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

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

RICK BLANGIARDI MAYOR MEIA



DAWN TAKEUCHI APUNA DIRECTOR PO'O

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

REGINA MALEPEAI 2ND DEPUTY DIRECTOR HOPE PO'O KUALUA

December 16, 2024

2024/ED-9 (MAK)

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

Dear Director Evans:

SUBJECT:

Revised Ordinances of Honolulu (ROH) Chapters 25

Draft Environmental Assessment (EA)

Project:

Bank of Hawai'i - Hawai'i Kai

Landowner:

B. P. Bishop Trust Estate (Kamehameha Schools)

Applicant:

Bank of Hawai'i

Agent:

PBR Hawai'i & Associates, Inc. (Greg Nakai) 6650 Kalaniana'ole Highway - Hawai'i Kai

Address:

0000 Kalamana die mignway - i

Tax Map Key:

3-9-017: 040

Request:

Special Management Area (SMA) Major Permit

Proposal:

Construction of a new bank on the subject site, which is

located within the SMA.

With this letter, the Department of Planning and Permitting hereby transmits the Draft EA and Anticipated Finding of No Significant Impact for the construction of a new bank for the above-referenced parcel in the East Honolulu District, on the island of Oʻahu, for publication in the next edition of *The Environmental Notice*.

We have uploaded an electronic copy of this letter and the Draft EA to your online submittal site.

Ms. Mary Alice Evans, Director December 16, 2024 Page 2

Should you or the public have any questions, please contact Michael Kat, of our Zoning Regulations and Permits Branch, at (808) 768-8013 or via email at michael.kat@honolulu.gov.

Very truly yours,

Dawn Takeuchi Apuna

Director

From: webmaster@hawaii.gov

To: <u>DBEDT OPSD Environmental Review Program</u>

Subject: New online submission for The Environmental Notice

Date: Monday, December 16, 2024 9:17:36 AM

Action Name

Bank of Hawai'i - Hawai'i Kai

Type of Document/Determination

ROH Ch 25 Draft EA and AFNSI

Judicial district

Honolulu, Oʻahu

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

(1) 3-9-017:040

Action type

Applicant

Other required permits and approvals

Special Management Area Major Permit; Dust Control Plan; Noise Permit (if necessary); Americans with Disabilities Act (ADA) Compliance; Section 6E, HRS Review; Grading, Grubbing, and Stockpiling Permits; Building Permit (electrical, plumbing, civil); Occupancy Permit; Site Development Master Application for Sewer Connection; Storm Drain Connection License (if necessary); Storm Water Quality Strategic Plan; Rules Relating to Water Quality and Storm Drainage Standards Compliance; and Industrial Wastewater Discharge Permit (application submitted)

Discretionary consent required

Special Management Area Major Permit

Agency jurisdiction

City and County of Honolulu

Approving agency

Department of Planning and Permitting

Agency contact name

Michael Kat

Agency contact email (for info about the action)

michael.kat@honolulu.gov

Email address for receiving comments

michael.kat@honolulu.gov

Agency contact phone

(808) 768-8013

Agency address

650 South King Street Honolulu, Hawaii 96813 United States Map It

Applicant

Bank of Hawai'i

Applicant contact name

Scott Yoshihara

Applicant contact email

gnakai@pbrhawaii.com

Applicant contact phone

(808) 521-5631

Applicant address

130 Merchant Street #1010 Honolulu, Hawaii 96813 United States Map It

Is there a consultant for this action?

Yes

Consultant

PBR Hawai'i & Associates, Inc.

Consultant contact name

Greg Nakai

Consultant contact email

gnakai@pbrhawaii.com

Consultant contact phone

(808) 521-5631

Consultant address

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

Action summary

Bank of Hawai'i proposes to build a new bank on the location of the existing Scratch Hawai'i Kai Restaurant in Hawai'i Kai, Oʻahu. Bank of Hawai'i's objective is to construct a new branch bank facility that approximates the existing building's footprint and massing, incorporates sustainable design features, accommodates future sea level rise and flood elevation levels, promotes brand visibility, and improves customer service and experience.

Attached documents (signed agency letter & EA/EIS)

- DEA-FINAL-2024-11-26-w-coverappendices.pdf
- OPSD-Transmittal-Letter.pdf

Action location map

• Action-Location-Map-Project_Site.zip

Authorized individual

Michael Kat

Authorization

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

Bank of Hawai'i – Hawai'i Kai

Draft Environmental Assessment/
Anticipated Finding of No Significant Impact

Prepared for: Bank of Hawaiʻi

Prepared by:





TABLE OF CONTENTS

1.0	INT	RODUCTION	1		
	1.1	PROJECT SUMMARY	1		
	1.2	LOCATION	2		
	1.3	SURROUNDING LAND USES	2		
	1.4	LAND OWNERSHIP	3		
	1.5	IDENTIFICATION OF APPLICANT	3		
	1.6	IDENTIFICATION OF ENVIRONMENTAL CONSULTANT	3		
	1.7	COMPLIANCE WITH STATE OF HAWAI'I AND CITY AND COUNTY HONOLULU ENVIRONMENTAL LAWS			
	1.8	IDENTIFICATION OF AGENCIES CONSULTED			
	1.0	1.8.1 Early Consultation			
		1.8.2 Hawai'i Kai Neighborhood Board No. 1			
2.0	PR∩	OJECT DESCRIPTION			
2.0		BACKGROUND AND NEED FOR THE PROJECT			
	2.1				
	2.2	PROJECT OBJECTIVES			
	2.3	DESCRIPTION OF THE PROJECTPROJECT COST AND IMPLEMENTATION TIMEFRAME			
	2.4	PROJECT COST AND IMPLEMENTATION TIMEFRAME	10		
3.0		DESCRIPTION OF THE NATURAL ENVIRONMENT, POTENTIAL IMPACTS,			
	AND	MITIGATION MEASURES			
	3.1	CLIMATE			
	3.2	TOPOGRAPHY	11		
	3.3	SOILS			
		3.3.1 Natural Resources Conservation Service			
		3.3.2 Land Study Bureau Detailed Land Classification			
		3.3.3 Agricultural Lands of Importance to the State of Hawai'i			
	3.4	HYDROLOGY			
	3.5	NATURAL HAZARDS			
	3.6	FLORA & FAUNA	19		
4.0		CRIPTION OF THE HUMAN ENVIRONMENT, POTENTIAL IMPACT			
	AND	MITIGATION MEASURES	25		
	4.1	ARCHAEOLOGICAL AND CULTURAL RESOURCES			
		4.1.1 Archaeological Resources			
		4.1.2 Cultural Resources	27		
	4.2	TRANSPORTATION	30		
		4.2.1 Roadways and Traffic	30		
		4.2.2 Public Transportation	34		
		4.2.3 Bicycle and Pedestrian Facilities	34		
	4.3	NOISE	35		

	4.4	AIR QUALITY	36
	4.5	VISUAL RESOURCES	
	4.6	SOCIAL & ECONOMIC CHARACTERISTICS	38
	4.7	INFRASTRUCTURE AND UTILITIES	39
		4.7.1 Water System	39
		4.7.2 Wastewater System	40
		4.7.3 Drainage System	41
		4.7.4 Electrical and Telecommunications Systems	41
		4.7.5 Solid Waste	
	4.8	PUBLIC SERVICES AND FACILITIES	44
		4.8.1 Police Protection	44
		4.8.2 Fire Protection	
		4.8.3 Health Care Services	
		4.8.4 Recreational Facilities	46
		4.8.5 Schools	
		4.8.6 Other Community Services	47
5.0	LAN	D USE CONFORMANCE	49
	5.1	STATE OF HAWAI'I	49
		5.1.1 State Land Use Law, Chapter 205, Hawai'i Revised Statutes	49
		5.1.2 Coastal Zone Management Act, Chapter 205A, Hawai'i Revised Statu	ites
			49
		5.1.3 Hawai'i State Planning Act, Chapter 226, Hawai'i Revised Statutes	55
		5.1.3.1 Hawai'i State Plan, Part I: Overall Theme, Goals, Objectives as	
		Policies	55
		5.1.3.2 Hawai'i State Plan, Part II: Planning Coordination and Implementation	77
		5.1.3.3 Hawai'i State Plan, Part III: <i>Priority Guidelines</i>	
		5.1.4 State Environmental Policy, Chapter 344, Hawai'i Revised Statutes	
	5.2	CITY AND COUNTY OF HONOLULU	
	٥.٤	5.2.1 O'ahu General Plan	
		5.2.2 East Honolulu Sustainable Communities Plan	
		5.2.3 Land Use Ordinance	
		5.2.4 Zoning Ordinance 78-82	
		5.2.5 Joint Development Conditional Use Permit 89/CUP1-43	
		5.2.6 Special Management Area	
	5.3	LIST OF REQUIRED PERMITS AND APPROVALS	
6.0	ALTI	ERNATIVES	101
-	6.1	NO ACTION	
	6.2	ALTERNATIVE ACTION	
	J.2		. 101
7.0	FIND	OINGS, SUPPORTING REASONS, AND DETERMINATION	103
	7.1	PROBABLE IMPACT, INCLUDING CUMULATIVE IMPACTS	. 103

	7.2	SIGNIFICANCE CRITERIA	103
	7.3	ANTICIPATED DETERMINATION	
8.0	REF	TERENCES	
0.0	IXL	EREICES	
		LIST OF TABLES	
Table	e 1: Pre	-Assessment Consultation	4
Table	2: Exi	sting Level of Service (LOS)	31
		jected 2026 Without Project Level of Service (LOS)	
Table	4: Fut	ure Traffic Conditions With Project	33
		jected 2026 With Project Level of Service (LOS)	
Table	e 6: Co	mparison of Existing and Proposed Buildings	37
Table	e 7: Coa	astal Zone Management Act, Chapter 205A, HRS	50
Table	8: Ha	wai'i State Plan, Chapter 226, HRS – Part I	55
Table	9: Ha	wai'i State Plan, Chapter 226, HRS – Part III	78
Table	e 10: St	ate Environmental Policy, Chapter 344, HRS	88
Table	e 11: Zo	oning Lots Identified in Conditional Use Permit No. 89/CUP1-43	95
Table	212: Sp	pecial Management Area, Chapter 25, ROH: Review Guidelines	96
Table	e 13: Ro	equired Permits and Approvals	100
		LIST OF APPENDICES	
		: Pre-Assessment Consultation Comments and Responses	
		: Conceptual Site Plan	
		: Conceptual Floor Plan	
		: Building Elevations	
		: Existing Conditions/Topography	
		: Archaeological Report	
		: Cultural Impact Assessment	
		: Transportation Impact Analysis Report	
		Hawai'i Kai Neighborhood Board No. 1	
Appe	ndıx J:	Figures	

LIST OF FIGURES

Figure 1: Regional Location Figure 2: Aerial Image Figure 3: Tax Map Key

Figure 4: Special Management Area

Figure 5: Site Photos

Figure 6: Zoning Map Height Limit Figure 7: Flood Insurance Rate Map

Figure 8: Topography

Figure 9: Natural Resources Conservation Service Soil Survey

Figure 10: USFWS National Wetlands Inventory

Figure 11: Tsunami Evacuation Zone

Figure 12: National Hurricane Storm Surge Hazard

Figure 13: USFWS Critical Habitats

Figure 14: Area Roadways & Study Intersections

Figure 15: Public Facilities

Figure 16: East Honolulu Sustainable Communities Plan

Figure 17: Zoning

LIST OF ABBREVIATIONS & ACRONYMS

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

A	
ALISH	Agricultural Lands of Importance to the State of Hawai'i
AM	Morning
AMSL	Above Mean Sea Level
В	
B-2	Community Business Zoning District
BFE	Base Flood Elevation
BMPs	Best Management Practices
BMS	Building Management Systems
BOH	Bank of Hawai'i
BWS	City and County of Honolulu, Board of Water Supply
C	
CCH	City and County of Honolulu
CWPPP	Certified Water Pollution Plan Preparer
CWRM	DLNR Commission on Water Resource Management
CZM	Coastal Zone Management
D	
DAR	State of Hawai'i, DLNR, Division of Aquatic Resources
DHS	State of Hawai'i, Department of Human Services
DLNR	State of Hawai'i, Department of Land and Natural Resources
DOE	State of Hawai'i, Department of Education
DOFAW	State of Hawai'i, DLNR, Division of Forestry and Wildlife
DOT	State of Hawai'i, Department of Transportation

DPP City and County of Honolulu, Department of Planning and Permitting \mathbf{E} EA **Environmental Assessment EHSCP** East Honolulu Sustainable Communities Plan State of Hawai'i, Office of Planning & Sustainable Development **ERP** Environmental Review Program Erosion and Sediment Control Plan **ESCP** F **FEMA** Federal Emergency Management Agency **FHAT** Flood Hazard Assessment Tool **FIRM** Flood Insurance Rate Map **FONSI** Finding of No Significant Impact A building footprint provides the outline of a building drawn along the **Footprint** exterior walls, with a description of the exact size, shape, and location of its foundation. \mathbf{G} **GPS Global Positioning System** H H-POWER Honolulu Program of Waste Energy Recovery HAR Hawai'i Administrative Rules **HECO** Hawaiian Electric Company **HFD** Honolulu Fire Department **HPD** Honolulu Police Department Hawai'i Revised Statutes **HRS** I **IPaC** Information for Planning and Consultation **JDA** Joint Development Agreement L **LBSP** Land-Based Sources of Pollution Low Impact Development LID Level of Service LOS LRFI Literature Review and Field Inspection LSB Land Study Bureau State of Hawai'i, Land Use Commission LUC Land Use Ordinance LUO M Massing Building massing refers to the overall vertical configuration of the building. **MPH** Miles Per Hour **MSL** Mean Sea Level N NB Neighborhood Board National Highway System NHS National Oceanic and Atmospheric Administration NOAA **NPDES** National Pollutant Discharge Elimination System Permit 0 O'ahu Invasive Species Committee **OISC**

	OPSD	State of Hawai'i, Office of Planning and Sustainable Development
P	DCD) (D	
	PCBMP	Post-Construction Best Management Practices
	PIFWO	Pacific Islands Fish and Wildlife Office
	PM	Afternoon
	ppt	parts per thousand
R		
	ROH	Revised Ordinances of Honolulu
\mathbf{S}		
	SFP	State Functional Plan
	SHPD	State of Hawai'i, Historic Preservation Division
	SLR	Sea Level Rise
	SLR-XA	Sea Level Rise Exposure Area
	SMA	Special Management Area
T		
	TIAR	Transportation Impact Analysis Report
	TMK	Tax Map Key
U		
	UIC	Underground Injection Control
	USFWS	U.S. Fish and Wildlife Service

U.S. Geological Survey

USGS

1.0 INTRODUCTION

This Environmental Assessment (EA) is prepared in accordance with Chapter 25, Revised Ordinances of Honolulu (ROH), and Chapter 205A, Hawai'i Revised Statutes (HRS), for the construction of the proposed Bank of Hawai'i (BOH) - Hawai'i Kai ("Project").

1.1 PROJECT SUMMARY

Project Name: Bank of Hawai'i - Hawai'i Kai

Location: 6650 Kalaniana'ole Highway, Hawai'i Kai, Hawai'i 96825

Judicial District: East Honolulu

Tax Map Key (TMK): (1) 3-9-017:040

Applicant: Bank of Hawai'i (BOH)

Landowner: TMK (1) 3-9-017:040 is owned by Kamehameha Schools

Existing Uses: Vacant standalone restaurant building

Proposed Action: BOH proposes to build a bank on the location of the existing Scratch

Kitchen Hawai'i Kai Restaurant in Hawai'i Kai

Project Area: Less than 10,920 square feet (gross area)

Land Use Designations: • State Land Use: *Urban*

• East Honolulu Sustainable Communities Plan Land Use Map: Regional

Town Center

• County Zoning: Community Business (B-2)

Special Management Area (SMA):

The Project is located within the SMA.

Permits/Approvals Required:

- Chapter 25, ROH Compliance
- SMA Use Permit Major
- Dust Control Plan
- Noise Permit (if necessary)
- Americans with Disabilities Act Compliance
- Section 6E, HRS Review
- Grading, Grubbing, and Stockpiling Permits
- Building Permit (electrical, plumbing, civil)
- Occupancy Permit
- Site Development Master Application for Sewer Connection
- Storm Drain Connection License (if necessary)
- Storm Water Quality Strategic Plan

• Rules Relating to Water Quality and Storm Drainage Standards Compliance

• Industrial Wastewater Discharge Permit (application submitted)

Determining Agency: City and County of Honolulu (CCH) Department of Planning and

Permitting (DPP)

Anticipated Finding of No Significant Impact (FONSI)

Determination:

1.2 LOCATION

During the pre-Assessment consultation process, the State Office of Planning and Sustainable Development (OPSD) wrote:

"...The subject EA should provide a regional location map of the subject property on O'ahu, with the project site proximity and relation to the CCH-designated SMA boundary." (Refer to letter in Appendix A)

The Project site is located at 6650 Kalaniana ole Highway in Hawai Kai, East Honolulu, Oʻahu, Hawaiʻi (Figure 1: Regional Location), and the property is identified as TMK (1) 3-9-017:040 (Figure 3: Tax Map Key). The overall area of the property is 0.2507 acre or 10,920 square feet. The Project site is located mauka of Kalaniana ole Highway, Maunalua Bay Beach Park, and the Pacific Ocean (Figure 1: Regional Location; Figure 2: Aerial Image). The Project site contains a vacant standalone restaurant ("Scratch Kitchen Hawai'i Kai"), but for years was known as "Outback Steakhouse". As shown on Figure 4, the Project site is located within the Special Management Area (SMA).

1.3 SURROUNDING LAND USES

The surrounding land uses are reflective of modern development that started in the early 1960's. According to ASM Affiliates, Inc. (Appendix F):

"In 1959 Kaiser Permanente established the Hawai'i Kai Development Corporation and purchased rights to develop the land from the Bishop Estate. Through dredging activities, spoil materials were used as fill along the marshy perimeters of the fishpond in order to create the planned commercial and residential development of Hawai'i Kai. Additionally, former ranch lands surrounding the pond were also graded and developed. A series of historic aerial photographs taken between 1952 and 1993 shows the steady progress of the development (Figure 9 [of Appendix F]). Between 1963 and 1978, the current project area and surrounding embankment were graded, the highway realigned, and fill was used to expand the peninsula. In the 1980s, the Hawaii Kai Towne Center was developed, and by 1991 the current project area was developed a restaurant building still in current use."

The Project site is on the southwestern edge of Hawai'i Kai Towne Center (Figure 5: Site Photos) which is bounded by Kalaniana'ole Highway, Keāhole Street, and Koko Marina. Hawai'i Kai Towne Center contains a "campus" of retail and office buildings, including a "strip mall", standalone buildings (including a Costco, Extra Space Storage, City Mill, and Raising Cane's), and two office buildings (Hawai'i Kai Corporate Plaza and Hawai'i Kai Executive Plaza I).

Hawai'i Kai Towne Center was originally developed as "Marina Business Center 2." Zoning for Marina Business Center 2 was approved via Ordinance 78-82 in August 1978. Zoning Design Criteria are attached to Ordinance 78-82 as Exhibit E, and places design restrictions, particular on portions of Hawai'i Kai Towne Center facing the marina, Keāhole Street and Kalaniana'ole Highway. The Zoning Design Criteria also addresses open spaces, height limits, and total leasable floor area. More discussion of zoning requirements can be found in Sections 5.2.4 and 5.2.5.

Beyond Kalaniana'ole Highway is Maunalua Bay Beach Park and the Pacific Ocean. To the north, and across Keāhole Street, is the Hawai'i Kai Park and Ride, the Elaine Dobashi Dog Park; and open space. To the east and south of Hawai'i Kai Towne Center is Koko Marina.

1.4 LAND OWNERSHIP

Utilizing the Tax Map Key (TMK) system, the land under the Project site is identified as TMK (1) 3-9-017:040, which is owned by B.P. Bishop Trust Estate (Kamehameha Schools).

Contact: Jennifer Tom

Senior Asset Manager Commercial Real Estate Kamehameha Schools 567 South King Street Honolulu, HI 96813 Phone: (808) 523-6200

1.5 IDENTIFICATION OF APPLICANT

Bank of Hawai'i is the Applicant.

Contact: Scott Yoshihara

Director Branch & Contact Center Strategy & Operations

130 Merchant Street #1010

Honolulu, HI 96813 Phone: (808) 351-9541

1.6 IDENTIFICATION OF ENVIRONMENTAL CONSULTANT

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

Contact: Greg Nakai

Senior Associate PBR HAWAII

1001 Bishop Street, Suite 650

Honolulu, HI 96813 Phone: (808) 521-5631 Fax: (808) 523-1402

1.7 COMPLIANCE WITH STATE OF HAWAI'I AND CITY AND COUNTY OF HONOLULU ENVIRONMENTAL LAWS

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

"...As the proposed action will require agency approvals, the Draft Environmental Assessment (Draft EA) should include a discussion on the...triggers from HRS 343 that necessitate the preparation of an Environmental Assessment." (Appendix A)

In the City and County of Honolulu (CCH), management of lands within the SMA is regulated through Chapter 25, ROH. Permit review guidelines (in Chapter 25, ROH) used by Department of Planning and Permitting (DPP) and the City Council, are derived from Section 205A-26 HRS Act 16 (SB2060, SD2, HD2), adopted on September 15, 2020, amended Chapter 205A, HRS. The proposed Project requires an SMA Use Permit – Major. Per ROH Section 25-3.3(c)(1), "Any proposed development within the special management area requiring a special management area use permit shall be subject to an assessment by the agency in accordance with the procedural steps set forth in HRS Chapter 343." Preparation of this document is in accordance with the procedural steps of Chapter 343, HRS (2007) and Title 11, Chapter 200.1, Hawai'i Administrative Rules (HAR) pertaining to Environmental Impact Statements.

1.8 IDENTIFICATION OF AGENCIES CONSULTED

1.8.1 Early Consultation

A Pre-Assessment consultation was conducted from February 12, 2024, to March 13, 2024, prior to the preparation of the Draft Environmental Assessment (Draft EA). The purpose of the Pre-Assessment consultation was to consult with agencies, organizations, and individuals with technical expertise or an interest in, or will be affected by, the Proposed Project. This process is part of the scoping process for the Draft EA. Comments and input received during this period were used to identify environmental issues and concerns to be addressed in the Draft EA.

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

Agencies/Organizations/Individuals	Pre- Assessment Consultation Letter Sent	Pre- Assessment Comment Received (Comment Date)	
STATE			
Environmental Review Program (ERP)	Х	2/26/24	
Department of Accounting and General Services	Х		
Department of Business, Economic Development & Tourism (DBEDT)	Х		

Table 1: Pre-Assessment Consultation

Agencies/Organizations/Individuals	Pre- Assessment Consultation Letter Sent	Pre- Assessment Comment Received (Comment Date)
DBEDT – Hawai'i State Energy Office/Strategic Industries Division	Х	
DBEDT – Office of Planning and Sustainable Development	X	3/12/24
Department of Defense	X	2/22/24
Department of Health (DOH)	X	
DOH – Environmental Health Administration	Х	
DOH – Clean Water Branch	Х	
DOH – Wastewater Branch	Х	
Department of Human Services	Х	3/6/24
Department of Land and Natural Resources (DLNR)	Х	
DLNR – Commission on Water Resource Management	Х	2/26/24
DLNR – Division of Aquatic Resources	Х	3/15/24
DLNR – Division of Boating and Outdoor Recreation	Х	2/23/24
DLNR – Division of Forestry & Wildlife	Х	4/11/24
DLNR – Engineering Division	Х	
DLNR – Historic Preservation Division	Х	
Department of Transportation	Х	
Hawai'i Housing Finance and Development Corporation	Х	
Hawai'i Community Development Authority	Х	
Office of Hawaiian Affairs	Х	
FEDERAL		
U.S. Army Corps of Engineers, Pacific Ocean Division	Х	
U.S. Fish and Wildlife Service	Х	2/22/24
NOAA National Marine Fisheries Service	Х	
Federal Emergency Management Agency, Region IX	Х	
COUNTY		
Board of Water Supply	Х	3/5/24
Department of Community Services	Х	2/20/24
Department of Design and Construction	Х	3/5/24
Department of Environmental Services	Х	
Department of Facility Maintenance	Х	3/4/24
Department of Planning and Permitting	Х	3/12/24
Department of Transportation Services	Х	
Oʻahu Transit Services	Х	
Honolulu Fire Department	Х	2/22/24
Honolulu Police Department	Х	3/5/24
Office of Climate Change, Sustainability, and Resiliency	Х	
Neighborhood Commission Office	Х	

		Pre-
	Pre-	Assessment
Agencies/Organizations/Individuals	Assessment Consultation	Comment Received
	Letter Sent	(Comment
		Date)
ELECTED OFFICIALS		
U.S. Senator Mazie Hirono	Х	
U.S. Representative Ed Case	X	
Governor Josh Green	X	
Mayor Rick Blangiardi	X	
State Senator Stanley Chang (District 9)	Х	
State Senator Chris Lee (District 25)	Х	
State Representative Gene Ward (District 18)	Х	
State Representative Mark Hashem (District 19)	Х	
City Councilmember Tommy Waters (District 4)	Х	
Neighborhood Board No. 1 Chair Roberta Mayor	Х	
UTILITIES		
Hawaiian Electric Company, Inc.	Х	
Spectrum	Х	2/29/24
Hawaiian Telcom	Х	
Hawai'i Gas	Х	
CITIZEN GROUPS/INDIVIDUALS, OTHER CONSULTED PARTIES		
University of Hawai'i - School of Ocean and Earth Science	Х	
and Technology (SOEST)	^	
University of Hawai'i Sea Grant College Program	Х	
LIBRARIES		
Hawaiʻi Kai Public Library	X	
Hawai'i State Library - Hawai'i Documents Center	Х	

1.8.2 Hawai'i Kai Neighborhood Board No. 1

As required by Ordinance 21-27 and ROH 25-5.3(b), on April 30, 2024, a presentation was made to the Hawai'i Kai Neighborhood Board No. 1. The Project appeared on the Hawai'i Kai Neighborhood Board Regular Meeting Agenda as item 5.1 "Special Management Area (SMA) Use Permit Application for Bank of Hawai'i Branch at Hawai'i Kai Towne Center – Presenter: Greg Nakai, Planner and Senior Associate, PBR HAWAII." Refer to Appendix I for the agenda and minutes from the meeting. Representatives from BOH, as well as the Project architect, were also in attendance to answer questions about the Project. After the presentation, Neighborhood Board members and the general public asked the following questions or made the following remarks (paraphrased in *italics* below):

- Will the proposed bank be one or two stories? (Reply: Both options are currently under consideration.)

- Would be concerned about the impact of a two-story building on views. (Reply: Concern acknowledged.)
- Will the lawn fronting Kalaniana'ole Highway be impacted by the proposed Project? (Reply: "No".)
- Please explain the movement of Bank of Hawai'i facilities in Hawai'i Kai. (Reply: BOH first established a branch bank in this community in the 1970s, adjacent to Zippy's in the Koko Marina Shopping Center. Due to increasing maintenance issues and a desire for improved public visibility, the branch was relocated in 2017 to a smaller space at the Makai-side of the Koko Marina Shopping Center, facing Kalaniana'ole Highway. Public visibility was significantly improved; however, the smaller size was found to be insufficient to meet customer transaction volume. In early 2024, the Bank took the opportunity to expand the branch into an adjacent vacant tenant space. The expanded branch can better accommodate the transaction volumes, but the shopping center parking lot is often congested and unappealing to customers. Therefore, the Bank is interested in building a new, ground-up branch to address all concerns.)
- Board member characterized Project as "oceanfront" and noted she was against storage facility. (Reply: Opinion acknowledged.)
- Didn't bank recently conduct renovations at its existing facilities at Koko Marina Center? (Reply: The expansion involved 500 square feet).
- What is the size of the current bank in Hawai'i Kai? (Reply: 3,000 square feet, so the proposed Project will represent a doubling of current facilities to better serve the Bank's customers).
- I like the customer service at the existing Bank of Hawai'i branch, and when I visit other larger banks, there is not the same level of customer service...so the proposed bank might not necessarily translate to better service. (Reply: Opinion acknowledged.)
- You mentioned that from a marketing perspective, visibility is important, but it comes with visual impacts. (Reply: Opinion acknowledged.)
- *Will the new bank include a drive-through or drive-up?* (Reply: No).
- Will safety deposit boxes be included? (Reply: As of yet undetermined.)
- *Just make the new bank look nice.* (Reply: Acknowledged).
- What was the size of the previous bank near Zippy's? (Reply: Can't recall for sure but maybe 5,000 to 7,000 square feet...but was inefficiently laid out by current standards).
- Can existing standalone restaurant building be repurposed? (Reply: That is still under consideration.)
- Does the Bank of Hawai'i have control over the property, or is this presentation exploratory? (Reply: The Bank has a lease in place).

- If the proposed bank is developed as a 2-story building, what will go on the second floor? (Reply: Still under development, but thoughts include conference and meeting rooms, hybrid workspaces for non-customer-facing employees).
- Want to reiterate my concern about "good banking" vs visibility. (Reply: Acknowledged).
- In response to presentation that the advantage of the proposed site is better parking than the current location, one NB member noted that she is a customer at a rival bank at Hawai'i Kai Towne Center, and parking is "horrible." (Reply: Acknowledged)
- Want to reiterate my concern about "marketing" vs "service". (Reply: Acknowledged)

2.0 PROJECT DESCRIPTION

This section provides background information and a general description of the proposed BOH Hawai'i Kai ("Project").

2.1 BACKGROUND AND NEED FOR THE PROJECT

The current BOH Hawai'i Kai Branch at Koko Marina Shopping Center has experienced a significant increase in transaction volume since the closure of a nearby in-store branch. The Bank's temporary solution was to expand the current branch into an adjacent tenant space. The preferred long-term solution is to construct a new branch building to better serve the Bank's customer base and reaffirm the Bank's commitment to the local community.

2.2 PROJECT OBJECTIVES

BOH's objective is to construct a new branch bank facility that approximates the existing building's footprint and massing, incorporates sustainable design features, accommodates future sea level rise (SLR) and flood elevation levels, promotes brand visibility, and improves customer service and experience.

2.3 DESCRIPTION OF THE PROJECT

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

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

Currently the Project site is occupied by a vacant standalone restaurant building (formerly "Outback Steakhouse" and "Scratch Kitchen Hawai'i Kai"). The restaurant building was completed circa 1991. The Project site is located within Hawai'i Kai Towne Center which required a zone change from R-6 Residential to B-2 Community Business Zoning District. As the Project Property and other properties required them to be jointly developed, the landowner, Kamehameha Schools was party to a Joint Development Agreement (JDA) in 1989 (89/CUP1-43).

The proposed Project involves the replacement of the existing vacant standalone restaurant building with a new BOH branch bank. Although the County zoning height limit is 60 feet (Figure 6: Zoning Map Height Limit), it is BOH's intention to replace the existing building with a new bank branch building approximately 40 feet in height and approximating the scale of the existing building in terms of building footprint, massing, and height.

Site Constraints

Based on the State of Hawai'i, Department of Land and Natural Resources (DLNR), Flood Hazard Assessment Tool (FHAT), the Project site is located within the Flood Hazard Zone AE (elevation 9 feet). Refer to Figure 7: Flood Insurance Rate Map. Zone AE areas are subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. Base Flood Elevations (BFEs) are shown (in this case, elevation 9 feet) on Federal Emergency Management Agency

(FEMA) Firm Panel 15003C0387G, Flood Insurance Rate Map (FIRM) Index Date and Panel Effective Date of January 19, 2011 (Figure 7). Therefore, the Project site is subject to Chapter 21A, Flood Hazard Areas, ROH. As the Site is approximately 3 to 8 feet above mean sea level (AMSL), the finished floor elevation is planned to be above elevation 9 feet AMSL.

As previously noted, the zoning height limit over the Project site is 60 feet (Figure 6), but there are no plans for the proposed bank building to achieve that height.

Finally, the Project site is less than 10,920 square feet (gross area) and is the smallest of the "standalone" building parcels with the Hawai'i Kai Towne Center "campus".

Inspired by Place

The Project site is located and configured to have visual access across Kalaniana'ole Highway and Maunalua Bay Beach Park towards the ocean, as well as towards the Ko'olau Mountain Range.

Sustainability

The Project is designed to be resource-efficient, healthy, regionally relevant, and a model for sustainability. The design will maximize opportunities for natural daylighting and open-air seating and meeting spaces to take advantage of natural ventilation where possible. Building and site systems will be designed to work passively and with energy and water efficiency as much as possible, putting minimal stress on the current land and infrastructure.

Materials and Design

Designed to highlight the maritime influence on the community, the architectural palette will include puka lava stone as a predominant material to represent land, topped with a wave-shaped roof form to represent the ocean. The building will also incorporate decorative mosaic tile murals that will emphasize the community through art in the murals. Exterior open patios and lanais will offer all the opportunity to enjoy the exterior environment.

2.4 PROJECT COST AND IMPLEMENTATION TIMEFRAME

The current construction budget estimate is \$3 million. These funds do not include furniture, fixtures, or equipment. Construction of BOH Hawai'i Kai is anticipated to start upon receipt of an approved building permit and is expected to be completed in 10 months.

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

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

3.1 CLIMATE

According to Weatherspark, the average monthly low temperatures in East Honolulu range from 69 to 76 degrees Fahrenheit, while the average monthly high temperatures range from 78 to 85 degrees Fahrenheit, with the coolest temperatures occurring in January and February and the warmest month occurring in September. On average, East Honolulu experiences the lowest amount of rainfall (averaging 0.3 inches) in June while the maximum average precipitation occurs in January (approximately 2.5 inches). The predominant average hourly wind direction in East Honolulu is from the east throughout the year. The average of mean hourly wind speeds ranges from 12.4 miles per hour (mph) in January to 16.5 mph in July.

Potential Impacts and Mitigation Measures of the Proposed Project

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

Potential Impacts and Mitigation Measures of the Proposed Project and Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to climate are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to the climate as the replaced building(s).

3.2 TOPOGRAPHY

The Project site and immediately surrounding area bounded by Kalaniana'ole Highway, and Koko Marina, was originally part of Kuapā Pond and wetlands, which was filled to create land for development. According to a review of U.S. Geological Survey (USGS) topographical maps, the fill occurred sometime between 1959 and 1969, and included fill for seaward expansion of Maunalua Bay Beach Park. A USGS aerial photograph taken in 1978 shows the filled areas (including the Project site, and a widened Maunalua Bay Beach Park), as well as Keāhole Street. The 1978 USGS topographical map shows buildings on the filled areas of Kuapā Pond. The terrain is relatively flat, having been modified during the construction of the existing standalone restaurant building (see Figure 8: Topography and Appendix E). Elevations range from 3.25 to 3.28 feet AMSL.

Potential Impacts and Mitigation Measures of the Proposed Project

The proposed branch bank will be built on mostly graded land where the existing standalone restaurant building is currently sited. By replacing the existing building, the proposed Project will

have a negligible effect on the topography of the area, it is not expected to have any short-term, long-term, direct, indirect, or cumulative impacts on topography.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to topography are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to topography as the replaced building(s).

3.3 SOILS

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

3.3.1 Natural Resources Conservation Service

As shown on Figure 9, the *Natural Resources Conservation Service, Soil Survey for the Island of O'ahu* classifies the soil underlying the Project site as Fill land, mixed (FL).

3.3.2 Land Study Bureau Detailed Land Classification

The University of Hawai'i Land Study Bureau (LSB) document, *Detailed Land Classification, Island of O'ahu*, classifies soils based on a productivity rating. Letters indicate class of productivity with A representing the highest class and E the lowest. The soils of the Project site and Hawai'i Kai Towne Center is classified "U" or "Urban."

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

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

Potential Impacts and Mitigation Measures of the Proposed Project

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

"Pursuant to Hawaii Administrative Rules (HAR) § 11-200.1-18(d)(7) — identification and analysis of impacts and alternatives considered; to ensure that nearshore marine resources along the south shore of Oʻahu remain protected, the negative effects of stormwater runoff and sediment loading from the proposed project site of Malama Bay and the greater marine ecosystem near the project area should be evaluated.

"Issues that may be examined include, but are not limited to, project site characteristics in relation to flood and erosion prone areas, vulnerability of the nearshore environment any

increase in volume or flow rate of stormwater runoff. Developing mitigation measures for the protection of the water quality and the coastal ecosystem should take this into account, pursuant to $HAR \ \S \ 11-200.1-18(d)(8)$.

"Furthermore, we note that this project may be subject to low impact development (LID) design requirements by the CCH-DPP. LID design features are an effective method in limiting the impact of polluted stormwater runoff on the downslope coastal and marine environment. It is advised that DPP be consulted on this matter." (Appendix A)

During the pre-Assessment consultation process, the DLNR Division of Aquatic Resources (DAR) wrote:

"Due to the close proximity of the proposed construction site to the ocean, it is highly important that construction activities minimize impacts on marine resources where possible. This includes actions to prevent changes in water quality and any actions that prevent interactions with or negative impacts on aquatic organisms.

"Erosion/LBSP:

"DAR recommends that best management practices for mitigation of erosion and LBSP be followed. The close proximity to aquatic resources should be considered during design and construction. Landscape design and leveling should be such that long term erosion and LBSP are minimized.

"DAR would like to request notification, photo-documentation, and GPS-coordinates for any occurrence where above-average amounts of sediment or pollution have entered the water, in order to assess impact, if any." (Appendix A)

Construction of the proposed Project will not have a deleterious effect on the soil in the Project site. The site has been previously modified to accommodate the existing standalone restaurant building. The soils underlying the Project site have no capacity to impact the availability of agricultural land for cultivation.

During grading and construction, there is always the potential for soil erosion and runoff, and the generation of fugitive dust. All construction activities will comply with all applicable federal, state, and county regulations and rules for erosion, sedimentation, and dust control. Contractors will use best management practices (BMPs) to minimize erosion during construction and planting, including watering loose soils during construction, and planting groundcover over areas where construction has been completed, silt fences and other erosion control devices. Additionally, BMPs for stormwater management will be implemented to minimize impacts of the Project to the area's hydrology and existing drainage facilities, while maintaining on-site infiltration and preventing polluted runoff from storm events. These measures will address any direct impacts from construction and avoid any secondary or cumulative impacts from erosion or fugitive dust caused by construction. Following construction, exposed soils will have been built over, paved over or landscaped to control erosion. The estimated disturbed area should be less than one acre (the Project site consists of .025 acre of land). Therefore, a general National Pollutant Discharge Elimination System (NPDES) Permit for construction activities should not be required.

Long-term impacts will be mitigated by the installation of LID measures to manage stormwater at this site before it is returned to the natural system. Such measures will be designed to manage stormwater in a way that better replicates natural systems, thereby slowing the flow of surface water from the site and reducing pollutants in the process, resulting in improved water quality of the downstream water bodies. No impacts to ground water resources or the ocean are anticipated.

Construction and permanent post-construction BMPs and LID measures will be designed, implemented, and maintained in compliance with the Administrative Rules, Title 20, DPP, Chapter 3 – Rules Relating to Water Quality, effective August 16, 2017. Onsite drainage system improvements will be designed in accordance with DPP's Storm Drainage Standards, dated August 2017. See also the discussion in Section 4.7.3 (Drainage System) below.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to agricultural productivity or soil erosion are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to agricultural productivity and soil erosion as the replaced building(s).

3.4 HYDROLOGY

Surface Water

There is no surface water (such as the ocean or streams) that abuts the Project site. *Makai* of the Project site is Kalaniana'ole Highway, which separates the Hawai'i Kai Towne Center from Maunalua Bay Beach Park and the Pacific Ocean. To the east and south of Hawai'i Kai Towne Center is Koko Marina.

Ground Water

According to the State of Hawai'i's Underground Injection Control (UIC) Program, the Project site is located above (mauka of) the UIC line, which means the underlying aquifer is considered a drinking water source (State of Hawai'i Department of Health, Safe Drinking Water Branch, n.d.).

Wetlands

No wetlands occur directly where the BOH is proposed to be located (Figure 10: USFWS National Wetlands Inventory. The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory indicates that the nearest wetland is an Estuarine and Marine Wetland habitat (classified as M1UBLx), located makai (south and across Kalaniana'ole Highway and Maunalua Bay Beach Park) of the proposed Project Site (U.S. Fish and Wildlife Service, n.d.).

Classification code M1UBLx stands for:

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

no shelter from wind and waves, are also considered part of the Marine System because they generally support typical marine biota.

Subsystem **Subtidal (1)**: The substrate in these habitats is continuously covered with tidal water (i.e., located below extreme low water).

Class **Unconsolidated Bottom (UB)**: Includes all wetlands and deepwater habitats with at least 25 percent cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30 percent.

Water Regime **Subtidal** (L): Tidal salt water continuously covers the substrate.

Special Modifier Excavated (x): This Modifier is used to identify wetland basins or channels that were excavated by humans.

Potential Impacts and Mitigation Measures of the Proposed Project

During the pre-Assessment consultation process, the DLNR Commission on Water Resources Management (CWRM) wrote:

"We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at http://planning.hawaii.gov/czm/initiatives/low-impact-development/...

"There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality." (Appendix A)

As the anticipated total disturbed area (including sidewalks, utility trenching, fire lane) is 10,920 square feet, the graded area outside of the building footprint is planned to be less than 7,500 square feet, and the proposed Project would be classified as a Category 3 project.

Category 3 projects require an Erosion and Sediment Control Plan (ESCP), Details, and Notes, prepared by a Certified Water Pollution Plan Preparer (CWPPP) as per the Rules Relating to Water Quality, and the implementation of an ESCP Coordinator during construction.

The proposed Project appears to require Post-Construction Best Management Practices (PCBMP) as a Priority B1 project (redeveloping over 5,000 SF of impervious surface area within a retail mall area and commercial property with a parking lot with more than 20 stalls). Official requirements for PCBMP will be determined by the Storm Water Quality Branch during building permit/processing. The proposed Project is not expected to have any short-term, long-term, direct, indirect, or cumulative impacts on hydrological features, such as surface water, marine water or wetlands.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to surface water, groundwater, and wetlands are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to surface water, groundwater, and wetlands as the replaced building(s).

3.5 NATURAL HAZARDS

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

"The Project site is susceptible to coastal hazards associated with sea level rise (SLR), wave action, flooding, tsunamis, and storm surge. Therefore, proposed development activities must be evaluated not only for potential impacts to sensitive SMA resources, but also for current and future susceptibility to these coastal hazards. According to the State of Hawai'i Sea Level Rise Viewer, the makai portion of the property may be affected by 3.2 ft. of SLR by 2100. Therefore, we recommend proposed development be sited as far mauka on a property as practicable, and designed to minimize potential risk of loss to the structure.

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

"The subject property is also located entirely within the Flood Zone AE, as mapped by the Federal Emergency Management Agency. Flood Zone AE is the flood fringe area and corresponds with areas subject to the one proposed Project's compliance with the City's Flood Hazard Areas Ordinance (Chapter 21A, ROH)..." (Appendix A)

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

Flooding

As shown on Figure 7, the Project site is located within the Flood Hazard Zone AE (elevation 9 feet). Zone AE areas are subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown (in this case, elevation 9 feet). FEMA Firm Panel 15003C0387G, FIRM Index Date and Panel Effective Date of January 19, 2011. Therefore, the Project site is subject to Chapter 21A, Flood Hazard Areas, ROH.

Tsunami

Since the early 1800s, approximately 50 tsunamis have inundated Hawai'i's shores. Seven historical events have caused major damage. The most recent tsunami impacting O'ahu occurred on March 11, 2011, causing damage to several locations around the island, especially the North Shore.

Figure 11 shows the extent of the Tsunami Evacuation and Extreme Tsunami Evacuation Zones. The entire Hawai'i Kai Towne Center, including the Project site, is in the Tsunami Evacuation Zone. In the event of an Extreme Tsunami event, Haha'ione Elementary School and Kaiser High School are just outside of the upper reaches of the Extreme Tsunami Evacuation Zone and could provide refuge for evacuees. In the event of traffic congestion, vertical evacuation may be possible in the upper floors of the nearby Hawai'i Kai Corporate Plaza and Hawai'i Kai Executive Plaza I buildings.

Hurricanes

Since 1980, two hurricanes have had a devastating effect on Hawai'i: Hurricane 'Iwa in 1982 and Hurricane 'Iniki in 1992. Long-term prediction of future hurricanes is virtually impossible. However, one should reasonably anticipate the prospect of another hurricane impacting the islands.

Hurricane events may also cause a storm surge, which is an abnormal rise of water generated by a storm, over and above the normal tidal levels. This rise in water level can cause extreme flooding in coastal areas, particularly if a storm surge coincides with a normal high tide (NOAA, n.d.). According to the National Hurricane Storm Surge Hazard Maps (Figure 12), the Project site (as well as many properties fronting Koko Marina) may be subject to flooding inundation of less than three feet above ground level during a Category 3 or 4 hurricane event (National Oceanic and Atmospheric Administration (NOAA) National Hurricane Center (NHC), n.d.).

Climate Change & Sea Level Rise

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

"Due to the project site's proximity to Malama Bay, the long-term viability of this project is in question. The built environment of lowland areas of Hawai'i Kai may be vulnerable to coastal inundation and natural hazards associated with SLR. To assess the potential environmental impacts and vulnerability of this site, we suggest the Draft EA refer to the findings of the Hawai'i Sea Level Rise Vulnerability and Adaptation Report 2017, accepted by the Hawai'i Climate Change Mitigation and Adaptation Commission.

"The Report, and Hawai'i SLR Viewer at https://www.pacioos.hawaii.edu/shoreline/slrhawaii/ identifies a 3.2-foot SLR exposure area across the main Hawaiian Islands, as a starting evaluation point. The Draft EA should provide a map of at least 3.2-foot SLR exposure area in relation to the project area, and evaluate site-specific mitigation measures, including setbacks from the shoreline or relocation options further inland, increasing the height of the proposed structures to accommodate higher water levels, or related climate change adaptation strategies when feasible." (Appendix A)

Sea Level Rise (SLR) is one of the many growing concerns associated with global climate change and can be especially taxing on the limited resources of an island ecosystem. While it cannot be known how the Project site will be affected by SLR and climate change in the future, scientific

models for potential climate change factors have been considered for redevelopment of the Project site.

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

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

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

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

Earthquake & Volcanic Hazards

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

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

Potential Impacts and Mitigation Measures of the Proposed Project

The proposed Project is not anticipated to have any impact or any deleterious effects on natural hazard conditions and no unique mitigation measures are planned, other than observing the International Building Code in the design of the facility (to address the potential impacts from hurricanes and earthquakes). During the pre-Assessment consultation process, the State Department of Defense (which includes the Hawai'i Emergency Management Agency) wrote:

"The State of Hawaii Department of Defense has no comments to offer relative to the project at this time." (Appendix A)

According to the ALTA Survey Map, the Project site is located outside the 3.2-foot SLR exposure area (SLR-XA) (Figure 8 and Appendix E).

In addition, the proposed Project will be located mauka of Kalaniana'ole Highway and the closest shoreline (Appendix B), and will not be built within the shoreline setback, nor will it impact or exacerbate shoreline hazards related to existing open space, nearby beaches, public access to and along the shoreline, public safety, and public resources.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to flooding, tsunamis, hurricanes, SLR, earthquakes and volcanic hazards are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to flooding, tsunamis, hurricanes, SLR, earthquakes and volcanic hazards as the replaced building(s). If a future building(s) increases the impermeable surface area, there is a potential for increased runoff. It is likely that the designers of a future building(s) will try to mitigate the impact of increased runoff through the design of the project(s).

3.6 FLORA & FAUNA

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

"The Pacific Islands Fish and Wildlife Office (PIFWO) is transitioning to the use of the Information for Planning and Consultation (IPaC) online portal, https://ipac.ecosphere.fws.gov/, for federal action agencies and non-federal agencies or individuals to obtain official species lists, including threatened and endangered species and designated critical habitat in your project area." (Appendix A)

As recommended an IPaC list was ordered, and a copy is to the USFWS pre-Assessment consultation letter in Appendix A. The Project site has been subject to intense human utilization since its construction between 1959 and 1969. The portion of the Project site that is not occupied by the existing restaurant building is developed with a combination of concrete, brick, paver, and gravel walkways and is partially landscaped with hedges. Immediately adjacent to and surrounding the Project site along its south (makai) and east edges is a landscaped and highly manicured outdoor area containing decorative rock and knoll features and lush vegetation both within and outside of planters, including Bermuda grass (*Cynodon dactylon*), pindo palms (*Butia capitata*),

Christmas palms (*Adonidia merrillii*), ti (*Cordyline fruticosa*), plumeria (*Plumeria obtusa*), and other species. According to the USFWS National Wetlands Inventory map (Figure 10: USFWS National Wetlands Inventory), there are no wetlands or open bodies of water on the Project site. Because the Project is being proposed where there is an existing building, there are no known habitats for rare, threatened, or endangered flora or faunal species (Figure 13: USFWS Critical Habitats) on the Project Site. The closest critical habitats are located in the inside of Hanauma Bay, on the southeast side of Koko Head Crater and up in the Koʻolau Mountains (Figure 13: USFWS Critical Habitats).

Potential Impacts and Mitigation Measures of the Proposed Project

During the pre-Assessment consultation process, the DLNR DAR wrote:

"Light Pollution:

"Artificial lighting from construction sites can disorient and confuse marine wildlife such as sea turtles, fish, crabs, and birds. The disruption of their natural rhythms can have long-lasting consequences on their survival and population dynamics.

"DAR recommends that construction activities occur during the daylight hours to the extent possible. All outdoor lighting should be fully shielded and pointed downward. Outdoor lighting should be turned off when not necessary, and automatic sensors are recommended.

"Seabird fledgeling [sic] season occurs during Sept 15th - Dec 15th, and nighttime activity should be halted during this time. Fledglings become easily confused by artificial lighting, which can cause them to crash or land on the ground. Downed fledglings [sic] become easy prey for cats, mongoose, or other predators. If downed or injured fledglings [sic] are observed in the construction area, they should be reported for rescue:

"Hawaii Wildlife Center (808) 884-5000 9:00 am - 5:00 pm, 7 days a week

"Hawaii Marine Animal Response (808) 220-7802 7:00am - 7:00pm, 7 days a week

https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/#response

"Personnel working on-site should be informed of the hazards light pollution may pose to seabirds and other wildlife and be able to recognize native species.

"Entanglement:

"DAR recommends that the applicant utilize best management practices to eliminate any potential for incidental entanglement of any marine organism, including seabirds. At the end of each day and upon completion of the construction project, all construction-related debris that could potentially endanger species by causing entanglement shall be cleared from the construction area.

"Barbed wire poses a large hazard for seabirds, especially fledglings [sic]. Fences should not have barbed wire.

"If incidental entanglement of protected species occurs DAR and the appropriate federal agency should be notified immediately." (Appendix A)

During the pre-Assessment consultation process, the DLNR Division of Forestry and Wildlife (DOFAW) wrote:

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

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

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

"Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai'i please visit https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf.

"The State threatened manu-o- $K\bar{u}$ or White Tern (Gygis alba) is known to nest in the vicinity of the proposed project. If tree trimming or removal is planned, DOFAW strongly recommends a qualified biologist survey for the presence of White Terns prior to any action that could disturb the trees. White Tern pairs typically lay their single egg on a tree branch with no nest. Eggs and chicks can be dislodged by construction equipment or workers that contact trees in which White Terns are nesting. As such, a tree protection program should be in place for any mature trees with nesting or roosting White Terns. For more information regarding detailed Best Management Practices when conducting tree care activities with manu-o- $K\bar{u}$ present, please visit

https://www.whiteterns.org/uploads/8/6/3/2/86323044/mok_tree_care_guidelines_19062 2.pdf. If a nest is discovered, please notify DOFAW staff for assistance.

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

"The State endangered pueo or Hawaiian Short-eared owl (Asio flammeus sandwichensis) could potentially occur in the project vicinity. Pueo are most active during dawn and dusk twilights. Remove and exclude non-native mammals such as mongoose, cats, dogs, and ungulates from the nesting area. Minimize habitat alterations and disturbance during pueo breeding season. Pueo nest on the ground and active nests have been found year-round. Before any potentially disturbing activity like clearing vegetation, especially ground-based disturbance, DOFAW recommends a qualified biologist conduct surveys during crepuscular hours and walk line transects through the area to detect any active pueo nests. If a pueo nest is discovered, notify DOFAW staff, minimize time spent at the nest, and establish a minimum buffer distance of 100 meters from the nest until chicks are capable of flight.

"The invasive Coconut Rhinoceros Beetle (CRB) or Oryctes rhinoceros is found on the islands of Oʻahu, Hawaiʻi Island, Maui and Kauaʻi. On July 1, 2022, the Hawaiʻi Department of Agriculture (HDOA) approved Plant Quarantine Interim Rule 22-1. This rule restricts the movement of CRB-host material within or to and from the island of Oʻahu, which is defined as the Quarantine Area. Regulated material (host material or host plants) is considered a risk for potential CRB infestation. Host material for the beetle specifically includes a) entire dead trees, b) mulch, compost, trimmings, fruit and vegetative scraps, and c) decaying stumps. CRB host plants include the live palm plants in the following genera: Washingtonia, Livistona, and Pritchardia (all commonly known as fan palms), Cocos (coconut palms), Phoenix (date palms), and Roystonea (royal palms). When such material or these specific plants are moved there is a risk of spreading CRB because they may contain CRB in any life stage. For more information regarding CRB, please visit https://dlnr.hawaii.gov/hisc/info/invasive-species- profiles/coconut-rhinoceros-beetle/.

"DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid 'Ōhi'a Death), vertebrate and invertebrate pests (e.g., Little Fire Ants, Coconut Rhinoceros Beetles, etc.), or invasive plant parts (e.g., Miconia, Pampas Grass, etc.) that could harm our native species and ecosystems. We recommend consulting the O'ahu Invasive Species Committee (OISC) at (808) 266-7994 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their

spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

"DOFAW is concerned about impacts to vulnerable birds from nonnative predators such as cats, rodents, and mongooses. We recommend taking action to minimize predator presence; remove cats, place bait stations for rodents and mongoose, and provide covered trash receptacles.

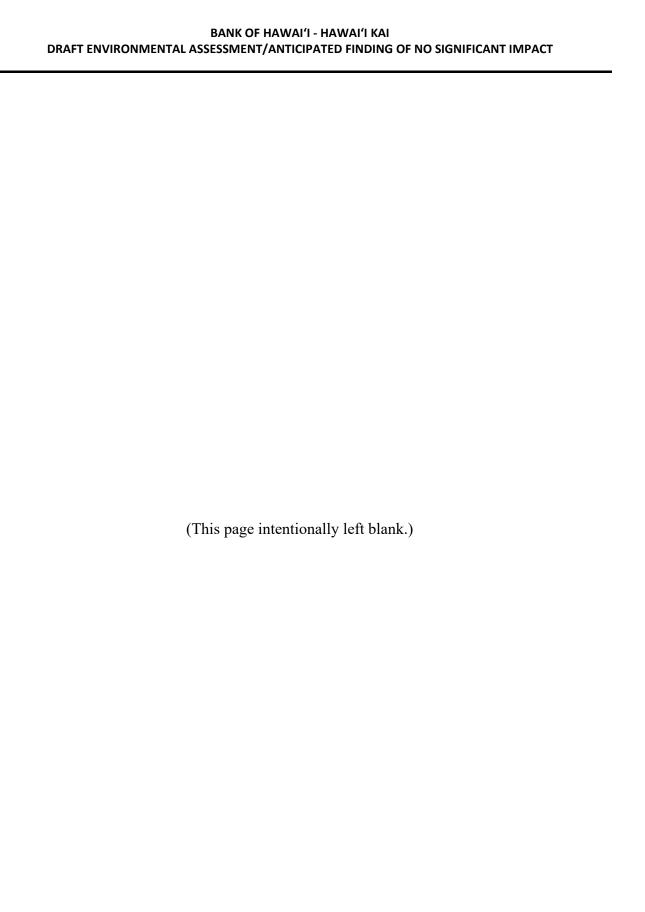
"DOFAW recommends using native plant species for landscaping that are appropriate for the area; i.e., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to www.plantpono.org for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.

"We recommend that Best Management Practices are employed during and after construction to contain any soils and sediment with the purpose of preventing damage to near-shore waters and marine ecosystems." (Appendix A)

The proposed Project will involve changes and/or improvements to existing built, paved and landscaped areas. The proposed Project will involve the redevelopment of the current site of a standalone restaurant building, which does not attract or provide a feeding or nesting habitat for any state or federally listed species. Due to intense human utilization of the Project site (and Hawai'i Kai Towne Center) since it's construction between 1959 and 1969, the proposed Project is not anticipated to have any impact on protected or endangered flora or faunal species. There are no plans to conduct construction at night to avoid disorienting or confusing marine wildlife. In addition, there are no plans to install barbed wire fencing either during construction or permanently. No mitigation measures are planned.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to flora and fauna are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to flora and fauna as the replaced building(s).



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

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

4.1 ARCHAEOLOGICAL AND CULTURAL RESOURCES

4.1.1 Archaeological Resources

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

"The Draft EA should include a discussion identifying historic properties within the project area, the potential impacts as a result of the Project, and the appropriate mitigation to be implemented. Additionally, the Project should be submitted to the State Historic Preservation Division (SHPD) for review and comment under Chapter 6E-42, HRS. Please include our request for comment letter when submitting the Project to the SHPD. Our letter is available on line through the link found on page one of this letter." (Appendix A)

An archaeological literature review and field inspection (LRFI) was conducted for the Project by ASM Affiliates, Inc. (ASM). It is attached to this EA as Appendix F, and summarized below. Chapter 2. Background, of the LRFI provides a cultural and historical context of the Project site, including a description for Keahupua-o-Maunalua fishpond, and the eventual evolution from farming to ranching, some fishing and truck farming before the modern development of Hawai'i Kai. An excerpt from the LRFI states:

"A portion of Wall's (1902) Hawaiian Government Survey map of O'ahu shows the extent of grazing lands containing and surrounding the project area (Figure 7 [of Appendix F], grazing lands outlined in yellow). The aforementioned Maunalua Ranch continued operations within the ahupua'a until 1926, then was again leased for ranching to Alan S. Davis in 1932. Both a honey and a charcoal company were also started in the area around this time. In the mid-20th century agricultural use of the area also grew, and by 1959 the 178 families farming the area were responsible for producing sixty percent of the pigs, flower, and lettuce grown on O'ahu (Takemoto et al. 1975:28).

"In the 1920s, development of the Kalaniana ole Highway (State Route 72) reached Maunalua, formalizing the traditional trails and dirt roads used to transverse the ahupua a. Per aerial imagery taken in 1927, the coastal highway alignment between the fishpond and Maunalua Bay was constructed along the same sand embankment as the fishpond wall, passing directly beneath the current project area (Figure 8 [of Appendix F]). By the 1950s, the road alignment was moved makai to make space for residential development along the embankment, which had begun to be artificially expanded through dredging and land reclamation activities.

"In 1959 Kaiser Permanente established the Hawai'i Kai Development Corporation and purchased rights to develop the land from the Bishop Estate. Through dredging activities,

spoil materials were used as fill along the marshy perimeters of the fishpond in order to create the planned commercial and residential development of Hawai'i Kai. Additionally, former ranch lands surrounding the pond were also graded and developed. A series of historic aerial photographs taken between 1952 and 1993 shows the steady progress of the development (Figure 9 [of Appendix F]). Between 1963 and 1978, the current project area and surrounding embankment were graded, the highway realigned, and fill was used 980s, the Hawaii Kai Towne Center was developed, and by 1991 the current project area was developed a restaurant building still in current use." (Appendix F)

ASM conducted a surface reconnaissance of the Project area in January 2024 in order to assess the absence or presence of surface archaeology and any potential effect of the proposed ground-disturbing activities expected across the entirety of the parcel. Results of the surface reconnaissance are discussed below.

"The project area, consisting of TMK: (1) 3-9-017:040, is developed with a single-story restaurant building within the asphalt parking lot of the Hawai'i Kai Towne Center, accessible from the south via Kalaniana'ole Highway or the west via Keahole Street (Figure 12 [of Appendix F]). The restaurant building, constructed in 1991, covers nearly the entire parcel and features a combination angled roof, which is mirrored in a small structure above the building entryway and stairs (Figure 13 [of Appendix F]). The parcel is situated approximately one meter above the surrounding roadway elevation atop a low terrace formed by a retaining wall along the makai edge of the parking lot and a gentle landscaped slope between the parcel and Kalaniana 'ole Highway (Figure 14 [of Appendix F]). The edges of the subject parcel are developed with a combination of gravel, brick, and paver walkways surrounding the restaurant building (Figure 15 [of Appendix F]), which are in turn surrounded by a landscaped and highly manicured outdoor area containing decorative rock and knoll features and lush vegetation both within and outside of planters including Bermuda grass (Cynodon dactylon), pindo palms (Butia capitata), Christmas palms (Adonidia merrillii), and ti (Cordyline fruticosa), among others (Figures 16 and 17 [of Appendix F]). Aside from imported topsoil used in the various planters around the perimeter of the project area, no surface or subsurface sediments were exposed or available examination during the field inspection." (Appendix F)

Potential Impacts and Mitigation Measures of the Proposed Project

Given the negative findings with respect to above-ground archaeological resources ASM concluded that "the proposed development will not affect any historic properties." ASM Affiliates' recommended determination of effect for the proposed Project is "no historic properties affected." ASM also wrote:

"However, due to the current project location in the immediate vicinity of the Keahupuao Maunalua fishpond (SIHP 50-80-15-00049) and above the pre-1950s alignment of Kalaniana ole Highway, it is possible that associated archaeological deposits may be encountered during ground- disturbing activities conducted during the current project. Therefore, it is recommended that an archaeological monitoring plan and subsequent

archaeological monitoring for identification purposes is completed in compliance with HAR §13-279 for the current project." (Appendix F)

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to archaeological and historical resources are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to archaeological and historical resources as the replaced building(s).

4.1.2 Cultural Resources

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

"The Draft EA must include a discussion analyzing the impact of the proposed Project on cultural practices and features associated within the project area." (Appendix A)

A cultural impact assessment (CIA) was prepared for the Project by ASM Affiliates, Inc. It is attached to this EA as Appendix G, and summarized below.

The cultural-historical information gathered as part of the CIA demonstrates that the Project area is located within a region, Honolulu (Kona) District, which was significant throughout the Precontact and Historic Periods. According to the CIA, early historical accounts and maps report a populated landscape along the coast along with cultivation of coastal flats, valley floors, and the use of fishponds. The Project area is situated generally atop a sand embankment forming a large part of the seawall of Keahupua-o-Maunalua fishpond, later referred to as Loko Kuapā, Maunalua Pond, and Kuapā Pond. Following European Contact, Maunalua was transformed by dramatic losses of traditional Hawaiian practices and population brought about by the rise of western commercialized ranching, fishing, and agriculture. Following the Māhele the entire ahupua'a was leased as ranch land, while its offshore fisheries were productively utilized. Historic maps and aerial imagery reveal that in the early 1900s construction of the Kalaniana'ole Highway led to further development of the area, including a small residential area atop the sand bank of Loko Kuapā, portions of which were situated within the current Project area. Subsequently, development of the planned Hawai'i Kai community extensively modified the landscape through dredging and land reclamation activities conducted within the fishpond. During this time additional lands were added around the sand embankment to form a small island, which was then developed as the Hawai'i Kai Towne Center shopping complex in the 1980s. The Project area was most recently developed as a restaurant in 1991, which remained a restaurant until its closure in 2024.

As noted in the CIA, gathering input from community members with genealogical ties and long-standing residency or relationships to the study area is vital to the process of assessing potential cultural impacts to resources, practices, and beliefs. It is precisely these individuals that ascribe meaning and value to traditional resources and practices.

To identify individuals knowledgeable about traditional cultural practices and/or uses associated with the current Project and study area, a public notice containing (a) locational information

about the Project area, (b) a description of the proposed Project, and (c) contact information was printed in a newspaper with State-wide readership. ASM submitted the public notice to the Office of Hawaiian Affairs (OHA) on January 29, 2024, for publication in their monthly newspaper, Ka Wai Ola. This notice was published in the March 2024 edition of Ka Wai Ola and a copy of the public notice is included in the CIA (Appendix G of this Draft EA). No responses were received from the public notice.

Additionally, ASM staff identified and contacted twenty-three individuals/organizations via phone and email who were long-time residents of Hawai'i Kai and/or the broader Maunalua area and thought to have knowledge of both traditional cultural properties and/or past and ongoing practices associated with the project area and its environs. In some instances individuals who declined their participation referred other potential contributors to ASM. ASM provided each of the persons/organizations contacted with a consultation packet that contained maps of the project area and a brief description of the proposed project. Proposed plans for the project were not included as they were not available until several months later. Of the twenty-three people contacted, six agreed to be interviewed for this study: Malia Lum-Kawaihoa Marquez, Ann Marie Nālani Kirk, Lo Kaimuloa, Chris Cramer, Angela Correa-Pei, and Elizabeth Reilly.

Potential Impacts and Mitigation Measures of the Proposed Project

There are no specific ongoing traditional cultural practices or valued cultural resources that were identified within the footprint of the Project area. Development within the Project area associated with the Kalaniana'ole Highway in the 1920s and later the Hawai'i Kai community created within Keahupua-o-Maunalua fishpond (Loko Kuapā) in the second half of the 20th century suggests that any traditional cultural practices that may have once taken place within the Project area likely predate these developments. Historical research and consultant testimony revealed no such cultural practices occurring within the Project area before or during this time.

Previous cultural studies have identified numerous cultural practices associated with Keahupua-o-Maunalua and Maunalua Ahupua'a, including fishing, fishpond aquaculture, and subsistence agriculture. However, it is also noted that due to historic and modern development, the area is unable to support many of these cultural practices today. Interviewees provided information about the building affecting winds, viewshed, and rainfall along with the slow decline in shade and gathering places. Additionally, the loss of traditional Hawaiian place names was reported as a concern. From these meetings, it is apparent that the height for the proposed Project is of great concern. While the interviewees discussed locations of historical importance within greater Maunalua, none of these were identified as being within the footprint of the Project area.

According to the CIA, several interviewees discussed the importance of place names. While place names such as Hawai'i Kai and Koko Marina are readily recognizable locations, they speak to the development history in the second half of the twentieth century, much of which was heavily contested and resulted in the eviction and removal of residents from the land. Conversely, traditional names intertwine knowledge about a place and root individuals to their genealogies and kuleana (privilege, responsibility) to that place. Further, the traditional names often reference interconnected relationships across the landscape. For instance, Maunalua may reference the geographic landmarks in the area, translating as "two mountains" which likely refers to Koko Head and Koko Crater.

According to ASM, the revitalization of these place names is an essential aspect of reconnecting people to the land. As such, ASM recommends that BOH consider naming the branch the "Maunalua Branch" to honor the traditional place name of the 'ili 'āina and later ahupua'a of Maunalua. ASM further recommends that BOH partner with a local educational Hawaiian non-profit to research and incorporate interpretive signage indicating the traditional place names, their locations, and the meaning behind these names.

A consideration of height and the effects of height on the viewshed, rain, wind, and general environmental context was more nuanced. All interviewees agreed there was concern about the height of a building, particularly a potential two-story building. While interviewees acknowledged the considerable height and scale of buildings on either side of the Project area, the construction of additional tall buildings was viewed as a cumulative impact, contributing to the continual erosion of the viewshed and severance of mauka-makai connections.

Conversely, interviewees indicated a concern of a loss of gathering spaces. The current building site, previously a restaurant, served as a place for families to gather or paddling groups to socialize in a more casual manner. While a second story addition would create concerns over blocking the viewshed, it would also provide an opportunity to create community or shared space, including the installation of interpretive materials. It is recommended that BOH carefully consider ways in which it can maintain gathering space while also limiting the height of the building.

According to the CIA, a final concern expressed was the loss of native habitat, in particular, the importance of shade trees and canopy. Kukui and 'ulu trees provided both important culturally valued resources and outdoor social spaces where families and neighbors could gather, reifying social bonds and exchanging cultural knowledge. Additionally, interviewees pointed to the effect that canopy has on the environment, such as cooling the air and shading the ground and understory. Where possible, it is recommended that the BOH plant native plants, with a particular emphasis on shade producing trees, and consider the installation of breezeways and other indoor/outdoor spaces.

Given the findings of the current study that no traditional cultural properties or practices were identified within the boundaries of Project area, it is ASM's conclusion that the proposed redevelopment of 6650 Kalaniana'ole Highway will not result in any direct impacts to valued cultural, historical, or natural resources; or associated traditional and customary practices. However, in accordance with the archaeological field inspection conducted for the proposed Project (Appendix F of this EA), ASM Affiliates recommends that archaeological monitoring is conducted in support of the proposed Project in order to identify and document possible archaeological deposits related to Keahupua-o-Maunalua fishpond (SIHP 50-80-15-00049) or historic development of the parcel. In addition to an archaeological monitor, ASM Affiliates recommends a cultural monitor to be present and on-site for all ground disturbing activities throughout the length of the construction process to ensure adherence to Hawaiian protocols for burial practices, and handling of any culturally sensitive resources, including Iwi Kūpuna (ancestral human remains).

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to cultural resources are anticipated. The

portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to cultural resources as the replaced building(s).

4.2 TRANSPORTATION

WSP USA, Inc. ("WSP") prepared a Transportation Impact Analysis Report (TIAR) which is summarized below and attached as Appendix H.

4.2.1 Roadways and Traffic

As shown on Figure 14, the key roadways and intersections in the vicinity of the Project site are Kalaniana'ole Highway and Keāhole Street.

Descriptions of Roads Studied

Kalaniana'ole Highway – Kalaniana'ole Highway (State Route 61/72) originates in Maunawili at its intersection with Pali Highway (State Route 61) and Kamehameha Highway (State Route 83). Route 61 continues as Kalaniana'ole Highway to its intersection with Kailua Road then turns and travels through Waimānalo as State Route 72, continuing through Hawai'i Kai past the Project area. It continues west through Niu Valley, 'Āina Haina, and Wai'alae Iki before ending in Kāhala at H-1 Freeway. Within the study area, Kalaniana'ole Highway is classified as a principal arterial and is on the National Highway System (NHS). It is a 6-lane, divided highway west of Keāhole Street and a 4-lane, undivided highway east of Keāhole Street. The posted speed limit within the study area is 35 mph. Major intersections are signalized and coordinated within the study area.

Hawai'i Kai Drive – Hawai'i Kai Drive is a CCH roadway that originates at Kalaniana'ole Highway and provides access to Haha'ione Valley, Kamilo Nui Valley, and Kamilo'iki Valley, eventually terminating at its intersection with Kealahou Steet in Kalama Valley. Within the study area, Hawai'i Kai Drive is a four-lane, undivided minor arterial. The posted speed limit is mostly 25 mph with a short segment at 35 mph near Kalama Valley.

Keāhole Street - Keāhole Street is a four-lane, undivided CCH roadway that originates at Kalaniana'ole Highway and ends at its intersection with Hawai'i Kai Drive in the vicinity of the Kalele Kai residential community. The posted speed limit is 25 mph.

Other Roadways – Other roadways observed for the TIAR were internal Hawai'i Kai Towne Center roadways.

Intersections Studied

For the TIAR, traffic turning movements and traffic counts were taken at the following intersections:

- Kalaniana'ole Highway/Hawai'i Kai Drive;
- Kalaniana'ole Highway/Keāhole Street;
- Keāhole Street/Hawai'i Kai Towne Center Driveway (right turn in/right turn out); and

• Keāhole Street/Hawai'i Kai Towne Center Driveway/Hawai'i Kai Park & Ride.

Based on the traffic counts, the morning (AM) and afternoon (PM) peak hours were found to occur from 7:30 AM to 8:30 AM and from 3:45 PM to 4:45 PM, respectively.

Operating conditions at an intersection by approach are expressed as a qualitative measure known as Level of Service (LOS) ranging from A to F. LOS A represents operations with low vehicular delay, while LOS F represents conditions with relatively high vehicular delay. The overall intersection LOS is a weighted average of the LOS of individual traffic movement groups.

Current Traffic Conditions

The TIAR notes that the Kalaniana'ole Highway/Hawai'i Kai Drive intersection and the Kalaniana'ole Highway/Keāhole Street intersection are coordinated and operate on a 240-second cycle length. Due to the long cycle length and prioritization of through traffic flow on Kalaniana'ole Highway (with LOS A through C, regardless of the peak hour or the intersections studied), traffic operations at the two signalized Kalaniana'ole Highway intersections studied show queuing and longer delays for Kalaniana'ole Highway left turns and cross street movements.

The existing LOS for the four studied intersection are shown on Table 2 below:

		1 Peak Iour		l Peak Iour
Intersection	LOS	Delay	LOS	Delay
Kalanianaole Hwy /Hawaii Kai Dr	D	37.0	С	31.9
Kalanianaole Hwy /Keahole St	E	55.8	D	42.8
Kalanianaole Hwy /Hawaii Kai Towne Center	С	15.6	В	14.4
Keahole St /Hawaii Kai Towne Center /Hawaii Kai Park and Ride	В	13.0	В	13.5

Table 2: Existing Level of Service (LOS)

As shown on Table 2 above, the intersection of Kalaniana'ole Highway at Keāhole Street experiences by far the longest vehicular delay (higher in the morning presumably for westbound commutes to jobs and schools.

All other intersections studied operate at an acceptable LOS (B through D) – regardless of the peak hour, with Kalaniana'ole Highway/Keāhole Street intersection rated at LOS D during the PM peak hour.

In summary the two signalized Kalaniana'ole Highway intersections favor the east and westbound through traffic during both peak periods. As a result, this movement operates well at both intersections. Prioritizing the through movements on Kalaniana'ole Highway result in left turns from Kalaniana'ole Highway and cross street movements operating at LOS F due to the delay in

waiting for their signal phase. Although there is delay, these movements were observed to clear within one signal cycle. The main exception is the eastbound Kalaniana'ole Highway left turn to Keāhole Street during the PM peak hour. This movement has significant demand and all of the traffic demand frequently cannot clear within one signal cycle.

The Hawai'i Kai Towne Center intersections at Keāhole and at Kalaniana'ole Highway operate at acceptable overall levels of service. The signalized Keāhole Street intersection has selected individual turning movements that experience delay due to prioritization of the Keāhole Street through movement, but these were observed to clear within one signal cycle.

Potential Impacts and Mitigation Measures of the Proposed Project

While the actual date when the proposed Bank will be in operation is uncertain, for the purposes of the TIAR, the 2026 traffic conditions were analyzed to establish baseline conditions. No changes to the existing land uses (other than the proposed action) or roadway system within the study area were assumed. Also, no changes in bus routes or service were assumed. The projected LOS for the four studied intersection in 2026 (without the Project) are shown on Table 3 below:

AM Peak PM Peak Hour Hour LOS LOS Delay Delay Intersection Kalanianaole Hwy D C /Hawaii Kai Dr 37.1 32.1 Kalanianaole Hwy Ε /Keahole St 56.3 D 43.6 Kalanianaole Hwy /Hawaii Kai Towne Center C 15.6 В 14.4 Keahole St /Hawaii Kai Towne Center /Hawaii Kai Park and Ride В 13.0 В 13.5

Table 3: Projected 2026 Without Project Level of Service (LOS)

In 2026, the study area intersections are projected to operate at the same levels of service as existing. This is expected due to the minor volume increases within the study area.

The two signalized Kalaniana'ole Highway intersections are expected to have LOS A operations for the main line through movements and LOS F delays for the left turns and minor street movements. Despite the delay, these turning movements are generally expected to clear in once cycle with the exception of the eastbound Kalaniana'ole Highway turn to Keāhole Street during the PM peak hour.

The two Hawai'i Kai Towne Center intersections are projected to operate at acceptable overall levels of service. The signalized Keāhole Street intersection is anticipated to have some high delay individual turning movements but these are expected to clear within one cycle.

Future Traffic Conditions With the Proposed Bank Project

In order to estimate future traffic conditions with the proposed Bank Project, WSP calculated the number of trips that might be generated during the AM and PM peak hours. Please refer to Table 4:

Table 4: Future Traffic Conditions With Project

				AN	Peak H	lour	PM	PM Peak Hou		
	Land Use	Den	sity	In	Out	Total	In	Out	Total	
911	Walk-In Bank	5.727	k SF	45	42	87	77	74	151	
	Raw Total			45	42	87	77	74	151	
	Pass-By			-12	-12	-24	-26	-26	-52	
	Total New Tr	ips		33	30	63	51	48	99	

Notes: units in table are vehicles per hour

The projected LOS for the four studied intersections in 2026 (with the Project) are shown on Table 5 below:

Table 5: Projected 2026 With Project Level of Service (LOS)

	AM Peak Hour			l Peak Iour
Intersection	LOS	Delay	LOS	Delay
Kalanianaole Hwy /Hawaii Kai Dr	D	37.0	С	32.1
Kalanianaole Hwy /Keahole St	E	56.2	D	45.8
Kalanianaole Hwy /Hawaii Kai Towne Center	С	15.6	В	14.4
Keahole St /Hawaii Kai Towne Center /Hawaii Kai Park and Ride	В	14.5	В	14.0

As shown in Table 5 above, in 2026, the four study area intersections are projected to operate at the same overall LOS with and without the Project. A minor increase in delay at certain minor turning movements is projected at the Kalaniana'ole Highway/Keāhole Street and the Keāhole Street/Hawai'i Kai Park & Ride/Hawai'i Kai Towne Center intersections.

Potential Impacts and Mitigation Measures of the Proposed Project

The proposed bank's hours of operations will be 8:00 AM to 4:00 PM on weekdays, 9:00 AM to 1:00 PM on Saturdays, and closed on Sundays. Based on the LOS analysis comparing the with- and without-Project scenarios, it is concluded that the Project will not significantly impact traffic operations at the study area intersections in the vicinity of the Project. As shown in Table 3 and Table 5, the four study area intersections are projected to operate at the same overall LOS with and without the Project (and compared to existing traffic conditions). Minor increases in delay at

certain minor turning movements are projected at the Kalaniana'ole Highway/Keāhole Street and the Keāhole Street/Hawai'i Kai Park & Ride/Hawai'i Kai Towne Center intersections. But these would occur without the proposed Project.

As shown in Table 4, the project-generated traffic volumes are low and are not anticipated to have a significant impact on the Hawai'i Kai Towne Center internal intersections.

Most of the potential short-term traffic impacts would occur during the construction of the facility, and would be caused by construction traffic. These would be temporary impacts, only occurring during construction. These impacts would no longer occur once the proposed Bank is complete.

During the pre-Assessment consultation process, the CCH Department of Facility Maintenance wrote:

"We have no comments as this time, as do not have any facilities or easements on the subject property." (Appendix A)

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to transportation are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to traffic as the replaced building(s) depending on the land use, the hours of operation, etc.

4.2.2 Public Transportation

The CCH operates TheBus, a public bus transportation service for the island of Oʻahu. The Hawaiʻi Kai Park & Ride is located opposite the Hawaiʻi Kai Towne Center driveway on Keāhole Street. The Park & Ride provides 134 parking stalls and serves the following routes:

- 1L Kalihi/Hawai'i Kai Limited Stops
- 1 Kaimukī/Kalihi
- 23 Ala Moana/Hawai'i Kai/Sea Life Park
- 80 Hawai'i Kai Express
- 82 Hawai'i Kai Kalama Valley Express
- PH6 Hawai'i Kai/Pearl Harbor Express

Potential Impacts and Mitigation Measures

Since the proposed Project will not generate new residents or bus riders, it is not expected to have any short-term, long-term, direct, indirect, or cumulative impacts on public transportation. BOH has an established bus pass benefit program, which involves discounted monthly bus passes.

4.2.3 Bicycle and Pedestrian Facilities

According to Figure 3 of the O'ahu Bike Plan, there is an existing bike route on Kalaniana'ole Highway between Lunalilo Home Road and Keāhole Street. Eastward along Kalaniana'ole Highway (from about the location of the Project site) there are existing bike lanes heading

westward. The O'ahu Bike Plan shows no proposed bike lanes, paths or routes along Keāhole Street. Since there is a TheBus Transit Center/Park & Ride along Keāhole Street, and most of TheBus vehicles have bike racks, bicycle riders have access to many areas of O'ahu from the vicinity of the proposed Project.

There are paved sidewalks along both sides of Keāhole Street between Hawai'i Kai Drive and Kalaniana'ole Highway.

Between Lunalilo Home Road and Keāhole Street, there are paved shoulders along Kalaniana'ole Highway that are occasionally used by pedestrians and bicyclists, but the walking experience is not desirable because of: the relatively high speeds of vehicles, the traffic-generated noise, and probably the perception of unsafe conditions since the shoulders are not grade-separated. Approximately in the area fronting the Project site, the State provides sidewalks along both sides of Kalaniana'ole Highway heading westbound. In addition, the Hawai'i Kai Towne Center provides a grade separated sidewalk on the portion of their project fronting Kalaniana'ole Highway.

On-street parking is prohibited along Kalaniana'ole Highway and Keāhole Street. On-street parking is allowed on Hawai'i Kai Drive mauka of the bridge, roughly 600' mauka of Kalaniana'ole Highway.

Potential Impacts and Mitigation Measures of the Proposed Project

The Proposed Project will not increase the number of residents onsite or alter current traffic patterns on site that would impact the pedestrian or bike circulation along public rights-of-way. Long-term vehicle and pedestrian circulation will remain unchanged from existing conditions due to future operations of the proposed bank. Bank customers on foot or bicycles are expected to access the proposed Bank and the rest of Hawai'i Kai Towne Center from adjoining neighborhoods as they do now. As the proposed Project will not present any negative long-term impacts to area bicycle and pedestrian facilities, no mitigation measures are required. BOH has an established bicycle commuters reimbursement program that offers employees expense reimbursements per month.

4.3 NOISE

Due to the proximity of the Project site near Kalaniana'ole Highway, the Property is subject to vehicular traffic noise. Other typical noise sources such as bird vocalizations, and wind through vegetation are hardly audible in comparison to traffic noise at least on the makai side of the Project site. There are no noise sensitive uses adjoining the Property such as schools, residences or hospitals.

Potential Impacts and Mitigation Measures of the Proposed Project

Construction activities for the Project will inevitably create temporary noise impacts. The building contractor may employ mitigation measures to minimize those temporary noise impacts including the use of mufflers and implementing construction curfew periods. Pursuant to Chapter 11-46, HAR, all project activities must comply with all community noise controls.

Once in operation, the Project site is not located next noise sensitive uses and will not be audible to the closest residents along Kalaniana'ole Highway because of noise attenuation from other

existing Hawai'i Kai Towne Center buildings and the noise generated by traffic along Kalaniana'ole Highway. No mitigation measures are proposed as the noise generated as a result of the proposed Project represents no substantial change from current noise occurrences.

The proposed Project is not expected to have any short-term, long-term, direct, indirect, or cumulative impacts on noise.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to the acoustical environment are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to the acoustical environment as the replaced building(s) (depending on the land use and hours of operation).

4.4 AIR QUALITY

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

Potential Impacts and Mitigation Measures of the Proposed Project

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

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

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

• Installing silt screening in areas of disturbance.

In the long-term, the proposed Project is not anticipated to have a long-term impact on air quality in the immediate vicinity. As the proposed Project will not present any long-term impacts to air quality, no mitigation measures are required. In summary, the proposed Project is not expected to have any short-term, long-term, direct, indirect, or cumulative impacts on air quality.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to air quality are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to air quality as the replaced building(s) (depending on the land use of the future building[s]). As previously stated, the State's good air quality is largely a function of the predominant trade winds blowing from the northeast. It is unlikely, given the current business-commercial zoning, that a future land use at Hawai'i Kai Towne Center will impact air quality.

4.5 VISUAL RESOURCES

The existing vacant restaurant building is one story, with a footprint of 7,263 square feet, and a height of 37 feet, 4 inches above the finished floor elevation. The nearest coastal public highway is Kalaniana'ole Highway. The existing building is highly visible from Kalaniana'ole Highway (Figure 5, Site Photos), however, from the nearest State Highway, Kalaniana'ole Highway, it does not obstruct views to the shoreline or key landmarks such as Koko Crater, Koko Head, the Ko'olau Mountain Range and Kuli'ou'ou Ridge. The existing building does not obstruct views along the shoreline.

Potential Impacts and Mitigation Measures of the Proposed Project

The proposed BOH building will be located on the site of the existing vacant restaurant building. The basic differences between the existing building and the proposed BOH Building are as follows:

	Existing vacant restaurant building	Proposed BOH building	Differences
Footprint (in square feet)	7,263	6,835	-428
Number of Floors	1	2	+1
Height of Rooftop above finished floor elevation	37 feet, 4 inches	Approx. 40	Approx. +2 feet, 8 inches

Table 6: Comparison of Existing and Proposed Buildings

In general, it is anticipated that the proposed bank building will be two floors, have a smaller footprint (of 6,835 square feet), and a building height of approximately 40 feet above the finished

floor elevation, which is only slightly higher than the existing building height of 37 feet, 4 inches above the finished floor elevation. Because no adverse visual impacts are expected to views to the shoreline or key landmarks such as Koko Crater, Koko Head, or the Koʻolau Mountain Range, no additional mitigation measures are proposed.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

The existing buildings along Kalaniana'ole Highway are highly visible (Figure 5, Site Photos), however, from the nearest State Highway, Kalaniana'ole Highway, these buildings do not obstruct views to the shoreline or key landmarks such as Koko Crater, Koko Head, or the Ko'olau Mountain Range. The existing buildings do not obstruct views along the shoreline.

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to visual resources are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) will likely pose a similar impact to visual resources as the replaced building(s).

4.6 SOCIAL & ECONOMIC CHARACTERISTICS

The postal zip code 96825 includes the areas referred to as Hawai'i Kai, Kealaula Kai, Mariner's Cove, Kamilo'iki Valley, Kalama Valley, Queen's Gate and Portlock. According to the Census Reporter (https://censusreporter.org/), this zip code encompasses 10.9 square miles and a population of 30,444. The median age is 49 which is about 25 percent higher than the median age in "Urban Honolulu" (38.8) and approximately the same percentage higher than median age in the State (39.9). Fifty-three percent of the population is between the ages of 18 to 64.

Zip code 96825 contains 11,920 housing units, of which 71 percent are single-family units. Of those 11,920 housing units, 92 percent are occupied; and most are owner-occupied (83 percent). The median value of owner-occupied housing units is \$1,006,800 (which is about 20 percent higher than the amount in "Urban Honolulu" (\$832,200) and about 1.3 times the amount in the State (\$764,800).

There are approximately 11,000 households in the zip code 96825 or approximately 2.8 persons per household. Within this zip code 10.7 percent of the households moved since the previous year (compared with 13.7 and 13 percent, for "Urban Honolulu" and the State, respectively). Eightynine percent of the households were in the same home from a year ago.

The median household income in zip code 96825 is \$148,536, which is about 1.5 times the median income of both "Urban Honolulu" (\$99,816) and the State (\$94,814).

Potential Impacts and Mitigation Measures of the Proposed Project

The Project is proposed in a relatively stable area in terms of age, home ownership, property values and household income. It is anticipated that the proposed Project will be successful given its location within the geographical area identified as postal zip code 96825, but especially given its proximity to Kalaniana'ole Highway and Keāhole Street (and within the Hawai'i Kai Towne Center).

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to socio-economic conditions are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) may pose a similar impact to socio-economic conditions as the replaced building(s) (assuming similar land use and hours of operation).

4.7 INFRASTRUCTURE AND UTILITIES

4.7.1 Water System

The Project site is serviced from an existing Honolulu Board of Water Supply (BWS) water meter for the Hawai'i Kai Towne Center, which currently provides water service to the existing building to be demolished.

Potential Impacts and Mitigation Measures of the Proposed Project

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

"The existing water system is currently adequate to accommodate the proposed development. However, please be advised that the existing Honolulu water system capacity has been reduced due to the shut-down of the Halawa Shaft pumping station as a proactive measure to prevent fuel contamination from the Navy's Red Hill Bulk Storage Tank fuel releases. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval, pending evaluation of the water system conditions at that time on a first-come, first-served basis. The Board of Water Supply (BWS) reserves the right to change any position or information stated herein up until the final approval of the building permit application.

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

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

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

Water conservation measures are required for all proposed developments. These measures include utilization of nonpotable water for irrigation using rain catchment, drought tolerant plants, xeriscape landscaping, efficient irrigation systems, such as a

drip system and moisture sensors, and the use of Water Sense labeled ultra-low flow water fixtures and toilets.

The construction drawings should be submitted for our approval, and the construction schedule should be coordinated to minimize impact to the water system.

The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department." (Appendix A)

The new water demand for the new building is anticipated to be less than the previous restaurant use at the existing building, so the existing private water plumbing line to the building is planned to be reutilized to supply the new building plumbing fixtures. Close coordination will be maintained with the BWS to ensure that the water system will not be adversely impacted and no interruption of water services to adjacent areas is anticipated. During the design phase, the construction drawings will be submitted to the BWS for review and approval, including confirmation of the existing and proposed water fixture units and flow requirements for the new building.

When water is made available, the BOH will pay the BWS Water System Facilities Charges for resource development, transmission and daily storage. BWS Cross-Connection Control and Backflow Prevention requirements will be fulfilled prior to the issuance of the building permit.

On-site fire protection requirements will be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department (HFD).

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to the BWS source, storage and transmission system are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) may pose a similar impact to the BWS source, storage and transmission system as the replaced building(s) (depending on the land use and hours of operation, and whether the future building[s] is/are more sustainably designed).

4.7.2 Wastewater System

The Project site is serviced from an existing Hawai'i American Water sewer lateral for the Hawai'i Kai Towne Center, to which the existing building to be demolished is currently connected.

Potential Impacts and Mitigation Measures of the Proposed Project

The new wastewater demand for the new building is anticipated to be less than the previous restaurant use at the existing building, so the existing private sewer plumbing line to the building is planned to be reutilized and reconnect to the existing Hawai'i American Water sewer system.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to the existing Hawai'i American Water

wastewater collection, treatment and disposal system are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) may pose a similar impact to the existing Hawai'i American Water wastewater collection, treatment and disposal system as the replaced building(s) (depending on the land use of the future building[s] and hours of operation).

4.7.3 Drainage System

The existing site runoff primarily sheet flows through the landscaped area to the existing public storm drain system along Kalaniana'ole Highway. A portion of the site that drains into the existing parking lot drains into onsite private drain inlets and storm drain system, which also connects to the existing public storm drain system along Kalaniana'ole Highway.

Potential Impacts and Mitigation Measures of the Proposed Project

No impacts or mitigation measures are anticipated. The new building and site development will follow the same drainage patterns as the existing conditions, and stormwater quality provisions will be provided for the site redevelopment. The building floor will be built above the 9-foot BFE to avoid flooding potential.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to drainage patterns and conditions are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) may pose a similar impact to drainage patterns and conditions as the replaced building(s) (depending on the land use, and whether the future building[s] is/are more sustainably designed).

4.7.4 Electrical and Telecommunications Systems

The Project site is served by the Hawaiian Electric Company (HECO) for electrical service and is currently served by Hawaiian Telcom for telephone service and Spectrum (formerly Oceanic Time Warner Cable) for cable TV service.

Potential Impacts and Mitigation Measures of the Proposed Project

During the pre-Assessment consultation process, the DLNR CWRM wrote:

"We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program description can be found online at http://energy.hawaii.gov/green-business-program." (Appendix A)

According to its 2022 Environmental, Social, Governance (ESG) Report, BOH supports environmental sustainability through financing renewable energy projects (\$150 million

committed as of December 31, 2022) and through implementing building management systems (BMS) at 74 percent of its locations.

BOH also participates in HECO's Fast Demand Response program at its two largest facilities. Through this participation, the Bank not only receives financial rewards for reducing its usage during periods of peak demand but also contributes to preserving the reliability of the island's electrical grid (there is photovoltaic installed at over 60 percent of owned facilities, that generate 3.4 megawatt hours of energy annually).

Reducing energy consumption is one of BOH's top priorities, and it continues to achieve year-over-year demand reduction. This is accomplished through many initiatives across the Bank's network, including LED lighting upgrades, photovoltaic installation with battery storage, BMS installation, and a variety of infrastructure upgrades and modernizations.

During the pre-Assessment consultation process, Spectrum wrote:

"Thank you for the opportunity to review and comment on the proposed construction Project. According to our drawings. We may be affected by the proposed work. We have underground equipment nearby. The locations of existing CATV pull-boxes, duct routes, aerial routes, and crossings are shown on the provided plans. SPECTRUM is submitting drawings with information on the facilities within the project area. Please note these drawings are to be used for reference only. The exact locations, depth and routing of all underground CATV facilities must be verified in the field due to construction variances. In any case toning through the One Call Center will identify our facilities in the immediate area. At this time, SPECTRUM occupies both CATV and Hawaiian Telcom's (HTCO) duct systems. The sections of this project that is highlighted in your scope of work, may conflict with existing Spectrum facilities.

"This information has been provided to help minimize delays and prevent damage to existing CATV structures within the project area..." (Appendix A)

According to the design team's electrical and telecommunication engineering consultant, the drawings provided by Spectrum show their underground facilities wrapping around the Koko Head and makai sides of the existing restaurant building. The proposed new building will be on a smaller pad, and no major modifications are proposed for the parking/driveway entrance areas; the proposed Project is thus unlikely to affect Spectrum's existing underground infrastructure. Presumably the same would apply for HECO and Hawaiian Telcom facilities within the Project site area.

The design team led by MC3 Architects will have its electrical and telecommunication engineering consultant coordinate with Spectrum to minimize delays and prevent damage to existing CATV structures within the near vicinity of the Project. In addition, the appropriate drawing sets will include the standard "General Contractor's Notes" provided by Spectrum.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to electrical and telecommunications facilities are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along

Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) may pose a similar impact to electrical and telecommunications facilities as the replaced building(s) (depending on the land use and hours of operation, and whether the future building[s] is/are more sustainably designed).

4.7.5 Solid Waste

Solid waste is currently collected regularly by a private collection service and disposed at a CCH solid waste facility. While the exact amount of solid waste generated by the existing restaurant is not available, the Restaurant Food Waste Action Guide (2018) states that "The U.S. restaurant sector generates 11.4 million tons of food waste annually (7.3 million tons from full-service restaurants and 4.1 million tons from limited-service restaurants), the full cost of which is more than \$25 billion. According to the City and County of Honolulu 2017 Waste Composition Study, organics (36 percent) make up the largest portion of Honolulu's overall waste stream.

Potential Impacts and Mitigation Measures of the Proposed Project

During the construction phase, solid waste generated at the site is anticipated to increase over current conditions. The additional waste is expected to include materials from demolition, grading, construction and landscaping activities. Any demolition or construction waste generated by the Project will be disposed of at a solid waste disposal facility that complies with the applicable provisions (Chapter 11-58.1, HAR "Solid Waste Management Control"). Solid waste that cannot be recycled will be disposed of at landfills, the incinerator, or transfer stations. A waste-to-energy combustor, H-POWER (Honolulu Program of Waste Energy Recovery), is located at the Campbell Industrial Park and incinerates about 1,800 tons of combustible waste per day. The electricity generated is bought by HECO. Currently, the H-POWER facility receives all residential and commercial packer truck wastes on the island. Waste contractors will be asked to submit disposal receipts and invoices to ensure proper disposal of waste. The proposed Project will also comply with the provisions of Chapters 11-260 to 11-280, HAR, relating to hazardous waste.

In the long term, additional solid waste may be generated by the proposed Bank. However, the proposed bank use of the site should result in less contribution of organics to Honolulu's overall waste stream than the current restaurant use. The amount of new solid waste can be accommodated by existing waste infrastructure. In addition, design elements may be considered to facilitate the separation and collection of materials for recycling.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to the CCH collection, recycling, processing, and disposal system are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) may pose a similar impact to the CCH collection, recycling, processing, and disposal system as the replaced building(s) (depending on the land use and whether the future building[s] is/are more sustainably designed and constructed).

4.8 PUBLIC SERVICES AND FACILITIES

4.8.1 Police Protection

The Project site is located within Honolulu Police Department (HPD) District 7 - East Honolulu (Figure 15: Public Facilities). District 7 encompasses about 40 square miles in East Honolulu, from Punahou Street to Makapu'u Point and from the many valleys in the Ko'olau Range to the beaches from Diamond Head to Sandy Beach. The district includes residential neighborhoods, commercial properties, the University of Hawai'i's Mānoa campus, Kapi'olani Community College, Chaminade University, and many of Honolulu's primary and secondary private schools. A walk-in/storefront Substation is located in the Hawai'i Kai Towne Center. The address is 6600 Kalaniana'ole Highway. The Substation is around the 'Ewa corner of the Hawai'i Kai Satellite City Hall office. The hours of operation are 9:00 AM to 9:00 PM.

Potential Impacts and Mitigation Measures of the Proposed Project

The Applicant does not anticipate that the Project will create an increased long-term demand on existing police protection services. The proximity of the police substation will likely deter security issues at the proposed Bank. As the proposed Project will not present any long-term impacts to police services, no mitigation measures are required. During the pre-Assessment consultation process, the HPD wrote:

"Based on the information provided, the Honolulu Police Department does not have any comments at this time." (Appendix A)

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to police protection services are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) may pose a similar impact to police protection services as the replaced building(s) (depending on the land use and hours of operation).

4.8.2 Fire Protection

The Hawai'i Kai Fire Station is the closest fire station to the Project site (Figure 15), located at 515 Lunalilo Home Road, approximately 4 minutes or 1.7 mile east of the Project site.

The current building is surrounded by either pavement (parking, driveways or roads) or lawn (shoulder of Kalaniana ole Highway) and accessible by fire hoses.

Potential Impacts and Mitigation Measures of the Proposed Project

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

1. "The fire department access roads shall be in accordance with National Fire Protection Association (NFPA) 1; 2018 Edition, Section 18.2.3.

- 2. "A fire department access road shall extend to within 50 feet(15 meters) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. (NFPA 1; 2018 Edition, Section 18.2.3.2.1.)
- 3. "Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet (46 meters) from fire department access roads as measured by an approved route around the exterior of the building or facility. (NFPA 1; 2018 Edition, Sections 18.2.3.2.2 and 18.2.3.2.2.1, as amended.)
- 4. "An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1; 2018 Edition, Sections 18.3 and 18.4.
- 5. "Submit civil drawings to the City and County of Honolulu's Department of Planning and Permitting and route them to the HFD for review and approval.

"The requirements above are required by the HFD. This project may have additional requirements to be met as determined by other agencies." (Appendix A)

Similar to the current restaurant building, the proposed Bank building will be surrounded by either pavement (parking, driveways or roads) or lawn (shoulder of Kalaniana'ole Highway), and will be accessible by fire trucks.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to fire protection services are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) may pose a similar impact to fire protection services as the replaced building(s) (depending on the land use and whether the future buildings include fire sprinklers).

4.8.3 Health Care Services

The closest emergency rooms (including Kapi'olani Medical Center for Women and Children, Straub Emergency Department, and The Queen's Medical Center Emergency Room) are located approximately nine miles (or 18 minutes) away in downtown Honolulu. There are also several medical clinics in Hawai'i Kai, including: the Kaiser Permanente Hawai'i Kai Clinic (located nearby within the Hawai'i Kai Towne Center), The Queen's Health Care Center – Hawai'i Kai, and the Straub Medical Center – Hawai'i Kai Clinic.

Potential Impacts and Mitigation Measures of the Proposed Project

Although there may be an unavoidable and occasional need for emergency health care services by employees and customers, the Project will not cause an increase in the number of residents and is not expected to significantly increase the need for emergency services. Additionally, the Proposed

Project is not expected to have a long-term adverse impact on emergency medical providers or their ability to service the community. No mitigation measures are proposed.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to nearby or major health care services are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) may pose a similar impact to nearby or major health care services as the replaced building(s) (depending on the land use and hours of operation).

4.8.4 Recreational Facilities

Nearby public recreational facilities include: Elaine Dobashi Dog Park, Maunalua Bay Beach Park, Koko Head District Park, and Haha'ione Valley Neighborhood Park.

Potential Impacts and Mitigation Measures of the Proposed Project

During the pre-Assessment consultation process, the State of Hawai'i DLNR Division of Boating and Ocean Recreation wrote "We have no objections" (Appendix A). The proposed Project will not displace any existing public recreational facilities or add to the resident population and create any additional demand for public recreational facilities in the vicinity of the Project. No mitigation measures are proposed.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to public recreational facilities are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) may pose a similar impact to public recreational facilities as the replaced building(s) (depending on the land use).

4.8.5 Schools

Nearby State Department of Education (DOE) public schools include Haha'ione Elementary, Kamilo'iki Elementary, Koko Head Elementary, Niu Valley Middle, and Kaiser High School (Figure 15, Public Facilities).

Potential Impacts and Mitigation Measures of the Proposed Project

The Project will have no impact on generating new residents or enrollment or any impact on the operations of other nearby public or private schools. No mitigation measures are proposed.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any residential or other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to the DOE public school operations are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings

may eventually be replaced, at which time, that future project(s) may pose a similar impact to the DOE public school operations as the replaced building(s) (depending on the land use).

4.8.6 Other Community Services

During the pre-Assessment consultation process the State of Hawai'i Department of Human Services (DHS) wrote:

"DHS has reviewed the Bank of Hawaii Hawaii Kai project and the map of the area. A check on DHS' internal data system and Google Maps found that one (1) registered family child care home located within a one (1) mile radius of the area that may be affected." (Appendix A)

DHS did not provide an exact location where the child care home is located. It should be noted that closest residence on Kalaniana'ole Highway is located over 1,000 feet away (to the east). The closest residence is located over 900 feet away on 'Opihikao Way (to the north).

Potential Impacts and Mitigation Measures of the Proposed Project

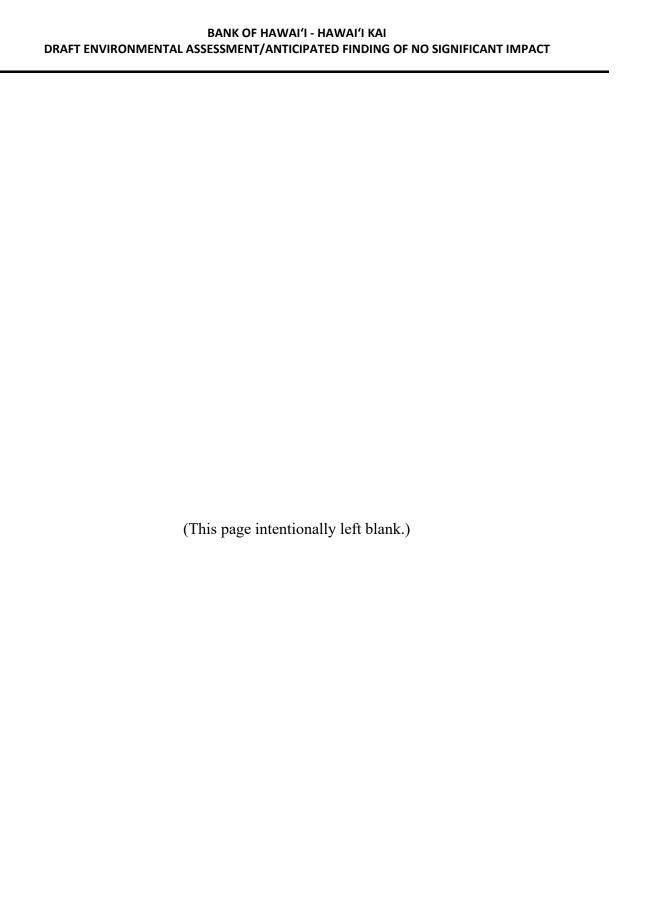
During the pre-Assessment consultation process, the CCH Department of Community Services wrote:

"Our review indicates that the proposed project should have no adverse impacts on any Department of Community Services activities or projects in the surrounding neighborhood." (Appendix A)

The proposed Project will have no impact on other community services. No mitigation measures are proposed.

Potential Impacts and Mitigation Measures of the Hawai'i Kai Towne Center

As BOH is not aware of any other projects being proposed within the portions of the Hawai'i Kai Towne Center within the SMA, no cumulative impacts to other community services are anticipated. The portion of Hawai'i Kai Towne Center within the SMA (and along Kalaniana'ole Highway) is built out, but it is possible that one or more of the existing buildings may eventually be replaced, at which time, that future project(s) may pose a similar impact to other community services as the replaced building(s) (depending on the land use and hours of operation).



5.0 LAND USE CONFORMANCE

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

5.1 STATE OF HAWAI'I

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

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

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

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

The Coastal Zone Management (CZM) Area, as defined in Chapter 205A, HRS, includes all the lands of the State. Therefore, the proposed Project lies within the CZM Area. During the pre-Assessment consultation process, the OPSD wrote:

"The 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 U.S. territorial sea" under Hawai'i Revised Statutes (HRS) \S 205A-1.

"Pursuant to HRS § 205A-4, in implementing the objectives of the CZM program, agencies shall consider ecological, cultural, historic, esthetic, recreational, scenic, open space values, coastal hazards, and economic development. As the proposed action will require agency approvals, the Draft Environmental Assessment (Draft EA) should include a discussion on the project's consistency with the policies of the Hawai'i CZM Program, HRS § 205A-2, as well as the triggers from HRS 343 that necessitate the preparation of an Environmental Assessment." (Appendix A)

The CZM Program aims to provide recreational opportunities, protect historic resources, protect scenic and open space resources, protect coastal ecosystems, provide facilities for economic development, reduce hazards, and manage development. Program objectives and applicability to the proposed Project are discussed in Table 7 below:

Table 7: Coastal Zone Management Act, Chapter 205A, HRS

	STAL ZONE MANAGEMENT ACT, CHAPTER 205A, HRS S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
	ational Resources			
Object	tive: (A) Provide coastal recreational opportunities accessible to the public.			
Polici			1	1
	anagement; and			X
	ovide adequate, accessible, and diverse recreational opportunities in the coastal ne management area by:			
(i)	Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;			X
(ii)	Requiring replacement of coastal resources having significant recreational value including, but not limited to, surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;			X
(iii)	Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;			X
(iv)	Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;			X
(v)	Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;			X
(vi)	Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;	X		
(vii)	Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and			X
(viii)	Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of section 46-6.			X
Theref	ssion: The proposed Project is not a coastal development and is not located fore, policies regarding shoreline recreation resources and shoreline public access proposed Project. The water quality standards are discussed under the Coastal Ecosplicies.	are no	ot appl	icable

COASTAL ZONE MANAGEMENT ACT, CHAPTER 205A, HRS (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Historic Resources			
Objective: (A) Protect, preserve, and, where desirable, restore those natural and man prehistoric resources in the coastal zone management area that are significant in Hawa history and culture.			
Policies:		1	,
(A) Identify and analyze significant archaeological resources;	X		
(B) Maximize information retention through preservation of remains and artifacts or salvage operations; and			X
(C) Support state goals for protection, restoration, interpretation, and display of historic resources.	X		
Discussion: Due to the extensive disturbance that the Project Site has experienced existing restaurant building, it is unlikely that subsurface historic resources are pres Applicant has contracted the preparation of a new archaeological inventory sur archaeological or cultural remains be encountered during construction, all work in the i of the find will cease and the SHPD will be contacted for establishment of appropriaccordance with Chapter 6E, HRS.	ent. H vey. mmed	oweve Should iate vi	er, the d any cinity
Scenic and Open Space Resources			
Objective: (A) Protect, preserve, and, where desirable, restore or improve the quality and open space resources.	of co	astal s	scenic
Policies:			
(A) Identify valued scenic resources in the coastal zone management area;			X
(B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;	X		
(C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and			X
(D) Encourage those developments that are not coastal dependent to locate in inland areas.			X
Discussion: The Project is not coastal dependent, and is located inland on an already that currently contains a building (that is proposed to be replaced). The Project is material coastal highway (Kalaniana'ole Highway) and will not block views to and along the shape of the coastal highway (Kalaniana'ole Highway) and will not block views to and along the shape of the coastal highway (Kalaniana'ole Highway) and will not block views to and along the shape of the coastal highway (Kalaniana'ole Highway) and will not block views to and along the shape of the coastal highway (Kalaniana'ole Highway) and will not block views to and along the shape of the coastal highway (Kalaniana'ole Highway) and will not block views to and along the shape of the coastal highway (Kalaniana'ole Highway) and will not block views to and along the shape of the coastal highway (Kalaniana'ole Highway) and will not block views to and along the shape of the coastal highway (Kalaniana'ole Highway) and will not block views to and along the shape of the coastal highway (Kalaniana'ole Highway) and will not block views to and along the shape of the coastal highway (Kalaniana'ole Highway) and will not block views to and along the shape of the coastal highway (Kalaniana'ole Highway) and will not block views to and along the coastal highway (Kalaniana'ole Highway) and will not block views to an along the coastal highway (Kalaniana'ole Highway) and will not block views to an along the coastal highway (Kalaniana'ole Highway) and will not block views to an along the coastal highway (Kalaniana'ole Highway) and will not block views to an along the coastal highway (Kalaniana'ole Highway) and will not block views to an along the coastal highway (Kalaniana'ole Highway) and will not block views to an along the coastal highway (Kalaniana'ole Highway) and will not block views to an along the coastal highway (Kalaniana'ole Highway) and will not block views to along the coastal highway (Kalaniana'ole Highway) and will not block views to along the coastal highwa	auka o	f the j	-
Coastal Ecosystems			
Objective: (A) Protect valuable coastal ecosystems, including reefs, from disruption and impacts on all coastal ecosystems.	l minin	nize ac	dverse
Policies:			
(A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;			X
(B) Improve the technical basis for natural resource management;			X

COASTAL ZONE MANAGEMENT ACT, CHAPTER 205A, HRS	S	N/S	N/A
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)			
(C) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;			X
(D) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and			X
(E) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.	X		
Discussion: The Project will not directly impact coastal ecosystems as it will be setback shoreline by approximately 150 feet (and the four-lane Kalaniana'ole Highway implemented during construction to prevent erosion and stormwater runoff during the construction to prevent erosion.). BM	IPs w	ill be
Economic Uses			
Objective: (A) Provide public or private facilities and improvements important to the suitable locations.	State's	econo	my in
Policies:			
(A) Concentrate coastal dependent development in appropriate areas;			X
(B) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and			X
(C) Direct the location and expansion of coastal dependent developments to areas prand used for such developments and permit reasonable long-term growth at such coastal dependent development outside of presently designated areas when:			
(i) Use of presently designated locations is not feasible;			X
(ii) Adverse environmental effects are minimized; and			X
(iii) The development is important to the State's economy.			X
Discussion: The Proposed Project is not a coastal dependent development.		<u>I</u>	
Coastal Hazards			
Objective: (A) Reduce hazard to life and property from tsunami, storm waves, stream subsidence, and pollution.	floodi	ing, er	osion,
Policies:			
(A) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;	X		
(B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;			X

(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)	S	N/S	N/A
(C) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and	X		
(D) Prevent coastal flooding from inland projects.			X
Discussion: Information regarding flooding, tsunami evacuation zones, hurricane storm SLR are presented in section 3.5 of this EA.	surge	hazaro	ds and
Managing Development			
Objective: (A) Improve the development review process, communication, and public p management of coastal resources and hazards.	articip	pation	in the
Policies:	1	I	***
(A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;			X
(B) Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and			X
(C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.	X		
Discussion: Early consultation (scoping) comments were obtained, incorporated integrated in Appendix A. In addition, this E.A. discusses notation impacts and mitic			nd are
reproduced in Appendix A. In addition, this EA discusses potential impacts and mitig the proposed Project and will provide an opportunity for input during the Draft EA period.	Publi	c Con	res of
the proposed Project and will provide an opportunity for input during the Draft EA	Publi	c Con	res of
the proposed Project and will provide an opportunity for input during the Draft EA period. Public Participation Objective: (A) Stimulate public awareness, education, and participation in coastal man			res of
the proposed Project and will provide an opportunity for input during the Draft EA period. Public Participation Objective: (A) Stimulate public awareness, education, and participation in coastal man Policies:	nagem		res of
the proposed Project and will provide an opportunity for input during the Draft EA period. Public Participation Objective: (A) Stimulate public awareness, education, and participation in coastal man			res of
the proposed Project and will provide an opportunity for input during the Draft EA period. Public Participation Objective: (A) Stimulate public awareness, education, and participation in coastal man Policies:	nagem		res of
the proposed Project and will provide an opportunity for input during the Draft EA period. Public Participation Objective: (A) Stimulate public awareness, education, and participation in coastal man Policies: (A) Promote public involvement in coastal zone management processes; (B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government	nagem		res of

COASTAL ZONE MANAGEMENT ACT, CHAPTER 205A, HRS	S	N/S	N/A
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)			
Beach Protection			
Objective: (A) Protect beaches for public use and recreation. Policies:			
(A) Locate new structures inland from the shoreline setback to conserve open space,			X
minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;			Λ
(B) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and			X
(C) Minimize the construction of public erosion-protection structures seaward of the shoreline.			X
(D) Prohibit private property owners from creating a public nuisance by inducing or cultivating the private property owner's vegetation in a beach transit corridor; and			X
(E) Prohibit private property owners from creating a public nuisance by allowing the private property owner's unmaintained vegetation to interfere or encroach upon a beach transit corridor.			X
Discussion: The proposed Project is located mauka of the closest shoreline setbac Kalaniana'ole Highway), and does not involve shoreline erosion protection structure prohibit transit to the shoreline or lateral shoreline access.			
Marine Resources			
Objective: (A) Promote the protection, use, and development of marine and coastal retheir sustainability.	esourc	es to c	issure
Policies:	ı	ı	
(A) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;			X
(B) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;			X
(C) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;			X
(D) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and			X
(E) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.			X

COASTAL ZONE MANAGEMENT ACT, CHAPTER 205A, HRS	S	N/S	N/A
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			

Discussion: The proposed Project will be located approximately 150 feet inland from the closest vegetation line (and mauka of Kalaniana'ole Highway) and will not impact marine or coastal resources.

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

The Hawai'i State Plan, Chapter 226 HRS (2007) provides guidelines for the future growth of the State of Hawai'i. The Hawai'i State Plan identifies goals, objectives, policies, and priorities for allocating the State's resources, including public funds, services, human resources, land, energy, and water. The Plan was enacted to achieve "a desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people." Table 8 below outlines the proposed Project's conformance with each theme, goal, objective, policy, and guideline of the Plan.

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

Table 8: Hawai'i State Plan, Chapter 226, HRS – Part I

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME,	S	N/S	N/A
GOALS, OBJECTIVES AND POLICIES			
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			
HRS § 226-1: Findings and Purpose			
HRS § 226-2: Definitions			
HRS § 226-3: Overall Theme.			

Hawai'i's people, as both individuals and groups, generally accept and live by a number of principles or values which are an integral part of society. This concept is the unifying theme of the State Plan. The following principles or values are established as the overall theme of the Hawai'i State Plan:

- (1) Individual and family self-sufficiency refers to the rights of people to maintain as much self-reliance as possible. It is an expression of the value of independence, in other words, being able to freely pursue personal interests and goals. Self-sufficiency means that individuals and families can express and maintain their own self-interest so long as that self-interest does not adversely affect the general welfare. Individual freedom and individual achievement are possible only by reason of other people in society, the institutions, arrangements and customs that they maintain, and the rights and responsibilities that they sanction.
- (2) Social and economic mobility refers to the right of individuals to choose and to have the opportunities for choice available to them. It is a corollary to self-sufficiency. Social and economic mobility means that opportunities and incentives are available for people to seek out their own levels of social and economic fulfillment.
- (3) Community or social well-being is a value that encompasses many things. In essence, it refers to healthy social, economic, and physical environments that benefit the community as a whole. A sense of social responsibility, of caring for others and for the well-being of our community and of participating in social and political life, are important aspects of this concept. It further implies the aloha spirit--attitudes of tolerance, respect, cooperation and unselfish giving, within which Hawai'i's society can progress.

DRAFT ENVIRONMENTAL ASSESSMENT/ANTICIPATED FINDING OF NO SIGNIFICANT	IVIPAC	. 1	
HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME,	S	N/S	N/A
GOALS, OBJECTIVES AND POLICIES			
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			
One of the basic functions of our society is to enhance the ability of individuals and group	ps to p	oursue	their
goals freely, to satisfy basic needs and to secure desired socio-economic levels. The e	lemen	ts of c	hoice
and mobility within society's legal framework are fundamental rights. Society's role			
conditions within which individuals and groups can approach their desired levels of self-			
determination. This enables people to gain confidence and self-esteem; citizens contribute	e mor	e wher	ı they
possess such qualities in a free and open society.			
Government promotes citizen freedom, self-reliance, self-determination, social and ci	vic re	sponsi	bility
and goals achievement by keeping order, by increasing cooperation among many divers		•	
groups, and by fostering social and civic responsibilities that affect the general welfare			
number and activities of individuals and groups, the more complex government's re			
function of government, however, is to assist citizens in attaining their goals. Government	nent p	orovide	es for
meaningful participation by the people in decision-making and for effective access to au	thorit	ty as w	ell as
an equitable sharing of benefits. Citizens have a responsibility to work with their government	nent to	o contr	ibute
to society's improvement. They must also conduct their activities within an agreed-upon	legal	systen	ı that
protects human rights.			

Discussion: The proposed Project is supportive of economic mobility as banking is important to economic self-sufficiency in Hawai'i.

HRS § 226-4: State Goals.

In order to guarantee, for the present and future generations, those elements of choice and mobility that insure that individuals and groups may approach their desired levels of self-reliance and self-determination, it shall be the goal of the State to achieve:

- (1) A strong, viable economy, characterized by stability, diversity and growth that enables fulfillment of the needs and expectations of Hawai'i's present and future generations.
- (2) A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.
- (3) Physical, social and economic well-being, for individuals and families in Hawai'i, that nourishes a sense of community responsibility, of caring and of participation in community life.

Discussion: The proposed Project is supportive of self-reliance as banking is important to economic well-being for individuals and families in Hawai'i.

HRS § 226-5: Objectives and policies for population. (a) Objective: It shall be the objective in planning for the State's population to guide population growth to be consistent with the achievement of physical, economic and social objectives contained in this chapter. (b) Policies: (1) Manage population growth statewide in a manner that provides increased opportunities for Hawai'i's people to pursue their physical, social and economic aspirations while recognizing the unique needs of each county. (2) Encourage an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires.

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(3) Promote increased opportunities for Hawai'i's people to pursue their socio- economic aspirations throughout the islands.			X
(4) Encourage research activities and public awareness programs to foster an understanding of Hawai'i's limited capacity to accommodate population needs and to address concerns resulting from an increase in Hawai'i's population.			X
(5) Encourage federal actions and coordination among major governmental agencies to promote a more balanced distribution of immigrants among the states, provided that such actions do not prevent the reunion of immediate family members.			X
(6) Pursue an increase in federal assistance for states with a greater proportion of foreign immigrants relative to their state's population.			X
(7) Plan the development and availability of land and water resources in a coordinated manner so as to provide for the desired levels of growth in each geographic area.	X		
Discussion: The Project is sited in an area where urban development for desired levels o planned (and since developed). Using the existing space currently occupied by an e building within the Hawai'i Kai Towne Center is an efficient use of land and existing in	xisting	g resta	urant
HRS § 226-6: Objectives and policies for the economy in general. (a) Objectives: Planning for the State's economy in general shall be directed toward a	chieve	ment o	of the
following objectives: (1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawai'i's people, while at the same time stimulating the development and expansion of economic activities capitalizing on defense, dual-use, and science and technology assets, particularly on the neighbor islands where employment opportunities may be limited.			X
(2) A steadily growing and diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands.			X
(b) Policies:	1		l
(1) Promote and encourage entrepreneurship within Hawai'i by residents and nonresidents of the State.			X
(2) Expand Hawai'i's national and international marketing, communication, and organizational ties, to increase the State's capacity to adjust to and capitalize upon economic changes and opportunities occurring outside the State.			X
(3) Promote Hawai'i as an attractive market for environmentally and socially sound investment activities that benefit Hawai'i's people.			X
(4) Transform and maintain Hawai'i as a place that welcomes and facilitates innovative activity that may lead to commercial opportunities.			X

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

GOALS, OBJECTIVES AND POLICIES			
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			
(20) Increase effective communication between the educational community and the private sector to develop relevant curricula and training programs to meet future employment needs in general, and requirements of new, potential growth industries in particular.			X
•			
(21) Foster a business climate in Hawai'iincluding attitudes, tax and regulatory policies, and financial and technical assistance programsthat is conducive to the expansion of existing enterprises and the creation and attraction of new business and industry.			X
Discussion: The proposed Project will not have a significant impact on the overall State Project will involve the replacement of an existing restaurant building with a new bank			. The
HRS § 226-7: Objectives and policies for the economy – agriculture			
(a) Objectives: Planning for the State's economy with regard to agriculture shall be achievement of the following objectives:	direct	ed tow	vards
• Viability of Hawai'i's sugar and pineapple industries.			X
Growth and development of diversified agriculture throughout the State.			X
• An agriculture industry that continues to constitute a dynamic and essential component of Hawai'i's strategic, economic, and social well-being.			X
(b) Policies:			
(1) Establish a clear direction for Hawai'i's agriculture through stakeholder commitment and advocacy.			X
(2) Encourage agriculture by making best use of natural resources.			X
(3) Provide the governor and the legislature with information and options needed for prudent decision making for the development of agriculture.			X
(4) Establish strong relationships between the agricultural and visitor industries for mutual marketing benefits.			X
(5) Foster increased public awareness and understanding of the contributions and benefits of agriculture as a major sector of Hawai'i's economy.			X
(6) Seek the enactment and retention of federal and state legislation that benefits Hawai'i's agricultural industries.			X
(7) Strengthen diversified agriculture by developing an effective promotion, marketing, and distribution system between Hawai'i's food producers and consumers in the State, nation, and world.			X
(8) Support research and development activities that strengthen economic productivity in agriculture, stimulate greater efficiency, and enhance the development of new products and agricultural by-products.			X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(9) Enhance agricultural growth by providing public incentives and encouraging private initiatives.			X
(10) Assure the availability of agriculturally suitable lands with adequate water to accommodate present and future needs.			X
(11) Increase the attractiveness and opportunities for an agricultural education and livelihood.			X
(12) In addition to the State's priority on food, expand Hawai'i's agricultural base by promoting growth and development of flowers, tropical fruits and plants, livestock, feed grains, forestry, food crops, aquaculture, and other potential enterprises.			X
(13) Promote economically competitive activities that increase Hawai'i's agricultural self-sufficiency, including the increased purchase and use of Hawai'i-grown food and food products by residents, businesses, and governmental bodies as defined under section 103D-104.			X
(14) Promote and assist in the establishment of sound financial programs for diversified agriculture.			X
(15) Institute and support programs and activities to assist the entry of displaced agricultural workers into alternative agricultural or other employment.			X
(16) Facilitate the transition of agricultural lands in economically nonfeasible agricultural production to economically viable agricultural uses.			X
Discussion: The proposed Project will not impact the State's agricultural industry. involve the replacement of an existing restaurant building with a new bank building.	The F	Project	will
HRS § 226-8: Objectives and policies for the economy – visitor industry			
(a) Objectives: Planning for the State's economy with regard to the visitor industry towards the achievement of the objective of a visitor industry that constitutes a major congrowth for Hawai'i's economy.			
(b) Policies:(1) Support and assist in the promotion of Hawai'i's visitor attractions and facilities.			X
(2) Ensure that visitor industry activities are in keeping with the social, economic, and physical needs and aspirations of Hawai'i's people.			X
(3) Improve the quality of existing visitor destination areas by utilizing Hawai'i's strengths in science and technology.			X
(4) Encourage cooperation and coordination between the government and private sectors in developing and maintaining well-designed, adequately serviced visitor industry and related developments which are sensitive to neighboring communities and activities.			X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	S	N/S	N/A
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			
(5) Develop the industry in a manner that will continue to provide new job opportunities and steady employment for Hawai'i's people.			X
(6) Provide opportunities for Hawai'i's people to obtain job training and education that will allow for upward mobility within the visitor industry.			X
(7) Foster a recognition of the contribution of the visitor industry to Hawai'i's economy and the need to perpetuate the aloha spirit.			X
(8) Foster an understanding by visitors of the aloha spirit and of the unique and sensitive character of Hawai'i's cultures and values.			X
Discussion: The proposed Project will not impact the State's visitor industry. The Project replacement of an existing restaurant building with a new bank building.	ct will	involv	e the
HRS § 226-9: Objective and policies for the economy – federal expenditures			
(a) Objective: Planning for the State's economy with regard to federal expenditures towards achievement of the objective of a stable federal investment base as an integ Hawai'i's economy.			
(b) Policies:			
(1) Encourage the sustained flow of federal expenditures in Hawai'i that generates long-term government civilian employment.			X
(2) Promote Hawai'i's supportive role in national defense, in a manner consistent with Hawai'i's social, environmental, and cultural goals by building upon dual-use and defense applications to develop thriving ocean engineering, aerospace research and development, and related dual-use technology sectors in Hawai'i's economy.			X
(3) Promote the development of federally supported activities in Hawai'i that respect state-wide economic concerns, are sensitive to community needs, and minimize adverse impacts on Hawai'i's environment.			X
(4) Increase opportunities for entry and advancement of Hawai'i's people into federal government service.			X
(5) Promote federal use of local commodities, services, and facilities available in Hawai'i.			X
(6) Strengthen federal-state-county communication and coordination in all federal activities that affect Hawai'i.			X
(7) Pursue the return of federally controlled lands in Hawai'i that are not required for either the defense of the nation or for other purposes of national importance, and			X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	S	N/S	N/A
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			
HRS § 226-10: Objectives and policies for the economy – potential growth and inno			
(a) Objective: Planning for the State's economy with regard to potential growth and in			
shall be directed towards achievement of the objective of development and expansion of	poten	tial gr	owth
and innovative activities that serve to increase and diversify Hawai'i's economic base.			
(b) Policies:	ı		
(1) Facilitate investment and employment in economic activities that have the potential to expand and diversify Hawai'i's economy, including but not limited to diversified agriculture, aquaculture, renewable energy development, creative media, health care, and science and technology-based sectors.			X
(2) Facilitate investment in innovative activity that may pose risks or be less labor-intensive than other traditional business activity, but if successful, will generate revenue in Hawai'i through the export of services or products or substitution of imported services or products.			X
(3) Encourage entrepreneurship in innovative activity by academic researchers and instructors who may not have the background, skill, or initial inclination to commercially exploit their discoveries or achievements.			X
(4) Recognize that innovative activity is not exclusively dependent upon individuals with advanced formal education, but that many self-taught, motivated individuals are able, willing, sufficiently knowledgeable, and equipped with the attitude necessary to undertake innovative activity.			X
(5) Increase the opportunities for investors in innovative activity and talent engaged in innovative activity to personally meet and interact at cultural, art, entertainment, culinary, athletic, or visitor-oriented events without a business focus.			X
(6) Expand Hawai'i's capacity to attract and service international programs and activities that generate employment for Hawai'i's people.			X
(7) Enhance and promote Hawai'i's role as a center for international relations, trade, finance, services, technology, education, culture, and the arts.			X
(8) Accelerate research and development of new energy- related industries based on wind, solar, ocean, and underground resources and solid waste.			X
(9) Promote Hawai'i's geographic, environmental, social, and technological advantages to attract new economic activities into the State.			X
(10) Provide public incentives and encourage private initiative to attract new industries that best support Hawai'i's social, economic, physical, and environmental objectives.			X
(11) Increase research and the development of ocean-related economic activities such as mining, food production, and scientific research.			X

77 0 0 1 37 0 37 0 1 37 1 37 1 37 1 37 1	S	N/S	N/A
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)			
(12) Develop, promote, and support research and educational and training programs that will enhance Hawai'i's ability to attract and develop economic activities of benefit to Hawai'i.			X
(13) Foster a broader public recognition and understanding of the potential benefits of new, or innovative growth-oriented industry in Hawai'i.			X
(14) Encourage the development and implementation of joint federal and state initiatives to attract federal programs and projects that will support Hawai'i's social, economic, physical, and environmental objectives.			X
(15) Increase research and development of businesses and services in the telecommunications and information industries.			X
(16) Foster the research and development of nonfossil fuel and energy efficient modes of transportation.			X
(17) Recognize and promote health care and health care information technology as growth industries.			X
Discussion: The proposed Project has no direct relation to the State's goals on pote innovative activities.	ntial	growth	and
HRS § 226-10.5: Objectives and policies for the economy – information industry			
(a) Objective: Planning for the State's economy with regard to telecommunications	and	·	
technology shall be directed toward recognizing that broadband and wireless communicated infrastructure are foundations for an innovative economy and positioning Hawai broadband and wireless communications and applications in the Pacific Region.	icatio	п сара	bility
technology shall be directed toward recognizing that broadband and wireless communication and infrastructure are foundations for an innovative economy and positioning Hawai broadband and wireless communications and applications in the Pacific Region. (b) Policies:	icatio	п сара	bility ler in
technology shall be directed toward recognizing that broadband and wireless communicated infrastructure are foundations for an innovative economy and positioning Hawai broadband and wireless communications and applications in the Pacific Region.	icatio	п сара	bility
technology shall be directed toward recognizing that broadband and wireless communication and infrastructure are foundations for an innovative economy and positioning Haward broadband and wireless communications and applications in the Pacific Region. (b) Policies: (1) Promote efforts to attain the highest speeds of electronic and wireless communication within Hawai'i and between Hawai'i and the world, and make high	icatio	п сара	bility Ier in
technology shall be directed toward recognizing that broadband and wireless communication and infrastructure are foundations for an innovative economy and positioning Haward broadband and wireless communications and applications in the Pacific Region. (b) Policies: (1) Promote efforts to attain the highest speeds of electronic and wireless communication within Hawai'i and between Hawai'i and the world, and make high speed communication available to all residents and businesses in Hawai'i. (2) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawai'i to accommodate future growth and innovation in	icatio	п сара	bility ler in X
technology shall be directed toward recognizing that broadband and wireless communication and infrastructure are foundations for an innovative economy and positioning Haward broadband and wireless communications and applications in the Pacific Region. (b) Policies: (1) Promote efforts to attain the highest speeds of electronic and wireless communication within Hawai'i and between Hawai'i and the world, and make high speed communication available to all residents and businesses in Hawai'i. (2) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawai'i to accommodate future growth and innovation in Hawai'i's economy. (3) Facilitate the development of new or innovative business and service ventures in the information industry which will provide employment opportunities for the	icatio	п сара	bility ler in X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(6) Ensure that the development of new businesses and services in the industry are in keeping with the social, economic, and physical needs and aspirations of Hawai'i's people.			X
(7) Provide opportunities for Hawai'i's people to obtain job training and education that will allow for upward mobility within the information industry.			X
(8) Foster a recognition of the contribution of the information industry to Hawai'i's economy.			X
(9) Assist in the promotion of Hawai'i as a broker, creator, and processor of information in the Pacific.			X
Discussion: The proposed Project has no direct relation to the State's goals on informat	ion in	dustry.	
HRS § 226-11: Objectives and policies for the physical environment – land-based marine resources.	d, sho	reline,	and
(a) Objectives: Planning for the State's physical environment with regard to land-base marine resources shall be directed towards achievement of the following objectives:	ed, sho	oreline	, and
(1) Prudent use of Hawai'i's land-based, shoreline, and marine resources.	X		
(2) Effective protection of Hawai'i's unique and fragile environmental resources.			X
(b) Policies:			
(1) Exercise an overall conservation ethic in the use of Hawai'i's natural resources.			X
(2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.			X
(3) Take into account the physical attributes of areas when planning and designing activities and facilities.			X
(4) Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.			X
(5) Consider multiple uses in watershed areas, provided such uses do not detrimentally affect water quality and recharge functions.			X
(6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawai'i.			X
(7) Provide public incentives that encourage private actions to protect significant natural resources from degradation or unnecessary depletion.			X
(8) Pursue compatible relationships among activities, facilities, and natural resources.			X
(9) Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes.			X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Discussion: By building on the site of the existing restaurant building, the proposed Pr State's goal of prudent land-based resources.			
HRS § 226-12: Objective and policies for the physical environment – scenic, natuhistoric resources.			
(a) Objective: Planning for the State's physical environment shall be directed towards a objective of enhancement of Hawai'i's scenic assets, natural beauty, and multi-cresources.			
(b) Policies:(1) Promote the preservation and restoration of significant natural and historic resources.			X
(2) Provide incentives to maintain and enhance historic, cultural, and scenic amenities.			X
(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.			X
(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawai'i's ethnic and cultural heritage.			X
(5) Encourage the design of developments and activities that complement the natural beauty of the islands.			X
Discussion: The proposed Project has no relationship to the promotion and/or available historic resources in the State of Hawai'i, as it will replace an existing restaurant building			
HRS § 226-13: Objectives and policies for the physical environment – land, air, and			
(a) Objectives: Planning for the State's physical environment with regard to land, air, a shall be directed towards achievement of the following objectives:	and w	ater qı	ıality
(1) Maintenance and pursuit of improved quality in Hawai'i's land, air, and water resources.			X
(2) Greater public awareness and appreciation of Hawai'i's environmental resources.			X
(b) Policies:			
(1) Foster educational activities that promote a better understanding of Hawai'i's limited environmental resources.			X
(2) Promote the proper management of Hawai'i's land and water resources.	X		
(3) Promote effective measures to achieve desired quality in Hawai'i's surface, ground, and coastal waters.			X
(4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawai'i's people.			X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME,	S	N/S	N/A
GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	~		
(5) Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters.			X
(6) Encourage design and construction practices that enhance the physical qualities of Hawai'i's communities.			X
(7) Encourage urban developments in close proximity to existing services and facilities.	X		
(8) Foster recognition of the importance and value of the land, air, and water resources to Hawai'i's people, their cultures and visitors.			X
Discussion: Siting the proposed bank on site of the existing restaurant building is support goal of encouraging development in proximity to existing services and facilities, while to land and water resources.			
HRS § 226-14: Objective and policies for facility systems – in general.			
(a) Objective: Planning for the State's facility systems in general shall be directed tow of the objective of water, transportation, waste disposal, and energy and telecommunical support statewide social, economic, and physical objectives. (b) Policies:			
(1) Accommodate the needs of Hawai'i's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.			X
(2) Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.			X
(3) Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.			X
(4) Pursue alternative methods of financing programs and projects and cost-saving techniques in the planning, construction, and maintenance of facility systems.			X
Discussion: The proposed Project has no direct relation to the State's objective and posystems (water, transportation, waste disposal, and energy and telecommunication systems)		for fa	cility
HRS § 226-15: Objectives and policies for facility systems – solid and liquid wastes	i.		
(a) Objectives: Planning for the State's facility systems with regard to solid and liquidirected towards the achievement of the following objectives:		tes sha	ıll be
(1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.			X
(2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility, and other areas.			X
	<u> </u>		

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(b) Policies:			
(1) Encourage the adequate development of sewerage facilities that complement planned growth.			X
(2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic.			X
(3) Promote research to develop more efficient and economical treatment and disposal of solid and liquid wastes.			X
Discussion: The proposed Project has no direct relation to the State's objective and poliliquid wastes facility systems.	icies fo	or solic	d and
HRS § 226-16: Objective and policies for facility systems – water.			
(a) Objective: Planning for the State's facility systems with regard to water shall be achievement of the objective of the provision of water to adequately accommodate dome commercial, industrial, recreational, and other needs within resource capacities. (b) Policies:			
(1) Coordinate development of land use activities with existing and potential water supply.	X		
(2) Support research and development of alternative methods to meet future water requirements well in advance of anticipated needs.			X
(3) Reclaim and encourage the productive use of runoff water and wastewater discharges.			X
(4) Assist in improving the quality, efficiency, service, and storage capabilities of water systems for domestic and agricultural use.			X
(5) Support water supply services to areas experiencing critical water problems.			X
(6) Promote water conservation programs and practices in government, private industry, and the general public to help ensure adequate water to meet long-term needs.			X
Discussion: The existing restaurant building is connected to Honolulu Board of Water facilities. Similarly, the proposed bank building will secure connection to BWS facilities.		ply (B	SWS)
HRS § 226-17: Objectives and policies for facility systems – transportation.			
(a) Objective: Planning for the State's facility systems with regard to transportation toward the achievement of the following objectives:	shall i	be dire	ected
(1) An integrated multi-modal transportation system that services statewide needs and promotes the efficient, economical, safe, and convenient movement of people and goods.			X
(2) A statewide transportation system that is consistent with and will accommodate planned growth objectives throughout the State.			X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(b) Policies:			
(1) Design, program, and develop a multi-modal system in conformance with desired growth and physical development as stated in this chapter;			X
(2) Coordinate state, county, federal, and private transportation activities and programs toward the achievement of statewide objectives;			X
(3) Encourage a reasonable distribution of financial responsibilities for transportation among participating governmental and private parties;			X
(4) Provide for improved accessibility to shipping, docking, and storage facilities;			X
(5) Promote a reasonable level and variety of mass transportation services that adequately meet statewide and community needs;			X
(6) Encourage transportation systems that serve to accommodate present and future development needs of communities;			X
(7) Encourage a variety of carriers to offer increased opportunities and advantages to interisland movement of people and goods;			X
(8) Increase the capacities of airport and harbor systems and support facilities to effectively accommodate transshipment and storage needs;			X
(9) Encourage the development of transportation systems and programs which would assist statewide economic growth and diversification;			X
(10) Encourage the design and development of transportation systems sensitive to the needs of affected communities and the quality of Hawai'i's natural environment;			X
(11) Encourage safe and convenient use of low-cost, energy-efficient, non-polluting means of transportation;			X
(12) Coordinate intergovernmental land use and transportation planning activities to ensure the timely delivery of supporting transportation infrastructure in order to accommodate planned growth objectives; and			X
(13) Encourage diversification of transportation modes and infrastructure to promote alternate fuels and energy efficiency.			X
Discussion: The proposed Project has no direct relation to the State's objective transportation facility systems.	and p	olicie	s for
HRS § 226-18: Objectives and policies for facility systems – energy.			
(a) Objectives: Planning for the State's facility systems with regard to energy shall be di achievement of the following objectives, giving due consideration to all:	rected	towar	d the
(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;			X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(2) Increased energy security and self-sufficiency through the reduction and ultimate elimination of Hawai'i's dependence on imported fuels for electrical generation and ground transportation;			X
(3) Greater diversification of energy generation in the face of threats to Hawai'i's energy supplies and systems;			X
(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use; and			X
(5) Utility models that make the social and financial interests of Hawai'i's utility customers a priority.			X
(b) To achieve the energy objectives, it shall be the policy of this State to ensure the shoprovision of adequate, reasonably priced, and dependable energy services to accommod (c) Other Policies:			
(1) Support research and development as well as promote the use of renewable energy sources;			X
(2) Ensure that the combination of energy supplies and energy-saving systems is sufficient to support the demands of growth;			X
(3) Base decisions of least-cost supply-side and demand-side energy resource options on a comparison of their total costs and benefits when a least-cost is determined by a reasonably comprehensive, quantitative, and qualitative accounting of their long-term, direct and indirect economic, environmental, social, cultural, and public health costs and benefits;			X
(4) Promote all cost-effective conservation of power and fuel supplies through measures including:			
(A) Development of cost-effective demand-side management programs;			X
(B) Education;			X
(C) Adoption of energy-efficient practices and technologies; and			X
(D) Increasing energy efficiency and decreasing energy use in public infrastructure;			X
(5) Ensure, to the extent that new supply-side resources are needed, that the development or expansion of energy systems uses the least-cost energy supply option and maximizes efficient technologies;			X
(6) Support research, development, demonstration, and use of energy efficiency, load management, and other demand-side management programs, practices, and technologies;			X
(7) Promote alternate fuels and transportation energy efficiency;			X

	1		
HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(8) Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications;			X
(9) Support actions that reduce, avoid, or sequester Hawai'i's greenhouse gas emissions through agriculture and forestry initiatives.			X
(10) Provide priority handling and processing for all state and county permits required for renewable energy projects;			X
(11) Ensure that liquefied natural gas is used only as a cost-effective transitional, limited-term replacement of petroleum for electricity generation and does not impede the development and use of other cost-effective renewable energy sources; and			X
(12) Promote the development of indigenous geothermal energy resources that are located on public trust land as an affordable and reliable source of firm power for Hawai'i.			X
Discussion: The proposed Project has no direct relation to the State's objective and perfacility systems.	olicies	for en	nergy
HRS § 226-18.5: Objectives and policies for facility systems – telecommunications.			
(a) Objective: Planning for the State's telecommunications facility systems shall be directive.	ected i	towara	ls the
achievement of dependable, efficient, and economical statewide telecommunications sy supporting the needs of the people.			
(b) To achieve the telecommunications objective, it shall be the policy of this State to ensof adequate, reasonably priced, and dependable telecommunications services to accommunications:			
(1) Facilitate research and development of telecommunications systems and resources;			X
(2) Encourage public and private sector efforts to develop means for adequate, ongoing telecommunications planning;			X
(3) Promote efficient management and use of existing telecommunications systems and services; and			X
(4) Facilitate the development of education and training of telecommunications personnel.			X
Discussion: The proposed Project has no direct relation to the State's objective telecommunications facility systems.	and p	policie	s for
HRS § 226-19: Objectives and policies for socio-cultural advancement – housing.			
(a) Objectives: Planning for the State's socio-cultural advancement with regard to directed toward the achievement of the following objectives:	housii	ng sha	ll be

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME,	S	N/S	N/A
GOALS, OBJECTIVES AND POLICIES			
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)			**
(1) Greater opportunities for Hawai'i's people to secure reasonably priced, safe, sanitary, and livable homes, located in suitable environments that satisfactorily accommodate the needs and desires of families and individuals, through collaboration and cooperation between government and nonprofit and for-profit developers to ensure that more affordable housing is made available to very low-, low- and moderate-income segments of Hawai'i's population.			X
(2) The orderly development of residential areas sensitive to community needs and other land uses.			X
(3) The development and provision of affordable rental housing by the State to meet the housing needs of Hawai'i's people.			X
(b) Policies:	,		
(1) Effectively accommodate the housing needs of Hawai'i's people.			X
(2) Stimulate and promote feasible approaches that increase housing choices for low-income, moderate-income, and gap-group households.			X
(3) Increase homeownership and rental opportunities and choices in terms of quality, location, cost, densities, style, and size of housing.			X
(4) Promote appropriate improvement, rehabilitation, and maintenance of existing housing units and residential areas.			X
(5) Promote design and location of housing developments taking into account the physical setting, accessibility to public facilities and services, and other concerns of existing communities and surrounding areas.			X
(6) Facilitate the use of available vacant, developable, and underutilized urban lands for housing.			X
(7) Foster a variety of lifestyles traditional to Hawai'i through the design and maintenance of neighborhoods that reflect the culture and values of the community.			X
(8) Promote research and development of methods to reduce the cost of housing construction in Hawai'i.			X
Discussion: The proposed Project has no relationship to the availability of housing in the	State	of Hav	vaiʻi.
HRS § 226-20: Objectives and policies for socio-cultural advancement – health			
(a) Objectives: Planning for the State's socio-cultural advancement with regard to health towards achievement of the following objectives:	ı shall	be dire	ected
(1) Fulfillment of basic individual health needs of the general public.			X
(2) Maintenance of sanitary and environmentally healthful conditions in Hawai'i's communities.			X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(3) Elimination of health disparities by identifying and addressing social determinants of health.			X
(b) Policies:			
(1) Provide adequate and accessible services and facilities for prevention and treatment of physical and mental health problems, including substance abuse.			X
(2) Encourage improved cooperation among public and private sectors in the provision of health care to accommodate the total health needs of individuals throughout the State.			X
(3) Encourage public and private efforts to develop and promote statewide and local strategies to reduce health care and related insurance costs.			X
(4) Foster an awareness of the need for personal health maintenance and preventive health care through education and other measures.			X
(5) Provide programs, services, and activities that ensure environmentally healthful and sanitary conditions.			X
(6) Improve the State's capabilities in preventing contamination by pesticides and other potentially hazardous substances through increased coordination, education, monitoring, and enforcement.			X
(7) Prioritize programs, services, interventions, and activities that address identified social determinants of health to improve native Hawaiian health and well-being consistent with the United States Congress' declaration of policy as codified in title 42 United States Code section 11702, and to reduce health disparities of disproportionately affected demographics, including native Hawaiians, other Pacific Islanders, and Filipinos. The prioritization of affected demographic groups other than native Hawaiians may be reviewed every ten years and revised based on the best available epidemiological and public health data.			X
Discussion: The proposed Project has no direct relation to the State's objective and p cultural advancement – health.	olicies	s for s	ocio-
HRS § 226-21: Objective and policies for socio-cultural advancement – education.			
(a) Objectives: Planning for the State's socio-cultural advancement with regard to edirected towards achievement of the objective of the provision of a variety of educational enable individuals to fulfill their needs, responsibilities, and aspirations.			
(b) Policies:			37
(1) Support educational programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.			X
(2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.			X
(3) Provide appropriate educational opportunities for groups with special needs.			X

GOALS, OBJECTIVES AND POLICIES	S	N/S	N/A
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable) (4) Promote educational programs which enhance understanding of Hawai'i's cultural heritage.			X
(5) Provide higher educational opportunities that enable Hawai'i's people to adapt to changing employment demands.			X
(6) Assist individuals, especially those experiencing critical employment problems or barriers, or undergoing employment transitions, by providing appropriate employment training programs and other related educational opportunities.			X
(7) Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking, and reasoning.			X
(8) Emphasize quality educational programs in Hawai'i's institutions to promote academic excellence.			X
(9) Support research programs and activities that enhance the education programs of the State.			X
HRS § 226-22: Objective and policies for socio-cultural advancement – social servi (a) Objective: Planning for the State's socio-cultural advancement with regard to social directed towards the achievement of the objective of improved public and private so activities that enable individuals, families, and groups to become more self-reliant improve their well-being.	l servio cial se	ervices	and
(b) Policies:		1	
(1) Assist individuals, especially those in need of attaining a minimally adequate standard of living and those confronted by social and economic hardship conditions,			
through social services and activities within the State's fiscal capacities.			X
			X
through social services and activities within the State's fiscal capacities. (2) Promote coordination and integrative approaches among public and private agencies and programs to jointly address social problems that will enable individuals, families, and groups to deal effectively with social problems and to			
through social services and activities within the State's fiscal capacities. (2) Promote coordination and integrative approaches among public and private agencies and programs to jointly address social problems that will enable individuals, families, and groups to deal effectively with social problems and to enhance their participation in society. (3) Facilitate the adjustment of new residents, especially recently arrived immigrants,			X

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

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	S	N/S	N/A
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			
HRS § 226-24: Objective and policies for socio-cultural advancement – indivi-	dual 1	rights	and
personal well-being. (a) Objective: Planning for the State's socio-cultural advancement with regard to indi	vidual	riahts	e and
personal well-being shall be directed towards achievement of the objective of increased of			
protection of individual rights to enable individuals to fulfill their socio-economic needs			
(b) Policies:			
(1) Provide effective services and activities that protect individuals from criminal acts and unfair practices and that alleviate the consequences of criminal acts in order to foster a safe and secure environment.			X
(2) Uphold and protect the national and state constitutional rights of every individual.			X
(3) Assure access to, and availability of, legal assistance, consumer protection, and other public services which strive to attain social justice.			X
other public services which surve to attain social justice.			
(4) Ensure equal opportunities for individual participation in society.			X
Discussion: The proposed Project has no direct relation to the State's objective and p cultural advancement – individual rights and personal well-being.	olicies	s for s	ocio-
HRS § 226-25: Objective and policies for socio-cultural advancement – culture.			
(a) Objective: Planning for the State's socio-cultural advancement with regard to culture toward the achievement of the objective of enhancement of cultural identities, traditions, and arts of Hawai'i's people.			
(b) Policies:	37	1	
(1) Foster increased knowledge and understanding of Hawai'i's ethnic and cultural heritages and the history of Hawai'i.	X		
(2) Support activities and conditions that promote cultural values, customs, and arts that enrich the lifestyles of Hawai'i's people and which are sensitive and responsive to family and community needs.	X		
(3) Encourage increased awareness of the effects of proposed public and private actions on the integrity and quality of cultural and community lifestyles in Hawai'i.	X		
(4) Encourage the essence of the aloha spirit in people's daily activities to promote harmonious relationships among Hawai'i's people and visitors.	X		
Discussion: While the proposed Project has no direct relation to the State's objective socio-cultural advancement – culture, the Applicant's employees have volunteered Maunalua several times and in 2024 with Aloha Tree Alliance at the Kuli'ou'ou Ridge To	ed wit		
HRS § 226-26: Objectives and policies for socio-cultural advancement – public safe			
Objectives: Planning for the State's socio-cultural advancement with regard to publi directed towards the achievement of the following objectives:	ic safe	ety sha	ıll be
(1) Assurance of public safety and adequate protection of life and property for all people.			X

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

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	S	N/S	N/A
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			
(2) Pursue an openness and responsiveness in government that permits the flow of public information, interaction, and response.			X
(3) Minimize the size of government to that necessary to be effective.			X
(4) Stimulate the responsibility in citizens to productively participate in government for a better Hawai'i.			X
(5) Assure that government attitudes, actions, and services are sensitive to community needs and concerns.			X
(6) Provide for a balanced fiscal budget.			X
(7) Improve the fiscal budgeting and management system of the State.			X
(8) Promote the consolidation of state and county governmental functions to increase the effective and efficient delivery of government programs and services and to eliminate duplicative services wherever feasible.			X

Discussion: The proposed Project has no direct relation to the State's objective and policies for sociocultural advancement – government.

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

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

State Functional Plans

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

• County General Plan

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

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

Table 9: Hawai'i State Plan, Chapter 226, HRS – Part III

HAWAI'I STATE PLAN, CHAPTER 226, HRS - PART III. PRIORITY	S	N/S	N/A
GUIDELINES			
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			
HRS § 226-101: Purpose. The purpose of this part is to establish overall priority guid	lelines	to add	dress
areas of statewide concern.			
HRS § 226-102: Overall direction. The State shall strive to improve the quality of			
present and future present and future population through the pursuit of desirable course	v		v
major areas of statewide concern which merit priority attention: economic develop			
growth and land resource management, affordable housing, crime and criminal justice, of	quality	educa	ition,
principles of sustainability, and climate change adaptation.			
HRS § 226-103: Economic priority guidelines.			
(a) Priority guidelines to stimulate economic growth and encourage business expansion	and do	evelop	ment
to provide needed jobs for Hawai'i's people and achieve a stable and diversified eco	onomy	' :	
(1) Seek a variety of means to increase the availability of investment capital for			X
new and expanding enterprises.			
(A) Encourage investments which:			
(i) Reflect long term commitments to the State;			X
(") D. 1			37
(ii) Rely on economic linkages within the local economy;			X
(iii) Diversify the economy;			X
(iv) Reinvest in the local economy;			X
(iv) itemvest in the local economy,			21
(v) Are sensitive to community needs and priorities; and			X
(vi) Demonstrate a commitment to provide management opportunities to			X
Hawai'i residents; and			
(B) Encourage investments in innovative activities that have a nexus to the State	e. such	as:	
	,		
(i) Present or former residents acting as entrepreneurs or principals;			X
(ii) Academic support from an institution of higher education in Hawai'i;			X
(iii) Investment interest from Hawai'i residents;			X
(iv) Resources unique to Hawai'i that are required for innovative activity; and			X
	<u> </u>		

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

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)			
(A) Expand vocational training in diversified agriculture, aquaculture,			X
information industry, and other areas where growth is desired and feasible.			1
(B) Encourage more effective career counseling and guidance in high schools and post-secondary institutions to inform students of present and future			X
career opportunities.			
(C) Allocate educational resources to career areas where high employment is expected and where growth of new industries is desired.			X
(D) Promote career opportunities in all industries for Hawai'i's people by encouraging firms doing business in the State to hire residents.			X
(E) Promote greater public and private sector cooperation in determining industrial training needs and in developing relevant curricula and on-the-job training opportunities.			X
(F) Provide retraining programs and other support services to assist entry of displaced workers into alternative employment.			X
(b) Priority guidelines to promote the economic health and quality of the visitor industri	y:	<u> </u>	
(1) Promote visitor satisfaction by fostering an environment which enhances the			X
Aloha Spirit and minimizes inconveniences to Hawai'i's residents and visitors.			21
(2) Encourage the development and maintenance of well-designed, adequately serviced hotels and resort destination areas which are sensitive to neighboring communities and activities and which provide for adequate shoreline setbacks and beach access.			X
(3) Support appropriate capital improvements to enhance the quality of existing resort destination areas and provide incentives to encourage investment in upgrading, repair, and maintenance of visitor facilities.			X
(4) Encourage visitor industry practices and activities which respect, preserve, and enhance Hawai'i's significant natural, scenic, historic, and cultural resources.			X
(5) Develop and maintain career opportunities in the visitor industry for Hawai'i's people, with emphasis on managerial positions.			X
(6) Support and coordinate tourism promotion abroad to enhance Hawai'i's share of existing and potential visitor markets.			X
(7) Maintain and encourage a more favorable resort investment climate consistent with the objectives of this chapter.			X
(8) Support law enforcement activities that provide a safer environment for both visitors and residents alike.			X

GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)			
(9) Coordinate visitor industry activities and promotions to business visitors			X
through the state network of advanced data communication techniques.			
(c) Priority guidelines to promote the continued viability of the sugar and pineapple inc	dustrie	es:	
(1) Provide adequate agricultural lands to support the economic viability of the sugar and pineapple industries.			X
(2) Continue efforts to maintain federal support to provide stable sugar prices high enough to allow profitable operations in Hawai'i.			X
(3) Support research and development, as appropriate, to improve the quality and production of sugar and pineapple crops.			X
(d) Priority guidelines to promote the growth and development of diversified agriculture	e and a	aquacu	lture
(1) Identify, conserve, and protect agricultural and aquacultural lands of importance and initiate affirmative and comprehensive programs to promote economically productive agricultural and aquacultural uses of such lands.			X
(2) Assist in providing adequate, reasonably priced water for agricultural activities.			X
(3) Encourage public and private investment to increase water supply and to improve transmission, storage, and irrigation facilities in support of diversified agriculture and aquaculture.			X
(4) Assist in the formation and operation of production and marketing associations and cooperatives to reduce production and marketing costs.			X
(5) Encourage and assist with the development of a waterborne and airborne freight and cargo system capable of meeting the needs of Hawai'i's agricultural community.			X
(6) Seek favorable freight rates for Hawai'i's agricultural products from interisland and overseas transportation operators.			X
(7) Encourage the development and expansion of agricultural and aquacultural activities which offer long-term economic growth potential and employment opportunities.			X
(8) Continue the development of agricultural parks and other programs to assist small independent farmers in securing agricultural lands and loans.			X
(9) Require agricultural uses in agricultural subdivisions and closely monitor the uses in these subdivisions.			X
(10)Support the continuation of land currently in use for diversified agriculture.			X
(11)Encourage residents and visitors to support Hawai'i's farmers by purchasing locally grown food and food products.			X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(e) Priority guidelines for water use and development:			
(1) Maintain and improve water conservation programs to reduce the overall water consumption rate.			X
(2) Encourage the improvement of irrigation technology and promote the use of nonpotable water for agricultural and landscaping purposes.			X
(3) Increase the support for research and development of economically feasible alternative water sources.			X
(4) Explore alternative funding sources and approaches to support future water development programs and water system improvements.			X
(f) Priority guidelines for energy use and development:			
(1) Encourage the development, demonstration, and commercialization of renewable energy sources.			X
(2) Initiate, maintain, and improve energy conservation programs aimed at reducing energy waste and increasing public awareness of the need to conserve energy.			X
(3) Provide incentives to encourage the use of energy conserving technology in residential, industrial, and other buildings.			X
(4) Encourage the development and use of energy conserving and cost-efficient transportation systems.			X
(g) Priority guidelines to promote the development of the information industry:	<u> </u>		
(1) Establish an information network, with an emphasis on broadband and wireless infrastructure and capability, that will serve as the foundation of and catalyst for overall economic growth and diversification in Hawai'i.			X
(2) Encourage the development of services such as financial data processing, a products and services exchange, foreign language translations, telemarketing, teleconferencing, a twenty-four-hour international stock exchange, international banking, and a Pacific Rim management center.	X		
(3) Encourage the development of small businesses in the information field such as software development, the development of new information systems, peripherals, and applications; data conversion and data entry services; and home or cottage services such as computer programming, secretarial, and accounting services.			X
(4) Encourage the development or expansion of educational and training opportunities for residents in the information and telecommunications fields.			X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			
(5) Encourage research activities, including legal research in the information and telecommunications fields.			X
(6) Support promotional activities to market Hawai'i's information industry services.			X
(7) Encourage the location or co-location of telecommunication or wireless information relay facilities in the community, including public areas, where scientific evidence indicates that the public health, safety, and welfare would not be adversely affected.			X
Discussion: The proposed Project has no direct relation to the State's economic priority supportive of the priority guideline to encourage the development of services such banking.			
HRS § 226-104: Population growth and land resources priority guidelines.			
(a) Priority guidelines to effect desired statewide growth and distribution:			
(1) Encourage planning and resource management to insure that population growth rates throughout the State are consistent with available and planned resource capacities and reflect the needs and desires of Hawai'i's people.			X
(2) Manage a growth rate for Hawai'i's economy that will parallel future employment needs for Hawai'i's people.			X
(3) Ensure that adequate support services and facilities are provided to accommodate the desired distribution of future growth throughout the State.			X
(4) Encourage major state and federal investments and services to promote economic development and private investment to the neighbor islands, as appropriate.			X
(5) Explore the possibility of making available urban land, low-interest loans, and housing subsidies to encourage the provision of housing to support selective economic and population growth on the neighbor islands.			X
(6) Seek federal funds and other funding sources outside the State for research, program development, and training to provide future employment opportunities on the neighbor islands.			X
(7) Support the development of high technology parks on the neighbor islands.			X
(b) Priority guidelines for regional growth distribution and land resource utilization:			
(1) Encourage urban growth primarily to existing urban areas where adequate public facilities are already available or can be provided with reasonable public expenditures, and away from areas where other important benefits are present, such as protection of important agricultural land or preservation of lifestyles.			X

AWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY UIDELINES ey: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N
(2) Make available marginal or nonessential agricultural lands for appropriate urban uses while maintaining agricultural lands of importance in the agricultural district.			
(3) Restrict development when drafting of water would result in exceeding the sustainable yield or in significantly diminishing the recharge capacity of any groundwater area.			
(4) Encourage restriction of new urban development in areas where water is insufficient from any source for both agricultural and domestic use.			
(5) In order to preserve green belts, give priority to state capital-improvement funds which encourage location of urban development within existing urban areas except where compelling public interest dictates development of a noncontiguous new urban core.			
(6) Seek participation from the private sector for the cost of building infrastructure and utilities, and maintaining open spaces.			
(7) Pursue rehabilitation of appropriate urban areas.			
(8) Support the redevelopment of Kaka'ako into a viable residential, industrial, and commercial community.			
(9) Direct future urban development away from critical environmental areas or impose mitigating measures so that negative impacts on the environment would be minimized.			
(10) Identify critical environmental areas in Hawai'i to include but not be limited to the following: watershed and recharge areas; wildlife habitats (on land and in the ocean); areas with endangered species of plants and wildlife; natural streams and water bodies; scenic and recreational shoreline resources; open space and natural areas; historic and cultural sites; areas particularly sensitive to reduction in water and air quality; and scenic resources.			
(11)Identify all areas where priority should be given to preserving rural character and lifestyle.			
(12)Utilize Hawai'i's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, conservation lands, and other limited resources for future generations.	X		
(13)Protect and enhance Hawai'i's shoreline, open spaces, and scenic resources.			

Discussion: The proposed Project is located within the State Land Use Urban District and in particular, on a site currently occupied by an existing building. As such, the proposed Project is in line with the State's population growth and land resources priority guidelines.

HAWAII STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A		
(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)					
HRS § 226-105: Crime and criminal justice. Priority guidelines in the area of crime and criminal justice:					
(1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.			X		
(2) Target state and local resources on efforts to reduce the incidence of violent crime and on programs relating to the apprehension and prosecution of repeat offenders.			X		
(3) Support community and neighborhood program initiatives that enable residents to assist law enforcement agencies in preventing criminal activities.			X		
(4) Reduce overcrowding or substandard conditions in correctional facilities through a comprehensive approach among all criminal justice agencies which may include sentencing law revisions and use of alternative sanctions other than incarceration for persons who pose no danger to their community.			X		
(5) Provide a range of appropriate sanctions for juvenile offenders, including community-based programs and other alternative sanctions.			X		
(6) Increase public and private efforts to assist witnesses and victims of crimes and to minimize the costs of victimization.			X		
Discussion: The proposed Project has no direct relation to the State's priority guideline crime and criminal justice.	nes in	the ar	ea of		
HRS § 226-106: Affordable housing.					
Priority guidelines for the provision of affordable housing:		I	37		
(1) Seek to use marginal or nonessential agricultural land and public land to meet housing needs of low- and moderate-income and gap-group households.			X		
(2) Encourage the use of alternative construction and development methods as a means of reducing production costs.			X		
(3) Improve information and analysis relative to land availability and suitability for housing.			X		
(4) Create incentives for development which would increase home ownership and rental opportunities for Hawai'i's low- and moderate-income households, gapgroup households, and residents with special needs.			X		
(5) Encourage continued support for government or private housing programs that provide low interest mortgages to Hawai'i's people for the purchase of initial owner- occupied housing.			X		
(6) Encourage public and private sector cooperation in the development of rental housing alternatives.			X		

(Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)			
(7) Encourage improved coordination between various agencies and levels of government to deal with housing policies and regulations.			X
(8) Give higher priority to the provision of quality housing that is affordable for Hawai'i's residents and less priority to development of housing intended primarily for individuals outside of Hawai'i.			X
Discussion: The proposed Project has no direct relation to the State's priority guidelines of affordable housing.	for th	e prov	isioı
HRS § 226-107: Quality education.			
Priority guidelines to promote quality education:	1	1	
(1) Pursue effective programs which reflect the varied district, school, and student needs to strengthen basic skills achievement;			X
(2) Continue emphasis on general education "core" requirements to provide common background to students and essential support to other university programs;			X
(3) Initiate efforts to improve the quality of education by improving the capabilities of the education work force;			X
(4) Promote increased opportunities for greater autonomy and flexibility of educational			X
institutions in their decision-making responsibilities;			
	e ava	ilabilit	y o:
institutions in their decision-making responsibilities; (5) Increase and improve the use of information technology in education by the	e ava	ilabilit	y or
institutions in their decision-making responsibilities; (5) Increase and improve the use of information technology in education by th telecommunications equipment for:	e ava	ilabilit	
institutions in their decision-making responsibilities; (5) Increase and improve the use of information technology in education by the telecommunications equipment for: (A) The electronic exchange of information;	e ava	ilabilit	X
 institutions in their decision-making responsibilities; (5) Increase and improve the use of information technology in education by th telecommunications equipment for: (A) The electronic exchange of information; (B) Statewide electronic mail; and (C) Access to the Internet. Encourage programs that increase the public's awareness and understanding 	e ava	ilabilit	X
institutions in their decision-making responsibilities; (5) Increase and improve the use of information technology in education by th telecommunications equipment for: (A) The electronic exchange of information; (B) Statewide electronic mail; and (C) Access to the Internet.	e ava	ilabilit	X
institutions in their decision-making responsibilities; (5) Increase and improve the use of information technology in education by th telecommunications equipment for: (A) The electronic exchange of information; (B) Statewide electronic mail; and (C) Access to the Internet. Encourage programs that increase the public's awareness and understanding of the impact of information technologies on our lives; (6) Pursue the establishment of Hawai'i's public and private universities and colleges	e ava	ilabilit	X X X
institutions in their decision-making responsibilities; (5) Increase and improve the use of information technology in education by th telecommunications equipment for: (A) The electronic exchange of information; (B) Statewide electronic mail; and (C) Access to the Internet. Encourage programs that increase the public's awareness and understanding of the impact of information technologies on our lives; (6) Pursue the establishment of Hawai'i's public and private universities and colleges as research and training centers of the Pacific;	e ava	ilabilit	X X X X

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A			
HRS § 226-108: Sustainability.						
Priority guidelines and principles to promote sustainability shall include:						
(1) Encouraging balanced economic, social, community, and environmental priorities;			X			
(2) Encouraging planning that respects and promotes living within the natural resources and limits of the State;	X					
(3) Promoting a diversified and dynamic economy;			X			
(4) Encouraging respect for the host culture;			X			
(5) Promoting decisions based on meeting the needs of the present without compromising the needs of future generations			X			
(6) Considering the principles of the ahupua'a system; and			X			
(7) Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawai'i.			X			
Discussion: The proposed Project will promote sustainable building strategies such as da ventilation, LED lighting and occupancy sensors.	ylight	ing, na	itural			
HRS § 226-109: Climate change adaptation priority guidelines.						
Priority guidelines to prepare the State to address the impacts of climate change, included areas of agriculture; conservation lands; coastal and nearshore marine areas; naturesources; education; energy; higher education; health; historic preservation; water reenvironment, such as housing, recreation, transportation; and the economy shall:	ıral a	nd cul	tural			
(1) Ensure that Hawai'i's people are educated, informed, and aware of the impacts climate change may have on their communities;			X			
(2) Encourage community stewardship groups and local stakeholders to participate in planning and implementation of climate change policies;			X			
(3) Invest in continued monitoring and research of Hawai'i's climate and the impacts of climate change on the State;			X			
(4) Consider native Hawaiian traditional knowledge and practices in planning for the impacts of climate change;			X			
(5) Encourage the preservation and restoration of natural landscape features, such as coral reefs, beaches and dunes, forests, streams, floodplains, and wetlands, that have the inherent capacity to avoid, minimize, or mitigate the impacts of climate			X			
change;						

HAWAI'I STATE PLAN, CHAPTER 226, HRS - PART III. PRIORITY	S	N/S	N/A
GUIDELINES			
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			
(7) Promote sector resilience in areas such as water, roads, airports, and public health,			X
by encouraging the identification of climate change threats, assessment of potential			
consequences, and evaluation of adaptation options;			
(8) Foster cross-jurisdictional collaboration between county, state, and federal agencies			X
and partnerships between government and private entities and other			
nongovernmental entities, including nonprofit entities;			
(9) Use management and implementation approaches that encourage the continual			X
collection, evaluation, and integration of new information and strategies into new			
and existing practices, policies, and plans; and			
(10) Encourage planning and management of the natural and built environments that			X
effectively integrate climate change policy.			

Discussion: According to the ALTA Survey Map, the Project site is located outside the 3.2-foot SLR-XA (Figure 8 and Appendix E). As such, the building and site improvements are not anticipated to be affected by a 3.2-foot SLR.

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

The State Environmental Policy, as defined in Chapter 344, HRS, establishes the policy of the State of Hawai'i on natural resource conservation and the environment. The Project's consistency with the State Environmental Policy is outlined in Table 10 below:

Table 10: State Environmental Policy, Chapter 344, HRS

State Environmental Policy, Chapter 344, Hawai'i Revised Statutes (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
State Environmental Policy §344-3 Environmental policy. It shall be the policy of the State, through its program. resources to:	s, auth	noritie	s, and
(1) Conserve the natural resources, so that land, water, mineral, visual, air and other natural resources are protected by controlling pollution, by preserving or augmenting natural resources, and by safeguarding the State's unique natural environmental characteristics in a manner which will foster and promote the general welfare, create and maintain conditions under which humanity and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of the people of Hawai'i.			X
(2) Enhance the quality of life by: (A) Setting population limits so that the interaction between the natural and artificial environments and the population is mutually beneficial;			X

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

State Environmental Policy, Chapter 344, Hawai'i Revised Statutes (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(G) Promote the optimal use of solid wastes through programs of waste prevention, energy resource recovery, and recycling so that all our wastes become utilized.			X
Discussion: The proposed Project has no direct relationship to the management of lar visual, air, and other natural resources, other than that the location of the Project will m natural and visual resources by siting the proposed bank building where the existing is located.	inimiz	e impa	acts to
(3) Flora and fauna.			
(A) Protect endangered species of indigenous plants and animals and introduce new plants or animals only upon assurance of negligible ecological hazard;			X
(B) Foster the planting of native as well as other trees, shrubs, and flowering plants compatible to the enhancement of our environment.			X
Discussion: The Project is not in any critical habitat areas and will have no impact on e	ndange	ered sp	ecies.
(4) Parks, recreation, and open space.			
 (A) Establish, preserve and maintain scenic, historic, cultural, park and recreation areas, including the shorelines, for public recreational, educational, and scientific uses; 			X
(B) Protect the shorelines of the State from encroachment of artificial improvements, structures, and activities;			X
(C) Promote open space in view of its natural beauty not only as a natural resource but as an ennobling, living environment for its people.			X
Discussion: The proposed Project will be located approximately 150 feet from the clo is separated from the shoreline by Kalaniana'ole Highway), and will have no impact cultural, park, and recreation areas.			•
(5) Economic development.			
(A) Encourage industries in Hawai'i which would be in harmony with our environment;			X
(B) Promote and foster the agricultural industry of the State; and preserve and conserve productive agricultural lands;			X
(C) Encourage federal activities in Hawai'i to protect the environment;			X
(D) Encourage all industries including the fishing, aquaculture, oceanography, recreation, and forest products industries to protect the environment;			X

State Environmental Policy, Chapter 344, Hawai'i Revised Statutes (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(E) Establish visitor destination areas with planning controls which shall include but not be limited to the number of rooms;			X
(F) Promote and foster the aquaculture industry of the State; and preserve and conserve productive aquacultural lands.			X
Discussion: While the proposed Project is not directly related to the State's poli development, BOH is supportive of economic development that would not result Hawai'i's environment.			
(6) Transportation.			
(A) Encourage transportation systems in harmony with the lifestyle of the people and environment of the State;			X
(B) Adopt guidelines to alleviate environmental degradation caused by motor vehicles;			X
(C) Encourage public and private vehicles and transportation systems to conserve energy, reduce pollution emission, including noise, and provide safe and convenient accommodations for their users.			X
Discussion: The proposed Project is not directly related to the State's policies for trans	sporta	tion.	
(7) Energy.			
(A) Encourage the efficient use of energy resources.	X		
Discussion: The design of the new BOH building will incorporate LED luminaires w much more energy efficient than legacy-type fixtures (T8 tubes), and will also required lighting controls consisting of occupancy sensors where required.			
(8) Community life and housing.			
(A) Foster lifestyles compatible with the environment; preserve the variety of lifestyles traditional to Hawai'i through the design and maintenance of neighborhoods which reflect the culture and mores of the community;			
(B) Develop communities which provide a sense of identity and social satisfaction in harmony with the environment and provide internal opportunities for shopping, employment, education, and recreation;			X
(C) Encourage the reduction of environmental pollution which may degrade a community;			X
(D) Foster safe, sanitary, and decent homes;			X
•			

State Environmental Policy, Chapter 344, Hawai'i Revised Statutes (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
plans and designs in urban areas; and preserve and promote mountain-to-ocean vistas.			
Discussion: The proposed Project is not directly related to the State's policies on cohousing.	ommu	nity lit	fe and
(9) Education and culture.			
(A) Foster culture and the arts and promote their linkage to the enhancement of the environment;			X
(B) Encourage both formal and informal environmental education to all age groups.			X
Discussion: The proposed Project is not directly related to the State's policies on educ	ation a	and cu	lture.
(10) Citizen participation.			
(A) Encourage all individuals in the State to adopt a moral ethic to respect the natural environment; to reduce waste and excessive consumption; and to fulfill the responsibility as trustees of the environment for the present and succeeding generations; and			X
(B) Provide for expanding citizen participation in the decision making process so it continually embraces more citizens and more issues.	X		
Discussion: This EA discusses potential impacts and mitigation measures of the propos	ed Pro	ject ar	ıd will

Discussion: This EA discusses potential impacts and mitigation measures of the proposed Project and will provide an opportunity for citizen participation during the Draft EA Public Comment period.

5.2 CITY AND COUNTY OF HONOLULU

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

"The Draft EA should describe the Project's consistency with Chapter 21, ROH, the Land Use Ordinance, the Oahu General Plan, and East Honolulu Sustainable Communities Plan. In addition, because the EA is being prepared in support of a future SMA Use Permit application, the Draft EA should also analyze the Project's consistency with Chapter 25, ROH, the SMA Ordinance; Chapter 26, ROH, the Shoreline Setback Ordinance; and Chapter 205A, Hawai'i Revised Statutes (HRS)." (Appendix A)

The Land Use Ordinance (LUO) is discussed in Section 5.2.3 below; the O'ahu General Plan is discussed in Section 5.2.1 below, and the East Honolulu Sustainable Communities Plan (EHSCP) is discussed in Section 5.2.2 below.

5.2.1 O'ahu General Plan

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

5.2.2 East Honolulu Sustainable Communities Plan

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

In 2021, the CCH adopted the East Honolulu Sustainable Communities Plan (EHSCP) as one of eight community-oriented plans to guide public policy, investment and decision making through the 2040 planning horizon. The property is located within the EHSCP area. The EHSCP presents a vision for the region's future, presenting policies, guidelines and conceptual schemes intended to guide policy for the preparation of more detailed zoning maps, land use regulations, and public and private sector investment decisions. The document serves as a guide to land use and all development projects should be based on the extent to which the Project supports, conforms to, and carries out the purposes of the vision and respective policies and guidelines of the plan. These policies, principles, and guidelines are then implemented through ordinances such as the LUO (zoning code).

According to the EHSCP, the region's role and identity within the overall framework of island-wide planning and land management is defined as a region with limited development and population growth. The area will maintain itself as a predominantly residential area characterized by generally low-rise, low-density development; and, moderate growth of business centers, retail and service commercial uses, and satellite institutional and public uses geared to serving the needs of households.

The vision for the EHSCP includes protecting community resources through protection of natural and scenic resources, and preserving cultural and historic resources. The vision also calls for adapting to changing community needs by addressing changing demographics and aging housing and infrastructure. Key elements to implement this vision include: maintaining a community growth boundary to help preserve open space and agricultural lands; adoption of the concept of *ahupua* 'a in land use and natural resource management; the protection, management and preservation of the Ka Iwi Shoreline access, ridge and valley neighborhoods, mauka-makai

recreational access, and natural areas; addressing housing stability and age-friendly communities; refocusing commercial centers; and climate change adaption.

According to the Urban Land Use Map in the EHSCP, the Project site (which is located with the "Hawai'i Kai Towne Center") is designated as a "Regional Town Center" (refer to Figure 16: East Honolulu Sustainable Communities Plan).

5.2.3 Land Use Ordinance

The Land Use Ordinance, or LUO (Chapter 21, ROH), is the CCH's zoning ordinance. The LUO regulates land use in accordance with adopted land use policies, including the General Plan and Development/Sustainable Communities Plans. The LUO seeks to encourage orderly development and promote and protect public health, safety and welfare through the establishment of land use regulation and zoning districts. As shown on Figure 17, the Project Area is currently zoned B-2 (Community Business). The purpose of Community Business zoning is to provide community-wide business establishments, accessed off major streets in centrally located areas, that can serve several neighborhoods and can be conveniently accessed by vehicles and pedestrians. Examples of permitted uses include, but are not limited to: amusement and recreation facilities, business services, convenience stores, eating establishments, office buildings, business colleges, day-care facilities, automobile service stations, and more. This zoning excludes most residential dwellings or lodgings; dwelling units are permitted only for Consulates or as an accessory dwelling for an owner or caretaker.

Discussion: The proposed Project is consistent with the LUO in that banks fall in the LUO land use category of "Financial institutions," which is a permitted use in the B-2 zoning district.

Per Section 21-3.110-1 of the LUO, within the B-2 Community Business (zoning) District, the development standards are enumerated in Table 21-3.4 of the LUO. Under Table 21-3.4, the current height limit under B-2 zoning is shown on the zoning map (60 feet). Since the proposed Project is estimated to be approximately <u>40</u> feet, the building height is within the current height limit.

5.2.4 Zoning Ordinance 78-82

As noted in Section 1.2, Hawai'i Kai Towne Center was originally developed as "Marina Business Center 2." Zoning for Marina Business Center 2 was approved via Honolulu City Council Ordinance 78-82 in August 1978. Zoning Design Criteria are attached to Ordinance 78-82 as Exhibit E, and identifies design restrictions, particular on portions of Hawai'i Kai Towne Center facing the marina, Keāhole Street and Kalaniana'ole Highway. The Zoning Design Criteria also addresses open spaces, height limits, and total leasable floor area. Of the design criteria, "C. Roadway Setback and Open Space" has the most bearing on the Project site as it is located along Kalaniana'ole Highway. In part, "C. Roadway Setback and Open Space" states: "No structure, except as provided herein, may be constructed within...fifty (50) feet of the Kalanianaole Highway property line."

The Zoning Design Criteria also establishes building heights according to a project's location within Hawai'i Kai Towne Center. The Project site is located Zone 1, or within 100 feet of Kalaniana'ole Highway. The Zoning Design Criteria states that "the maximum height of any

structure above finished grade within Zone 1 shall be forty (40) feet..." However, according to https://cchnl.maps.arcgis.com/apps/webappviewer/index.html, the zoning height limit for all of Hawai'i Kai Towne Center is sixty (60) feet.

In addition, the Zoning Design Criteria states that "The leasable floor area within the buildings is to be constructed on the Parcel shall not exceed 500,000 square feet." According to Hawai'i Kai Towne Center, the total gross leasable area is approximately 458,572 square feet.

5.2.5 Joint Development Conditional Use Permit 89/CUP1-43

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

"...Our records indicate that under Conditional Use Permit No. 89/CUP1-43 the Subject site is joint developed with the adjacent zoning lots (i.e. TMKs: 3-9-017: 011, 016, 034, 041, and 042). Given this, the Draft EA must include all zoning lots identified in the approved joint development agreement when describing the Project's consistency with development standards and all other applicable governmental regulations and provisions." (Appendix A)

In 1989, a Conditional Use Permit (CUP) was approved for Hawai'i Kai Towne Center. At the time of the approval, the original parcels that comprised Marina Business Center 2 had already been consolidated and re-subdivided, which resulted in several lots, presumably because certain tenants required separate parcels.

Per DPP's request, all of the zoning lots identified in Conditional Use Permit No. 89/CUP1-43 are shown on Table 11 below.

Table 11: Zoning Lots Identified in Conditional Use Permit No. 89/CUP1-43

TMK 3-9-017 parcel #	Zoned B-2 per Ordinance 78-82 (Yes/No)	Subject to Joint Development Agreement Conditional Use Permit 89/CUP1-43 (Yes/No)	In the Special Management Area (Yes/No)	Business and/or Use
001	Yes	Yes	No	Costco and Parking
011	Yes	Yes	Yes	Parking & Driveways
016	Yes	Yes	Yes	Corporate Plaza (Satellite City Hall / American Savings Bank)
034	Yes	Yes	No	Aloha Petroleum gas station
040	Yes	Yes	Yes	Vacant restaurant building
041	Yes	Yes	Yes	Executive Plaza (Commercial / Office)
042	Yes	Yes	Yes	Executive Plaza (Commercial / Office)

TMK 3-9-017 parcel #	Zoned B-2 per Ordinance 78-82 (Yes/No)	Subject to Joint Development Agreement Conditional Use Permit 89/CUP1-43 (Yes/No)	In the Special Management Area (Yes/No)	Business and/or Use
044	Yes	Yes	No	Strip Mall
045	Yes	Yes	No	City Mill
046	Yes	Yes	No	Raising Cane
047	Yes	Yes	No	Parking
048	Yes	Yes	No	Parking
049	Yes	Yes	No	Parking
051	Yes	Yes	Yes	Extra Space of Honolulu
052	Yes	Yes	Yes	Roadway

5.2.6 Special Management Area

The CCH has designated the shoreline and certain inland areas of O'ahu as being within the Special Management Area (SMA). The SMA areas are designated sensitive environments that are protected in accordance with the State's CZM policies, as set forth in Chapter 25, ROH. As shown in Figure 4, the Project is located entirely in the SMA, and is subject to the provisions of Chapter 25, ROH.

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

The guidelines for the review of developments proposed in the SMA are set forth in §25-3.2, ROH, and are discussed in Table 12 below:

Table 12: Special Management Area, Chapter 25, ROH: Review Guidelines

	N/S	N/A
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)		

§25-3.2 REVIEW GUIDELINES

The following guidelines shall be used by the [city] council or its designated agency for the review of developments proposed in the special management area.

(a) All development in the special management area shall be subject to reasonable terms and conditions set by the council to ensure that:

SPECIAL MANAGEMENT AREA, CHAPTER 25, ROH	S	N/S	N/A
Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)			
(1) Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas and natural reserves is provided to the extent consistent with sound conservation principles;			X
(2) Adequate and properly located public recreation areas and wildlife preserves are reserved;			X
(3) Provisions are made for solid and liquid waste treatment, disposition and management which will minimize adverse effects upon special management area resources; and	X		
(4) Alterations to existing land forms and vegetation; except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic recreational amenities and minimum danger of floods, landslides, erosion, siltation or failure in the event of earthquake.	X		
Discussion:			
While the proposed Project site is within the coastal zone, no coastal resources will be adverse affected, as the proposed Project involves the replacement of an existing restaurant building wi a new bank building. The Project site is located 150 feet from the closest shoreline at Kalaniana'ole Highway separates the Project site from the Maunalua Bay Beach Park. At alterations to the Project site and construction of the proposed bank building should cauminimum adverse effect to water resources and scenic recreational amenities and result minimum danger of floods, landslides, erosion, siltation or failure in the event of earthquake.			
As with the current restaurant building, the proposed bank building will be served by the Hawai'i American Water wastewater collection, treatment and disposal system. Any soli generated by the proposed bank and its customers will be collected and transferred to		d was	

generated by the proposed bank and its customers will be collected and transferred to a CCH solid waste facility. Solid waste generated from the proposed Project is expected to be significantly less than that generated by the existing restaurant. Provisions for solid and liquid waste treatment, disposition and management will minimize adverse effects upon SMA resources

(b) No development shall be approved unless the [city] council has first found that:				
(1) The development will not have any substantial, adverse environmental or ecological effect except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health and safety, of compelling public interest. Such adverse effect shall include, but not be limited to, the potential cumulative impact of individual developments each one of which taken in itself might not have a substantial adverse effect and the elimination of planning options;	e			
(2) The development is consistent with the objectives and policies set forth in Section 25-3.1 and area guidelines contained in HRS Section 205 226;				
(3) The development is consistent with the county general plan, development plans and zoning. Such a finding of consistency does not preclude				

SPECIAL MANAGEMENT AREA, CHAPTER 25, ROH		N/S	N/A
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			
concurrent processing where a development plan amendment or zone change may also be required.			

Discussion:

- (1) The proposed Project is not anticipated to involve a substantial degradation of environmental quality. The Project site has long been developed and in use as a commercial facility. Planning and design for the Project includes mitigation measures to prevent or minimize potential adverse environmental effects. The proposed Project will not significantly contribute to impacts resulting from an increase in resident population, such as increased demand on infrastructure, increased traffic, increased demand on public services or facilities, or an increased demand on natural resources in the vicinity of the Project Site. The Project will not result in cumulative effects, will not involve a commitment to larger actions, and will not result in the elimination of planning options. Section 7.1 provides detailed discussion regarding cumulative and secondary impacts, and any irreversible or irretrievable commitment of resources.
- (2) The proposed Project is consistent with the objectives and policies set forth in Chapter 205A-2, HRS, and SMA guidelines contained in Chapter 205-A26, HRS. See Section 5.1.2 above for discussion of the Project's compliance with the State's objectives and policies for the Coastal Zone.
- (3) The proposed Project is consistent with the O'ahu General Plan (see Section 5.2.1); East Honolulu Sustainable Communities Plan (see Section 5.2.2); and the LUO (see Section 5.2.3).

(c)	The	[citv]	' council	shall	seek to	minimi7e	where	reasonable:
101	1116	ı Cııvı	Councu	SHULL	seen io	munitimae.	where	reasonable.

(6) 111	(c) The fetty council shall seek to minimize, where reasonable.				
(1)	Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough or lagoon;			X	
(2)	Any development which would reduce the size of any beach or other area usable for public recreation;			X	
(3)	Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special management area and the mean high tide line where there is no beach;			X	
(4)	Any development which would substantially interfere with or detract from the line of sight toward the sea from the state highway nearest the coast; and			X	
(5)	Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.			X	

Discussion:

- (1) The proposed Project does not involve dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough, or lagoon.
- (2) The proposed Project will not affect Maunalua Bay Beach Park or other area usable for public recreation.

SPECIAL MANAGEMENT AREA, CHAPTER 25, ROH	S	N/S	N/A
(Key: $S = Supportive$, $N/S = Not Supportive$, $N/A = Not Applicable$)			

- (3) The Project is not located where it would reduce or impose restrictions upon public access to any shoreline areas or surface waters, as it is separated from Maunalua Bay Beach Park by Kalaniana'ole Highway, and 150 feet away from the nearest coastline.
- (4) The proposed Project is located mauka of Kalaniana ole Highway (which is the State highway nearest the coast) and does not interfere with or detract from the line of sight toward the sea from Kalaniana ole Highway.
- (5) The Project will not adversely affect:
 - a. Water quality, because:
 - i. To mitigate localized ponding and flooding at the Project site, new sidewalk culverts, trench drains, and swales should be implemented to divert runoff away from the new building towards the existing downstream drainage swale;
 - ii. Construction activities will comply with all applicable Federal, State, and County regulations and rules for erosion control;
 - b. Existing areas of open water free of visible structures, because:
 - i. The proposed bank building will replace the existing restaurant building which is located mauka (inland) of Kalaniana'ole Highway;
 - c. Existing and potential fisheries and fishing grounds, because:
 - i. Water quality will be protected as described elsewhere in this EA;
 - d. Wildlife habitats, because:
 - i. Due to intense human utilization of Maunalua with the development of Hawai'i Kai, the proposed Project is not anticipated to have any impact on protected or endangered flora or faunal species (refer to Section 3.6);
 - e. Potential or existing agricultural uses of land, because:
 - i. The Project site has been used for commercial uses for many years and is located in the State Land Use Urban district and City and County of Honolulu B-2 Community Business zoning district.

5.3 LIST OF REQUIRED PERMITS AND APPROVALS

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

"The Draft EA should include a discussion of any other discretionary permits and approvals that the proposed project will require prior to the Project's implementation." (Appendix A)

Anticipated permits and approvals that may be required are outlined in Table 13 below.

Table 13: Required Permits and Approvals

AGENCY	PERMIT/APPROVAL
State of Hawai'i	
Department of Health	Dust Control Plan
	Noise Permit (if necessary)
Department of Health – Disability and	Americans with Disabilities Act
Communication Access Board	Compliance
Department of Land and Natural Resources,	Section 6E, HRS Review
Historic Preservation Division	
City and County of Honolulu	
Department of Environmental Services	• Industrial Wastewater Discharge Permit (application submitted)
Department of Planning and Permitting	 Chapter 25, ROH Compliance SMA Use Permit – Major Permit Grading, Grubbing, and Stockpiling Permits Occupancy Permit Building Permit (electrical, plumbing, civil) Site Development Master Application for Sewer Connection Storm Drain Connection License (if necessary) Storm Water Quality Strategic Plan Rules Relating to Water Quality and Storm Drainage Standards Compliance

6.0 ALTERNATIVES

In compliance with the provisions of Section 11-200.1-18(d)(7), HAR relating to Environmental Assessments, an environmental assessment must discuss potential alternatives to the proposed action which could attain the objectives of the action in sufficient detail to explain why they were rejected. The alternatives considered include:

6.1 NO ACTION

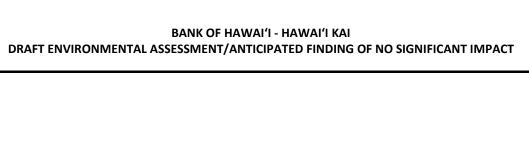
The no-action alternative is no change to the existing site. While this alternative could alter adverse impacts, it would not meet the objective of the Project as stated in Section 2.2 of this EA:

"BOH's objective is to construct a new branch bank facility that approximates the existing building's footprint and massing, incorporates sustainable design features, accommodates future sea level rise and flood elevation levels, promotes brand visibility, and improves customer service and experience."

Under this alternative, the proposed bank building will not be constructed. Without the proposed Project, BOH will not have a significant presence between Kāhala Mall and the Hawai'i Kai Towne Center.

6.2 ALTERNATIVE ACTION

While renovating the existing restaurant building was initially considered, the multiple floor levels and numerous interior columns presented a challenge to the Bank's typical design aesthetic. In addition, the existing floor elevations are below the BFE and therefore subject to flooding. Ultimately, a new building, designed and constructed to specifically meet the needs and unique requirements of a financial institution was determined to be the best solution to maximize both the employee and customer experience.



7.0 FINDINGS, SUPPORTING REASONS, AND DETERMINATION

To determine whether the proposed bank may have a significant impact on the physical and human environment, all phases and expected consequences of the proposed Project have been evaluated, including potential primary, secondary, short-range, long-range, and cumulative impacts. Based on this evaluation, the Approving Agency (DPP) anticipates issuing a Finding of No Significant Impact (FONSI) for the Project. The supporting rationale for this finding is presented in this chapter.

7.1 PROBABLE IMPACT, INCLUDING CUMULATIVE IMPACTS

Cumulative impacts are impacts on the environment that result from the action when added to other past, present, and foreseeable future actions by other agencies or persons. Examples of possible cumulative impacts of a proposed action could be those related to increased traffic and parking during off-peak hours of the day.

The proposed Project involves the demolition of the existing restaurant building and replacing it with a new bank building. The proposed Project will not result in an increase in the number of new residents living in the area. Therefore, the Project will not significantly contribute to impacts resulting from an increase in resident (or visitor) population, such as increased demand on infrastructure, increased peak-hour traffic, increased demand on public services or facilities, or an increased demand on natural resources in the vicinity of the Project Site. Socio-economic impacts resulting from the proposed Project are anticipated to be beneficial. Construction will generate excise taxes, employment, income taxes, and indirect economic opportunities.

7.2 SIGNIFICANCE CRITERIA

Based upon the previous information presented in this document the proposed permitting and construction of the Project will likely have no significant environmental impacts. This determination is based upon the 13 Significance Criteria outlined in Chapter 343, HRS, as amended and Title 11 Chapter 200.1-13 HAR 1996, discussed below.

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

Since the proposed Project involves the replacement of the existing standalone restaurant building with a new branch bank building, it will not irrevocably commit a natural, cultural or historic resource.

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

The proposed Project will not curtail the range of beneficial uses of the environment as the Site is currently developed with a standalone restaurant building.

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

The Environmental Policies enumerated in Chapter 344, HRS promote conservation of natural resources, and an enhanced quality of life for all citizens. As detailed in Section 5.1.4 above, the

proposed Project does not conflict with the State's long-term environmental policies, goals, or guidelines as expressed in Chapter 344, HRS, and will not significantly impact natural resources due to the fact that the Site is already developed with a standalone restaurant building and has been subject to intense human utilization somewhere between 1959 to 1969 when large portions of Kuapā Pond and wetlands was filled to create land for development (see discussion in Section 3.2 TOPOGRAPHY above).

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

The relatively small scale of the proposed Project should not have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State.

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

The potential temporary impacts related to noise, air or water quality during construction will be addressed through construction management practices in compliance with Federal, State and County requirements. BOH's practice to build sustainably will help to ensure that the proposed Project will not negatively affect public health. The Project site does not abut residential areas, public schools, hospitals or medical centers.

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

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

(7) Involve a substantial degradation of environmental quality;

No substantial environmental degradation is anticipated. BOH has committed itself to a development practice of environmental sustainability, especially in regard to energy use.

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

The proposed bank is relatively modest and is anticipated to have less of an environmental impact than a restaurant, which would probably present a greater demand for electricity, gas, and water. In addition, a restaurant would generate more wastewater and solid waste. Since the Project site and Hawai'i Kai Corporate Plaza share a parking lot, it is not anticipated that larger actions, such as more commercial (or residential or industrial) use could be built without the addition of structured parking.

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

The proposed branch bank Project will occupy a site that is already committed to a standalone restaurant building within the Hawai'i Kai Towne Center development; moreover, due to intense human utilization of Hawai'i Kai Towne Center, the proposed Project is not anticipated to have any impact on endangered flora or faunal species. The site contains no habitat for rare, threatened or endangered plant or animal species or their respective habitats.

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

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

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

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

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

The Project site does not lie in an environmentally sensitive area such as a SLR-XA, beach, erosion-prone area, estuary, freshwater or coastal waters. Likewise, the Project is not anticipated to have any impact on any natural hazard conditions. The Project site is located within Flood Hazard Zone AE (BFE 9 feet). The new building is planned to have its floor elevation set at 9 feet AMSL, or higher, to be above the FEMA BFE and meet the CCH's floodplain management ordinance. The 9-foot floor elevation is also above the potential 3.2-foot SLR scenario.

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

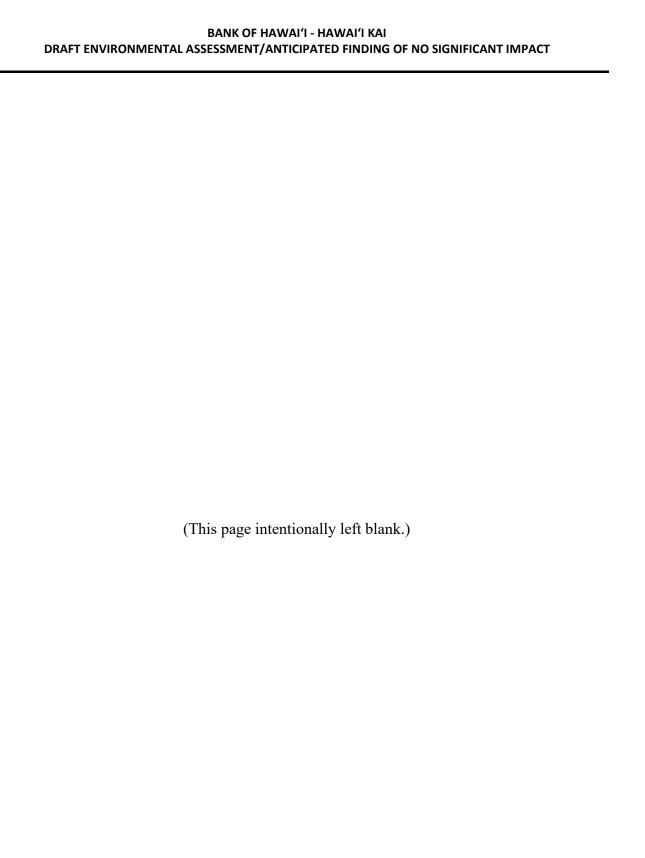
The proposed Project is located inland on an already-developed parcel that currently contains a building (that is proposed to be replaced). The Project is mauka of the public coastal highway (Kalaniana'ole Highway) and will not block views to and along the shoreline.

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

The proposed Project (TMK 3-9-017:040) will not require substantial energy consumption nor produce substantial greenhouse gases. The proposed banking use of the site will result in less energy consumption and emit less greenhouse gas than the existing restaurant.

7.3 ANTICIPATED DETERMINATION

On the basis of impacts and mitigation measures examined in this document and analyzed under the above criteria, it is anticipated that the proposed Project will not have a significant effect on the physical or human environments. Pursuant to Chapter 343, HRS, the approving agency, DPP anticipates that it will issue a FONSI.



8.0 REFERENCES

- City and County of Honolulu Department of Emergency Management. (n.d.). *Tsunami Evacuation Zones*. Retrieved October 2021, from https://cchnl.maps.arcgis.com/apps/webappviewer/index.html?id=39a9e07068a14d01 a85b437adcf50beb
- Coleman, H. (2014). Ke Kula Wela La o Pahua: The Cultural and Historical Significance of Pahua Heiau, Maunalua, Oʻahu. Honolulu: Office of Hawaiian Affairs.
- Department of Transportation Services. (2019). *Oahu Bike Plan 2019 Update*. City and County of Honolulu. Retrieved from https://www.honolulu.gov/rep/site/dts/bike_docs/OBP_Final_2019_Oahu_Bike_Plan_Update.pdf
- Hawai'i Climate Change Mitigation and Adaptation Commission. (2017). Hawai'i Sea Level Rise Vulnerability and Adaptation Report. Retrieved from Prepared by Tetra Tech, Inc. and the State of Hawai'i Department of Land and Natural Resources, Office of Conservation and Coastal Lands, under the State of Hawai'i Department of Land and Natural Resources Contract No: 64064: https://climateadaptation.hawaii.gov/wp-content/uploads/2017/12/SLR-Report_Dec2017.pdf
- Hawaiian Volcano Observatory. (2015). Earthquakes in Hawaii: What You Need to Know.
- Honolulu Board of Water Supply, Townscape, Inc., and the City and County of Honolulu Department of Planning and Permitting. (2009). *Wai 'anae Watershed Management Plan, Final Plan*. Honolulu, HI. Retrieved from https://www.boardofwatersupply.com/bws/media/files/waianae-wmp-final-report-full-2009-08.pdf
- Jordan, N., & Allen, J. (2010). Revised Draft Archaeological Assessment and Section 106 Review, Hawai'i Kai Marina and Channel Maintenance Dredging, Manualua Ahupua'a, Kona District, O'ahu, Hawai'i. Honolulu: International Archaeological Research Institute, Inc.
- McAllister, J. G. (1933). *Archaeology on Oahu*. Honolulu: Bernice Pauahi Bishop Museum Bulletin 104, Bishop Museum Press.
- National Oceanic and Atmospheric Administration (NOAA) National Hurricane Center (NHC). (n.d.). *National Storm Surge Hazard Maps*. Retrieved October 2021, from https://arcg.is/0rfPmC
- NOAA. (n.d.). *Storm Surge Overview*. Retrieved from National Hurricane Center and Central Pacific Hurricane Center: https://www.nhc.noaa.gov/surge/

- Office of Hawaiian Affairs. (2018). *Archaeological Preservation Plan Pahua Heiau*. Honolulu: Prepared by Nohopapa Hawai'i.
- PacIOOS, Sea Level Rise: Hawai'i Sea Level Rise Viewer. (2019). Retrieved from Pacific Islands Ocean Observing System (PacIOOS): https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/
- State of Hawai'i Department of Health, Safe Drinking Water Branch. (n.d.). *Underground Injection Control Program*. Retrieved October 13, 2021, from https://health.hawaii.gov/sdwb/underground-injection-control-program/
- U.S. Fish and Wildlife Service. (n.d.). *National Wetlands Inventory*. Retrieved October 2021, from Surface Waters and Wetlands: https://www.fws.gov/wetlands/data/mapper.html
- USFWS. (n.d.). *Wetlands Mapper*. Retrieved October 2021, from National Wetlands Inventory: https://www.fws.gov/wetlands/data/mapper.html

APPENDIX A: Pre-Assessment Consultation Comments and Responses



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

630 SOUTH BERETANIA STREET • HONOLULU, HAWAI'I 96843 Phone: (808) 748-5000 • www.boardofwatersupply.com

RICK BLANGIARDI MAYOR *MEIA*

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

ERWIN KAWATA DEPUTY MANAGER *HOPE MANAKIA*



March 5, 2024

NĀ'ĀLEHU ANTHONY, Chair KAPUA SPROAT, Vice Chair BRYAN P. ANDAYA JONATHAN KANESHIRO EDWIN H. SNIFFEN, Ex-Officio GENE C. ALBANO, P.E., Ex-Officio

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

Dear Mr. Nakai:

Subject: Your Letter Dated February 12, 2024 Requesting Comments on the

Environmental Assessment Pre-Consultation for Bank of Hawai'i, Hawai'i Kai at 6650 Kalaniana'ole Highway – Tax Map Key: 3-9-017: 040

Thank you for your letter regarding the proposed bank at the Hawai'i Kai Towne Center.

The existing water system is currently adequate to accommodate the proposed development. However, please be advised that the existing Honolulu water system capacity has been reduced due to the shut-down of the Hālawa Shaft pumping station as a proactive measure to prevent fuel contamination from the Navy's Red Hill Bulk Storage Tank fuel releases. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval, pending evaluation of the water system conditions at that time on a first-come, first-served basis. The Board of Water Supply (BWS) reserves the right to change any position or information stated herein up until the final approval of the building permit application.

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

Mr. Greg Nakai March 5, 2024 Page 2

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

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

Water conservation measures are required for all proposed developments. These measures include utilization of nonpotable water for irrigation using rain catchment, drought tolerant plants, xeriscape landscaping, efficient irrigation systems, such as a drip system and moisture sensors, and the use of Water Sense labeled ultra-low flow water fixtures and toilets.

The construction drawings should be submitted for our approval, and the construction schedule should be coordinated to minimize impact to the water system.

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

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

Very truly yours,

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

timin Kamara



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA

Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP Associate

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

1001 Bishop Street, Suite 650 Honolulu, Hawaii 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-maii: sysadmin@pbrhawaii.com

printed on recycled paper

November 26, 2024

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

Attn: Barry Usagawa, Water Resources Division

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Mr. Lau,

Thank you for your letter dated March 5, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i ("Applicant"), we have reviewed the Board of Water Supply's (BWS's) comments, and provide the following responses:

We appreciate the current assessment that the existing water system is currently adequate to accommodate the proposed development. However, we acknowledge that the existing Honolulu water system capacity has been reduced due to the shut-down of the Hālawa Shaft pumping station as a proactive measure to prevent fuel contamination from the Navy's Red Hill Bulk Storage Tank fuel releases, and that the final decision on the availability of water will be confirmed when the building permit application is submitted for approval, pending evaluation of the water system conditions at that time on a first-come, first-served basis. We also acknowledge that the BWS reserves the right to change any position or information stated herein up until the final approval of the building permit application.

We also acknowledge that BWS requests 10% voluntary water conservation of all customers until new sources are completed and requires water conservation measures in all new developments. We believe this will be relatively easy to accomplish as the existing restaurant use (Scratch Kitchen Hawai'i Kai) will be replaced by the proposed bank. The proposed design also includes a café, but the capacity will be smaller than the existing restaurant use.

We appreciate the information that there is currently no moratorium on the issuance of new and additional water services.

We acknowledge when water is made available, the Applicant will be required to pay BWS's Water System Facilities Charges for resource development, transmission, and daily storage.

Mr. Ernest Y.W. Lau, P.E.

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, HAWAI'I KAI,

O'AHU, TMK 3-9-017: 040

November 26, 2024

Page 2 of 2

The project architect, MC3, and its design team will incorporate water conservation measures in the project design, including non-potable water for irrigation using rain catchment, drought tolerant plants, xeriscape landscaping, efficient irrigation systems, such as a drip system and moisture sensors, and the use of Water Sense labeled ultra-low flow water fixtures and toilets.

We also acknowledge that the construction drawings should be submitted for BWS approval, and the construction schedule should be coordinated with BWS to minimize impact to the water system.

Per BWS's recommendations, the on-site fire protection requirements will be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

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

Sincerely,

PBR HAWAI

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i

Andrew Fox, Bank of Hawai'i

DEPARTMENT OF COMMUNITY SERVICES

KA 'OIHANA LAWELAWE KAIĀULU

CITY AND COUNTY OF HONOLULU

925 DILLINGHAM BOULEVARD, SUITE 200 • HONOLULU, HAWAIʻI 96817 PHONE: (808) 768-7762 • FAX: (808) 768-7792 • WEB: www.honolulu.gov

RICK BLANGIARDI MAYOR MEIA



ANTON C. KRUCKY DIRECTOR PO'O

AEDWARD LOS BANOS DEPUTY DIRECTOR HOPE PO'O

February 20, 2024

PBR HAWAII & Associates, Inc. 1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813 Attn: Greg Nakai

Dear Mr. Nakai:

SUBJECT: Pre-Consultation: DRAFT Environmental Assessment

Bank of Hawai'i, New Hawai'i Kai Branch

6650 Kalaniana'ole Highway, Honolulu, Hawai'i 96825

TMK: (1) 3-9-017:040

Thank you for notifying us that PBR HAWAII & Associates, Inc. is preparing a Draft Environmental Assessment (DEA) for the above-named project on behalf of Bank of Hawai'i.

Our review indicates that the proposed project should have no adverse impacts on any Department of Community Services activities or projects in the surrounding neighborhood.

Thank you for providing us the opportunity to comment on this matter.

Sincerely,

Anton C. Krucky

Director



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED® AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP Associate

C.R. IMIPONO WICHMAN
Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner November 26, 2024

Mr. Anton C. Krucky Director Department of Community Services City and County of Honolulu 925 Dillingham Boulevard, Suite 200 Honolulu, HI 96817

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Mr. Krucky,

Thank you for your letter dated February 20, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we acknowledge that the proposed project should have no adverse impacts on any Department of Community Services' activities or projects in the surrounding neighborhood.

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

Sincerely,

PBR HAWAII

Greg Nakai

Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawaiʻi 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

printed on recycled paper

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

650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAI'I 96813 PHONE: (808) 768-8480 • FAX: (808) 768-4567 • WEBSITE: honolulu.gov

RICK BLANGIARDI MAYOR MEIA



HAKU MILLES, P.E. DIRECTOR PO'O

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

March 5, 2024

SENT VIA EMAIL

Greg Nakai gnakai@pbrhawaii.com

Dear Mr. Nakai:

Subject: Pre-Assessment Consultation for a HRS Chapter 343

Environmental Assessment - Bank of Hawai'i Hawai'i Kai,

Hawai'i Kai, O'ahu, TMK 3-9-017:040

Thank you for the opportunity to review and comment. The Department of Design and Construction has no comments to offer at this time.

Should you have any questions, please contact me at (808) 768-8480.

Sincerely,

By beallogn
for Haku Milles, P.E., LEED AP

Director

HM:krn (917178)



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

November 26, 2024

Mr. Haku Milles, P.E., LEED AP Director Department of Design and Construction City and County of Honolulu 650 S. King St. 11th Floor Honolulu, HI 96813

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Mr. Milles,

Thank you for your letter dated March 5, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we acknowledge your Department has no comments to offer at this time.

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

Sincerely,

PBR HAWAII

Greg Nakai

Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

printed on recycled paper

DEPARTMENT OF FACILITY MAINTENANCE KA 'OIHANA MĀLAMA HALE CITY AND COUNTY OF HONOLULU

1000 ULU`OHIA STREET, SUITE 215, KAPOLEI, HAWAI'I 96707 PHONE: (808) 768-3343 • Fax: (808) 768-3381 • WEBSITE: honolulu.gov

RICK BLANGIARDI MAYOR MFIA



DIRECTOR AND CHIEF ENGINEER
PO'O A ME LUNA NUI 'ENEKINIA'
WARREN K MAMIZUKA

WARREN K. MAMIZUKA DEPUTY DIRECTOR HOPE PO'O

GENE C. ALBANO, P.E.

IN REPLY REFER TO: DRM 24-92

March 4, 2024

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

Dear Mr. Nakai:

Subject: Pre-Assessment Consultation for HRS Chapter 343,

Environmental Assessment, Bank of Hawaii

TMK: 3-9-017:040

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

We have no comments at this time, as we do not have any facilities or easements on the subject property.

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

Sincerely

Director and Chief Engineer



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED® AP BD+C Vice-President / Principal

CATIE CULLISON, AICP

Vice-President / Principal
TOM SCHNELL, AICP

Vice-President / Principal

MARC SHIMATSU, ASLA

RAYMOND T. HIGA, ASLA

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP Associate

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

November 26, 2024

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

Attn: Mr. Kyle Oyasato, Division of Road Maintenance

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Mr. Albano,

Thank you for your letter dated March 4, 2024 (reference no. DRM 24-92), regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we acknowledge that DFM has no comments at this time, as DFM does not have any facilities or easements on the subject property.

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

Sincerely,

PBR HAWAII

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

printed on recycled paper

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

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

RICK BLANGIARDI MAYOR *MEIA*



DAWN TAKEUCHI APUNA DIRECTOR PO'O

JIRO A. SUMADA DEPUTY DIRECTOR HOPE PO'O

March 12, 2024

2024/ELOG-282 (MAK)

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

Dear Mr. Nakai:

SUBJECT: Pre-Consultation - Environmental Assessment (EA)

Bank of Hawai'i – Hawai'i Kai Project 6650 Kalaniana'ole Highway – Hawai'i Kai

Tax Map Key (TMK) 3-9-017: 040

This is in response to your letter, received February 20, 2024, requesting comments on the scope and content to be addressed in a Draft EA, as required under Chapter 25, Revised Ordinance of Honolulu (ROH), for the demolition of an existing commercial building and construction of a new bank on a 10,920-square-foot (sq.-ft.) lot located in the B-2 Community Business District and the Special Management Area (SMA) in Hawai'i Kai, O'ahu. Our step-by-step instructions for the preparation of EAs can be found on our website at the link below. Please utilize this resource as you prepare the disclosure document:

www.honolulu.gov/dpp/permitting/zoning-permits

In addition, the following items should be addressed in the Draft EA:

- <u>Existing and Proposed Structures</u>: The Draft EA should describe any existing or proposed structures, including when the existing structures were built, and identify any associated building permits (BPs) or other land use approvals.
- <u>Joint Development</u>: Our records indicate that under Conditional Use Permit No. 89/CUP1-43 the Subject site is joint developed with the adjacent zoning lots (i.e. TMKs: 3-9-017: 011, 016, 034, 041, and 042). Given this, the Draft EA must

Mr. Greg Nakai March 12, 2024 Page 2

include all zoning lots identified in the approved joint development agreement when describing the Project's consistency with development standards and all other applicable governmental regulations and provisions.

• <u>Land Use Consistency</u>: The Draft EA should describe the Project's consistency with Chapter 21, ROH, the Land Use Ordinance, the Oahu General Plan, and East Honolulu Sustainable Communities Plan. In addition, because the EA is being prepared in support of a future SMA Use Permit application, the Draft EA should also analyze the Project's consistency with Chapter 25, ROH, the SMA Ordinance; Chapter 26, ROH, the Shoreline Setback Ordinance; and Chapter 205A, Hawai'i Revised Statutes (HRS). Instructions for preparation of an SMA Use (Major) Permit application are available on our website at:

www.honolulu.gov/dpp/permitting/coastal-area-permits

- Other Permits and Approvals: The Draft EA should include a discussion of any other discretionary permits and approvals that the proposed project will require prior to the Project's implementation.
- <u>Coastal Hazards</u>: The Project site is susceptible to coastal hazards associated with sea level rise (SLR), wave action, flooding, tsunamis, and storm surge. Therefore, proposed development activities must be evaluated not only for potential impacts to sensitive SMA resources, but also for current and future susceptibility to these coastal hazards. According to the State of Hawai'i Sea Level Rise Viewer, the makai portion of the property may be affected by 3.2 ft. of SLR by 2100. Therefore, we recommend proposed development be sited as far mauka on a property as practicable, and designed to minimize potential risk of loss to the structure.

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

• <u>Flood Hazards</u>: The subject property is also located entirely within the Flood Zone AE, as mapped by the Federal Emergency Management Agency. Flood Zone AE is the flood fringe area and corresponds with areas subject to the one

Mr. Greg Nakai March 12, 2024 Page 3

proposed Project's compliance with the City's Flood Hazard Areas Ordinance (Chapter 21A, ROH), which is available online at:

www.honolulu.gov/dpp/resources/ordinances

- <u>Cultural Impact Assessment (CIA)</u>: The Draft EA must include a discussion analyzing the impact of the proposed Project on cultural practices and features associated within the project area. The content requirements for a CIA are as detailed in Hawaii Administrative Rules Sections 11-200-10 and 16 through 18.
- Historic Properties: The Draft EA should include a discussion identifying historic properties within the project area, the potential impacts as a result of the Project, and the appropriate mitigation to be implemented. Additionally, the Project should be submitted to the State Historic Preservation Division (SHPD) for review and comment under Chapter 6E-42, HRS. Please include our request for comment letter when submitting the Project to the SHPD. Our letter is available online through the link found on page one of this letter.

Copies of available records for the Subject property can be obtained from our Data Access and Imaging Branch. Please note that any request for permit research and/or copies (e.g., a Certificate of Occupancy, or a specific land use or building permit) must be accompanied with a research request fee. A money order or certified check in the amount of \$5.00, made payable to the City and County of Honolulu, will initiate the process of researching and copying the specific records you are interested in obtaining. There will also be a copy charge of \$0.50 for the first page of every record, and \$0.25 for each page of the same record, thereafter. In addition to the copy charge, there is a research fee of \$5.00 per 10 minutes, or fraction thereof, of research time. Shipping and handling charges will also be added to your total cost for this type of request. These charges will be imposed separately from the zoning clearance and confirmation request fee. Please contact our Customer Service Division at (808) 768-8272 for cost estimates to initiate the request.

Should you have any questions, please contact Michael Kat, of our Zoning Regulations and Permits Branch, at (808) 768-8013 or via email at michael.kat@honolulu.gov.

Very truly yours,

Dawn Takeuchi Apuna

Director



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD
Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP Associate

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

printed on recycled paper

November 26, 2024

Ms. Dawn Takeuchi Apuna
Director
City and County of Honolulu
Department of Planning and Permitting
Frank F. Fasi Municipal Building
650 S. King St. 7th Floor
Honolulu, HI 96813

Attn: Michael Kat, Zoning Regulations and Permits Branch

SUBJECT: 2024/ELOG-282 (MAK)

PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Ms. Takeuchi Apuna,

Thank you for your letter dated March 12, 2024 (reference no. 2024/ELOG-282 (MAK)), regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we have reviewed the Department of Planning and Permitting's (DPP's) comments, and provide the following responses:

- The Draft Environmental Assessment (EA) will include a description of existing and proposed structures, including when the existing structure was built and identify any associated building permits (BPs) or other land use approvals.
- As requested, all of the zoning lots identified in the approved joint development will be identified when describing the Project's consistency with development standards and all other applicable governmental regulations and provisions.
- The Draft EA will provide a discussion on the Project's consistency with Revised Ordinances of Honolulu (ROH) Chapter 21 (Land Use Ordinance), the O'ahu General Plan, and the East Honolulu Sustainable Communities Plan. The Draft EA will also provide a discussion on the Project's consistency with ROH Chapter 25 (SMA Ordinance), ROH Chapter 26 (Shoreline Setback Ordinance), and Hawai'i Revised Statutes (HRS) Chapter 205A (Coastal Zone Management Act).
- We appreciate your staff's provision of the link for preparing a SMA Use (Major) Permit application.
- The Draft EA will include a discussion of any other major land use permits and approvals that the Project will require.
- We shared your staff's comments on building siting given the potential for sea level rise (SLR) to the Project Architect.
- The Draft EA will also provide a discussion on Project alternatives, site design, project design features, Best Management Practices (BMPs), and appropriate mitigations measures to reduce potential impacts related to coastal hazards to the extent possible.

Ms. Dawn Takeuchi Apuna

SUBJECT: 2024/ELOG-282 (MAK); PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

November 26, 2024

Page 2 of 2

- The Draft EA will provide a discussion of the Project's compliance with ROH Chapter 21A (Flood Hazards Ordinance).
- The Draft EA will include a cultural impact assessment (CIA).
- The Draft EA will include a study suitable for submittal to the State Historic Preservation Division for review and comment under HRS Chapter 6E-42 (State Historic Preservation Review).
- We appreciate the information that your staff provided on researching records on the Subject Property.

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

Sincerely,

PBR HAWAII

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i



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

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

RICK BLANGIARDI MAYOR *MEIA*



SHELDON K. HAO FIRE CHIEF LUNA NUI KINAI AHI

JASON SAMALA DEPUTY FIRE CHIEF HOPE LUNA NUI KINAI AHI

February 22, 2024

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

Dear Mr. Nakai:

Subject: Preassessment Consultation for a Hawai'i Revised Statues Chapter 343

Environmental Assessment Bank of Hawai'i - Hawai'i Kai 6650 Kalaniana'ole Highway Hawai'i Kai, O'ahu, Hawai'i Tax Map Key: 3-9-017: 040

In response to your letter dated February 16, 2024, regarding the abovementioned subject, the Honolulu Fire Department (HFD) reviewed the submitted information and requires that the following be complied with:

- 1. The fire department access roads shall be in accordance with National Fire Protection Association (NFPA) 1; 2018 Edition, Section 18.2.3.
- 2. A fire department access road shall extend to within 50 feet (15 meters) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. (NFPA 1; 2018 Edition, Section 18.2.3.2.1.)
- 3. Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet (46 meters) from fire department access roads as measured by an approved route around the exterior of the building or facility. (NFPA 1; 2018 Edition, Sections 18.2.3.2.2 and 18.2.3.2.2.1, as amended.)

- 4. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1; 2018 Edition, Sections 18.3 and 18.4.
- 5. Submit civil drawings to the City and County of Honolulu's Department of Planning and Permitting and route them to the HFD for review and approval.

The requirements above are required by the HFD. This project may have additional requirements to be met as determined by other agencies.

Should you have questions, please contact Battalion Chief Jean-Claude Bisch of our Fire Prevention Bureau at 808-723-7151 or jbisch@honolulu.gov.

Sincerely,

CRAIG UCHIMURA Assistant Chief

CU/MD:jl



R. STAN DUNCAN, ASLA

President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

printed on recycled paper

November 26, 2024

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

Attn: Battalion Chief Jean-Claude Bisch, Fire Prevention Bureau

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Assistant Chief Uchimura,

Thank you for your letter dated February 22, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we have reviewed your letter and offer the following responses:

The information provided on fire department access roads has been relayed to the Project Architect, MC3, and its design team. It is acknowledged that an approved water supply capable of supplying the required fire flow for fire protection shall be provided to the proposed Project. In addition, civil drawings will be submitted to the Department of Planning and Permitting (which will then be routed to the Honolulu Fire Department for review and approval).

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

Sincerely,

PBR HAWAII

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i



POLICE DEPARTMENT KA OHANA MAKAI O HONOLULU CITY AND COUNTY OF HONOLULU

801 SOUTH BERETANIA STREET • HONOLULU, HAWAI'I 96813 TELEPHONE: (808) 529-3111 • WEBSITE: www.honolulupd.org

RICK BLANGIARDI MAYOR MEIA



ARTHUR J. LOGAN CHIEF KAHU MÄKA'I

KEITH K. HORIKAWA RADE K. VANIC DEPUTY CHIEFS HOPE LUNA NUI MÄKA"I

OUR REFERENCE EO-SH

March 5, 2024

SENT VIA EMAIL

Mr. Greg Nakai gnakai@pbrhawaii.com

Dear Mr. Nakai:

This is in response to your correspondence of February 16, 2024, requesting input for the Pre-Assessment Consultation for the proposed Bank of Hawai'i – Hawai'i Kai project, to be located at 6650 Kalaniana'ole Highway at the Hawai'i Kai Towne Center.

Based on the information provided, the Honolulu Police Department does not have any comments at this time.

If there are any questions, please call Major Brian Lynch of District 7 (East Honolulu) at (808) 723-3369.

Sincerely,

GLENN HAYASHI Assistant Chief of Police

Elen Hayada

Support Services Bureau



November 26, 2024

R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate GREG NAKAI

Senior Associate

NICOLE SWANSON, ASLA Associate

 $\begin{array}{l} {\it BRADLEY FURUYA, AICP} \\ {\it Associate} \end{array}$

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner Mr. Glenn Hayashi Assistant Chief of Police Support Services Bureau Police Department City and County of Honolulu 801 South Beretania Street Honolulu, HI 96813

Attn: Major Brian Lynch, District 7 (East Honolulu)

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Assistant Chief Hayashi,

Thank you for your letter dated March 5, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we acknowledge the Honolulu Police Department does not have any comments at this time.

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

Sincerely,

PBR HAWAII

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawaii 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

From: <u>Dang, Charmian I</u>
To: <u>Greq Nakai</u>

Subject: Bank of Hawaii in Hawaii Kai Project

Date: Thursday, February 22, 2024 4:21:26 PM

Attachments: IPaC Info Letter Species List Instructions PIFWO 20Apr2022 Final.pdf

Dear Mr. Nakai,

Our office received your letter requesting the US Fish and Wildlife Service's input on the Hawaii Kai Bank of Hawaii project on Oahu. Below are instructions for the IPAC online portal to obtain a list of species that may be affected in the project location and conservation measures which should be included in the draft EA.

The Pacific Island Fish and Wildlife Office (PIFWO) is transitioning to the use of the Information for Planning and Consultation (IPaC) online portal, https://ipac.ecosphere.fws.gov/, for federal action agencies and non-federal agencies or individuals to obtain official species lists, including threatened and endangered species and designated critical habitat in your project area. Using IPaC expedites the process for species list distribution and takes minimal time. Therefore, the IPaC list would fulfill your request for a species list. Please find step by step instructions attached to use IPaC for future projects, and feel free to share with additional project partners.

For recommended avoidance and minimization measures, you can visit the following webpage https://www.fws.gov/office/pacific-islands-fish-and-wildlife/library

Aloha, Charmian Dang

Charmian Dang U. S. Fish and Wildlife Biologist Pacific Islands Fish and Wildlife Office 300 Ala Moana Boulevard, Room 3-122 Honolulu, Hawaii 96850 808-792-9400



United States Department of the Interior



FISH AND WILDLIFE SERVICE Pacific Islands Fish and Wildlife Office 300 Ala Moana Boulevard, Room 3-122 Honolulu, Hawaiʻi 96850

Subject: IPaC generated official species list for the Pacific Islands Fish and Wildlife Office

Dear Action Agency or Applicant:

The Pacific Islands Fish and Wildlife Office (PIFWO) is transitioning to the Information for Planning and Consultation (IPaC) online portal, https://ipac.ecosphere.fws.gov/ for federal action agencies and non-federal agencies or individuals to obtain official species lists, including threatened and endangered species, designated critical habitat, and avoidance and minimization measures to consider in your general project design. IPaC has been used by continental USFWS offices to provide official species lists and avoidance and minimization guidance since 2017. Using IPaC expedites the process for species list distribution. Obtaining a species list in IPaC is relatively straightforward and takes minimal time to complete. Step by step instructions are included below.

Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of your species list should be verified after 90 days. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change the species list. Verification can be completed by visiting the IPaC website at regular intervals during project planning and implementation. An updated list may be requested through the IPaC system by completing the same process used to obtain the initial species list.

We hope this process provides efficiencies to our partners in obtaining a species list. For federal action agencies, it also opens additional IPaC functionality that the PIFWO office is still working on, such as the use of Determination Keys for informal section 7 programmatic consultations. We will let our agency partners know when that functionality becomes available.

If you have questions about a species list obtained through the IPaC system or need assistance in completing an IPaC species list request, please contact the Service at 808-792-9400 or via email at pifwo_admin@fws.gov. We appreciate your efforts to conserve listed species across the Pacific Islands.

INTERIOR REGION 9
COLUMBIA-PACIFIC NORTHWEST

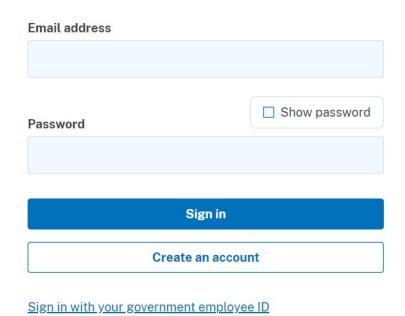
INTERIOR REGION 12
PACIFIC ISLANDS

Instructions for Action Agencies and partners to obtain an official species list in IPaC

- Navigate to https://ipac.ecosphere.fws.gov/
- You can get an unofficial species list without logging in. However, if you want an official species list you will need to log in first using your Login.gov account. If you don't have an IPaC account, they are easy to create.



Select Log in with Login.gov and sign in using your email and password.



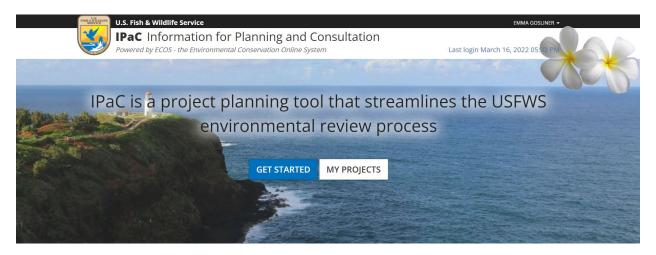
If you have a PIV or CAC card, you can sign in using that method as well.

Sign in with your PIV or CAC

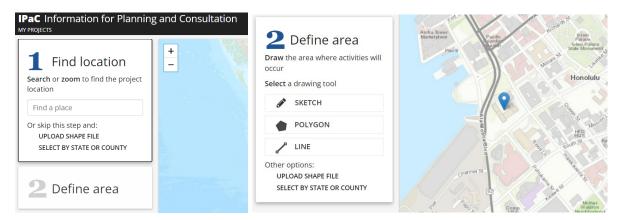
Make sure you have a Login.gov account and you've set up PIV/CAC as a two-factor authentication method.



• Once you log in, select "Get Started".

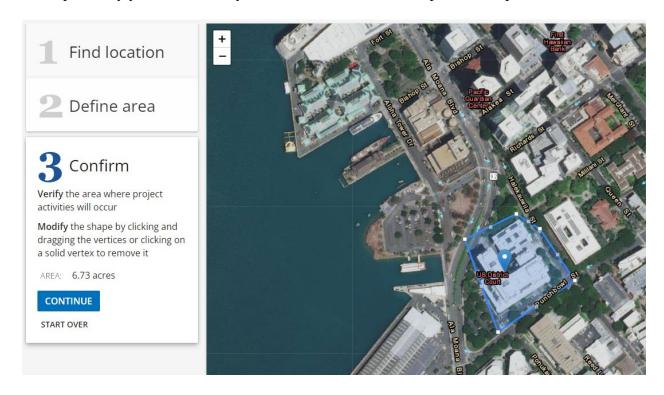


• Define the action area: Identify the location of the proposed action by uploading an existing shapefile or by entering an address or coordinates of the action area. Once identified on the map, you can manually draw the action area using the drawing tools.



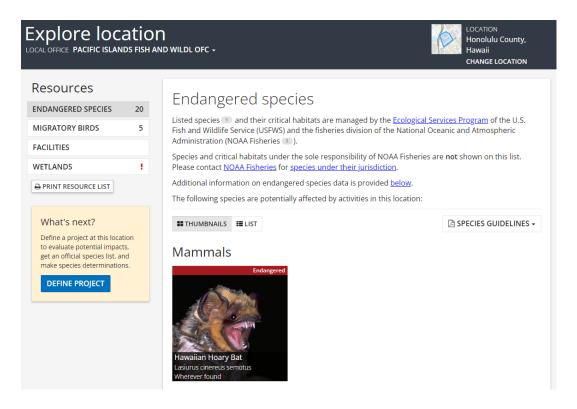


To help identify your action area you can choose between multiple base maps available.

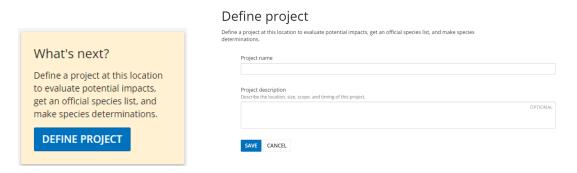


Press continue when you have finished drawing or uploading the action area location.

- The species information on the page that follows is <u>not</u> official. However, it identifies the project County, local Fish and Wildlife Field Office, species covered under NOAA Fisheries as well as Migratory Bird Treaty Act species. The list can be viewed in Thumbnail or List format.
- Once the species list populates you will see images of the species that may occur on, near, or transgress across your project. Click on SPECIES GUIDELINES on your top right to see Avoidance and Minimization measures to incorporate into your General Project Design Guidelines.

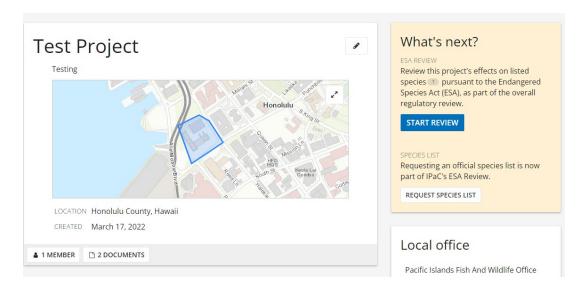


- Continue with the following steps to comply with the requirements of ESA section 7 to obtain an **official species list**.
- Select Define Project

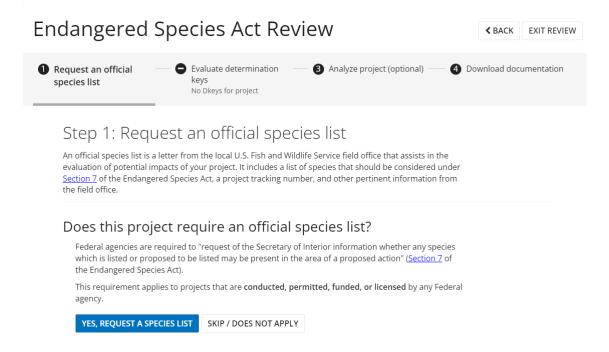


Enter the Project Name and a brief description of the project (a description is not mandatory, but recommended for future coordination with the Service). Click SAVE at bottom of page.

• At the bottom of the What's next box on the right, click Request Species List



• on the following screen, click Yes, Request Species List

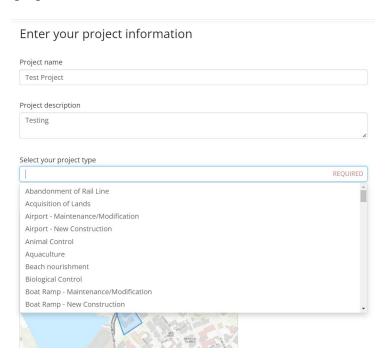


• Fill out the contact information for yourself or your agency. Contractors, state partners, and any other project proponents may request a species list and should be covered using the dropdown menus.

Tell us about the project and your organization or agency



• From the pull-down menu for Classify Type of Project, select the project type that best fits the proposed action.



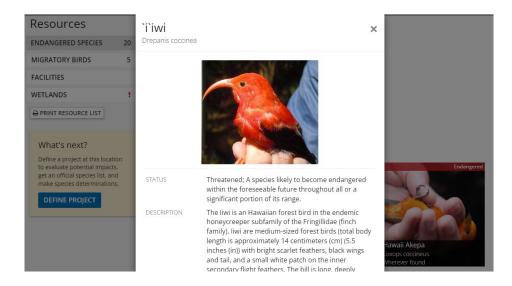
 Once all required sections are filled out, press SUBMIT OFFICIAL SPECIES LIST REQUEST

Location



SUBMIT OFFICIAL SPECIES LIST REQUEST

- An Official Species List should be generated and available for download in a couple of seconds.
- If you need additional information on a species, click on their name that is hot-linked to their species information page. A brief overview of the species' status, description and critical habitat will appear as well as a link to their ECOS species profile.





November 26, 2024

R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

Ms. Charmian Dang U.S. Fish and Wildlife Biologist Pacific Islands Fish and Wildlife Office 300 Ala Moana Boulevard, Room 3-122 Honolulu, HI 96850

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Ms. Dang,

Thank you for your email dated February 22, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, at your suggestion, we ordered an IPaC list.

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

Sincerely,

PBR HAWAII

Greg Nakai

Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

JOSH GREEN, M.D. GOVERNOR KE KIA'ĀINA



STATE OF HAWAII KA MOKU'ĀINA O HAWAI'I

DEPARTMENT OF HUMAN SERVICES

KA 'OIHANA MĀLAMA LAWELAWE KANAKA
BENEFIT, EMPLOYMENT AND SUPPORT SERVICES DIVISION

1010 Richards Street, Suite 512 Honolulu, Hawaii 96813

March 6, 2024

CATHY BETTS
DIRECTOR
KA LUNA HO'OKELE

JOSEPH CAMPOS II
DEPUTY DIRECTOR
KA HOPE LUNA HO'OKELE

TRISTA SPEER
DEPUTY DIRECTOR
KA HOPE LUNA HO'OKELE

Re: 24-00036

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

Dear Mr. Nakai:

Subject: Pre-Assessment Consultation for a HRS Chapter 343 Environmental Assessment –

Bank of Hawaii Hawaii Kai, Hawaii Kai, Oahu, TMK 3-9-017: 040

This is in response to letter dated February 16, 2024 requesting the Department of Human Services (DHS) to comment on the above-named project.

DHS has reviewed the Bank of Hawaii Hawaii Kai project and the map of the area. A check on DHS' internal data system and Google Maps found one (1) registered family child care home located within a one (1) mile radius of the area that may be affected.

Should you have any questions regarding this matter, please contact Ms. Tracy Oshita, Acting Child Care Regulation Program Specialist, at (808) 586-5243.

Sincerely,

Scott Nakasone

Assistant Division Administrator

c: Cathy Betts, Director

Scott Maragan



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP Associate

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner November 26, 2024

Mr. Scott Nakasone Assistant Division Administrator State of Hawai'i Department of Human Services 1010 Richards Street, Suite 512 Honolulu, HI 96817

Attn: Ms. Tracy Oshita, Acting Child Care Regulation Program Specialist

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Mr. Nakasone,

Thank you for your letter dated March 6, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, the Draft Environmental Assessment (EA) will note that there is one (1) registered family child care home located within a one (1) mile radius of the area that may be affected.

DHS did not provide an exact location where the child care home is located. It should be noted that the closest residence on Kalaniana'ole Highway is located over 1,000 feet away (to the east). The closest residence is located over 900 feet away on Opihikao Way (to the north).

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

Sincerely,

PBR HAWAII

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

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



DAWN N. S. CHANG

KENNETH S. FINK, M.D., MGA, MPH NEIL J. HANNAHS AURORA KAGAWA-VIVIANI, PH.D. WAYNE K. KATAYAMA PAUL J. MEYER LAWRENCE H. MIIKE, M.D., J.D.

> DEAN D. UYENO ACTING DEPUTY DIRECTOR

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

COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO

P.O. BOX 621 HONOLULU, HAWAII 96809

		Feb 26, 2024 REF: RFD.6237.
TO:		Greg Nakai, Senior Associate PBR Hawaii & Associate, Inc. ,
FRO	PM:	Dean D. Uyeno, Acting Deputy Director Commission on Water Resource Management
SUB	JECT:	HRS Chapter 343 Environmental Assessment-Bank of Hawaii, 6650 Kalaniana'ole Highway
FILE NO.: TMK NO.:		RFD.6237.3 (1) 3-9-017:040
wate legal cons Wate	agemeers of to lly prote servations er Cod	hank you for the opportunity to review the subject document. The Commission on Water Resource ent (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all the State are held in trust for the benefit of the citizens of the State, therefore all water use is subject to sected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through on measures and appropriate resource management. For more information, please refer to the State e, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. uments are available via the Internet at http://dlnr.hawaii.gov/cwrm .
Our	comm	ents related to water resources are checked off below.
(3)—	1.	We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.
(3)—	2.	We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
3	3.	We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.
	4.	We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at http://www.usgbc.org/leed . A listing of fixtures certified by the EAP as having high water efficiency can be found at http://www.epa.gov/watersense .
X	5.	We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at http://planning.hawaii.gov/czm/initiatives/low-impact-development/
35-	6.	We recommend the use of alternative water sources, wherever practicable.
X	7.	We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program

description can be found online at http://energy.hawaii.gov/green-business-program.

Landscape Industry Council of Hawaii. These practices can be found online at

We recommend adopting landscape irrigation conservation best management practices endorsed by the

http://www.hawaiiscape.com/wp-content/uploads/2013/04/LICH Irrigation Conservation BMPs.pdf.

Page	2	
April	3,	2024

X	9.	There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.
(3)—	10.	The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water. The Water Use Permit may be conditioned on the requirement to use dual line water supply systems for new industrial and commercial developments.
3	11.	The Hawaii Water Plan is directed toward the achievement of the utilization of reclaimed water for uses other than drinking and for potable water needs in one hundred per cent of State and County facilities by December 31, 2045 (§174C-31(g)(6), Hawaii Revised Statutes). We strongly recommend that this project consider using reclaimed water for its non-potable water needs, such as irrigation. Reclaimed water may include, but is not limited to, recycled wastewater, gray water, and captured rainwater/stormwater. Please contact the Hawaii Department of Health, Wastewater Branch, for more information on their reuse guidelines and the availability of reclaimed water in the project area.
(0)—	12.	A Well Construction Permit(s) is (are) are required before the commencement of any well construction work.
(0)—	13.	A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.
(3)—	14.	There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.
39-	15.	Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
39-	16.	A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a steam channel.
39—	17.	A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.
(3)—	18.	A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.
3	19.	The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.
(9)	ОТН	ER:

If you have any questions, please contact Ryan Imata of the Regulation Branch at (808) 587-0225 or Katie Roth of the Planning Branch (808) 587-0216.



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP Associate

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner November 26, 2024

Mr. Dean D. Uyeno
Acting Deputy Director
State of Hawai'i
Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, HI 96809

Attn: Ryan Imata, Regulation Branch; and Katie Roth, Planning Branch

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Mr. Uyeno,

Thank you for your memorandum dated February 26, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we appreciate your comments regarding:

- best management practices for stormwater management;
- participation in the Hawai'i Green Business Program; and
- potential for ground or surface water degradation/contamination.

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

Sincerely,

PBR HAWAII

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com



CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT







STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES KA 'OIHANA KUMUWAIWAI 'ĀINA LAND DIVISION

P.O. BOX 621 HONOLULU, HAWAII 96809

March 22, 2024

LD 0210

PBR HAWAII & Associates, Inc. Attn: Greg Nakai 1001 Bishop Street, Suite 650 Honolulu, Hawaii 96813

Via email:gnakai@pbrhawaii.com

Dear Sir:

SUBJECT: Pre-Assessment Consultation for a HRS Chapter 343 Environmental

Assessment-Bank of Hawaii, 6650 Kalaniana'ole Highway, Hawaii Kai,

Tax Map Key: (1) 3-9-017:040

Thank you for the opportunity to review and comment on the subject project. The Land Division of the Department of Land and Natural Resources (DLNR) distributed copies of your request to DLNR's various divisions for their review and comment.

Enclosed are comments received from our Division of Boating and Ocean Recreation and the Division of Aquatic Resources. Should you have any questions, please feel free to contact Timothy Chee via email at timothy.chee@hawaii.gov. Thank you.

Sincerely,

Russoll Tsuji

Russell Y. Tsuji Land Administrator

Attachments

cc: Central Files



LOCATION:

APPLICANT:



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

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES KA 'OIHANA KUMUWAIWAI 'ĀINA LAND DIVISION

P.O. BOX 621 HONOLULU, HAWAII 96809

February 22, 2024

LD 0210

MEMORANDUM

TO:	DLNR Agencies:				
	X Div. of Aquatic Resources (via email: kendall.l.tucker@hawaii.gov)				
	X Div. of Boating & Ocean Recreation (via email: richard.t.howard@hawaii.gov)				
	X Engineering Division (via email: DLNR.Engr@hawaii.gov)				
	X Div. of Forestry & Wildlife (via email: Rubyrosa.T.Terrago@hawaii.gov)				
	X Div. of State Parks (curt.a.cottrell@hawaii.gov)				
	X Commission on Water Resource Management (via email: DLNR.CWRM@hawaii.go				
	X Office of Conservation & Coastal Lands (via email:Sharleen.k.kuba@hawaii.gov)				
	X Land Division - Oahu District (via email: barry.w.cheung@hawaii.gov)				
	X Aha Moku (via email: leimana.k.damate@hawaii.gov)				
	Russoll Tsuji				
FROM:	Russell Y. Tsuji, Land Administrator				
SUBJECT:	Pre-Assessment Consultation for a HRS Chapter 343 Environmental				
	Assessment-Bank of Hawaji, 6650 Kalanjana'ole Highway				

Transmitted for your review and comment is information on the above-referenced project. Please submit any comments to <u>timothy.chee@hawaii.gov</u> at the Land Division by the internal deadline of **March 15, 2024**. If no response is received by this date, we will assume your agency has no comments. If you have any questions, please contact Timothy Chee at the above email address. Thank you.

Hawaii Kai District, Island of Oahu, Hawaii

TMK: (1) 3-9-017:040

PBR HAWAII & Associates, Inc.

BRIEF COMMENTS:	We have no objections. () We have no comments.
8	() We have no additional comments.
	() Comments are included attached.
	Signed:
	Print Name: Kicharo Howaro
	Division: Do Gor
	Date: 2/13/2021
Attachments	
Cc: Central Files	

JOSH GREEN, M.D. GOVERNOR | KE KIA AINA

SYLVIA LUKE LIEUTENANT GOVERNOR | KA HOPE KIA AINA



Cc: Central Files



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

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I **DEPARTMENT OF LAND AND NATURAL RESOURCES** KA 'Olhana KUMUWAIWAI 'ĀINA LAND DIVISION

P.O. BOX 621 HONOLULU, HAWAII 96809

February 22, 2024

LD 0210

MEMORANDUM

TO: **DLNR Agencies:** X Div. of Aquatic Resources (via email: kendall.l.tucker@hawaii.gov) X Div. of Boating & Ocean Recreation (via email: richard.t.howard@hawaii.gov) X Engineering Division (via email: DLNR.Engr@hawaii.gov) X Div. of Forestry & Wildlife (via email: Rubyrosa.T. Terrago@hawaii.gov) X Div. of State Parks (curt.a.cottrell@hawaii.gov) X Commission on Water Resource Management (via email: DLNR.CWRM@havaii.gov) X Office of Conservation & Coastal Lands (via email: Sharleen.k.kuba@hawaii.gov) X Land Division – Oahu District (via email: barry.w.cheung@hawaii.gov) X Aha Moku (via email: leimana.k.damate@hawaii.gov) Russoll Tsuji FROM: Russell Y. Tsuji, Land Administrator SUBJECT: Pre-Assessment Consultation for a HRS Chapter 343 Environmental Assessment-Bank of Hawaii, 6650 Kalaniana'ole Highway Hawaii Kai District, Island of Oahu, Hawaii LOCATION: TMK: (1) 3-9-017:040 APPLICANT: PBR HAWAII & Associates, Inc.

Transmitted for your review and comment is information on the above-referenced project. Please submit any comments to timothy.chee@hawaii.gov at the Land Division by the internal deadline of March 15, 2024. If no response is received by this date, we will assume your agency has no comments. If you have any questions, please contact Timothy Chee at the above email address. Thank you.

BRIEF COMMENTS:	() We have no objections.() We have no comments.
	() We have no additional comments.
	(Comments are included/attached.
	Signed:
	Print Name: Brian J. Neilson- Administrator
	Division: Aquatic Resources
	Date: Mar 15, 2024
Attachments	

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

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA ÄINA





STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF AQUATIC RESOURCES

1151 PUNCHBOWL STREET, ROOM 330 HONOLULU, HAWAII 96813

Date: 3/14/2024 DAR # AR6584

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

RYAN K.P. KANAKA"OLE FIRST DEPUTY

DEAN D. UYENO ACTING DEPUTY DIRECTOR - WATER

ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES

BOATING AND OCEAN RECREATION BUREAU
OF COMVEYANCES

COMMISSION ON WATER RESOURCE
MANAGEMENT

CONSERVATION AND CASSOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

MEMORAND TO:	DUM Brian J. Neilson DAR Administrator	
FROM:	Elizabeth Monaghan , Aquatic Biologist	
SUBJECT:	Pre-Assessment Consultation for a HRS Chapter 343 Environmental Assessment-Bank of Hawaii, 6650 Kalaniana'ole Highway	
Request Subm	nitted by: PBR HAWAII & Associates, Inc.	
Location of Pr	TMK · (1) 2 0 017:040	
Brief Description of Project: PBR HAWAil & Associates, Inc., is assisting Bank of Hawai'i ("Applicant") to prepare a Hawai'i Revised Statutes (HRS) Chapter 343 Environmental Assessment (EA) for a proposed bank, to be located on the site of the existing Scratch Hawai'i Kai building on O'ahu. The Project site is located at 6650 Kalaniana'ole Highway in Hawai'i Kai, O'ahu, and the Project site is located entirely within TMK 3-9-017: 040. The Property consists of 0.2507 acres or 10,920 square feet and is located mauka of Kalaniana'ole Highway in a commercial development known as Hawai'i Kai Towne Centre. The proposed bank building will replace the existing Scratch Hawai'i Kai building.		
Comments: ☐ No Comme	ents	
Thank you for providing DAR the opportunity to review and comment on the proposed project. Should there be any changes to the project plan, DAR requests the opportunity to review and comment on those changes.		
Comments Ap	proved: Date:	

DAR#	AR6584	

Comments

Due to the close proximity of the proposed construction site to the ocean, it is highly important that construction activities minimize impacts on marine resources where possible. This includes actions to prevent changes in water quality and any actions that prevent interactions with or negative impacts on aquatic organisms.

Erosion/LBSP:

DAR recommends that best management practices for mitigation of erosion and LBSP be followed. The close proximity to aquatic resources should be considered during design and construction. Landscape design and leveling should be such that long term erosion and LBSP are minimized.

During construction these measures would include any type of barrier (e.g. sediment barriers/bags, petroleum absorption diapers, etc.) that limits the amount of sediment or LBSP (e.g. petroleum products, chemicals, debris, etc.) to the maximum extent practicable. DAR recommends that all construction materials be composed of environmentally inert materials to the extent practicable. The Contractor shall consider the weather while performing construction. Some work may be performed during low rain conditions, but all construction would be halted during storm conditions or when storm conditions threaten the watershed.

DAR would like to request notification, photo-documentation, and GPS-coordinates for any occurrence where above-average amounts of sediment or pollution have entered the water, in order to assess impact, if any.

Comments

Light Pollution:

Artificial lighting from construction sites can disorient and confuse marine wildlife such as sea turtles, fish, crabs, and birds. The disruption of their natural rhythms can have long-lasting consequences on their survival and population dynamics.

DAR recommends that construction activities occur during the daylight hours to the extent possible. All outdoor lighting should be fully shielded and pointed downward. Outdoor lighting should be turned off when not necessary, and automatic sensors are recommended.

Seabird fledgeling season occurs during Sept 15th - Dec 15th, and nighttime activity should be halted during this time. Fledglings become easily confused by artificial lighting, which can cause them to crash or land on the ground. Downed fledgelings become easy prey for cats, mongoose, or other predators. If downed or injured fledgelings are observed in the construction area, they should be reported for rescue:

Hawaii Wildlife Center (808) 884-5000 9:00 am – 5:00 pm, 7 days a week

Hawaii Marine Animal Response (808) 220-7802 7:00am – 7:00pm, 7 days a week

https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/#response

Personnel working on-site should be informed of the hazards light pollution may pose to seabirds and other wildlife and be able to recognize native species.

DAR#	AR6584	

Comments

Entanglement:

DAR recommends that the applicant utilize best management practices to eliminate any potential for incidental entanglement of any marine organism, including seabirds. At the end of each day and upon completion of the construction project, all construction-related debris that could potentially endanger species by causing entanglement shall be cleared from the construction area.

Barbed wire poses a large hazard for seabirds, especially fledgelings. Fences should not have barbed wire.

If incidental entanglement of protected species occurs DAR and the appropriate federal agency should be notified immediately.

Thank you for the opportunity to comment. We look forward to reviewing and commenting on the proposed project when a more detailed plan is available



R. STAN DUNCAN, ASLA

RUSSELL Y. J. CHUNG, FASLA

VINCENT SHIGEKUNI Semor Vice President / Pelusina

GRANT T. MURAKAMI. AICP. LEED! AP RD+C Senior Vice President / Principal

KIMI MIKAMI YUEN, LEED' AP BD+C. Vice President & Principal

CATIE CULLISON, AICP

TOM SCHNELL, AICP Vice-President & Principal

RAYMOND T HIGA, ASLA Associate Principal

MARC SHIMATSU, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Pencipal

NATHALIE RAZO Associate Peneipal

ANN MIKIKO BOUSLOG, PhD Director of Land Feationnes & Real Estate

RAMSAY R. M. TAUM

MICAH McMILLEN, ASLA, LEED AP

ETSUVO KILA

GREG NAKAI Senon Associate

NICOLE SWANSON, ASLA

BRADLEY FURUYA, AICP

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

1001 Bishop Street, Suite 650 Hemolulu, Hiwari 9681.3-3484 Tel: (808) 523-5631 Fax: (808) 523-4402 E-mail: sysulmingphthawaii com

printed on recycled paper

February 16, 2024

Ms. Dawn Chang Chairperson State of Hawai'i Department of Land and Natural Resources P.O. Box 621 Honolulu HI 96809

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I HAWAI'I KAI, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Ms. Chang,

This letter supersedes a previous letter dated February 12, 2024, which may have inadvertently been mailed incorrectly. We appreciate your patience in this matter. Should you have any questions, please do not hesitate to contact me.

PBR HAWAII & Associates, Inc., is assisting Bank of Hawai'i ("Applicant") to prepare a Hawai'i Revised Statutes (HRS) Chapter 343 Environmental Assessment (EA) for a proposed bank, to be located on the site of the existing Scratch Hawai'i Kai building on O'ahu.

The Project site is located at 6650 Kalaniana'ole Highway in Hawai'i Kai, O'ahu (Figure 1), and the Project site is located entirely within TMK 3-9-017: 040 (Figure 2). The Property consists of 0.2507 acres or 10,920 square feet and is located mauka of Kalaniana'ole Highway in a commercial development known as Hawai'i Kai Towne Centre. The proposed bank building will replace the existing Scratch Hawai'i Kai building.

The Project site is located within the Special Management Area and will require a Major Special Management Area Use Permit.

With this letter, we seek your input on the project and comments as to whether the proposed project may have an impact on any of your existing or proposed projects, plans, policies, or programs that we should consider when preparing the HRS Chapter 343 Draft EA. Please send us any comments you may have by <u>March 17, 2024</u>. You may mail your comments to:

PBR HAWAII & Associates, Inc. Attn: Greg Nakai 1001 Bishop Street, Suite 650 Honolulu, HI 96813-3484 gnakai@pbrhawaii.com

Sincerely,

PBR HAWAII

Greg Nakai Senior Associate

Enclosures:

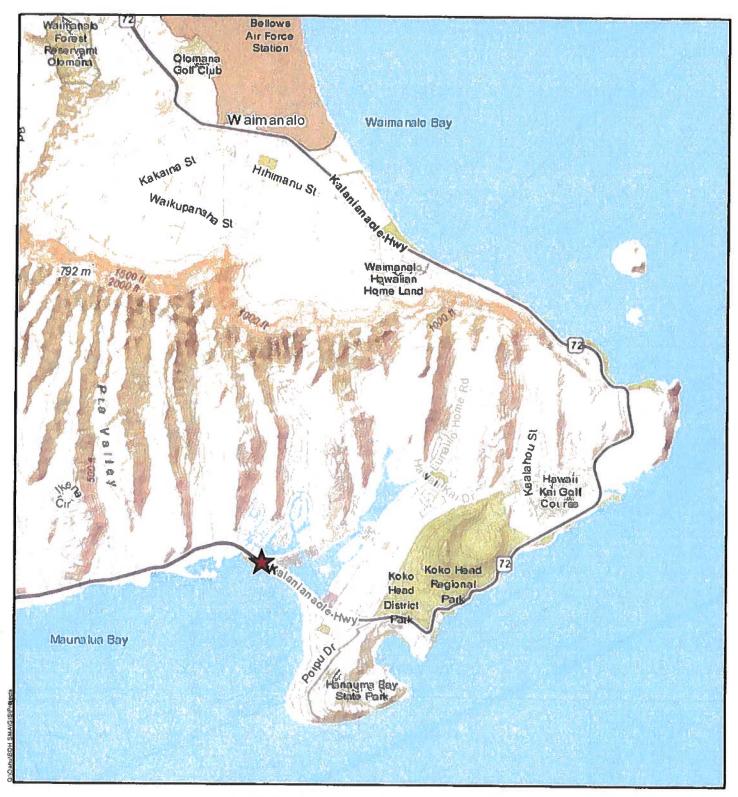
Figure 1: Regional Location Map

Figure 2: Tax Map Key



14 FEB 20 PM 2: 05





LEGEND



Project Site

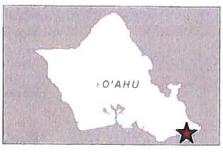
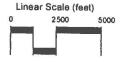


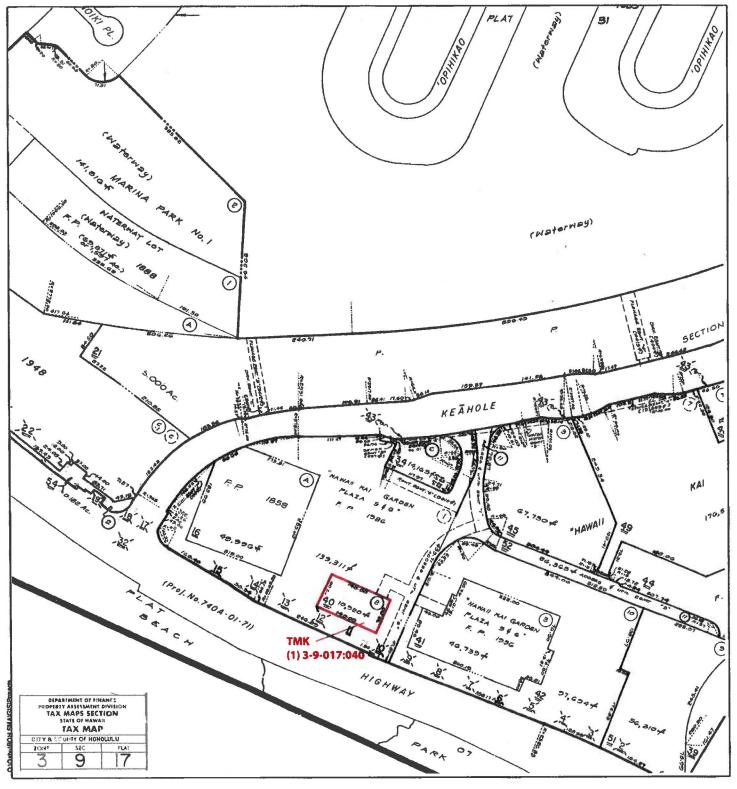
Figure 1: Regional Location Map

Island of O'ahu





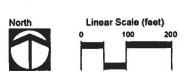




LEGEND



Figure 2: Tax Map Key









R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA

Senior Associate
GREG NAKAI

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP Associate

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

November 26, 2024

Mr. Brian J. Neilson
DAR Administrator
State of Hawai'i
Department of Land and Natural Resources
Division of Aquatic Resources
1151 Punchbowl Street, Room 330
Honolulu, HI 96813-3088

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Mr. Neilson,

We have reviewed your Division's memorandum to Mr. Tsuji dated March 14, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we appreciate the comments on erosion/LBSP, light pollution impacts on various marine wildlife, and the potential impacts of entanglement on various species.

We value DLNR DAR's participation in the environmental review process. Your memorandum and this response will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD
Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA

Senior Associate

GREG NAKAI
Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner November 26, 2024

Mr. Richard Howard
Property Manager VI
State of Hawai'i
Department of Land and Natural Resources
Division of Boating and Outdoor Recreation
4 Sand Island Access Road
Honolulu, HI 96819

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Mr. Howard,

We have reviewed your Division's memorandum to Mr. Tsuji dated February 23, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we acknowledge that DLNR's Division of Boating and Ocean Recreation (DOBOR) has "no objections."

We value DLNR DOBOR's participation in the environmental review process. Your memorandum and our response will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai

Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawaii 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

SYLVIA LUKE LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



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



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

LAND DIVISION

P.O. BOX 621 HONOLULU, HAWAII 96809

February 22, 2024

LD 0210

MEMORANDUM

FROM: DLNR Agencies:

X Div. of Aquatic Resources (via email: kendall.l.tucker@hawaii.gov)

X Div. of Boating & Ocean Recreation (via email: richard.t.howard@hawaii.gov)

X Engineering Division (via email: DLNR.Engr@hawaii.gov)

X_Div. of Forestry & Wildlife (via email: Rubyrosa.T.Terrago@hawaii.gov)

X Div. of State Parks (curt.a.cottrell@hawaii.gov)

X Commission on Water Resource Management (via email: DLNR.CWRM@hawaii.gov)
X Office of Conservation & Coastal Lands (via email:Sharleen.k.kuba@hawaii.gov)

X Land Division – Oahu District (via email: barry.w.cheung@hawaii.gov)

X Aha Moku (via email: leimana.k.damate@hawaii.gov)

TO: Russell Y. Tsuji, Land Administrator Russell Tsuji

SUBJECT: Pre-Assessment Consultation for a HRS Chapter 343 Environmental

Assessment-Bank of Hawaii, 6650 Kalaniana'ole Highway

LOCATION: Hawaii Kai District, Island of Oahu, Hawaii

TMK: (1) 3-9-017:040

APPLICANT: PBR HAWAII & Associates, Inc.

Transmitted for your review and comment is information on the above-referenced project. Please submit any comments to <u>timothy.chee@hawaii.gov</u> at the Land Division by the internal deadline of **March 15, 2024**. If no response is received by this date, we will assume your agency has no comments. If you have any questions, please contact Timothy Chee at the above email address. Thank you.

BRIEF COMMENTS:	() We have no objections.() We have no comments.
	() We have no additional comments.
	Comments are included/attached.
	Signed:
	Print Name: Jason D. Omick, Acting Wildlife Prog. Mgr.
	Division: Forestry and Wildlife
	Date: Apr 11, 2024
Attachments	

Cc: Central Files

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

SYLVIA LUKE LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA





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

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

April 11, 2024

DAWN N.S. CHANG

CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

RYAN K.P. KANAKA'OLE FIRST DEPUTY

DEAN D. UYENO ACTING 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

Log no. 4453

MEMORANDUM

TO: RUSSEL Y. TSUJI, Administrator

Land Division

FROM: JASON D. OMICK, Acting Wildlife Program Manager

Division of Forestry and Wildlife

SUBJECT: Division of Forestry and Wildlife Comments for the Pre-Assessment

Consultation HRS Chapter 343, Proposed Bank of Hawai'i, O'ahu

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received the Pre-Asessment HRS Chapter 343 Consultation Request for a new proposed Bank of Hawai'i building at 6650 Kalaniana'ole Highway in the Hawai'i Kai District, on the Island of O'ahu, Hawai'i; TMK: (1) 3-9-017:040. The property consists of 0.2507 acres and is located mauka of the highway in a commercial development know as Hawai'i Kai Towne Center.

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

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

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

Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawaii please visit https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf.

The State threatened manu-o-Kū or White Tern (*Gygis alba*) is known to nest in the vicinity of the proposed project. If tree trimming or removal is planned, DOFAW strongly recommends a qualified biologist survey for the presence of White Terns prior to any action that could disturb the trees. White Tern pairs typically lay their single egg on a tree branch with no nest. Eggs and chicks can be dislodged by construction equipment or workers that contact trees in which White Terns are nesting. As such, a tree protection program should be in place for any mature trees with nesting or roosting White Terns. For more information regarding detailed Best Management Practices when conducting tree care activities with manu-o-Kū present, please visit

https://www.whiteterns.org/uploads/8/6/3/2/86323044/mok_tree_care_guidelines_190622.pdf. If a nest is discovered, please notify DOFAW staff for assistance.

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

The State endangered pueo or Hawaiian Short-eared owl (*Asio flammeus sandwichensis*) could potentially occur in the project vicinity. Pueo are most active during dawn and dusk twilights. Remove and exclude non-native mammals such as mongoose, cats, dogs, and ungulates from the nesting area. Minimize habitat alterations and disturbance during pueo breeding season. Pueo nest on the ground and active nests have been found year-round. Before any potentially disturbing activity like clearing vegetation, especially ground-based disturbance, DOFAW recommends a qualified biologist conduct surveys during crepuscular hours and walk line transects through the area to detect any active pueo nests. If a pueo nest is discovered, notify DOFAW staff, minimize time spent at the nest, and establish a minimum buffer distance of 100 meters from the nest until chicks are capable of flight.

The invasive Coconut Rhinoceros Beetle (CRB) or Oryctes rhinoceros is found on the islands of O'ahu, Hawai'i Island, Maui and Kaua'i. On July 1, 2022, the Hawai'i Department of Agriculture (HDOA) approved Plant Quarantine Interim Rule 22-1. This rule restricts the movement of CRB-host material within or to and from the island of O'ahu, which is defined as the Quarantine Area. Regulated material (host material or host plants) is considered a risk for potential CRB infestation. Host material for the beetle specifically includes a) entire dead

trees, b) mulch, compost, trimmings, fruit and vegetative scraps, and c) decaying stumps. CRB host plants include the live palm plants in the following genera: Washingtonia, Livistona, and Pritchardia (all commonly known as fan palms), Cocos (coconut palms), Phoenix (date palms), and Roystonea (royal palms). When such material or these specific plants are moved there is a risk of spreading CRB because they may contain CRB in any life stage. For more information regarding CRB, please visit https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/.

DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid 'Ōhi'a Death), vertebrate and invertebrate pests (e.g., Little Fire Ants, Coconut Rhinoceros Beetles, etc.), or invasive plant parts (e.g., Miconia, Pampas Grass, etc.) that could harm our native species and ecosystems. We recommend consulting the O'ahu Invasive Species Committee (OISC) at (808) 266-7994 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

DOFAW is concerned about impacts to vulnerable birds from nonnative predators such as cats, rodents, and mongooses. We recommend taking action to minimize predator presence; remove cats, place bait stations for rodents and mongoose, and provide covered trash receptacles.

DOFAW recommends using native plant species for landscaping that are appropriate for the area; i.e., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to www.plantpono.org for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.

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

We appreciate your efforts to work with our office for the conservation of our native species. These comments are general guidelines and should not be considered comprehensive for this site or project. It is the responsibility of the applicant to do their own due diligence to avoid any negative environmental impacts. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible. If you have any questions, please contact Katherine Cullison, Habitat Conservation Planning Coordinator, at katherine.cullison@hawaii.gov.

Sincerely,

9092

JASON D. OMICK Acting Wildlife Program Manager



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED® AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED $^{\circ}$ AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

printed on recycled paper

November 26, 2024

Mr. Jason D. Omick Acting Wildlife Program Manager State of Hawai'i Department of Land and Natural Resources Division of Forestry and Wildlife 1151 Punchbowl Street, Room 325 Honolulu, HI 96813

Attn: Katherine Cullison, Habitat Conservation Planning Coordinator

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Mr. Omick,

We have reviewed your Division's memorandum (reference Log no. 4453) to Mr. Tsuji dated April 11, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we will incorporate appropriate comments from the memorandum in the Draft EA.

We value DLNR DOFAW's participation in the environmental review process. Your memorandum and our response will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i





R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP Associate

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

November 26, 2024

Mr. Russell Y. Tsuji Land Administrator State of Hawai'i Department of Land and Natural Resources Land Division P.O. Box 621 Honolulu, HI 96809

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Mr. Tsuji,

Thank you for your letter dated March 22, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we have provided written responses to comments received from DLNR's Commission on Water Resource Management, Division of Boating and Ocean Recreation, the Division of Aquatic Resources, and the Division of Forestry and Wildlife.

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

Sincerely,

PBR HAWAII

Greg Nakai

Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com



JOSH GREEN, M.D. GOVERNOR KE KIA'ĀINA



KENNETH S. HARA MAJOR GENERAL ADJUTANT GENERAL

KA 'AKUKANA KENELALA

STEPHEN F. LOGAN BRIGADIER GENERAL DEPUTY ADJUTANT GENERAL KA HOPE 'AKUKANA KENELALA

STATE OF HAWAI'I KA MOKU'ĀINA O HAWAI'I **DEPARTMENT OF DEFENSE**

KA 'OIHANA PILI KAUA

OFFICE OF THE ADJUTANT GENERAL 3949 DIAMOND HEAD ROAD HONOLULU, HAWAI'I 96816-4495

February 22, 2024

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

SUBJECT: Pre-Assessment Consultation for Environmental Assessment, Bank of Hawaii

Hawaii Kai, Oahu TMK (1) 3-9-017:040

Dear Mr. Nakai:

Thank you for the opportunity to comment on the above project. The State of Hawaii Department of Defense has no comments to offer relative to the project at this time.

Should there be any questions, please contact Mr. Tad T. Nakayama at 808-369-3490 or tad.t.nakayama@hawaii.gov.

Sincerely,

Shao Yu L. Lee, R.A.

Major, Hawaii National Guard

Chief Engineering Officer



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP Associate

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

November 26, 2024

Ms. Shao Yu L. Lee, R.A. Major, Hawai'i National Guard Chief Engineering Officer State of Hawai'i Department of Defense Office of the Adjutant General 3949 Diamond Head Road Honolulu, HI 96816-4495

Attn: Mr. Tad T. Nakayama

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Major Lee,

Thank you for your letter dated February 22, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we acknowledge that the State Department of Defense has no comments to offer relative to the Project at this time.

We value your Department's participation in the environmental review process. Your letter will be reproduced in the forthcoming Draft EA.

Sincerely,

100

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

printed on recycled paper

From: <u>DBEDT OPSD Environmental Review Program</u>

To: <u>Greg Nakai</u>

Subject: BOH Hi Kai comments

Date: Monday, February 26, 2024 9:34:07 AM

FYI....The Environmental Advisory Council does not have any comments on this project.

Thank you, Environmental Review Program DBEDT - Office of Planning and Sustainable Development 235 S. Beretania St ≉702 Honolulu, Hawaii 96813 (808) 586-4185

NOTE: Environmental Review Program's primary role is to facilitate Hawai'i's environmental review process by providing relevant advice to agencies, applicants, consultants and the public. ERP is not authorized to make determinations on Environmental Assessments, Environmental Impact Statements or exemptions. Pursuant to Chapter 343, Hawai'i Revised Statutes, all such determinations are made by appropriate State or county agencies, county mayors or the Governor.



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD
Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP Associate

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner November 26, 2024

Ms. Onaona Thoene Chairperson, Environmental Advisory Council Environmental Review Program DBEDT – Office of Planning and Sustainable Development 235 S. Beretania Street #702 Honolulu, HI 96813

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Ms. Thoene,

Thank you for the email from the Environmental Review Program's Environmental Advisory Council (ERP-EAC) dated February 26, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we acknowledge that the ERP-EAC has no comments to offer relative to the Project at this time.

We value your agency's participation in the environmental review process. Your letter will be reproduced in the forthcoming Draft EA.

Sincerely,

PBR HAWAII

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

printed on recycled paper



JOSH GREEN, M.D.

SYLVIA LUKE LT. GOVERNOR

MARY ALICE EVANS
INTERIM DIRECTOR

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

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

DTS202402150920NA

Coastal Zone Management Program

Environmental Review

Program

Land Use Commission

Land Use Division

Special Plans Branch

State Transit-Oriented Development

Statewide Geographic Information System

Statewide Sustainability Program March 12, 2024

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

Dear Mr. Nakai:

Subject: Pre-Assessment Consultation for a HRS Chapter 343

Environmental Assessment – Bank of Hawai'i

Hawai'i Kai Branch, Honolulu, O'ahu

TMK: (1)3-9-017: 040

This pre-consultation review material on the proposed development of the Bank of Hawaii (BOH) Building in Hawai'i Kai was forwarded to our office in memo format dated February 12, 2024.

It is our understanding that BOH proposes the development of a new Branch in Hawai'i Kai on the location of the existing Scratch Hawai'i Kai building. The Property consists of 10,920 square feet and is located mauka of Kalaniana'ole Highway at the Hawai'i Kai Towne Centre.

The Office of Planning and Sustainable Development (OPSD) has reviewed the submitted material and has the following comments to offer:

1. <u>Hawai'i Coastal Zone Management (CZM) Program</u>
The 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 U.S. territorial sea"

under Hawai'i Revised Statutes (HRS) § 205A-1.

Pursuant to HRS § 205A-4, in implementing the objectives of the CZM program, agencies shall consider ecological, cultural, historic, esthetic, recreational, scenic, open space values, coastal hazards, and economic development. As the proposed action will require agency approvals, the Draft Environmental Assessment (Draft EA) should include a discussion on the project's consistency with the policies of the Hawai'i CZM Program, HRS § 205A-2, as well as the triggers from HRS 343 that necessitate the preparation of an Environmental Assessment.

2. Special Management Area (SMA) Permitting

We note the review material acknowledges the need for a Special Management Area (SMA) Use Permit. The Environmental Assessment (EA) can serve as a supporting document for the SMA Use Permit application by specifically examining compliance with the requirements of SMA use under Revised Ordinances of Honolulu (ROH) Chapter 25, and by consulting with the Department of Planning and Permitting (DPP), City and County of Honolulu (CCH). The subject EA should provide a regional location map of the subject property on Oʻahu, with the project site proximity and relation to the CCH-designated SMA boundary.

3. Stormwater Runoff, Erosion, and Water Resources

Pursuant to Hawaii Administrative Rules (HAR) § 11-200.1-18(d)(7) – identification and analysis of impacts and alternatives considered; to ensure that nearshore marine resources along the south shore of O'ahu remain protected, the negative effects of stormwater runoff and sediment loading from the proposed project site of Malama Bay and the greater marine ecosystem near the project area should be evaluated.

Issues that may be examined include, but are not limited to, project site characteristics in relation to flood and erosion prone areas, vulnerability of the nearshore environment any increase in volume or flow rate of stormwater runoff. Developing mitigation measures for the protection of the water quality and the coastal ecosystem should take this into account, pursuant to HAR § 11-200.1-18(d)(8).

Furthermore, we note that this project may be subject to low impact development (LID) design requirements by the CCH-DPP. LID design features are an effective method in limiting the impact of polluted stormwater runoff on the downslope coastal and marine environment. It is advised that DPP be consulted on this matter.

4. Climate Change Adaptation/Sea Level Rise (SLR)

Due to the project site's proximity to Malama Bay, the long-term viability of this project is in question. The built environment of lowland areas of Hawai'i Kai may be vulnerable to coastal inundation and natural hazards associated with SLR. To assess the potential environmental impacts and vulnerability of this site, we suggest the Draft EA refer to the findings of the Hawai'i Sea Level Rise Vulnerability and Adaptation Report 2017, accepted by the Hawai'i Climate Change Mitigation and Adaptation Commission.

The Report, and Hawai'i SLR Viewer at https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/identifies a 3.2-foot SLR exposure area across the main Hawaiian Islands, as a starting evaluation point. The Draft EA should provide a map of at least 3.2-foot SLR exposure area in relation to the project area, and evaluate site-specific mitigation measures, including setbacks from the shoreline or relocation options further inland, increasing the height of the proposed structures to accommodate higher water levels, or related climate change adaptation strategies when feasible.

Mr. Greg Nakai March 12, 2024 Page 3

If you wish to respond to this comment letter, please include DTS 202402150920NA in the subject line. If you have any questions or concerns, please contact Joshua Hekekia at (808) 587-2845 or by email to Joshua.K.Hekeia@hawaii.gov.

Sincerely,

Mary Alice Evans,

· May Alie Evans

Interim Director



R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD
Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI Senior Associate

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP

C.R. 'IMIPONO WICHMAN Associate

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

1001 Bishop Street, Suite 650 Honolulu, Hawaiʻi 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402

E-mail: sysadmin@pbrhawaii.com

printed on recycled paper

November 26, 2024

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

Attn: Joshua Hekekia

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Ms. Evans,

Thank you for your letter dated March 12, 2024 (reference no. DTS202402150920NA), regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we have reviewed the Office of Planning & Sustainable Development's (OPSD's) comments, and provide the following responses:

- 1. As requested, the Draft Environmental Assessment (EA) will provide a discussion on the Project's consistency with Hawai'i Revised Statutes (HRS) Chapter 205A-2 (Hawai'i Coastal Zone Management Program) as well as the triggers from HRS Chapter 343 (State EIS Law) that necessitate the preparation of the EA.
- 2. We appreciate the advice on the EA in regard to the SMA Use Permit application and have consulted with DPP. The EA will provide a regional location map of the Subject Property showing the proximity of the SMA boundary.
- 3. The Draft EA will include the Project Civil Engineer's comparison of runoff from existing conditions, as a way of describing the possible impacts of stormwater runoff and sediment loading from the Proposed Project. The Project Civil Engineer will consult with DPP regarding possible low impact development (LID) design features.
- 4. The Draft EA will include a map of a 3.2-foot sea level rise in relation to the Project Area and will include a reference to the Hawai'i Sea Level Rise Vulnerability and Adaptation Report (2017). The Bank of Hawai'i's lease over the property is for a minimum of 21 years, and it acknowledges that eventually, both pedestrian and vehicular access to the site could be different than the immediate future.

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

Sincerely,

PBR HAWAII

Greg'Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i From: <u>Donaldson, James A</u>

To: Greg Nakai

Subject: Bank of Hawaii @ 6650 Kalanianiole Hwy Date: Thursday, February 29, 2024 7:07:41 AM

Attachments: BANK OF HAWAII 6650 KALANIANIOLE HWY - CATV MAP-Layout1.pdf

Contractor Notes 2016 (R3).pdf

Aloha Greg,

RE: Bank of Hawaii @ 6650 Kalanianiole Hwy

Thank you for the opportunity to review and comment on the proposed construction Project. According to our drawings. We may be affected by the proposed work. We have underground equipment nearby. The locations of existing CATV pull-boxes, duct routes, aerial routes, and crossings are shown on the provided plans. SPECTRUM is submitting drawings with information on the facilities within the project area. Please note these drawings are to be used for reference only. The exact locations, depth and routing of all underground CATV facilities must be verified in the field due to construction variances. In any case toning through the One Call Center will identify our facilities in the immediate area. At this time, SPECTRUM occupies both CATV and Hawaiian Telcom's (HTCO) duct systems. The sections of this project that is highlighted in your scope of work, may conflict with existing Spectrum facilities.

This information has been provided to help minimize delays and prevent damage to existing CATV structures within the project area. Should you have any questions or concerns, please feel free to contact me at 808-292-7721, or email me at James.Donaldson@charter.com

Attached: asbuilt map of requested areas(1 pdf)

Our Contractors notes

Thank you,

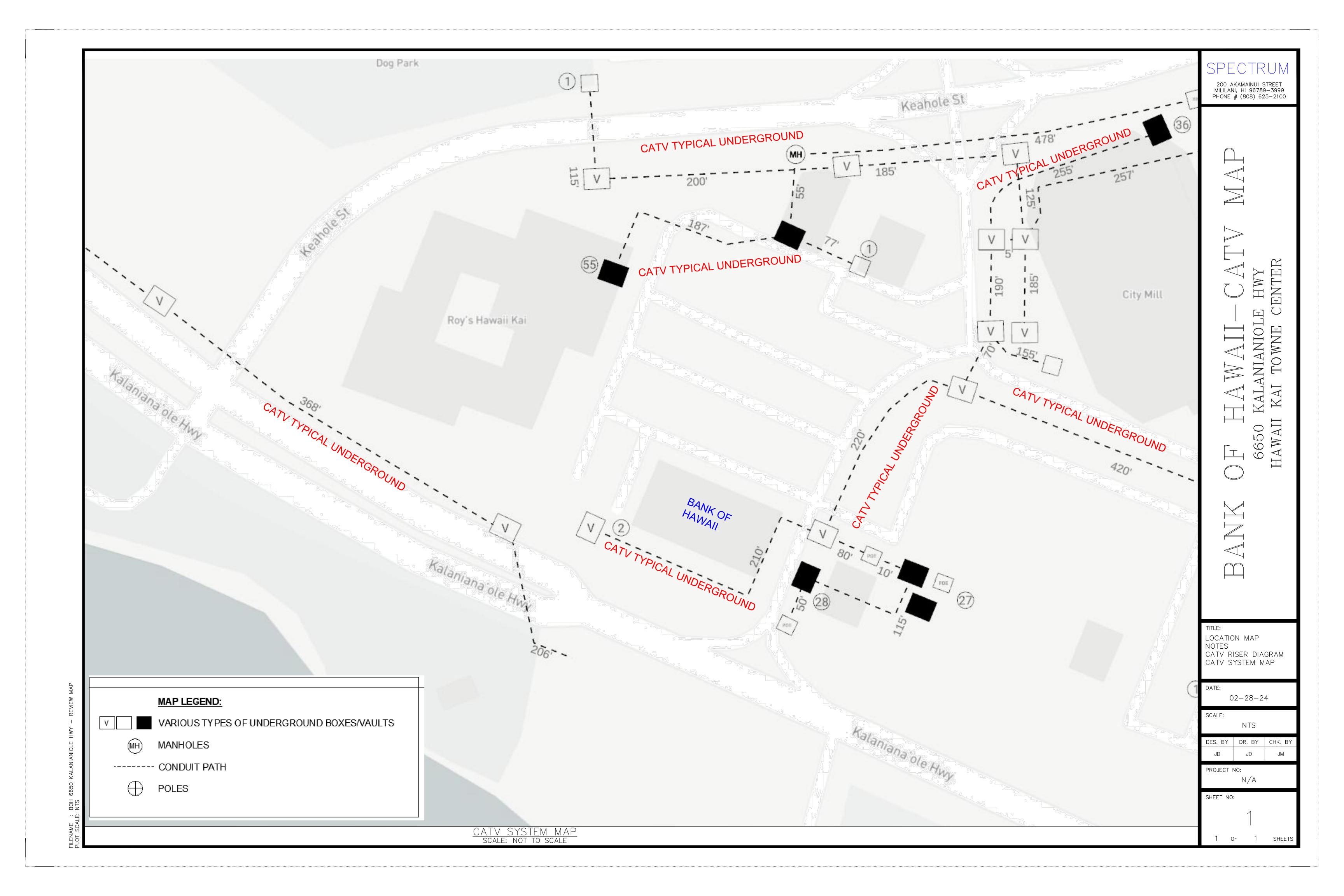
James Donaldson

SPECTRUM OSP Engineering | Construction Coordinator 151 Pali'i St , Mililani Hi 96789

T: 808-292-7721

E: james.donaldson@charter.com

The contents of this e-mail message and any attachments are intended solely for the addressee(s) and may contain confidential and/or legally privileged information. If you are not the intended recipient of this message or if this message has been addressed to you in error, please immediately alert the sender by reply e-mail and then delete this message and any attachments. If you are not the intended recipient, you are notified that any use, dissemination, distribution, copying, or storage of this message or any attachment is strictly prohibited.



GENERAL CONTRACTOR'S NOTES:

- 1. THE CONTRACTOR SHALL PROCURE AND PAY FOR ALL LICENSES AND PERMITS AND SHALL GIVE ALL NOTICES NECESSARY AND INCIDENT TO THE DUE AND LAWFULL PROSECUTION OF THE WORK.
- 2. THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THESE UTILITIES AS A RESULT OF HIS OPERATIONS. ADJUSTMENTS TO THE NEW DUCTLINE ALIGNMENT, IF REQUIRED, SHALL BE MADE TO PROVIDE THE REQUIRED CLEARANCES.
- 3. THE CONTRACTOR SHALL BRACE ALL POLES OR LIGHT STANDARDS NEAR THE NEW DUCTLINE, MANHOLE OR HANDHOLE DURING ITS OPERATIONS.
- 4. THE CONTRACTOR SHALL SAW-CUT A.C. PAVEMENT, CONCRETE GUTTER, AND CONCRETE SIDEWALK WHEREVER NEW MANHOLES, HANDHOLES, PULLBOXES OR DUCTLINES ARE TO BE PLACED AND SHALL RESTORE TO EXISTING CONDITION OR BETTER.
- 5. THE UNDERGROUND PIPES, CABLES, OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREAS. WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.
- 6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE COST FOR SUPLEMENTARY MEASURES, WHICH WILL BE REQUIRED BY THE CITY AND COUNTY, SHALL BE BORNE BY THE CONTRACTOR.
- 7. PRIOR TO THE EXCAVATION OF THE DUCTLINE, THE CONTRACTORSHALL REQUEST THAT OCEANIC CABLE COMPANY TO LOCATE EXISTING DUCTLINE WHEREVER REQUIRED.
- 8. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTION NOT TO DAMAGE EXISTING CABLES OR DUCTS. ANY WORK INVOLVING EXISTING CABLES OR DUCTS SHALL BE DONE IN THE PRESENCE OF THE OCEANIC CABLE COMPANY INSPECTOR OR HIS REPRESENTATIVE. TEMPORARY CABLE AND DUCT SUPPORT SHALL BE PROVIDED WHEREVER NECESSARY.

- 9. THE CONTRACTOR SHALL NOTIFY THE OCEANIC CABLE COMPANY INSPECTOR 72 HOURS PRIOR TO THE START OF WORK ON CATV INFRASTRUCTURE, POURING CONCRETE, OR BACKFILLING. OCEANIC'S INSPECTOR(S): PERRY SAMUELU AT 387-2496 OR PAUL CASPILLO AT 479-1637.
- 10. WHEREVER CONNECTIONS TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES PRIOR TO EXCAVATION OF THE MAIN TRENCHES TO VERIFY THEIR LOCATIONS AND DEPTHS.
- 11. CONTRACTOR SHALL PROVIDE ALL MATERIALS AND FURNISH ALL LABOR AND EQUIPMENT NECESSARY TO INSTALL THE DUCTLINE IN PLACE COMPLETE.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT ALL REQUIRED LINES AND GRADES AND SHALL PRESERVE ALL BENCH MARKS AND WORKING POINTS NECESSARY TO LAY OUT THE WORK CORRECTLY. THE NEW DUCTLINE SHALL BE ADJUSTED BY THE CONTRACTOR TO SUIT THE EXISTING CONDITIONS AND THE DETAILS AS DESCRIBED IN THE PLANS.
- 13. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE OF HAWAII, DEPARTMENT OF HEALTH.
- 14. THE LOCATION OF CATV FACILITIES SHOWN ON PLANS ARE FROM EXISTING RECORDS WITH VARYING DEGREES OF ACCURACY AS TO ITS ACTUAL FIXED LOCATION. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY OF CATV FACILITIES.
- 15. THE CONTRACTOR SHALL OBTAIN EXCAVATION PERMIT CLEARANCE FROM OCEANIC'S ENGINEERING SECTION LOCATED AT 200 AKAMAINUI ST., MILILANI TECH PARK.
- 16. FOR ANY FIELD ASSISTANCE OR VERIFICATION OF CATV FACILITIES, THE CONTRACTOR SHALL CALL OCEANIC CABLE AT 625-2100 AND ASK FOR THE OSP ENGINEERING DEPARTMENT.
- 17. ANY WORK REQUIRED TO RELOCATE CATV FACILITIES SHALL BE DONE BY OCEANIC CABLE AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION REQUIREMENTS AND ASSOCIATED COSTS.
- 18. ANY DAMAGE TO OCEANIC'S FACILITIES SHALL BE REPORTED TO OTWC'S TOC DEPARTMENT AT 625-8169.

- 19. THE CONTRACTOR SHALL TUNNEL UNDER EXISTING CONCRETE CURB AND GUTTER AS NECESSARY TO EXTEND CONDUIT INTO EXISTING CATV PULLBOX AND INTO THE PROPOSED POWER SUPPLY PULLBOX.
- 20. ALL EXISTING IMPROVEMENTS THAT ARE DISTURBED DURING THE CONSTRUCTION PHASE SHALL BE RESTORED TO ITS ORIGINAL OR BETTER CONDITION AT NO COST TO THE CITY IN ACCORDANCE WITH CITY'S STANDARDS.
- 21. AT LOCATIONS WHERE EXISTING CATV PULLBOX REPLACEMENT IS PROPOSED, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTION NOT TO DAMAGE THE EXISTING CABLES IN THE PULLBOX. ALL DAMAGES TO EXISTING CABLES SHALL BE REPAIRED BY OCEANIC CABLE AND PAID FOR BY THE CONTRACTOR.
- 22. COORDINATE ALL PENETRATION OF TELEPHONE PULLBOXES WITH HAWAIIAN TEL INSPECTOR.
- 23. SMOOTH FINISH INSIDE WALL OF EXISTING PULLBOXES AND HAND-HOLES TO ITS ORIGINAL CONDITION OR BETTER.
- 24. ALL NEW CONCRETE ENCASED CONDUIT SHALL BE PVC PIPE-SCHEDULE 40. ALL NEW DIRECT-BUIRED CONDUIT SHALL BE PVC PIPE-SCHEDULE 80. USE OF ANY OTHER MATERIAL TYPE (GTS, ETC.) SHALL BE LIMITED TO MATCHING EXISTING FACILITES. CONNECTION OF DISSIMILAR MATERIALS TO REQUIRE APPROVAL FROM OTWC INSPECTOR AND ENGINEERING DEPT.
- 25. THE CONTRACTOR SHALL PLACE POLY CORD THROUGH OUT PROJECT, AND SECURE IN MANHOLES, HANDHOLES, AND PULLBOXES.
- 26. FOR 3" CONDUITS OR LARGER, THE CONTRACTOR SHALL INSTALL NEPTCO WP1800 MULETAPE OR APPROVED EQUAL IN ALL DUCTLINES, LEAVE MULETAPE IN PLACE FOR FUTURE USE AS A PULL OR FISH LINE, UNLESS OTHERWISE NOTED. REFERENCE GTE MATERIAL CODE NO. 571154. ALL DUCTS SHALL BE CAPPED TO PREVENT ENTRY OF FOREIGN MATERIAL DURING CONSTRUCTION AND AT COMPLETION OF INSTALLATION. ENDBELLS ARE REQUIRED FOR CONDUITS 2" AND LARGER.
- 27. PENETRATION INTO PULLBOXES IF NECESSARY TO BE FROM FACTORY INSTALLED OPENING OR FROM BRICKS POSITION. PENETRATION FROM PULLBOX WALLS IS NOT ACCEPTABLE.
- 28. BENDS IN THE DUCT ALIGNMENT, DUE TO CHANGES IN GRADE SHALL HAVE A MINIMUM RADIUS OF 20-FEET. ALL 90-DEGREE C-BENDS AT A POLE OR AT THE BUILDING FLOOR SLAB PENETRATION, SHALL HAVE A BEND RADIUS OF 10 TIMES THE DIAMETER OF THE DUCT OR GREATER.

- 29. MINIMUM LENGTH OF CONDUIT USED SHALL NOT BE LESS THANK 5-FEET IN LENGTH. USE OF PARTIAL CONDUIT SECTIONS ALLOWABLE IS AT OTWC INSPECTOR(S) DISCRETION.
- 30. ALL CONDUITS SHALL ENTER THROUGHT THE END "SHORT WALL" OF THE PULL-BOX. ENTRY SHALL BE AT 90 DEGRESS (PERPENDICULAR) TO WALL FACE WITH BENDS NO LESS THAN 12" FROM EXTERIOR WALL.
- 31. A MINIMUM OF (2) PRECAST SECTIONS MUST BE USED ON ALL 2X4 OR 2X6 PULLBOXES.
- 32. ALL NEW CONSTRUCTION SHALL UTILIZE CONCRETE PRECAST BASE UNLESS OTHERWISE APPROVED OR SPECIFIED BY OTWC INSPECTOR(S).
- 33. WHEN THREE (3) OR MORE 4" CONDUITS ENTER ONE END WALL OF ANY PULLBOX, ONLY BRICK BASES WILL BE ALLOWED UNLESS OTHERWISE INSTRUCTED/APPROVED BY OTWC INSPECTOR(S).
- 34. TWO MINIMUM LAYERS OF BRICKS TO BE USED LOWER THAN THE LOWEST DUCT ENTERING THE PULLBOX. TOP LAYER OF BRICK TO BE FLUSH WITH TOP OF CONDUIT OR HIGHER.
- 35. FOR UPGRADE/REPAIRS TO EXISTING PULL-BOXES, BRICKS MAY BE USED AND SHALL ALWAYS BE AT LEAST TWO LAYERS LOWER THAN THE LOWEST DUCT ENTERING THE PULLBOX.
- 36. AT NO TIME SHALL CEMENT MORTAR, WOOD, OR ANY OTHER MATERIAL BE USED BETWEEN PRECAST SECTIONS.
- 37. LEVELING OR RAISING OF BOXES TO GRADE MUST BE DONE:
 - A. PRE-CAST BASE(S USING GRAVEL LAYER UNDER BASE (TYPE 3B OR EOUIVALENT APPROVED BY OTWC INSPECTOR)
 - B. BRICK BASE(S) ADJUSTMENTS TO BRICKWORK SECTION. THE PERMANENT INSTALLATION OF WOODEN WEDGES TO ACCOMPLISH THIS PURPOSE WILL NOT BE ACCEPTED.
- 38. 5/8" x 8' COPPER GROUND RODS SHALL BE PLACED IN ALL PULLBOXES UNLESS OTHERWISE DIRECTED BY OCEANIC TIME WARNER CABLE. GROUND RODS WILL BE PLACED IN THE CORNER 3" TO 4" FROM THE WALL AND AWAY FROM ANY CONDUIT WITH NO MORE THAN 8" STICKING UP ABOVE GROUND.
- 39. TRENCHING TO BE BY HAND DIGGING NEAR AND ACROSS EXISTING UTILITY LINES.
- 40. MINIMUM CLEARANCE BETWEEN STREET LIGHT STAND AND FIRE HYDRANTS SHALL BE THREE FEET.

- 41. UNDERGROUND UTILITIES SHOWN HEREON IS FOR INFORMATION ONLY. NO GUARANTEE IS MADE ON THE ACCURACY OR COMPLETENESS OF SAID INSTALLATION.
- 42. FOR UNDERGROUND CABLE LOCATING AND MARKING, FIVE WORKING DAYS ADVANCE NOTICE IS REQUIRED. THREE WORKING DAYS ADVANCE NOTICE IS REQUIRED FOR ANY INSPECTION BY A DESIGNATE REPRESENTATIVE. CONTRACTOR SHALL TAKE NECESSARY PRECAUTION NOT TO DAMAGE ANY EXISTING CABLES OR DUCTS. OCEANIC'S INSPECTOR OR DESIGNATED REPRESENTATIVE IS REQUIRED TO BE AT ANY JOB SITE WHENEVER THERE WILL BE A BREAKAGE INTO OR ENTRY INTO ANY STRUCTURE THAT CONTAIN OCEANIC'S FACILITIES.
- 43. CONCRETE STRENGTH SHALL BE 3000 PSI IN 28 DAYS.
- 44. CURING AND BACKFILLING. MAINTAIN CONCRETE IN A MOIST CONDITION FOR 24 HOURS MINIMUM FOR 3,000 PSI AND 48 HOURS MINIMUM FOR 2,500 PSI BEFORE COMPACTED.

 BACKFILLING: 72 HOURS MINIMUM BEFORE PERMITTING MOTOR TRAFFIC LOAD ON DUCTLINE. CURING METHOD SHALL MEET OCEANIC TWC INSPECTOR'S APPROVAL.
- 45. INSTALL 8-MIL. THICK ORANGE COLOR WARNING TAPE 4-INCH WIDE ENTIRE LENGTH OF TRENCH WHEN PLACING CATV CONDUITS. TAPE SHOULD READ "CAUTION BURIED CABLE LINE BELOW".

 MANUFACTURED BY HARRIS INDUSTRIES, INC. CATALOG NUMBER UT-43 OR EQUIVALENT TAPE. TAPE TO BE INSTALLED 12-INCHES BELOW GRADE.
- 46. AFTER DUCTLINE HAS BEEN COMPLETED, A MANDREL WITH A SQUARE FRONT NOT LESS THAN 12-INCH LONG AND HAVING A DIAMETER OF ¼-INCH LESS THAN THE INSIDE DIAMETER OF DUCT, SHALL BE PULLED THROUGH EACH DUCT AFTER WHICH A BRUSH WITH STIFF BRISTLES SHALL BE PULLED THROUGH TO MAKE CERTAIN THAT NO PARTICLES OF EARTH, SAND, OR GRAVEL HAVE BEEN LEFT INSIDE. DUCTS SHALL BE COMPLETELY DRY AND CLEAN.
- 47. METALLIC ENTRANCE CONDUITS SHALL BE GROUNDED.
- 48. ALL CONDUITS WITHIN A BUILDING SHALL:
- A) BE INSTALLED IN THE SHORTEST AND STRAIGHTEST POSSIBLE RUN.
- B) HAVE NO SECTION LONGER THAN 100-FEET NOR CONTAIN MORE THAN TWO 90-DEGREE BENDS. AN APPROVED SIZED JUNCTION BOX OR GUTTER BOX SHALL BE PLACED IF THIS IS EXCEEDED.
- C) ALL BENDS SHALL BE LONG SWEEP-RADIUS BENDS BUT THE INSIDE RADIUS OF THE BEND MUST NEVER BE LESS THAN TEN TIMES THE DIAMETER OF THE CONDUIT.

- 49. ALL CONSTRUCTION MUST BE INSPECTED AND APPROVED BY OCEANIC PRIOR TO THE INSTALLATION OF ANY OF ITS FACILITIES AND THE ENERGIZING OF ITS SYSTEM.
- 50. CONTRACTOR AND/OR CUSTOMER SHALL PROVIDE OCEANIC WITH SUFFICIENT INSTALLATION TIME IN THEIR OCCUPANCY TIME TABLE.

FILE:ContraNotes.doc



November 26, 2024

R. STAN DUNCAN, ASLA President / Chairman

RUSSELL Y. J. CHUNG, FASLA Executive Vice-President / Principal

VINCENT SHIGEKUNI Senior Vice-President / Principal

GRANT T. MURAKAMI, AICP, LEED* AP BD+C Senior Vice-President / Principal

KIMI MIKAMI YUEN, LEED* AP BD+C Vice-President / Principal

CATIE CULLISON, AICP Vice-President / Principal

TOM SCHNELL, AICP Vice-President / Principal

MARC SHIMATSU, ASLA Principal

RAYMOND T. HIGA, ASLA Associate Principal

DACHENG DONG, LEED* AP Associate Principal

NATHALIE RAZO Associate Principal

ANN MIKIKO BOUSLOG, PhD Director of Land Economics & Real Estate

RAMSAY R. M. TAUM Cultural Sustainability Planner

ETSUYO KILA Senior Associate

GREG NAKAI

NICOLE SWANSON, ASLA Associate

BRADLEY FURUYA, AICP

C.R. 'IMIPONO WICHMAN

THOMAS S. WITTEN, FASLA Chairman Emeritus

W. FRANK BRANDT, FASLA Founding Partner

Mr. James Donaldson Construction Coordinator SPECTRUM OSP Engineering 151 Pali'i Street Mililani HI 96789

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT – BANK OF HAWAI'I, HAWAI'I KAI, O'AHU, TMK 3-9-017: 040

Dear Mr. Donaldson,

Thank you for your email dated February 29, 2024, regarding the subject Project. As the planning consultant for the Bank of Hawai'i, we appreciate the comments and drawings you provided. The design team led by MC3 Architects will have its electrical and telecommunication engineering consultant coordinate with Spectrum to minimize delays and prevent damage to existing CATV structures within the near vicinity of the Project. In addition, the appropriate drawing sets will include the standard "General Contractor's Notes" provided by Spectrum.

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

Sincerely,

PBR HAWAII

Greg Nakai Senior Associate

cc: Trenton Lum, Bank of Hawai'i Andrew Fox, Bank of Hawai'i

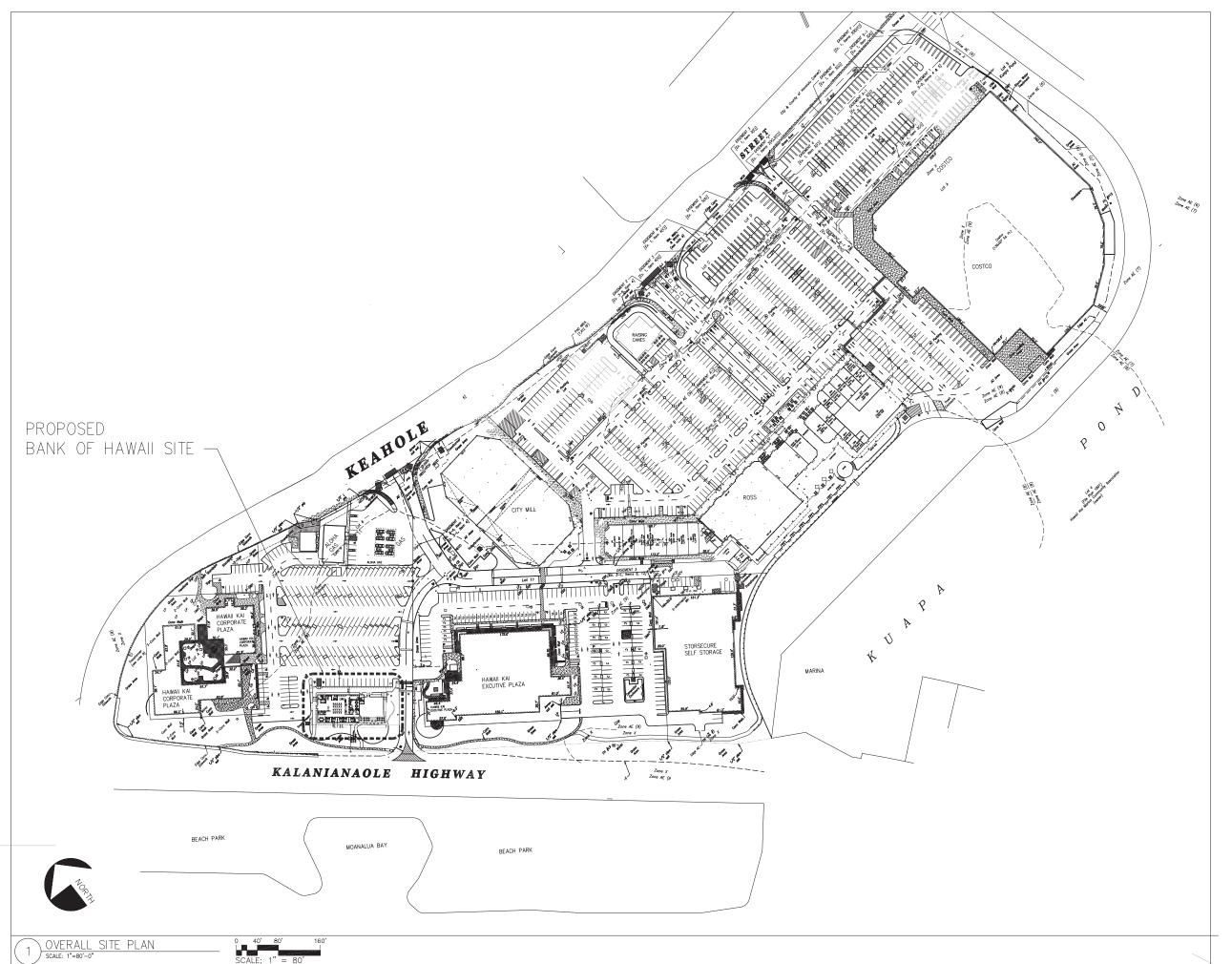
1001 Bishop Street, Suite 650 Honolulu, Hawai'i 96813-3484 Tel: (808) 521-5631 Fax: (808) 523-1402 E-mail: sysadmin@pbrhawaii.com

printed on recycled paper



APPENDIX B: Conceptual Site Plan







1044 NUUANU AVENUE HONOLULU, HI 96817 PHONE: (808) 529-0807

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROUECT WILL BE UNDER MY OBSERVATION. OBSERVATION OF CONSTRUCTION AS DEFINED IN HAWAII ADMINISTRATIVE RULES (TITLE 16, CHAPTER 115)



APRIL 30, 2026
EXPIRATION DATE OF LICENSE

PROJECT TITLE

BANK OF HAWAII

AT THE HAWAII KAI TOWN CENTER

6650 KALANIANA'OLE HIGHWAY HONOLULU, HI 96825

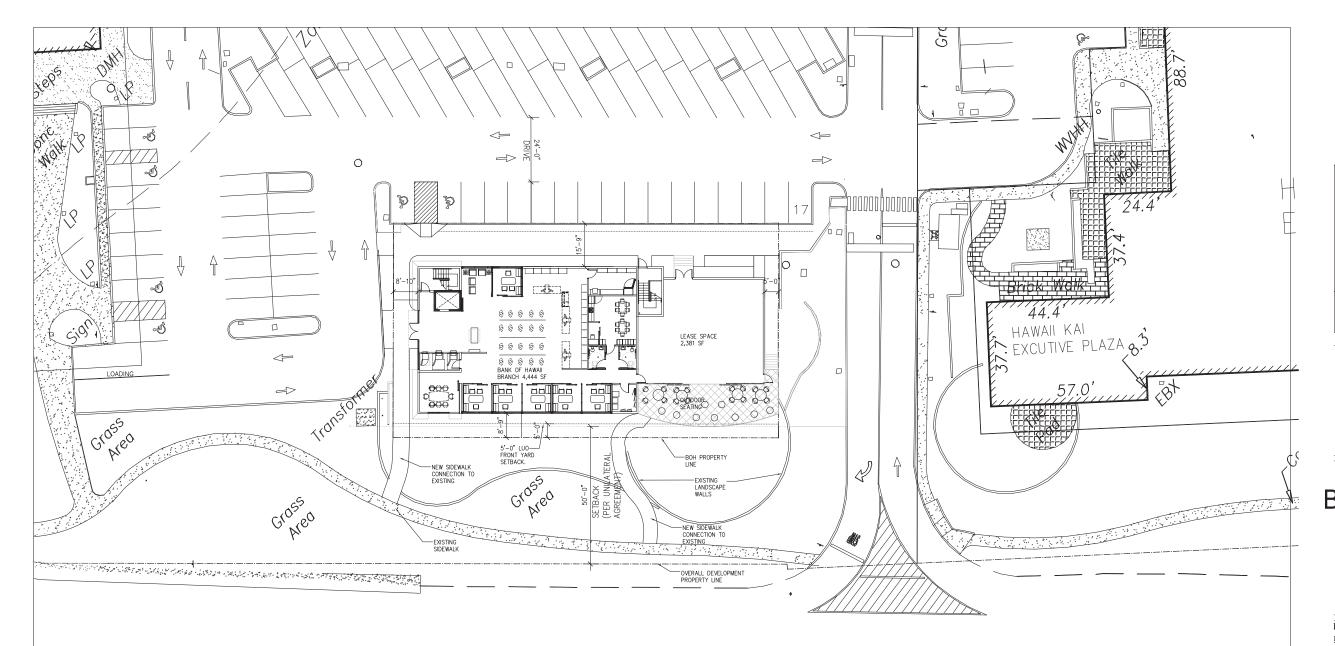
T.M.K.: (1) 3-9-017:040

NO	DESCRIPTION	ON DATE	BY
110	DIRECTAL TIC	JA DAIL	DI
JOB NU		DATE	
240	08	10/25/24	
PROJEC	T DIRECTOR	DESIGNED BY	
DRAWN	BY	CHECKED BY	
CAD FI	7.0		
CAD FI	PP		
SCALE			
AS S	HOWN		
PHASE		SUBMITTAL	
PHASE	I /\		
PHASE	ŁΑ	SUDIVILLIAL	-

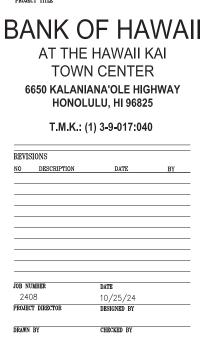
OPTION 5D ALT OVERALL SITE PLAN

SHEET NUME

SD-1.0



KALANIANAOLE HIGHWAY



ARCHITECTS

1044 NUUANU AVENUE HONOLULU, HI 96817 PHONE: (808) 529-0807

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
OBSERVATION OF CONSTRUCTION AS DEFINED IN HAWAII ADMINISTRATIVE RULES (TITLE 16, CHAPTER 115)

APRIL 30, 2026
EXPIRATION DATE OF LICENSE

Ton It

1 ENLARGED SITE PLAN



ENLARGED SITE PLAN

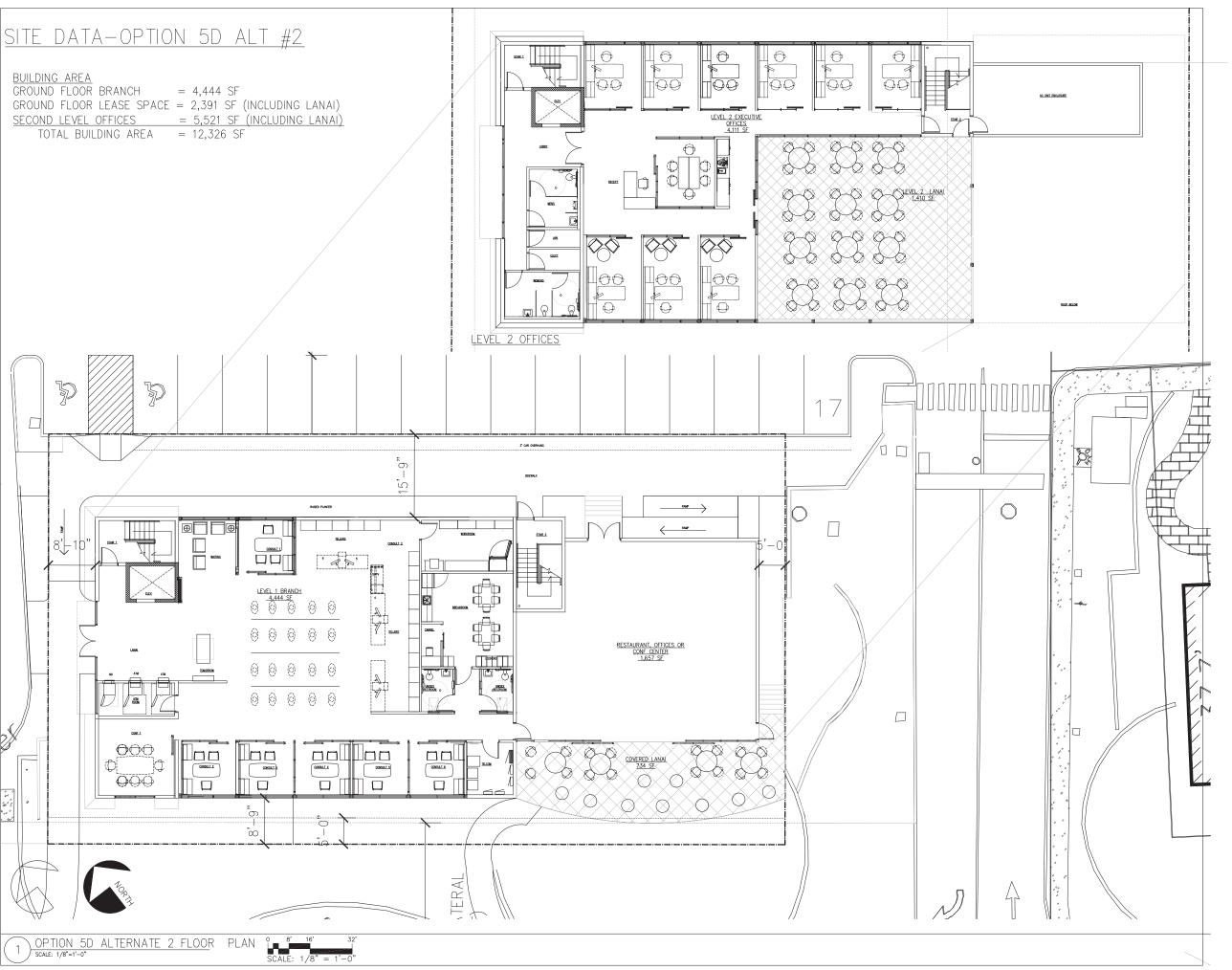
OPTION 5D ALT

EA SUBMITTAL

SD-2.0

APPENDIX C: Conceptual Floor Plan







HONOLULU, HI 96817 PHONE: (808) 529-0807

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. OBSERVATION OF CONSTRUCTION AS DEFINED IN HAWAII ADMINISTRATIVE RULES (TITLE 16, CHAPTER 115)

RULES (TITLE 16, CHAPTER 11
SIGNATURE

APRIL 30, 2026
EXPIRATION DATE OF LICENSE

PROJECT TITLE

BANK OF HAWAII

AT THE HAWAII KAI TOWN CENTER

6650 KALANIANA'OLE HIGHWAY HONOLULU, HI 96825

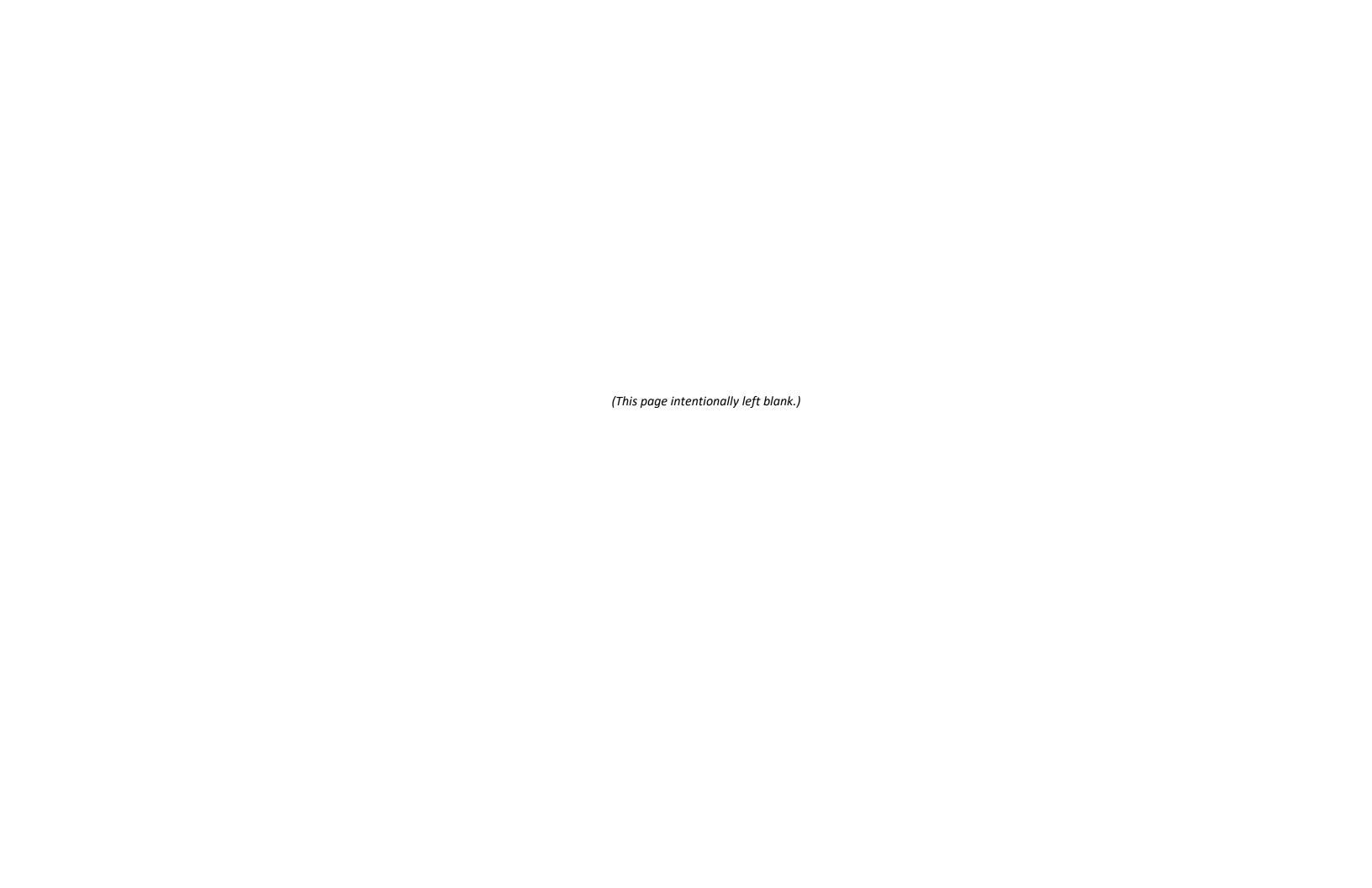
T.M.K.: (1) 3-9-017:040

REVISIONS					
DESCRIPTION	DATE	BY			
BER	DATE				
3	10/25/24				
DIRECTOR	DESIGNED BY				
Y	CHECKED BY				
NWC					
FA SU	IBMITTAL				
ILE					
2 II()N 5	ol) All 2				
	DESCRIPTION BEER B DIRECTOR Y DWN E.A. S.U. TILE	DESCRIPTION DATE BER DATE 3 10/25/24 DIRECTOR DESIGNED BY Y CHECKED BY DWN EASUBMITTAL			

FLOOR PLAN

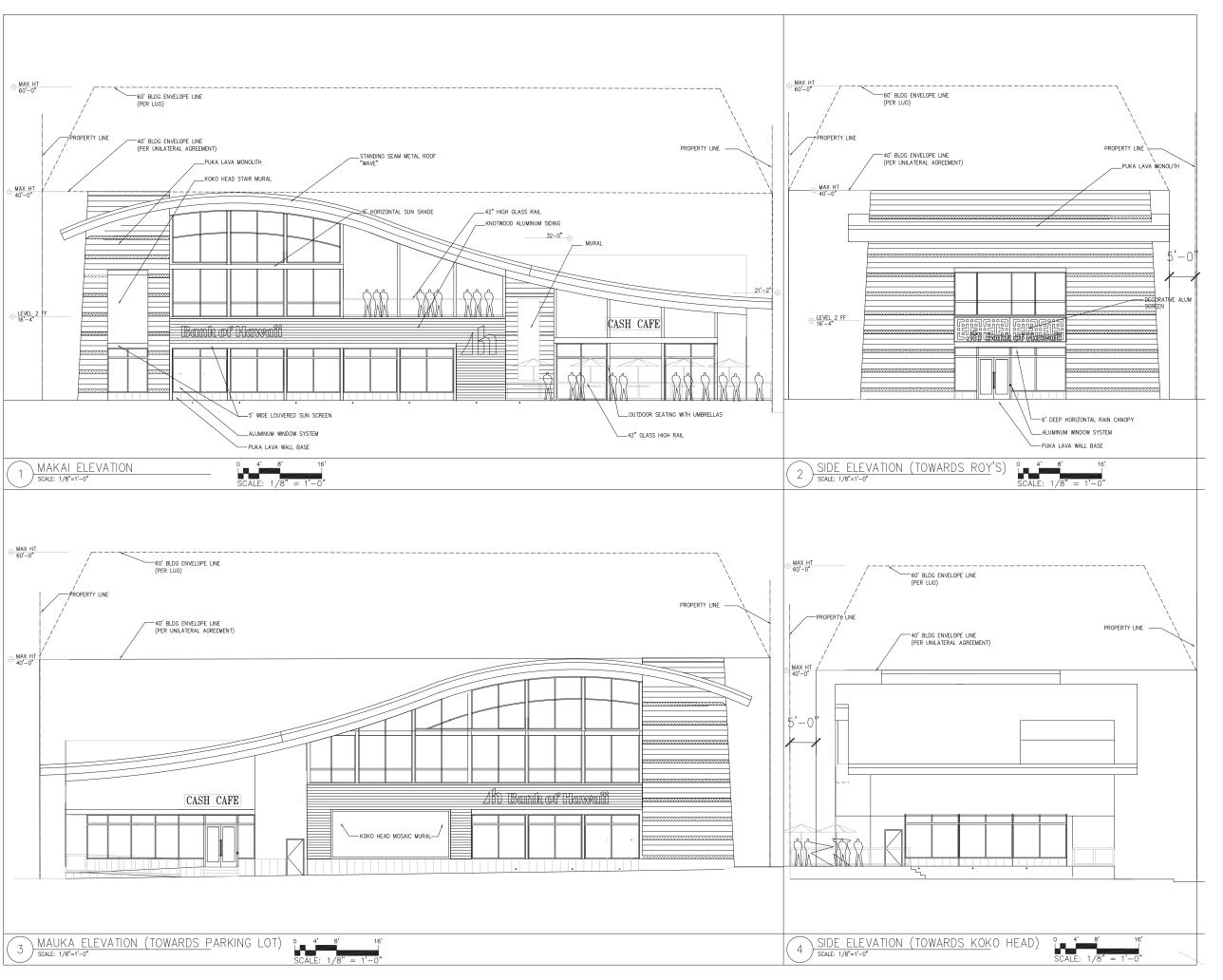
SHEET NUMB

A1.0



APPENDIX D:Building Elevations







THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. OBSERVATION OF CONSTRUCTION AS DEFINED IN HAWAII ADMINISTRATIVE RULES (TITLE 16, CHAPTER 115)

P-02

APRIL 30, 2026
EXPIRATION DATE OF LICENSE

PROJECT TITLE

BANK OF HAWAII

AT THE HAWAII KAI **TOWN CENTER**

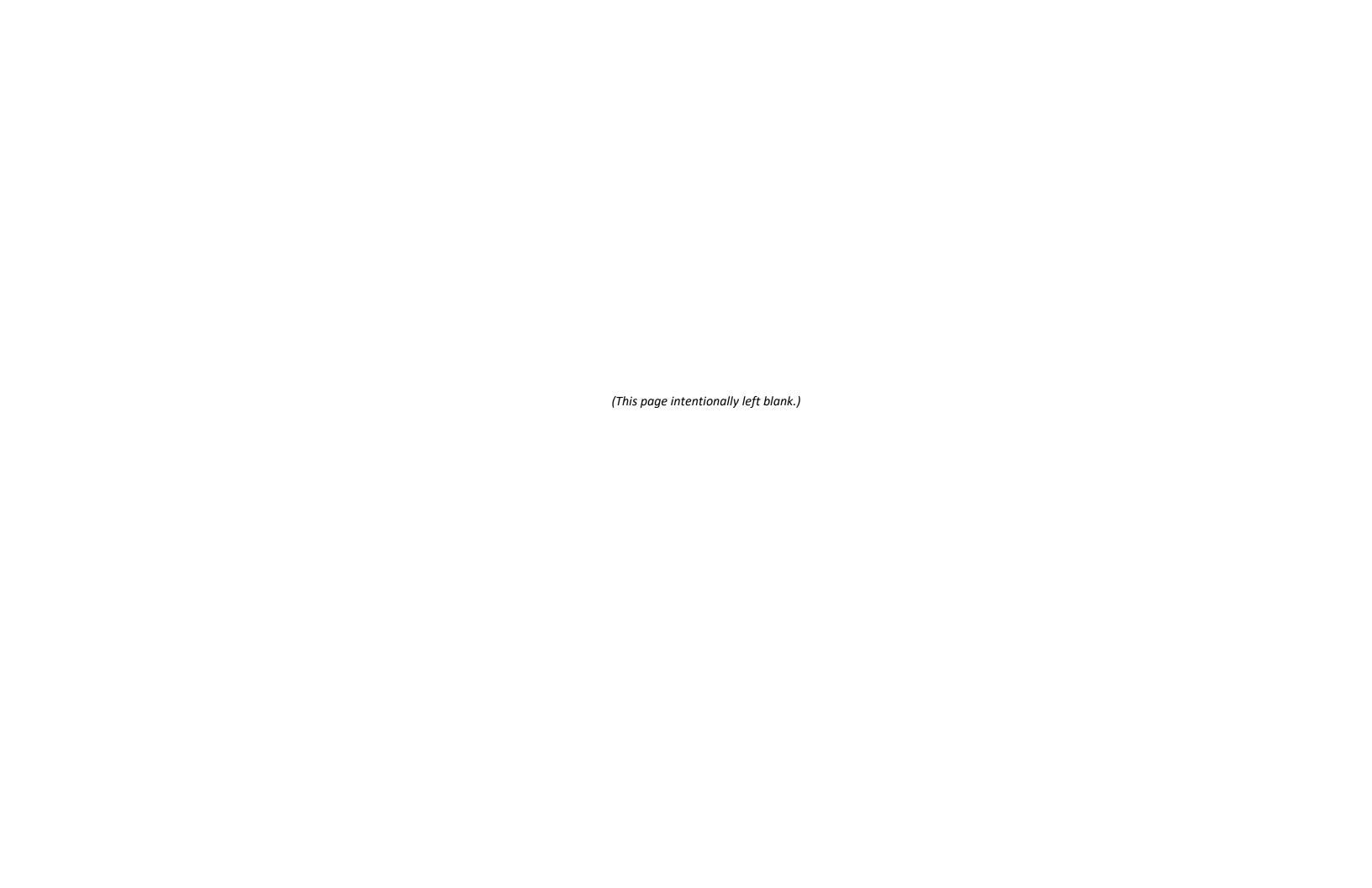
6650 KALANIANA'OLE HIGHWAY HONOLULU, HI 96825

T.M.K.: (1) 3-9-017:040

NΩ	DESCRIPTION	DATE	BY
NO	DESCRIPTION	DATE	DI
_			
JOB NUMBER		DATE	
2408		10/25/24	
PROJEC	T DIRECTOR	DESIGNED BY	
DRAWN	ВҮ	CHECKED BY	
CAD FI	10		
CAD FI	ьь		
SCALE			
AS S	HOWN		
PHASE			
	EA SI	JBMITTA	L
SHEET	TITLE		

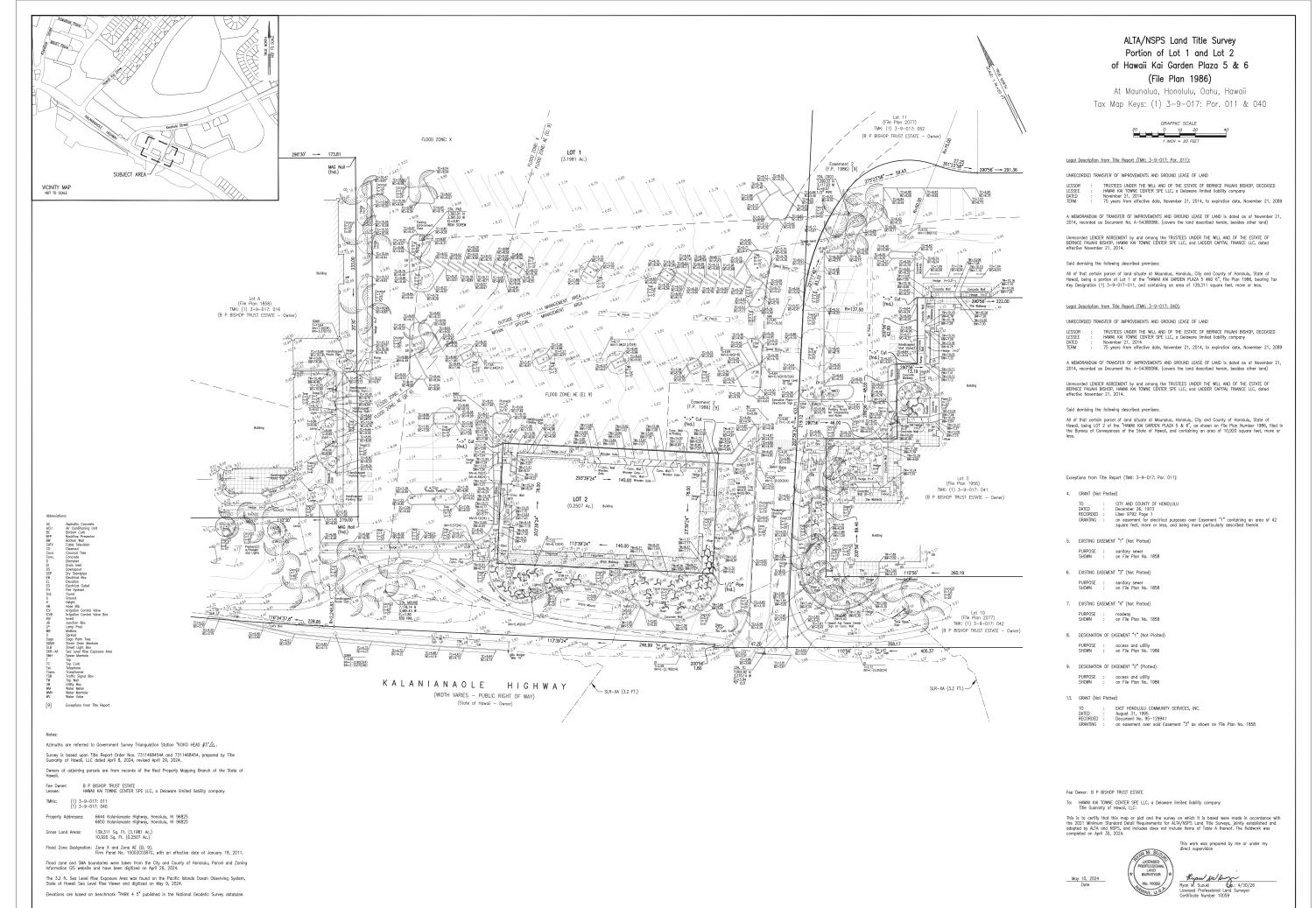
OPTION 5D ELEVATION

A2.0



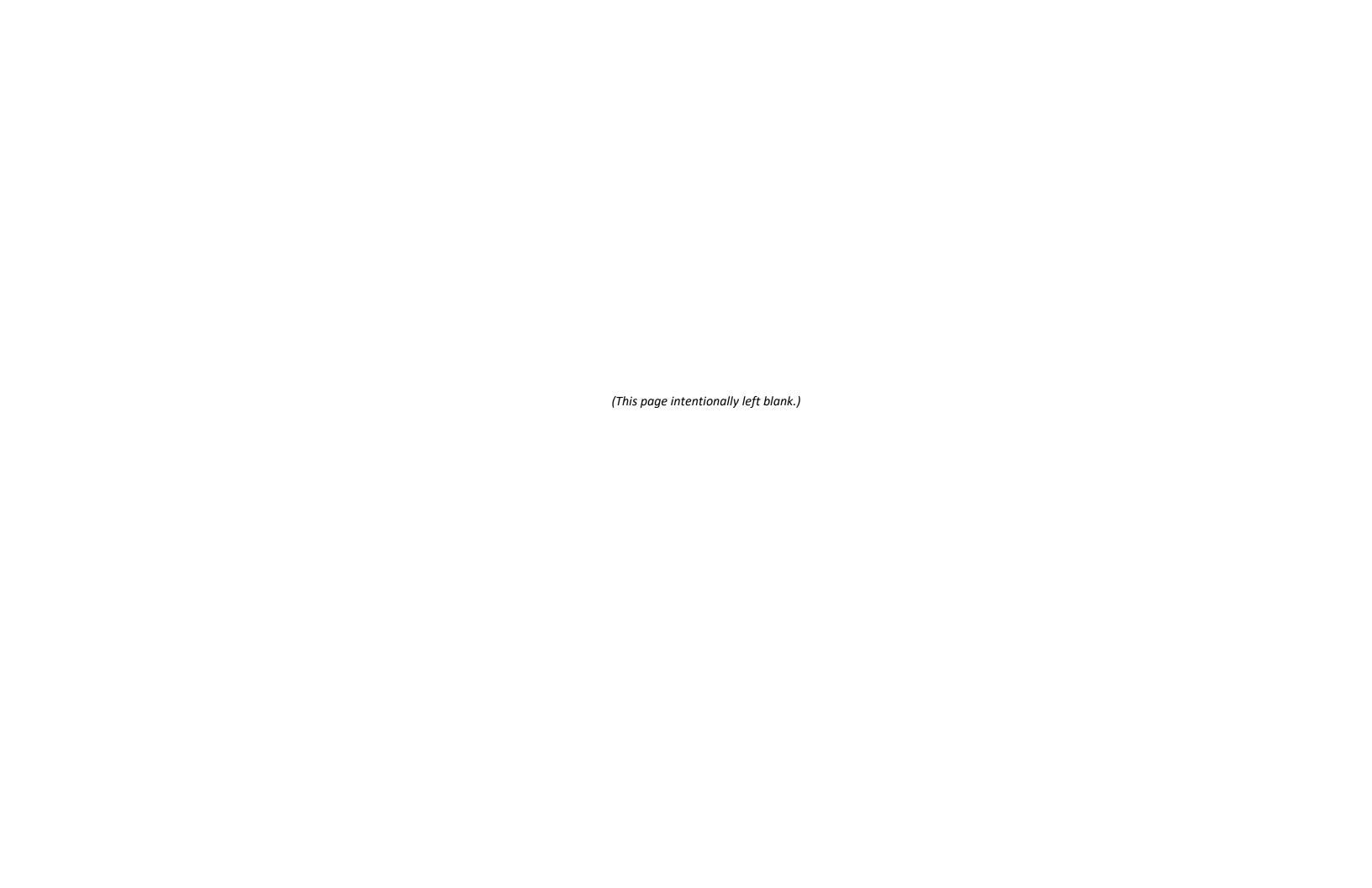
APPENDIX E: Existing Conditions/Topography





R. M. TOWILL CORPORATION

2024 North King Street Suite 20 Honolulu, Hawaii 96819 Tel: (808)842-1133



APPENDIX F: Archaeological Report



An Archaeological Literature Review and Field Inspection of 6650 Kalaniana'ole Highway

TMK: (1) 3-9-017:040

Maunalua Ahupua'a Ko'olaupoko District Island of O'ahu



Prepared By:

Evan Ryder, B.A. and Nick Belluzzo, M.A.

Prepared For:

PBR Hawaii & Associates, Inc. 1001 Bishop Street, Suite 650 Honolulu, HI 96813

April 2024



Archaeology • History • Anthropology • Architectural History

Hilo Office: (808) 969-6066 Fax: (808) 443-0065 507-A E. Lanikaula Street, Hilo, HI 96720

Honolulu Office: (808) 439-8089 Fax: (808) 439-8087 820 Mililani Street, Suite 700, Honolulu, HI 96813

An Archaeological Literature Review and Field Inspection of 6650 Kalaniana'ole Highway

TMK: (1) 3-9-017:040

Maunalua Ahupua'a Ko'olaupoko District Island of O'ahu



EXECUTIVE SUMMARY

At the request of PBR Hawaii & Associates, Inc. (PBR), on behalf of the Bank of Hawaii (BOH), ASM Affiliates (ASM) conducted an archaeological literature review and field inspection (LRFI) of 6650 Kalaniana'ole Highway (TMK: [1] 3-9-017:040) in Maunalua Ahupua'a, Ko'olaupoko District, Island of O'ahu. The 0.2507-acre subject parcel is located within the Hawai'i Kai Towne Center shopping complex and is currently developed with a single story restaurant (a former Outback Steakhouse; currently Scratch Kitchen) constructed in 1991. The Hawai'i Kai Towne Center was established in the 1980s and comprises the majority of a small peninsula located between Maunalua Bay and the Hawai'i Kai Marina, developed atop portions of a former fishpond, Loko Keahupua-o Maunalua (see Figures 1 and 2).

On January 25, 2024, Kevin Pico, B.A., under the supervision of Nick Belluzzo, M.A., conducted a surface reconnaissance of the project area in order to assess the absence or presence of surface archaeology and any potential effect of the proposed ground-disturbing activities expected across the entirety of the parcel.

Given the negative findings with respect to above-ground archaeological resources it is concluded that the proposed development will not affect any historic properties. The recommended determination of effect for the proposed project is "no historic properties affected." However, due to the current project location in the immediate vicinity of the Keahupua-o Maunalua fishpond (SIHP 50-80-15-00049) and above the pre-1950s alignment of Kalaniana ole Highway, it is possible that associated archaeological deposits may be encountered during ground-disturbing activities conducted during the current project. Therefore, it is recommended that an archaeological monitoring plan and subsequent archaeological monitoring for identification purposes is completed in compliance with Hawai'i Administrative Rules (HAR §13-279) for the current project.

CHAPTERS

P	Page
EXECUTIVE SUMMARY	I
1. INTRODUCTION	1
PROJECT AREA DESCRIPTION	1
2. BACKGROUND	6
CULTURE-HISTORICAL CONTEXT	6
PREVIOUS ARCHAEOLOGICAL STUDIES	12
3. FIELD INSPECTION AND FINDINGS	16
REFERENCES CITED	20
FIGURES	
P	Page
1. Project area location shown over a portion of the USGS National Map 2017	2
2. Tax Map Key (TMK) Plat Map for (1) 3-9-017 showing the project area (parcel :040)	3
3. Recent aerial composite showing the location of the project area.	4
4. Geological deposits in the vicinity of the APE.	5
5. Soil deposits in the vicinity of the area of the APE.	5
6. Portion of Registered Map 1019 (Jackson Gresley 1884) showing road, coconut groves, and sporadic dwellings surround Kuapā Fishpond	8
7. Portion of Wall's (1902) government survey showing land use in the vicinity of the project area	10
8. 1927 aerial photograph showing the newly constructed highway running through the current project area (source: USGS via UH Mānoa Library MAGIS)	10
9. Historic aerial collage showing the development of Hawai'i Kai around the current project area	11
10. Project area over a portion of McAllister's O'ahu site map (1933:57)	12
11. Prior archaeological studies conducted in the vicinity of the APE.	15
12. Overview of the project area within the Hawai'i Kai Towne Center, view to the west	16
13. Restaurant building within the project area, view to the south.	17
14. Slight elevation gain within parcel, view to the northwest.	17
15. Walkway surrounding the restaurant building, view to the east.	18
16. Landscaped and manicured outdoor area, view to the northwest.	18
17. Landscaped and manicured outdoor area including above ground planter, view to the northwest	19

1. INTRODUCTION

At the request of PBR Hawaii & Associates, Inc. (PBR), on behalf of the Bank of Hawaii (BOH), ASM Affiliates (ASM) conducted an archaeological literature review and field inspection (LRFI) of 6650 Kalaniana'ole Highway, Tax Map Key (TMK): (1) 3-9-017:040, in Maunalua Ahupua'a, Ko'olaupoko District, Island of O'ahu (Figures 1 through 3).

The scope of the proposed project involves the demolition of an existing restaurant building occupying the entirety of the parcel and subsequent construction of a new Bank of Hawai'i branch facility. Ground-disturbing activities are expected across the entire parcel to depths at or below the water table as a result of the proposed demolition and construction.

The proposed project will be subject to Hawai'i Revised Statutes (HRS) Chapter 343 and Chapter 6E-42 review. This study does not fulfill the requirements of an archaeological inventory survey as specified in Hawai'i Administrative Rule (HAR) Chapter 13-276. Rather, the level of effort undertaken in this study is sufficient to provide the agency and its planners with information regarding the general nature, density, and distribution of archaeological and historic resources that may be expected within the project area.

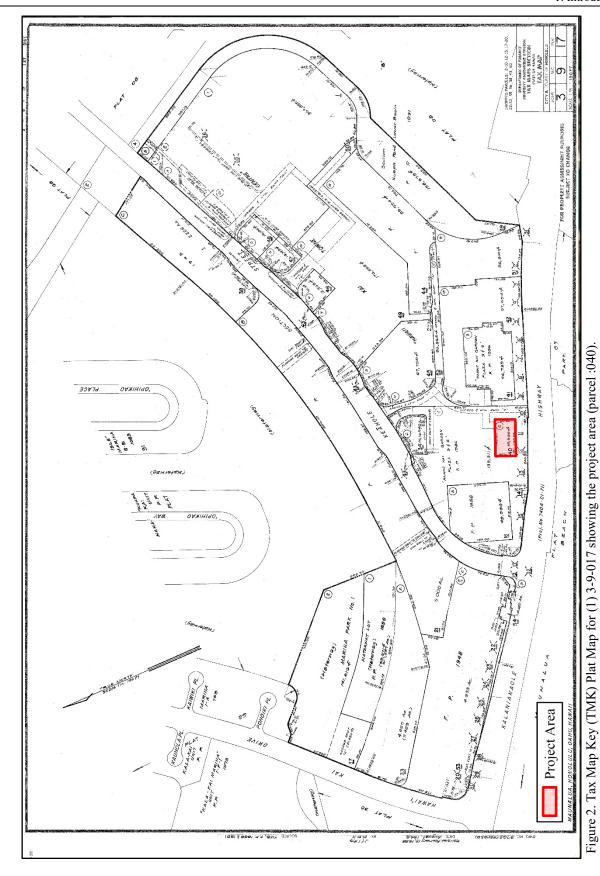
PROJECT AREA DESCRIPTION

The project area comprises 6650 Kalaniana'ole Highway (TMK: [1] 3-9-017:040) in Maunalua Ahupua'a, Ko'olaupoko District, Island of O'ahu. The 0.2507-acre subject parcel is located within the Hawai'i Kai Towne Center shopping complex and is currently developed with a single-story restaurant (a former Outback Steakhouse; currently Scratch Kitchen) constructed in 1991. The Hawai'i Kai Towne Center was established in the 1980s and comprises the majority of a small peninsula located between Maunalua Bay and the Hawai'i Kai Marina, developed atop portions of a former fishpond, Loko Keahupua-o Maunalua (see Figures 1 and 2).

The entirety of the project area is currently developed with a single-story restaurant of approximately 7,000 square feet surrounded by sidewalks, planters, and a large parking lot. The parcel rests at approximately five meters above sea level and receives an average of 773.3 millimeters of rainfall annually, the majority of which falls between October and March (Giambelluca et al. 2013). Geologically, the project area sits atop beach deposits (Figure 4; Qbd) overlayed by fill land, mixed soils (Figure 5; FL) (Foote et al. 1972; Sherrod et al. 2007). The project area and surrounding development are located in the immediate vicinity of the former seawall of Loko Kuapā, much of which has been filled and reclaimed starting in the 1940s.



Figure 1. Project area location shown over a portion of the USGS National Map 2017.



LRFI for 6650 Kalaniana'ole Highway, Maunalua, Honolulu, O'ahu



Figure 3. Recent aerial composite showing the location of the project area.



Figure 4. Geological deposits in the vicinity of the APE.



Figure 5. Soil deposits in the vicinity of the area of the APE.

2. BACKGROUND

To generate a set of expectations regarding the nature of archaeological resources that might be encountered within the current study area, and to establish an environment within which to assess the significance of any such resources, a general culture-historical context for Koʻolaupoko Districts that includes specific information regarding the known history of Maunalua Ahupuaʻa and the project area vicinity is presented. This is followed by a discussion of relevant prior archaeological studies conducted near the project area.

CULTURE-HISTORICAL CONTEXT

As previously mentioned, the project area is located within the moku (traditional district) of Kona, now referred to as Honolulu. Traditionally the lands of Maunalua were considered an 'ili (land division smaller than an ahupua'a, similar to a modern neighborhood) of Waimānalo Ahupua'a within the Ko'olaupoko District, though in the mid-19th century were redesignated as an 'ili of Waikīkī Ahupua'a in Kona. Subsequently, the area was granted ahupua'a status of its own within Kona. Handy et al. described the lands and coast of ancient Kona thusly:

This area is subject to the cyclonic southerly (kona) storms in winter months, but through most of the year is cooled by trade winds sweeping through low gaps in the Koʻolau range at the top of Moanalua, Kalihi, Nuʻuanu and Manoa Valleys. There were abundant rain, ever flowing streams, springs, pools, verdant interior valleys, broad slopes and well-watered low-lands, fishpond areas, harbors, beaches, and lagoons. Altogether Kona was, for Oahu, the area richest in natural resources and most pleasant for abundant and comfortable living. (1972:473–474)

According to Pukui et al. (1974:149), "Mauna" and "lua" can be translated literally into "two mountains", likely in reference to the prominent volcanic remnants of Koko Head and Koko Crater. Additionally, Makapu'u Point, the easternmost point on O'ahu, lies at the ahupua'a's northern border with Waimānalo. These natural features, along with a fishpond called Keahupua-o-Maunalua (later known as Kuapā), were reverenced through many mo'olelo, traditional, and historical accounts of the area.

Domain over the relatively arid Maunalua lands fell to Pele, the goddess of fire, lava, and volcanoes, who naturally found herself in constant conflict with the god of forests and cultivation, Kamapua'a, who laid claim to the verdant windward lands of the Ko'olau range (Kelly 1984:23). Kamapua'a once attacked Pele near Kalapana, though to prevent her from being caught and assaulted, her sister, Kapo, lured him away with her detachable flying vagina (kohelele – another traditional name for Koko Crater. He followed the lure all the way to Koko Head, where it left an imprint in the ground in the form of Koko Crater (Sterling and Summers 1962:43).

Legend suggests that Maunalua may have been home to the first settlement established by the second wave of migration to Hawai'i, led by ali'i (chief) Moikeha and his sisters after their round-trip journey to Tahiti. The sister's names were Makapu'u (bestowed upon Makapu'u point) and Makaaoa (bestowed upon the lower lands surrounding Kaloko) (Takemoto et al. 1975:6; Sterling and Summers 1962:5).

Takemoto summarizes another legend recorded by Sterling and Summers (1962:4-71):

Hi'iaka, the faithful sister of Pele, same through Maunalua while on a special mission to find and bring back Lohiau, Pele's lover. On her journey, Pele created spirits, for example, Ihiikilauakea and Kauniniula on Koko Head who were consoled and complimented by Hi'iaka. At Makapu'u, Hi'iaka and her disciples were greeted by a supernatural being who had sent a storm forcing the group the land there. While resting at Makapu'u, Hi'iaka turned a pretty woman to stone for wasting her food, and later had the young woman's brother turned to stone for not rescuing his sister in time. The couple became the balancing stones which have since disappeared. (1975:6)

Maunalua was equally known for Loko (fishpond) Keahupua-o-Maunalua, also known later as Kuapā. According to Kikuchi (1973:9, 37) loko kuapā was first a general term for one of the six main types of Hawaiian fishpond, characterized by a seawall (kuapā) as its artificial enclosing feature and in most cases contained one or more sluice gates (makahā) constructed upon shallow shoal and wave-protected locations provided by fringing reefs. Keahupua-o-Maunalua well embodied a loko kuapā, featuring an approximately 5,000 foot long basalt and coral seawall built atop a natural ten to fifteen foot wide sand embankment. Notably, the western end of the wall did not connect to the nearest land but instead paralleled the shoreline inland approximately 1,400 feet from the beach. This likely provided marine access to the freshwater pond just within the wall at the inland end for vessels (Sterling and Summers 1978:270). Per Handy and Handy, "Ke-ahu-pua (The-shrine-[of the]-baby-mullet) fishpond of Maunalua is one of those said to have been built by the Menehune, or "Little Fold"; this one at the behest of a local chiefess, Mahoe, to whom the land belonged. . . It is regarded as the largest of enclosed sea ponds, being 523 acres in extent" (1972:377).

Sterling and Summers summarize mo'olelo recorded in McAllister (1933) regarding practices and legends associated with the fishpond:

At times there was a dearth of fish, wish Mahoe coped with in this manner. On the nights of Kane, she took a baby pig as it come from the womb of the mother, and had her small grandson carry the squealing animal about the pond. There was a strict tapu until the next night, which was the night of Lono. No fishing was permitted, and no noise allowed the disturbed the praying kahuna. On the night of Lono, seaweed and ilima were gathered and placed on the shrine. After the night of Lono, when this ceremony was apparently completed, there was plenty of fish. (1978:270)

In June of 1786, the English ships King George and Queen Charlottle, under the commands of Captions Portlock and Dixon respectively, became the first westerners to make landing at Maunalua. In a search for freshwater, the crews disembarked at Maunalua beach, to the west of the fishpond, and began making their way east:

We landed on a fine sandy beach admidst [sic] a vast number of the inhabitants, who all behaved with great order, and never attempted to approach nearer than we desired. They informed us that there was no water near our landing-place, but that we should find plenty farther down along shore, and one of the natives accompanied us as a guide: however, our progress was soon impeded by a small salt water river that has a communication with King George's Bay [the name the crew gave to Maunalua Bay]. (Takemoto et al. 1975:13)

This saltwater river was likely the inland sea passage created by the west side of the kuapā as it parallels the shore. As such, the crew was forced to return to their boats, and after some difficulty in navigating the shallow shoals in the area, determined that it was impossible to water at this location without "an infinite amount of trouble" (ibid.).

Following the conquest of Oʻahu, King Kamehameha I surveyed his newly conquered lands through a circuit of the island. In an attempt to set an example of the importance of hard work and industry, Kamehameha stopped at and repaired the walls of Keahupua-o-Maunalua and would then continue on to also repair the ponds at Kawainui, Kaʻelepulu, Ukoʻa, and others elsewhere across Oʻahu. He granted the lands of Maunalua to his father-in-law, Keʻeaumoku, though they quickly passed to his daughter and Kamehamehaʻs favorite wife, Kaʻahumanu. Upon her death, the lands were passed to her daughter, Kinau, then again to her daughter Victoria Kamāmalu (Takemoto et al. 1975:16).

During Gilbert Mathison's 1821 circumnavigation of Oʻahu, he recorded a saltwater lake (likely referring to the fishpond) and a village of roughly one hundred huts on the shore. A few years later, in 1826, Levi Chamberlain and his missionaries visited Maunalua during a mission to preach and inspect the sixty-nine schools of Oʻahu, returning again in 1828. He complied the following notes on his time around the fishpond (Takemoto et al. 1975:17–18):

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

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

Chamberlain also recorded the student population over the course of six years, which highlights a portion of the period of Hawaiian depopulation - especially in more rural areas - that occurred throughout the first half of the 19th century. In 1826, he recorded no school building or teacher, though by 1828 sixty-five student had been enrolled under kumu Nahaleelua. In 1830, enrollment was down slightly to sixty students under kumu Kahu, though by 1832 had dropped to only nineteen students (Takemoto et al. 1975:17–18).

The profound religious, socioeconomic, and demographic changes that took place in the early 1800s resulted in the establishment of a Euro-American style of land tenure, and the Māhele 'Āina of 1848 or Great *Māhele* was the vehicle used to divide the land between the crown, government, konohiki, and native tenants. Prior to this land reformation, all the land and natural resources of Hawai'i were held in trust by the ali'i who, in concert with konohiki land agents, meted out use rights to the native tenants at will. During the Māhele all lands were placed in one of three categories: Crown Lands (for the occupant of the throne), Government Lands, or Konohiki Lands; all three types of land were subject to the rights of the native tenants therein through the Kuleana Act of 1850. The lands of Maunalua

granted to Victoria Kamāmalu within Commission Award 7713 on April 7, 1854. No Kuleana parcels or other awards were granted within the ili.

The following century in Maunalua was characterized by a decrease in traditional Hawaiian population and practices as western commercial ranching and fishing operations came to dominate the area. Kamāmalu was the first to lease out all of the Maunalua lands to William Webster, and subsequently Manuel Paiko - who already leased Kuli'ou'ou immediately to the west – for use as ranch lands. Similarly, the offshore fisheries were leased and sold to interested parties. Ownership of the ahupua'a eventually passed to Kekuanaoa, Kamāmalu's father, then to Lot Kamehameha V, Ruth Ke'elikolani, then through Bernice Pauahi Bishop and into the Bishop Estate Trust (Takemoto et al. 1975:21–23).

Per tax records, in 1855, Maunalua was home to ninety-nine people across thirty-eight households. By 1860, there were only sixteen households and it is noted the head of one was quite sick. Twenty years later, in 1880, only four households remained. A map produced by George Gresley Jackson in 1884 of the east coast of Oʻahu shows a small village of approximately fifteen dwellings and a grove of coconut trees around the fishpond, but shows no signs of further development or land utilization at the time (Figure 6). This trend of decreasing population in the area continued into the 1890s, when an increase in ranching and fishing activities began to once again draw people to Maunalua. In 1890, there were once again sixteen households, comprised of one Portuguese, three Chinese, and the rest Hawaiian families. Takemoto provides the following description of Maunalua in 1900:

Maunalua Ranch and Yit Lee Company, who owned a big fishing complex, employed most of the inhabitants. Maunalua Ranch had over 1,500 head of cattle, ten oxen, sixty-four horses, thirteen mules and six pigs roaming throughout Maunalua. Five Chinese families were working for the Damons, probably as ranch hands. Five other Chinese families worked for Yit Lee. There existed only one independent Chinese family not under Damon or Yit Lee. The eight Hawaiian families on the land, including one blind man, were truck farmers of some sort since all but two owned carts used for bringing goods to Honolulu. . . Thus, by the turn of the century most families in the <u>ili</u> were ranch hands, fishermen, or truck farmers living a relatively quiet life in an area which would be considered the country. (1975:25)

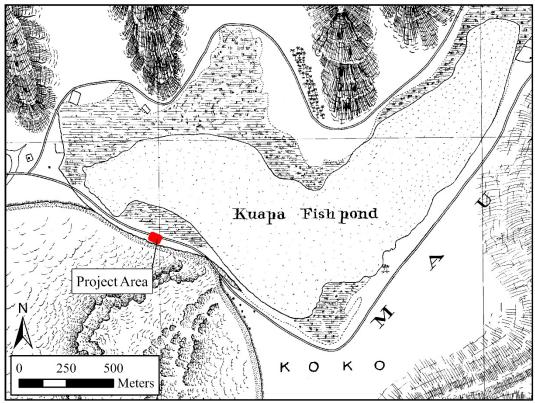


Figure 6. Portion of Registered Map 1019 (Jackson Gresley 1884) showing road, coconut groves, and sporadic dwellings surround Kuapā Fishpond.

A portion of Wall's (1902) Hawaiian Government Survey map of Oʻahu shows the extent of grazing lands containing and surrounding the project area (Figure 7, grazing lands outlined in yellow). The aforementioned Maunalua Ranch continued operations within the ahupuaʻa until 1926, then was again leased for ranching to Alan S. Davis in 1932. Both a honey and a charcoal company were also stared in the area around this time. In the mid-20th century agricultural use of the area also grew, and by 1959 the 178 families farming the area were responsible for producing sixty percent of the pigs, flower, and lettuce grown on Oʻahu (Takemoto et al. 1975:28).

In the 1920s, development of the Kalaniana'ole Highway (State Route 72) reached Maunalua, formalizing the traditional trails and dirt roads used to transverse the ahupua'a. Per aerial imagery taken in 1927, the coastal highway alignment between the fishpond and Maunalua Bay was constructed along the same sand embankment as the fishpond wall, passing directly beneath the current project area (Figure 8). By the 1950s, the road alignment was moved makai to make space for residential development along the embankment, which had begun to be artificially expanded through dredging and land reclamation activities.

In 1959 Kaiser Permanente established the Hawai'i Kai Development Corporation and purchased rights to develop the land from the Bishop Estate. Through dredging activities, spoil materials were used as fill along the marshy perimeters of the fishpond in order to create the planned commercial and residential development of Hawai'i Kai. Additionally, former ranch lands surrounding the pond were also graded and developed. A series of historic aerial photographs taken between 1952 and 1993 shows the steady progress of the development (Figure 9). Between 1963 and 1978, the current project area and surrounding embankment were graded, the highway realigned, and fill was used to expand the peninsula. In the 1980s, the Hawaii Kai Towne Center was developed, and by 1991 the current project area was developed a restaurant building still in current use.

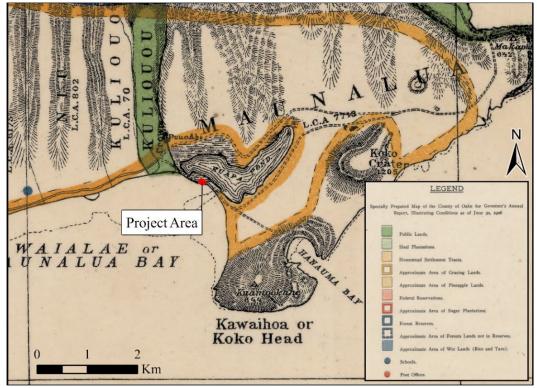


Figure 7. Portion of Wall's (1902) government survey showing land use in the vicinity of the project area.



Figure 8. 1927 aerial photograph showing the newly constructed highway running through the current project area (source: USGS via UH Mānoa Library MAGIS).

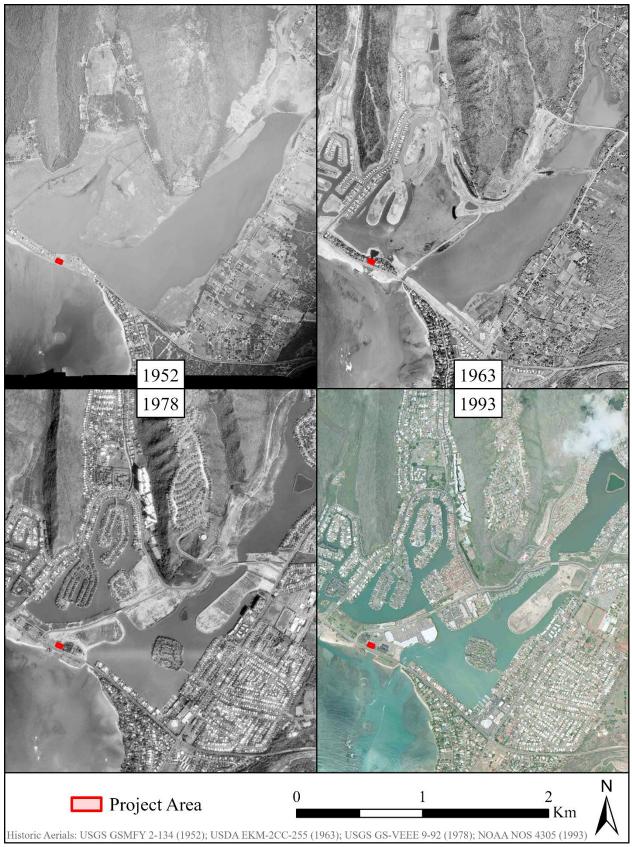


Figure 9. Historic aerial collage showing the development of Hawai'i Kai around the current project area.

PREVIOUS ARCHAEOLOGICAL STUDIES

No previous archaeological studies have taken place within the current project area. However, at least fifteen archaeological studies have been conducted in the general vicinity of Hawai'i Kai. These studies, which include archaeological inventory surveys, archaeological assessments, literature reviews, archaeological monitoring, burial/coroners reports, and field inspections, are summarized below and presented in relation to the current project in Figures 10 and 11. All State Inventory of Historic Places site numbers (SIHPs) in the following section are prefixed by 50-80-15.

The earliest published descriptions of archaeological sites near the current project area were presented by McAllister (1933) in his landmark study *Archaeology of Oahu*. McAllister's work formed the basis of a 1962 publication called *Sites of Oahu* (Sterling and Summers 1962). This compilation of data from published and unpublished sources as well as informant testimony was later augmented and reprinted under the same title by Sterling and Summers (1978). The initial survey conducted by McAllister generally focused on sites that were readily visible on the surface, such as heiau platforms, stone mounds, caves, ditches, ponds, and unusual looking stones. The smaller and less dramatic sites and buried resources were for the most park overlooked in the early studies on the coastal plain. Instead of being based on excavated features and analyses of excavated materials, McAllister described the sites and features in terms of ethnographic accounts that Thrum (1906) had collected from people familiar with local history. The oral traditions recall interesting information about chiefs, priests, fishing and cultivation practices, deities, myths, rituals, and site functions. McAllister (1933) mentions three sites (Sites 47, 48, and 49, see Figure 10) in the immediate vicinity of the current project area, with many more just inland as well as further along the coasts.

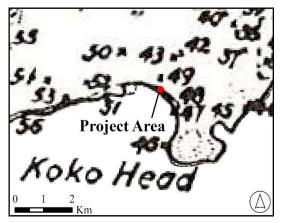


Figure 10. Project area over a portion of McAllister's O'ahu site map (1933:57).

Site 47 (SIHP -00047), Fishing Shrine (*ko'a*) known as Huanui: Located approximately 400 meters north of the project area, Huanui is described as an exact duplicate of Site 48, though was slightly larger. The shrine was used to attract mullet (McAllister 1933:68).

Site 48 (SIHP -00047), Fishing Shrine (ko'a) known as Hina: Located approximately 800 meters southeast of the current project area, "The shrine is roughly square in shape with the corners rounded, and measures 16.5 feet across. It is formed by coral walls 1 foot high. . . inside the walls is a paving of small bits of coral and sand. . . facing the sea is an entrance 2.5 feet wide [and] just within the entrance are six sharp lava stones forming an oval about 1 foot wide and 1.5 feet long. It was here the offering of fish was placed. . ." (ibid.).

Site 49 (SIHP -00049), Keahupua-o-Maunalua fishpond: This pond covered over 520 acres in 1851, and by 1921 contained 300 acres of open water and 125 acres of marshlands, the remnants of which comprise the Hawai'i Kai Marina and waterways. The Hawaii Kai Towne Center is constructed upon fill materials placed upon portions of the original fishpond wall and interior. The old wall of the pond was built upon a 10- to fifteen-foot-wide natural sand embankment with lava and coral stones stretching approximately 5,000 feet, and notably paralleled the Honolulu side of the shoreline for some distance — which at the time of recordation was believed to provide access to the freshwater spring for boats and ships outside the pond wall.

An informant, Mr. Moe, believed the construction of the pond cut a former fishing village in the Hahaaione Valley off from their sea resources and habitation subsequently moved toward the Honolulu side of the pond. A notable feature of the pond is a large upright stone, measuring 4.5 feet high and 2 to 3 feet wide, which is recounted in the story of Waikaaia. A man who once lived in Maunalua, Waikaaia was unhappy with the traditional custom of allowing his wife to stay with other men, and when she did, he gradually became insane. One night, while she was away, he went to Hanauma Bay and tore up the great rock in a rage, then carried it back to the pond wall and placed it, naming it after himself. Additionally, the pond was reportedly connected to Kaelepulu pond (Site 377) in Kailua via underground tunnels, through which vast schools of mullet would mysteriously travel. At the time of recordation, Japanese fishermen leasing the pond confirmed the phenomenon still occurred (McAllister 1933:69-70).

With the advent of cultural resource management (CRM) in the 1970s in response to stricter historic preservation laws and increased modern development, archaeologists started to record less noticeable surface sites and to test for subsurface deposits across Oʻahu. Several CRM projects have been conducted in the vicinity of the current project area. The findings of these previous studies, which are important to generating predictive models of the number and type of archaeological features that may be encountered within the current project, are presented below.

During an Archaeological Reconnaissance Survey conducted mauka of the fishpond, just over one kilometer northeast of the current project area (Price-Beggerly and McNeil 1985), a total of eleven archaeological sites were recorded. One site (SIHP -02906) was an abandoned and collapsed historic habitation. The remaining sites were traditional Hawaiian habitation-related sites including a terraced platform (SIHP -02900), terraces previously recorded by McAllister (1933) (SIHP -00042), caves and natural cavities (SIHP -02901, -02902, -02905, -02907, -02908, -02909, and -02910), a wall and platform (SIHP -02903), and a standalone platform (SIHP -02904).

Archaeological monitoring was conducted approximately two kilometers east of the current project during trenching associated with a sewer expansion in the Hawaii Kai Job Corps Center (Kennedy 1987). As a result of monitoring, no archaeological features or deposits were encountered as landfill materials had disturbed, displaced, or deeply buried any extant cultural deposits.

Partial human skeletal remains were recovered by two young hikers along Mariner's Ridge in 1988 and taken to the local fire station, and as such, cannot be attributed to a specific location on the ridge (Annino 1988). Analysis revealed that the remains likely belonged to multiple individuals based on size and condition of teeth recovered, though no temporal affiliation was attributed to the remains.

An Archaeological Inventory Survey was conducted in support of a proposed electrical transmission line along Kamehame Ridge approximately 3.5 kilometers northeast of the current project area (Borthwick and Hammatt 1991). As a result of the survey, no archaeological sites were encountered or recorded.

Between 700 and 1,000 meters northwest of the current project area, a series of human skeletal remains were inadvertently discovered and subsequently documented across at least four reports during construction efforts associated with the Kalaniana ole Highway Widening Project (Dagher 1993; Eblé and Cleghorn 1994; Putzi et al. 1996; Putzi and Carlson 1997). While only twelve burials are detailed in the reports (Burials No. 1, 2, 6-10, and 24-29), at least twenty-nine burials from both the pre- and post-contact eras total were identified throughout the course of construction efforts. All of the burials were recovered from a Jaucas sand deposit located immediately mauka of Paiko Lagoon and were granted SIHP -04841, the Bay Street Cemetery.

Approximately 150 meters southwest of the cemetery (SIHP -04841), and one kilometer west of the current project area, additional skeletal remains were encountered during redevelopment of the Kuliouou Gedatsu Church (Collins 1999). Encountered at thirty to fifty centimeters below surface within a Jaucas sand deposit, the remains were inferred to be from the historic era and were granted SIHP -05774.

In 1998, Kumu Pono Associates conducted historical documentary research for City & County owned lands at Koko Head Regional Park, about two kilometers west of the current project area (Maly and Wong-Smith 1998). While no new archaeological study was completed, previous work by McAllister (1933) within the study area is summarized, and settlement patterns and moʻolelo explained. No surface archaeology was affected by the proposed park project, though due to the cultural importance of much of the Maunalua coast it was recommended that further oral historical data was collected and shared through a "friends of the park" association.

An Archaeological Assessment was conducted along lower Kaluanui Ridge in support of a rockfall mitigation project (O'Hare et al. 2003) approximately 1.5 kilometers northeast of the current project area. While no new archaeological sites were recorded, Hāwea Heiau (originally recorded by McAllister [1933] [SIHP-00042), as well as sites recorded by Price-Beggerly & McNeill 1985 (SIHP -02900 through -02911) were relocated along the edge of the project area.

Another Archaeological Assessment and Section 106 Review was undertaken across various locations within the Hawai'i Kai Marina and Channel for maintenance dredging, reaching within 100 meters of the current project area (Jorden and Allen 2010). While no new archaeological sites were identified, dredging activities would be conducted within Loko Keahupua-o-Maunalua (SIHP -00049), and therefore archaeological monitoring including the inspection of all dredged spoils was recommended.

An additional Archaeological Inventory Survey was conducted approximated one kilometer northeast of the current project area (Yucha and McDermott 2011), during which no new sites were identified, though SIHP -00043 (first recorded by McAllister [1933]) and SIHP -02900 (first recorded by Price-Beggerly & McNeill 1985) were relocated within the project area. Subsequently, Archaeological Monitoring was conducted within a portion of the

same project area in 2016 (Reveal et al. 2016). While ground disturbing activities were conducted exclusively within thick deposits of fill materials, one new archaeological site (SIHP -07928) consisting of a historic era stacked basalt cesspool with piping and a concrete cap was identified within the northwest corner of the project area.

The most proximal prior archaeological study to the current project area consists of Archaeological Monitoring conducted in support of trenching and drilling activities associated with wastewater improvements as close as 40 meters to the southwest of current project area (Hammatt 2014). Stratigraphic deposits generally consisted of imported landscaping topsoil overlaying a thick crushed coral fill associated with land reclamation efforts in Kuapā (Keahupua-o-Maunalua) Fishpond conducted in the 1940s, all of which overlies a natural marine sand. It was concluded that prior to reclamation efforts, the entirety of the project area was completely submerged.

14

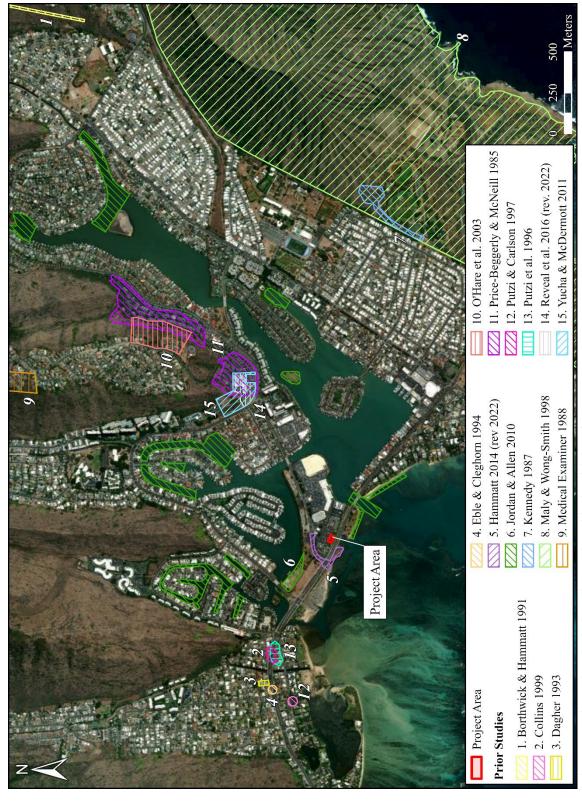


Figure 11. Prior archaeological studies conducted in the vicinity of the APE.

3. FIELD INSPECTION AND FINDINGS

On January 25, 2024, Kevin Pico, B.A., under the supervision of Nick Belluzzo, M.A., conducted a surface reconnaissance of the project area in order to assess the absence or presence of surface archaeology and any potential effect of the proposed ground-disturbing activities expected across the entirety of the parcel. Results of the surface reconnaissance are discussed below.

The project area, consisting of TMK: (1) 3-9-017:040, is developed with a single-story restaurant building within the asphalt parking lot of the Hawai'i Kai Towne Center, accessible from the south via Kalaniana'ole Highway or the west via Keahole Street (Figure 12). The restaurant building, constructed in 1991, covers nearly the entire parcel and features a combination angled roof, which is mirrored in a small structure above the building entryway and stairs (Figure 13). The parcel is situated approximately one meter above the surrounding roadway elevation atop a low terrace formed by a retaining wall along the makai edge of the parking lot and a gentle landscaped slope between the parcel and Kalaniana'ole Highway (Figure 14). The edges of the subject parcel are developed with a combination of gravel, brick, and paver walkways surrounding the restaurant building (Figure 15), which are in tern surrounded by a landscaped and highly manicured outdoor area containing decorative rock and knoll features and lush vegetation both within and outside of planters including Bermuda grass (*Cynodon dactylon*), pindo palms (*Butia capitata*), Christmas palms (*Adonidia merrillii*), and ti (*Cordyline fruticosa*), among others (Figures 16 and 17). Aside from imported topsoil used in the various planters around the perimeter of the project area, no surface or subsurface sediments were exposed or available examination during the field inspection.

Given the negative findings with respect to above-ground archaeological resources it is concluded that the proposed development will not affect any historic properties. The recommended determination of effect for the proposed project is "no historic properties affected." However, due to the current project location in the immediate vicinity of the Keahupua-o Maunalua fishpond (SIHP 50-80-15-00049) and above the pre-1950s alignment of Kalaniana ole Highway, it is possible that associated archaeological deposits may be encountered during ground-disturbing activities conducted during the current project. Therefore, it is recommended that an archaeological monitoring plan and subsequent archaeological monitoring for identification purposes is completed in compliance with HAR §13-279 for the current project.



Figure 12. Overview of the project area within the Hawai'i Kai Towne Center, view to the west.



Figure 13. Restaurant building within the project area, view to the south.



Figure 14. Slight elevation gain within parcel, view to the northwest.



Figure 15. Walkway surrounding the restaurant building, view to the east.



Figure 16. Landscaped and manicured outdoor area, view to the northwest.

18



Figure 17. Landscaped and manicured outdoor area including above ground planter, view to the northwest.

REFERENCES CITED

Annino, James

1988 *Medical Examiner's Report: Mariner's Ridge Skeletal Remains.* City and County of Honolulu - Department of the Medical Examiner. City and County of Honolulu, Honolulu, HI.

Borthwick, Douglas, and Hallett Hammatt

Archaeological Survey for the Proposed Na Pali Haweo Electrical Transmission Line Relocation Alignment, Kamehameha Ridge. Cultural Surveys Hawai'i. Prepared for Pacific Planning and Engineering, Kailua, HI.

Collins, Sara

Inadvertent Discovery of Human Remains at 6077, 6085, 6091& 6095 Summer St. SHPD. Prepared for Ross Cordy, Honolulu, HI.

Dagher, Cathleen

1993 Inadvertent Discovery of Human Skeletal Remains at 61-669 Kamehameha Highway, Hale'iwa, Waialua, O'ahu. State Historic Preservation Division, Department of Land and Natural Resources.

Eblé, Francis, and Paul Cleghorn

First Incidence of Human Skeletal Remains (Burial No. 2) Uncovered as a Result of Construction Activities for Phase II Widening of Kalaniana'ole Highway. BioSystems Analysis, Inc. Prepared for Engineers Surveyors Hawai'i, Inc., Kailua, Hawai'i.

Foote, Donald, Elmer Hill, Sakuichi Nakamura, and Floyd Stephens

1972 Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. United States Department of Agriculture, in conjunction with the University of Hawai'i Agricultural Extension. U.S. Government Printing Office, Washington, D.C.

Giambelluca, Thomas W., Qi Chen, Abby G. Frazier, Jonathan P. Price, Yi-Leng Chen, Pao-Shin Chu, Jon K. Eischeid, and Donna M. Delparte

Online Rainfall Atlas of Hawai'i. Bulletin of the American Meteorological Society 94(3). March:313-316.

Hammatt, Hallett

Final Archaeological Monitoring Report for the Maunalua Bay Beach Park Wastewater Systems Project. Cultural Surveys Hawai'i, Inc. Prepared for Shimabukuro, Endo & Yoshizaki, Inc., Kailua, HI.

Handy, E. S. Craighill, and Elizabeth Green Handy

Native Planters in Old Hawaii: Their Life, Lore and Environment. Bernice P. Bishop Museum bulletin, 233. Bishop Museum Press, Honolulu, Hawai'i.

Jorden, Nicole, and Jane Allen

2010 Archaeological Assessment and Section 106 Review, Hawai'i Kai Marina and Channel Maintenance Dredging. International Archaeological Research Institute, Inc. Prepared for Anchor QEA, LP, Honolulu, HI.

Kelly, Marion 1984

Cultural Resources Overview for the Queen's Beach Park Feasibility Study. Bernice P. Bishop Museum Department of Anthropology. Prepared for City and County of Honolulu - Department of Parks and Recreation, Honolulu, HI.

Kennedy, Joseph

Archaeological Monitoring Report for Upgrading the Sewerage System at the Hawaii Kai Job Corps Center. Archaeological Consultants of Hawaii. Prepared for Garrett Sullivan of Kaikor Corp. and R.M. Towill Corporation, Haleiwa, HI.

Maly, Kepā, and Helen Wong-Smith

1998 Historical Documentary Research: Kawaihoa-Kuamo'okane, Hanauma, and Kohelepelepe - The Koko Head Regional Park and Nature Preserve. Kumu Pono Associates. Prepared for Group 70 International, Hilo, HI.

O'Hare, Constance, David Shideler, and Hallett Hammatt

2003 Archaeological Assessment in Support of the Proposed Lalea Rockfall Mitigation, Phase II Project Hawaii Kai. Cultural Surveys Hawai'i, Inc. Prepared for Gary T. Tamamoto - Earthtech, Kailua, HI.

Price-Beggerly, Patricia, and Judith R. McNeil

1985 Archaeological Reconnaissance of the Proposed Marina Zoning Project Kaluanui 1, 2, and 3 (Hawaii Kai). Archaeological Consultants. Prepared for Environmental Communications Inc., Honolulu, Hawai'i.

Pukui, Mary Kawena, Samuel H. Elbert, and Esther T. Mo'okini

1974 Place Names of Hawaii: Revised and Expanded. University of Hawai'i Press, Honolulu, Hawai'i.

Putzi, Jeffrey L., and Ingrid K. Carlson

Report of Burials 24-29, Human Skeletal Remains Uncovered as a Result of Construction Activities for Phase II Widening of Kalaniana'ole Highway, Honolulu, Hawai'i, State Site No. 50-80-15-4841. Biosystems Analysis, Inc. and Garcia and Associates. Engineers Surveyors Hawai'i, Inc., Honolulu.

Putzi, Jeffrey L., M. Paul McIntosh, and Ingrid K. Carlson

Report of Burials 6-10, Human Skeletal Remains Uncovered as a Result of Construction Activities for Phase II Widening of Kalaniana'ole Highway, Honolulu, Hawai'i, TMk No. 3-8-03:40, Volume I of State Site No. 50-80-15-4841. Vol. I. Engineers Surveyors Hawai'i, Inc., Honolulu.

Reveal, Maria, Brittany Beauchan, and Hallett Hammatt

2016 Final Archaeological Monitoring Report for the 7000 Hawaii Kai Development Project. Cultural Surveys Hawai'i, Inc. Prepared for Avalon Development Company, LLC, Kailua, HI.

Sherrod, David R., John M. Sinton, Sarah E. Watkins, and Kelly M. Brunt

Geologic Map of the State of Hawai'i. Open-File Report 2007-1089. U.S. Department of the Interior, U.S. Geological Survey. http://pubs.usgs.gov/of/2007/1089.

Sterling, Elspeth P., and Catherine C. Summers

1962 Sites of Oahu. Bishop Museum Press, Honolulu, Hawai'i.

1978 Sites of Oahu. Bishop Museum Press, Honolulu, Hawai'i.

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

1975 Historical/Cultural Essay Report on the Kuapa Pond Area. Partnership of Joerger-Takemoto Historical Research. United States Army Corps of Engineers, Honolulu.

Yucha, Trevor, and Matt McDermott

2011 Final Archaeological Inventory Survey Report for the Hale Ka Lae Development Project. Cultural Surveys Hawai'i Inc. Prepared for Hale Ka Lae Development, LLC, Kailua, HI.



APPENDIX G:Cultural Impact Assessment



Cultural Impact Assessment for the 6650 Kalaniana'ole Highway Redevelopment Project

(1) 3-9-017:040

Maunalua Ahupua'a Kona (Honolulu) District Island of O'ahu

FINAL VERSION



Prepared By:

Keely Toledo, B.A. Teresa Gotay, M.A., Nick Belluzzo, M.A. and Evan Ryder, B.A.

Prepared For:

PBR Hawaii & Associates, Inc. 1001 Bishop Street, Suite 650 Honolulu, HI 96813

November 2024



Hilo Office: (808) 969-6066 Fax: (808) 443-0065 507-A E. Lanikaula Street, Hilo, HI 96720

Honolulu Office: (808) 439-8089 Fax: (808) 439-8087 820 Mililani Street, Suite 700, Honolulu, HI 96813

ASM PROJECT NUMBER 45270.01

Cultural Impact Assessment for the 6650 Kalaniana'ole Highway Redevelopment Project

(1) 3-9-017:040

Maunalua Ahupua'a Kona (Honolulu) District Island of O'ahu



CHAPTERS

	Page
1. INTRODUCTION	1
PROJECT AREA DESCRIPTION	
PROPOSED DEVELOPMENT ACTIVITY	
2. CULTURE-HISTORICAL CONTEXT	6
GENERALIZED MODEL OF HAWAIIAN ORIGINS AND SETTLEMENT	6
TRADITIONAL HAWAIIAN LAND STEWARDSHIP AND RESOURCE	
MANAGEMENT PRACTICES	7
LEGENDARY ACCOUNTS	
The Battles of Kūali'i at Kawaluna	
Kāne and Kanaloa	10
Pele and Hiʻiaka	11
Waiakaaia	11
The Disappearing Mullet of Keahupua-o-Maunalua	11
TRADITIONAL LAND USE IN MAUNALUA	11
Agricultural practices	11
Loko Kuapā	
THE PROJECT AREA VICINITY AND MAUNALUA DURING THE LATE 18 ⁷	
AND EARLY 19 TH CENTURY	
Historical Accounts by Early Explorers and Missionaries	13
THE MĀHELE 'ĀINA OF 1848	
THE PROJECT AREA VICINITY AFTER THE MĀHELE	
LATE NINETEENTH CENTURY CHANGES IN LAND USE	
TWENTIETH CENTURY LAND USE, DEVELOPMENT, AND ACTIVISM	18
THE DEVELOPMENT OF HAWAII KAI AND THE IMMEDIATE PROJECT	
AREA VICINITY	
PREVIOUS ARCHAEOLOGICAL AND CULTURAL STUDIES	
3. CONSULTATION	29
INTERVIEW METHODOLOGY AND SUMMARIES	30
Lo Kaimuloa	31
Ann Marie Nālani Kirk	31
Malia Lum-Kawaihoa Marquez	32
Chris Cramer	
Elizabeth Reilly	35
Angela Correa-Pei	36
4. IDENTIFICATION AND MITIGATION OF POTENTIAL CULTURAL	
IMPACTS	38
SUMMARY OF CULTURE-HISTORICAL BACKGROUND INFORMATION	39
FINDINGS AND RECOMMENDED MITIGATION STRATEGIES	
REFERENCES CITED	
APPENDIX A. PUBLIC NOTICE	
135 5 34 147 543 13 1 1 UPPLIU 1 UPPLIU 1 UPPLIU 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

FIGURES

	Page
1. Project area location shown over a portion of the USGS National Map 2017.	2
2. Tax Map Key (TMK) Plat Map for (1) 3-9-017 showing the project area (parcel :040)	3
3. Recent aerial composite showing the location of the project area	4
4. The project area within the Hawai'i Kai Towne Center, view to the west	5
5. Early sounding map of Maunalua Bay from (Dixon 1789)	14
6. View from an anchorage at Maunalua Bay (Dixon 1789)	
7. Sketch of Maunalua by British explorer William Dampier, ca. 1826 (source:www.maunalua.net)8. Portion of Registered Map 1019 (Jackson Gresley 1884) showing roads, a marshland and	15
sporadic dwellings in the immediate project area vicinity.	
9. Comparison of aerial photographs from 1927 (left) and 1940 (right) of the project area vicinity (source: USGS via UH Mānoa Library MAGIS)	19
10. Anti-development protestors of Kalama Valley ca. 1970-1971 (source:	
www.kaainamomona.org)	21
11. Newspaper Announcement, "Work to Start at End of Month on Hawaii Kai Shopping	
Center" (source: Honolulu Star Bulletin)	
12. 1983 newspaper Announcement, (source: Honolulu Star Bulletin)	
13. Comparison of aerial and satellite images showing the development of Hawai'i Kai	
14. Prior archaeological studies conducted in the vicinity of the APE	
15. Observing traditional place names, "MAUNALUA" on the welcome sign to East O'ahu	33
TABLES	
1. Persons/organizations contacted for consultation.	29

1. INTRODUCTION

At the request of PBR Hawaii & Associates, Inc. (PBR), on behalf of the Bank of Hawaii (BOH), ASM Affiliates (ASM) prepared this Cultural Impact Assessment (CIA) to inform an Environmental Assessment (EA) being prepared for the proposed redevelopment of 6650 Kalaniana'ole Highway (TMK: [1] 3-9-017:040), Maunalua Ahupua'a, Kona (Honolulu) District, Island of O'ahu (Figures 1 through 3) and consists of 0.2507 acres of commercial-zoned land. BOH and MC-Architecture propose the demolition of an existing restaurant building occupying the entirety of the parcel and subsequent construction of a new Bank of Hawaii branch facility. Ground-disturbing activities associated with the proposed demolition and new building construction are expected to occur across the entire parcel to depths at or below the water table.

This CIA, which is intended to inform an EA conducted in compliance with Hawai'i Revised Statutes (HRS) Chapter 343, is being prepared pursuant to Act 50 and in accordance with the Office of Environmental Quality Control (OEQC) *Guidelines for Assessing Cultural Impacts*, adopted by the Environmental Council, State of Hawai'i, on November 19, 1997 (Office of Environmental Quality Control (OEQC) 1997) Act 50, which was proposed and passed as Hawai'i State House of Representatives Bill No. 2895 and signed into law by the Governor on April 26, 2000, specifically acknowledges the State's responsibility to protect native Hawaiian cultural practices. Act 50 further states that environmental studies "should identify and address effects on Hawaii's culture, and traditional and customary rights" and that "native Hawaiian culture plays a vital role in preserving and advancing the unique quality of life and the 'aloha spirit' in Hawai'i. Articles IX and XII of the state constitution, other state laws, and the courts of the State impose on governmental agencies a duty to promote and protect cultural beliefs, practices, and resources of native Hawaiians as well as other ethnic groups.

The historical land use of the project area as well as a discussion of the Precontact cultural context within Maunalua Ahupua'a and greater Kona (Honolulu) District is presented in the pages that follow. The consultation process is then described, and the results of consultation are presented, which is followed by a discussion of potential cultural impacts and the appropriate actions and strategies necessary to mitigate any potential impacts.

PROJECT AREA DESCRIPTION

The project area is located in Maunalua, in a neighborhood also known as Hawai'i Kai, within Maunalua Ahupua'a at 6650 Kalaniana'ole Highway within Kona (Honolulu) District on the Island of O'ahu. The 0.2507-acre subject parcel is located approximately 13 miles east of downtown Honolulu and placed within a shopping complex plaza named Hawai'i Kai Towne Center. The project area is bound to the north and west by a parking lot, to the east by an access road for the shopping center, and to the south by Kalaniana'ole Highway. The project area is currently developed with a low-profile single-story building of approximately 7,000 square feet constructed in 1991, which was formerly a restaurant (Figure 4). The building covers nearly the entire parcel and features a combination roof design. The project area is situated in the immediate vicinity of the former seawall of Keahupua-o-Maunalua, also known as Kuapā Fishpond, much of which has been filled in and otherwise modified to allow for starting residential, commercial, and office development since the 1940s.



Figure 1. Project area location shown over a portion of the USGS National Map 2017.

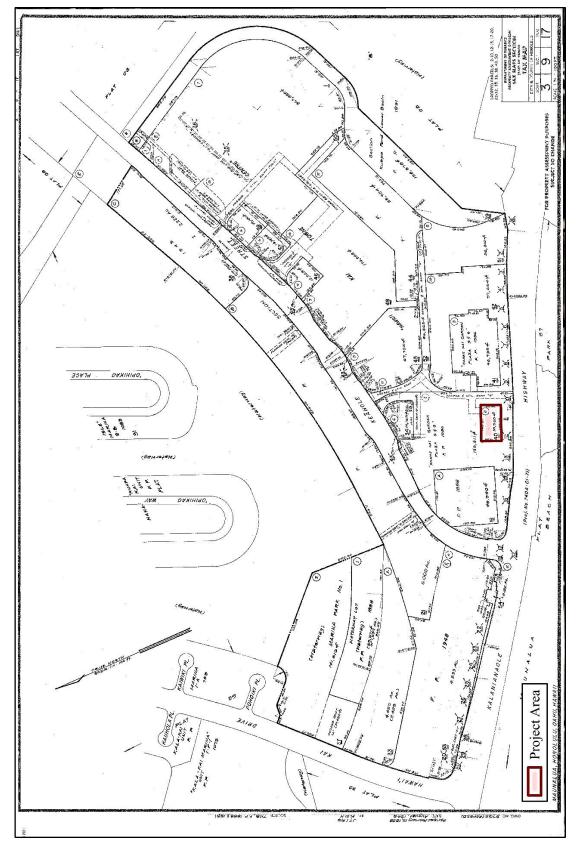


Figure 2. Tax Map Key (TMK) Plat Map for (1) 3-9-017 showing the project area (parcel :040).



Figure 3. Recent aerial composite showing the location of the project area.



Figure 4. The project area within the Hawai'i Kai Towne Center, view to the west.

PROPOSED DEVELOPMENT ACTIVITY

The proposed BOH Redevelopment Plan includes the demolition of the existing building and the construction of a new building within the extant building footprint. The proposed new construction has a total building area of 12,326 square feet (sf) comprised of 4,444 sf for the ground floor of the BOH branch; 2,391 sf of ground floor lease space, which includes a lanai; and 5,521 sf of second level BOH executive offices including a second lanai. The bank branch customer area occupies roughly 65 percent of the ground floor and the remaining 35 percent of the ground floor comprises space for a restaurant, cafe, offices, or conference center, and a covered lanai with four tables and seating with umbrellas on the *makai* side of the building. The upper floor lanai includes space for 12 tables that look onto a portion of the ground floor roof and *makai* towards Maunalua Bay. The proposed design incorporates two murals and lava stone elements.

2. CULTURE-HISTORICAL CONTEXT

As specified in the OEQC Guidelines for Assessing Cultural Impacts (1997:1), "...the geographical extent of the inquiry should, in most instances, be greater than the area over which the proposed action will take place." This guideline exists "to ensure that cultural practices which may not occur within the boundaries of the project area, but which may nonetheless be affected, are included in the assessment" (ibid.). Thus, the following discussion focuses on the immediate project area vicinity as well as Maunalua Ahupua'a and the eastern portion of Kona (Honolulu) District. The chronological summary presented below begins with a synthesis of Precontact settlement patterns and Historic land use that includes legendary and historical references to Maunalua and concludes with a review of the findings from prior investigations conducted in the project area vicinity. Combined, this information provides a means for understanding the project area within the context of the greater cultural landscape.

GENERALIZED MODEL OF HAWAIIAN ORIGINS AND SETTLEMENT

While the question of when Hawai'i was first settled by Polynesians remains contested, scholars working in the fields of archaeology, folklore, Hawaiian studies, and linguistics have offered several theories. With advances in palynology and radiocarbon dating techniques, Kirch (2011), Athens et al. (2014), and Wilmshurst et al. (2011) have argued that Polynesians arrived in the Hawaiian Islands sometime between A.D. 1000 and A.D. 1200. This initial migration on intricately crafted *wa'a kaulua* (double-hulled canoes) to Hawai'i from Kahiki, the ancestral homeland of Hawaiian deities and peoples from southern Pacific islands, occurred at least from initial settlement to the 13th century. According to Fornander (1969), Hawaiians brought from their homeland certain Polynesian customs and beliefs: the major gods Kāne, Kū, Lono, and Kanaloa (who have cognates in other Pacific cultures); the *kapu* system of political and religious governance; and the concepts of *pu'uhonua* (places of refuge), *'aumakua* (ancestral deity), and *mana* (divine power). Archaeologist Kenneth Emory who worked in the early to mid-20th century reported that the sources of early Hawaiian populations originated from the southern Marquesas Islands (Emory in Tatar 1982). However, Emory's theory is not universally accepted, as Hawaiian scholars in the past and present have argued for a pluralistic outlook on ancestral Hawaiian origins from Kahiki (Kamakau 1866; Nakaa 1893; Poepoe 1906; Fornander 1916; Kikiloi 2010; Case 2015).

While stories of episodic migrations were widely published in the Hawaiian language by knowledgeable $k\bar{u}$ 'auhau (individuals trained in the discipline of remembering genealogies and associated ancestral stories), the cultural belief that living organisms were $h\bar{a}nau$ 'ia (born) out of a time of eternal darkness ($p\bar{o}$) and chaos (kahuli) was adapted by the Hawaiian people to reflect their deep connection to their environment. As an example, the Kumulipo, Hawai'i's most famed ko 'ihonua (a cosmogonic genealogical chant), establishes a birth-rank genealogical order for all living beings (Beckwith 1951; Lili'uokalani 1978). One such genealogical relationship that remains widely accepted in Hawai'i is the belief that kalo (taro) plants, in addition to all other plants, land animals, and sea creatures, are elder siblings to humans (Beckwith 1951). This concept of hierarchical creation enforces the belief that all life forms are intimately connected, evidencing the cultural transformations that occurred in the islands through intensive interaction with their local environment to form a uniquely Hawaiian culture. The kaona (hidden knowledge) from Lili'uokalani's (1978) version of the Kumulipo was lost in the Beckwith (1951) edition (McDougall 2016). In addition to being read as a structuring of relationships, the Kumulipo also reifies a notion of Hawaiian identity and sovereignty with a rejection of what McDougall (2015) terms "colonial entitlement." The importance of the Kumulipo continues to underpin notions of Hawaiian identity and resistance to colonialism in the present (Ho'omanawanui 2022).

In Hawai'i's early past, inhabitants were primarily engaged in subsistence-level agriculture and fishing (Handy et al. 1991). Following the initial settlement period, communities clustered in the *ko'olau* (windward) shores of the Hawaiian Islands where freshwater was abundant. Sheltered bays allowed easy access to both nearshore fisheries, enriched by numerous estuaries, and deep-sea fisheries (McEldowney 1979; Newman 1970). Widespread modification of the land also occurred as newly arrived Hawaiian *kanaka mahi'ai* (farmers) developed new subsistence strategies, adapting their familiar patterns and traditional tools to work efficiently in their new environment (Pogue 1978; Kirch and McCoy 2023; Newman 1969). Areas with the richest natural resources became heavily populated over time, resulting in the population's expansion to the *kona* (leeward) side of the islands and more remote areas (Cordy 2000), what Hommon (2013:226-227) refers to as the "salubrious core hypothesis."

TRADITIONAL HAWAIIAN LAND STEWARDSHIP AND RESOURCE MANAGEMENT PRACTICES

Hawaiian philosophies of life in relation to the environment helped to maintain both natural, spiritual, and social order. The following excerpt adapted from *Ka Papa Honua a me Nā Kai-An Overview of the Hawaiian Landcape* by Kepā Maly as published online provides a concise description of the intimate relationship that exists between Hawaiians and their environment:

Hawaiians have developed a "sense of place" over hundreds of generations of evolving attachment to the natural, physical, and spiritual environments. Hawaiian culture does not have a clear dividing line of where culture ends and nature begins.

In a traditional Hawaiian context, nature and culture are one and the same...The wealth and limitations of the landscapes and ocean resources gave birth to, and shaped the Hawaiian world view. The 'āina (land), wai (water), kai (ocean), and lewa (sky) were the foundation of life and the source of the spiritual relationship between people and their environments. (Ulukau 2009)

The 'ōlelo no 'eau (proverbial saying) "hānau ka 'āina, hānau ke ali 'i, hānau ke kanaka" translates to "born was the land, born were the chiefs, born were the commoners" and conveys the belief that all aspects of the land, including kanaka (humans), are connected through kinship links that extend beyond the immediate family (Pukui 1983). 'Āina or land, was perhaps most revered, as noted in the 'ōlelo no 'eau "he ali 'i ka 'āina; he kauwā ke kanaka," which Pukui (Pukui 1983) translated as "[t]he land is a chief; man is its servant." The lifeways of early Hawaiians, which were dependent entirely on the finite natural resources of the islands, necessitated the development of sustainable resource management practices. Over time, what developed was an ecologically responsive management system that integrated the care of watersheds, natural freshwater systems, and nearshore fisheries (Jokiel, Rodgers et al. 2011).

Disciplined and astute observations of the natural world became one of the most fundamental stewardship tools used by the ancient Hawaiians. The vast knowledge acquired through direct observation enabled them to detect and record the subtlest of changes, distinctions, and correlations within the natural world. Examples of their keen understanding are evident in the development of Hawaiian nomenclature to describe various types of rains, clouds, winds, stones, environments, flora, and fauna. Many of these names are geographically unique or island-specific, and have been recorded in *oli* (chants), *mele* (songs), *pule* (prayers), *inoa 'āina* (place names), *wahi pana* (legendary places) and '*ōlelo no'eau* (proverbial sayings). Other Hawaiian arts and practices such as *hula* (traditional dance), *lapa'au* (traditional healing), *lawai'a* (fishing), and *mahi'ai* (farming) further aided in the practice of knowing the rhythms and cycles of the natural world.

Comprehensive systems of resource management and stewardship of the land were coupled by the strict adherence to practices that maintained and enhanced the *mana* of all things in the Hawaiian world. In Hawaiian belief, the whole of the natural world including certain places and people, especially those of high rank, possessed *mana* (Pukui, Haertig et al. 1972, Pukui and Elbert 1986). *Mana* was considered divine as it was attributed to the pantheon of Hawaiian gods (*kini akua*) who were embodied in the 'āina (land) and its elemental forces, natural resources, as well as specific material objects and some persons (Crabbe, Fox et al. 2017). Buck (1993) expanded on this concept noting that *mana* was associated with "the well-being of a community, in human knowledge and skills (canoe building, harvesting) and in nature (crop fertility, weather etc.)" (c.f. Else 2004).To protect the *mana* of certain resources, places, and people, *kapu* of various kinds were implemented and strictly enforced. Vital to the preservation and respect for mana was the implementation and adherence to the *kapu* system. Elbert and Pukui (1986) define *kapu* as "taboo, prohibitions; special privilege or exemption (132)" Kepelino noted that *kapu* associated with *akua* (deities) applied to all social classes, while *kapu* associated with *ali* i were applied to the people (in Beckwith 1971). As *kapu* dictated social relationships, they also provided "environmental rules and controls that were essential for a subsistence economy" (Else 2004).

A companion to *kapu* was the concept of *noa*, translated as "freed of taboo, released from restrictions, profane, freedom" (Pukui and Elbert 1986). Some *kapu*, particularly those associated with maintaining social hierarchy and gender differentiation were immutable, while those *kapu* placed on natural resources were applied and enforced according to seasonal changes. The application of *kapu* to natural resources ensured that such resources remained available for future use. When the *ali'i* or the lesser chiefs, including *konohiki* (land managers) and *po'o lawai'a* (head fishermen) determined that a particular resource was to be made available to the people, a decree was proclaimed indicating that *kapu* had been lifted, thereby making it *noa*. Although transitioning a resource from a state of *kapu* to *noa* allowed for its use, people were expected to practice sustainable harvesting methods and pay tribute to the paramount chief and the *akua* associated with that resource. *Kapu* were strictly enforced and violators faced serious consequences including death (Jokiel, Rodgers et al. 2011). Violators who escaped execution sought sanctuary at

pu'uhonua, designated places of refuge, or an individual who could pardon the accused (Kamakau 1992). After completing the proper rituals, the violator was absolved of his or her crime and allowed to reintegrate back into society. In summary, the interweaving of beliefs, land stewardship practices, and the socio-political system form the basis of the relationship shared between the Hawaiian people and the land. It is through the analysis of these dynamic elements that we develop an understanding of the complex sense of place.

The development of the *ahupua'a* land management system added to the already complex social hierarchy. The *ahupua'a* was the principal land division that functioned for taxation purposes and furnished its residents with nearly all subsistence and household necessities. *Ahupua'a* are land divisions that typically include multiple ecozones from *mauka* (upland mountainous regions) to *makai* (shore and near-shore regions), assuring a diverse subsistence resource base (Hommon 2013; Hommon 1986). Although the *ahupua'a* land division typically incorporated all of the ecozones, their size and shape varied greatly (Cannelora 1974). Noted Hawaiian historian and scholar Samuel Kamakau (1976:8-9) summarized the ecozones that could be found in a given *ahupua'a*:

Here are some names for [the zones of] the mountains—the *mauna* or *kuahiwi*. A mountain is called a *kuahiwi*, but *mauna* is the overall term for the whole mountain, and there are many names applied to one, according to its delineations ('ano). The part directly in back and in front of the summit proper is called the *kuamauna*, mountaintop; below the *kuamauna* is the *kuahea*, and makai of the *kuahea* is the *kuahiwi* proper. This is where small trees begin to grow; it is the *wao nahele*. Makai of this region the trees are tall, and this is the *wao lipo*. Makai of the *wao lipo* is the *wao 'eiwa*, and makai of that the *wao ma'ukele*. Makai of the *wao ma'ukele* is the *wao akua*, and makai of there is the *wao kanaka*, the area that people cultivate. Makai of the *wao kanaka* is the 'ama'u, fern belt, and makai of the 'ama'u the 'apa'a, grasslands.

A solitary group of trees is a *moku la'au* (a "stand" of trees) or an *ulu la'au*, grove. Thickets that extend to the *kuahiwi* are *ulunahele*, wild growth. An area where *koa* trees suitable for canoes (*koa wa'a*) grow is a *wao koa* and mauka of there is a *wao la'au*, timber land. These are dry forest growths from the 'apa'a up to the *kuahiwi*. The places that are "spongy" (*naele*) are found in the *wao ma'ukele*, the wet forest.

Makai of the 'apa'a are the pahe'e [pili grass] and 'ilima growths and makai of them the kula, open country, and the 'apoho hollows near to the habitations of men. Then comes the kahakai, coast, the kahaone, sandy beach, and the kalawa, the curve of the seashore—right down to the 'ae kai, the water's edge.

That is the way ka po'e kahiko [the ancient people] named the land from mountain peak to sea.

Ahupua'a were ruled by ali'i 'ai ahupua'a or chiefs who controlled the ahupua'a resources. Generally speaking, ali'i 'ai ahupua'a had complete autonomy over the ahupua'a they oversaw (Malo 2020). Ali'i 'ai ahupua'a, in turn, answered to an ali'i 'ai moku (chief who claimed the abundance of the entire moku or district) (Malo 2020). Ahupua'a residents were not bound to the land nor were they considered property of the ali'i. If the living conditions under a particular ahupua'a chief were deemed unsuitable, the residents could move freely in pursuit of more favorable conditions (Lam 1985). This structure safeguarded the well-being of the people and the overall productivity of the land by ensuring the continued contributions of all who resided therein. To that end, ahupua'a lands were managed by an appointed konohiki, oftentimes a chief of lower rank, who oversaw and coordinated stewardship of an area's natural resources (Lam 1985). In some places, the po'o lawai'a had the same responsibilities as the konohiki (Jokiel et al. 2011).

The *maka* 'āinana (commoners, literally the "people that attend the land") who lived on the land had rights to gather resources for subsistence and tribute within their *ahupua* 'a (Jokiel et al. 2011; MacKenzie 2010). As part of these rights, residents were required to supply resources and labor to *ali* 'i (chiefs) of local, regional, and island chiefdoms. The *ahupua* 'a became the equivalent of a local community with its own social, economic, and political significance and served as the taxable land division during the annual *Makahiki* procession (Kelly 1956). During the time of *Makahiki*, the paramount *ali* 'i sent select members of his/her retinue to collect *ho* 'okupu (tribute and offerings) in the form of goods from each *ahupua* 'a. The *maka* 'āinana brought their share of *ho* 'okupu to an *ahu* (altar) that was marked with the image of a *pua* 'a (pig) and served as a visual marker of *ahupua* 'a boundaries. In most instances, these boundaries followed mountain ridges, hills, rivers, or ravines (Alexander 1890). However, Chinen (1958) reports that "oftentimes only a line of growth of a certain type of tree or grass marked a boundary; and sometimes only a stone determined the corner of a division." These ephemeral markers, as well as their more permanent counterparts, were oftentimes named as evidenced in the thousands of boundary marker names that are listed in Soehren (2010).

Many ahupua'a were divided into smaller land units known as 'ili and 'ili kūpono (often shortened to 'ili kū), which were created for the convenience of the ahupua'a chief and served as the basic land unit which hoa'āina (caretakers of particular lands) often retained for multiple generations (Jokiel et al. 2011; MacKenzie 2010). As 'ili were typically passed down in families, so too were the associated kuleana or responsibilities and privileges tied to the land. and its resources. The right to use and cultivate 'ili was kept within the 'ohana (family), regardless of the succession of ali'i 'ai ahupua'a (Handy et al. 1991). Whether dispersed or wholly intact, 'ili required a cross-section of available resources, and for the hoa'āina, this generally included access to agriculturally fertile lands and coastal fisheries. 'Ili kūpono differed from other 'ili lands because they did not fall under the jurisdiction of the ahupua'a chief. Rather, they were specific areas containing resources that were highly valued by the ruling paramount chiefs, such as fishponds (Handy et al. 1991).

This form of district subdividing was integral to Hawaiian life and the product of advanced natural resource management systems. As populations resided in an area over centuries, direct teaching and extensive observations of an area's natural cycles and resources were retained, well-understood, and passed down orally over the generations. This knowledge informed management decisions that aimed to sustainably adapt subsistence practices to meet the needs of growing populations. The *ahupua'a* system and the highly complex land management system are but one example of the uniquely Hawaiian culture that developed in these islands.

LEGENDARY ACCOUNTS

The subject *ahupua* 'a of Maunalua is situated within the southeastern end of the island of O'ahu between the Ko'olau mountains and the sea. Traditions suggest that Maunalua may have been home to the first settlement established by the second wave of migration to Hawai'i, led by *ali'i* Moikeha and his sisters after their round-trip journey to Tahiti. The sister's names were Makapu'u (bestowed upon Makapu'u Point) and Makaaoa (bestowed upon the lower lands surrounding Kaloko) (Takemoto et al. 1975:6; Sterling and Summers 1962:5). According to Pukui et al. (1974:149), "Maunalua" can be translated literally into "two mountains", likely in reference to the prominent volcanic tuff cones of Kohelepelepe (Koko Crater) and Mo'okua Kaneapua (Koko Head). The additional geological features of Makapu'u Point (hill beginning or bulging eye [Pukui et al. 1974:142]), the easternmost point on O'ahu, lies at the border between Maunalua and Waimānalo (to the north). Traditional *mo'olelo* (tales) were passed down orally through the generations and many tales focus on *wahi pana* or legendary places. A Maunalua community member shared the following tale as reported by Lima et. al. (2017:118–119).

The moʻolelo, prevalent during the time of Kakuhihewa, was about Kūmauna, a demi-god from Maui who came to live in this area with 50 to 60 of his followers - rain servants; the Mānoa rains are Kūmauna's rain servants. Kūmauna lived by trickery and deceit and would go to Pālolo to steal taro. Supposedly, he also drowned his favorite son, Maunalua, in the fishpond. One participant explained that the name Maunalua not only references two mountains, it also refers to Kūmauna's favorite son, Maunalua.

Many other myths and legends associated with *wahi pana* of greater Maunalua Ahupua'a have been recorded and a selection of them are presented below.

The Battles of Kūali'i at Kawaluna

Born at Kalapawai, Kailua, Koʻolaupoko, Oʻahu, Kūaliʻi was an *aliʻi* of Oʻahu who reigned during the 17th century. Seeking to increase his rule over Oʻahu, Kūaliʻi waged war against the chiefs of Waialua, 'Ewa, Waiʻanae, and eventually made his way towards Hilo, Molokaʻi and Lānaʻi (de Silva 2003). Kūaliʻi's first battle on Oʻahu with a general was at Kawaluna, above Waolani, where "a great slaughter took place" (Fornander 1916:408). The battle takes place at a time when there were four kings on Oʻahu, before the time of Kakuhihewa. These were Lonohulimoku of Koolaupoko, Lonohulilani of Koolauloa and Waialua, Lonokukaelekoa of Waiʻanae and 'Ewa, and Lonoikaika of Kona which was described as being from Moanalua to Maunalua. When Kūaliʻi was just coming into his manhood while residing at Kalehuawehe in Waikīkī, he hears complaints from the personal attendants of oppression by Lonoikaika. The attendants challenge Kūaliʻi to do something about it, saying:

If your muscular body was only that of a fearless warrior these bones would indeed be saved: but no, your strength is worthless. Here we are being ordered roughly by the different chiefs which is so degrading and angers us. In your younger days you could beat everybody whom you fought against. Being so fearless in your childhood days, one would think it would continue; yet alas, it is only the fearless-ness of youth. Kualii replied: There will be fighting then, since you have found the cause why I should urge it. A few days hence the pili grass will be reddened (Fornander 1916:408).

Having heard of Kūali'i's dedication of the temple at Kawaluna, Lonoikaika sends an army to Keanamano. The soldiers spend the night at Keanamano. Early the following morning, Kūali'i wakes his father, telling him to get up and ready the men to retreat as the King's armies have them surrounded. Confused by his father, Kauakahiakahoowaha asks how Kūali'i knows they are surrounded. Kūali'i states the night has spoken to him and has told him that Lonoikaika knows of the dedication and considers the overstep, a rebellion and has sent his armies.

Kauakahiakahoowaha urges Kūaliʻi to stay and fight, stating "Why should we run? Do you suppose that we would be saved by escaping? If we are to die in this battle, running will not save us, we would indeed die; and if we are to live, we will surely live" (Fornander 1916-1917:408). Kūaliʻi is convinced to stay and fight and Kauakahiakahoowaha tells him that he will not be fighting. Hearing this Kūaliʻi pleads with him to stay for his own protection, telling his father, "You must not go; remain where you are; if you go, I may not be able to see you, for you might get killed by mistake; it is best that you stay with me and let us die together in this battle against Lonoikaika if need be" (Fornander 1916-1917:410).

Finishing the conversation, Kūali'i noticed the sun had risen and the plains below covered with the king's army, "the pili grass was red with men" (Fornander 1916-1917:410). Seeing the men below, Kūali'i covered himself as if he was sleeping; determined he was defeated, he waited for the armies to approach. A messenger by the name of Hema, proceeded the armies waiting and ready for battle to approach Kūali'i informing him that there will be a battle today. Kūali'i retorted, stating that he is a mere child, not trained in the art of war; not only will he not stop the battle but is not equipped to do so and suggested Hema go back to Lonoikaika and find out the reason for declaring war on such a person.

Hema informed Kūali'i that he was sent by Lonoikaika because Kūali'i had dedicated the temple at Kawaluna. Kūali'i responded that it was his right to do so. Upon hearing what Kūali'i had said to Hema, Lonoikaika became very upset and ordered his armies to close in around Kūali'i. When Kūali'i saw this he called out for his personal attendant, Maheleana saying:

where are you: This morning you must learn how to fight and how to be brave." Maheleana replied: "One cannot show his strength against such odds. The rain clouds are encircling from above, from sea-ward and from all sides." Kualii spoke up: "There are two of us as Kane and Kanaloa are also two. Let us then make a stand and you will see these numbers flee." While the armies were closing around Kualii he entered the temple to pray. At the close of Kualii's prayer Maheleana looked and lo, the enemy was close upon them. Kualii then reached for his war club Manaiakalani and handed it to Maheleana with the remark: "Here is my war club, go out and enter into the army of Lonoikaika" (Fornander 1916-1917:410)

With the war club in hand and newfound courage, Meleana went out and began to slaughter the men. Seeing this, the enemy began to retreat, running directly towards Lonoikaika. When the warriors began to retreat, Kūaliʻi began slaughtering all of Lonoikaika's chiefs with the dead bodies being "strewn around like logs of wood" (Fornander 1916-1917:410). Many were dead and Kūaliʻi victorious, resulting in him becoming the king of Kona and taking possession of all of the lands from Moanalua to Maunalua. Kūaliʻi went to live at Kalanihale in Kailua, Koʻolaupoko.

Kāne and Kanaloa

Kāne the god of fresh water (wai) and Kanaloa, his companion, the deity of the ocean waters (kai) are famous for circuiting the islands and creating springs to aid in the mixing of their food of choice, kawa ('awa). In Maunalua, there is a place called Mo'o-kua-o-Kāne'apua, now Koko Head. Kāne'apua is said to be the younger brother of Kāne and this place, which makes up the eastern rim of Maunalua Bay and the western edge of neighboring Hanauma Bay, is named for him. It is here that one of Kāne and Kanaloa's springs was opened. which has since dried and left the land arid (Handy et al. 1991). The legend of Kāne and Kanaloa's arrival in Maunalua reads as follows:

O Kane! [said Kanaloa] we keep on going and we are dying of hunger! Let us eat." Kane looked about him and saw that there was no water for mixing their refreshment of 'awa drink. He struck the earth with his staff and water gushed forth. They had not gone far [on their waterless way] when Kanaloa wanted to eat again . . . so Kane again struck the earth. . . and water gushed forth. . . and many were the waterholes made by Kane between Hanauma and Laeahi [Leahi] (Handy et al. 1991:110)

Pele and Hi'iaka

Domain over the relatively arid Maunalua lands fell to Pele, the goddess of fire, lava, and volcanoes (Kelly 1984:23). The following legend tells of Pele and her sister Hi'aka:

Hi'iaka, the faithful sister of Pele, came through Maunalua while on a special mission to find and bring back Lohiau, Pele's lover. On her journey, Pele created spirits, for example, Ihiikilauakea and Kauniniula on Koko Head who were consoled and complimented by Hi'iaka. At Makapu'u, Hi'iaka and her disciples were greeted by a supernatural being who had sent a storm forcing the group the land there. While resting at Makapu'u, Hi'iaka turned a pretty woman to stone for wasting her food, and later had the young woman's brother turned to stone for not rescuing his sister in time. The couple became the balancing stones which have since disappeared (Takemoto et al. 1975:6)

Waiakaaia

This *mo 'olelo* tells of a *pōhaku* (stone) known as Waiakaaia that carried cultural significance and was formerly located within the project area vicinity near the middle of the wall enclosing Loko Kuapā. In 1930, archaeologist J. Gilbert McAllister observed Waiakaaia in the wall of Loko Kuapā. He described the *pōhaku* as a large upright stone that measured "4.5 feet high, 3 feet wide at the bottom, 2 feet wide at the top, and 5.5 inches thick" and was "securely embedded diagonally across the wall, with one of its broad sides facing exactly north" (McAllister 1933:69). He recounts Waiakaaia's origins thusly,

This stone is said to be Waiakaaia, named for a man who once lived in Maunalua. This man was married to a woman of whom he was apparently very fond. In keeping with Hawaiian customs of marital life, Waiakaaia gave consent for his wife to stay with other men. However, when she was away he was greatly worried, and it preyed so consistently upon his mind that he became insane. One night when she was gone, he left the lonely hut and went to Hanauma Bay, where in great rage he tore up a large stone and carried it to the fishpond wall. This was a super-human feat, as one can see from the size of the stone. This stone he placed on the wall of the pond, naming it after himself, and it stands there today as a monument to his memory (ibid.)

The Disappearing Mullet of Keahupua-o-Maunalua

Mullet, such as those found in Keahupua-o-Maunalua (Kuapā fishpond) were favored across the Hawaiian Islands due to their "sweet flavor and their accessibility at the mouths of fresh-water streams" (Handy et al. 1991:376). The following story tells of whole schools of mullet that would suddenly vanish and then materialize elsewhere under mysterious circumstances. According to the legend, the mullet would disappear from Kuapā Pond and reappear in a large spring where Ka'elepulu Stream empties into Kailua Bay in neighboring Ko'olaupoko District on the other side of the mountains. Some people believed the two bodies of water were linked by an underground tunnel that ran beneath the Ko'olaus. While others held that the mullet would swim from Maunalua around the easternmost tip of the island and beyond Waimānalo to Ka'elepulu stream. According to Handy et al. (1991), the disappearing mullet remained a mystery to most people at the time they conducted their study - in the 1930s.

TRADITIONAL LAND USE IN MAUNALUA

The current project area falls within the coastal portion of Maunalua Ahupua'a. According to King (1935), the enactment of the Civil Code of 1859 resulted in the re-categorizing of the 'ili 'āina to an ahupua'a; thus, a name once used to reference an 'ili 'āina (Maunalua) was converted to an ahupua'a. Whereas early maps and government documents indicate Maunalua was an 'ili of the ahupua'a of Waimānalo being situated on the south side of the Ko'olau range within Ko'olaupoko District; however in 1932, the district boundaries of O'ahu were revised and "from Makapuu Head in Maunalua to Moanalua inclusive" comprised Honolulu District, which we now refer to as Kona District (King in Coulter 1935:222–224).

Agricultural practices

According to Handy et al. (1991) 'uala (sweet potato) was the principal crop in the project area vicinity. 'Uala was planted as a supplement in drier areas where wetland kalo (taro) was unable to grow, such as along the sandy coast. "On the south side of the ridge at this end of the island, Maunalua and Hahaione districts were famous for their sweet potatoes (Handy 1940:155). McAllister (1933) writes of evidence left behind of the old Hawaiian sweet potato patches "[f]rom the Lighthouse road at [at Makapu'u] to the small old crater in Kaiama Valley" (McAllister 1933:64). Handy (1940:155) further described traditional agricultural practices in the project area environs thusly:

According to the last surviving Kamaaina of Maunalua by Handy, sweet poatotoes were grown in the small valleys, such as Kamilonui, as well as on the coastal plain. The plain below Kamiloiki and Kealakipapa was known as Ke-kula-o-Kamauwai. This was the famous potato-planting place from which came the potatoes traded to ships that anchored off Hahaione in whaling days. The village at this place, traces of which may still be seen [ca. 1930s], was called Wawamalu.

Per Lima et al (2017), the literal translation of Wawamalu is "shady valley" and per Pukui and Elbert (1986) it means "sandy beach."

Loko Kuapā

Maunalua was also known for a *loko* (fishpond) called Keahupua-o-Maunalua, later referred to as Loko Kuapā, Maunalua Pond, and Kuapā Pond. According to Kikuchi (1973), *loko kuapā* was originally a general term for one of the six main types of Hawaiian fishpond, characterized by a *kuapā* or seawall as its enclosing feature that contained one or more *makahā* (sluice gates). Such ponds were constructed upon shallow shoals within areas protected from waves by a nearby fringing reef. Keahupua-o-Maunalua was a prime example of a *loko kuapā* with a roughly 5,000-foot-long *kuapā* comprising a sand embankment that was reinforced with stones and coral on its superior surface and *makai* side. Per McAllister (1933), a map of Loko Kuapā from 1851 showed the water area of the pond as 523 acres, which lessened to 301 acres of water area and 125 acres of swamp land by 1921. In 1930, when McAllister conducted his island-wide archaeological survey of Oʻahu sand embankment measured ten to fifteen feet across while the stone facing was significantly narrower. The west end of the *kuapā*, "did not connect to the nearest land, but was built back to the brackish spring which is about 1400 feet from the beach" and enclosed it (McAllister 1933:69).

In addition to recording archaeological sites he encountered in person, McAllister depended on local informants for their knowledge regarding existing sites and those long since gone, as well as traditional cultural, beliefs, practices, and land use associated with them. Regarding its construction, "According to Makea Napahi, my informant, the pond was built by Mahoe, her great-grandmother. When the pond had been only partially completed, the *menehune* came and in one night finished the construction" (McAllister 1933:69). Another informant, Mr. Moe of Kamehameha Schools opined the following to McAllister:

... a large fishing village formerly existed in Hahaione Valley at the head of the pond, which, according to him, was not a pond, but an arm of the sea. The people from this village fished off Maunalua in their canoes, and when the pond was built it cut off their access to the sea and the village declined. There was a great number of ruins in and about the Kamehameha farm school. Mr Moe also believes that the Honolulu end of the pond was so peculiarly indented in order that boats from ships might have ready access to the brackish spring, from which they might obtain water. (ibid.)

Loko Kuapā also had an association with mullet, which was a prized fish throughout the area that favored its brackish waters. Adult mullet known as 'ama 'ama or 'anae, were often placed under kapu when their numbers were few, and Ka'ahumanu did just that (Maly and Maly 2003). McAllister (1933:70) also summed up the use of the kapu system and an associated traditional cultural practice related to Kuapā Pond as follows:

At times there was a dearth of fish, which Mahoe coped with in this manner. On the nights of Kane, she took a baby pig as it came from the womb of the mother, and had her small grandson carry the squealing animal about the pond. There was a strict tapu [kapu] until the next night, which was the night of Lono. No fishing was permitted, and no noise was allowed to disturb the praying kahuna. On the night of Lono, seaweed and *ilima* were gathered and placed on the shrine. After the night of Lono, when this ceremony was apparently completed, there was plenty of fish.

As conveyed in the account above, offerings and prayers were an essential part of traditional Hawaiian lifeways, particularly as they relate to fishing. According to Hawaiian tradition, guardians of the water known as *mo 'o* brought health and welfare, as well as fish to the people who *ho 'omano* (honor) them. Laukapu was the guardian of the pond at Maunalua. Honoring Laukapu was *kanawai pa 'a* (a fixed rule) of Maunalua and when satisfied she would fill Kuapā with baby mullet (Maly and Maly 2003). Perhaps this belief contributed to the traditional name of Kuapā: Ke-ahupua, which means "the shrine of the baby mullet" (Handy et al. 1991).

THE PROJECT AREA VICINITY AND MAUNALUA DURING THE LATE 18TH AND EARLY 19TH CENTURY

Knowledge of Maunalua Ahupua'a and the greater Kona District during the late 18th and first half of the 19th century is derived mostly from the writings of early explorers and missionaries who documented their experiences and observations. They describe Maunalua as sparsely populated along the coast. It is evident through these accounts that although Maunalua residents were still largely rooted in traditional subsistence practices, procurement, and trade, western influence was slowly infiltrating into native lifeways.

Historical Accounts by Early Explorers and Missionaries

In June of 1786, the English ships King George and Queen Charlottle, under the commands of Captains Portlock and Dixon respectively, became the first westerners to make landing at Maunalua (Dixon 1789; Portlock 1789). In a search for freshwater, the crews disembarked at Maunalua beach, to the west of the fishpond, and made their way east:

We landed on a fine sandy beach amidst a vast number of the inhabitants, who all behaved with great order, and never attempted to approach nearer than we desired. They informed us that there was no water near our landing-place, but that we should find plenty farther down along shore, and one of the natives accompanied us as a guide: however, our progress was soon impeded by a small salt water river that has a communication with King George's Bay [the name the crew gave to Maunalua Bay] (Portlock 1789:71).

The saltwater river referred to above was likely the inland sea passage created by the west side of the Loko Kuapā as it parallels the shore. As such, the crew was forced to return to their boats, and after some difficulty in navigating the shallow shoals in the area, determined that it was impossible to secure water at this location without "an infinite amount of trouble" (ibid.). However, the crew was able to secure sufficient water over a number of days, brought to them by residents from Maunalua and its vicinity in exchange for Western goods. They noted that "potatoes and taro are likewise met with here in great plenty, but I never observed any bread-fruit, and scarcely any yams (Portlock 1789:75)." Prior to departing, a priest in a double-hulled canoe presented Portlock with a *mahiole* (feathered helmet) from the *ali'i*, Kahekili (Portlock 1789:76).

Portlock and Dixon returned to King George's Bay in November of 1786 to get water on their way to China. During that visit, they were informed that "not only water, but everything the island produced, was tabooed by the king's orders (Portlock 1789:154)." Following Kahekili's initial visit to their ship and an exchange of gifts, the *kapu* were suspended (Dixon 1789:97; Portlock 1789:157). As a result of their visit, Dixon (1789) produced a map of the soundings of Maunalua Bay (Figure 5), which was the first cartographic depiction of any portion of Oʻahu (Fitzpatrick and Moffat 1986:33); and provided an illustration of a coastal village at Maunalua Bay (Figure 6).

Of particular relevance to the current project area vicinity, on one of Kahekili's visits he gifted the men mullet acquired from Kuapā Pond, observed to be connected to the sea and only navigable by small craft (Takemoto et al. 1975:15). Despite the numerous visits and gift exchanges, the captains were warned by the priest that Kahekili was constructing a building whose purpose was unknown. If it was being built for an *akua*, as a heiau, this would indicate they were preparing for an attack; however, Dixon and Portlock were also told the building might only be a storehouse and therefore not a threat (Portlock 1789; (Dixon 1789:104). Any potential attack was abandoned following a show of force by the foreigners who shot a pig in front of Kahekili, who soon departed. Not long after, many *heiau* were torn down and burned.

Following the conquest of Oʻahu, King Kamehameha I surveyed his newly conquered lands through a circuit of the island. In an attempt to set an example of the importance of hard work and industry, Kamehameha stopped at and repaired the walls of Keahupua-o-Maunalua and would then continue on to also repair the ponds at Kawainui, Kaʻelepulu, Ukoʻa, and elsewhere across Oʻahu. He granted the lands of Maunalua to his father-in-law, Keʻeaumoku, though they quickly passed to his daughter and Kamehameha's favorite wife, Kaʻahumanu. Upon her death, the lands were passed to her daughter, Kinau, then again to her daughter Victoria Kamāmalu (Takemoto et al. 1975:16).

During Gilbert Mathison's 1821 circumnavigation of Oʻahu, he recorded a saltwater lake (likely referring to the fishpond) and a village of roughly one hundred huts on the shore whose inhabitants were mostly fishermen. Mathison also reported that the saltwater pond "was divided from the sea by a large embankment of sand, which on extraordinary occasions is probably overflowed by the tide" (Mathison [1825] in McAllister 1933:69).

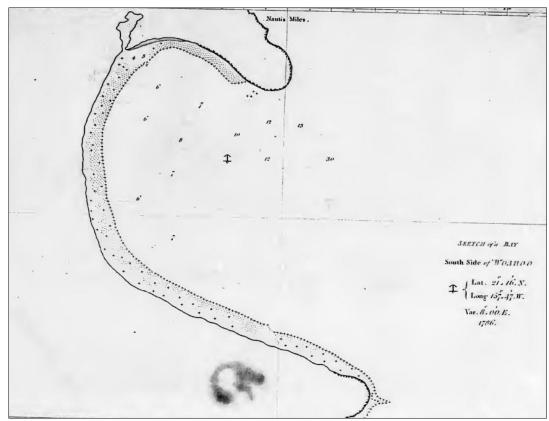


Figure 5. Early sounding map of Maunalua Bay from (Dixon 1789).

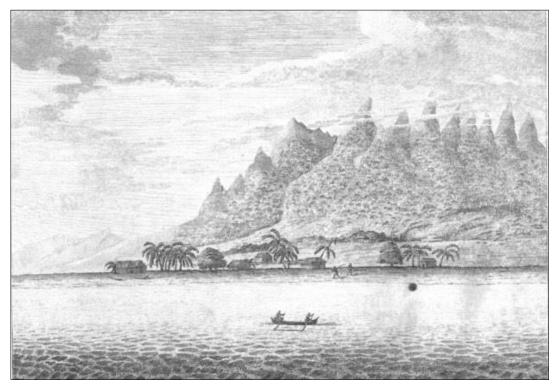


Figure 6. View from an anchorage at Maunalua Bay (Dixon 1789).

A few years later, in 1826, Levi Chamberlain and his missionaries visited Maunalua during a mission to preach and inspect the sixty-nine schools of O'ahu, returning in 1828. He compiled the following notes on his time around the fishpond (Takemoto et al. 1975:17–18):

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

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

Chamberlain also recorded the student population over the course of six years, which highlights a portion of the period of Hawaiian depopulation - especially in more rural areas - that occurred throughout the first half of the 19th century, here and elsewhere on rural Oʻahu (Green 1980; Naboa 2009). In 1826 (Figure 7), he recorded no school building or teacher, though by 1828 sixty-five students had been enrolled under Kumu Nahaleelua. In 1830, enrollment was down slightly to sixty students under Kumu Kahu, though by 1832 had dropped to only nineteen students (Takemoto et al. 1975:17–18).

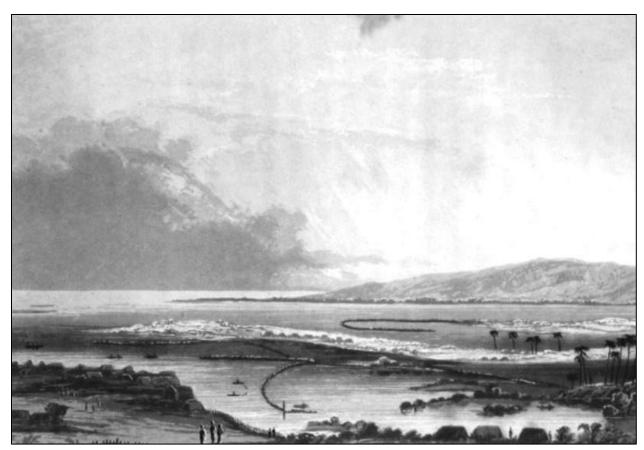


Figure 7. Sketch of Maunalua by British explorer William Dampier, ca. 1826 (source:www.maunalua.net)

THE MĀHELE 'ĀINA OF 1848

The socioeconomic and demographic changes that took place in the years after the arrival of foreigners promoted the establishment of a Euro-American style of land ownership, and the *Māhele 'Āina* of 1848 became the vehicle for determining ownership of native lands. As a result of the *Māhele*, land interests of King Kamehameha III became known as Crown Lands; those of the *ali 'i* became known as *konohiki* lands-named after the headman or land managers who oversaw entire *ahupua 'a* for the *ali 'i*. The chiefs and *konohiki* were required to present their claims to the Land Commission to receive awards for lands provided to them by Kamehameha III. The lands were identified by name only, with the understanding that the ancient boundaries would prevail until the land could be surveyed. This process expedited the work of the Land Commission and expedited the transfers (Chinen 1961). In addition, recipients of konohiki awards were required to provide a portion of their lands as commutation to the government. These lands surrendered to the government became known as Government Land (Chinen 1958; Chinen 1961).

All lands awarded during the *Māhele* were subject to the rights of the native tenants therein; those individuals who lived on the land worked it for their subsistence and the welfare of the chiefs. The Kuleana Act of 1850 allowed native tenants to claim and acquire fee simple titles to *kuleana* parcels that they actively lived on or farmed at the time of the *Māhele*. Not all lands that were claimed were awarded. The claims and resultant awards were issued Land Commission Award (LCAw.) numbers, which in conjunction with the volumes of documentation, remain in use today to identify the original owners and their use of the *kuleana* lands. The Kuleana Act also clarified access to *kuleana* parcels, which were typically landlocked, and addressed gathering rights within an *ahupua* 'a.

On January 27, 1848, M. Kekūanaoʻa, father and trustee for Victoria Kamāmalu, claimed many lands in the name of his daughter, including the *'ili 'āina* of Maunalua in Waimānalo. Kekūanaoʻa was a *kaukau ali'i* (a lesser chief) and was responsible for the overseeing of the *'āina* of his *Ali'i nui* (high chief or High chiefess), Kamāmalu. Kamāmalu was the heir to the *'āina* of Kīna'u and Ka'ahumana as the next designated *Kuhina Nui* (the principal advisor to the paramount chief of any island) (Kame'eleihiwa 1992:207). Prior to the Māhele of 1848, Kamāmalu held 163 *'āina*. Following the Māhele, she retained only 48 of these having relinquished 115 *'āina* or seventy-one percent (Kame'eleihiwa 1992:229). In 1861, Maunalua was granted to Kamāmalu in Royal patent number 4475. Maunalua is identified as *'apana* (section) 30 of LCAw. 7713.

THE PROJECT AREA VICINITY AFTER THE MĀHELE

In conjunction with the *Māhele 'Āina* of 1848, the King authorized the issuance of Royal Patent Grants (RP) to applicants for tracts of land, larger than those generally available through the Land Commission. The process for applications was clarified by the "Enabling Act," which was ratified on August 6, 1850. The Act resolved that portions of the Government Lands established during the *Māhele* should be set aside and sold as grants. The stated goal of this program was to enable native tenants, many of whom were not awarded *kuleana* parcels during the *Māhele*, to purchase lands of their own. Despite the stated goal of the grant program, many of the Government Lands were eventually sold or leased to foreigners. According to Tomonari-Tuggle (1998:38)., "as early as 1847, 30 parcels of these lands were sold as grants," which she qualifies as among the earliest such sales in the Hawaiian Islands

Native tenants wishing to claim their lands were required to register with the Land Commission, who assigned a number to each claim, and that number (the Native Register) was used to track the claimant through the entire land claims process. The native tenants registering their *kuleana* were then required to have at least two individuals (typically neighbors) provide testimony to confirm their claim to the land. Those testimonies given in Hawaiian became known as the Native Testimony, and those given in English became known as Foreign Testimony. Upon provision of the required information, the Land Commission rendered a decision, and if successful, the tenant was issued the LCAw. Finally, to relinquish any government interest in the property, the holder of an LCAw. obtained a Royal Patent Grant from the Minister of the Interior.

In 1862, the Commission of Boundaries (Boundary Commission) was established in the Kingdom of Hawai'i to legally set the boundaries of all the *ahupua'a* that had been awarded, by name only, as a part of the *Māhele*. Subsequently, in 1874, the Boundary Commission was authorized to certify the boundaries for lands brought before them. As a part of this process, the Boundary Commission gathered testimony from informants, who were typically elder *kama'āina* (native-born or one well-acquainted with an area) residents who learned of the boundaries from their ancestors, relatives, or neighbors. The boundary information was collected primarily between 1873 and 1885 and was usually given in Hawaiian and simultaneously transcribed into English. Although hearings for most *ahupua'a* boundaries were brought before the Boundary Commission and later surveyed by Government employed surveyors, in some instances, the boundaries were established through a combination of other methods. In some cases, *ahupua'a* boundaries were established by conducting surveys on adjacent *ahupua'a*. Or in cases where the entire *ahupua'a* was

divided and awarded as Land Commission Award(s) and or Government-issued Land Grants (both of which required formal surveys), the Boundary Commission relied on those surveys to establish the boundaries for that *ahupua'a*. Although these small-scale surveys aided in establishing the boundaries, they lack the detailed knowledge of the land that is often found in the Boundary Commission hearings.

In the meantime, it is worthwhile to see how her managers conducted the affairs of her estate and how much she was involved in their activities. While she was in San Francisco, in late April, Charles had sent out a letter, signed by Pauahi, informing the appropriate parties that Keau had been appointed the agent for their lands in Ke'ei, Kona. A few days later Charles wrote a letter for Pauahi to R. F. Bickersten, of the Commission for Boundaries for the Island of Oahu, asking for a hearing to settle the boundaries of her lands at Maunalua, Kona, O'ahu. On May 5th, Damon wrote a similar letter on Pauahi's behalf for a hearing to settle the boundaries of the 'ili (section of land) of Pāhoa, Wai'anae. And in June, Damon wrote to F. S. Lyman asking him to survey the *ahupua'a* of Umauma "which belongs to Mrs. Bishop" in order to have the boundaries settled. (Kanahele 2002:185)

LATE NINETEENTH CENTURY CHANGES IN LAND USE

During the late Nineteenth Century, Maunalua experienced a decrease in the Hawaiian population and traditional land use practices as western commercialized ranching and fishing operations came to dominate the area. Kamāmalu leased all the Maunalua lands to William Webster, and subsequently Manuel Paiko for use as ranch land. Similarly, the offshore fisheries were leased and sold to interested parties. Ownership of the *ahupua'a* eventually passed to Kekuanaoa, Kamāmalu's father, then to Lot Kamehameha V, Ruth Ke'elikolani, then through Bernice Pauahi Bishop and into the Bishop Estate Trust (Takemoto et al. 1975:21–23).

Per tax records, in 1855, Maunalua was home to ninety-nine people across thirty-eight households, though by 1860 had only sixteen households; it is noted the head of one was quite sick. Twenty years later, in 1880, only four households remained. A map produced by George Gresley Jackson in 1884 of the east coast of O'ahu shows a small village of approximately fifteen dwellings and a grove of coconut trees around the fishpond, but shows no signs of further development or land utilization at the time (Figure 8).

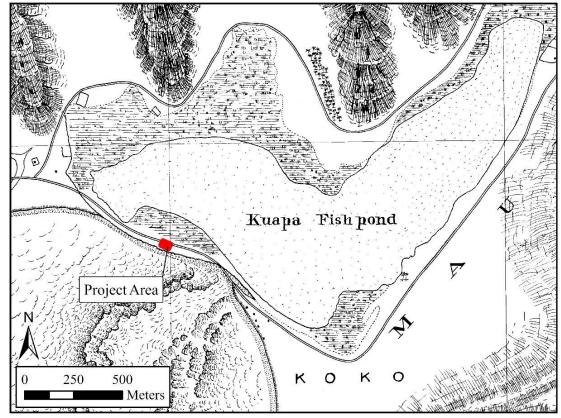


Figure 8. Portion of Registered Map 1019 (Jackson Gresley 1884) showing roads, marshland and sporadic dwellings in the immediate project area vicinity.

As increased industry and tourism began to impact Hawai'i, Bowser (1880) published "The Hawaiian Kingdom Statistical and Commercial Directory and Tourists' Guide 1880-1881. In a piece called "An Itinerary of the Hawaiian Islands," Bowser writes this of the area:

The next valley to which I came is called Wailupe. Here I found a fine dairy farm occupied by Mr. J. Perry. About a mile further on I came to the Niu ranch belonging to Mrs. Adams. In this farm there are 1,200 acres, all pasture land. Signor Manuel Paiko occupies all the country beyond this to the most eastern point of the island, Makapuu Point, beyond which the coast returns sharply to the westward, and we come to Waimanalo again...Signor Paiko's ranches in the Maunalua and Kuliouou Valleys are both dairy and grazing farms. His residence is at Maunalua, where he has a considerable freehold, besides which he rents some 8,000 acres of pasture land.

From this point I retraced my steps to Honolulu. There is open to the traveler the choice of two roads here; it being only about twenty miles to Honolulu by way of Waimanalo and the Pali. By the route I had come, the distance is only eleven miles, and I chose the shorter route. The choice, except in regard to the time saved, was not a wise one. I found the return journey a very dreary one. The excitement of novelty was gone, and with it any glamour that may have assisted to make the outward journey enjoyable. However lovely, and worth exploring some of the ravines inland may be, the country round the coast, between Honolulu and Makapuu Point, is by no means interest-ing; much of it is stony and barren. (Bowser 1880)

The trend of decreasing population in the area continued into the 1890s, when an increase in ranching and fishing activities began to draw people once again to Maunalua. In 1890, there were once again sixteen households, comprised of one Portuguese, three Chinese, and the rest Hawaiian families. Takemoto provides the following description of Maunalua in 1900:

Maunalua Ranch and Yit Lee Company, who owned a big fishing complex, employed most of the inhabitants. Maunalua Ranch had over 1,500 head of cattle, ten oxen, sixty-four horses, thirteen mules and six pigs roaming throughout Maunalua. Five Chinese families were working for the Damons, probably as ranch hands. Five other Chinese families worked for Yit Lee. There existed only one independent Chinese family not under Damon or Yit Lee. The eight Hawaiian families on the land, including one blind man, were truck farmers of some sort since all but two owned carts used for bringing goods to Honolulu. . . Thus, by the turn of the century most families in the <u>ili</u> were ranch hands, fishermen, or truck farmers living a relatively quiet life in an area which would be considered the country. (1975:25)

Maunalua Ranch continued operations within the ahupua'a until 1926, then was again leased for ranching to Alan S. Davis in 1932. Both a honey and a charcoal company were also started in the area around this time. In the mid-20th century agricultural use of the area also grew, and by 1959 the 178 families farming the area were responsible for producing sixty percent of the pigs, flower, and lettuce grown on O'ahu (Takemoto et al. 1975:28).

TWENTIETH CENTURY LAND USE, DEVELOPMENT, AND ACTIVISM

In the 1920s, development of the Kalaniana'ole Highway (State Route 72) reached Maunalua, formalizing the former trails and dirt roads used to traverse the *ahupua'a* and east Kona District. As seen in an aerial photograph taken in 1927 (Figure 9), a gently curved roadway alignment extends to the north and *mauka* of the project area closer to the fishpond than the ocean. In contrast, an aerial photograph taken in 1940 shows a more formal roadway alignment resembling the modern footprint of Kalaniana'ole Highway extending northwest-southeast in a more linear fashion, immediately to the south and *makai* of the project area. The 1940 highway alignment is situated within an area that appears as unmodified sandy coastline in the earlier (1927) image.

During the latter half of the twentieth century, land use practices and the general landscape of the project area environs were to change drastically. Widespread development took over the southeastern coastal lands and many of the culturally significant areas of traditional land use and lifeways were destroyed in the process. Land ownership and associated development activities were largely driven by a small number of wealthy individuals who in some cases also had political positions of power and served in the territorial and later state legislature and government. For instance, Herbert K. H. Lee, who partnered with Henry J. Kaiser to develop Hawaii Kai in 1959, was a democratic senator and territorial legislator (Cooper and Daws 1985).

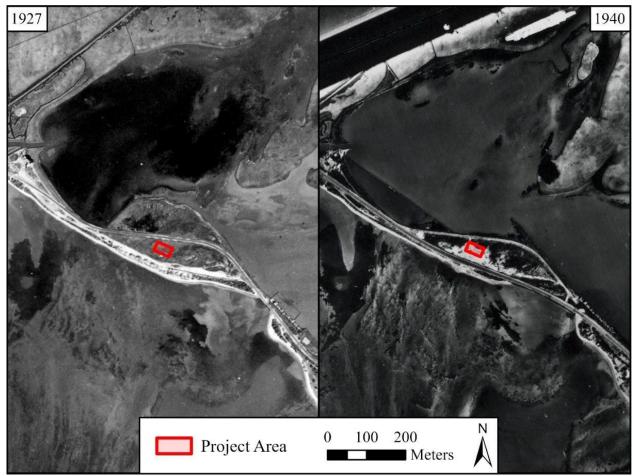


Figure 9. Comparison of aerial photographs from 1927 (left) and 1940 (right) of the project area vicinity (source: USGS via UH Mānoa Library MAGIS).

The passing of the State Land Use Law (LUL) of 1961, a statewide zoning measure-was the first of its kind in the United States (Cooper and Daws 1985). The LUL had a lasting impact on the environment and population of the Hawaiian Islands, and the current project area vicinity was no exception. As a result of the LUL, lands previously dedicated to farming were overtaken by urban development in the form of subdivisions "spread all over the place," which undermined the islands' chances to be self-sustaining and lead to a lack of government services for these new communities (Cooper and Daws 1985:86). Hawai'i Island and O'ahu underwent the most LUL-spurred urban development. At that time, O'ahu "was only 10% of the state's total land area, yet it held some 54% of all prime agricultural land" most of which ended up getting paved over and built upon to make way for roads, parking lots, and shopping centers, such as the one where the current project area (ibid.). During the 1950s and 1960s, fifty percent of the population of east Kona District and Windward O'ahu lived on lands they leased from wealthy landowners, rather than owned. Per Cooper and Daws (1985:422), "on O'ahu overall during the 1960s, Bishop's lease lots accounted for 40% of all new lots coming on the market."

Within a decade after the LUL, the Land Use Commission (LUC) came under review in 1969 and then again in 1974 in response to proposed redistricting of agricultural and conservation to urban districts extending from Pearl City to the project area environs of Hawaii Kai (Cooper and Daws 1985). The latter LUC review coincided with the anti-eviction and environmental protection activities of the Hawaiian renaissance movement in response to the threat and execution of mass evictions, such as those which occurred in neighboring Kalama Valley discussed below. According to Cooper and Daws (1985:291) only Oʻahu and Kauaʻi development "involved the evictions of whole communities with no acceptable relocation plan." Such circumstances likely contributed to the Kānaka 'Ōiwi sovereignty movement, which was driven by the desire for stolen lands and waters to be returned to Native Hawaiians.

Access, ownership, and careful management of natural resources are vital to the movement. Per Mast and Mast (1996:57) "the prudent use of land (and waters) is essential to the quality of life of the people." Pollution, contamination and major modifications to the land, coastline, nearshore waters, waterways, native forests, and watersheds associated with urbanization spawned the environmental movement of the 1960s and contributed to the resistance movement of the 1970s. As Kanaka 'Ōiwi (Native Hawaiian) activist, educator, and author Haunani-Kay Trask writes, the Kalama Valley Protests served "as a classic example of landless poor fighting for residency rights from the landed rich" brought about by the shift of Hawai'i economy from agriculture and cash crops to tourism and land development. Trask writes:

Hawai'i's move to an increasing dependence on tourism and land speculation in the second half of the century...led to an overnight boom in hotels, high-cost subdivision and condominium developments, and luxury resort complexes which necessitated ever-growing demands for land. Concentrated land ownership, a problem since the spread of plantation agriculture in the 19th century, had increased in the 20th century. Small landowners controlled less than 10 percent of the land. The military, the State and large private estates, and foreign and mainland American developers owned the remainder. As a result, large landowners drove up the price of land, capitalizing on the rush to commercial development (Trask 1987:127)

Rapid urbanization of Maunalua for Hawai'i Kai increased tensions between developers and local community residents. Trask notes, "by 1970, nearly 80 percent of Hawai'i's residents could not afford the new units that had been built" and would shortly become a major political issue. With a higher cost of living, many of Hawai'i's local people found themselves "forced to bear an increasingly heavy tax burden to pay for the infrastructure demanded by the tourist industry" (127) with an even heavier burden on Native Hawaiians. Trask emphasized, "In this economic transformation, Hawaiians suffered particularly. . . Already economically exploited and culturally suppressed, rural Hawaiian communities which had been relatively untouched during the plantation period were besieged by rapid development of their agricultural areas beginning in the late 1960s. Pushed from their rural enclaves by the developer's bulldozer, many of these Hawaiians took up residences in crowded urban high-rises or in makeshift beach villages. Others moved to one of the dwindling farming valleys, such as Kalama, in the hopes of staving off the end to their slow, rural lifestyle" (Trask 1987:128). By the 1960's, more than 150 families had taken up residency in the valley due to eviction for developmental plans lead by industrialist Henry Kaiser and the Hawai'i Kai Development Corporation.

In 1971 and 1972, Bishop Estate evicted residents of Kalama Valley to make way for development. Many consider this to be among the earliest struggles over land in Hawai'i and as the catalyst for the organizing of a social protest movement. A pig farmer named George Santos who lived on 'Ehukai Road, chose not to leave his home and farm as part of the mass eviction. Students at University of Hawai'i's Ethnic Studies program and community members rallied around him (Figure 10). And the resistance came to a head on May 21, 1971. Mary Choy, who was one of nine women jailed for their participation that day shared her account of what happened, which was reported by Mast and Mast (1996:182) as follows:

The showdown between George and other Hawaiian tenants on the land and the bishop Estate began. The State of Hawai'i's special force was there in full battle dress and assault weapons. Ironically, many of the force were men of Hawaiian ancestry. Following a discussion of who would stay and be arrested or leave, thirty-six of us decided to stay. The young people then climbed on the rooftop of George's house, to be brought down one-by-one by the police, fingerprinted on the spot, [and] driven away in police cars to the old police station on Young Street. George was the first to be dragged out of his house. His pigs, including piglets, were removed many to die later from the inhumane treatment.

A trial followed the arrests, and the resisters were all found guilty of trespassing; in response to an appeal for a jury trial in a higher court, the State dropped all the charges to avoid the controversy that would have likely emerged. According to John Witeck as reported by Mast and Mast (1996:345), after Kalama Valley, "talk of Hawaiian sovereignty and independence was first put into action with the idea that people should refuse to move, occupy land, and develop new alternatives for the use of the land." Per Witeck, in the summer of 1971, "the People's Coalition for Justice and Peace did a weeklong march around the island [of Oʻahu]" over 100 participants "linked the issues of Vietnam, Kalama Valley, and the atomic bombing of Hiroshima and Nagasaki" (ibid).



Figure 10. Anti-development protestors of Kalama Valley ca. 1970-1971 (source: www.kaainamomona.org).

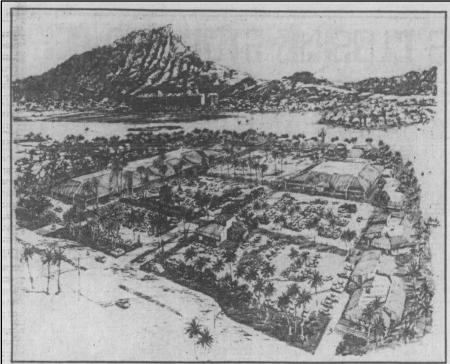
In 1979, Honolulu City Council approved "a high-density residential project in Hawaii Kai" against the objections of the local community (ibid:156). Around that time, wealthier *haoles* (foreigners) living on the mainland began funding the urban development spreading across O'ahu's southern coast in places like nearby Kahala, located 7 miles to the west of the project area.

As with Hawai'i Kai, another powerful person was involved with the development of Kalama Valley. William H. Heen who served as deputy attorney for Honolulu County and Deputy Attorney General for the Territory of Hawai'i headed the developers of the Kalama Land Company (Cooper and Daws 1985). Despite the political unrest and activism within neighboring Kalama Valley, from 1970 to 1975, fifty percent of the leased lots were owned by Bishop Estate (Cooper and Daws). In the 1980s, Guy Nakamoto of Hawai'i's Thousand Friends group in concert with Life of the Land and the Sierra Club Legal Defense Fund sued polluters in Windward Kailua and Hawai'i Kai (Mast and Mast 1996). In 1983, a ruling by Judge Ronald B Greig regarding land in Kamiloiki Valley directly *mauka* of the project area, conveyed that many Bishop lessees felt exploited by the large landholders and that the residents of Maunalua and beyond wanted to buy their lots to get out from under their landlords (Cooper and Daws 1985).

THE DEVELOPMENT OF HAWAII KAI AND THE IMMEDIATE PROJECT AREA VICINITY

By the early 1980s, an announcement for a central shopping center was published on August 07, 1980, by the Honolulu Star Bulletin (Figure 11). The article, titled "Work to Start at End of Month on Hawaii Kai Shopping Center" shared project details for a two-plaza shopping center along Maunalua bayfront and on top of the previously dredged and filled Kuapā Fishpond (Honolulu Star-Bulletin 1980). Headed by Kaiser Hawaii Kai Development Co. and Kacor Realty, the 37-acre project area would spread across "two separate parcels on either side of the Keahole Bridge on Keahole Street," with the first phase developing "10 acres and 150,000 square feet of retail and office space" (plaza located northeast of project area). The shopping center, originally named the "Kuapā Kai Center" intended to house "a Safeway Supermarket and a Payless Drugstore, several smaller shops, fast-food outlets, a hardware store, office space and a medical clinic." The second phase, encompassing "27 acres across the canal from the first phase" planned to house "two anchor department stores, . . . smaller retail shops, a movie theater, parking and restaurants" with a

handful of businesses along the "waterfront around the perimeter" (direct plaza of project area). Kaiser Hawaii Kai Development Co. and Kacor Realty planned to complete construction by 1983 with an end total of "500,000 square feet of commercial and retail space" (ibid).



SOON TO BEGIN—Site work will begin by the end of the month on a new shopping center for Hawaii Kai

Work to Start at End of Month on Hawaii Kai Shopping Center

Hawaii Kai will have another shopping center next year.

Kaiser Hawaii Kai Development Kaiser Hawaii Kai Development Co. (Kacor Realty) plans to begin construction by the end of this month on the first phase of a two-phase complex to be known as Kuapa Kai Center, the whole to be completed by 1983 at a cost of \$35 million to \$50 million.

It will cover a total of 37 acres on wo separate parcels on either side f the Keahole Bridge on Keahole

The first phase, which will cover 10 acres and include 150,000 square feet of retail and office space, is scheduled to be finished by next summer. It will have a Safeway Supermarket and a Payless Drugstore, several smaller shops, fastfood outlets, a hardware store, office space and a medical clinic.

Leasing has just begun and Kacor is negotiating with businesses and with a medical group that plans to operate the clinic.

The second part of the project — the larger part — will be built on 27 acres across the canal from the first phase, and will include two anchor department stores, and smaller retail shops, a movie theater, parking

and restaurants. Some businesses will be on the waterfront around the perimeter.

The project will be financed internally and will be completed in conjunction with nine office buildings that will surround the center. Three of them will be included in Phase One, six in Phase Two.

PLANS FOR THE second phase are still not firm and the timetable for construction depends on a com-mitment from two major (unnamed) department stores for the anchor spaces, according to Charles Coupe, vice president for Kacor Realty.

"If we're able to obtain the anchors," he said, "we're figuring on a completion date around 1983. But if the anchors can't commit them-selves to opening another branch, it might be longer."

Whenever it's finished, the com-pleted complex will contain about 500,000 square feet of commercial and retail space

and retail space.

Coupe said the company believes there is definitely a demand for additional shopping outlets in Hawaii Kai. "From what we can tell there is a demand there," he said.

And although the new complex will mean competition for Koko Marina

Shopping Center a short distance away, Coupe thinks the older center will benefit from the added facilities because people in the Hawaii Kai area will have more incentive to do their shopping locally.

Koko Marina will get the spinoff,

he said.

"THERE HAS BEEN a tremendous retail sales leakage to Kahala Mall, Ala Moana, and along the corridor," Coupe said. ("The corri-dor" refers to Kalanianaole High-

corridor," Coupe said. ("The corridor", refers to Kalanianaole Highway between Hawaii Kai and Honolulu's urban center. Although Kahala Mall is the closest major shopping mall, the smaller Aina Haina and Niu Valley shopping centers attract business along the corridor also.)

Coupe pointed out that if people have to drive to Honolulu to make major purchases, such as clothing and shoes, they are inclined to pick up small sundry items on the same trip rather than make an extra stop at their neighborhood store.

With major stores anchoring the second phase of Kuapa Kai, there's a better chance people won't bother to drive to the city, he said, "and there's more chance of spinoff. People will go comparison shopping at both (Kuapa Kai and Koko Marina) centers."

Figure 11. Newspaper Announcement, "Work to Start at End of Month on Hawaii Kai Shopping Center" (source: Honolulu Star Bulletin).

Per the Honolulu Star Bulletin, construction of the Kuapā Kai Center primarily sought to increase commercial market retail in the Maunalua area, with an emphasis on redirecting sales and revenue from the "corridor," defined as the length of "Kalanianaole Highway between Hawaii Kai and Honolulu's urban center." Speaking to the economic motives and reasoning for developing the Maunalua area for the center, Kacor Realty Vice President Charles Coupe emphasized, "There has been a tremendous retail sales leakage to Kahala Mall, Ala Moana, and along the corridor", noting that "if people have to drive to Honolulu to make major purchases, such as clothing and shoes, they are inclined to pick small sundry items on the same trip rather than make an extra stop at their neighborhood store." The Honolulu Star Bulletin underscores the one-dimensional answer given by the Vice President for the shopping center, noting: "Coupe said the company believes there is definitely a demand for additional shopping outlets in Hawaii Kai. 'From what we can tell there is a demand there,' he said." However, no further reasons or insight is given to characterize or contextualize who is driving the demand and who is against.

Following the completion of the Kuapā Kai Center in 1983, a conversation with the project architect David Stringer was published by the Honolulu Star Bulletin on May 26, 1983 (Figure 12). Speaking to the community reception of the shopping center, Stringer remarked, "the Kuapa Kai Center, at one time, was like Rodney Dangerfield—'It couldn't get any respect'" (Jerry Tune 1983). The article noted pushback from Maunalua residents, citing concerns of "congestion, pollution, and incompatibility with the community." In order to gain respect, Stringer shared the lengths his team took to design a complex that sought to center the community and serve as a "village center". He shared:

To gain this respect, the design of the center had to overcome a number of obstacles. First, the negative image of a neighborhood shopping center typically composed of two large warehouse-type market and drugstores connected by a string of bland, glass shop fronts. In addition to the normal planning concerns, this unique parcel had the majority of its waterfront perimeter facing high-priced residential projects. And unlike other neighborhood shopping centers, it is fronted on only one street. . . One of the major obstacles in creating a subtle village concept was suppressing the desire of the major tenants and national fast-food operators for massive exposure through large buildings and excessive signing.

To mitigate the presence of large businesses and integrate with the community, the article noted "the architect used low-profile restaurants, offices, and an unusual fast-food pavilion to interface with the surrounding community," employing undulating roof forms to give "the general appearance of a 'village' center." Stringer cited the cooperative efforts of Safeway and Longs to comply with the village feel vision, sharing, "we were able to meld their roof forms into a scale complementary to the smaller shops and the surrounding residential neighborhood." Speaking to the design highlights of the project, Stringer shared, overall "the most pleasing aspect of the center is the absence of over excessive commercialization" (ibid).

Addressing the legacy of the forced evictions of Kalama Valley for real estate and the commercial development of Maunalua, Kanaka 'Ōiwi scholar N. Ha'alilio Solomon states, "Hawaii Kai is but one example of. . . disruption of islandscape" (Solomon 2023:187). Solomon emphasizes the long-term effects of non-local influences of building and development specific to Maunalua and Hawaii Kai. He writes, "The impact of. . . urbanization in Hawaii Kai constitutes the most severe, most visible, and most lasting transformation that undermines traditional practices of resource access, sustainability, and food production". He continues, stating "The local ecology has been permanently impacted by the incessant development of real estate and retail space presumed by the colonial logics of urbanization and subdivision. The area's marina houses yachts and fishing boats, [are now] indicative of Hawaii Kai" (Soloman 187). Per Soloman, "Residential neighborhoods now obstruct most views of the nearby shore and lake, as well as access to them. . . Together, all of these factors have degraded Maunalua in its Hawaiian sense of place, grossly repurposing it to suit the demands of Americanism" (Solomon 188).

A series of historic aerial photographs taken between 1952 and 1993 reproduced as (Figure 13) below, shows the steady progress of the development. Through dredging activities, spoil materials were used as fill along the marshy perimeters of the fishpond in order to create the planned commercial and residential development of Hawai'i Kai. Additionally, former ranch lands surrounding the pond were also graded and developed. Between 1963 and 1978, the current project area and surrounding embankment were graded, the highway realigned, and fill was used to expand the peninsula. During this time additional land area was added around the former seawall to form a small island, which was then developed as the Hawai'i Kai Towne Center shopping complex in the 1980s. And by 1991 the current project area was developed as the restaurant building and parking area. The project area was most recently developed for use as a restaurant in 1991 and remained so until its last occupant closed for business in 2023.

Quality Design Secret to Success

Kuapa Kai Center Wins Respect

By Jerry Tune Star-Bulletin Writer

Architect David Stringer says the Kuapa Kai Center, at one time, was like Rodney Danger-field — "It couldn't get any re-

time, was like Rodney Dangerfield — "It couldn't get any respect."

Four years ago at a community meeting, then Mayor! Frank F. Fasi stood on top of a table at Katser High School and counted community noses. All those opposed to the center on one side of the room and all those for the center on the other. Stringer said fortunately for everyone the positive voices prevailed. "Today the Kuapa Kai Center despite many of the original fears of congestion, pollution, and incompatibility with the community — stands as an object of community pride." Stringer said. To gain this respect, the design of the center had to overcome a number of obstacles. First, the negative image of a neighborhood shopping center typically composed of two large warehouse type market and drugstores connected by a string of bland, glass shop fronts.

"In addition to the normal planning concerns, this unique parcel had the majority of its waterfront perimeter facing high-priced residential projects. And unlike other neighborhood shopping centers, it is fronted on only one street."

STRINGER and his associates attempted to turn the negatives

STRINGER and his associates attempted to turn the negatives

attempted to turn the negatives into positives.

Rather than placing the large market and drugstore on the waterfront, the architect used low-profile restaurants, offices and an unusual fast-food pavilion to interface, with the arrangement. to interface with the surrounding

community.

Undulating roof forms gave the general appearance of a "village"

center.
"One of the major obstacles in creating a subtle village concept was suppressing the desire of the major tenants and national fast-



GAINING TENANTS-The center is 80 percent leased. Shop fronts are shown in Craig T. Kojima's photo, below.



ity center could only enhance the entire Hawaii Kai development," Stringer said. "To enhance the pedestrian circulation system throughout the site, the pedes-trian was given priority over the

of parking courts separated by wide pedestrian promenades. "There are also plans for a pedestrian link to a future com-

Turn to Page B-7, Col. 1

Quality Design Wins Kuapa Kai Respect

Continued from Page B-1

munity center directly across the marina

Stringer said that the most pleasing aspect of the center is the absence of overexcessive commercialization.

"THIS WAS avoided by tasteful "THIS WAS avoided by fasterui signing on the part of the majors (Safeway and Longs) and Kacor's insistence on unique sculptured storefronts with the generous use of colorful woods and unique graphics."
Stringer's firm, having designed

ore than 30 neighborhood and regional centers throughout the country, believes that the Kuapa Kai Center represents their most successful effort in melding a commercial entity to a residential neighborhood. Charles Coupe, vice president

at Kacor, said the corporation definitely wanted to "control the quality" at the shopping center and that is what led to the design innovations.

innovations.
"It was a gamble to put the fast-food restaurants in the back but they (Pizza Hut and Diner's) are both doing well," Coupe said.
Rents are a little higher at the Kaupa Kai Center but this is due not only to the higher quality of construction but also to the fact that the center started on filled land, which made the base more expensive to develon.

Approximately 60 percent of the perimeter of the center is on the waterfront. The nine acres of land include 100,000 square feet of mixed-use office space and shops with a 40,000-square-foot Safeway and a 20,000-square-foot

Figure 12. 1983 newspaper Announcement, (source: Honolulu Star Bulletin).

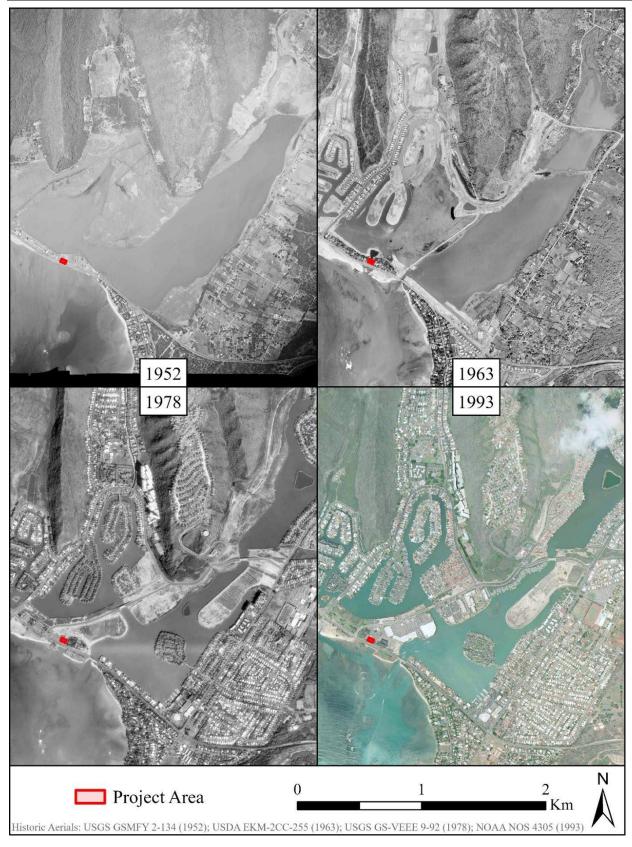


Figure 13. Comparison of aerial and satellite images showing the development of Hawai'i Kai.

PREVIOUS ARCHAEOLOGICAL AND CULTURAL STUDIES

At least sixteen archaeological studies have been completed in the general vicinity of the current project, one of which, a literature review and field inspection, was conducted within the current project area. These studies, which include archaeological inventory surveys, archaeological assessments, literature reviews, archaeological monitoring, burial/coroners' reports, and field inspections, are summarized below and presented in relation to the current project in Figure 14. All State Inventory of Historic Places site numbers (SIHPs) in the following section are prefixed by 50-80-15.

The earliest published descriptions of archaeological sites near the current project area were presented by McAllister (1933) in his landmark study, *Archaeology of Oahu*. McAllister's work formed the basis of a 1962 publication called *Sites of Oahu* (Sterling and Summers 1962) which revised and expanded McAllister's (1933) work. This compilation of data from published and unpublished sources as well as informant testimony was later augmented and reprinted under the same title by Sterling and Summers (1978). The initial survey conducted by McAllister generally focused on sites that were readily visible on the surface, such as *heiau* platforms, stone mounds, caves, ditches, ponds, and unusual looking stones. The smaller and less dramatic sites and buried resources were for the most part overlooked in the early studies on the coastal plain. Instead of being based on excavated features and analyses of excavated materials, McAllister described the sites and features in terms of ethnographic accounts that he and Thomas Thrum had collected from people familiar with local history in the *Hawaiian Almanac and Annual*, particularly Thrum's list of *heiau*. The oral traditions recall interesting information about chiefs, priests, fishing and cultivation practices, deities, myths, rituals, and site functions.

McAllister (1933) mentions three sites (Sites 47, 48, and 49) in the immediate vicinity of the current project area, with many more just inland and further along the coast. McAllister (1933:68–69) writes:

Site 47 (SIHP -00047), Fishing Shrine (*koʻa*) known as Huanui: Located approximately 400 meters north of the project area, Huanui is described as an exact duplicate of Site 48, though was slightly larger. The shrine was used to attract mullet (McAllister 1933:68).

Site 48 (SIHP -00047), Fishing Shrine (ko'a) known as Hina: Located approximately 800 meters southeast of the current project area, "The shrine is roughly square in shape with the corners rounded, and measures 16.5 feet across. It is formed by coral walls 1 foot high. . . inside the walls is a paving of small bits of coral and sand. . . facing the sea is an entrance 2.5 feet wide [and] just within the entrance are six sharp lava stones forming an oval about 1 foot wide and 1.5 feet long. It was here the offering of fish was placed. . ."

Site 49 (SIHP -00049), Keahupua-o-Maunalua fishpond: This pond covered over 520 acres in 1851, and by 1921 contained 300 acres of open water and 125 acres of marshlands, the remnants of which comprise the Hawai'i Kai Marina and waterways. The Hawai'i Kai Towne Center is constructed upon fill materials placed upon portions of the original fishpond wall and interior. The old wall of the pond was built upon a 10- to fifteen-foot-wide natural sand embankment with lava and coral stones stretching approximately 5,000 feet, and notably paralleled the Honolulu side of the shoreline for some distance – which at the time of recordation was believed to provide access to the freshwater spring for boats and ships outside the pond wall.

With the advent of cultural resource management (CRM) in the 1970s in response to stricter historic preservation laws and increased modern development, archaeologists started to record less noticeable surface sites and to test for subsurface deposits across Oʻahu. Several CRM projects have been conducted in the vicinity of the current project area. The findings of these previous studies, which are important to generating predictive models of the number and type of archaeological features that may be encountered within the current project, are presented below.

During an Archaeological Reconnaissance Survey conducted *mauka* of the fishpond, just over one kilometer northeast of the current project area (Price-Beggerly and McNeil 1985), a total of eleven archaeological sites were recorded. One site (SIHP -02906) was an abandoned and collapsed historic habitation. The remaining sites were traditional Hawaiian habitation-related sites including a terraced platform (SIHP -02900), terraces previously recorded by McAllister (1933) (SIHP -00042), caves and natural cavities (-02901, -02902, -02905, -02907, -02908, -02909, and -02910), a wall and platform (SIHP -02903), and a standalone platform (SIHP -02904).

Archaeological monitoring was conducted approximately two kilometers east of the current project during trenching associated with a sewer expansion in the Hawai'i Kai Job Corps Center (Kennedy 1987). As a result of monitoring, no archaeological features or deposits were encountered as landfill materials had disturbed, displaced, or deeply buried any extant cultural deposits.

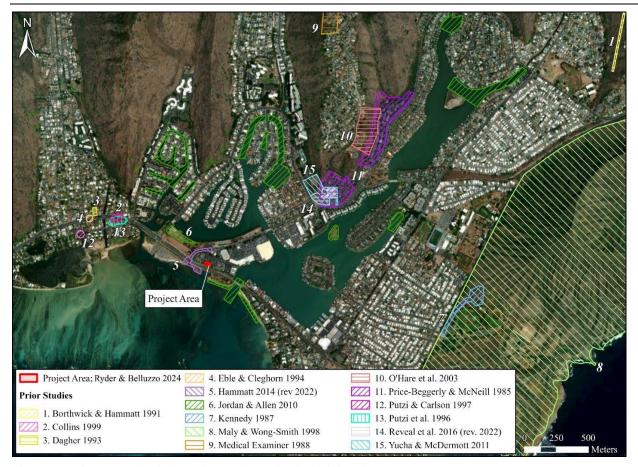


Figure 14. Prior archaeological studies conducted in the vicinity of the APE.

Partial skeletal remains were recovered by two young hikers along Mariner's Ridge in 1988 and taken to the local fire station, and as such, cannot be attributed to a specific location on the ridge (Annino 1988). Analysis revealed that the remains likely belonged to multiple individuals based on size and condition of teeth recovered, though no temporal affiliation was attributed to the remains.

An Archaeological Inventory Survey was conducted in support of a proposed electrical transmission line along Kamehame Ridge approximately 3.5 kilometers northeast of the current project area (Borthwick and Hammatt 1991). As a result of the survey, no archaeological sites were encountered or recorded.

Between 700- and 1000-meters northwest of the current project area, a series of human skeletal remains were inadvertently discovered and subsequently documented across at least four reports during construction efforts associated with the Kalaniana ole Highway Widening Project (Dagher 1993; Eblé and Cleghorn 1994; Putzi et al. 1996; Putzi and Carlson 1997). While only twelve burials are detailed in the reports (Burials No. 1, 2, 6-10, and 24-29), at least twenty-nine burials from both the pre- and post-contact eras total were identified throughout the course of construction efforts. All of the burials were recovered from a Jaucas sand deposit located immediately *mauka* of Paiko Lagoon and were granted SIHP -04841, the Bay Street Cemetery.

Approximately 150 meters southwest of the cemetery (SIHP -04841), and one kilometer west of the current project area, additional skeletal remains were encountered during redevelopment of the Kuliouou Gedatsu Church (Collins 1999). Encountered thirty to fifty centimeters below surface within a Jaucas sand deposit, the remains were inferred to be from the historic era and were granted SIHP -05774.

In 1998, Kumu Pono Associates conducted historical documentary research for City & County owned lands at Koko Head Regional Park, about two kilometers west of the current project area (Maly and Wong-Smith 1998). While no new archaeological study was completed, previous work by McAllister (1933) within the study area is summarized, and settlement patterns and *mo'olelo* explained. No surface archaeology was affected by the proposed park project, though due to the cultural importance of much of the Maunalua coast it was recommended that further oral historical data was collected and shared through a "friends of the park" association.

An Archaeological Assessment was conducted along lower Kaluanui Ridge in support of a rockfall mitigation project (O'Hare et al. 2003) approximately 1.5 kilometers northeast of the current project area. While no new archaeological sites were recorded, Hāwea Heiau (originally recorded by McAllister [1933] [SIHP-00042), as well as sites recorded by Price-Beggerly & McNeill 1985 (SIHP -02900 through -02911) were relocated along the edge of the project area.

Another Archaeological Assessment and Section 106 Review was undertaken across various locations within the Hawai'i Kai Marina and Channel for maintenance dredging, reaching within 100 meters of the current project area (Jorden and Allen 2010). While no new archaeological sites were identified, dredging activities would be conducted within Loko Keahupua-o-Maunalua (SIHP -00049), and therefore archaeological monitoring including the inspection of all dredged spoils was recommended.

An additional Archaeological Inventory Survey was conducted approximated one kilometer northeast of the current project area (Yucha and McDermott 2011), during which no new sites were identified, though SIHP -00043 (first recorded by McAllister [1933]) and SIHP -02900 (first recorded by Price-Beggerly & McNeill 1985) were relocated within the project area. Subsequently, Archaeological Monitoring was conducted within a portion of the same project area in 2016 (Reveal et al. 2016). While ground disturbing activities were conducted exclusively within thick deposits of fill materials, one new archaeological site (SIHP -07928) consisting of a historic era stacked basalt cesspool with piping and a concrete cap was identified within the northwest corner of the project area.

The most proximal prior archaeological study to the current project area consists of Archaeological Monitoring conducted in support of trenching and drilling activities associated with wastewater improvements as close as 40 meters to the southwest of current project area (Hammatt 2014). Stratigraphic deposits generally consisted of imported landscaping topsoil overlaying a thick crushed coral fill associated with land reclamation efforts in Kuapā (Keahupua-o-Maunalua) Fishpond conducted in the 1940s, all of which overlies a natural marine sand. It was concluded that prior to reclamation efforts, the entirety of the project area was completely submerged.

In 2024, in support of the current project, ASM conducted a literature review and field inspection of the current project area (Ryder and Belluzzo 2024). No historic properties were identified within the project area, however, due to the proximity of Keahupua-o-Maunalua fishpond (SIHP -00049) and the project location atop a previous alignment of Kalaniana'ole Highway, archaeological monitoring for identification purposes was recommended during all ground-disturbing activities associated with the current project.

3. CONSULTATION

The process of identifying and assessing the proposed project's potential impacts on traditional cultural properties, practices, and beliefs associated with the project area and vicinity depends on input from former and current community members. Particularly, consultation with those who reside near the project area and/or have familial, genealogical, or cultural ties to the location. Such individuals ascribe meaning and significance to traditional cultural resources and practices based on their 'ike (knowledge and understanding) and sense of place, which are largely absent from the archaeological and historical record. To that end, ASM conducted talk-story oral interviews to gather contributors' 'ike and mana'o (beliefs and opinions) to inform the preparation of the current document.

As stated in the OEQC (1997) Guidelines for Assessing Cultural Impacts, the goal of the oral interview process is to identify potential cultural resources, practices, and beliefs associated with the proposed project area. It is the present authors' further contention that oral interviews augment the process of assessing the significance of any identified traditional cultural properties or practices. Thus, it is the researcher's responsibility to use the 'ike of the interviewees to identify and describe potential cultural impacts and propose appropriate mitigative actions, as necessary. This chapter begins with a description of efforts undertaken to identify persons believed to have knowledge of the current project area and vicinity, followed by the interview methodology. Lastly, interview summaries that have been reviewed and approved by the consulted parties are presented.

To identify individuals knowledgeable about traditional cultural properties and practices (both past and ongoing) associated with the current project area and the wider vicinity, ASM submitted a public notice to *Ka Wai Ola* for publication on January 29, 2024. *Ka Wai Ola* is a monthly publication with state-wide readership issued by the Office of Hawaiian Affairs. This notice was published in the March 2024 edition of *Ka Wai Ola* and contained (a) locational information about the project area; (b) a description of the proposed project; and (c) contact information for participation in the consultation process as part of the preparation of the current document. The public notice is included as Appendix A of this report. However, there were no responses to the public notice.

Additionally, ASM staff identified and contacted twenty-three individuals/organizations (Table 1) via phone and email who were long-time residents of Hawai'i Kai and/or the broader Maunalua area and thought to have knowledge of both traditional cultural properties and/or past and ongoing practices associated with the project area and its environs. In some instances, individuals who declined their participation referred other potential contributors to ASM. ASM provided each of the persons/organizations contacted with a consultation packet that contained maps of the project area and a brief description of the proposed project. Proposed plans for the project were not included as they were not available until several months later. Of the twenty-three people contacted, six agreed to be interviewed for this study: Malia Lum-Kawaihoa Marquez, Ann Marie Nālani Kirk, Lo Kaimuloa, Chris Cramer, Angela Correa-Pei, and Elizabeth Reilly.

Table 1. Persons/organizations contacted for consultation.

Name	Organization/Affiliation	Contact Date(s)	Results
Angela Correa-Pei	Kupaʻāina o Kuliʻouʻou	May 24, 2024	Interviewed August 21, 2024, pending approval
Ann Marie Nālani	Maunalua Bay Recreation	August 8, 2024	Interviewed August 28, 2024
Kirk	Advisory Committee (M-RAC),		
	Member; Founder, Kokua		
	Needed, maunalua.net		
Chris Cramer	ED Maunalua Fishpond	August 7, 2024	Email response August 13, 2024
	Heritage Center		
Elizabeth Reilly	Hawaii Kai Neighborhood	August 8, 2024	Email response
	Board No.1, Subdistrict 10,		November 4, 2024
	Board Member		
Friends of Maunalua	Organization	August 5, 2024	No response
Bay			
Hawaiian Civic Club	Organization	August 2, 2024	No response
of Honolulu			
Herb Schreiner	Hawaii Kai Neighborhood	August 8, 2024	Declined
	Board No.1, Subdistrict 10,		

Table 1 continues on next page

Name	Organization/Affiliation	Contact Date(s)	Results
Iwalani Ah Quinn	Resident of Maunalua	August 26, 2024	No response.
Hui Nalu Canoe Club	Organization	August 5, 2024	No response.
Luka Zavas	Livable Hawaii Kai Hui	August 6, 2024	Declined and referred Kaleo Paik
Jeannine Johnson	Hawaii Kai Neighborhood Board No.1, Subdistrict 10, Board Member	August 8, 2024	Declined and referred Iwalani Ah Quinn
Kaleo Paik	Cultural Advisor to Livable Hawaii Kai Hui Foundation	August 6, 2024	No response.
Kamakana Ferreira	Lead Compliance Specialist, Office of Hawaiian Affairs	August 23, 2024	No response.
Kekoa and Kaumaka Wong	Hawaii Kai Neighborhood Board No.1, Subdistrict 10, Board Member	August 8, 2024	No response.
Kimo Franklin	Farmer and Resident of Maunalua	October 10, 2024	No response.
Kūʻikeokalani Kamakea-ʻŌhelo	Office of Hawaiian Affairs, and local fisherman	August 5, 2024	No response.
Linda Krieger	Maunalua Bay Recreation Advisory Committee (M-RAC) Member (Surfing)	August 5, 2024	No response.
Lo Kaimuloa	Hawaii Kai Neighborhood Board No.1, Subdistrict 10, Board Member	August 8, 2024	Interviewed August 20, 2024
Makani Christensen	Maunalua Bay Recreation Advisory Committee (M-RAC) Member (Fishing)	August 5, 2024	No response.
Malia Lum-Kawaihoa Marquez	Hawaii Kai Neighborhood Board No.1, Subdistrict 10, Board Member	August 8, 2024	Interviewed September 26, 2024
Mary-Lindsey Kalikolani Correa	Kupaʻāina o Kuliʻouʻou	May 24, 2024	No response.
Roberta Mayor	Hawaii Kai Neighborhood Board No.1, Subdistrict 10, Chair	August 2, 2024	Declined interview, referred Jeannine Johnson, Malia Marquez, Ann Marie Kirk, Chris Cramer, Lo Kaimuloa, Kekoa and Kaumaka Wong, and Elizabeth Reilly.
Waipa Parker	Kupaʻāina o Kuliʻouʻou	May 24, 2024	No response.

 $end\ of\ table$

INTERVIEW METHODOLOGY AND SUMMARIES

Prior to the interviews, ASM staff provided information about the nature and location of the proposed project and informed the potential interviewees about the CIA preparation process. ASM made it clear to all potential interviewees that their cooperation was completely voluntary and that they had the option to review their interview summaries prior to inclusion in this report. With their consent, ASM staff conducted informal talk-story interviews that touched upon the interviewees' biographical information, background, and their association with the project area and vicinity. ASM staff asked questions about their knowledge of the project area and vicinity including land use history, stories, and legends. Interviewees were also asked if they knew of the presence of any traditional cultural properties and past or ongoing cultural practices within the project area and vicinity.

ASM staff also invited informants to identify potential impact(s), if any, that may result from the proposed redevelopment project and the construction of a new bank building. When applicable, interviewees were encouraged to offer reasonable strategies to mitigate such impacts. ASM staff conducted interviews either in person or via phone, as well as via email correspondence. The results of the consultation exchanges are summarized below. Interviews that are pending review and approval by the consulted parties are not included and will be added to the final version of this document.

Lo Kaimuloa

On August 20, 2024, ASM Archaeologist Keely Toledo conducted an interview by phone with Lo Kaimuloa, a resident of Maunalua. While Ms. Kaimuloa indicated that she was not Native Hawaiian, she shared that her family is. She underscored how often the labor of advocating for Native Hawaiian and local community concerns consistently and directly falls on Native Hawaiians. She expressed concern on how time-consuming it is for community voices and advocates to respond and comment on commercial developmental plans, particularly when such plans change frequently and with little to no notice to the community.

As the conversation progressed, Ms. Kaimuloa shared more about her background, memories, and ties to Hawai'i Kai. She has lived in the area her whole life, as did her parents and grandparents. When Ms. Kaimuloa's family moved to Portlock Road (located to the southeast of the project area and situated near the bayfront) they were not allowed to construct any buildings more than a single story tall. Such a restriction on building height was intended to protect accessibility to the bay and ensure the viewshed was uninterrupted for all those who lived in the area. She also stated that development of the Hawai'i Kai area only hurts the land with repeated and frequent projects, noting "We don't need any more offices."

When asked about her understanding of the proposed BOH Redevelopment Project, Ms. Kaimuloa stated that BOH planned to take over the existing space and "doll it all up". She had initially heard that the proposed changes would be limited to the redevelopment of the existing building and infrastructure. However, she also shared that she heard developers had changed the initial plan and wanted to address the possibility of a second-floor addition. In a follow-up email, Ms. Kaimuloa clarified that, "the Bank of Hawaii relocation project would be great if they stick to the structure that is existing and no additional office space."

When asked about the potential cultural impacts of the proposed BOH Redevelopment Project, Ms. Kaimuloa shared that her *kupuna's* final resting place is in Maunalua Bay and that the bay gives her and her family a sense of comfort. She emphasized her children and grandchildren will not have a view of the bay if the building height increases. She is also concerned that the addition of a second story will result in the winds being blocked and that "the rain won't fall the same way." She cited the Bank of Hawaii at the Koko Marina Center as an example, stating that Hawai'i Kai had no need for another bank location.

Ms. Kaimuloa shared that she and her community "are holding tight, so tight, to everything we have fought so hard for." And that she thinks BOH should pause and reflect on the project. She opined that if BOH claims they support Hawai'i, then they should respect the concerns and desires of the community. Ms. Kaimuloa asked for BOH to "please mālama what we have; don't start destruction; keep Hawai'i, Hawai'i." By this she meant that she would like BOH to preserve, protect, and take care of (mālama) Maunalua Bay and preserve the rich history of fishing in the area. At the end of the conversation, Ms. Kaimuloa recommended ASM speak to Ms. Ann Marie Kirk for more information and insight regarding the Maunalua area.

Ann Marie Nālani Kirk

On August 28, 2024, ASM Archaeologist Keely Toledo interviewed via video chat Ms. Ann Marie Nālani Kirk, a Native Hawaiian activist and filmmaker from Maunalua. Ms. Kirk has lived in the Maunalua area for the past 50 years, and has been involved with community work for a number of decades. She seeks to preserve and protect the cultural landscape of Maunalua by sharing *moʻolelo* (stories) to inform her community and future generations.

Throughout the conversation, Ms. Kirk highlighted the cultural significance of referring to the project area as Maunalua, as opposed to using the development name, Hawai'i Kai. Noting that the use of the development name erases the genealogy of the 'Āina and leads to a disconnection of people to the land, its history, and *mana* (power). Ms. Kirk also highlighted the importance of preserving open spaces and respecting the cultural *mo'olelo* associated with the area, including the significance of the former fishing shacks and the Loko I'a (fishpond) of Maunalua. Like Lo Kaimuloa before her, Ms. Kirk mentioned *kupuna* (elder) Joseph "Joe" Lukela, who was the last *konohiki* of the area whom the Joe Lukela Beach Park (located southeast of the project area) was named after in remembrance.

When asked about the BOH Redevelopment Project, Ms. Kirk expressed her disappointment upon learning that the BOH is considering adding a second story to the building, sharing that a second floor would block the viewshed and window into the *mauka* lands where cultural sites are located, and would also obstruct the winds from the Hanauma side (southeast of project area) and create a "concrete canyon" effect.

Ms. Kirk also noted that the proposed project area sits in a complex with other two- and three-story buildings. Specifically, The Original Roy's in Hawai'i Kai Asian Fusion Restaurant & Extra Space Storage building, remarking they have already changed the atmosphere of Maunalua due to their height. She expressed that the addition of another floor with constant lights would impact Maunalua Bay with light pollution, which she shared, needs to "sleep" at night. She also discussed the community's efforts to preserve open spaces and the view plane from the bayfront, citing a previous movement to prevent development on the Great Lawn area, located directly to the northwest of the project area.

At the end of our conversation, Ms. Kirk shared her hesitation in participating in such interviews due to past experiences where community input and *mo'olelo* were misused or disregarded by archaeological groups and developers. She expressed concern that the community's stories and perspectives may be used against them or reduced to footnotes in development plans.

Malia Lum-Kawaihoa Marquez

On September 26, 2024, ASM Archaeologist Keely Toledo conducted a video-chat interview with Ms. Malia Lum-Kawaihoa Marquez. Born and raised in Maunalua, Oʻahu, Ms. Marquez has witnessed the dramatic commercial and residential development of Maunalua over the last 50 years.

When asked if she was familiar with any past or ongoing cultural practices, Ms. Marquez shared her knowledge regarding the history of Maunalua, largely known by its suburban development name, Hawai'i Kai. She noted that Maunalua was home to a 523-acre fishpond named Keahupua-o-Maunalua, also known as Kuapā Fishpond, and the largest Kānaka 'Ōiwi (Native Hawaiian) fishpond on Oʻahu and within Oceania. She shared that Keahupua-o-Maunalua served as both the structural and cultural foundation for fish cultivation and traditional resource management that is central to Kānaka 'Ōiwi food systems and culture. She also shared that Keahupua-o-Maunalua brings a historical and cultural "richness" that is unique to the Maunalua area, in contrast to a richness determined by real-estate ownership and affluence that is strongly associated with present-day Hawai'i Kai.

On the topic of Hawai'i Kai, Ms. Marquez emphasized that the planned suburb is physically built over Maunalua, and explained how Henry J. Kaiser used dredging to form man-made islands to build houses within and over Kuapā fishpond in the 1960s and early 1970s. She recalled the strength of the Hawaiian Renaissance and local Kānaka 'Ōiwi communities, noting the joint fight and opposition to the Hawai'i Kai development that led many to find refuge in Kalama Valley. Ms. Marquez shared her personal ties to the forced evictions of Kalama Valley, noting that her exhusband's 'ohana' were one of the last pig farmers and sheet metal workers to be forcibly removed.

When asked how Maunalua has changed over her lifetime, Ms. Marquez shared her experience and insight of community dynamics as a born and raised resident of Maunalua. She noted that even though many families came from different ethnic backgrounds—such as Japanese, Chinese, Filipino—they all knew how to get along based on their shared experience of living and growing up in Maunalua. Ms. Marquez also noted that many of the families and their descendants all had a collective respect for one another and Hawai'i, due in part to their shared history of immigrating to the Hawaiian Kingdom and then choosing to remain and have families following the illegal overthrow of the monarchy. In speaking about the present community members and residents of Maunalua, Ms. Marquez shared that the people who have recently flown in and moved to the area "don't understand us." She emphasized, they "want to bring what they have over there [the continental United States], over here [Hawai'i] and change how over here is."

When asked to clarify the difference in attitudes between those who have lived in Maunalua for generations versus those who moved to the area only recently, Ms. Marquez shared that Americans who move to Hawai'i come with a sense of entitlement. She stated, "If you're going to come over here, you need to learn and adapt and understand that you are going to be [in] something as sacred as Maunalua." She further contextualized the ways that entitlement is present in the current Hawai'i Kai community, stating "It's a different taste in your mouth. Some come with open minds, but there are many that have that entitlement. As I get older, you see it in the grocery stores. You see it just walking at night. You see it [with] them calling the police that there's someone brown in the neighborhood. It turn[s] into something that we're not supposed to be. And that's kind of sad, because before we all used to . . . be able to understand this special place."

Ms. Marquez underscored the importance and necessity of listening and honoring local voices when it comes to community decisions and land development, especially against the backdrop of entitled newcomers who further their own agendas based on their own perspective and reasons for development. She asserted, "If you're not from here or brought here generations ago, I think we have a better understanding of this 'aina than people that are recently coming here."

Regarding the history of commercial development, Kānaka 'Ōiwi erasure, and gentrification, Ms. Marquez shared her memories of Maunalua before the Hawai'i Kai Towne Center (formerly known as the Kuapā Kai Center) was constructed in the early 1980s. She described the landscape as "all dirt with no houses, bushes all over" and a place she would play as a young child. She also shared a memory of her mother taking her to the blessing of the Keahole Street Safeway when she was 10 years old, noting that the opening of the grocery store was a huge ordeal for the community. In speaking more about the opening ceremony, Ms. Marquez recalled the effort to educate the community on the proper pronunciation of the newly built Kuapā Kai Center and its ties to Kuapā Fishpond within Maunalua:

I remember they had a blessing. I remember being there. They had the Maile Lei; they had a little untie [as part of the ceremony]. I was so little, but I remember because The Brothers Cazimero were singing and he was teaching the audience what they named the Safeway. It's now Hawai'i Kai Shopping Center, but before that, it was called Kuapā Kai Center. . . nobody could say Kuapā Kai [with the long 'a' sound], they called it Ku-apa Kai. And when they were performing, they were saying the pronunciation of this shopping center is 'Kuapā,' like the fishpond and 'Kai' after. But nobody was willing to say Kuapā Kai, so they axed the whole name about five years later maybe, and they changed it to the Hawai'i Kai Shopping Center, and then Costco is the Hawai'i Kai Towne Center.

Upon conveying her recollection, Ms. Marquez contextualized the significance and long-term impact of the name change from Kuapā Kai to Hawai'i Kai, noting how the replacement and erasure of 'Kuapā' and its association with the land and significant Kānaka 'Ōiwi sites further erases the history and presence of the Hawaiian community in Hawai'i. When asked why such a name change occurred, Ms. Marquez stated, it "might have been because there's no more Kuapā, there is no more fishpond, it is built over. Why would you even name it Kuapā when it's a bunch of outsiders going to a Safeway? So, I think that was part of the changing too. . . changing names benefits gentrification; compared to keeping original place names." In an effort to reclaim Indigenous and Kānaka 'Ōiwi place names, Ms. Marquez has successfully advocated and recently overseen the implementation and installation of the traditional Hawaiian place name 'MAUNALUA' to be added to the Hawai'i Kai welcome sign (Figure 15). She noted the placement of Maunalua beneath Hawai'i Kai on the sign signifies that Hawai'i Kai is built on top of Maunalua, and that the acknowledgement of Maunalua is a giant step in "bringing back the original place name of this 'āina'.



Figure 16. Observing traditional place names, "MAUNALUA" on the welcome sign to East O'ahu.

Recounting a history of erasure and lack of regard for Kānaka 'Ōiwi voices and lived experiences in previous development projects, Ms. Marquez expressed concerns about BOH's efforts to increase density along the Maunalua Bayfront. She asserted that the demolition and construction of a single-story commercial building would obstruct and hinder the visual means to culturally connect with Maunalua as a significant Kānaka 'Ōiwi place, and thus further disrupt Maunalua's cultural landscape. When asked to describe Maunalua's cultural landscape, Ms. Marquez shared that Maunalua means "two mountains" in 'Olelo Hawai'i (the Hawaiian Language)—Mauna is *mountain* and Elua is *two*. Regarding the cultural significance of Maunalua she continued:

They have their own stories. One is named Kohelepelepe (*Koko Head*) and the other one is named Kuamoʻokāne (*Koko Cater*). They have deep-rooted Moʻolelo, or stories of these very famous mountains. Along with these mountains, what makes Maunalua, *Maunalua* is Keahupua-o-Maunalua. Keahupua-o-Maunalua was the name of our fishpond, also known as Kuapā. And that was the home of the 'Anae, the Aholehole. Our fishpond had an intricate system that when the fishes came around, they would come around the island through Diamond Head and come through Maunalua, and it would go so far up into the valley where there was a lava tube and it could take the fish to Kailua. So, what makes Maunalua, *Maunalua*, was our fishes, our fishpond, our mountains, our abundance of sweet potato and thriving sustainability.

Ms. Marquez emphasized her *pilina*—feeling of belonging and connection—to a place deeply rooted within Hawaiian culture, personhood, and identity when she sees the two mountains of Maunalua. She stated, "When you come into Maunalua, as you round the corner, what you should be seeing is our two mountains. You shouldn't be looking to the left [at the project area *mauka* of Kalaniana'ole Highway] saying 'oh wow, that's a big building', your eyes should focus on Maunalua." To further contextualize the significance of *pilina*, Ms. Marquez shared, that when she is on the freeway, "as soon as I hit Kahala and I see my mountains, I know I'm at home, and that's what a true pilina [is]." She further defined the concept thusly, "As Kanaka, that is your pilina to the land, that is you being comforted not by your physical house, it's that feeling of what you've been used to your whole life

When asked to suggest actions to minimize the impact the proposed BOH Redevelopment Project may have on traditional practices and the cultural landscape of Maunalua, Ms. Marquez emphasized the need for Hawaiian material-culture sensitivity. She recommended BOH hire a cultural monitor to be present on-site for all ground disturbing activities and throughout the entirety of the construction process. In earlier email correspondence, Ms. Marquez wrote: "When you start digging, for any construction site I believe there should always be a cultural monitor. Our Maunalua was once the largest fishpond in all of Oceania so there may be items, bones, [and] artifacts there." In addition to the presence of a cultural monitor, Ms. Marquez stressed the importance of respecting and heeding the direction and judgements of the cultural monitor. She shared that oftentimes, archaeological monitors fail to listen and disregard the insight and knowledge of the cultural monitor, which creates a difficult and precarious work environment. Ms. Marquez also advised keeping the proposed construction as simple and low-profile as possible, due in part to limited resources and the effect on *pilina*. She wrote, "I speak from Maunalua, I don't think we need anything tall, anything more. Our cultural resources are so limited already."

In closing, Ms. Marquez shared her experience with community consultations concerning other proposed development projects within Maunalua. She opined that like other companies, BOH will not listen nor incorporate the feedback given due to consultation being treated as a "checkmark" in the review process. She stated,

You know, at the Bank of Hawaii, they're going to do what they're going to do . . . it's sad, but we're kind of used to that kind of development. But at least they could be careful in regard to what we're thinking, and why they need to knock it down and build new. . . they're going to spend millions of dollars for this fancy Bank of Hawaii, and what I don't want is [for] it to look like the three-story building in Kahala. That's already an eyesore, it's too big.

She asserted, "It's like nobody works anymore with ethics... because it used to be very important when you have a business and that you're being ethically pono [correct or balanced] in your practice... I have not seen ethics for the past, I don't know, 30 years. They just check-mark the boxes and keep going on with their day." Recounting the rapid and commercial development of Maunalua over the last 50 years, Ms. Marquez is concerned how Bank of Hawaii will continue to reinforce development that dismisses the cultural needs and desires of Maunalua for convenience and materialism, rather than protecting and ensuring the cultural islandscape of Maunalua for generations to come.

Chris Cramer

On August 13, 2024, ASM Archaeologist Nick Belluzzo communicated via email with Mr. Chris Cramer, cultural advisor for Livable Hawaii Kai Hui and the Founder and Director of the Maunalua Fishpond Heritage Center. Mr. Cramer shared that he is a historian at the Maunalua Fishpond Heritage Center. Although not a *kupuna*, he shared the following: "Loko I'a o Maunalua, which dates to ancient times is of great cultural and historic significance." He continued, "At 523 acres, it was known to be the largest loko i'a in Hawai'i. At one time this vast resource of fish belonged to Maui Mū'a along with the traveling uhu [parrot fishes] of Makapu'u. The great kuapā stretched all the way across Maunalua Bay and was finished by the menehune in one night." In response to how the project would impact cultural resources of the area, Mr. Cramer stated, "Building[s] that would obstruct or diminish the view plane of this ancient corridor should certainly be kept to a minimum."

Elizabeth Reilly

On November 4, ASM Archaeologist Keely Toledo communicated via email correspondence with Ms. Elizabeth Reilly, founder and president of Livable Hawaii Kai Hui, and Vice-Chair of the Hawaii Kai Neighborhood Board (HKNB). Ms. Reilly wrote the following in response to potential cultural impacts of the proposed BOH Redevelopment Project within Maunalua:

It is a busy time of year for us so though this may not make it in time to include in your report I felt compelled to reply as how Maunalua is redeveloped is important to me as a resident, community advocate and certainly within the boundaries of working with other community groups and cultural practitioners.

Note: In March of 2022 we celebrated the signing of the East Honolulu Sustainable Communities Plan (EHSC Plan) at Honolulu Hale with the Mayor. We worked for five years on this with DPP and even pooled our community dollars to hire Townscape to facilitate more community engagement. Just a few months ago our BWS [Board of Water Supply] East Honolulu Watershed Management Plan was finalized which took community, SSFM [engineering firm] and BWS on a six-year journey.

She stated that "the details about how a new structure may look are very important to the Maunalua community.". And continued as follows:

Please be aware that Maunalua is a small town with close relationships. We either bank at Bank of Hawaii (BOH) or have family and friends that do [their banking there] which includes knowing the BOH staff. This is important to share because since BOH's presentation months ago at the Hawaii Kai Neighborhood Board, residents have been talking to one another and to BOH staff. It was clearly stated at the HKNB meeting by BOH that they did not need a second story. They also said they could run the full-service banking within the existing structure. It was the architect that seems to be pushing the second floor and as such, BOH would not speak to that possibility but rather asked the architect to speak to it.

The remainder of Ms. Reilly's email response is reproduced below.

To follow was a rather interesting question and answer from the Board to the architect. The takeaway seems to be the Board and community in attendance felt it was unnecessary to tear-down and build back taller. There are many vacant office spaces and retail shop spaces in Maunalua. Furthermore, adding what will probably be a more industrial looking "urban type building" with 2nd floor is not who we are as a people. We are Maunalua and after many years of wanting our proper place name used, we finally get to take a leap in that direction with now having "Maunalua" on our entrance sign that also reads "Hawaii Kai" (the marketing name used to sell homes). (I should note it was Malia Marquez whom [sic] carried this community vision across the finish line and to her credit got the Hawaii Kai Marina Association to agree to the sign and pay for it.) This is an example of how we, the Maunalua community, achieve community goals... and there are more such success stories.

We are defined by our land and rich Hawaiian history which we have to work extraordinarily hard to bring forth because of the rampant development from the 70's and 80's that did not factor in cultural sites nor natural resources (not blaming, just pointing out from where our vigilant passion comes from). We value the micro details of our cultural and natural resources such as light exposure, breezes, the wind itself and how it carries light rain and gifts back a rainbow, the ability to see our iconic ridge tops, mountains and ocean, our night sky and darkness when the community sleeps.

The area of the new BOH location is across from a very important park renamed by community effort that honors the last konohiki of the area - holder of the old Hawaiian fishing rights -- Joe Lukela Beach Park - It was Ann Marie Kirk and Chris Cramer that carried that community vision across the finish line. A new two-story structure further creates division, separates and blocks the elements of nature and spirit - It is the cumulative effect of such redevelopments that we are vigilantly passionate about and appreciate your time to listen, acknowledge and subsequently act, or not.

At the moment, there is no community benefit to a tear-down and build back with a 2nd story. Adding a coffee shop seems like an afterthought to help provide value to the community. Furthermore, the maps in the EHSC Plan clearly show that area will be badly affected, eventually, by sea-level rise. And then there is the recovery from weather events with tidal surges that flood and close the highway. Thus, when HKNB members were giving the thumbs down to a tear-down and referring to it as a waste, this was part of what some were thinking- no resiliency, no moderation just overindulgence from the architect's approach.

If indeed BOH feels the second level is needed they should come back to the HKNB and share the why and possibly identify community benefits and design details (interior and exterior) that proudly showcases Maunalua culture and unique resources (suggest connecting with Maunalua.net for specific ideas). Might I also share that a building that is tiered AND has an opening through the center might help relieve the feeling and perception of building walls that further disconnect us from our important landscapes and views for physical and spiritual reasons, this also respects the winds of Maunalua which we value.

Angela Correa-Pei

On August 21, 2024, ASM Archaeologist Nick Belluzzo conducted an in-person interview with Ms. Angela Jo Lokalia Correa-Pei. Born and raised in Kuli'ou'ou Valley, O'ahu, Ms. Correa-Pei still resides there with her family who have lived in the valley since 1912. In reflecting on her family's lineage and ties to the area, she shared that her Tūtū Naomi Lokalia Reeves Correa was raised there, as well as her father and his 13 siblings. Ms. Correa-Pei has lived in the area her whole life, only leaving to attend college, and has been back ever since. She noted that she will probably stay there till she passes on.

When asked about her earliest memories of Maunalua, Ms. Correa-Pei shared her childhood memories of playing in mango trees, crabbing at Kuli'ou'ou Beach Park, and hiking and swimming in the mauka streams with her cousins. She described the environment and landscape of her youth, noting that Kuli'ou'ou Beach Park was primarily mud flats, what she believed was due to the Kaiser dredgings in the 1960s. However, she has heard different accounts from various sources about the mudflats, some have said that it was a sandy beach prior to the dredging and others say that the mudflats pre-existed the dredging. Ms. Correa-Pei further shared that in the last six years, there has been an influx of sand that has covered the mudflats of her youth, and the beach park is continuously changing on a week-to-week basis. Speaking to the history of development, Ms. Correa-Pei recalled the project area pre-development, sharing: "when I grew up, you know, this whole area where this development is proposed was just all grass and dirt hills. And my brothers and cousins used to ride their BMX bikes through there. It was just all open space when I grew up until they built Kuapā Isle."

In addition to the changing of the mudflats and beach front, Ms. Correa-Pei has also noticed and observed less limu (seaweed), crabs, and natural resources. She shared that she has noticed less greenery, less cool breezes due to tall buildings, and an increase of development within Kuli'ou'ou Valley. She emphasized the difference in development between now and from when she was a kid. Recalling a memory with her father, Ms. Correa-Pei shared:

[I] grew up going out to Kawaihoa you know, more commonly called China Walls. My dad was taking us out there from when I was young, you know, to boogie board and swim. Fortunately, the coastline of Kawaihoa has stayed relatively the same over the years, at least through my lifetime. Unfortunately, though, the popularity of the area has significantly increased in the last 10 years and that will take a toll on the coastline. People leave their rubbish down there all the time. The surrounding area, the neighborhood, has been relatively the same throughout my lifetime – lots of homes – just larger homes now. But I know in my dad's lifetime, there weren't homes out there, and they'd have to walk to get to the point. My granduncle Charlie Boy Reeves was one of, if not the first, people to paipo board at China Walls. For me, the bay today is relatively the same as it was throughout my youth, when speaking about what is visible, like the channel and channel markers. When I paddled for Hui Nalu in elementary, that part of the ocean

with the channel, the dredged channel and all that, that was already there in my younger years, my elementary years. However, we know that what is not seen, the resources below – the coral reefs, the limu, the fish – those are not relatively the same as my childhood, those resources have been significantly impacted by over-development in the Maunalua area and recreational use of the bay.

When asked if she was familiar with any stories from kūpuna before the construction of the channel within Maunalua, Ms. Correa-Pei shared that she unfortunately did not have a lot of stories specific to the bay prior to the construction of the channel, but shared that her family's good friends, who have lived near Kuli'ou'ou Beach Park for over 100 years, would talk about all the haole koa in the area and how they would create a trail to go from their house down to the ocean sandbar. On the beach, the family would visit their ahu (altar or shrine) and pay respects to the area as the place was where their family members would be placed when they hala (pass on). She shared that the 'ohana ahu is still used to this day. In addition to the ahu, Ms. Correa-Pei noted the beachfront was also used for picking limu and fishing. She recalled memories of her uncle's yard, sharing that he would lay out the fish after a day of fishing, and everyone would come and get what they needed. This occurred on a regular basis. Along with her uncles, Ms. Correa-Pei noted that her tutu, cousins, and brothers and sisters would go down to pick limu (seaweed), fish, and capture he'e (octopus). She underscored the impact of development on the once readily available and abundant natural resources of the area prior to the development with Kaiser.

On project impacts, Ms. Correa-Pei discussed the importance of preserving the mauka-makai connection, viewsheds, and having open spaces and trees for shade and coolness. She stressed the importance of having an unobstructed right of way for the natural flow of rainfall and air that travels from mauka to makai, citing the connection and fluidity of rainfall to streams to replenishing the ocean. She also emphasized that the increase of density within Maunalua has had an impact on the climate over time, she noted, "having so much development in East Honolulu, it has changed the weather over time. [T]hat's one thing that my kūpuna do clearly note, the change in the weather, how the development has made our area less cool, less breeze then it used to be when my father was younger, and even when I was younger. We know that this is a global issue."

In discussing the importance of the mauka-makai connection, Ms. Correa-Pei shared, "being able to see the mountains when you're on the makai side, to feel that connection, is important. When Kamehameha schools wanted to develop their open space across from the boat ramp, some people refer to it as the big lawn, I and many others opposed the development. 'It's really the only open space between mauka and makai, from Kuli'ou'ou to Koko Marina, and that was a big concern for us. As a community, to lose that open space and to have that flow and that connection, the visual and spiritual connection from mauka to makai, obstructed was a concern as there is such limited open space, especially in the makai areas, and we want to preserve as much as we can. For this space there's existing development with the large one-story building. For me, with the buildings being lower, there's less obstruction, you are able to see mauka when you are out on the bay or even just driving down Kalaniana'ole, and you just feel more connected as a community to the mauka to makai aspect and you know would like to see that preserved. The value of mauka to makai is important because it instills in us the need to mālama 'āina.

When asked what ways to mitigate the impacts of the project. Ms. Correa-Pei recommended that the building be kept to one-story, preferably in the same footprint of the existing building. She noted that while she would prefer a return of open space but knows that a new building is inevitable and recommends that BOH honor the area's cultural significance through incorporating and planting native trees such as Kukui or Ulu for shade, design with Hawaiian patterns/photos to honor the history of the area, and strongly recommends the use of the traditional and rightful place name Maunalua instead of Hawaii Kai for the proposed bank branch. Ms. Correa-Pei stated that "if BOH does want to honor and uplift Hawaiian culture and identity as they message in their commercials, honoring the rightful name of Maunalua, rather than Hawaii Kai, which was named for Henry [Kai]ser who so greatly negatively impacted Maunalua's natural resources and the lives of many Hawaiians from this area, is the most basic thing they could do."

4. IDENTIFICATION AND MITIGATION OF POTENTIAL CULTURAL IMPACTS

The purpose of the current document is to identify and assess traditional cultural properties and practices associated with the project area and vicinity. In 1990, the National Park Service issued National Register Bulletin 38 "Guidelines for Evaluating and Documenting Traditional Cultural Properties" (Parker and King 1992). Per Bulletin 38, traditional refers to "the beliefs, customs, and practices of a living community that have been passed down through the generations, usually orally or through practice" (Parker and King 1992:1). And culture refers to "the traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of any community be it an Indian tribe, a local ethnic group, or the people of the nation as a whole" (ibid.). Of particular relevance to the current CIA, in 1992, an amendment to the National Historic Preservation Act, Section 101(d) expanded the eligibility for inclusion on the National Register of Historic Places (NRHP) to include properties considered culturally important to Native Hawaiian organizations.

Parker (1993:2), provides a concise definition of the traditional cultural property concept as a place or property that has an association with "cultural practices and beliefs that are (1) rooted in the history of a community and (2) are important to maintaining the continuity of that community's traditional beliefs and practices" and "essential to continue on-going cultural traditions." Per Parker (1993), despite being problematic, the term property was selected for administrative purposes so as to include more types of historic properties beyond those considered sacred places for consideration as traditional cultural properties. Unfortunately, property most often refers to a commodity that can be bought and sold. The concept of ownership inherent in the term is often in direct contradiction with the lifeways and beliefs the framework of traditional cultural properties evaluation seeks to recognize and protect.

Traditional cultural properties are identified and evaluated under the same general procedures as historic properties. Thus, to be eligible for the NRHP, a traditional cultural property "is subject to the same general time threshold... it must have been important to maintaining traditions for at least 50 years" (Parker 1993:4). Furthermore, per Bulletin 38 (Parker and King 1992:16), traditional cultural properties are tangible places that must be delineated by boundaries, which "are often difficult to define."

Hawaiian traditional cultural properties, because it is precisely the concept of boundaries that runs counter to the traditional Hawaiian belief system. The sacredness of a particular landscape feature is often cosmologically tied to the rest of the landscape as well as to other features on it. To limit a property to a specifically defined area could separate it from what makes it significant in the first place. However objectionable the concept of boundaries may be, it is nonetheless the regulatory benchmark for defining and assessing traditional cultural properties.

Thus, the significance of traditional cultural properties should be determined by the community that values them.

These traditions shall be founded in an ethnic community's history and contribute to maintaining the ethnic community's cultural identity. Traditional associations are those demonstrating a continuity of practice or belief until present or those documented in historical source materials, or both

The OEQC guidelines identify several types of traditional practices and beliefs that are subject to assessment. Including but not limited to the following: spiritual and religious, residential, commercial, subsistence, resource access-related, and recreational (OEQC 1997). The guidelines also specify that man-made and natural historic properties, as well as submerged and surface cultural resources are considered traditional cultural properties and subject to assessment.

As the OEQC guidelines do not contain criteria for assessing the significance of traditional cultural properties, this study will adopt the state criteria for evaluating the significance of historic properties, of which traditional cultural properties are a subset. To be significant the potential historic property or traditional cultural property must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

- a Be associated with events that have made an important contribution to the broad patterns of our history;
- b Be associated with the lives of persons important in our past;
- c Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;
- d Have yielded, or is likely to yield, information important for research on prehistory or history;

e Have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group's history and cultural identity.

While it is the practice of the DLNR-SHPD to consider most historic properties significant under Criterion d, at a minimum, traditional cultural properties are also significant under Criterion e. A further analytical framework for addressing the preservation and protection of traditional native practices specific to Hawaiian communities resulted from the *Ka Pa'akai O Ka 'Āina* v Land Use Commission court case. The court decision established a three-part process relative to evaluating such potential impacts. First, to determine the presence of any valued historical, natural, and/or cultural resources and prior and/or ongoing traditional cultural practices; and the extent to which any Native Hawaiian rights are exercised. Second, to identify the extent to which those resources, practices, and rights will be affected or impaired. And third, to specify any reasonable actions needed mitigate potential impacts to Native Hawaiian religious rights and traditional cultural properties and practices as identified.

The proposed project includes the demolition of an existing restaurant facility and construction of a new Bank of Hawaii branch within the project area. The new bank facility is intended to provide banking services to Bank of Hawaii patrons in the Hawai'i Kai area which is currently serviced through only a single branch within the Koko Marina Center and three stand-alone ATMs. The existing building footprint and location are to remain generally unchanged within the Hawai'i Kai Towne Center; and no changes in zoning or easements are proposed.

SUMMARY OF CULTURE-HISTORICAL BACKGROUND INFORMATION

The cultural-historical information gathered as part of this study demonstrates that the project area is located within a region, Honolulu (Kona) District, which was significant throughout the Precontact and Historic Periods. Early historical accounts and maps report a sparsely populated coastal area with aquaculture along with cultivation of coastal flats, valley floors and uplands. The project area is situated near the center of the former seawall of Keahupua-o-Maunalua fishpond also known as Loko Kuapā, Maunalua Pond, and Kuapā Pond. In the early 1900s, the project area vicinity hosted a village of roughly one hundred huts on the shore whose inhabitants were mostly fishermen. Following European Contact, Maunalua was transformed by dramatic losses of traditional Hawaiian practices and population decline brought about by the rise of commercial agriculture, ranching, and fishing enterprises. Following the Māhele 'Āina of 1848, the entire *ahupua* 'a was leased as ranch land, while its offshore fisheries were productively utilized.

In the 1920s, development of the Kalaniana ole Highway (State Route 72) reached Maunalua, formalizing the former trails and dirt roads used to traverse the *ahupua* and east Kona District. After 1950, widespread development took over the southeastern coastal lands and many of the culturally significant areas of traditional land use and lifeways were destroyed in the process. Land ownership and associated development activities were largely driven by a small number of wealthy individuals. The development of the Hawai'i Kai neighborhood and Koko Marina included extensive modification of the landscape through dredging and land reclamation activities within the fishpond. During this time additional land area was added around the former seawall to form a small island, which was then developed as the Hawai'i Kai Towne Center shopping complex in the 1980s. The project area was most recently developed for use as a restaurant in 1991 and remained so until its last occupant closed for business in 2023.

Previous cultural studies have identified numerous cultural practices associated with Keahupua-o-Maunalua and Maunalua Ahupua'a, including fishing, fishpond aquaculture, and subsistence agriculture. However, it is also noted that due to historic and modern development, the area is unable to support many of these cultural practices today. Interviewees Lo Kaimuloa and Angela Correa-Pei provided information about the building affecting winds, viewshed, and rainfall along with the slow decline in shade and gathering places. Additionally, the loss of traditional names was reported as a concern. From these meetings, it is apparent that the height for the proposed project is of great concern. While the interviewees discussed locations of historical importance within greater Maunalua, none of these were identified as being within the footprint of the project area.

FINDINGS AND RECOMMENDED MITIGATION STRATEGIES

The current study indicates that no traditional cultural properties or practices have been identified within the proposed BOH Redevelopment Project footprint. However, the consultation process revealed that the construction has the potential to have an impact upon the Maunalua community's sense of place. If the bank building includes a second story it would obstruct and hinder the visual means for the community to connect with Maunalua Bay, which holds cultural significance for the residents of Maunalua.

Several interviewees discussed the importance of traditional Hawaiian place names, which express Hawaiian cultural identity and their connection or pilina with the project area environs. Traditional place names root individuals to their genealogies and kuleana (privilege, responsibility) to that place (Ho'omanawanui 2019:59-60). Per Oliveira, "place names play a significant role in narrating [Kānaka 'Ōiwi] identity" as "kupuna were the ones who first gave names and meanings to Hawai'i," thus, "place names are the words of. . .ancestors" (Oliveira 2009:101-102). In addition, traditional place names often reference interconnected relationships across the landscape. For instance, Maunalua translates as "two mountains" thus defining two geographic landmarks in the area: Kohelepelepe (Koko Head) and Kuamo'okāne (Koko Crater). The project area's location along Kalaniana'ole Highway sits at the center of the cityscape and located directly makai of Maunalua Bay Beach and Maunalua Bay Beach Park. The view along the highway allows residents and visitors alike to look out onto the ocean from the bayfront, as well as observe Kohelepelepe (Koko Head) and Kuamo'okāne (Koko Crater). The revitalization of these place names is an essential aspect of reconnecting people to the land, especially in Maunalua where previous efforts to utilize or evoke traditional place names and historical sites (ex. Kuapā Fishpond & The Kuapā Kai Center) were replaced and erased due to inability and/or difficulty in pronunciation. Although the project area location is most often referred to as Hawai'i Kai and/or Koko Marina these names speak to the development history of the area rather than contribute to the preservation of Hawaiian culture. Some of the late twentieth century development resulted in the eviction and removal of residents from the land, specifically Kalama Valley.

The interviewees spoke of the impairment and destruction of their historic sense of the area as a result of the extensive land modification associated with the development of Hawai'i Kai, which also interfered with their ability to connect and feel a part of Maunalua. Previous efforts to increase building density within Maunalua generated a history of erasure and a lack of regard for traditional cultural properties and practice. Historically, Maunalua Kānaka 'Ōiwi and residents alike have been able to look out onto the bay and connect with a landscape just as their $k\bar{u}puna$ once did. Ms. Kaimuloa shared "her kupuna's final resting place is in Maunalua Bay and that the bay gives her and her family a sense of comfort."

As Ms. Kirk expressed concerns that a building that had lights on constantly would increase light pollution within Maunalua and prevent culturally significant Maunalua Bay from being able to sleep at night. The *mauka-makai* relationship is not simply one-way; one can observe a *makai-mauka* connection as well. The restoration and protection of the viewshed from both the ocean and the land is essential to maintain integrity of feeling and a sense of place for Kānaka 'Ōiwi. For example, the role of *pilina* or connection is a vital component of Hawaiian culture. *Pilina* to the land forms the basis for an intimate relationship and understanding of the natural world and contextualizing their origin a concept known as *moʻokūʾauhau*. Ms. Marquez emphasized her pilina and feeling at home when seeing the two mountains of Maunalua. Her *pilina* needs to be recognized not only as a community value but also as a design guideline for future development. The proposed project needs to mindfully create density in a manner that is not monolithic or disrupts the visual culture associated with the two mountains of Maunalua. BOH and the architects should seek to include design processes that honors community voice and engagement and reflects that the Hawaiian sense of place is not limited to physical constructs.

As mentioned by Ms. Reilly, residents have been talking to one another and to BOH staff since BOH's presentation earlier this year to the HKNB. Per Ms. Reilly, during that meeting BOH clearly stated that they do not need a second story as part of the new construction and could operate full-service banking within the existing building. All interviewees were concerned about the effects of height on the viewshed, rain, wind, and general environmental context. While interviewees acknowledged the height and scale of buildings on either side of the project area, the construction of additional two to three-story buildings is viewed as a cumulative negative impact, contributing to the continual erosion of the viewshed and interruption of *mauka-makai* connections. Thus, limiting the bank building to one story will reflect the original intent for both the Hawaii Kai Towne Center and the Hawaii Kai Shopping Center. Thereby mitigating the presence of large businesses in order to achieve more of a village atmosphere. By employing a low-profile building BOH can ensure the integrity and character of the original design of the shopping center to maintain a village center feel.

A final concern expressed was the loss of native habitat, in particular, the importance of shade trees and canopy. *Kukui* and *'ulu* trees provided both important culturally valued resources and outdoor social spaces where families and neighbors could gather, reifying social bonds and exchanging cultural knowledge. Additionally, interviewees pointed to the effect that canopy has on the environment, such as cooling the air and shading the ground and understory. Ms. Reilly also shared the following:

a building that is tiered AND has an opening through the center might help relieve the feeling and perception of building walls that further disconnect us from our important landscapes and views for physical and spiritual reasons, this also respects the winds of Maunalua which we value.

ASM recommends that BOH acknowledge and recognize the cultural affiliations of Maunalua by using 'Maunalua' to identify the proposed new branch location rather than Hawai'i Kai. This will recognize the significance of preserving traditional place names, which is a valued component of Hawaiian culture. Naming the branch as such would also support ongoing community-led initiatives to bring back traditional place names near the project area. For instance, the recent addition of Maunalua to the Hawai'i Kai welcome sign (see Figure 15) It is further recommended that the Bank of Hawaii also partner with a local educational Hawaiian non-profit to research and incorporate interpretive signage within the new branch to educate customers and visitors to the Bank of Hawaii. ASM also recommends that the new branch landscape with native plants and particular emphasis on shade trees and consider architectural design elements that accommodate and highlight existing viewsheds and breezes, such as breezeways and outdoor gathering spaces.

In accordance with the archaeological field inspection conducted for the proposed project (Ryder and Belluzzo 2024), ASM Affiliates recommends that archaeological monitoring is conducted in support of the proposed project in order to identify and document possible archaeological deposits related to Keahupua-o-Maunalua fishpond (SIHP 50-80-15-00049) or historic development of the parcel In addition to an Archaeological monitor, ASM Affiliates recommends a cultural monitor to be present and on-site for all ground disturbing activities throughout the length of the construction process to ensure adherence to Hawaiian protocols for burial practices, and handling of any culturally sensitive resources, including Iwi Kūpuna (ancestral human remains).

It is imperative to respect Kānaka 'Ōiwi's customary right to connect with their homelands. By doing so, Bank of Hawaii will be able abide by Act 50 of HRS 343-2, which specifically acknowledges the State's responsibility to protect native Hawaiian cultural practices—to preserve and perpetuate the quality of life and the *aloha* spirit unique to Hawai'i. During the project launch and design phase both architects and BOH need to convey that the proposed BOH Redevelopment Project will add to rather than harm the Maunalua community or their significant traditional cultural properties.

REFERENCES CITED

Alexander, William Dewitt

1890 A Brief History of Land Titles in the Hawaiian Kingdom. In *Hawaiian Alamanac and Annual for 1891*. Press Publishing Company, Honolulu. https://www.hawaiiankingdom.org/land-system.shtml.

Annino, James

1988 *Medical Examiner's Report: Mariner's Ridge Skeletal Remains*. City and County of Honolulu - Department of the Medical Examiner. City and County of Honolulu, Honolulu, HI.

Athens, J. Stephen, Timothy M. Rieth, and Thomas S. Dye

2014 A Paleoenvironmental and Archaeological Model-Based Age Estimate for the Colonization of Hawai'i. *American Antiquity* 79(1):144–155.

Beckwith, Martha Warren

1951 The Kumulipo, a Hawaiian Creation Chant. University of Chicago Press, Chicago.

Borthwick, Douglas, and Hallett Hammatt

1991 Archaeological Survey for the Proposed Na Pali Haweo Electrical Transmission Line Relocation Alignment, Kamehameha Ridge. Cultural Surveys Hawaii. Prepared for Pacific Planning and Engineering, Kailua, HI.

Cannelora, Louis

1974 The Origin of Hawaii Land Titles and of the Rights of Native Tenants. Security Title Corp., Honolulu.

Case, Emalani M. K.

2015 I Kahiki Ke Ola: In Kahiki There Is Life Ancestral Memories and Migrations in the New Pacific. Ph.D. Thesis, Victoria University of Wellingtom, Wellington.

Chinen, J.J

1958 *The Great Mahele: Hawaii's Land Division of 1848.* University of Hawaii Press, Honolulu, Hawai'i. 1961 *Original Land Titles in Hawaii.* Privately published.

Collins, Sara

1999 *Inadvertent Discovery of Human Remains at 6077, 6085, 6091 & 6095 Summer St.* SHPD. Prepared for Ross Cordy, Honolulu, HI.

Cooper, Geroge, and Gavan Daws

1985 Land and Power in Hawaii. The Democratic Years. Benchmark Books, Honolulu, Hawaii.

Cordy, Ross H.

2000 Exalted Sits the Chief, the Ancient History of Hawai'i Island. Mutual Publishing, Honolulu.

Coulter, John Wesley

1935 A Gazetteer of the Territory of Hawaii. University of Hawaii Research Publications Number 11. University of Hawaii, Honolulu.

Dagher, Cathleen

1993 Inadvertent Discovery of Human Skeletal Remains at 61-669 Kamehameha Highway, Hale'iwa, Waialua, O'ahu. State Historic Preservation Division, Department of Land and Natural Resources.

Dixon, George

1789 A Voyage Around the World; But More Particularly to the North-West Coast of America: Performed in 1785, 1786, 1787, 1788, in The King George and Queen Charlotte, Captains Portlock and Dixon. Geo. Goulding, London. https://archive.org/details/b30452508/page/n7.

Eblé, Francis, and Paul Cleghorn

1994 First Incidence of Human Skeletal Remains (Burial No. 2) Uncovered as a Result of Construction Activities for Phase II Widening of Kalaniana ole Highway. BioSystems Analysis, Inc. Prepared for Engineers Surveyors Hawaii, Inc., Kailua, Hawaii.

Fitzpatrick, Gary L., and Riley Moore Moffat

1986 The Early Mapping of Hawai 'i. Palapala 'āina ; v. 1. Editions Ltd., Honolulu, Hawaii.

Fornander, A.

1969 An Account of the Polynesian Race: Its Origin and Migrations and the Ancient History of the Hawaiian People to the Times of Kamehameha I. Charles E. Tuttle Co., Inc, Tokyo.

Fornander, Abraham

1916 Fornander Collection of Hawaiian Antiquities and Folk-Lore., editor Thomas G. Thrum. Vol. 1. Memoirs of the Bernice Pauahi Bishop Museum. Bishop Museum Press, Honolulu.

Green, Roger C.

1980 *Mākaha Before 1880 A.D. Makaha Valley Historical Project. Summary. Report No. 5.* Department of Anthropology. Bernice P. Bishop Museum, Honolulu, Hawai'i.

Hammatt, Hallett

2014 Final Archaeological Monitoring Report for the Maunalua Bay Beach Park Wastewater Systems Project. Cultural Surveys Hawaii, Inc. Prepared for Shimabukuro, Endo & Yoshizaki, Inc., Kailua, HI.

Handy, E., E. Handy, and Mary Kawena Pukui

1991 Native Planters in Old Hawaii: Their Life, Lore, and Environment. Bishop Museum Bulletin 233. Honolulu, Hawai'i.

Hommon, Robert J.

2013 The Ancient Hawaiian State: Origins of a Political Society. Oxford University Press, New York.

Hommon, R.T.

1986 Social Evolution in Ancient Hawai'i. In *Island Societies: Archaeological Approaches to Evolution and Trans-Formation*, pp. 55–88. University Press, Cambridge.

Honolulu Star-Bulletin

1980 Work to Start at End of Month on Hawaii Kai Shopping Center. *Honolulu Star-Bulletin* August 7.

Jerry Tune

1983 Quality Design Secret to Success, Kuapa Kai Center Wins Respect. Honolulu Star-Bulletin.

Jokiel, P. L., K. S. Rodgers, W. J. Walsh, D. A. Polhemus, and T. A. Wilhelm

2011 Marine Resource Management in the Hawaiian Archipelago: The Traditional Hawaiian Systemin Relation to the Western Approach. *Journal of Marine Biology* 2011. Hindawi Limited, January:1–16.

Jorden, Nicole, and Jane Allen

2010 Archaeological Assessment and Section 106 Review, Hawai'i Kai Marina and Channel Maintenance Dredging. International Archaeological Research Institute, Inc. Prepared for Anchor QEA, LP, Honolulu, HI.

Kamakau, Samuel M.

1866 Ka moolelo o Kamehameha I: Mokuna III. Ka Nupepa Kuokoa December 22, V edition.

Kamakau, Samuel Manaiakalani

1976 The Works of the People of Old: Na Hana a Ka Po'e Kahiko. Bernice P. Bishop Museum special publication; 61. Bishop Museum Press, Honolulu, Hawai'i.

Kame'eleihiwa, Lilikalā

1992 Native Land and Foriegn Desires: Pehea Lā E Pono Ai? Bishop Museum Press, Honolulu, Hawai'i.

Kelly, Marion

1956 Changes in Land Tenure in Hawaii, 1778-1850. University of Hawaii, Honolulu.

1984 *Cultural Resources Overview for the Queen's Beach Park Feasibility Study*. Bernice P. Bishop Museum Department of Anthropology. Prepared for City and County of Honolulu - Department of Parks and Recreation, Honolulu, HI.

Kennedy, Joseph

1987 Archaeological Monitoring Report for Upgrading the Sewerage System at the Hawaii Kai Job Corps Center. Archaeological Consultants of Hawaii. Prepared for Garrett Sullivan of Kaikor Corp. and R.M. Towill Corporation, Haleiwa, HI.

Kikiloi, Kekuewa Scott T.

2010 Rebirth of an Archipelago: Sustaining a Hawaiian Cultural Identity for People and Homeland. *Hūlili: Multidisciplinary Research on Hawaiian Well-Being* 6:73–115.

Kirch, Patrick Vinton

When Did the Polynesians Settle Hawai'i? A Review of 150 Years of Scholarly Inquiry and a Tentative Answer. *Hawaiian Archaeology* 12:3–26.

Kirch, Patrick Vinton, and Mark D. McCoy

2023 Feathered Gods and Fishhooks: The Archaeology of Ancient Hawai'i, Revised Edition. University of Hawai'i Press, Honolulu, Hawai'i. http://ebookcentral.proquest.com/lib/uhm/detail.action?docID=30655005.

Lam, Maivan

1985 The Imposition of Anglo-American Land Tenure Law on Hawaiians. *The Journal of Legal Pluralism and Unofficial Law* 17(23). Routledge, January 1:103–128.

Lili'uokalani

1978 *The Kumulipo: An Hawaiian Creation Myth.* Pueo Press, Kentfield, California. https://catalog.hathitrust.org/Record/000157042.

Lima, Pūlama, Kelley Uyeoka, Momi Wheeler, Li'i Bitler, Deandra Castro, and Kekuewa Kikiloi

2017 Haʻa NāʻUala o Pahua I Ke Kula o Kamauwai; The Potatoes of Pahua Danced in the Plains of Kamauwai. Draft Archaeological Preservation Plan Pahua Heiau. Waimānalo Ahupuaʻa. Koʻolaupoko Moku, Oʻahu Mokupuni. TMK 3-9-056:038. Nohopapa Hawaiʻi.

MacKenzie, Melody Kapilialoha

2010 Hawaiian Custom in Hawai'i State Law. http://hdl.handle.net/10125/35201.

Malo, Davida

2020 The Moʻolelo Hawaiʻi of Davida Malo. Volume 2, Hawaiian Text and Translation. University of Hawaiʻi Press, Honolulu, Hawaiʻi.

Maly, Kepā, and Onaona Maly

2003 Volume I: Ka Hana Lawai'a a Me Nā Ko'a o Na Kai 'Ewalu. .A History of Fishing Practices and Marine Fisheries of the Hawaiian Islands. Kumu Pono Associates. Prepared for The Nature Conservancy, Honolulu.

Maly, Kepā, and Helen Wong-Smith

1998 Historical Documentary Research: Kawaihoa-Kuamoʻokane, Hanauma, and Kohelepelepe - The Koko Head Regional Park and Nature Preserve, Ahupuaʻa of Maunalua, District of Kona, Island of Oʻahu, TMK: 3-6-12, Por. 1,2,4,6,8,10,12,13,14 & 16. Kumu Pono Associates. Prepared for Group 70 International, Hilo, HI.

Mast, Anne B., and Robert H. Mast

1996 Autobiography of Protest in Hawai'i. University of Hawai'i Press.

McAllister, J. Gilbert

1933 Archaeology of Oahu. Bishop Museum Press, Honolulu, Hawai'i.

McDougall, Brandy Nālani

2015 Moʻokū'auhau versus Colonial Entitlement in English Translations of the Kumulipo. *American Quarterly* 67(3). The Johns Hopkins University Press:749–779.

2016 Finding Meaning: Kaona and Contemporary Hawaiian Literature. University of Arizona Press. https://www.jstor.org/stable/j.ctt1bj4qbs.

McEldowney, Holly

1979 Archaeological and Historical Literature Search and Research Design: Lava Flow Control Study, Hilo, Hawai'i. Department of Anthropology, B.P. Bishop Museum, Prepared for the U.S. Army Engineer Division, Pacific Ocean.

Naboa, Deona

2009 Post-Contact Abandonment of Traditional House Sites in Upper Wai'anae Valley, Hawaiian Islands. M.A., Northern Illinois University, Evanston, Illinois.

https://www.proquest.com/docview/304965232/abstract/C54B0BCD561408BPQ/1.

Nakaa, G. W.

1893 He moolelo Hawaii: Mokuna II: Ke kumu mua o ko Hawaii nei kanaka. *Ka Nupepa Kuokoa* February 4, XXXII edition.

Newman, T. Stell

1969 Cultural Adaptations to the Island of Hawaii Ecosystem: The Theory Behind the 1968 Lapakahi Project. In *Archaeology on the Island of Hawaii*, Richard Pearson, editor, pp. 3–14. Asian and Pacific Archaeology Series 3. Social Science Research Institute, University of Hawaii, Honolulu.

1970 Mauka--Makai: Fishing and Farming on the Island of Hawaii in A.D. 1778. *Anthropology*. Ph.D. Dissertation, University of Hawaii, Honolulu.

Office of Environmental Quality Control (OEQC)

Guidelines for Assessing Cultural Impacts, as Adopted by the State of Hawaii Environmental Council in 1997 and Amdeded in 2000. http://oeqc2.doh.hawaii.gov/OEQC_Guidance/1997-Cultural-Impacts-Guidance.pdf.

O'Hare, Constance, David Shideler, and Hallett Hammatt

2003 Archaeological Assessment in Support of the Proposed Lalea Rockfall Mitigation, Phase II Project Hawaii Kai. Cultural Surveys Hawaiʻi, Inc. Prepared for Gary T. Tamamoto - Earthtech, Kailua, HI.

Oliveira, Katrina-Ann R. Kapā'AnaokalāOkeola NāKoa

2009 Wahi a Kahiko: Place Names as Vehicles of Ancestral Memory. *AlterNative: An International Journal of Indigenous Peoples* 5(2). December:100–115.

Ho'omanawanui, ku'ualoha

2019 E Hoʻi Ka Piko (Returning to the Center): Theorizing Moʻokūʻauhau as Methodology in an Indigenous Literary Context. In *The Past Before Us: Moʻokūʻauhau as Methodology*, Nālani Wilson-Hokowhitu, editor, pp. 50–68. University of Hawai'i Press, Honolulu, Hawai'i.

He Pū'ao Ke Kai, He Kai Ka Pū'ao (Ocean as Womb, Womb as Ocean): Mana Wahine Aloha 'Āina Activism as Return, Revival, and Remembrance. *Amerasia Journal* 48(2). Routledge, May 4:107–123.

Parker, Patricia L.

1993 Traditional Cultural Properties: What You Do and How We Think. *CRM* 16:1–5.

Poepoe, J. M.

1906 Moolelo Hawaii Kahiko. *Ka Na 'i Aupuni* June 21, II edition.

Pogue, John

1978 Moolelo of Ancient Hawaii. KU Pa'a Publishing, Honolulu, Hawai'i.

Portlock, Nathaniel

A Voyage Round the World; but More Particularly to the North-West Coast of America: Performed in 1785, 1786, 1787, and 1788, in the King George and Queen Charlotte, Captains Portlock and Dixon. Embellished with Twenty Copper-Plates. Dedicated, by Permission, to His Majesty. By Captain Nathaniel Portlock. Printed for John Stockdale, opposite Burlington-House, Piccadilly; and George Goulding, James Street, Covent Garden, London.

Price-Beggerly, Patricia, and Judith R. McNeil

1985 Archaeological Reconnaissance of the Proposed Marina Zoning Project Kaluanui 1, 2, and 3 (Hawaii Kai). Archaeological Consultants. Prepared for Environmental Communications Inc., Honolulu, Hawaii.

Pukui, Mary Kawena, Samuel H. Elbert, and Esther T. Mo'okini

1974 Place Names of Hawaii: Revised and Expanded. University of Hawaii Press, Honolulu, Hawai'i.

Putzi, Jeffrey L., and Ingrid K. Carlson

1997 Report of Burials 24-29, Human Skeletal Remains Uncovered as a Result of Construction Activities for Phase II Widening of Kalaniana ole Highway, Honolulu, Hawai i, State Site No. 50-80-15-4841. Biosystems Analysis, Inc. and Garcia and Associates. Engineers Surveyors Hawai i, Inc., Honolulu.

Putzi, Jeffrey L., M. Paul McIntosh, and Ingrid K. Carlson

1996 Report of Burials 6-10, Human Skeletal Remains Uncovered as a Result of Construction Activities for Phase II Widening of Kalaniana ole Highway, Honolulu, Hawai i, TMK No. 3-8-03:40, Volume I of State Site No. 50-80-15-4841. Vol. I. Engineers Surveyors Hawaii, Inc., Honolulu.

Reveal, Maria, Brittany Beauchan, and Hallett Hammatt

2016 *Final Archaeological Monitoring Report for the 7000 Hawaii Kai Development Project*. Cultural Surveys Hawai'i, Inc. Prepared for Avalon Development Company, LLC, Kailua, HI.

de Silva, Kīhei

2003 He Inoa No Kūali'i. *Ka'iwakīloumoku: Pacific Indigenous Institute*. Kamehameha Schools. https://kaiwakiloumoku.ksbe.edu/article/mele-he-inoa-no-kualii.

Soehren, Lloyd J.

A Catalog of Hawaiian Place Names: Compiled from the Records of the Boundary Commission and The Board of Commissioners to Quiet Land Titles of the Kingdom of Hawaii. *A Catalog of Hawaiian Place Names*. https://ulukau.org/cgi-bin/hpn?e=d-0hpn--00-0-0-010---4-----0-0l--1en-Zz-1---20-about---00031-001-10escapewin-00&a=d&a=p&p=intro.

Solomon, N. Ha'alilio

Maunalua: Shifting Nomenclatures and Spatial Reconfiguration in Hawaii Kai. In *Migrant Ecologies: Environmental Histories of the Pacific World*, pp. 185–208. University of Hawaii Press. https://www.jstor.org/stable/jj.13568100.16?searchText=Kuapa+Kai+Center&searchUri=%2Faction%2FdoBasicSearch%3FQuery%3DKuapa%2BKai%2BCenter%26so%3Drel&ab_segments=0%2Fbasic_search_gsv2%2Fcontrol&refreqid=fastly-default%3A656d4587a95eb50b164b90a37a6c4227&seq=20.

Sterling, Elspeth P., and Catherine C. Summers

1962 Sites of Oahu. Bishop Museum Press, Honolulu, Hawai'i.

1978 Sites of Oahu. Bishop Museum Press, Honolulu, Hawai'i.

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

1975 *Historical/Cultural Essay Report on the Kuapa Pond Area*. Partnership of Joerger-Takemoto Historical Research. United States Army Corps of Engineers, Honolulu.

Tatar, Elizabeth

1982 *Nineteenth Century Hawaiian Chant.* Pacific Anthropological Records 33. Department of Anthropology, Benice Pauahi Bishop Museum, Honolulu, Hawai'i.

http://reservesvod.library.manoa.hawaii.edu/mult/2104_exs_chant_types_styles/.

Trask, Haunani-Kay

1987 Birth of the Modern Hawaiian Movement: Kalama Valley, O'ahu. *Hawaiian Journal of History* 21. Honolulu, Hawaiian Historical Society:126–153.

Ulukau

2009 Sense of Place. *Kūkulu Nā Uapo - Building Bridges*. https://ulukau.org/gsdl2.81/cgi-bin/cbkukulu?a=d&d=D0.2.7.2.2.5>=0&x=1&e=010off--00-1--0--010---4------0-01--11en ------ 00-3-1-000--0-0-11000.

Wilmshurst, Janet, Terry Hunt, Carl Lipo, and Atholl Anderson

2011 High-Precision Radiocarbon Dating Shows Recent and Rapid Colonization of East Polynesia. *Proceedings of the National Academy of Sciences* 108:1815–1820.

Yucha, Trevor, and Matt McDermott

2011 Final Archaeological Inventory Survey Report for the Hale Ka Lae Development Project. Cultural Surveys Hawai'i Inc. Prepared for Hale Ka Lae Development, LLC, Kailua, HI.

APPENDIX A. PUBLIC NOTICE

CULTURAL IMPACT ASSESS-MENT: BANK OF HAWAI'I, HAWAII KAI PROJECT

On behalf of PBR HAWAII & Associates, Inc., ASM Affiliates is preparing a Cultural Impact Assessment to inform a HRS, Chapter 343 Environmental Assessment being prepared for the Bank of Hawaii, Hawaii Kai project. The project is located at TMK: (1) 3-9-017:040 at 6650 Kalaniana'ole Highway in Maunalua Ahupua'a, Ko'olaupoko District, Island of O'ahu. The project seeks to remodel the former Outback Steakhouse restaurant into a Bank of Hawai'i branch location.

ASM is seeking kamaʻāina familiar with the area's cultural resources, customs, and practices. We also seek input regarding strategies to prevent or mitigate impacts on culturally valued resources or traditional customary practices. If you know of such information, contact Keely Toledo, ktoledo@asmaffiliates.com, (808) 439-8089.

APPENDIX H: Transportation Impact Analysis Report



TRAFFIC IMPACT ANALYSIS

Bank of Hawaii – Hawaii Kai

Hawaii Kai, Island of Oahu, Hawaii

April 2024



TRAFFIC IMPACT ANALYSIS

Bank of Hawaii – Hawaii Kai

Hawaii Kai, Island of Oahu, Hawaii

April 2024

Prepared For: PBR Hawaii & Associates, Inc. 1001 Bishop Street, Suite 650 Honolulu, Hawaii 96813

Prepared By: WSP USA, Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813

WSP Reference Number: US0023616.2617

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	EXISTING CONDITONS	4
Α.	Existing Land Use	4
В.	Existing Roadway System	4
C.	Existing Transit	5
D.	Existing Intersection Geometry and Control	6
Ε.	Bicycle/Pedestrian Facilities	8
F.	Existing Traffic/Pedestrian Volumes	8
G.	Existing Traffic Operations	11
Н.	Summary of Results	14
III.	FUTURE 2026 CONDITIONS WITHOUT PROJECT	15
Α.	Future 2026 Land Use and Roadway System	15
В.	Future 2026 Transit	15
C.	2026 Traffic Volumes Without Project	15
D.	Future 2026 Traffic Operations Without Project	18
Ε.	Summary of Results	20
IV.	FUTURE 2026 CONDITIONS WITH PROJECT	21
Α.	Future 2026 Traffic Volumes With Project	21
В.	Future 2026 Traffic Operations With Project	23
C.	Summary of Results	28

V.	CONCLUSIONS & RECOMMENDATIONS			
A.	Conclusions	29		
В.	Recommendations	29		
	APPENDICES			
Appe	pendix A Traffic Count Data	A		
Appe	pendix B Level of Service Definitions	В		
Appe	pendix C Synchro Reports	C		
Appe	pendix D Trip Generation Equations	D		

FIGURES

Figure 1	Vicinity Map	2
Figure 2	Proposed Bank of Hawaii Site Plan	3
Figure 3	Existing Lane Configurations	7
Figure 4	Existing Peak Hour Traffic Volumes	9
Figure 5	Existing Peak Hour Pedestrian Crossing Volumes	. 10
Figure 6	Projected Year 2026 Peak Hour Traffic Volumes Without Project	. 17
Figure 7	Project-Generated Peak Hour Traffic Volumes	. 24
Figure 8	Projected Year 2025 Peak Hour Traffic Volumes With Project	. 25
	TABLES	
Table 1	Peak Hour Bike Counts	8
Table 2	Existing Level of Service	. 12
Table 3	Historical AADT on Kalaniana'ole Highway	. 15
Table 4	Historical Census Population	. 16
Table 5	Projected 2026 Without Project Level of Service	. 19
Table 6	Trip Generation Average Rates	. 22
Table 7	Bank of Hawaii Trip Generation Summary	. 22
Table 8	Projected 2026 With Project Level of Service	. 26

I. INTRODUCTION

Bank of Hawaii is planning to open a new branch at the Hawaii Kai Towne Center, located in Hawaii Kai at the northeast corner of the Kalaniana'ole Highway/Keāhole Street intersection as shown in Figure 1. Bank of Hawaii has an existing branch located at Koko Marina Center. This location has experienced a significant increase in transaction volume due to the closure of a nearby in-store branch. Bank of Hawaii's temporary solution was to expand the Koko Marina Center location into an adjacent tenant space, but the preferred long-term solution is to construct a new flagship branch to serve Hawaii Kai.

The new location will replace the building which formerly housed Outback Steakhouse, reducing the square footage from approximately 7,213 square feet (SF) to 5,727 SF. The smaller footprint allows the bank to provide two additional parking stalls on the mauka side of the building. The current site plan is shown in Figure 2. The proposed year of opening is 2026.

Figure -

Page 2

II. EXISTING CONDITONS

A. Existing Land Use

As shown in Figures 1 and 2, the project site is located in the Hawaii Kai Towne Center, a 27-acre shopping center featuring restaurants, retail commercial, and other businesses and services. The Towne Center is located adjacent to the Hawaii Kai Marina. The Hawaii Kai Park & Ride, the Elaine Dobashi Dog Park, and Reynolds Recycling are located across from Hawaii Kai Towne Center's makai-most Keāhole Street driveway. Maunalua Bay Beach Park has three access points makai of Kalaniana'ole Highway.

B. Existing Roadway System

The project study area consists of the project's Kalaniana'ole Highway and Keāhole Street access points along with two major intersections on Kalaniana'ole Highway.

1. Kalaniana'ole Highway

Kalaniana'ole Highway (State Route 61/72) originates in Maunawili at its intersection with Pali Highway (State Route 61) and Kamehameha Highway (State Route 83). Route 61 continues as Kalaniana'ole Highway to its intersection with Kailua Road then turns and travels through Waimānalo as State Route 72, continuing through Hawaii Kai past the project area. It continues west through Niu Valley, 'Āina Haina, and Wai'alae Iki before ending in Kahala at H-1 Freeway. Within the study area, Kalaniana'ole Highway is classified as a principal arterial and is on the National Highway System (NHS). It is a 6-lane, divided highway west of Keāhole Street and a 4-lane, undivided highway east of Keāhole Street. The posted speed limit within the study area is 35 miles per hour (mph). Major intersections are signalized and coordinated within the study area.

2. Hawaii Kai Drive

Hawaii Kai Drive is a City & County of Honolulu (City) roadway that originates at Kalaniana'ole Highway and provides access to Haha'ione Valley, Kamilo Nui Valley, and Kamilo'iki Valley, eventually terminating at its intersection with Kealahou Steet in Kalama Valley. Within the study area, Hawaii Kai Drive is a four-lane, undivided minor arterial. The posted speed limit is mostly 25 mph with a short segment at 35 mph near Kalama Valley.

3. Keāhole Street

Keāhole Street is a four-lane, undivided City roadway that originates at Kalaniana'ole Highway and ends at its intersection with Hawaii Kai Drive in the vicinity of the Kalele Kai residential community. The posted speed limit is 25 mph.

C. Existing Transit

The City operates TheBus, a public bus transportation service for the island of Oahu. The Hawaii Kai Park & Ride is located opposite the Hawaii Kai Towne Center driveway on Keāhole Street. The Park & Ride provides 134 parking stalls and serves the following routes:

• 1L – Kalihi/Hawaii Kai Limited Stops

- Route 1L provides limited stop service between the Skyline rail station at Aloha Stadium,
 the Kalihi Transit Center, and Kamilo'iki Valley in Hawaii Kai.
- o The route enters Hawaii Kai via Kawaihae Street, providing local service along Hawaii Kai Drive and Keāhole Street, stopping at the Hawaii Kai Park & Ride and continuing with local service east on Kalaniana'ole Highway to Lunalilo Home Road to Kamilo'iki Valley.

1 – Kaimuku/Kalihi

- Route 1 primarily provides local transit service between the Kalihi Transit Center and Kahala Mall.
- During the early morning and evening hours, it also serves Hawaii Kai to augment the span of service of Route 1L.
- o Its route within Hawaii Kai is identical to Route 1L.

• 23 – Ala Moana/Hawaii Kai/Sea Life Park

- Route 23 connects Ala Moana Shopping Center to Sea Life Park via Hawaii Kai through Kalama Valley.
- o The route enters Hawaii Kai via Keāhole Street, stopping at the Hawaii Kai Park & Ride and continuing mauka on Keāhole Street, Wailua Street, and Lunalilo Home Road, before turning onto Hawaii Kai Drive and circulating within Kalama Valley. It then provides service to Sea Life Park.

• 80 – Hawaii Kai Express

Route 80 provides Express Bus service between Civic Center/Downtown to Kamilo'iki
 Valley in Hawaii Kai.

- o The route enters Hawaii Kai via Kawaihae Street, providing local service along Hawaii Kai Drive and Keāhole Street, stopping at the Hawaii Kai Park & Ride and continuing east on Kalaniana'ole Highway to Lunalilo Home Road to Kamilo'iki Valley.
- 82 Hawaii Kai Kalama Valley Express
 - Route 82 provides Express Bus service between Civic Center/Downtown and Kalama
 Valley in Hawaii Kai.
 - o The route enters Hawaii Kai via Keāhole Street, stopping at the Hawaii Kai Park & Ride and continuing mauka with local service via Keāhole Street, Wailua Street, and Lunalilo Home Road before turning onto Hawaii Kai Drive to access Kalama Valley.
- PH6 Hawaii Kai/Pearl Harbor Express
 - o Route PH6 extends Express Route 80 to service Pearl Harbor.

D. Existing Intersection Geometry and Control

Existing traffic conditions were observed and documented, and operations of study area intersections were analyzed. The existing intersection operational characteristics established base conditions for comparison between future operations with and without the project.

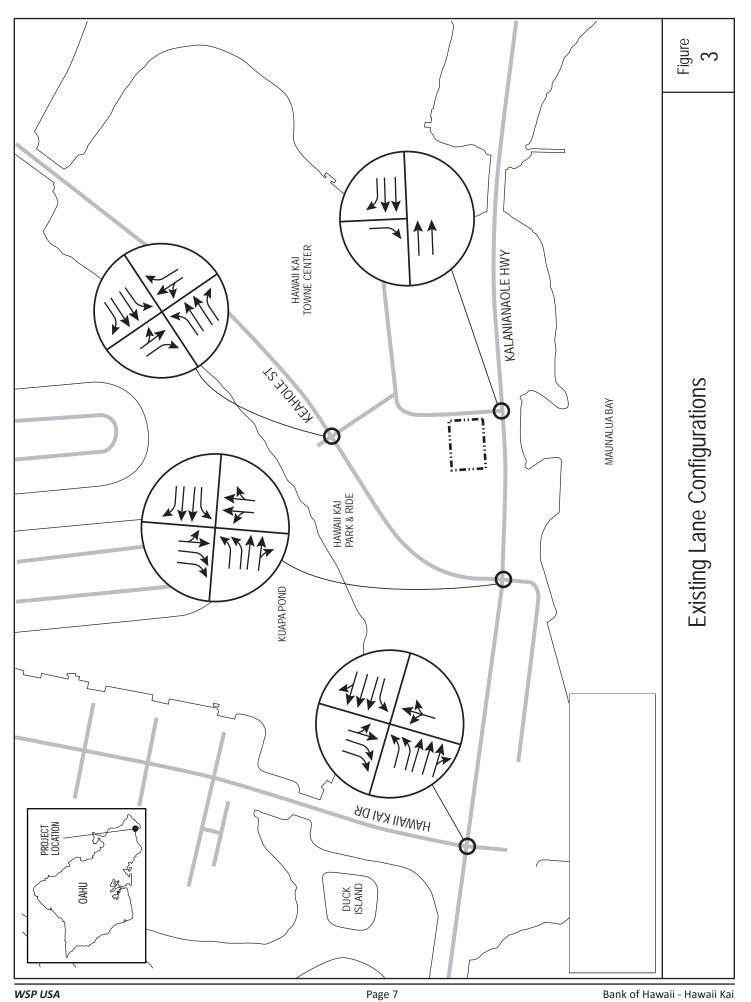
Traffic-related data were collected for each of the study intersections below:

- Kalaniana'ole Highway/Hawaii Kai Drive
- Kalaniana'ole Highway/Keāhole Street
- Kalaniana'ole Highway/Hawaii Kai Towne Center Driveway
- Keāhole Street/Hawaii Kai Towne Center Driveway/Hawaii Kai Park & Ride

Traffic turning movement counts, field observations of intersection operations, and general intersection characteristics were noted. Geometric lane configurations and intersection traffic control were collected. Intersection geometry inventory included the following:

- Number of lanes and lane widths,
- Crosswalk locations,
- Unsignalized intersection control, and
- Posted speed limits.

These data were used as inputs into the intersection analyses. The existing lane configurations are shown in Figure 3.



E. Bicycle/Pedestrian Facilities

Bike lanes are provided on Kalaniana'ole Highway within the study area. Hawaii Kai Drive and Keāhole Street do not provide bike lanes and cyclists are expected to share the road with motorists. A handful of cyclists were observed on Kalaniana'ole Highway during the study periods. As shown in Table 1, bike traffic was concentrated on Kalaniana'ole Highway during the PM peak hour.

Table 1 Peak Hour Bike Counts

	AM	PM
Kalaniana'ole Hwy/Hawaii Kai Dr	4	14
Kalaniana'ole Hwy/Keāhole St	2	14
Kalaniana'ole Hwy/Hawaii Kai Towne Center	5	12
Keāhole St/Hawaii Kai Towne Center/Hawaii Kai Park and Ride	1	1

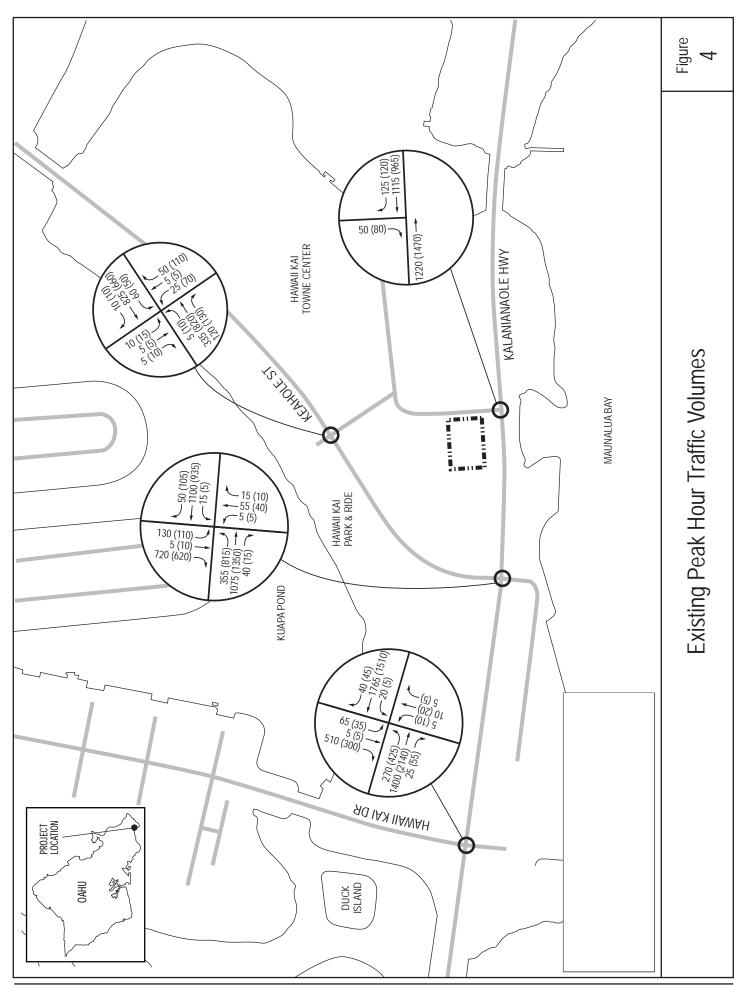
Sidewalks are provided on both sides of Kalaniana'ole Highway west of the study area, terminating at a point between Keāhole Street and the Hawaii Kai Towne Center driveway to Kalaniana'ole Highway. A detached sidewalk is also provided between the shopping center and Kalaniana'ole Highway. Sidewalks are provided on both sides of Hawaii Kai Drive and Keāhole Street. On-street parking is prohibited along Kalaniana'ole Highway and Keāhole Street. On-street parking is allowed on Hawaii Kai Drive mauka of the bridge, roughly 600' mauka of Kalaniana'ole Highway.

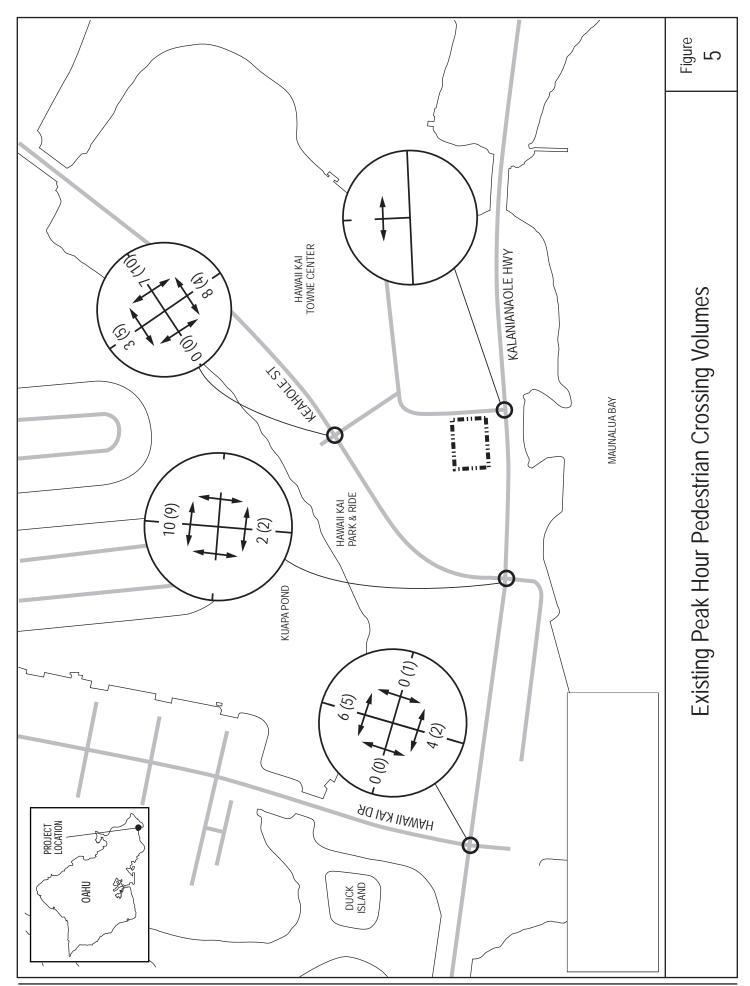
F. Existing Traffic/Pedestrian Volumes

Traffic turning movement and pedestrian/bicycle counts were conducted on Thursday, March 28, 2024 during the AM and PM peak hours at the study area intersections:

- Kalaniana'ole Highway/Hawaii Kai Drive
- Kalaniana'ole Highway/Keāhole Street
- Kalaniana'ole Highway/Hawaii Kai Towne Center Driveway
- Keāhole Street/Hawaii Kai Towne Center Driveway/Hawaii Kai Park & Ride

The AM and PM peak hours were found to occur from 7:30 AM to 8:30 AM and from 3:45 PM to 4:45 PM, respectively. Figure 4 shows the existing peak hour traffic turning movement volumes at these intersections. Figure 5 shows the existing peak hour pedestrian crossing volumes. Existing traffic count data can be found in Appendix A.





G. Existing Traffic Operations

The intersections were analyzed in Synchro 11 using the methodologies for unsignalized intersections outlined in the *Highway Capacity Manual 6th Edition (HCM6)*.

Operating conditions at an intersection by approach are expressed as a qualitative measure known as Level of Service (LOS) ranging from A to F. LOS A represents operations with low vehicular delay, while LOS F represents conditions with relatively high vehicular delay. The overall intersection LOS is a weighted average of the LOS of individual traffic movement groups. Appendix B has more detailed definitions of intersection LOS. Appendix C contains the Synchro worksheets. Table 2 displays the existing conditions LOS for each intersection.

The Kalaniana'ole Highway/Hawaii Kai Drive intersection and the Kalaniana'ole Highway/Keāhole Street intersection are coordinated and operate on a 240-second cycle length. Due to the long cycle length and prioritization of through traffic flow on Kalaniana'ole Highway, traffic operations at the two signalized Kalaniana'ole Highway intersections show queuing and longer delays for Kalaniana'ole Highway left turns and cross street movements.

Kalaniana'ole Highway/Hawaii Kai Drive

During the AM peak hour, this intersection operates at LOS D overall. The eastbound and westbound Kalaniana'ole Highway through movements operate at LOS A and B, respectively. The eastbound left turn operates at LOS F. The makai-bound Hawaii Kai Drive left and right turn movements operate at LOS F. An overlap phase is provided for the right turn movement during the eastbound left turn phase. Although these turning movements operate at LOS F, they were generally observed to clear within one cycle.

During the PM peak hour, this intersection operates at LOS C overall. The eastbound and westbound Kalaniana'ole Highway through movements operate at LOS B and C, respectively. The eastbound Kalaniana'ole Highway left turn operates at LOS F. The makai-bound Hawaii Kai Drive left and right turn movements operate at LOS F. All movements were generally observed to clear within one cycle. It should be noted that the queue related to the eastbound left turn from the downstream Keāhole Street intersection was observed to queue back to the Hawaii Kai Drive intersection during the PM peak.

Table 2 Existing Level of Service

				A۱	√l Peak H	our	P۱	/I Peak H	our
		Lane							
Intersection	Direction	Group	Movement	LOS	Delay	v/c	LOS	Delay	v/c
		L	Left	F	128.0	0.90	F	116.9	0.92
	Kalaniana'ole Hwy		Through	Α	9.7	0.40	В	13.1	0.57
	EB	TR	Right	В	10.1	0.40	В	13.9	0.58
		L	Left	F	143.0	0.77	F	144.3	0.47
	Kalaniana'ole Hwy		Through	В	18.6	0.55	С	24.9	0.49
	WB	TR	Right	В	19.1	0.55	С	25.5	0.49
			Left	F	111.8	0.39	F	86.2	0.14
	Hawaii Kai Dr		Through	Α	0.0	0.00	Α	0.0	0.00
	NB	LTR	Right	Α	0.0	0.00	Α	0.0	0.00
			Left	F	147.0	0.77	F	87.5	0.16
	Hawaii Kai Dr	LT	Through	Α	0.0	0.00	Α	0.0	0.00
Kalaniana'ole Hwy	SB	R	Right	F	107.3	0.89	Ε	66.2	0.37
/Hawaii Kai Dr	0	verall		D	37.0		С	31.9	
		L	Left	F	121.0	0.92	F	101.5	1.03
	Kalaniana'ole Hwy		Through	В	13.0	0.47	Α	1.0	0.49
	EB	TR	Right	В	13.0	0.47	Α	0.9	0.49
		L	Left	F	145.6	0.68	F	148.7	0.48
	Kalaniana'ole Hwy	T	Through	С	25.3	0.55	С	33.1	0.48
	WB	R	Right	В	16.5	0.06	С	25.6	0.12
			Left	F	89.7	0.29	F	87.6	0.15
	Keāhole St		Through	Α	0.0	0.00	Α	0.0	0.00
	NB	LT/TR	Right	F	88.7	0.23	F	87.5	0.14
			Left	F	119.3	0.77	F	100.6	0.55
	Keāhole St	LT	Through	Α	0.0	0.00	Α	0.0	0.00
Kalaniana'ole Hwy	SB	R	Right	F	121.7	1.02	Ε	59.1	0.58
/Ke āho le St	,				55.8		D	42.8	
	Kalaniana'ole Hwy								
	EB	T	Through	-	-	-	-	-	-
	Kalaniana'ole Hwy	T	Through	-	-	-	-	-	-
	WB	R	Right	-	-	-	-	-	-
	Towne Center								
Kalaniana'ole Hwy	SB	R	Right	С	15.0	0.14	В	13.6	0.17
/Hawaii Kai Towne Center	Highest De			С	15.0		В	13.6	
		L	L	F	103.1	0.46	E	56.7	0.46
	Keāhole St	T	T	Α	6.4	0.15	В	11.7	0.43
	NB	R	R		0.0			0.0	
		L	L	F	106.1	0.80	D	54.7	0.72
	Keāhole St	T	T	Α	5.8	0.34	Α	9.5	0.33
	SB	R	R		0.0			0.0	
			L	E	65.2	0.16	С	30.3	0.20
	Towne Center	LT	T	Α	0.0	0.00	Α	0.0	0.00
	WB	R	R		0.0			0.0	
			L	E	63.5	0.06	С	28.3	0.06
Keāhole St	Hawaii Kai P&R	LT	T	Α	0.0	0.00	Α	0.0	0.00
/Hawaii Kai Towne Center	EB	R	R		0.0			0.0	
/Hawaii Kai Park and Ride		verall	through move	В	13.0		В	13.5	

Delay shown in seconds per vehicle, L=left turn, T=through movement, R=right turn

Kalaniana'ole Highway/Keāhole Street

During the AM peak hour, this intersection operates at LOS E overall. The eastbound and westbound Kalaniana'ole Highway through movements operate at LOS B and C, respectively. The eastbound left turn operates at LOS F. The makai-bound Keāhole Street left and right turn movements operate at LOS F. An overlap phase is provided for the right turn movement during the eastbound left turn phase. Although these turning movements operate at LOS F, they were generally observed to clear within one cycle.

During the PM peak hour, this intersection operates at LOS D overall. The eastbound and westbound Kalaniana'ole Highway through movements operate at LOS A and C, respectively. The eastbound Kalaniana'ole Highway left turn operates at LOS F. The makai-bound Keāhole Street left and right turn movements operate at LOS F. All movements were generally observed to clear within one cycle. It should be noted that the eastbound left turn queue was observed to queue back to the Hawaii Kai Drive intersection. As shown in Figure 4, the high demand for the eastbound left turn is significantly higher during the PM peak hour compared to the AM peak hour. The increased amount of green time required for this turning movement also means that the makai-bound Keāhole Street right turn receives more green time and combined with slightly lower turning movement demand, results in a lower delay for this movement compared to the AM peak hour.

Kalaniana'ole Highway/Hawaii Kai Towne Center

This right-in/right-out intersection is projected to operate at LOS C during the AM peak hour and at LOS B during the PM peak hour.

Keāhole Street/Hawaii Kai Towne Center

This intersection operates at LOS B during the AM peak hour. Keāhole Street through movements operate at LOS A while the Park & Ride and Towne Center left turns operate at LOS E. The two Keāhole Street left turns operate at LOS F. These turn movements were relatively low in volume and were observed to clear within one cycle and high delay appears to be caused by the long cycle length. It should be noted that traffic was occasionally observed to queue back from the downstream Kalaniana'ole Highway/Keāhole Street intersection during the AM peak period.

This intersection operates at LOS B during the PM peak hour. The mauka-bound and makai-bound Keāhole Street through movements operate at LOS B and A, respectively. While the mauka-bound Keāhole left turn into the Park & Ride operates at LOS E, all other movements operate at LOS D or better.

H. Summary of Results

The two signalized Kalaniana'ole Highway intersections favor the east and westbound through traffic during both peak periods. As a result, this movement operates well at both intersections. Prioritizing the through movements on Kalaniana'ole Highway result in left turns from Kalaniana'ole Highway and cross street movements operating at LOS F due to the delay in waiting for their signal phase. Although there is delay, these movements were observed to clear within one signal cycle. The main exception is the eastbound Kalaniana'ole Highway left turn to Keāhole Street during the PM peak hour. This movement has significant demand and all of the traffic demand frequently cannot clear within one signal cycle.

The Hawaii Kai Towne Center intersections at Keāhole and at Kalaniana'ole Highway operate at acceptable overall levels of service. The signalized Keāhole Street intersection has selected individual turning movements that experience delay due to prioritization of the Keāhole Street through movement, but these were observed to clear within one signal cycle.

III. FUTURE 2026 CONDITIONS WITHOUT PROJECT

The new Bank of Hawaii site is planned to be completed in 2026. The 2026 conditions without project were analyzed to establish baseline conditions.

A. Future 2026 Land Use and Roadway System

No changes to the existing land use other than the proposed action or roadway system within the study area were assumed.

B. Future 2026 Transit

No changes in bus routes or service are assumed.

C. 2026 Traffic Volumes Without Project

In deriving Year 2026 background traffic volumes, historical traffic volumes on Kalaniana'ole Highway were obtained at Station B72007201379 located just west of Hawaii Kai Marina Bridge, east of the Hawaii Kai Towne Center's driveway to Kalaniana'ole Highway. Traffic data from 2010 to 2019 was obtained and the Annual Average Daily Traffic (AADT) is shown in Table 3 below.

Table 3 Historical AADT on Kalaniana'ole Highway

AADT
33,800*
32,700*
30,400
27,100
30,800
30,600
31,100
25,000

Note: AADT in vehicles per day

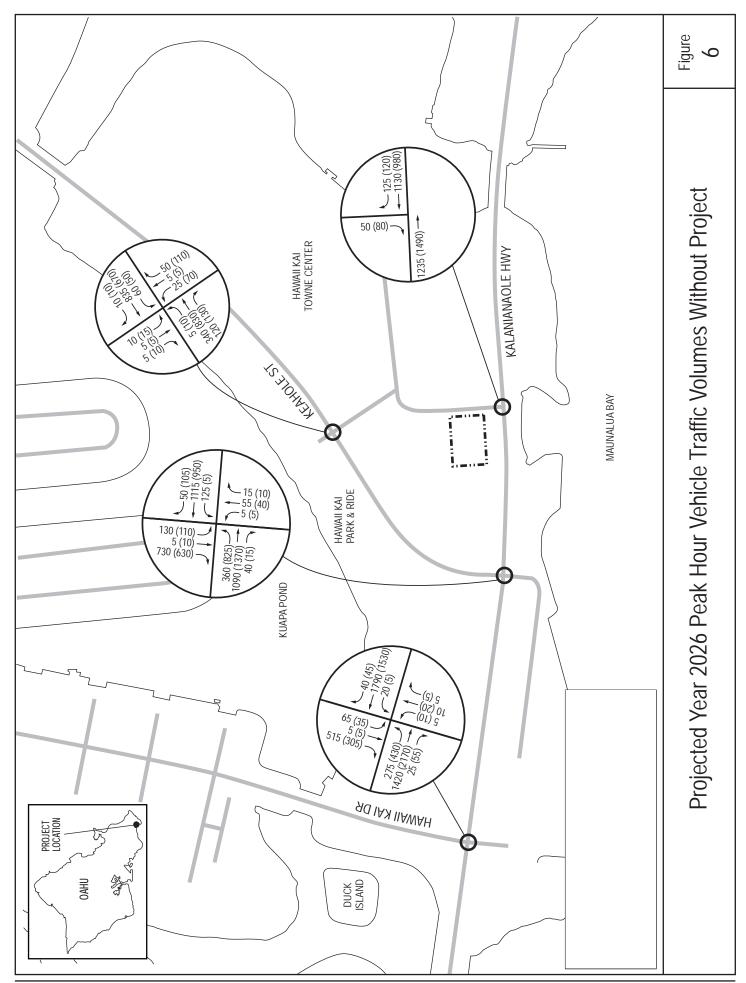
As shown, the historical data is inconsistent, with significant drops in daily traffic between 2012 and 2013 and then again between 2016 and 2019. It was determined that historical data could not be used as a basis to generate future growth.

^{*} No AADT given; 2-day average shown.

U.S. Census Bureau data was consulted to help estimate future regional traffic. Table 4 shows the 2010 and 2020 populations for the Hawaii, the City & County of Honolulu (Oahu), and the East Honolulu Census Designated Place (CDP). As shown, the annual linear growth for the State of Hawaii and island of Oahu are both 0.7%. The annual linear growth rate for the East Honolulu CDP is 0.2% by comparison. This makes sense considering the developed nature of the area. Since Kalaniana'ole Highway is a principal arterial that handles both regional and local traffic, an annual growth rate of 0.7% consistent with regional growth was used. The growth rate was applied to the existing 2024 traffic volumes to obtain projected 2026 background traffic without project. The projected 2026 traffic volumes without project are shown in Figure 6 and reflect a small magnitude of background traffic growth.

Table 4 Historical Census Population

	State of Hawaii	City & County of Honolulu	East Honolulu CDP
2010	1,360,301	953,207	49,914
2020	1,455,271	1,016,508	50,992
Annual Growth Rate	0.7%	0.7%	0.2%



D. Future 2026 Traffic Operations Without Project

The intersections were analyzed in Synchro 11 using the methodologies for unsignalized intersections outlined in the *Highway Capacity Manual 6th Edition (HCM6)*. Table 5 displays the projected 2025 LOS without project for each intersection.

Kalaniana'ole Highway/Hawaii Kai Drive

During the AM peak hour, this intersection is projected to operate at LOS D overall which is the same as the existing condition. The eastbound and westbound Kalaniana'ole Highway through movements are projected to operate at LOS A and B, respectively. The eastbound Kalaniana'ole Highway left turn and the makai-bound Hawaii Kai Drive left and right turn movements are projected to operate at LOS F.

During the PM peak hour, this intersection is projected to operate at LOS C overall. The eastbound and westbound Kalaniana'ole Highway through movements are projected to operate at LOS B and C, respectively. The eastbound Kalaniana'ole Highway left turn, the makai-bound Hawaii Kai Drive left and right turn movements are projected to operate at LOS F. Eastbound queuing consistent with existing conditions is expected to persist in the future year.

Kalaniana'ole Highway/Keāhole Street

During the AM peak hour, this intersection is projected to operate at LOS E overall which is the same as the existing condition. The eastbound and westbound Kalaniana'ole Highway through movements are projected to operate at LOS B and C, respectively. The eastbound left turn and the makai-bound Keāhole Street left and right turn movements are projected to operate at LOS F. Makai-bound queuing consistent with existing conditions is expected to persist in the future year.

During the PM peak hour, this intersection is projected to operate at LOS D overall. The eastbound and westbound Kalaniana'ole Highway through movements are projected to operate at LOS A and C, respectively. The eastbound Kalaniana'ole Highway left turn and the makai-bound Keāhole Street left and right turn movements are projected to operate at LOS F. Eastbound queuing consistent with existing conditions is expected to persist in the future year.

Table 5 Projected 2026 Without Project Level of Service

				A۱	Л Peak H	our	PΝ	Л Peak H	our
		Lane							
Intersection	Direction	Group	Movement	LOS	Delay	v/c	LOS	Delay	v/c
		L	Left	F	128.4	0.91	F	117.0	0.92
	Kalaniana'ole Hwy		Through	Α	9.6	0.40	В	13.3	0.58
	EB	TR	Right	В	10.0	0.40	В	14.1	0.58
		L	Left	F	142.7	0.77	F	144.3	0.47
	Kalaniana'ole Hwy		Through	В	18.7	0.56	С	25.3	0.50
	WB	TR	Right	В	19.3	0.56	С	26.0	0.50
			Left	F	111.8	0.39	F	86.2	0.14
	Hawaii Kai Dr		Through	Α	0.0	0.00	Α	0.0	0.00
	NB	LTR	Right	Α	0.0	0.00	Α	0.0	0.00
			Left	F	147.0	0.77	F	87.5	0.16
	Hawaii Kai Dr	LT	Through	Α	0.0	0.00	Α	0.0	0.00
Kalaniana'ole Hwy	SB	R	Right	F	107.1	0.89	Ε	66.0	0.37
/Hawaii Kai Dr	Ov	erall	_	D	37.1		С	32.1	
		L	Left	F	121.2	0.92	F	105.1	1.05
	Kalaniana'ole Hwy		Through	С	13.1	0.47	Α	1.0	0.49
	EB	TR	Right	С	13.1	0.47	Α	0.9	0.49
		L	Left	F	145.6	0.68	F	148.7	0.48
	Kalaniana'ole Hwy	T	Through	С	25.7	0.56	С	33.4	0.49
	WB	R	Right	В	16.6	0.06	С	25.6	0.12
			Left	F	89.7	0.29	F	87.6	0.15
	Keāhole St		Through	Α	0.0	0.00	Α	0.0	0.00
	NB	LT/TR	Right	F	88.7	0.23	F	87.5	0.14
			Left	F	119.3	0.77	F	100.6	0.55
	Keāhole St	LT	Through	Α	0.0	0.00	Α	0.0	0.00
Kalaniana'ole Hwy	SB	R	Right	F	123.9	1.03	Ε	59.5	0.59
/Keāhole St	Ov	erall		Ε	56.3		D	43.6	
	Kalaniana'ole Hwy								
	EB	T	Through	-	-	-	-	-	-
	Kalaniana'ole Hwy	T	Through	-	-	-	-	-	-
	WB	R	Right	-	-	-	-	-	-
	Towne Center								
Kalaniana'ole Hwy	SB	R	Right	С	15.1	0.14	В	13.8	0.17
/Hawaii Kai Towne Center	Highest Dela	ay Movem		С	15.1		В	13.8	
		L	L	F	103.1	0.46	E	56.7	0.46
	Keāhole St	T	T	Α	6.5	0.15	В	11.8	0.44
	NB	R	R		0.0			0.0	
		L	L	F	106.1	0.80	D	54.7	0.72
	Keāhole St	Т	T	Α	5.9	0.34	Α	9.6	0.33
	SB	R	R		0.0			0.0	
			L	Е	65.2	0.16	С	30.3	0.20
	Towne Center	LT	T	Α	0.0	0.00	Α	0.0	0.00
	WB	R	R		0.0			0.0	
			L	Ε	63.5	0.06	С	28.3	0.06
Keāhole St	Hawaii Kai P&R	LT	T	Α	0.0	0.00	Α	0.0	0.00
/Hawaii Kai Towne Center	R	R		0.0			0.0		
/Hawaii Kai Park and Ride	Ov	erall		В	13.0		В	13.5	

Delay shown in seconds per vehicle

Kalaniana'ole Highway/Hawaii Kai Towne Center

This right-in/right-out intersection is projected to operate at LOS C during the AM peak hour and at LOS B during the PM peak hour.

Keāhole Street/Hawaii Kai Towne Center

This intersection is projected to operate at LOS B during the AM peak hour. Keāhole Street through movements are projected to operate at LOS A while the Park & Ride and Towne Center left turns are projected to operate at LOS E. The two Keāhole Street left turns are projected to operate at LOS F. Downstream queuing consistent with existing conditions is expected to persist in the future year.

This intersection is projected to operate at LOS B during the PM peak hour. The mauka-bound and makai-bound Keāhole Street through movements are projected to operate at LOS B and A, respectively. While the mauka-bound Keāhole left turn into the Park & Ride is projected to operate at LOS E, all other movements are projected to operate at LOS D or better.

E. Summary of Results

The study area intersections are projected to operate at the same levels of service as existing. This is expected due to the minor volume increases within the study area.

The two signalized Kalaniana'ole Highway intersections are expected to have LOS A operations for the main line through movements and LOS F delays for the left turns and minor street movements. Despite the delay, these turning movements are generally expected to clear in once cycle with the exception of the eastbound Kalaniana'ole Highway turn to Keāhole Street during the PM peak hour.

The two Hawaii Kai Towne Center intersections are projected to operate at acceptable overall levels of service. The signalized Keāhole Street intersection is anticipated to have some high delay individual turning movements but these are expected to clear within one cycle.

IV. FUTURE 2026 CONDITIONS WITH PROJECT

The 2026 conditions with project were analyzed to identify the project's impacts on study area intersections. Due to the closure of another Bank of Hawaii branch, the Koko Marina Bank of Hawaii location has experienced a significant increase in transactions which would be alleviated by the new Hawaii Kai Towne Center location.

A. Future 2026 Traffic Volumes With Project

In order to analyze the project's operational impacts, the 2026 traffic volumes with project were estimated. 2026 traffic volumes with project are the sum of project-generated trips and the baseline traffic volumes established in the previous section.

1. Trip Generation

As shown in Figure 2, the new Bank of Hawaii building will have a 5,727 square foot (SF) footprint and will replace a building with a 7,213 SF footprint. The proposed branch bank project will add two more stalls to the shared Hawaii Kai Towne Center parking fronting the project compared to the existing condition. The bank will operate as a walk-in bank, with no drive-through facilities. Its hours of operation will be 8:00 AM to 4:00 PM on weekdays, 9:00 AM to 1:00 PM on Saturdays, and will be closed on Sundays. Per the Bank of Hawaii, average dwell times for customers is anticipated to be in the 5–10-minute range.

The *Institute of Transportation Engineers (ITE), Trip Generation, 11th Edition* was used to estimate the number of trips generated by the bank. Equations for ITE land uses 911 (Walk-In Bank) were used where available and 912 (Drive-In Bank) data was used as a reference. Peak hour trips are generally calculated using data/equations for the peak hour of the adjacent street. Peak hour of generator (the peak hour of trips produced by the trip generator) data is sometimes used if insufficient peak hour of adjacent street data is available or to be conservative.

For the AM peak hour trip generation, no peak hour of adjacent street data was available for the Walk-In Bank land use. Therefore, Walk-in Bank AM peak hour of generator data was used after being adjusted using Drive-In Bank data.

For the PM peak hour trip generation, peak hour of adjacent street data was available but had insufficient available data points. However, when comparing peak hour of adjacent street and peak hour of generator data for the Drive-In Bank land use, it was determined that both data sets were roughly equivalent (i.e. the PM peak hour of generator and peak hour of adjacent street occur at roughly the same time,).

Therefore, Walk-in Bank PM peak hour of generator data was used as a proxy for peak hour of adjacent street.

The final result is an average rate of 15.17 trips per 1,000 SF for the AM peak hour and 26.4 trips per 1,000 SF for the PM peak hour as shown in Table 6.

Table 6 Trip Generation Average Rates

		AN	/	P۱	1
	ITE Code	Generator	Adjacent	Generator	Adjacent
911	Walk-In Bank	22.54	15.17*	<mark>26.40</mark>	N/A
912	Drive-In Bank	14.78	9.95	20.92	21.01

^{*}Calculated, rates are vehicle trips/1,000 square feet

Table 7 summarizes the trips generated by the proposed development in its build year 2026.

Table 7 Bank of Hawaii Trip Generation Summary

				AIV	l Peak F	Hour	PM	Peak F	lour
	Land Use	Den	ısity	ln	Out	Total	ln	Out	Total
911	Walk-In Bank	45	42	87	77	74	151		
	Raw Total			45	42	87	77	74	151
	Pass-By			-12	-12	-24	-26	-26	-52
•	Total New Tr	ips	•	33	30	63	51	48	99

Notes: units in table are vehicles per hour

The raw total shown in Table 7 represents the total number of estimated trips entering and existing the bank during the AM and PM peak hours. However, not all of this traffic is new traffic added to the street system. Banks and other retail/service land uses often attract a portion of trips already traveling on adjacent roadways. These "pass-by" trips were accounted for at the turning movement into and out of the project site. But they are not new trips, so these are subtracted from the through traffic passing by the project site. Average AM and PM peak hour pass-by rates were obtained from the *ITE Trip Generation Handbook*, 3rd Edition. 29% was used for the AM peak hour and 35% was used for the PM peak hour. Trip generation equations and graphs are shown in Appendix D.

2. Trip Distribution

Shopping center traffic was assumed to be a mix of retail and service land uses. Therefore, existing travel patterns were used to distribute the project-generated trips.

3. Trip Assignment

Project-generated trips were assigned to the roadway network based on existing travel patterns. Project-generated trips are shown in Figure 7. The projected 2025 peak hour volumes with project are shown in Figure 8.

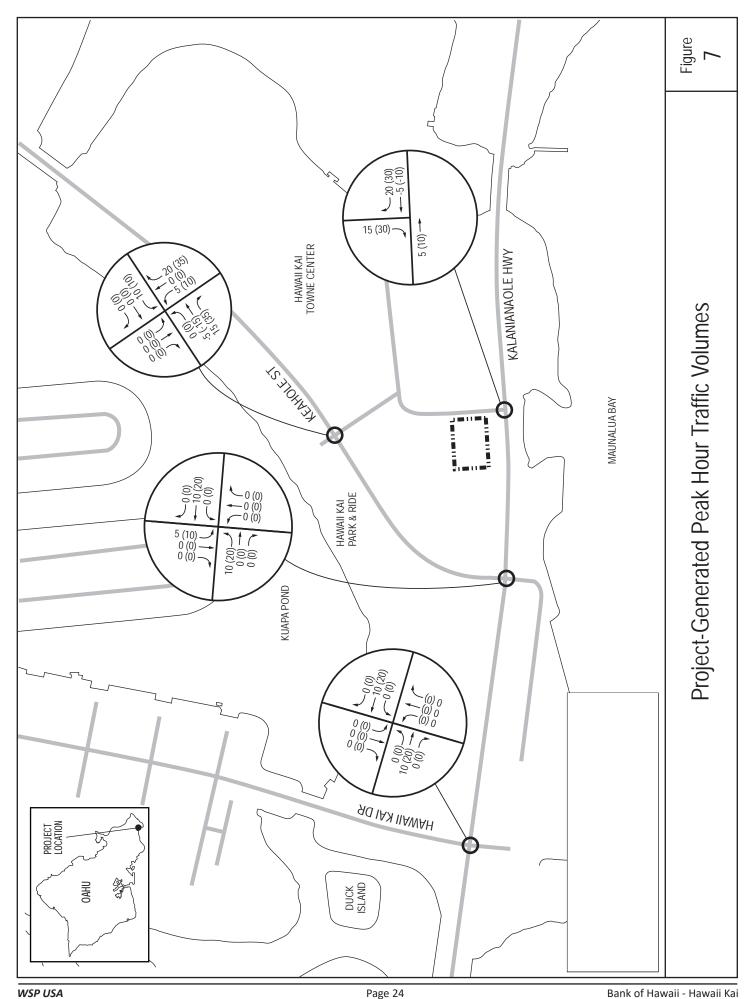
B. Future 2026 Traffic Operations With Project

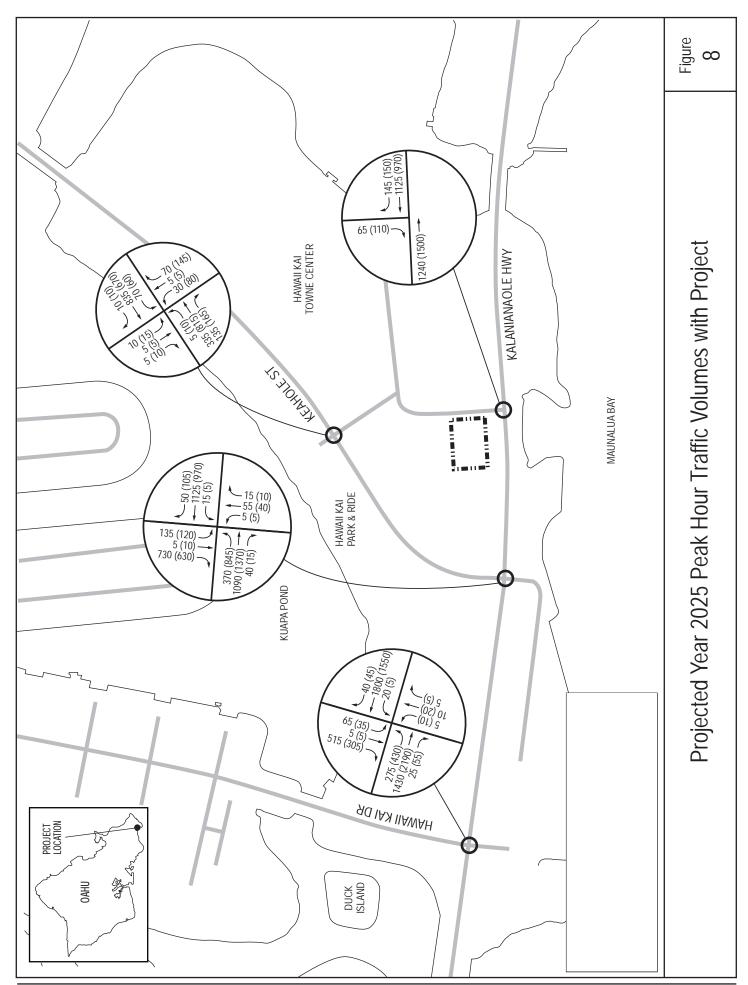
The intersections were analyzed in Synchro 11 using the methodologies for unsignalized intersections outlined in the *Highway Capacity Manual 6th Edition (HCM6)*. Table 8 displays the projected 2026 LOS with project for each intersection.

Kalaniana'ole Highway/Hawaii Kai Drive

During the AM peak hour, this intersection is projected to operate at LOS D overall, which is the same as the Without Project scenario. The eastbound and westbound Kalaniana'ole Highway through movements are projected to operate at LOS A and B, respectively. The eastbound Kalaniana'ole Highway left turn and the makai-bound Hawaii Kai Drive left and right turn movements are projected to operate at LOS F.

During the PM peak hour, this intersection is projected to operate at LOS C overall which is also the same as the Without Project condition. The eastbound and westbound Kalaniana'ole Highway through movements are projected to operate at LOS B and C, respectively. The eastbound Kalaniana'ole Highway left turn the makai-bound Hawaii Kai Drive left and right turn movements are projected to operate at LOS F. Queuing in the eastbound direction is an existing issue and is not projected to be affected by the project.





Draft

Table 8 Projected 2026 With Project Level of Service

				A۱	Л Peak H	our	P۱	/I Peak H	our
		Lane							
Intersection	Direction	Group	Movement	LOS	Delay	v/c	LOS	Delay	v/c
		L	Left	F	128.4	0.91	F	117.0	0.92
	Kalaniana'ole Hwy		Through	Α	9.6	0.40	В	13.3	0.58
	EB	TR	Right	В	10.0	0.40	В	14.1	0.58
		L	Left	F	142.7	0.77	F	144.3	0.47
	Kalaniana'ole Hwy		Through	В	18.7	0.56	С	25.3	0.50
	WB	TR	Right	В	19.3	0.56	С	26.0	0.50
			Left	F	111.8	0.39	F	86.2	0.14
	Hawaii Kai Dr		Through	Α	0.0	0.00	Α	0.0	0.00
	NB	LTR	Right	Α	0.0	0.00	Α	0.0	0.00
			Left	F	147.0	0.77	F	87.5	0.16
	Hawaii Kai Dr	LT	Through	Α	0.0	0.00	Α	0.0	0.00
Kalaniana'ole Hwy	SB	R	Right	F	107.1	0.89	Ε	66.0	0.37
/Hawaii Kai Dr	0,	verall		D	37.1		С	32.1	
		L	Left	F	121.2	0.92	F	105.1	1.05
	Kalaniana'ole Hwy		Through	С	13.1	0.47	Α	1.0	0.49
	EB	TR	Right	С	13.1	0.47	Α	0.9	0.49
		L	Left	F	145.6	0.68	F	148.7	0.48
	Kalaniana'ole Hwy	T	Through	С	25.7	0.56	С	33.4	0.49
	WB	R	Right	В	16.6	0.06	С	25.6	0.12
			Left	F	89.7	0.29	F	87.6	0.15
	Keāhole St		Through	Α	0.0	0.00	Α	0.0	0.00
	NB	LT/TR	Right	F	88.7	0.23	F	87.5	0.14
			Left	F	119.3	0.77	F	100.6	0.55
	Keāhole St	LT	Through	Α	0.0	0.00	Α	0.0	0.00
Kalaniana'ole Hwy	SB	R	Right	F	123.9	1.03	Е	59.5	0.59
/Keāhole St	0	verall		Е	56.3		D	43.6	
	Kalaniana'ole Hwy								
	EB	T	Through	-	-	-	-	-	-
	Kalaniana'ole Hwy	T	Through	-	-	-	-	-	-
	WB	R	Right	-	-	-	-	-	-
	Towne Center								
Kalaniana'ole Hwy	SB	R	Right	С	15.1	0.14	В	13.8	0.17
/Hawaii Kai Towne Center	Highest De	lay Mover		С	15.1		В	13.8	
		L	L	F	103.1	0.46	E	56.7	0.46
	Keāhole St	T	Т	Α	6.5	0.15	В	11.8	0.44
	NB	R	R		0.0			0.0	
		L	L	F	106.1	0.80	D	54.7	0.72
	Keāhole St	T	Т	Α	5.9	0.34	Α	9.6	0.33
	SB	R	R		0.0			0.0	
			L	Е	65.2	0.16	С	30.3	0.20
	Towne Center	LT	Т	Α	0.0	0.00	Α	0.0	0.00
	WB		R		0.0			0.0	
			L	Е	63.5	0.06	С	28.3	0.06
Keāhole St	Hawai Kai P&R	LT	Т	Α	0.0	0.00	Α	0.0	0.00
/Hawaii Kai Towne Center	R	R		0.0			0.0		
/Hawaii Kai Park and Ride	0,	verall		В	13.0		В	13.5	

Delay shown in seconds per vehicle

Kalaniana'ole Highway/Keāhole Street

During the AM peak hour, this intersection is projected to operate at LOS E overall which is the same as the existing condition. The eastbound and westbound Kalaniana'ole Highway through movements are projected to operate at LOS B and C, respectively. The eastbound left turn and the makai-bound Keāhole Street left and right turn movements are projected to operate at LOS F. It should be noted that due to the signal actuation, the increased demand and green time for the eastbound Kalaniana'ole left turn is expected to increase green time for the overlapping makai-bound Keāhole Street right turn. Because this is a high-demand movement, the intersection's overall delay is very slightly reduced compared to the Without Project scenario. Queuing in the makai-bound direction is an existing issue and is not projected to be affected by the project.

During the PM peak hour, this intersection is projected to operate at LOS D overall. The intersection's overall delay is projected to increase from 43.6 to 45.8 seconds per vehicle. The eastbound and westbound Kalaniana'ole Highway through movements are projected to operate at LOS A and C, respectively. The eastbound Kalanianole Highway left turn is projected to increase in delay by 8.2 seconds per vehicle but still operate at LOS F compared to the Without Project scenario. Likewise, the makai-bound Keāhole Street left turn movements are projected to increase in delay by 2.5 seconds per vehicle but still operate at LOS F compared to the Without Project scenario. Queuing in the eastbound direction is an existing issue and is not projected to be affected by the project.

Kalaniana'ole Highway/Hawaii Kai Towne Center

This right-in/right-out intersection is projected to operate at LOS C during the AM peak hour and at LOS B during the PM peak hour with an increase in delay of about 0.5 seconds per vehicle compared to the Without Project scenario.

Keāhole Street/Hawaii Kai Towne Center

This intersection is projected to projected to operate at LOS B during the AM peak hour. The intersection's overall delay is projected to increase from 13.0 to 14.5 seconds per vehicle when comparing the Without Project scenario to the With Project scenario. Keāhole Street through movements are projected to

operate at LOS A while the Park & Ride and Towne Center left turns are projected to operate at LOS E. The two Keāhole Street left turns are projected to operate at LOS F. Downstream queuing consistent with existing conditions is expected to persist in the future year.

This intersection is projected to operate at LOSB during the PM peak hour. The intersection's overall delay is projected to increase from 13.5 to 14.0 seconds per vehicle when comparing the Without Project scenario to the With Project scenario. The mauka-bound and makai-bound Keāhole Street through movements are projected to operate at LOSB and A, respectively. While the mauka-bound Keāhole left turn into the Park & Ride operates at LOSE, all other movements operate at LOSD or better.

C. Summary of Results

As shown in Table 5 and Table 8, the four study area intersections are projected to operate at the same overall LOS with and without the project. A minor increase in delay at certain minor turning movements is projected at the Kalaniana'ole Highway/Keāhole Street and the Keāhole Street/Hawaii Kai Park & Ride/Hawaii Kai Towne Center intersections.

V. CONCLUSIONS & RECOMMENDATIONS

Bank of Hawaii is planning to open a new branch at the Hawaii Kai Towne Center, located in Hawaii Kai. The new building will replace the former Outback Steakhouse with a reduced footprint. Two additional parking stalls will be provided compared to the existing condition. Its hours of operation will be 8:00 AM to 4:00 PM on weekdays, 9:00 AM to 1:00 PM on Saturdays, and closed on Sundays. The proposed year of opening is 2026.

A. Conclusions

Based on the LOS analysis comparing the with and without project scenarios, it is concluded that the project will not significantly impact traffic operations at the study area intersections in the vicinity of the project. As shown in Table 5 and Table 8, the four study area intersections are projected to operate at the same overall LOS with and without the project. Minor increases in delay at certain minor turning movements are projected at the Kalaniana'ole Highway/Keāhole Street and the Keāhole Street/Hawaii Kai Park & Ride/Hawaii Kai Towne Center intersections.

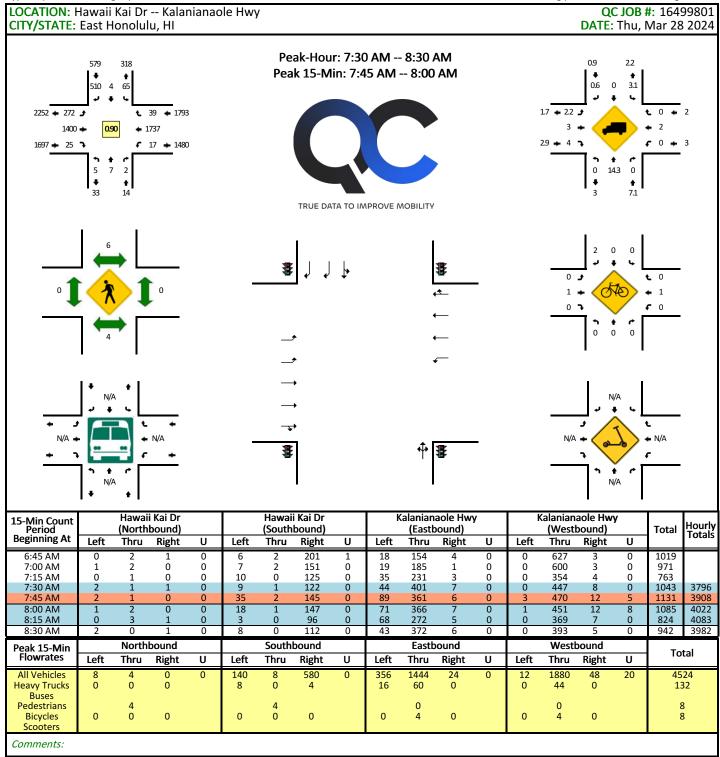
Based on the anticipated short dwell times of 5-10 minutes and the increase in parking stalls provided directly adjacent to the project, no impact to existing Hawaii Kai Towne Center parking is anticipated. As shown in Figure 7, the project-generated traffic volumes are low and are not anticipated to have a significant impact on the Hawaii Kai Towne Center internal intersections.

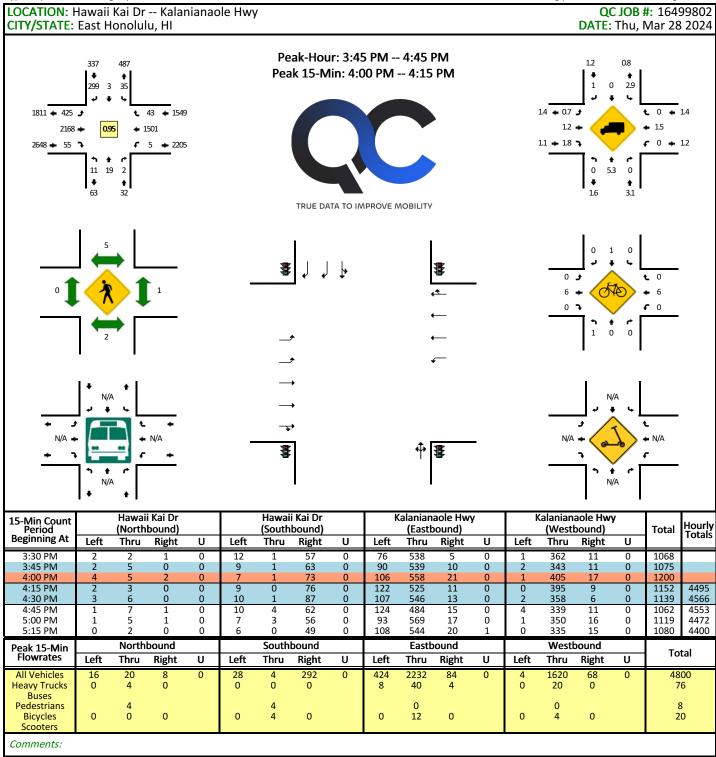
B. Recommendations

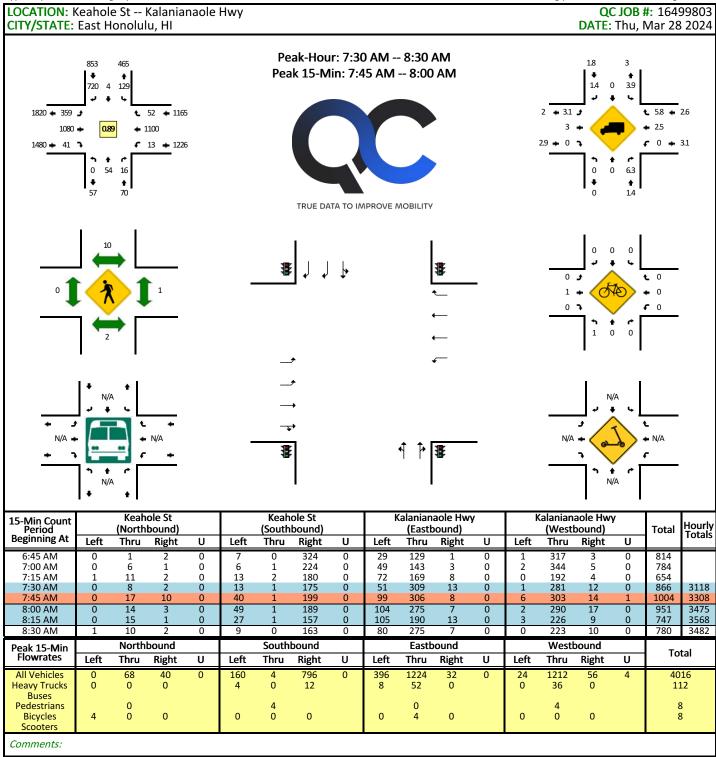
Based on the traffic analysis results, the following are recommended:

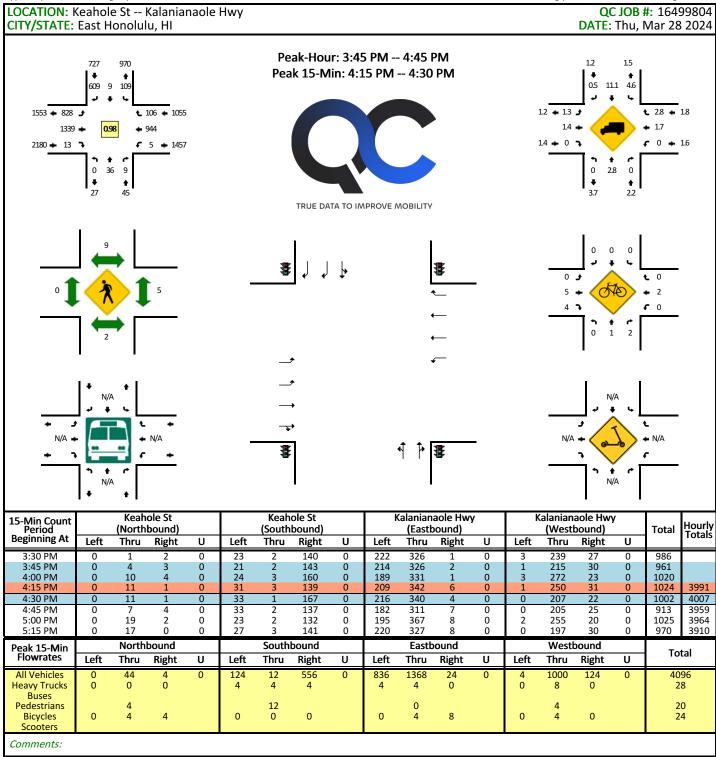
- Consider using diagonal parking in the parking lot fronting the project in order to be consistent with the surrounding parking stalls and one-way travel.
- Ensure that parking stall and parking aisle dimensions meet the minimum standards for parking stalls per the Revised Ordinances of Honolulu.

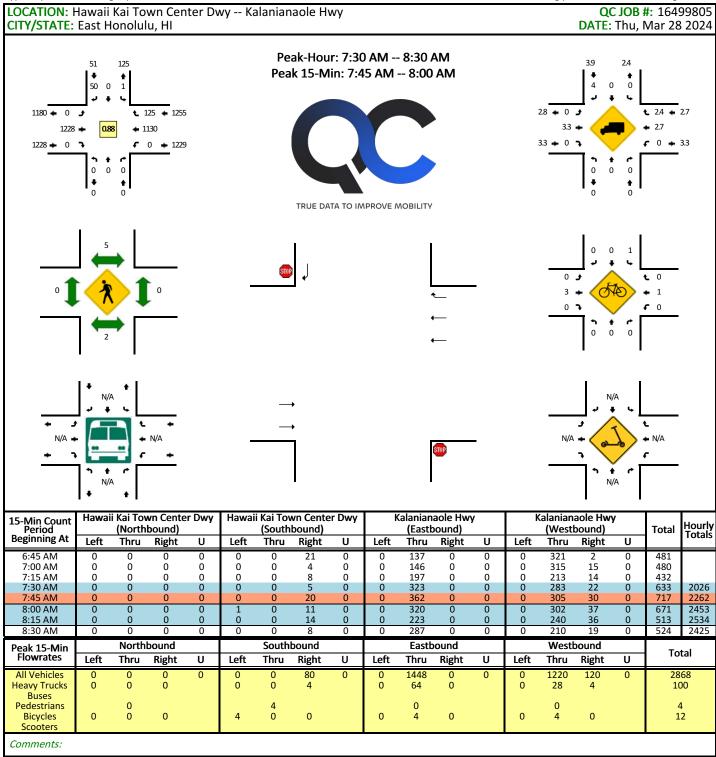
Appendix A Traffic Count Data

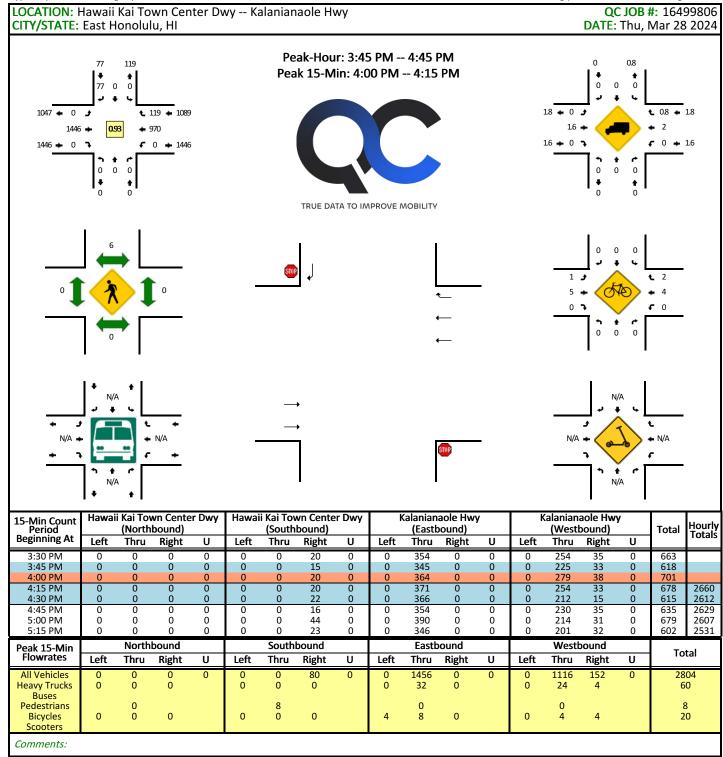




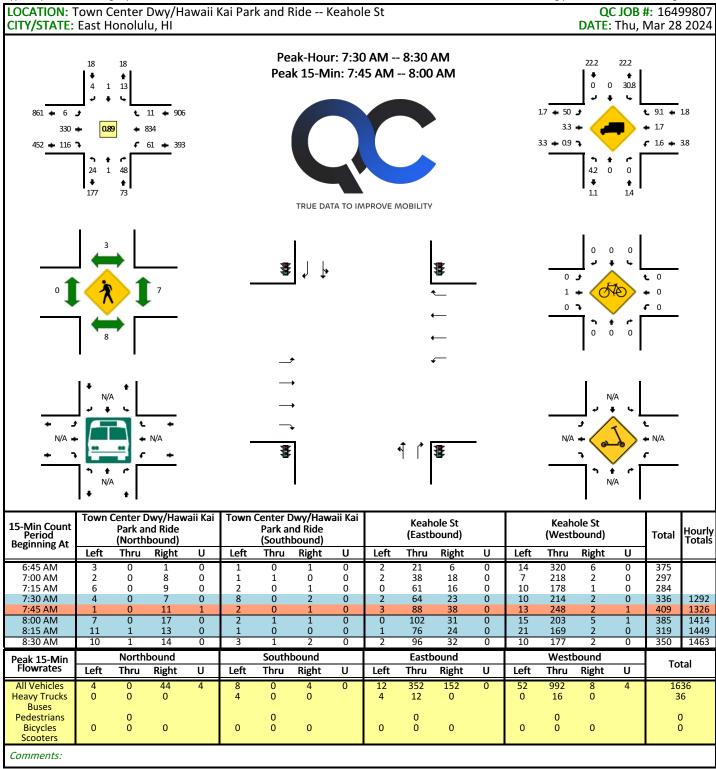




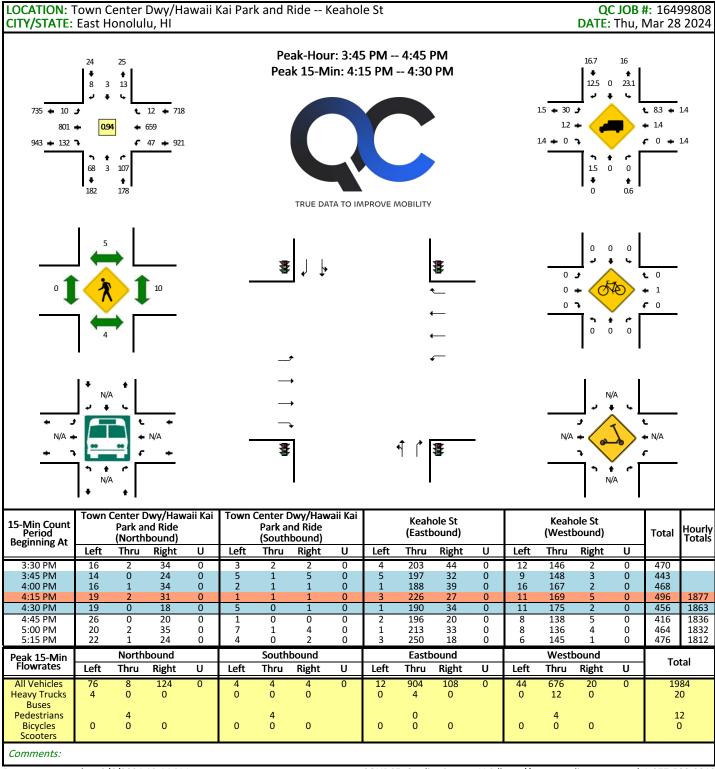




Report generated on 3/6/2024 12:52 PM



Report generated on 3/6/2024 1:14 PM



Report generated on 3/6/2024 12:14 PM

Appendix B Level of Service Definitions

The *Highway Capacity Manual* defines six Intersection Levels of Service (LOS), labeled A through F, from free flow to congested conditions.

Levels of Service for <u>signalized intersections</u> is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, geometric delay, any incidents, and any other vehicles. Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle, typically for a 15-minute analysis period. Delay is a complex measure and depends on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group.

LEVEL-OF-SERVICE A: Low control delay, up to 10 seconds/vehicle (s/veh). This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.

LEVEL-OF-SERVICE B: Control delay greater than 10 and up to 20 s/veh. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.

LEVEL-OF-SERVICE C: Control delay greater than 20 and up to 35 s/veh. These higher delays may result from only fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LEVEL-OF-SERVICE D: Control delay greater than 35 and up to 55 s/veh. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LEVEL-OF-SERVICE E: Control delay greater than 55 and up to 80 s/veh. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent.

LEVEL-OF-SERVICE F: Control delay in excess of 80 s/veh. This level, considered unacceptable to most drivers, often occurs with oversaturation, that is when arrival flow rates exceed the capacity of lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

For <u>unsignalized intersections</u>, the *Highway Capacity Manual* evaluates gaps in the major street traffic flow and calculates available gaps for left-turns across oncoming traffic and for the left and right-turns onto the major roadway from the minor street. Average control delay, based on these factors, is still used to define the levels of service.

LEVEL-OF-SERVICE A: Low control delay, up to 10 s/veh.

LEVEL-OF-SERVICE B: Control delay greater than 10 and up to 15 s/veh.

LEVEL-OF-SERVICE C: Control delay greater than 15 and up to 25 s/veh.

LEVEL-OF-SERVICE D: Control delay greater than 25 and up to 35 s/veh.

LEVEL-OF-SERVICE E: Control delay greater than 35 and up to 50 s/veh.

LEVEL-OF-SERVICE F: Control delay in excess of 50 s/veh.

Appendix C Synchro Reports

	_≉	→	7	*	←	٤	•	×	/	Ĺ	×	✓
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻሻ	ተተኈ		ሻ	ተተኈ			4			ર્ન	77
Traffic Volume (veh/h)	270	1400	25	20	1765	40	5	10	5	65	5	510
Future Volume (veh/h)	270	1400	25	20	1765	40	5	10	5	65	5	510
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1885	1885	1885
Adj Flow Rate, veh/h	300	1556	28	22	1961	44	6	11	6	72	6	567
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	1	1	1
Cap, veh/h	332	3937	71	29	3575	80	19	30	10	96	6	636
Arrive On Green	0.10	0.77	0.77	0.02	0.70	0.70	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	3428	5124	92	1781	5138	115	0	230	81	518	46	2812
Grp Volume(v), veh/h	300	1026	558	22	1299	706	23	0	0	78	0	567
Grp Sat Flow(s),veh/h/ln	1714	1689	1839	1781	1702	1849	311	0	0	565	0	1406
Q Serve(g_s), s	20.8	24.2	24.2	3.0	45.0	45.1	0.0	0.0	0.0	0.0	0.0	31.0
Cycle Q Clear(g_c), s	20.8	24.2	24.2	3.0	45.0	45.1	31.0	0.0	0.0	31.0	0.0	31.0
Prop In Lane	1.00		0.05	1.00		0.06	0.26		0.26	0.92		1.00
Lane Grp Cap(c), veh/h	332	2595	1413	29	2369	1287	59	0	0	102	0	636
V/C Ratio(X)	0.90	0.40	0.40	0.77	0.55	0.55	0.39	0.00	0.00	0.77	0.00	0.89
Avail Cap(c_a), veh/h	400	2595	1413	96	2369	1287	59	0	0	102	0	636
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.69	0.69	0.69	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	107.2	9.2	9.2	117.6	17.9	18.0	93.6	0.0	0.0	105.5	0.0	90.0
Incr Delay (d2), s/veh	20.7	0.5	0.8	25.3	0.6	1.2	18.2	0.0	0.0	41.6	0.0	17.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	9.2	10.2	1.6	18.2	20.0	1.6	0.0	0.0	6.2	0.0	18.9
Unsig. Movement Delay, s/vel												
LnGrp Delay(d),s/veh	128.0	9.7	10.1	143.0	18.6	19.1	111.8	0.0	0.0	147.0	0.0	107.3
LnGrp LOS	F	А	В	F	В	В	F	A	A	F	A	F
Approach Vol, veh/h		1884			2027			23			645	
Approach Delay, s/veh		28.6			20.1			111.8			112.1	
Approach LOS		С			С			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	190.4		35.0	27.3	173.0		35.0				
Change Period (Y+Rc), s	6.0	6.0		4.0	4.0	6.0		4.0				
Max Green Setting (Gmax), s	13.0	180.0		31.0	28.0	167.0		31.0				
Max Q Clear Time (g_c+I1), s	5.0	26.2		33.0	22.8	47.1		33.0				
Green Ext Time (p_c), s	0.0	17.9		0.0	0.5	30.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			37.0									
HCM 6th LOS			D									

	≭	-	7	*	•	۲	•	×	/	6	×	</th <th></th>	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations	ሻሻ	ተ ኈ		ች	^	7		414			सी	77	
Traffic Volume (veh/h)	355	1075	40	15	1100	50	5	55	15	130	5	720	
Future Volume (veh/h)	355	1075	40	15	1100	50	5	55	15	130	5	720	
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approac		No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1885	1885	1885	1870	1870	1870	
Adj Flow Rate, veh/h	399	1208	45	17	1236	56	6	62	17	146	6	809	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	
Percent Heavy Veh, %	3	3	3	3	3	3	1	1	1	2	2	2	
Cap, veh/h	435	2585	96	25	2246	994	23	249	73	191	7	795	
Arrive On Green	0.13	0.75	0.75	0.01	0.64	0.64	0.16	0.16	0.16	0.16	0.16	0.16	
Sat Flow, veh/h	3428	3465	129	1767	3526	1560	28	1572	464	1022	42	2781	
Grp Volume(v), veh/h	399	614	639	17	1236	56	25	0	60	152	0	809	
Grp Sat Flow(s), veh/h/l	n1714	1763	1832	1767	1763	1560	433	0	1631	1064	0	1390	
Q Serve(g_s), s	27.6	32.6	32.7	2.3	47.0	3.2	0.6	0.0	7.7	27.0	0.0	38.0	
Cycle Q Clear(g_c), s	27.6	32.6	32.7	2.3	47.0	3.2	35.2	0.0	7.7	34.6	0.0	38.0	
Prop In Lane	1.00		0.07	1.00		1.00	0.24		0.28	0.96		1.00	
Lane Grp Cap(c), veh/h	1 435	1315	1366	25	2246	994	87	0	258	198	0	795	
V/C Ratio(X)	0.92	0.47	0.47	0.68	0.55	0.06	0.29	0.00	0.23	0.77	0.00	1.02	
Avail Cap(c_a), veh/h	529	1315	1366	52	2246	994	87	0	258	198	0	795	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.00	0.96	
Uniform Delay (d), s/ve	h 03.5	11.9	11.9	117.8	24.3	16.4	87.9	0.0	88.2	103.4	0.0	85.8	
Incr Delay (d2), s/veh	17.5	1.1	1.1	27.9	1.0	0.1	1.8	0.0	0.5	15.9	0.0	35.9	
Initial Q Delay(d3),s/ve	h 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),ve	h/lß .5	13.4	14.0	1.3	20.4	1.3	1.4	0.0	3.3	10.4	0.0	29.0	
Unsig. Movement Dela	y, s/veł	ı											
LnGrp Delay(d),s/veh	121.0	13.0	13.0	145.6	25.3	16.5	89.7	0.0	88.7	119.3	0.0	121.7	
LnGrp LOS	F	В	В	F	С	В	F	Α	F	F	Α	F	
Approach Vol, veh/h		1652			1309			85			961		
Approach Delay, s/veh		39.1			26.5			89.0			121.3		
Approach LOS		D			С			F			F		
Timer - Assigned Phs	1	2		4	5	6		8					
Phs Duration (G+Y+Rc), s9.4			42.0		158.9		42.0					
Change Period (Y+Rc)		6.0		4.0	5.0	6.0		4.0					
Max Green Setting (Gn				38.0	37.0			38.0					
Max Q Clear Time (g_c				37.2	29.6	49.0		40.0					
Green Ext Time (p_c),		11.7		0.0	0.9			0.0					
Intersection Summary													
HCM 6th Ctrl Delay			55.8										
HCM 6th LOS			E										
			_										

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		^	^	7		7
Traffic Vol, veh/h	0	1220	1115	125	0	50
Future Vol, veh/h	0	1220	1115	125	0	50
Conflicting Peds, #/hr	0	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
Storage Length	-	-	-	115	-	0
Veh in Median Storage,	# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	4	4
Mvmt Flow	0	1386	1267	142	0	57
		.000	0,			- 0,
	ajor1		Major2		/linor2	
Conflicting Flow All	-	0	-	0	-	634
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.34
Pot Cap-1 Maneuver	0	_	-	0	0	417
Stage 1	0	_	_	0	0	-
Stage 2	0	_	-	0	0	_
Platoon blocked, %	0	_	_	- 0		
Mov Cap-1 Maneuver	_			_	_	417
Mov Cap-1 Maneuver	_	-	_	-	-	417
		-	-	-	-	
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		15	
HCM LOS					C	
Minor Lane/Major Mvmt		EBT	WBT S			
Capacity (veh/h)		-	-	417		
HCM Lane V/C Ratio		-	-	0.136		
HCM Control Delay (s)		-	-	15		
HCM Lane LOS		-	-	С		
HCM 95th %tile Q(veh)		-	-	0.5		
_(:0:1)						

	۶	→	*	•	+	•	1	†	~	/	+	-√
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	^	7	ሻ	^	7		र्स	7		र्स	7
Traffic Volume (veh/h)	5	335	120	60	825	10	25	5	50	5	5	10
Future Volume (veh/h)	5	335	120	60	825	10	25	5	50	5	5	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.98		1.00	0.98		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1885	1885	1885	1574	1574	1574
Adj Flow Rate, veh/h	6	376	0	67	927	0	28	6	0	6	6	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	2	2	2	1	1	1	22	22	22
Cap, veh/h	13	2591		84	2753		181	35		105	91	
Arrive On Green	0.01	0.73	0.00	0.05	0.77	0.00	0.12	0.12	0.00	0.12	0.12	0.00
Sat Flow, veh/h	1767	3526	1572	1781	3554	1585	1187	297	1598	605	771	1334
Grp Volume(v), veh/h	6	376	0	67	927	0	34	0	0	12	0	0
Grp Sat Flow(s), veh/h/ln	1767	1763	1572	1781	1777	1585	1484	0	1598	1376	0	1334
Q Serve(g_s), s	0.5	5.1	0.0	6.0	12.8	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.5	5.1	0.0	6.0	12.8	0.0	3.1	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.82		1.00	0.50		1.00
Lane Grp Cap(c), veh/h	13	2591		84	2753		217	0		196	0	
V/C Ratio(X)	0.46	0.15		0.80	0.34		0.16	0.00		0.06	0.00	
Avail Cap(c_a), veh/h	55	2591		100	2753		217	0		196	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	79.4	6.3	0.0	75.7	5.5	0.0	63.7	0.0	0.0	62.9	0.0	0.0
Incr Delay (d2), s/veh	23.8	0.1	0.0	30.4	0.3	0.0	1.5	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.0	0.0	3.5	4.7	0.0	1.4	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/vel			0.0	10/1	Г 0	0.0	/ F 0	0.0	0.0	/O.F	0.0	0.0
LnGrp Delay(d),s/veh	103.1	6.4	0.0	106.1	5.8	0.0	65.2	0.0	0.0	63.5	0.0	0.0
LnGrp LOS	F	A		F	A		E	A		<u>E</u>	A	
Approach Vol, veh/h		382			994			34			12	
Approach Delay, s/veh		8.0			12.6			65.2			63.5	
Approach LOS		А			В			Ł			Ł	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.6	124.0		23.0	7.2	130.4		23.0				
Change Period (Y+Rc), s	6.0	6.0		4.0	6.0	6.0		4.0				
Max Green Setting (Gmax), s	9.0	118.0		19.0	5.0	122.0		19.0				
Max Q Clear Time (g_c+I1), s	8.0	7.1		5.1	2.5	14.8		3.1				
Green Ext Time (p_c), s	0.0	3.0		0.1	0.0	9.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			13.0									
HCM 6th LOS			В									
Notos												

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

	_#	→	7	*	←	٤	•	×	/	Ĺ	×	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	14.54	↑ ↑₽		ች	ተተኈ			4			र्स	77
Traffic Volume (veh/h)	425	2140	55	5	1510	45	10	20	5	35	5	300
Future Volume (veh/h)	425	2140	55	5	1510	45	10	20	5	35	5	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	4005	No	4005	1005	No	1005	105/	No	105/	1005	No	1005
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1856	1856	1856	1885	1885	1885
Adj Flow Rate, veh/h	447	2253	58	5	1589	47	11	21	5	37	5	316
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1 488	1 3925	1 101	1 11	1 3218	1 95	3 80	3 146	3 32	1 232	30	042
Cap, veh/h Arrive On Green	0.14	0.76	0.76	0.01	0.63	0.63	0.17	0.17	0.17	0.17	0.17	862 0.17
Sat Flow, veh/h	3483	5160	132	1795	5136	152	363	878	194	1224	178	2807
Grp Volume(v), veh/h	447	1496	815	5	1061	575	37	0	0	42	0	316
Grp Sat Flow(s), veh/h/ln	1742	1716	1861	1795	1716	1857	1434	0	0	1402	0	1403
Q Serve(g_s), s	30.4	44.4	44.7	0.7	40.2	40.2	0.1	0.0	0.0	0.0	0.0	21.1
Cycle Q Clear(g_c), s	30.4	44.4	44.7	0.7	40.2	40.2	7.1	0.0	0.0	7.1	0.0	21.1
Prop In Lane	1.00	741.4	0.07	1.00	70.2	0.08	0.30	0.0	0.14	0.88	0.0	1.00
Lane Grp Cap(c), veh/h	488	2610	1416	11	2149	1163	259	0	0.11	262	0	862
V/C Ratio(X)	0.92	0.57	0.58	0.47	0.49	0.49	0.14	0.00	0.00	0.16	0.00	0.37
Avail Cap(c_a), veh/h	639	2610	1416	37	2149	1163	259	0	0	262	0	862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	101.8	12.2	12.2	118.9	24.2	24.2	85.1	0.0	0.0	86.2	0.0	65.0
Incr Delay (d2), s/veh	15.1	0.9	1.7	25.4	0.7	1.3	1.2	0.0	0.0	1.3	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.9	17.4	19.3	0.4	17.0	18.5	2.1	0.0	0.0	2.4	0.0	7.9
Unsig. Movement Delay, s/vel												
LnGrp Delay(d),s/veh	116.9	13.1	13.9	144.3	24.9	25.5	86.2	0.0	0.0	87.5	0.0	66.2
LnGrp LOS	F	В	В	F	С	С	F	A	A	F	A	<u>E</u>
Approach Vol, veh/h		2758			1641			37			358	
Approach Delay, s/veh		30.2			25.5			86.2			68.7	
Approach LOS		С			С			F			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	188.6		44.0	39.7	156.3		44.0				
Change Period (Y+Rc), s	6.0	6.0		4.0	6.0	6.0		4.0				
Max Green Setting (Gmax), s	5.0	179.0		40.0	44.0	140.0		40.0				
Max Q Clear Time (g_c+l1), s	2.7	46.7		9.1	32.4	42.2		23.1				
Green Ext Time (p_c), s	0.0	45.1		0.2	1.3	18.9		1.4				
Intersection Summary												
HCM 6th Ctrl Delay			31.9									
HCM 6th LOS			С									

	_≉	-	7	*	•	۲	•	×	/	6	×	✓	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations	ሻሻ	ተ ኈ		ሻ	^	7		414			4	77	
Traffic Volume (veh/h)	815	1350	15	5	935	105	5	40	10	110	10	620	
Future Volume (veh/h)	815	1350	15	5	935	105	5	40	10	110	10	620	
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	0.99		0.98	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approac		No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1885	1885	1885	
Adj Flow Rate, veh/h	832	1378	15	5	954	107	5	41	10	112	10	633	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	1	1	1	
Cap, veh/h	805	2837	31	11	1977	875	36	291	74	205	16	1083	
Arrive On Green	0.46	1.00	1.00	0.01	0.56	0.56	0.16	0.16	0.16	0.16	0.16	0.16	
Sat Flow, veh/h	3483	3629	39	1781	3554	1572	114	1861	474	1125	100	2767	
Grp Volume(v), veh/h	832	680	713	5	954	107	22	0	34	122	0	633	
Grp Sat Flow(s), veh/h/l		1791	1878	1781	1777	1572	837	0	1611	1226	0	1383	
Q Serve(g_s), s	55.5	0.0	0.0	0.7	39.1	7.8	0.3	0.0	4.4	19.9	0.0	37.5	
Cycle Q Clear(g_c), s	55.5	0.0	0.0	0.7	39.1	7.8	24.6	0.0	4.4	24.3	0.0	37.5	
Prop In Lane	1.00		0.02	1.00		1.00	0.23		0.29	0.92		1.00	
Lane Grp Cap(c), veh/h		1400	1468	11	1977	875	149	0	252	220	0	1083	
V/C Ratio(X)	1.03	0.49	0.49	0.48	0.48	0.12	0.15	0.00	0.14	0.55	0.00	0.58	
Avail Cap(c_a), veh/h	805	1400	1468	78	1977	875	149	0	252	220	0	1083	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	0.79	0.79	0.79	1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.00	0.96	
Uniform Delay (d), s/ve		0.0	0.0	118.9	32.3	25.4	87.1	0.0	87.3	97.8	0.0	58.4	
Incr Delay (d2), s/veh	37.0	1.0	0.9	29.7	0.8	0.3	0.5	0.0	0.2	2.9	0.0	0.8	
Initial Q Delay(d3),s/ve		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),ve		0.4	0.4	0.4	17.5	3.1	1.2	0.0	1.9	7.5	0.0	15.8	
Unsig. Movement Dela	•		0.0	4.40.7	00.4	05 (07./	0.0	07.5	100 /	0.0	FO 4	
LnGrp Delay(d),s/veh		1.0	0.9	148.7	33.1	25.6	87.6	0.0	87.5	100.6	0.0	59.1	
LnGrp LOS	F	Α	A	F	С	С	F	A	F	F	A	<u>E</u>	
Approach Vol, veh/h		2225			1066			56			755		
Approach Delay, s/veh		38.5			32.9			87.5			65.9		
Approach LOS		D			С			F			Е		
Timer - Assigned Phs	1	2		4	5	6		8					
Phs Duration (G+Y+Rc), \$5.9	192.1		42.0	60.0	138.0		42.0					
Change Period (Y+Rc)		4.5		4.5	4.5	4.5		4.5					
Max Green Setting (Gn	na 1k) ,5s	178.5		37.5	55.5	133.5		37.5					
Max Q Clear Time (g_c	:+ 112). ,7s	2.0		26.6	57.5	41.1		39.5					
Green Ext Time (p_c),	s 0.0	14.4		0.1	0.0	9.0		0.0					
Intersection Summary													
HCM 6th Ctrl Delay			42.8										
HCM 6th LOS			D										

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		^	^	7		7
Traffic Vol, veh/h	0	1470	965	120	0	80
Future Vol, veh/h	0	1470	965	120	0	80
Conflicting Peds, #/hr	0	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
Storage Length	-	-	-	115	-	0
Veh in Median Storage,	# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	0	1581	1038	129	0	86
		1001	1000	127		- 00
	ajor1		Major2		/linor2	
Conflicting Flow All	-	0	-	0	-	519
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	_	-	-	-	-
Follow-up Hdwy	-	-	_	_	-	3.32
Pot Cap-1 Maneuver	0	-	_	0	0	502
Stage 1	0	_	_	0	0	- 302
Stage 2	0		-	0	0	_
Platoon blocked, %	U	-	_	U	U	
		-	-			EVO
Mov Cap-1 Maneuver	-	-	-	-	-	502
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		13.6	
HCM LOS	U		U		13.0 B	
TIGIVI LOS					ט	
Minor Lane/Major Mvmt		EBT	WBT:	SBLn1		
Capacity (veh/h)				502		
HCM Lane V/C Ratio		-	_	0.171		
HCM Control Delay (s)		-	-	13.6		
HCM Lane LOS		_	_	В		
HCM 95th %tile Q(veh)				0.6		
HOW JULY JOHNE COLVERY		_	_	0.0		

	۶	→	•	•	—	•	1	†	~	/	+	-√
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	^	7	7	^	7		र्स	7		र्स	7
Traffic Volume (veh/h)	10	820	130	50	660	10	70	5	110	15	5	10
Future Volume (veh/h)	10	820	130	50	660	10	70	5	110	15	5	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1648	1648	1648
Adj Flow Rate, veh/h	11	872	0	53	702	0	74	5	0	16	5	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	17	17	17
Cap, veh/h	24	2030	0.00	74	2128	0.00	364	22	0.00	284	78	0.00
Arrive On Green	0.01	0.57	0.00	0.04	0.59	0.00	0.21	0.21	0.00	0.21	0.21	0.00
Sat Flow, veh/h	1795	3582	1598	1795	3582	1598	1340	104	1598	998	366	1397
Grp Volume(v), veh/h	11	872	0	53	702	0	79	0	0	21	0	0
Grp Sat Flow(s), veh/h/ln	1795	1791	1598	1795	1791	1598	1444	0	1598	1364	0	1397
Q Serve(g_s), s	0.5	12.4	0.0	2.6	8.8	0.0	2.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.5	12.4	0.0	2.6	8.8	0.0	3.9	0.0	0.0	0.9	0.0	0.0
Prop In Lane	1.00	0000	1.00	1.00	0400	1.00	0.94	•	1.00	0.76	•	1.00
Lane Grp Cap(c), veh/h	24	2030		74	2128		386	0		362	0	
V/C Ratio(X)	0.46	0.43		0.72	0.33		0.20	0.00		0.06	0.00	
Avail Cap(c_a), veh/h	101	2030	1.00	181	2128	1.00	386	0	1.00	362	0	1.00
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	43.7	11.1	0.0	42.3	9.1	0.0	29.1	0.0	0.0	28.0	0.0	0.0
Incr Delay (d2), s/veh	13.0	0.7	0.0	12.4	0.4	0.0	1.2	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.8	0.0	1.4	3.3	0.0	1.5	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh	56.7	11 7	0.0	54.7	9.5	0.0	30.3	0.0	0.0	28.3	0.0	0.0
LnGrp Delay(d),s/veh	56.7 E	11.7 B	0.0	54. <i>1</i>		0.0	30.3 C	0.0 A	0.0	28.3 C		0.0
LnGrp LOS	<u> </u>			U	A						A 21	
Approach Vol, veh/h		883			755			79			21	
Approach LOS		12.3			12.7			30.3			28.3	
Approach LOS		В			В			С			С	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	56.5		23.0	7.2	59.0		23.0				
Change Period (Y+Rc), s	6.0	6.0		4.0	6.0	6.0		4.0				
Max Green Setting (Gmax), s	9.0	49.0		19.0	5.0	53.0		19.0				
Max Q Clear Time (g_c+l1), s	4.6	14.4		5.9	2.5	10.8		2.9				
Green Ext Time (p_c), s	0.0	7.8		0.3	0.0	6.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			13.5									
HCM 6th LOS			В									
Notos												

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

	_≉	→	7	*	←	٤	•	×	/	Ĺ	×	</th
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻሻ	ተተኈ		ሻ	ተተኈ			4			ર્ન	77
Traffic Volume (veh/h)	275	1420	25	20	1790	40	5	10	5	65	5	515
Future Volume (veh/h)	275	1420	25	20	1790	40	5	10	5	65	5	515
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1885	1885	1885
Adj Flow Rate, veh/h	306	1578	28	22	1989	44	6	11	6	72	6	572
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	1	1	1
Cap, veh/h	338	3947	70	29	3576	79	19	30	10	96	6	640
Arrive On Green	0.10	0.77	0.77	0.02	0.70	0.70	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	3428	5125	91	1781	5140	114	0	230	81	518	46	2812
Grp Volume(v), veh/h	306	1040	566	22	1317	716	23	0	0	78	0	572
Grp Sat Flow(s),veh/h/ln	1714	1689	1839	1781	1702	1849	311	0	0	565	0	1406
Q Serve(g_s), s	21.2	24.5	24.6	3.0	46.0	46.2	0.0	0.0	0.0	0.0	0.0	31.0
Cycle Q Clear(g_c), s	21.2	24.5	24.6	3.0	46.0	46.2	31.0	0.0	0.0	31.0	0.0	31.0
Prop In Lane	1.00		0.05	1.00		0.06	0.26		0.26	0.92		1.00
Lane Grp Cap(c), veh/h	338	2601	1416	29	2369	1287	59	0	0	102	0	640
V/C Ratio(X)	0.91	0.40	0.40	0.77	0.56	0.56	0.39	0.00	0.00	0.77	0.00	0.89
Avail Cap(c_a), veh/h	400	2601	1416	96	2369	1287	59	0	0	102	0	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.68	0.68	0.68	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	107.1	9.2	9.2	117.6	18.1	18.1	93.6	0.0	0.0	105.5	0.0	89.8
Incr Delay (d2), s/veh	21.4	0.5	0.8	25.0	0.6	1.2	18.2	0.0	0.0	41.6	0.0	17.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	9.3	10.3	1.6	18.6	20.5	1.6	0.0	0.0	6.2	0.0	19.1
Unsig. Movement Delay, s/vel		0.7	10.0	140.7	10.7	10.0	111.0	0.0	0.0	147.0	0.0	107.1
LnGrp Delay(d),s/veh	128.4	9.6	10.0	142.7	18.7	19.3	111.8	0.0	0.0	147.0	0.0	107.1
LnGrp LOS	F	A 1010	В	F	В	В	F	A	A	F	A	<u> </u>
Approach Vol, veh/h		1912			2055			23			650	
Approach Delay, s/veh		28.8			20.3			111.8			111.9	
Approach LOS		С			С			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	190.8		35.0	27.7	173.0		35.0				
Change Period (Y+Rc), s	6.0	6.0		4.0	4.0	6.0		4.0				
Max Green Setting (Gmax), s	13.0	180.0		31.0	28.0	167.0		31.0				
Max Q Clear Time (g_c+I1), s		26.6		33.0	23.2	48.2		33.0				
Green Ext Time (p_c), s	0.0	18.4		0.0	0.5	31.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			37.1									
HCM 6th LOS			D									

ب	٠.	→	7	*	←	٤	•	×	/	6	×	✓	
Movement EB	L	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations 7	<u>ነ</u>	∱ }			^	7		414			4	77	
Traffic Volume (veh/h) 36		1090	40	15	1115	50	5	55	15	130	5	730	
Future Volume (veh/h) 36	0 1	1090	40	15	1115	50	5	55	15	130	5	730	
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT) 1.0	0		1.00	1.00		0.99	1.00		1.00	1.00		1.00	
Parking Bus, Adj 1.0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach		No			No			No			No		
Adj Sat Flow, veh/h/ln 185		1856	1856	1856	1856	1856	1885	1885	1885	1870	1870	1870	
Adj Flow Rate, veh/h 40		1225	45	17	1253	56	6	62	17	146	6	820	
Peak Hour Factor 0.8		0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	
, .	3	3	3	3	3	3	1	1	1	2	2	2	
Cap, veh/h 44		2586	95	25	2241	992	23	249	73	191	7	798	
Arrive On Green 0.1		0.75	0.75	0.01	0.64	0.64	0.16	0.16	0.16	0.16	0.16	0.16	
Sat Flow, veh/h 342		3467	127	1767	3526	1560	28	1572	464	1022	42	2781	
Grp Volume(v), veh/h 40		622	648	17	1253	56	25	0	60	152	0	820	
Grp Sat Flow(s), veh/h/ln171		1763	1832	1767	1763	1560	432	0	1631	1064	0	1390	
Q Serve(g_s), s 27.		33.3	33.4	2.3	48.2	3.3	0.6	0.0	7.7 7.7	27.0 34.6	0.0	38.0	
Cycle Q Clear(g_c), s 27. Prop In Lane 1.0		33.3	33.4 0.07	1.00	48.2	1.00	35.2 0.24	0.0	0.28	0.96	0.0	38.0	
Lane Grp Cap(c), veh/h 44		1315	1366	25	2241	992	87	0	258	198	0	798	
V/C Ratio(X) 0.9		0.47	0.47	0.68	0.56	0.06	0.29	0.00	0.23	0.77	0.00	1.03	
Avail Cap(c_a), veh/h 52		1315	1366	52	2241	992	87	0.00	258	198	0.00	798	
HCM Platoon Ratio 1.0		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I) 0.9		0.92	0.92	1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.00	0.96	
Uniform Delay (d), s/vef103.		12.0	12.0	117.8	24.7	16.5	87.9	0.0	88.2	103.4	0.0	85.6	
Incr Delay (d2), s/veh 17.		1.1	1.1	27.9	1.0	0.1	1.8	0.0	0.5	16.0	0.0	38.3	
Initial Q Delay(d3),s/veh 0.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/liß.		13.7	14.3	1.3	20.9	1.3	1.4	0.0	3.3	10.4	0.0	29.4	
Unsig. Movement Delay, s/v													
LnGrp Delay(d),s/veh 121.		13.1	13.1	145.6	25.7	16.6	89.7	0.0	88.7	119.3	0.0	123.9	
LnGrp LOS	F	В	В	F	С	В	F	Α	F	F	Α	F	
Approach Vol, veh/h	1	1674			1326			85			972		
Approach Delay, s/veh		39.2			26.9			89.0			123.2		
Approach LOS		D			С			F			F		
Timer - Assigned Phs	1	2		4	5	6		8					
Phs Duration (G+Y+Rc), s9.	4 1			42.0		158.6		42.0					
Change Period (Y+Rc), s 6.		6.0		4.0	5.0	6.0		4.0					
Max Green Setting (Gmax),				38.0	37.0			38.0					
Max Q Clear Time (g_c+l14).		35.4		37.2	29.9	50.2		40.0					
Green Ext Time (p_c), s 0.		12.0		0.0	0.9	13.7		0.0					
Intersection Summary													
HCM 6th Ctrl Delay			56.3										
HCM 6th LOS			Ε										

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		^	^	₩ P	ODL	7 T
Traffic Vol, veh/h	0	1235	1130	125	0	50
Future Vol, veh/h	0	1235	1130	125	0	50
Conflicting Peds, #/hr	0	0	0	5	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
Storage Length	_	-	_	115	_	0
Veh in Median Storage,		0	0	-	0	-
Grade, %	-	0	0	_	0	_
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	4	4
Mvmt Flow	0	1403	1284	142	0	57
WWW. Tion		1 100	1201			01
					41 0	
	ajor1		Major2		/linor2	
Conflicting Flow All	-	0	-	0	-	642
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.34
Pot Cap-1 Maneuver	0	-	-	0	0	412
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	412
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Annroach	FR		WR		SB	
Approach HCM Control Delay S	EB		WB		SB 15.1	
HCM Control Delay, s	EB 0		WB 0		15.1	
HCM Control Delay, s HCM LOS			0		15.1	
HCM Control Delay, s		EBT	0	SBLn1	15.1	
HCM Control Delay, s HCM LOS		EBT_	0		15.1	
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt		EBT -	0 WBT		15.1	
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h)		-	0 WBT	412 0.138	15.1	
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio		-	0 WBT -	412 0.138	15.1	

	•	→	•	•	•	•	•	†	/	/	ţ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ		7	ሻ		7		र्स	7		र्स	7
Traffic Volume (veh/h)	5	340	120	60	835	10	25	5	50	5	5	10
Future Volume (veh/h)	5	340	120	60	835	10	25	5	50	5	5	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.98		1.00	0.98		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1885	1885	1885	1574	1574	1574
Adj Flow Rate, veh/h	6	382	0	67	938	0	28	6	0	6	6	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	2	2	2	1	1	1	22	22	22
Cap, veh/h	13	2591		84	2753		181	35		105	91	
Arrive On Green	0.01	0.73	0.00	0.05	0.77	0.00	0.12	0.12	0.00	0.12	0.12	0.00
Sat Flow, veh/h	1767	3526	1572	1781	3554	1585	1187	297	1598	605	771	1334
Grp Volume(v), veh/h	6	382	0	67	938	0	34	0	0	12	0	0
Grp Sat Flow(s), veh/h/ln	1767	1763	1572	1781	1777	1585	1484	0	1598	1376	0	1334
Q Serve(g_s), s	0.5	5.2	0.0	6.0	13.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(q_c), s	0.5	5.2	0.0	6.0	13.0	0.0	3.1	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.82		1.00	0.50		1.00
Lane Grp Cap(c), veh/h	13	2591		84	2753		217	0		196	0	
V/C Ratio(X)	0.46	0.15		0.80	0.34		0.16	0.00		0.06	0.00	
Avail Cap(c_a), veh/h	55	2591		100	2753		217	0		196	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	79.4	6.3	0.0	75.7	5.5	0.0	63.7	0.0	0.0	62.9	0.0	0.0
Incr Delay (d2), s/veh	23.8	0.1	0.0	30.4	0.3	0.0	1.5	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.0	0.0	3.5	4.8	0.0	1.4	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/vel												
LnGrp Delay(d),s/veh	103.1	6.5	0.0	106.1	5.9	0.0	65.2	0.0	0.0	63.5	0.0	0.0
LnGrp LOS	F	Α		F	Α		Ε	Α		E	Α	
Approach Vol, veh/h		388			1005			34			12	
Approach Delay, s/veh		7.9			12.6			65.2			63.5	
Approach LOS		A			В			E			E	
	1			1							_	
Timer - Assigned Phs Phs Duration (G+Y+Rc), s	12 /	124.0		22.0	5	120.4		8				
,	13.6	124.0		23.0	7.2	130.4		23.0				
Change Period (Y+Rc), s	6.0	6.0		4.0	6.0	6.0 122.0		4.0				
Max Green Setting (Gmax), s	9.0	118.0		19.0	5.0 2.5	15.0		19.0 3.1				
Max Q Clear Time (g_c+l1), s		7.2		5.1								
Green Ext Time (p_c), s	0.0	3.0		0.1	0.0	9.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			13.0									
HCM 6th LOS			В									
Notes												

	#	→	7	/	←	€	•	×	/	Ĺ	×	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻሻ	↑ ↑₽		ሻ	ተተኈ			4			र्स	77
Traffic Volume (veh/h)	430	2170	55	5	1530	45	10	20	5	35	5	305
Future Volume (veh/h)	430	2170	55	5	1530	45	10	20	5	35	5	305
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	1005	No	4005	1005	No	4005	105/	No	105/	1005	No	1005
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1856	1856	1856	1885	1885	1885
Adj Flow Rate, veh/h	453	2284	58	5	1611	47	11	21	5	37	5	321
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	2027	1	1	1	1	3	3	3	1	1	1
Cap, veh/h	494	3927	99 0.76	11	3210	94	80	146 0.17	32	232 0.17	30	867
Arrive On Green	0.14	0.76		0.01	0.62	0.62 150	0.17	876	0.17	1224	0.17	0.17
Sat Flow, veh/h	3483	5162	131	1795	5139		362		194		178	2807
Grp Volume(v), veh/h	453	1516	826	5 1705	1076	582	37	0	0	42	0	321
Grp Sat Flow(s), veh/h/ln	1742	1716	1861	1795	1716	1857	1432	0	0	1402	0	1403
Q Serve(g_s), s	30.8	45.4	45.8	0.7	41.1	41.1	0.1	0.0	0.0	0.0	0.0	21.4
Cycle Q Clear(g_c), s	30.8	45.4	45.8 0.07	0.7 1.00	41.1	41.1 0.08	7.1 0.30	0.0	0.0 0.14	7.1 0.88	0.0	21.4 1.00
Prop In Lane	1.00 494	2610	1416	1.00	2143	1160	258	0	0.14	262	0	867
Lane Grp Cap(c), veh/h V/C Ratio(X)	0.92	0.58	0.58	0.47	0.50	0.50	0.14	0.00	0.00	0.16	0.00	0.37
Avail Cap(c_a), veh/h	639	2610	1416	37	2143	1160	258	0.00	0.00	262	0.00	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	101.6	12.3	12.3	118.9	24.6	24.6	85.1	0.00	0.0	86.2	0.00	64.8
Incr Delay (d2), s/veh	15.4	1.0	1.8	25.4	0.7	1.3	1.2	0.0	0.0	1.3	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.1	17.8	19.8	0.4	17.4	19.0	2.1	0.0	0.0	2.4	0.0	8.0
Unsig. Movement Delay, s/vel		17.0	17.0	0.1	.,	17.0	2	0.0	0.0	2.1	0.0	0.0
LnGrp Delay(d),s/veh	117.0	13.3	14.1	144.3	25.3	26.0	86.2	0.0	0.0	87.5	0.0	66.0
LnGrp LOS	F	В	В	F	С	C	F	A	A	F	A	E
Approach Vol, veh/h		2795			1663			37			363	
Approach Delay, s/veh		30.3			25.9			86.2			68.5	
Approach LOS		С			С			F			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	188.6		44.0	40.1	155.9		44.0				
Change Period (Y+Rc), s	6.0	6.0		44.0	6.0	6.0		44.0				
Max Green Setting (Gmax), s	5.0	179.0		40.0	44.0	140.0		40.0				
Max Q Clear Time (q_c+l1), s	2.7	47.8		9.1	32.8	43.1		23.4				
Green Ext Time (p_c), s	0.0	46.7		0.2	1.3	19.4		1.4				
* :	0.0	40.7		0.2	1.0	17.4		1.7				
Intersection Summary			20.4									
HCM 6th Ctrl Delay			32.1									
HCM 6th LOS			С									

	≭	-	7	_	←	٤	•	×	<i>></i>	6	×	✔	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations	ሻሻ	ħβ		ሻ	^	7		414			र्स	77	
Traffic Volume (veh/h)	825	1370	15	5	950	105	5	40	10	110	10	630	
Future Volume (veh/h)	825	1370	15	5	950	105	5	40	10	110	10	630	
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	0.99		0.98	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approac		No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1885	1885	1885	
Adj Flow Rate, veh/h	842	1398	15	5	969	107	5	41	10	112	10	643	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	1	1	1	
Cap, veh/h	805	2837	30	11	1977	875	36	290	74	205	16	1083	
Arrive On Green	0.46	1.00	1.00	0.01	0.56	0.56	0.16	0.16	0.16	0.16	0.16	0.16	
Sat Flow, veh/h	3483	3630	39	1781	3554	1572	113	1859	474	1125	100	2767	
Grp Volume(v), veh/h	842	689	724	5	969	107	22	0	34	122	0	643	
Grp Sat Flow(s), veh/h/l		1791	1878	1781	1777	1572	835	0	1611	1226	0	1383	
Q Serve(g_s), s	55.5	0.0	0.0	0.7	39.9	7.8	0.3	0.0	4.4	19.9	0.0	37.5	
Cycle Q Clear(g_c), s	55.5	0.0	0.0	0.7	39.9	7.8	24.6	0.0	4.4	24.3	0.0	37.5	
Prop In Lane	1.00	1100	0.02	1.00	4077	1.00	0.23	•	0.29	0.92	•	1.00	
Lane Grp Cap(c), veh/h		1400	1468	11	1977	875	149	0	252	220	0	1083	
V/C Ratio(X)	1.05	0.49	0.49	0.48	0.49	0.12	0.15	0.00	0.14	0.55	0.00	0.59	
Avail Cap(c_a), veh/h	805	1400	1468	78	1977	875	149	0	252	220	1.00	1083	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	0.78	0.78	0.78	1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.00	0.96 58.6	
Uniform Delay (d), s/ve		0.0	0.0	118.9 29.7	32.5	25.4	87.1 0.5	0.0	87.3 0.2	97.8 2.9	0.0	0.8	
Incr Delay (d2), s/veh	40.6	0.0	0.9	0.0	0.9	0.3	0.0	0.0	0.2	0.0	0.0	0.0	
Initial Q Delay(d3),s/ve %ile BackOfQ(50%),ve		0.4	0.0	0.0	17.9	3.1	1.2	0.0	1.9	7.5	0.0	16.1	
Unsig. Movement Dela			0.4	0.4	17.7	3.1	1.2	0.0	1.7	7.3	0.0	10.1	
LnGrp Delay(d),s/veh	•	1.0	0.9	148.7	33.4	25.6	87.6	0.0	87.5	100.6	0.0	59.5	
LnGrp LOS	F	Α	Α	140.7 F	33.4 C	23.0 C	67.0 F	Α	67.5 F	F	Α	57.5 E	
Approach Vol, veh/h	'	2255		ı	1081		ı	56	<u> </u>		765	<u> </u>	
Approach Delay, s/veh		39.8			33.1			87.5			66.0		
Approach LOS		37.0 D			33.1 C			67.5 F			00.0 F		
		U											
Timer - Assigned Phs	1	2		4	5	6		8					
Phs Duration (G+Y+Rc	, .			42.0		138.0		42.0					
Change Period (Y+Rc),		4.5		4.5	4.5	4.5		4.5					
Max Green Setting (Gn				37.5	55.5			37.5					
Max Q Clear Time (g_c				26.6	57.5	41.9		39.5					
Green Ext Time (p_c),	s 0.0	14.8		0.1	0.0	9.2		0.0					
Intersection Summary													
HCM 6th Ctrl Delay			43.6										
HCM 6th LOS			D										

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		^	^	7		7
Traffic Vol, veh/h	0	1490	980	120	0	80
Future Vol, veh/h	0	1490	980	120	0	80
Conflicting Peds, #/hr	0	0	0	6	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
Storage Length	-	-	-	115	-	0
Veh in Median Storage,	# -	0	0	-	0	-
Grade, %	-	0	0	-	0	_
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	0	1602	1054	129	0	86
WWIIIC I IOW	U	1002	1001	127	U	00
	ajor1		Major2		/linor2	
Conflicting Flow All	-	0	-	0	-	527
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	_	-	-	-
Critical Hdwy Stg 2	_	_	_	-	_	_
Follow-up Hdwy	_	_	_	_	-	3.32
Pot Cap-1 Maneuver	0	_	_	0	0	496
Stage 1	0	_	_	0	0	- 70
Stage 2	0	_	-	0	0	_
	U			U	U	-
Platoon blocked, %		-	-			407
Mov Cap-1 Maneuver	-	-	-	-	-	496
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		13.8	
HCM LOS	U		U		13.0 B	
FICIVI LU3					Ď	
Minor Lane/Major Mvmt		EBT	WBT:	SBLn1		
Capacity (veh/h)		_	-	496		
HCM Lane V/C Ratio		_	_	0.173		
HCM Control Delay (s)		_	_	13.8		
HCM Lane LOS		_	_	В		
HCM 95th %tile Q(veh)		-	_	0.6		
HOW YOUR WINE WIVEIN		_	-	0.0		

	۶	→	•	•	←	4	1	†	~	/	†	✓
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	^	7	ሻ	^	7		र्स	7		र्स	7
Traffic Volume (veh/h)	10	830	130	50	670	10	70	5	110	15	5	10
Future Volume (veh/h)	10	830	130	50	670	10	70	5	110	15	5	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1648	1648	1648
Adj Flow Rate, veh/h	11	883	0	53	713	0	74	5	0	16	5	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	17	17	17
Cap, veh/h	24	2030	0.00	74	2128	0.00	364	22	0.00	284	78	0.00
Arrive On Green	0.01	0.57	0.00	0.04	0.59	0.00	0.21	0.21	0.00	0.21	0.21	0.00
Sat Flow, veh/h	1795	3582	1598	1795	3582	1598	1340	104	1598	998	366	1397
Grp Volume(v), veh/h	11	883	0	53	713	0	79	0	0	21	0	0
Grp Sat Flow(s), veh/h/ln	1795	1791	1598	1795	1791	1598	1444	0	1598	1364	0	1397
Q Serve(g_s), s	0.5	12.6	0.0	2.6	9.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.5	12.6	0.0	2.6	9.0	0.0	3.9	0.0	0.0	0.9	0.0	0.0
Prop In Lane	1.00	2020	1.00	1.00	2120	1.00	0.94	0	1.00	0.76	0	1.00
Lane Grp Cap(c), veh/h	24	2030		74	2128		386	0		362	0	
V/C Ratio(X)	0.46	0.44		0.72	0.33		0.20	0.00		0.06	0.00	
Avail Cap(c_a), veh/h	101 1.00	2030 1.00	1 00	181 1.00	2128	1.00	386	1.00	1.00	362	1.00	1.00
HCM Platoon Ratio Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00 1.00	1.00	0.00	1.00 1.00	0.00	1.00 0.00
Uniform Delay (d), s/veh	43.7	11.1	0.00	42.3	9.2	0.00	29.1	0.00	0.00	28.0	0.00	0.00
Incr Delay (d2), s/veh	13.0	0.7	0.0	12.4	0.4	0.0	1.2	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.9	0.0	1.4	3.4	0.0	1.5	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh		т. /	0.0	1.7	5.4	0.0	1.5	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d),s/veh	56.7	11.8	0.0	54.7	9.6	0.0	30.3	0.0	0.0	28.3	0.0	0.0
LnGrp LOS	50.7 E	В	0.0	D	Α.	0.0	C	Α	0.0	C	Α	0.0
Approach Vol, veh/h		894			766			79			21	
Approach Delay, s/veh		12.4			12.7			30.3			28.3	
Approach LOS		12.4			В			C			20.5 C	
•	1					,					0	
Timer - Assigned Phs	0.7	2		22.0	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	56.5		23.0	7.2	59.0		23.0				
Change Period (Y+Rc), s	6.0	6.0		4.0	6.0	6.0		4.0				
Max Green Setting (Gmax), s	9.0	49.0		19.0 5.9	5.0 2.5	53.0		19.0 2.9				
Max Q Clear Time (g_c+l1), s	4.6 0.0	14.6 7.9		0.3	0.0	11.0 6.2		0.0				
Green Ext Time (p_c), s	0.0	7.9		0.3	0.0	0.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			13.5									
HCM 6th LOS			В									
Notes												

	#	→	7	*	←	€	•	×	/	6	×	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	1,1	↑ ↑₽		ች	ተተኈ		_	4			र्स	77
Traffic Volume (veh/h)	275	1430	25	20	1800	40	5	10	5	65	5	515
Future Volume (veh/h)	275	1430	25	20	1800	40	5	10	5	65	5	515
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	105/	No	4057	4070	No	1070	4707	No	4707	1005	No	1005
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1885	1885	1885
Adj Flow Rate, veh/h	306	1589	28	22	2000	44	6	11	6	72	6	572
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	1	1	1
Cap, veh/h	338	3947	70 0.77	29	3577	79 0.70	19 0.13	30	10	96 0.13	0.12	640
Arrive On Green	0.10	0.77 5126		0.02	0.70	113		0.13 230	0.13 81	518	0.13	0.13
Sat Flow, veh/h	3428		90	1781	5141		0				46	2812
Grp Volume(v), veh/h	306	1047	570	22	1324	720	23	0	0	78	0	572
Grp Sat Flow(s), veh/h/ln	1714	1689	1839	1781	1702	1849	311	0	0	565	0	1406
Q Serve(g_s), s	21.2	24.8	24.8	3.0	46.4	46.6	0.0	0.0	0.0	0.0	0.0	31.0
Cycle Q Clear(g_c), s	21.2 1.00	24.8	24.8 0.05	3.0 1.00	46.4	46.6 0.06	31.0	0.0	0.0 0.26	31.0 0.92	0.0	31.0
Prop In Lane	338	2601	1416	29	2369	1287	0.26 59	0	0.20	102	0	1.00 640
Lane Grp Cap(c), veh/h V/C Ratio(X)	0.91	0.40	0.40	0.77	0.56	0.56	0.39	0.00	0.00	0.77	0.00	0.89
Avail Cap(c_a), veh/h	400	2601	1416	96	2369	1287	59	0.00	0.00	102	0.00	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.68	0.68	0.68	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	107.1	9.2	9.2	117.6	18.2	18.2	93.6	0.0	0.00	105.5	0.00	89.8
Incr Delay (d2), s/veh	21.4	0.5	0.9	25.0	0.7	1.2	18.2	0.0	0.0	41.6	0.0	17.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	9.4	10.4	1.6	18.8	20.7	1.6	0.0	0.0	6.2	0.0	19.1
Unsig. Movement Delay, s/vel		7.1	10.1	1.0	10.0	20.7	1.0	0.0	0.0	0.2	0.0	17.1
LnGrp Delay(d),s/veh	128.4	9.7	10.0	142.7	18.8	19.4	111.8	0.0	0.0	147.0	0.0	107.1
LnGrp LOS	F	A	В	F	В	В	F	A	A	F	A	F
Approach Vol, veh/h		1923			2066			23			650	
Approach Delay, s/veh		28.7			20.3			111.8			111.9	
Approach LOS		С			С			F			F	
	1	2		4	5	6		8				
Timer - Assigned Phs Phs Duration (G+Y+Rc), s	9.8	190.8		35.0	27.7	173.0		35.0				
Change Period (Y+Rc), s	6.0	6.0		4.0	4.0	6.0		4.0				
Max Green Setting (Gmax), s	13.0	180.0		31.0	28.0	167.0		31.0				
Max Q Clear Time (g_c+l1), s		26.8		33.0	23.2	48.6		33.0				
Green Ext Time (p_c), s	0.0	18.7		0.0	0.5	32.0		0.0				
<u> </u>	0.0	10.7		0.0	0.5	32.0		0.0				
Intersection Summary			0= 0									
HCM 6th Ctrl Delay			37.0									
HCM 6th LOS			D									

_#	_	> 7	/	←	٤	•	×	<i>></i>	6	K	✓	
Movement EB	. EE	T EBF	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations 7	i ↑	la La	ች	^	7		414			र्स	77	
Traffic Volume (veh/h) 37				1125	50	5	55	15	135	5	730	
Future Volume (veh/h) 37	109	0 40) 15	1125	50	5	55	15	135	5	730	
Initial Q (Qb), veh)	0 (0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT) 1.0)	1.00	1.00		0.99	1.00		1.00	1.00		1.00	
Parking Bus, Adj 1.0	1.0	00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach	N	lo		No			No			No		
Adj Sat Flow, veh/h/ln 185	5 185	6 1856	1856	1856	1856	1885	1885	1885	1870	1870	1870	
Adj Flow Rate, veh/h 41				1264	56	6	62	17	152	6	820	
Peak Hour Factor 0.89				0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	
	}	3		3	3	1	1	1	2	2	2	
Cap, veh/h 45°				2230	987	21	239	71	190	6	808	
Arrive On Green 0.13				0.63	0.63	0.16	0.16	0.16	0.16	0.16	0.16	
Sat Flow, veh/h 342				3526	1560	16	1510	447	1013	40	2781	
Grp Volume(v), veh/h 41				1264	56	23	0	62	158	0	820	
Grp Sat Flow(s), veh/h/ln171				1763	1560	339	0	1634	1053	0	1390	
Q Serve(g_s), s 28.5				49.3	3.3	0.6	0.0	8.0	28.2	0.0	38.0	
Cycle Q Clear(g_c), s 28.8				49.3	3.3	36.8	0.0	8.0	36.2	0.0	38.0	
Prop In Lane 1.0		0.07			1.00	0.26		0.27	0.96		1.00	
Lane Grp Cap(c), veh/h 45				2230	987	73	0	259	196	0	808	
V/C Ratio(X) 0.93				0.57	0.06	0.32	0.00	0.24	0.81	0.00	1.02	
Avail Cap(c_a), veh/h 52				2230	987	73	0	259	196	0	808	
HCM Platoon Ratio 1.0				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I) 0.9				1.00	1.00	1.00	0.00	1.00	0.96	0.00	0.96	
Uniform Delay (d), s/vef103.				25.3	16.8	88.0	0.0	88.4	104.2	0.0	85.2	
Incr Delay (d2), s/veh 18.		.1 1.1		1.1	0.1	2.4	0.0	0.5	20.5	0.0	34.9	
Initial Q Delay(d3),s/veh 0.0		.0 0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/14.		.7 14.3	1.3	21.4	1.3	1.3	0.0	3.5	11.1	0.0	29.3	
Unsig. Movement Delay, s/v												
LnGrp Delay(d),s/veh 121.				26.3	16.9	90.5	0.0	88.8	124.7	0.0	120.1	
LnGrp LOS I		B E	8 F	C	В	F	A	F	<u> </u>	A	<u> </u>	
Approach Vol, veh/h	168			1337			85			978		
Approach Delay, s/veh	39			27.4			89.3			120.8		
Approach LOS		D		С			F			F		
Timer - Assigned Phs		2	4	5	6		8					
Phs Duration (G+Y+Rc), s9.4	185	.0	42.0	36.6	157.8		42.0					
Change Period (Y+Rc), s 6.0		.0	4.0	5.0	6.0		4.0					
Max Green Setting (Gmax),		.0	38.0	37.0	150.0		38.0					
Max Q Clear Time (g_c+l14),			38.8	30.8	51.3		40.0					
Green Ext Time (p_c), s 0.0		.0	0.0	0.8	13.9		0.0					
Intersection Summary												
HCM 6th Ctrl Delay		56.2										
HCM 6th LOS		E										

Intersection						
	0.4					
	BL	EBT	WBT	WBR	SBL	SBR
	.DL				SDL	
Lane Configurations	^	^	^	7	0	7
Traffic Vol, veh/h	0	1240	1125	145	0	65
Future Vol, veh/h	0	1240	1125	145	0	65
Conflicting Peds, #/hr	0	0	0	5	0	0
	ree	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
Storage Length	-	-	-	115	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	4	4
Mvmt Flow	0	1409	1278	165	0	74
		_		_		
Major/Minor Majo	or1		/lajor2		/linor2	
Conflicting Flow All	-	0	-	0	-	639
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.34
Pot Cap-1 Maneuver	0	-	-	0	0	414
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		_	_			
Mov Cap-1 Maneuver	_	_	_	_	_	414
Mov Cap-2 Maneuver	_	_	_	_	_	
Stage 1	_	_	_	_	_	_
Stage 2	_	_	_	_	_	
Staye 2		-	-		-	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		15.6	
HCM LOS					С	
		EDT	MOT	201 4		
Minor Lane/Major Mvmt		EBT	WBT S			
Capacity (veh/h)		-	-	414		
HCM Lane V/C Ratio		-	-	0.178		
HCM Control Delay (s)		-	-			
HCM Lane LOS		-		С		
HCM 95th %tile Q(veh)		-	-	0.6		

	۶	→	•	•	—	•	•	†	~	/	+	√
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	^	7	ሻ	^	7		र्स	7		र्स	7
Traffic Volume (veh/h)	5	335	135	70	835	10	30	5	70	5	5	10
Future Volume (veh/h)	5	335	135	70	835	10	30	5	70	5	5	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.98		1.00	0.98		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1885	1885	1885	1574	1574	1574
Adj Flow Rate, veh/h	6	376	0	79	938	0	34	6	0	6	6	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	2	2	2	1	1	1	22	22	22
Cap, veh/h	13	2571		97	2759		185	29		105	91	
Arrive On Green	0.01	0.73	0.00	0.05	0.78	0.00	0.12	0.12	0.00	0.12	0.12	0.00
Sat Flow, veh/h	1767	3526	1572	1781	3554	1585	1223	251	1598	608	774	1334
Grp Volume(v), veh/h	6	376	0	79	938	0	40	0	0	12	0	0
Grp Sat Flow(s), veh/h/ln	1767	1763	1572	1781	1777	1585	1474	0	1598	1382	0	1334
Q Serve(g_s), s	0.5	5.2	0.0	7.1	13.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.5	5.2	0.0	7.1	13.0	0.0	3.8	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.85	_	1.00	0.50	_	1.00
Lane Grp Cap(c), veh/h	13	2571		97	2759		214	0		196	0	
V/C Ratio(X)	0.46	0.15		0.81	0.34		0.19	0.00		0.06	0.00	
Avail Cap(c_a), veh/h	55	2571	1.00	99	2759	4.00	214	0	4.00	196	0	1.00
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	80.0	6.6	0.0	75.7	5.5	0.0	64.6	0.0	0.0	63.5	0.0	0.0
Incr Delay (d2), s/veh	23.8	0.1	0.0	37.7	0.3	0.0	1.9	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.0	0.0	4.3	4.8	0.0	1.6	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/vel	103.8	6.8	0.0	113.4	5.8	0.0	66.5	0.0	0.0	64.1	0.0	0.0
LnGrp Delay(d),s/veh	103.8 F		0.0	113.4 F	5.8 A	0.0	00.5 E		0.0	04.1 E	0.0 A	0.0
LnGrp LOS		A 202		г				A		<u> </u>		
Approach Vol, veh/h		382			1017			40			12	
Approach LOS		8.3 A			14.2			66.5			64.1	
Approach LOS					В			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	124.0		23.0	7.2	131.7		23.0				
Change Period (Y+Rc), s	6.0	6.0		4.0	6.0	6.0		4.0				
Max Green Setting (Gmax), s	9.0	118.0		19.0	5.0	122.0		19.0				
Max Q Clear Time (g_c+l1), s		7.2		5.8	2.5	15.0		3.1				
Green Ext Time (p_c), s	0.0	3.0		0.1	0.0	9.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			14.5									
HCM 6th LOS			В									

	_#	→	7	/	←	٤	•	×	/	Ĺ	×	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	77	↑ ↑₽		7	ተተኈ			4			र्स	77
Traffic Volume (veh/h)	430	2190	55	5	1550	45	10	20	5	35	5	305
Future Volume (veh/h)	430	2190	55	5	1550	45	10	20	5	35	5	305
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	1005	No	4005	1005	No	1005	105/	No	105/	1005	No	1005
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1856	1856	1856	1885	1885	1885
Adj Flow Rate, veh/h	453	2305	58	5	1632	47	11	21	5	37	5	321
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1 494	1 3928	1 99	1 11	1 3212	1 92	3 80	3 146	3 32	1 232	30	047
Cap, veh/h Arrive On Green	0.14	0.76	0.76	0.01	0.62	0.62	0.17	0.17	0.17	0.17	0.17	867 0.17
Sat Flow, veh/h	3483	5163	130	1795	5141	148	362	876	194	1224	178	2807
Grp Volume(v), veh/h	453	1529	834	5	1089	590	37	0	0	42	0	321
Grp Sat Flow(s), veh/h/ln	1742	1716	1862	1795	1716	1858	1432	0	0	1402	0	1403
Q Serve(g_s), s	30.8	46.2	46.6	0.7	41.9	41.9	0.1	0.0	0.0	0.0	0.0	21.4
Cycle Q Clear(g_c), s	30.8	46.2	46.6	0.7	41.9	41.9	7.1	0.0	0.0	7.1	0.0	21.4
Prop In Lane	1.00	70.2	0.07	1.00	71.7	0.08	0.30	0.0	0.14	0.88	0.0	1.00
Lane Grp Cap(c), veh/h	494	2610	1416	11	2143	1161	258	0	0.11	262	0	867
V/C Ratio(X)	0.92	0.59	0.59	0.47	0.51	0.51	0.14	0.00	0.00	0.16	0.00	0.37
Avail Cap(c_a), veh/h	639	2610	1416	37	2143	1161	258	0	0	262	0	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.85	0.85	0.85	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	101.6	12.4	12.4	118.9	24.8	24.8	85.1	0.0	0.0	86.2	0.0	64.8
Incr Delay (d2), s/veh	15.4	1.0	1.8	25.2	0.7	1.4	1.2	0.0	0.0	1.3	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.1	18.1	20.1	0.4	17.7	19.4	2.1	0.0	0.0	2.4	0.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	117.0	13.4	14.2	144.1	25.5	26.1	86.2	0.0	0.0	87.5	0.0	66.0
LnGrp LOS	F	В	В	F	С	С	F	A	A	F	A	<u>E</u>
Approach Vol, veh/h		2816			1684			37			363	
Approach Delay, s/veh		30.3			26.1			86.2			68.5	
Approach LOS		С			С			F			Е	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	188.6		44.0	40.1	155.9		44.0				
Change Period (Y+Rc), s	6.0	6.0		4.0	6.0	6.0		4.0				
Max Green Setting (Gmax), s	5.0	179.0		40.0	44.0	140.0		40.0				
Max Q Clear Time (g_c+I1), s	2.7	48.6		9.1	32.8	43.9		23.4				
Green Ext Time (p_c), s	0.0	47.8		0.2	1.3	19.9		1.4				
Intersection Summary												
HCM 6th Ctrl Delay			32.1									
HCM 6th LOS			С									

	_≉	-	7	*	•	۲	•	×	/	6	×	</th <th></th>	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations	ሻሻ	∱ }		ሻ	^	7		414			4	77	
Traffic Volume (veh/h)	845	1370	15	5	970	105	5	40	10	120	10	630	
Future Volume (veh/h)	845	1370	15	5	970	105	5	40	10	120	10	630	
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	0.99		0.98	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approac	ch	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1885	1885	1885	
Adj Flow Rate, veh/h	862	1398	15	5	990	107	5	41	10	122	10	643	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	1	1	1	
Cap, veh/h	805	2837	30	11	1977	875	34	278	71	205	14	1083	
Arrive On Green	0.46	1.00	1.00	0.01	0.56	0.56	0.16	0.16	0.16	0.16	0.16	0.16	
Sat Flow, veh/h	3483	3630	39	1781	3554	1572	101	1782	456	1125	92	2767	
Grp Volume(v), veh/h	862	689	724	5	990	107	21	0	35	132	0	643	
Grp Sat Flow(s), veh/h/l		1791	1878	1781	1777	1572	723	0	1615	1217	0	1383	
Q Serve(g_s), s	55.5	0.0	0.0	0.7	41.1	7.8	0.3	0.0	4.5	21.8	0.0	37.5	
Cycle Q Clear(g_c), s	55.5	0.0	0.0	0.7	41.1	7.8	26.7	0.0	4.5	26.4	0.0	37.5	
Prop In Lane	1.00		0.02	1.00		1.00	0.24		0.28	0.92		1.00	
Lane Grp Cap(c), veh/h		1400	1468	11	1977	875	132	0	252	219	0	1083	
V/C Ratio(X)	1.07	0.49	0.49	0.48	0.50	0.12	0.16	0.00	0.14	0.60	0.00	0.59	
Avail Cap(c_a), veh/h	805	1400	1468	78	1977	875	132	0	252	219	0	1083	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	0.78	0.78	0.78	1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.00	0.96	
Uniform Delay (d), s/ve		0.0	0.0	118.9	32.8	25.4	87.2	0.0	87.3	98.7	0.0	58.6	
Incr Delay (d2), s/veh	48.8	1.0	0.9	29.7	0.9	0.3	0.5	0.0	0.3	4.4	0.0	8.0	
Initial Q Delay(d3),s/ve		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),ve		0.4	0.4	0.4	18.4	3.1	1.1	0.0	2.0	8.3	0.0	16.1	
Unsig. Movement Dela	•												
LnGrp Delay(d),s/veh		1.0	0.9	148.7	33.7	25.6	87.8	0.0	87.6	103.1	0.0	59.5	
LnGrp LOS	F	A	A	F	С	<u>C</u>	F	A	F	<u> </u>	A	<u>E</u>	
Approach Vol, veh/h		2275			1102			56			775		
Approach Delay, s/veh		43.5			33.4			87.7			66.9		
Approach LOS		D			С			F			Е		
Timer - Assigned Phs	1	2		4	5	6		8					
Phs Duration (G+Y+Rc), \$5.9	192.1		42.0	60.0	138.0		42.0					
Change Period (Y+Rc),		4.5		4.5	4.5	4.5		4.5					
Max Green Setting (Gn	na 1k) ,5s	178.5		37.5	55.5	133.5		37.5					
Max Q Clear Time (g_c		2.0		28.7	57.5	43.1		39.5					
Green Ext Time (p_c),		14.8		0.1	0.0	9.5		0.0					
Intersection Summary													
HCM 6th Ctrl Delay			45.8										
HCM 6th LOS			D										

Intersection						
Int Delay, s/veh	0.6					
		EDT	MOT	WDD	CDI	CDD
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		^	^	7		7
Traffic Vol, veh/h	0	1500	970	150	0	110
Future Vol, veh/h	0	1500	970	150	0	110
Conflicting Peds, #/hr	0	0	0	6	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
Storage Length	-	-	-	115	-	0
Veh in Median Storage,	# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1613	1043	161	0	118
N A = 1 = 1/N A1 = = 1	-!- 4		4-1-0		A! O	
	ajor1		Major2		/linor2	
Conflicting Flow All	-	0	-	0	-	522
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	0	499
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		_	_			
Mov Cap-1 Maneuver	_	_	_	_	_	499
Mov Cap-1 Maneuver	_	_	_	<u>-</u>		
Stage 1		-	_	-	-	_
· ·	-	-	-		•	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		14.4	
HCM LOS					В	
		EDE	14/07	001 4		
Minor Lane/Major Mvmt		EBT	WBT:	SBLn1		
Capacity (veh/h)		-	-	177		
HCM Lane V/C Ratio		-	-	0.237		
HCM Control Delay (s)		-	-	14.4		
HCM Lane LOS		-	-	В		
HCM 95th %tile Q(veh)		-	-	0.9		
, ,						

	۶	→	•	•	←	•	1	†	/	/	+	√
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	^	7	*	^	7		र्स	7		र्स	7
Traffic Volume (veh/h)	10	815	165	60	670	10	80	5	145	15	5	10
Future Volume (veh/h)	10	815	165	60	670	10	80	5	145	15	5	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1648	1648	1648
Adj Flow Rate, veh/h	11	867	0	64	713	0	85	5	0	16	5	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	17	17	17
Cap, veh/h	24	2011		83	2128		366	19		285	78	
Arrive On Green	0.01	0.56	0.00	0.05	0.59	0.00	0.21	0.21	0.00	0.21	0.21	0.00
Sat Flow, veh/h	1795	3582	1598	1795	3582	1598	1350	91	1598	1005	368	1397
Grp Volume(v), veh/h	11	867	0	64	713	0	90	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	1795	1791	1598	1795	1791	1598	1441	0	1598	1373	0	1397
Q Serve(g_s), s	0.5	12.5	0.0	3.1	9.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.5	12.5	0.0	3.1	9.0	0.0	4.5	0.0	0.0	0.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.94		1.00	0.76		1.00
Lane Grp Cap(c), veh/h	24	2011		83	2128		385	0		364	0	
V/C Ratio(X)	0.46	0.43		0.77	0.33		0.23	0.00		0.06	0.00	
Avail Cap(c_a), veh/h	101	2011		181	2128		385	0		364	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	43.7	11.3	0.0	42.1	9.2	0.0	29.3	0.0	0.0	28.0	0.0	0.0
Incr Delay (d2), s/veh	13.0	0.7	0.0	14.0	0.4	0.0	1.4	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.9	0.0	1.7	3.4	0.0	1.8	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.7	12.0	0.0	56.1	9.6	0.0	30.7	0.0	0.0	28.3	0.0	0.0
LnGrp LOS	E	В		E	Α		С	Α		С	A	
Approach Vol, veh/h		878			777			90			21	
Approach Delay, s/veh		12.6			13.4			30.7			28.3	
Approach LOS		В			В			С			С	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.1	56.1		23.0	7.2	59.0		23.0				
Change Period (Y+Rc), s	6.0	6.0		4.0	6.0	6.0		4.0				
Max Green Setting (Gmax), s	9.0	49.0		19.0	5.0	53.0		19.0				
Max Q Clear Time (q_c+l1), s	5.1	14.5		6.5	2.5	11.0		2.9				
Green Ext Time (p_c), s	0.0	7.7		0.3	0.0	6.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			14.0									
HCM 6th LOS			В									
Notos												

Draft

Appendix D Trip Generation Equations



QuickFacts

East Honolulu CDP, Hawaii

QuickFacts provides statistics for all states and counties. Also for cities and towns with a population of 5,000 or more.

Peoplation Population estimates, July 1, 2023, (V2023) Population Estimates, July 1, 2022, (V2022) Population estimates base, April 1, 2020, (V2023) Population estimates base, April 1, 2020, (V2023) Population estimates base, April 1, 2020 (estimates base) to July 1, 2023, (V2023) Population, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022) Population, Census, April 1, 2020	Δ : Δ : Δ : Δ : Δ : Δ : Δ : Δ : Δ : Δ :
Population estimates, July 1, 2023, (V2023) Population Estimates, July 1, 2022, (V2022) Population estimates base, April 1, 2020, (V2023) Population estimates base, April 1, 2020, (V2022) Population, percent change - April 1, 2020 (estimates base) to July 1, 2023, (V2023) Population, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022) Population, Census, April 1, 2020	♠♠♠♠
Population estimates, July 1, 2023, (V2023) Population Estimates, July 1, 2022, (V2022) Population estimates base, April 1, 2020, (V2023) Population estimates base, April 1, 2020, (V2022) Population, percent change - April 1, 2020 (estimates base) to July 1, 2023, (V2023) Population, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022) Population, Census, April 1, 2020	♠♠♠♠
Population Estimates, July 1, 2022, (V2022) Population estimates base, April 1, 2020, (V2023) Population estimates base, April 1, 2020, (V2022) Population, percent change - April 1, 2020 (estimates base) to July 1, 2023, (V2023) Population, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022) Population, Census, April 1, 2020	△ △ △ △ △
Population estimates base, April 1, 2020, (V2023) Population estimates base, April 1, 2020, (V2022) Population, percent change - April 1, 2020 (estimates base) to July 1, 2023, (V2023) Population, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022) Population, Census, April 1, 2020	& & & &
Population estimates base, April 1, 2020, (V2022) Population, percent change - April 1, 2020 (estimates base) to July 1, 2023, (V2023) Population, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022) Population, Census, April 1, 2020	& & &
Population, percent change - April 1, 2020 (estimates base) to July 1, 2023, (V2023) Population, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022) Population, Census, April 1, 2020	<u>^</u>
Population, Percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022) Population, Census, April 1, 2020	Δ
Population, Census, April 1, 2020	
	50.0
Pomulation Congue April 1 2010	50,9
Population, Census, April 1, 2010	49,9
ge and Sex	•
Persons under 5 years, percent	▲ 4.4
Persons under 18 years, percent	△ 18.5
Persons 65 years and over, percent	₾ 27.4
Female persons, percent	▲ 50.4
Race and Hispanic Origin	
White alone, percent	▲ 24.2
Black or African American alone, percent (a)	▲ 0.
American Indian and Alaska Native alone, percent (a)	▲ 0.
Asian alone, percent (a)	△ 47.
Native Hawaiian and Other Pacific Islander alone, percent (a)	△ 2.
Two or More Races, percent	△ 24.
Hispanic or Latino, percent (b)	△ 6.
White alone, not Hispanic or Latino, percent	△ 23.
Population Characteristics	
Veterans, 2018-2022	3,7
Foreign born persons, percent, 2018-2022	15.
Housing	
Housing units, July 1, 2022, (V2022)	
Owner-occupied housing unit rate, 2018-2022	83.
Median value of owner-occupied housing units, 2018-2022	\$1,117,;
Median selected monthly owner costs -with a mortgage, 2018-2022	\$3,
Median selected monthly owner costs -without a mortgage, 2018-2022	S
Modian gross rent, 2018-2022	\$3,
Building permits, 2022	
Camilies & Living Arrangements	
louscholds, 2018-2022	17,
Persons per household, 2018-2022	2
Living in same house 1 year ago, percent of persons age 1 year+, 2018-2022	90.
Language other than English spoken at home, percent of persons age 5 years+, 2018-2022	19.
	17.
Computer and Internet Use	07
Households with a computer, percent, 2018-2022	96.
Households with a broadband Internet subscription, percent, 2018-2022	94.
ducation	
High school graduate or higher, percent of persons age 25 years+, 2018-2022	97.
Bachelor's degree or higher, percent of persons age 25 years+, 2018-2022	60.
lealth	
With a disability, under age 65 years, percent, 2018-2022	3

Economy	
In civilian labor force, total, percent of population age 16 years+, 2018-2022	60.4%
In civilian labor force, female, percent of population age 16 years+, 2018-2022	54.1%
Total accommodation and food services sales, 2017 (\$1,000) (c)	74,125
Total health care and social assistance receipts/revenue, 2017 (\$1,000) (c)	105,49
Total transportation and warehousing receipts/revenue, 2017 (\$1,000) (c)	5,22
Total retail sales, 2017 (\$1,000) (c)	358,24
Total retail sales per capita, 2017 (c)	N.A
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2018-2022	31.0
Income & Poverty	
Median household income (in 2022 dollars), 2018-2022	\$151,224
Per capita income in past 12 months (in 2022 dollars), 2018-2022	\$68,070
Persons in poverty, percent	△ 4.2%
BUSINESSES	
Businesses	
Total employer establishments, 2021	>
Total employment, 2021	
Total annual payroll, 2021 (\$1,000)	>
Total employment, percent change, 2020-2021	
Total nonemployer establishments, 2020	>
All employer firms, Reference year 2017	69-
Men-owned employer firms, Reference year 2017	383
Women-owned employer firms, Reference year 2017	130
Minority-owned employer firms, Reference year 2017	408
Nonminority-owned employer firms, Reference year 2017	187
Veteran-owned employer firms, Reference year 2017	58
Nonveteran-owned employer firms, Reference year 2017	55%
⊕ GEOGRAPHY	
Geography	
Population per square mile, 2020	2,213.4
Population per square mile, 2010	2,169.
Land area in square miles, 2020	23.0
Land area in square miles, 2010	23.0
FIPS Code	1506290

About datasets used in this table

Value Notes

.

Methodology differences may exist between data sources, and so estimates from different sources are not comparable.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info 3 icon to the left of each row in TAI learn about sampling error.

The vintage year (e.g., V2023) refers to the final year of the series (2020 thru 2023). Different vintage years of estimates are not comparable.

In Vintage 2022, as a result of the formal request from the state, Connecticut transitioned from eight counties to nine planning regions. For more details, please see the Vintage 2022 release notes available here: Release Notes.

Users should exercise caution when comparing 2018-2022 ACS 5-year estimates to other ACS estimates. For more information, please visit the 2022 5-year ACS Comparison Guidance page.

Fact Notes

- (a) Includes persons reporting only one race
- (c) Economic Census Puerto Rico data are not comparable to U.S. Economic Census data
- (b) Hispanies may be of any race, so also are included in applicable race categories

Value Flags

- Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest or upper interval of an open ende
- F Fewer than 25 firms
- D Suppressed to avoid disclosure of confidential information
- ${\bf N} \qquad {\bf Data} \ {\bf for} \ {\bf this} \ {\bf geographic} \ {\bf area} \ {\bf cannot} \ {\bf be} \ {\bf displayed} \ {\bf because} \ {\bf the} \ {\bf number} \ {\bf of} \ {\bf sample} \ {\bf cases} \ {\bf is} \ {\bf too} \ {\bf small}.$
- FN Footnote on this item in place of data
- X Not applicable
- S Suppressed; does not meet publication standards
- NA Not available
- Z Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, Stat Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.



Hawaii



Population estimates, July 1, 2023, (V2023)

1,435,138

QuickFacts Hawaii

QuickFacts provides statistics for all states and counties. Also for cities and towns with a population of 5,000 or more.

	ntion
△ 1,435,13	ation estimates, July 1, 2023, (V2023)
1 ,439,39	tion Estimates, July 1, 2022, (V2022)
△ 1,455,27	tion estimates base, April 1, 2020, (V2023)
▲ 1,455,27	tion estimates base, April 1, 2020, (V2022)
▲ -1.49	tion, percent change - April 1, 2020 (estimates base) to July 1, 2023, (V2023)
△ -1.19	tion, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022)
1,455,27	tion, Census, April 1, 2020
1,360,30	tion, Census, April 1, 2010
	nd Sex
₫ 5.5	s under 5 years, percent
△ 20.69	s under 18 years, percent
△ 20.49	s 65 years and over, percent
4 9.79	persons, percent
	nd Hispanic Origin
△ 25.2°	alone, percent
⚠ 2.2°	or African American alone, percent (a)
▲ 0.49	can Indian and Alaska Native alone, percent (a)
△ 37.19	alone, percent (a)
△ 10.3°	Hawaiian and Other Pacific Islander alone, percent (a)
△ 24.7°	More Races, percent
△ 11.19	ic or Latino, percent (b)
△ 21.39	alone, not Hispanic or Latino, percent
	ation Characteristics
93,67	ns, 2018-2022
18.09	n born persons, percent, 2018-2022
	ıg
568,07	ng units, July 1, 2022, (V2022)
61.89	-occupied housing unit rate, 2018-2022
\$764,80	n value of owner-occupied housing units, 2018-2022
\$2,77	n selected monthly owner costs -with a mortgage, 2018-2022
S63	n selected monthly owner costs -without a mortgage, 2018-2022
\$1,86	n gross rent, 2018-2022
4,33	ng permits, 2022
	es & Living Arrangements
483,90	nolds, 2018-2022
2.9	s per household, 2018-2022
87.0	in same house 1 year ago, percent of persons age 1 year+, 2018-2022
25.79	age other than English spoken at home, percent of persons age 5 years+, 2018-2022
	uter and Internet Use
94.59	holds with a computer, percent, 2018-2022
89.89	
92.7	
34.7	
34./	
7.0°	
	tion chool graduate or higher, percent of persons age 25 years+, 2018-2022 or's degree or higher, percent of persons age 25 years+, 2018-2022 disability, under age 65 years, percent, 2018-2022 s without health insurance, under age 65 years, percent

	Hawaii
Population estimates, July 1, 2023, (V2023)	△ 1,435,138
Total accommodation and food services sales, 2017 (\$1,000) (c)	12,101,847
Total health care and social assistance receipts/revenue, 2017 (\$1,000) (c)	9,785,700
Total transportation and warehousing receipts/revenue, 2017 (\$1,000) (c)	6,431,447
Total retail sales, 2017 (\$1,000) (c)	21,658,911
Total retail sales per capita, 2017 (c)	\$15,191
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2018-2022	26.6
Income & Poverty	
Median household income (in 2022 dollars), 2018-2022	\$94,814
Per capita income in past 12 months (in 2022 dollars), 2018-2022	\$42,683
Persons in poverty, percent	▲ 10.2%
₩ BUSINESSES	
Businesses	
Total employer establishments, 2021	32,488
Total employment, 2021	469,179
Total annual payroll, 2021 (S1,000)	25,513,923
Total employment, percent change, 2020-2021	-14.6%
Total nonemployer establishments, 2020	109,569
All employer firms, Reference year 2017	23,731
Men-owned employer firms, Reference year 2017	13,027
Women-owned employer firms, Reference year 2017	4,830
Minority-owned employer firms, Reference year 2017	12,087
Nonminority-owned employer firms, Reference year 2017	8,317
Veteran-owned employer firms, Reference year 2017	S
Nonveteran-owned employer firms, Reference year 2017	18,946

226.6

211.8

6,422.48

6,422.63

15

Geography

FIPS Code

Population per square mile, 2020

Population per square mile, 2010 Land area in square miles, 2020

Land area in square miles, 2010

About datasets used in this table

Population estimates, July 1, 2023, (V2023)

1,435,138

Hawaii

Value Notes

Methodology differences may exist between data sources, and so estimates from different sources are not comparable.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographics statistically indistinguishable. Click the Quick Info 🐧 icon to the left of each row in TAI learn about sampling error.

The vintage year (e.g., V2023) refers to the final year of the series (2020 thru 2023). Different vintage years of estimates are not comparable.

In Vintage 2022, as a result of the formal request from the state, Connecticut transitioned from eight counties to nine planning regions. For more details, please see the Vintage 2022 release notes available here: Release Notes.

Users should exercise caution when comparing 2018-2022 ACS 5-year estimates to other ACS estimates. For more information, please visit the 2022 5-year ACS Comparison Guidance page.

Fact Notes

- (a) Includes persons reporting only one race
- Economic Census Puerto Rico data are not comparable to U.S. Economic Census data (c)
- Hispanies may be of any race, so also are included in applicable race categories (b)

Value Flags

- Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest or upper interval of an open ende
- Suppressed to avoid disclosure of confidential information
- Data for this geographic area cannot be displayed because the number of sample cases is too small.
- Footnote on this item in place of data
- Not applicable
- Suppressed; does not meet publication standards
- Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, Stat Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.



QuickFacts

Honolulu County, Hawaii

QuickFacts provides statistics for all states and counties. Also for cities and towns with a population of 5,000 or more.

Population estimates, July 1, 2023, (V2023)	A :
PEOPLE	
opulation	
Population estimates, July 1, 2023, (V2023)	A 2
Population Estimates, July 1, 2022, (V2022)	⚠ 995,6
Population estimates base, April 1, 2020, (V2023)	A 1
Population estimates base, April 1, 2020, (V2022)	△ 1,016,5
Population, percent change - April 1, 2020 (estimates base) to July 1, 2023, (V2023)	A
Population, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022)	△ -2.
Population, Census, April 1, 2020	1,016,
Population, Census, April 1, 2010	953,
Age and Sex	
Persons under 5 years, percent	△ 5.
Persons under 18 years, percent	▲ 20.
Persons 65 years and over, percent	<u> </u>
Female persons, percent	△ 49
Race and Hispanic Origin	
White alone, percent	₾ 21
Black or African American alone, percent (a)	<u> </u>
American Indian and Alaska Native alone, percent (a)	₾ 2
Asian alone, percent (a)	<u> </u>
Native Hawaiian and Other Pacific Islander alone, percent (a)	<u> </u>
Two or More Races, percent	
	△ 23
Hispanic or Latino, percent (b)	△ 10
White alone, not Hispanic or Latino, percent	▲ 17
Population Characteristics	
Veterans, 2018-2022	68
Foreign born persons, percent, 2018-2022	19
Housing	
Housing units, July 1, 2022, (V2022)	373.
Owner-occupied housing unit rate, 2018-2022	58
Median value of owner-occupied housing units, 2018-2022	\$832
Median selected monthly owner costs -with a mortgage, 2018-2022	\$2
Median selected monthly owner costs -without a mortgage, 2018-2022	<u> </u>
Median gross rent, 2018-2022	\$1
Building permits, 2022	2
Families & Living Arrangements	
louscholds, 2018-2022	333
Persons per household, 2018-2022	
Living in same house 1 year ago, percent of persons age 1 year+, 2018-2022	86
anguage other than English spoken at home, percent of persons age 5 years+, 2018-2022	26
Computer and Internet Use	
Households with a computer, percent, 2018-2022	94
Households with a broadband Internet subscription, percent, 2018-2022	90
ducation	
High school graduate or higher, percent of persons age 25 years+, 2018-2022	92
Bachelor's degree or higher, percent of persons age 25 years+, 2018-2022	36
lealth	
With a disability, under age 65 years, percent, 2018-2022	6
Persons without health insurance, under age 65 years, percent	

Economy	
In civilian labor force, total, percent of population age 16 years+, 2018-2022	59.9%
In civilian labor force, female, percent of population age 16 years+, 2018-2022	58.7%
Total accommodation and food services sales, 2017 (\$1,000) (c)	6,805,400
Total health care and social assistance receipts/revenue, 2017 (\$1,000) (c)	7,522,451
Total transportation and warehousing receipts/revenue, 2017 (\$1,000) (c)	5,107,362
Total retail sales, 2017 (\$1,000) (c)	14,266,055
Total retail sales per capita, 2017 (c)	\$14,454
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2018-2022	27.4
Income & Poverty	
Median household income (in 2022 dollars), 2018-2022	\$99,816
Per capita income in past 12 months (in 2022 dollars), 2018-2022	\$44,026
Persons in poverty, percent	₾ 9.3%
BUSINESSES	
Businesses	
Total employer establishments, 2021	20,973
Total employment, 2021	311,943
Total annual payroll, 2021 (S1,000)	17,596,708
Total employment, percent change, 2020-2021	-14.3%
Total nonemployer establishments, 2020	66,913
All employer firms, Reference year 2017	16,295
Men-owned employer firms, Reference year 2017	8,927
Women-owned employer firms, Reference year 2017	3,381
Minority-owned employer firms, Reference year 2017	9,389
Nonminority-owned employer firms, Reference year 2017	4,403
Veteran-owned employer firms, Reference year 2017	S
Nonveteran-owned employer firms, Reference year 2017	12,868
⊕ GEOGRAPHY	
Geography	
Population per square mile, 2020	1,692.4
Population per square mile, 2010	1,586.
Land area in square miles, 2020	600.63
Land area in square miles, 2010	600.74
FIPS Code	15003

About datasets used in this table

Value Notes

.

Methodology differences may exist between data sources, and so estimates from different sources are not comparable.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info 3 icon to the left of each row in TAI learn about sampling error.

The vintage year (e.g., V2023) refers to the final year of the series (2020 thru 2023). Different vintage years of estimates are not comparable.

In Vintage 2022, as a result of the formal request from the state, Connecticut transitioned from eight counties to nine planning regions. For more details, please see the Vintage 2022 release notes available here: Release Notes.

Users should exercise caution when comparing 2018-2022 ACS 5-year estimates to other ACS estimates. For more information, please visit the 2022 5-year ACS Comparison Guidance page.

Fact Notes

- (a) Includes persons reporting only one race
- (c) Economic Census Puerto Rico data are not comparable to U.S. Economic Census data
- (b) Hispanies may be of any race, so also are included in applicable race categories

Value Flags

- Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest or upper interval of an open ende
- F Fewer than 25 firms
- D Suppressed to avoid disclosure of confidential information
- ${\bf N} \qquad {\bf Data} \ {\bf for} \ {\bf this} \ {\bf geographic} \ {\bf area} \ {\bf cannot} \ {\bf be} \ {\bf displayed} \ {\bf because} \ {\bf the} \ {\bf number} \ {\bf of} \ {\bf sample} \ {\bf cases} \ {\bf is} \ {\bf too} \ {\bf small}.$
- FN Footnote on this item in place of data
- X Not applicable
- S Suppressed; does not meet publication standards
- NA Not available
- Z Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, Stat Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

Walk-in Bank

(911)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

AM Peak Hour of Generator

Setting/Location: General Urban/Suburban

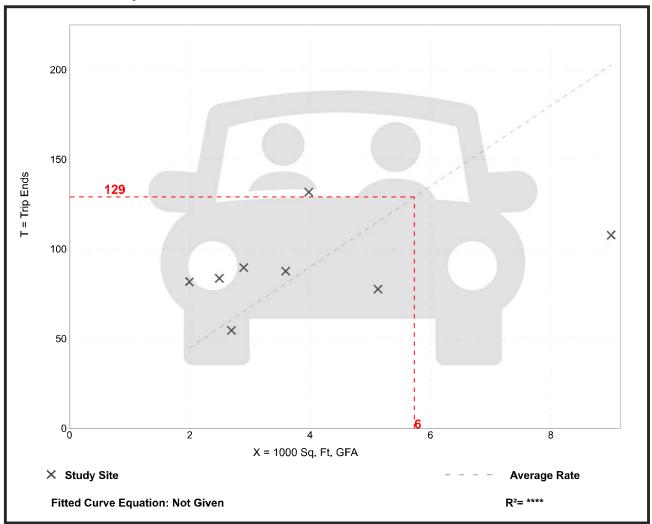
Number of Studies: 8 Avg. 1000 Sq. Ft. GFA: 4

Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
22.54	12.00 - 41.00	10.28

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

Walk-in Bank

(911)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

PM Peak Hour of Generator

Setting/Location: General Urban/Suburban

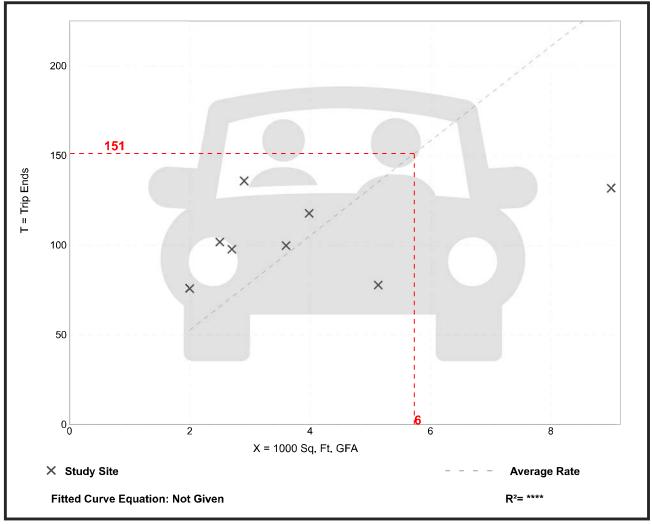
Number of Studies: 8 Avg. 1000 Sq. Ft. GFA: 4

Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
26.40	14.67 - 46.83	12.27

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

(912)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

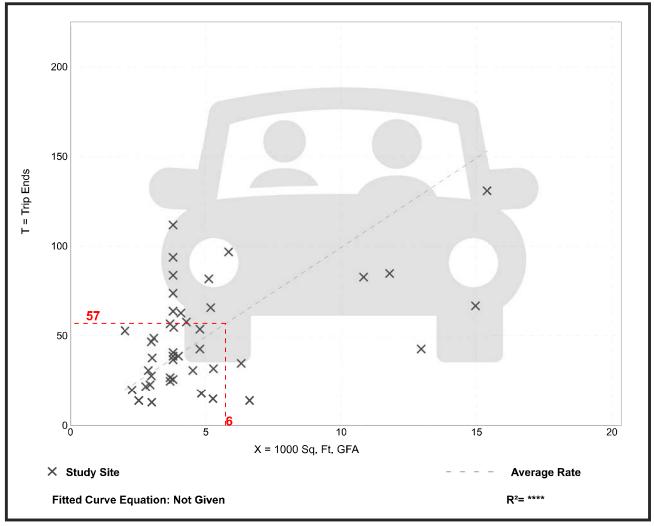
Number of Studies: 44 Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 58% entering, 42% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.95	2.12 - 29.47	6.00

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

1/1

(912)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

AM Peak Hour of Generator

Setting/Location: General Urban/Suburban

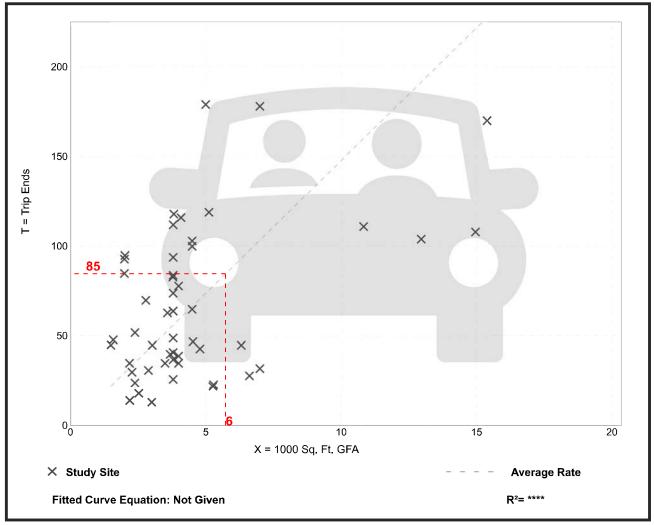
Number of Studies: 51 Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
14.78	4.18 - 47.03	9.60

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

(912)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

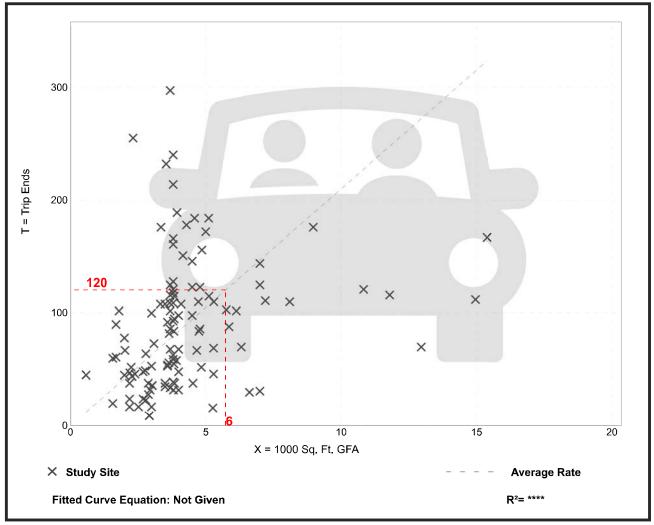
Number of Studies: 114 Avg. 1000 Sq. Ft. GFA: 4

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate		Range of Rates	Standard Deviation			
	21.01	3.04 - 109.91	15.13			

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

(912)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

PM Peak Hour of Generator

Setting/Location: General Urban/Suburban

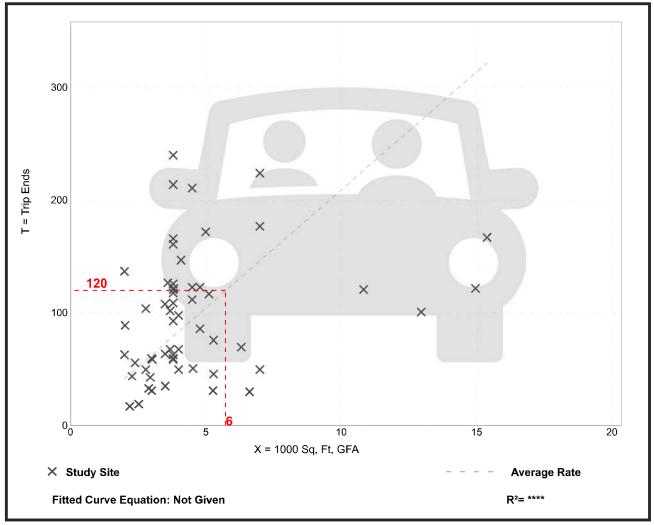
Number of Studies: 57 Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate		Range of Rates	Standard Deviation			
	20.92	4.54 - 68.50	13.57			

Data Plot and Equation



Trip Gen Manual, 11th Edition

Institute of Transportation Engineers

Pass-By Traffic

PM AM 29% 27% 15% 24% 48% 34% 64% 27% 57% 40% 47% 27% 53% 16% 43% 36% 41% 24%

> 29% 29% 27% 25% 31%

> 29%

21% 29% 42%

26%

21% 29% Table E.25 Pass-By and Non-Pass-By Trips Weekday, AM Peak Period Land Use Code 912—Drive-in Bank

SIZE	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIPS (%)			ADJ. STREET		
(1,000 SQ. FT. GFA)						PRIMARY	DIVERTED	TOTAL	PEAK HOUR VOLUME	SOURCE	
3.8	Camp Hill Mall, PA	March 2005	.11	7:45–8:45 a.m.	27	-	1,20	73	_	McMahon Associates, Inc.	
3.8	Exeter Twp, PA	March 2005	9	8:00-9:00 a.m.	24	-	1-1	76	_	McMahon Associates, Inc.	
3.8	York, PA	March 2005	22	7:45–8:45 a.m.	34	-	-	66	-	McMahon Associates, Inc.	
3.8	York, PA	March 2005	30	8:00–9:00 a.m.	27	-	1 - 1	73	-	McMahon Associates, Inc	
3.8	Mountain Road, PA	March 2005	34	7:30–8:30 a.m.	40	-	1-1	60	7—	McMahon Associates, Inc	
3.8	Muhlenberg, PA	March 2005	7	8:00-9:00 a.m.	27	-	1 - 1	73	-	McMahon Associates, Inc.	
3.8	York, PA	March 2005	15	8:00-9:00 a.m.	16	-	7-1	84	-	McMahon Associates, Inc.	
3.8	Derry Street, PA	March 2005	27	8:00-9:00 a.m.	36	-	-	64	-	McMahon Associates, Inc.	

Average Pass-By Trip Percentage: 29

Table E.27 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period
Land Use Code 912—Drive-in Bank

SIZE	SQ.	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIPS (%)			ADJ STREET	
1,000 SQ. FT. GFA)						PRIMARY	DIVERTED	TOTAL	PEAK HOUR VOLUME	SOURCE
16.0	Overland Park, KS	Dec. 1988	20	4:30-5:30 p.m.	15	55	30	85	-	-
33	Louisville area, KY	July 1993	1,1	4:00-8:00 p.m.	48	22	30	52	2,570	Barton Asohman Assoc.
3.4	Louisville area, KY	July 1993	1-1-	4:00-6:00 p.m.	84	22	14	36	2,266	Barton-Aschman Assoc
34	Louisville area, KY	July 1993	75	400-800 pm	57	11	32	43	1,955	Barton-Aschmar Assoc.
3.5	Louisville ansa, KY	June 1993	53	400-800 p.m.	47	32	21	53	2,765	Barton-Aschman Assoc
64	Louisville area, KY	June 1993	66	400-800 pm	53	20	27	47	2.610	Barton-Aschman Assoc
3.8	Colonial Park, PA	March 2005	56	400-500 p.m.	43	-	-	57		McMahon Associates, Inc.
38	Camp Hill Mall, PA	March 2006	38	4:15-5:15 p.m.	41	-	-	59		McMahon Associates, Inc.
3.6	Exeter Twp, PA	March 2006	14	400-500 p.m.	24	-	-	.76		McMahon Associates Inc.
3.8	York, PA	March 2005	63	4:00-5:00 p.m.	29	-	-	71	-	McMahon Associates, Inc.
3.6	York; PA	March 2005	70	4:00-5:00 p.m.	29	-	-	71	-	McMahon Associates, Inc.
3.6	Palmyra, PA	March 2006	29	4:15-5:15 p.m.	27	-	-	73	-	McMahon Associates, Inc.
3.8	Mountain Road, PA	March 2006	41.	400-500 p.m.	25	12	-	75	-	McMahon Associates, Inc.
3.8	Hummelstown, PA	March 2005	37	4:00-8:00 p.m.	31	-	-	69	-	McMahon Associates, Inc.
3.8	Mutrenberg, PA	March 2005	19	400-600 pm	29	-	-	71		McMahon Associates, Inc.
38	York, PA	March 2006	34	4:00-6:00 p.m.	21	-	-	79	1-2	McMahon Associates, Inc.
3.8	Derry Street, PA	March 2005	36	400-800 p.m.	29		-	71	1 1	McMahon Associates, Inc.
36	Arlington, WA.	Sept. 2007	_	4:00-6:00 p.m.	42	50	8	58	-	657
2.7	Lynnwood, WA	Sept. 2007		4:00-6:00 p.m.	26	66	8	74	- 2	657
2.8	Redmond, WA	Sept. 2007	-	400-800 p.m.	21	55	24	79	-	657
3.6	Snohamish, WA	July 2007	100	400-600 p.m.	29	_	_	71	-	657

Average Pass-By Trip Percentage: 35

[&]quot;—" means no data were provided

[&]quot;--" means no data were provided

APPENDIX I: Hawaiʻi Kai Neighborhood Board No. 1





HAWAII KAI NEIGHBORHOOD BOARD

REGULAR MEETING AGENDA – Tuesday, April 30, 2024

ROBERTA MAYOR

ELIZABETH REILLY

Sub district #10 Chairperson

7:00 pm Haha'ione Elementary School Cafeteria and Web Access:

Meeting Link: https://cchnl.webex.com/cchnl/j.php?MTID=mae76dcd47dffb65b7757ca96f711001f

Meeting Number / Access Code: 2490 571 8154

Password: NB01

Join by Phone: +1-408-418-9388

Meeting Materials: https://drive.google.com/drive/folders/1ZNUDkxp2QU3dU9HJritG0vz3iFWRBceU

Neighborhood Commission Office YouTube:

https://www.youtube.com/@cityandcountyneighborhoodc2559/videos

HOLLY LYONS

Sub district #2 Secretary

At Large Vice Chair

JOEL BRILLIANT

At Large

1. CALL TO ORDER – Chair Roberta Mayor

1.1. Introduction of Board members

CHELSEA CHAE At Large

GREG KNUDSEN

At Large

STACEY MARTIN

At Large

At Large

DIXON PARK

ILSE SILVA-KROTT

Sub district #1

SAMUEL WOLFF

Sub district #4

ELIJAH LEE Sub district #5

HERB SCHREINER

Sub district #6

KIM HOLLANDSWORTH

Sub district #7

GENE TIERNEY Sub district #8

PAIGE ALTONN

Sub district #11

Hawaii Kai Neighborhood Board #1

c/o Neighborhood Commission Office 925 Dillingham Blvd., #160 Honolulu. Hawaii 96817 Phone: (808) 768-3710 Fax: (808) 768-3711 www.honolulu.gov/nco

Hawaii Kai Neighborhood Board meets 7 p.m. the last Tuesday of every month except Dec. at Haha'ione Elementary School cafeteria. The public is welcome.

- 2. STATUS REPORTS-Three (3) minutes maximum per department. Questions to follow.
 - 2.1. Honolulu Fire Department
 - 2.2. Honolulu Police Department
 - 2.3. Board of Water Supply
 - 2.4 Kaiser Complex Schools
 - 2.5. Hawaii Department of Transportation, Highways Division
- 3. **COMMUNITY ANNOUNCEMENTS** – Brief announcements by board members and the public on events, activities, and general information directly relating to Hawaii Kai.
- 4. PUBLIC-GENERATED ISSUES – Two (2) minutes per speaker. Questions to follow. Issues/concerns not listed elsewhere on the Board's agenda may be raised but no Board action may be taken because of the "Sunshine Law."
- PRESENTATIONS Ten (10) minutes per presentation. Questions to follow. Discussion 5. or action as needed.
 - 5.1. Special Management Area (SMA) Use Permit Application for Bank of Hawaii Branch at Hawai'i Kai Towne Center - Presenter: Greg Nakai, Planner and Senior Associate, PBR Hawaii
 - Consider Possible Overnight Park Closure Hours for Beach Parks on the Kaiwi 5.2. Coast. Community Input Welcomed.
- 6. OFFICIALS' REPORTS - Three (3) minutes per speaker. Reports should relate to issues of interest to residents of Hawaii Kai. Questions to follow.
 - 6.1. Mayor Rick Blangiardi's Representative - Amy Asselbaye
 - 6.2. City Council Chair Tommy Waters - District 4
 - Governor Josh Green's Representative Mike Buck 6.3.
 - Senator Stanley Chang District 9 6.4.
 - Senator Chris Lee District 25 6.5.
 - 6.6. Representative Gene Ward – District 18
 - 6.7. Representative Mark Hashem – District 19
 - 6.8. Congressional Representatives
- 7. **BOARD BUSINESS –** For discussion/action. Five (5) minutes per item.
 - 7.1. Consider Banning Left Turns For Vehicles Exiting Koko Marina Shopping Center Onto Kalaniana'ole Hwy
 - 7.2. Concerns About the New Kalaniana'ole Highway Speed Hump
 - 7.3. Update on Koko Head Shooting Range - Condition and Renovations
 - 7.4. Update on Koko Crater Stables
 - Update on Kaiwi Coast Scenic By Established 1973 7.5.
 - 7.6. Update on Kamilo Nui Valley Agriculture
 - Three Absence Notice: Consider Declaring a Vacancy for a Sub-District 7.7.

8. BOARD COMMITTEES

- 8.1. Board Committees: Transportation; Education; Parks & Recreation; Planning, Zoning & Environment
- 8.2. Announcements by committee chairpersons or members as needed.
- 9. APPROVAL OF REGULAR MEETING MINUTES Minutes for March 25, 2024.

10. OTHER BOARD ANNOUNCEMENTS

- 10.1. Board Member Announcements
- 10.2. Board Chairperson Announcements
 - 10.2.1. Correspondence
 - 10.2.2. Other Announcements

11. CLOSING ANNOUNCEMENTS

- 11.1. The next regular meeting of the Hawaii Kai Neighborhood Board is on Tuesday, May 28, 2024 at 7:00 pm at the Haha'ione Elementary School Cafeteria and on Webex.
- 11.2. Hawaii Kai Neighborhood Board regular meetings are cablecast on Olelo Ch. 49 on the 2nd Monday of the following month at 9:00 p.m. and repeating on that month's 3rd Friday at 7:00 a.m. Videos can also be seen online at www.olelo.org/olelonet (search "Hawaii Kai Board"), or via www.honolulu.gov/nco/boards ("Board Meeting Video Archive").

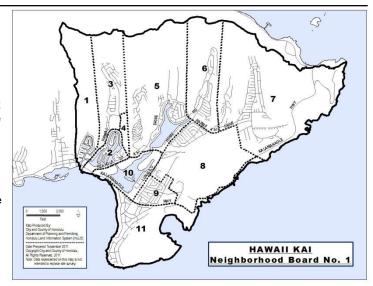
12. ADJOURNMENT

Hawaii Kai Neighborhood Board

For agenda, minutes, member contact directory, and other information, go to www.honolulu.gov/nco/boards.

To receive this Board's agenda and minutes by mail or email, visit the Neighborhood Commission Office, 925 Dillingham Blvd., Suite 160, Honolulu, Hawaii 96817; call 768-3710 or fax 768-3711; or go to www.honolulu.gov/nco.

If you would like to attend a Neighborhood Board meeting and have questions about accommodations for a physical disability or a special physical need, call the Neighborhood Commission Office at 808-768-3710 between 8:00 a.m. and 4:00 p.m. at least 24 hours before the scheduled meeting.



NEIGHBORHOOD COMMISSION • 925 DILLINGHAM BOULEVARD, SUITE 160 HONOLULU, HAWAII, 96817 PHONE (808) 768-3710 • FAX (808) 768-3711 • WEBSITE http://www.honolulu.gov/nco

REGULAR MEETING WRITTEN SUMMARY FOR VIDEO RECORD TUESDAY, APRIL 30, 2024 ONLINE VIA WEBEX AND IN PERSON AT HAHA'IONE ELEMENTARY SCHOOL CAFETERIA

Video recording of this meeting can be found at: https://www.youtube.com/watch?v=sWjkqXWgRUs

Reports and other meeting materials can be found at: https://drive.google.com/drive/folders/1ZNUDkxp2QU3dU9HJritG0vz3iFWRBceU

<u>CALL TO ORDER</u> – [0:00:02]: Chair Roberta Mayor called the meeting to order at 7:01 p.m. A quorum was established with 14 members of the Board present. Note: This 15-member Board requires eight (8) members to establish a quorum and to take official Board action.

<u>Board Members Present:</u> Herb Schreiner, Stacey Martin, Paige Altonn, Greg Knudsen, Elijah Lee, Roberta Mayor, Elizabeth Reilly (arrived at 7:03 p.m.), Ilse Silva-Krott, Samuel Wolff, Kim Hollandsworth, Gene Tierney, Joel Brilliant, Dixon Park and Holly Lyons.

Board Member Absent: Chelsea Chae.

<u>Guests</u>: Lieutenant Aaron Miura (Honolulu Police Department); Iris Oda (Board of Water Supply); Amy Asselbaye (Mayor Rick Blangiardi's Representative); Shannon Goo, Principal, Haha'ione Elementary School; Amanda Zepeda (Council Chair Tommy Waters' Office); Mike Buck (Governor Josh Green's Representative); Representative Gene Ward; Finn Carnahan (Senator Stanley Chang's office); Bryan Kimura and Galen Wong (Hawaii Department of Transportation, Highways Division); Laura Thielen (Department of Parks and Recreation); Malia Marquez, Joseph Pugh, Cher Sullivan, Laura Clizby, Judy Nii, Kaleo Nakoa, Greg Nakai, Lisa Bishop and Wendy Din (Residents); and Jeffrey Jones (Neighborhood Commission Office). **Note:** Name was not included if not legible, signed-in, not stated, and/or not participated in the discussion—Total Attendees: 57 Participants.

STATUS REPORTS [0:02:08]:

Honolulu Fire Department (HPD) [0:02:10]: No representative present.

Report: https://drive.google.com/file/d/18FTrZmWrNHtAzz-kG8PIAuglvRF8vQrX/view?usp=drive_link

Honolulu Police Department (HFD) [0:02:34]: Lieutenant Miura provided the monthly statistics for March 2024.

Crime Mapping Statistics: https://www.honolulupd.org/information/crime-mapping/

Questions, comments, and concerns followed – [0:04:28] A resident's concern was shared about the lack of police officers at busy intersections along Kalaniana'ole Highway during the mid-March power outage. HPD tries to address traffic concerns but lacks sufficient manpower. It was noted that when traffic lights are not working, drivers should treat these intersections as 4-way stops and proceed with caution.

<u>Board of Water Supply (BWS) [0:10:03]</u>: Iris Oda shared the general water announcements for March 2024. She noted that the Kalama Valley repairs are awaiting the needed materials. See also Boardofwatersupply.com Protect Oahu Water.

Questions, comments, and concerns followed – [0:11:00]

<u>Kaiser Complex Schools [0:12:27]:</u> Principal Goo shared the Kaiser Complex Schools' updates. He urged community members not to feed the feral chickens as they are a serious concern on the school campuses. Koko Head Elementary will be celebrating its 70th anniversary next year. The Kaiser HS Science Olympiad placed second in the state. Niu Valley Middle School was awarded a 6-year term of accredition to 2030. Kaiser HS and Niu Valley Middle School earned 5-year authorizations as International Baccalaureate Schools (IB), a prestigious distinction. Mr. Goo explained that IB schools were developed by diplomats who wanted a rigorous school program for their children when posted abroad.

- Report: https://drive.google.com/file/d/14rTFDQRCejvPJV6g5xZl4BrkYQyE5Z10/view?usp=drive_link
- The Kaiser HS graduation is Friday, May 24 at 6:00 pm.

Questions, comments, and concerns followed – [0:16:25]

Hawaii Department of Transportation [0:18:25]: Bryan Kimura provided a presentation addressing the issues and questions shared at the March 2024 Regular Board Meeting.

 Presentation: https://docs.google.com/presentation/d/1RWyU0ERDQxJ7whbjRKOqb8vgePKxO56U/edit?usp=drive-link&ouid=1156048

 78251730642927&rtpof=true&sd=true Questions, comments, and concerns – [0:24:49] Mr. Kimura indicated that the raised crosswalk on Kalaniana'ole Highway was constructed in reponse to residents' concerns and complaints about safely crossing the highway, and that speed humps are installed with bicyclists in mind. HDOT determined that a stoplight or flashing beacon at that location was not warranted. Mr. Kimura indicated that HDOT would monitor the illegal left turns into and out of Portlock Road onto Kalaniana'ole Highway and determine if delineators or other measures might be considered. He also indicated that they would look at the issue of left turns out of the Koko Marina Shopping Center onto Kalaniana'ole Highway, in response to the Board's safety concerns and to the question of whether left turns out of the shopping center should be banned. HDOT will report back, possibly in the spring.

Mr. Kimura clarified that the Hawaii Department of Transportation has jurisdiction over Kalaniana'ole Highway which is a state highway and that the City and County Transportation Services has jurisdiction over other Hawaii Kai roadways.

COMMUNITY ANNOUNCEMENTS [0:42:38]:

<u>Community Invitations [0:42:49]</u>: Member Reilly shared the volunteer opportunity every second Saturday at the Hāwea Heiau Complex and Keawāwa Wetland and the Hāwea Heiau Talk Story on Saturday, May 18, 2024.

- Volunteer Opportunity: https://drive.google.com/file/d/1LsspSbalggBF 5xmuk7rkkyFVFyodlKS/view?usp=drive_link
- Talk Story: https://drive.google.com/file/d/19be1teDF0fMeANj5XfJ1r5_GY8P7YqLe/view?usp=drive_link

<u>Purple Heart City and County [0:44:15]</u>: Member Brilliant shared that on April 17, 2024, the City Council certified the Honolulu City and County to be a Purple Heart City and County. Purple hearts are awarded to honor those wounded in action.

<u>Board Correspondence Announcements [0:45:05]</u>: Chair Mayor shared announcements regarding: a Hawaiian Electric Company (HECO) pole and transformer replacement scheduled for May 2; Island Sound Studios LLC applying for a special liquor license for Saturday parties during the summer months; Department of Planning and Permitting (DPP) draft environmental assessment for an upcoming development that is requesting a waiver from the 40-foot ocean set-back.

Questions, comments, and concerns followed – [0:47:51]

<u>Maunalua Signage [0:48:58]</u>: Resident Malia Marquez shared an update on the current progress for installing the "Maunalua" signage at the entrance to Hawai'i Kai.

Questions, comments, and concerns followed – [0:51:03]

PUBLIC GENERATED ISSUES [0:52:08]:

Speed Mitigation at Haha'ione Elementary School [0:52:28]: Resident Laura Clizby, who assists as a crossing guard at Haha'ione Elementary School, shared how beneficial speed humps would be if installed on the roadway at the entrance to the school and at the crosswalks near the school as children make their way to and from school.

Questions, comments, and concerns followed – [0:53:21]. It was shared that traffic safety at school sites was brought up at the Safe Schools Town Hall meeting and that the City and County Department of Transportation Services has made this a priority.

<u>Increase in HOA fees [0:55:55]:</u> Resident Joseph Pugh shared his concerns regarding residents leaving the community due to the constant increase in HOA condominium fees. He shared that the recent rise in insurance premiums has caused the HOA fees at his condominium to increase 400% over the past year.

Questions, comments, and concerns – [0:56:43] It was noted that the state legislators are aware of this increase in home hazard insurance due to natural disasters and that this is a probem affecting not only Hawai'i residents but is a nationwide problem.

PRESENTATIONS [0:58:54]:

Special Management Area (SMA) Use Permit Application for Bank of Hawai'i Branch at Hawai'i Kai Town Center [0:58:58]: Greg Nakai and members of the development team presented the SMA permit application for a relocation to the Hawai'i Kai Town Center. Their current space at the Koko Marina Shopping Center is limited (3000 sq ft) so the move to the Town Center would double their space and improve their services, while being able to service people conveniently.

Questions, comments, and concerns followed – [1:04:45] Board members raised several concerns about the importance of maintaining the viewshed for this waterfront property. As this is a visible property at the entrance to Hawaii Kai, setbacks from the highway and open green space are desirable. Several members also voiced concerns about a two-story building being built in that location.

Consider Possible Overnight Park Closure Hours for Beach Parks on the Kaiwi Coast [1:17:41]: Board members discussed again whether potential park closure hours would benefit the community. Questions remained about what exactly might be closed at a "beach park" if closure hours were enacted. Department of Parks and Recreation (DPR) Director Laura Thielen was able to provide insight into the park closure hours, noting that people have a right to access the beach to fish, but that parking

lots and grassy areas could be closed. She clarified that "beach" is the highwater mark, which often changes. She indicated that she would research how unimproved areas such as Wawamalu Beach might be affected. Questions, comments, and concerns were addressed throughout the presentation. If keeping off-road vehicles away from the sand dunes is the board's intended outcome, perhaps closing beach parks is too broad a remedy. As there was no motion introduced to close the beach parks along the Kaiwi shoreline, the board chair, with the concurrence of the board members, indicated that this issue would be taken off the agenda. If a concern arises in the future affecting a specific beach park, the concern may be addressed on a case-by-case basis.

OFFICIALS' REPORTS [1:45:27]:

Mayor Rick Blangiardi's Representative [1:45:30]: Amy Asselbaye provided a report and highlighted the following: the newly installed speed hump on Kalaniana'ole Hwy; Koko Crater Botanical Gardens and Stables; beach park closure hours; and the grate repair on Portlock Rd. DPR Director Thielen also participated in the discussion. Questions, comments, and concerns occurred during the report.

- Mayor's Monthly Report: <u>www.oneoahu.org/newsletter</u>
- Mayor's Town Hall meeting is scheduled for May 23rd at 6:30pm at KoKo Head District Park gym.

Questions, comments, and concerns followed.

Board members were very concerned about the report that \$600,000 in Capital Improvement Project (CIP) funds were being directed to repair the waterlines that service the stables, the botanical gardens and Sandy Beach, and not being directed to repair and improve the condemned structures at the stable that would make this community asset again available to the Hawaii Kai residents and the general public. It was shared that promises were made by the Mayor's office to make this community asset whole again. Director Thielen clarified that Capital Improvement Project funds must be used for projects that will last the entirety of the term of the bonds which is generally about 20-25 years and cannot be used to demolish the condemned structures.

<u>City Council Chair Tommy Waters [2:05:24]</u>: Amanda Zepeda provided a report and highlighted the following: insight on the budget for Koko Crater Stables; information on the Maunalua Bay signage; homes having too much concrete; and Senate Bill 3202. April 2024 Newsletter:

https://static1.squarespace.com/static/6098c5bb75e480679bd2fab3/t/65f1f3dd5f09575737bed311/1710355444%E2%80%8E%E2%80%8E337/Apr2024 D4+Newsletter.pdf%E2%80%8E

Questions, comments, and concerns followed – [2:08:44]. Amanda indicated that there is \$500,000 in the coming year's operational budget for the stables and she will find out how those funds might be used; if those funds might be used to demolish the condemned structures and improve the stables. She shared that their office had received a number of complaints that homes along Hawaii Kai Drive have too much concrete. She referenced a county ordinance that homes in the Hawaii Kai area should have no more than 75% of their lot in non-permeable matter (concrete). She also noted the council's continued opposition to Senate Bill 3202 which will be voted on at the legislature tomorrow.

Governor Josh Green's Representative [2:17:39]: Mike Buck provided a report and highlighted the following: social media misinformation; protecting the community; the clearing of the Diamond Head homeless encampments; and encouraging community involvement. For more updates, visit https://governor.hawaii.gov or contact Mike Buck at michael.buck@honolulu.gov

Questions, comments, and concerns followed - [2:23:29].

<u>Senator Stanley Chang [2:27:54]</u>: Finn Carnahan provided the report and highlighted the following: voting for bills making their way through the legislature; Senator Chang's Housing Committee bills; and a message from the judiciary regarding scams, such as the "warrant for failure to report to jury duty" scam. For updates, visit https://www.senatorchang.com/newsletters.

Senator Chris Lee [2:30:43]: No representative was present.

Representative Gene Ward [2:30:50]: Representative Ward provided the report and highlighted the following: addressing social media misinformation such as reports on the closing of Costco and the Satellite City Hall which are just rumors; the police substation is not a substation but a work station, and police services will not be affected if the work station is closed; encouraging public testimony with the closing of the legislative session; and a Safe Streets update.

Representative Mark Hashem - [2:39:23]: No representative was present.

<u>Congressional Representatives – [2:39:26]</u>: No representatives were present.

BOARD BUSINESS [2:39:31]:

Consider Banning Left Turns For Vehicles Exiting Koko Marina Shopping Center Onto Kalaniana'ole Hwy [2:39:50]: Bryan Kimura provided an update on a number of traffic issues earlier in the meeting. He shared that HDOT would study the issue of drivers making left turns out of the Koko Marina Shopping Center and report back to the board at a later time.

TUESDAY, APRIL 30, 2024 PAGE 4 OF 4

Questions, comments, and concerns followed – [2:40:27] Member Tierney requested this issue remain on next month's agenda as he has a proposed solution that he would like the board to consider. A copy of his proposal was shared with Galen Wong of HDOT for HDOT's consideration as they study the question of whether left turns out of Koko Marina Shopping Center onto Kalaniana'ole Highway should be banned.

<u>Update on Koko Head Shooting Range [2:43:03]</u>: Update shared during the Mayor's Representative's Report. The second full-time staff person for the range has not yet been hired.

Update on Koko Crater Stables [2:43:10]: Update shared earlier in the meeting during the Mayor's Representative's Report.

<u>Update on Kaiwi Coast Scenic Byway [2:43:13]</u>: The Kaiwi Coast Scenic Byway was discussed earlier in the meeting in regards to possible beach park closure hours along the Kaiwi coast.

<u>Update on Kamilo Nui Valley Agriculture [2:43:30]</u>: Resident and farmer Judy Nii provided an update on the current state of agriculture in Hawai'i Kai. The farmers are concerned about the pending termination of their leases and find it difficult to plan their crops with the uncertainty. It was shared that the Kamehameha Schools Maunalua team will be providing an update to the neighborhood board on their plans for their Maunalua leased properties in the summer or early fall.

Questions, comments, and concerns followed - [2:47:24].

Three Absence Notice: Consider Declaring a Vacancy for a Sub-District [2:49:04]: Chair Mayor explained that when a board member misses three meetings during the year, July to June, the board may take action to declare the seat vacant. Member Hollandsworth, who currently holds the seat, officially resigned as a Board Member, stating that her current circumstances make it difficult for her to continue to represent her sub-district. This creates a Sub-District 7 vacancy which will be noted on a future agenda.

BOARD COMMITTEES [2:51:24]: No updates.

APPROVAL OF REGULAR MEETING MINUTES – [2:51:29]: Hearing no issues or revisions, the March 25, 2024 regular meeting minutes were approved as written.

OTHER BOARD ANNOUNCEMENTS - [2:51:49]: No updates.

CLOSING ANNOUNCEMENTS - [2:51:55]:

- Meeting: The next regular meeting of the Hawaii Kai Neighborhood Board is Tuesday, May 28, 2024, 7:00 p.m., at Haha'ione Elementary School Cafeteria and on WebEx.
- Olelo: The Hawai'i Kai Neighborhood Board's regular meetings are cablecast on Olelo Ch. 49 on the 2nd Monday of the following month at 9:00 p.m. and repeating on that month's 3rd Friday at 7:00 a.m. Videos can also be seen online at www.olelo.org/olelonet (search "Hawai'i Kai Board") or via www.honolulu.gov/nco/boards ("Board Meeting Video Archive").

ADJOURNMENT – [2:52:48] – Chair Mayor adjourned the meeting at 9:55 p.m.

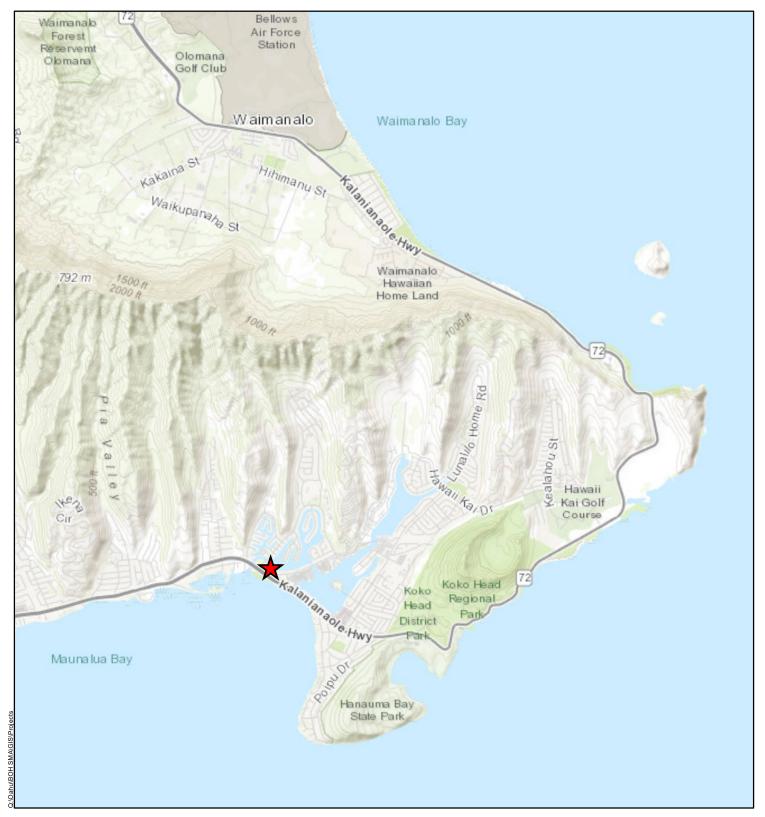
Submitted By: Jeffrey Jones, Neighborhood Assistant

Reviewed By: Holly Lyons, Secretary

Reviewed and Finalized By: Roberta Mayor, Chair

APPENDIX J: Figures







Project Site



TMK Parcels



Figure 1: **Regional Location Map**

BOH Hawai'i Kai

North Linear Scale (feet) 2500

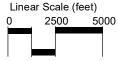






Figure 2: Aerial Image

BOH Hawai'i Kai

North Linear S

Linear Scale (feet)
0 200 400



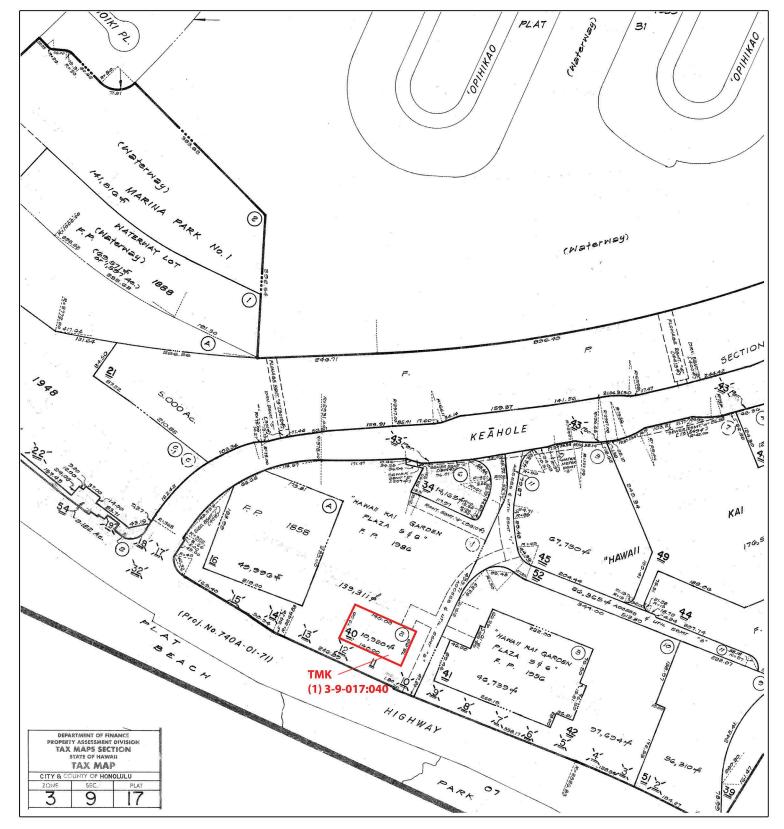
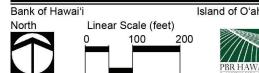
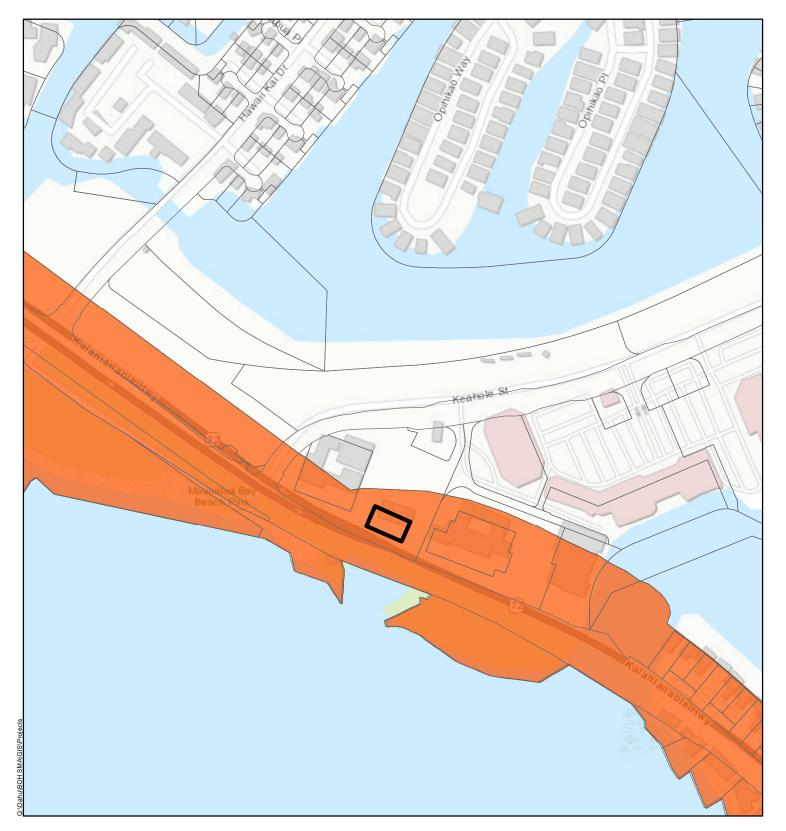




Figure 3: Tax Map Key

BOH Hawai'i Kai







Special Management

Figure 4: Special Management Area



Linear Scale (feet)





1. View Eastward Towards Scratch Hawaii Kai Building



2. View of Parking Lot Behind Scratch Hawaii Kai Building



3. View of Scratch Hawaii Kai Building from Parking Lot



4. View Westward Towards Scratch Hawaii Kai Building



5. View Towards Scratch Hawaii Kai Building from Across Kalaniana (ale Hwy



6. View Towards Hawaii Kai Towne Center Entry from Kalaniana'ole Hwy



7. View Towards Hawaii Kai Towne Center Entry from Kalaniana ole Hwy 2



8 .View Towards Scratch Hawaii Kai Building from Maunalua Bay Beach Parking Lot



9 .View Towards Scratch Hawaii Kai Building from Maunalua Bay Beach



Figure 5:

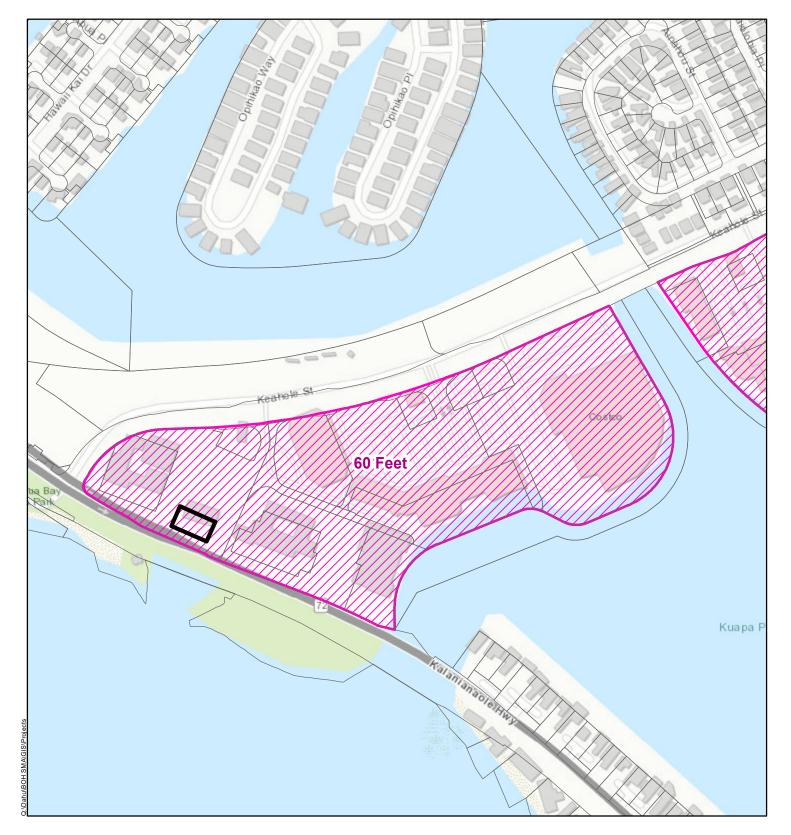
Site Photos

BOH Hawai'i Kai

Bank of Hawai'i



Island of O'ahu





Project Site

TMK Parcels

Zoning Map Height Limit

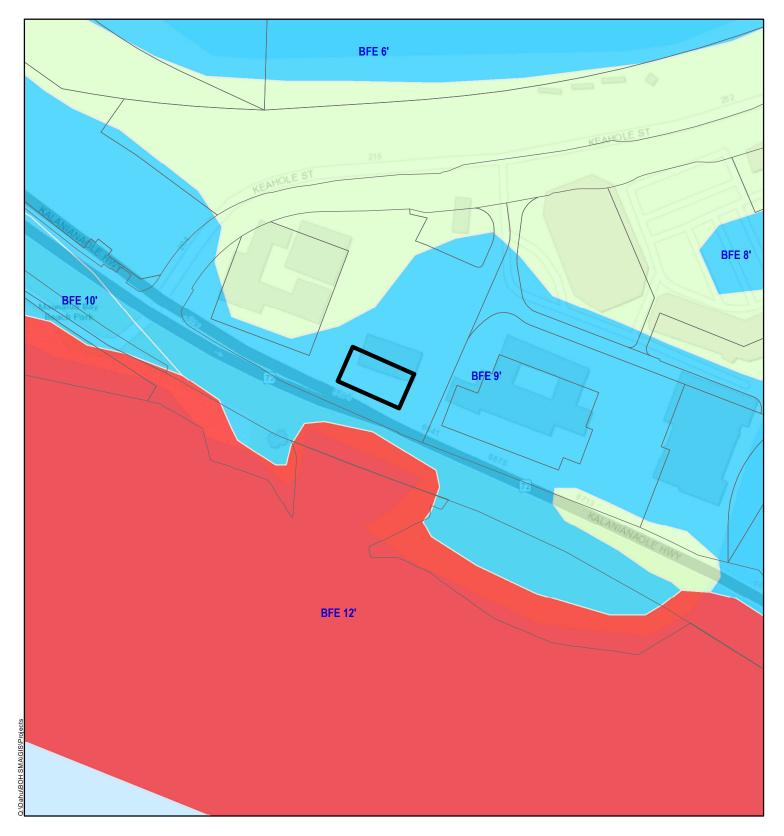
Figure 6: Zoning Map Height Limit

BOH Hawai'i Kai

North Linear Scale (feet)

0 175 350





Project Site

Flood Hazard Areas

AE: 1%-Annual-Chance Flood, with BFE

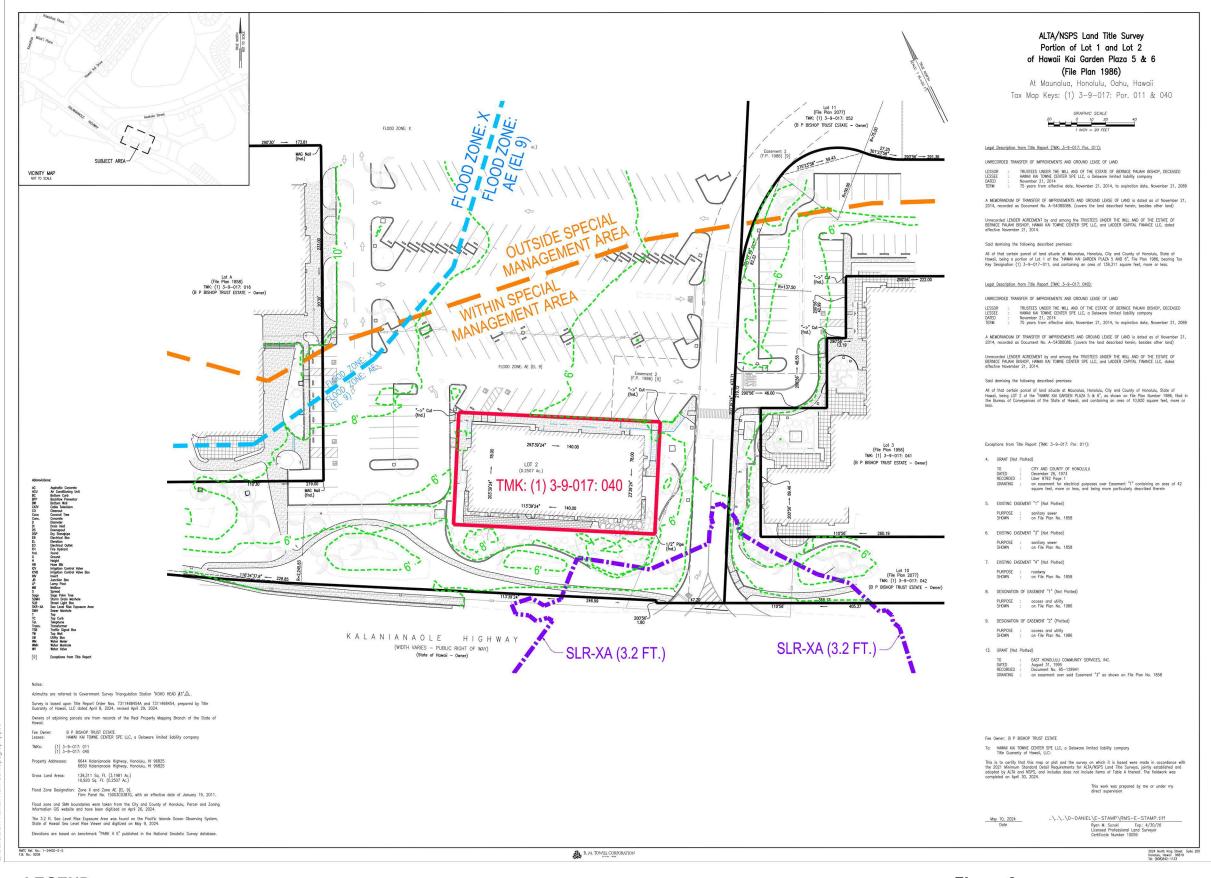
VE: 1%-Annual-Chance Coastal Flood, with BFE

X: Outside 0.2%-Annual-Chance Floodplain

Figure 7: Flood Insurance Rate Map

BOH Hawai'i Kai

North Linear Scale (feet)



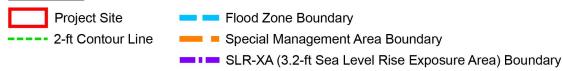
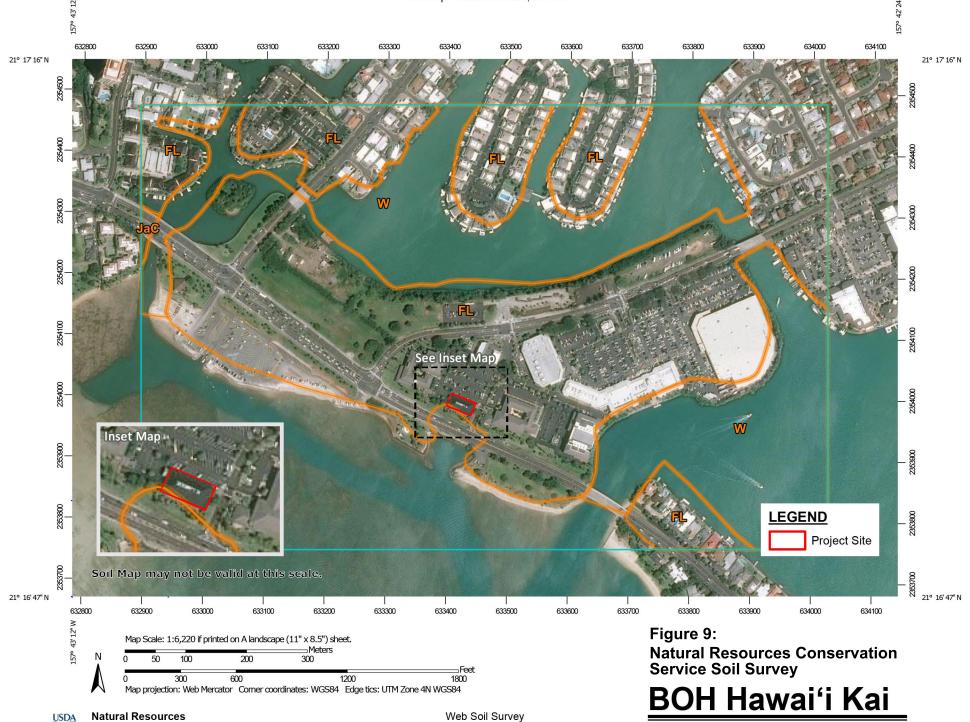


Figure 8: Topography

BOH Hawai'i Kai

Bank of Hawai'i

and of Oʻahu

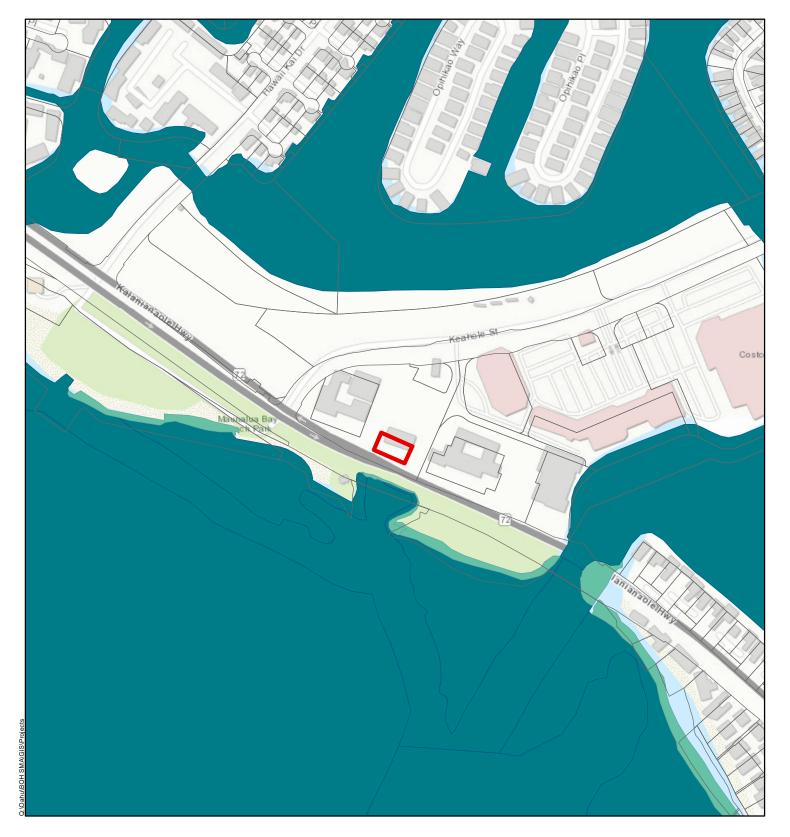


National Cooperative Soil Survey

Bank of Hawai'i

Island of O'ahu

Conservation Service





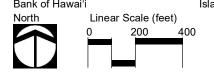
Wetlands

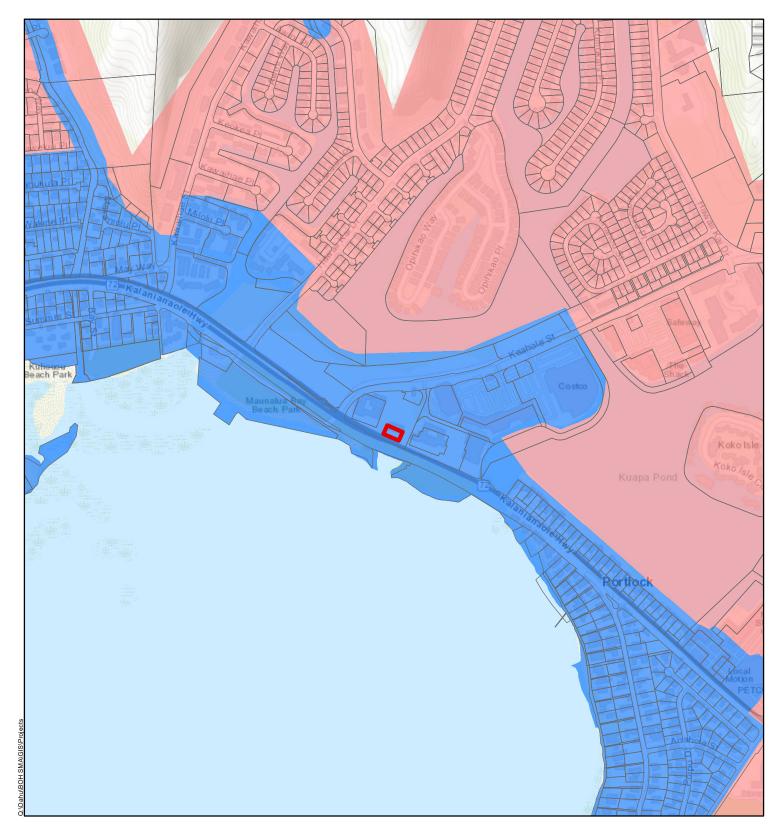
Estuarine and Marine Wetland

Estuarine and Marine Deepwater

Figure 10: USFWS National Wetlands Inventory

BOH Hawai'i Kai







Tsunami Evacuation Zone

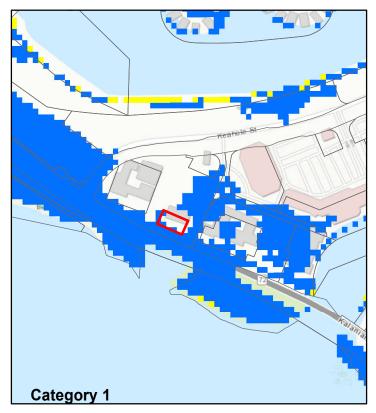
Extreme Tsunami Evacuation Zone

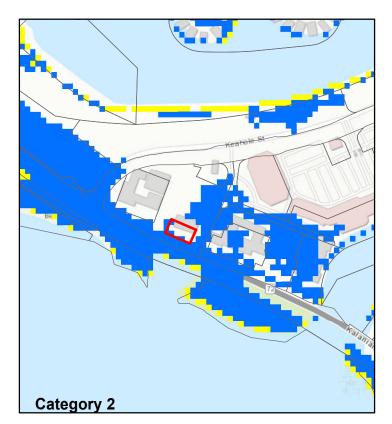
Figure 11: **Tsunami Evacuation Zones**

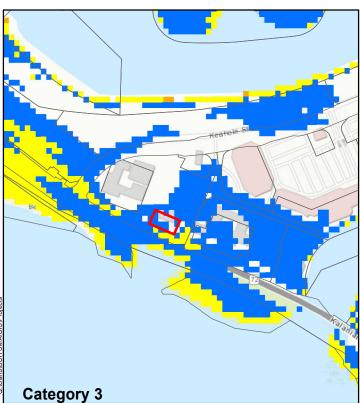
BOH Hawai'i Kai

Linear Scale (feet)









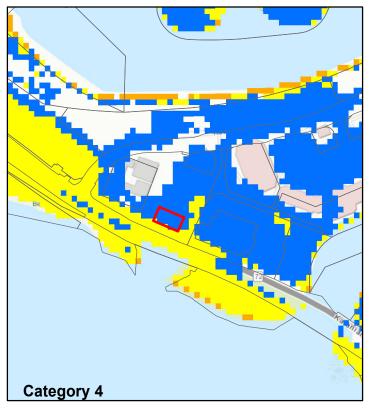
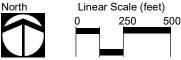




Figure 12: National Hurricane Storm Surge Hazard

BOH Hawai'i Kai Bank of Hawai'i Island of O'al North Linear Scale (feet)



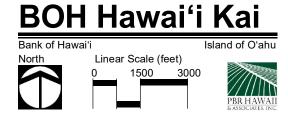


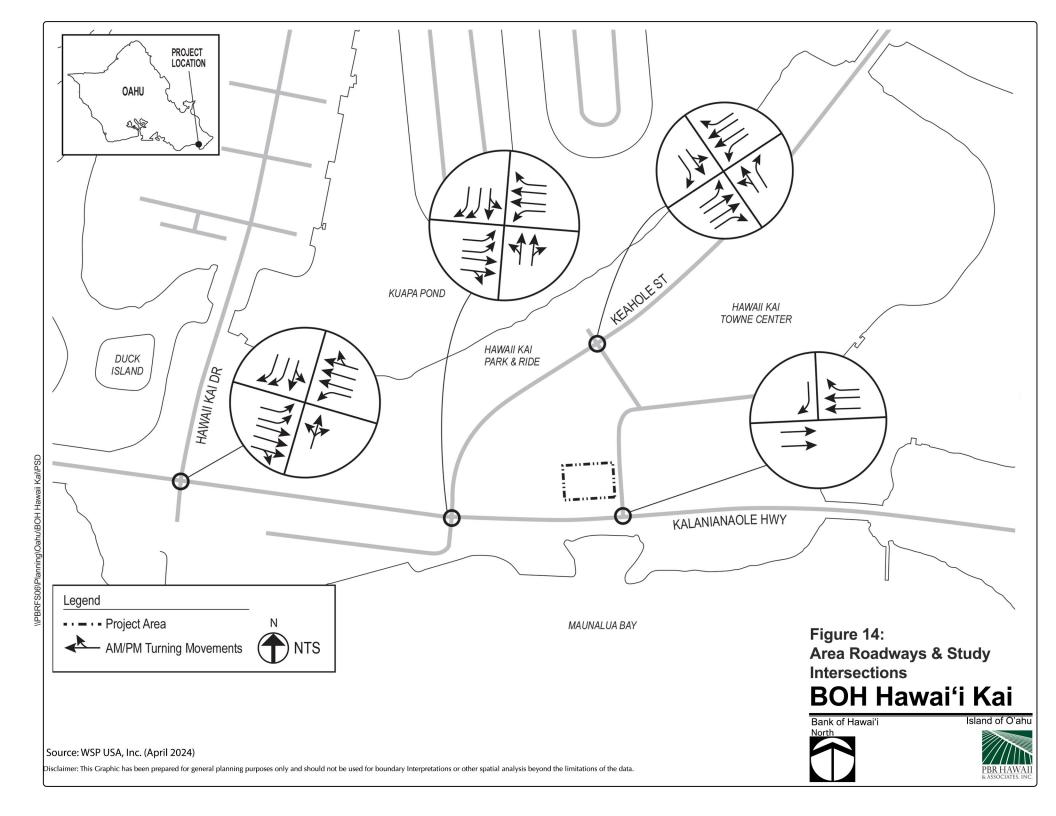


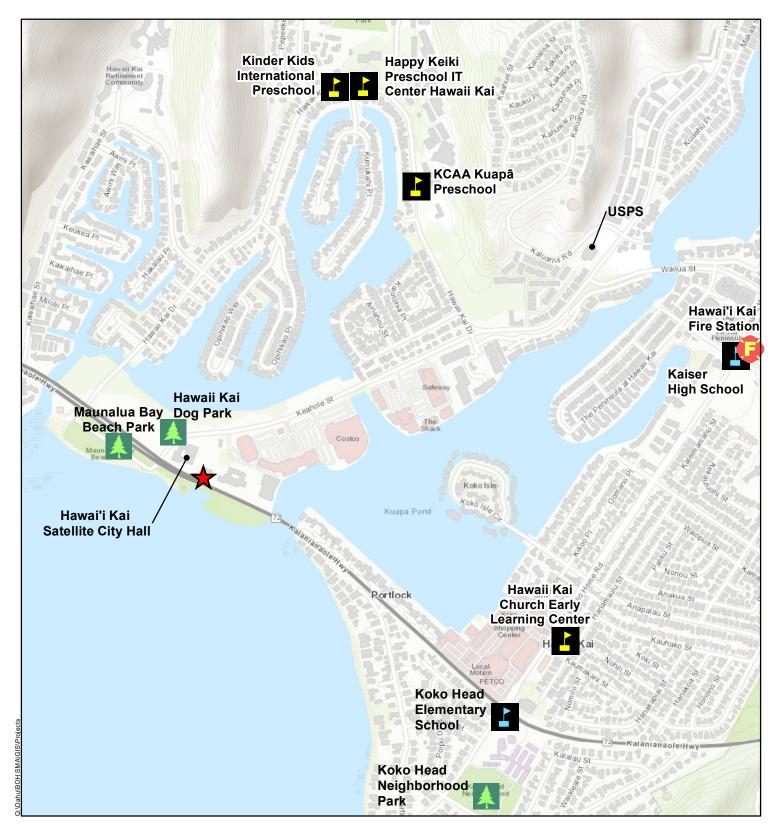


USFWS Animals, Insects & Plants Critical Habitat

Figure 13: USFWS Critical Habitats









Project Site



Public Schools



Fire Stations



Pre-Schools

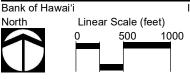


Parks

Figure 15: **Public Facilities**

BOH Hawai'i Kai

North





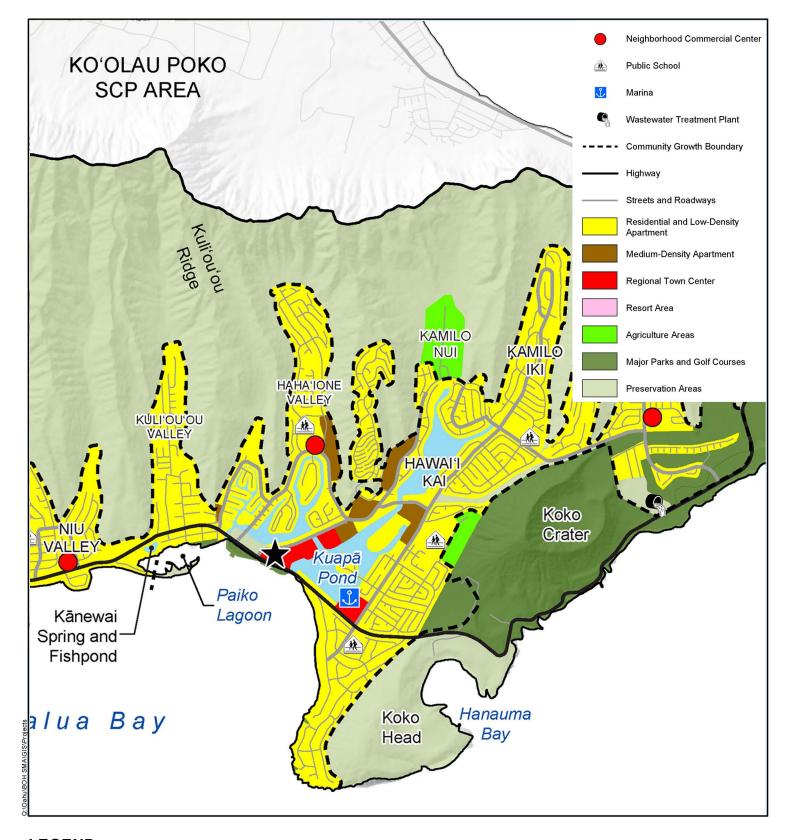




Figure 16: East Honolulu Sustainable Communities Plan

BOH Hawai'i Kai



Island of O'ahu

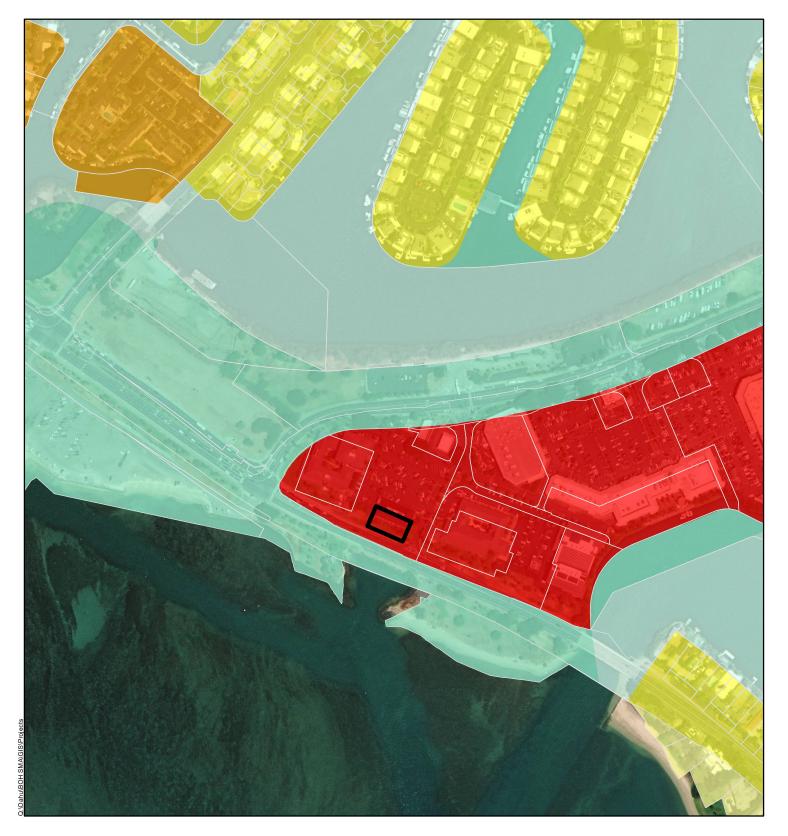




Figure 17: Zoning

