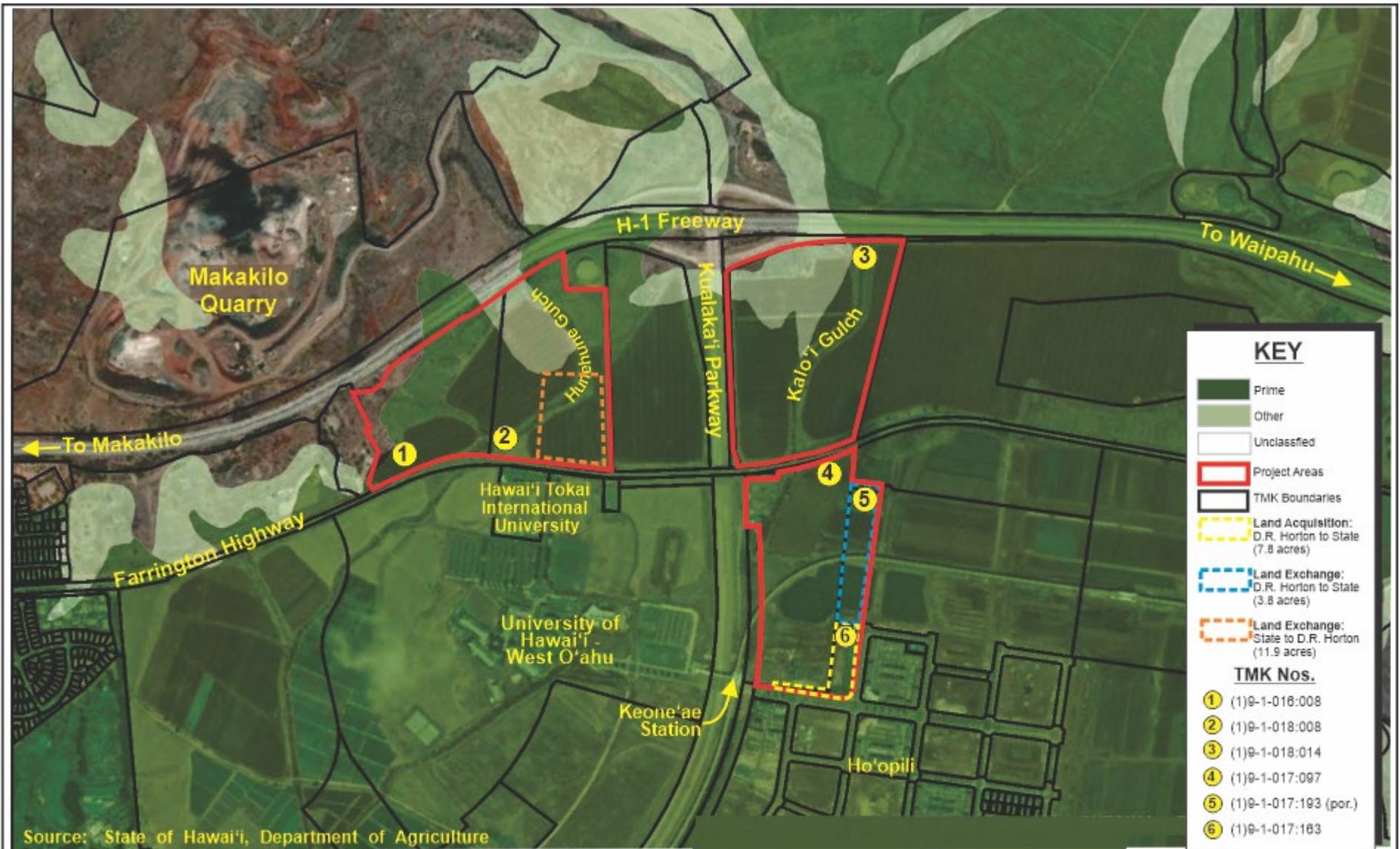


Figure 6

DLNR East Kapolei TOD Plan
Agricultural Lands of Importance to the
State of Hawai'i Map



The University of Hawai'i, Land Study Bureau (LSB) developed the Overall Productivity Rating, which classified soils according to five (5) levels, with "A" representing the class of highest productivity soils and "E" representing the lowest.

These letters are followed by numbers which further classify the soil types by conveying such information as texture, drainage, and stoniness. The ratings are based on soil properties, topography, climate, and other factors. Most of the project area is designated as "A" and "B" with portions designated as "C" and "E". See **Figure 7**.

Chapter 205, HRS, declared that the people of Hawai'i have a substantial interest in conserving the agricultural resources of the State. The State calls for the identification of Important Agricultural Lands (IAL) to identify and plan for the maintenance of a strategic agricultural land resource base that can support a diversity of agricultural activities and opportunities that expand agricultural income. The project area is not designated as IAL.

An analysis of impacts to agricultural productivity will be included in the Draft EIS.

5. Streams and Wetlands

The Hunehune Gulch and the Kalo'i Gulch traverse through the project area. In addition, the National Wetland Inventory identifies an unnamed riverine feature that traverses both the Kualaka'i Parkway East and Keone'ae Station Area project parcels. See **Figure 8**. This feature is likely a remnant agricultural ditch. It is noted that there are no perennial flows of water observed in the riverines or gulches at the project site.

The project area will be surveyed for aquatic resources and a jurisdictional waters delineation for wetlands, streams and ditches will be prepared. In addition, coordination will be undertaken with the Department of the Army (DA), U.S. Army Corps of Engineers (USACE) to determine if any drainageways are waters of the U.S and thus to determine if any DA permitting is required. This coordination will be further discussed in the Draft EIS.

The PEDR that will be prepared will also assess hydrological conditions affecting the natural drainage patterns within the project area, as well as the project's impact on existing features. As mentioned previously, a copy of the PEDR will be included and discussed in the Draft EIS.



Figure 7

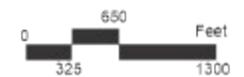
DLNR East Kapolei TOD Plan
Land Study Bureau Map





Figure 8

DLNR East Kapolei TOD Plan Streams and Wetlands Map



Prepared for: State of Hawai'i, Department of Land and Natural Resources



6. Flood and Tsunami Hazards

The Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) indicates that the majority of the project area is located within Flood Zone D, an area with potential but undetermined flood hazards. Land in Flood Zone D has not been analyzed for flood hazards and tends to be in areas with little development. See **Figure 9**. The County of Honolulu, Department of Emergency Management's Tsunami Evacuation Maps designate three areas: 1) the Safe Zone, illustrated in green on the maps, identifies the area to which people should evacuate in the event of a tsunami; 2) the Extreme Tsunami Evacuation Zone, shown in yellow, designates areas which should be evacuated during an Extreme Tsunami Warning; and 3) the Tsunami Evacuation Zone, shown in red, identifies areas which should be evacuated in the event of any type of Tsunami Warning. During a Tsunami Warning, destructive waves may inundate all coastlines, while during an Extreme Tsunami Warning waves may move more significantly inland. The Tsunami Evacuation Map for the project area shows the project area as being within the Safe Zone. See **Figure 10**.

There are no restrictions on development associated with the Flood Zone D designation and the entire project area is located outside of the Tsunami Evacuation Zone. Retention basins and appropriate flood prevention measures will be implemented into the project's overall drainage plan which will be discussed further in the Draft EIS.

7. Sea Level Rise

Due to Hawai'i's location in the Pacific, it is often faced with risks due to extreme weather events. Changing climatic patterns caused by global warming result in impacts, including rising sea levels, storm surge, increased flood potential, and beach erosion for oceanfront and shoreline parcels. To evaluate potential risks due to sea level rise, several resources that are available for planning for sea level rise in Hawai'i were consulted. These include the Hawai'i Sea Level Rise Vulnerability and Adaptation Report that was prepared in 2017 by the Hawai'i Climate Change Mitigation and Adaptation Commission that projects a 3.2-foot rise in sea level for the Hawaiian Islands by the mid-to-latter half of the 21st century. It is noted that the project sites are located inland and outside of the projected 3.2-foot sea level rise exposure area (Hawai'i Climate Change Mitigation and Adaptation Commission, 2017). Sea level rise impacts will be further discussed in the Draft EIS.



Figure 9

DLNR East Kapolei TOD Plan
Flood Hazard Zones Map



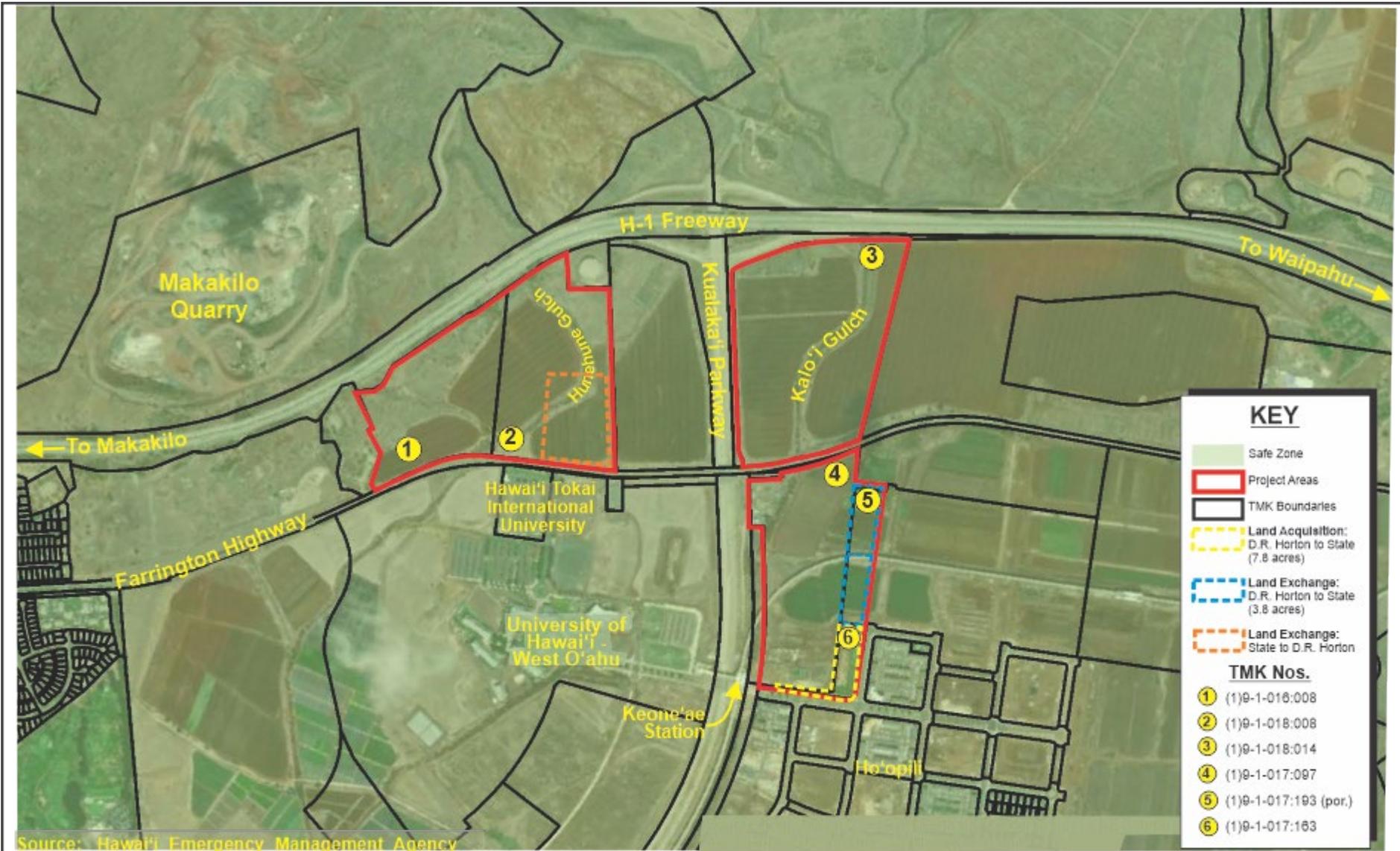


Figure 10

DLNR East Kapolei TOD Plan
Tsunami Evacuation Zones Map



Prepared for: State of Hawai'i, Department of Land and Natural Resources



8. Flora and Fauna

A site specific Flora/Fauna Survey to determine if threatened or endangered species are present in the project area will be carried out as part of the environmental review process for the project. A copy of the Flora/Fauna Survey will be included and discussed in the Draft EIS.

9. Air Quality

The area in general does not experience adverse air quality conditions. The State of Hawai'i, Department of Health (DOH) Clean Air Branch measures ambient air quality in Kapolei. Measurements from the Kapolei station indicate that generally, air quality in the region is good.

An Air Quality and Greenhouse Gas Emissions Study will be prepared as part of the environmental review process, a copy which will be included and discussed in the Draft EIS.

10. Greenhouse Gas Emissions

Within the State of Hawai'i, the energy sector (including fossil fuel burning to produce electricity, transportation, waste incineration, and natural gas systems) is identified as the source of approximately 89 percent of greenhouse gas (GHG) emissions. Other sources of GHG emissions include industrial facilities, agriculture and forestry, and waste treatment such as landfills, composting, and wastewater treatment (State of Hawai'i, Department of Health, 2021). As discussed above, an Air Quality and Greenhouse Gas Emissions Study will be prepared as part of the environmental review process for the project. A copy of this report will be included and discussed in the Draft EIS.

11. Noise

Existing background noise in the vicinity of the project area is principally attributed to vehicular traffic traversing through the area.

A Noise Study will be prepared as part of the environmental review process, a copy of which will be included and discussed in the Draft EIS.

12. Scenic and Open Space Resources

The project area is situated within East Kapolei of the 'Ewa Region at the foothills of the Wai'anae mountain range. The Wai'anae mountains are a primary scenic resource in the area. The area is relatively flat, but views of the Pacific Ocean, Diamond Head, and downtown Honolulu can be seen in the distance from certain vantage points.

The proposed project will be designed with careful consideration given to community input to be obtained during the planning process, to complement and enhance existing development within East Kapolei. A view analysis, providing “before” and “after” perspectives of the proposed master plan development from public vantage points, will be prepared and included in the Draft EIS.

13. Archaeological and Historic Resources

Archaeological documentation will be prepared for the project area and coordination undertaken with the State Historic Preservation Division (SHPD) as part of the environmental review process for the proposed project area. This documentation and consultation with SHPD will be reported in the Draft EIS to document the manner in which archaeological resources may be impacted and how such impacts will be mitigated.

14. Cultural Resources

In terms of traditional Hawaiian perspectives of the island, the project site is situated within the moku, traditional land district, of ‘Ewa and in the ahupua‘a of Honouliuli. The Honouliuli ahupua‘a encompasses the land from the ‘Ewa-Wai‘anae boundary to the western boundary of Pearl Harbor, or Pu‘uloa. Here, fish and limu were consumed and lo‘i and kalo were abundant.

Following Western settlement in the islands, land uses in Honouliuli underwent a transition away from subsistence cultivation. The Great Māhele of 1848 precipitated the acquisition of substantial tracts of land by mainland businessmen for the establishment of plantations and ranches. In 1877, James Campbell purchased much of the land in Honouliuli which was primarily used for cattle grazing. During the plantation era, much of the land was also used for sugar cultivation. Since the decline of the sugar industry in Hawai‘i, much of the land in the ahupua‘a of Honouliuli remains vacant. However, in more recent years there have been multiple housing, commercial, and industrial developments (PBR, 2008).

A Cultural Impact Assessment (CIA) for the project area will be prepared as part of the environmental review process. A copy of the CIA report will be included and its findings discussed in the Draft EIS.

15. Environmental Contaminants and Hazardous Materials

The project area was in previous agricultural cultivation and, therefore, has the potential to contain contaminants in the form of pesticides and fertilizers.

A Phase 1 Environmental Site Assessment will be conducted for the project area to assess these potential hazards.

It is noted that light industrial uses are proposed for portions of the project. Anticipated light industrial uses include warehousing and distribution types of activity. Heavy industrial uses such as manufacturing, nuisance industries and storage of raw materials will not be permitted. The DLNR stipulates that lessees shall not allow the storage or use of hazardous materials not sanctioned by law or by the highest standards prevailing in the industry.

Additionally, a schematic landscape design for the project will be based upon a sustainable concept that reduces the use of chemical herbicides, pesticides, and fertilizers. The main objective will be to create a low maintenance, aesthetically pleasing landscape that limits impacts to the site and surrounding natural resources. While fertilizers may be used to help establish new plantings, and herbicides and pesticides may be used for landscape maintenance, the intent is to limit the use of fertilizers, herbicides, and pesticides to the extent practicable.

Furthermore, a comprehensive drainage system will be implemented as part of the proposed project to retain stormwater increases due to the development and also provide water quality treatment to prevent impacts to downstream properties. A more detailed discussion of the project's landscaping and drainage system in relation to this resource parameter will be included in the Draft EIS.

B. SOCIO-ECONOMIC ENVIRONMENT

1. Regional Setting

From a regional standpoint, the project area is located in East Kapolei within the larger 'Ewa region on the west side of O'ahu. The 'Ewa region has been steadily developing into the secondary urban center which contains multiple residential communities and commercial centers. The city of Kapolei is home to Kapolei Hale, the City and County of Honolulu's regional satellite city hall, as well as a State office building with eight (8) departments, and a Federal Government office building.

The proposed project will be designed to be compatible with the surrounding residential, commercial, industrial, and government land uses. Project design parameters will take into consideration architectural and landscape thematic concepts which will advance consistency with the area's built environment. Design guidelines will be prepared and included in the Draft EIS.

2. Population, Demography, and Social Impacts

O'ahu's population in 2010 was 911,841 residents. The island's population grew to 984,821 residents in 2020, an increase of 8 percent since 2010. The proposed project is located on the west side of O'ahu in the 'Ewa district. Just as O'ahu's population has grown, the resident population of 'Ewa has also increased. The population of the 'Ewa region in 2010 was 323,118. According to the 2020 Census, the resident population for the region was approximately 360,841, an increase of 10.5 percent over 10 years (U.S. Census Bureau, 2020).

The proposed project is aimed at creating a sustainable, mixed use TOD area that will create employment and housing opportunities for O'ahu residents. The project will connect to the Keone'ae Rail Station located next to the UHWO and will be surrounded by other planned communities, including D.R. Horton's Ho'opili master planned community and the Department of Hawaiian Home Land's (DHHL's) Ka'uluokaha'i residential community.

3. Housing

The project proposes the creation of up to 1,000 multi-family rental units. The severe need and pent up demand for housing, particularly affordable housing, has long been acknowledged throughout the State and on the island of O'ahu.

Findings and recommendations from a residential market study will be included and discussed in the Draft EIS.

4. Economy and Labor Force

The economy and labor force of O'ahu is varied and consists mostly of non-agricultural jobs in industries such as government, defense, trade, transportation and utilities, health care, retail, and other professional services.

As previously mentioned, a market study has been prepared to assess the demand for industrial, commercial, office and rental housing spaces in the project region. Findings and recommendations from the market study will be included and discussed in the Draft EIS. In addition, an Economic and Fiscal Impact Assessment report will be conducted as part of the environmental process, a copy of which will be included and the findings of which will be discussed in the Draft EIS.

C. PUBLIC SERVICES

1. Police and Fire Protection

The headquarters of the Honolulu Police Department (HPD) are located in Honolulu. The department consists of several patrol, support, administrative, and investigative divisions that service the areas of Honolulu, Kahuku, Kalihi, Kailua, Kāneʻohe, Kapolei, Pearl City, Wahiawa, Waiʻanae, and Waikīkī.

The HPD's Kapolei Police Station, along with the Waiʻanae Substation service District 8, which includes communities of ʻEwa, ʻEwa Beach, Westloch, Barbers Point, Kapolei, Makakilo, Campbell Industrial Park, Honokai Hale, Ko Olina, Nānākuli, Māʻili, Waiʻanae, Mākaha, Mākua, and Kaʻena.

Fire prevention, protection, and suppression services are provided by the Honolulu Fire Department (HFD).

Consultation with the HPD and HFD will be undertaken during the environmental review process.

2. Medical Facilities

There are two (2) hospitals in the vicinity of the project area which include The Queen's Medical Center West Oʻahu in ʻEwa Beach, approximately five (5) miles from the project area, and Hawaiʻi Pacific Health's Pali Momi Medical Center in ʻAiea, approximately 10 miles away from the project area. Both hospitals provide general, acute, and emergency care services.

Clinics and doctors' offices are situated throughout Kapolei which include the Queen's Health Center, Kaiser Permanente's West Oʻahu Medical Office, Urgent Care Hawaiʻi and the Waiʻanae Coast Comprehensive Health Center.

Analysis of the proposed project's impacts on medical facilities will be included in the Draft EIS.

3. Education Facilities

The Hawaiʻi Department of Education (DOE) operates eight (8) schools in the Kapolei complex. Barber's Point Elementary School, Hoʻokele Elementary School, Kapolei Elementary School, Makakilo Elementary School, and Mauka Lani Elementary School cover kindergarten to grade 5. Honouliuli Middle School covers grades 6 to 7 and Kapolei Middle School covers grades 6 to 8 while Kapolei High School covers grades 9 to 12. The enrollment for these schools are presented in **Table 4.**

Table 4. Enrollments at Department of Education Schools Serving Kapolei Residents

School	Actual Enrollment
	SY 21-22
Kapolei High School	2,032
Honouliuli Middle School	445
Kapolei Middle School	943
Barber’s Point Elementary School	503
Ho’okele Elementary School	779
Kapolei Elementary School	717
Makakilo Elementary School	469
Mauka Lani Elementary School	592

Several of the DOE schools in Kapolei have opened in the last decade, including Ho’okele Elementary School which opened in 2015 and Honouliuli Middle School which opened in 2018.

The University of Hawai’i West O’ahu (UHWO), located in Kapolei next to the project area, is a branch of the University of Hawai’i system. UHWO is a four-year university and had an enrollment of 3,008 students in fall 2021. The campus sits upon an approximately 193-acre parcel and contains multiple classrooms, faculty and administrative offices, a campus center, courtyard, student garden and parking lots.

A discussion of impacts to educational facilities will be included in the Draft EIS.

4. Recreational Facilities

Diverse recreational opportunities are available in the ‘Ewa region and West O’ahu. There are multiple beach parks along the West O’ahu coast including Barber’s Point Beach Park, Ko Olina Beach Park, Ma’ili Beach Park, and Mākaha Beach Park. There are also multiple community parks which include Kapolei Regional Park and Makakilo Community Park, along with several municipal golf courses. Activities, such as fishing, surfing, snorkeling, swimming, and camping, are popular forms of recreation in the area.

A discussion of impacts to recreational facilities will be included in the Draft EIS.

5. Solid Waste Collection

The City and County of Honolulu operates nine (9) refuse drop off-locations, six (6) convenience centers, and three (3) transfer stations for trash disposal by O’ahu residents. Commercial trash disposal is only allowed at the three (3) transfer stations. Refuse from these locations are transferred to either the Waimānab

Gulch Sanitary Landfill (WGSL) or the H-Power (Honolulu Program of Waste Energy Recovery) facility. Combustible waste processed at H-Power is incinerated and converted into energy. Approximately 2,000 tons of waste is processed and converted at H-Power to produce up to 10 percent of O'ahu's electricity. The City and County of Honolulu has initiated a process to identify a new landfill location after the WGSL reaches capacity.

A discussion of solid waste considerations will be included in the Draft EIS.

D. INFRASTRUCTURE

1. Roadways

Access to the project sites are provided by Farrington Highway, the Queen Lili'uokalani Freeway (H-1), and Kualaka'i Parkway. Farrington Highway is a major State highway that runs along the west and southwestern O'ahu coast. The H-1 is the island's busiest highway and connects Kapolei to Honolulu and the eastern side of O'ahu. Kualaka'i Parkway is a regional road that bisects the project area and provides access from Kapolei Parkway to the project area, Farrington Highway and the H-1.

A Traffic Impact Analysis Report (TIAR) addressing the build-out of the proposed project will be prepared as part of the environmental review process to assess the potential traffic impacts associated with the proposed development. A copy of the project's TIAR will be included and discussed in the Draft EIS.

2. Water System

There is an existing 2.5 million gallon (MG) potable water tank owned by the BWS located along the northeastern edge of the Kualaka'i Parkway West project area. There are plans to house an additional water tank for R-1 recycled water within the Kualaka'i Parkway West area, however, there is no existing domestic water infrastructure connecting to the project site. An existing 2.5 MG reservoir (East Kapolei 440 foot system) provides potable water to UHWO. An additional 2.5 MG reservoir is planned next to the existing reservoir to service the proposed project area.

A PEDR for the proposed development will be prepared as part of the environmental review process to assess water needs for the proposed development. The PEDR will identify water source and demand for domestic, irrigation, and fire protection as well as water distribution systems. A copy of the PEDR will be included and discussed in the Draft EIS.

3. Wastewater System

Existing sewer infrastructure in the vicinity of the project area consists of a trunk sewer main that ranges in diameter from 30 to 42 inches and runs along Kualaka'i Parkway. This trunk sewer main will be extended along Kualaka'i Parkway to provide access for future developments. Nearby DHHL and D.R. Horton residential developments are serviced by an existing 36-inch Keahumoa Trunk Sewer that is located on Keahumoa Parkway and Mango Tree Road.

A PEDR for the proposed development will be prepared as part of the environmental review process to assess wastewater infrastructure needs of the proposed project, including collection, treatment, and reuse options. A copy of the PEDR will be included and discussed in the Draft EIS.

4. Drainage System

Stormwater runoff currently surface flows in a generally southern direction through the project area, following natural drainage paths downslope toward the ocean.

A PEDR for the proposed development will be prepared as part of the environmental review process to assess the potential drainage impacts of the proposed project. A copy of the PEDR will be included and discussed in the Draft EIS and will describe the design of the proposed comprehensive drainage system for the project.

5. Electrical, Telephone, and Cable Television

Electrical power, telephone, and cable television services to the region are provided by the Hawaiian Electric Company, Hawaiian Telcom, and Spectrum, respectively.

As previously mentioned, a PEDR will be prepared as part of the environmental review process, a copy of which will be included and discussed in the Draft EIS. Energy conservation and efficiency measures will be incorporated into the project design phase of development to reduce overall energy use.

Coordination with the Hawaiian Electric Company, Hawaiian Telcom, and Spectrum will continue to ensure that systems' planning and design can be programmed in concert with the project development schedule.

E. CUMULATIVE AND SECONDARY IMPACTS

Cumulative impacts are defined by Title 11, Chapter 200.1, HAR, Environmental Impact Statement Rules as:

[T]he impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

An assessment of the project's potential cumulative impacts will be examined in further detail in the Draft EIS.

“Secondary impacts” or “indirect effects” are defined by Title 11, Chapter 200.1, HAR as:

[E]ffects which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems including ecosystems.

Secondary impacts are those which have the potential to occur later in time or farther in the distance, but are still reasonably foreseeable. They can be viewed as actions of others that are taken because of the presence of the project. Secondary impacts from highway projects, for example, can occur because they can induce development by removing one of the impediments to growth. Secondary impacts will be addressed in further detail in the Draft EIS.

**RELATIONSHIP TO
GOVERNMENTAL PLANS,
POLICIES, AND CONTROLS**



III. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

The following chapter sets forth the land use regulatory context for the implementation of the proposed project:

A. STATE LAND USE DISTRICTS

Pursuant to Chapter 205, Hawai'i Revised Statutes (HRS), all lands in the State have been placed into one (1) of four (4) major land use districts by the State Land Use Commission (LUC). These land use districts are designated "Urban", "Rural", "Agricultural", and "Conservation". The project area is located within the "Urban" district. See **Figure 11**. The proposed land uses are permissible within the "Urban" district.

B. HAWAI'I STATE PLAN

Chapter 226, HRS, also known as the Hawai'i State Plan, is a long-range comprehensive plan which serves as a guide for the future long-term development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. An assessment of the proposed project in the context of the Hawai'i State Plan will be presented in the Draft EIS.

C. STATE FUNCTIONAL PLANS

A key element of the Statewide Planning System are Functional Plans which set forth the policies, statewide guidelines, and priorities within a specific field of activity. There are 13 Functional Plans which have been developed by the State agency primarily responsible for a given functional area. Together with the County General Plans, the State Functional Plans establish more specific strategies for implementation. In particular, State Functional Plans provide for the following:

- Identify major Statewide priority concerns
- Define current strategies for each functional area
- Identify major relationships among functional areas
- Provide direction and strategies for departmental policies, programs, and priorities
- Provide a guide for the allocation of resources
- Coordinate State and County roles and responsibilities in the implementation of the Hawai'i State Plan

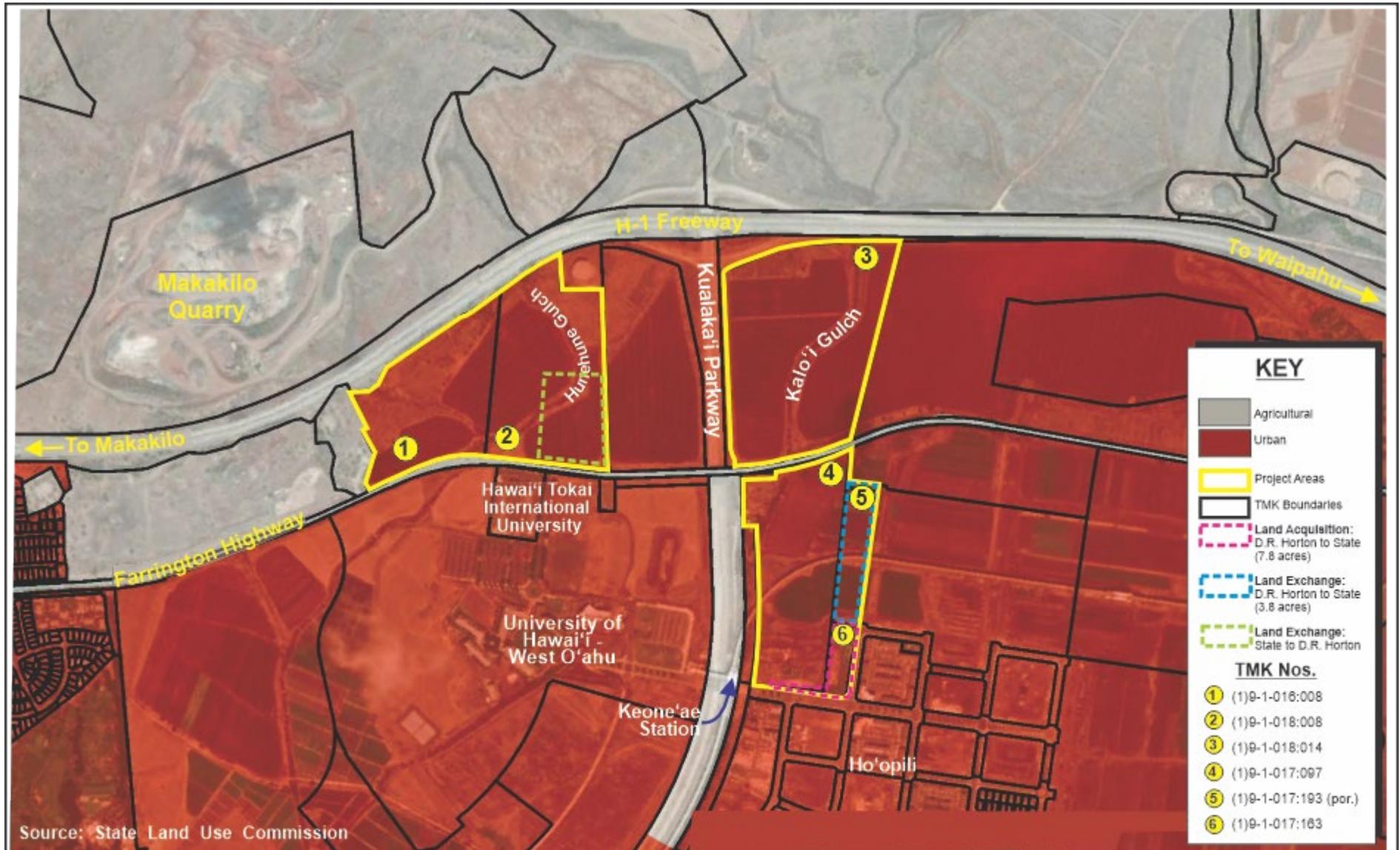


Figure 11

DLNR East Kapolei TOD Plan State Land Use Districts Map



The Draft EIS will provide an assessment of the relationship between the proposed project and the 13 State Functional Plans.

D. O‘AHU GENERAL PLAN

The *O‘ahu General Plan* establishes long-range objectives focusing on the social, economic, environmental, and urban design objectives for the general welfare and aspirations of the residents of O‘ahu as required by the City Charter. The Revised *O‘ahu General Plan* was adopted by the City Council in January 2022.

The *O‘ahu General Plan* is a guide for all levels of government, private enterprise, neighborhood and citizen groups, organizations, and individual citizens in eleven (11) areas of concern:

1. Population
2. Economic Activity
3. The Natural Environment
4. Housing
5. Transportation and Utilities
6. Energy
7. Physical Development and Urban Design
8. Public Safety
9. Health and Education
10. Culture and Recreation
11. Government Operations and Fiscal Management

The eleven (11) subject areas provide the framework for the City’s expression of broad public policy concerning the needs of the people and the functions of government. The objectives and policies contained in the plan reflect the comprehensive planning process of the City and County which address all aspects of the health, safety, and welfare of the people of O‘ahu.

An assessment of the proposed project in the context of the objectives and policies of the *O‘ahu General Plan* will be presented in the Draft EIS.

E. ‘EWA DEVELOPMENT PLAN

The first *‘Ewa Master Plan* was prepared for the Estate of James Campbell (Campbell Estate) in 1955. By 1974 it had been revised twice. All three (3) versions of the plan envisioned a major new urban community on the ‘Ewa Plain. In the early 1970’s, the City and County of Honolulu, Department of Planning and Permitting (DPP) began a “General Plan Revision Program” which focused on directing growth to ‘Ewa. This culminated with the adoption of a new *O‘ahu General Plan* in 1977 and designated the City of Kapolei as a “Secondary Urban Center” (SUC) in order to “...relieve developmental pressures in the urban fringe and rural areas”.

In the early 1980's, the *'Ewa Master Plan* was revised to identify the location of a major "city center" between Makakilo, Campbell Industrial Park and the Barbers Point Naval Air Station. Amendments to the 1986 City and County *'Ewa Development Plan* established the urban core of the SUC at its current location in Kapolei. Later in 1986, the Campbell Estate completed a detailed implementation plan for the city center. At this time, the *'Ewa Master Plan* became the landowners' *Kapolei Area Long Range Master Plan*.

The current *'Ewa Development Plan* is one (1) of eight (8) community-based plans which are intended to guide public policy, infrastructure investment, and land use decision making over a 25-year period as prescribed in the City Charter. Each of the eight (8) plans responds to specific conditions and community values of the focus region. As the 'Ewa region was identified in the *O'ahu General Plan* as an area where population growth and development activity is to be directed, the 'Ewa plan is designated as a "Development Plan".

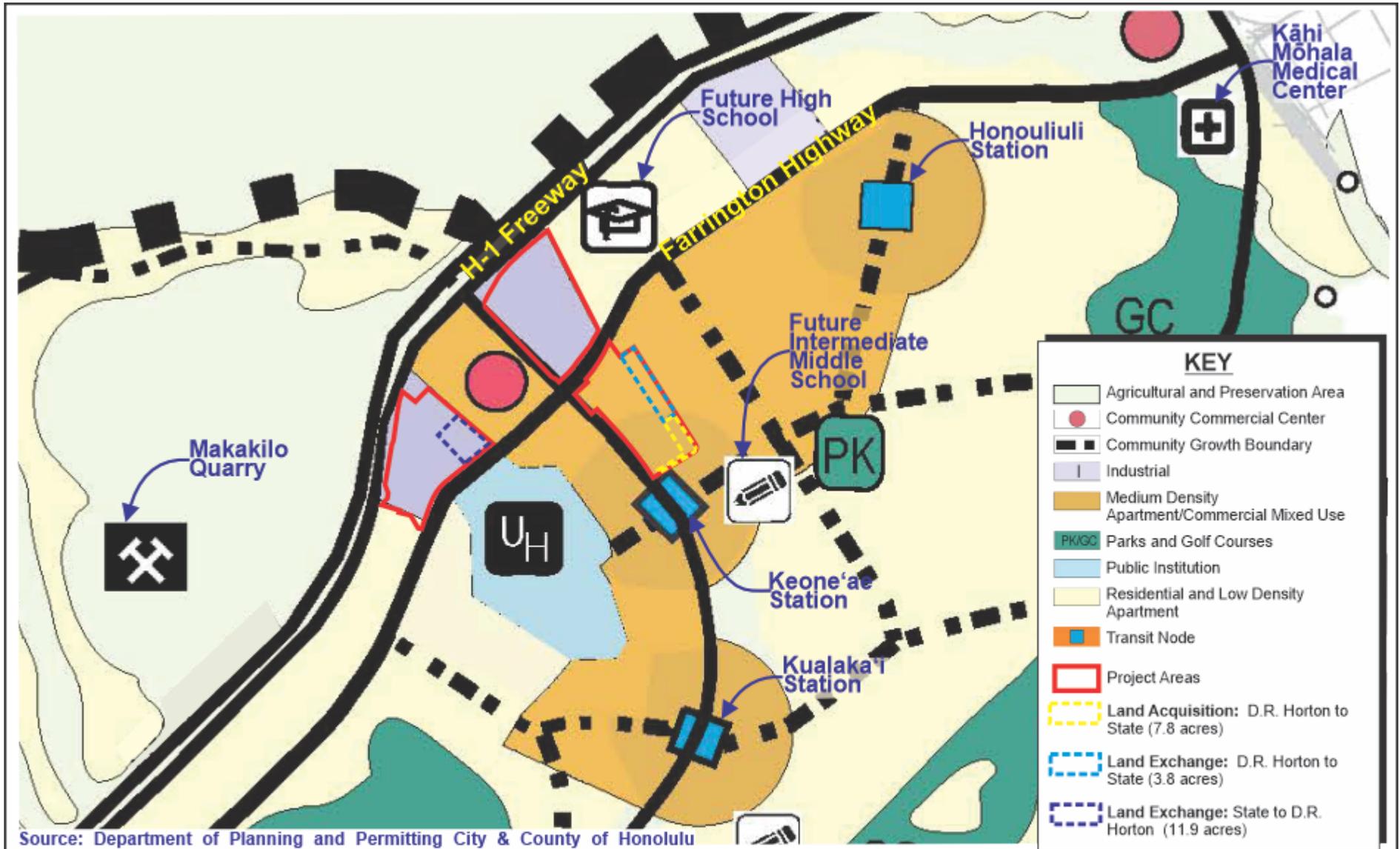
The *'Ewa Development Plan* was last updated in 2020. The adopted amendment fosters consistency with the *East Kapolei Neighborhood TOD Plan's* height and density recommendations which promote increased development opportunities around the region's three (3) rail transit stations, including the Keone'ae Station, located adjacent to the project area. The plan presents a vision for 'Ewa's future development and provides conceptual land use plans that will serve as a policy guide for more detailed zoning maps and regulations, and public and private sector investment decisions.

The vision of the *'Ewa Development Plan* is to:

- Protect agricultural lands and open space
- Develop the Secondary Urban Center around the City of Kapolei
- Build master planned residential communities that support walking, biking, and transit use
- Protect natural, historical and cultural resources
- Provide adequate infrastructure to meet current and anticipated needs

The project area is designated for "Industrial" and "Medium Density Apartment/Commercial Mixed Use" uses on the *'Ewa Development Plan's* Urban Land Use Map. See **Figure 12**.

An assessment of the proposed project in the context of the policies and implementing guidelines of the *'Ewa Development Plan* will be presented in the Draft EIS.



Source: Department of Planning and Permitting City & County of Honolulu

Figure 12

DLNR East Kapolei TOD Plan
 'Ewa Development Plan Urban Land Use Map

NOT TO SCALE



Prepared for: State of Hawai'i, Department of Land and Natural Resources



F. EAST KAPOLEI NEIGHBORHOOD TRANSIT-ORIENTED DEVELOPMENT PLAN

The *East Kapolei Neighborhood TOD Plan* provides recommendations for urban design characteristics in an effort to create sustainable, compact mixed-use developments in the areas surrounding the Honouliuli/Ho‘opili, Keone‘ae/University of Hawaii-West O‘ahu (UHWO), and Kualaka‘i/East Kapolei rail transit stations, which will provide the East Kapolei community with convenient rail transit access to downtown Honolulu.

Each of the rail transit station areas will provide for unique development opportunities and their respective TOD plan aims to give each station its own identity based on the local conditions and development needs. Further, the rail transit station area plans have been developed for each of the three (3) rail transit stations through an inclusive community-based planning effort to ensure that the needs of the area stakeholders have been integrated into the final plan. The Keone‘ae rail transit station will facilitate UHWO’s university village, which envisions a different mix of uses focused on students and campus life. According to the *East Kapolei Neighborhood TOD Plan*, the Keone‘ae rail transit station also enhances the DLNR’s vision for its landholdings, primarily to create jobs, provide affordable housing opportunities, and to support its natural, cultural and recreational resource management and protection programs.

The three (3) rail transit station areas are envisioned to be neighborhoods structured in a pedestrian-friendly environment with numerous housing, employment, educational, and recreational opportunities, thus, taking full advantage of the benefits of rail transit service.

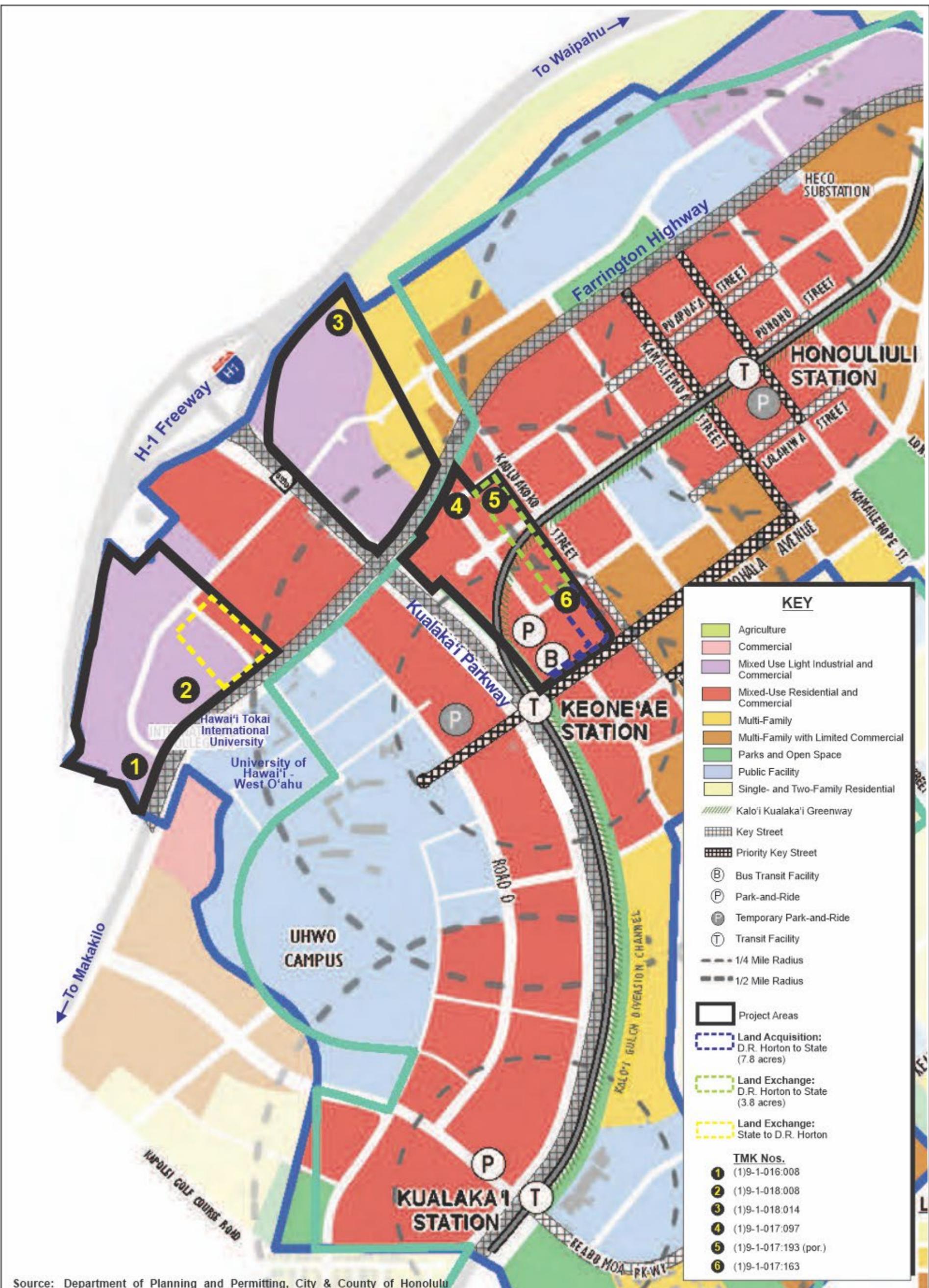
The *East Kapolei Neighborhood TOD Plan* also provides recommendations for the City and County in order to implement the plan. These include height and density amendments to the *‘Ewa Development Plan* and creating TOD and special zoning districts, among others.

The project area is designated for “Mixed-Use Light Industrial and Commercial”, “Mixed-Use Residential and Commercial”, and “Multi-Family” uses on the *East Kapolei Neighborhood TOD Plan’s* Land Use Map. See **Figure 13**.

An assessment of the proposed project in the context of the principles and recommendations of the *East Kapolei Neighborhood TOD Plan* will be presented in the Draft EIS.

G. LAND USE ORDINANCE OF THE CITY AND COUNTY OF HONOLULU

The majority of the project area is zoned “AG-1, Restricted Agriculture”, while Tax Map Key (TMK) (1)9-1-017:163 is primarily zoned “AMX-2, Apartment Mixed Use Medium-Density”, with a small portion zoned “BMX-3, Community Business Mixed-Use”. The



Source: Department of Planning and Permitting, City & County of Honolulu

Figure 13

DLNR East Kapolei TOD Plan
East Kapolei Transit Oriented Development Plan Map

NOT TO SCALE



portion of TMK (1)9-1-017:193 within the project area is zoned “R-3.5, Residential” by the Land Use Ordinance (LUO) of the City and County of Honolulu. See **Figure 14**.

As discussed previously, the project parcels have been identified within the *East Kapolei Neighborhood TOD Plan* for mixed-use light industrial, mixed-use residential and commercial, and multi-family uses. It is anticipated that TOD-specific zoning designations in line with the uses specified by the *East Kapolei Neighborhood TOD Plan* will be adopted.

H. COASTAL ZONE MANAGEMENT AREA

The Hawai'i Coastal Zone Management Program (HCZMP), as formalized in Chapter 205A, HRS, establishes objectives and policies for the preservation protection and restoration of natural resources of the Hawai'i Coastal Zone. The Coastal Zone Management (CZM) area is defined as all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the United States territorial sea. The City and County of Honolulu utilizes its Special Management Area (SMA) regulatory mechanism to implement the HCZMP.

Although the proposed project is not within the SMA of the City and County of Honolulu, the applicability of coastal zone management considerations applies to all lands in the State of Hawai'i. An assessment of the proposed project's conformance to the objectives and policies of the HCZMP will be included in the Draft EIS.

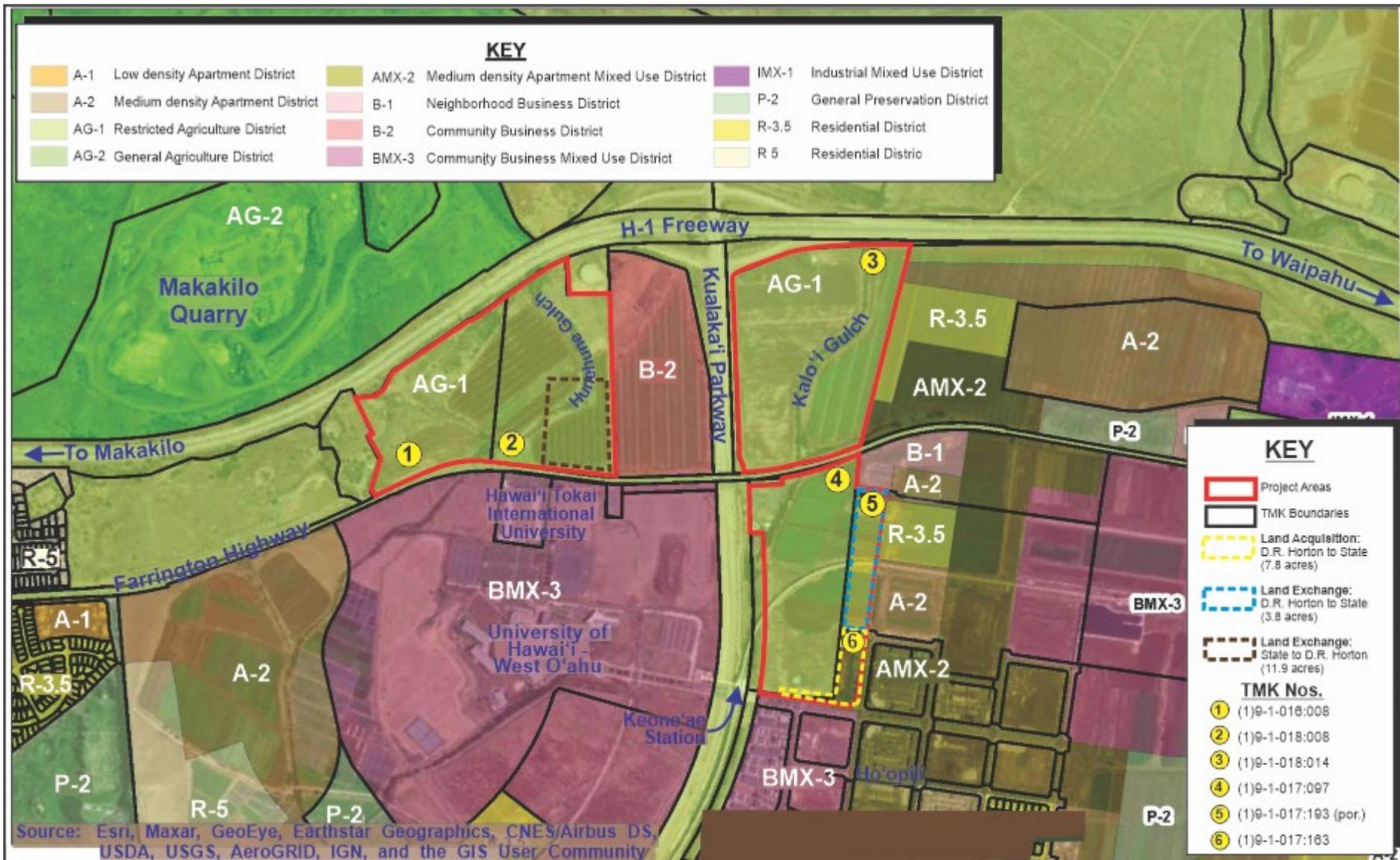
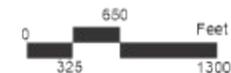


Figure 14

DLNR East Kapolei TOD Plan Land Use Ordinance Zoning Map



Prepared for: State of Hawai'i, Department of Land and Natural Resources



SOH DLNR/E Kapolei MP EIS 2337/Applications/Figures/Zoning



**ALTERNATIVES TO THE
PROPOSED ACTION**

IV



IV. ALTERNATIVES TO THE PROPOSED ACTION

The following is a summary of possible alternatives that may be considered and discussed in detail in the Draft Environmental Impact Statement (EIS).

A. FORMULATION OF THE PREFERRED ALTERNATIVE FRAMEWORK

The master plan framework described in Chapter I of this document was developed through an extensive design process intended to ensure that the *East Kapolei Neighborhood TOD Master Plan* was addressed by the project through the following fundamental objectives:

1. Variety of new land uses to generate revenue
2. Creation of affordable rental housing opportunities
3. Improve access to public agencies and services
4. Incorporate alternative modes of transportation to reduce reliance on automobiles

Through the planning process, the DLNR and its master planning consultant developed various iterations of the land plan. The three (3) alternatives prepared were discussed in a report entitled *East Kapolei Strategic Development Plan (Plan)*, prepared in October 2020 by R.M. Towill.

As noted above, three (3) alternative land plans were prepared through a series of charrettes and design meetings as a part of the project's design process, which culminated in the preparation of the *East Kapolei Strategic Development Plan*. Common elements found in all three (3) alternatives included:

- Proposals for new intersections at Kualaka'i Parkway and the east-west industrial park collector road connecting Kualaka'i Parkway West to Kualaka'i Parkway East, as well as at Kualaka'i Parkway and Farrington Highway
- A new industrial/business park located in the Kualaka'i Parkway West area
- A proposed realignment of the Hunehune Gulch in the Kualaka'i Parkway West area
- An area of light industrial parcels directly adjacent to the southeast intersection of the H-1 Freeway and Kualaka'i Parkway
- A mixed-use area surrounding the Keone'ae Rail Transit Station to include a park-and-ride area, multi-family rental units, a hotel site, as well as various retail and office spaces

Other considerations in the formulation of the land plan alternatives included provision of rental housing units, drainage improvements, multi-modal and vehicular circulation, and open space.

A brief description of the three (3) alternatives as discussed in the *East Kapolei Strategic Development Plan* is provided below.

1. Alternative 1

A distinguishing feature of Alternative 1 is that the project would realign all parts of Kalo'i Gulch through the project area, and focus Kualaka'i Parkway East on industrial uses, with presumed access from both Kualaka'i Parkway and off of D.R. Horton's planned "Road A". In the Keone'ae Station Area, the gulch realignment would allow for maximum productivity with relatively large areas available for multi-family, commercial and hotel developments, as well as the park-and-ride facility. This area extends closer to and encompasses more of the corner area at the main intersection of Kualaka'i Parkway and Farrington Highway than the other alternatives, which is also due to the proposed Kalo'i Gulch realignment.

In this alternative, the industrial/business park area in the Kualaka'i Parkway West area remains largely the same as the preferred alternative.

2. Alternative 2

In Alternative 2, the proposed Kalo'i Gulch realignment was slightly less extensive, with only its lower portion within Kualaka'i Parkway East realigned in order to reduce construction costs as compared to Alternative 1. This resulted in less developable space for the Kualaka'i Parkway East project areas, and due to the irregular configuration of sites, areas on the eastern side of the gulch were assumed to be more suitable for residential than for industrial development. This resulted in approximately 19.6 acres for multi-family rental use, with direct access off Farrington Highway, and only 18.4 acres of light industrial land in this area. Kualaka'i Parkway East would also have a park area of about 5.1 acres.

In this alternative, the industrial/business park area of Kualaka'i Parkway West is the same as under Alternative 1 and the preferred alternative. Also, the Keone'ae Station Area is unchanged from Alternative 1.

3. Alternative 3

In Alternative 3, there is no planned realignment of Kalo'i Gulch in the Kualaka'i Parkway East area. The existing alignment allows a more developable project area at the southern edge of Kualaka'i Parkway East on the west of the gulch, resulting in 29.5 acres of light industrial lands in this area. Kualaka'i Parkway East would

also offer 15.2 acres for rental housing development. In the Keone‘ae Station Area, this alternative has slightly less developable areas due to the alignment of the gulch, with approximately 9.7 acres for multi-family rental uses accommodating approximately 750 units, and 11.4 acres of commercial/mixed use medical clinic, medical offices, and a potential hotel area makai of Farrington Highway. This option also results in 2.6 acres of prime commercial parcels at the southwest corner of the Kualaka‘i Parkway and Farrington Highway intersection.

Like the other two (2) alternatives, the Alternative 3 offers 44.2 acres of industrial/business park in Kualaka‘i Parkway West.

The *East Kapolei Strategic Development Plan* identified Alternative 3 as the preferred alternative. The preferred Alternative 3 plan seeks to minimize up-front costs based on no realignment of the Kalo‘i Gulch. Alternative 3 has a lower physical impact on existing conditions with less costly development features, including avoiding or lessening the modification of existing gulches in the area, thereby reducing costs for the owner and future land developers.

As a result of additional analysis of project cost, land characteristics, and coordination amongst stakeholders, a refined master plan was developed. This plan, based on Alternative 3, will serve as the guiding framework for continued planning and design moving forward.

B. OTHER DESIGN ALTERNATIVES

1. No Land Exchange

Through its assessment of alternatives, the DLNR will consider a proposal to conduct a land exchange for State lands on TMK (1) 9-1-018:008 with lands on TMKs (1) 9-1-017:163 and (1) 9-1-017:193, owned by D.R. Horton. Refer to **Figure 2**. The land exchange is currently included as part of the preferred alternative and was included in the three (3) alternatives discussed in the Plan. However, should it be determined that the land exchange would not be feasible from a development standpoint, the land exchange action may be removed from the preferred alternative. If removed, the portion of land on TMK (1) 9-1-018:008 that would have been given to D.R. Horton, would be developed for additional light industrial uses consistent with the plans for the parcel. Further discussion on this alternative and its feasibility will be included in the Draft EIS.

2. Increased Housing Density

The proposed housing components to be developed are currently designed for a maximum of 1,000 residential units. However, it is noted that the underlying zoning designations for the properties would allow for up to 2,000 residential units.

Although there is potential for development of a higher density housing component, this alternative is not deemed feasible for a variety of reasons. Due to the DLNR's inability to sell the land, the housing components would be rental only, which is not financially feasible for workforce and market housing options. In addition, increased density requires different construction methodologies that have higher costs that ultimately compounds the financial feasibility challenges. Further discussion on this alternative and its feasibility will be included in the Draft EIS.

C. NO-ACTION ALTERNATIVE AND DEFERRAL OF ACTION ALTERNATIVE

The no-action and deferred action alternatives would leave the subject property in its current undeveloped state. The no-action and deferral of action alternatives would involve neither a commitment of resources, nor short- and long-term environmental effects related to the implementation of the project. The context for the no-action and deferred action alternatives, however, must be viewed in terms of broader needs of the East Kapolei region and the DLNR use of its lands to generate lease revenue. Thus, the no action alternative will eliminate any income from the land to fund various DLNR programs. The need to consider land use alternatives to accommodate future urban growth is essential to sustaining the economy over the planning horizon set forth by the City and County's *O'ahu General Plan* and *'Ewa Development Plan*.



**SUMMARY OF ADVERSE
ENVIRONMENTAL EFFECTS
THAT CANNOT BE AVOIDED
AND IRREVERSIBLE AND
IRRETRIEVABLE COMMITMENTS
OF RESOURCES**

V



V. SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The development of the project will result in certain unavoidable construction-related impacts as will be fully discussed in the Draft EIS.

Potential effects include short-term noise, air and water quality impacts occurring during the site preparation and construction phases of the project. These impacts will arise as a direct result of construction activities, such as the generation of noise from construction equipment, the generation of dust and other airborne pollutants, and erosion from wind and stormwater runoff during grading and other construction activity. Appropriate Best Management Practices (BMPs), such as use of sound attenuating construction equipment, will be used, where practicable, to mitigate noise impacts caused by construction; as well as installation of dust fences and watering of exposed areas to mitigate air quality impacts, and temporary drainage measures to handle water quality impacts from stormwater runoff.

Assessment of the proposed project will be carried out during preparation of the Draft EIS, which will identify other potential impacts and mitigation measures. The Draft EIS will include a range of technical studies including Noise and Air Quality studies, as well as a Preliminary Engineering and Drainage Report. The Draft EIS will include the results of these studies and potential mitigation measures to minimize any adverse impacts resulting from the project. A complete list of the proposed studies is noted in **Chapter X**.

Implementation of the proposed project is expected to result in the irreversible and irretrievable commitment of land and fiscal resources. Other resource commitment categories relate to energy, labor, and material resources. This commitment, however, is considered appropriate in the context of the project's objectives and long-range land use goals.

Addressing land use development issues and market needs from a comprehensive planning perspective provides an efficient and effective means of developing and implementing infrastructure and related service components. It is in this context that commitment of resources will be considered in the Draft EIS.



**SIGNIFICANCE CRITERIA
ASSESSMENT**

VI



VI. SIGNIFICANCE CRITERIA ASSESSMENT

The proposed project, its expected primary and secondary consequences, as well as the short- and long-term effects of the action, have been evaluated in accordance with the Significance Criteria of §11-200.1-13, HAR, Title 11, Chapter 200.1, “Environmental Impact Statement Rules”. A more thorough review and assessment of the significance criteria will be presented in the Draft EIS once technical studies have been completed. Considerations for preliminary significance criteria assessment are presented below:

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

Archaeological documentation and CIA reports will be prepared for the project area. Copies of these studies and appropriate mitigation measures, as may be necessary, will be included and discussed in the Draft EIS.

Consultation with SHPD and Office of Hawaiian Affairs (OHA) will be conducted to ensure historic, archaeological, and cultural concerns are addressed and appropriate mitigation measures identified.

The proposed project’s potential impact to natural and cultural resources and proposed mitigation measures, as may be necessary, will be assessed through the preparation of appropriate studies, including preliminary engineering and environmental studies which will be provided in the Draft EIS.

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

The proposed project supports the mission of the DLNR to *“enhance, protect, conserve and manage Hawai‘i’s unique and limited natural, cultural and historic resources held in public trust for current and future generations of the people of Hawai‘i nei, and its visitors, in partnership with others from the public and private sectors”*.

Technical studies will be prepared and included in the Draft EIS and will contribute to the environmental review process. For example, assessment of drainage will be investigated during the EIS preparation phase and the findings will be used to assess potential impacts and appropriate mitigation measures to minimize any reduction in the beneficial uses of the environment.

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

The State’s Environmental Policy and Guidelines are set forth in Chapter 344, HRS. Upon completion of the technical reports for the Draft EIS document, an assessment of the project relative to the State’s environmental policies and guidelines will be undertaken.

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

An analysis of the proposed project's potential impact on economic welfare, social welfare, or cultural practices of the community or State will be discussed in the Draft EIS. An Economic and Fiscal Impact Assessment for the project will be undertaken, and will be included and discussed in the Draft EIS.

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

Technical studies addressing health-related issues, such as air quality and noise emissions, will be prepared and discussed in the Draft EIS. In addition, a Phase I Environmental Site Assessment will be prepared to determine if recognized environmental conditions in connection with the project area are present. Nonetheless, the proposed project's potential impact on public health will be further assessed in the Draft EIS.

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

Technical studies addressing public infrastructure and services will be included in the Draft EIS. Coordination will be undertaken during the environmental review process with State and County agencies, as well as with utility service providers, to address services and facilities requirements for the project.

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

A full range of technical studies will be carried out in preparation of the Draft EIS to identify impacts and offer appropriate mitigation measures to minimize environmental degradation. For example, preliminary engineering work will investigate drainage options to mitigate adverse impacts to downstream and adjacent properties. Archaeological, cultural, and biological investigations will be conducted to ensure that valued historical, cultural, and biological resources are appropriately managed. Copies of the foregoing studies will be included and discussed in the Draft EIS.

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

From a future land use perspective, the project area is within areas designated for appropriate urban growth. A further analysis of the project's potential cumulative and/or secondary impacts will be included in the Draft EIS.

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

A Flora/Fauna Survey will be conducted within the project area to assess the existence of rare, threatened, or endangered species or habitats. A copy of the Flora/Fauna Study report will be included and discussed in the Draft EIS.

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

Potential impacts on noise, air, and water quality resulting from the project will be assessed in technical studies, copies of the which will be included and discussed in the Draft EIS.

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.**

Assessments relating to environmentally sensitive areas, impacts and potential mitigation measures will be carried out and the results incorporated into the Draft EIS document.

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

Potential effects on scenic and open space resources and scenic view corridors resulting from the proposed project will be evaluated in greater detail and discussed in the Draft EIS document.

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

The project will involve the commitment of fuel for construction equipment, vehicle and machinery during construction and maintenance activities. Coordination with Hawaiian Electric Company will be undertaken during the preparation of the Draft EIS to ensure that appropriate planning is implemented to address power supply issues. Sustainability measures to reduce overall energy consumption and greenhouse gas emissions associated with the project will be discussed in the Draft EIS.

Given the potential impacts that need to be addressed in greater detail, it has been determined that an EIS is warranted pursuant to Chapter 343, HRS, and §11-200.1-14(d)(2), HAR.



**LIST OF PERMITS AND
APPROVALS**

VII



VII. LIST OF PERMITS AND APPROVALS

The following is a preliminary list the permits and approvals that are anticipated to be required for implementation of the proposed project:

Federal:

1. U.S. Department of Army Permit (DA), as applicable.

State of Hawai'i:

1. Chapter 343, HRS, Environmental Impact Statement
2. Chapter 6E, HRS, Historic Preservation Compliance
3. National Pollutant Discharge Elimination System (NPDES) Permit
4. Noise Permit, as applicable
5. Section 401 Water Quality Certification, as applicable (if DA permit required)
6. Coastal Zone Management Consistency Determination, as applicable (if DA permit required)

City and County of Honolulu:

1. Adoption of Transit-Oriented Development Zoning Designations
2. Building Permits
3. Other Construction Permits (i.e., grading, electrical, plumbing)



PUBLIC MEETING

VIII



VIII. PUBLIC MEETING

A public scoping meeting for the project, as required by §11-200.1-23, HAR, will be held on November 14, 2022 at 5:30 p.m. at the Salvation Army Kroc Center located at 91-3257 Kualakāī Parkway, 'Ewa Beach, Hawai'i 96706



**OTHER ELEMENTS TO BE
ADDRESSED IN THE DRAFT
ENVIRONMENTAL IMPACT
STATEMENT**



IX

IX. OTHER ELEMENTS TO BE ADDRESSED IN THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

The Draft EIS will address all elements of §11-200.1-24, HAR for preparation of Draft EISs. This section of the rules provides that the Draft EIS address specific content requirements for EIS documents. Information to complete these sections of the EIS document will be gathered through the technical studies to be completed, as well as comments received in the review of this EISPN document and during the EIS public scoping meeting. In this regard, the Draft EIS will also address the following topics:

- Relationship Between the Local Short-term Uses of the Humanity's Environment and the Maintenance and Enhancement of Long-Term Productivity
- Unresolved Issues

**STUDIES ANTICIPATED TO BE
INCLUDED IN THE DRAFT
ENVIRONMENTAL IMPACT
STATEMENT**



X. STUDIES ANTICIPATED TO BE INCLUDED IN THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

The forthcoming Environmental Impact Statement will include several technical reports and studies prepared by experts in specific fields. The reports and studies will include:

Name of Study	Name of Consultant
Air Quality and Greenhouse Gas Emissions Study	Terry A. Hayes Associates
Archaeological Documentation and Consultation	Honua Consulting
Conceptual Landscape Plan	PBR Hawaii, Inc.
Cultural Impact Analysis	Honua Consulting
Design Guidelines	HDR Inc.; PBR Hawaii, Inc.
Economic and Fiscal Impact Assessment	Colliers International
Flora and Fauna Survey	AECOS, Inc.
Market Study	Colliers International
Noise Impacts Analysis Study	Y. Ebisu & Associates
Jurisdictional Waters Delineation Survey	AECOS, Inc.
Phase 1 Environmental Site Assessment	Enviroservices
Preliminary Engineering and Drainage Report	R.M. Towill Corporation
Sustainability Plan	PBR Hawaii, Inc.
Traffic Impact Analysis Report	Austin, Tsutsumi & Associates, Inc.
View Analysis	HDR Inc.; PBR Hawaii, Inc.



**EARLY CONSULTATION WITH
AGENCIES IN PREPARATION OF
THE ENVIRONMENTAL IMPACT
STATEMENT PREPARATION
NOTICE**

XI



XI. EARLY CONSULTATION WITH AGENCIES IN PREPARATION OF THE ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE

The following is a list of agencies and stakeholders that were consulted during the preparation of EISPN. Input received from these agencies was considered in the formulation of the EISPN.

1. State of Hawai'i, Office of Planning and Sustainable Development
2. State of Hawai'i, Department of Transportation
3. State of Hawai'i, Hawai'i Housing Finance and Development Corporation
4. Representative Luella Costales, Hawai'i State House of Representatives, District 39
5. Representative Sharon Har, Hawai'i State House of Representatives, District 42
6. Representative Matthew LoPresti, Hawai'i State House of Representatives, District 41
7. University of Hawai'i West O'ahu
8. City and County of Honolulu, Department of Planning and Permitting
9. City and County of Honolulu, Department of Transportation Services
10. Honolulu Authority for Rapid Transportation
11. D.R. Horton
12. Ho'opili Community Association
13. Chair Mitchell Tynanes, City and County of Honolulu, 'Ewa Neighborhood Board
14. Chair Anthony Makana Paris, City and County of Honolulu, Makakilo, Kapolei and Honokai Hale Neighborhood Board



**PARTIES TO BE CONSULTED
DURING THE PREPARATION
OF THE DRAFT
ENVIRONMENTAL IMPACT
STATEMENT**

XII



XII. PARTIES TO BE CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

A copy of this Environmental Impact Statement Preparation Notice has been sent to the following agencies, organizations, and individuals for review. Agency, organization, and individual comments received, and, responses to substantive comments will be included in the Draft Environmental Impact Statement.

FEDERAL AGENCIES

1. Larry Yamamoto, State Conservationist
Natural Resources Conservation Service
U.S. Department of Agriculture
P. O. Box 50004
Honolulu, HI 96850-0001
2. Linda Speerstra, Chief
U.S. Department of the Army
U.S. Army Engineer District, Honolulu
Regulatory Branch, Building 230
Fort Shafter, HI 96858-5440
Send via email:
CEPOH-RO@usace.army.mil
3. U.S. Department of Interior
U.S. Fish and Wildlife Service
300 Ala Moana Blvd., Rm. 3-122
Honolulu, HI 96850
7. Dr. Sylvia Hussey, Chief Executive Officer
State of Hawai'i
Office of Hawaiian Affairs
560 N. Nimitz Highway, Suite 200
Honolulu, HI 96817
8. William Aila, Jr., Chair
State of Hawai'i
Department of Hawaiian Home Lands
P.O. Box 1879
Honolulu, HI 96805
9. Dr. Elizabeth Char, Director
State of Hawai'i
Department of Health
1250 Punchbowl St., Room 325
Honolulu, HI 96813

STATE AGENCIES

4. Pankaj Bhanot, Director
State of Hawai'i
Department of Human Services
P.O. Box 339
Honolulu, HI 96809
5. Jade Butay, Director
State of Hawai'i
Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813
6. Denise Iseri-Matsubara, Executive Director
State of Hawai'i
Hawai'i Housing Finance and Development
Corporation
677 Queen Street
Honolulu, HI 96813
10. Mike McCartney, Director
State of Hawai'i
Department of Business, Economic
Development and Tourism
P.O. Box 2359
Honolulu, HI 96804
11. Major General Kenneth Hara, Adjutant
General
State of Hawai'i
Department of Defense
3949 Diamond Head Road
Honolulu, HI 96816
12. Keith Hayashi, Superintendent
State of Hawaii
Department of Education
P.O. Box 2360
Honolulu, HI 96804
13. David Ige, Governor
State of Hawai'i
Executive Chambers, State Capitol
Honolulu, HI 96813

14. Josh Green, Lt. Governor
State of Hawai'i
Executive Chambers, State Capitol
Honolulu, HI 96813
 15. Mike Gabbard, Senator
Hawai'i State Capitol, Room 201
Honolulu, HI 96813
 16. Sharon Har, Representative
Hawai'i State Capitol, Room 318
Honolulu, HI 96813
 17. Matthew LoPresti, Representative
Hawai'i State Capitol, Room 333
Honolulu, HI 96813
 18. Luella Costales, Representative
Hawai'i State Capitol, Room 320
Honolulu, HI 96813
 19. Bob McDermott, Representative
Hawai'i State Capitol, Room 427
Honolulu, HI 96813
 20. M. Kaleo Manuel, Deputy Director
State of Hawai'i
Commission on Water Resource
Management
P.O. Box 621
Honolulu, HI 96809
 21. Curt Otaguro, Comptroller
State of Hawai'i
Department of Accounting and General
Services
1151 Punchbowl Street, #426
Honolulu, HI 96813
 22. Phyllis Shimabukuro-Geiser, Chair
State of Hawai'i
Department of Agriculture
1428 South King Street
Honolulu, HI 96814-2512
 23. Suzanne Case, Chairperson
State of Hawai'i
Department of Land and Natural Resources
P.O. Box 621
Honolulu, HI 96809
 24. Mary Alice Evans, Director
State of Hawai'i
Office of Planning and Sustainable
Development
P.O. Box 2359
Honolulu, HI 96804
 25. Dan Orodener, Executive Officer
State of Hawai'i
State Land Use Commission
P.O. Box 2359
Honolulu, HI 96804
 26. University of Hawai'i at Manoa
Environmental Center
2500 Dole Street, Krauss Annex 19
Honolulu, HI 96822
 27. University of Hawai'i West O'ahu
91-1001 Farrington Highway
Kapolei, HI 96707
- CITY AND COUNTY AGENCIES**
28. Ernest Y.W. Lau, Manager and Chief
Engineer
City and County of Honolulu
Board of Water Supply
630 S. Beretania Street
Honolulu, HI 96843
 29. Pamela A. Witty-Oakland, Director
City and County of Honolulu
Department of Community Services
925 Dillingham Boulevard, Suite 200
Honolulu, HI 96817
 30. Robert J. Kroning, Director
City and County of Honolulu
Department of Design and Construction
650 S. King Street, 11th Floor
Honolulu, HI 96813
 31. Melvin Kaku, Director
City and County of Honolulu
Department of Emergency Management
Frank F. Fasi Municipal Building
650 South King Street, Basement
Honolulu, HI 96813
 32. Roger Babcock, Jr. Director
City and County of Honolulu
Department of Environmental Services
1000 'Ulu'ohi'a Street, Suite 308
Kapolei, HI 96707

33. Sandra Pfund, Director
City and County of Honolulu
Department of Land Management
530 South King Street, Suite 306
Honolulu, HI 96813
 34. Michele K. Nekota, Director
City and County of Honolulu
Department of Parks and Recreation
1000 'Ulu'ohi'a Street, Suite 309
Kapolei, HI 96707
 35. Dean Uchida, Director
City and County of Honolulu
Department of Planning and Permitting
650 S. King Street, 7th Floor
Honolulu, HI 96813
 36. Lori Kahikina, Executive Director and Chief
Executive Officer
Honolulu Authority for Rapid Transportation
1099 Alakea Street, 17th Floor
Honolulu, HI 96813
 37. Rade Vanic, Interim Chief
City and County of Honolulu
Honolulu Police Department
801 S. Beretania Street
Honolulu, HI 96813
 38. Wes Frysztacki, Director
City and County of Honolulu
Department of Transportation Services
650 S. King Street, 3rd Floor
Honolulu, HI 96813
 39. Manuel P. Neves, Chief
City and County of Honolulu
Honolulu Fire Department
636 South Street
Honolulu, HI 96813-5007
 40. James D. Howe, Director
City and County of Honolulu
Honolulu Emergency Services Department
3375 Koapaka Street, Suite H450
Honolulu, HI 96819
 41. Matthew Gonser, Executive Director and
Chief Resilience Officer
City and County of Honolulu
Office of Climate Change,
Sustainability and Resiliency
650 South King Street, 11th Floor
Honolulu, HI 96813
 42. Andria Tupola, Ph.D., Councilmember
Honolulu City Council
500 South King Street
Honolulu, HI 96813
 43. Tommy Waters, Council Chair
Honolulu City Council
500 South King Street
Honolulu, HI 96813
 44. Esther Kia'aina, Council Vice Chair
Honolulu City Council
500 South King Street
Honolulu, HI 96813
 45. Heidi Tsuneyoshi, Councilmember
Honolulu City Council
500 South King Street
Honolulu, HI 96813
 46. Calvin Say, Councilmember
Honolulu City Council
500 South King Street
Honolulu, HI 96813
 47. Carol Fukunaga, Councilmember
Honolulu City Council
500 South King Street
Honolulu, HI 96813
 48. Radiant Cordero, Councilmember
Honolulu City Council
500 South King Street
Honolulu, HI 96813
 49. Brandon Elefante, Councilmember
Honolulu City Council
500 South King Street
Honolulu, HI 96813
 50. Augie Tulba, Councilmember
Honolulu City Council
500 South King Street
Honolulu, HI 96813
- COMMUNITY ORGANIZATIONS**
51. D.R. Horton
130 Merchant Street, Suite 112
Honolulu, HI 96813
 52. The Salvation Army
Hawaiian & Pacific Island Division
2950 Manoa Road
Honolulu, HI 96822

53. Ho'opili Community Association
91-1565 Honouliuli Street
Ewa Beach, HI 96706

54. Ewa Neighborhood Board
c/o Neighborhood Commission Office
Kapalama Hale
925 Dillingham Boulevard, Suite 160
Honolulu, HI 96817

55. Makakilo Kapolei Honokai Hale
Neighborhood Board
c/o Neighborhood Commission Office
Kapalama Hale
925 Dillingham Boulevard, Suite 160
Honolulu, HI 96817

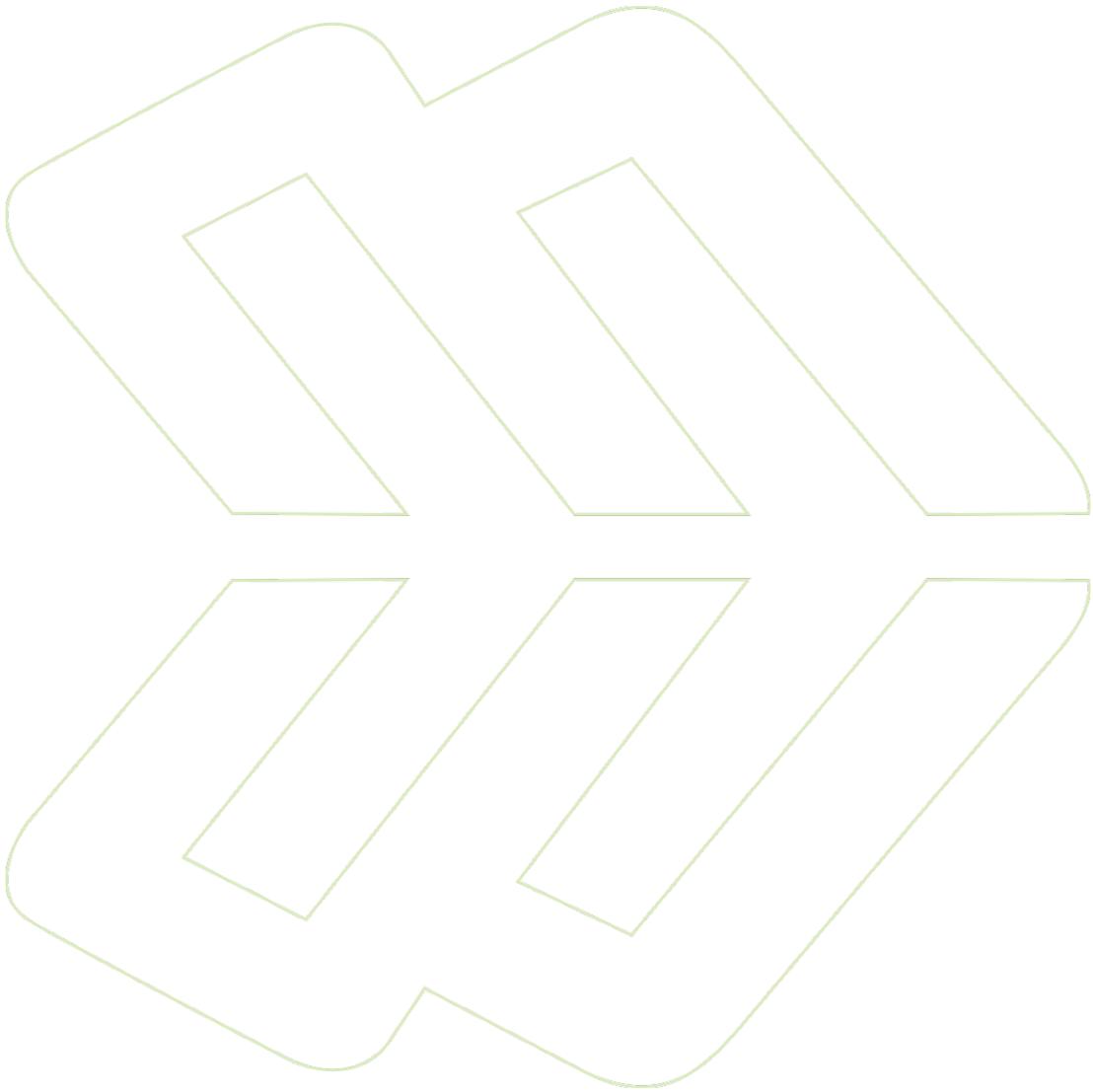
56. Kalaeloa Stakeholders Group
c/o Hawai'i Community Development
Authority
547 Queen Street
Honolulu, HI 96813

REFERENCES

XIII

XIII. REFERENCES

- City and County Honolulu, East Kapolei Neighborhood Transit-Oriented Development Plan, 2020.
- City and County of Honolulu, 'Ewa Development Plan, 2013 amend. 2020.
- City and County of Honolulu, General Plan, 1992 amend. 2022.
- Foote et al, U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of Islands of Kauai, Oahu, Maui, Moloka'i and Lāna'i, State of Hawai'i, 1972.
- Giambelluca, T.W., Q. Chen, A.G. Frazier, J.P. Price, Y.-L. Chen, P.-S. Chu, J.K. Eischeid, and D.M. Delparte, 2013: Online Rainfall Atlas of Hawai'i. Bull. Amer. Meteor. Soc. 94, 313-316, doi: 10.1175/BAMS-D-11-00228.1.
- Hawai'i Climate Change Mitigation and Adaptation Commission, Hawai'i Sea Level Rise Vulnerability and Adaptation Report, 2017.
- PBR Hawaii, Ho'opili O'ahu Final Environmental Impact Statement, 2008.
- State of Hawai'i, Department of Agriculture, Agricultural Lands of Importance to the State of Hawai'i, 1977.
- State of Hawai'i, Department of Business, Economic Development, State of Hawaii Data Book, 2020.
- State of Hawai'i, Department of Business, Economic Development, and Tourism, Population and Economic Projections for the State of Hawai'i to 2040, March 2012.
- State of Hawai'i, Department of Health, Clean Air Branch, Hawaii Greenhouse Gas Emissions Report for 2017, Final Report, April 2021.
- State of Hawai'i, Department of Labor and Industrial Relations, <https://www.hiwi.org/gsipub/index.asp?docid=417>, Accessed March 2020.
- R.M. Towill, East Kapolei Strategic Development Plan, October 2020.
- U.S. Census Bureau, 2010 Census Summary File 1, Accessed 2019.
- U.S. Census Bureau, 2020 Census Redistricting Data (Public Law 94-171) Summary File, Legacy Data Format, August 2021.
- U.S. Fish and Wildlife Service; National Wetlands Inventory, [http://www.fws.gov/wetlands/Data/ Mapper.html](http://www.fws.gov/wetlands/Data/Mapper.html).
- University of Hawai'i, Land Study Bureau, Detailed Land Classification, Island of O'ahu, 1963.
- University of Hawai'i, The Pueo Project, <https://www.pueoproject.com>.



MUNEKIYO HIRAGA

Planning. Project Management. Sustainable Solutions.