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IN REPLY REFER TO:
HWY-DD 2.4311

October 29, 2020

TO: KEITH KAWAOKA, ACTING DIRECTOR
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM: JADE T. BUTAY
DIRECTOR OF TRANSPORTATION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT AND ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT FOR ALA MOANA BOULEVARD ELEVATED PEDESTRIAN WALKWAY KAKAAKO, ISLAND OF OAHU, HAWAII

With this letter, the State of Hawaii Department of Transportation (HDOT) transmits the Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI) for the proposed Ala Moana Boulevard Elevated Pedestrian Walkway situated in Kakaako, on the island of Oahu for publication in the next available edition of the Environmental Notice.

Enclosed is an Adobe Acrobat PDF file of the DEA-AFONSI. All required information associated with this request for publication is being furnished via the Office of Environmental Quality Control's online form.

Should you have any questions, please contact Li Nah Okita, HDOT Project Manager, at (808) 692-7581 or Michelle Kwan, HDOT Project Engineer, at (808) 692-8441 of our Design Section, Design Branch, Highways Division, or by email at Li.Nah.Okita@hawaii.gov or Michelle.S.Kwan@hawaii.gov and reference letter number HWY-DD 2.4311 as noted above.

Enclosures

c: Randall Urasaki, WSP USA Inc.

21-080

From: webmaster@hawaii.gov
To: HI Office of Environmental Quality Control
Subject: New online submission for The Environmental Notice
Date: Friday, October 30, 2020 3:48:33 PM

Action Name

Ala Moana Boulevard Elevated Pedestrian Walkway, Federal-Aid Project No. BLD-092-1(029)

Type of Document/Determination

Draft environmental assessment and anticipated finding of no significant impact (DEA-AFNSI)

HRS §343-5(a) Trigger(s)

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

Judicial district

Honolulu, O‘ahu

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

Ala Moana Boulevard Right of Way; 2-3-001:129; 2-3-001:130; 2-1-058:132; 2-1-058:133

Action type

Agency

Other required permits and approvals

Section 106 of the National Historic Preservation Act; HRS Chapter 6E-8 Review; Section 7 of the Endangered Species Act; Magnuson-Stevens Fisheries Act: Essential Fish Habitat; Coastal Zone Management Federal Consistency Review; Major Special Management Area (SMA) Use Permit; Disability and Communication Access Board (DCAB) Review / Approval; National Pollutant Discharge Elimination System for Stormwater Discharges Associated with Construction Activities Community Noise Permit; Community Noise Variance; Grading, Grubbing, Stockpiling, and Excavation Permit

Proposing/determining agency

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Map It

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Action summary

The State of Hawaii Department of Transportation, Highways Division (HDOT) in partnership with Victoria Ward, Limited (VWL) have been awarded a Better Utilizing Investments to Leverage Development or BUILD Transportation Discretionary Grant from the U.S. Department of Transportation to build an elevated pedestrian and bicycle walkway over Ala Moana Boulevard between the intersections of Ward Avenue and Kamakee Street in the City & County of Honolulu. The new elevated walkway would be accessible via both stairway and an Americans with Disabilities Act (ADA) path that connects to Ala Moana Boulevard sidewalks and other pathways on either side of the structure. It would be equipped with lighting, landscaping, and drainage that ties into the roadway facility. A central pier to support the walkway structure would be placed in the highway median. Night work may be required to minimize impacts on traffic from lane closures.

Reasons supporting determination

Chapter 4 of the Draft EA

Attached documents (signed agency letter & EA/EIS)

- AlaMoanaBlvdElevPedWalkWyDRAFT-EA-2020-11-08.pdf
- HWY-DD-2.4311_Ala-Moana-Blvd-Elev-Ped-Walkway-DEA-to-OEQC-Memo.pdf

Authorized individual

Rachel Adams

Authorization

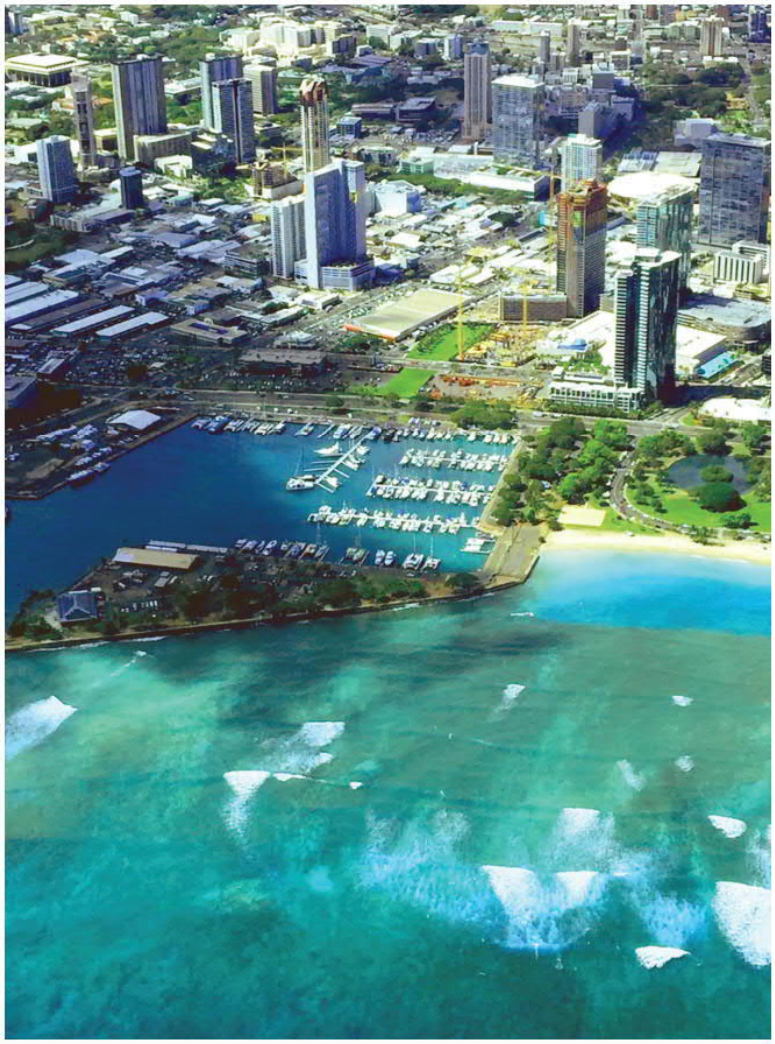
- The above named authorized individual hereby certifies that he/she has the authority to make this submission.

ALA MOANA BOULEVARD ELEVATED PEDESTRIAN WALKWAY

DRAFT ENVIRONMENTAL ASSESSMENT

FEDERAL AID PROJECT
NO. BLD-092-1(029)

KAKAAKO,
OAHU,
HAWAII



NOVEMBER 8, 2020

Draft ENVIRONMENTAL ASSESSMENT
Ala Moana Elevated Pedestrian Walkway
Federal-Aid Project No. BLD-092-1(029)
Kakaako, Island of Oahu, Hawaii

Submitted Pursuant to the

Hawaii Environmental Policy Act,
Chapter 343, Hawaii Revised Statutes, and
Title 11, Chapter 200.1, Hawaii Department of Health Administrative Rules

by the:

Department of Transportation, Highways Division
State of Hawaii

The following person may be contacted for additional information concerning this document:

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601 Kamokila Boulevard, #609
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This Draft Environmental Assessment documents the provisional finding that there would be no significant environmental impacts if the proposed Ala Moana Elevated Pedestrian Walkway were to be built. The proposed project would be constructed through a public-private partnership between HDOT and Victoria Ward, Limited. In addition, the project has been awarded federal funds from a U.S. Department of Transportation Better Utilizing Investments to Leverage Development or BUILD Transportation Discretionary grant. This safety project is intended to create a 'land bridge' for Ward Village and surrounding community residents to walk or bike across Ala Moana Boulevard, connecting mauka and makai land uses over the busy highway. Furthermore, the project would fulfill transportation and community plans for Kakaako set forth by the Hawaii Community Development Authority.

EXECUTIVE SUMMARY

The State of Hawaii Department of Transportation, Highways Division (HDOT) in partnership with Victoria Ward, Limited (VWL) have been awarded a Better Utilizing Investments to Leverage Development or BUILD Transportation Discretionary Grant from the U.S. Department of Transportation to build an elevated pedestrian and bicycle walkway over Ala Moana Boulevard between the intersections of Ward Avenue and Kamakee Street in the City & County of Honolulu.

This Draft Environmental Assessment (EA) discloses the foreseeable environmental and social impacts that could result from the project's implementation and commits to the employment of specific measures to prevent, minimize or mitigate adverse impacts to the environment. Table ES-1 provides a summary of the potential impacts and the proposed measures to avoid, minimize, or mitigate those potential effects.

Table ES-1: Summary of Potential Impacts by Alternative

Section	No Build	Build Alternative Impacts	Mitigation / Minimization / Avoidance Measures
2.1 Geographic Setting	No impact.	No impact. Grading, grubbing, and other ground-disturbing activities would not substantially alter topography, drainage patterns or geologic processes in a negative way.	None proposed.
2.2 Natural Hazards	No impact. However, there would be no secondary access to properties or potential for upward retreat.	No impact. AASHTO's Load and Resistance Factor Design (LRFD) Bridge Design Specifications, which includes seismic retrofit would be adhered. In the event of inundation, the elevated walkway would provide secondary access and/or possible retreat.	None proposed.
2.3 Water Resources	No impact.	Less than significant. Potential stormwater run-off attributable to the elevated walkway is not sufficient to degrade water quality at Kewalo Basin and surrounding waters. Groundwater would not be impeded and would not modify the SOBA.	None proposed.

Section	No Build	Build Alternative Impacts	Mitigation / Minimization / Avoidance Measures
2.4 Biological Resources	No impact.	Less than significant. The elevated walkway would require removal of a number of shower trees and coconut trees. The number of trees that would remain and the relative importance of the trees do not meet the significance threshold. Nesting White terns (manu-o-ku) (Gygis alba) and the Hawaiian Hoary Bat (opeapea) (Lasiurus cinereus semotus) may be affected if they are nesting in the trees during removal. Nighttime lighting may affect Seabirds. Construction activities have potential to introduce invasive species.	State Division of Forestry and Wildlife's recommended best management practices as well as avoidance and mitigation measures will be incorporated into the project plans. See Section 2.4.3.
2.5 Air Quality	No impact.	No impact.	None proposed.
2.6 Noise	No impact.	No impact.	None proposed. See Section 2.14.6 for Noise Impacts During Construction and Mitigation Measures.
2.7 Land Use	No impact.	Less than significant. Approximately 12,931 square feet of Kewalo Basin frontage/driveway would be incorporated into the landing and paths associated with the walkway. Approximately 13,217 square feet of the future Victoria Ward park would become an easement to support the mauka landing. No businesses at Kewalo Basin would be displaced by the proposed project.	None proposed.
2.8 Social and Economic Conditions	No impact.	No impact.	None proposed.

Section	No Build	Build Alternative Impacts	Mitigation / Minimization / Avoidance Measures
2.9 Historic and Archaeological	No impact. No additional information would be gathered from the proposed Archaeological Monitoring Program, which may yield information regarding the extent of archaeological resources in the project area.	Section 106 of the National Historic Preservation Act (Section 106) and Chapter 6E-8 of the Hawaii Revised Statutes (HRS 6E-8) Review is in progress therefore the assessments of significance, anticipated impacts, and proposed mitigation and minimization measures are considered preliminary. Nonetheless, this Draft EA discloses those resources that have been identified, and the proposed action's potential effect on them. SIHP #-7655 (buried post-Contact salt pan remnants, cultural deposits, and human burials), which was identified in previous surveys, is eligible for the National Register of Historic Places. Other archaeological resources within the project area are: #-7658 (Buried post-contact surfaces and structural remnants); #-7659 (Ward Estate concretized auwai); #-7660 (Post-contact trash fill); and #-8925(Sub-surface cultural layer).	Archaeological monitoring is proposed. See Section 2.9.3.
2.10 Cultural Resources	No impact.	None anticipated. However, in the event that iwi kupuna or cultural finds are encountered during construction, traditional customs and practices would be invoked.	In the event of iwi kupuna or cultural finds, Hawaii Revised Statutes and Hawaii Administrative Rules will be adhered to. See Section 2.14.7.
2.11 Transportation Infrastructure	The need for a protected crossing between Kamakee Street and Ward Avenue would not be met.	Over-all efficiency of the transportation system would be improved and the need for a safe crossing for pedestrians and bicyclists would be met.	None proposed.
2.12 Parklands and Recreational Resources	No impact.	None anticipated.	None proposed.

Section	No Build	Build Alternative Impacts	Mitigation / Minimization / Avoidance Measures
2.13 Visual and Aesthetic Resources	No impact.	Less than significant. Design features would enhance the visual quality and aesthetics.	Bridge design and landscaping will create a structure that is compatible with the existing visual character of the adjacent recreational and commercial/retail areas. See Section 2.13.3.
2.14 Construction Impacts	No impact.	Less than significant. Short-term temporary disruptions would occur to various resources during construction but would not result in long-term effects.	General good housekeeping practices would be implemented for consideration of all resources.

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CHAPTER 1. DESCRIPTION OF THE PROPOSED ACTION

1.1 Introduction

The State of Hawaii Department of Transportation, Highways Division (HDOT) in partnership with Victoria Ward, Limited (VWL) have been awarded a Better Utilizing Investments to Leverage Development or BUILD Transportation Discretionary Grant from the U.S. Department of Transportation to build an elevated pedestrian and bicycle walkway over Ala Moana Boulevard between the intersections of Ward Avenue and Kamakee Street in the City & County of Honolulu. See Figure 1-1. The BUILD grant was submitted in response to a tragic accident in January 2019. Three people were killed and five seriously injured by a truck running into them while they were waiting on the pedestrian island to cross Ala Moana Boulevard. As a result of the tragedy, the State Legislature passed HCR No. 162 H.D.1, asking HDOT, the City and private entities to look at enhancing pedestrian safety on Ala Moana Boulevard at Kamakee Street.

This project, which envisions a "land bridge" for Ward Village and the surrounding community to walk or bike across Ala Moana Boulevard, connecting them to the oceanfront Ala Moana Regional Park, and Kewalo Basin Harbor (Kewalo Basin), is the result of the BUILD grant.

Ala Moana Boulevard is a state-owned roadway under HDOT's jurisdiction, while Ward Avenue and Kamakee Street are owned by the City and County of Honolulu (the City).

1.1.1 Purpose of This Document

The project actions proposed by HDOT require environmental review in accordance with Chapter 343 of Hawaii Revised Statutes (HRS) because of the use of State funds and lands. Therefore, the environmental review must comply with Hawaii Administrative Rules [Title 11, Chapter 200.1 (August 2019)]. Note that although the project will require property from the State Department of Business, Economic Development, and Tourism's Hawaii Community Development Authority (HCDA), HDOT remains the appropriate proposing and decision-making authority because the transfer of HCDA's property is ancillary to HDOT's primary action.

This Draft Environmental Assessment (EA) discloses the foreseeable environmental and social impacts that could result from the project's implementation and commits to the employment of specific measures to prevent, minimize or mitigate adverse impacts to the environment. Additionally, this Draft EA contains a record of all comments and consultation activities that have been conducted to date as part of project planning.

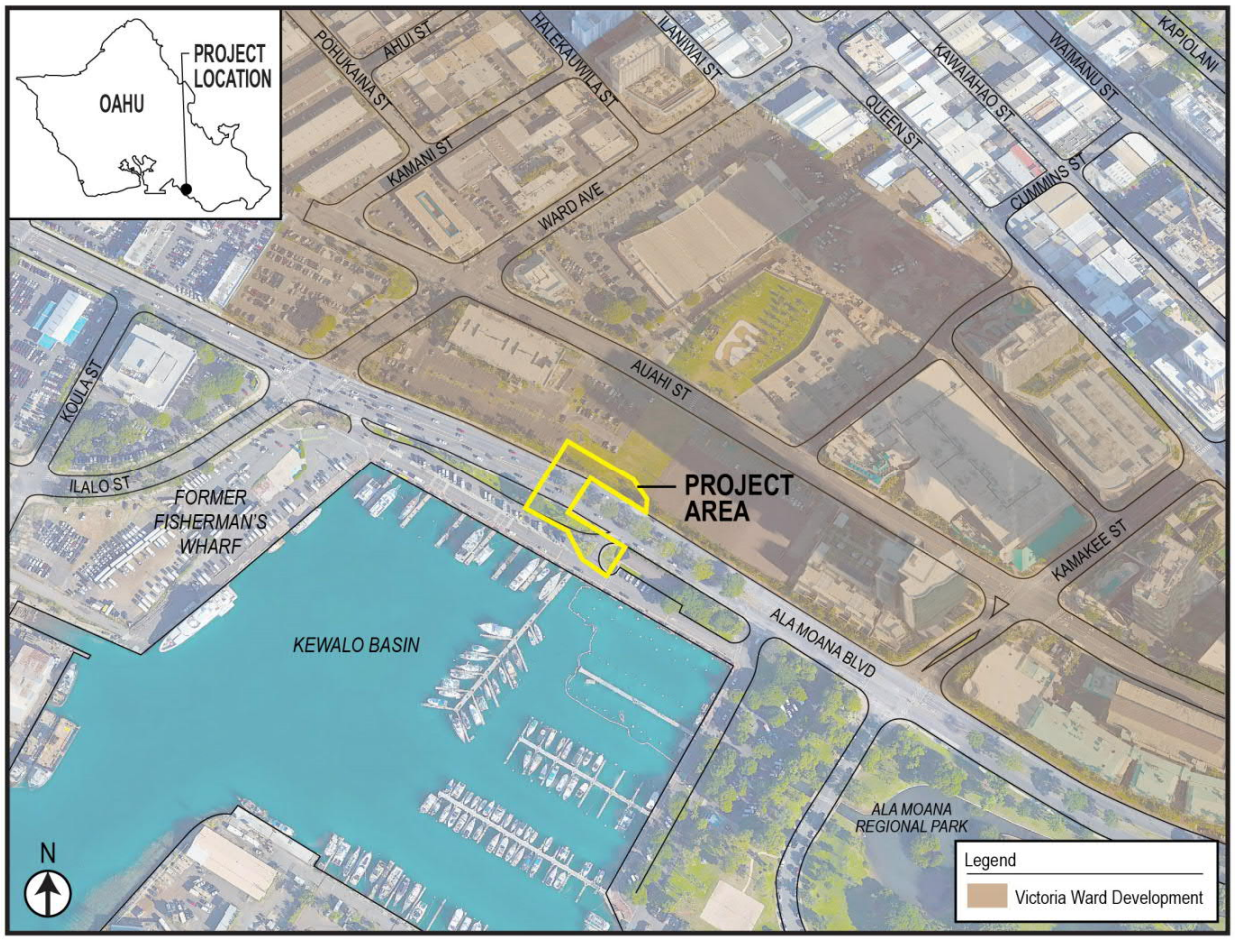

Figure 1-1. Project Area Map

Because the BUILD grant, administered by the Federal Highway Administration (FHWA), will be used to construct this project, the project is considered a federal action and must also comply with the National Environmental Policy Act (NEPA); a federally-mandated environmental review process. To comply with NEPA, a Categorical Exclusion (CatEx) is anticipated for this project. This Draft EA provides supporting documentation for compliance with NEPA and other federal environmental regulations, the coordination for which are ongoing. Should the FHWA determine that an EA is a more appropriate level of review, this Draft EA would serve as the public review document to support the NEPA process. Other federal laws that apply to the proposed project include, but are not limited to, Section 7 of the Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act, Section 106 of the National Historic Preservation Act, and Section 4(f) of the 1966 Department of Transportation Act.

HDOT has determined that the Proposed Action is not likely to have a "significant" impact in accordance with HRS Chapter 343 and HAR 11-200.1-13. Therefore, HDOT anticipates issuing a "Finding of No Significant Impact" (FONSI) for the project. After receipt of comments on this Draft EA, HDOT will reassess its preliminary determination that a FONSI is appropriate. If it is determined that the project will have significant impacts, HDOT will either revise the proposed project to avoid causing the significant impact or begin preparing an Environmental Impact Statement (EIS).

1.1.2 Organization of This Document

This Draft EA is organized as follows:

- Chapter 1 discusses the Purpose and Need for the proposed project and introduces the alternatives that were considered, as well as the project's anticipated schedule, costs, and permits and approvals that may be required.
- Chapter 2 describes existing conditions, potential impacts, and any proposed mitigation measures.
- Chapter 3 documents the agency and public coordination conducted to date.
- Chapter 4 provides the Anticipated FONSI statement, pursuant to HRS Chapter 343.
- Chapter 5 consists of a list of references used in the preparation of this Draft EA.
- **Appendix A** contains records of comments and coordination conducted for the proposed project.
- **Appendices B through D** are various technical reports prepared for this project.

1.1.3 Naming Conventions in This Document

This document generally uses the directional terms north, south, east, and west. However, the Hawaiian terms "*mauka*" and "*makai*" (towards the mountains and towards the ocean, respectively) are also used, especially where these terms may be the most accurate way to describe a direction or location. For this project area, mauka generally corresponds to a north or north easterly direction, and makai is a south or south westerly direction.

1.2 Project Purpose and Need

The Ala Moana Boulevard Elevated Pedestrian Walkway project is needed to improve pedestrian and bicyclist safety as well as increase connectivity along Ala Moana Boulevard between Ward Avenue and Kamakee Street. Details of these project objectives are described in the following sections.

1.2.1 Pedestrian and Bicyclist Safety

Kakaako, part of Honolulu's urban center, is envisioned to become "*the most desirable urban place in Hawaii in which people can work, live, visit, learn, and play*" – a modern village (HCDA, 2020). Orienting the transportation environment to support alternative transportation modes such as walking, biking, and public transit is central to achieving this vision as this sparsely populated warehouse and commercial area is transformed into a dense urban mix of residential, commercial, retail, and recreational spaces (HCDA, 2013). Development in Kakaako is overseen by HCDA. By making alternative transportation modes attractive, HCDA plans to re-distribute and absorb the increased transportation demands generated by Kakaako's intensified land uses using networks of pedestrian and bicycle paths instead of larger roadways and parking lots. HCDA's design guidelines are presented in two separate master plans, which divides Kakaako into Mauka and Makai Community Development Districts -Kakaako Mauka (HCDA, 2011) and Kakaako Makai

(HCDA, 2005) (Figure 1-2**)**. Ala Moana Boulevard serves as the boundary between Kakaako Mauka and Kakaako Makai.

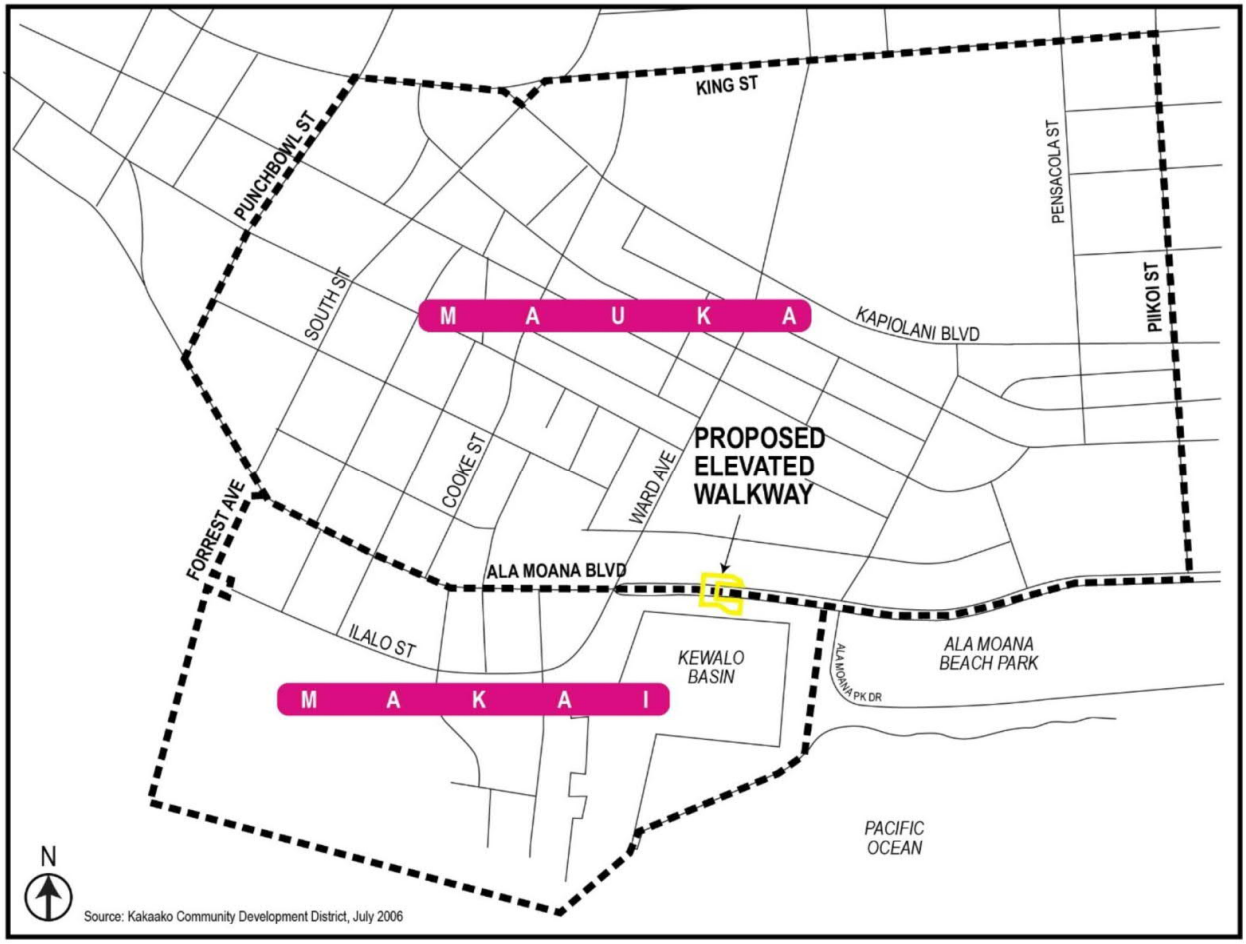

Figure 1-2. Kakaako Community Development District

Mauka of Ala Moana Boulevard, the 60-acre master planned Ward Village is in various phases of entitlement, construction, and completion. When it is fully completed in 2027, it will create at least 4,500 residential condominiums, 86,000 square feet of retail uses, and over 55,000 square feet of restaurant uses (Wilson Okamoto Corporation [WOC], 2020). Additionally, the Honolulu Rail Transit's Kakaako Station will be located nearby with an entrance from Ward Ave at Halekauwila Street, where 2,650 pedestrians and cyclists are projected to access the station each day at full build-out (HART, 2011).

Makai of Ala Moana Boulevard, Kewalo Basin Harbor and the Kakaako Waterfront Park form the primary uses within Kakaako Makai. Within this District, the Office of Hawaiian Affairs (OHA), HCDA, and City and County of Honolulu (City) are proposing a mix of future land uses that would result in adding 153,000 square feet of restaurant uses, 110,700 square feet of retail uses, and 20,000 square feet of commercial uses (WOC, 2020). Additionally, the City's Department of Design and Construction (DDC) is in the process of designing improvements to Ala Moana Regional Park, which lies east of the Kakaako Makai District (DDC, 2019).

Existing and future land uses within a quarter mile radius (within a 5-minute walk) mauka and makai of Ala Moana Boulevard are anticipated to contribute to the demand to cross the busy highway. At full build-out of Ward Village, these land uses are projected to generate 243 pedestrian and 36 bicyclist crossings within the project limits of Ala Moana Boulevard during the PM peak hour or roughly 2,100 pedestrians and bicyclists per day.[1] By contrast, in 2018, the number of pedestrians observed crossing Ala Moana Boulevard at Ward Avenue and Kamakee Street during the peak hour was 65 and 53, respectively (WOC, 2020). The number of bicyclists observed in 2018 was considered minimal or insignificant (WOC, 2020). By 2027, the projected growth of pedestrians and bicyclists that will need to cross Ala Moana Boulevard is more than double the existing volumes. Crossing improvements are needed to manage these large volumes of pedestrians and cyclists safely and efficiently.

1.2.2 Increase Access and Connectivity

Ala Moana Boulevard generally consists of three (3) lanes in each direction, plus turn lanes with a landscaped median (see Figure 1-3). In the stretch of roadway bounded by Ward Avenue and Kamakee Street, the speed limit is 35 mph.

Figure 1-3. Street View of the Proposed Project Area

Ala Moana Boulevard, Ward Avenue, and Kamakee Street are all considered pedestrian-friendly because of their wide sidewalks, large tree canopies and landscaped buffers that enhance the pedestrian experience. However, currently, pedestrians coming to and from the land uses on either side of the highway must cross Ala Moana Boulevard using the crosswalks at Kamakee Street or Ward Avenue, which are more than 1,300 feet apart. An additional mid-block crossing is needed to create strong pedestrian and bicycle links across the high-volume highway. The added crossing would increase connectivity in both the mauka-makai and east-west directions with shorter blocks, resulting in overall improved efficiency. As land use intensifies, the additional crossing will allow

[1] Note that these projections are estimates of the number of PM peak hour bridge users, which includes those that are attracted by the idea of the bridge experience in and of itself. It also does not reflect the anticipated demand for crossings that would remain at the at-grade Kamakee Street and Ward Avenue intersections. Nonetheless, it facilitates an understanding of the overall increase in pedestrian and bicycle needs generated by adjacent land uses.

pedestrians direct access to those future uses. Protective measures for the crossing would be needed given the heavy traffic on the roadway and projected pedestrian and bicyclist volumes.

1.3 Alternatives Addressed in This Draft EA

This project, as defined in this Draft EA, is proceeding as a result of BUILD funding, which means that to some degree, the solution to the transportation problem has already been defined as an elevated pedestrian bridge at approximately this location. Design and location variations that may otherwise be different enough to be considered in developing an elevated pedestrian bridge project are not anticipated to be acceptable under the BUILD grant. Therefore, this EA focuses on analyzing only a single Build Alternative and the No Build Alternative.

1.3.1 No Build Alternative

The No-Build alternative is typically referred to as the "do nothing" scenario. As a point of comparison in this Draft EA's impact analysis, the No Build alternative assumes that programmed transportation improvements and development is carried through, except without the proposed action.

Several safety improvements associated with current and upcoming repaving projects for Ala Moana Boulevard include:

- Ala Moana Boulevard at Kamakee St.
    - Right turns from westbound Ala Moana Boulevard to northbound Kamakee St. will not be allowed.
    - "No Right Turn on Red" signs will be installed on the other 3 approaches to the intersection.
- Ala Moana Boulevard at Piikoi St.: "No Right Turn on Red" signs will be installed on both right turn approaches to the intersection.
- Ala Moana Boulevard at Atkinson Drive: Wider crosswalks will be constructed across both Ala Moana Boulevard and Atkinson Drive

Other pedestrian improvements will be incorporated into Ala Moana Boulevard Resurfacing Project anticipated to advertise in November 2020.

Additional programmed transportation assumptions are based on the 2040 Oahu Regional Transportation (2040 ORTP) Plan, which guides transportation development on Oahu through 2040. Additionally, the Statewide Transportation Improvement Program (STIP) builds on the 2040 ORTP by prioritizing near term federal funding for transportation projects on a statewide basis.

The No Build Alternative assumes that the transportation projects identified within the Mid-Range Plan in the ORTP (anticipated for development by 2029) and the current STIP (Federal Fiscal Year (FFY) 2019 - 2022) will be carried out. Currently, the 2040 ORTP and FFY 2019-2022 STIP identify the Ala Moana Boulevard Elevated Pedestrian Walkway (Project Number OS87) and the City's Bikeway Improvements Program (OC1). Upcoming projects in the City's Bikeway Improvements Program includes installation of protected bikeways along Ward Avenue from South King Street to Ala Moana Boulevard in both directions. Section 2.1 describes the network

of future cycling and pedestrian facilities. No other improvements specific to Ala Moana Boulevard are identified in the 2040 ORTP and FFY 2019-2022 STIP except for the proposed project.

Section 1.2.1 and Section 2.1 describe the land use developments that are slated for Kakaako Mauka and Kakaako Makai Districts.

1.3.2 Build Alternative

The proposed project would build a new, elevated mauka-makai oriented walkway over Ala Moana Boulevard, at the location shown in Figure 1-1. As an elevated, non-motorized shared-use path, the bridge would improve pedestrian and bicyclist safety by creating a dedicated connection over the highway. The project's location mid-block between Ward Avenue and Kamakee Street shortens the distance between crossings, which is currently 1,300 feet. Additionally, the project would facilitate continuity between recreational uses at the future Victoria Ward Park mauka of Ala Moana Boulevard to existing recreational and commercial resources makai of Ala Moana Boulevard – Ala Moana Regional Park and Kewalo Basin. Figure 1-4, Figure 1-5, and Figure 1-6, provide various perspectives of an early concept of the elevated walkway.

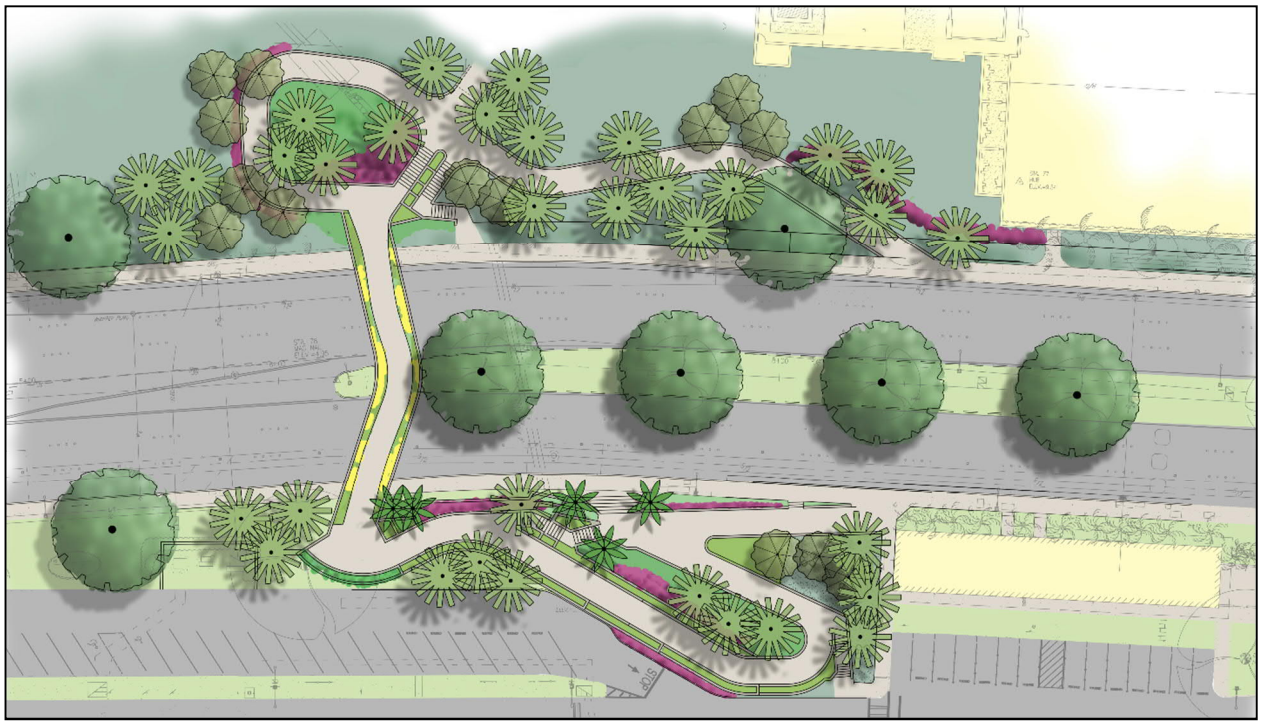

Figure 1-4. Conceptual Layout and Landscaping Plan

Figure 1-5. Conceptual View Along Ala Moana Boulevard Looking West

Figure 1-6. Conceptual View from Elevated Walkway Looking Toward Kewalo Harbor

Although the project name highlights pedestrian use, bicycles will be welcome on the walkway. Figure 1-7 provides a typical section of the walkway. The new elevated walkway would be accessible via both stairway and Americans with Disabilities Act (ADA) paths or ramps that connect to Ala Moana Boulevard sidewalks and other pathways on either side of the structure.

Lighting would be needed for the elevated walkway, ADA paths, and sidewalks leading to the structure, and under the structure along both sides of Ala Moana Boulevard.

Anticipated ground disturbance includes excavations for bridge foundations, retaining wall foundations, tree plantings, irrigations lines, storm drain adjustments, light pole foundations, and electrical wiring. A central pier to support the walkway structure would be placed in the highway median.

Trees within the right-of-way may require removal or relocation. The bridge would be attractively landscaped.

Night work may be required to minimize impacts on traffic from lane closures. During construction, full closure and one-lane closures may require detours. At this time, no underground utilities are expected to be relocated. If any relocations are needed, HDOT will coordinate with the appropriate utilities. Drainage from the walkway would drain into the landscaped areas or tie into the roadway drainage system.

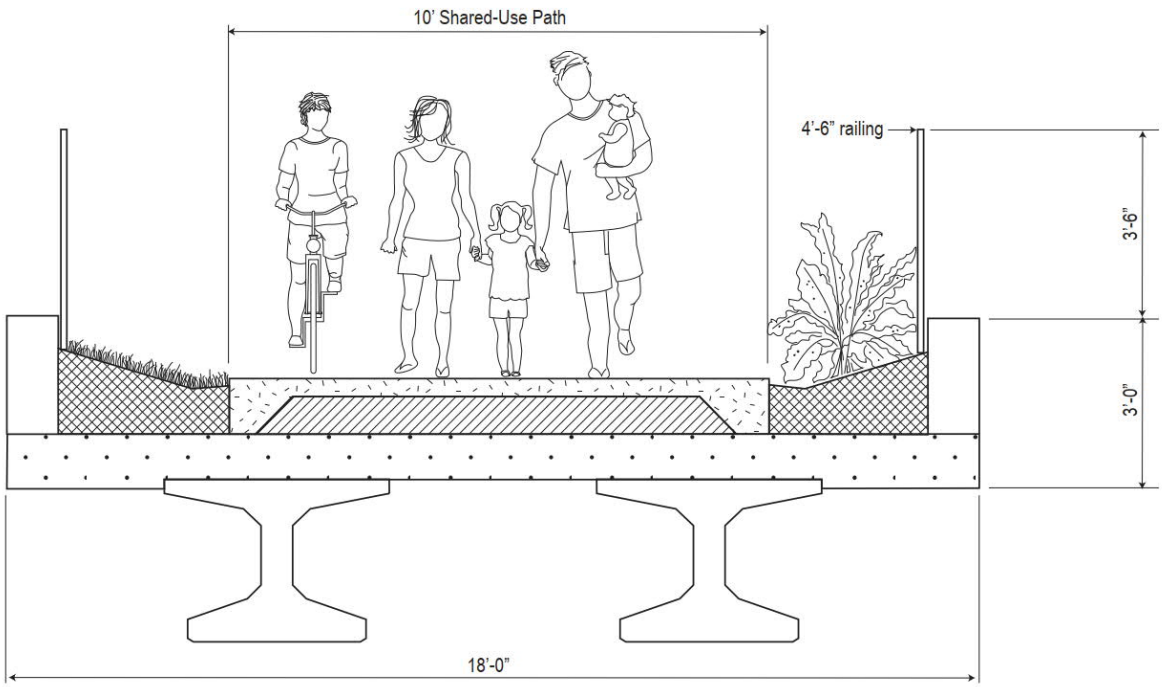

Figure 1-7. Typical Section of Proposed Elevated Walkway

1.3.3 Alternatives Considered but Rejected

Transportation System Management Alternatives

Transportation System Management (TSM) techniques can be used to increase pedestrian and cyclist safety. TSM techniques are relatively low-cost measures used to improve operations of the existing roads. TSM techniques may include measures such as slight adjustments to geometry (existing lane widths and/or channelization striping), including modifications at discrete access points such as cross walks or driveways.

Lastly, operational improvements embodied as TSM Alternatives would not be compelling or eligible as BUILD grant applications. BUILD grants focus on Capital Improvement Projects with a private funding contribution. The Resolution specifically identified an elevated walkway as a possible solution. Restriping, new sidewalks, pedestrian scrambles, and other TSM adjustments could provide some limited operational improvements but could not provide the operational and safety improvements offered by a pedestrian bridge. Evaluation of specific TSM alternatives that were considered are provided in the remainder of this section.

Street Level Crosswalk

One TSM alternative that was considered, is the addition of a signalized crosswalk at the street level. This alternative was rejected because it would not provide the same level of safety and convenience created by the elevated walkway. Its performance in meeting the project's objectives, when compared to the elevated walkway, is far less effective because it impedes both pedestrian and traffic flows. The 6-lane width of the highway is a long distance for pedestrians to cover while vehicles are at a stop. With the anticipated higher volumes of people associated with future development, these seemingly small delays in transportation system performance will stack up, translating into notable increased congestion.

Pedestrian Scramble Alternative

Another potential TSM alternative, which has been suggested during project scoping, is to reconfigure the cross walk to be an all-stop crosswalk, also known as a pedestrian scramble. Instead of halting traffic in one direction, the crosswalk is striped so pedestrians can cross in any direction while all traffic stops. These crosswalks allow for the speedy, uninterrupted transit of pedestrians across intersections without the need to pause at any island or median between lanes. In Waikiki, the intersection at Kalakaua Avenue and Lewers Street has been reconfigured in this manner (Figure 1-8). Pedestrian scrambles are not appropriate solutions for a mid-block crossing since there must be at least one other leg to make it an intersection.

Figure 1-8. Pedestrian Scramble at Intersection of Kalakaua Avenue and Lewers Street
Source: Star-Advertiser April 30, 2020

1.4 Project Schedule and Cost

1.4.1 Project Schedule

The proposed project's milestones and associated dates are shown in Figure 1-9. Construction is anticipated to take 18 months.

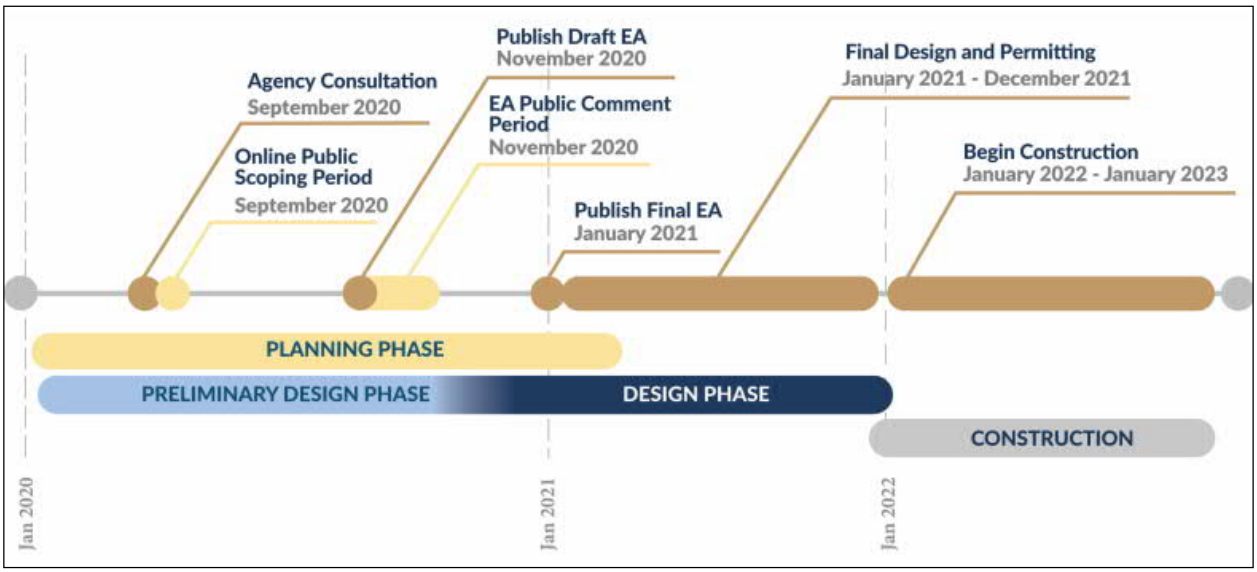

Figure 1-9. Project Schedule

1.4.2 Project Cost

The overall project cost is anticipated to be 30 million dollars. A majority of the project funding is from the BUILD grant, which is administered by FHWA. The remainder of the cost will be funded by the State and private contributions, as shown. The project is a partnership between the HDOT and VWL. HDOT will procure the contractor, administer construction, maintain the structure, and own the walkway, while VWL will contribute the right-of-way for the walkway's mauka landing area, and secure the makai landing area right-of-way from the HCDA. VWL also is funding the environmental review and walkway design. After construction, Ward Village Owners Association will be responsible for custodial duties, landscaping, and security for the walkway.

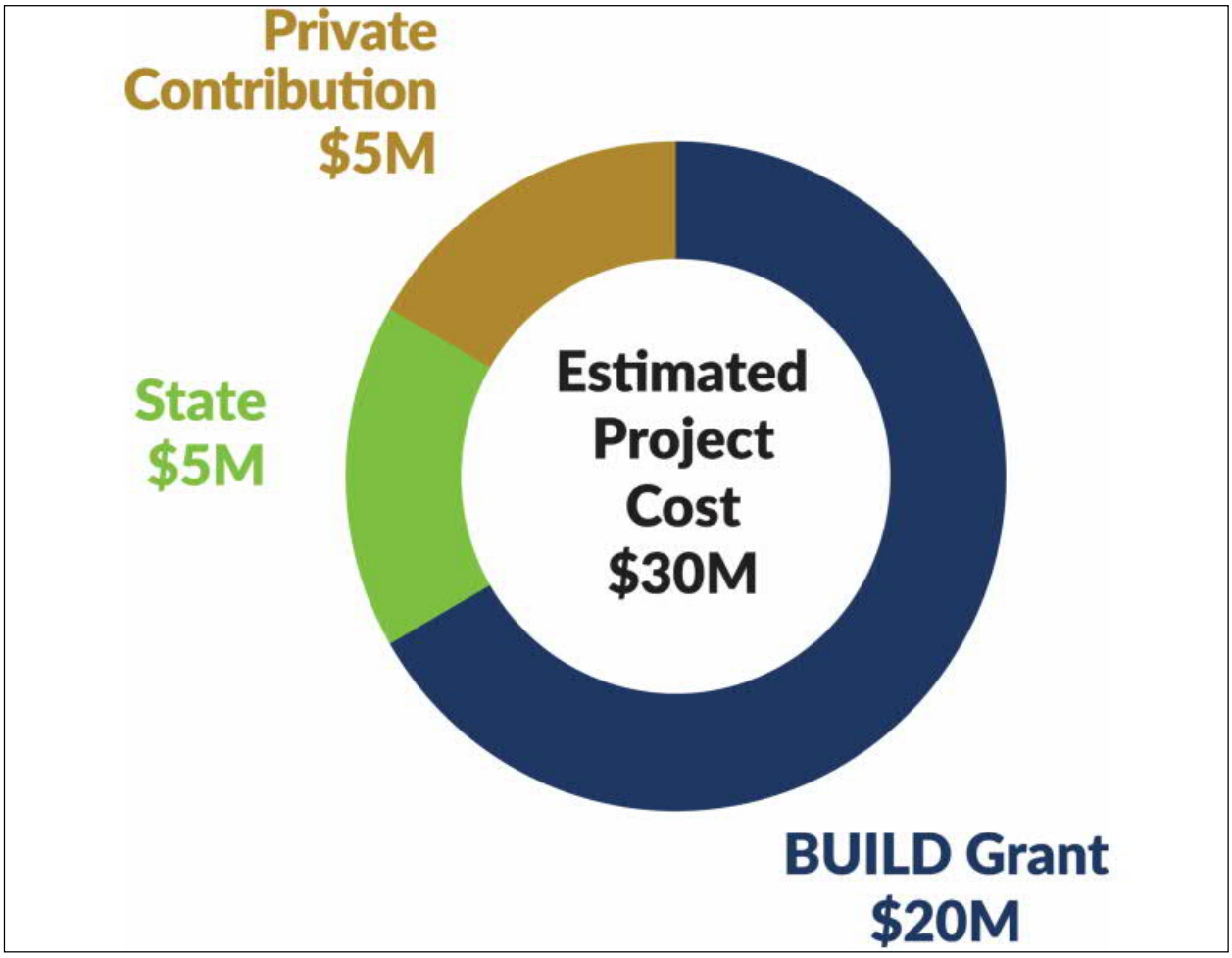

Figure 1-10. Estimated Project Cost and Funding Breakdown

1.5 Permits and Approvals

Please see Table 1-1 below for a list of the environmental permits and approvals that may be required prior to the construction of the proposed project. As noted in the table, some of the coordination is currently on-going.

Table 1-1. Permits and Approvals Required for the Project

Permit / Approval	Agency	Status
Section 106 of the National Historic Preservation Act;	State Historic Preservation Officer; State of Hawaii, Department of Land and Natural Resources, State Historic Preservation Division	On-going
Hawaii Revised Statutes (HRS) Chapter 6E-8 Review	State of Hawaii, Department of Land and Natural Resources, State Historic Preservation Division	On-going
Section 7 of the Endangered Species Act;	U.S. Fish and Wildlife Service and National Oceanographic and Atmospheric Administration	Completed
Special Management Area (SMA) Use Permit	State of Hawaii, Office of Planning	To be submitted after project Finding of No Significant Impact (FONSI)
Coastal Zone Management Consistency Review	State of Hawaii, Department of Business Economic Development and Tourism (DBEDT)	On-going
Disability and Communication Access Board (DCAB) Review / Approval	State of Hawaii DCAB	To be submitted during design
National Pollutant Discharge Elimination System (NPDES) for Stormwater Discharges Associated with Construction Activities	State of Hawaii, Department of Health, Clean Water Branch	To be submitted during design
Noise Permit	State of Hawaii, Department of Health, Indoor and Radiological Health Branch	To be submitted during design
Noise Variance	State of Hawaii, Department of Health, Indoor and Radiological Health Branch	To be submitted during design
Grading, Grubbing, Stockpiling and Excavation permit	City and County of Honolulu, Department of Planning and Permitting (DPP)	To be submitted by contractor

CHAPTER 2. AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND PROPOSED MITIGATION

This chapter describes the existing environmental conditions of the project site, long-term impacts of the proposed project, and the proposed mitigation measures to avoid, minimize, or mitigate those potential effects. The relative impact that will likely remain after mitigation is also described. Each section within this chapter is dedicated to analyzing a specific environmental or social discipline. Short-term potential construction phase impacts are discussed in a single section, Section 2.14.

Existing conditions, potential impacts, and proposed mitigation measures presented in this chapter have been developed through (a) review of existing information related to the project areas (see references section); (b) studies conducted specifically for the project; (c) coordination with regulatory agencies; and (d) consultation with the general public.

2.1 Geographic Setting

This section addresses the project site's topography, soil conditions, and potential presence of hazardous materials.

2.1.1 Existing Conditions

Topography and Soils

The project area is located within central coastal Honolulu, surrounded by modern urban development including commercial buildings, paved streets, sidewalks, utility infrastructure, and landscaped margins.

Kakaako was originally a low-lying swampland and in the project area the underlying material is recent fill. According to the U.S. Department of Agriculture Natural Resources Conservation Service (1972), the soil throughout the project area is categorized as Fill Land, mixed (FL). These types of lands are generally found on coastal, low-lying areas that are now urban.

Results of archaeological subsurface testing indicate that natural Jaucas Sand (JaC) underlie mauka portions of the project area (Pammer et al. 2014). Foote et al. describe Jaucas sand as: "In a representative profile the soil is single grain, pale brown to very pale brown, sandy, and more than 60 inches deep. In many places the surface layer is dark brown as a result of accumulation of organic matter and alluvium" (1972).

Soils within the project area are not considered of the quality deemed suitable for farmland. They are not classified as Agricultural Lands of Importance to the State of Hawaii (ALSH), neither are they considered prime, unique or other important agricultural land.

The elevation of the project area is between approximately 5 feet above mean sea level.

Hazardous Materials

Physical conditions and project location suggest a limited possibility of site contamination due to the lack of current and past heavy industry, gas stations, or other businesses usually associated

with hazardous materials. No concerning sites of suspected contamination near the project area appear on the State Department of Health EHACONNECT site https://eha-cloud.doh.hawaii.gov/connect/map .

Hazardous materials may be transported on Ala Moana Boulevard. HDOT regulates any movement of hazardous materials on State roads.

2.1.2 Potential Impacts

No Build Alternative

Under the No Build Alternative, the topography and soils that make up the geographic setting and geologic processes in the project area would not change. There would be no change to the presence or prevalence of hazardous materials in the project area.

Build Alternative

The proposed project would not alter topography in such a way that topography, drainage patterns or geologic processes would substantially change. Moreover, the proposed elevated walkway is consistent with the urban built environment.

Soils described as fill often have issues with settlement. The design and construction sequence will take into account potential for settlement to avoid movement and cracking of the structure. Section 2.14 describes the short-term impacts associated with construction.

Jaucas sand, likely to be encountered on the mauka portion of the walkway, is often associated with archeological deposits as described in more detail in Section 2.9.

The proposed project does not involve hazardous materials or the construction of a facility that would use hazardous material in its operations. While hazardous materials could potentially be transported on Ala Moana Boulevard, the proposed pedestrian walkway would have no effect on their transportation.

2.1.3 Avoidance, Minimization, and Mitigation Measures

Grading, grubbing, and other earthwork activities would not alter topography in such a way that topography, drainage patterns or geologic processes would substantially change therefore no avoidance, minimization, or mitigation measures are proposed.

If any hazardous materials are encountered during construction, all regulations from State Department of Health and other regulatory agencies would be followed, as described in Section 2.14.

2.2 Natural Hazards

Generally, natural hazards in Hawaii are considered to be earthquakes, flooding, hurricanes, landslides, tsunamis, as well as climate change and sea level rise.

Earthquakes

The project area generally experiences earthquakes at the same rate and proportion as the rest of the island and is not more or less prone to their effect. Annually, the State of Hawaii averages about 100 earthquakes of magnitude 3 or greater, ten of magnitude 4 or greater, and one of magnitude 5 or greater (Hawaii Volcano Observatory, 2017). Typically, people report feeling earthquakes larger than about magnitude 3.

Flooding

The National Flood Insurance Program (NFIP), administered by the Federal Emergency Management Agency (FEMA), maintains flood hazard maps to determine the reference height used by property insurance companies to assess flood risk, called a Base Flood Elevation (BFE). The project is in Flood Zone AE (Figure 2-1). Zone AE is an area that has a 1 % probability of flooding each year, which is why it is commonly referred to as the "100-year floodplain". The area is therefore considered to be at high risk of flooding.

Landslides

As described in Section 2.1.1, the project area is within a low-lying urban environment. It is not susceptible to landslides.

Tsunami

The State of Hawaii Emergency Management Agency has determined evacuation zones to inform the public about leaving the area when a tsunami is predicted. The proposed pedestrian walkway is in the evacuation zone for all tsunami warnings (Figure 2-2).

Climate Change and Sea Level Rise

While climate change is a phenomenon affecting global systems, including changes in precipitation patterns and the frequency/degree of heavy rains, this analysis focuses on sea level rise.

Since the start of the 20th century, the average global sea level has been rising. The rising sea level is affecting coastal areas all over the world. Between 1900 and 2016, the sea level rose by 16–21 centimeters. More precise data gathered from satellite radar measurements reveal an accelerating rise of 7.5 centimeters from 1993 to 2017, which is a trend of roughly 30 centimeters per century. This acceleration is due mostly to human-caused global warming, which is driving thermal expansion of seawater and the melting of land-based ice sheets and glaciers. Climate scientists expect the rate to further accelerate during the 21st century. With increased sea level, many coastal urban areas are under threat as key utilities can be damaged. NOAA estimates that 40% of the United States population lives along coastal areas, with coastal areas making up only 10% of the nation’s landmass. Rising sea levels also worsen damage from hurricanes and tsunami.

While much of the State’s highways are under threat, the south shore of Oahu was not included in the Statewide Coastal Highway Program Report (2019) used to assess highway assets under threat of rising sea level. However, Pacific Islands Ocean Observation System (PacIOOS), a collaboration of University of Hawaii and NOAA/CSP estimates increasing sea levels in the future.

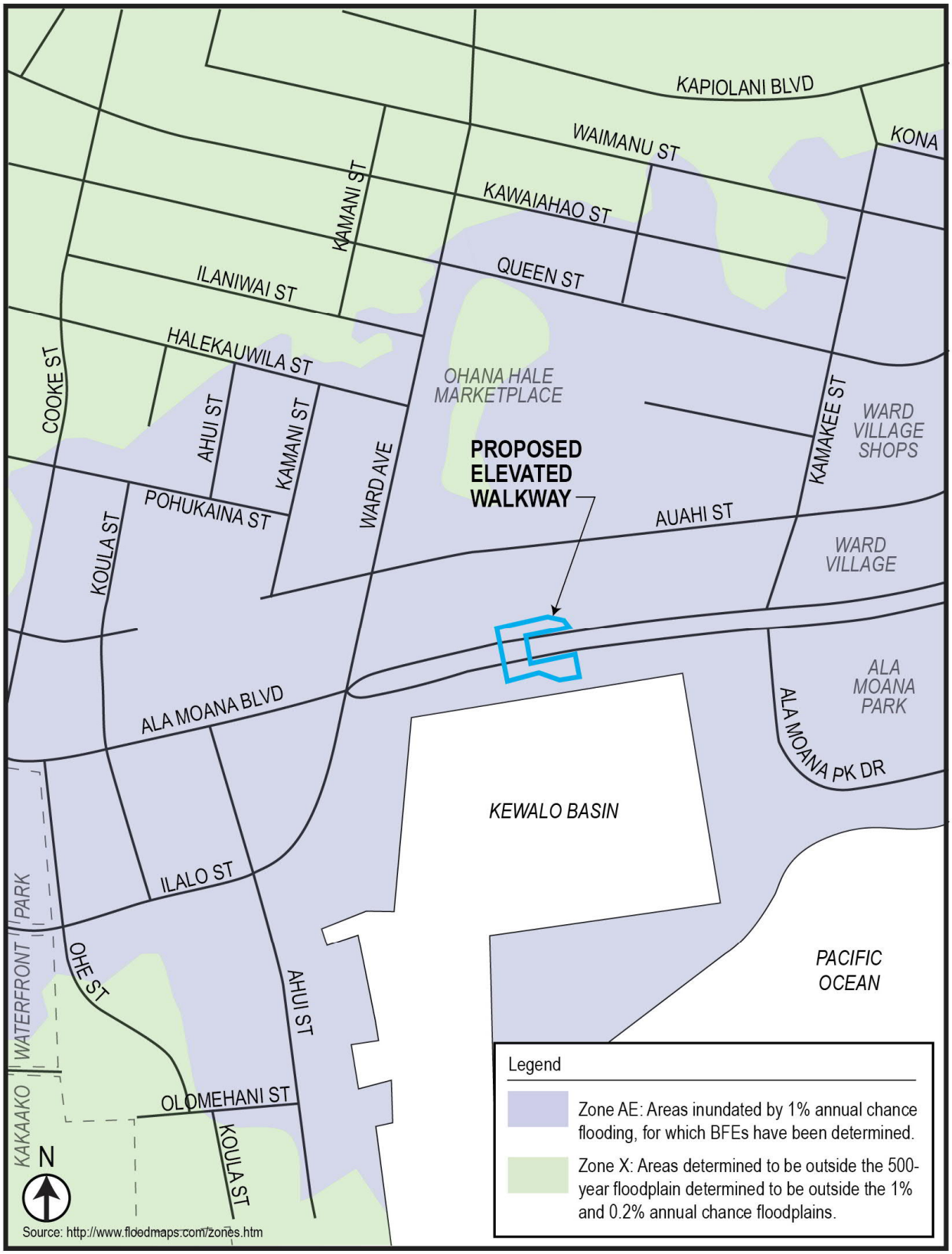

Figure 2-1. Floodzone Map

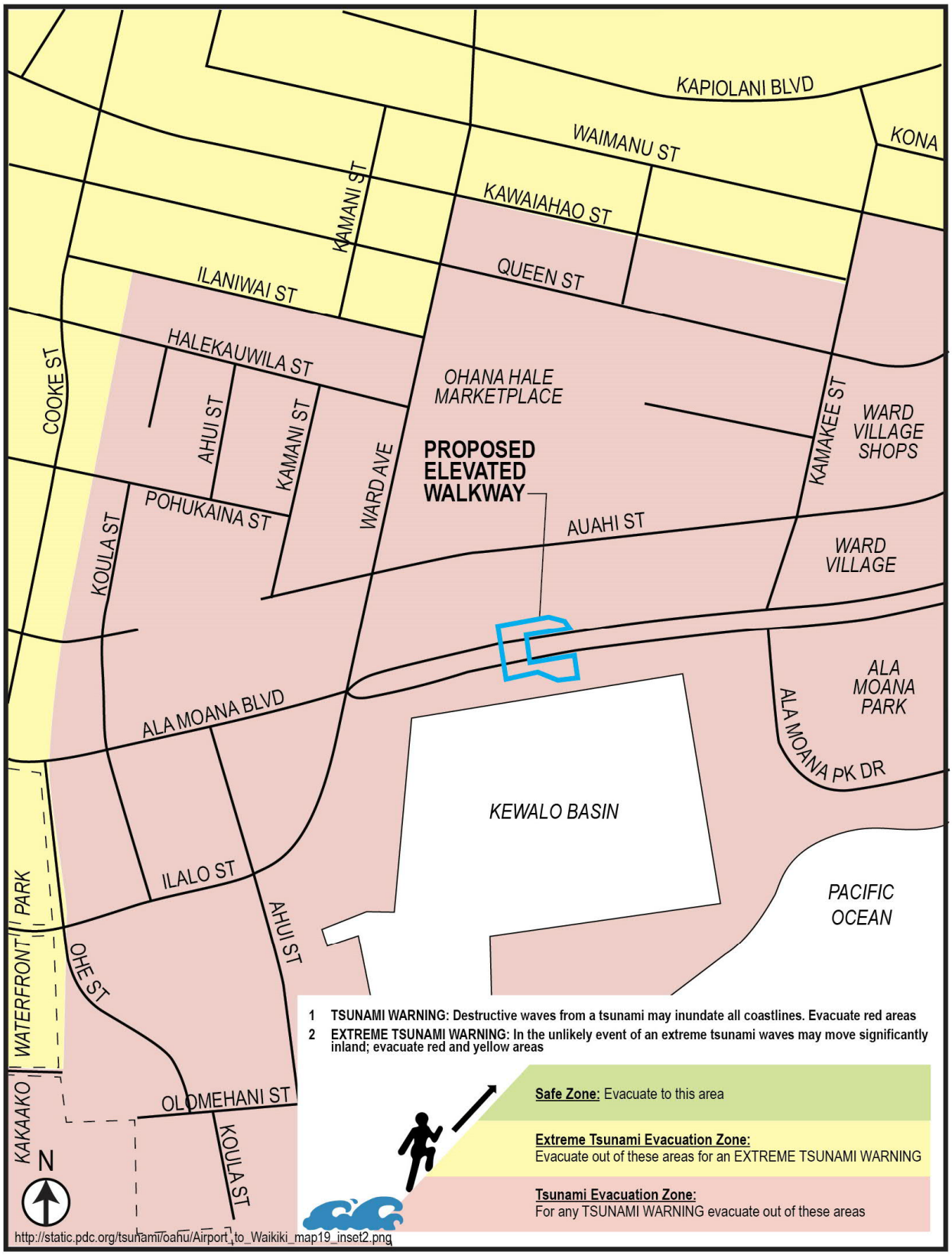

Figure 2-2. Tsunami Evacuation Zone Map

The project area currently sits at approximately 5 feet above sea level and is vulnerable to sea level rise. The PacIOOS estimates an increase in sea level of one meter by the end of the century, 2100. Figure 2-3 shows the effects of one meter on the project area, as well as surrounding Kakaako and Ward Village.

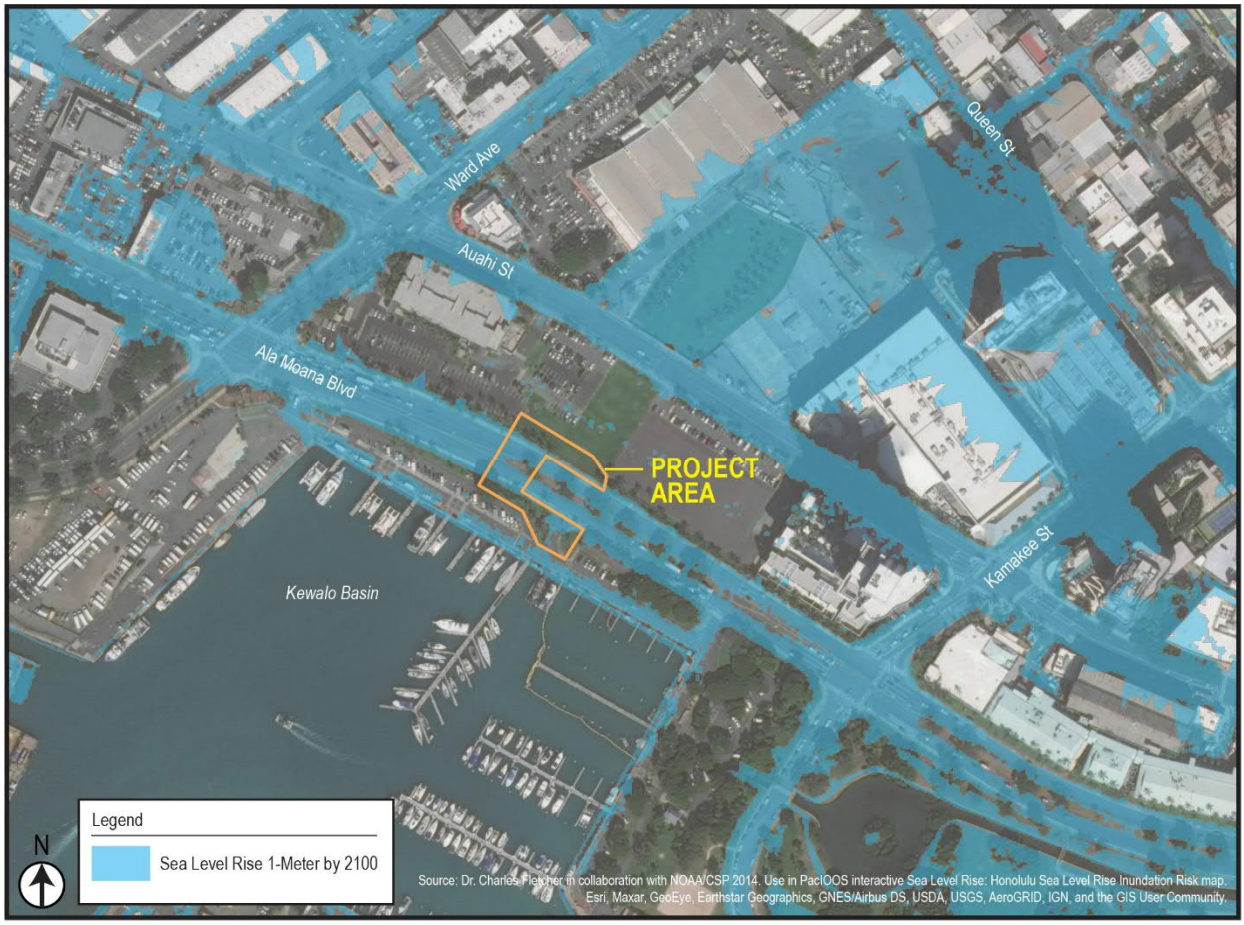

Figure 2-3. Sea Level Rise Inundation Map

2.2.1 Potential Impacts

No Build Alternative

Under the No Build Alternative, there would be no change to the existing environment. During flood events, increased precipitation from climate change or inundation from sea level rise, there would be no secondary access to properties or potential upward retreat facilitated by the proposed elevated walkway.

Build Alternative

The proposed project would not increase the project area's vulnerability to earthquakes, landslides, flooding, tsunami or sea level rise. Neither would it have any bearing on the change in precipitation patterns or frequency and degree of heavy rains anticipated with climate change. The proposed elevated walkway would be designed in accordance with the American Association of

State Highway and Transportation Officials (AASHTO's) Load and Resistance Factor Design (LRFD) Bridge Design Specifications, which includes seismic provisions. In the event of flooding, tsunami or sea level rise, the elevated pedestrian walkway would provide a safer and more effective way to evacuate than the No Build Alternative.

2.2.2 Avoidance, Minimization, and Mitigation Measures

The proposed project would not result in any changes to the existing environment that would exacerbate the effects of earthquakes, landslides, flooding, tsunami or sea level rise, therefore, no avoidance, minimization, or mitigation measures are proposed.

2.3 Water Resources

2.3.1 Existing Conditions

Surface Waters

Kewalo Basin Harbor (Kewalo Basin) is immediately adjacent to the project area. It is a commercial boat harbor that serves as home to some of Honolulu's commercial fishing fleet, as well as charter and excursion vessels that serve the Hawaii tourist market. Waters within Kewalo Basin are classified by the State of Hawaii's Water Classification system as a Class A Marine Water body. The objective of Class A waters is to protect their use for recreational and aesthetic enjoyment. Other uses are permitted as long as they are compatible with the protection and propagation of fish, shellfish, and wildlife, as well as recreational purposes.

Per the 2018 State of Hawaii Water Quality Monitoring and Assessment Report, the data collected was not sufficient to determine whether Kewalo Basin's near shore water quality was in attainment for all pollutant parameters or water quality criteria that support its designated use. Specifically, not enough information was available to determine recreational health, which is assessed by enumerating enterococci bacteria. Other indicators of general ecosystem health such as total nitrogen (TN), nitrate+nitrate-nitrogen (NO_3+NO_2); total phosphorous (TP); and total suspended solids (TSS) were considered attained or within the established threshold. Turbidity, a measure of how well light passes through water and can be attributed to a variety of factors such as bacteria, algae, dyes, etc., was not considered attained.

Groundwater

Groundwater in Oahu occurs in perched water tables, deep basalt aquifers, and shallow aquifers within the caprock. Groundwater in the project area occurs as a tidally influenced perched water table. The project is located within the boundaries of the Southern Oahu Basal Aquifer (SOBA), a deep basalt aquifer. The Environmental Protection Agency (EPA) has designated the SOBA as the sole or principal source of drinking water for southern Oahu. Section 1424(e) of the Safe Drinking Water Act requires certain projects with federal funding to coordinate with the EPA to evaluate potential impacts. FHWA and EPA entered into a Memorandum of Understanding (MOU) in 1984 to determine which projects would need to be individually reviewed by EPA. Projects processed as a categorical exclusion (CatEx) under NEPA do not need to be individually reviewed by EPA.

In addition to the SOBA, a linear man-made water channel fed by pumped groundwater and stormwater is thought to run beneath the project area. This culvert, a concretized auwai, is a

continuous underground feature that runs mauka-makai from the Neal S. Blaisdell at Kapiolani Boulevard to Kewalo Basin. It is believed to have been constructed between 1919 and 1927. Although mapping suggests that the channel may occur beneath the project area, sub-surface testing in support of the project's Archaeological Inventory Survey Report and the geotechnical borings have not encountered this feature. Section 2.8 describes the archaeological and historic resources within the project area.

2.3.2 Potential Impacts

No Build Alternative

Under the No Build Alternative, there would be no ground-disturbing activities and no addition of impervious surface to contribute to storm water run-off. Existing water resources would not be affected.

Build Alternative

Surface Waters

Storm water runoff acts as a conduit for urban pollutants that have potential to degrade water quality. Ala Moana Boulevard has a curb and gutter stormwater drainage system that is typical of any roadway, and to which the proposed elevated walkway would drain into. Additional runoff and potential pollutants associated with the proposed project would not be of a quantity or quality that would create a perceptible change in storm water discharge to Kewalo Basin and surrounding waters.

Moreover, the proposed project would not affect the use of these marine waters and is compatible with the protection and propagation of fish, shellfish, and wildlife, as well as with recreational uses in and on Kewalo Basin.

Section 2.14 describes the project's potential impacts to water quality during construction.

Groundwater

Based on the MOU between FHWA and EPA, the project would not require individual review or coordination with EPA for the SOBA because of the NEPA CatEx. The elevated pedestrian walkway would not impact the SOBA groundwater resources or the perched water table. Specifically, there would be no addition of contaminants and pollutants and no modifications to the SOBA.

The proposed project would not disrupt the flow of the artesian pump that feeds the concretized auwai upstream. Section 2.9 describes the project's potential to affect the concretized auwai as a historic property.

2.3.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization, or mitigation measures are needed to protect water quality at Kewalo Basin during operation of the proposed project because the quantity and quality of storm water discharged to Kewalo Basin and surrounding waters would not create a detectable change.

Construction best management practices (BMPs) would be implemented to minimize the potential for temporary impacts to Kewalo Basin due to stormwater runoff during construction, as described in Section 2.14.

In addition, based on the impact analysis provided in Section 2.3.2, no avoidance, minimization, or mitigation measures are needed to protect the SOBA or artesian pump upstream.

2.4 Biological Resources

Section 7 of the Endangered Species Act of 1973 requires federal agencies to consider impacts on endangered or threatened species and critical habitat of such species. For terrestrial species, it requires that federal agencies consult with the U.S. Fish and Wildlife Service (USFWS) and National Oceanographic and Atmospheric Administration's National Marine Fisheries Service (NMFS) for marine mammals, regarding the effects of any major construction activity on a listed species or species proposed as endangered, or those effects which could result in the destruction or adverse modification of designated critical habitat (40 Code of Federal Regulations 402).

The State's counterpart law is Chapter 195D, Hawaii Revised Statutes (HRS), as amended, under which species are similarly protected. The remainder of this section discusses the impact to biological resources in this regulatory context.

2.4.1 Existing Conditions

Vegetation in the project area is typical of highway landscaping, which includes roadside grasses, coconut trees, and rainbow shower trees. Consultation with USFWS and NMFS, found that no listed threatened or endangered species or critical habitats under their respective jurisdictions are known to occur in the project area.

Similarly, a request to the State's Division of Forestry and Wildlife (DOFAW) regarding the occurrence of State protected species identified the potential for the State endangered White Tern or Manu-o-Ku (*Gygis alba*) nesting around the proposed project site, as well as the potential for the State listed Hawaiian Hoary Bat or Opeapea (*Lasiurus cinereus semotus*) to occur in the project area and roost in nearby trees. Lastly, given the project's proximity to the shoreline, seabirds may pass through the area.

Correspondence with USFWS, NOAA and DOFAW is in **Appendix A**.

2.4.2 Potential Impacts

No Build Alternative

Under the No Build Alternative, there would be no ground-disturbing activities and no disruption to the existing environment, therefore existing biological resources would not be affected.

Build Alternative

While the proposed project would not have any direct impact to federally protected species or critical habitat, the project would remove a few rainbow shower trees from the Ala Moana Boulevard median, and several coconut trees from the adjacent landscaping. Trees that would be relocated or removed are not considered "Exceptional" by the City and County of Honolulu.

Construction activities, specifically tree trimming, removal, and disturbance have potential to impact nesting White Terns (January through June peak nesting season) and the Hawaiian Hoary Bat during pupping season (June 1 through September 15).

Nighttime lighting during operations and nighttime work have the potential to adversely impact Seabirds because they can become disoriented by the artificial lighting.

Construction activities can lead to the spread of invasive species by moving invasive plant parts or soil and plant materials containing invasive fungal pathogens, vertebrate and invertebrate pests from one construction site location to another.

2.4.3 Avoidance, Minimization, and Mitigation Measures

To avoid and minimize potential project impacts to White Terns, Hawaiian Hoary Bats, and Seabirds the following suggested measures from DOFAW will be incorporated into the project plans:

- Examine all trees slated to be cut to determine if there are White Terns nesting in them, especially during the breeding season (January through June). If a nest is discovered, DOFAW staff will be called for assistance.
- Avoid disturbance, removal, or trimming of woody trees greater than 15 feet tall during the Hawaiian Hoary Bat birthing and pup rearing season (June 1 through September 15). If this cannot be avoided, DOFAW staff will be consulted.
- For nighttime lighting that may be required, all lights should be fully shielded and downward facing to minimize impacts to Seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season from September 15 through December 15.

Lastly, to minimize the potential introduction or spread of invasive fungal pathogens, vertebrate and invertebrate pests that could harm native species and ecosystems, the project will incorporate best management practices (BMPs), including minimizing the movement of plant or soil material between worksites; and cleaning excess soil and debris from all equipment, materials, and personnel to minimize the risk of spreading invasive species.

2.5 Air Quality

2.5.1 Existing Conditions

The 1977 Clean Air Act (CAA), amended in 1990, provided for the establishment of National Ambient Air Quality Standards (AAQS) by the U.S. Environmental Protection Agency (U.S. EPA). The State of Hawaii has also established its own standards. Hawaii is an attainment area, meeting both federal and State standards for ambient air quality.

Regional air quality impacts are primarily dependent on changes in vehicle miles traveled (VMT), vehicle hours traveled (VHT), and vehicle mix (gasoline-fueled cars vs. diesel-fueled trucks and buses). None of these factors are predicted to change due to building the project.

2.5.2 Potential Impacts

No Build Alternative

Under the No Build Alternative, it is assumed that there would be no change in air quality despite the intensified land use projected for Kakaako. The lack of a safe and convenient crossing of Ala Moana Boulevard would mean that people who are within walking distances would still opt for vehicle use. However, the change in air quality, if any, would remain negligible due to enhanced performance standards in vehicle emissions from gasoline vehicles; increased use of electric vehicles; parking capacity at adjacent land uses; and prevailing trade winds.

Build Alternative

The proposed project would decrease the VMT, VHT, and vehicle mix because it would make alternate modes of transportation such as walking, biking, and transit more appealing. Given this, the project is not predicted to cause or exacerbate a violation of the State or National AAQS.

For construction-related impacts to Air Quality please see Section 2.14.

2.5.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization and mitigation measures are proposed.

2.6 Noise

2.6.1 Existing Conditions

Noise is defined as any sound that is undesirable or interferes with normal human activities. The project environment consists largely of urban uses, and noise in the project area comes predominantly from traffic on Ala Moana Boulevard. Adjacent parks in the area are actively used as the scene of festivals, sports competition and other noise generating activities. Figure 2-4 below provides examples of the typical sound environment for urban uses and common noise sources for relative comparison.

Relative Sound Level	½ as loud		Baseline			Twice as loud			Four times as loud
Typical Sound Environment	Indoor Office		Urban Residential			Urban Commercial			
Lmax of Common Noise Sources		Washing Machine (3 ft)	Auto (50 mph at 50 ft)	Vacuum Cleaner (3 ft)		Garbage Disposal (3 ft)	Delivery Truck (50 mph at 50 ft)	Dump Truck (50 mph at 50 ft)	Blender (3 ft)
Sound Level dBA	60	65	70		75	80	85		90
Lmax at 50 ft of Transit Noise Source			Rail Transit with a Barrier (50 mph)			Rail Transit (50 mph) City Bus (50 mph)			

Sources: EPA 1971, EPA 1974, FTA 2006

Figure 2-4. Relative Noise Levels

2.6.2 Potential Impacts

No Build Alternative

Under the No Build Alternative, the noise-related environment would become quieter as the urban commercial land uses at Victoria Ward shift to urban residential. Noise from the parks are anticipated to remain as the exist.

Build Alternative

No impacts to the noise environment are anticipated as the presence of any additional pedestrians and/or bicyclists is not anticipated to increase noise to a level that would be discernable to the surrounding area.

For discussion regarding construction-related noise impacts, please see Section 2.14.6.

2.6.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization and mitigation measures are being proposed for the project. The proposed project would result in a non-motorized path that would not contribute to any noise-related concerns.

2.7 Land Use

2.7.1 Existing Conditions

Until recently the area inland of Ala Moana Boulevard known as Kakaako was mostly industrial and retail. In 1976, the Hawaii Community Development Authority (HCDA) was created by the State Legislature to oversee the redevelopment of the area. In the late 2000s, two masterplans were approved for the redevelopment of the region. Design guidelines are presented in two separate master plans, which divides Kakaako into Mauka and Makai Community Development Districts. The project area and proposed walkway would connect the Mauka and Makai Kakaako Community Development Districts.

Land ownership in the Mauka District is a mix of privately- and publicly-owned lands (Figure 2-5). The two major private landowners and developers in the Mauka District are Kamehameha Schools and Victoria Ward, Limited (VWL). While in the Makai District, the Office of Hawaiian Affairs (OHA), HCDA, and the City and County of Honolulu have jurisdiction and proposals to develop it.

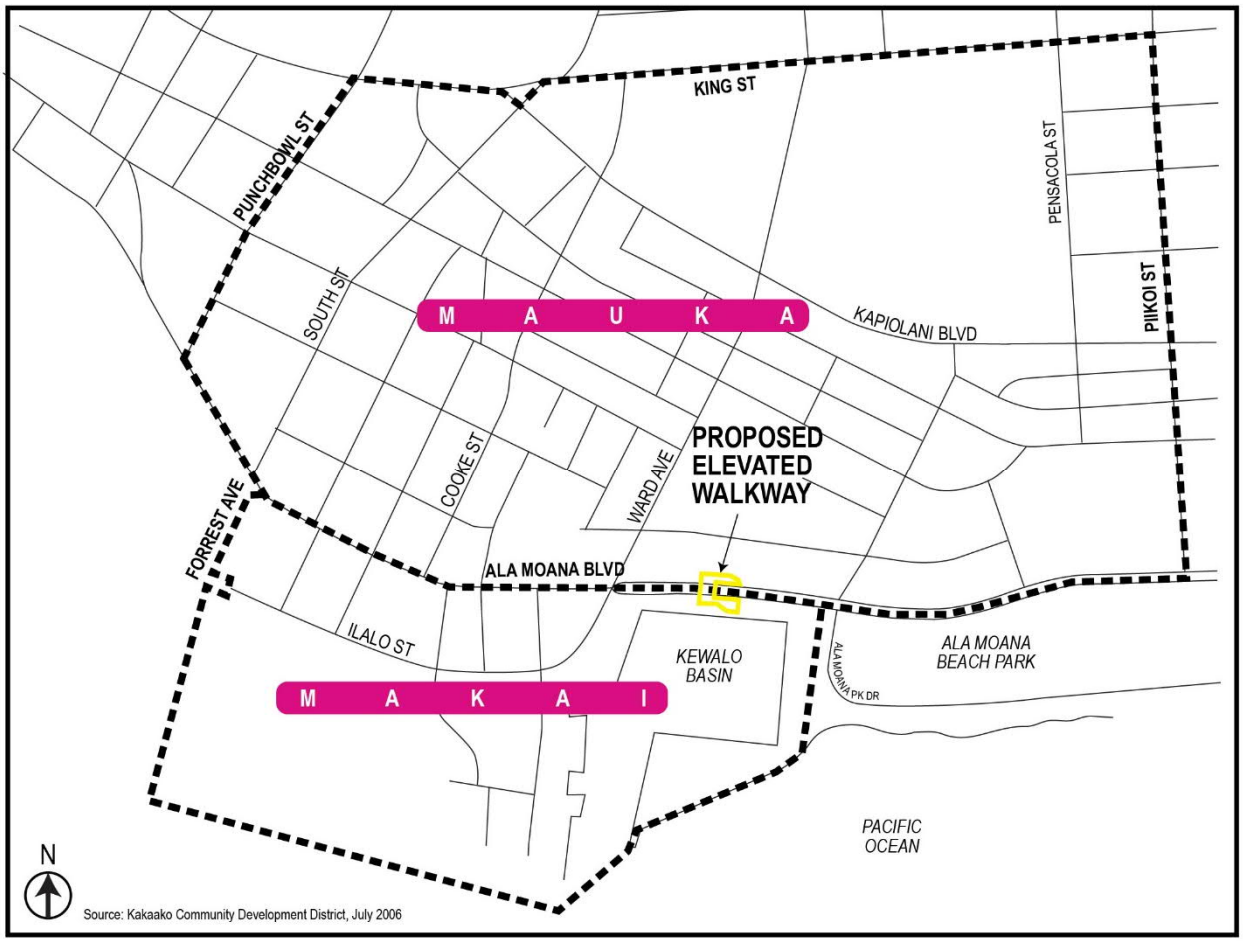

Figure 2-5. Kakaako Districts

VWL is the owner and developer for the property immediately adjacent to Ala Moana Boulevard. The 60-acre Ward Village is a new mixed-use condominium complex that opened its first building in 2016 and has continued to build new towers every year. A central feature of Ward Village, when completed, will be the future Victoria Ward Park. This public recreational space is envisioned to be similar to New York City's Central Park where acres of green space spanning multiple blocks, will be surrounded by commercial and residential uses.

Kewalo Basin, on the makai side of the proposed walkway, and the Kewalo Basin Park are owned by HCDA. Kewalo Basin itself is leased and managed by a private entity – Kewalo Harbor LLC. Kewalo Basin Harbor hosts a variety of businesses and activities that range from yachting, sport fishing, parasailing, scuba diving, etc. It also allows for mooring of recreational and commercial vessels. Because Kewalo Basin serves a commercial purpose it does not meet the criteria of a Section 4(f) resource, which is described in Section 2.12.

2.7.1 Potential Impacts

No Build Alternative

Under the No Build Alternative, the Mauka and Makai Kakaako Community Development Districts will be developed in accordance with plans for land use. Figure 2-6 shows the locations

of development areas within 0.5 miles of the proposed project. These land uses contribute to the volumes of pedestrians anticipated along this stretch of Ala Moana Boulevard.

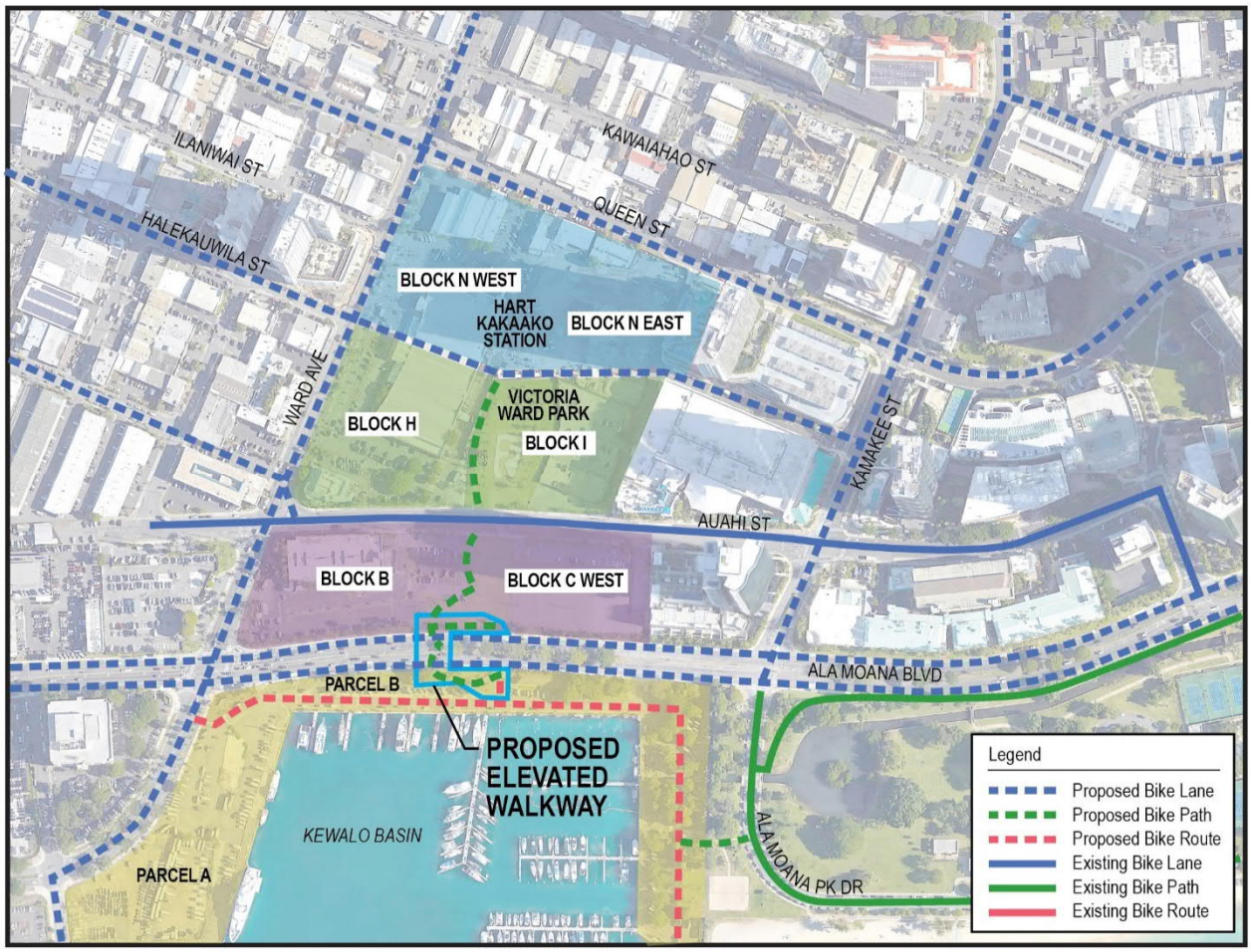

Figure 2-6. Development Surrounding the Project Area

Table 2-1 summarizes the major developments, which includes full-build out of VWL by year 2027. Development areas are in various stages of implementation – planning and construction.

Table 2-1. Kakaako Mauka and Makai Uses

Development Area	Residential Units (Number of Units)	Commercial Uses (Square Footage)	Retail Uses (Square Footage)	Restaurant Uses (Square Footage)
Block C West	350	-	-	-
Block B	350	-	-	-
Block H	600	-	30,000	15,000
Block I	566	-	30,500	27,784
Block N-East	751	-	7,500	7,500
Block N-West	506	-	18,152	5,000
Parcel A	-	-	110,700	153,000
Parcel B	-	20,000	-	-
Total	3,123 Units	20,000 square feet	196,853 square feet	208,284 square feet

Under the No Build scenario, these land uses would not change. Also, no easements or property acquisition would be needed for the elevated path.

Build Alternative

Under the Build Alternative, the proposed project would provide a safe crossing for pedestrians and bicyclists generated by adjacent land uses. Section 2.11 describes the project impact on the transportation system and anticipated number of crossings that the proposed project would facilitate.

The elevated walkway would be constructed within the Ala Moana Boulevard right-of-way and easements from VWL and HCDA. The estimated total right-of-way easement required is 26,148 square feet. The exact square footage may change as the design is not yet finalized.

On the mauka side of Ala Moana Boulevard, the right-of-way easement is estimated to be 13,217 square feet and is set aside as part of the future Victoria Ward Park.

On the makai side, approximately 12,931 square feet of the Kewalo Basin frontage would be needed from HCDA to support the walkway landing and associated paths. The Kewalo Basin driveway would be reconfigured and closed on Diamond Head side nearest to the landing to accommodate the paths leading to/from the elevated walkway. No businesses at Kewalo Basin would not be displaced by procurement of the easement.

2.7.2 Avoidance, Minimization, and Mitigation Measures

As described in Section 2.7, the Kewalo Basin driveway would be reconfigured to make room for the elevated structure.

2.8 Social and Economic Conditions

HDOT's Title VI Plan (2009) is designed to fulfill its responsibilities under Title VI of the Civil Rights Act of 1964, as amended, Executive Order 12898 on Environmental Justice, US DOT Order 5610.2 on Environmental Justice, and other related non-discrimination regulations and directives. Because Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, or

national origin, HDOT uses detailed race categories to attempt to treat people of different national origins equitably in its highway planning, programs, and activities.

Executive Order (EO) 12898, called "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," was signed by the President on February 11, 1994. It directs federal agencies to take appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority or low-income populations. If minority or low-income populations are found in the project vicinity, good faith effort must be made to ensure that disproportionate and adverse impacts on low-income and minority populations are prevented, minimized, or mitigated. An example of good faith effort is additional public notification or outreach to these groups.

Pursuant to the EO, "low-income" means households with incomes at or below the U.S. Department of Health and Human Services (DHHS) poverty guidelines. The 2019 poverty guidelines for the state of Hawaii is at or below $29,620 for a family/household of four.

The federal definition of "minority" includes the following groups:

- Black: a person having origins in any of the black racial groups of Africa.
- Hispanic: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- Asian: a person having origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent or the Pacific Islands.
- American Indian or Alaskan Native (AIAN): a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.
- Native Hawaiian or Other Pacific Islander (NHOPI): a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

The following discussion relies on 2010 census data. As a new census is underway, much of the information collected is dated. In addition, Kakaako has undergone major changes in the last few years including construction of numerous residential and commercial developments.

2.8.1 Existing Conditions

Population and Ethnicity

The State of Hawaii is an unusual, but increasingly common case, where traditionally-defined "minority" populations make up the majority of the population.

The largest ethnic group in Hawaii is Asian. This group makes up 37.6% of the overall State population. Those who classify themselves as "Two or More Races" make up 24.0% of the population.

Table 2-2 exhibits demographic characteristics for the State of Hawaii, County of Honolulu (Island of Oahu), and the census tracts for Kakaako (Census Tract 37) and Ala Moana (Census Tract 38). The proposed elevated pedestrian walkway spans between the two census tracts.

Table 2-2. Demographic Characteristics

	Hawaii State	Honolulu County	Kakaako (37)	Ala Moana (38)
Population	1,422,029	987,638	6,569	5,775
Ethnicity				
White	25%	21%	19.5%	16.7%
Black or African American	1.8%	2.4%	0.7%	0.5%
American Indian/Alaska Native	0.2%	0.2%	0%	0%
Asian	37.8%	42.5%	59.8%	57.2%
Native Hawaiian/Other Pacific Islander	10.1%	9.5%	5.2%	3.1%
Two or More Races	24.0%	23.5%	13.3%	22.6%
Age				
Under 5 Years	6.4%	6.3%	6.4%	9.7%
18 to 64 Years	61.1%	76%	68.9%	59.7%
65 or More Years	17.3%	17.7%	20.0%	23.0%

Source: U.S. Census Bureau (2019). *American Community Survey 5-year estimates*.
World Population Review. https://worldpopulationreview.com/us-cities/whitmore-village-hi-population/. Accessed April 2020.

The population of Kakaako was 6,569 and the population of Ala Moana was 5,775 less than 0.01% of the total Oahu population. As indicated in Table 2-2, the demographic characteristics of the residents are for the most part similar to that of the general population of Oahu and the state, except for a few variations. A significantly higher portion of the area population is Asian with corresponding fewer other ethnic groups than that of the State and Island. The other difference is a slightly older population in the project area than Honolulu or overall for the State.

Income and Employment

Table 2-3 shows the median household incomes and employment characteristics. In terms of income, the proportion of persons living below the poverty line in the project area is slightly higher and income lower than Honolulu and the State. As discussed later in Section2-39 2.16, the area is undergoing a revitalization directed by HCDA and the 2010 census data likely does not reflect the current income and employment characteristics of the project area.

Table 2-3. Income and Employment Characteristics

	Hawaii State	Honolulu County	Kakaako (37)	Ala Moana (38)
Number of Households	456,782	311,525	3,290	2,930
Median Household Income	$78,084	$97,139	$84,634	$71,091
Persons Below Poverty Level	9.9%	8.7%	10.1%	11.1%
Unemployed	2.8%	2.7%	1.1%	1.3%

Source: U.S. Census Bureau (2018 and 2019). *American Community Survey 5-year estimates*.

2.8.2 Potential Impacts

No Build Alternative

Under the No-Build Alternative, public facilities and services will remain the same and there will be no impact to residents or users of the area.

Build Alternative

In accordance with the federal definition of "minority" as presented earlier, which includes those of Asian and Native Hawaiian/Pacific Island ancestry, the proposed project would affect minority populations. Socio-economic trends illustrate a population where the household median income is lower than the median income for Oahu.

While the project is located within a "minority" community, it would not disproportionately affect the community in an adverse manner. Temporary impacts such as noise and dust would occur in relation to construction activities. However, benefits would include a safe, non-motorized access between the shoreline amenities and community housing.

The proposed project, regardless of the Build Alternative selected, would result in a new non-motorized path that would provide a facility that would be accessible to all non-motorized users.

2.8.3 Avoidance, Minimization, and Mitigation Measures

Because the proposed project would not disproportionately affect a "minority" community and would provide an elevated pedestrian walkway that would be accessible to all for non-motorized users, there are no proposed avoidance, minimization, or mitigation measures for the project.

2.9 Historic and Archaeological Resources

Section 106 of the National Historic Preservation Act (NHPA) requires actions that are federally funded, authorized, or implemented take into account the effect of such actions on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places (National Register, or NRHP). Such resources are considered significant historic properties. The Section 106 process involves coordination and consultation with the State Historic Preservation Officer (SHPO) and other agencies and organizations that have an interest in or are mandated to protect historic properties. In addition, the Advisory Council on Historic Preservation (ACHP) is afforded the opportunity to comment on actions that may potentially affect these significant historic properties. At the State level, Chapter 6E-8 of the Hawaii Revised Statutes (HRS) places similar responsibilities on State agencies to evaluate their projects.

Hawaii Statutes define "historic property" as any building, structure, object, district, area, or site, including heiau and underwater sites that is over 50 years old. Although the State law has a broader definition of what is considered a historic property, similar to Section 106, only those resources that are included or considered eligible for the Hawaii Register of Historic Places (Hawaii Register) are protected by HRS 6E-8. This document will refer to those properties that are considered eligible for the National and/or Hawaii Register (protected under Section 106 and HRS

6E-8) as "significant historic properties" to distinguish them from those that are considered historic because they are over 50 years old.

For a district, site, building, structure, or object to be considered eligible for the NRHP or Hawaii Register, it must possess integrity of location, design, setting, materials, workmanship, feeling, and association, and must meet one of the following criteria:

> A) Associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B) Associated with the lives of persons significant in our past; or
>
> C) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D) Have yielded or may be likely to yield information important in prehistory or history.

The Hawaii Register of Historic Places (Hawaii Register) provides an additional criterion:

> E) Has an important value to the native Hawaiian people or to another ethnic group.

In accordance with regulations provided in 36 Code of Federal Regulations (CFR) 800, the federal sponsoring or regulating agency has the responsibility of conducting a good faith effort to identify whether there are any significant historic properties in the project's Area of Potential Effect (APE) after initiating the Section 106 process. If any significant historic property(ies) are identified within the APE, the federal agency would then assess whether it would be adversely affected by the proposed project.

Under NHPA Section 106, the federal agency – in this case, FHWA – is responsible for assessing the effects of the project on all significant historic properties within the APE. Under the State rules, the proposing agency, HDOT, carries the same burden to identify historic properties within the project study area (HAR 13-275-5), assess their significance (HAR 13-275-6), and evaluate the proposed project's impacts (HAR 13-275-7).

Pursuant to Section 106, FHWA can render one of the following three possible findings for SHPD review and concurrence:

- No historic properties affected;
- No adverse effect; and
- Adverse effect.

"No historic properties affected" means that either there are no significant historic properties present, or there are significant historic properties present but the undertaking would have no effect upon them of any kind.

"No adverse effect" means that there could be an effect, but the effect would not be harmful to those characteristics that qualify the property for inclusion in the National Register, "in a manner

that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association." (36 CFR 800.5(a)(1))

An "Adverse effect" means an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property.

Pursuant to HRS 6E-8, HDOT can render one of the following two possible findings for SHPD review and concurrence:

- No historic properties affected; or
- Effect, with proposed mitigation commitments.

"No historic properties affected" means that either there are no significant historic properties present, or there are significant historic properties present but the undertaking would have no effect upon them of any kind (HAR 13-275-7).

"Effect, with proposed mitigation commitments" means that the project will affect one or more significant historic properties, and the effects will be potentially harmful. However, the agency has proposed mitigation commitments involving one or more forms of mitigation to reasonably and acceptably mitigate the harmful effects.

2.9.1 Existing Conditions

Previous archaeological investigations within the vicinity of the project area indicate that there is the potential for encountering additional pre-contact and post-contact subsurface cultural deposits related to traditional native Hawaiian land use and habitation, historic military use, and/or human remains.

Anticipated ground disturbance includes excavations for bridge foundations, retaining wall foundations, tree plantings, irrigation lines, light pole foundations, and electrical wiring. The project area comprises 0.729 acre and includes portions of TMKs: [1] 2 3 001:129 and 130 and 2 1 058:132 and 133, as well as the Ala Moana Boulevard right-of-way.

The project's proposed APE includes the elevated walkway's footprint and locations of ground disturbance described above as well as areas where construction access, staging, and potential noise or visual changes may be experienced. The proposed APE comprises 9.155 acres (Figure 2-7)

A Draft Archaeological Inventory Survey Report is in preparation by Cultural Surveys Hawaii to support both federal and Hawaii State historic preservation review requirements to document and evaluate archaeological historic properties' eligibility for listing on the National Register and to assess the archaeological historic properties' significance under the Hawaii State significance criteria.

The investigation identified five cultural resources/historic properties in the proposed project area. Three of these properties had previously been identified by Pammer et al. (2014) within the mauka (northeast) portion of the current project area. The properties identified in the project area are described below.

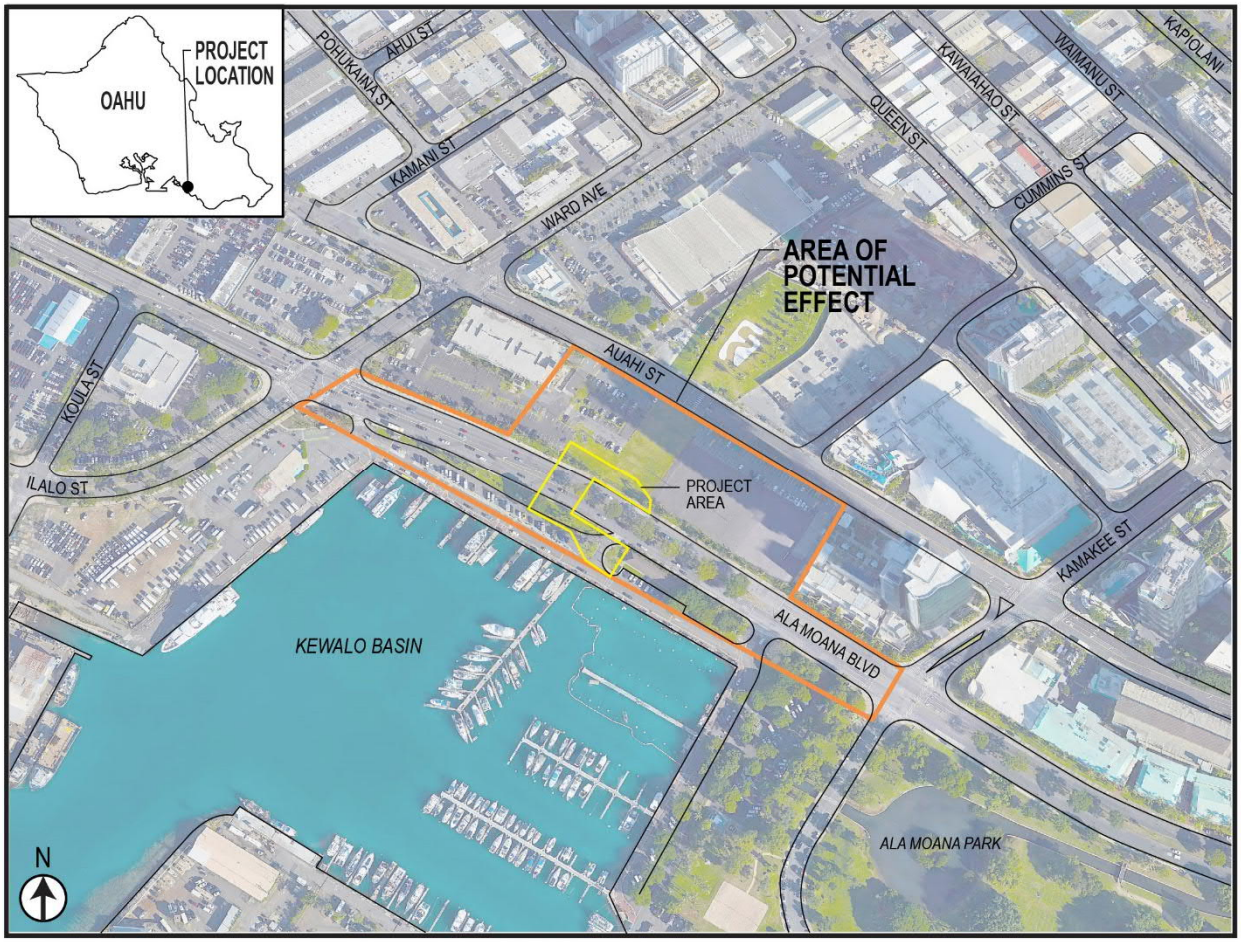

Figure 2-7. Area of Potential Effect

SIHP #50-80-14-7655 (#-7655) is a previously identified historic property consisting of buried post-Contact salt pan remnants, cultural deposits, and human burials. This site was previously assessed by Pammer et al in 2014 as significant under Hawaii state historic property significance Criterion c (embodies the distinctive characteristics of a type, period, or method of construction, represents the work of a master, or possesses high artistic value), Criterion d (has yielded, or may be likely to yield, information important for research on prehistory or history), and Criterion 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). Because it possesses integrity of location, design, materials, workmanship, and feeling, SIHP # -7655 has the potential to yield additional important information on the overall architectural design of historical salt works, as well as cultural use of the complex. It is additionally assessed as eligible for inclusion on the National Register under Criteria c and d.

SIHP # -7658 is a previously identified historic property consisting of buried post-Contact surfaces and structural remnants. Pammer et al. (2014) documented a component of SIHP # -7658 in the mauka portion of the current project area. This component comprises a compacted cinder surface, which likely dates to the early and/or mid-twentieth century. During the current AIS fieldwork,

one new component of SIHP # -7658 was identified. This new component comprises two adjacent fill deposits, interpreted as the former surface of Ala Moana Boulevard (formerly called "Beach Road"). SIHP # -7658 was previously assessed as significant under Hawaii state historic property significance Criterion d (has yielded, or is likely to yield, information important for research on prehistory or history). This assessment was based on the historic property's potential to provide additional information on twentieth century commercial infrastructure within Kakaako. Though SIHP # -7658 was previously assessed as significant under Hawaii state significance Criterion d, it is a modest archaeological deposit with limited information potential. HDOT's initial assessment is that the archaeological resource does not possess integrity of location, design, setting, materials, workmanship, feeling, and association required for eligibility to the Hawaii State Register. Additionally, it does not meet the threshold of the National Register significance criteria. Therefore, the historic property is not deemed eligible for the State or National Register.

SIHP # -7659 is a previously identified historic property consisting of the Ward Estate concretized auwai. It is a linear water channel that conveys a mix of pumped groundwater and storm drain water. It is a continuous sub-surface feature running mauka-makai through the project area from Kapiolani Boulevard to Kewalo Basin. Subsurface testing has not encountered or been able to locate the feature within the project area. However, the orientation of the auwai, documented in previous studies, suggests that it extends through the project area. SIHP # -7659 was previously assessed by Pammer et al as significant under Hawaii state historic property significance Criterion d (has yielded, or is likely to yield, information important for research on prehistory or history). This assessment was based on the historic property's potential to provide information on land modification associated with the Kewalo reclamation project and subsequent urban development. HDOT's initial assessment is that the archaeological resource does not possess all aspects of integrity required for eligibility to the Hawaii State Register. Additionally, it does not meet the threshold of the National Register significance criteria because it is a modest archaeological deposit with limited information potential. Therefore the historic property is not deemed eligible for the State or National Register.

SIHP # -7660 is a previously identified historic property comprising post-Contact trash fill within an abandoned concrete storm drain box. SIHP # -7660 was previously assessed as significant under Hawaii state historic property significance Criterion d (has yielded, or may be likely to yield information important for research on prehistory or history). This assessment was based on the historic property's potential to provide information on the urban expansion of Honolulu into Kakaako. Although it retains integrity of location and materials, HDOT's initial assessment is that the archaeological resource does not possess all aspects of integrity required for eligibility to the Hawaii State Register. Additionally, it does not meet the threshold of the National Register significance criteria because it is a modest archaeological deposit with limited information potential. Therefore the historic property is not deemed eligible for the State or National Register.

SIHP # -8925 is a newly identified historic property comprising a buried, culturally enriched A horizon with two associated features, designated as Features 1 and 2. Feature 1 is a pit feature interpreted as a post mold, and Feature 2 is a discontinuous charcoal lens. SIHP # -8925 is assessed as potentially significant under Hawaii state historic property significance Criterion d (has yielded, or is likely to yield, information important for research on prehistory or history). This historic property has provided and can potentially provide additional information on coastal Kakaako land use prior to modern urban development. Although it retains integrity of location, materials, and design, HDOT's initial assessment is that the archaeological resource does not possess all aspects

of integrity required for eligibility to the Hawaii State Register. Additionally, it does not meet the threshold of the National Register significance criteria because it is a modest archaeological deposit with limited information potential. Therefore the historic property is not deemed eligible for the State or National Register.

Other Properties in the APE

Background research identified an additional four historic properties that have been documented previously within the proposed APE, but outside the project area. Three are archaeological historic properties comprising human burial sites (SIHP #s -6377, -7656, and -7770). The fourth is an architectural historic property, Ala Moana Park (a component of SIHP # -1388, City and County of Honolulu Art Deco Parks thematic group).

The three archaeological historic properties (SIHP #s -6377, -7656, and -7770) have been previously assessed as significant under Hawaii state historic property significance Criterion d (has yielded, or may be likely to yield, information important for research on prehistory or history) and Criterion 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). They have not been previously assessed for National Register eligibility.

Based on past precedent of similar archaeological historic properties (i.e., fragmented human remains in a disturbed context), these burial sites do not meet any of the significance criteria to be listed on the National Register. SIHP # -1388, Ala Moana Park, is not listed on the National Register; however, it was listed on the Hawaii Register of Historic Places (Hawaii Register) under significance Criteria A and C in 1988 as part of the City and County of Honolulu Art Deco Parks thematic group. Based on the information available, SIHP # -1388, Ala Moana Park, is assessed as significant under HAR §13 275 6 under Criteria a and c and National Register significance Criteria A and C.

2.9.2 Potential Impacts

The Section 106 process is currently in the consultation process, which will be completed prior to filing the NEPA CatEx. For the HRS § 6E process, although HDOT has provided preliminary assessments of archaeological historic properties, SHPD is expected to conduct its HRS § 6E review responsibilities in conjunction with their Section 106 responsibilities. The potential impacts described in this section should be considered cursory as they have not been coordinated with Section 106 consulting parties. Nonetheless, the anticipated impacts described are intended to fulfill the impact disclosure requirements of HRS 343.

No Build Alternative

Under the No Build Alternative, no historic properties would be affected. No additional information would be gathered from the proposed archaeological monitoring program that would yield information regarding the extent of SIHP #-7655 and other subsurface archaeology described in Section 2.9.1.

Build Alternative

Section 2.9.1 summarizes the assessment of five archaeological historic properties within the project area that the project has potential to impact.

Of the five archaeological historic properties within the project area, only SIHP #-7655 (buried post-Contact salt pan remnants, cultural deposits, and human burials) is assessed as eligible for inclusion on the National Register. SIHP #-7655 has been documented extensively and previously assessed during prior archeological investigations. Available information does not provide an indication of the exact makai extent or boundary of SIHP #-7655, however, the extensive documentation during the VWL Block B East AIS (Pammer et al. 2014) indicates that the far makai extent of this historic property extends only into the mauka-most portion of the project area. It is possible that excavations associated with the project will not affect or expose buried, intact portions of SIHP #-7655 (McDermott et al. 2020). The proposed project would also provide an opportunity to document SIHP #-7655 during the archaeological monitoring program.

Based on the extensive previous documentation of the historic property, the location of the historic property only along the far mauka margin of the project area, and the potential for additional documentation during archaeological monitoring, the project is anticipated to have "no adverse effect" on SIHP #-7655 under Section 106 standards, and "no historic properties affected" under HRS 6E-8. These suggested findings are preliminary.

2.9.3 Avoidance, Minimization, and Mitigation Measures

Based on preliminary efforts to comply with Section 106 and HRS§6E, the possible HRS§6E mitigation commitments consist of archaeological data recovery in the form of archaeological monitoring. Archaeological monitoring will be conducted for all project-related ground disturbance and will follow a SHPD-accepted archaeological monitoring plan (AMP). The AMP will additionally stipulate that project ground disturbance must be kept away from SIHP # -7656, human skeletal remains previously identified by Pammer et al. (2014), just Ewa (northwest) of the current project area.

2.10 Cultural Resources and Practices

A Cultural Impact Assessment (CIA) was prepared by Cultural Surveys Hawaii to comply with the State of Hawaii's environmental review process, which requires consideration of the proposed project's potential effect on cultural beliefs, practices, and resources. The CIA is provided in **Appendix B**.

Through document research and cultural consultation efforts, the report provides information compiled to date pertinent to the assessment of the proposed project's potential impacts to cultural beliefs, practices, and resources (pursuant to the Office of Environmental Quality Control's Guidelines for Assessing Cultural Impacts) which may include traditional cultural properties (TCPs). These TCPs may be significant historic properties under State of Hawaii significance Criterion e, pursuant to Hawaii Administrative Rules (HAR) §13-275-6 and §13-284-6. Significance Criterion e refers to historic properties that "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" (HAR §13-275-6 and §13-284-6). The document is intended to support the project's environmental review and may also serve to support the project's historic preservation review under HRS §6E-8 and HAR §13-284.

Cultural Surveys Hawaii attempted to contact Native Hawaiian organizations, agencies, and community members as well as cultural and lineal descendants in order to identify individuals with cultural expertise and/or knowledge of the project area and vicinity.

2.10.1 Existing Conditions

The project area includes the footprint of direct construction-related ground disturbance—the bridge and retaining wall foundations, the landscaping, etc. The project area measures 0.729 acre (0.295 hectare) and is located in ili aina (smaller land division within an ahupuaa) of Kakaako, Honolulu (Kou) Ahupuaa, Honolulu (Kona) District, Oahu.

Kakaako is located between two of the most intensely populated and cultivated areas in southeastern Oahu - Waikiki and Honolulu (also known as Kou). The Kakaako area consisted of marshes, some wetlands, and access to marine resources. Native Hawaiians utilized these areas for salt making, farming, and harvesting fish in fishponds. Throughout the past 150 years, Kakaako has been heavily modified by historic filling of the area for land reclamation.

Puukea Heiau was located in the ili of Kukuluaeo. Puukea means "white hill" and is also the name of a smaller land division within Kukuluaeo Ili that is mentioned in at least two Land Commission Awards. There is a possibility the heiau (alter, shrine) platform or the area it was built on was one of the few elevated locations in the flat, low-lying swamp that surrounded it.

A trail traversed the Kakaako area, ultimately connecting Waikiki to Honolulu. It is described as the middle trail (close to the current alignment of Queen Street) extending from Kalia to Kukuluaeo as passing along the graves of those who died in the smallpox epidemic of 1853, and into the center of the coconut grove of Honuakaha. On the upper side of the trail was the place of Kinau, the father of Kekauonohi.

Makai of the project area, Kewalo Basin was formerly a shallow reef that enclosed a deep section of water. In the mid-1880s, the harbor was dredged and filled. Mauka of the Kewalo Basin, iwi kupuna were discovered at the intersection of Ala Moana Boulevard and Kamakee Street.

Most land in Kewalo and Kukuluaeo was used to produce salt. Native Hawaiians used paakai (salt) to flavor food, to preserve food such as fish, use for ceremonial practices, as well as for medicinal purposes.

In 1840, Hansen's disease was first reported and officially identified in 1853. In 1865, a hospital in Kalihi Ahupuaa was established to help examine any who may have contracted the disease. If confirmed, patients were exiled to Kalaupapa on Molokai. In 1881, a receiving station was built in Kakaako for patients who had contracted the Hansen's disease. This station was located in a block now bounded by Ala Moana, Auahi, Coral, and Keawe streets, and was under the direction of Saint Marianne Cope (Griffin et al., 1987, as cited in Kaapana et al, 2020).

During an 1853 smallpox epidemic, patients were isolated at a temporary quarantine camp in Kakaako (Thrum, 1897 as cited in Kaapana et al, 2020). Victims of the disease were buried at

Honuakaha Cemetery, near the junction of Quinn and South streets (Griffin et al. 1987 as cited in Kaapana et al, 2020).

Kakaako was the location for a battery of three cannons used to salute visiting naval vessels. The small battery, named Fort Armstrong, was set up on the Kaakaukukui Reef as a station for the storage for underwater mines.

Based on the project area history, and the contributions of culturally knowledgeable participants, no traditional cultural activities have been identified as currently occurring in the project area. However, the past traditional activity of burying iwi kupuna in sandy soil deposits that are present in the nearby project area must be considered. Any time kupuna are identified as present in the project area, their presence alone activates on-going cultural activities at the precise location of the iwi. Traditional cultural activities will include but may not be limited to religious ceremony, protective measures for the iwi, and decision-making to address disposition of the iwi.

2.10.2 Potential Impacts

No Build Alternative

If the No Build Alternative were selected, it is anticipated that there would be no changes to the known cultural practices of the area.

Build Alternative

Should kupuna iwi be encountered, traditional cultural practices attached to the iwi, which are also protected by law under the Hawaii Revised Statutes (HRS) and Hawaii Administrative Rules (HAR) will be followed as described in Section 2.14.7. As such there would not be any change or disruption to the cultural practices of the area due to the construction of an elevated pedestrian walkway.

2.10.3 Avoidance, Minimization, and Mitigation Measures

In the event of iwi kupuna or cultural finds, project proponents will follow the procedures discussed in Section 2.14.7.

2.11 Transportation Infrastructure

2.11.1 Existing Conditions

Ala Moana Boulevard is part of Route 92, a major east–west highway on the island of Oahu which begins at exit 15 off Interstate Route H-1 in Honolulu and ends 0.6 mile east of the Ala Wai Canal crossing in Waikiki. The western portion, west of Richards Street, is known as the Nimitz Highway. East of Richards Street, Route 92 is locally known as Ala Moana Boulevard. In the project area, Ala Moana Boulevard is 3 lanes in each direction with a landscaped median. The speed limit is 35 mph.

The project area is bounded by two intersections on Ala Moana Boulevard -Ward Avenue and Kamakee Street. There are no pedestrian crossings between these two intersections, which is a distance of at least 1,300 feet. By comparison, the crosswalks between Piikoi and Atkinson are

spaced roughly 700 feet apart while other signalized crossings from Piikoi Street to Queen Street to Kamakee Street are 1,100 feet apart. All crosswalks along Ala Moana Boulevard/Nimitz Highway are signal controlled. Therefore, the project area represents the furthest gap between signal controlled crosswalks along Nimitz Highway/Ala Moana Boulevard.

Kamakee Street becomes Ala Moana Park Drive on the makai side of Ala Moana Boulevard. Both intersections are signalized with pedestrian crosswalks.

Existing and Near-Future Public Transit

The City and County of Honolulu's Department of Transportation Services – Public Transit Division currently provides an island-wide public bus transit system called TheBus. The Handi-Van provides para-transit service for semi-ambulatory and non-ambulatory persons with disabilities. Both systems are operated by Oahu Transit Services (OTS).

Passengers utilizing the public transportation services contribute greatly to the pedestrian or bicycle traffic in the project area. In addition to numerous other buses in the general area are: Frequent Urban Routes 19 and 20; Major Suburban Routes 42, 60, 65 and 67; and Commute Route 88A, pass through the project area (Figure 2-8).

The Honolulu Rail Transit's Kakaako Station will be located nearby with an entrance from Ward Avenue at Halekauwila Street, where 2,650 pedestrians and cyclists are projected to access the station each day (HART, 2011). The station is set to open in 2025.

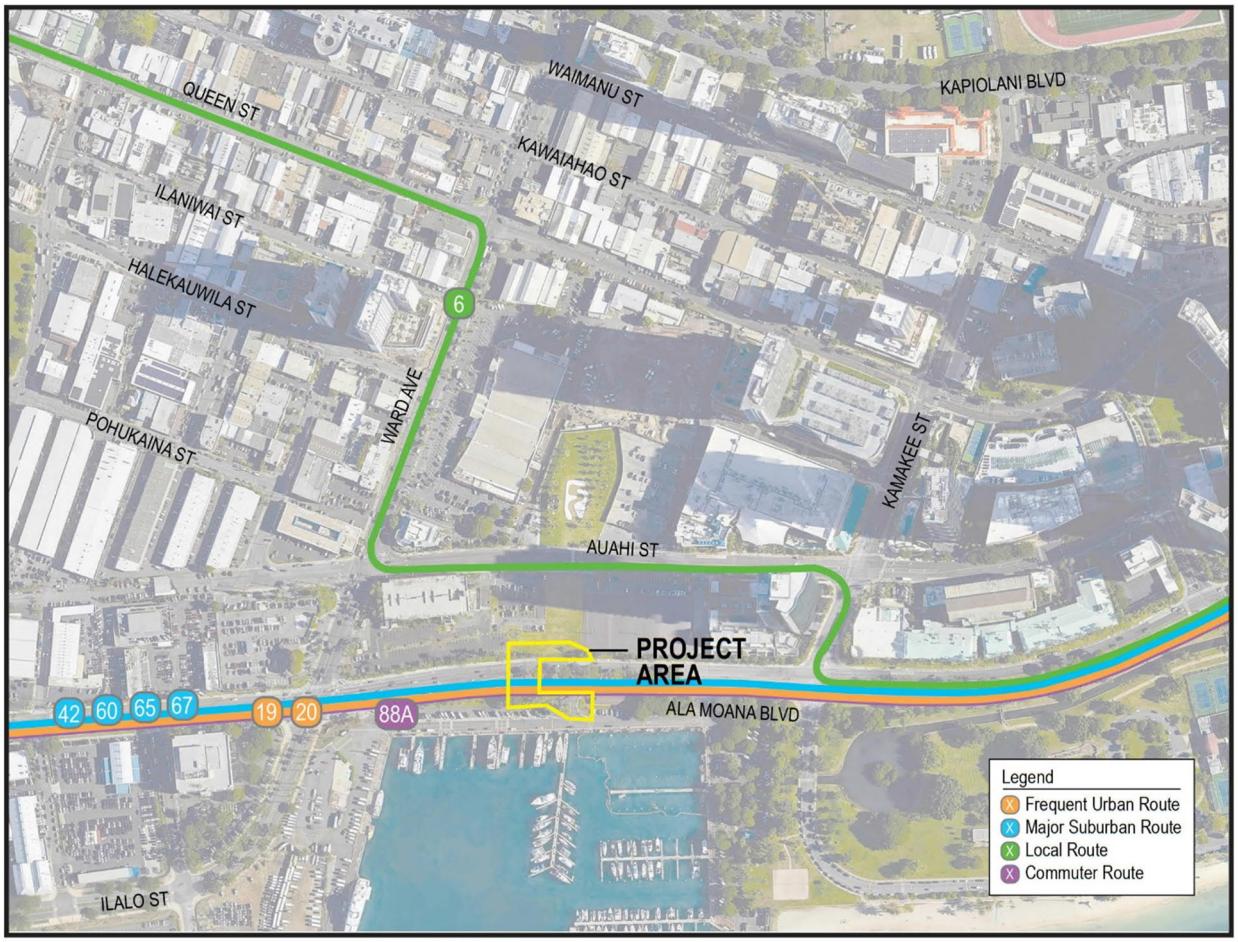

Figure 2-8. Kakaako Transit Station and Bus Routes

Cycling and Pedestrian Facilities

Ala Moana Boulevard, Ward Avenue, and Kamakee Street are all considered pedestrian-friendly or pedestrian-oriented environments because their wide sidewalks, large tree canopies and landscaped buffers enhance the pedestrian experience. However, currently, pedestrians coming to and from the land uses on either side of the highway must cross Ala Moana Boulevard using the crosswalks at Kamakee Street or Ward Avenue, which as previously noted, are more than 1,300 feet apart. Both intersections are signalized with pedestrian crosswalks.

In 2018, the number of pedestrians observed crossing at Ward Avenue and Kamakee Street during the peak hour was 65 and 53, respectively. The number of bicyclists observed in 2018 was considered minimal or insignificant.

The Bike Oahu Route Map (Figure 2-9) shows that biking on Ala Moana Boulevard is described as not "bicycle friendly' and is grouped with roads that have 'heavy traffic and do not have adequate shared use between bicyclists and motorists (HDOT Website, Accessed May 22, 2020). Existing conditions along Ala Moana Boulevard and Ward Avenue do not support a bicycle-friendly environment, even though there are bike paths nearby at Ala Moana Regional Park for novice bicyclists.

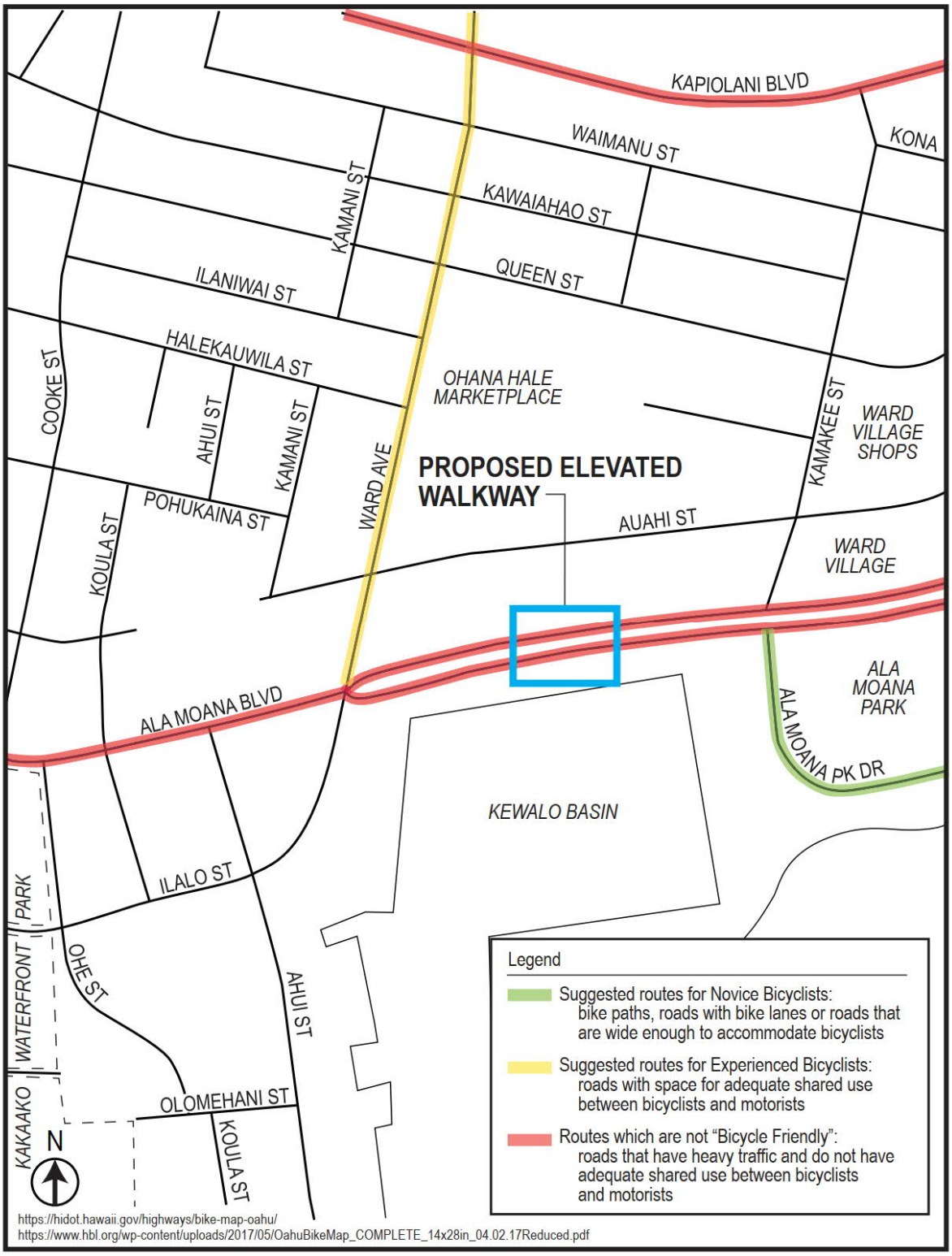

Figure 2-9: Existing Bicycle-Friendly Environment

2.11.2 Potential Impacts

No Build Alternative

A detailed assessment of pedestrian and bicycle demands that would be supported by the proposed bridge was prepared and is provided in **Appendix C**.

Section 2.7 describes the land uses within a quarter mile radius (within a 5-minute walk) mauka and makai of Ala Moana Boulevard are anticipated to contribute to the demand to cross the busy highway. At completion, these land uses are projected to generate 243 pedestrian and 36 bicyclist crossings of Ala Moana Boulevard during the PM peak hour or roughly 2,100 pedestrians and bicyclists per day.

The future transportation network, specifically pedestrian and bicycle facilities in the Kakaako District is guided by the Kakaako Mauka and Kakaako Makai Master Plans; the Statewide Pedestrian Master Plan (2013); the Oahu Bike Plan (2019); the Kakaako Community Transit Oriented Development Plan (2015); and the VWL Master Plan. These documents provide policies and implementation plans for significant bike lane improvements in Honolulu's urban core that will make cycling safer (see Figure 2-10).

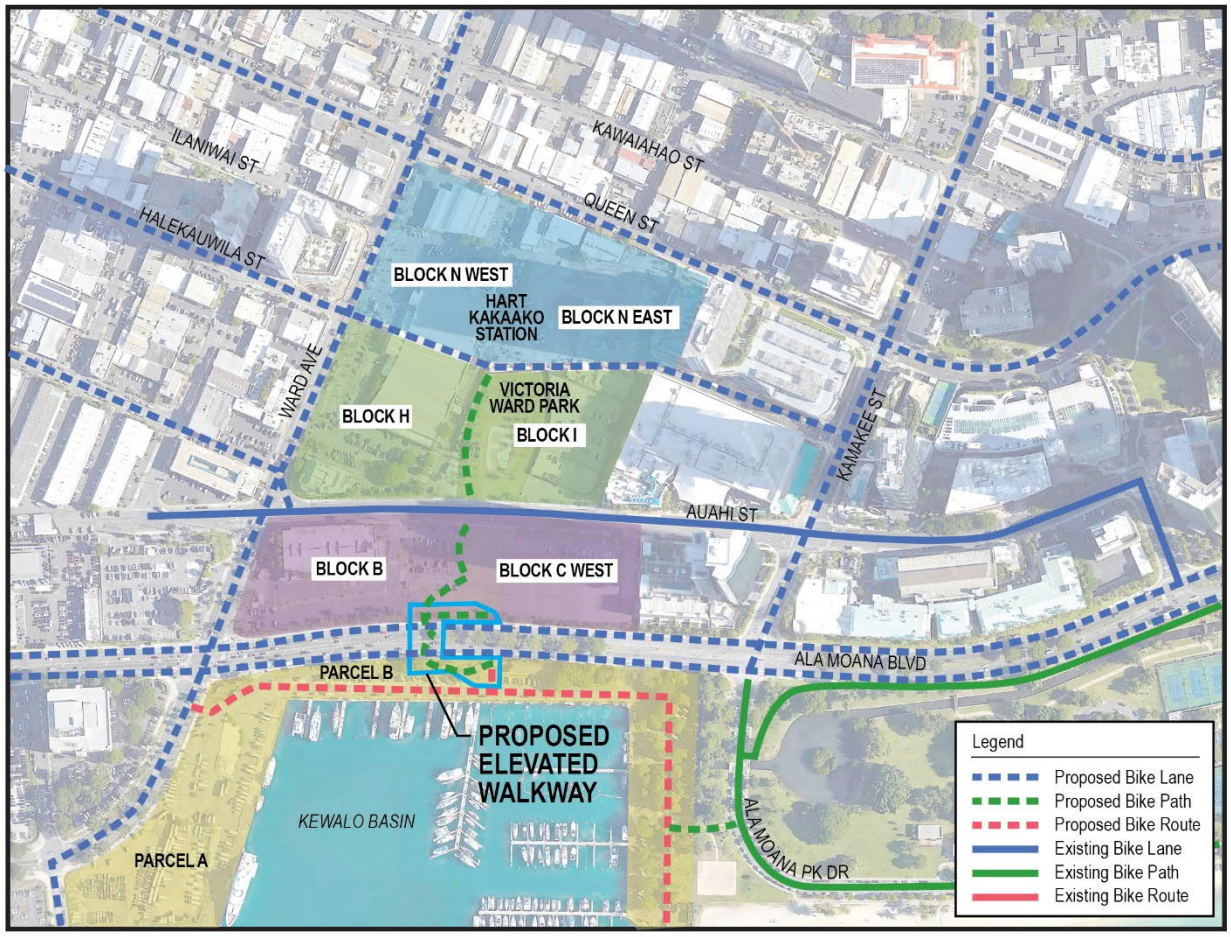

Figure 2-10. Planned Bike Facility Improvements

The result of these policies and plans are a protected bike lane along Ward Avenue between Ala Moana Boulevard and South King Street, as well as a bike path through Victoria Ward Park.

In addition, HDOT will construct other safety improvements along Ala Moana Boulevard with construction to begin in November 2020:

- Kamakee Street: Operations will be modified to not allow right turns from westbound Ala Moana Boulevard. "No Right Turn on Red" signs will be added at the other 3 approaches to the intersection.
- Piikoi Street: Operations will be modified with installation of "No Right Turn on Red" signs on both right turn approaches to the intersection.
- Atkinson Boulevard: Crosswalks to Ala Moana Regional Park and Ala Moana Shopping Center will be widened.

Under the No Build Alternative, improvements at existing intersections will enhance pedestrian safety at existing crossings. Pedestrian and bicycle facilities planned by the City and County of Honolulu, and VWL would be constructed. However, the increased demand to cross between Kamakee Street and Ward Avenue, the largest stretch of Ala Moana Boulevard/Nimitz Highway without a protected crossing, would go unmet.

Build Alternative

The proposed project would meet the proposed project's purpose and need to create a safe pedestrian and bicycle mauka-makai link across the high-volume Ala Moana Boulevard. The added crossing would result in an overall improved efficiency, allowing pedestrians and bicyclists direct access as land use intensifies within the project area.

2.11.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization, or mitigation measures proposed.

2.12 Parklands and Recreational Resources

Section 4(f) of the Department of Transportation Act of 1966 (49 United States Code (USC) 303) (23 Code of Federal Regulations (CFR) 774.3 (a) and (b)) mandates that "special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites." Section 4(f) prohibits the Federal Highway Administration (FHWA), and other administrations of the U.S. Department of Transportation, from approving the "use" of a publicly-owned park, recreation area, wildlife and waterfowl refuge, or historic site in a federal transportation program or project unless:

(a) FHWA determines that:

1. There is no prudent and feasible avoidance alternative to the use of land from the property, and
2. The program or project includes all possible planning to minimize harm to the property resulting from such use.

Or:

(b) FHWA determines that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) would have a *de minimis* impact on the property.

As defined in 23 CFR 774.17, the use of a protected Section 4 (f) resource occurs when any of the conditions below are met:

- "When land [of the Section 4(f) property] is permanently incorporated into a transportation facility";
- "When there is a temporary occupancy of land [of the Section 4(f) property] that is adverse in terms of the [Section 4(f)] statute's preservation purpose as determined by the criteria in [CFR 23] 774.13(d)"; or
- When there is constructive use of a Section 4(f) property as determined by the criteria in [CFR 23] 774.15".

The use of a Section 4(f) property for transportation purposes can only be permitted if there is no "feasible and prudent" alternative to such use and the action includes all possible planning to minimize harm to the property from such use.

Section 2.9 discusses the project's potential impacts on significant historic and archaeological resources. Given the objectives of Section 4(f) special emphasis is placed in this section of identification of public park and recreation lands, wildlife and waterfowl refuges that may be affected by the proposed project.

2.12.1 Existing Conditions

Ala Moana Regional Park is one of the most heavily used parks in the State. As one of the premiere parks and historic spaces in the Honolulu's "Lei of Green", Ala Moana Regional Park, the "People's Park", is a beloved community space. The 100-acre Beach Park is not only for beach goers, but is used for other activities including running, biking, youth sports, picnics, canoe racing, and many other activities sought out by an entire spectrum of residents. Many festivals, such as the Memorial Day Lantern Floating Peace Celebration and Independence Day Fireworks, and fundraisers including the Annual Pet Walk from the Hawaiian Humane Society, draw participants from the entire island. The park has served as a gathering place for tourists and locals alike for the last 82 years and draws more than 4 million visitors per year. Ala Moana Regional Park was listed on the Hawaii Register of Historic Places in 1988 as part of the multiple property listing of the "City and County of Honolulu Art Deco Parks and Playgrounds." See Section 2.9.

HCDA's Kakaako Makai Parks Master Plan (2017) identifies existing parks within the Kakaako Makai District and the vision for development. These nearby parks include Gateway Park, Kakaako Waterfront Park, and Kewalo Basin Park.

The surf break known as Kewalos is makai of Ala Moana Boulevard and Kewalo Basin. Surfing is not only a recreational activity but is also a traditional cultural activity dating long before western contact to the Hawaiian Islands.

Kewalo Basin Harbor is a state-owned commercial harbor held by HCDA. Section 2.7 describes uses and activities at Kewalo Basin. Historically a fishing harbor, Kewalo Basin is home to many

small businesses which include boats for scuba, deep sea fish fishing, sunset cruises, whale watching, and other activities aimed at tourists. While these are recreational activities, they are considered commercial enterprise because they are not free to the general public. Therefore, these uses at Kewalo Basin are not protected by Section 4(f).

2.12.2 Potential Impacts

No Build Alternative

Under the No Build Alternative, there will be no impact to any of the parks and recreational resources because no property would be displaced.

Build Alternative

The proposed pedestrian walkway would provide safe transportation options for park users to access the makai recreational resources. Construction of the elevated walkway is not anticipated to critical driver of demand for access to the parks and nearby resources. As a transportation facility, the walkway would meet a future need that is driven by land use.

2.12.3 Avoidance, Minimization, and Mitigation Measures

Parks and recreational areas in the vicinity of the project would not be impacted either long-term or during the construction of the elevated pedestrian walkway, therefore, no avoidance, minimization, or mitigation measures are anticipated.

2.13 Visual and Aesthetic Resources

2.13.1 Existing Conditions

The Visual and Aesthetic Resources Technical Memorandum (**Appendix D**) provides an assessment of changes in visual resources, visual character, and visual quality as a result of the proposed Ala Moana Boulevard Elevated Pedestrian Walkway Project. This assessment uses the U.S. Department of Transportation Federal Highway Administration's Guidelines for the Visual Impact Assessment of Highway Projects to evaluate changes to the natural, cultural, and project environments and how those changes would be perceived by viewers.

Land within the Area of Visual Effect (AVE) of the highway ranges from 5 to 10 feet in elevation. Available views are primarily limited to the coastal plain with views of the mountains in the background; however, views in most locations are contained by human-made elements (buildings, fences, signs, etc.), trees, palms, and tropical vegetation lining the roadway. Natural elements such as native and ornamental landscaping are associated with human development on the mauka side of the Ala Moana Boulevard. Where roads are located close to the water views of the ocean and harbor area are available on the makai side. In the urban environment, animals are primarily limited to personal pets and birds.

Development within the AVE is located in the Kakaako area of Honolulu. It is characterized by commercial, retail, and residential urban development. Human-made structures range from a single story to multiple 40+ story condominium buildings. Concrete and asphalt roadways and parking areas are ubiquitous throughout the area. Glass, metal, concrete, and stone are pervasive

building materials. Brightly colored and electrified advertising signage is common. Large numbers of vehicles utilize nearby surface parking lots and parking structures.

Overhead utility lines and streetlights are located throughout the AVE. Art and decorative elements are at harbor and park entrances and are associated with many of the commercial, retail, and residential buildings. There are also a series of fish sculptures in the vegetated area between Ala Moana Boulevard. and the harbor. Additionally, there is recreational and commercial boat traffic in Kewalo Basin Harbor.

2.13.2 Potential Impacts

No Build Alternative

Under the No Build Alternative, there will be no impact to any viewplanes in the project area, or the AVE overall.

Build Alternative

The Visual and Aesthetic Resources Technical Memorandum concludes the project would have similar visual elements such as vegetation, materials, colors, form, and shape as existing visual elements and would be compatible with the existing conditions. Viewers would generally not experience adverse negative visual impacts and, the project would be visually compatible with the existing natural, cultural, and project environments.

2.13.3 Avoidance, Minimization, and Mitigation Measures

Several visual design features and actions would be included with the Project. These design features would ensure that the proposed project would comply with local codes and regulations, enhance visual quality and aesthetics, and promote safety. Design features include the following:

- Plant suitable vegetation where appropriate per local landscape codes within project limits and in adjoining rights-of-way.
- Use shielding in exterior lighting to ensure that light sources (such as bulbs) do not shine directly toward the roadway, recreational area, or sensitive natural areas.
- Design project to be compatible with the existing visual character of the adjacent recreational and commercial/retail areas. Use aesthetic treatments to comply with applicable local design standards and enhance the cultural environment and cultural order. These treatments could include façade treatments, public art, and the use of colors and finishes such as concrete, or stainless steel that would provide long lasting, low maintenance visual elements.

2.14 Construction Impacts

2.14.1 Maintenance of Traffic

Construction activities could cause motorists traveling on Ala Moana Boulevard to experience delay and inconvenience. To minimize traffic and access problems on Ala Moana Boulevard and adjacent side streets, construction phasing and traffic control plans would be developed and

implemented. Some proposed construction activities would be restricted to off-peak nighttime hours due to the traffic impacts that would occur if they were performed during daytime hours. The public would be routinely informed of planned construction activities and lane closures throughout the construction period.

2.14.2 Solid Waste Management and Hazardous Waste

Construction planning would include development of spill prevention, control, and countermeasure plans, erosion and sedimentation control plans, and plans for handling and disposal of contaminated materials. Good housekeeping BMPs would be required of the contractor, such as ensuring that:

- All waste materials be collected and stored in securely lidded dumpsters that are emptied before becoming overly full and not buried on site;
- Materials stored on-site be stored in a neat, orderly manner in appropriate containers (i.e., per manufacturers recommendations);
- All on-site vehicles be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage;
- A spill cleanup kit be located on-site where petroleum products, paints, or other hazardous materials are stored; and
- All sanitary waste generated during the construction phase would be collected from portable units as required and directed to a HDOH-permitted treatment facility.

Hazardous materials contamination is not likely to be uncovered during construction. However, during construction, personnel should be alert for signs of potential petroleum contamination when soil is excavated. If contamination were identified during construction, the contractor would report it immediately to HDOT. Handling of hazardous materials and possible site remediation would be required in accordance with applicable State and federal laws, specifying the handling, treatment, and disposal of contaminated materials.

2.14.3 Water Resources

The primary potential for construction-phase water resource impacts would be associated with erosion and sedimentation associated with the project's earth disturbing activities. Preventing polluted runoff from impacting the nearshore waters is particularly important given the location adjacent to Kewalo Basin. The project would not alter existing drainage patterns.

Storm water runoff and erosion during project construction and landscaping would be mitigated through the use of construction Best Management Practices (BMPs) established before work begins.

2.14.4 Biological Resources

To avoid and minimize potential project impacts to White Terns, Hawaiian Hoary Bats, and Seabirds the following suggested measures from DOFAW will be incorporated into the project plans:

- Examine all trees slated to be cut to determine if there are White Terns nesting in them, especially during the white tern breeding season (January through June). If a nest is discovered, DOFAW staff will be called for assistance.
- Avoid disturbance, removal, or trimming of woody trees greater than 15 feet tall during the Hawaiian Hoary Bat birthing and pup rearing season (June 1 through September 15). If this cannot be avoided, DOFAW staff will be consulted.
- For nighttime lighting that may be required, all lights should be fully shielded and downward facing to minimize impacts to Seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season from September 15 through December 15.

Lastly, to minimize the potential introduction or spread of invasive fungal pathogens, vertebrate and invertebrate pests that could harm native species and ecosystems, the project will incorporate best management practices (BMPs), including minimizing the movement of plant or soil material between worksites; and cleaning excess soil and debris from all equipment, materials, and personnel to minimize the risk of spreading invasive species.

2.14.5 Air Quality

Air quality impacts during construction generally consist of fugitive dust and mobile source emissions from construction equipment.

The emission rate for fugitive dust emissions from construction activities is difficult to estimate accurately because its generation varies greatly depending upon the type of soil, the amount and type of dirt-disturbing activity, the moisture content of exposed soil, and wind speed. Frequent watering would control fugitive dust at the construction site.

Construction vehicles and equipment would emit engine exhaust. The largest of this equipment is usually diesel-powered, which emit relatively high levels of NOx in comparison to gasoline-powered equipment. However, standards for such pollutants are set on an annual basis and would therefore not likely be violated by short-term construction equipment emissions.

2.14.6 Noise

Construction would involve the use of heavy machinery that may cause temporary noise impacts to adjacent noise sensitive land uses. Table 2-4 presents a range of noise levels for various construction equipment anticipated to be used during construction of the proposed project. Equipment noise levels vary depending on the make and model of the equipment, the operation being performed, the condition of the equipment, and other variables. The noise levels listed are based on published measurement taken at a distance of 50 feet from the equipment.

Table 2-4. Construction Equipment Noise Levels

Equipment	Decibels	Equipment	Decibels
Standard Construction Equipment		Light Impact Equipment	
Truck	75 - 90	Jack Hammer	81 - 98
Saw	72 - 81	Jumping Jack	81 - 97
Light Tower	62 - 72		
Cold Planer	79 - 88	Heavy Impact Equipment	
Paving Machine	86 - 88	Hoe rams	95 - 106
Roller	63 - 70	Vibratory Sheetpile driver	90 - 100
Striping machine	75 - 86		
Concrete Truck	75 - 88		
Backhoe/Loader	72 - 83		
Compressor	74 - 87		
Generator	71 - 82		
Crane	75 - 87		

Since the Hawaii Department of Health (HDOH) maintains community noise control standards (HAR Section 11 46) that apply to construction noise, these specifications would be followed. A noise permit would be obtained for construction activities performed during standard work hours (Monday through Friday 7:00 a.m. through 6:00 p.m. and Saturday 9:00 a.m. through 6:00 p.m.).

A noise variance would be obtained to allow construction activities to occur beyond standard work hours. Some construction would occur at night, beyond standard work hours due to the traffic impacts that would ensue should the work be performed during normal work hours. As part of obtaining the noise variance, HDOT would notify surrounding residents based on HDOH's project recommendations.

Mitigation measures that could be employed to lessen noise disturbances during night work, including such tasks as:

- The contractor sending an informational flyer to all addresses within 500 feet of the project area roughly two weeks prior to the start of construction. The flyer will include general project information and the name and phone number of a contractor representative to contact.
- Updating of HDOT's website with information regarding the time and location of night work as well as a name and phone number to contact with questions or complaints.
- Quiet work procedures would be employed to attenuate and control noise emissions emanating from the construction site, such as:
    - Either ambient-sensing backup alarms or ground guides will be used for signaling when equipment backs up at night (8:00 p.m. to 6:00 a.m.).
    - Construction activity constraints for night work, where applicable.
    - The strategic placement of stationary equipment such as compressors and generators.
    - All equipment will be maintained in good working order and with appropriate mufflers.

- A job-site inspector will be designated to whom immediate complaints can be forwarded for prompt response and who will have the general responsibility of monitoring quiet work procedures.
- Instructional meetings will be held with construction crews and truck drivers to discuss noise abatement procedures, including the use of engine brakes, loading and unloading cargo, shouting, use of signal callers, and other practices as required.
- The selected contractor would have a corrective action program in place that lays out steps and responsibilities to respond to complaints and correct deficiencies.

Final noise mitigation measures will be included in the noise variance granted by DOH.

2.14.7 Historic and Archaeological Resources

Based on the AIS results, the anticipated HRS §6E mitigation commitments consist of archaeological data recovery in the form of archaeological monitoring. Archaeological monitoring will be conducted for all project-related ground disturbance and will follow an SHPD-accepted archaeological monitoring plan (AMP). The AMP will additionally stipulate that project ground disturbance must be kept away from SIHP # -7656, kupuna iwi previously identified by Pammer et al. (2014), just Ewa (northwest) of the current project area.

Project construction workers and all other personnel involved in the construction and related activities of the project will be informed of the possibility of inadvertent cultural finds, including human remains. In the event that any potential historic properties are identified during construction activities, all activities will cease and SHPD will be notified pursuant to HAR §13-280-3. In the event that human remains are encountered, all earth moving activities in the area will stop, the area will be cordoned off, and the SHPD and Police Department will be notified pursuant to HAR §13-300-40. In addition, in the event of an inadvertent discovery of human remains, the completion of a burial treatment plan, in compliance with HAR §13-300 and HRS §6E-43, is recommended.

In the event that iwi kupuna and/or cultural finds are encountered during construction, project proponents will consult with cultural and lineal descendants of the area to develop a reinternment plan and cultural preservation plan for proper cultural protocol, curation, and long-term maintenance.

2.14.8 Utilities

Public utilities refer to telephone, natural gas, electricity, sewer, wastewater, and storm drain services and facilities. No utilities are anticipated to be relocated for the proposed project. However, numerous utilities traverse the project area. Prior to construction, all existing utility lines in proximity to the proposed walkway will be identified and their depths located to avoid damaging them.

2.15 Relationship of Short-Term Uses and Long-Term Productivity

Construction of the Ala Moana Boulevard Elevated Pedestrian Walkway would have short-term effects on the environment as described in the previous section. These effects would end with the completion of construction.

The proposed project would provide a long-term safety improvement within the Kakaako Community Development District (KCDD). The safety and mobility benefit that would be provided by the proposed project would be greater than the short-term adverse effects on the human environment. The proposed elevated walkway does not exclude future options, narrow the range of beneficial uses of the environment, or pose long-term risks to health and safety.

2.16 Consistency with Government Plans, Policies, and Controls

2.16.1 State of Hawaii Plans and Controls

Hawaii State Plan

The Hawaii State Plan (June 1991), as codified in HRS Chapter 226, consists of comprehensive goals, objectives, policies and priorities for all areas of government functions, including the protection of the physical environment, the provision of public facilities systems, and the promotion and assistance of socio-cultural advancement.

The Hawaii State Plan encourages coordination of transportation activities and programs among governmental and private parties and promotes systems that accommodate present and future community development needs. Similarly, the proposed project would enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance and assure adequate access to significant natural and cultural resources in public ownership.

Hawaii State Land Use Controls

The State Land Use Law, Chapter 205 HRS, established the State Land Use Commission, which classifies all lands in Hawaii into four land use districts: Urban, Rural, Agricultural, and Conservation. Each classification has specific land use objectives, development constraints, and administrative control. The proposed action would occur on land designated as Urban.

HDOT Statewide Pedestrian Master Plan

The Statewide Pedestrian Master Plan (Plan) is a comprehensive strategy developed by the State of Hawaii Department of Transportation (HDOT) for improving pedestrian safety, mobility, and accessibility along State highways throughout Hawaii. The Plan serves as one component of implementing the HDOT's mission to provide a safe, efficient and accessible highway system. The Plan describes the need to find federal funding opportunities to implement the plan as has been done with the BUILD grant used to pay for most of this project.

Goals were formulated to implement the vision and maintain consistency with other HDOT transportation system goals. The project meets several of the goals in the Plan including:

Goal 1: Improve pedestrian mobility and accessibility,

Goal 2: Improve pedestrian safety.

Goal 3: Improve connectivity of the pedestrian network.

Goal 4: Promote environmental benefits of walking.

Goal 6: Enhance communities and economic development by creating pedestrian-oriented areas and positive pedestrian experiences.

The Plan identifies 31 projects that will improve pedestrian safety and mobility around the state. Ala Moana Boulevard at Ward Avenue intersection (project O11) was characterized as an "area of concern". The intersection of Ala Moana Boulevard and Ward Avenue in Honolulu experiences high volumes of traffic and considerable pedestrian volumes. The crosswalks across Ala Moana Boulevard are long and do not have median refuges for crossing pedestrians. The makai side crosswalk at Ward Avenue crosses at a skewed angle, which adds to its length.

Although the Plan recommended reducing the curb radii at the southeast corner to reduce the pedestrian crossing distances and lowering vehicle speeds around the right turn, the proposed project would alleviate the pedestrian volume at the Ward intersection, as well as compensate for the lack of a median refuge/long crossing distance.

Kakaako Community Development District

The State Legislature created the Hawaii Community Development Authority (HCDA) in 1976 to guide the revitalization of underdeveloped urban communities in the State. Kakaako was the first designated Community Development District – Kakaako Community Development District (KCDD).

Lands makai of Ala Moana Boulevard were added to the KCDD boundaries in 1982. The project area is within the Makai Area of the KCDD (Figure 2-11). Work within the Makai Area must conform to the KCDD Makai Area Rules (Hawaii Administrative Rules, Title 15, Subtitle 4, Chapter 23). The KCDD Makai Area Rules supersede any provisions of the City's Land Use Ordinance or the City's Primary Urban Center Development Plan.

The Kakaako Community Development District Mauka and Makai Area Plans and Rules are designed to guide the redevelopment of this former warehouse area into a vibrant pedestrian-oriented urban community. The Mauka and Makai Area Plans establish the general redevelopment goals and objectives for each respective area, while the Mauka and Makai Area Rules specify regulations.

Under the most recent KCDD Makai Area Plan adopted in October 2005, the overall vision for the Kakaako Makai Area is "to create an active, vibrant area through a variety of new developments, including an expansive waterfront park, maritime uses along the harbor, restaurants, markets and entertainment along Kewalo Basin, a children's museum, educational and research facilities, residential and commercial developments. In addition, the provision of public open spaces, cultural facilities and amenities will distinguish the Kakaako Makai Area as a place dedicated and attractive to the people of Hawaii." However, residential development in the KCDD Makai Area is not permitted per HRS 206E-31.5 (2006). The proposed project supports the urban design principles and elements of the Makai Area Plan by serving as a safe pedestrian and bicycle facility.

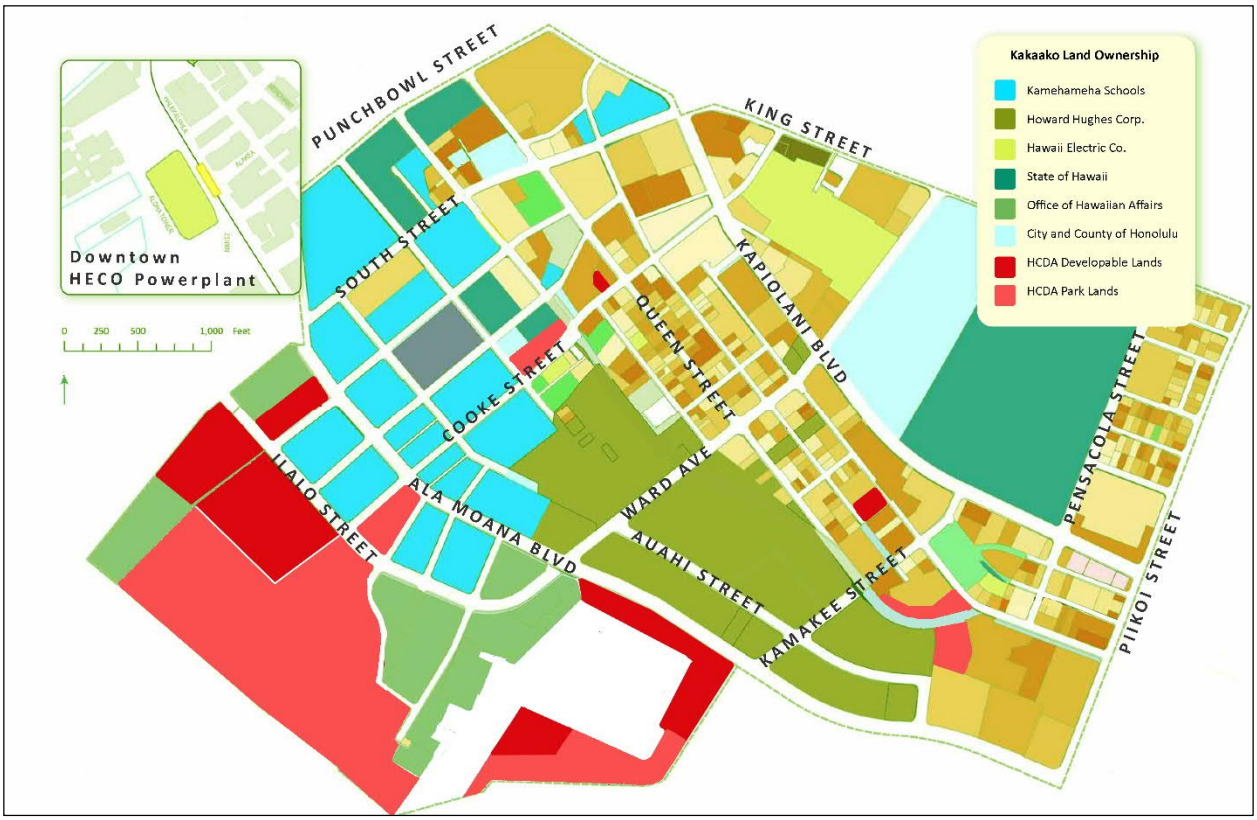

Figure 2-11. Kakaako Community Development District Mauka and Makai Area Plans

Coastal Zone Management

The objectives and policies of the Hawaii Coastal Zone Management (CZM) Program are designed to protect and manage Hawaii's valuable coastal areas and resources. The proposed action is located within the State's CZM area, which covers the entire State. Pursuant to 15 CFR 930.32, federally-permitted, licensed or assisted activities undertaken in or affecting Hawaii's coastal zone must be consistent with the CZM objectives and policies.

The following brief discussion describes the project's consistency with the objectives and policies of the State's CZM Program. This assessment will be reviewed by the Department of Business, Economic Development and Tourism (DBEDT), Office of Planning, the agency administering the State's CZM program.

Recreation Resources

The proposed project would allow safer access to the recreational amenities on the makai side of Ala Moana Boulevard. Pedestrians and cyclists could more easily cross the elevated walkway and visit Ala Moana Regional Beach Park and Kewalo Basin, facilities with ocean craft, swimming, festivals, jogging paths and other recreational options.

Historic Resources

An Archaeological Inventory Survey Report (in-progress) and a Cultural Impact Assessment was conducted to identify historic and cultural resources that could be affected by the project. The

State Historic Preservation Division (SHPD) and others (see Chapter 3) were consulted to ensure that all potential historic properties, cultural practices, and stakeholders were identified.

Scenic and Open Space Resources

The proposed project would provide enhanced viewing by elevating the users as they crossed the pedestrian walkway. The elevated walkway would allow users to capture both upland views of Kakaako and the makai view of the harbor channel.

Coastal Ecosystems

The proposed project would not disrupt coastal ecosystems. The proposed project is in the Special Management Area and will obtain an SMA Permit through the Hawaii Department of Business, Economic Development and Tourism's Office of Planning (Office of Planning).

Economic Uses

The proposed project would benefit residents and visitors by making it safer to cross Ala Moana Boulevard for pedestrian and cyclists to access both the makai recreational resources and the mauka businesses. The intersection would function better for motorists who would no longer have to wait for numerous pedestrians to cross.

Coastal Hazards

The elevated walkway could be an infrastructure element for evacuation in the event of a coastal hazard, such as a hurricane or tsunami. The walkway would provide increased evacuation capabilities, allowing pedestrians to move freely to higher ground.

Managing Development

The proposed project would facilitate local development in the Kakaako Community Development District (KCDD). Required permits are discussed in Chapter 1.

Public Participation

Consultations with federal, State and County agencies have been conducted. For more information see Chapter 3. Additional opportunities for public participation would be afforded after the Draft EA is published.

Beach Protection

The proposed project would not affect coastal erosion because the project site is not adjacent to or abutting a beach.

Marine Resources

The pedestrian walkway would allow easier access to marine and coastal resources. Also see Coastal Ecosystems above.

2.16.2 City and County of Honolulu Plans and Controls

General Plan of the City and County of Honolulu

The General Plan (revised 2002) provides broad statements on the objectives and policies of the City and County of Honolulu with regard to the overall physical and economic development of the island, as well as to the health and safety of the island's residents. Some of the policies advocate providing or facilitating:

- Pedestrian walkways for getting around Downtown and Waikiki and for trips to schools, parks and shopping centers.
- The redevelopment of Kakaako as a major residential, as well as commercial and light industrial area.

Oahu Bike Plan 2019 Update

The Oahu Bike Plan 2019 Update builds off the foundation provided in the 2012 Plan. The Plan's vision is "Oahu is a bicycle friendly community where bicycling is a safe, viable and popular travel choice for residents and visitors of all ages." The focus of this 2019 Oahu Bike Plan Update is to identify specific projects, policies, and programs that will expand bicycle ridership and provide a network of safe, comfortable bikeways attractive to users of all ages and abilities.

The Plan provides maps of existing and proposed bicycle facilities which will tie in well to the elevated walkway (see Section 2.10). In conjunction with VWL, the elevated walkway provides a direct route from the makai side of Ala Moana to the Kakaako HART Station. The Plan suggests that effective integration of bikes and public transit depends on people being able to bicycle comfortably and safely to and from stations and stops and that private developments, such as VWL, can also play a key role in providing connectivity. As discussed in the Plan, private landowners should facilitate bicycle and pedestrian connectivity along and/or through their property.

City and County Zoning

City and County of Honolulu zoning is required to be in conformance with Development Plan designations of the Department of Planning and Permitting (DPP) and Land Use Ordinance (LUO). The LUO provides a list of zoning districts and precincts and the permitted uses and structures for each district and precinct. The purpose of the LUO is to regulate land use to encourage orderly development in accordance with adopted land use policies, including the Oahu General Plan and to promote and protect the public health, safety and welfare.

While the City's Land Use Ordinance usually regulates land use, the project area is located the KCDD. The KCDD is regulated by the State of Hawaii and not the City and County of Honolulu as discussed in Section 2.7. The KCDD Makai Area Rules (HAR Chapter 23, Title 15) adopted in September 2005 supersede any provisions of the City's Land Use Ordinance or the City's Primary Urban Center Development Plan.

Special Management Area

HRS Chapter 205A outlines special controls, policies and guidelines for development within an area along the shoreline referred to as the Special Management Area (SMA), as designated by the 1975 Shoreline Protection Act. The SMA area is the most sensitive area of the coastal zone, and

is much smaller than the CZM area. An SMA permit is required for any development within the SMA.

The City's Department of Planning and Permitting administers the SMA permits for Oahu, but pursuant to HRS 206E-8.5 and HAR Chapter 15-150, the State Office of Planning administers and manages the SMA permits for the KCDD. An SMA permit from the Office of Planning will be required for the proposed project.

2.17 Secondary and Cumulative Impacts

2.17.1 Potential Secondary Impacts

Ward Village will proceed regardless if the pedestrian walkway is constructed. While the walkway would help improve pedestrian safety and allow automobiles to transit the area more easily, factors affecting development such as demand, property prices and disposable income levels are likely to have a far greater effect on development pressures. The proposed project would not induce secondary land uses. HDOT does not anticipate additional secondary impacts that would otherwise not occur.

2.17.2 Potential Cumulative Impacts

This project would not result in commitments to implement other projects. Should the project proceed to construction, the proposed shared use facility would serve as another pedestrian and bicycle link between other planned pedestrian and bicycle improvements. Additionally, the proposed project would facilitate access to planned development with potential to even mitigate the increased demands for access.

CHAPTER 3. COMMENTS AND COORDINATION

This chapter summarizes public and agency consultation and coordination activities associated with this project that have been conducted to date, which helped inform the preparation of this Draft EA. Project pre-assessment consultation and coordination activities included meetings and correspondence with government agencies, community organizations, stakeholders, and the general public.

3.1 Agency and Stakeholder Consultation

The following agencies, elected officials, organizations, and others were contacted by email between September 11th and 14th, 2020. They were asked if they were aware of any environmental or social issues associated with the proposed project. Those unreachable by email were contacted by letter. A list of recipients is provided below and an asterisk (*) appears next to those entities that responded to the email or letter. Responses from the general public or individuals that did not receive scoping letters are identified with double asterisks (**).

Copies of correspondences are provided in **Appendix A**; meeting minutes and telephone logs not contained in **Appendix A** are available for review upon request at the HDOT-Highways Division, Design Branch office (HWY-DD).

Responses to scoping requests helped to inform preparation of this Draft EA.

<u>Federal Agencies</u>

U.S. Department of Agriculture, National Resource Conservation Service

U.S. Department of Defense, U.S. Army Corps of Engineers

U.S. Department of Homeland Security, Federal Emergency Management Agency

U.S. Department of Housing and Urban Development, Honolulu Field Office

U.S. Environmental Protection Agency, Pacific Islands Contact Office

<u>State of Hawaii Agencies</u>

Department of Accounting and General Services*

Department of Agriculture

Department of Budget and Finance*

Department of Business, Economic Development & Tourism (DBEDT)

DBEDT, Hawaii Community Development Authority*

DBEDT, Office of Planning

Department of Defense

Department of Education*

Department of Hawaiian Home Lands

Department of Health (DOH)

DOH, Clean Water Branch*

DOH, Hazard Evaluation and Emergency Response Office

DOH, Indoor and Radiological Health Branch

Department of Land and Natural Resources (DLNR)

DLNR, Commission on Water Resource Management

DLNR, Division of Boating and Ocean Recreation

DLNR, Division of State Parks

DLNR, Engineering Division*

DLNR, Division of Forestry and Wildlife*

DLNR, Land Division*

DLNR, Office of Coastal and Conservation Lands*

Office of Hawaiian Affairs

City and County of Honolulu Agencies

Board of Water Supply*

Department of Community Services*

Department of Design and Construction*

Department of Emergency Management

Department of Environmental Services

Department of Facility Maintenance

Department of Parks and Recreation

Department of Planning and Permitting*

Department of Transportation Services (DTS)

DTS, Pedestrian Safety Program

Emergency Services Department, Emergency Medical Services Division

Honolulu Authority for Rapid Transportation*

Honolulu Fire Department*

Honolulu Police Department*

Neighborhood Boards Commission Office

Office of Climate Change, Sustainability and Resiliency*

Office of Economic Development

Elected Officials

Mayor Kirk Caldwell, City and County of Honolulu

State Senator Lorraine Inouye, Chair, Senate Committee on Transportation

State Senator Sharon Y. Moriwaki, District 12

State Representative Tom Brower, District 22

Utilities

Charter Communications/ Spectrum*

Hawaii Gas

Hawaiian Electric Company

Hawaiian Telecommunications, Inc.

Sandwich Isles Communications*

Community and Other Organizations

Ala Moana-Kakaako Neighborhood Board, Chair

AquaZone Scuba

Atlantis Adventures

Blue Nun Sportfishing

Breeze Hawaii Diving

Captain Bruce

Conservation Council of Hawaii*

Dive Oahu

E Sea Ride Her

Elyatt Yacht Charter

Farm Lovers Market

Friends of Iolani Palace

Friends of Kewalos*

Hawaii Bicycling League*

Hawaii Experiences

Hawaii Glass Bottom Boats

Hawaii Nautical

Hawaii Pirate Ship Adventures

Hawaii Transportation Association*

Hawaii Yachts

Hawaiian Diving Adventures

Hawaii's Thousand Friends

Historic Hawaii Foundation

Honolulu Island Charters

Honolulu Sailing Co.

Honolulu Scuba Company

Island Charters Sport Fishing

Kakaako United

Kamoauli

Kewalo Harbor LLC

Kulololoia Ohana

Kupu

Maggie Joe Sport Fishing

Magic Sport Fishing

Makani Catamaran
Manu Kai Catamaran
Marine and Land Activities of Hawaii
Na Hoku II Catamaran
Oahu Catamarans
Oahu Metropolitan Planning Organization
Oahu Transit Services, Inc.
Pacific Sport Fishing
Rainbow Scuba
Royal Hawaiian Catamaran
Ruckus Sport Fishing and Diving
Sail Blue Hawaii
Sandy's Sportfishing and Excursions
Sashimi I & II Sport Fishing
Sea Verse Sport Fishing
Sierra Club
The Outdoor Circle
Tradewind Charters
Victoria Ward, Ltd.
Waikiki Dive Center
Waikiki Sport Fishing
Ward Village Owners Association
Whipsaw Sport Fishing
X-treme Parasail

Cultural and Lineal Descendants with ties to the Project Area

Ms. Keala Norman*
Mr. Manuel M. Kuloloio

Other Individuals

Ms. Bianca Isaki**
Mr. Bruce Lum**
Mr. Douglas Meller**
Ms. Grace Lam**
Ms. Gwen Young**
Mr. Kaimana Pine**
Mr. Mark Want**
Mr. Paul McCurdy**
Mr. Phil Alencastre**
Mr. Rick Lachowicz**
Ms. Shar Chun-Lum**
Mr. Tom Schnell**
Mr. Tommy Penrose**

HDOT attempted to contact the following agencies, organizations, and individuals via letter and/or e-mail as part of the consultation effort, but these efforts were unsuccessful due to undeliverable contact information, including address listing or e-mail:

- Hawaiian Electric Company, Customer Installations Department, Planning and Design Division;
- Maggie Joe Sport Fishing
- Makani Catamaran
- Manu Kai Catamaran

3.2 Regulatory Coordination

Because the project must comply with certain federal and State environmental laws and regulations, the following coordination and consultation activities are being conducted. See **Appendix A** for copies of all written correspondence referenced in the discussions below.

3.2.1 Section 106 of the National Historic Preservation Act and Hawaii Revised Statutes Chapter 6E-8

The National Historic Preservation Act (NHPA) requires that actions that are federally funded, authorized, or implemented take into account the effect of such actions on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places (NRHP). Such resources are called historic properties. The Section 106 process involves coordination and consultation with the State Historic Preservation Officer (SHPO), and other agencies and organizations that have an interest in or is mandated to protect historic properties. In addition, the Advisory Council on Historic Preservation (ACHP) is afforded the opportunity to comment on actions that may adversely affect historic properties. At the State level, Hawaii Revised Statutes (HRS) Chapter 6E-8 (HRS 6E-8) places similar responsibilities on State agencies to evaluate their projects. Since the project is both a federal and State action, both regulations apply to the project.

An Archaeological Inventory Survey Report (AISR) is in progress. Section 2.8 of this document contains a preliminary summary of the study, HDOT's initial findings, and project's anticipated impacts.

The following consultation and coordination activities were conducted in fulfillment of HRS 6E-8 and Section 106:

- Letter on July 1, 2020 from HDOT to SHPD to initiate Section 106 consultation and request information on properties eligible for the NRHP from SHPO.
- Letter on July 1, 2020 from HDOT to SHPD requesting information on Native Hawaiian Organizations (NHOs) and parties for consultation pursuant to Section 106. HDOT also requested concurrence on the proposed APE. A list of NHOs identified for Section 106 consultation was included in the letter.
- A Notice of Consultation regarding Section 106 consultation for the Ala Moana Boulevard Elevated Pedestrian Walkway project was published in the *Honolulu Star Advertiser* on July 8, 2020.
- Letter dated July 16, 2020, emailed/mailed on July 17, 2020 from HDOT to NHOs, individuals and families with cultural and lineal ties to the project area, and knowledgeable stakeholders inviting them to participate in Section 106 consultation for the project. A list of recipients is noted in the July 1, 2020 letter to SHPD.
- Email on July 17, 2020 from Mr. Umi Kai, Aha Kane to HDOT indicating that he has no reply to the email received.
- Email on July 18, 2020 from Ms. Norman to HDOT, indicating that she would like to participate in the Section 106 consultation process. She also requested that cultural monitors work alongside the archaeological monitors during project construction.
- Letter on July 20, 2020 from The Conservation Council for Hawaii to HDOT, recommending the following: use of lighting that has no negative impacts on wildlife; measures to ensure the project area and adjacent areas are kept clean and environmentally

friendly; and installation of an emergency communication system for pedestrian use in case of emergencies on the walkway.

- Email on July 24, 2020 from Mr. Kuloloio to HDOT, responding to the invitation to participate as a consulting party in the Section 106 process. Mr Kuloloio indicated his participation as a cultural descendant, affected individual, and representative of I Ke Kai o Kuloloia – the Kuloloia Lineage and a registered native Hawaiian organization. Mr. Kuloloio included Ms, Leinaala Kuloloio Vedder as a member and the point of contact for the Kuloloia Lineage – I Ke Kai o Kuloloia.
- Letter on July 28, 2020 from Historic Hawaii Foundation (HHF) to HDOT, agreeing with the proposed APE. HHF notes that the historic Ala Moana Regional Park is within the viewshed of the project and will be accessed via the walkway. HHF further notes that Kewalo Basin has been home to fishing vessels for over a century and is associated with historic events, including traditional fishing activities and commerce. They recommend that Kewalo Basin be assessed as a potential historic property, if such an assessment has not occurred during any prior study. Additionally, they suggest the surf break known as Kewalos be evaluated as a traditional cultural property (TCP), as surfing is a traditional cultural activity dating to the pre-Contact period. Finally, HHF states that there may be subsurface archaeological historic properties present as well, due to the long history of use of the area for fishing, salt making, and other activities.
- Letter/email on August 10, 2020 from HDOT to Mr. Kuloloio, thanking him for his expressed interest to participate as a consulting party. HDOT requested clarification on whether Mr. Kuloloio and Ms. Vedder prefer to be recognized as consulting as individuals or as representatives of a native Hawaiian organization. HDOT also requested comments on the proposed APE and whether Mr. Kuloloio has any knowledge of historic properties within the APE.
- Letter/email on August 14, 2020 from HDOT to Conservation Council of Hawaii (CCH), thanking CCH for their comments on the project. HDOT requested clarification on whether CCH prefers to be consulted specifically under Section 106 regulations or whether they prefer to participate in the broader environmental review process since their comments are applicable to those disciplines as well.
- Email on August 21, 2020 from Mr. Kuloloio to HDOT clarifying his request to be consulted as an individual cultural descendant and as a member of the Kuloloia Lineage – I Ke Kai o Kuloloia, a registered native Hawaiian organization. Mr. Kuloloia provided information and context for previously documented historic properties within the proposed APE.

3.2.2 Section 7 of the Endangered Species Act and HRS Chapter 195D

Section 7 of the Endangered Species Act (ESA) requires that federally-funded actions not jeopardize any species listed as threatened or endangered, or adversely modify designated critical habitat. HRS Chapter 195D, the State counterpart law to the ESA, provides for the protection of aquatic life, wildlife, or land plant species that are indigenous to Hawaii.

The following consultation and coordination activities were conducted with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7:

- Letter dated May 20, 2020 from HDOT to USFWS requesting a species list.
- Email from USFWS to HDOT (May 27, 2020) indicating that no federally listed endangered, threatened, or proposed threatened or endangered species, or proposed or designated critical habitat occur on the proposed project site. However, the USFWS white terns (manu o ku) (*Gygis alba*), a State of Hawaii endangered species, might be within the project limits.
- Letter on July 23, 2020 from HDOT to FHWA advising the determination of "No Effect" on threatened or endangered plant or animal species, or critical habitats under the jurisdiction of USFWS within the project limits.
- On July 28, 2020, FHWA issued the finding of "No Effect" on threatened or endangered plant or animal species, or critical habitats under the jurisdiction of USFWS within the project limits through concurrence with HDOT.

The following consultation and coordination activities were conducted with the National Oceanic and Atmospheric Association (NOAA) pursuant to Section 7:

- Letter dated May 20, 2020 from HDOT to NOAA requesting a species list.
- Email from NOAA to HDOT on May 27, 2020 indicating that no federally listed endangered, threatened, or proposed threatened or endangered species, or proposed or designated critical habitat occur on the proposed project site.
- Letter on July 23, 2020 from HDOT to FHWA advising the determination of "No Effect" on species under the jurisdiction of NOAA within the project limits.
- On July 28, 2020, FHWA issued the finding of "No Effect" on species under the jurisdiction of NOAA within the project limits through concurrence with HDOT.

The following consultation was conducted with the State of Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife:

- Letter on October 1, 2020 from HDOT to DOFAW requesting if any species of concern or threatened and endangered plant and animal species and critical habitats within the vicinity of the project would be affected by this project.
- Letter on October 26, 2020 from DOFAW to HDOT indicating that the White Tern or Manu o Ku (*Gygis alba*) has been recorded nesting around the proposed project site, as well as the State listed Hawaiian Hoary Bat or Opeapea (*Lasiurus cinereus semotus*) has potential to occur in the project vicinity. Recommendations to avoid, minimize, and mitigate impacts to these species were provided.

3.2.3 The Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 U.S.C. § 1801), as amended, establishes a national program for the conservation and management of United States fish stock to prevent overfishing, replenish previously overfished species, ensure conservation, and facilitate long-term protection of essential fish habitat (EFH) so that the Nation's fishery resources

may realize its full potential (16 U.S.C. § 1801). The Western Pacific Regional Fishery Management Council (Council) has established EFH for Bottomfish, Seamount Groundfish, Crustaceans, Coral Reef Ecosystems, Precious Coral, and Pelagic species in marine waters surrounding the Main Hawaiian Islands. Pursuant to the MSA, the Council has also developed a Hawaii Fishery Ecosystem Plan that identifies specific sources of adverse impacts to EFH from non-fishing activities. The MSA requires that each federal agency consult with NOAA's National Marine Fisheries Service (NMFS) in regard to any federal action that may adversely affect EFH (16 U.S.C. 1855(b)(2)).

Consultation and coordination with the NMFS pursuant to the MSA is on-going.

3.3 Public Involvement Activities

Public involvement activities for the proposed project include an on-line "Question and Answer Session" on October 15, 2020. To inform the public about the meeting, a press release was issued to the media and the meeting announcement was featured on the evening news. Recipients of scoping letters, identified in Section 3.1, also received the public meeting announcement via email.

At this informational session, the public was presented with a short 2-minute video and invited to ask any questions or comments they may have regarding the proposed project. Information presented at the meeting and a meeting summary was later posted on HDOT's website at https://hidot.hawaii.gov/. Those attending the Zoom meeting were invited to send in their comments until October 22, 2020.

A summary of questions and issues raised at the Question and Answer Session is provided in **Appendix A**. Comments received were evaluated in the preparation of this document. Individuals and organizations that commented are listed with other pre-scoping commentors in Section 3.1.

CHAPTER 4. ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT

In accordance with Hawaii Revised Statutes (HRS) Chapter 343 and Hawaii Administrative Rules (HAR) Sections 11-200.1-19, HDOT anticipates issuing a FONSI for the proposed project. This anticipated FONSI will be announced in the State's Environmental Notice along with an announcement of the availability of this Draft EA. This assessment is based on an evaluation of project impacts in relation to the "Significance Criteria" specified in HAR 11-200.1-13.

The discussion below is the preliminary significance evaluation, subject to changes that may be made upon receipt of public and agency review comments that may be filed during the public comment period of this Draft EA. The Significance Criteria appear below in italics, followed by a brief discussion of the project in relation to the specific criterion. The nature of the project's potential impacts, and committed mitigation measures to minimize adverse impacts, are discussed in detail in Chapter 2.

1. *Irrevocably commit a natural, cultural, or historic resource* – The proposed project would not cause the loss or destruction of any natural, cultural, or historic resources. Section 2.8 and Section 2.9 describe the anticipated impacts to historical, archaeological and cultural resources. The project may remove or relocate trees in the median, which has potential to affect the White Terns (manu o ku) (*Gygis alba*) and Hawaiian Hoary Bat (opeapea) (*Lasiurus cinereus semotus*), which occur and may nest or roost in the area. Removal or relocation of trees does not pass the significance threshold as a significant impact because the number of affected trees is considered minimal. None of the trees for removal or relocation are deemed "Exceptional", as defined by the City. See Section 2.4. With the exception of the White Tern and Hawaiian Hoary Bat, areas directly affected by the proposed project do not contain species of concern or related critical habitat. To avoid and minimize potential project impacts to species, avoidance, minimization, and mitigation measures would be incorporated into the project plans.

2. *Curtails the range of beneficial uses of the environment* – The proposed project would not curtail beneficial uses of the environment, instead it would enhance the beneficial uses of the area by constructing a safe pedestrian and bicycle access over Ala Moana Boulevard. The community's pedestrians and bicyclists would have a ready link to natural and social resources by providing a safer way to connect Ala Moana Beach Park, Kewalo Basin, and other makai areas with the major residential and commercial centers on the mauka side of Ala Moana Boulevard.

3. *Conflicts with the State's environmental policies or long-term environmental goals established by law* – The proposed project is consistent with the environmental goals and objectives of the State of Hawaii, as demonstrated in this section and in Section 2.16. Specifically, the project supports the goals of the Hawaii Community Development Authority (HCDA) created by the State Legislature to oversee the redevelopment of the area.

4. *Have a substantial adverse effect on the economic welfare, social welfare, and cultural practices of the community or State* – The proposed project would not have an adverse effect on the economic or social welfare nor the cultural practices of the community or

State. Rather, the proposed project would improve safety for pedestrians and cyclists crossing Ala Moana Boulevard to access the waterfront resources, which include cultural, commercial, and recreational resources. Enhanced access to these resources improve the over-all quality of life, as determined by economic, social, and cultural aspects of well-being.

5. *Have a substantial adverse effect on public health* – The project would not have a substantial adverse effect on public health. The proposed project would improve public health by improving safety for pedestrians and cyclists.

6. *Involve adverse secondary impacts, such as population changes or effects on public facilities* – The proposed project would not involve substantial secondary impacts. It is not anticipated to induce development of the area or lead to population growth as a result of its construction. The proposed walkway is within a small and localized location where growth is guided by the HCDA.

7. *Involve a substantial degradation of environmental quality* – The proposed pedestrian walkway would not degrade environmental quality. The project would not result in adverse environmental conditions, as demonstrated in Chapter 2.

8. *Be individually limited but cumulatively have substantial adverse effect upon the environment or involves a commitment for larger actions* – The proposed project would not have a cumulative effect on the environment or create a commitment for larger actions. The proposed elevated walkway is a complete, independent project with logical termini.

9. *Have a substantial adverse effect on a rare, threatened, or endangered species or its habitat* – No rare, threatened, or endangered species, or habitat exist within the project area. However, species that are considered native to Oahu and protected by Chapter 195D, White Tern and the Hawaiian Hoary Bat, may nest or roost within trees in the project area. To avoid and minimize potential project impacts to these species, measures have been incorporated into the project plans. See Section 2.4 and Section 2.14.4.

10. *Have a substantial adverse effect on air or water quality or ambient noise level* – The proposed project would not detrimentally affect air or water quality or ambient noise levels and would comply with State of Hawaii, City and County of Honolulu, and federal environmental regulations and standards as described in Sections 2.3, 2.5, 2.6 and Section 2.14. The project incorporates design elements to minimize stormwater run-off, and during construction, Best Management Practices (BMPs) would be used to control and minimize stormwater runoff. The project would obtain a noise permit and noise variance for construction. While there would be short-term construction noise impacts, no long-term adverse noise impacts are anticipated.

11. *Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area such as a floodplain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters* – The project would not have substantial adverse effects on an environmentally sensitive area . The project site is located along the coast within a Tsunami Inundation Zone, Flood Zone AE, and Sea Level Rise Exposure Area; however, the proposed project would not increase the area's vulnerability to flooding. Should the area

be exposed to flooding, the elevated walkway would provide a pedestrian route that is on high ground.

12. *Have a substantial adverse effect on scenic vistas and viewplanes, during day or night, identified in county or state plans or studies* – The project would not have substantial adverse effects on scenic vistas and viewplanes. The proposed project would create a new vantage point from elevated walkway to view the coastal resources makai of Ala Moana Boulevard. The walkway would not block or significantly affect any existing scenic views. Section 2.13 describes the proposed project's anticipated impact on scenic views and viewplanes.

13. *Require substantial energy consumption or emit substantial greenhouse gases* – The proposed project would not result in substantial energy consumption. There may be short-term increase in energy consumption during the project's construction; however, it would be offset by the project's long-term benefits as the shared use path would provide commuters with a separate non-motorized and accessible alternative to single occupancy vehicle modes of transportation.

CHAPTER 5. REFERENCES

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APPENDIX A
CONSULTATION, CORRESPONDENCE AND MEETING INFORMATION

APPENDIX A-1
COORDINATION / CONSULTATION EFFORTS
Agencies
Elected Officials
Organizations / Groups
Public

The following agencies, elected officials, organizations, and others were contacted by email between September 11th and 14th, 2020. They were asked if they were aware of any environmental or social issues associated with the proposed project. Those unreachable by email were contacted by letter. A list of recipients is provided below and an asterisk (*) appears next to those entities that responded to the email or letter. Responses from the general public or individuals, agencies, and organizations that did not receive scoping letters are identified with double asterisks (**). Copies of correspondences are provided in **Appendix A**; meeting minutes and telephone logs not contained in **Appendix A** are available for review upon request at the HDOT-Highways Division, Design Branch office (HWY-DD).

Responses to scoping requests helped to inform preparation of this Draft EA.

Federal Agencies

U.S. Department of Agriculture, National Resource Conservation Service

U.S. Department of Defense, U.S. Army Corps of Engineers

U.S. Department of Homeland Security, Federal Emergency Management Agency

U.S. Department of Housing and Urban Development, Honolulu Field Office

U.S. Environmental Protection Agency, Pacific Islands Contact Office

State of Hawaii Agencies

Department of Accounting and General Services*

Department of Agriculture

Department of Budget and Finance*

Department of Business, Economic Development & Tourism (DBEDT)

DBEDT, Hawaii Community Development Authority*

DBEDT, Office of Planning

Department of Defense

Department of Education*

Department of Hawaiian Home Lands

Department of Health (DOH)

DOH, Clean Water Branch*

DOH, Hazard Evaluation and Emergency Response Office

DOH, Indoor and Radiological Health Branch

Department of Land and Natural Resources (DLNR)

DLNR, Commission on Water Resource Management

DLNR, Division of Boating and Ocean Recreation

DLNR, Division of State Parks

DLNR, Engineering Division*

DLNR, Division of Forestry and Wildlife*

DLNR, Land Division*

DLNR, Office of Coastal and Conservation Lands*

Office of Hawaiian Affairs

City and County of Honolulu Agencies

Board of Water Supply*

Department of Community Services*

Department of Design and Construction*
Department of Emergency Management
Department of Environmental Services
Department of Facility Maintenance
Department of Parks and Recreation
Department of Planning and Permitting*
Department of Transportation Services (DTS)
DTS, Pedestrian Safety Program
Emergency Services Department, Emergency Medical Services Division
Honolulu Authority for Rapid Transportation*
Honolulu Fire Department*
Honolulu Police Department*
Neighborhood Boards Commission Office
Office of Climate Change, Sustainability and Resiliency*
Office of Economic Development

Elected Officials

Mayor Kirk Caldwell, City and County of Honolulu
State Senator Lorraine Inouye, Chair, Senate Committee on Transportation
State Senator Sharon Y. Moriwaki, District 12
State Representative Tom Brower, District 22

Utilities

Charter Communications/ Spectrum*
Hawaii Gas
Hawaiian Electric Company
Hawaiian Telecommunications, Inc.
Sandwich Isles Communications*

Community and Other Organizations

Ala Moana-Kakaako Neighborhood Board, Chair
AquaZone Scuba
Atlantis Adventures
Blue Nun Sportfishing
Breeze Hawaii Diving
Captain Bruce
Conservation Council of Hawaii*
Dive Oahu
E Sea Ride Her
Elyatt Yacht Charter
Farm Lovers Market
Friends of Iolani Palace
Friends of Kewalos*
Hawaii Bicycling League*
Hawaii Experiences
Hawaii Glass Bottom Boats
Hawaii Nautical
Hawaii Pirate Ship Adventures
Hawaii Transportation Association*
Hawaii Yachts
Hawaiian Diving Adventures
Hawaii's Thousand Friends
Historic Hawaii Foundation
Honolulu Island Charters
Honolulu Sailing Co.
Honolulu Scuba Company
Island Charters Sport Fishing
Kakaako United
Kamoauli
Kewalo Harbor LLC
Kulololoia Ohana
Kupu
Maggie Joe Sport Fishing
Magic Sport Fishing
Makani Catamaran
Manu Kai Catamaran
Marine and Land Activities of Hawaii
Na Hoku II Catamaran
Oahu Catamarans
Oahu Metropolitan Planning Organization

Oahu Transit Services, Inc.
Pacific Sport Fishing
Rainbow Scuba
Royal Hawaiian Catamaran
Ruckus Sport Fishing and Diving
Sail Blue Hawaii
Sandy's Sportfishing and Excursions
Sashimi I & II Sport Fishing
Sea Verse Sport Fishing
Sierra Club
The Outdoor Circle
Tradewind Charters
Victoria Ward, Ltd.
Waikiki Dive Center
Waikiki Sport Fishing
Ward Village Owners Association
Whipsaw Sport Fishing
X-treme Parasail

Cultural and Lineal Descendants with ties to the Project Area

Ms. Keala Norman*
Mr. Manuel M. Kuloloio

Other Individuals

Ms. Bianca Isaki**
Mr. Bruce Lum**
Mr. Douglas Meller**
Ms. Grace Lam**
Ms. Gwen Young**
Mr. Kaimana Pine**
Mr. Mark Want**
Mr. Paul McCurdy**
Mr. Phil Alencastre**
Mr. Rick Lachowicz**
Ms. Shar Chun-Lum**
Mr. Tom Schnell**
Mr. Tommy Penrose**

HDOT attempted to contact the following agencies, organizations, and individuals via letter and/or e-mail as part of the consultation effort, but these efforts were unsuccessful due to undeliverable contact information, including address listing or e-mail:

- Hawaiian Electric Company, Customer Installations Department, Planning and Design Division;
- Maggie Joe Sport Fishing
- Makani Catamaran
- Manu Kai Catamaran

DAVID Y. IGE
GOVERNOR

CURT T. OTAGURO
COMPTROLLER

AUDREY HIDANO
DEPUTY COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

(P)20.158

SEP 22 2020

MEMORANDUM

TO: Ms. Michelle Kwan, Engineering Program Manager
Design Branch, Highways Division
Department of Transportation

FROM: Christine L. Kinimaka
Public Works Administrator

SUBJECT: Ala Moana Boulevard Elevated Pedestrian Walkway
Kakaako, Oahu, Federal Aid Project No. BLD-092-1 (029)
Pre-Assessment Scoping for Chapter 343 Hawaii Revised Statutes (HRS)
Draft Environmental Assessment

Thank you for the opportunity to provide comments at this pre-assessment scoping stage of your environmental assessment process for the subject project. The project does not appear to directly impact any existing facilities that are managed or operated by the Department of Accounting and General Services, and we have no comments to offer at this time.

If you have any questions, your staff may call Mr. Dennis Chen of the Planning Branch at 586-0491.

DYKC:mo

DAVID Y. IGE
GOVERNOR

EMPLOYEES' RETIREMENT SYSTEM
HAWAII EMPLOYER-UNION HEALTH BENEFITS TRUST FUND
OFFICE OF THE PUBLIC DEFENDER

STATE OF HAWAI'I
DEPARTMENT OF BUDGET AND FINANCE
P.O. BOX 150
HONOLULU, HAWAI'I 96810-0150

CRAIG K. HIRAI
DIRECTOR

ROBERT YU
DEPUTY DIRECTOR

ADMINISTRATIVE AND RESEARCH OFFICE
BUDGET, PROGRAM PLANNING AND
MANAGEMENT DIVISION
FINANCIAL ADMINISTRATION DIVISION
OFFICE OF FEDERAL AWARDS MANAGEMENT (OFAM)

September 16, 2020

TO: Ms. Karen Chun, Engineering Program Manager
Design Branch, Highways Division
Department of Transportation

FROM: Craig K. Hirai
Director of Finance

SUBJECT: Ala Moana Boulevard Elevated Pedestrian Walkway, Kaka'ako, O'ahu, Federal Aid Project No. BLD-092-1(029), Pre-Assessment Scoping for Chapter 343, HRS, Draft Environmental Assessment

This is to acknowledge receipt of your memorandum dated September 8, 2020, which is soliciting comments on the Ala Moana Boulevard Elevated Pedestrian Walkway, Kaka'ako, O'ahu, Federal Aid Project No. BLD-092-1(029), Pre-Assessment Scoping for Chapter 343, HRS, Draft Environmental Assessment.

The Department of Budget and Finance has no comments at this time.

HAWAII COMMUNITY DEVELOPMENT AUTHORITY

DAVID Y. IGE
GOVERNOR

JOHN WHALEN
CHAIR

GARETT KAMEMOTO
INTERIM EXECUTIVE DIRECTOR

547 Queen Street, Honolulu, Hawaii 96817
Web site: http://dbedt.hawaii.gov/hcda/

Telephone: (808) 594-0300
Fax: (808) 587-0299

October 5, 2020

Ms. Michelle Kwan
Hawaii Department of Transportation
Design Branch, Design Section, Highways Division
601 Kamokila Boulevard, Room 609
Kapolei, Hawaii 96707

Dear Ms. Kwan,

Re: Ala Moana Boulevard Elevated Pedestrian Walkway Kakaako, Oahu
Federal Aid Project No. BLD-092-1 (029) Pre- Assessment Scoping for Chapter 343 Hawaii Revised Statutes Draft Environmental Assessment

Thank you for the opportunity to provide input on the proposed elevated pedestrian and bicycle walkway over Ala Moana Boulevard between Ward Avenue and Kamakee Street. We have no specific comments to offer at this time. However, we do recommend that you refer to the Transportation Plan section of the Kakaako Community Development District Mauka Area Plan and Makai Area Plan. The respective Transportation Plans provide objectives for pedestrians, public transportation, cars and bicycles within the respective Districts.

The Mauka and Makai Area Plans are available on our website:
Mauka Area Plan: https://dbedt.hawaii.gov/hcda/files/2018/02/Mauka-Area-Plan.-small.pdf
Makai Area Plan: http://dbedt.hawaii.gov/hcda/files/2013/02/Makai-Area-Plan-EFF-2005-10-24.pdf

Again, thank you for the opportunity to provide input on the proposed Project.

If you have any questions regarding this matter, please contact Ms. Susan Tamura of our Planning Office, at 594-0300, or by email at susan.j.tamura@hawaii.gov.

Sincerely,

Garett Kamemoto
Interim Executive Director

DAVID Y. IGE
GOVERNOR

DR. CHRISTINA M. KISHIMOTO
SUPERINTENDENT

STATE OF HAWAI`I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI`I 96804

OFFICE OF FACILITIES AND OPERATIONS

RECEIVED
20 OCT -8 A8:36
DESIGN BRANCH
HIGHWAYS DIVISION
DEPT. OF TRANSPORTATION

October 5, 2020

TO: Ms. Karen Chun
Engineering Program Manager, Design Branch, Highway Division
Department of Transportation

FROM: Kenneth G. Masden II
Public Works Manager, Planning Section
Facilities Development Branch

SUBJECT: **Pre- Assessment Comments for the Preparation of an Environmental Assessment for the Ala Moana Boulevard Elevated Pedestrian Walkway,Kakaako, Oahu, Hawaii**

The Hawaii State Department of Education (HIDOE) has the following comments for the proposed Ala Moana Elevated Pedestrian Walkway (Project) located in Kakaako, Oahu.

The proposed Project will not impact HIDOE schools or facilities.

Thank you for the opportunity to comments. Should you have questions, please contact Robyn Loudermilk, Acting Land Use Planner of the Facilities Development Branch, Planning Section, at 784-5093 or via email at Robyn.Loudermilk@k12.hi.us.

KGM:rll

DAVID Y. IGE
GOVERNOR OF HAWAII

BRUCE S. ANDERSON, Ph.D.
DIRECTOR OF HEALTH

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

In reply, please refer to:
File:

09010PCTM.20

September 15, 2020

Ms. Karen Chun
Engineering Program Manager
Design Branch, Highways Division
601 Kamokila Boulevard, Room 609
Kapolei, Hawaii 96707

Attention: Ms. Michelle Kwan

Dear Ms. Chun:

SUBJECT: Comments on Pre-Assessment Scoping for Draft Environmental Assessment for Ala Moana Boulevard Elevated Pedestrian Walkway Federal Aid Project No. BLD-092-1(029) Kakaako, Island of Oahu, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your letter, dated September 8, 2020, requesting comments on your project. The DOH-CWB has reviewed the subject document and offers these comments. Please note that our review is based solely on the information provided in the subject document and its compliance with the Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard project comments on our website at:
https://health.hawaii.gov/cwb/files/2018/05/Memo-CWB-Standard-Comments.pdf.

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.

   b. Designated uses (HAR Section 11-54-3), as determined by the classification of the receiving State waters.

   c. Water quality criteria (HAR Sections 11-54-4 through 11-54-8).

2. You may be required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for discharges of wastewater, including storm water runoff, into State surface waters (HAR Chapter 11-55).

For NPDES general permit coverage, a Notice of Intent (NOI) form must be submitted at least 30 calendar days before the commencement of the discharge. An application for a NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. To request NPDES permit coverage, you must submit the applicable form ("CWB Individual NPDES Form" or "CWB NOI Form") through the e-Permitting Portal and the hard copy certification statement with the respective filing fee ($1,000 for an individual NPDES permit or $500 for a Notice of General Permit Coverage). Please open the e-Permitting Portal website located at: https://eha-cloud.doh.hawaii.gov/epermit/. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool and locate the appropriate form. Follow the instructions to complete and submit the form.

3. If your project involves work in, over, or under waters of the United States, it is highly recommended that you contact the Army Corp of Engineers, Regulatory Branch (Tel: 835-4303) regarding their permitting requirements.

   Pursuant to Federal Water Pollution Control Act [commonly known as the "Clean Water Act" (CWA)], Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40 of the Code of Federal Regulations, Section 122.2; and Hawaii Administrative Rules (HAR), Chapter 11-54.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR Chapter 11-54, and/or permitting requirements, specified in HAR Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

5. It is the State's position that all projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. Project planning should:

   a. Treat storm water as a resource to be protected by integrating it into project planning and permitting. Storm water has long been recognized as a source of irrigation that will not deplete potable water resources. What is often overlooked is that storm water recharges ground water supplies and feeds streams and estuaries; to ensure that these water cycles are not disrupted, storm water cannot be relegated as a waste product of impervious surfaces. Any project planning must recognize storm water as an asset that sustains and protects natural ecosystems and traditional beneficial uses of State waters, like community beautification, beach going, swimming, and fishing. The approaches necessary to do so, including low impact development methods or ecological bio-

engineering of drainage ways must be identified in the planning stages to allow designers opportunity to include those approaches up front, prior to seeking zoning, construction, or building permits.

b. Clearly articulate the State's position on water quality and the beneficial uses of State waters. The plan should include statements regarding the implementation of methods to conserve natural resources (e.g. minimizing potable water for irrigation, gray water re-use options, energy conservation through smart design) and improve water quality.

c. Consider storm water Best Management Practice (BMP) approaches that minimize the use of potable water for irrigation through storm water storage and reuse, percolate storm water to recharge groundwater to revitalize natural hydrology, and treat storm water which is to be discharged.

d. Consider the use of green building practices, such as pervious pavement and landscaping with native vegetation, to improve water quality by reducing excessive runoff and the need for excessive fertilization, respectively.

e. Identify opportunities for retrofitting or bio-engineering existing storm water infrastructure to restore ecological function while maintaining, or even enhancing, hydraulic capacity. Particular consideration should be given to areas prone to flooding, or where the infrastructure is aged and will need to be rehabilitated.

If you have any questions, please visit our website at:http://health.hawaii.gov/cwb/, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

Alec Wong

ALEC WONG, P.E., CHIEF
Clean Water Branch

CTM

c: Ms. Michelle Kwan, Hawaii DOT-HWY
[via email DOT.HWY-AlaMoanaPed@hawaii.gov only]

DAVID Y. IGE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 14, 2020

LD 940e
HWY-DD 2.3630

Michelle Kwan
Design Branch
Design Section, Highways Division
Hawaii Department of Transportation
601 Kamokila Boulevard, Room 609
Kapolei, HI 96707

Via email: DOT.HWY-AlaMoanaPed@hawaii.gov

Dear Ms. Kwan:

SUBJECT: **Ala Moana Boulevard Elevated Pedestrian Walkway**
Kakaako, Oahu, Federal Aid Project No. BLD-092-1(029)
Pre-Assessment Scoping for Chapter 343 Hawaii Revised Statutes
Draft Environmental Assessment

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 (a) Engineering Division, (b) Division of Forestry and Wildlife, and (c) Land Division – Oahu District. Should you have any questions about the attached responses, please feel free to contact Barbara Lee via email at barbara.j.lee@hawaii.gov. Thank you.

Sincerely,
Russell Tsuji

Russell Y. Tsuji
Land Administrator

Enclosure(s)
cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 17, 2020

LD 940e
HWY DD 2.3630

MEMORANDUM

FROM: ~~TO:~~ **DLNR Agencies:**

_X_ Division of Aquatic Resources *(via email: Kendall.L.Tucker@hawaii.gov)*
__ Division of Boating & Ocean Recreation
_X_ Engineering Division *(via email: DLNR.Engr@hawaii.gov)*
_X_ Division of Forestry & Wildlife *(via email: Rubyrosa.T.Terrago@hawaii.gov)*
__ Division of State Parks
_X_ Commission on Water Resource Management *(via email: DLNR.CWRM@hawaii.gov)*
__ Office of Conservation & Coastal Lands
_X_ Land Division – Kauai District *(via email: DLNR.Land@hawaii.gov)*
_X_ Historic Preservation *(via email: DLNR.Intake.SHPD@hawaii.gov)*

TO: ~~FROM:~~ Russell Y. Tsuji, Land Administrator *Russell Tsuji*

SUBJECT: **Ala Moana Boulevard Elevated Pedestrian Walkway, Kakaako, Oahu, Federal Aid Project No. BLD-092-1(029), Pre-Assessment Scoping for Chapter 343, Hawaii Revised Statutes, Draft Environmental Assessment**

LOCATION: Ala Moana Boulevard, Honolulu, Island of Oahu

APPLICANT: State of Hawaii Department of Transportation, Highways Division

Transmitted for your review and comment is information on the above-referenced subject. Please submit any comments by **October 07, 2020** to DLNR.Land@hawaii.gov, and copied to barbara.j.lee@hawaii.gov and darlene.k.nakamura@hawaii.gov.

If no response is received by the above date, we will assume your agency has no comments. If you have any questions, please contact Barbara Lee directly via email at barbara.j.lee@hawaii.gov. Thank you.

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

Signed: _____
Print Name: Carty S. Chang, Chief Engineer
Division: Engineering Division
Date: Sep 29, 2020

Attachments
Cc: Central Files

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/Russell Y. Tsuji
Ref: Ala Moana Boulevard Elevated Pedestrian Walkway, Kakaako, Oahu, Federal Aid Project No. BLD-092-1(029), Pre-Assessment Scoping for Chapter 343, Hawaii Revised Statutes, Draft Environmental Assessment
Location: Ala Moana Boulevard, Honolulu, Island of Oahu
Applicant: State of Hawaii Department of Transportation, Highways Division

COMMENTS

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high risk areas). State projects are required to comply with 44CFR regulations as stipulated in Section 60.12. Be advised that 44CFR reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards.

The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood Hazard Zones are designated on FEMA's Flood Insurance Rate Maps (FIRM), which can be viewed on our Flood Hazard Assessment Tool (FHAT) (http://gis.hawaiinfip.org/FHAT).

If there are questions regarding the local flood ordinances, please contact the applicable County NFIP coordinating agency below:

- Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- Maui/Molokai/Lanai County of Maui, Department of Planning (808) 270-7253.
- Kauai: County of Kauai, Department of Public Works (808) 241-4896.

The applicant should include water demands and infrastructure required to meet project needs. Please note that the projects within State lands requiring water service from their local Department/Board of Water Supply system will be required to pay a resource development charge, in addition to Water Facilities Charges for transmission and daily storage.

The applicant is required to provide water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update projections.

Signed: _____
CARTY S. CHANG, CHIEF ENGINEER

Date: Sep 29, 2020

DAVID Y. IGE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 17, 2020

LD 940e
HWY DD 2.3630

MEMORANDUM

TO: **DLNR Agencies:**
X Division of Aquatic Resources *(via email: Kendall.L.Tucker@hawaii.gov)*
__Division of Boating & Ocean Recreation
X Engineering Division *(via email: DLNR.Engr@hawaii.gov)*
X Division of Forestry & Wildlife *(via email: Rubyrosa.T.Terrago@hawaii.gov)*
__Division of State Parks
X Commission on Water Resource Management *(via email: DLNR.CWRM@hawaii.gov)*
__Office of Conservation & Coastal Lands
X Land Division – Kauai District *(via email: DLNR.Land@hawaii.gov)*
X Historic Preservation *(via email: DLNR.Intake.SHPD@hawaii.gov)*

FROM: Russell Y. Tsuji, Land Administrator *Russell Tsuji*
SUBJECT: **Ala Moana Boulevard Elevated Pedestrian Walkway, Kakaako, Oahu, Federal Aid Project No. BLD-092-1(029), Pre-Assessment Scoping for Chapter 343, Hawaii Revised Statutes, Draft Environmental Assessment**
LOCATION: Ala Moana Boulevard, Honolulu, Island of Oahu
APPLICANT: State of Hawaii Department of Transportation, Highways Division

Transmitted for your review and comment is information on the above-referenced subject. Please submit any comments by **October 07, 2020** to DLNR.Land@hawaii.gov, and copied to barbara.j.lee@hawaii.gov and darlene.k.nakamura@hawaii.gov.

If no response is received by the above date, we will assume your agency has no comments. If you have any questions, please contact Barbara Lee directly via email at barbara.j.lee@hawaii.gov. Thank you.

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

Signed: _____
Print Name: DAVID G. SMITH, Administrator
Division: Forestry and Wildlife
Date: Oct 5, 2020

Attachments
Cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 17, 2020

LD 940e
HWY DD 2.3630

MEMORANDUM

TO: **DLNR Agencies:**
X Division of Aquatic Resources *(via email: Kendall.L.Tucker@hawaii.gov)*
__Division of Boating & Ocean Recreation
X Engineering Division *(via email: DLNR.Engr@hawaii.gov)*
X Division of Forestry & Wildlife *(via email: Rubyrosa.T.Terrago@hawaii.gov)*
__Division of State Parks
X Commission on Water Resource Management *(via email: DLNR.CWRM@hawaii.gov)*
__Office of Conservation & Coastal Lands
X Land Division – Kauai District *(via email: DLNR.Land@hawaii.gov)*
X Historic Preservation *(via email: DLNR.Intake.SHPD@hawaii.gov)*

FROM: Russell Y. Tsuji, Land Administrator *Russell Tsuji*
SUBJECT: **Ala Moana Boulevard Elevated Pedestrian Walkway, Kakaako, Oahu, Federal Aid Project No. BLD-092-1(029), Pre-Assessment Scoping for Chapter 343, Hawaii Revised Statutes, Draft Environmental Assessment**
LOCATION: Ala Moana Boulevard, Honolulu, Island of Oahu
APPLICANT: State of Hawaii Department of Transportation, Highways Division

Transmitted for your review and comment is information on the above-referenced subject. Please submit any comments by **October 07, 2020** to DLNR.Land@hawaii.gov, and copied to barbara.j.lee@hawaii.gov and darlene.k.nakamura@hawaii.gov.

If no response is received by the above date, we will assume your agency has no comments. If you have any questions, please contact Barbara Lee directly via email at barbara.j.lee@hawaii.gov. Thank you.

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

Signed: Darlene Bryant-Takamatsu
Print Name: Darlene Bryant-Takamatsu
Division: Land Division
Date: 9/30/2020

Attachments
Cc: Central Files

From: Lemmo, Sam J <sam.j.lemmo@hawaii.gov>
Sent: Thursday, September 17, 2020 9:24 AM
To: Kaanoi, Malia R <malia.r.kaanoi@hawaii.gov>
Cc: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: RE: Ala Moana Boulevard Elevated Pedestrian Walkway Draft EA

Mahalo. Looks like its not in our jurisdiction.

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843
www.boardofwatersupply.com

KIRK CALDWELL, MAYOR

BRYAN P. ANDAYA, Chair
KAPUA SPROAT, Vice Chair
RAY C. SOON
MAX J. SWORD

ROSS S. SASAMURA, Ex-Officio
JADE T. BUTAY, Ex-Officio

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

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

October 12, 2020

Mr. Jade Butay, Director
State of Hawaii
Department of Transportation
Highways Division
Design Branch
601 Kamokila Boulevard, Room 609
Kapolei, Hawaii 96707

Attention: Ms. Michelle Kwan

Dear Mr. Butay:

Subject: Letter Dated September 8, 2020 Requesting Comments on the Pre-Draft Environmental Assessment Scoping for Ala Moana Boulevard Elevated Pedestrian Walkway Between Ward Avenue and Kamakee Street

The Board of Water Supply (BWS) has a 12-inch water main traversing through the proposed project site along Ala Moana Boulevard. This water main should be made accessible for repairs and maintenance. All structures should be adequately set back from the water main to facilitate repairs and to prevent damage to the structures in the event of main breaks, repair, and/or maintenance.

Tentatively, BWS has a water main project in the vicinity of the elevated pedestrian walkway scheduled for fiscal year 2026. The water main project will require a vertical clearance of 20 feet.

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

If you have any questions, please contact Robert Chun, Project Review Branch of our Water Resources Division at 748-5443.

Very truly yours,

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

DEPARTMENT OF COMMUNITY SERVICES
CITY AND COUNTY OF HONOLULU
925 DILLINGHAM BOULEVARD, SUITE 200•HONOLULU, HAWAII 96817
PHONE: (808) 768-7762 • FAX: (808) 768-7792
www.honolulu.gov/dcs

KIRK CALDWELL
MAYOR

PAMELA A. WITTY-OAKLAND
DIRECTOR

REBECCA J.'I. SOON
DEPUTY DIRECTOR

October 6, 2020

Ms. Michelle Kwan
State of Hawai'i
Department of Transportation
Design Branch, Design Section Highway Division
601 Kamokila Boulevard, Room 609
Kapolei, Hawai'i 96707

Dear Ms. Kwan:

SUBJECT: Draft Environmental Assessment for the proposed Ala Moana Boulevard Pedestrian and Bicycle Elevated Walkway Project pursuant to the State of Hawai'i, Hawai'i Revised Statues (HRS) Chapter 343 and the Hawai'i Administrative Rules (HAR), Title 11, Chapter 200

Thank you for your letter regarding preparation for a Draft Environmental Assessment for the proposed Ala Moana Boulevard Pedestrian and Bicycle Elevated Walkway project.

Our review of the documents indicated that the proposed project would 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,

Pamela A. Witty-Oakland
Director

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8480 • Fax: (808) 768-4567
Web site: www.honolulu.gov

KIRK CALDWELL
MAYOR

MARK YONAMINE, P.E.
DIRECTOR

HAKU MILLES, P.E.
DEPUTY DIRECTOR

October 2, 2020

SENT VIA EMAIL

Ms. Michelle Kwan
DOT.HWY-Alamoanaped@hawaii.gov

Dear Ms. Kwan,

Thank you for the opportunity to review and comment on the Ala Moana Boulevard Elevated Pedestrian Walkway Pre-Assessment. The Department of Design and Construction had the following comments.

The DOT should review the EIS and master plan for the Ala Moana Regional Park. Since the proposed elevated pedestrian walkway's purpose is to provide safer access to the recreational facilities along the shoreline, the proposed improvements should be located nearer to the Ala Moana Regional Park which is the major recreational facility that the people would cross the roadway to reach. This improvement should be coordinated with the improvements the City is making and is planned in the future for this park.

Should you have any further questions, please contact Clifford Lau, Chief of our Facilities Division at 768-8483.

Sincerely,

FOR Mark Yonamine, P.E
Director

MY:ms (826642)

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

KIRK CALDWELL
MAYOR

KATHY K. SOKUGAWA
ACTING DIRECTOR

TIMOTHY F. T. HIU
DEPUTY DIRECTOR

EUGENE H. TAKAHASHI
DEPUTY DIRECTOR

October 7, 2020 2020/ELOG-1932(WA)

Ms. Michelle Kwan
Hawaii Department of Transportation
Design Branch, Design Section, Highways Division
601 Kamokila Boulevard, Room 609
Kapolei, Hawaii 96707

Dear Ms. Kwan:

SUBJECT: Pre-Draft Environmental Assessment
Ala Moana Boulevard Elevated Pedestrian Walkway
Federal Aid Project No. BLD-092-1(029)

We have reviewed the Pre-Assessment for the Ala Moana Boulevard Elevated Pedestrian Walkway Project (received September 30, 2020). The Project is within the Kakaako Community Development District (KCDD) and the Special Management Area (SMA) and is outside the zoning and land use jurisdiction of the Department of Planning and Permitting. The KCDD is regulated by the State of Hawaii Community Development Authority, and development within the SMA is reviewed by the State Office of Planning.

Please be informed that we received your letter (dated September 8, 2020) on September 30, 2020 and hope you receive our comment in a timely manner. Should you have any questions, please contact William Ammons, of our staff, at 768-8025.

Very truly yours,

for Kathy K. Sokugawa
Acting Director

HONOLULU AUTHORITY for RAPID TRANSPORTATION

IN REPLY REFER TO:
HART-COR-00174

Andrew S. Robbins
EXECUTIVE DIRECTOR AND CEO

David H. Uchiyama
DEPUTY EXECUTIVE DIRECTOR AND COO

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October 7, 2020

Ms. Michelle Kwan
Design Branch, Design Section
Highways Division
Hawaii Department of Transportation
601 Kamokila Boulevard, Room 609
Kapolei, Hawaii 96707

Dear Ms. Kwan:

Subject: Ala Moana Boulevard Elevated Pedestrian Walkway
Kakaako, Oahu, Federal Aid Project No. Building-092 (029)
Pre-Assessment Scoping for Chapter 343 Hawaii Revised
Statutes Draft Environmental Assessment
HWY-DD-2.3630

Mahalo for the opportunity to comment on the Ala Moana Boulevard Elevated Pedestrian Walkway in this pre-assessment phase of the Environmental Assessment process. The Honolulu Authority for Rapid Transportation (HART) has not identified any issues with the project location or alternatives under evaluation at this time. HART also offers the following comment on the proposed project:

This project could also help mitigate its environmental impacts by incorporating educational and interpretive signage and media to help facilitate a greater awareness of the community history by bridge users. HART has conducted extensive technical research on the historic resources in the area as well as Native Hawaiian Pre- and Post-Contact history of the ahupua'a. HART is also in the process of completing research documents on other historic themes. While these resources are readily available to the public, HART is willing to work with the Hawaii Department of Transportation and the project developer to identify appropriate materials to support the development of interpretive and educational resources. HART's information can also be incorporated into the Section 106 Consultation for this project.

Thank you for informing HART of this project and its status. HART requests continued coordination and updates as this project progresses. More information about the Honolulu Rail Transit Project is available at www.honolulutransit.org. We appreciate the opportunity to comment. Please refer any questions or requests for clarification to Ryan Tam at 768-6189 or rtam1@honolulu.gov.

Very truly yours,

Andrew S. Robbins
Executive Director and CEO

HONOLULU FIRE DEPARTMENT

CITY AND COUNTY OF HONOLULU

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

KIRK CALDWELL
MAYOR

MANUEL P. NEVES
FIRE CHIEF

LIONEL CAMARA JR.
DEPUTY FIRE CHIEF

September 17, 2020

Ms. Karen Chun
Engineering Program Manager
Design Branch, Highways Division
Department of Transportation
State of Hawaii
601 Kamokila Boulevard
Kapolei, Hawaii 96707

RECEIVED
20 SEP 22 P4:06
DESIGN BRANCH
HIGHWAYS DIVISION
DEPT. OF TRANSPORTATION

Dear Ms. Chun:

Subject: Environmental Assessment
Scoping and Preassessment Consultation
Ala Moana Boulevard Elevated Pedestrian Walkway
Kakaako, Oahu

In response to your letter dated September 8, 2020, regarding the abovementioned subject, the Honolulu Fire Department reviewed the submitted information and determined that there will be no significant impact to fire department services.

Should you have questions, please contact Battalion Chief Wayne Masuda of our Fire Prevention Bureau at 723-7151 or wmasuda@honolulu.gov.

Sincerely,

JASON SAMALA
Assistant Chief

JS/AA:bh

POLICE DEPARTMENT

CITY AND COUNTY OF HONOLULU

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

KIRK CALDWELL
MAYOR

SUSAN BALLARD
CHIEF

JOHN D. McCARTHY
CLYDE K. HO
DEPUTY CHIEFS

OUR REFERENCE EO-DK

October 1, 2020

SENT VIA EMAIL

Ms. Michelle Kwan
DOT.HWY-AlaMoanaPed@hawaii.gov

Dear Ms. Kwan:

Thank you for the opportunity to review the proposed project to build an elevated pedestrian and bicycle walkway over Ala Moana Boulevard between Ward Avenue and Kamakee Street.

The Honolulu Police Department (HPD) recommends that all necessary signs, lights, barricades, and other safety equipment be installed and maintained by the contractor during the construction phase of the project. The impact of the ingress/egress of construction vehicles, equipment, and deliveries should be evaluated to ensure the traffic flow is not adversely affected as Ala Moana Boulevard is a major arterial highway. The HPD advises having a larger loading zone area for deliveries and first responders.

Additionally, the HPD would like to address public safety due to the increase in pedestrian and vehicular traffic around the proposed development and the Ward Village area in general. The HPD suggests utilizing private security guards, installing security cameras, implementing clearly defined crosswalks, and/or brighter, more suitable lighting for customers, visitors, and residents during the evening hours.

If there are any questions, please call Major Glenn Hayashi of District 1 (Central Honolulu) at 723-3327.

Sincerely,

RADE K. VANIC
Assistant Chief of Police
Support Services Bureau

OFFICE OF CLIMATE CHANGE, SUSTAINABILITY AND RESILIENCY
CITY AND COUNTY OF HONOLULU
925 DILLINGHAM BOULEVARD, SUITE 257 • HONOLULU, HAWAIʻI 96817
PHONE: (808) 768-2277 • EMAIL: resilientoahu@honolulu.gov • INTERNET: www.resilientoahu.org

KIRK CALDWELL
MAYOR

JOSHUA W. STANBRO
EXECUTIVE DIRECTOR &
CHIEF RESILIENCE OFFICER

October 8, 2020

SENT VIA EMAIL

Ms. Michelle Kwan
Hawaiʻi Department of Transportation, Design Branch
Design Section, Highways Division
601 Kamokila Boulevard, Room 609
Kapolei, Hawaiʻi 96707
DOT.HWY-AlaMoanaPed@hawaii.gov

SUBJECT: State of Hawaiʻi Department of Transportation, Highways Division
Ala Moana Boulevard Elevated Pedestrian Walkway
Kakaʻako, Oʻahu, Federal Aid Project No. BLD-092-1(029)
Pre-Assessment Scoping for Chapter 343 Hawaii Revised Statutes Draft Environmental Assessment

Dear Ms. Kwan:

Thank you for the opportunity to provide comments on the State of Hawai'i Department of Transportation, Highways Division's (HDOT) proposed elevated walkway over Ala Moana Boulevard between Ward Avenue and Kamakeʻe Street, connecting Ward Village and Kewalo Basin Harbor.

The following comments present items that the Environmental Assessment should address:

- alignment with the HDOT Statewide Pedestrian Master Plan goals and objectives;
- efforts to date to implement project O-11 of the HDOT Statewide Pedestrian Master Plan (i.e., Ala Moana Boulevard at Ward Avenue Intersection), as it is an identified project relevant to this projects objectives and alternatives analysis;
- landscape and street tree impacts from the elevated walkay's landings, center median column, and/or walkway deck itself;
- Special Management Area determination and rules and regulations for the project/makai side landing;
- sea level rise and other coastal hazard risk impacts, including National Flood

Insurance Program requirements.

Urban design principles and pedestrian behaviors, as well as, long-term asset management programs, do not generally favor elevated walkways. As stated in the project communication, “HDOT is proposing the project to provide a safe and efficient way for pedestrians to cross over the busy highway and reduce vehicle-pedestrian accidents at the Ward Avenue and Kamakeʻe Street intersections.” However, even if there is a new elevated crossing in-between the other two intersections, pedestrians will continue to cross at the signalized intersections at Ward Avenue and Kamakeʻe Street and remain vulnerable absent other Ala Moana Boulevard corridor or intersection-specific changes. Such an investment in and long-term management of an elevated crossing should be evaluated against other at-grade solutions for this proposed project location; at the Ward Avenue and Kamakeʻe Street intersections; and/or at those existing signalized intersections in conjunction with this proposed project location.

Lastly, if constructed and there is such an increase in pedestrian volumes touching down at Kewalo Basin Harbor, additional pedestrian improvements along Ala Moana Boulevard between Ward Avenue and Kamakeʻe Street (i.e., entrance to Ala Moana Regional Park) would be warranted.

Thank you again for the opportunity to provide scoping comments on the proposed project. Should you have any questions on this information, please contact Matthew Gonser at matthew.gonser@honolulu.gov or (808) 768-2276.

Sincerely,

Joshua Stanbro
Executive Director and
Chief Resilience Officer

From: Kaai, Allyson K <Allyson.Kaai@charter.com>
Sent: Monday, September 14, 2020 4:25 PM
To: Kaanoi, Malia R <malia.r.kaanoi@hawaii.gov>
Cc: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: [EXTERNAL] FW: Ala Moana Boulevard Elevated Pedestrian Walkway Draft EA

Aloha Malia,
Sending confirmation that we are in receipt of the attached request and will review.

Please email all future requests to haw.engineering.research@charter.com or send via USPS mail to the address below.

Spectrum Oceanic LLC
ATTN: Field Engineering
200 Akamainui Street
Mililani, HI 96789

Please let me know if you have any questions.

Thank you,
Allyson

Spectrum
Allyson Kaai | Manager, Field Engineering | (O) 808.625.8471
200 Akamainui Street Mililani HI 96789

From: lbiven@sandwichisles.com <lbiven@sandwichisles.com>
Sent: Friday, September 18, 2020 3:39 PM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Cc: lduran@sandwichisles.com <lduran@sandwichisles.com>; jayson@sandwichisles.com <jayson@sandwichisles.com>; likoh@waimana.com <likoh@waimana.com>
Subject: [EXTERNAL] FW: Ala Moana Boulevard Elevated Pedestrian Walkway Draft EA

Aloha DOT,

Sandwich Isles Communications (SIC) does not have any comments Ala Moana Boulevard Elevated Pedestrian Walkway project.

SIC does not have any facilities within this project. We do not have any future projects planned for this site.

Mahalo for the opportunity to provide comments,
Lew Biven
Sandwich Isles Communications, Inc.
Cell: 781-4215
Office: 540-5748

Conservation Council for Hawai'i

Hawai'i's voice for wildlife
Kō Hawai'i o nā holoholona lōhiu

July 20, 2020

Hawaii Department of Transportation
Design Branch, Design Section, Highways Division
601 Kamokila Blvd. Room 609
Kapolei, Hawaii 96707
RE: HWY-DD 2.2459

Conservation Council For Hawaii would like to thank you for the opportunity to provide comment for the proposed walkway over Ala Moana Boulevard that will provide the much needed safety for pedestrians in this heavy traffic location. We would like to offer the following comments:

1. Lighting - We strongly recommend lighting that has no negative impacts on wildlife.
2. Project Site - Recommend tight measures in ensuring that the project site, project area, and adjacent areas are kept clean and environmentally friendly. Being that this project is in close proximity to Kewalo Basin, we encourage tight knit measures to ensure that there are no hazards to the marine ecosystem before, during, and after construction.
3. Safety for pedestrians - Recommend an emergency communication system for pedestrian use in the case of emergencies that may occur on the walkway.

Again, we thank you for the opportunity to offer comments for this proposed project.

Mahalo Nui,

Moana Bjur

Moana Bjur
Executive Director

Conservation Council for Hawai'i • EIN: 99-0199211
250 Ward Ave Ste 215 • Honolulu, HI 96814 • info@conservehi.org • (808) 593-0255

FRIENDS OF KEWALOS
PROTECT, PRESERVE, MALAMA

To: State of Hawaii Department of Transportation
From: Friends of Kewalos
Date: October 5, 2020

Subject: Ala Moana Boulevard Elevated Pedestrian Walkway

Aloha,

Building a pedestrian bridge over busy Ala Moana Boulevard is a great public safety project. It gives the public safe access to the ocean and parks. It will also enhance traffic flow. Even better it is federally funded.

For these reasons, Friends of Kewalos supports this project. In addition, when appropriate, we would like to provide input on the design of the bridge to reflect the natural beauty of Hawaii and blend in with the surrounding area mauka and makai.

Mahalo for this opportunity to provide comments. I can be reached at the address below.

Sincerely,

Ron Iwami
Friends of Kewalos, President
ronald@kewalo.org

From: Chad Taniguchi <chad@hbl.org>
Sent: Thursday, October 15, 2020 1:02 PM
To: Kwan, Michelle S <michelle.s.kwan@hawaii.gov>
Subject: Fwd: Fw: [EXTERNAL] Ala Moana Boulevard Elevated Pedestrian Walkway Public Question and Answer Session – October 15, 2020

Aloha Michelle,
Do you already have conceptual drawings?
Will these be shown tonight?
Mahalo, Chad

Imagine Safe Streets
Chad Taniguchi
cell 808 255 8271
Everyone has the right to be safe on Hawaii's roads.
Mamalahoe Kanawai, Kamehameha's Law of the Splintered Paddle1797, Hawaii constitution1978

From: Chad Work <chad@hbl.org>
Sent: Tuesday, September 22, 2020 10:28 PM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>

Thank you. I trust my previous emails will be considered comments. No response needed if yes.

If it is ok with you please reply to all so I don't have to hunt for email addresses in future.

If there is opportunity to talk with design consultant prior to concept plan development we'd like to do that.

Please reply to all with timeline. Mahalo Chad

Chad Taniguchi

From: Chad Taniguchi <chad@hbl.org>
Sent: Sunday, September 13, 2020 3:24 PM
To: Kaanoi, Malia R <malia.r.kaanoi@hawaii.gov>; Lori McCarney <lori@hbl.org>; John Rogers <jhr@hawaii.rr.com>; malia@hbl.org <malia@hbl.org>; Dohm, Diane A <diane.a.dohm@hawaii.gov>; Roper, Rachel LA <Rachel.LA.Roper@hawaii.gov>; Wollenbecker, Richard J <richard.j.wollenbecker@hawaii.gov>
Cc: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: [EXTERNAL] Re: Ala Moana Boulevard Elevated Pedestrian Walkway Draft EA

Aloha Malia,

I may have missed Figure 1. Please resend.

Thank you for sending this. We have been interested in this project because it is our belief that the entire Ala Moana Blvd corridor needs to be made safer, not just in this one area.

Ed Sniffen and others from DOT, HBL, and OMPO walked from Kamakee St to Atkins Dr. in Feb Mar 2019 and came up with suggestions for changes, including removing the free right turn going toward downtown on Ala Moana & Kamakee, aligning the crosswalks, and adding crosswalks in 4 directions.

I hope this project will not be considered the whole solution to this corridor. Regarding the overpass, however, in order to provide comments in 30 days it would be helpful for your consultant WSP to attach some preliminary drawings that could be commented on.

ADA and safe access for people who walk, safe adequate access for people who bike are essential.

Is there a timeline for the entire project other than this 30-day request for comment?

Mahalo, Chad

Imagine Safe Streets
Chad Taniguchi
cell 808 255 8271
Everyone has the right to be safe on Hawaii's roads.
Mamalahoe Kanawai, Kamehameha's Law of the Splintered Paddle1797, Hawaii constitution1978

From: Gareth Sakakida <gareth@htahawaii.org>
Sent: Friday, October 9, 2020 3:28 PM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>; Kaanoi, Malia R <malia.r.kaanoi@hawaii.gov>
Subject: [EXTERNAL] Ala Moana Pedestrian Bridge

Aloha HDOT and Ms. Kaanoi,

Following are the general comments received from our board members on the Ala Moana Pedestrian Bridge.

Comments have generally been favorable.
There was a comment requesting a pedestrian bridge at Kalakaua, and Royal Hawaiian, Avenues first.
There was a question regarding how high the bridge would be from the roadway.

Mahalo,
Gareth

--
Gareth K. Sakakida
Hawaii Transportation Association
Managing Director
PO Box 30166
Honolulu, Hawaii 96820
Ph: 808-833-6628
Fax: 808-833-8486
email: gareth@htahawaii.org

From: Carolyn Norman <ckeala@hotmail.com>
Sent: Monday, September 14, 2020 7:21 PM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: [EXTERNAL] Input on Ala Moana Pedestrian Walkway EA

Aloha e Ms. Kwan,

My name is Keala Norman, recognized descendant and I received an email asking for input.

I know that in this area just Ewa of where the footing for the mauka side of the pedestrian walkway will be are known burials that were identified in Cultural Surveys Hawaii's AIS.

Mahalo,
Keala Norman

From: Bianca Isaki <bianca@kahea.org>
Sent: Friday, October 16, 2020 5:29 AM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Cc: Malama Moana <malamaalamoana@gmail.com>; Bruce Lum <savealamoanabeachpark@gmail.com>
Subject: [EXTERNAL] Questions on proposed pedestrian bridge at Ala Moana

To whom it may concern,

I am a Honolulu resident and a regular user of Ala Moana beach park. I have two main concerns about the proposed pedestrian bridge. First, the DOT and other project proponents appear to be using the tragic January 2019 deaths of car accident victims as a way to gain support for what is clearly intended to be an amenity for the luxury high rise condominiums in Ward "Village." This is not lost on anyone who has been paying attention in the past decade. Other than citing the deaths of these three pedestrians, what other studies has DOT completed to determine the placement of the pedestrian bridge? Pedestrian traffic appears much more concentrated at the Waikīkī entrance of Ala Moana boulevard. More broadly, there are many other areas in much needed repair across O`ahu. How did the DOT determine that Ward Village should be prioritized for federal spending and improvements?
Second, what studies have been done to address overcrowding at Ala Moana beach park? The pedestrian bridge seems like a way to entice more people to use the park as an extension of Ward Village. Ala Moana beach environs, not just the parking, are already extremely crowded. Creating more ways to make it easier for those in the nearby condos to access the park does not seem necessary, other than to increase the value of market rate condo units.

Thank you for responses to my questions and concerns.

Bruce Lum
Save Ala Moana Beach Park Hui
99-546 Iwaiwa Street
Aiea, Hawaii 96701

October 22, 2020

Ms. Michelle Kwan, Project Engineer
HDOT Highways Division
869 Punchbowl Street
Honolulu, HI 96813

Re: Ala Moana Boulevard Elevated Pedestrian Walkway

Dear Ms. Kwan,

After participating in the Zoom information meeting and doing some research and thinking, I have come to the conclusion that this project is over kill for producing pedestrian and bicycle safety. I do not believe that the $30 million dollars of taxpayer dollars that is earmarked to build the Ala Moana Boulevard Elevated Pedestrian Walkway will result in taxpayer's money being spent well or deliver the safety to the extent implied.

Implying that spending $30 million dollars on this elevated walkway, to prevent and correct what went so very wrong, in the tragic, unbelievable and fatal accident, that left 3 pedestrians dead, at the intersection of Ala Moana Blvd. and Kamekeʻe Street on January 29, 2019 is inaccurate. True, they were pedestrians and they were waiting for traffic signals to turn in their favor for crossing the street. However, the driver that caused the instant and horrific loss of life lost control of his vehicle by attempting to pull-off an insanely high speed and doubly insane 90 degree maneuver across three lanes of active traffic while trying to evade police. Needless to say, he failed in the most horrific way possible and killed 3 people who were in the wrong place at the deadliest wrong instant.

For this project to imply that, if the proposed elevated walkway had been there at the time, it would have prevented that accident and eliminated its fatal outcomes is distortion of realities at its worse. The proposed walkway design has ground level ingress and egress points at both street-level ends of the walkway that would also be prone to a speeding, out-of-control vehicle plowing through pedestrians at the ingress and egress points beside Ala Moana Blvd.

It is my opinion that more fiscally responsible and equally safe solutions are available to HDOT and it should do its due diligence in going the extra mile to deliver a less expensive, sound and equally safe pedestrian solution in lieu of pressing forward with this project in its current form.

From another perspective, I can't think of a currently functioning, elevated walkway anywhere

within the central business district of Honolulu (ie: makai of H-1). This elevated walkway would be a glaring exception. Constructing elevated walkways in the central business district is not a trivial undertaking and people are already very reluctant to agree to having more constructing of structures that disrupt our daily lives and familiar view plains.

There are many unsafe pedestrian crossings, throughout Honolulu's central business district and Waikiki, that might benefit from upgraded or newer crossings, so why is so much money being focused on the exclusive service to pedestrians traversing the rail-to-Kewalo Basin corridor, and why must this elevated walkway be central to Howard Hughes' Ward Village, and why must taxpayers shoulder the lion's share of the cost. The elevated walkway is a very sweet deal for Howard Hughes Corporation, but at the expense of more pressing safety projects going unsatisfied across Honolulu County.

Completion of this elevated walkway adds a more troubling and problematic dilemma for our county. This project, if completed, would set a precedence that would probably lead to an outcry, by other developers and real property speculators. They could claim that they should be granted the same building permits, for the sake of "elevated walkway equity", throughout the central Honolulu business district. Approving permits for elevated walkways, based on "equity", might compromise the high standards of the permitting process that is in place now.

Lastly, in light of the projected hosting of 2,650 pedestrians and cyclists each day by rail, "the proposed elevated walkway would safely connect pedestrians and bicyclists generated by these future developments to Kewalo Basin, Kakaako Waterfront Park, and Ala Moana Beach Park." These statements from the Ala Moana Elevated Pedestrian Walkway Project handout is the sounding of an ominous alarm to the Save Ala Moana Beach Park Hui, because all the current data shows that 3 million visitors enter Ala Moana Beach Park every day. Volumes of rules and regulations exist to provide protection for health, safety and order for park users and visitors, but effective enforcement is not practiced and has been near impossible to apply. A highly chronic problem is sidewalk congestion and unfettered sidewalk use of every kind. Adding more pedestrians and bicyclists to Ala Moana Beach Park would dramatically upset the already strained volume of mixed-mode pedestrian traffic that now exists on the parks sidewalks and road. The Ala Moana Elevated Pedestrian Walkway Project must take responsibility for doing a thorough and credible capacity study for Ala Moana Beach Park, and scrutinize the real and potential cumulative impacts that the elevated walkway project could introduce, because of the increased volume of pedestrian and bicycle traffic.

I appreciate this opportunity for the public to provide pre-EA comments on the Ala Moana Elevated Pedestrian Walkway Project.

Mahalo,

Bruce Lum
Save Ala Moana Beach Park Hui

Douglas Meller
2615 Aaliamanu Place
Honolulu, HI 96813
email: douglasmeller@gmail.com
landline: 595-8208

10/20/20 Informal Comments Re Proposed Ala Moana Boulevard Elevated Multi-Use Path

Thank you for responding to my episodic email questions and for hosting an interesting and informative public Q&A session last Thursday evening. I really appreciate that the DOT has asked the public how to maximize public benefits from a proposed DOT project.

In my opinion, no other improvements are required for pedestrians to significantly benefit from either a new elevated, landscaped walkway or a new elevated multi-use path over Ala Moana Boulevard between Ward Avenue and Kamakee Street. However, in my opinion, other improvements are required before bicyclists can significantly benefit from a new elevated multi-use path over Ala Moana Boulevard between Ward Avenue and Kamakee Street.

As part of this federal-aid project, or as a follow-up project, I suggest that the DOT determine and develop improvements necessary for relatively inexperienced bicyclists to safely ride between the proposed elevated multi-use path, Ala Moana Park's internal roadway, and Ward Avenue's intersection with Ala Moana Boulevard. Such bicycle-related improvements will require additional funds, environmental clearances, permits, easements over private property, and right-of-entry for public property not within the DOT's jurisdiction.

My current understanding, which may need correction in the project EA, is that:

- The DOT has been awarded a $20 million discretionary federal grant to design and construct an elevated, landscaped facility for pedestrians to walk over Ala Moana Boulevard between Ward Avenue and Kamakee Street.
- This federal grant may not be used at a different location or for a totally unrelated purpose.
- Federal approval of this discretionary grant required that a private party offer right-of-way and/or funding for a significant share of required "local match".
- The Howard Hughes Corp. offered to contribute right-of-way and share non-federal costs if this grant were awarded.
- No other private party has made a similar offer. (It might be helpful for the EA to explain DOT procedures to solicit private participation.)
- This federal grant may be used either for a park-like elevated walkway on which bicyclists must push their bicycles or for a relatively conventional elevated multi-use path on which bicyclists may safely ride their bicycles.
- For safety reasons, an elevated multi-use path needs to be wider, straighter, have higher railings, have gentler curves, have brighter lighting, exclude landscaping that

obscures sight distance, and cost more than a park-like elevated walkway on which bicyclists may only push (but not ride) their bicycles.

- If this project costs more than anticipated, the federal grant will not increase and the DOT would need to use other funds which could be used for other desirable DOT projects.
- Pedestrians using existing Ala Moana Boulevard sidewalks will have safe access to both the mauka and makai ends of the proposed elevated multi-use path.
- At some undetermined future date when a private park is developed between Auahi Street and Ala Moana Boulevard, the public will be allowed to walk across the park for access to the mauka end of the proposed elevated multi-use path. Ward Villages plans to close this private park to the public on evenings and on some undetermined days.
- More analysis is needed concerning safe legal routes for bicyclists to ride to and from both ends of the proposed elevated multi-use path. Conflicts and safety problems will probably result if bicyclists ride along existing Ala Moana Boulevard sidewalks for access to the proposed elevated multi-use path.
- According to the City's "Complete Streets" website, within a year the City will install delineators, striping, and curbs to create "protected bike lanes" on both sides of Ward Avenue from South King Street to Ala Moana Boulevard.
- Additional improvements may be needed for inexperienced bicyclists to safely ride:
    - between the mauka side of the Ala Moana Boulevard/Ward Avenue intersection and the mauka end of the proposed elevated multi-use path.
    - between the makai side of the Ala Moana Boulevard/Ward Avenue intersection, the makai end of the proposed multi-use path, and the Ewa end of Ala Moana Park's internal roadway.

From: l <gracelam@aol.com>
Sent: Saturday, October 10, 2020 8:41 AM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: [EXTERNAL] elevated pedestrian walk

Just wonder how do you expect seniors in wheel chairs, with walkers/canes and parents with strollers to get up the elevated pedestrian walk?

Thanks.

Grace Lam

From: gwen young <gwen.young7@gmail.com>
Sent: Wednesday, October 21, 2020 11:24 AM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: [EXTERNAL] ALA MOANA ELEVATED WALKWAY Comments from Resident

Dear Department of Transportation,
Positive compliments to all on the goals to protect pedestrian safety. This is a great concern to our community.
I do have the following concerns with the proposed plan and am not supportive of the current plan.

Concerns:

1. For the 30 million cost, we could build at least 30 simple over crosses and save lives across our state.
2. 30 million for a single glamour walk, sounds lovely but is not fiscally responsible when we could optimally use so much less for the same result or build so many more walkways with our resources.
3. A much more affordable solution is a simple over crossing.
4. An alternate solution that does not require construction is: the Pedestrian scramble, which we successfully employ in Waikiki and has the added benefit of making Waikiki so much more pedestrian friendly and opens more business to the shops and restaurants there.
5. Bike traffic: bicycles are an important part of our transportation system and mostly left out of traffic and pedestrian discussions and plans. With the success of BIki, especially in the Kaka'ako - Ala Moana - Waikiki corredor this needs to be considered. Already HBL (Honolulu Bicycling League) is supporting this proposed walkway project, stating the many benefits of it for bicycling traffic. The curved path design is not usable nor effective for bike and pedestrian traffic and either needs to be revised for both modes of transportation to utilize or clearly stated that bikes cannot use it.
6. But, bikes must be able to use the path as many surfers and beach users take their bikes, a green transportation solution, to Ala Moana Beach. This aspect MUST be addressed.
7. One pedestrian walkway by Kewalos marina is NOT an effective solution for pedestrian safety and needs. Pedestrian traffic at Piikoi and Ala Moana is huge, especially around sunset, when car visibility of pedestrians is at a low point. Project supporters will say that pedestrians can easily walk down to the Eva end of ALa Moana to cross, but there is no way most will do that. For example, our Kupuna already struggle with the simple distance at Piikoi or at Queen when they cross Ala Moana.

Mahalos for your time and for sharing my thoughts with the group.

Thank you,
Gwen Young

From: Kaimana Pinē <kaimanapine@gmail.com>
Sent: Thursday, October 15, 2020 12:30 PM
To: DOT HWY-Ala Moana Ped
Subject: [EXTERNAL] Ward Village + Marina bridge...

Follow Up Flag: Follow up
Flag Status: Flagged

Aloha,

A few questions below, mahalo nui for your time.

Q:

1. How will this help the more congested pedestrian traffic at Ala Moana Park and Ala Moana Center? Being a legacy community gathering spot and transit hub, why does Ward Village have priority? Please elaborate on the reasoning and provide your research.

2. Who will fund bridge maintenance such as landscaping and cleaning?

3. What alternatives have you explored that do not utilize Federal or Public funds?

4. Where can we see the various impact studies of the project?

Mahalo, -Kaimana

www.KaimanaPine.com | 1.808.478.7068

From: Want, Mark S <mark.s.want@hawaii.gov>
Sent: Monday, October 12, 2020 6:55 AM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: Fw: [EXTERNAL] Ala Moana Boulevard Elevated Pedestrian Walkway Public Question and Answer Session – October 15, 2020

Aloha,
I plan to attend the session, but would like to read any available project information in advance of the meeting.
Could you please link me to project proposal or other information?
Thanks,
Mark
271-7251

From: manager@hawaikitower.org <manager@hawaikitower.org>
Sent: Tuesday, October 13, 2020 10:28 AM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: [EXTERNAL] HHC Overpass to Ala Moana Beach Park

Dear DOT,

I read the proposed project details and am outraged beyond belief. What this feels like to me is an attempt by HHC to obtain $24 million in public funds to enhance their master planned development. HHC will earn profits in excess of $1billion from the development of this master planned project. They can certainly afford to construct the overpass at their expense, NOT the taxpayers.

Currently, well over 5,000 housing units exist between Atkinson and Kamakee Streets, south of Rycroft. The proposed overpass will not benefit any of these taxpaying homeowners at all. If the C&C wants to protect pedestrians, the crosswalks from Atkinson to Kamakee are where pedestrian safety should be focused. These homeowners and taxpayers have been living in these locations for 20-40 years, contributing millions to the C&C/State.

For $30 million protective barriers could be erected at all traffic signals and cross walks from Atkinson to Kamakee. These are the places where people cross Ala Moana Blvd to access the park. No one living east of Kamakee will walk west to an overpass to cross Ala Moana Blvd to go to the park. This proposed new overpass only benefits the future owners of HHC developments - future owners who have yet to pay a nickel in taxes. If HHC wants an overpass for their project, let them pay for it and maintain it!

I am also outraged that HHC is using the graphic images of the January 2019 fatal accident to solicit support and public money for their project. Shame on them! My daughter and her friend Casimir were victims of the accident. To see my daughter's picture lying in the hospital bed being used as a marketing tool for the HHC effort to steal $24 million from the taxpayers is outrageous!

What's even sadder is to think the DOT/C&C/State are all colluding with HHC and don't seem to think that spending $24 million (which will surely turn into $40 or $50 million) of taxpayer money to benefit a private developer is okay. To me that's a violation of the fiduciary duty public servants have to utilize taxpayer funds.

If the DOT wants to increase pedestrian safety, install automated ticket cameras for vehicles running red lights and not stopping to make right turns. This technology is effective in California and proven. I cross the street at Piikoi and Ala Moana almost every day to go to the park. Traffic lights don't mean anything to drivers and HPD doesn't enforce traffic laws effectively.

Good thing that Treacy isn't leading HHC Hawaii anymore. Hopefully Johnstone will have better local sense. I welcome him to come talk to the locals who live and work across from the park.

Paul McCurdy, PCAM
Resident Manager
AOAO of Hawaiki Tower, Inc.
88 Piikoi St.
Honolulu, HI 96814
Office: 808-589-1344
Fax: 808-589-1346
Cell: 808-497-2901
www.hawaikitower.org

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From: Phil Alencastre <palencastre@yahoo.com>
Sent: Friday, October 16, 2020 8:11 PM
To: DOT HWY-Ala Moana Ped
Subject: [EXTERNAL] Questions re Ala Moana Blvd Elevated Pedestrian Walkway

Follow Up Flag: Flag for follow up
Flag Status: Flagged

I wasn't available for the October 15th online Zoom meeting. I have some questions:

1. Will the walkway be handicap accessible? If so, it will require a very long ramp. Where is the project to touch ground on either side of Ala Moana Blvd.?
2. Is VWL paying for the design?
3. $20 million for a pedestrian walkway seems like a lot. Why is the cost so high?
4. Would a project to improve safety on Kamehameha Hwy on the North Shore where the tourist stop to look at the turtles and create a traffic jam qualify for future BUILD funds?

From: Rick Lachowicz <rick.lachowicz@gmail.com>
Sent: Saturday, October 10, 2020 10:31 AM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: [EXTERNAL] SAD

Sad. Just more concrete to facilitate more crowds, high raises, traffic, and polluted water while destroying the beaches, fish, coral reefs, and Honolulu. Waikiki use to be rated as the top beach in the world, now is over crowded and over built. Unless action is taken, it will turn into a city like Hong Kong were you are unable to own a car due to traffic and unavailable parking. Only buses, taxi and an unbuilt rail.

Sent from my iPad

October 22, 2020 DRAFT

DOT.HWY-AlaMoanaPed@hawaii.gov

Aloha Kākou,

As DOT prepares the Ala Moana Pedestrian Bridge Draft Environmental Assessment for public comment, I have the following concerns. When estimating and evaluating significant short-term and long-term effects of this project, it is critical to get as much public input as possible. In addition to technical evaluation, the economic impact and social results that the project will bring must be considered. Please publicize the Draft EA and comment period broadly.

SAFETY

What happened to the study requested by HCR 162, H.D. 1 and 142? What other initiatives to increase pedestrian safety—i.e. reduced speed limits, better lighting, flashing lights, scramble crossings, raised pedestrian crosswalks, no right turns on red lights at crosswalks., etc. were considered for this project.

A bridge across roads with active traffic seem like a more extreme approach. Not only is it more costly (the Nu`uanu project will cost $60,000 vs. $5 M of state dollars), but a bridge at this location may lead to more traffic accidents. Several examples come to mind. In 2008, Baby Cyrus Belt was thrown from the Pedestrian overpass in Punchbowl the highway below. Last year, traffic came to a crawl when teenagers tossed objects from a Kalihi Bridge. More recently, on October 15, 2020, an older man on the 7th Avenue bridge threw a 2-pound rock from the bridge, hitting a car below, shattering the driver's windshield and seriously injuring his passenger. The Kaka`ako-Ala Moana area is prone to individuals who persistently vandalize or abuse public facilities at the beach and they will have access to this bridge.

How will the bridge be "danger proofed" so nothing can be tossed from the bridge endangering the drivers below? What safeguards will prevent sign wavers access to stand on the bridge and distract drivers below as Trump Supporters did it on Aiea and Pearl City Overpasses?

More concerning, making this a multi-user bridge invites accidents. Pedestrians, especially those transporting recreational equipment need a lot of space and will be proceeding at a different speed than bicyclists. People traveling in both directions, using different modes of transportation, may lead to right-of-way disputes. Being close to the Rail stop, visitors who arrive too early to check in with their luggage may make their way to the beach.

The Honolulu Public Views Study (November 2019), noted the public was disturbed about the disappearing views of the mountains and ocean, the impact of Rail, and light pollution. The view of the mountains has already been compromised by tall towers. This project will be a visual eyesore to drivers coming in or out of Ala Moana/Ka`kaako. Will drivers potentially be distracted by the bridge lighting or activity, that may result in more fender benders or hitting pedestrians or bicyclists crossing the road?

CAPACITY AND IMPACT ON ALA MOANA BEACH PARK

This bridge will undoubtedly increase the crowds that utilize Ala Moana Beach Park. HHC plans to build 4.000+ units on the Mauka side of the bridge and their residents will have easy access. Being close to a projected Rail site, the bridge will also provide visitors and residents access. It will also attract bicyclists as part of a designated bike path. With all this traffic, one must consider the cumulative impact to the park and the narrow sidewalks on Ala Moana Boulevard.

ECONOMIC AND SOCIAL IMPACT

When Howard Hughes Corporation (HHC) first introduced this concept in 2018, there was public opposition to the project. Then the horrific accident occurred in January 2019. This proposal is not at the site of the accident but rather tied to HHC properties, both existing and planned. In this proposal, HH is contributing approximately 20% or $5 M, including lands they control and design expertise. While this is a sizable contribution, HHC will stand to profit significantly, by having their bridge built with federal and State Funds. What would it have cost HHC to build it themselves? The State will be responsible for maintenance of this amenity for HHC residents and any liability that may result from accidents stemming from bridge.

The economic gain for HHC is an economic loss for pedestrians in other communities as $5 million of State Highway Funds will be tied to this project just to build it. How could those funds be better used? Based on a recent DOT press release, Nuuanu's pedestrian problems will be addressed with a project costing only $60,000. "Installation of the reduced speed limit signs and the two raised pedestrian crossings is scheduled for November 2020 and is anticipated to cost approximately $60,000 in state highways funds. Design of the raised pedestrian crossings will be similar to the raised pedestrian crossings installed on Farrington Highway by Waianae Intermediate and High School, Kalihi Street by King Kalakaua Middle School, and Fort Weaver Road by Ilima Intermediate School."

With just part of the $5 million DOT dollars, another raised pedestrian crossing and better lighting have could be put in Nanakuli, where a 78-year old man was struck and died in a regular marked crosswalk on Monday, October 19, 2020.

This bridge is scheduled to take 30 months to complete. Our communities island-wide need to have viable remedies for pedestrian safety now. To have real social impact, DOT's $5 M should be spent on pedestrian safety measures throughout the County to benefit more communities.

Mahalo for the opportunity to present our concerns to DOT. Please reconsider this project.

Respectfully,

Shar Chun-Lum
Save Ala Moana Beach Park Hui
(808) 354-2434

From: Tom Schnell <ta092103@gmail.com>
Sent: Wednesday, September 16, 2020 11:58 PM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: [EXTERNAL] Ala Moana Boulevard Elevated Pedestrian Walkway

Dear Ms. Kwan,

I am in support of a pedestrian walkway over Ala Moana Boulevard. I have lived in Kakaako since 1995 and run, walk, and bike throughout the area on a daily basis. A pedestrian pathway over Ala Moana Boulevard is needed and would provide much safer access to the Kakaako Makai area and Ala Moana Beach Park. Please keep me informed as the process moves forward and let me know when the Draft EA will be available for public comment.

Tom Schnell
600 Queen St.#3008
Honolulu, Hawaii 96813

From: Tommy Penrose <tommypenrose@hotmail.com>
Sent: Sunday, October 11, 2020 1:54 PM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: [EXTERNAL] Pedestrian Cross Walk over Ala Moana

I would like to say that I do not agree with this plan at this time. It may turn out that the rail will not go to the area described. Even with the cross walk there will still be pedestrian cross walks across the street. If the rail doesn't come to this area then the cross walk will just become another hiding spot for the homeless and houseless criminals.

Tommy Penrose
Ala Moana Blvd.
808-392-6534

APPENDIX A-2
REGULATORY CONSULTATION

National Historical Preservation Act Section 106

Endangered Species Act Section 7, U.S. Fish and Wildlife Service

Endangered Species Act Section 7, National Oceanographic and Atmospheric Administration

Hawaii Revised Statues Chapter 195D, Department of Land and Natural Resources, Division of Forestry and Wildlife

DAVID Y. IGE
GOVERNOR

HIGHWAY DESIGN BRANCH, ROOM 688A
BRIDGE DESIGN SECTION, ROOM 611
CADASTRAL DESIGN SECTION, ROOM 600
HIGHWAY DESIGN SECTION, ROOM 609
HYDRAULIC DESIGN SECTION, ROOM 636
LANDSCAPING DESIGN SECTION, ROOM 688A
TECHNICAL DESIGN SECTION, ROOM 688

JADE T. BUTAY
DIRECTOR

Deputy Directors
LYNN A.S. ARAKI-REGAN
DEREK J. CHOW
ROSS M. HIGASHI
EDWIN H. SNIFFEN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

IN REPLY REFER TO:
HWY-DD 2.2458

July 1, 2020

RECEIVED
JUL - 8 2020
WSP USA INC.
HONOLULU, HAWAII

TO: SUZANNE CASE
CHAIRPERSON AND STATE HISTORIC PRESERVATION OFFICER
DEPARTMENT OF LAND AND NATURAL RESOURCES

ATTN: ALAN S. DOWNER, Ph.D.
ADMINISTRATOR AND DEPUTY STATE HISTORIC PRESERVATION OFFICER
STATE HISTORIC PRESERVATION DIVISION

FROM: KAREN CHUN Karen Chun
ENGINEERING PROGRAM MANAGER
DESIGN BRANCH, HIGHWAYS DIVISION

SUBJECT: NATIONAL HISTORIC PRESERVATION ACT, SECTION 106
CONSULTATION: REQUEST FOR ELIGIBLE HISTORIC PROPERTIES
LISTED THE HAWAII STATE INVENTORY
ALA MOANA BOULEVARD ELEVATED PEDESTRIAN WALKWAY
HONOLULU AHUPUAA, HONOLULU (KONA) DISTRICT, OAHU
FEDERAL-AID PROJECT NO. BLD-092-1(029)
TAX MAP KEYS: ALA MOANA BOULEVARD RIGHT-OF-WAY;
2-3-001:129; 130; 2-1-058: 129; 132; 133; 134; AND 2-3-037: 001

On behalf of the Federal Highway Administration (FHWA), the State of Hawaii, Department of Transportation (HDOT) would like to consult with the State Historic Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (2006), for the subject pedestrian safety project.

Consultation with SHPO

Pursuant to 36 *Code of Federal Regulations* (CFR) 800.2(c)(1), SHPO has a consultative role in the Section 106 process. For SHPO to ensure that historic properties are taken into consideration at all levels in planning and development in the Section 106 process, HDOT requests SHPO's assistance in carrying out its historic preservation responsibilities. Please provide us with information on all eligible historic properties or cultural sites listed on the state inventory that are

within the boundaries of the Area of Potential Effect (APE) that is listed below. Please provide us with the dimension of each site (length, width, and depth). We also request that you provide us with information on issues your agency may have relating to the undertaking's potential effects on each significant historic property you have identified and provided a description on.

APE

A request for concurrence on the APE is being sent simultaneously with this request for information on historic properties eligible for listing in the Hawaii Register of Historic Places. The proposed project is located in Honolulu, Oahu Island, Hawaii. Please refer to Figure 1 for a project location map and APE. It is anticipated that ground disturbance associated with the elevated walkway's construction would be limited to the project area or footprint, shown in yellow on Figure 1. However, when accounting for construction staging, stockpiling, and access, as well as areas where indirect effects of the project may be experienced (i.e. visual changes, construction noise, construction traffic), the proposed APE, identified within the attached figure in orange, would be approximately 1 acre in its entirety.

The APE would follow Ala Moana Boulevard for about 1,500 feet from the Ward Avenue crosswalk to Kamakee Street crosswalk. On the makai side, the APE reaches to the wharf's sidewalk (near the boat slip), while the mauka edge would follow the Ala Moana Boulevard right-of-way, except where the staging area would occur. The staging area reaches to the full limits of the Ward Village property boundary on the mauka side of Ala Moana Boulevard. The staging area is a grassy lawn, and a paved parking lot for Kakaako Farmers Market, Ward Consolidated Theaters and other nearby businesses.

We would appreciate a written response to our request within 30 days from date of receipt, to Li Nah Okita, HDOT Project Manager, or Michelle Kwan, HDOT Project Engineer, via email at li.nah.okita@hawaii.gov or michelle.s.kwan@hawaii.gov. Please reference letter number HWY-DD 2.2458 as noted above in your response.

Attachment

c: FHWA, WSP

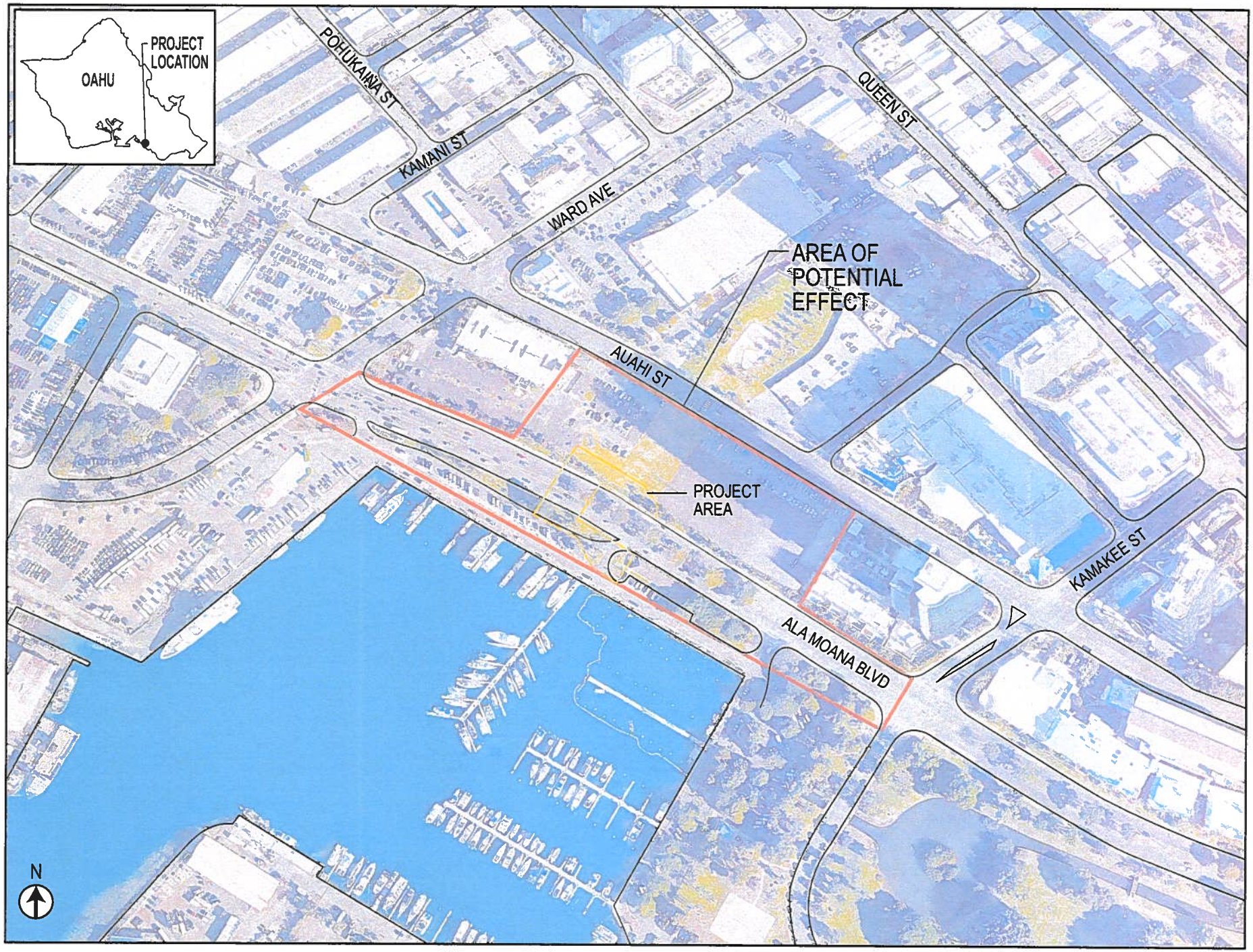

Figure 1
Area of Potential Effect
Ala Moana Elevated Pedestrian Walkway

DAVID Y. IGE
GOVERNOR

HIGHWAY DESIGN BRANCH, ROOM 688A
BRIDGE DESIGN SECTION, ROOM 611
CADASTRAL DESIGN SECTION, ROOM 600
HIGHWAY DESIGN SECTION, ROOM 609
HYDRAULIC DESIGN SECTION, ROOM 636
LANDSCAPING DESIGN SECTION, ROOM 688A
TECHNICAL DESIGN SECTION, ROOM 688

JADE T. BUTAY
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ROSS M. HIGASHI
EDWIN H. SNIFFEN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

IN REPLY REFER TO:
HWY-DD 2.2456

July 1, 2020

RECEIVED
JUL - 8 2020
WSP USA INC.
HONOLULU, HAWAII

TO: SUZANNE CASE
CHAIRPERSON AND STATE HISTORIC PRESERVATION OFFICER
DEPARTMENT OF LAND AND NATURAL RESOURCES

ATTN: ALAN S. DOWNER, Ph.D.
ADMINISTRATOR AND DEPUTY STATE HISTORIC PRESERVATION OFFICER
STATE HISTORIC PRESERVATION DIVISION

FROM: KAREN CHUN Karen Chun
ENGINEERING PROGRAM MANAGER
DESIGN BRANCH, HIGHWAYS DIVISION

SUBJECT: NATIONAL HISTORIC PRESERVATION ACT, SECTION 106: INITIATION, REQUEST FOR CONTACT INFORMATION, AND AREA OF POTENTIAL EFFECT CONCURRENCE
ALA MOANA BOULEVARD ELEVATED PEDESTRIAN WALKWAY
HONOLULU AHUPUAA, HONOLULU (KONA) DISTRICT, OAHU
FEDERAL-AID PROJECT NO. BLD-092-1(029)
TAX MAP KEYS: ALA MOANA BLVD. RIGHT-OF-WAY; 2-3-001:129; 130; 2-1-058: 129; 132; 133; 134; AND 2-3-037: 001

On behalf of the Federal Highway Administration (FHWA), the State of Hawaii, Department of Transportation (HDOT) is initiating consultation with the State Historic Preservation Officer (SHPO) under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (2006), for the subject pedestrian safety project. In addition, HDOT seeks information the SHPO may have on Native Hawaiian organizations (NHO) and potential consulting parties. Lastly, HDOT requests the State Historic Preservation Officer's concurrence on the proposed Area of Potential Effect (APE), pursuant to Section 106 of the NHPA and Title 36 of the Code of Federal Regulations (CFR), Part800.4(a)(1).

The proposed federally funded HDOT project is considered a federal action and undertaking as defined in CFR, Part 800.16(y). Effective May 1, 2016, FHWA issued a Delegation of Authority allowing HDOT and local public agencies to conduct NHPA Section 106 consultations with SHPO, NHO, and qualified consulting parties per 36 CFR, Part 800.2(c)(4). FHWA will remain responsible for all findings and determinations charged to the agency during the Section 106 process.

Overview of the Undertaking

The proposed project would build a new, elevated mauka-makai oriented walkway over Ala Moana Boulevard to remove pedestrian traffic out of the existing at-grade Ward Avenue and Kamakee Street intersections. HDOT is proposing the project to provide a safe and efficient way for pedestrians to cross over the busy highway and reduce vehicle-pedestrian accidents at these intersections. The project is a partnership between HDOT and the Howard Hughes Corporation (HHC). HDOT will procure and administer construction and own the bridge while HHC will contribute the mauka right-of-way, and secure the makai landing right-of-way from the Hawaii Community Development Authority (HCDA). HHC will also fund the environmental review and walkway design, as well as maintain non-structural improvements.

Ala Moana Boulevard generally consists of 3 lanes in each direction plus turn lanes with a landscaped median. In the stretch of roadway bounded by Kamakee Street and Ward Avenue, the speed limit is 35 mph. Mauka of Ala Moana Boulevard, HHC is developing the 60-acre master planned Ward Village, which is expected to create at least 4,500 new residential condominiums. Additionally, the Honolulu Rail Transit's Kakaako Station will be located nearby with an entrance from Ward Ave at Halekauila Street, where 2,650 pedestrians and cyclists are projected to access the station each day[1]. The proposed elevated pedestrian walkway would connect pedestrians generated by these future developments to Kewalo Basin, Kakaako Waterfront Park, and Ala Moana Beach Park.

The new elevated walkway would be accessible via both stairway and an American with Disabilities Act (ADA) path that connects to the Ala Moana Boulevard sidewalks on either side of the structure. On the makai side of the bridge, an observation deck area is proposed as part of the design to allow users to capture both upland views of Kakaako and the makai view of the harbor channel. Lighting would be needed for the elevated walkway, as well as ADA paths or sidewalks leading to the structure, and under the structure at Ala Moana Boulevard.

A central pier to support the elevated walkway would be placed in the highway median. At this time, no utilities are expected to be relocated. Construction is anticipated to start in January 2022 and be completed by June 2023. Night work may be required to minimize impacts on traffic from lane closures. During construction, full closure and one-lane closures may require detours.

[1] Honolulu Authority for Rapid Transit (HART), *Station Access and Modal Interface Report*, August 2011.

Area of Potential Effect (APE)

The proposed project is located in Honolulu, Oahu Island, Hawaii. Please refer to Figure 1 for a project location map and APE. It is anticipated that ground disturbance associated with the elevated walkway's construction would be limited to the project area or footprint, shown in yellow on Figure 1. However, when accounting for construction staging, stockpiling, and access, as well as areas where indirect effects of the project may be experienced (i.e. visual changes, construction noise, construction traffic), the proposed APE, identified within the attached figure in orange, would be approximately 1 acre in its entirety.

The APE would follow Ala Moana Boulevard for about 1,500 feet from the Ward Avenue crosswalk to Kamakee Street crosswalk. On the makai side, the APE reaches to the wharf's sidewalk (near the boat slip), while the mauka edge would follow the Ala Moana Boulevard right-of-way, except where the staging area would occur. The staging area reaches to the full limits of the Ward Village property boundary on the mauka side of Ala Moana Boulevard. The staging area is a grassy lawn, and a paved parking lot for Kakaako Farmers Market, Ward Consolidated Theaters and other nearby businesses. HDOT's efforts to identify historic properties within the APE will rely on consultation with your agency; consultation described within the next section of this letter; review of previous recent studies conducted in the APE; and development of an Archaeological Inventory Survey (AIS). The AIS is in preparation to support Chapter 6E-8 of the Hawaii Revised Statutes (HRS 6E-8) review. Its subsurface testing program for the project study area or APE has been coordinated with your agency separately.

Consultations

In addition to consulting with SHPO, consultation with NHOs currently listed on the U.S. Department of Interior, Office of Native Hawaiian Relations, NHOs List, with an applicable interest in the APE has been undertaken at the same time as our consultation with your agency. The following agencies, organizations, individuals are being contacted by formal letter:

- Aha Kane;
- Aha Moku-Oahu, Kona District;
- Aha Wahine;
- Association of Hawaiian Civic Clubs;
- Association of Hawaiian Homestead Lands;
- Au Puni O Hawaii;
- Conservation Council of Hawaii;
- Council for Native Hawaiian Advancement;
- Friends of Iolani Palace;
- Friends of Kewalo;
- George K. Cypher Ohana;
- Hawaiian Civic Club of Honolulu;
- Hawaiian Community Assets, Inc.;
- Historic Hawaii Foundation;
- Hui Huliau Inc.;
- Imua Hawaii;
- Kamehameha Schools;
- Kanu o ka Aina Learning Ohana;
- Ke Aupuni O Hawaii;

- Ke One O Kakuhihewa;
- Kingdom of Hawaii;
- Koolau Foundation;
- Kuaaina Ulu Auamo;
- Kula no na Poe Hawaii;
- Maa Ohana c/o Lani Maa Lapilio;
- Mahu Ohana;
- Na Koa Ikaika Ka Lahui Hawaii;
- Na Kuauhau o Kahiwakaneikopolei;
- Nanakuli Housing Corporation;
- Native Hawaiian Chamber of Commerce;
- Native Hawaiian Hospitality Association;
- Oahu Island Burial Council;
- Oahu Island Burial Council, Ewa Representative;
- Office of Hawaiian Affairs;
- Pai Foundation;
- Papa Ola Lokahi;
- Papakolea Community Development Corporation;
- Partners in Development Foundation;
- Royal Hawaiian Academy of Traditional Arts;
- Sovereign Councils of the Hawaiian Homelands Assembly;
- State of Hawaii Department of Hawaiian Homelands;
- State of Hawaii Department of Land and Natural Resources, AHA Moku Advisory;
- The Friends of the Hokulea and Hawaiiloa;
- The Imua Group;
- The Makua Group;
- The Mary Kawena Pukui Cultural Preservation Society;
- University of Hawaii at Manoa;
- Benjamin Del Toro;
- Daniel Del Toro;
- Rachel Del Toro;
- Samuel Del Toro;
- Collette Higgins;
- Aliikaua Kaleikini;
- Haloa Kaleikini;
- Kala Kaleikini;
- Mahiamoku Kaleikini;
- Moehonua Kaleikini;
- Noeau Kaleikini;
- Tuahine Kaleikini;
- Betty Keanaaina;
- Kihei Keanaaina;
- Luther Keanaaina;
- Noelani Keanaaina;
- Regina Keanaaina;
- Vicky Keanaaina;
- Wilsam Keanaaina;
- Ashford Kekaula;
- Justin Kealiipaakaua;
- Adrian Keohokalole;
- Joseph M.K. Keohokalole;
- Emalia Keohokalole;
- Manuel M. Kuloloio;
- Kaleo Norman;
- Keala Norman;
- Keliinui Norman;
- Theodore Norman;
- Nalani Olds;
- Ryan Tam

Section 106 notice/advertisement will also be included in the Star Advertiser. NHOs and Native Hawaiian descendants with ancestral, lineal or cultural ties to, cultural and historical property knowledge of and/or concerns for, and cultural or religious attachment to the proposed APE will be asked to provide a response within 30 days of notification. In addition, other individuals and organizations with demonstrated legal, economic or historic preservation interest will also be asked to respond to the Section 106 notice/advertisement.

Upon receipt of responses to the initial consultation, additional efforts such as meetings, site visits and conference calls will be conducted as necessary to address the Section 106 requirements.

Request for Information

Pursuant to 36 CFR Part 800.3(f) in consultation with SHPO, we are interested if your agency is acquainted with any NHO or Hawaiian descendants with ancestral, lineal or cultural ties to or cultural and/or historic property knowledge of or concerns for, and cultural or religious attachment to the proposed project area, we would appreciate receiving their names and contact information within the 30 days of notification.

Per 36 CFR Part 800.2(a)(4)(c)(5) we request the names of individuals and organizations who have demonstrated their legal, economic, historic preservation interest to SHPO on the proposed subject undertaking. As the office of record for this undertaking, we also request SHPO provide us with a copy of the correspondence initiated by interested parties who has approached SHPO to request consulting party status for this undertaking.

In addition to providing us with information on NHOs, we ask for your concurrence to our determination on the proposed APE.

We would appreciate all responses in writing within 30 days from date of receipt, to Li Nah Okita, HDOT Project Manager, or Michelle Kwan, HDOT Project Engineer, via email at li.nah.okita@hawaii.gov or michelle.s.kwan@hawaii.gov or by U.S. Postal Service to Hawaii Department of Transportation, Design Branch, Design Section, Highways Division, 601 Kamokila Boulevard, Room 609, Kapolei, Hawaii, 96707. Please reference the letter number HWY-DD 2.2456 as noted above in your response.

Attachment

c: FHWA, WSP

AFFIDAVIT OF PUBLICATION

IN THE MATTER OF
NOTICE OF CONSULTATION

STATE OF HAWAII }
} SS.
City and County of Honolulu }

Doc. Date: JUL - 8 2020 **# Pages:** 1
Notary Name: Patricia K. Reese First Judicial **Circuit**
Doc. Description: Affidavit of Publication
Notary Signature JUL - 8 2020 Date

PATRICIA K. REESE NOTARY PUBLIC No. 86-467 STATE OF HAWAII

Lisa Sakakida being duly sworn, deposes and says that she is a clerk, duly authorized to execute this affidavit of Oahu Publications, Inc. publisher of The Honolulu Star-Advertiser, MidWeek, The Garden Island, West Hawaii Today, and Hawaii Tribune-Herald, that said newspapers are newspapers of general circulation in the State of Hawaii, and that the attached notice is true notice as was published in the

Honolulu Star-Advertiser 1 times on:
07/08/2020
MidWeek 0 times on:
The Garden Island 0 times on:
Hawaii Tribune-Herald 0 times on:
West Hawaii Today 0 times on:
Other Publications: 0 times on:

And that affiant is not a party to or in any way interested in the above entitled matter.

Lisa Sakakida

Subscribed to and sworn before me this 8th day of July A.D. 20 20

Patricia K. Reese, Notary Public of the First Judicial Circuit, State of Hawaii
My commission expires: Oct 07, 2022

Ad # 0001286486

PATRICIA K. REESE NOTARY PUBLIC No. 86-467 STATE OF HAWAII

ICS

NOTICE OF CONSULTATION
SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT OF 1966 AS AMENDED (2006)

ALA MOANA BOULEVARD ELEVATED PEDESTRIAN WALKWAY
HONOLULU AHUPUAA, HONOLULU (KONA) DISTRICT, OAHU
FEDERAL-AID PROJECT NO. BLD-092-1(029)
TAX MAP KEYS: ALA MOANA BLVD. RIGHT-OF-WAY; 2-3-001:129; 130; 2-1-058: 129; 132; 133; 134; AND 2-3-037: 001

Notice is hereby given that the Federal Highway Administration (FHWA) and State of Hawaii Department of Transportation, Highways Division (HDOT) propose a pedestrian safety project. This federally federal funded HDOT project is considered a federal action and undertaking, as defined by Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (2006).

The proposed project would build a new, elevated mauka-makai oriented walkway over Ala Moana Boulevard to remove pedestrian traffic out of the existing at-grade Ward Avenue and Kamakee Street intersections. HDOT is proposing the project to provide a safe and efficient way for pedestrians to cross over the busy highway and reduce vehicle-pedestrian accidents at these intersections.

The new elevated walkway would be accessible via both stairway and an American with Disabilities Act (ADA) path that connects to the Ala Moana Boulevard sidewalks and other pathways on either side of the structure. On the makai side of the bridge, an observation deck area is proposed as part of the design to allow users to capture both upland views of Kakaako and the makai view of the harbor channel. Lighting would be needed for the elevated walkway, ADA paths or sidewalks leading to the structure, and under the structure along Ala Moana Boulevard.

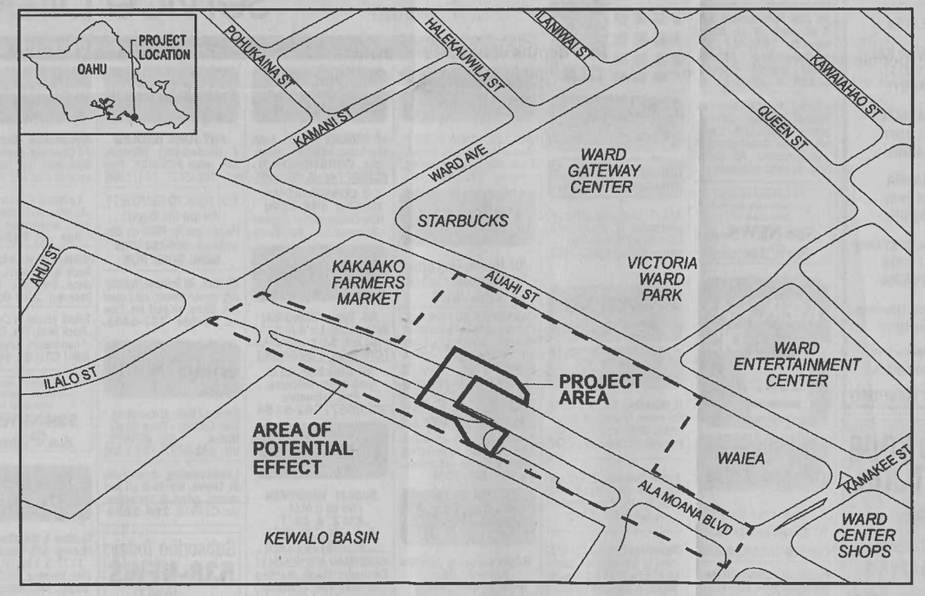
A central pier to support the walkway structure would be placed in the highway median. At this time, no utilities are expected to be relocated. Construction is anticipated to start in January 2022 and be completed by June 2023. Night work may be required to minimize impacts on traffic from lane closures.

The elevated walkway's footprint or locations of ground disturbance are shown as the project area in the map below. However, the proposed Area of Potential Effects (APE), where construction access, staging, and potential noise or visual changes may be experienced is shown as the larger APE boundary. In all the APE is about 1 acre. It would follow Ala Moana Boulevard for about 1,500 feet from the Ward Avenue crosswalk to Kamakee Street crosswalk, while on the makai side, the proposed APE reaches to the wharf's sidewalk (near the boat slip). The mauka edge of the APE would follow the Ala Moana Boulevard right-of-way, except where the staging area would occur. The staging area reaches to the full limits of the Ward Village property boundary on the mauka side of Ala Moana Boulevard. The staging area is a grassy lawn, and a paved parking lot for Kakaako Farmers Market, Ward Consolidated Theaters and other nearby businesses.

Pursuant to Section 106 of the NHPA, Native Hawaiian Organizations and Native Hawaiian descendants with ancestral, lineal or cultural ties to, cultural and historical property knowledge of and/or concerns for, and cultural or religious attachment to the proposed project area are requested to contact HDOT. Other individuals and organizations with demonstrated legal, economic or historic preservation interest in the undertaking are asked to contact HDOT and share information you may have on historical and cultural sites that you may have knowledge of within the proposed APE. We welcome any information within 30 days of notice.

Interested participants are requested to contact Ms. Michelle Kwan, Project Engineer, via email at Michelle.S.Kwan@hawaii.gov or by U.S. Postal Service to Hawaii Department of Transportation, Design Branch, Design Section, Highways Division, 601 Kamokila Boulevard, Room 609, Kapolei, Hawaii, 96707.

Please respond by August 8, 2020.



From: Umi Kai
Sent: Friday, July 17, 2020 1:53 PM
To: Kwan, Michelle S
Subject: [EXTERNAL] Re: Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway - NHPA , Section 106 Consultation

Aloha,
I have no reply to this email
Mahalo
Umi

Sent from my iPhone

On Jul 17, 2020, at 11:34 AM, 'Kwan, Michelle S' via Forwarding: Umi Kai wrote:

Aloha Mr. Kai,

Please find attached to this email the following correspondence from the Hawaii Department of Transportation (HDOT) Highways Division:

> National Historic Preservation Act, Section 106 Consultation with Native Hawaiian Organizations and Potential Consulting Parties
> Ala Moana Boulevard Elevated Pedestrian Walkway
> Honolulu Ahupuaa, Honolulu (Kona) District, Oahu
> Federal Aid Project No. BLD-092-1(029)
> Letter Number HWY-DD 2.2459 dated July 16, 2020

We look forward to your response to the attached letter.

Best Regards,

Michelle Kwan
Hawaii Department of Transportation
Highways Division, Design Branch, Design Section
601 Kamokila Boulevard, Room 609
Kapolei, Hawaii 96707

<HWY-DD 2.2459_Ala Moana Elev Ped Walkway Section 106 Consult_Aha Kane.pdf>

From: Carolyn Norman
Sent: Saturday, July 18, 2020 1:55 PM
To: Kwan, Michelle S
Subject: [EXTERNAL] Re: Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway - NHPA , Section 106 Consultation

Aloha e Michelle,

Yes, I would like to participate in the section 106 consultation process.
Growing up, I have always remembered this area as being a boat harbor and Fisherman's Wharf and Ward Warehouse. I do know that near the mauka area, where the footing for this pedestrian overpass will be, there were Iwi Kupuna found during an AIS for HHC. So, for those reasons I have requesting that an AIS be done for this project especially on the mauka side where the footing for this overpass will be located. I also request cultural monitors to work along side archaeological monitors for this project.

Mahalo nui,
Keala Norman

From: Carolyn Norman
Sent: Monday, September 14, 2020 7:21 PM
To: DOT HWY-Ala Moana Ped <DOT.HWY-AlaMoanaPed@hawaii.gov>
Subject: [EXTERNAL] Input on Ala Moana Pedestrian Walkway EA

Aloha e Ms. Kwan,

My name is Keala Norman, recognized descendant and I received an email asking for input.

I know that in this area just Ewa of where the footing for the mauka side of the pedestrian walkway will be are known burials that were identified in Cultural Surveys Hawaii's AIS.

Mahalo,
Keala Norman

Conservation Council for Hawai'i

Hawai'i's voice for wildlife
Kō Hawai'i o nā holoholona lōhiu

July 20, 2020

Hawaii Department of Transportation
Design Branch, Design Section, Highways Division
601 Kamokila Blvd. Room 609
Kapolei, Hawaii 96707
RE: HWY-DD 2.2459

Conservation Council For Hawaii would like to thank you for the opportunity to provide comment for the proposed walkway over Ala Moana Boulevard that will provide the much needed safety for pedestrians in this heavy traffic location. We would like to offer the following comments:

1. Lighting - We strongly recommend lighting that has no negative impacts on wildlife.
2. Project Site - Recommend tight measures in ensuring that the project site, project area, and adjacent areas are kept clean and environmentally friendly. Being that this project is in close proximity to Kewalo Basin, we encourage tight knit measures to ensure that there are no hazards to the marine ecosystem before, during, and after construction.
3. Safety for pedestrians - Recommend an emergency communication system for pedestrian use in the case of emergencies that may occur on the walkway.

Again, we thank you for the opportunity to offer comments for this proposed project.

Mahalo Nui,

Moana Bjur

Moana Bjur
Executive Director

Conservation Council for Hawai'i • EIN: 99-0199211
250 Ward Ave Ste 215 • Honolulu, HI 96814 • info@conservehi.org • (808) 593-0255

From: Kuloloio, Manuel M (US)
Sent: Friday, July 24, 2020 11:04 AM
To: Kwan, Michelle S; Okita, Li Nah
Cc: Kuloloio, Manuel M (US); manuel.kuloloio@gmail.com; Les (pokaiuli2@gmail.com); Ala Vedder (puniawalei@hotmail.com); Downer, Alan S; Sakahara, Timothy J; Todd Apo
Subject: [EXTERNAL] Manuel Kuloloio AND Kuloloi'a Lineage - I Ke Kai 'o Kuloloi'a (HWY-DD-2.2459): Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway - NHPA , Section 106 Consultation REQUEST

Aloha Ms. Karen Chun, Ms. Michelle Kwan, and Li Nah Okita and Federal Highway Administration

RE: Manuel Kuloloio (HWY-DD-2.2459): Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway - NHPA , Section 106 Consultation, written REQUEST
Kuloloi'a Lineage – I Ke Kai o Kuloloi'a (HWY-DD-2.2459): Federal Aid Project No. BLD-092-1(029) Ala Moana Blvd Elevated Pedestrian Walkway - NHPA , Section 106 Consultation, written REQUEST

In accordance with your State of Hawaii Department of Transportation July 16, 2020 letters (HWY-DD-2.2459) attached, I formally submit my written request here and request our intention to participate in the Section 106 process for the above Federal Highway Administration federal action and undertaking, under the auspices of Manuel Makahiapo Kuloloio (cultural descendant), as an affected individual, and under the auspices of Kuloloi'a Lineage - I Ke Kai o Kuloloi'a, a registered NHO. I have copied my sister Leina'ala Kuloloio Vedder here, as she is a member and a POC for the Kuloloi'a Lineage – I Ke Kai o Kuloloi'a following the passing of our father Leslie Apiu Aipalena Kuloloio.

Thank you for your communication, and we look forward to future collaboration in this safety inspired tasking.

I pray this finds you and your loved one safe as we prepare for Hurricane Douglas this weekend.

Me Ke Aloha Maluhia,
Manny

Manuel Makahiapo Kuloloio
Quality Assurance Manager
Ship Repair, Hawaii Shipyards
BAE Systems Platforms & Services
BAE Systems, Inc.

M: 808 479 2377 | E: manuel.kuloloio@baesystems.com
Bravo 13, Pearl Harbor, Hawai'i, 96860, U.S.A.
www.baesystems.com

Connect with BAE Systems:

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HISTORIC HAWAI'I FOUNDATION

680 Iwilei Road Suite 690, Honolulu HI 96817 • (808) 523-2900 • preservation@historichawaii.org • www.historichawaii.org

July 28, 2020

Karen Chun
Engineering Program Manager
Design Branch, Highways Division
Hawai'i Department of Transportation
601 Kamokila Blvd. Room 609
Kapolei, HI 96707

Via email: Karen.Chun@hawaii.gov

RE: National Historic Preservation Act, Section 106 Consultation and Review
Ala Moana Boulevard Elevated Pedestrian Walkway
Federal-Aid Project No. BLD-092-1(029)
Honolulu Ahupua'a, Kona Moku, Island of O'ahu
TMK : Ala Moana Blvd Right of Way
2-3-129; 130; 2-1-058: 129; 132; 134; and 2-3-037:001

Reference No. HWY-DD 2.2459

Dear Ms. Chun:

Thank you for referring the above-mentioned project to Historic Hawai'i Foundation (HHF) under Section 106 of the National Preservation Act (NHPA). HHF received the State of Hawai'i Department of Transportation (HDOT) letter dated July 16, 2020 opening consultation (received via email on July 17, 2020), containing the invitation to consult and a map of the proposed Area of Potential Effect (APE).

HDOT has initiated Section 106 consultation on behalf of the Federal Highway Administration (FHWA) in accordance with its delegation of authority (FHWA letter to Hawai'i State Historic Preservation Officer, April 8, 2016). The FHWA will remain responsible for determinations of eligibility and effects on historic properties, as well as resolution of effects.

The Section 106 initiation letter requests the following:

- Intention to participate in the Section 106 Consultation
- Comment on the proposed APE
- Identification of historic properties within the APE

Interests of Historic Hawai'i Foundation

Historic Hawai'i Foundation is a statewide nonprofit organization established in 1974 to encourage the preservation of sites, buildings, structures, objects and districts that are significant to the history of Hawai'i. HHF is a consulting party to FHWA and its state and local partners pursuant to the

implementing regulations of the NHPA at 36 Part 800.2(c)(5) as an organization with a demonstrated interest in the undertaking and a concern for the effects on historic properties. **Historic Hawai'i Foundation accepts the invitation to participate as a consulting party for the proposed undertaking.**

Description of Undertaking

The proposed project is the construction of an elevated pedestrian walkway/overpass spanning Ala Moana Boulevard and connecting Ward Village with the Kewalo Basin and harbor areas. The project is a partnership between public (FHWA, HDOT) and private (Howard Hughes Corporation) entities. HDOT will procure and administer construction and will own the bridge. HHC will contribute the mauka right of way and secure the makai right of way from the Hawai'i Community Development Authority, fund design, historic preservation review, environmental review, and maintain non-structural elements. The FHWA will award federal funding for the project.

Area of Potential Effect

The proposed APE boundaries include the overpass project site; temporary staging, contractor access, and parking areas; and areas in which indirect effects may be experienced, including visual impacts, noise and traffic.

Historic Hawai'i Foundation agrees with the proposed APE.

Identification of Historic Properties

HDOT's letter requested information on historical and cultural sites within the APE. We note the following:

Although not within the direct APE, the historic **Ala Moana Park** is within the viewshed of the project and will be accessed by overpass. Ala Moana Park was listed on the Hawai'i Register of Historic Places in 1988 as part of the multiple property listing of the "City and County of Honolulu Art Deco Parks and Playgrounds."

Kewalo Basin has been home to fishing vessels for over a century, including wood-hulled fishing sampans since the late 1800s. It is associated with historic events including traditional fishing activities and commerce. Our records include summary statements attributed to the State Historic Preservation Division that Kewalo Basin is "culturally significant to the history of Hawai'i" and "should be preserved," although we cannot locate the original documentation. We recommend that a literature review of previous archaeological surveys and cultural impact statements be conducted to determine if Kewalo Basin has previously been identified as a historic property. If not, such an assessment should be conducted.

The surf break known as **Kewalos** is accessed from this location. Surfing is not only a recreational activity, but is also a traditional cultural activity dating long before western contact to the Hawaiian Islands. We recommend that Kewalos be evaluated as a Traditional Cultural Property that may be eligible for the national register of historic places. Contributing features could include access by both land and sea.

We expect that there may be **subsurface archaeological and cultural resources** present as well as those above ground, due to the long history of the area for fishing, salt making and other cultural activities.

Thank you for the opportunity to comment. We look forward to continuing consultation to identify historic properties and assess any potential effects.

Very truly yours,

Kiersten Faulkner

Kiersten Faulkner
Executive Director

Copies via email:

- Hawai'i Department of Transportation
  - Li Nah Okita, Project Manager [Li.Nah.Okita@hawaii.gov]
  - Michelle Kwan, Project Engineer [Michelle.S.Kwan@hawaii.gov]
- Federal Highway Administration
  - Meesa Otani [meesa.otani@dot.gov]
- Hawai'i State Historic Preservation Division
  - Susan Lebo [Susan.A.Lebo@hawaii.gov]
  - Stephanie Hacker [stephanie.hacker@hawaii.gov]
  - Tanya Gumapac-McGuire [Tanya.Gumapac-Mcguire@hawaii.gov]
  - Julia Flauaus [julia.flauaus@hawaii.gov]

From: Kwan, Michelle S
Sent: Monday, August 10, 2020 9:02 AM
To: Kuloloio, Manuel M (US)
Cc: Ala Vedder; Okita, Li Nah; Chun, Karen
Subject: RE: Manuel Kuloloio AND Kuloloi'a Lineage - I Ke Kai 'o Kuloloi'a (HWY-DD-2.2459): Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway - NHPA , Section 106 Consultation REQUEST

Aloha Mr. Kuloloio,

Thank you very much for your response to our Section 106 consultation letter dated July 16, 2020.

We would like to request your clarification regarding how you and your sister, Ms. Leina'ala Kuloloio Vedder, would like to be consulted under Section 106 – as an individuals or as a Native Hawaiian Organization?

We would also like to request from you any comments to the proposed Area of Potential Effect (APE) as shown in our July 16, 2020 consultation letter or if you have any knowledge of historic properties with the APE?

A formal response from HDOT is attached.

Best Regards,

Michelle Kwan
Hawaii Department of Transportation
Highways Division, Design Branch, Design Section
601 Kamokila Boulevard, Room 609
Kapolei, Hawaii 96707

DAVID Y. IGE
GOVERNOR

HIGHWAY DESIGN BRANCH, ROOM 688A
BRIDGE DESIGN SECTION, ROOM 611
CADASTRAL DESIGN SECTION, ROOM 600
HIGHWAY DESIGN SECTION, ROOM 609
HYDRAULIC DESIGN SECTION, ROOM 636
LANDSCAPING DESIGN SECTION, ROOM 688A
TECHNICAL DESIGN SECTION, ROOM 688

JADE T. BUTAY
DIRECTOR

Deputy Directors
LYNN A.S. ARAKI-REGAN
DEREK J. CHOW
ROSS M. HIGASHI
EDWIN H. SNIFFEN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

IN REPLY REFER TO:
HWY-DD 2.3621

August 10, 2020

VIA EMAIL: manuel.kuloloio@baesytems.com

Mr. Manuel M. Kuloloio
Lineal Descendant
94-242 Keaukaha Place
Waipahu, Hawaii 96797

Dear Mr. Kuloloio:

Subject: National Historic Preservation Act (NHPA), Section 106 Consultation
Ala Moana Boulevard Elevated Pedestrian Walkway
Honolulu Ahupuaa, Honolulu (Kona) District, Oahu
Federal-Aid Project No. BLD-092-1(029)
Tax Map Keys: Ala Moana Boulevard Right-of-Way;
2-3-001:129; 130; 2-1-058: 129; 132; 133; 134; and 2-3-037: 001

The State of Hawaii Department of Transportation (HDOT) is in receipt of your email dated July 24, 2020, requesting to be a consulting party for the proposed elevated pedestrian bridge project. As mentioned in our consultation letter dated July 16, 2020, the Federal Highways Administration (FHWA) has authorized HDOT to act on behalf of FHWA regarding the NHPA Section 106 notification and consultation. We would like to request your clarification on if you or your sister, Ms. Leina'ala Kuloloio Vedder, would like to be consulted as individuals or as a Native Hawaiian Organization? We also would like to request from you any comments on the proposed Area of Potential Effect (APE) or any knowledge of historic properties within the APE. A map of the proposed APE is enclosed. We would appreciate a response by August 21, 2020.

Please feel free to send any additional coordination or questions to the Project Engineer, Michelle Kwan at michelle.s.kwan@hawaii.gov or to the project e-mail address at DOT.HWY-AlaMoanaPed@hawaii.gov and reference letter number HWY-DD 2.3621 as noted above. We look forward to working with you and the State Historic Preservation Division on these needed improvements.

Sincerely,

Karen Chun

KAREN CHUN
Engineering Program Manager
Design Branch, Highways Division

Enclosure

c: FHWA, WSP

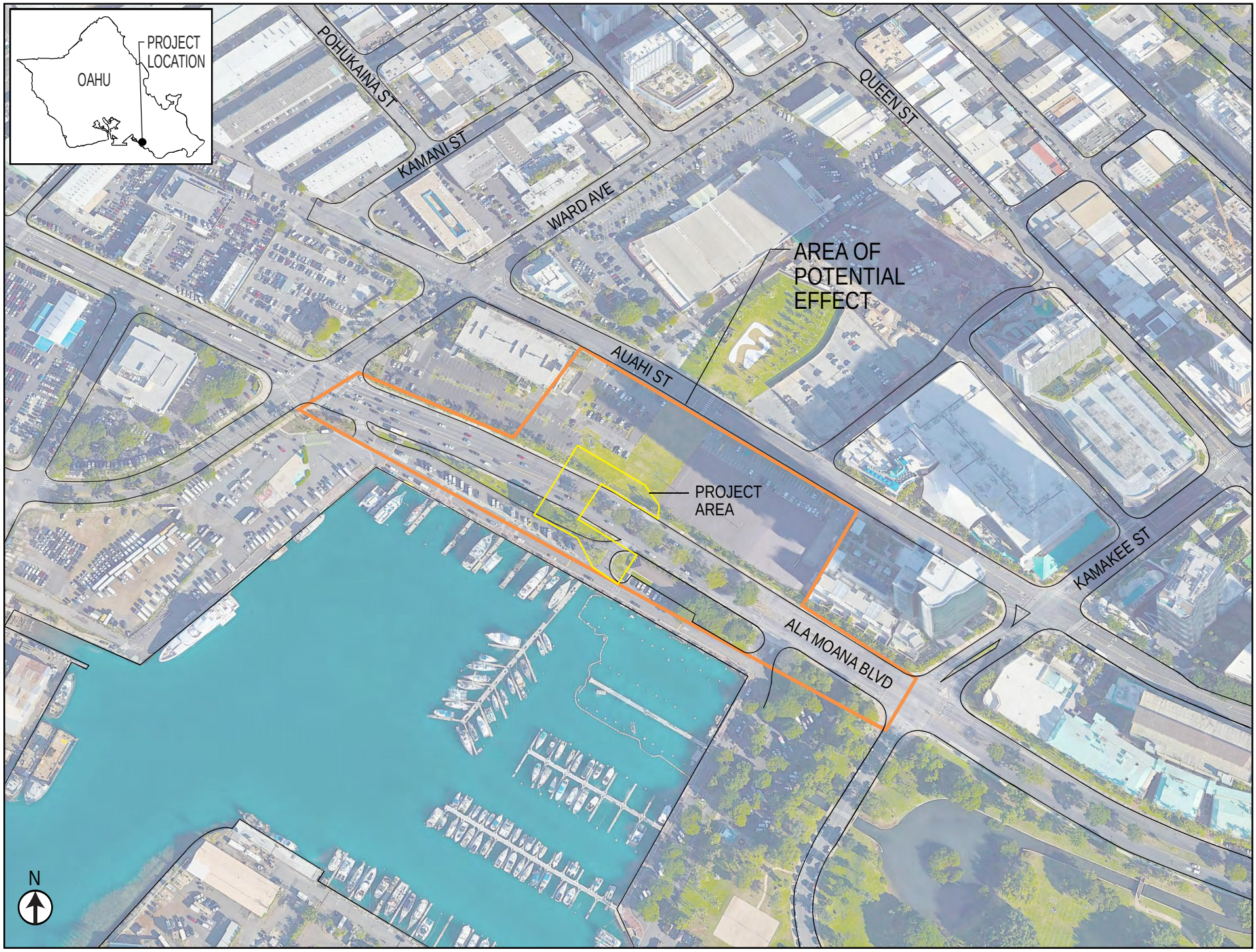

Figure 1
Area of Potential Effect
Ala Moana Elevated Pedestrian Walkway

From: Kwan, Michelle S
Sent: Friday, August 14, 2020 10:50 AM
To: Moana Bjur
Cc: Okita, Li Nah
Subject: RE: [EXTERNAL] CCH Comments HWY-DD-2.2459

Aloha Ms. Bjur,

Thank you again for your email regarding the Section 106 Consultation for the subject project. I apologize for our delayed response.

We appreciate your comments regarding project lighting, maintaining an environmentally friendly project site, and recommending safety measures for pedestrians using the proposed walkway. Your comments will be incorporated into the Draft Environmental Assessment and evaluated as the project design moves forward.

As requested in our letter to Conservation Council of Hawaii dated July 16, 2020, do you have any comments regarding the proposed APE or any knowledge of historic properties within the APE?

Please see attached for our formal response.

Thank you again for your input and interest in the proposed project.

Best Regards,

Michelle Kwan
Hawaii Department of Transportation
Highways Division, Design Branch, Design Section
601 Kamokila Boulevard, Room 609
Kapolei, Hawaii 96707
Ph: (808) 692-8441

DAVID Y. IGE
GOVERNOR

HIGHWAY DESIGN BRANCH, ROOM 688A
BRIDGE DESIGN SECTION, ROOM 611
CADASTRAL DESIGN SECTION, ROOM 600
HIGHWAY DESIGN SECTION, ROOM 609
HYDRAULIC DESIGN SECTION, ROOM 636
LANDSCAPING DESIGN SECTION, ROOM 688A
TECHNICAL DESIGN SECTION, ROOM 688

JADE T. BUTAY
DIRECTOR

Deputy Directors
LYNN A.S. ARAKI-REGAN
DEREK J. CHOW
ROSS M. HIGASHI
EDWIN H. SNIFFEN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

IN REPLY REFER TO:
HWY-DD 2.3620

August 14, 2020

VIA EMAIL: info@conservehi.org

Ms. Moana Bjur
Executive Director
Conservation Council for Hawaii
250 Ward Avenue, Suite 215
Honolulu, Hawaii 96814

Dear Ms. Bjur:

Subject: National Historic Preservation Act, Section 106 Consultation, Ala Moana Boulevard Elevated Pedestrian Walkway
Honolulu Ahupuaa, Honolulu (Kona) District, Oahu
Federal-Aid Project No. BLD-092-1(029)
Tax Map Key(s): Ala Moana Boulevard Right-of-Way;
2-3-001:129; 130; 2-1-058: 129; 132; 133; 134; and 2-3-037: 001

The State of Hawaii Department of Transportation (HDOT) is in receipt of your letter dated July 20, 2020, commenting on the proposed Ala Moana Boulevard Elevated Pedestrian Walkway project. We appreciate the comments in your letter requesting that the project lighting have no negative impacts on wildlife, maintaining a clean and environmentally friendly project site and recommending safety measures for pedestrians using the proposed walkway. Your comments will be incorporated into the Draft Environmental Assessment and evaluated as we move forward in developing the project's design plans and specifications. The project will adhere to Best Management Practices to ensure there is no harm to the marine ecosystem.

As mentioned in our letter to the Conservation Council of Hawaii on July 16, 2020, the Federal Highways Administration (FHWA) has authorized HDOT to act on behalf of FHWA regarding the National Historic Preservation Act Section 106 notification and consultation. Does the Conservation Council for Hawaii have any comments on the Area of Potential Effect (APE) or any knowledge of historic properties within the APE?

Based on the nature of your comments, HDOT will continue to include your organization in project notifications pertaining to general environmental concerns and the biological environment. Please let us know if you would also like to be considered a consulting party for the purposes of identifying historic resources and the project's potential effects on them. We wish to be considerate of your time and organization's mission, so want to make sure that the subject matter of our requests is appropriate.

If you would like to make additional comments, please send them to Michelle Kwan, Project Engineer, at michelle.s.kwan@hawaii.gov or to our project e-mail address: DOT.HWY-AlaMoanaPed@hawaii.gov or by U.S. Postal Service to Hawaii Department of Transportation, Design Branch, Design Section, Highways Division, 601 Kamokila Boulevard, Room 609, Kapolei, Hawaii, 96707 and reference letter number HWY-DD 2.3620 as noted above. We appreciate your interest in this project.

Sincerely,

Karen Chun

KAREN CHUN
Engineering Program Manager
Design Branch, Highways Division

c: FHWA

From: Kuloloio, Manuel M (US)
Sent: Friday, August 21, 2020 10:54 PM
To: Kwan, Michelle S; Chun, Karen
Cc: Kuloloio, Manuel M (US); Leinaala Vedder; Les; Okita, Li Nah; Chun, Karen; Sakahara, Timothy J; Downer, Alan S; Todd Apo
Subject: [EXTERNAL] Manuel Kuloloio AND Kuloloi'a Lineage - I Ke Kai 'o Kuloloi'a (HWY-DD-2.3621): Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway - NHPA , Section 106 Consultation

Aloha Ms. Chun and Ms. Kwan,

RE: Manuel Kuloloio AND Kuloloi'a Lineage - I Ke Kai 'o Kuloloi'a (HWY-DD-2.3621): Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway - NHPA , Section 106 Consultation

To clarify, I requested and request to be consulted as an individual, a cultural descendant.

In addition, I requested and request to also be consulted under the auspices of Kuloloi'a Lineage – I Ke Kai o Kuloloi'a, a registered Native Hawaiian Organization (NHO).

You have requested my comments on the proposed Area of Potential Effect (APE) or any knowledge of historic properties within the APE. Normally, the proposing agency would also share with me a record and overlay of archival, recorded, researched and State Historic Preservation Division (SHPD) documented historic properties within the Project Area, the Area of Potential Effect, and to include areas surrounding the APE.

I understand there have been previously documented historic properties within the proposed APE, including human burial sites identified along the northern edges of Ala Moana Boulevard as SIHP # -7770, SHIP #-7656 (contiguous to the Project Area), and SHIP #-6377. Depending on the exact demarcation of your most SouthEast corner of the APE, the City and County of Honolulu Art Deco Parks & Playground may situate within this APE boundary.

Natural harbors or awa (bays) such as Kewalo are formed by the continuous, constant gravity flowing of fresh water from mauka to makai, for example, which is not very conducive to the growth of coral. Historical records of the Victoria Ward Estate identified a fresh water spring or ground water source near her family home that flowed down to the ocean. The Ward Estate was granted Hawaiian Kingdom recognized fishery rights that extended into the ocean fronting Kewalo. A most recent aerial survey of the area shows two small fenced-in areas North of the Project Area and within the APE. Today, I drove into this parking lot and witnessed opened pits with concrete type lining on the bottom and two vertical sides, and each was securely bordered by galvanized fencing. This appears that a deliberate, controlled subsurface testing may have already been accomplished in this area. This may be the historic property previously identified at SIHP #-7659 of the Victoria Ward Estate concrete ditch-like, water channel of sorts that brought water from mauka to makai. These "ditch-like" concrete features reminded me of the "on the surface ones" I used to witness on Maui from Hamakuapoko going SouthWest toward Paia Town and South toward Kihei. I have been told that there are historical maps that describe this layout running from Kapiolani Boulevard into Kewalo Basin. It would be invaluable to witness this historical map. My father-in-law, a retired engineer for Hawaiian Dredging, also shared

many fascinating stories of his work down Ward Avenue as the lead of sewer repair and/or replacement. The orientation of one of the concrete ditches mentioned above, appears to potentially intersect the Project Area itself.

SIHP #-7655 is a historic property, previously identified, which consisted of human burials and "filled" salt pan remnants. This may be part of both the APE and Project Area.

I have included as an attachment selected documentation of the Sea, Kai, Awa, Bay, Reef, Sand, Beach, Shore, House, Stream, and Pond of KULOLOI'A, including the unabridged Map of Honolulu in 1810, and Kuloloia and Waine'e, Maui.

Thank you for allowing our family to meaningfully participate in early research, early consultation, and early review to support the mission success of this unique, safety-oriented, and uncommon project between the State of Hawaii Department of Transportation and the Howard Hughes Corporation at Kewalo, O'ahu, Hawaii.

LA'A; MA'A; PA'A!

Me Ke Aloha Ha'aha'a,
Manny

Manuel Makahiapo Kuloloio
Quality Assurance Manager
Ship Repair, Hawaii Shipyards
BAE Systems Platforms & Services
BAE Systems, Inc.

DAVID Y. IGE
GOVERNOR

HIGHWAY DESIGN BRANCH, ROOM 688A
BRIDGE DESIGN SECTION, ROOM 611
CADASTRAL DESIGN SECTION, ROOM 600
HIGHWAY DESIGN SECTION, ROOM 609
HYDRAULIC DESIGN SECTION, ROOM 636
LANDSCAPING DESIGN SECTION, ROOM 688A
TECHNICAL DESIGN SECTION, ROOM 688

JADE T. BUTAY
DIRECTOR

Deputy Directors
LYNN A.S. ARAKI-REGAN
DEREK J. CHOW
ROSS M. HIGASHI
EDWIN H. SNIFFEN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

IN REPLY REFER TO:
HWY-DD 2.2438

May 20, 2020

VIA EMAIL: pifwo_admin@fws.gov

Ms. Katherine Mullett
Field Supervisor
Department of the Interior
U.S. Fish and Wildlife Service
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Box 50088
Honolulu, Hawaii 96850-5000

Dear Ms. Mullett:

Subject: Ala Moana Boulevard Elevated Pedestrian Walkway
Federal-Aid Project No. BLD-092-1(029)
Section 7, Endangered Species Act Consultation
Request for Species List

The Federal Highways Administration (FHWA) intends to fund the Ala Moana Boulevard Elevated Pedestrian Walkway project and therefore is considered a federal action. On behalf of FHWA, the State of Hawaii Department of Transportation (HDOT) would like to request a list of threatened and endangered plant and animal species, as well as critical habitats within the vicinity of the project to enable an appropriate determination for this project under Section 7 of the Endangered Species Act.

Per the August 7, 1986, letter from the FHWA to the U.S. Fish and Wildlife Service (USFWS), the FHWA has designated State highway or transportation agencies as non-federal representatives to conduct informal consultations. However, the FHWA remains responsible for all findings and determinations charged to the agency during the Section 7 process.

All official letters to the USFWS shall be transmitted under the HDOT letterhead. All determination letters regarding the findings will be transmitted under the FHWA letterhead.

The proposed work includes building an elevated pedestrian walkway over Ala Moana Boulevard. The project envisions a 'land bridge' for Ward Village and surrounding community residents to safely walk or bike across the busy highway, connecting them to ocean front Ala Moana Beach Park, Kewalo Harbor, and Kakaako Waterfront Park. The walkway would link to paths on either side of Ala Moana Boulevard. It would be equipped with lighting, landscaping, and drainage that ties into the roadway facility. Construction is expected to begin January 2022 and be completed by June 2023. Night work is anticipated. A map of the project area is enclosed.

Furthermore, to assist us in our assessment, we also respectfully ask for USFWS's opinion on the likely impact of the project based on the potential issues of the location considering the proposed construction activities and schedule.

Should you have any questions, please call Li Nah Okita, HDOT Project Manager, at (808) 692-7581 or Michelle Kwan, HDOT Project Engineer, at (808) 692-8441 of our Design Section, Design Branch, Highways Division, or by email at Li.Nah.Okita@hawaii.gov or Michelle.S.Kwan@hawaii.gov and reference letter number HWY-DD 2.2438 as noted above.

Sincerely,

Karen Chun

KAREN CHUN
Engineering Program Manager
Design Branch, Highways Division

Enclosure

c: FHWA, WSP

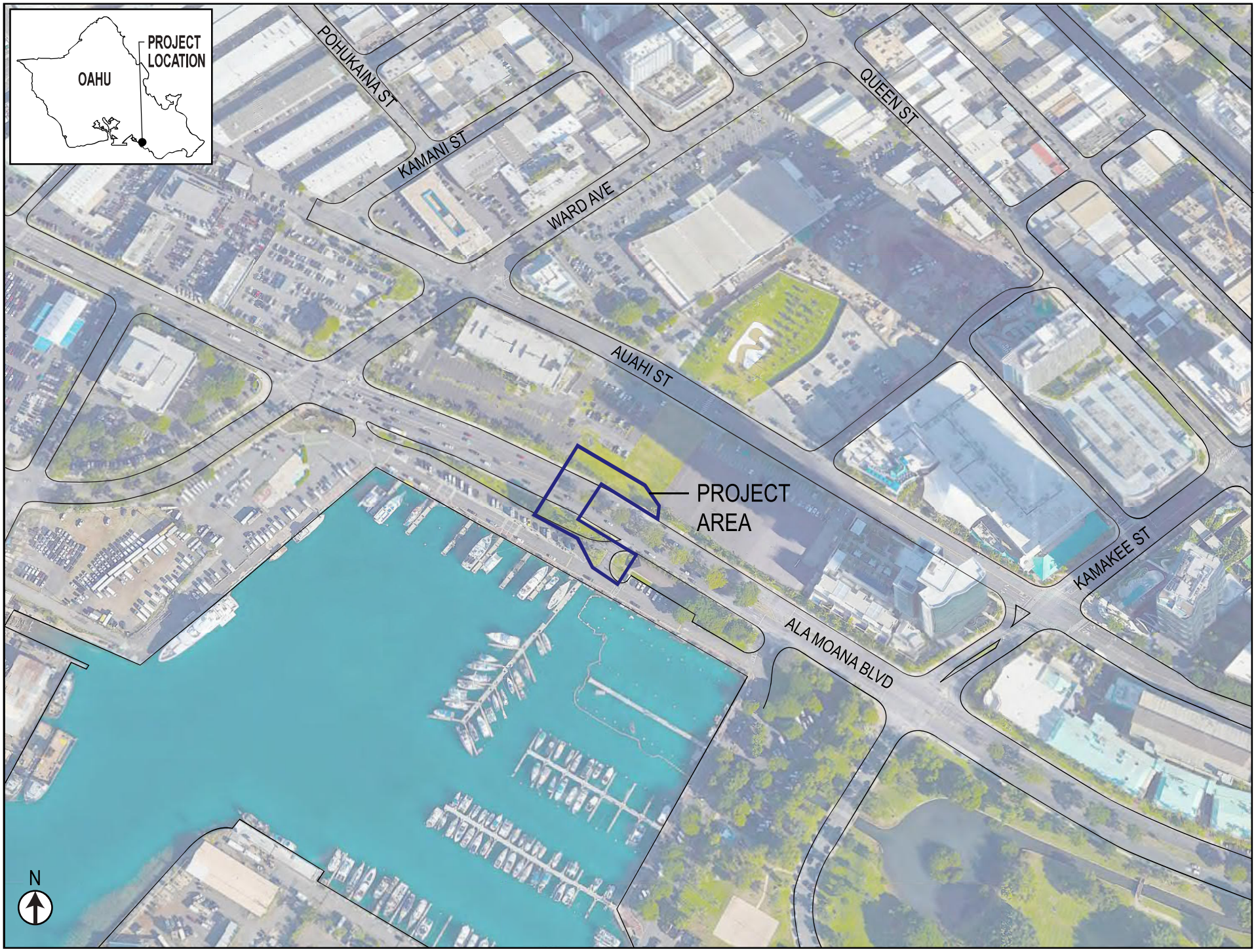

Figure 01
Project Location Map
Ala Moana Elevated Pedestrian Walkway

Subject: FW: [EXTERNAL] Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway Section 7 Request for Species List

Attachments: HWY-DD 2.2438 BLD-092-1(029) Ala Moana Elevated Pedestrian Walkway Sec 7 Req for Species List (USFWS).pdf

---

From: LeBlanc, Darren <darren_leblanc@fws.gov>
Sent: Wednesday, May 27, 2020 8:49 AM
To: Kwan, Michelle S <michelle.s.kwan@hawaii.gov>
Subject: Fw: [EXTERNAL] Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway Section 7 Request for Species List

Hi Michelle. Thank you for requesting a list of threatened or endangered species and critical habitat for the Ala Moana pedestrian bridge project. Based on the location of the project, no listed species are likely to be affected and no critical habitat is designated in that area. However, there may be white terns (manu'o ku) nesting in this area. This species is listed by the State of Hawaii as endangered on Oahu.

To avoid and minimize potential project impacts to white terns we recommend you incorporate the following applicable measures into your project plan:

- If tree trimming is part of your project, please examine all trees slated to be cut to determine if there are white terns nesting in them, especially during the white tern breeding season (January thru June).
- Do not trim branches or remove trees with nesting white terns.
- Do not disturb a nesting tree or branch for at least 80 days from when the egg is laid.

Thanks again for your consultation request. Please let me know if you have any questions.

Darren LeBlanc
Planning and Consultation Team Leader
USFWS, Pacific Islands Fish and Wildlife Office
300 Ala Moana Blvd., Room 3-122
Honolulu, HI 96850
office - 808-792-9403
cell - 808-321-9280

From: Wolfe, Matthew J <matthew_wolfe@fws.gov> on behalf of PIFWO_Admin, FW1 <pifwo_admin@fws.gov>
Sent: Tuesday, May 26, 2020 1:26 PM
To: LeBlanc, Darren <darren_leblanc@fws.gov>
Subject: Fw: [EXTERNAL] Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway Section 7 Request for Species List

Good afternoon Darren,

Here is incoming correspondence dated **May 20, 2020** regarding the Dept of Transportation Highways Design Branch Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway Section 7 Request for Species List that was received on May 26, 2020.

Previously existing Background TAILS Information: **None.**

The final date to provide written comments on this project is on **June 19, 2020**. Please let us know if you need further assistance with this project.

Very Respectfully,

Matthew J.Y.M. Wolfe

Office Assistant

Pacific Islands Fish & Wildlife Office

U.S. Fish & Wildlife Service

Department of the Interior

300 Ala Moana Blvd, Room 3-122

Honolulu, HI 96850

Phone: (808) 792-9438

fws.gov

From: Kwan, Michelle S <michelle.s.kwan@hawaii.gov>
Sent: Tuesday, May 26, 2020 10:53 PM
To: PIFWO_Admin, FW1 <pifwo_admin@fws.gov>
Cc: Okita, Li Nah <li.nah.okita@hawaii.gov>
Subject: [EXTERNAL] Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway Section 7 Request for Species List

Hello,

Please find attached a Section 7 Request for Species List for the following Hawaii Department of Transportation (HDOT) Project – Ala Moana Boulevard Elevated Pedestrian Walkway.

We kindly ask USFWS for a list of threatened and endangered species and critical habitats within our project and opinion on the likely impact of the project.

Please let us know if you have any questions.

Best Regards,

Michelle Kwan
Hawaii Department of Transportation
Highways Division, Design Branch, Design Section

DAVID Y. IGE
GOVERNOR

HIGHWAY DESIGN BRANCH, ROOM 688A
BRIDGE DESIGN SECTION, ROOM 611
CADASTRAL DESIGN SECTION, ROOM 600
HIGHWAY DESIGN SECTION, ROOM 609
HYDRAULIC DESIGN SECTION, ROOM 636
LANDSCAPING DESIGN SECTION, ROOM 688A
TECHNICAL DESIGN SECTION, ROOM 688

JADE T. BUTAY
DIRECTOR

Deputy Directors
LYNN A.S. ARAKI-REGAN
DEREK J. CHOW
ROSS M. HIGASHI
EDWIN H. SNIFFEN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

IN REPLY REFER TO:
HWY-DD 2.2467

July 23, 2020

Mr. Ralph Rizzo
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
300 Ala Moana Boulevard, Room 3-306
Honolulu, Hawaii 96850

Attention: Meesa Otani

Dear Mr. Rizzo:

Subject: Section 7, Endangered Species Act
Request for Approval on Effect Determination
Ala Moana Boulevard Elevated Pedestrian Walkway
Federal-Aid Project No. BLD-092-1(029)

Based on the information provided by the U.S. Fish and Wildlife Service (USFWS) in the enclosed email from Darren Leblanc on May 27, 2020, and the nature of the proposed work, the State of Hawaii Department of Transportation (HDOT) requests concurrence from the Federal Highway Administration that the proposed Ala Moana Boulevard Elevated Pedestrian Walkway will have no effect on threatened or endangered plant or animal species, or critical habitats under the jurisdiction of USFWS within the project limits.

The proposed work includes building an elevated pedestrian walkway over Ala Moana Boulevard. A map of the project area is enclosed. The project envisions a "land bridge" for Ward Village and surrounding community residents to safely walk or bike across the busy highway, connecting them to ocean front Ala Moana Beach Park, Kewalo Harbor, and Kakaako Waterfront Park. The walkway would link to paths on either side of Ala Moana Boulevard. It would be equipped with lighting, landscaping, and drainage that ties into the roadway facility. Construction is expected to begin January 2022 and be completed by June 2023. Night work is anticipated.

Because no threatened or endangered plant or animal species, or critical habitats were identified under the USFWS jurisdiction within the project limits, it has been determined that the subject project will have "no effect" to Section 7 resources. We request your concurrence with our determination.

Should you have any questions, please contact Li Nah Okita, HDOT Project Manager, at (808) 692-7581 or Michelle Kwan, HDOT Project Engineer, at (808) 692-8441 of our Design Section, Design Branch, Highways Division, or by email at Li.Nah.Okita@hawaii.gov or Michelle.S.Kwan@hawaii.gov and reference letter number HWY-DD 2.2467 as noted above.

Sincerely,

Karen Chun

KAREN CHUN
Engineering Program Manager
Design Branch, Highways Division

Enclosure

c: WSP

I CONCUR: Date 07/28/2020
for
Division Administrator, FHWA

Meesa S. Otani
Digitally signed by MEESA T. OTANI
Date: 2020.07.28 10:30:26 -10'00'

By: Meesa Otani
Environmental Engineer

Subject: FW: [EXTERNAL] Re: Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway Section 7 Request for Species List

---

From: Ron Dean - NOAA Federal <ron.dean@noaa.gov>
Sent: Wednesday, May 27, 2020 5:04 PM
To: Kwan, Michelle S <michelle.s.kwan@hawaii.gov>
Cc: Okita, Li Nah <li.nah.okita@hawaii.gov>; Lesley Hawn - NOAA Federal <Lesley.Hawn@noaa.gov>; Joel Moribe - NOAA Federal <joel.moribe@noaa.gov>
Subject: [EXTERNAL] Re: Federal Aid Project No. BLD-092-1(029) Ala Moana Boulevard Elevated Pedestrian Walkway Section 7 Request for Species List

Hi Michelle:

We have reviewed the project, but it does not appear that the action will impact the marine environment, which is the only area there under NOAA's jurisdiction. Terrestrial areas that turtles may utilize are under US FIsh and Wildlife jurisdiction, and there is no monk seal Critical Habitat in that area.

So, it appears that the activity will not affect any ESA listed species or Critical Habitat under NMFS' jurisdiction. If you have more information indicating that this is not the case, we will be happy to analyze it.

Feel free to contact me anytime to discuss, but from what we can tell from the information presented, it does not appear that there is a need to consult with us on this project.

Thanks for reaching out to us,

-Ron

On Tue, May 26, 2020 at 12:54 PM 'Kwan, Michelle S' via _NMFS PIR ESHESA <efhesaconsult@noaa.gov> wrote:

> Hello,
>
> Please find attached a Section 7 Request for Species List for the following Hawaii Department of Transportation (HDOT) Project – Ala Moana Boulevard Elevated Pedestrian Walkway.
>
> We kindly ask NOAA for a list of threatened and endangered species and critical habitats within our project and opinion on the likely impact of the project.
>
> Please let us know if you have any questions.

Best Regards,

Michelle Kwan

Hawaii Department of Transportation

Highways Division, Design Branch, Design Section

601 Kamokila Boulevard, Room 609

Kapolei, Hawaii 96707

Ph: (808) 692-8441

--

Ron Dean
Intergovernmental Coordination and Conservation Branch Chief
Protected Resources Division
National Marine Fisheries Service - Pacific Island Regional Office
1845 Wasp Blvd., Bldg 176, Room 2542
Honolulu, HI 96818
808-725-5140

50 Years of Science, Service, and Stewardship

www.fisheries.noaa.gov/region/pacific-islands

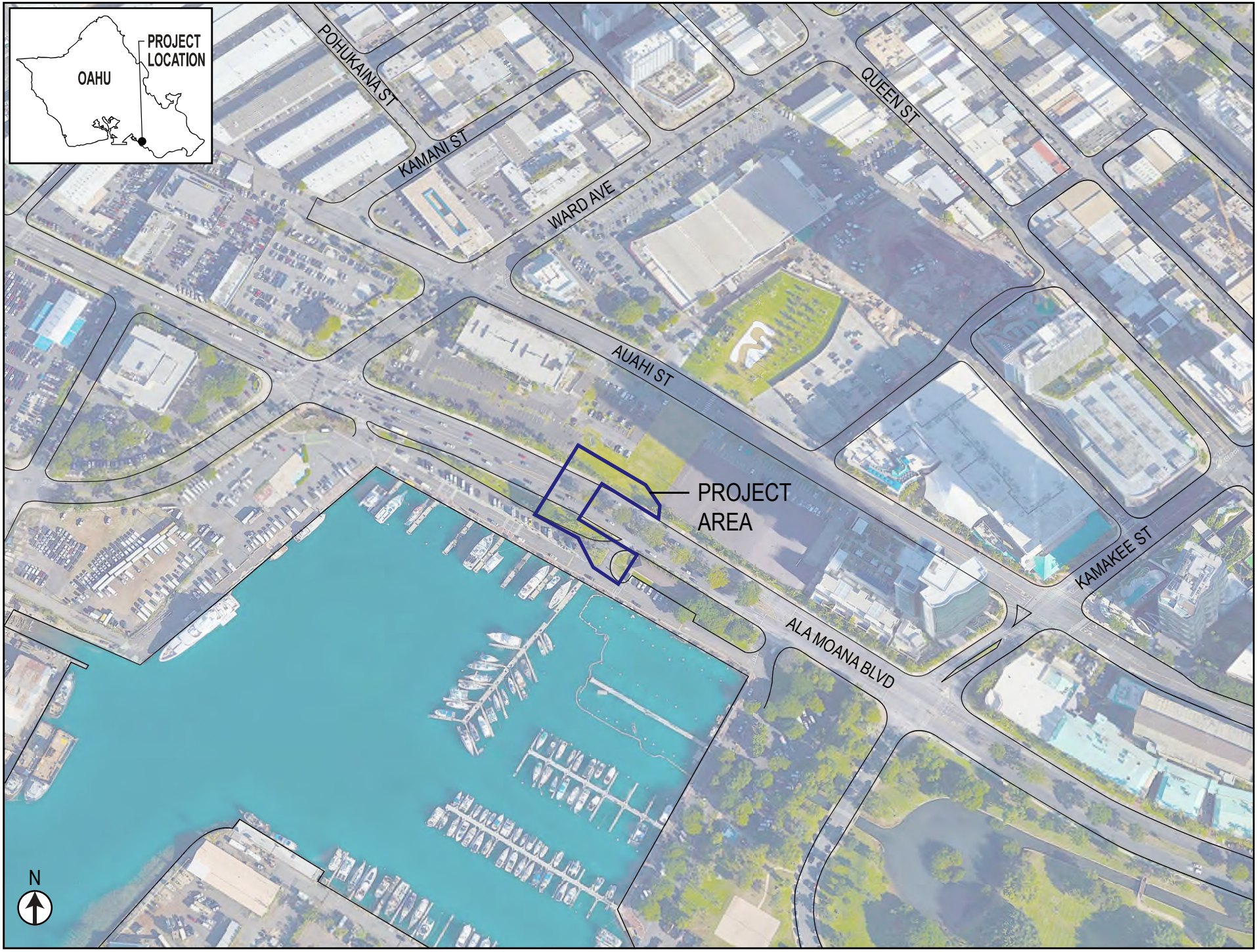

Figure 01
Project Location Map
Ala Moana Elevated Pedestrian Walkway

DAVID Y. IGE
GOVERNOR

HIGHWAY DESIGN BRANCH, ROOM 688A
BRIDGE DESIGN SECTION, ROOM 611
CADASTRAL DESIGN SECTION, ROOM 600
HIGHWAY DESIGN SECTION, ROOM 609
HYDRAULIC DESIGN SECTION, ROOM 636
LANDSCAPING DESIGN SECTION, ROOM 688A
TECHNICAL DESIGN SECTION, ROOM 688

JADE T. BUTAY
DIRECTOR

Deputy Directors
LYNN A.S. ARAKI-REGAN
DEREK J. CHOW
ROSS M. HIGASHI
EDWIN H. SNIFFEN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

IN REPLY REFER TO:
HWY-DD 2.2468

July 23, 2020

Mr. Ralph Rizzo
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
300 Ala Moana Boulevard, Room 3-306
Honolulu, Hawaii 96850

Attention: Meesa Otani

Dear Mr. Rizzo:

Subject: Section 7, Endangered Species Act
Request for Approval on Effect Determination
Ala Moana Boulevard Elevated Pedestrian Walkway
Federal-Aid Project No. BLD-092-1(029)

Based on the information provided by the National Oceanic and Atmospheric Administration (NOAA) in the enclosed email from Ron Dean on May 27, 2020, and the nature of the proposed work, the State of Hawaii Department of Transportation (HDOT) requests concurrence from the Federal Highway Administration that the proposed Ala Moana Boulevard Elevated Pedestrian Walkway will have no effect on species under the jurisdiction of NOAA within the project limits.

The proposed work includes building an elevated pedestrian walkway over Ala Moana Boulevard. A map of the project area is enclosed. The project envisions a “land bridge” for Ward Village and surrounding community residents to safely walk or bike across the busy highway, connecting them to ocean front Ala Moana Beach Park, Kewalo Harbor, and Kakaako Waterfront Park. The walkway would link to paths on either side of Ala Moana Boulevard. It would be equipped with lighting, landscaping, and drainage that ties into the roadway facility. Construction is expected to begin January 2022 and be completed by June 2023. Night work is anticipated.

Because no threatened or endangered plant or animal species, or critical habitats were identified under the National Marine Fisheries Service jurisdiction within the project limits, it has been determined that the subject project will have "no effect" to Section 7 resources. We request your concurrence with our determination.

Should you have any questions, please contact Li Nah Okita, HDOT Project Manager, at (808) 692-7581 or Michelle Kwan, HDOT Project Engineer, at (808) 692-8441 of our Design Section, Design Branch, Highways Division, or by email at Li.Nah.Okita@hawaii.gov or Michelle.S.Kwan@hawaii.gov and reference letter number HWY-DD 2.2468 as noted above.

Sincerely,

Karen Chun

KAREN CHUN
Engineering Program Manager
Design Branch, Highways Division

Enclosure

c: WSP

I CONCUR: Date 07/28/2020
for
Division Administrator, FHWA

Meesa S. Otani
Digitally signed by MEESA T. OTANI
Date: 2020.07.28 10:27:03 -10'00'

By: Meesa Otani
Environmental Engineer

DAVID Y. IGE
GOVERNOR

HIGHWAY DESIGN BRANCH, ROOM 688A
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JADE T. BUTAY
DIRECTOR

Deputy Directors
LYNN A.S. ARAKI-REGAN
DEREK J. CHOW
ROSS M. HIGASHI
EDWIN H. SNIFFEN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

IN REPLY REFER TO:
HWY-DD 2.3640

October 1, 2020

VIA EMAIL: rubyrosa.t.terrago@hawaii.gov

TO: SUZANNE D. CASE
CHAIRPERSON
DEPARTMENT OF LAND AND NATURAL RESOURCES

ATTN: DAVID SMITH
ADMINISTRATOR
DIVISION OF FORESTRY AND WILDLIFE

FROM: KAREN CHUN Karen Chun
ENGINEERING PROGRAM MANAGER
DESIGN BRANCH, HIGHWAYS DIVISION

SUBJECT: ALA MOANA BOULEVARD ELEVATED PEDESTRIAN WALKWAY
KAKAAKO, OAHU, FEDERAL-AID PROJECT NO. BLD-092-1(029)
CHAPTER 195D HAWAII REVISED STATUTES (HRS) CONSULTATION

The State of Hawaii Department of Transportation (HDOT) is proposing to build an elevated pedestrian and bicycle walkway over Ala Moana Boulevard, which would provide a safe and efficient way for pedestrians and bicyclists to cross over the busy highway and reduce vehicle-pedestrian accidents at the Ward Avenue and Kamakee Street intersections.

The purpose of this letter is to consult with the Department of Land and Natural Resources' Division of Forestry and Wildlife to determine if any species of concern, or threatened and endangered plant and animal species and critical habitats within the vicinity of the project would be affected by this project.

The project is a partnership between the HDOT and Victoria Ward Limited (VWL). HDOT will procure and administer construction and own the bridge while VWL will contribute the mauka right-of-way, and secure the makai landing right-of-way from the Hawaii Community Development Authority. VWL will also fund the environmental review and walkway design, as well as maintain non-structural improvements. The Federal Highway Administration (FHWA) will contribute construction funding. As a federal undertaking, FHWA has consulted with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (USFWS) regarding species protected by federal regulations.

Proposed work includes building a "land bridge" over Ala Moana Boulevard with links to paths on either side of the roadway. A map of the project area is enclosed. Mauka of Ala Moana Boulevard, VWL is developing a 60-acre master planned Ward Village, which is expected to create at least 4,500 new residential condominiums. Additionally, the Honolulu Rail Transit's Kakaako Station will be located nearby where 2,650 pedestrians and cyclists are projected to access the station each day.[1]

The new elevated walkway would be accessible via both stairway and an American with Disabilities Act (ADA) path that connects to the Ala Moana Boulevard sidewalks. Lighting would be needed for the elevated walkway, ADA paths or sidewalks leading to the structure, and under the structure along Ala Moana Boulevard. The bridge would be landscaped, and drainage would tie into the roadway facility.

A central pier to support the walkway structure would be placed in the highway median. Trees within the right-of-way may require removal or relocation. At this time, no underground utilities are expected to be relocated. Construction is anticipated to start in January 2022 and be completed by June 2023. Night work may be required to minimize impacts on traffic from lane closures. During construction, full closure and one-lane closures may require detours.

To assist us in our assessment, if you have any knowledge or concerns regarding the likely impact of the project on species of concern or species protected by Chapter 195D HRS, we would appreciate receiving such information in writing within 30 days of the date of this letter. Informal consultation with the USFWS, yielded information that nesting white fairy terns or manu-o-ku (*Gygis alba*) may occur within the project area. Specific knowledge of their likely occurrence, as well as recommendations and best management practices to avoid, minimize, or mitigate impacts to these species would be greatly appreciated.

Should you have any questions, please contact Li Nah Okita, HDOT Project Manager, at (808) 692-7581 or Michelle Kwan, HDOT Project Engineer, at (808) 692-8441 of our Design Section, Design Branch, Highways Division, or by email at Li.Nah.Okita@hawaii.gov or Michelle.S.Kwan@hawaii.gov and reference letter number HWY-DD 2.3640 as noted above.

Enclosure

[1] Honolulu Authority for Rapid Transit (HART), *Station Access and Modal Interface Report*, August 2011.

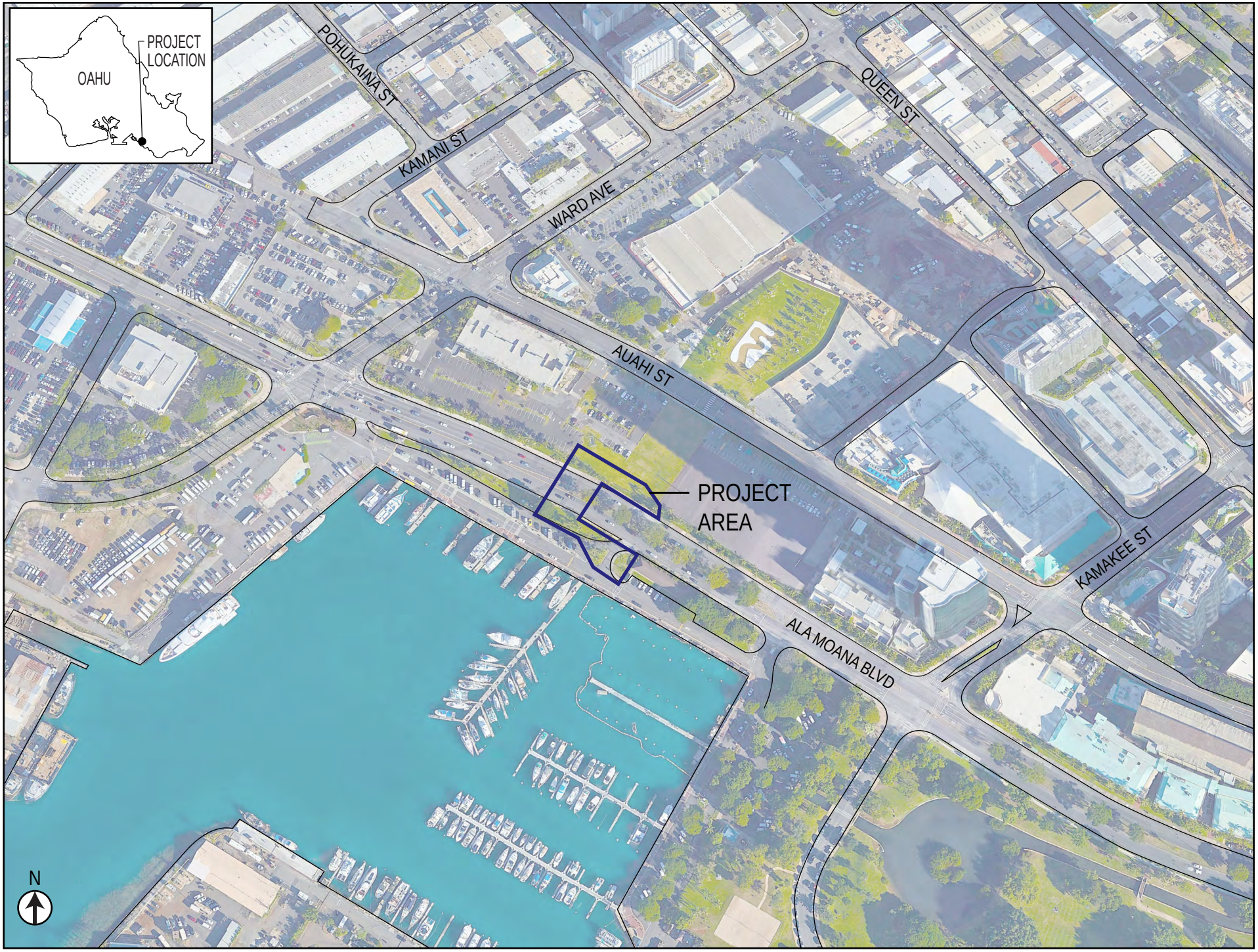

Figure 01
Project Location Map
Ala Moana Elevated Pedestrian Walkway

DAVID Y. IGE
GOVERNOR OF HAWAII

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

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813

October 26, 2020

MEMORANDUM *Log no. 2834*

TO: KAREN CHUN, Engineering Program Manager
Design Branch, Highways Division
Department of Transportation

FROM: DAVID G. SMITH, Administrator
Division of Forestry and Wildlife

SUBJECT: Division of Forestry and Wildlife Comments for Ala Moana Boulevard Elevated Pedestrian Walkway Kakaʻako, Oʻahu, Federal-aid Project No. BLD-092-1(029) Chapter 195D Hawaii Revised Statutes (HRS) Consultation

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received your inquiry regarding the elevated pedestrian walkway on Ala Moana Boulevard in Kakaʻako on Oʻahu, Hawaiʻi. The proposed project consists of building a "land bridge" with links to paths on either side of Ala Moana Boulevard to provide an efficient way for pedestrians and bicyclists to cross over the roadway.

The State endangered White Tern (*Gygis alba*) or Manu o Kū has been recorded nesting around the proposed project site. If tree trimming or removal is planned, DOFAW strongly recommends surveying for the presence of White Terns prior to any action that could disturb the trees. White Tern pairs lay their single egg in a branch fork with no nest. The eggs and chicks can be easily dislodged by construction equipment that nudges the trees. If a nest is discovered, please notify DOFAW staff at (808) 587-0166 for assistance.

The State listed Hawaiian Hoary Bat or ʻŌpeʻapeʻa (*Lasiurus cinereus semotus*) has the potential to occur in the vicinity of the project area and may roost in nearby trees. If any site clearing is required this should be timed to avoid disturbance during the bat birthing and pup rearing season (June 1 through September 15). If this cannot be avoided, woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed without consulting DOFAW.

We note that artificial lighting can adversely impact seabirds that may pass through the area at night by causing disorientation. This disorientation can result in collision with manmade artifacts or grounding of birds. For nighttime lighting that might be required, DOFAW recommends that all lights be fully shielded to minimize impacts. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season from September 15 through December 15. This is the period when young seabirds take their maiden voyage to the open sea. For illustrations

and guidance related to seabird-friendly light styles that also protect the dark, starry skies of Hawai‘i please visit: https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf.
DOFAW recommends minimizing the movement of plant or soil material between worksites, such as in fill. Soil and plant material may contain invasive fungal pathogens, vertebrate and invertebrate pests (e.g. Little Fire Ants, Coconut Rhinoceros Beetles), or invasive plant parts that could harm our native species and ecosystems. We recommend consulting the O‘ahu Invasive Species Committee at (808) 266-7994 in planning, design, and construction of the project to learn of any high-risk invasive species in the area and ways to mitigate spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

We appreciate your efforts to work with our office for the conservation of our native species. 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 Koa Matsuoka, Protected Species Habitat Conservation Planning Associate at (808) 587-4149 or koa.matsuoka@hawaii.gov.

APPENDIX A-3
VIRTUAL PUBLIC MEETING

Public Meeting Question & Answer Session Notes

Ala Moana Boulevard Elevated Pedestrian Walkway

Public Meeting / Question & Answer Session Notes

October 15, 2020
Location: Zoom (Video Conference)
A recording of the meeting is available.
https://hidot.hawaii.gov/highways/amwalkway/
Link Here: https://vimeo.com/469960108

Started admitting public at 5:55
Meeting opened: 6:05

Scott Keillor (WSP) started off with a welcome, presented the agenda and discussed the ground rules.

Nick Fazio (WSP) explained how to participate in the meeting and then Scott Keillor introduced the HDOT staff.

George Abcede (HDOT) provided background information on the project and introduced the video. After a few moments, there were some technical difficulties with the video, and he switched to explaining the design concepts for the bridge by showing renderings and a cross section. The video then started again.

At the end of the video, Ed Sniffen (HDOT) answered some questions the team thought the public might have:

1. Will the crosswalks at Ward Avenue and Kamakee be retained? This project is about safety, what else is HDOT doing to improve safety at Ala Moana Boulevard? Couldn't these funds be used for other safety improvements?
    - At-grade intersections at Ward Avenue and Kamakee Street will not change as a result of this project and implementation of this project does not mean that other improvements at Ala Moana Boulevard cannot proceed.
    - Safety improvements are being planned. Roadway resurfacing from Sand Island Access Road to Kalia Road is being looked at. During the resurfacing, the Kamakee and Piikoi intersection will be addressed, including "no turn on Red" restrictions which will be implemented to protect pedestrians and cyclists. There will be restriping and crosswalk widening at some intersections that will allow for increased safety and visibility for pedestrians, cyclists, and drivers. Crosswalk improvements in the Kalihi area will also contribute to safety improvements of this corridor as a whole. Plans will be posted on HDOT website for public feedback next week.
    - The BUILD grant was awarded for this project only and BUILD grants require private funds to be invested. HDOT will continue to look at measures to enhance pedestrian safety along Ala Moana Blvd.

2. The project location has already been selected, and we're looking at a preliminary concept. What input does HDOT need from us?
    - This project can only move ahead because of the BUILD federal grant. These types of grants are looking for additional funding to maximize public funds. VWL stepped up as a partner. FHWA awarded the grant money based on this specific project and location. The concept is preliminary, but the design details are not set. Looking at making this project the best it can be for the community. We welcome comments on the proposed design, and elements associated with it.

3. What have you done to be sure the project doesn't affect iwi kūpuna?

    An archaeological inventory survey and a cultural impact assessment is in the process of being prepared. We have started to reach out to cultural and lineal descendants of the area to assist us in identifying those sensitive resources.

4. Hasn't this area been identified to be part of the Sea Level Rise inundation area? Why are we investing any funds in infrastructure here?

    A 1-meter rise is predicted by the turn of century. Normal wave action will impact the system prior to 2100. The state report is always referred to regarding sea level inundation. There is a beach park in that area and an elevated walkway could remain an effective means of crossing the inundated areas. Until that time of Sea Level Rise affecting this area, people still require efficient and safe transportation.

5. How will this bridge affect our "country-like" refuge at Kewalo? What impact will these big droves of people have on our refuge from the urban life? Is this just another benefit for the Victoria Ward condominiums, and accommodating their residents?

    This is a tie in for the future needs in this growing area. Mauka developments, aside from VWL, will be contributing to traffic. There will be a new rail station and businesses coming in. We could not build this project without the grant funds. We are preparing for the future.

<u>COMMUNITY QUESTIONS</u>

Questions were submitted both through the chat box and having attendees "raise" their hand via the Zoom Application.

Q: Is the BUILD grant only for this location?
A: Yes. The awarded BUILD grant funds can only be used in this location, with this partner (Victoria Ward Limited).

Q: A bridge over an active road is dangerous because things can be thrown over the edge.
A: To ensure minimized impacts to traffic below there will be a vegetated edge buffer between the walkway and the edge of structure. We cannot guarantee that we can stop all misbehavior on any of our systems.

Q: There is more pedestrian traffic at Ala Moana Park and Ala Moana Center than the Ward area. Why build the bridge here?
A: More pedestrian traffic is expected in the project area in the future. One of the federal grant requirements was having a private entity to partner with HDOT on the project. This project was awarded over competing projects from all over the nation. Ward Village stepped up as a partner with a winning grant application.

Q: Application talks about a pedestrian walkway. Have the project partners committed to including cyclists?
A: Yes.

Q: Who controls the bridge after completion?
A: HDOT will control the bridge after completion.

Q: Is there any intent to improve pedestrian/cyclist facilities below and around the bridge to improve pedestrian traffic along Ala Moana Boulevard?
A: Yes. HDOT will look at that.

Q: Where is the non-Ward resident access on the Mauka side?
A: The project is not dedicated to Ward residents. There are stairs/ramp that lead directly to Ala Moana Boulevard. ADA Accessible accesses are available from the public sidewalk as well as the future Victoria Ward Park.

Comment: Hawaii Bicycling League (HBL) is excited about the access but concerned new and experienced bicyclists will have trouble navigating the turns. Potential for issues between pedestrians and cyclists. HBL also has concerns about the increased load once the train starts and longer distance cyclists as this is a major thoroughfare for cyclists. Also concerns regarding bike share usage among inexperienced tourists. HBL has offered to assist with easing potential issues among pedestrians and cyclists given their concerns.

Q: What are the projected use statistics (post-COVID)?
A: Anticipated to return to normal and increase with rail usage.

Q: Nothing states that the approval includes cyclists riding across the bridge.
A: HDOT checked with USDOT and they agreed cyclists are allowed. The repaving project can contribute to accommodations for cyclists going east-west along Ala Moana (or adjacent streets).

Comment: Douglas Meller does not object to bicyclists on the bridge, but additional accommodations should be made for bicyclists along Ala Moana Boulevard East and West. New bike ways need to be connected to existing bikeways, otherwise they will not work. Weekend cycling conditions are hazardous.

Q: If the crosswalks at Ward and Kamakee will still be used why spend all this money on this one spot?
A: The project accommodates present and future needs. HDOT is not saying that the current intersections aren't working , but this project will tie into other improvements on the corridor and will provide for additional accommodations for pedestrians and bicyclists throughout corridor. Project may cost $30M but State is only contributing $4.5M. Existing pedestrian crossings will still be used, but HDOT is looking at additional improvements such as eliminating right turns on red at intersections like Piikoi.

Q: What is it that HCC [Howard Hughes Corporation, more appropriately, Victoria Ward, Limited. (VWL)] is putting into the match for the project?
A: HDOT has explained the HCC [HHC][VWL] contribution in previous question.

Q: What is HDOT doing to avoid unintended consequences of the bridge such as bringing more wheeled vehicles to Ala Moana Beach park and making the park a tourist destination park? What is the steepest grade or slope along the path including the bridge and what kinds of provisions/laws are there to protect people on the bridge?
A: Pedestrian overpasses require 36-inch railings, bicycle usage would raise the railing requirement to 42 inches. HDOT does not expect the bridge to drive more traffic to the park, but to make it easier to access the beach park. HDOT can discuss safety and better enforcement with HPD on State and City ordinances that already exist for vehicle prohibition on public sidewalks and walkways.

Q: Ward used to be excellent at managing their land. Has there been discussion about using Ward security?
A: Yes. Part of the agreement with Ward includes HDOT taking care of the physical bridge structure and VWL will take care of the landscaping, the lighting and some security.

Q: Will bicyclists be required to walk across the bridge?
A: No. The plan is to allow riding, but we still need to consider safety issues related to riding bikes among pedestrians.

Q: What can we do to make sure it's not another ugly concrete structure and make sure it reflects the beauty of Hawaii?
A: That's part of what this discussion is about -- input to make the project what the public would want. Safety, environmental, and funding requirements will be analyzed to produce a structure that is an icon for the community, rather than an eyesore.

Q: What truck heights will clear the bottom of the bridge?
A: The proposed bridge will be 17.5 feet high to the bottom of the bridge. All vehicles (14-foot State restriction) that can go on the highway, will be able to get under the bridge. Exception loads can use alternate routes. Double decker buses can make it under the bridge. Drivers and transporters of oversized loads have the vehicle height limitations throughout the HDOT system.

Q: How high do pedestrians need to climb (in building stories)?
A: The climb is around two flights of stairs. The steepest grade for the ramps will be 5% which meets the ADA regulations.

Q: Who controls use and access?
A: HDOT controls use and access but VWL will extend their security to the bridge. There is no overnight closure of the bridge structure. It is a public facility.

Q: Does HDOT have plans to change other facilities along Ala Moana?
A: Looking at maximizing use for vehicles and bicycles currently. Other changes to Ala Moana Boulevard are in the plan for the repaving project which HDOT will post next week on HDOT website. There are no plans to add parking.

Q: How can you say park usage won't increase?
A: HDOT is accommodating the [pedestrian/bicycle] traffic that we see based on current use and future projections. Transportation systems do not govern use; land use does

Q: On the makai side, there's a harbor administrator building with an exit.
A: The exit near that building will be closed.

Q: Were at grade and no build options considered? Don't those have to be considered as a part of the NEPA process?
A: We consider other options, but the grant means we are leaning toward an elevated option. After analyzing the studies, the pros and cons of each are assessed.

Q: Will this Zoom recording be available to the public?
A: Yes. We will post it on the website. All the questions are being recorded.

Q: If the jurisdiction of the bridge is with the State, who will enforce homeless and others from the bridge if HPD is the arm of the city?
A: HDOT works well with HPD to handle unwanted individuals. Jurisdiction does not matter since HDOT and HPD work well together.

Q: Is it a pathway or walkway or other?
A: It's a shared use path on a grade separation.

Comment: A shared use path with pedestrians and bicyclists could pose a problem if there are no lines. Ala Moana Beach Park was brought up as an example.

Q: Construction is expected to take 30 months. What impacts will there be to traffic and current users during construction?
A: During construction we try to stay out of the ROW. HDOT will minimize both traffic and noise impacts. There are plans to work at night to minimize impacts to the public. There will be shutdowns to lay the girders and the contractor will do one side at a time. A contraflow will be implemented to ease gridlock during high traffic times. There might have to be a period when both sides will need to be closed, perhaps overnight or over a weekend, we try to minimize the need for this, but there will be an effort to inform the public of any closures.

Comment: Let's make this a beautiful functional addition to our city like the helix bridge in Singapore. It would be great to bring in other private sector support.

Comment: It's great to hear about controlling homelessness and HPD involvement, but it makes me wonder what has been happening at other parks, such as Kakaako, regarding difference in jurisdiction between City, State, and HPD.

Q: Can you foresee any limitations to users? What will be prohibited from the shared use path
A: Bicycles will be allowed to use the path, we know that shared use paths can be safe with both bicyclists and pedestrians, but will need to check on other types like scooter users. Mopeds can't use the path. HDOT envisions bicyclist and pedestrians. Statutes and ordinances outline what vehicles can use shared use paths from a legal perspective.

Q: Ala Moana sidewalk has very diverse types of users. Pedestrians are often carrying surfboards and there are Segways, motorized scooters, skateboards, one wheeled motorized devices and bicycles also on the shared path. Emerging vehicles will be used by residents and tourists. HDOT should recognize and ban all motorized vehicles from using this pathway. Often Segway users don't come alone, they come in a group.
A: Vehicles traveling at a certain speed are not expected in this area. The statutes and ordinances don't allow motorized vehicles, but currently Segways are allowed. Segways often travel at a lower speed than other motorized vehicles.

Comment: Please keep in mind that groups of motorized vehicle users poses a problem for folks in wheelchairs, those who are unable to travel at a certain speed or have full mobility of their legs.

Q: Do you think people will want to stand on the bridge to view the sunset and maybe clog up the bridge? Suggestion to have signs stating "no standing"?
A: HDOT can take a look at that.

Q: Is there a weight limit on the bridge?
A: We can get back to you on that. (Post meeting note: Bridge would be designed for a live load of 90 pounds per square-foot over the walkway path)

Q: There are two cement remnants of the historic freshwater channel (auwai) that ran from Kapiolani Home to Kewalo Harbor. Will HDOT, SHPD, and/or HHC protect these features?
A: Yes. We are in the process of evaluating archaeological and historic resources. We look at the proposed project and how it will affect the auwai system. We are aware of it will look at avoidance as a part of that process.

Comment: If there are two flights, there won't be many people carrying their segways to access the bridge.

Q: Where will Ward allow parking for non-residents? Since non-residents aren't granted street parking, Auahi parking could be limited.
A: At the moment, all of the parking at the Ward Village commercial level are promised to tenants for customer use. All the parking is currently committed to business tenants.

Q: Please explain who is on the planning team and how are they deciding on the design?
A: The decision makers are HDOT and VWL. WSP's role is advising, facilitation, and acting as a resource and coordinator for HDOT and VWL. Ed Sniffen is representing HDOT and Lee Cranmer representing VWL.

Q: Mauka side starts from the park (Victoria Ward Park) so since there isn't parking for the public, it seems this bridge is just for the ward residents.
A: Victoria Ward Park will extend from Ala Moana Boulevard, across Auahi St, to Halekauwila Street (to where the rail station will be). There will be a public use easement over the 5-acre park. The park will have similar hours and rules to public park hours, but it will be maintained by funds from the Ward community residents and merchants. Monthly dues will fund upkeep of this private park. During daylight hours, unless closed for maintenance or special event, it will be open to the public. Joint use pathways will allow bicycle use from the future HART station to the bridge for the general public during daylight hours. One of the donations form VWL is almost a third of an acre on which the bridge will be built. The bridge will be open 24/7 with access from Ala Moana Boulevard.

Q: At night, the park would be closed?
A: Rules are not in place yet, but the intent is to model the VWL park rules on the rules of other City parks, which are closed from dusk until dawn or extended hours 10pm-6am. Access through the park will be restricted, but access from Ala Moana Boulevard would not be restricted.

Chat box open until 7:40.

Closing comments by HDOT: Appreciate everyone's presence and involvement and we apologize the project is limited due to nature of funding. We want the public input and to make this the best project we can. We want this to be something the community can be proud of. We're committed to whole communities and we'll post plans for the repaving online next week. Please look at the plans and provide input.

Q: When will the formal comment period be held?

A: Until October 22. Comments can be sent to: dot.hwy-alamoanaped@hawaii.gov (provided verbally)

Meeting ended at 7:30

APPENDIX B
CULTURAL IMPACT ASSESSMENT

FINAL
Cultural Impact Assessment for the Ala Moana Boulevard Elevated Pedestrian Walkway Project, Honolulu Ahupuaʻa, Honolulu (Kona) District, Oʻahu TMKs: [1] 2-1-001:129 (por.), 2-1-058:132 and 133 (por.)

Prepared for
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Management Summary

Reference	Cultural Impact Assessment for the Ala Moana Boulevard Elevated Pedestrian Walkway Project, Honolulu Ahupua‘a, Honolulu (Kona) District, O‘ahu, TMKs: [1] 2-1-001:129 (por.), 2-1-058:132 and 133 (por.)
Date	August 2020
Project Number(s)	Cultural Surveys Hawai‘i, Inc. (CSH) Job Code: KAKAAKO 268
Agencies	SHPD; Hawai‘i Department of Transportation (HDOT), U.S. Department of Transportation (USDOT); City and County of Honolulu Department Planning and Permitting (DPP); Hawaii Community Development Authority (HCDA)
Land Jurisdiction	State (HDOT) and private (Victoria Ward, Limited [VWL])
Project Proponent	VICTORIA WARD, LTD. (VWL) HDOT
Project Location	The project is located in *‘ili ‘āina* (smaller land division within an *ahupua‘a*) of Kaka‘ako, Honolulu (Kou) Ahupua‘a, Honolulu (Kona) District, O‘ahu. The project area is located at the intersection of Ala Moana Boulevard and Ward Avenue. The project area is depicted on a portion of the 1998 Honolulu U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 1), a tax map plat (Figure 2), and a 2016 Google Earth Aerial Imagery photograph (Figure 3).
Project Description	Private and public partnership to build a pedestrian and bicycle bridge spanning Ala Moana Boulevard to connect pedestrians to and from Ward Village and Kewalo basin harbor.
Project Acreage	The project area includes the footprint of direct construction-related ground disturbance—the bridge and retaining wall foundations, the landscaping, etc. as described above. The project area measures 0.729 acre (0.295 hectare).
Document Purpose	This cultural impact assessment (CIA) was prepared to comply with the State of Hawai‘i’s environmental review process under Hawai‘i Revised Statutes (HRS) §343, which requires consideration of the proposed project’s potential effect on cultural beliefs, practices, and resources. Through document research and cultural consultation efforts, this report provides information compiled to date pertinent to the assessment of the proposed project’s potential impacts to cultural beliefs, practices, and resources (pursuant to the Office of Environmental Quality Control’s *Guidelines for Assessing Cultural Impacts*) which may include traditional cultural properties (TCPs). These TCPs may be significant historic properties under State of Hawai‘i significance Criterion e, pursuant to Hawai‘i Administrative Rules (HAR) §13-275-6 and §13-284-6. Significance Criterion e refers to historic properties that “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” (HAR §13-275-6 and §13-284-6).
Results of Background Research	Background for this project yielded the following results presented in approximately chronological order: Kaka‘ako, an *‘ili ‘āina*, of Waikīkī, is located between two of the most intensely populated and historically cultivated areas in southeastern O‘ahu, Waikīkī and Honolulu (also known as Kou). The Kaka‘ako area consisted of marshes, some wetlands, tidal flats and shoreline with access to marine resources of the fringing reefs. Native Hawaiians utilized the tidal flats for salt making, the uplands for farming, and the shoreline and reefs for harvesting fish, shellfish, and *limu* in fishponds. Pu‘ukea Heiau was located in the *‘ili* of Kukuluāe‘o according to Kamakau (1991:24). Pu‘ukea means “white hill” and is also the name of a smaller land division within Kukuluāe‘o ‘Ili that is mentioned in at least two Land Commission Awards (LCA); LCA 1502 (not awarded) and 1504. LCA 1504 is located near the junction of Halekauwila and Cooke streets. There is a possibility the *heiau* platform or the area it was built on was one of the few elevated locations in the flat, low-lying swamp that surrounded it. A trail traversed the Kaka‘ako area, ultimately connecting Waikīkī to Honolulu. ‘Ī‘ī (1959:89) described the middle trail (close to the current alignment of Queen Street) extending from Kālia to Kukuluāe‘o as passing “along the graves of those who died in the smallpox epidemic of 1853, and into the center of the coconut grove of Honuakaha. On the upper side of the trail was the place of Kinau, the father of Kekauonohi.” The ancient trails are now replaced by public streets. In 1840, Hansen’s disease was first reported and officially identified in 1853. In 1865, a hospital in the Kalihi Ahupua‘a was established to help examine anyone who may have contracted the disease. Confirmed patients were exiled to Kalaupapa on Moloka‘i. In 1881, a receiving station was built in Kaka‘ako for patients who had contracted the Hansen’s disease. This station was located in a block now bounded by Ala Moana, Auahi, Coral, and Keawe streets, and was under the direction of Saint Marianne Cope (Griffin et al. 1987:55). Much of the coastal land in the Kewalo and Kūkuluāe‘o areas were used to produce salt, even historically, as a large commercial enterprise. Native Hawaiians used *pa‘akai* to flavor food, to preserve food such as fish, for ceremonial practices, and for medicinal purposes. Salt is no

	longer produced in the area, however archaeological excavations on the *mauka* side of Ala Moana Boulevard. have uncovered the remains of the salt ponds from that commercial activity During an 1853 smallpox epidemic, patients were isolated at a temporary quarantine camp in Kaka‘ako (Thrum 1987:98). Victims of the disease were buried at Honuakaha Cemetery, near the junction of Quinn Lane and South Street (Griffin et al. 1987:13). Throughout the past 150 years, Kaka‘ako has been heavily modified by historic filling of the area for land reclamation. Ala Moana Boulevard. is located approximately at the former sandy shoreline and to *makai* of the project area. The shallow reef, where it enclosed a deeper section of water, was dredged to form the Kewalo Basin Harbor in the mid-1880s. Dredged materials were used to fill areas *mauka* of Ala Moana Boulevard. and to create fill land for the construction of wharfs and piers around the harbor for predominantly commercial *aku* fishing sampans and the old Coral Tuna cannery. The *aku* fishing and canning industry is no longer at Kewalo Basin but has been replaced by commercial deep sea fishing charter boat industry. The Kakaako area has been found to have many burial sites, some isolated *iwi kūpuna* and some in small cemeteries. Immediately *mauka* of the Kewalo Basin Harbor, *iwi kūpuna* were discovered in sand deposits beneath the roadway at the intersection of Ala Moana Boulevard and Kamake‘e Street (Souza et al. 2002).
Results of Community Consultation	CSH contacted, by mail and email, appropriate Native Hawaiian organizations and government agencies, and reached out to community members including known cultural and lineal descendants of Kaka‘ako to identify individuals with cultural expertise and/or knowledge of the project area and vicinity. Of the individuals contacted, CSH received feedback from the individuals below: 1. Manuel Makahiapo Kuloloio, Lineal Descendant 2. Ron Iwami, President, Friends of Kewalos The cultural knowledge, of participants who contributed through consultation, was voiced and their concerns are presented in a cultural context as follows: 1. Mr. Kuloloio stressed the presence of *iwi kūpuna* and the possibility of impacting *‘ilina* during the project. Mr. Kuloloio shared insight on various burials that are within the area of potential effect or within the project area. These burials sites are State Inventory Historic Places (SIHP) #s 50-80-14-07659, -6377, -07657, and -0770. 2. Mr. Kuloloio also shared the importance of *‘auwai* and lava tubes which help bring fresh water to the ocean which is vital in

	maintaining the health of the sea and sea life. Fishing and other ocean-practices were conducted around this area. Damage to an *‘auwai* or lava tube system can affect the ocean and its cultural practices. 3. Mr. Iwami understands the safety aspect of the Elevated Pedestrian Walkway but is concerned the walkway will grant easier access to individuals with no real connection to Kewalo. Mr. Iwami is concerned that scores of people, specifically from nearby luxury condos, will utilize this walkway to access Kewalo and impede on local residents that use Kewalo recreationally and who consider it a sanctuary.
Cultural Impact Assessment	No traditional cultural activities have been identified as currently occurring in the project area. However, the past traditional activity of burying *iwi kūpuna* in sandy soil deposits that are confirmed to be present in the project area (Farley et al. 2020) must be considered. At any time *kūpuna* are identified as present in the project area, their presence alone activates various on-going cultural activities at the precise location of the *iwi*. The traditional cultural activities will include but may not be limited to religious ceremony, protective measures for the *iwi* and decision making to address disposition of the iwi. These traditional cultural practices are attached to the *iwi* and are also protected by modern law under the Hawaii Revised Statutes (HAR) and Hawaii Administrative Rules (HAR). Current archaeological and geotechnical investigations find that the natural sandy deposits traditionally used for human burial are present in the project area. To insure the laws that protect the traditional cultural practices associated with burial are implemented immediately upon the discovery of *iwi kūpuna*, project construction workers and all other personnel involved in the construction and related activities of the project should be informed of the possibility of cultural finds especially human remains.

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Section 1 Introduction

1.1 Project Background

At the request of Victoria Ward, Limited (VWL), Cultural Surveys Hawai‘i, Inc. (CSH) has prepared this cultural impact assessment (CIA) for the Ala Moana Boulevard Elevated Pedestrian Walkway Project, Kaka‘ako, Honolulu Ahupua‘a, Honolulu (Kona) District, O‘ahu, TMK parcels [1] 2-1-001:129 (por.), 2-1-058:132 and 133 (por.); and Ala Moana Boulevard right-of-way (ROW). The elevated walkway will span Ala Moana Boulevard between its intersections with Ward Avenue and Kamake‘e Street. The project area is bounded to the north by a parking lot and structure associated with the recently demolished Ward Warehouse Shopping Center and a tract of lawn that now occupies a portion of the former Ward Warehouse; to the west and east by the Ala Moana Boulevard roadway and tree-lined median; and to the south by the Kewalo Basin and associated harbor. The 0.720-acre (0.295-hectare) project area is depicted on a portion of the 1998 Honolulu U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 1), a tax map plat (Figure 2), and a 2016 Google Earth Aerial Imagery photograph (Figure 3).

The project is a partnership between public and private entities. The Hawai‘i Department of Transportation (HDOT) will procure and administer construction and own the bridge, while VWL will contribute the *mauka* right-of-way and secure the *makai* landing right-of-way from the Hawaii Community Development Authority (HCDA), fund design, historic preservation review, and environmental review, as well as maintain non-structural improvements.

1.2 Document Purpose

The purpose of this CIA is to comply with the State of Hawai‘i’s environmental review process under Hawai‘i Revised Statutes (HRS) §343, which requires consideration of the project’s potential effect on cultural beliefs, practices, and resources (such as access to gather needed materials such as plants, food, and marine life). Through document research and cultural consultation efforts, this report provides information compiled to date pertinent to the assessment of the proposed project’s potential impacts on cultural beliefs, practices, and resources (pursuant to the Office of Environmental Quality Control’s *Guidelines for Assessing Cultural Impacts*), which may include traditional cultural properties (TCPs). These TCPs may be significant historic properties under State of Hawai‘i significance Criterion e, pursuant to Hawai‘i Administrative Rules (HAR) §13-275-6 and §13-284-6. Significance Criterion e refers to historic properties that “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” (HAR §13-275-6 and §13-284-6). The document is intended to support the project’s environmental review and may also serve to support the project’s historic preservation review under HRS §6E and HAR §13-275 and §13-284.

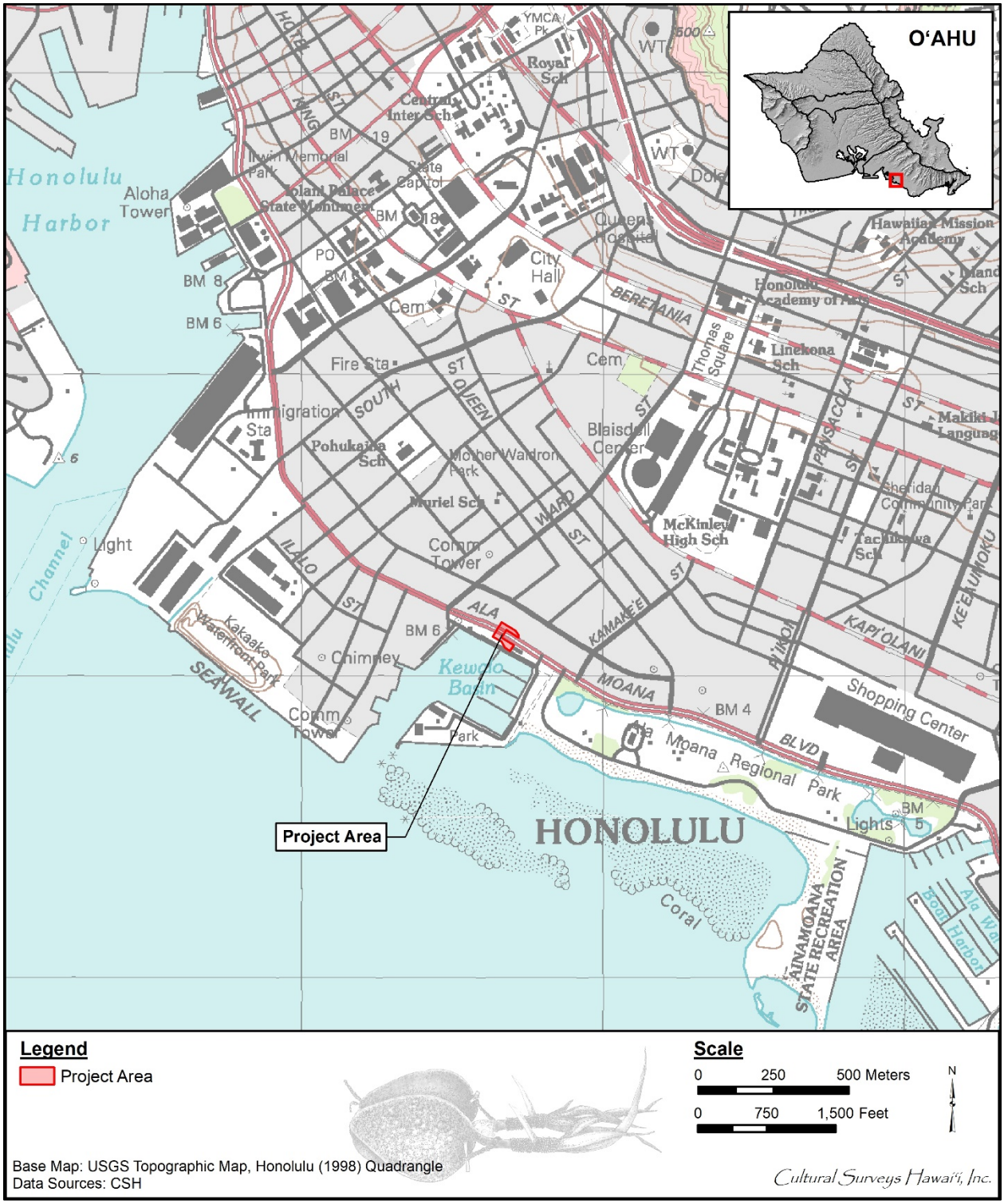

Figure 1. Portion of the 1998 Honolulu USGS 7.5-minute topographic quadrangle showing the project area

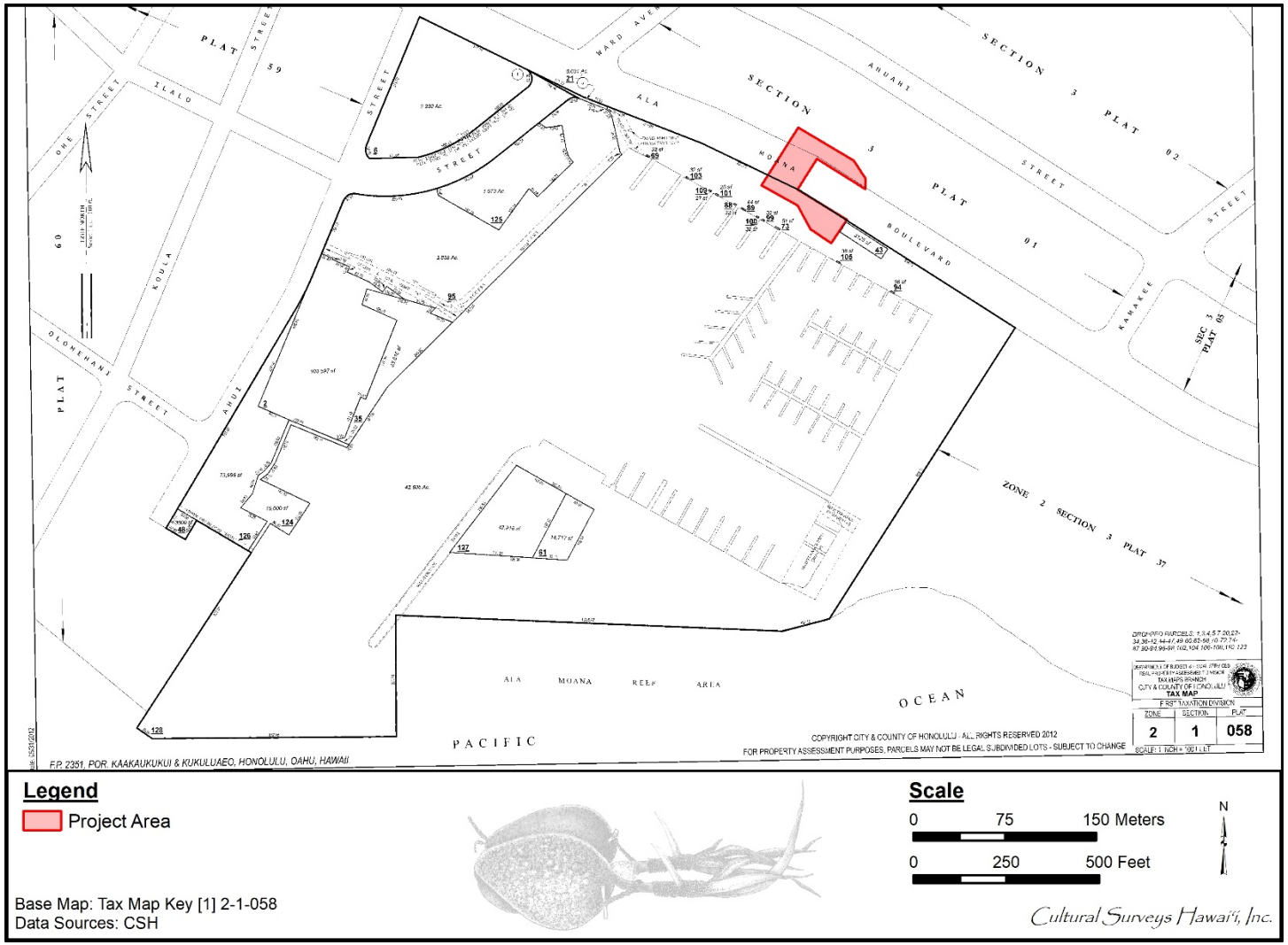

Figure 2. Tax Map Key (TMK) [1] 2-1-058 showing the project area (Hawai‘i TMK Service 2014)

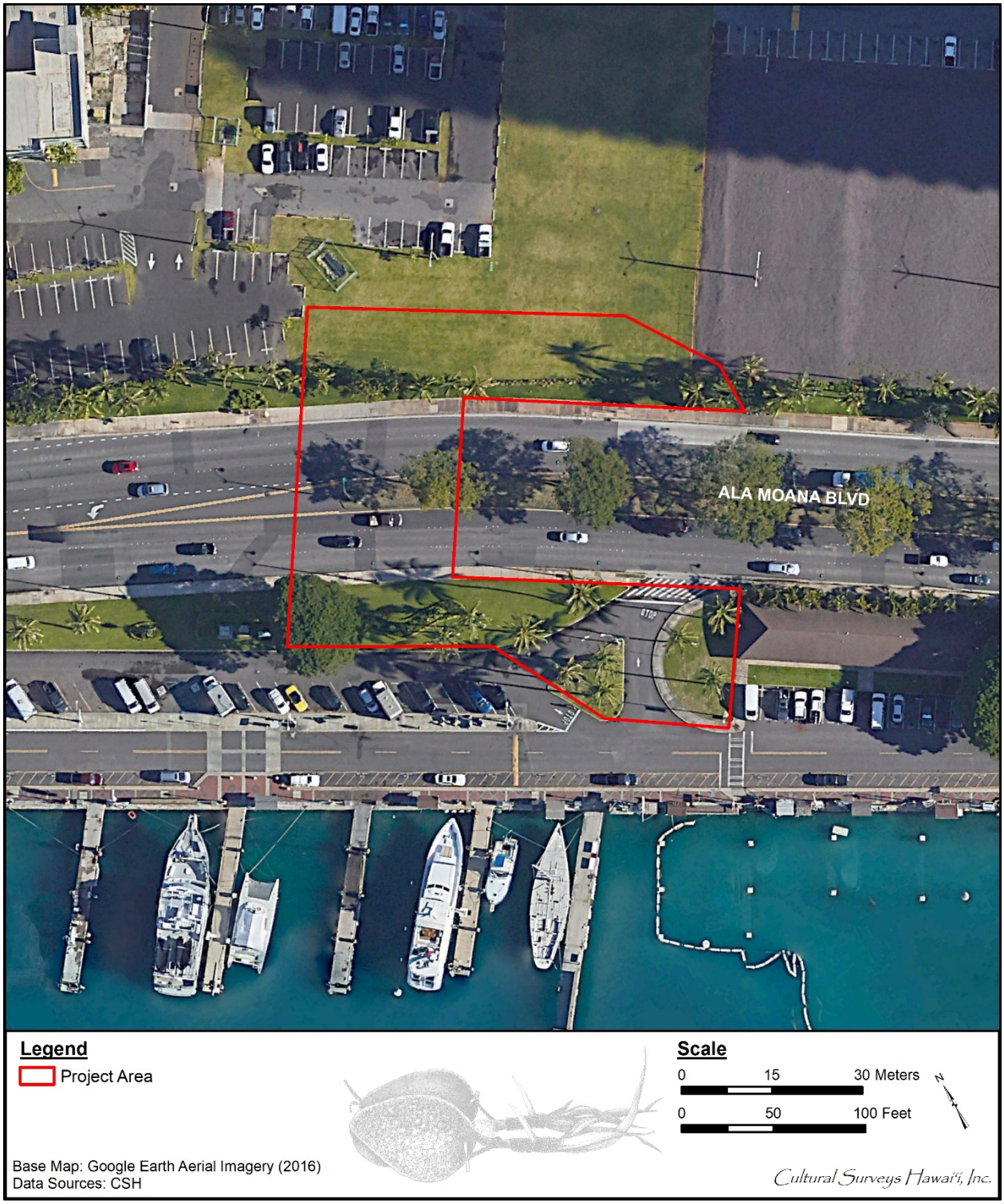

Figure 3. 2016 Google Earth Aerial Imagery photograph showing the location of the project area

The scope of work for this cultural impact assessment includes the following:

1. Examination of cultural and historical resources, including Land Commission documents, historic maps, and previous research reports, with the specific purpose of identifying traditional Hawaiian activities including gathering of plant, animal, and other resources or agricultural pursuits as may be indicated in the historic record.
2. Review of previous archaeological work at and near the subject parcel that may be relevant to reconstructions of traditional land use activities; and to the identification and description of cultural resources, practices, and beliefs associated with the parcel.
3. Interviews with knowledgeable parties regarding cultural and natural resources and practices at or near the parcel; present and past uses of the parcel; and/or other practices, uses, or traditions associated with the parcel and environs.
4. Preparation of a report that summarizes the results of these research activities and provides recommendations based on findings.

1.3 Environmental Setting

1.3.1 Natural Environment

The Kaka‘ako project area is within a physiographic region of O‘ahu called the Honolulu Plain, an area generally less than 4.5 m, or 15 feet (ft), above mean annual sea level (Davis 1989:5). The Honolulu Plain is stratified with late Pleistocene coral reef substrate overlain with calcareous marine beach sand or terrigenous sediments (i.e., formed from erosion of rocks on land), and stream-fed alluvial deposits (i.e., material deposited by running water) (Armstrong 1983:36). A highstand of the sea for the Hawaiian Islands, approximately 1.5 to 2.0 m above present sea level, has been well documented between 4,500 and 2,000 years ago (Stearns 1978:50).

The deposition of marine sediments during this elevated sea level greatly affected the Honolulu coastline. The subsequent drop in sea level to its present level, ca. 2,000 years ago, created a slightly erosional regime that may have removed sediments deposited during the preceding period of deposition (Dye and Athens 2000:19). However, the net gain in sediments would have been substantial. Nakamura (1979:65), citing a Hawaiian Territory Sanitary Commission Report, estimated that about one-third of the Honolulu Plain was a wetland in 1911. Pre-Contact Hawaiians used the lagoon/estuary environment of the Honolulu Plain to construct fishponds. Fishpond walls served as sediment anchors for the accumulation of detrital reef sediments. They also likely affected long-shore sedimentary transport, resulting in new littoral deposition and erosion patterns. Fishponds, which the Hawaiians no longer actively maintained or utilized in the post-Contact period, became locations for the deposition of fill. These reclaimed areas provided valuable new land near the heart of growing urban Honolulu. The current project area previously consisted of reef with a naturally deep outlet from freshwater runoff. Cultural activities such as fishing, diving, and *limu* (seaweed, any plant under water) gathering occurred here.

The entire project area is located on Fill Land, Mixed (FL) as indicated in the soil maps (Figure 4). Beaches (BS) and Water (W) are outside the project area but nearby. Fill Land consists of areas filled in with materials from dredging, excavation from upland, garbage, and bagasse and slurry from sugar mills (Foote et al. 1972:31).

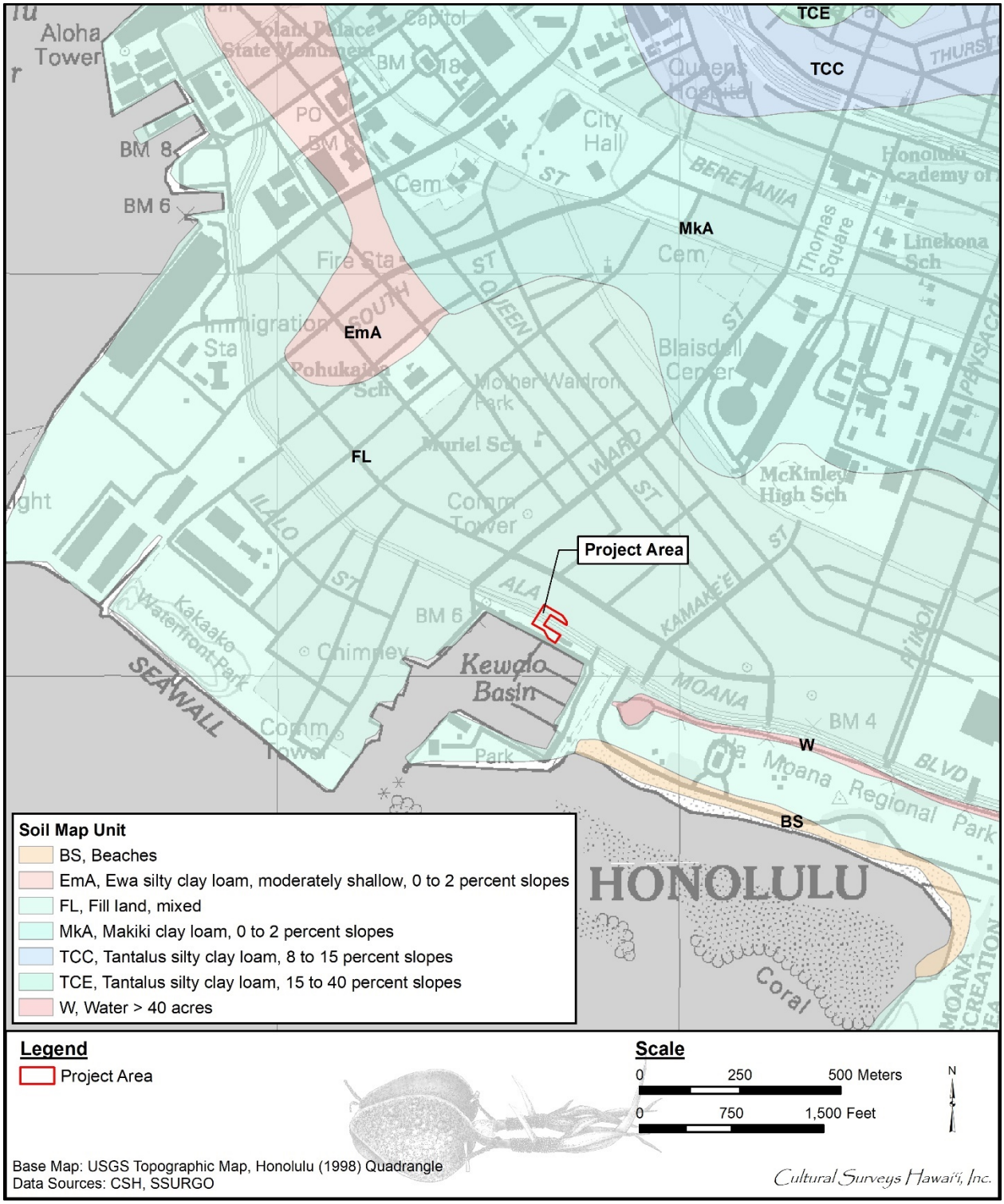

Figure 4. Portion of the 1998 Honolulu USGS topographic quadrangle indicating soils within project area and surroundings

Fill land, mixed, occurs in areas adjacent to the ocean. This particular land type is used for urban development including airports, housing areas, and industrial facilities.

1.3.2 *Ka Makani* (Winds)

For Native Hawaiians, winds were named for various reasons such as describing the type of wind, relating the wind to a story, or even relating the wind to the landscape. David Malo, a Native Hawaiian historian explains some general terms related to wind:

> […]There was the *kona*, a wind from the south, of great violence and of wide extent. It affected all sides of an island, east, west, north, and south, and continued for many days […]The *kona* wind often brings rain, though sometimes it israinless […]The *hoolua*, a wind that blows from the north, sometimes brings rain and sometimes is rainless […] The *hau* is a wind from the mountains, and they are thought to be the cause of it, because this wind invariably blows from the mountains outwards towards the circumference of the island. [Malo 1951:14]

An abundance of wind names appear in stories and chants. The *mo‘olelo* (story) The Wind Gourd of La‘amaomao tells the story of Pāka‘a and his son Kūapāka‘a who are descendants of the wind goddess La‘amaomao. With their possession of a special wind gourd, Pāka‘a and Kūapāka‘a could control and call forth the winds of Hawai‘i. Below is a portion of a chant for the winds of O‘ahu.

He Kukalahale ko Honolulu	Kukalahale is of Honolulu
He Ao-a-oa ko Mamala	‘Ao‘aoa is of Māmala,
He Olauniu ko Kapalama,	‘Ōlauniu is of Kapālama,
He Haupeepee ko Kalihi	Haupe‘epe‘e is of Kalihi,
He Ko-momona ko Kahauiki	Ko-momona is of Kahauiki
H*e Ho-e-o ko Moanalua*	Ho‘e‘o is of Moanalua

[Nakuina 1902:56–57; 1992:50]

This chant mentions two names associated with the project area. Kūkalahale is a wind associated with all of Honolulu, while ‘Ao‘aoa is a wind specific to the water area of Māmala, which Pukui and Elbert (1986:27) identify as a sea breeze. Other winds names are Mooaea, a north wind of Honolulu, Muuluu (possibly mū‘ululū, meaning “chilled” [Bishop Museum, Henriques Collection, HEN Vol. 1:1342]), and Kūkalahale (Pukui and Elbert 1986:560). The remaining names mentioned in the chant are the wind names for the other *ahupua‘a* (traditional land division) that fall within the Honolulu (Kona) Moku.

1.3.3 *Ka Ua* (Rains)

Precipitation is a major component of the water cycle and is responsible for depositing *wai* (fresh water) on local flora. Pre-Contact *kānaka* (Native Hawaiians) recognized two distinct annual seasons. The first, known as *kau* (period of time, especially summer) lasts typically from May to October and is a season marked by a high-sun period corresponding to warmer temperatures and steady trade winds. The second season, *ho‘oilo* (winter, rainy season) continues through the end of the year from November to April and is a much cooler period when trade winds are less frequent,

and widespread storms and rainfall become more common (Giambelluca et al. 1986:17). Typically the maximum rainfall occurs in January and the minimum in June (Giambelluca et al. 1986:17). In this area of the Honolulu District, rainfall averages less than 30 inches per year (Armstrong 1983:62). Northeasterly trade winds prevail throughout the year, although their frequency varies from more than 90% during the summer months to 50% in January; the average annual wind velocity is approximately 10 miles per hour (Wilson Okamoto 1998:2-1).

It was a customary and necessary tradition to grant a name for each type of rain. Rains were named to show their action toward plants or the supposed effects on people or their possessions (Pukui and Elbert 1986:361). Types of rain referencing the *moku* (district) of Kona and the *ahupua‘a* of Honolulu include Kūkalahale (Akana and Gonzalez 2015:127) and Wa‘ahila (also Wa‘ahia) (Akana and Gonzalez 2015:272).

1.3.3.1 Ka Ua Kūkalahale

The Kūkalahale rain is associated with the Honolulu and larger Kona district, according to Akana and Gonzales (2015). Kūkalahale is described as a passing rain while "*Ku kala hale*" means "standing under the eaves of the house" or "striking the house gables" (Akana and Gonzales 2015:127).

Kūkalahale is mentioned in the legend of Hi‘iakaikapoliopele saying:

> *A i ia wā i uhau a‘e ai ‘o Hi‘iaka i kēia kau, ‘oiai nō ka ua Kūkalahale o Honolulu nei e ho‘okawewe ana i ka lau lā‘au a me nā hākala ho‘i o nā hale pili o ia mau lā aloha o ka nohona o ko kākou mau kūpuna.*
>
> Then Hi‘iaka offered up this chant, while the Kūkalahale rain of Honolulu pattered upon the leaves of the trees and the thatched roofs of those beloved days of our ancestors. [Akana and Gonzales 2015:128]

In a *kanikau* (dirge) originally published in the Hawaiian newspaper *Ka Puke*, the Kūkalahale rain is mentioned:

> *Nākolo, nakulu, pa‘apa‘a‘ina kaupoku o Kākuhihewa ē*
> *Hewa ka i‘a a ‘Umiamaka i ka lili a ka ua Kūkalahale*
>
> The roofs of Kākuhihewa are roaring, rumbling, and crackling
> The fish of ‘Umiamaka was wronged by the jealousy of the Kūkalahale rain
> [Akana and Gonzales 2015:127]

The description of Kūkalahale rain upon thatched roofs relates to a translation of Kaka‘ako by Thrum (1922:639) meaning "prepare the thatching." This translation may have to do with the abundance of tall *pili* (*Heteropogon contortus*), a type of grass that was used as thatching that could be found within the Kaka‘ako area.

1.3.3.2 Ka Ua Wa‘ahila

Similar to Kūkalahale, the Wa‘ahila rain is noted in the broad Kona Moku in the *ahupua‘a* of Honolulu. The following passages mention this rain in relation to its environment and to the inhabitants of this *ahupua‘a* most closely familiar with its presence.

The following *kanikau* was written for Kahahana, ruling chief of O‘ahu and Molokai in 1778 (Kamakau 1991:92):

He pua ka lani, he pua laha ‘ole nei no nā moku

He kamaha‘o ka lani na O‘ahu

I walea ka lani i Kona, i ka lulu

I ka pohu wale o ka ua Wa‘ahia

Ke hāli‘i maila i ke pili

The chief is a flower, a rare blossom of the islands

Magnificent is the chief of O‘ahu

The chief relaxes at Kona in the calm

In the soothing serenity of the Wa‘ahia rain

Covering the pili grass

[Akana and Gonzales 2015:271–272]

This next *kanikau* was written for Ka‘ahumanu, the favored wife of Kamehameha I:

‘O ka wahine ‘alo ua Wa‘ahila o Kona

Nihi makani ‘alo ua Kūkalahale

Noho ānea kula wela lā o Pahua

Wahine holo ua Hā‘ao Nu‘uanu ē, ia

The woman who resists the Wa‘ahila rain of Kona

Creeping softly like the wind, resisting the Kūkalahale rain

A bleak existence along the hot plains of Pahua

Woman traveling in Nu‘uanu’s Hā‘ao rain

[Akana and Gonzales 2015:273]

1.3.4 *Ke Kahakai a me Ke Kai* (Seashore and Sea)

In 1911, it was estimated that about one-third of the Honolulu Plain was a wetland (Nakamura 1979:65, citing a Hawaiian Territory Sanitary Commission report). Native Hawaiians used the lagoon/estuary environment of the Honolulu plain to construct fishponds. Fishpond walls served as sediment anchors for the accumulation of detrital reef sediments. The undeveloped, natural condition of the project area consisted of low-lying marshes, tidal flats, and reef areas. Henry Kekahuna, a Hawaiian scholar and cartographer, describes Kaka‘ako saying, “There were formerly scattered dunes of white sand there” (Kekahuna 1958:4). Beginning in the late nineteenth century, these low-lying areas were filled in and then developed, which permanently changed the area into its present, fully urbanized, character.

Clark (2002) describes the Kaka‘ako peninsula area as the

> Land seaward of Ala Moana Boulevard between Kewalo Basin and Honolulu Harbor. The eastern half of the peninsula is the result of a reclamation project that

> began in 1948 with the construction of a massive seawall 10 feet high, 10 feet wide, and 30 feet wide at its base. The wall began on the reef near Olomehani Street and followed the Kewalo Channel to the present site of the University of Hawai'i's Pacific Biomedical Research Center. Then it was extended west to Fort Armstrong. With the completion of the seawall, the city began a reclamation project on the reef to create new industrial land. The shallow reef enclosed by the seawall was used as a landfill for noncombustible materials from the nearby incinerator and for other municipal refuse. The western half of the peninsula is the result of an earlier landfill to create Fort Armstrong and Piers 1 and 2 in Honolulu Harbor. [Clark 2002:145–146]

The Kaka‘ako reef and shoreline of the mid-twentieth century was well regarded for *limu, wana* (sea urchin), squid, and fish harvesting. Many Japanese from the Kaka‘ako area used these waters to pick *ogo* (*Gracilaria*). Kekahuna (1958) adds that many Gilbert Islanders made a living catching octopus and fishing in Kaka‘ako. The reef also offered good surf but as noted by Clark (2002), the 1948 construction of the Kewalo seawall and landfill drastically altered the shoreline when the reef was infilled.

1.3.5 Built Environment

The project area is in central coastal Honolulu, surrounded by modern urban development including commercial buildings, paved streets, sidewalks, utility infrastructure, and landscaped margins.

Section 2 Methods

2.1 Archival Research

Research centered on Hawaiian beliefs and activities including *ka‘ao* (legends), *wahi pana* (storied places), *‘ōlelo no‘eau* (proverbs), *oli* (chants), *mele* (songs), traditional *mo‘olelo* (stories), traditional subsistence and gathering methods, ritual and ceremonial practices, and more. Background research also focused on land transformations, development, and population changes beginning with the early post-Contact era to the present day.

Cultural documents, primary and secondary cultural and historical sources, historic maps, and photographs were reviewed for information pertaining to the study area. Research was primarily conducted at the CSH library. Other archives and libraries including the Hawai‘i State Archives, the Bishop Museum Archives, the University of Hawai‘i at Mānoa’s Hamilton Library, Ulukau, The Hawaiian Electronic Library (Ulukau 2014), the State Historic Preservation Division (SHPD) Library, the State of Hawai‘i Land Survey Division, the Hawaiian Historical Society, and the Hawaiian Mission Houses Historic Site and Archives are also repositories where CSH cultural researchers gather information. Information on Land Commission Awards (LCAs) were accessed via Waihona ‘Aina Corporation’s Māhele database (Waihona ‘Aina 2020), the Office of Hawaiian Affairs (OHA) Papakilo Database (Office of Hawaiian Affairs 2015), and the Ava Konohiki Ancestral Visions of ‘Āina website (Ava Konohiki 2015).

2.2 Community Consultation

2.2.1 Scoping for Participants

CSH begins its consultation efforts by utilizing a previous contact list to facilitate the interview process. CSH then reviews an in-house database of *kupuna* (elders), *kama‘āina* (native-born), cultural practitioners, lineal and cultural descendants, Native Hawaiian Organizations (NHOs; includes Hawaiian Civic Clubs and those listed on the Department of Interior’s NHO list), and community groups. CSH also contacts agencies such as SHPD, OHA, and the appropriate Island Burial Council where the proposed project is located for their response to the project and to identify lineal and cultural descendants, individuals and/or NHO with cultural expertise and/or knowledge of the study area. CSH is also open to referrals and new contacts.

2.2.2 “Talk Story” Sessions

Prior to the interview, CSH cultural researchers explain the role of a CIA, how the consent process works, the project purpose, the intent of the study, and how their *‘ike* (knowledge) and *mana‘o* (opinion) will be used in the report. The interviewee is given an Authorization and Release Form to read and sign.

“Talk Story” sessions range from the formal (e.g., sit down and *kūkākūkā* [consultation, discussion] in participant’s choice of place over set interview questions) to the informal (e.g., hiking to cultural sites near the study area and asking questions based on findings during the field outing). In some cases, interviews are recorded and transcribed later.

CSH also conducts group interviews, which range in size. Group interviews usually begin with set, formal questions. As the group interview progresses, questions are based on the interviewee’s

answers. Group interviews are always transcribed and notes are taken. Recorded interviews assist the cultural researcher in 1) conveying accurate information for interview summaries, 2) reducing misinterpretation, and 3) missing details to *mo‘olelo*.

CSH seeks *kōkua* (assistance) and guidance in identifying past and current traditional cultural practices of the study area. Those aspects include general history of the *ahupua‘a*; past and present land use of the study area; knowledge of cultural sites (for example, *wahi pana*, archaeological sites, and burials); knowledge of traditional gathering practices (past and present) within the study area; cultural associations (*ka‘ao* and *mo‘olelo*); referrals; and any other cultural concerns the community might have related to Hawaiian cultural practices within or in the vicinity of the study area.

2.2.3 Completion of Interview

After an interview, CSH cultural researchers transcribe and create an interview summary based on information provided by the interviewee. Cultural researchers give a copy of the transcription and interview summary to the interviewee for review and ask to make any necessary edits. Once the interviewee has made those edits, we incorporate their *‘ike* and *mana‘o* into the report. When the draft report is submitted to the client, cultural researchers then prepare a finalized packet of the participant’s transcription (if applicable), interview summary, and any photos that were taken during the interview. We also include a thank you card and honoraria. This is for the interviewee’s records.

It is important to CSH cultural researchers to cultivate and maintain community relationships. The CIA report may be completed, but CSH researchers continuously keep in touch with the community and interviewees throughout the year—such as checking in to say hello via email or by phone, volunteering with past interviewees on community service projects, and sending holiday cards to them and their *‘ohana* (family). CSH researchers feel this is an important component to building relationships and being part of an *‘ohana* and community.

“*I ulu no ka lālā i ke kumu*—the branches grow because of the trunk,” an *‘ōlelo no‘eau* (#1261) shared by Mary Kawena Pukui with the simple explanation: “Without our ancestors we would not be here” (Pukui 1983:137). As cultural researchers, we often lose our *kūpuna* but we do not lose their wisdom and words. We routinely check obituaries and gather information from other informants if we have lost our *kūpuna*. CSH makes it a point to reach out to the *‘ohana* (family) of our fallen *kūpuna* and pay our respects including sending all past transcriptions, interview summaries, and photos for families to have on file for genealogical and historical reference.

Section 3 Traditional Accounts

3.1 *Nā Ka‘ao* and *Mo‘olelo*

Hawaiian storytellers of old were greatly honored; they were a major source of entertainment and their stories contained lessons while interweaving elements of Hawaiian lifestyles, genealogy, history, relationships, arts, and the natural environment (Pukui and Green 1995:I). According to Pukui and Green (1995), storytelling is better heard than read for much becomes lost in the transfer from the spoken to the written word and *ka‘ao* are often full of *kaona* or double meanings.

Ka‘ao are defined by Pukui and Elbert (1986:108) as a "legend, tale […], romance, [and/or], fiction." *Ka‘ao* may be thought of as oral literature or legends, often fictional or mythic in origin, and have been "consciously composed to tickle the fancy rather than to inform the mind as to supposed events" (Beckwith 1970:1). Conversely, Pukui and Elbert (1986:254) define *mo‘olelo* as a "story, tale, myth, history, [and/or] tradition." The *mo‘olelo* are generally traditional stories about the gods, historic figures or stories which cover historic events and locate the events with known places. *Mo‘olelo* are often intimately connected to a *wahi pana*, a tangible place or space.

In differentiating *ka‘ao* and *mo‘olelo* it may be useful to think of *ka‘ao* as expressly delving into the *wao akua* (realm of the gods), discussing the exploits of *akua* (gods) in a primordial time. *Mo‘olelo* on the other hand, reference a host of characters from *ali‘i* (royalty) to *akua; kupua* (supernatural beings) to *maka‘āinana* (commoners); and discuss their varied and complex interactions within the *wao kānaka* (realm of man). Beckwith elaborates, "In reality, the distinction between *ka‘ao* as fiction and *mo‘olelo* as fact cannot be pressed too closely. It is rather in the intention than in the fact" (Beckwith 1970:1). Thus, a so-called *mo‘olelo*, which may be enlivened by fantastic adventures of *kupua*, "nevertheless corresponds with the Hawaiian view of the relation between nature and man" (Beckwith 1970:1).

Both *ka‘ao* and *mo‘olelo* provide important insight into a specific geographical area, adding to a rich fabric of traditional knowledge. The preservation and passing on of these stories through oration remains a highly valued tradition. Additionally, oral traditions associated with the study area communicate the intrinsic value and meaning of a place, specifically its meaning to both *kama‘āina* (native-born) as well as others who also value that place.

The following background sections of this study present a broad review of traditional and historical accounts concerning the general area in order to ascertain the specific history of the land within the study area boundaries. Many relate an age of mythical characters whose epic adventures led to and influenced Hawaiian *ali‘i* and *maka‘āinana*. The *ka‘ao* shared below are some of the oldest Hawaiian stories that have survived; they speak to the characteristics and environment of the area and its people.

3.2 *Nā Ka‘ao*

3.2.1 The Legend of Kapo‘i Kukaeunahiokapueo

In one legend, Kewalo is a marsh near the beach, where tall *pili* grass grew. A man named Kapo‘i went to this area to get thatching for his house. While there, he found seven eggs of a *pueo* (Hawaiian short-eared owl; *Asio fammeus sandwichensis*) and took them home to cook for his supper. An owl perched on the fence surrounding his house and cried out "O Kapoi, give me my

eggs!” After several such pleas, Kapo‘i eventually returned the eggs. In return, the owl became his *‘aumakua* (deified ancestor) and instructed him to build a *heiau* named Mānoa. Kapo‘i built the *heiau*, placed some bananas on the altar as a sacrifice, and set the *kapu* (taboo) days for its dedication. The king of O‘ahu, Kākuhihewa, who was building his own *heiau*, had made a law that if any man among his people erected a *heiau* and set the *kapu* before him, that man should die. Kapo‘i was seized and taken to the *heiau* of Kūpalaha at Waikīkī. Kapo‘i’s *‘aumakua* asked for aid from the king of the owls at Pu‘u Pueo in Mānoa, who gathered all of the owls of the islands. They flew to Kūpalaha and battled the king’s men, who finally surrendered: “The owls scratched at the eyes and noses of the men and befouled them with excrement” (Kamakau 1991:23). From this time, Hawaiians considered the owl a powerful *akua* (Thrum 1907:200–202; Westervelt 1963:135–137).

3.2.2 Kū‘ula

Kaka‘ako is mentioned in Thrum’s version (1907) of the legend of Kū‘ula, the god presiding over the fish, and his son ‘Ai‘ai. ‘Ai‘ai was the first to teach Hawaiians how to make various fishing lines and nets, the first to set up a *ko‘a kū‘ula*, a rock shrine on which the fishermen placed their first catch as an offering to Kū‘ula, and the first to set up *ko‘a i‘a*, fishing stations where certain fish were known to gather. Leaving his birthplace on Maui, ‘Ai‘ai traveled around the islands, establishing *ko‘a kū‘ula* and *ko‘a ia*. On O‘ahu, he landed first at Makapu‘u in Ko‘olaupoko, and then traveled clockwise around the island:

> Aiai came to Kalia [Waikīkī] and so on to Kakaako. Here he was befriended by a man named Apua, with whom he remained several days, observing and listening to the murmurs of the chief named Kou. This chief was a skillful haiku [bonito] fisherman, his grounds being outside of Mamala until you came to Moanalua. There was none so skilled as he, and generous withal, giving akus to the people throughout the district. [Thrum 1907:242]

While ‘Ai‘ai was living with Apua at Kaka‘ako, he fell in love with a young woman gathering *limu*. This woman was named Puiwa and ‘Ai‘ai took her to be his wife. Soon she gave birth to their son, whom ‘Ai‘ai named Puniaiki.

3.2.3 Kawaiaha‘o

Two springs in Kewalo are mentioned in the *mo‘olelo*, *Waters of Ha‘o*, which describes two children of the chief Ha‘o who ran away from their cruel stepmother. They stayed a time with the caretakers of Kewalo Spring, which may have been located close to the trail that connected Waikīkī and Honolulu. The children then left when they heard that the chiefess sent men to look for them. The two children followed the moonlit trail across the plain toward Kou (Honolulu), but finally collapsed from weariness and thirst. In a dream, the boy’s mother told him to pull up a plant close to his feet. When he did, he found a spring under the plant, which was called the Water of Ha‘o, or Kawaiaha‘o. This spring is located at the western end of the trail, near Kawaiaha‘o Church in Kaka‘ako (Pukui 1988:87–89).

3.2.4 Kānāwai Kaihehe‘e

Kewalo once had a famous fishpond used to drown the *kauwā* (outcast, pariah, slave, untouchable) and *kapu* breakers as the first step in a sacrificial ritual known as Kānāwai Kaihehe‘e (Kamakau 1991:6) or Ke-kai-he‘ehe‘e, which translates as “sea sliding along,” suggesting the victims were slid under the sea (Westervelt 1963:16). Kewalo is described as follows:

> A fishpond and surrounding land on the plains below King Street, and beyond Koula. It contains a spring rather famous in the times previous to the conversion to Christianity, as the place where victims designed for the Heiau of Kanelaau on Punchbowl slopes, was first drowned. The priest holding the victim’s head under water would say to her or him on any signs of struggling, ‘Moe malie i ke kai o ko haku.’ ‘Lie still in the waters of your superiors.’ From this it was called Kawailumalumai, ‘drowning waters.’ [Sterling and Summers 1978:292].

3.3 *Nā Wahi Pana* (Legendary Places)

Wahi pana are legendary or storied places of an area. These may include a variety of natural or human-made structures. Oftentimes dating to the pre-Contact period, most *wahi pana* are in some way connected to a particular *mo‘olelo*; however, a *wahi pana* may exist without a connection to any particular story. Davianna McGregor outlines the types of natural and human-made structures that may constitute *wahi pana* as follows:

> Natural places have mana, and are sacred because of the presence of the gods, the akua, and the ancestral guardian spirits, the ‘aumakua. Human-made structures for the Hawaiian religion and family religious practices are also sacred. These structures and places include temples, and shrines, or heiau, for war, peace, agriculture, fishing, healing, and the like; pu‘uhonua, places of refuge and sanctuaries for healing and rebirth; agricultural sites and sites of food production such as the lo‘i pond fields and terraces slopes, ‘auwai irrigation ditches, and the fishponds; and special function sites such as trails, salt pans, holua slides, quarries, petroglyphs, gaming sites, and canoe landings. [McGregor 1996:22]

As McGregor makes clear, *wahi pana* can refer to natural geographic locations such as streams, peaks, rock formations, ridges, offshore islands and reefs, or they can refer to Hawaiian land divisions such as *ahupua‘a* or *‘ili* and man-made structures such as fishponds. It is common for places and landscape features to have multiple names, some of which may only be known to certain *‘ohana* or even certain individuals within an *‘ohana*, and many have been lost, forgotten, or kept secret through time. Place names also convey *kaona* (hidden meaning) and *huna* (secret) information that may have political or subversive undertones. Before the introduction of writing to Native Hawaiians, cultural information was exclusively preserved and perpetuated orally. Native Hawaiians gave names to everything in their environment, including individual garden plots and *‘auwai* (water courses), house sites, intangible phenomena such as meteorological and atmospheric effects, *pōhaku* (rock, stone), *pūnāwai*, and many others. According to Landgraf (1994), Hawaiian *wahi pana* “physically and poetically describes an area while revealing its historical or legendary significance” (Landgraf 1994:v).

3.3.1 *Nā Pu‘u (Hills and Peaks)*

3.3.1.1 Pu‘unui

Pu‘unui translates to “big hill.” This *pu‘u* was one of the first developed areas in Nu‘uanu Valley beginning in 1900-1910.

3.3.1.2 Pu‘ukea

Pu‘ukea translates to “white hill.” This *pu‘u* was the location of a *heiau*. The chief Huanuikalala‘ila‘i governed Pu‘ukea Heiau in the land section of Kukuluāe‘o, according to Kamakau (1991:24).

3.3.2 *Nā Pōhaku* (Rocks)

3.3.2.1 Nā Pōhaku Ola Kapaemāhū a Kapuni

A sacred site in Kaka‘ako is Nā Pōhaku Ola Kapaemāhū a Kapuni, commonly referred to as the Wizard Stones of Kapaemāhū. These stones were unearthed in the late 1800s on the Waikīkī premises of the Cleghorn family, Governor A. Cleghorn, his wife Princess Likelike, and their daughter Princess Ka‘iulani. According to a *mo‘olelo* gathered by Thrum (1906:139–141), four soothsayers from the court of a Tahiti king came to Hawai‘i and helped to heal many people. Four large stones were gathered from the vicinity of a “bell rock” in Kaimukī and erected in Waikīkī to commemorate them, two at their habitation and two at their bathing place in the sea. The chief of the wizards, Kapaemahu, named his stone after himself, and a virtuous young chiefess was sacrificed and placed beneath the stone. Today they are located at Kūhiō Beach Park (Thrum 1906:139–141).

3.3.3 *Nā Heiau*

Heiau were sometimes elaborate and large communal structures, while others were simple earth terraces or shrines. *Heiau* were most commonly known as the locations for important ceremonies and as large structures with platforms or altars of one or more terraces (McAllister 1933:8). There are many different kinds of *heiau*, depending on the purpose for which they were built:

> If it were for peace in the chiefdom, *aupuni*, then a house for peace, a *hale o ka maluhia*, was erected; if for war, then a house for the [war] god in the war heiau, *ka heiau kaua* […] if for rebellion, then [a house for the rebel’s war god] in his own heiau. If it were for blessings to all the land, the well-being of all the people, for ‘food’ or ‘fish,’ then the chiefs built heiaus all over the land. The people, *maka‘ainana*, erected fishing shrines, *ko‘a ku‘ula*, all around the islands so that the land would be provided with fish. If there were distress because of trouble with the staple plant food, *‘ai*, heiaus called *ipu-o-Lono* were raised up all over the land to revive them. [Kamakau 1976:129]

3.3.3.1 Pu‘ukea Heiau

The chief Huanuikalala‘ila‘i governed Pu‘ukea Heiau in the land section of Kukuluāe‘o, according to Kamakau (1991:24). Pu‘ukea literally means “white hill” and is also the name of a small land division within the *‘ili* of Kukuluāe‘o mentioned in at least two Land Commission Awards; LCA 1502 (not awarded) and LCA 1504. LCA 1504 is located near the junction of Halekauwila and Cooke streets. It is common for a *heiau* to have the same name as the *‘ili* in which

it is located, so it is possible Pu‘ukea Heiau was also near the junction of Halekauwila and Cooke streets. The majority of the house sites in the mid-nineteenth century in Kukuluāe‘o were located near Halekauwila and Queen streets, *mauka* of the low-lying coastal swamplands on higher, dry ground. It is possible the *heiau* platform or the area it was built on was one of the few elevated locations in the flat, low-lying swamp that surrounded it, and thus gained the name *pu‘u kea*, or "white hill."

3.3.4 *Nā Ala Hele* (Trails)

Trails served to connect various settlements throughout O‘ahu. John Papa ‘Ī‘ī (1959) mentions some relevant place names while discussing early nineteenth century trails in the Honolulu/Waikīkī area (Figure 5). The fact that a trail traversed this region characterized by ponds, marshlands, and *lo‘i* (irrigated terrace) suggests the trail, especially as it neared the coastline at Kālia, must have run on a sand berm raised above surrounding wetlands and coral flats. ‘Ī‘ī describes the middle trail (probably close to the current alignment of Queen Street) from Waikīkī to Honolulu:

> The trail from Kalia led to Kukuluaeo, then along the graves of those who died in the smallpox epidemic of 1853, and into the center of the coconut grove of Honuakaha. On the upper side of the trail was the place of Kinau, the father of Kekauonohi. [‘Ī‘ī 1959:89]

The grave site referred to is the Honuakaha Cemetery at the *makai* corner of Halekauwila and South streets, *makai* of Kawaiaha‘o Church. Honuakaha was a settlement located generally between Punchbowl and South streets, on the *makai* side of Queen Street. ‘Ī‘ī describes the lower, coastal trail from Honolulu toward Waikīkī: "From the makai side of Kaoaopa was a trail to the sea at Kakaako, where stood the homes of the fishermen. Below the trail lived Hewahewa and his fellow kahunas" (‘Ī‘ī 1959:91).

3.4 *Nā ‘Ōlelo No‘eau* (Proverbs)

Hawaiian knowledge was shared by way of oral histories. Indeed, one's *leo* (voice) is oftentimes presented as *ho‘okupu* ("a tribute or gift" given to convey appreciation, to strengthen bonds, and to show honor and respect); the high valuation of the spoken word underscores the importance of the oral tradition (in this case, Hawaiian sayings or expressions), and its ability to impart traditional Hawaiian "aesthetic, historic, and educational values" (Pukui 1983:vii). Thus, in many ways these expressions may be understood as inspiring growth within the reader or between speaker and listener:

> They reveal with each new reading ever deeper layers of meaning, giving understanding not only of Hawai‘i and its people but of all humanity. Since the sayings carry the immediacy of the spoken word, considered to be the highest form of cultural expression in old Hawai‘i, they bring us closer to the everyday thoughts and lives of the Hawaiians who created them. Taken together, the sayings offer a basis for an understanding of the essence and origins of traditional Hawaiian values. The sayings may be categorized, in Western terms, as proverbs, aphorisms, didactic adages, jokes, riddles, epithets, lines from chants, etc., and they present a variety of literary techniques such as metaphor, analogy, allegory, personification, irony, pun,

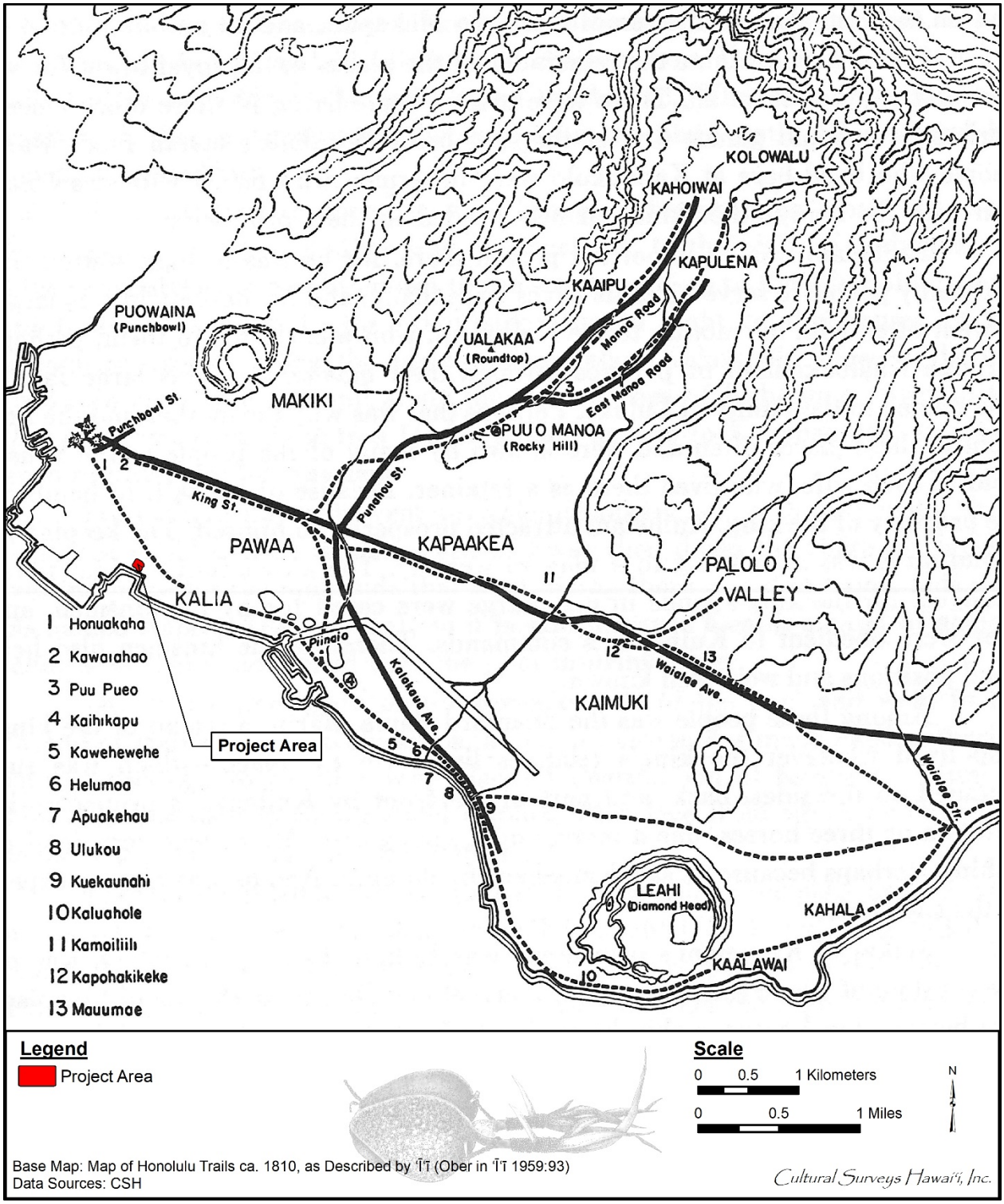

Figure 5. 1810 map of Honolulu trails (Ober in ‘Ī‘ī 1959)

> and repetition. It is worth noting, however, that the sayings were spoken, and that their meanings and purposes should not be assessed by the Western concepts of literary types and techniques. [Pukui 1983:vii]

Most simply, *‘ōlelo no‘eau* may be understood as proverbs and as a folk wisdom treasury of Hawaiian expressions. Oftentimes, references to places are within these Hawaiian expressions or proverbs.

This section draws from the collection of author and historian Mary Kawena Pukui and her knowledge of Hawaiian proverbs describing *‘āina* (land), chiefs, plants, and places. The following proverbs concerning the Kaka‘ako, Honolulu (Kona) Moku, and other surrounding areas come from Mary Kawena Pukui’s *‘Ōlelo No‘eau* (Pukui 1983).

3.4.1 Ka ‘Ōlelo No‘eau #407

This *‘ōlelo no‘eau* of Kou (Honolulu) refers to the coastal area:

> ***Hāhā pō‘ele ka pāpa‘i o Kou.***
> **The crabs of Kou are groped for in the dark**.
> Applied to one who goes groping in the dark. The chiefs held kōnane and other games at the shore of Kou (now central Honolulu), and people came from everywhere to watch. Very often they remained until it was too dark to see and had to grope for their companions.
> [Pukui 1983:50–51]

3.4.2 Ka ‘Ōlelo No‘eau #656

The Kaka‘ako coast fronted a narrow channel leading to Māmala, the entrance, and to the harbor, called Kuloloia:

> ***He kai hele kohana ko Māmala.***
> **A sea for going naked is at Māmala.**
> The entrance to Honolulu Harbor was known as Māmala. In time of war the people took off their clothes and traveled along the reef to avoid meeting the enemy on land.
> [Pukui 1983:74]

3.4.3 Ka ‘Ōlelo No‘eau #1128

> ***Hui aku na maka i Kou.***
> **The faces will meet in Kou.**
> We will all meet there. Kou (now central Honolulu) was the place where the chiefs played games, and people came from everywhere to watch.
> [Pukui 1983:120]

3.4.4 Ka ‘Ōlelo No‘eau #1652

> ***Ka wai huahua‘i o Kewalo.***
> **The bubbling water of Kewalo.**
> Kewalo once had a large spring where many went for cool, refreshing water.
> [Pukui 1983:178]

3.4.5 Ka ‘Ōlelo No‘eau #2486

> ***Ola ke awa o Kou i ka ua Wa‘ahila.***
> **Life comes to the harbor of Kou because of the Wa‘ahila rain.**
> It is the rain of Nu‘uanu that gives water to Kou (now central Honolulu).
> [Pukui 1983:272]

3.5 *Nā Oli* (Chants)

Oli, according to Mary Kawena Pukui (Pukui 1995:xvi–xvii), are often grouped according to content. Chants often were imbued with *mana* (spiritual power); such *mana* was manifested through the use of themes and *kaona*. According to Pukui, chants for the gods (*pule*; prayers) came first, and chants for the *ali‘i*, “the descendants of the gods,” came second in significance. Chants “concerning the activities of the earth peopled by common humans” were last in this hierarchy (Pukui 1995:xvi–xvii). Emerson conversely states,

> In its most familiar form the Hawaiians—many of whom [were lyrical masters]—used the oli not only for the songful expression of joy and affection, but as the vehicle of humorous or sarcastic narrative in the entertainment of their comrades. The dividing line, then, between the oli and those other weightier forms of the mele, the inoa [name], the kanikau (threnody), the pule, and that unnamed variety of mele in which the poet dealt with historic or mythologic subjects, is to be found almost wholly in the mood of the singer. [Emerson 1965:254]

While *oli* may vary thematically, subject to the perspective of the *ho‘opa‘a* (chanter), it was undoubtedly a valued art form used to preserve oral histories, genealogies, and traditions, to recall special places and events, and to offer prayers to *akua* and *‘aumākua* alike. Perhaps most importantly, as Alameida (1993:26) writes, “chants […] created a mystic beauty […] confirming the special feeling for the environment among Hawaiians: their one *hānau* (birthplace), their *kula iwi* (land of their ancestors).”

3.5.1 The Chief Huanuikalala‘ila‘i in Kewalo

Kewalo was the birthplace of Huanuikalala‘ila‘i, a chief famous for his love of cultivation at Kewalo and his care for the people (Kamakau 1991:24). An *oli* recounted by Kamakau (1991) captures the significance of Kewalo:

‘O Hua-a-Kamapau ke ‘li‘i	Hua-a-Kamapau the chief
O Honolulu o Waikīkī	O Honolulu, of Waikīkī
I hanau no la i kahua la i Kewalo,	Was born at Kewalo,
‘O Kālia la kahua	Kālia was the place [the site]
O Makiki la ke ēwe,	At Makiki the placenta,
I Kānelā‘au i Kahehuna ke piko,	At Kānelā‘au at Kahehuna the navel cord,
I Kalo i Pauoa ka ‘a‘a;	At Kalo at Pauoa the caul;
I uka i Kaho‘iwai i	Upland at Kaho‘iwai, at
Kanaloaho‘okau . . .	Kanaloaho‘okau . . .

[Kamakau 1991:24]

Kamakau (1991) recorded a traditional *wānana* (prophecy) that mentions the chief Huanuikalala‘ila‘i of Pu‘ukea Heiau:

[Ka makaua ua kahi o ‘Ewa]	[The increasing ‘first rain’ of ‘Ewa]
Ua puni ka i‘a o Mokumoa,	Overcomes the fish of Mokumoa,
Ua kau i‘a ka nene;	Washes up fish to the nene plants;
Ua ha‘a kalo ha‘a nu;	Lays low the taro as it patters down;
Ha‘a ka i‘a o Kewalo,	Lays low the fish of Kewalo,
Ha‘a na ‘ualu o Pahua,	Lays low the sweet potatoes of Pahua,
Ha‘a ka mahiki i Pu‘ukea,	Lays low the mahiki grass at Pu‘ukea,
Ha‘a ka unuunu i Pele‘ula,	Lays low the growing things at Pele‘ula
Ha‘a Makaaho i ke ala.	Lays low Makaaho [Makāho] in its path
E Kū e, ma ke kaha ka ua, e Kū,	O Kū, the rain goes along the edge [of the island], O Kū
[I ‘ai na ka i‘a o Maunalua] . . .	[‘Eating’ the fish of Maunalua] . . .

[Kamakau 1991:24–25]

The chant mentions the *mahiki* grass (seashore rush grass; *Sprorbolus virginicus*) of Pu‘ukea, a tufted rush found near the seashore. The term *mahiki* connotes several historical and contemporary meanings. With serious family discord, a *kupuna* (grandparent, ancestor) can continue with lines of inquiry of *ho‘oponopono* (family conference in which relationships are set right) to “peel off” layers of deeper feelings (Pukui et al. 1972:228). In the past, skilled *kāhuna* (priests) formerly exorcised malicious spirits from the afflicted in an exorcist ritual with the aid of *mahiki* (Pukui and Elbert 1986:219). The use of this grass in a ritual may explain its association with a ceremonial *heiau*, or it may simply suggest that the Kukuluāe‘o coast (fronting Kewalo Basin) was a good habitat and thus a favored place for healers to collect this type of grass.

3.5.2 The Battle of Nu‘uanu

The *heiau* of Pu‘ukea and Kaka‘ako are mentioned in the chant “The Battle of Nu‘uanu,” which concerns the 1795 invasion and conquest of O‘ahu by Kamehameha I. One section of the chant describes locations in Honolulu, possibly listing them from east to west:

75 *Lauwili i Pūkē (Pu‘ukea) i Ka-imu-hai-kanaka,*

76 *I Kai-kua, i Kakaako, i Mamala,*

77 *I ke kai o Kuloloia, Pakaka,*

78 *I ka-imu-hai-kanaka, i ka-wai-apuka-Kāne*.

[Kala‘ikuahulu 1880:131]

3.6 *Nā Mele* (Songs)

The following section draws from the Hawaiian art of *mele*, poetic song intended to create two styles of meaning.

> Words and word combinations were studied to see whether they were auspicious or not. There were always two things to consider the literal meaning and the *kaona*, or ‘inner meaning.’ The inner meaning was sometimes so veiled that only the people to whom the chant belonged understood it, and sometimes so obvious that anyone who knew the figurative speech of old Hawai‘i could see it very plainly. There are

> but two meanings: the literal and the *kaona*, or inner meaning. The literal is like the body and the inner meaning is like the spirit of the poem. [Pukui 1949:247]
>
> The Hawaiians were lovers of poetry and keen observers of nature. Every phase of nature was noted and expressions of this love and observation woven into poems of praise, of satire, of resentment, of love and of celebration for any occasion that might arise. The ancient poets carefully selected men worthy of carrying on their art. These young men were taught the old *meles* and the technique of fashioning new ones. [Pukui 1949:247]

There are a few *mele* that mention Honolulu and far fewer that mention Kaka‘ako. The following section below lists these songs. These particular *mele* may also be classified as *mele wahi pana* (songs for legendary or historic places).

3.6.1 Friends Meet in Kou

Honolulu was once called Kou, named for the most beautiful woman on O‘ahu. Kou composed a *mele* to her husband ‘Ouha, which includes some of the place names of coastal Honolulu and Kaka‘ako. One portion of the *mele* mentions the place Ka‘ākaukukui, with reference to a pool, possibly a reference to the salt ponds of the area:

Aloha ka makani lihi kao o Kālia	Beloved is the shoreline breeze in Kālia
Ke kali nei au ‘o kō ho‘i mai. . .	I await your return. . .
A pehea lā au, e Honoka‘upu,	And what of me, O Honoka‘upu,
ku‘u aloha	my love
I ka welelau nalu kai o Uhi, o ‘Ōa	Upon the crest of the surf at Uhi and ‘Oā
‘O nā makai ke ao (pō) o poina	Eyes in the living realm (night) of oblivion
Ma hea lā wau, e ke aloha lā	Where am I, O my love
‘O Kou ka papa	Kou is the coral flat
‘O Ka‘ākaukukui ka loko	Ka‘ākaukukui is the pool
‘O ka ‘alamihi a‘e nō	Some ‘alamihi indeed
‘O ka lā a pō iho	Wait all day until night
Hui aku i Kou nā maka.	Friends shall meet in Kou.

[Ho‘oulumāhiehie 2008a:297; Ho‘oulumāhiehie 2008b:277]

The exact meaning of the word *‘alamihi* within this *mele* is unknown. *‘Alamihi* is the name of a Native black crab, a scavenger that is often associated in Hawaiian sayings with corpse-eating (Pukui and Elbert 1986:18). *Alamihi* can also mean “path [of] regret” (Pukui et al. 1974:9).

3.6.2 Henehene Kou ‘Aka (For You and I)

This *mele* was composed in the 1920s in connection to Kamehameha students riding street cars from the first Kamehameha campus to Kaka‘ako.

Henehene kou ‘aka	Your laughter is so contagious

Kou le‘ale‘a paha	It's fun to be with you
He mea ma‘a mau ia	Always a good time
For you and I	For you and I
Ka‘a uila mākēneki	The streetcar wheels turn
Hō‘onioni kou kino	Vibrating your body
He mea ma‘a mau ia	Always a good time
For you and I	For you and I
I Kaka‘ako mākou	To Kaka‘ako we go
‘Ai ana i ka pipi stew	Eating beef stew
He mea ma‘a mau ia	Always a good time
For you and I	For you and I
I Waikīkī mākou	To Waikīkī we go
‘Au ana i ke kai	Swimming in the sea
He mea ma‘a mau ia	Always a good time
For you and I	For you and I
I Kapahulu mākou	To Kapahulu we go
‘Ai ana i ka līpoa	Eating seaweed
He mea ma‘a mau ia	Always a good time
For you and I	For you and I
Ha‘ina mai ka puana	Tell the refrain
Kou le‘ale‘a paha	It's fun to be with you
He mea ma‘a mau ia	Always a good time
For you and I	For you and I

[Hupala n.d.]

3.6.3 He Aloha Nō ‘o Honolulu

The following *mele* retraces the sea routes of the famed ship Maunaloa. These routes included Honolulu to Maui and onward to the west coast of Hawai‘i. This *mele* also describes the feel of the landscape with a different rain and wind for each place.

He aloha nō ‘o Honolulu	Dearly loved is Honolulu

i ka ua Kūkalahale	in the Kūkalahale rain
Ka nuku a‘o Māmala	The entrance of Māmala Bay
‘ae a‘e nei ma hope	fares on behind
Kau mai ana ma mua	Up ahead
ka malu ‘ula a‘o Lele	is the breadfruit shade of Lele
Kukui ‘a‘ā mau,	The ever-blazing torch
pio ‘ole i ke Kaua‘ula	unextinguished by the Kaua‘ula wind
‘Au aku i ke kai loa	Faring out to the deep sea
oni mai ana ‘o ‘Upolu	of ‘Upolu Point appears
Ho‘okomo iā Mahukona	Entering Mahukona
i ka makani ‘Āpa‘apa‘a	in the ‘Āpa‘apa‘a wind
E wiki ‘oe ‘apa nei	Make haste, slowpoke,
eia a‘e ‘o Kawaihae	for hers is Kawaihae
Ho‘ohaehae Nāulu,	Where the Nāulu showes
i ka makani ku‘ehu ‘ale	stir up wave gustling winds
‘O ka hao a ka Mūmuku	The buffering of the Mūmuku wind
poho pono nā pe‘a heke	fills out the topsails
‘O ka heke nō nā Kona	The Kona districts are foremost
i ke kai mā‘oki‘oki	with their sea-patterned hue
Ki‘ina ke koi‘i koi	The rush sweeps to
i ka piko o Hualālai	the summit of Hualālai
A la‘i wale ke kaunu	And love is contended,
‘a‘ole pahuna hala	no thrust is missed
Hale ‘ole nō kāua	We make no error
i ke kole maka onaona	with the tender-eyed kole fish
E haupā ‘oe a kena	You eat heartily,
i ka piko ‘oe a lihaliha	right to the rich oily belly
Hāli‘ali‘a mai ana	I‘m reminded
kou aloha kākia iwi	of your love holding me fast
Ho‘okomo iā Honu‘apo	Coming in to Honu‘apo

i ke kai kauha‘a	in the restless sea
Ha‘alele ka Maunaloa	The *Maunaloa* departs
i ka pohu la‘i a‘o Kona	the quiet tranquility of Kona
Ho‘okomo iā Ho‘okena	Porting into Ho‘okena
i ka pewa a‘o ka manini	in her bay like a manini tail
Ha‘ina mai ka puana	The story is told
‘o ka heke nō nā Kona	that the Kona districts are the finest
No Kona ke kai malino	For Kona are the clam seas,
kaulana i ka lehuleh	famous among all people.

[Wilcox et al. 2003:50–51]

3.6.4 Māmala (Na Ka Pueokahi)

In the song *Nā ka Pueo*, the *Pueo-kahi* was a ship named for a place near Hāna, Maui, which had been named for a *pueo kupua* (owl demigod). Honolulu harbor was called Māmala; note the play on words with *mālama* (to care for), to protect:

Nā ka Pueo-kahi ke aloha	Love from the *Pueo-kahi*,
Nēnē ‘au kai o Maui.	The Maui goose that sails the sea.
Ma ka ‘ilikai a‘o Māmala.	Over the sea at Māmala.
Mālama ‘ia iho ke aloha	Keep your love
I kuleana na‘u e hiki aku ai	And I have the right to come.
Ha‘ina ‘ia mai ka puana	Tell the refrain:
Nā ka Pueo-kahi ke aloha	Love from the *Pueo-kahi*.

[Elbert and Mahoe 1970:81–82]

3.6.5 Kai A‘o Māmala

This *mele*, translated to Sea of Māmala, is a love chant set on the island of O‘ahu. Māmala is the name of the channel leading into Honolulu Harbor. The chant is dedicated to Kalākaua. When this chant is performed as a canoe-paddle hula, the words "*hoe*, *hoe*" (paddle, paddle) are interjected by solo or chorus voices along with the appropriate motions.

Kahi mea i aloha ‘ia la	The certain one who is loved
Kahi kai a‘o Mama la	Is by the sea of Mamala
Malama hewa ‘ana ‘oe la	You are cherished
Ka ukana a ke aloha [hoe, hoe]	The burden of love (paddle , paddle)
Ua pono no kau hana la	You are doing right

He kino lehulehu ‘oe	You are representing many others
I hea la ka nohona la	Where are you dwelling?
I ka ‘olu a‘o Halaulani	In the pleasant surroundings of Halaulani
Helani nui no ‘oe la	Indeed you are a high chief
Na neia nui kino	In my estimation
Kou kino noho malie la	You are of gentle character
Ke ahe a ka Makua	Heeding your parents
Ha‘ina mai ka puana la	Tell the refrain
Kahi mea i aloha ‘ia	The certain one who is loved
Ha‘ina hou ka puana la	I repeat the refrain
Kaholomoku he inoa la	In honor of Kaholomoku
Ea la ea la ea la ea [hoe, hoe]	Tra-la-la-la
HE INOA NO KAHOLOMOKU	In the name of Kaholomoku

[Beamer 1987:52]

Section 4 Historical Accounts

4.1 Pre-Contact to Early Post-Contact Period

4.1.1 Observations of Early Explorers and Westerners

The Kaka‘ako area was traditionally used as a salt pan area by Native Hawaiians. The missionary, William Ellis, on a tour of the Hawaiian Islands in 1822 and 1823, noted salt pans and recorded the final step of crystallization. The following passage refers to salt pans he observed while touring Hawai‘i Island:

> The natives of this district (Kawaihae) manufacture large quantities of salt, by evaporating the sea water. We saw a number of their pans, in the disposition of which they display great ingenuity. They have generally one large pond near the sea, into which the water flows by a channel cut through the rocks, or is carried thither by the natives in large calabashes. After remaining there for some time, it is conducted into a number of smaller pans about six or eight inches in depth, which are made with great care, and frequently lined with large evergreen leaves, in order to prevent absorption. Along the narrow banks or partitions between the different pans, we saw a number of large evergreen leaves placed. They were tied up at each end, so as to resemble a narrow dish, and filled with sea water, in which the crystals of salt were abundant. [Ellis 1827:403–404]

Rev. Hiram Bingham, arriving in Honolulu in 1820, described a still predominantly Native Hawaiian environment on the brink of Western-induced transformations.

> We can anchor in the roadstead abreast of Honolulu village, on the south side of the island, about 17 miles from the eastern extremity[…] Passing through the irregular village of some thousands of inhabitants, whose grass thatched habitations were mostly small and mean, while some were more spacious, we walked about a mile northwardly to the opening of the valley of Pauoa, then turning southeasterly, ascending to the top of Punchbowl Hill, an extinguished crater, whose base bounds the northeast part of the village or town […] Below us, on the south and west, spread the plain of Honolulu, having its fishponds and salt making pools along the seashore, the village and fort between us and the harbor, and the valley stretching a few miles north into the interior, which presented its scattered habitations and numerous beds of *kalo* (*arum esculentum*) in its various stages of growth, with its large green leaves, beautifully embossed on the silvery water, in which it flourishes. [Bingham 1847:92–93]

The *mauka* portion of the *ahupua‘a* would have been in Bingham’s view as he stood atop “Punchbowl Hill” looking toward Waikīkī to the south. This area would have included part of the plain of Honolulu with its fishponds and salt making pools along the seashore. Another visitor to Honolulu in the 1820s, Capt. Jacobus Boelen, hints at the possible pre-Contact character of Honolulu and its environs, including the Kewalo area:

> It would be difficult to say much about Honoruru [Honolulu]. On its southern side is the harbor or the basin of that name [which as a result of variations in

> pronunciation [sic] is also written as Honolulu, and on some maps, Honoonoono]. The landlocked side in the northwest consists mostly of taro fields. More to the north there are some sugar plantations and a sugar mill, worked by a team of mules. From the north toward the east, where the beach forms the bight of Whytetee, the soil around the village is less fertile, or at least not greatly cultivated. [Boelen 1988:62]

Boelen's description implies that the Kaka‘ako and Kewalo areas are within a "not greatly cultivated" (Boelen 1988:62) region of Honolulu perhaps extending from Pūowaina (Punchbowl Crater) at the north through Kaka‘ako to the Kālia portion of Waikīkī in the east.

4.2 **Mid-1800s and the Māhele**

4.2.1 The Māhele

The Kaka‘ako area continued to remain outside Waikīkī and Honolulu during the post-Contact era. It served as a place of the dying and the dead, the trash and the wasteland, and the poor and immigrant; however, it also represents the birth of the modern centers of Waikīkī and Honolulu (Griffin et al. 1987:73).

The Organic Acts of 1845 and 1846 initiated the process of the Māhele—the division of Hawaiian lands—that introduced private property into Hawaiian society. In 1848, the Crown and the *ali‘i* received their land titles. *Kuleana* (Native land rights) awards to commoners for individual parcels within the *ahupua‘a* were subsequently granted in 1850. The crown lands were considered the private lands of the monarch, and many lands were sold or mortgaged during the reigns of Kamehameha III and IV to settle debts to foreigners. To end this practice, the Crown lands were made inalienable in 1865, and their dispensation was regulated by a Board of Commissioners of Crown Lands, which effectively put them under the administrative control of foreign-born residents (Kame‘eleihiwa 1992:310). Before the passage of the Act of 3 January 1865, which made Crown Lands inalienable, Kamehameha III and his successors did as they pleased with the Crown Lands, selling, leasing, and mortgaging them at will (Chinen 1958:27).

In 1850, the Privy Council passed resolutions that affirmed the rights of the commoners or native tenants. To apply for fee-simple title to their lands, native tenants were required to file their claim with the Land Commission within the specified time period of February 1846 to 14 February 1848. The Kuleana Act of 1850 confirmed and protected the rights of native tenants. Under this act, the claimant was required to have two witnesses who could testify they knew the claimant and the boundaries of the land, knew that the claimant had lived on the land for a minimum of two years, and knew that no one had challenged the claim. The land also had to be surveyed.

Not everyone who was eligible to apply for *kuleana* lands did so and, likewise, not all claims were awarded. Some claimants failed to follow through and come before the Land Commission, some did not produce two witnesses, and some did not get their land surveyed. For whatever reason, out of the potential 2,500,000 acres of Crown and Government lands "less than 30,000 acres of land were awarded to the native tenants" (Chinen 1958:31).

Among the first written descriptions of the Kaka‘ako area by Hawaiians are the testimonies recorded during the 1840s and 1850s in documents associated with LCAs and awardees of the Māhele. According to LCA records (Table 1), traditional Hawaiian usage of the region and its

environs may have been confined to salt making and aquaculture, with some wetland agriculture in those areas *mauka* or toward Waikīkī at the very limits of the field system descending from Makiki and Mānoa valleys. The testimonies indicate that Hawaiians lived and worked in the area before the nineteenth century. The LCA records also reveal that midway through the nineteenth century, taro cultivation, traditional salt making, and fishpond farming activities continued within the Kewalo/Kukuluāe‘o area. Due to the urbanization of Honolulu from the end of the nineteenth century, developers destroyed or buried the land features supporting these activities. The LCA records, historic maps, and archival photographs document more precisely traditional Hawaiian settlement and subsequent historic land usage near the present project area. Because the project area is situated on artificial land created by fill, there are no LCAs within the project area.

In the western portion of the Kaka‘ako district, the *‘ili* of Ka‘ākaukukui (LCA 7713) was awarded to Victoria Kamāmalu, sister of Kamehameha IV and Kamehameha V. There were no awards to commoners in this *‘ili*, which seems to have consisted entirely of land used for salt making. Early historic maps show no residences in this area until the twentieth century. The largest settlement in the vicinity was the village of Honuakaha, at the corner of Punchbowl and King streets. The government awarded a large number of house lots to commoners in this area; late nineteenth century and early twentieth century maps always show a cluster of houses in this area.

Table 1. LCAs in the Kaka‘ako District

LCA	Awardee	*‘Ili*	Comments
2	Robert Kilday	Pualoalo	Two fishponds in Kukuluāe‘o
200	Kaina, M.	Kawaiaha‘o; Koula	House lot
272	Joseph Booth	Koula	Royal Patent 306 to Joseph Booth
387	ABCFM	Beretania St, Punahou, Kawaiaha‘o, Kukuluaeo	Salt lands attached to Punahou
569	Puniwai	King St	House lot with salt beds at *makai* end
603	Hoonaulu	Waiahao; King St	House lot
673	Naiwi	Kawaiaha‘o	House lot
677	Kekūanao‘a for Kamāmalu	Honuakaha	Three lots on Queen St, salt pans on *makai* side; Parcel Two included Honuakaha guesthouse and cemetery
1503	Puaa	Kukuluaeo, Kewalo	House lot and four fishponds
1504	Pahika	Kukuluaeo, Kewalo	House lot, fishpond, salt bed
1903	Lolohi	Kukuluaeo	Two salt beds, 15 drains, two *poho kai* (hollows), one salt *kula*
3169	Koalele	Kewalo	*Makai* ponds
7713	V. Kamāmalu,	Honolulu	Retained
9549	Kaholomoku	Kukuluae‘e	Fishpond and four salt pans on east side
10463	Napela	Kukuluae‘e	House site, two ponds, one ditch, salt lands
10605	Pi‘ikoi, Iona	Kawelo, Puaaloalo	Ponds; four structures

The *‘ili* of Pualoalo**,** or Puaaloalo (10605-A), was awarded to Iona (Jonah) Pi‘ikoi. Pi‘ikoi was an *ali‘i*, a retainer of Kauikeaouli (Kamehameha III), and held several government posts. It consisted of three *lele* lands, two in Nu‘uanu Valley and a small parcel near the Kaka‘ako Salt Works.

The *‘ili* of Pu‘unui, which also had several *lele* lands, included the large rectangular section *mauka* the Kaka‘ako Salt Works. The upper portion was part of LCA 677 awarded to Matio Kekūanao‘a, a high *ali‘i* who was a close friend to Kamehameha II and was married to Kīna‘u, the daughter of Kamehameha I. The lower portion was awarded to Victoria Kamāmalu as part of LCA 7713.

The *‘ili* of Kukuluāe‘o was originally awarded to the king as LCA 387, but he returned it to the government. The *‘ili* was then awarded to the American Board of Commissioners for Foreign Missions (ABCFM). Initially this land was associated with Punahou School in Mānoa Valley, as Chief Boki gave the Punahou lands to Hiram Bingham, pastor of Kawaiaha‘o Church in 1829 (DeLeon 1978:3). In the Māhele, however, this land became “detached” from the Mānoa award and was instead given to the pastor of the Kawaiaha‘o Church, as noted in a history of the Punahou School (Foster 1991).

Kolowalu, a triangular section of land between Kukuluāe‘o and Kewalo, was awarded to the government during the Māhele. This small land was probably a *lele*. Mānoa has such a division, with an *‘ili* called Kolowalu in the uplands and an *‘ili* called Kolowalu in the taro lands. The Kolowalu fishpond was probably the coastal portion of this *‘ili*. It was not a separate award in the Māhele but was given in 1878 as a grant (Grant 3294) to Ka‘aua and Kalae, long-time caretakers of the land.

The seventh *‘āpana* (lot) of the *‘ili* of Kewalo (LCA 10605) was awarded to Kamake‘e Pi‘ikoi, wife of Jonah Pi‘ikoi (awardee of Pualoalo ‘Ili). The husband and wife shared the award (Kame‘eleihiwa 1992:269). Kewalo was a large 270.84-acre land section extending from Kawaiaha‘o Church to Sheridan Street. This land section had numerous large fishponds, which were awarded as part of the claim to Pi‘ikoi. The LCA parcels were described as house lots, fishponds, salt ponds or salt lands, *kula* (plain, field) or some combination of the above.

The Hawaiian people used the coastal strip mainly for salt collection; only a few house lots were nearby on Halekauwila and Queen streets. Fishponds were scattered throughout the area, with some modified into long, narrow ponds probably used to raise fish and ducks. The main habitation areas were adjacent to King Street on the *mauka* border or Kaka‘ako, and in Honuakaha Village at the northwestern border of the Kaka‘ako area.

Large portions of the Kukuluāe‘o and Kewalo sections of the Kaka‘ako district were once part of the Ward Estate. This land was first awarded as LCA 272 to Joseph Booth. Joseph Booth was an early English resident of the Hawaiian Islands who operated a saloon and hotel in Honolulu, known at the time of the Māhele as the Eagle Tavern. He was granted lands in downtown Honolulu, Kewalo Uka (Pacific Heights area), the *‘ili* of Kapuni, and an area with “Three fish ponds, and a part of the plain near the road leading to Waikiki.” Little information on these three fishponds is given in the LCA testimony, but Royal Patent No. 306 for these lands mentions one known as “the large fishpond” or “long fishpond,” which had two huts beside it. The owners later modified this pond into the “lagoon” on the Ward Estate. Figure 6 shows a long T-shaped fishpond and three “old fishponds” that seem to be overgrown with vegetation.

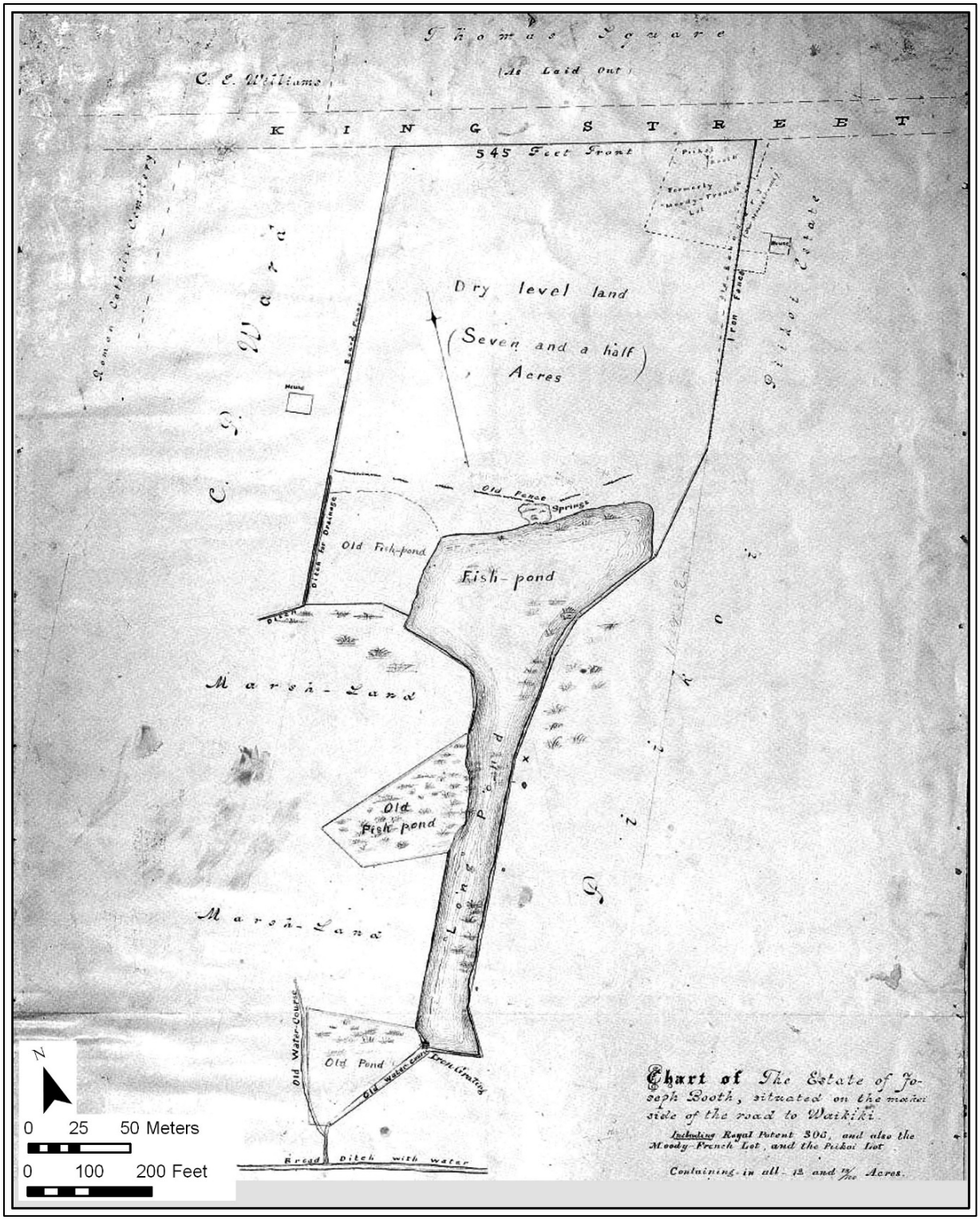

Figure 6. Estate of Joseph Booth, Royal Patent 206, LCA 272; later part of the Ward Estate (map reprinted in Hustace 2000:40)

Curtis Perry Ward, a native of Kentucky, came to the Hawaiian Islands in 1853 and soon established a livery and draying business, moving goods from the harbor to Honolulu Town and loading goods at the docks for the whaling and shipping industries. In 1865, he married Victoria Robinson, who was descended from the Hawaiian *ali‘i* and early French and British residents. For his new family, Ward purchased at auction the 12-acre Kewalo estate of Joseph Booth, Royal Patent 306, and additional contiguous lands in the Kō‘ula area in 1870. This constituted the *mauka* portion of the "Old Plantation" from Thomas Square on King Street to the *makai* border at Waimanu Street. A few years later (but before 1875), Ward added to his property with the purchase of 77 acres and 3,000 ft of ocean frontage in the *‘ili* of Kukuluāe‘o, *makai* of Queen Street.

Mr. Ward built a house in the southern style (Figure 7) at the *mauka* end of the estate near King Street, and modified the fishponds into a long "lagoon" (Figure 8). After the death of her husband in 1882, Victoria Ward derived much of her income from "eggs, bananas, firewood, *‘awa* (kava), taro leaf, *makaloa* grass, chickens, fish, hay, pigs, coconuts, salt, white sand *mānienie* grass, hides, butter, squid, and horses" collected from her lands (Hustace 2000:47). Victoria Ward raised her seven daughters on this estate. In 1957, the City and County of Honolulu purchased the *mauka* portion of the estate, razed the old homestead, filled in the ponds and the long lagoon, and constructed the new Blaisdell Civic Center (Hustace 2000:67, 77).

4.3 **Mid- to Late 1800s**

4.3.1 Kaka‘ako Salt Works and the Salt Pans of Kewalo and Kukuluāe‘o

As noted in the Land Commission Award testimony, much of the land in Kewalo and Kukuluāe‘o was used to produce salt. Salt Pans and accompanying infrastructure are depicted in an 1838 sketch entitled "Honolulu Salt Pans, Near Kakaako" (Figure 9) and in the 1845 sketch of the "Old Salt Pans" (Figure 10). As indicated by the description of various salt features, traditional Hawaiian salt production was accomplished by diverse methods. Malo describes one salt making method:

> Salt was manufactured in certain places. The women brought sea-water in calabashes, or conducted it in ditches to natural holes, hollows, and shallow ponds (*kaheka*) on the sea-coast, where it soon became strong brine from evaporation. Thence it was transferred to another hollow or shallow vat, where crystallization into salt was completed. [Malo 1951:123]

The Hawaiians used salt (*pa‘akai)* to flavor food, preserve fish by salting, for medicines, and for ceremonial purposes. In an article on Hawaiian salt works, Thomas Thrum discusses the large salt works at Alia Pa‘akai (Salt Lake in Moanalua) and at Pu‘uloa on the western loch of Pearl Harbor. Kamakau reported, "The king and Isaac of Pu‘uloa are getting rich by running the salt water into patches and trading salt with other islands" (Kamakau 1992:409). The salt was sent to Russian settlements in the Pacific Northwest, where it was used to pack salmon (Kurlansky 2002:406). Thrum also mentions a saltworks in Kaka‘ako:

> Honolulu had another salt-making section in early days, known as the Kakaako salt works, the property of Kamehameha IV, but leased to and conducted by E. O. Hall, and subsequently E. O. Hall and Son, until comparatively recent years. This enterprise was carried on very much after the ancient method of earth saltpans as described by Cook and Ellis. [Thrum 1923:116]

Figure 7. 1880s photograph of the Old Plantation House, with the Ward family's daughters and friends gathered on the lanai (photograph reprinted in Hustace 2000:46)

Figure 8. 1888 photograph of the “long lagoon” looking from the cupola of the Ward house toward the Kukuluāe‘o marshlands and the ocean (photograph reprinted in Hustace 2000:2)

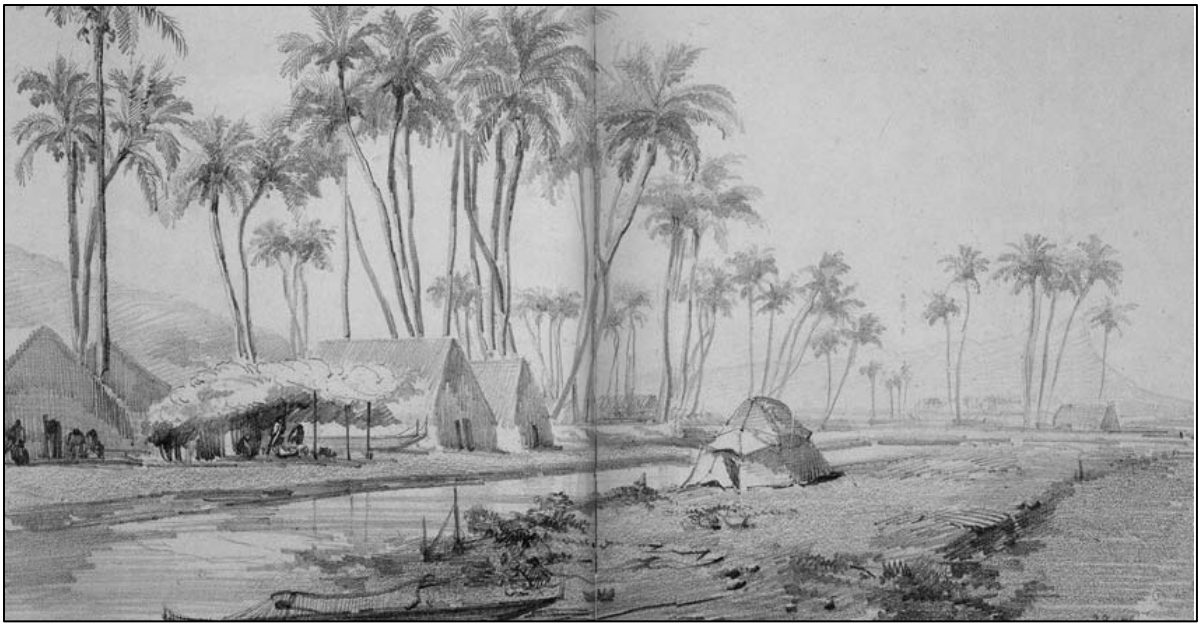

Figure 9. “Honolulu Salt Pan, near Kaka‘ako,” 1838 sketch drawn by a French visitor, Auguste Borget (original sketch at Peabody Essex Museum, Salem, Mass; reprinted in Grant 2000:64-65)

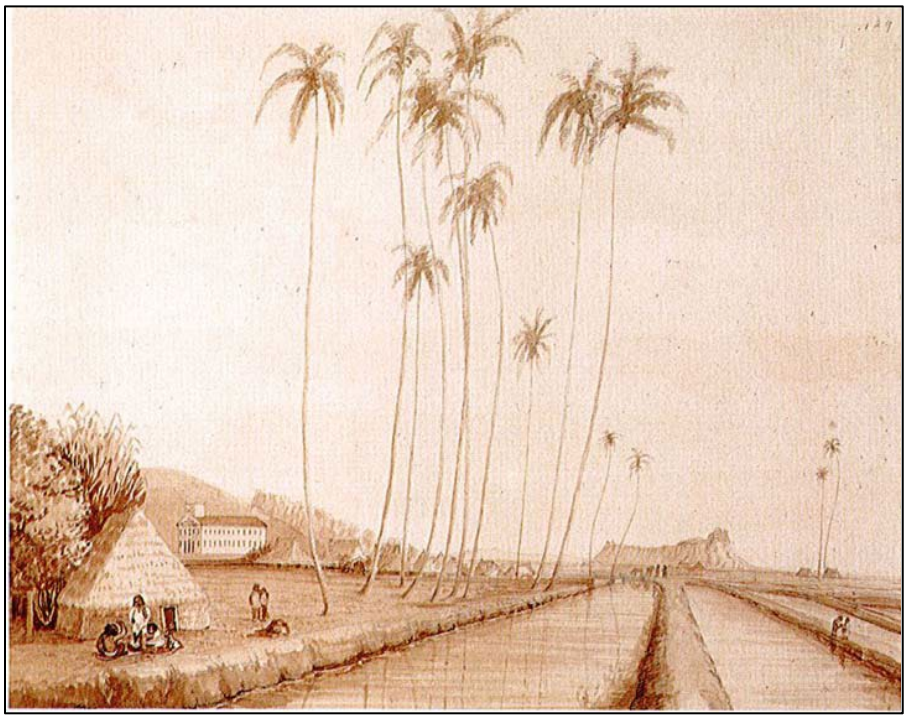

Figure 10. “Native Church [Kawaiaha‘o Church], Oahu, from the Old Salt Pans,” 1845 sketch drawn by John B. Dale, from the U.S. Exploring Expedition led by Lt. Charles Wilkes (J. Welles Henderson Collection, reprinted in Forbes 1992:126)

In the testimony for LCA 1903, Lolopi claimed four separate types of salt features: the ponds near the shore that fill with salt water at high tide (*ālia*); the drains where the salt water is transferred to smaller clay-lined or leaf-lined channels (*ho‘oliu*); the natural depressions (or modified depressions) in the rocks along the shore where salt formed naturally (*poho kai*); and the land that could probably not be used for agriculture as it was impregnated with salt (*kula*).

The export of salt declined in the late nineteenth century (Thrum 1924:116). By 1916, only one salt works, the Honolulu Salt Company, was still in operation. Salt continued to be manufactured for local use; the Kaka‘ako Salt Works appears on maps as late as 1891 and a page in Victoria Ward’s ledger for 1883 notes a yearly income of $651.50 received from her “Salt Lands” in Kukuluāe‘o (Hustace 2000:50). A 1902 photograph (Figure 11) shows the extensive salt beds of the Kewalo area.

By 1901, government agencies reported that most of the fishponds and salt pans *makai* of the Ward “Old Plantation” area were abandoned. In that year, the Hawaii Legislature proposed to build a ditch to drain away the “foul and filthy water that overflows that district at the present time.”

> The district makai of King St. and the Catholic Cemetery, Ewa of Mrs. Ward’s (the Old Plantation), *mauka* of Clayton St., and Waikiki of the land from King St., leading to the Hoomananaauao Church, consists of six large abandoned fish ponds and a large number of smaller ones, all in filthy condition, fed by springs and flowing into Peck’s ditches. Just makai of these ponds, at the end of Clayton street, next to Mr. Ward’s, is Peck’s place. An artesian well flushing the wash houses flows into two foul ditches, thence to the big pond which is Waikiki of what used to be Cyclomere and next to Mrs. Ward’s line [ditch] extending down to Waimanu St. The rear portion of Mrs. Ward’s property down to Waimanu St. used to be fish ponds all connecting to the sea by a ditch which is fed by an artesian well. These ponds, with the exception of three, are abandoned. [Hawaii Legislature 1901:185]

4.3.2 Human and Animal Quarantine

During an 1853 smallpox epidemic, patients were isolated at a temporary quarantine camp in Kaka‘ako (Thrum 1897:98), and victims of the disease were buried at the Honuakaha Cemetery, near the junction of Quinn and South streets (Griffin et al. 1987:13). Hansen’s disease, commonly known as leprosy, was first reported in 1840 and definitively identified in 1853. In 1865, a receiving hospital in Kalihi was set up to examine suspected lepers. If the disease was confirmed, the patients were forcibly exiled to the Kalaupapa colony on Moloka‘i. In 1881, a branch hospital or receiving station for cases of Hansen’s Disease was opened in Kaka‘ako, in a block now bound by Ala Moana, Auahi, Coral, and Keawe streets, under the direction of Saint Marianne Cope (Griffin et al. 1987:55) with 48 patients tended by Dr. George L. Fitch (Hanley and Bushnell 1979:112). One of the main purposes of the Kaka‘ako Detention Center was to keep suspected lepers isolated from the general public. Sister Leopoldina, a Franciscan sister, described the Kaka‘ako Hospital in 1885 as almost a prison, enclosed by

> [. . .] a high close board fence and large strong locked gates […] A large building [sat] over those gates where the lepers were allowed to talk with their relatives through prison bars. No one was allowed to enter without a permit from the Board of Health. [Hanley and Bushnell 1979:114]

Figure 11. Kewalo Brine Basins, 1902 photograph by Alonzo Gartley, taken near the Ward Street and Kapi‘olani Boulevard junction (original photograph at the Bernice Pauahi Bishop Museum, reprinted in Scott 1968:579)

As the complex was on a former salt marsh near the sea, it was subject to flooding at high tide. The salt water killed all vegetation and made it impossible to landscape the complex with grass or plants; the water swept away stone-bordered paths, corroded metal, and destroyed the whitewash on the buildings. Even so, the Board of Health expected the patients to feed themselves by growing their own vegetables in gardens on the center's grounds. Overcrowding was also a problem. The hospital, built to house 100 patients, had over 200 residents by 1883.

In 1883, Walter Murray Gibson, minister in King Kalākaua's government, and head of the Board of Health, sent out a plea for a religious order to care for the sick of Hawai‘i, especially the lepers. The call was answered by the Franciscan Sisters of Syracuse, New York, led by Mother Marianne Cope. The seven sisters arrived in Honolulu and made their first visit to the Kaka‘ako Leper Detention Center in November 1883. They were appalled with what they saw: tumble-down cottages, filth and flies in the dining area, and the stench of the leper's unwashed sores. The hospital steward, J.J. Van Geisen, took them on a tour.

> 'Now let me show you the most interesting place,' he announced, leading the group to a narrow building that teetered on pilings over the surf. The structure had been divided into three dingy cubicles, with warped floors and windows ghosted by salt spray. The first of the rooms was the 'morgue.' Van Geisen explaining that when a patient's condition reached a certain point, he was forced into the morgue and remained there until dead. The body was then dragged to the second cubicle, where Fitch performed an autopsy. Finally the remains were moved to the third room, to await a burial team. [Tayman 2006:143]

The sisters built a convent at the hospital in November to live near their patients. The convent was a two-story house with a hall, parlor, and refectory on the ground floor, and five bedrooms upstairs. A small chapel was attached to the rear of the structure, dedicated to St. Philomena. The sisters soon took the running of the hospital in hand, cleaning and whitewashing the cottages, separating the males and females into two wards, and setting up new landscaped areas and gardens (Figure 12).

In 1884, Mother Marianne built a home at Kaka‘ako for the non-leprous daughters of the patients from Kaka‘ako and the exiled lepers of Molokai (Figure 13). The girls' home was named after Queen Kapi‘olani, who supported the plan by raising funds. A two-story dormitory for the girls was built near the sister's chapel (Hanley and Bushnell 1980:222). A statue of Mother Marianne was built to honor her work during the Hansen's disease epidemic (Figure 14).

In 1888, the Hawai‘i Board of Health decided to close the branch, moving the receiving station to Kalihi, and determined that "The buildings at Kakakao should be entirely removed" (Hanley and Bushnell 1980:275). However, Thrum (1897:101) reports that victims of the cholera epidemic of 1895 were treated at the Kaka‘ako Hospital, so the buildings must have remained or been rebuilt.

In 1899, the first case of bubonic plague was identified in Hawai‘i and spread rapidly through the crowded tenements of Chinatown. The government decided that the best way to eradicate the disease was through "controlled burning" of the wooden buildings. Infected patients were moved to a quarantine camp at Kaka‘ako. Before new immigrants could travel to their new homes at the sugar plantations, doctors first examined them for disease. The Immigration Station was established in 1893 on Allen Street near downtown Honolulu, but it was moved to the Kaka‘ako

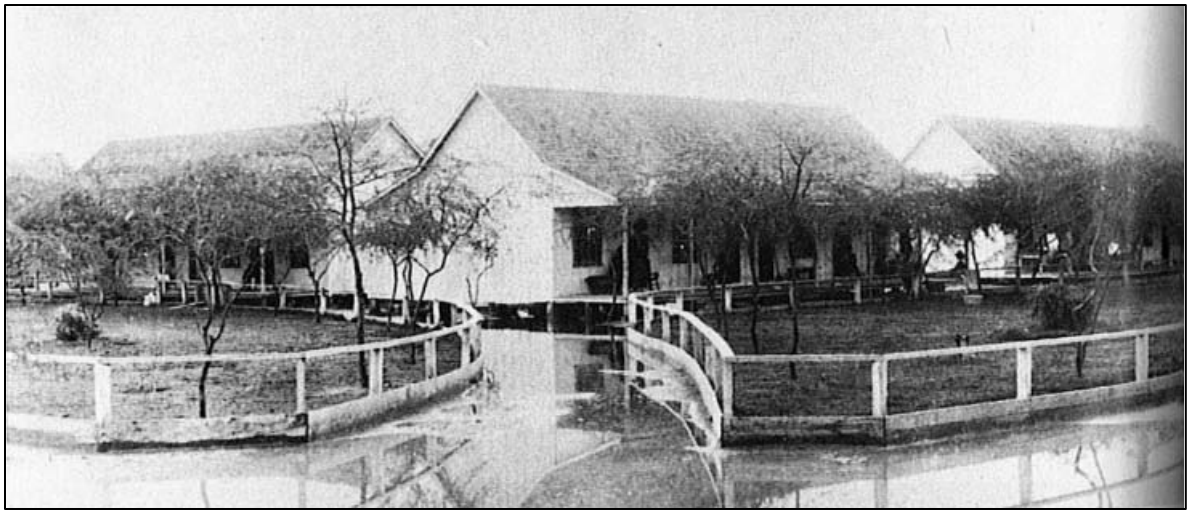

Figure 12. 1886 photograph of patient’s oceanside cottages at the Kaka‘ako Leper Detention Center (reprinted in Hanley and Bushnell 1980: photograph section)

Figure 13. 1886 photograph of the Kapi‘olani Home for Girls within the Kaka‘ako Leper Detention Center; Mother Marianne Copeland is the second woman from the right (reprinted in Haneley and Bushnell 1980: photograph section)

Figure 14. Statue of St. Marianne Cope at Kewalo Basin Park; St. Marianne was known for her loving care of Hansen’s disease patients (CSH 2010)

area in 1905. The station was built on mud flats, resting on a pile foundation; it was connected to the shoreline by two bridges (UH 1978:A-11).

Kaka‘ako not only acted as a land set aside for human quarantine, but also for animal quarantine. The first animal quarantine station in the Hawaiian Islands was established in 1905. A veterinarian checked in all imported animals, looking for diseases such as cholera in hogs and tuberculosis in cattle. The workers added kennels to the facility in 1909 for the quarantine of all dogs brought to the Islands. The animal quarantine station was on land wrested from the Ward Estate, in the area between Kamake‘e and Pi‘ikoi streets. The 1913 report has a photograph of the "lethal chamber" where gas was used to euthanize "mangy and homeless" dogs (Hawaii Board of Commissioners for Forestry and Agriculture 1913:214). It is probable the government also buried euthanized dogs at the station. The Ward family donated some of their land to the society to establish the first animal shelter. This land was at the corner of Pohukaina and Kō‘ula streets; the facility for "all homeless, hungry animals" was completed in 1925. The Humane Society moved to a new and larger facility in Mō‘ili‘ili in 1938 (Hawaiian Humane Society 1997:44, 53). As an area set apart for quarantine, other types of structures not suitable for construction near the center of town were built in Kaka‘ako, such as a pump house, a kerosene storage lot for kerosene used in government buildings, and a garbage incinerator for the daily disposal of the city's refuse (UH 1978) (Figure 15).

4.3.3 Military Infrastructure

During the monarchy, the waterfront of Kaka‘ako was the location for a battery with three cannons used to salute visiting naval vessels, which responded with their own cannon salutes (Figure 16). Other saluting batteries were at the top of Punchbowl Crater and at the Honolulu Fort (Dukas 2004:163), and these were used until the overthrow of the monarchy in 1893 (Judd 1975:57).

After the United States' annexation of the Islands in 1898, the U.S. Congress began to plan for the coastal defenses of their new territory. The major batteries were placed at Pearl Harbor and in Waikīkī, but a small reservation, named Fort Armstrong (Figure 17) was also set up on the Ka‘ākaukukui Reef as a station for the storage of underwater mines. In 1911, the Honolulu Rifle Association, and possibly other groups, used the flat, uninhabited Kaka‘ako lands near the coast as a rifle range. The militia probably chose this area for target practice based on the absence of any habitations in the area (Williford and McGovern 2003:15).

The fort saw some small action during World War I. The military authorities closed Honolulu Harbor between sunset and sunrise in October 1917. The steamer *Claudine,* which was sailing from Maui when the edict went into effect, sailed into Honolulu Harbor unknowingly after twilight. The coast artillery at Fort Armstrong shot a few shells across her bow, and the steamer quickly reversed her engines and went back out to sea until the following morning, when she could safely and legally come to shore (Thomas 1983:147). During the Japanese attack on 7 December 1941, the fort escaped relatively unscathed; only one motor pool structure was hit. Antiaircraft shells were fired from the fort but were ineffective; at least one hit the town rather than any aircraft (Richardson 2005:34). In the 1950s, the federal government returned most of Fort Armstrong to the Territory of Hawaii, which used the area to expand the shipping piers of the harbor.

R. J. Baker

DAY AND NIGHT—A COLUMN OF SMOKE

"The desert waterfront of Honolulu where there is a perpetual volcano," described this forsaken stretch of scrub covered coral wasteland between what would become the Ala Wai and Kewalo Basin. In the center of this desolation stood a refuse dump where, day and night, columns of smoke rose into the Hawaiian sky.

Figure 15. 1921 photograph of a city worker supervising open burning of trash understood to be on the west side of Kewalo Basin (original photograph by Ray Jerome Baker, reprinted in Scott 1968:578)

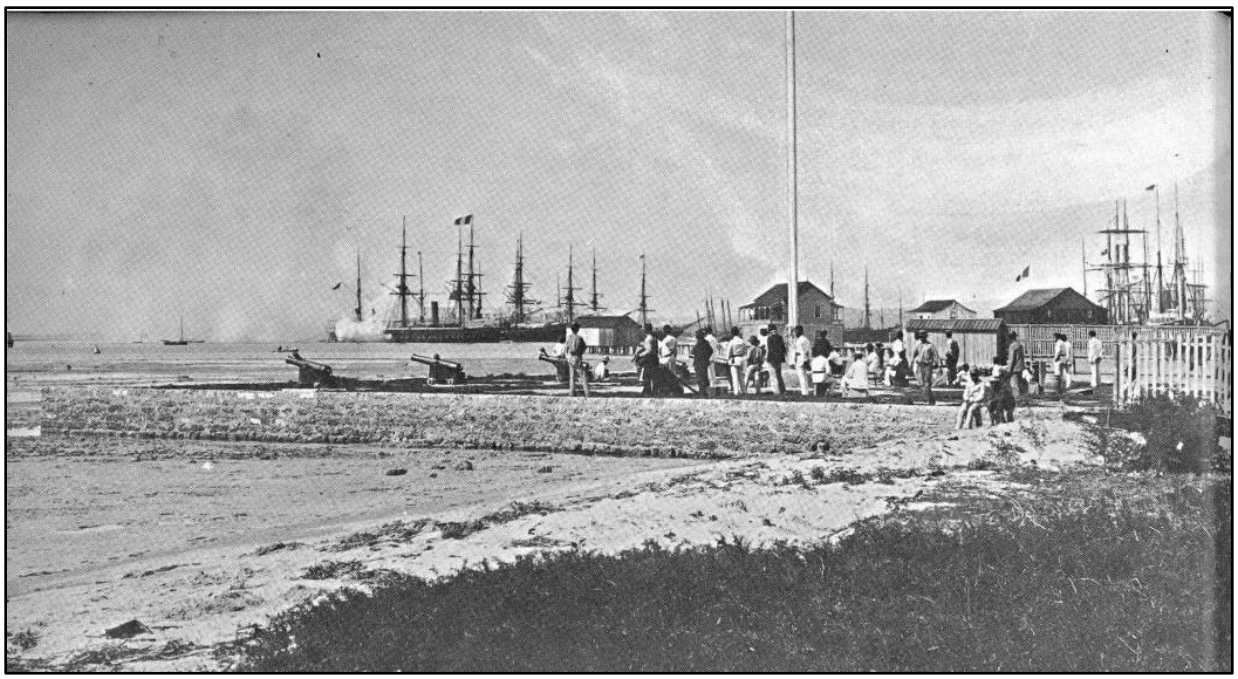

Figure 16. 1887 photograph of the Kaka‘ako Saluting Battery and flagstaff (original photograph taken by Karl Kortum and archived at the San Francisco Maritime Museum; reprinted in Scott 1968:176)

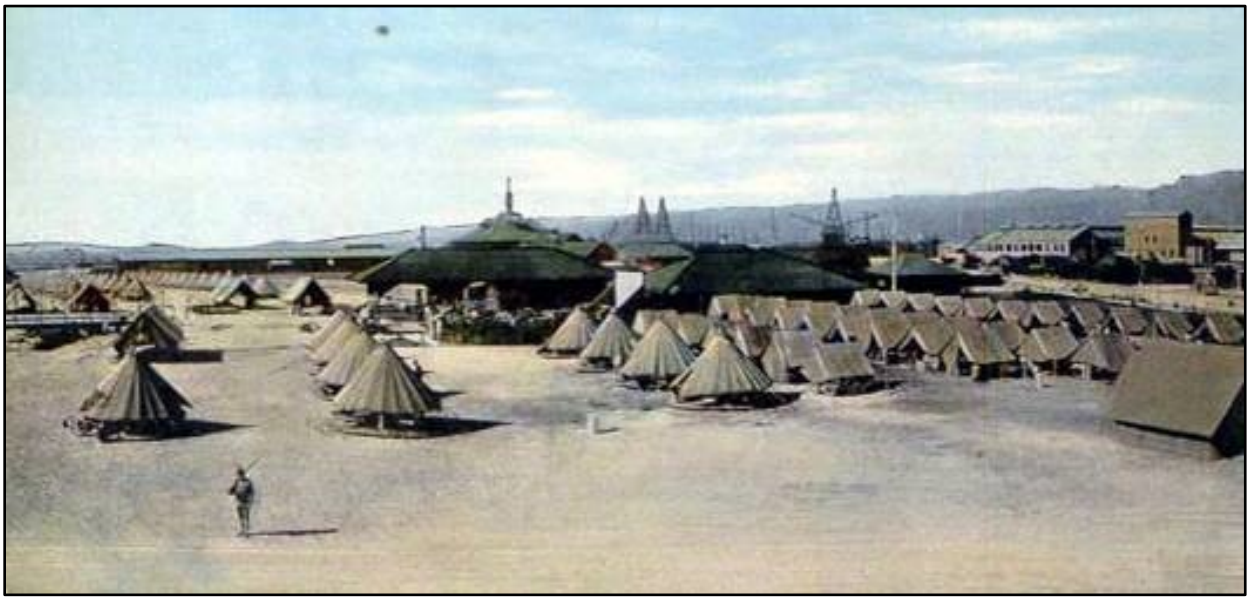

Figure 17. Colorized postcard (ca. 1911-1920) of Fort Armstrong (original black and white photograph at Hawai‘i State Archives; reprinted in Wisniewski 1984:18)

4.4 Twentieth Century to Present

4.4.1 The McFarlane Tuna Cannery and the Sampan Fleet

In 1919, the Hawaii Government appropriated $130,000 to improve the small harbor of Kewalo for the aim of "harbor extension in that it will be made to serve the fishing and other small craft, to the relief of Honolulu harbor proper" (Thrum 1920:147). As the area chosen for the harbor area was adjacent to several lumber yards, the basin was initially made to provide docking for lumber schooners, but by the time the wharf was completed in 1926, this import business had faded, so the harbor was used mainly by commercial fishermen. The dredged material from the basin was used to fill a portion of the Bishop Estate on the western edge of Waikīkī and some of the Ward Estate in the coastal area east of Ward Avenue (Hawaii Governor 1920:52). In 1941, the basin was dredged and expanded to its current 55 acres. In 1955, dredged material was placed along the *makai* side to form an 8-acre land section protected by a revetment. Figure 18 through Figure 21 depict these changes made to create the harbor and park.

At the dawn of the twentieth century, a single Japanese-style fishing vessel entered Hawaiian waters. Hans Van Tilburg describes the story of how this singular event led to the commercial *aku* (*bonito*, skipjack, *Katsuwonus pelamis*) fishing industry in Hawai‘i (Van Tilburg 2007:41–42). Mr. Nakasugi brought with him on the deck of the steamer a traditional 34-ft Japanese sailing *sampan* (relatively plat bottom wooden boat of Asian descent) (Figure 22). The term *sampan*, like junk and dhow, vaguely connotes a type of vessel used by several Asian cultures. Mr. Nakasugi's *sampan* featured a wooden hull and a light square-sailed rig, reminiscent of older Japanese fishing vessels with distinctive keels, planking, and bulkheads.

With continuing labor migration, Japanese vessels and their sailors found employment in the offshore fishing industry, soon unloading large catches of *‘ahi* (yellow-fin tuna, *Thunnus albacares*) and *aku* on the docks of Hawaiian shores. The Japanese fishermen opened the commercial tuna industry (Figure 23) in Hawai‘i in conjunction with the innovation of modern packing plants, and this enabled the expansion and modernization of the fishing fleet (Van Tilburg 2007:42). The small boat harbor of Kewalo Basin was developed in the 1920s to prevent the growing *aku* fishing fleet from overcrowding Honolulu Harbor (Kewalo Basin Harbor 2009). About 50 *sampan* used to congregate in the harbor near the River Street fish markets. The Hawaiian Dredging Company completed the Kewalo Basin wharf and channel in 1925, and all ships of the *aku* fishing fleet relocated to Kewalo Basin by 1930. The McFarlane Tuna Company (now Hawaiian Tuna Packers) built a shipyard in 1929 (corner of Cooke and Ala Moana) for their fishermen's *sampan* fleet and a new tuna cannery at the basin in 1933 (Clark 1977:64). The *aku* and *‘ahi* from the *sampan* fleet was processed as tuna in tins:

> The sixty-five sampan belonging to the company tie up at the company wharf and unload into steel-bottom slatted cars on a narrow gauge railway. Weighed in the cars, the fish are cleaned on a concrete floor and cooked, a ton or two at a time, in steam-jacketed cookers. After three hours in the cookers, it takes them ten hours to cool before they are stripped and sliced, oiled and sterilized, and cooled again. [Gessler 1938:185]

Figure 18. 1927 Kaka‘ako Coast Aerial Photograph (UH SOEST) depicting the project area

Figure 19. 1939-1941 Kaka‘ako Coast Aerial Photograph (U.S. Army Air Corps) depicting project area; toward the east, Ala Moana Beach Park, which is now on fill land; note the beach has been extended with fill

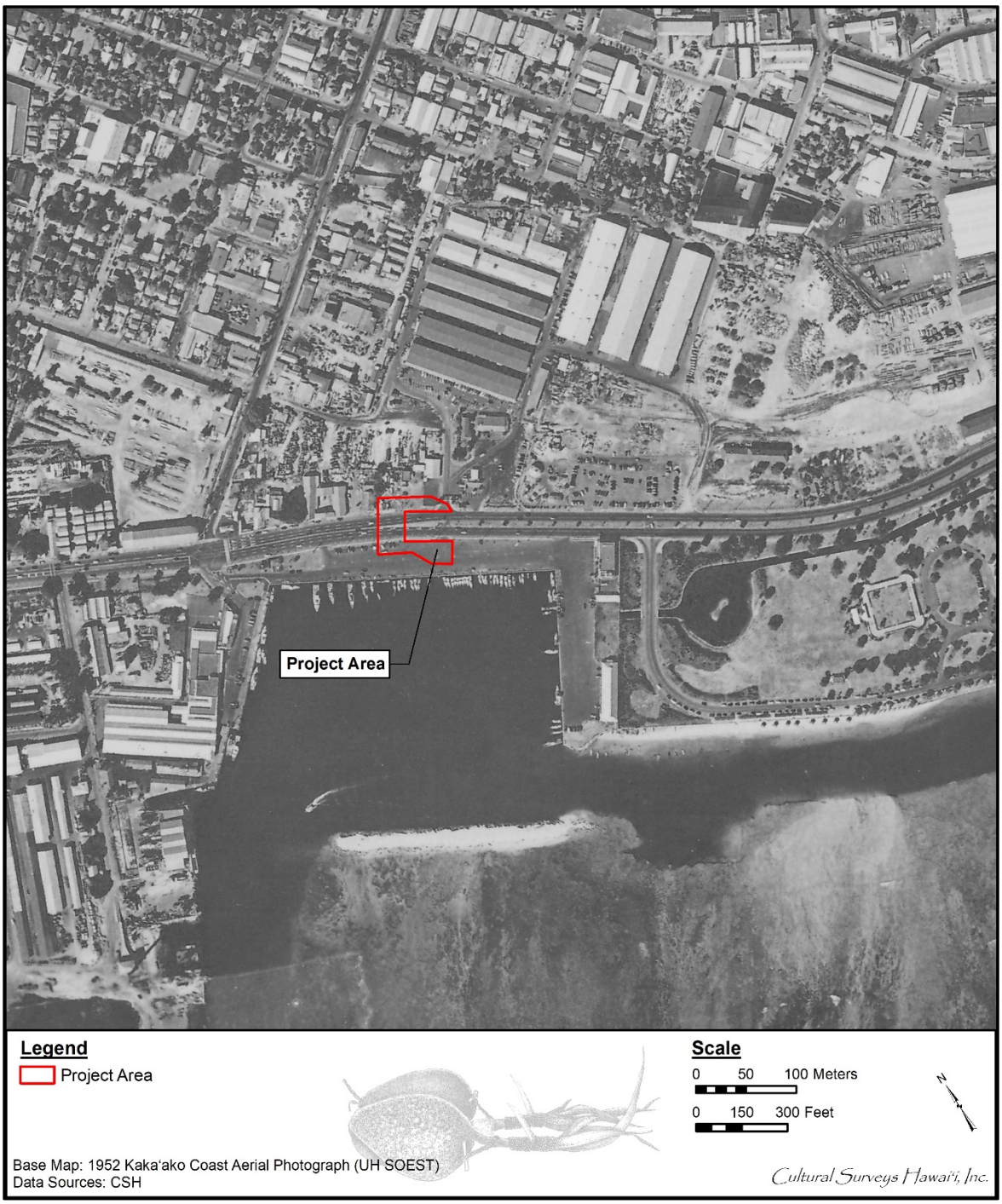

Figure 20. 1952 Kaka‘ako Coast Aerial Photograph (UH SOEST) with the project area; the road into Ala Moana Beach Park is now to the east of the project area; the Kewalo Basin Harbor area now consists of a parking lot; the channel spanning southwest to southeast has been dredged more

Figure 21. 1970 Kaka‘ako Coast Aerial Photograph (UH SOEST) with the project area; *makai* of the project area consists of facilities and a parking lot; additional filling is also evident

Figure 22. Kewalo Basin with sampans, ca. 1940s (Hawai‘i State Archives)

Figure 23. Hawaiian Tuna Packers Cannery in Kaka‘ako, ca. 1930s photograph (Hawai‘i State Archives)

World War II severely impacted the *sampan* fishing industry. Economic sanctions limited the operating of *aku sampan* to certain hours in a few near-shore areas, and this devastated the fishing industry by reducing the annual yield by 99% in 1942. The government confiscated the *sampan* fleet in groundless fear that the mainly Japanese owners would use the boats for spying or sabotage. The blue paint of the *sampan* was covered with white, and the boats were converted for use as coastal watch vessels. The U.S. military converted the cannery into an assembly plant for aircraft auxiliary fuel tanks. The independent Japanese tuna fishermen in their *sampan* never recovered from the World War II confiscations. Wood shortages after the war prevented the construction of new boats and the cannery reopened at only a quarter of its former capacity. The tuna fish cannery closed in 1985 when the industry became unprofitable (Van Tilburg 2007:44–45).

4.4.2 Kaka‘ako and Kewalo Incinerators

In the early years of garbage disposal, all trash was dumped into low-lying ground or landfills, or burned in the open. To reduce the volume of waste, plans were made to build incinerators, where “putrescible” waste (mainly animal and fish) could be burned, while non-animal material, “combustible” waste, was still disposed of using the earlier method (Young 2005). Thrum reported on the first incinerator in the Kaka‘ako area in 1905:

> Early in the year was completed the long projected garbage crematory for the disposal, daily, of the city's refuse by a patent and sanitary process. It is located on the shore of Kakaako, adjoining the sewer pumping station; is two stories in height and built of brick. [Thrum 1906:177]
>
> The dredging of Honolulu harbor and its channel is completed as far as planned for the present, and excavations for the Alakea and Kinau slips finished, the material therefrom being used to fill in a large area of Kakaako and the flats in the vicinity of the sewer pumping station and garbage crematory. The amount of material removed by the Federal dredging was a million and a half cubic yards. [Thrum 1907:148–149]

For the incinerator, Thrum noted the following:

> The new station is built on piles on reclaimed land that is being filled in from the coral dredgings that is going on, and is gradually taking on a tropical appearance.[…] Adjoining its premises on the mauka side is the new building designed for the Planters’ Association for their labor bureau. [Thrum 1907:148–149]

In the early 1920s, trash was burned in the open at the Ala Moana Dump (landfill area *makai* of Ala Moana Boulevard). The Hawaii Public Works recommended that an incinerator should be built for the burning of “putrescible” waste. The Kewalo Incinerator (Incinerator Number 1) was built in the Italianate style at the intersection of Ahui and Olomehani streets in 1930 by the City and County of Honolulu (Figure 24). The facility was built to dispose of waste from the Ala Moana dump and the ash was used to fill the seawall in Ka‘ākaukukui in the late 1940s creating 29 additional acres of land adjacent to Fort Armstrong. It ceased operations in 1945 when a new incinerator was built on Ohe Street.

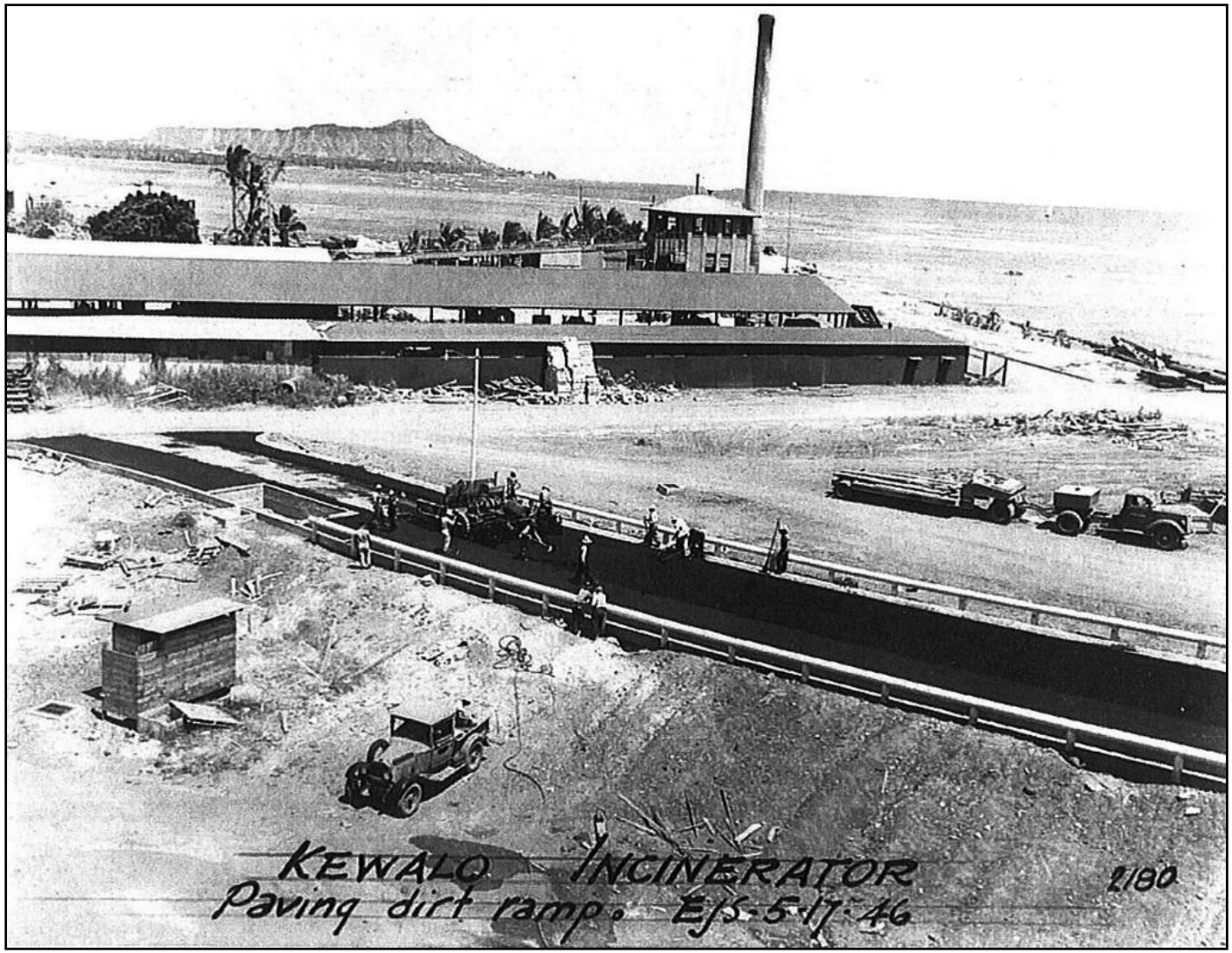

Figure 24. 1946 photograph of the Kewalo Incinerator No. 1, west side of Kewalo Harbor (Mason Architects 2002)

The building was used by the Marine Service Station in 1947. In the 1950s, the building was used by the Mitsuwa Kamaboko factory, which made *kamaboko*, a Japanese fishcake. In 1955, the adjacent property was purchased by the M. Otani Company, which built storehouses for the Smoked Fish Company, a fish market operated by the M. Otani Company. It is likely the smokestack for the incinerator was demolished at this time. Matsujiro Otani also founded the United Fishing Agency (UF) in 1952 to resolve disputes in the fishing industry. They operated a fish marketplace in A‘ala Park but moved to the Kewalo area in the early 1980s. After 1978, the incinerator building was used as storage by the United Fishing Agency, which has offices next door to the old incinerator. The second incinerator, built on Ohe Street in 1946–1948, was used for waste burning until 1997. The building was adapted for use by the Children’s Discovery Center in 1990 (Mason Architects 2002).

4.4.3 Land Reclamation

The first efforts to deepen Honolulu Harbor were made in the 1840s. The idea to use this dredged material, composed of sand and crushed coral, to fill in low-lying lands, was quickly adopted. Between 1857 and 1870, the “Esplanade” between Fort and Alakea streets was created on 22 acres of filled-in former reef and tideland. By 1874, Sand (Quarantine) Island, site of the first immigration station, had been created over “reclaimed” land on reefs (Hawai‘i Department of Transportation, Harbors Division 2007:3).

By the 1880s, filling-in of the mud flats, marshes, and salt ponds in the Kaka‘ako and Kewalo areas had begun. This filling was pushed by three separate but overlapping improvement justifications. The first directive or justification was for the construction of new roads and raising the grade of older roads, so improvements would not be washed away by flooding during heavy rains. A report by the Hawaii Board of Health (1908) noted the following:

> I beg to call attention to the built-up section of Kewalo, ‘Kaka‘ako,’ where extensive street improvements, filling and grading have been done. This, no doubt, is greatly appreciated and desirable to the property owners of that locality, but from a sanitary point of view is dangerous, inasmuch as no provision has been made to drain the improved section, on which have been erected neat cottages occupied for the greater part by Hawaiian and Portuguese families, now being from one to three feet below the street surface, and which will be entirely flooded during the rainy season. Unless this is remedied this locality will be susceptible to an outbreak [of cholera] such as we experienced in the past. [Hawaii Board of Health 1908:80]

As mentioned in the above quotation, the improvement justification most frequently cited was public health and sanitation, the desire to clean up rivers and ponds that were reservoirs for diseases such as cholera and that acted as breeding places for rats and mosquitoes. Thus, as early as 1902, the following was reported:

> The Board [of Health] has paid a great deal of attention to low-lying stagnant ponds in different parts of the city, and has condemned a number of them. The Superintendent of Public Works has given great assistance to seeing that the ponds condemned by the Board are filled. In September a pond on South Street was condemned as deleterious to the public health. [Hawaii Board of Health 1902:80]

The first areas to be filled were those closest to Honolulu town, followed by areas moving outward to Kaka‘ako (Griffin et al. 1987:13). The first fill material may have been set down for the Kaka‘ako Leper Branch Hospital (between Coral and Keawe streets), which had been built on a salt marsh. Laborers were hired to “haul in wagonloads of rubble and earth to fill up that end of the marsh” (Hanley and Bushnell 1980:113). In 1903, five more lots in Kewalo, on Laniwai, Queen, and Cooke streets, were condemned and ordered to be filled (Hawaii Board of Health 1903:6).

A main concern in this area was the Kaka‘ako Ditch, which originated from the large fishponds in the *mauka* portion of the Ward Estate and extended to the sea. A Hawaii legislature report of 1901 asked for an appropriation to build a new drainage ditch through the Kewalo district to address problems with older ditches:

> The district makai of King St. and the Catholic Cemetery, Ewa of Mrs. Ward’s (the Old Plantation) […] consists of six large abandoned fish ponds and a large number of smaller ones, all in filthy condition, fed by springs and flowing into Peck’s ditches. […] The rear portion of Mrs. Ward’s property down to Waimanu St. used to be fish ponds all connecting to the sea by a ditch which is fed by an artesian well. These ponds, with the exception of three, are abandoned.
>
> When Desky opened Kewalo for settlement he dug a ditch from the pond on Peck’s place along Waimanu St. to Mrs. Ward’s ditch, and drained all the above described property. A law suit ensued, as the foul water drove away the fish, and the connecting ditch was torn out […] and a dyke wall was built between Mrs. Ward’s and Peck’s.
>
> The result was that as the Kakaako ditch, at the point of juncture with Peck’s ditch, was too high, the water in Peck’s ditch rose and backed up […] and as it must necessarily go somewhere, it overflowed its banks and at present Ward avenue from end to end is a big pond with no footing for pedestrians, and a carriage driven through the other day sank to the body of the same in water and mud. [Hawaii First Legislative Assembly 1901:186]

Although public health and safety were prominently cited, according to Nakamura (1979), the main aim (and third justification) for filling in Honolulu, Kewalo, and Waikīkī lands was to provide more room for residential subdivisions, industrial areas, and tourist resorts. In the early twentieth century, Kaka‘ako was becoming a prime spot for large industrial complexes such as iron works, lumber yards, and draying companies, which needed large spaces for their stables, feed lots, and wagon sheds. In 1900, the Honolulu Iron Works, which produced most of the large equipment for the Hawaiian plantation sugar mills, moved from their old location at Queen and Merchant streets near downtown Honolulu to the shore at Kaka‘ako, on land that had been filled from dredged material during the deepening of Honolulu Harbor (Thrum 1901:172). Other businesses soon followed. Thrum (1902) noted the following:

> The Union Feed Co. is another concern whose business has outgrown the limits of its old location, corner of Queen and Edinburgh streets. Like the Iron Works Co. they have secured spacious premises at Kakaako, erecting buildings specially adapted to the needs of their extensive business at the corner of Ala Moana (Ocean Road) and South Street. [Thrum 1902:168]

Private enterprises were not the only new occupants of Kaka‘ako. A sewer pumping station, an immigrant station, and a garbage incinerator were also built on “reclaimed land.” Thrum noted the following:

> The dredging of Honolulu harbor and its channel is completed as far as planned for the present, and excavations for the *Alakea* and *Kinau* slips finished, the material therefrom being used to fill in a large area of Kakaako and the flats in the vicinity of the sewer pumping station and garbage crematory. The amount of material removed by the Federal dredging was a million and a half cubic yards. [Thrum 1907:148–149]

In 1900, a pond surrounded by a bicycle racing track, called the Cyclomere (built in 1897), in the Kewalo area was filled. This was on the *makai* side of Kapi‘olani Avenue between Cooke Street and Ward Avenue. In 1904, the area around South Street from King to Queen streets was filled in. The Hawaii Department of Public Works (1904:7) reported that “considerable filling [was] required” for the extension of Queen Street, from South Street to Ward Avenue, which would “greatly relieve the district of Kewalo in the wet season.”

Although the Board of Health could condemn a property and the Department of Public Works could then fill in the land, the process was rather arbitrary and piecemeal. In 1910, after an epidemic of bubonic plague, the Board of Health condemned a large section of Kewalo, consisting of 140 land parcels (including the areas once known as Kukuluāe‘o and Ka‘ākaukukui), which had numerous ponds (Hawaii Department of Public Works 1914:196).

In 1914, the entire

> locality bounded by King street, Ward avenue, Ala Moana and South street, comprising a total area of about two hundred acres, had been found by the board of health of the Territory to be deleterious to the public health in consequence of being low and below ‘the established grades of the street nearest thereto’ and at times covered or partly covered by water and improperly drained and incapable by reasonable expenditure of effectual drainage, and that said lands were in an unsanitary and dangerous condition. [Hawaii Reports 1915:329]

The superintendent then sent a letter to all the property owners, informing them that they must fill in the lands to the grade of the street level within 60 days. Only a few of the landowners complied, filling their land with a variety of materials. Most of the landowners did not comply with this notice, and in 1912, the bid was given to Lord-Young Engineering Company to fill in the land with “sand, coral and material dredged from the harbor or reef and the depositing of the same upon the land by the hydraulic method” (Hawaii Reports 1915:331). The recalcitrant landowners sued to stop the work, and in the suit, the method of hydraulic filling is described as follows:

> By this method the material dredged is carried in suspension or by the influence of water which is forced through large pipes and laid upon the lands and intervening streets, and afterwards is distributed and leveled, the water having drained off through ditches provided for the purpose. The work is done in large sections around which bulkheads have been constructed. A section can be filled in about thirty days, the dredger working about fifteen hours per day. And in about two months after a section has been filled the ground will have dried out so as to be fit for use as before.

> […] The character of the material varies from very fine sand to coarse bits of coral […]
>
> It appears in evidence that through the method employed the finest of the material which is carried upon the land settles when the water which transports it becomes quiet and as the water runs off a sludge or mud remains which forms a strata more or less impervious to water. This strata, however, is covered by the coarser and more porous material. […] It appears that by mixing in to a depth of a few inches ordinary soil small plants will grow without difficulty. […] The character of the locality must be considered. It is not adapted to agriculture, but is suited more particularly to such business purposes as it is now partly used for, such as stables, laundries, warehouses, mills, etc., and for cottages with small yards for the accommodation of laborers engaged in connection therewith. Upon the whole, we are of the opinion that the material proposed to be used in the fill-in of the lands of the complainants is not of a character as should be held to be improper for any of the reasons urged. [Hawaii Reports 1914:351]

The first land to be filled in was the portion of the Ward Estate Kukuluāe‘o property west of Ward Avenue, which was completely filled in by June 1913. In July of that year:

> 25,000 cubic yards of sand and ground-up coral were deposited on the Bishop Estate in the vicinity of Ala Moana and Keawe street, the reason for shifting operations to this part of the district being that the Hawaiian Sugar Planter's Association had erected a reinforced concrete building there and wished to have the lot brought to grade. [Hawaii Department of Public Works 1914:198]

By August 1913, the rest of the Ward Kukuluāe‘o lands west of Ward Avenue had been filled, and by February 1914, all of the land from South Street to Ward Avenue and from Ala Moana to Queen Street had been filled.

Legal proceedings in 1914 managed to shut down operations planned for the area from Ward Avenue to Waikīkī, but the filling-in was eventually completed (Thrum 1916:159–160). This land was mainly owned by the Bishop Estate, which leased the land to small farmers growing taro and rice and raising ducks in the ponds. In 1916, the Bishop Estate announced that as soon as their present tenant leases expired, they planned to fill the lands and divide them into residence and business lots (Larrison 1916:148–149). In 1919, a portion of the coastal section of the Bishop Estate lands was secured by the government in order to expand Kewalo Basin (Thrum 1920:148).

4.4.4 Kewalo Basin Dredging

Prior to dredging, Kewalo Basin was a natural deep pocket in the reef seaward of Ala Moana Boulevard, between Ward Avenue and Kamake‘e Street. It had been used as a canoe landing in pre-Contact times. In 1919, the Hawaii Government appropriated $130,000 to improve the small harbor of Kewalo for the aim of "harbor extension in that it will be made to serve the fishing and other small craft, to the relief of Honolulu harbor proper" (Thrum 1920:147). As the area chosen for the harbor area was adjacent to several lumber yards, the basin was initially made to provide docking for lumber schooners; however, by the time the wharf was completed in 1926, this import business had faded. Hence, the harbor was used mainly by commercial fishermen. The dredged material from the basin was used to fill a portion of the Bishop Estate on the western edge of

Waikīkī and some of the Ward Estate in the coastal area east of Ward Avenue (U.S. Department of the Interior 1920:52). The new basin and the coral fill, used to fill inland areas and make new land offshore, can be seen in a 1933 oblique aerial photograph of Kaka‘ako and Waikīkī (Figure 25). In 1941, the basin was dredged and expanded to its current 55 acres. In 1955, dredged material was placed along the *makai* side to form an 8-acre land section protected by a revetment, now part of the Kewalo Basin Park (Kewalo Basin Harbor 2013).

4.4.5 Commercial and Residential Development

Twentieth century maps and aerial photographs show the development of the Kukuluāe‘o area in a grid of streets extending from Honolulu town toward Waikīkī (Figure 26 through Figure 39). The 1919 U.S. Army War Department fire control map (see Figure 26) shows residences clustered around Queen Street and Ward Avenue. The project area is just *makai* of a grid of unpaved or proposed roads, and several structures are indicated. There are still many ponds northeast of the project area, in the area later to be part of McKinley High School, and east along the coast, which will be developed into Ala Moana Shopping Center and Park. Poor people, mainly Native Hawaiians, inhabited the area. In the 1920s, on the east side of Kewalo Basin, they congregated at a camp called “Blue Pond,” named after a large and deep pond near the shore. On the west side of the basin, in the Ka‘ākaukukui area (shortened to ‘Ākaukukui), they lived in shacks and sturdy houses in an area called “Squattersville,” so named because they lived without authorization on government land. This camp was generally around Olomehani Street, near the shore, protected from the waves by a long sea wall. Approximately 700 Hawaiians and part-Hawaiians lived in these two camps in the mid-1920s. By 1926, they were gone; the government evicted the families and razed the houses (Clark 1977:64).

A 1927 aerial photograph (see Figure 27) shows the development of dredging and filling projects in Kaka‘ako. Areas west of Ward Avenue and *makai* of Ala Moana Boulevard are filled and developed. Areas *mauka* and east have only been recently filled (indicated by bare white coral fill areas) or are still open marsh/rice lands, such as *makai* of the new McKinley High School, the long lagoon of the Ward Estate, and Kolowalu Pond. Kewalo Basin is an ill-defined dredged area of deep water east of Fort Armstrong.

On a 1939-1941 aerial photograph (see Figure 30), Ala Moana Park, on new land created with dredged fill, is depicted with a deep-water channel meant to allow boats to sail from Kewalo Basin to the Ala Moana Yacht Harbor. Kewalo Harbor, just *makai* of the project area, has been completed, and ships line the shoreline. The former white coral areas east of Ward Avenue now have some vegetation, but they are still not greatly developed past the stage shown on the 1927 aerial photograph.

On a 1943 U.S. Army War Department terrain map (see Figure 31), the eastern section of Kaka‘ako is an area of open lumber yards and large warehouses. After World War II, Kaka‘ako became increasingly industrialized, and residents moved out to the newer subdivisions away from the central Honolulu area. This 1943 map depicts the docks for Kewalo Basin. The McFarlane Tuna Company (now Hawaiian Tuna Packers) built a shipyard at the basin in 1929 for their fishermen’s “sampan fleet.” A new tuna cannery was built at the basin in 1933 but was taken over in 1941 by the military after the attack on Pearl Harbor. The cannery was used to make airplane gas tanks. Land in Kaka‘ako taken by the military was not returned until 1946 (Clark 1977:64; Gessler 1938:182–185).

Figure 25. Honolulu and Waikīkī from Fort Armstrong (lower right) to Diamond Head, 1933 oblique aerial photograph (Hawai‘i State Archives); new lands of coral fill show as white patches in inland areas, along Kapi‘olani Boulevard, and offshore for the new Ala Moana Park; Kewalo Basin is at the western (lower) end of the offshore fill area

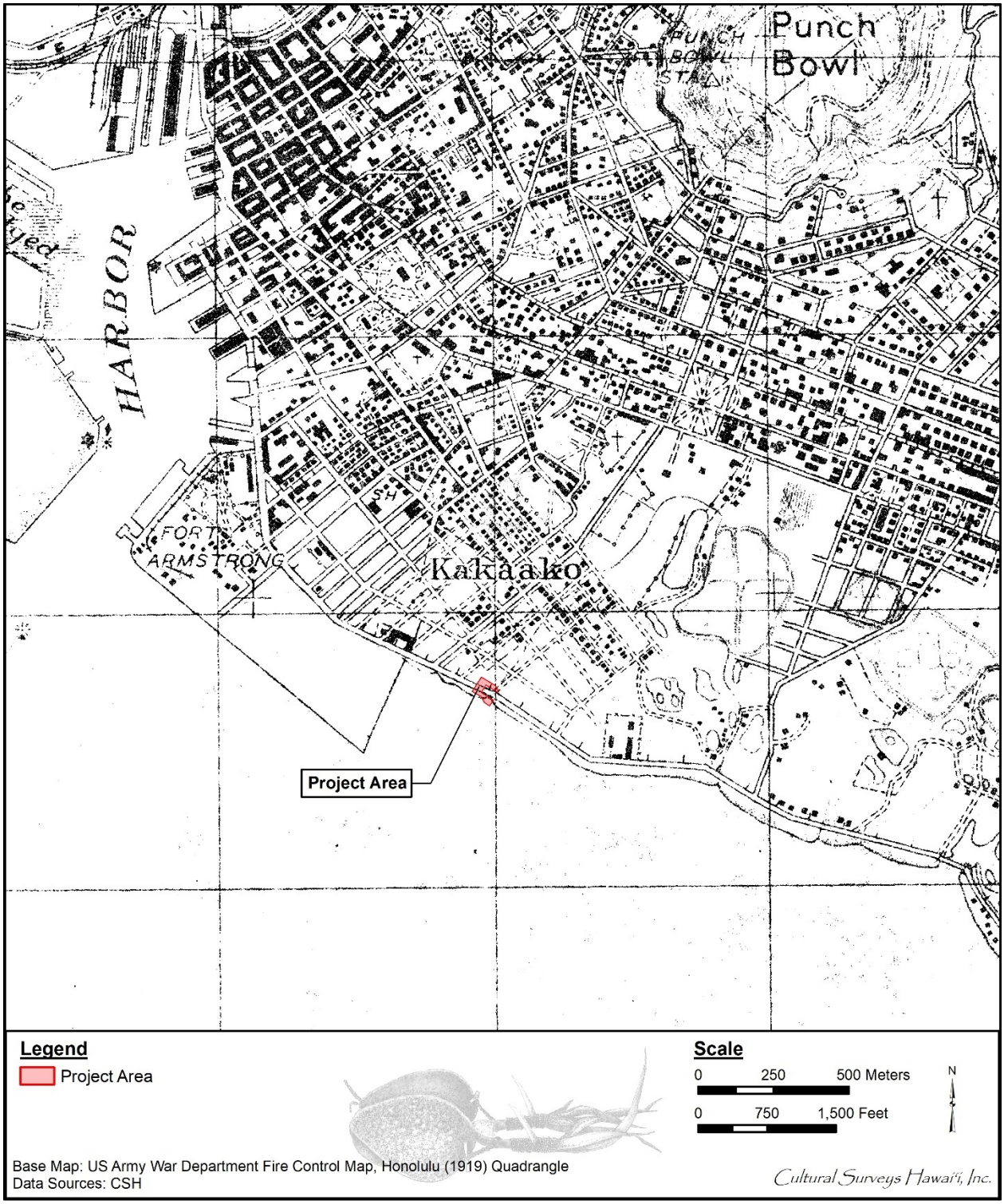

Figure 26. Portion of the 1919 U.S. Army War Department fire control map, Honolulu quadrangle, showing the project area

Figure 27. 1927 Kaka‘ako aerial photograph (UH SOEST) showing the project area

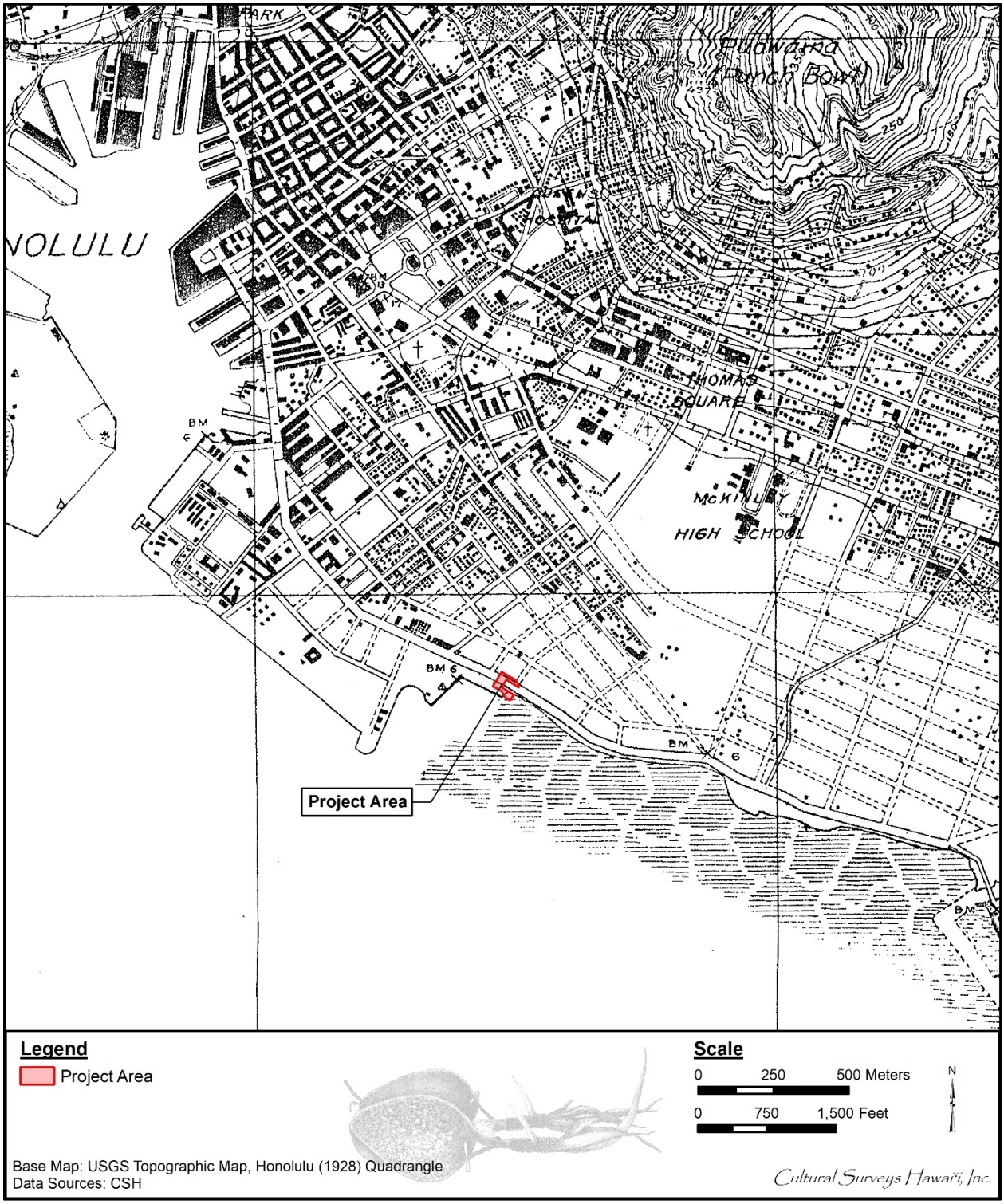

Figure 28. Portion of the 1928 Honolulu USGS topographic quadrangle, showing the project area

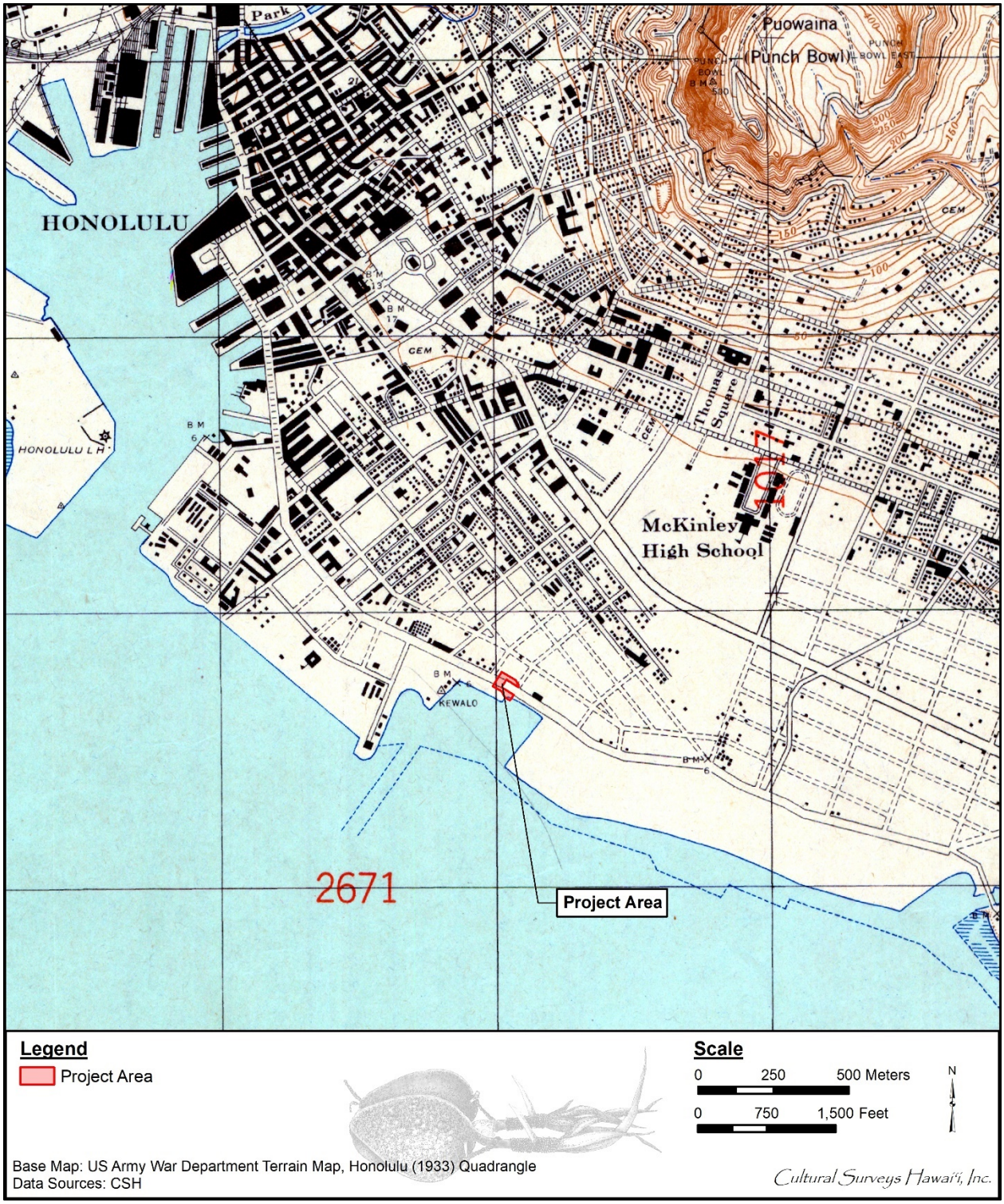

Figure 29. Portion of the U.S. Army War Department terrain map, Honolulu quadrangle, showing the project area

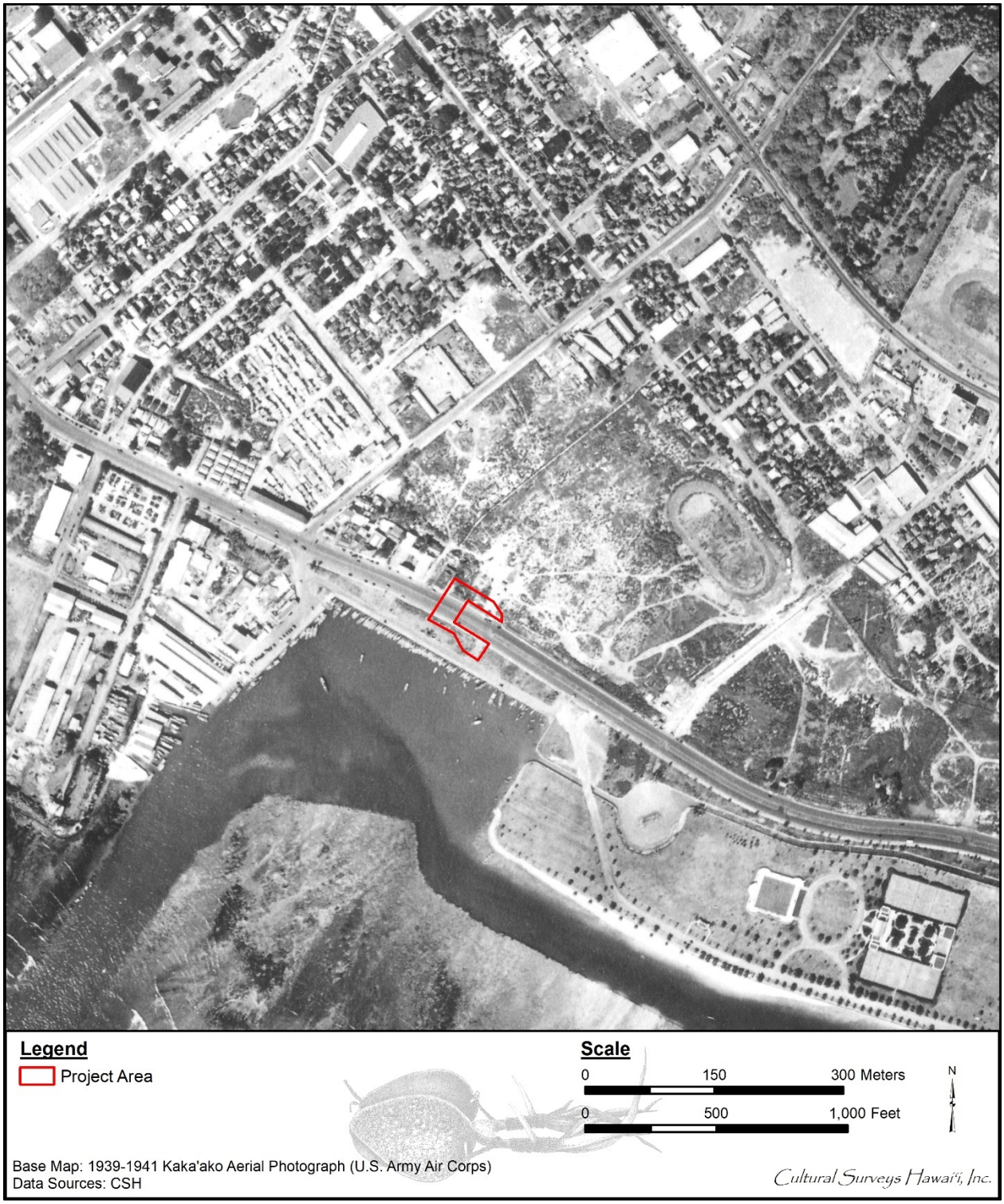

Figure 30. 1939-1941 Kaka‘ako aerial photograph (U.S. Army Air Corps) showing the project area

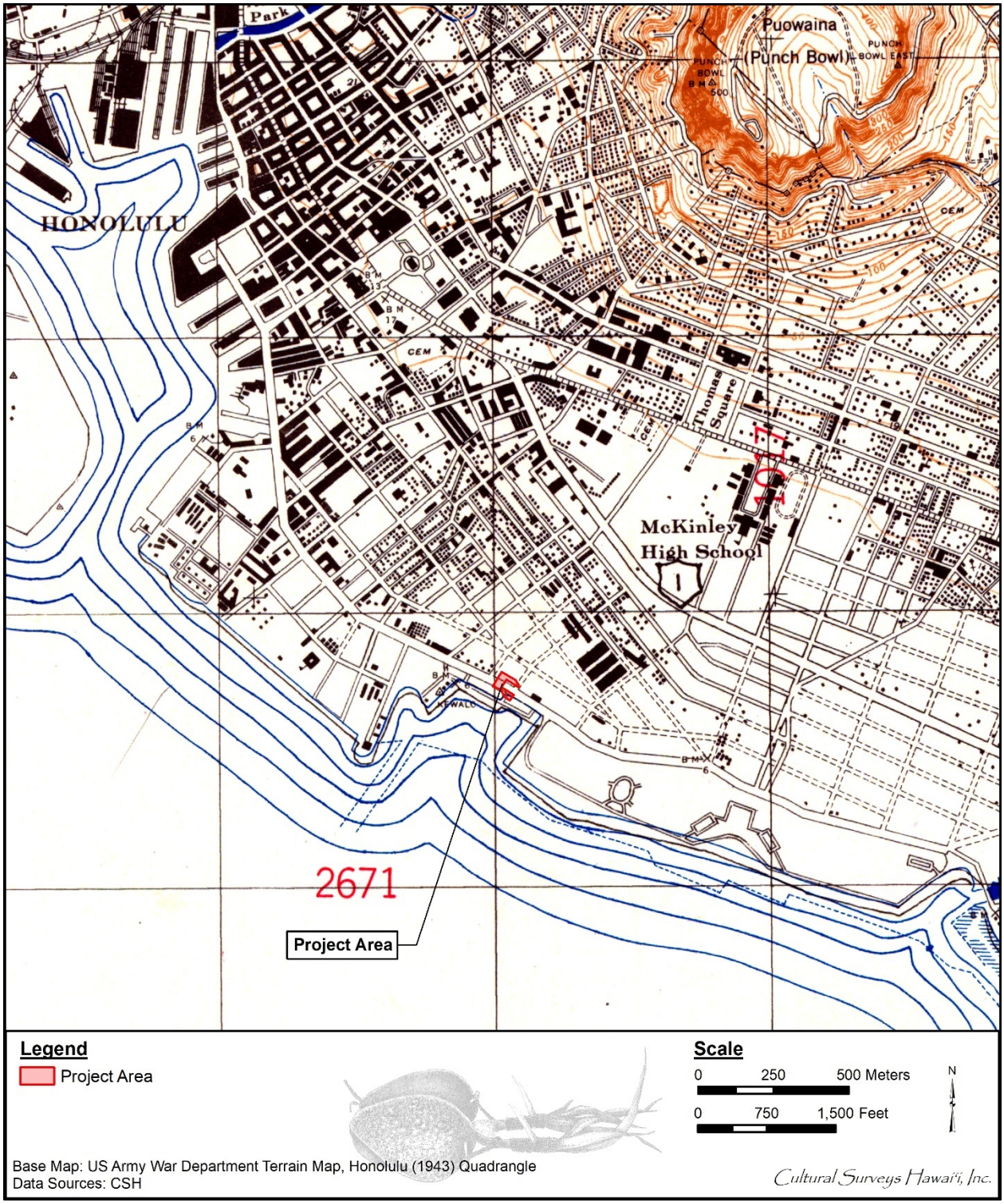

Figure 31. Portion of the 1943 U.S. Army War Department terrain map, Honolulu quadrangle, showing the project area

Figure 32. 1951 USGS aerial photograph of Kaka‘ako (UH MAGIS) showing the project area

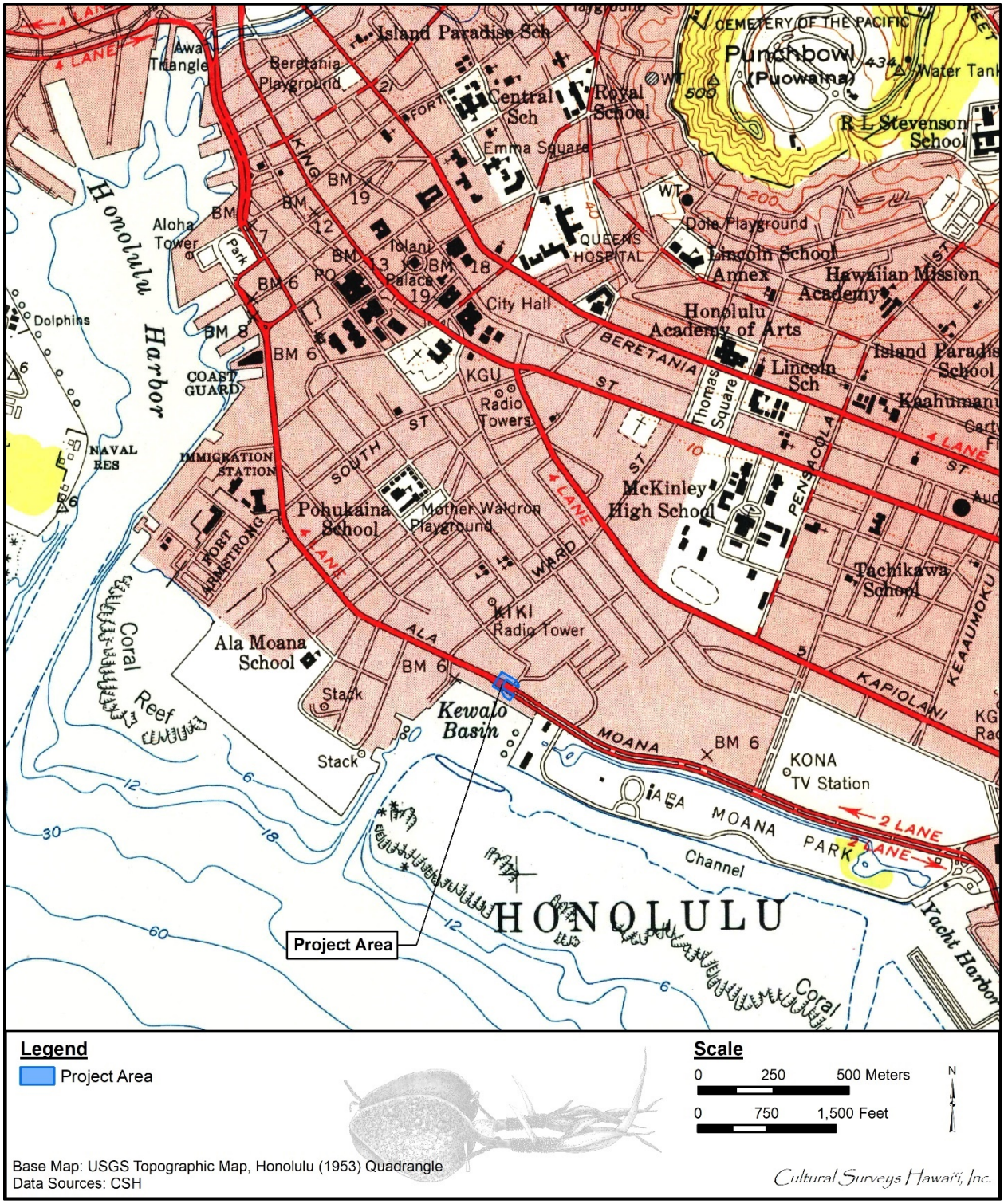

Figure 33. Portion of the 1953 Honolulu USGS topographic quadrangle, showing the project area

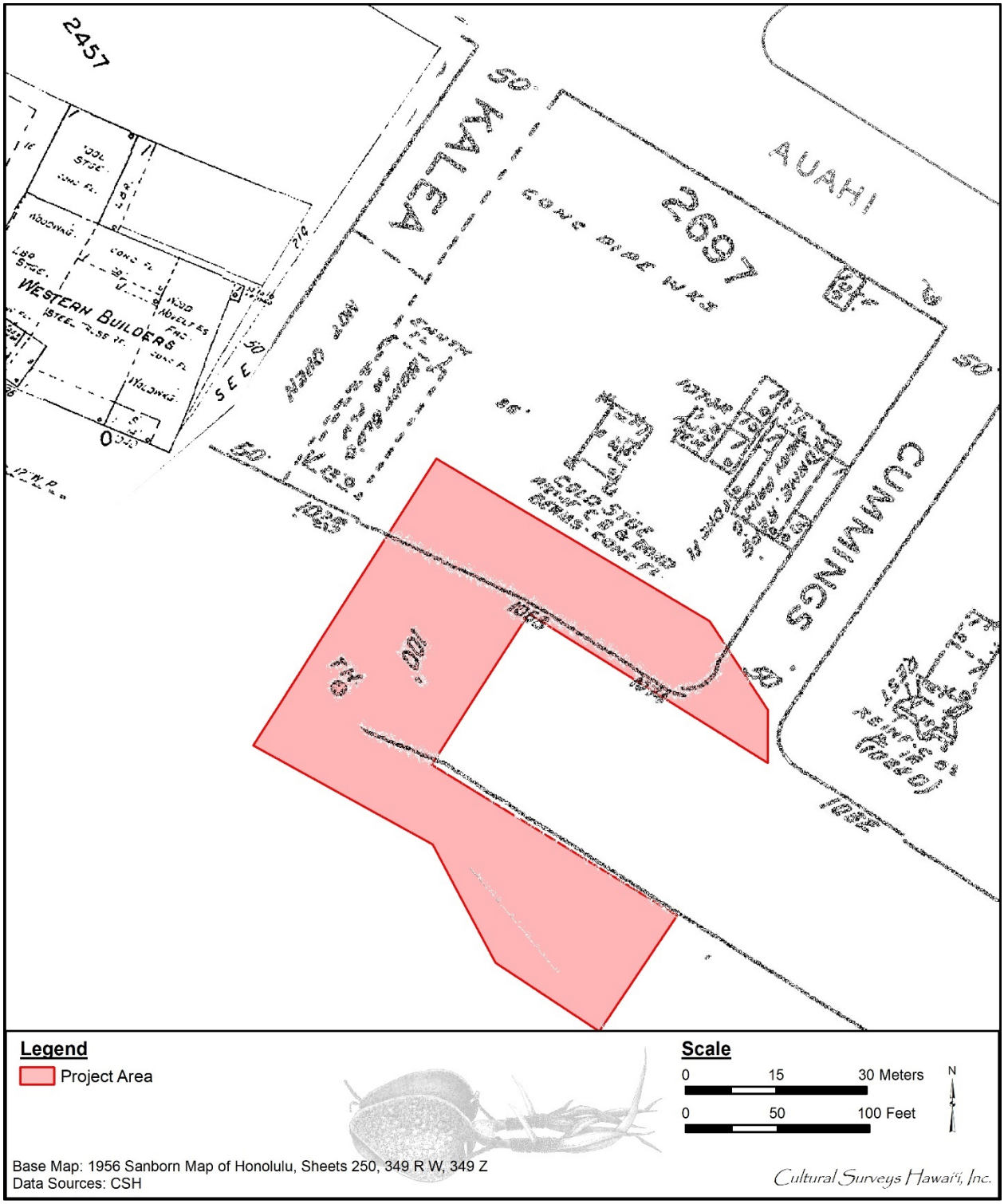

Figure 34. 1956 Sanborn map of Honolulu, Sheets 250, 349 R W, and 349 Z showing the project area

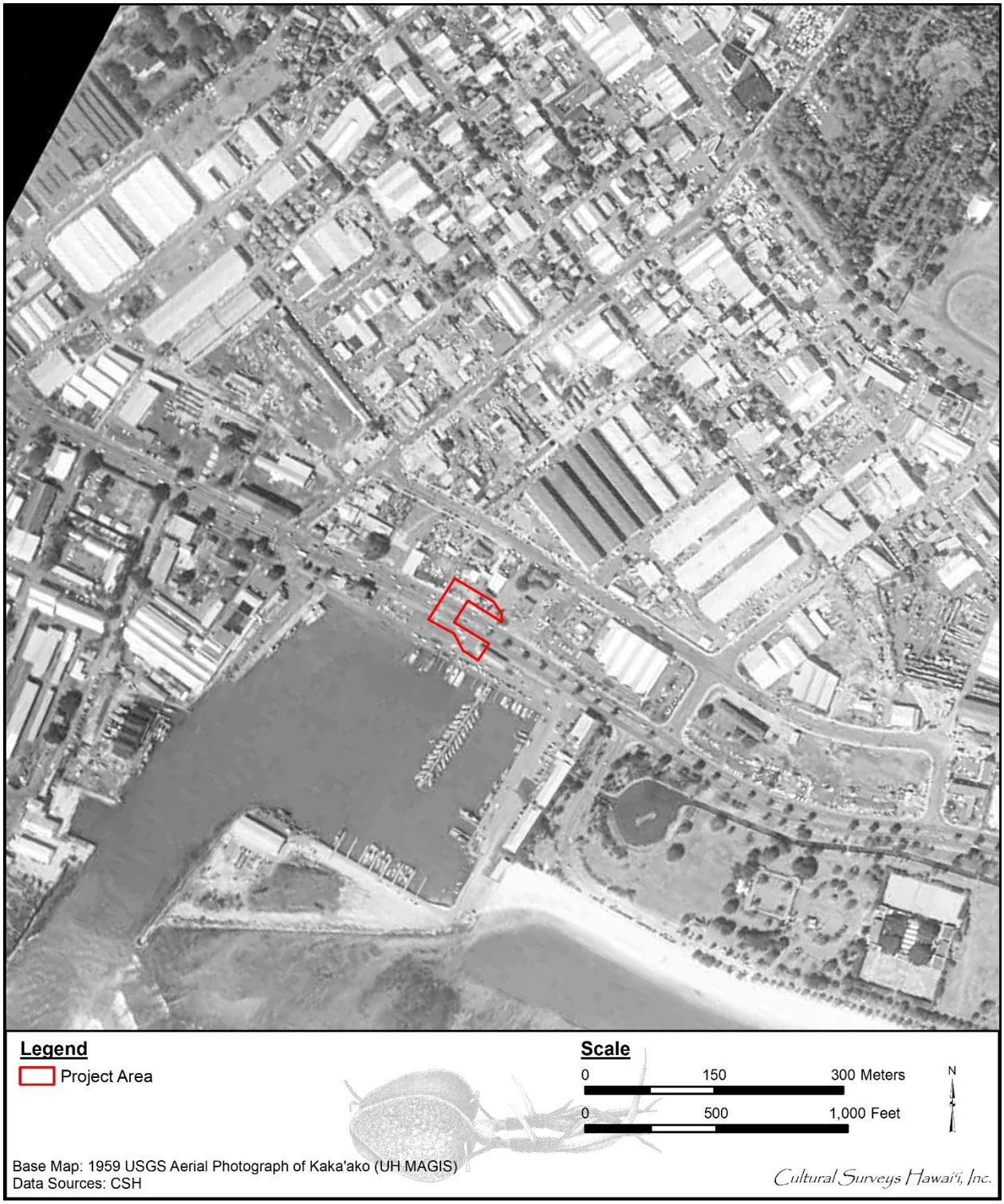

Figure 35. 1959 USGS aerial photograph of Kaka‘ako (UH MAGIS) showing the project area

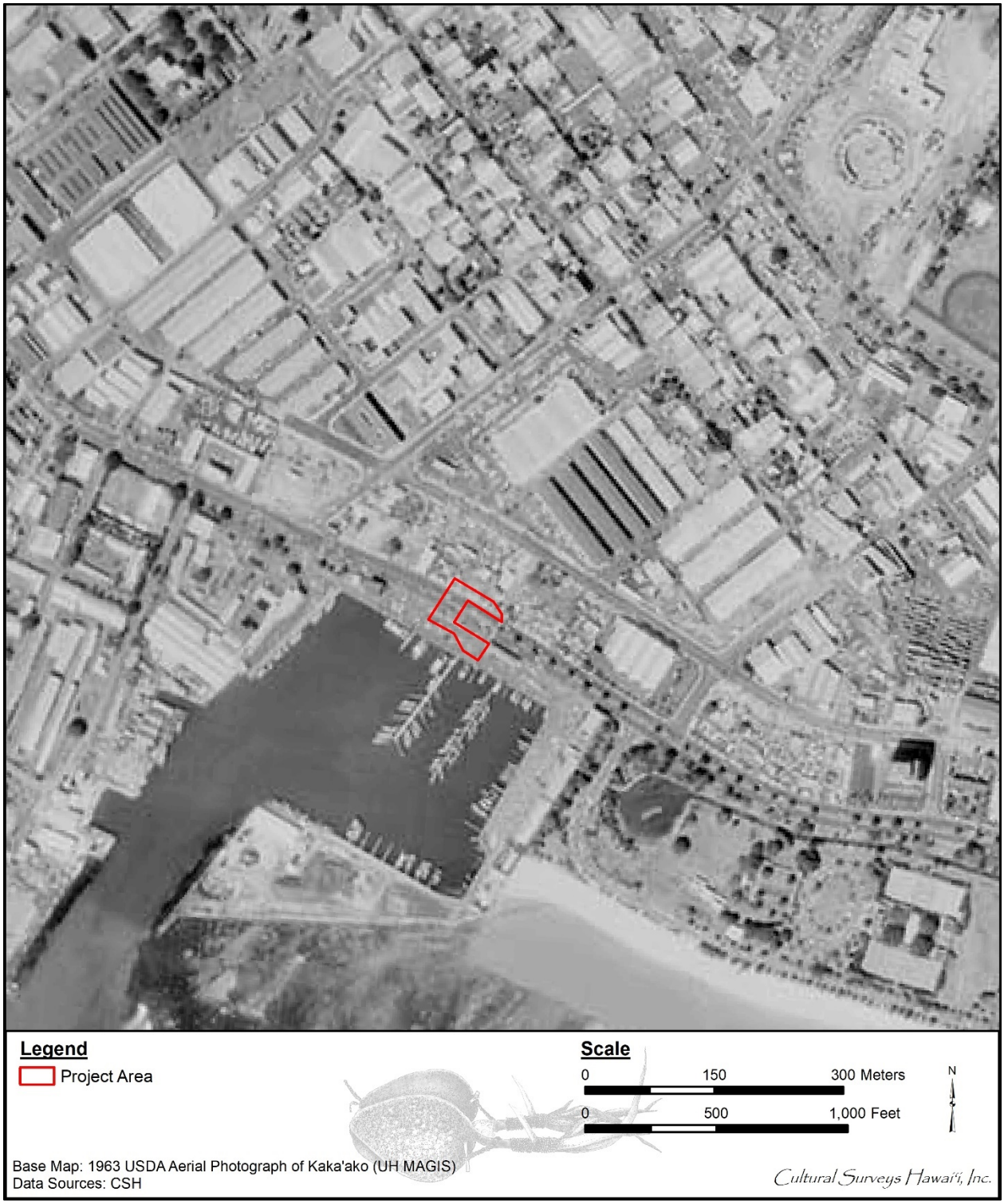

Figure 36. 1963 USDA aerial photograph of Kaka‘ako (UH MAGIS) showing the project area

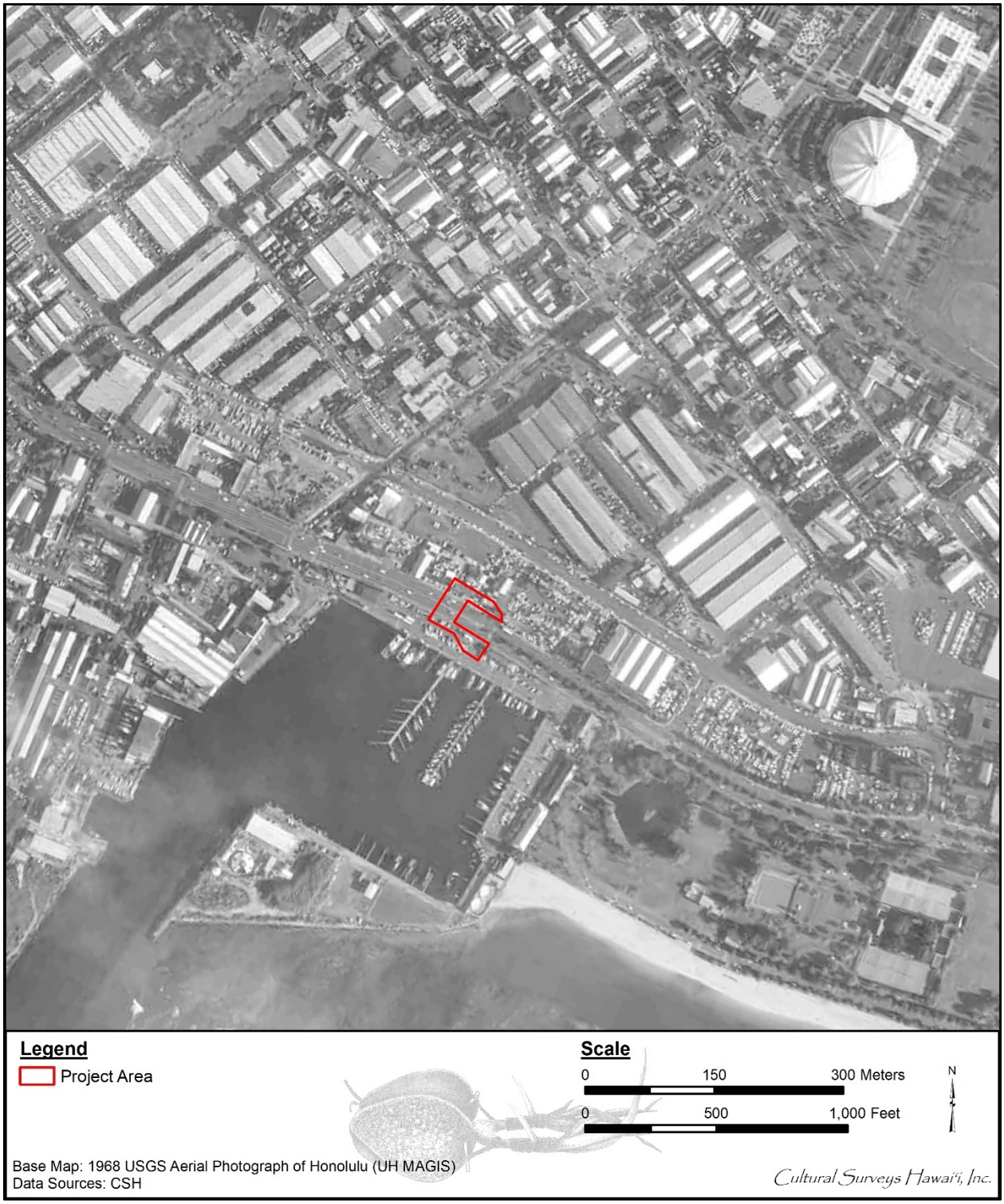

Figure 37. 1968 aerial photograph of Honolulu (UH MAGIS) showing the project area

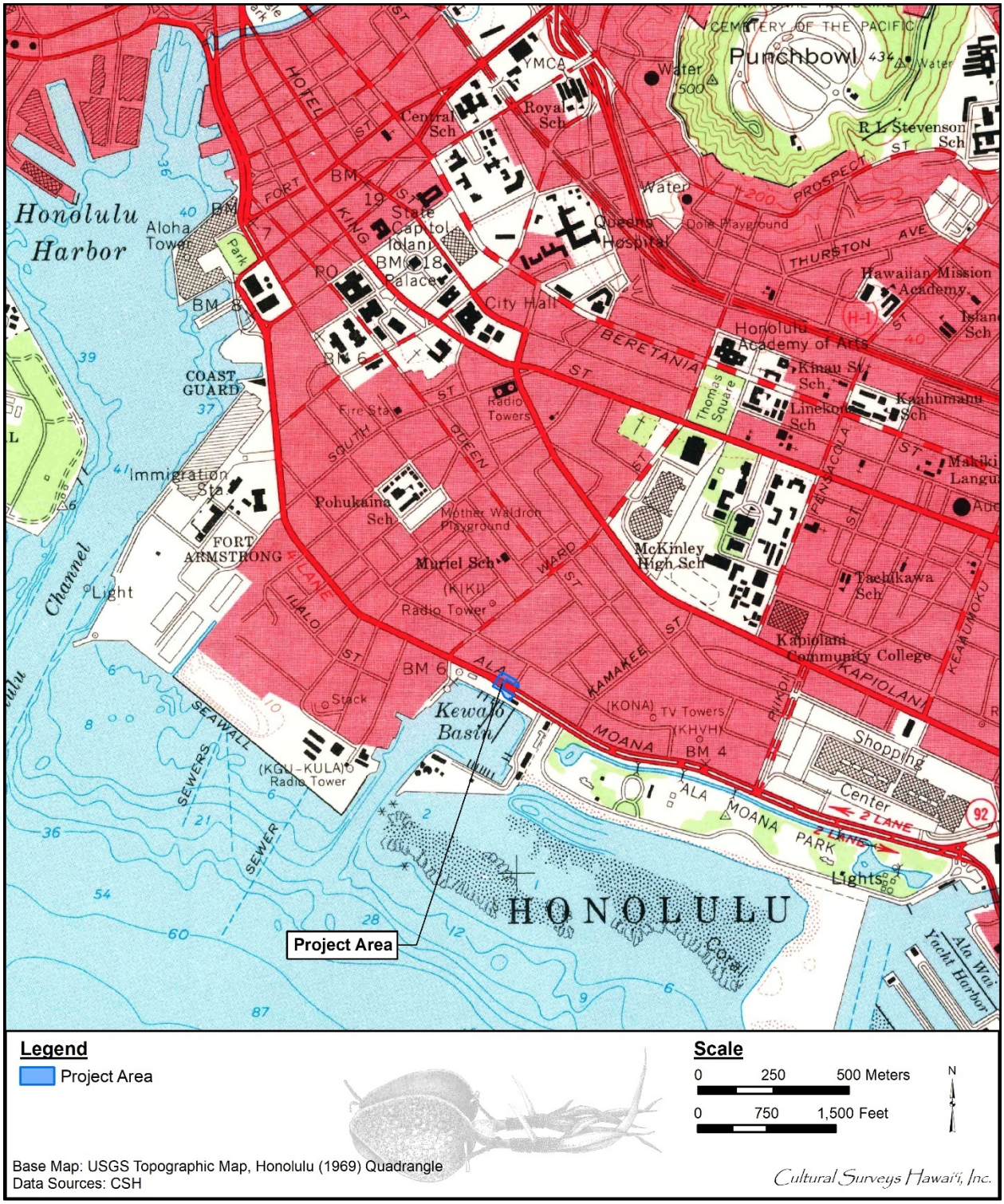

Figure 38. Portion of the 1969 Honolulu USGS topographic quadrangle, showing the project area

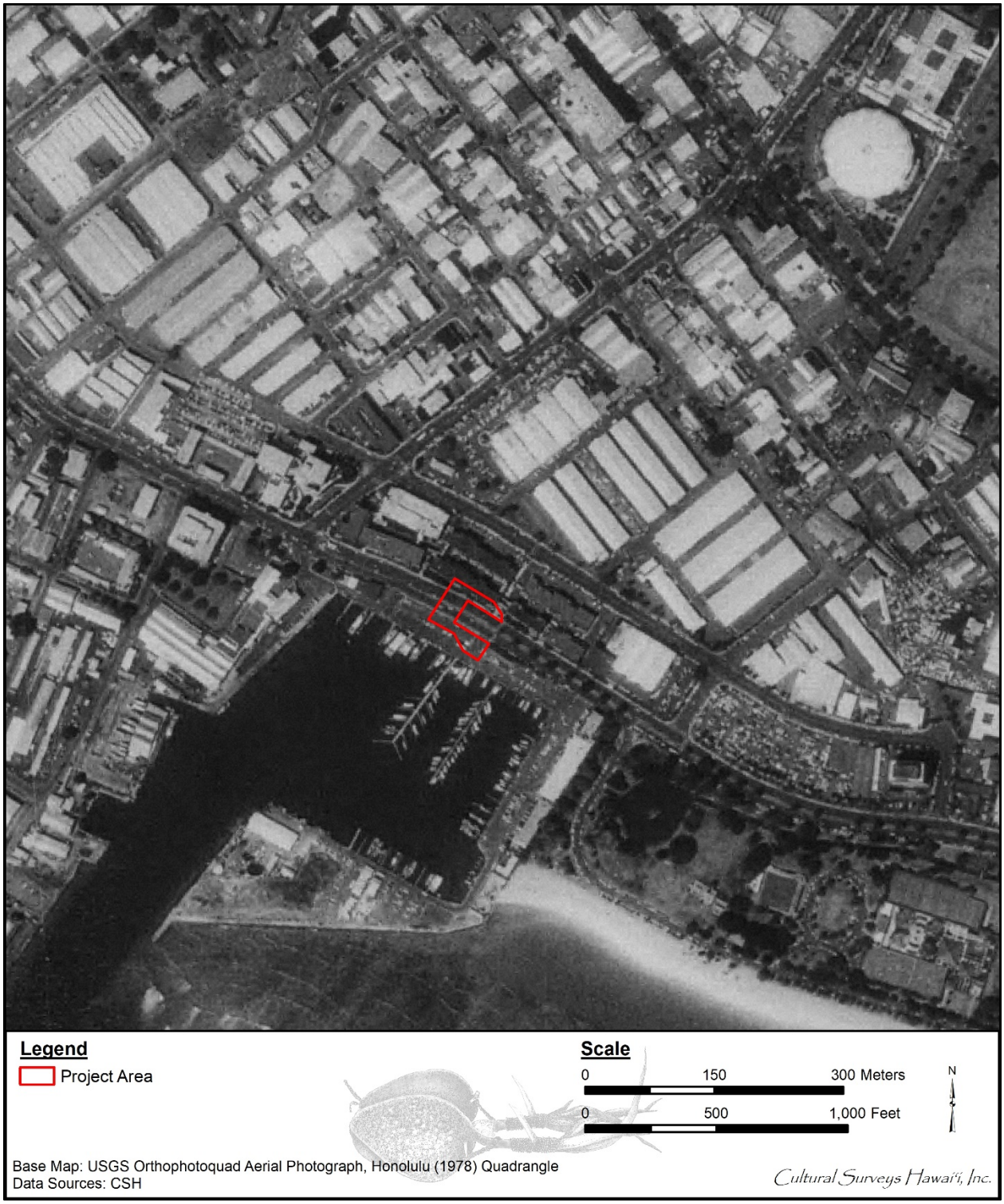

Figure 39. 1978 USGS Orthophotoquad aerial photograph, Honolulu quadrangle, showing the project area

A 1951 aerial photograph (see Figure 32) shows major development in the eastern section of Kaka‘ako, including numerous small commercial structures and large warehouse buildings. Coral fill has been placed to create the substrate for the new Ala Moana Shopping Center east of the project area, and new land has been created on the *makai* side of the former Fort Armstrong, west of Kewalo Basin. The dredged strip along the coast still extends from Kewalo Basin to Ala Moana Yacht Harbor and the western end of the Ala Wai Canal. A 1953 topographic map (see Figure 33) is less detailed than earlier maps but indicates many of the unimproved or proposed roads in the eastern section of Kaka‘ako have now been paved and improved. A 1956 Sanborn map (see Figure 34) shows the *mauka* portion of the project area as within a “CONC PIPE WKS” (concrete pipe works), although none of the associated structures are within the project area.

In 1964, new land along the western boundary of the Ala Wai Yacht Club was created to make a peninsula called “Magic Island,” later renamed ‘Āina Moana State Recreation Area. The construction of this peninsula cut off access for boats between the Kewalo and Ala Moana boat docks, and the function of the channel along Ala Moana Beach Park was changed into a safe swimming area (Clark 1977:60–63). On a 1968 aerial photograph (see Figure 37), large warehouses are now pervasive, and the Blaisdell Civic Center has replaced the grounds, house, and lagoon of the Ward Estate.

In 1975, it was estimated that there were 990 firms operating in Kaka‘ako, and that approximately 30% of the neighborhood residents worked in the area (University of Hawai‘i 1978:A-116–117). From the 1970s through the 1990s, portions of eastern Kaka‘ako were used for various small businesses that existed in warehouses and parking lots, as shown on a 1978 aerial photograph (see Figure 39). Many of these warehouses were roofed, open-sided storage sheds for large lumber yards.

Section 5 Previous Archaeological Research

5.1 Previous Archaeological Research

A review of previous archaeological studies in the immediate vicinity of the current project area indicates the area has been heavily studied and documented, primarily by CSH in association with the Ward Neighborhood Master Plan. Nine prior studies (Altizer et al. 2011; Hammatt and Shideler 2010; O'Hare et al. 2012, 2016; Pammer et al. 2014, 2018; Petrey et al. 2009; Sroat et al. 2014; Tulchin and Hammatt 2010) have been conducted at least partially within the project area. Four historic properties have been identified within the project area during these studies: State Inventory of Historic Places (SIHP) # 50-80-14-7655, buried post-Contact salt pan remnants; SIHP # 50-80-14-7658, buried post-Contact surfaces and structural remnants; SIHP # -7659, Ward Estate concretized *‘auwai*; and SIHP # -7660, post-Contact trash fill. Previous studies and previously identified historic properties within and in the vicinity of the project area are depicted on Figure 25 and Figure 26 and are discussed below.

5.1.1 Chiogioji and Hammatt 1991

CSH conducted historical research for a parcel within the block bounded by Ilaniwai, Kamani, Cooke, and Halekauwila streets (Chiogioji and Hammatt 1991). The research suggested the study area is in a region unlikely to have been extensively populated by Hawaiians in the pre-Contact period. However, Chiogioji and Hammatt (1991) note the area may have been extensively utilized for aquaculture and salt production, and that subsurface remnants of this activity likely remain extant beneath modern fill layers. Hence, subsurface testing was recommended.

5.1.2 Kaka‘ako Improvement District 3, Pohulani Elderly Rental Housing, and Kauhale Kaka‘ako (Winieski and Hammatt 2000)

Between November 1990 and September 1992, CSH conducted archaeological monitoring for three projects in Kaka‘ako, which were subsequently documented within a single archaeological monitoring report: the Kaka‘ako Improvement District 3 project, the Pohulani Elderly Rental Housing project, and the Kauhale Kaka‘ako project (Winieski and Hammatt 2000). Five backhoe trenches were excavated as part of the monitoring program for the Kauhale Kaka‘ako project. Within most of the project area (four test excavations), a natural silty sand A horizon that developed within Jaucas sand was identified beneath modern and historical fill layers. The A horizon contained a small amount of post-Contact artifacts (bottle glass and ceramic fragments), saw-cut mammal bone, sparse marine shell midden (cowrie and conus shell), and a pocket of charcoal and ash; no historic property number was assigned. The fifth test excavation, in the *makai* portion (south corner) of the project area, documented a natural wetland deposit beneath the fill deposits, consisting of finely banded sandy loam.

5.1.3 Kaka‘ako Improvement District 6 (Borthwick and Hammatt 2001)

Between 1999 and 2001, CSH conducted archaeological monitoring for the Kaka‘ako Improvement District 6 project, adjacent to Kewalo Basin and *makai* of the Ward Avenue-Ala Moana Boulevard intersection (Borthwick and Hammatt 2001). The project included the extension

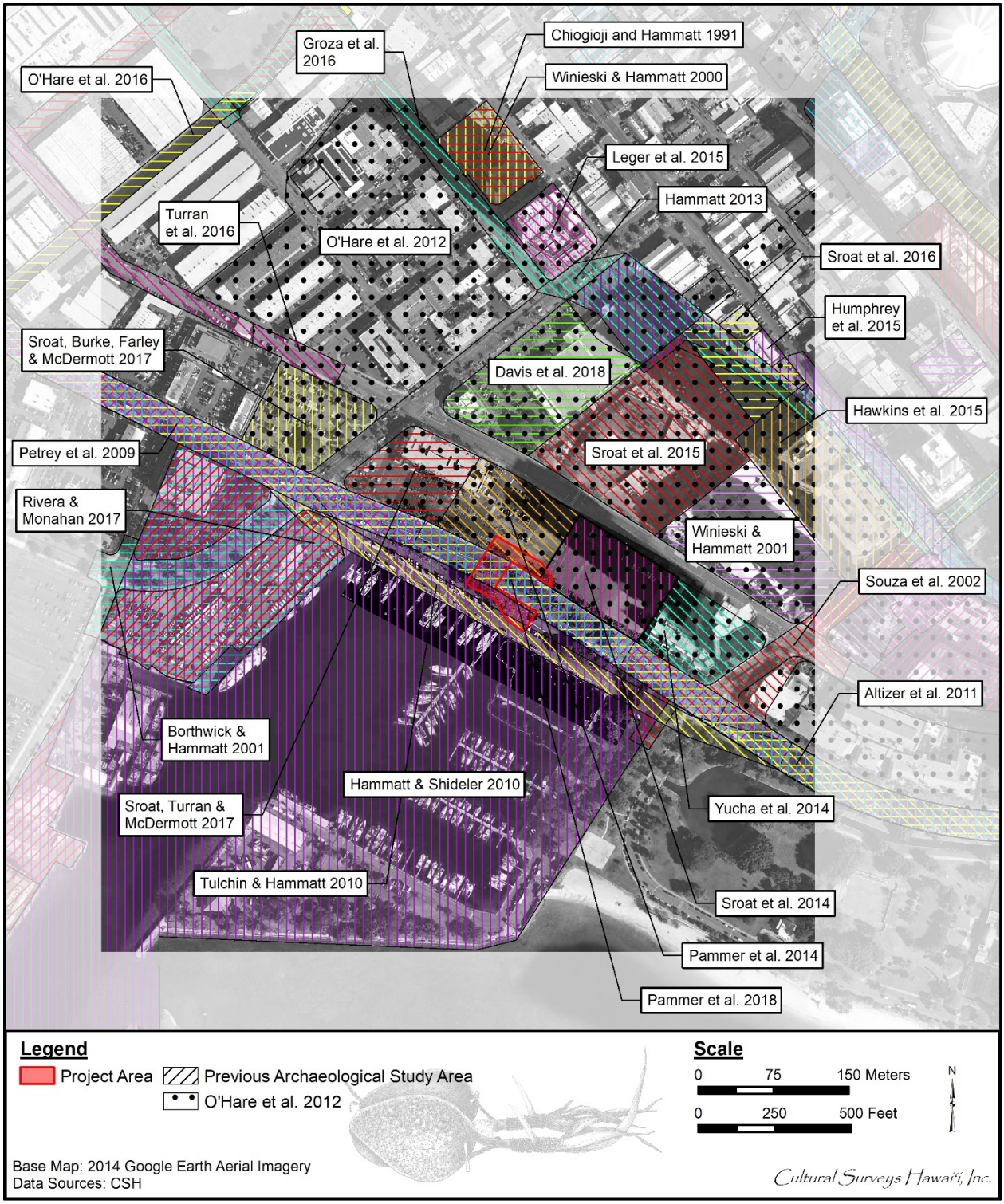

Figure 40. 2014 aerial photograph (Google Earth 2014) with overlay of previous archaeological studies within and in the vicinity of the project area

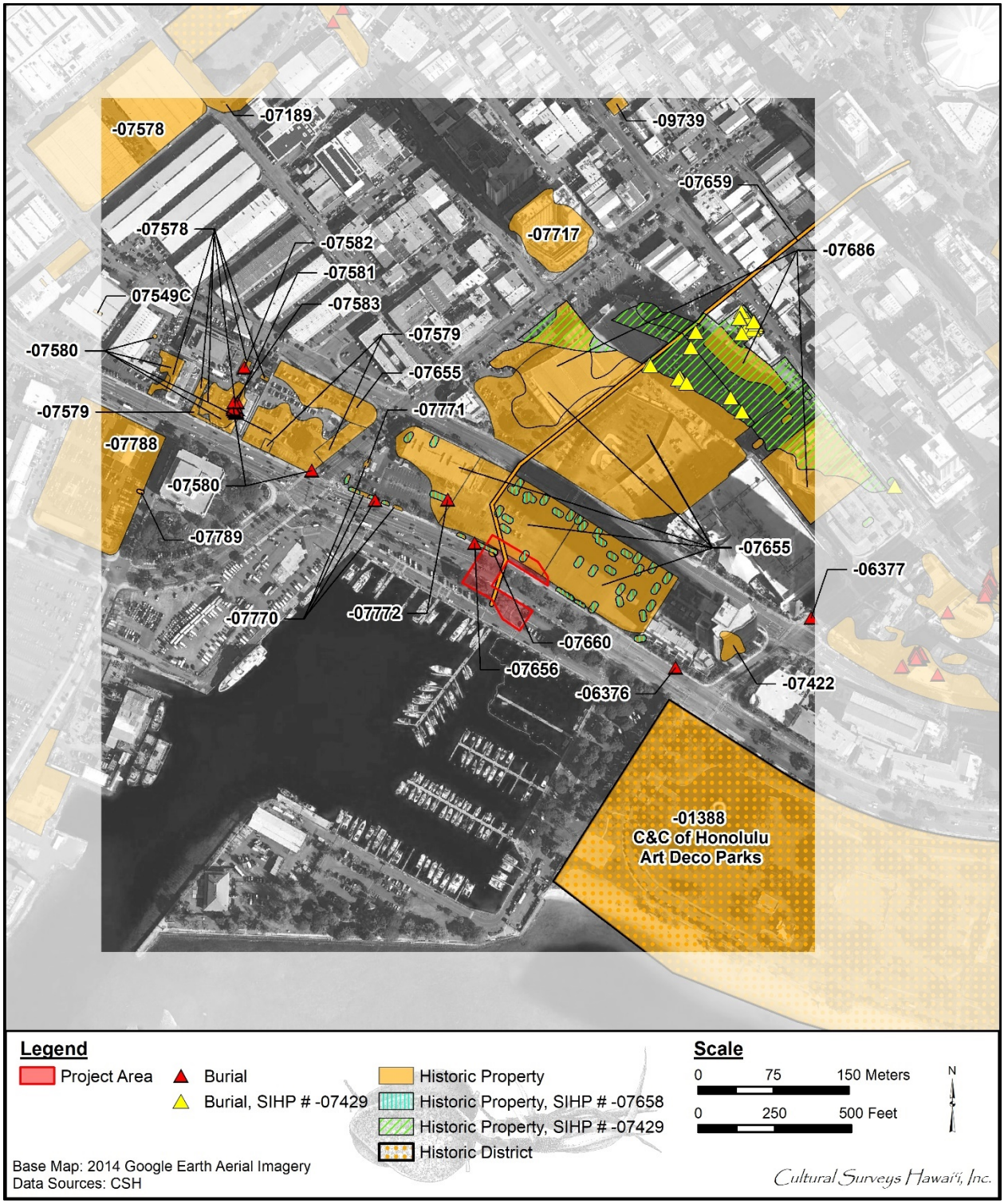

Figure 41. 2014 aerial photograph (Google Earth 2014) with overlay of historic properties previously identified within and in the vicinity of the project area

Table 2. Previous archaeological studies in the vicinity of the project area

Reference	Type of Study	Location	Results (SIHP # 50-80-14-)
Chiogioji and Hammatt 1991	Historical research	Block bounded by Cooke, Kamani, Halekauwila, and Ilaniwai streets	Concludes subsurface historic properties may be present beneath modern fill layers; recommends subsurface testing
Winieski and Hammatt 2000	Archaeological monitoring	Kauhale Kaka‘ako	Documented a buried A horizon, natural sand, and pond sediment underlying fill deposits; a small amount of cultural material as identified in the A horizon, but no SIHP number assigned
Borthwick and Hammatt 2001	Archaeological monitoring	Kaka‘ako Improvement District 6	No historic properties identified; documented various fill layers overlying natural tidal flats
Winieski and Hammatt 2001	Archaeological monitoring	Ward Village Phase II (Ward Theaters)	No historic properties identified; documented a buried wetland A horizon and a disturbed sand A horizon
Souza et al. 2002	Archaeological monitoring	Kaka‘ako Improvement District 7	Identified three disturbed traditional Hawaiian burials (SIHP #s -6376 through -6378)
Petrey et al. 2009	Archaeological monitoring	Nimitz Hwy and Ala Moana Blvd Resurfacing	No historic properties identified; excavations generally shallow
Hammatt and Shideler 2010	Archaeological literature review and field inspection	Kewalo Basin	No historic properties identified
Tulchin and Hammatt 2010	Archaeological literature review and field inspection	Sand Island Wastewater Treatment Plant and Sewer Basin Facilities	Recommends archaeological monitoring
Altizer et al. 2011	Archaeological monitoring	Kapi‘olani area	Documented SIHP # -6636, modified wetland deposit
O’Hare et al. 2012	Archaeological literature review and predictive model	Ward Neighborhood Master Plan	No new historic properties identified; archaeological inventory survey (AIS) recommended for all areas slated for ground disturbance

Reference	Type of Study	Location	Results (SIHP # 50-80-14-)
Hammatt 2013	Archaeological inventory survey	Honolulu Rapid Transit Project–City Center (Section 4)	Identified SIHP # -7429, culturally enriched A horizon with pit features and an isolated human bone, in vicinity of current project area
Pammer et al. 2014	Archaeological inventory survey	Ward Neighborhood Block B East (Ward Village Gateway)	Identified SIHP # -7655, buried post-Contact salt pan remnants; SIHP # -7656, disturbed human skeletal remains; SIHP # -7658, buried post-Contact surfaces and structural remnants; SIHP # -7659, concretized Ward Estate *‘auwai*; and SIHP # -7660, post-Contact trash fill; SIHP #s -7655, -7658, -7659, and -7660 identified within current project area
Sroat et al. 2014	Archaeological inventory survey	Ward Neighborhood Block C West (Ward Village Gateway)	Documented SIHP # -7655, buried post-Contact salt pan remnants, and SIHP # -7658, buried post-Contact surfaces and structural remnants
Yucha et al. 2014	Archaeological inventory survey	Ward Neighborhood Block C	Documented SIHP # -7422, burnt trash layer; most of project area contained Jaucas sand and/or peat A horizon beneath fill layers
Hawkins et al. 2015	Archaeological inventory survey	Ward Neighborhood Block M	Identified SIHP # -7429, consisting of two subsurface cultural deposits and associated features, and SIHP # -7686, buried post-Contact infrastructure remnants
Humphrey et al. 2015	Supplemental archaeological inventory survey	Honolulu Rapid Transit Project–City Center (Section 4)	Documented pit features and a human burial associated with SIHP # -7429, subsurface cultural deposits
Leger et al. 2015	Archaeological inventory survey	Ward Neighborhood Block O	Identified SIHP # -7717, traditional Hawaiian and post-Contact subsurface residential and commercial surfaces
Groza et al. 2016	Archaeological literature review and field inspection	Ala Moana Tributary Basin Sewer I/I Relief and Rehabilitation Project	On-call archeological monitoring recommended for portions of study area closest to current project area

Reference	Type of Study	Location	Results (SIHP # 50-80-14-)
O’Hare et al. 2016	Archaeological literature review and field inspection	BWS Honolulu Water System Improvements	Kaka‘ako/Kewalo section assessed as having medium to high archaeological potential
Sroat et al. 2015	Archaeological inventory survey	Ward Neighborhood Block I	Documented SIHP # -7429, subsurface cultural deposits and associated features including burial sites; SIHP # -7655, buried post-Contact salt pan remnants; and SIHP # -7659, Ward Estate concretized *‘auwai*
Sroat et al. 2016	Archaeological inventory survey	Ward Neighborhood Block N East	Documented SIHP # -7429, subsurface cultural deposits including a newly identified human burial ground, and SIHP # -7686, buried post-Contact infrastructure remnants
Turran et al. 2016	Archaeological monitoring	Ala Moana Blvd/Auahi St	No historic properties identified
Rivera and Monahan 2017	Archaeological monitoring	Environmental Site Assessments Kaka‘ako Makai	Possible early 20th century buried seawalls encountered; no SIHP number assigned
Sroat, Turran, and McDermott 2017	Archaeological inventory survey	Ward Neighborhood Block B West	Identified SIHP # -7655, buried post-Contact salt pan remnants; SIHP # -7658, buried post-Contact infrastructure remnants; SIHP # -7770, subsurface cultural deposits, including a human burial site; SIHP # -7771, subsurface post-Contact trash deposit; and SIHP # -7772, previously disturbed and scattered human remains within a fill deposit
Sroat, Burke, Farley, and McDermott 2017	Archaeological inventory survey	Ward Neighborhood Block A	Documented SIHP # -7579, 20th century buried infrastructure remnants; SIHP # -7580, subsurface cultural deposits with associated features and human burials; and SIHP # -7655, buried post-Contact salt pan remnants

Reference	Type of Study	Location	Results (SIHP # 50-80-14-)
Davis et al. 2018	Archaeological inventory survey	Ward Neighborhood Block H	Documented SIHP # -7429, subsurface cultural deposits; SIHP # -7655, buried post-Contact salt pan remnants; and SIHP # -7686, buried post-Contact infrastructure remnants
Pammer et al. 2018	Archaeological monitoring	Nimitz Hwy/ Ala Moana Blvd	Documented buried pond sediment associated with Loko Kaipuni (SIHP # -4573); human skeletal remains (SIHP #s -7435 and 7436); and buried post-Contact surfaces (SIHP # -8037)

of Ward Avenue *makai* of Ala Moana Boulevard, connecting with ‘Āhui Street; improvements to drainage, water, sewer, and utility systems; the construction of a parking lot; and landscaping. As anticipated based on the project area’s location within in-filled coastal waters *makai* of the previous shoreline, the documented stratigraphy consisted of various fill deposits overlying natural tidal flats comprising gleyed sandy clay to loamy clay. No historic properties were identified.

5.1.4 Ward Village Phase II (Ward Theaters) (Winieski and Hammatt 2001)

In 2000, CSH conducted archaeological monitoring for the Ward Village Phase II (Ward Theaters) project (Winieski and Hammatt 2001). Ground disturbance consisted primarily of open cut excavations, typically measuring 4 m by 4 m, for the installation of foundation piles, as well as linear excavations for installation of underground utilities, typically less than 1 m in depth.

Approximately 90% of the pile cap excavations exhibited nearly identical stratigraphic sequences, consisting of the modern asphalt or concrete surface, a thick layer of crushed coral fill, hydraulic (dredged) clay fill, and the decomposing coral shelf. Within the northwest corner of the building’s footprint, a buried silty sand A horizon was exposed, overlying a wetland sandy clay deposit. A buried loamy sand A horizon was also present above a sterile calcareous sand layer in a 50-m-long, shallow utility trench just *mauka* of the project area (i.e., within the location of the Block M project area). Within the southeast corner of the project area, near the intersection of Auahi and Kamake‘e streets, a loamy sand A horizon and Jaucas sand were intermittently observed; however, previous construction activities appeared to have significantly disturbed these deposits. No historic properties were identified.

5.1.5 Kaka‘ako Improvement District 7 (Souza et al. 2002)

In 2001, CSH conducted archaeological monitoring for the Kaka‘ako Improvement District 7 project (Souza et al. 2002). This project made improvements to drainage, water, sewer, and utility systems on Kamake‘e Street between Queen Street and Ala Moana Boulevard, and extended the drain system from Ala Moana Boulevard to Kewalo Basin. The project also included realignment of the existing Kamake‘e Street between Auahi Street and Ala Moana Boulevard.

A buried silty sand A horizon was identified within most of the excavations on Kamake‘e Street, while excavations at Ala Moana Beach Park and Kewalo Basin consisted entirely of fill material.

Three human burial finds were inadvertently discovered during archaeological monitoring. Burial 1 (SIHP # -6376), a single cranium, was discovered by construction personnel in the base yard backdirt pile. The backdirt pile was derived from a trench on Ala Moana Boulevard. Soil attached to the cranium indicated the burial originated within a sand deposit. Burial 2 (SIHP # -6377) was identified during backhoe excavations for a box drain on Kamake‘e Street. The burial, consisting of an adult individual, was within an undisturbed sand deposit. Burial 3 (SIHP # -6378), consisting of a femur and several rib fragments from an adult individual, was recovered from the construction base yard. The original location of the burial could not be determined.

5.1.6 Nimitz Highway and Ala Moana Boulevard Resurfacing (Petrey et al. 2009)

In 2007, CSH conducted archaeological monitoring for the Nimitz Highway and Ala Moana Boulevard Resurfacing project (Petrey et al. 2009), including within the current project area. Project excavations were generally to depths of 0.6 m below surface (mbs), with a maximum depth of 1.0-1.25 mbs, and exposed various layers of fill. No historic properties were identified.

5.1.7 Kewalo Basin Repairs (Hammatt and Shideler 2010)

In 2010, CSH conducted an archaeological literature review and field inspection for the Kewalo Basin Repairs project (Hammatt and Shideler 2010), which included the current project area. No historic properties were identified.

5.1.8 Sand Island Waste Water Treatment Plant and Sewer Basin Facilities (Tulchin and Hammatt 2010)

In 2010, CSH conducted an archaeological literature review and field inspection for the Sand Island Waste Water Treatment Plant and Sewer Basin Facilities project (Tulchin and Hammatt 2010), which included a portion of the current project area. Based on a review of historical documents and previous archaeological studies, Tulchin and Hammatt (2010) recommended a combination of on-site and on-call archaeological monitoring for the proposed project. The portion within the current project area was recommended for on-call monitoring, as it was assessed as having “low archaeological sensitivity.”

5.1.9 Kapi‘olani Area Revised Sewer System (Altizer et al. 2011)

In 2011, CSH conducted archaeological monitoring for the Kapi‘olani Area Revised Sewer System project (Altizer et al. 2011). The documented stratigraphy typically comprised fill deposits overlying buried wetland and lagoonal deposits. One previously identified historic property, SIHP # -6636, was documented during archaeological monitoring. SIHP # -6636 comprises a natural wetland deposit that was historically modified for rice cultivation.

5.1.10 Ward Neighborhood Master Plan (O’Hare et al. 2012)

In 2012, CSH conducted an archaeological literature review and field inspection for the Ward Neighborhood Master Plan project (O’Hare et al. 2012), including a portion of the current project area. No new historic properties were identified, but O’Hare et al. (2012) recommended an archaeological inventory survey (AIS) be conducted for portions of the study area slated for ground disturbance. This recommendation was based on the potential for human burials, the number of LCAs, and previously identified historic properties associated with the early development of Honolulu.

5.1.11 Honolulu Rapid Transit Project–City Center (Section 4) (Hammatt 2013; Humphrey et al. 2015)

Between November 2011 and February 2013, CSH conducted an AIS for the Honolulu Rapid Transit Project (HRTP)–City Center (Section 4), previously termed the High-Capacity Transit Corridor Project (HHCTCP), which extended from Kalihi Stream in the west to Ala Moana Center in the east (Hammatt 2013). Two hundred-fifty test excavations were documented. Nineteen historic properties were identified along the length of the project corridor; however, only one was in the vicinity of the current project area. SIHP # -7429 was documented northeast of the current project area and consists of a culturally enriched, buried A horizon overlying Jaucas sand. The A horizon reflected traditional Hawaiian and post-Contact (based on cultural content) land use and contained seven cultural features consisting of six pits (two identified as possible post molds) and one isolated human cranial fragment. Stratigraphy documented in this area showed interspersed areas of low-lying, inundated soils consistent with wetlands (peaty clay) and sand dunes (A horizon overlying Jaucas sand).

A 2014 supplemental AIS of the HRTP–City Center (Section 4) project area, from the Kaka‘ako Station to just east of Kamake‘e Street, further documented SIHP # -7429 as two cultural deposits (Humphrey et al. 2015). The cultural deposits consist of an in situ loamy sand A horizon (Component 2) and an overlying post-Contact fill deposit composed of locally available material (Component 1). Four additional features of SIHP # -7429 were identified, including a fire pit feature within Component 2 and a flexed human burial within the underlying Jaucas sand. Stratigraphy consisted of interspersed sand and wetland deposits.

5.1.12 Ward Neighborhood Blocks B East and C West (Ward Village Gateway) (Pammer et al. 2014; Sroat et al. 2014)

In 2014, CSH conducted archaeological inventory surveys for Ward Neighborhood Block B East (Pammer et al. 2014) and Block C West (Sroat et al. 2014), contiguous project areas that were subsequently combined into a single project, the Ward Village Gateway project. The *makai* (southwest) portion of Ward Village Gateway overlaps with the current project area. Thirty-eight test excavations were completed within Block B East, and 36 within Block C West. Four of the Block B East test excavations (T-14, T-28, T-32, and T-33) were at least partially within the current project area (see Figure 25). Six historic properties (SIHP #s -7655, -7656, -7658, -7659, -7660, and -7670) were identified within the combined Ward Village Gateway project area; four of these (SIHP #s -7655, -7658, -7659, and -7660) were identified within the current project area.

The modern developed land surface consisted of asphalt parking lot surfaces and concrete commercial floors associated with the Ward Warehouse commercial complex, as well as various layers of fill. Beneath these modern layers, within 38 test excavations, were buried twentieth century development land surfaces (SIHP # -7658) consisting of asphalt, concrete, coral and tar pavement, and oil-rolled surfaces. These buried surfaces overlie extensive reclamation fill deposits consisting of crushed coral and hydraulic (dredged) marine clay.

Underlying the reclamation fill deposits within most of the project area were post-Contact salt pan remnants, SIHP # -7655. These historic salt pan remnants are within areas of natural, low-lying, inundated deposits that had been converted to salt pan basins enclosed by man-made berm structures. The berm structures are composed of locally available material, and the salt pan beds consist of the natural sandy clay covered with very thin organic laminations. Two features

associated with SIHP # -7655, designated as Features 1 and 2, were identified. Feature 1 consists of naturally tabular limestone boulders, placed to create a relatively level surface over the natural marine sandy clay. Feature 2 consists of limestone boulders integrated into a man-made berm adjacent to a small section of peaty pond sediment.

Along the *makai* edge of the Ward Village Gateway project area, where the current project area is located, the stratigraphy changed to disturbed and reworked Jaucas sand and coastal marine sandy clay deposits, overlain by various fill deposits and crisscrossed by utility lines. Much of the disturbance to the natural deposits in this area appeared to be due to the surrounding urban development including landscaping, roadway improvements, and various stages of building infrastructure.

Three additional historic properties were documented in the western portion of the Ward Village Gateway project (Block B East). SIHP # -7656 consists of a single human cranial fragment identified within disturbed sand along the *makai* boundary of the project area. SIHP # -7659 consists of the concretized and rerouted Ward Estate *‘auwai*. SIHP # -7660 consists of a post-Contact trash fill within an abandoned storm drain box along the *makai* boundary of the project area. The historic trash included bottles, ceramics, metal, and boat trash likely related to the nearby fishing and tuna cannery industry.

5.1.13 Ward Neighborhood Block C (Yucha et al. 2014)

Between December 2012 and January 2013, CSH conducted an AIS for the Block C project area within the Ward Neighborhood Master Plan project (Yucha et al. 2014). Forty-one test excavations were distributed across the Block C study area, and one historic property, SIHP # -7422 (burnt trash layer), was identified. A hydraulic fill deposit associated with the infilling of Kaka‘ako between 1913 and 1930 was documented within the north, west, and south portions of the study area. Beneath the fill, a coarse sand A horizon was documented within 25 test excavations, while a peat A horizon was identified within three excavations in the northern portion of the study area. Jaucas sand was documented in 35 test excavations.

5.1.14 Ward Neighborhood Block M (Hawkins et al. 2015)

In 2014, CSH conducted an AIS for Ward Neighborhood Block M (Hawkins et al. 2015). Sixty-eight test excavations were completed, and two historic properties were documented: SIHP # -7429, subsurface cultural deposits, and SIHP # -7686, subsurface post-Contact infrastructure remnants.

SIHP # -7429 was documented within 11 test excavations, all within the north/*mauka* portion of the Block M project area, in the location of a buried sand dune. Two discrete cultural deposits were identified, consisting of a very thin, culturally enriched, post-Contact sandy fill deposit (Component 1) overlying an in situ sandy loam buried A horizon (Component 2). SIHP # -7429 Component 1 contains post-Contact material, faunal remains (including a modified dog bone), shell midden, charcoal, milled wood posts, and irrigation features. This layer was composed of locally available material, including A horizon material. SIHP # -7429 Component 2 contains both traditional Hawaiian and post-Contact cultural materials consisting of marine midden, charcoal, faunal bone, glass and ceramic fragments, a wood die, and other artifacts. Twelve features associated with SIHP # -7429 were identified and designated as Features 8–16. They consist of two fire pits, two postholes, an ash lens, two *‘auwai*, and five pits of indeterminate function.

Radiocarbon dating of one of the fire pits (Feature 8) indicated cultural usage of the sand dune as early as the fourteenth or fifteenth century (AD 1333-1337 [0.7% probability] or 1398-1449 [94.7% probability]).

SIHP # -7686 was a newly identified historic property consisting of buried commercial infrastructure remnants associated with mid- to late twentieth century development of the Block M project area. The remnants comprised buried concrete and asphalt surfaces with associated base course layers, concrete footings and beams, and a cinderblock structural remnant; these were documented within the central and northwest portions of the Block M project area.

5.1.15 Ward Neighborhood Block O (Leger et al. 2015)

In 2014, CSH conducted an AIS for Ward Neighborhood Block O (Leger et al. 2015). Twenty-seven test excavations were documented. The recorded stratigraphy consisted of modern surfaces and fill deposits, buried residential and/or commercial surfaces, and Kaka‘ako reclamation fill deposits, overlying natural Jaucas sand deposits within most of the project area and low-lying wetland (i.e., organic rich, marsh-like) deposits along the *makai* boundary. Several of the fill and natural deposits showed evidence of having served as stable living surfaces, containing cultural materials and/or features, and were designated as SIHP # -7717. The uppermost living surfaces consist of post-Contact commercial surfaces and infrastructure remnants, including concrete slabs, oiled road surfaces, asphalt, and concrete infrastructure remnants. These buried commercial surfaces indicate a change in land use within the Block O project area from residential to commercial sometime in the mid-twentieth century. Beneath these commercial surfaces are post-Contact fill layers that evidence use as living surfaces; they contain historical artifacts, faunal bone, charcoal, and associated features, including two dog burials. Natural (non-fill) living surfaces consist of portions of the natural sand A horizon containing historical artifacts, traditional-type cultural material (faunal bone, charcoal, marine shell midden), and/or post-Contact features including a milled wood posthole. In addition, a traditional Hawaiian grooved basalt sinker stone or canoe anchor was recovered from the underlying Jaucas sand.

5.1.16 Ward Neighborhood Block I (Sroat et al. 2015)

In 2014, CSH conducted an AIS for Ward Neighborhood Block I (Sroat et al. 2015). Eighty-eight test excavations were completed, and three historic properties were documented: SIHP # -7429, subsurface cultural deposits; SIHP # -7655, subsurface salt pan remnants; and SIHP # -7659, the Ward Estate concretized *‘auwai*.

The Block I AIS expanded the boundaries of the previously identified SIHP # -7429, documenting the presence of continuous subsurface cultural deposits from the corner of Ward Avenue and Queen Street to the corner of Queen and Kamake‘e streets, along the *makai* edge of a sand dune deposit that abuts the Kaka‘ako coastal wetlands. This historic property consists of post-Contact fill deposits composed of redeposited and reworked local sandy material (Component 1) and a natural A horizon that developed within Jaucas sand (Component 2). Sixty-two newly identified features were documented during the Block I AIS (SIHP # -7429 Features 20–79). The features consist of four midden pits, seven fire pits, 29 pits of indeterminate function, five post molds, a trash pit, a cobble hearth, a cat burial, a cluster of manuports, three burial sites (containing four individuals), two exhumation pits overlying two associated burial pits (containing only one human skeletal fragment), and five locations of disarticulated human skeletal remains.

SIHP # -7655 consists of a previously identified, large complex of buried post-Contact salt pan remnants. Within Block I, the salt pan remnants are within an area of low-lying, saturated deposits that extend from the *mauka* sand dune to the *makai* edge of the project area. The post-Contact salt pan remnants consist of salt pan basins edged by man-made berms. The berms are composed of locally available wetland/marine sandy clay deposits. The salt pan beds consist of the natural underlying marine deposits covered with organic laminations, or salt pan bed linings. Two distinct types of salt pan bed linings were identified within the Block I project area. Type 2 consists of a highly fibrous, laminated organic material, which was identified within the *makai* portion of the project area. Type 3 consists of a dense layer of finely laminated humic material containing distinct leaf inclusions, which was identified within the central and *mauka* portions of the project area. Type 1 salt pan bed linings were previously identified in the Ward Village Gateway project area as consisting of thinly laminated (1–2-cm thick) organic clay deposits.

Within Block I, SIHP # -7655 also includes portions of three *‘auwai* and an area of leveled sediments that constitute a post-Contact land surface, possibly utilized as a causeway for access and transportation purposes. Within the *mauka*/northern portion of SIHP # -7655 within Block I, cultural deposits were also identified within the salt pan berm structures, consisting of an A horizon with traditional-type material (charcoal, fire-affected rock, marine shell midden, and faunal bone) and associated features, including fire features (one of which contained a dog tooth pendant and a worked human bone tool) and a secondary human burial (SIHP # -7655 Features 3–6).

SIHP # -7659 consists of the Ward Estate concretized *‘auwai*, identified during the pedestrian survey of the Block I project area; it was not identified in any test excavations. The Ward Estate concretized *‘auwai* is a continuous feature running from Kapi‘olani Boulevard into Kewalo Basin.

5.1.17 Ala Moana Tributary Basin Sewer I/I Relief and Rehabilitation Project (Groza et al. 2016)

CSH conducted an archaeological literature review and field inspection for the Ala Moana Tributary Basin Sewer I/I Relief and Rehabilitation project (Groza et al. 2016). The study included a number of discrete areas in Honolulu, Kaka‘ako, Mānoa, Pālolo, Pauoa, Wai‘alae, and Waikīkī. Of these, Section 6 (Western Kaka‘ako) is the grouping closest to the current project area. No new historic properties were identified, and on-call archaeological monitoring was recommended for the portions of Section 6 closest to the current project area.

5.1.18 Board of Water Supply (BWS) Honolulu Water System Improvements Project (O’Hare et al. 2016)

CSH conducted an archaeological literature review and field inspection for the Board of Water Supply (BWS) Honolulu Water System Improvements project (O’Hare et al. 2016), including a portion of the current project area. The current project area was assessed as having medium archaeological potential. O’Hare et al. (2016) concluded it was likely the SHPD would require an AIS for the proposed project.

5.1.19 Ward Neighborhood Block N East (Sroat et al. 2016)

Between May 2014 and October 2015, CSH conducted an AIS for Ward Neighborhood Block N East (Sroat et al. 2016). Thirty-five test excavations were completed. Two previously identified historic properties were documented: SIHP # -7429, subsurface cultural deposits, and SIHP # -7686, subsurface post-Contact infrastructure remnants.

Within Block N East, the backshore sand dune associated with SIHP # -7429 was documented throughout the project area, along with two small swales containing low-lying saturated deposits. Similar to the adjacent Block I and Block M studies, the Block N East AIS documented multiple component cultural layers associated with SIHP # -7429. Component 1 layers consist of fill composed of locally available material, which were utilized as living surfaces; within Block N East, an additional Component 1 layer was identified, consisting of mixed fill (imported and local origin) associated with a row of late nineteenth and twentieth century houses along Queen Street. Cultural material within the Component 1 deposits consists largely of historical artifacts, faunal bone, and charcoal, with very sparse marine shell midden (*Nerita picea*) and traditional-type artifacts. Twenty-nine features were identified within Component 1 deposits, including eight post molds, three small trash pits, and a dog burial. Within Block N East, the underlying A horizon contains only light cultural material, including small amounts of marine shell midden (Neritidae), fire-affected rock, charcoal, a basalt manuport, faunal bone (pig, dog, cow, and rat), and small glass and ceramic fragments. Seventeen (non-burial) features were identified within Component 2 deposits, including five possible post molds.

A large human burial ground was also identified as part of SIHP # -7429, within the northern/*mauka* portion of the Block N East project area adjacent to Queen Street. Twenty-three in situ human burials and two areas of disturbed human skeletal remains were documented within sand A horizons (n=5) and Jaucas sand (n=18). Most of the burials consist of traditional-type burials (e.g., flexed, semi-flexed, or likely flexed), although at least one (and possibly another) consists of a post-Contact coffin burial, indicating an extended time period of human interment within this area of the sand dune. Two burials found at the water table contain preserved organic burial goods consisting of braided ti leaf (*Cordyline fruticosa*) cordage.

Within Block N East, SIHP # -7686 consists of buried asphalt (n=9) and an oil-rolled surface. These surfaces were documented within the central portion of the project area, forming a linear area, possibly representing a buried road or access route.

5.1.20 Ala Moana Boulevard/Auahi Street Sewer Rehabilitation Phase 2 and Phase 3 (Turran et al. 2016)

In 2013 and 2014, CSH conducted archaeological monitoring for the Ala Moana Boulevard/Auahi Street Sewer Rehabilitation Phase 2 and Phase 3 project (Turran et al. 2016). The documented stratigraphy comprised imported fill deposits overlying natural marine deposits atop the coral shelf. No historic properties were identified.

5.1.21 Phase II Environmental Site Assessments Kaka‘ako Makai (Rivera and Monahan 2017)

TCP Hawai‘i conducted archaeological monitoring in support of Phase II Environmental Site Assessments Kaka‘ako Makai (Rivera and Monahan 2017). Archaeological monitoring was conducted for all subsurface soil/sediment sampling (420 cores) by Environmental Science International, Inc., in Parcels A, C, and I. In 15% of the cores (62 of 420), the core hit something impenetrable. In several instances, it was hypothesized that this was the result of the core encountering buried seawalls that date to the early twentieth century; however, this could not be confirmed as observation was limited to the 2-inch diameter of the core. Hence, no SIHP number was assigned.

5.1.22 Ward Neighborhood Block B West (Sroat, Turran, and McDermott 2017)

Between May 2014 and March 2015, CSH conducted an AIS for Ward Neighborhood Block B West within the Ward Warehouse commercial complex (Sroat, Turran, and McDermott 2017). Twenty-eight test excavations were completed, and five historic properties documented: SIHP #s -7655, -7658, -7770, -7771, and -7772. SIHP #s -7655 and -7658 were previously identified, while SIHP #s -7770 through -7772 were newly identified.

Within Block B West, SIHP # -7655, subsurface post-Contact salt pan remnants, was identified within the *mauka* and eastern portions of the project area, within an area of low-lying, marine sandy clay. This area abuts coastal sand deposits documented within the *makai* and ‘Ewa portions of the project area. Salt pan berm structures were identified within six test excavations, consisting largely of relatively high, steep berms and composed of locally available sandy clay. Within one of the berms, a pit feature was documented extending through the berm to the underlying water table, where a dense layer of dark, decomposing material, milled wood, and coral gravel was observed. The pit contained abundant fish bone, small seeds, and several organic filaments interpreted as preserved fish excrement. Based on the context and contents, the feature was interpreted as an aquaculture feature, likely the remnants of a wood contraption utilized for farming fish. Salt pan bed deposits were identified within three test excavations, and possibly a fourth. The salt pan bed deposits consist of thin (1–3 cm thick), laminated, organic material consistent with the Type 1 deposits observed within the Ward Village Gateway AIS investigations.

Within Block B West, SIHP # -7658, post-Contact buried surfaces and structural remnants, consists of four concrete building foundation remnants, three buried asphalt layers, two oil-rolled surfaces, one buried brick and mortar surface, and two wood posts.

SIHP # -7770 consists of subsurface cultural deposits along the *makai* margins of the Block B West project area. The earliest deposit consists of a natural loamy sand A horizon with seven associated pit features, including two possible fire pits; the time period for this cultural layer is indeterminate. The overlying post-Contact cultural layer is a fill deposit composed of locally available material with three associated features, including a highly compacted, prepared, silty sand surface and a concentration of disarticulated human skeletal remains.

SIHP # -7771 consists of a post-Contact trash layer and associated pit. The artifacts consist primarily of household items of Hawaiian, Japanese, Euro-American, and European origin. The manufacture date ranges span the late 1800s to 1926-1933, indicating the layer was deposited post-1926.

SIHP # -7772 consists of disarticulated and fragmented human skeletal remains within a shallow fill deposit. Based on the crystalline organic matrix of the bone (i.e., exposure to water) and the presence of pockets of sandy clay within the fill layer (i.e., consistent with the local sandy clay basal deposit), the remains were interpreted as likely from a disturbed burial at the water table, typical of Hawaiian burial practices. The skeletal elements present (head, upper torso, arms, and knee area) are also consistent with disturbance to a flexed burial, in which the knees would be drawn close to the torso and arms.

5.1.23 Ward Neighborhood Block A (Sroat, Burke, Farley, and McDermott 2017)

In 2015, CSH conducted an AIS for Ward Neighborhood Block A (Sroat, Burke, Farley, and McDermott 2017). The observed stratigraphy consists of asphalt parking lot surfaces or imported

landscaping topsoil atop various layers of post-Contact fill largely related to the construction of the current Ward Plaza, Kaka‘ako land reclamation fill (significantly disturbed by the construction of Ward Plaza), and a thin layer of fill composed of locally available material (sandy clay or sandy loam), overlying two distinct natural stratigraphic zones. Within the majority of the Block A study area (*makai* and central portions), a buried sand dune was documented. This sand dune contains SIHP # -7580, subsurface cultural deposits with associated features and human burials. Along the *mauka* edge of the study area, low-lying marine sandy clay deposits were documented; this low-lying area evidences modifications associated with salt production and is part of SIHP # -7655. In addition, a third historic property was documented: SIHP # -7579, subsurface twentieth century infrastructure remnants. Within Block A, SIHP # -7579 consists of buried oil-rolled and asphalt surfaces alongside Ward Avenue and two small concrete surfaces alongside Ala Moana Boulevard.

5.1.24 Ward Neighborhood Block H (Davis et al. 2018)

In 2016, CSH conducted an AIS for Ward Neighborhood Block H (Davis et al. 2018). The AIS included 41 backhoe-assisted test excavations and four auger bores in both exterior (parking lot/accessways) and interior (warehouse space) locations. The documented stratigraphy consists of modern commercial surfaces (asphalt parking lot and concrete building surfaces), associated base course and grading layers, and various layers of historical fill, including early twentieth century Kaka‘ako reclamation fill, overlying two distinct natural stratigraphic zones. Within the north corner of the project area, a buried sand dune was documented. This sand dune appeared to be an extension of the buried sand dune documented with the Block I, Block N East, Block M, and HRTP–City Center (Section 4) project areas. This sand dune contains SIHP # -7429, subsurface cultural deposits with associated features and human burial sites. Within the remaining portions of the project area (i.e., the majority), a large area of coastal tidal flats/lagoonal deposits was documented. This low-lying, saturated area contains SIHP # -7655, historical salt pan remnants, and is contiguous with salt pan deposits within the Block I, Block B West, and Ward Village Gateway project areas. A third historic property, SIHP # -7686, post-Contact subsurface infrastructure remnants, was also identified within the Block H project area.

SIHP # -7429, as documented in Block H, consists of a loamy sand A horizon (Component 2) and an overlying fill deposit composed of locally available material (Component 1). These deposits contained only sparse cultural material, almost exclusively consisting of post-Contact materials, and four associated pit features, including one posthole. This contrasted with the sometimes dense complex of features and cultural materials within the adjacent Block I and Block N East project areas, which also contained human burial grounds.

SIHP # -7655, post-Contact salt pan remnants, was identified within the remaining portions of the project area, with the exception of the western boundary along Ward Avenue. Within Block H, it consists of salt pan berms, salt pan beds, and a possible *‘auwai*. The salt pan berms evidenced wide variability and included an area of high, steep berms in the *makai* portion of the project area along Auahi Street, various small berms dispersed within the central portion and constructed atop the level, basal sandy clay marine sediment without any apparent association with salt pan beds, and a berm structure that evidenced multiple building events and cultural usage (i.e., a fire feature). The salt pan beds were most distinguishable in the *mauka* portion of the project area within a contiguous zone of highly laminated salt pan bed liners. Within the remaining areas, the salt pan beds were distinguished by the presence of associated salt pan berms and/or their presence directly

atop the coral shelf (i.e., the natural soils had been entirely scraped away), rather than by distinctive salt pan liner laminations. The possible *‘auwai* structure was within the south corner of the project area and consisted of a narrow channel defined by square-cut embankments. The channel sediment contained a dense deposit of brackish water snails and peat.

SIHP # -7686, subsurface post-Contact infrastructure remnants and associated deposits, was documented throughout the Block H project area. Within Block H, SIHP # -7686 consists of buried asphalt surfaces, an oil-rolled surface, two buried wall remnants, two localized demolition deposits, and a large trash pit. Only one structural remnant pre-dates early twentieth century Kaka‘ako land reclamation. This early structural remnant and the two demolition deposits appeared to be associated with late nineteenth to early twentieth century residential use of the project area; however, most of the structural remnants represent mid-twentieth century commercial development.

5.1.25 Nimitz Highway and Ala Moana Boulevard Resurfacing and Highway Lighting Replacement Project (Pammer et al. 2018)

Between 2011 and 2016, CSH conducted archaeological monitoring for the Nimitz Highway and Ala Moana Boulevard Resurfacing and Highway Lighting Replacement project (Pammer et al. 2018), including a portion of the current project area. The current project area is within Stratigraphic Zone 2, which consisted of imported, modern fill deposits overlying natural Jaucas sand atop the decomposing coral shelf. The sand was often found to be disturbed or redeposited in association with prior utility installations; however, four traditional Hawaiian human burials (SIHP # -7435 Features A–D) were identified within undisturbed, natural sand in Stratigraphic Zone 2.

Section 6 Previous Cultural Impact Assessment Research

6.1 Previous Cultural Impact Assessment Research

A review of previous cultural impact assessment reports has been conducted for the project area or area of potential effect (APE) and beyond. Unlike archaeological inventory survey reports, the APE for CIAs is the immediate project area and extends to the wider land regions which can include the entire *ahupua‘a* and possibly the *moku*. Since Native Hawaiian traditions recognize and value the relationship with land from *mauka* to *makai*, the project area or APE denotes the location of the project, however, the term “study area” denotes the larger context of land that is critical in any CIA investigation. Previous CIA projects in close proximity to the project area are shown in Figure 42 and presented below in Table 3.

6.1.1 Mother Waldron Playground and the Former Pohukaina School Site (Hammatt 2001)

This CIA focused on disclosing any cultural impacts at Mother Waldron Playground and the former Pohukaina School site (Hammatt 2001). Eighteen community members, individuals, and/or organizations were contacted. Due the specificity of this project and consultation with SHPD, the consultation portion of this project was not as broad as originally intended. Results from this project include that Mother Waldron Playground and the former Pohukaina Elementary School once consisted of fishponds, tidal flats, salt pans and scattered dwellings. No knowledge or cultural concerns were shared specific to the project site.

6.1.2 Kaka‘ako Mauka Area Plan (O’Hare et al. 2008)

The Kaka‘ako Mauka Area Plan project (O’Hare et al. 2008) focused on establishing and planning principles and development objectives for the orderly redevelopment of the Kaka‘ako Mauka Area. In this CIA study, eighty-one community members (government agency or community organization representatives, or individuals such as past/current residents, lineal and cultural descendants, and cultural practitioners) were contacted. Thirty-four people have responded with twelve *kūpuna* and/or *kama‘āina* being interviewed. Results from these interviews include conducting in-depth archaeological study to identify *iwi kūpuna* within the area as probability of burials is high; overall concerns about future impacts to the Kaka‘ako region and the loss of the authentic and traditional heritage of Kaka‘ako as well as the displacement of local and family-owned businesses; the loss of historical properties; loss of view and remaining green spaces in Kaka‘ako due to high-rise buildings. Some recommendations to help remediate these concerns include creating a Hawaiian “cultural market”; providing lower rent for locally owned businesses; creating a monument as a repository for genealogies of the Hawaiian monarchy; creating a pedestrian overpass over Ala Moana Boulevard to Kewalo Basin; creating Hawaiian gardens with plants, such as *kukui* (*Aleurites moluccana*) and *kī* (*cordyline fruiticosa*) that people can gather and use.

6.1.3 Sand Island Waste Water Treatment Plant and Sewer Basin Facilities (Cruz et al. 2010)

The Sand Island Water Waste Treatment Plant and Sewer Basin Facilities project (Cruz et al. 2010) concentrated on conducting a planning and engineering study for improvements to Sand Island Sewer Basin wastewater conveyance and treatment facilities that will be required to meet service demands to the year 2030 and beyond.

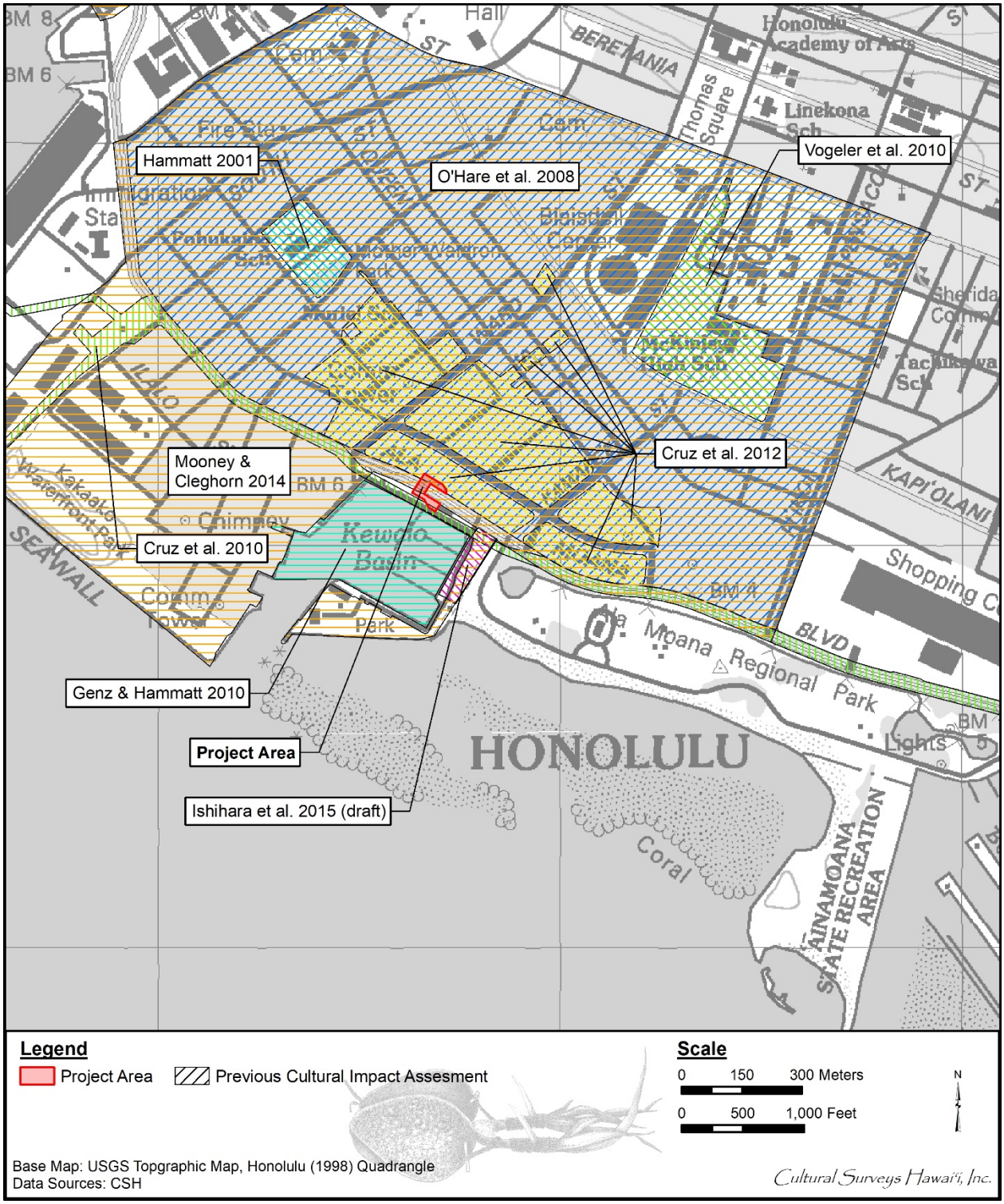

Figure 42. Portion of the 1998 Honolulu USGS 7.5-minute topographic quadrangle with overlay of previous cultural impact assessment studies within and in the vicinity of the project area

Table 3. Previous cultural impact assessment research in the vicinity of the project area

Reference	Location	No. of Contacts	Results
Hammatt 2001	Mother Waldron Playground and former Pohukaina Elementary School	Contacted 18 community members	Historic accounts about landscape and uses
O’Hare et al. 2008	Kaka‘ako Mauka Area	Contacted 34 people, 12 *kūpuna* or *kama‘āina* interviewed	In-depth archaeological study to identify *iwi kūpuna* within area; future impacts to Kaka‘ako region and loss of authentic and traditional heritage of Kaka‘ako, displacement of local and family-owned businesses; loss of historical properties
Cruz et al. 2010	Extends from Ke‘ehi Lagoon Park, Kapālama Basin, Kewalo Basin, Sand Island, Kewalo Basin, Ala Moana Park, and extends inland to Ala Wai Canal	Contacted 33 community members; 13 responses and six *kūpuna* and *kama‘āina* interviewed	Agricultural landscape such as *lo‘i* and *loko i‘a*, food sustainability practices, gathering practices, sampan *aku* boats and other fishing practices
Genz and Hammatt 2010	Kewalo Basin	Contacted 39 community members and/or individuals; 16 responses and six *kūpuna/ kama‘āina* interviewed	*Wahi pana* and *mo‘olelo* of Kaka‘ako; historic *mo‘olelo* such as epidemic; diverse ethnic neighborhoods; *lā‘au lapa‘au* plants and uses; sampan *aku* boats and other fishing practices; surfer community of Kewalo
Vogeler et al. 2010	McKinley High School campus	Contacted 20 community members and/or individuals; ten responses and five interviewed	Diversity and lifestyle at McKinley High School; *lā‘au lapa‘au* plants and medicinal uses; fishing practices near Kewalo Basin; inaccuracy and misrepresentation of President McKinley and his involvement with Native Hawaiians

Reference	Location	No. of Contacts	Results
Cruz et al. 2012	Ward Neighborhood	Contacted 59 community members and individuals; six responses and five interviewed	Importance of food, especially obtained through fishing and ocean resources; water usage as population increase in area; burial concerns and recommendations; education and resources for young Native Hawaiians to lead them into managerial positions
Mooney and Cleghorn 2014	Kaka‘ako Community Development District and Aloha Tower Special District	Study relied on past community contact efforts	Study relied on past community contact efforts
Ishihara et al. 2015	Kewalo Basin Harbor and Ala Moana Beach Park	Contacted 30 community members and/or individuals; three responses and two interviewed	Protecting historic properties such as Ala Moana Beach Park and potentially Kewalos surf break; history of Kewalo shoreline area used as a canoe landing, reef used for burials; various fishes and fishing practices; Hansen’s disease epidemic and Saint Marianne Cope contribution and statue

Thirty-three community members (government agency or community organization representatives or individuals such as residents, lineal and cultural descendants, and cultural practitioners) were contacted. Thirteen of those responded while six participated in interviews and contributed to the CIA. Results from those interviewed include the potential for underground water systems being damaged by sub-surface excavations and construction activities; potential negative impact of sewer bypass at Hart Street on Hālau Lōkahi Hawaiian Immersion School (no longer in existence); former abundance of area in *lo‘i* and *loko i‘a*; sharing of various *mo‘olelo* and history of the area such as Sand Island being the holding place for patients with leprosy or in 1932 George P. Mossman Hawaiian community being built to demonstrate traditional Hawaiian music and *lū‘au*; prominence of salt pans throughout the area; prominence of fleets of sampans or *aku* boats in Kewalo Basin; *limu* gathering practices done along the shoreline; gathering of native plants by students of Hālau Lōkahi Hawaiian Immersion School mostly for adornment, however, *laua‘e* had been used to help with stomach ailments. Community recommendations included that a qualified cultural monitor should be present during all ground excavations; personnel involved in

development should be informed of the possibility of inadvertent cultural finds, such as human remains; caution be taken during tunnel work in order to avoid damaging underground fresh water system; consultation with community should continue throughout all phases of the project.

6.1.4 Kewalo Basin Repairs (Genz and Hammatt 2010)

The Kewalo Basin Repairs project (Genz and Hammatt 2010) focused on the repair and/or replacement of mooring infrastructure at Kewalo Basin to modernize the facilities, increase its small craft moorage capacity, and improve operational efficiencies.

CSH contacted 39 community members and/or individuals. Sixteen of those contacted responded to CSH, with six *kūpuna* and/or *kama‘āina* participated in interviews for more in-depth contributions to the CIA. Results from these interviews include various *wahi pana* and *mo‘olelo*, such as those about the war god Kū; historic *mo‘olelo* about the landfill, coral flats, or the plague; ethnic diversity amongst residents of Kaka‘ako during the 1930s and 1940; knowledge about *lā‘au lapa‘au* and the various vegetation that grew within the area; the historic era of the *aku* and sampan of Kewalo Basin; the various marine life that existed in Kewalo; traditional Native Hawaiian culinary practices and preparation such as pigs or fish; the social community of surfers that has emerged at “Kewalos” (series of four surf breaks). Some community recommendations include accessibility and public access to the shoreline and ocean; cultural preservation and practices as well as preservation of tourism-based businesses such as parasail, sport fishing, and the Kewalo Keiki Fishing Conservancy; concerns about pollution and the potential of marine debris, pollutants, and other foreign matter endangering marine resources, water quality, and the ecosystem; maneuverability of *Kula Kai*, the last vintage wooden sampan *aku* boat; increased slips and traffic in and out of the channel poses harm to surfers as well as affects the quality of waves; creation of a more attractive place for locals and tourists which will promote the history of the place; promotion of fishing businesses and practices.

6.1.5 McKinley High School Athletic Complex Master Plan Project (Vogeler et al. 2010)

The McKinley High School Athletic Complex Master Plan project (Vogeler et al. 2010) consists of a replacement softball field (upgrade to softball stadium); expansion of the current existing girls’ locker room; replacement track and football field with fence; replacement and expansion of tennis courts; replacement of boys’ PE/athletic locker room and shower; replacement rifle range; new parking area; new two-story YMCA Wellness Center with a 50-m swimming pool, bleachers and a new three-story parking structure; expansion of the driveway access; new walkways/plazas; new gymnasium; renovation to the existing gymnasium, and a replacement baseball field.

CSH reached out to and contacted 20 community members and/or individuals; ten of these responded to the request and five participated in an interview. Results from the interviews include past memories and experience of life at McKinley High School which included activities that promoted sharing various cultural foods and traditions or learning about the plants and agriculture in the Kewalo area; gathering of various plants throughout the *ahupua‘a* such as banana stumps, *kōko‘olau* (*Bidens* spp.), *kamani* (*Calophyllum inophyllum*) leaves, *wiliwili* (*Erythrina sandwicensis*, formerly called *E. monosperma*) berries, and plants used for medicinal purposes such as *‘uhaloa* (*Waltheria indica* var. *americana*), *pōpolo* (*Solanum nigrum*), *māmaki* (*Pipturus* spp.), and *laukahi* (*Plantago major*) with *‘uhaloa* and *laukahi* being grown on the McKinley school campus; fishing using various styles along the shoreline from Ala Moana to Kewalo Basin like net fishing, pole fishing, or fishing on the sampan *aku* boats to catch *aku* or even reef fish such

as *‘aweoweo* (*Priacanthus)*, *mānini* (*Acanthurus triostegus*), *opelu* (*Decapterus pinnulatus* and *D. amaruadsi*), *‘aholehole* (*Kuhlia sandvicensis*), *‘ama‘ama* (*Mugil cephalus*), and squid; the feeling of “sense of place” while attending the school; the naming of the school after President McKinley still produced strong emotions with some individuals, expressing the inaccuracy of honoring an individual who does emanate the pride of Hawai‘i. Community recommendations for this project include keeping the “sense of place” feeling in the development plans; being prepared for inadvertent burials and handle them appropriately according to the law; addressing—even though not within the scope of the project—the McKinley statue and the true role that McKinley played in Native Hawaiian history.

6.1.6 Ward Neighborhood Master Plan (Cruz et al. 2012)

The Ward Neighborhood Master Plan project (Cruz et al. 2012) is a long-range plan of 20-plus years that would transform the Ward area into a new urban neighborhood with a range of housing types and commercial uses. A major focus of the plan is the construction of a central plaza and additional public plazas.

CSH reached out to and contacted 59 community members and/or individuals; six responded to the request and five participated in an interview and contributed to the CIA report. Results from the interviews include the area’s food sustainability as Kaka‘ako is known for its fishing and ocean resources; recollection of Kaka‘ako being a fishing village where all ethnicities fished and shared their catch with the community; the rising demand on water resources as the population of high-rises and residents increase; concerns about potential burials as the area was involved in Kamehameha’s overtaking of the islands and various battles occurred in the area starting from Waikīkī, up to Punchbowl and into Nu‘uanu; the connection and relation of the Hawaiian sovereignty movement to Kaka‘ako, stating it would be nice if Hawaiian history is embedded into the development so tourists can experience the Islands of Hawai‘i throughout the area; support for providing opportunities for young Native Hawaiians to receive support and education to obtain higher managerial positions in the new community. Concerns and recommendations include a sense of fear that this new urban community will out-price many people of Hawai‘i and many of the families who once comprised the community of Kaka‘ako; incorporation of traditional Hawaiian place names of Kaka‘ako into the design plan; inclusion of native plant species traditionally found within the area to be considered in the landscaping design; to uphold burial laws and should burial sites be identified, that all work should immediately cease and the appropriate agencies and lineal and cultural descendants be notified.

6.1.7 Kaka‘ako Community Development District Transit-Oriented Development Overlay (Mooney and Cleghorn 2014)

The CIA for Kaka‘ako Community Development District Transit-Oriented Development Overlay (Mooney and Cleghorn 2014) included previously conducted CIA reports within the *‘ili ‘āina* of Kaka‘ako. Consultation and community recommendations referenced in Mooney and Cleghorn (2014) were the results of five previously conducted cultural impact assessments; three of the five were CSH reports. They are O’Hare et al. (2008), Genz and Hammatt (2010), and Vogeler et al. (2010). The remaining two CIA reports are from Wilson Okamoto and Associates, Inc. (2002) and Elison and McElroy (2011).

The report from Wilson Okamoto and Associates, Inc. (2002) did not yield results as "protocol listed in the Guideline for Assessing Cultural Impacts (OEQC 2011) […]" (Mooney and Cleghorn 2014:88) were not followed.

The results from Elison and McElroy (2011) included individuals and community members who shared various *mo‘olelo* and traditional cultural practices within the Kaka‘ako area. Results included *mo‘olelo* about a graveyard area near Kawaiaha‘o Church; traditional place names within Kaka‘ako; various *oli* that mention places such as Kaka‘ako, Kālia, Māmala, and Kuloloia; potential burials within the area as various significant events such as the epidemics had occurred; various agricultural practices such as gathering *limu*, cultivating rice paddies, *lo‘i*, and salt production; fishing practices along Kewalo, Kaka‘ako, Fisherman's Wharf, Ala Moana Park, Sea of Kuloloia (from Honolulu Harbor to Ala Moana Park), and open ocean off Kaka‘ako; post-Contact sites such as a *hale* of Kamehameha I, fort and wharf of James Robinson; an European cemetery; the changing demographic in the community.

6.1.8 Kewalo Basin Retail (Ishihara et al. 2015)

The Kewalo Basin Retail project (Ishihara et al. 2015) involved a multi-use facility consisting of four two-level buildings within the Kewalo Basin, located between Kewalo Basin Harbor and Ala Moana Beach Park.

CSH reached out to a total of 30 community members and individuals; three responded and two of the three were interviewed for more in-depth contributions. Results included the designation of Ala Moana Beach Park as a historic property on the National Register of Historic Places; access of a surf break known as Kewalos south of the project area, noting that surfing is not only a recreational but a cultural practice as well; reforming the designation of Kaka‘ako as not an *ahupua‘a* but an *‘ili ‘āina* that resides in the *ahupua‘a* of Honolulu, once known as Kou during the time of Kākuhihwa; knowledge that Kewalo Basin was used as a canoe landing during the pre-Contact era; knowledge that the dredged land area was once reef; that families fishing could be seen along the shoreline; the high number of burials *mauka* of project area indicated the area had been heavily populated; Native Hawaiians buried the dead close to the ocean in sand; bodies were sometimes buried under reef so as not to drift out into ocean; a *tako* (Japanese for octopus) hunter frequented the area; other fish caught in the Kewalo area included *menpachi* (*Myripristis* spp.), *aweoweo*, *ulua* (*Caranx sexfasciatus*), *papio* (juvenile *ulua*), *akule* (*Selar crumenophthalmus*), and *halalu* (juvenile aweoweo); *pueo* (*Asio flammeus* sandwichensis) is an *aumakua* of the Kaka‘ako area; description of a statue of Saint Marianne Cope who helped patients with Hansen's disease and who would fish and relax near Kewalo during her down time.

Some community recommendations include keeping the historic integrity of historic properties; evaluation of the surf break Kewalos as a traditional cultural property; consultation with lineal and cultural descendants to be involved in the CIA; providing accessibility to the park and park facilities; anticipating the effects of a large population of boat patrons and influx of new residents on parking and public access.

Section 7 Previous Oral History Research

There have been many oral history projects conducted with residents of the Kaka‘ako area, including the two-volume report by the University of Hawai‘i’s Ethnic Study Oral History Project (UH 1978), called *Remembering Kaka‘ako*. The following is a summary of some of the interviews pertinent to the current project area, with additional material from other resources.

In the early to mid-twentieth century, Kaka‘ako was a vibrant residential section on the outer boundary of Honolulu with a diverse ethnic mix of Hawaiians, Chinese, Japanese, Filipinos, Portuguese, and others. Bachelors lived in rented rooms, and families lived in small houses clustered together with others of the same ethnic background. Although each ethnic group lived in their own clusters, diverse residents mixed together at church, school, and community activities and events.

7.1 Native Hawaiians

Until the twentieth century, most residents of Kaka‘ako, were Native Hawaiians: the fishermen who lived in scattered shacks on Fishermen’s Point and along the coast, the caretakers of the saltpans and fishponds, and the people who clustered around the *ali‘i* and *kāhuna* complexes at Honuakaha village and coconut grove and the beach *makai* of the grove. With the advent of commerce with visiting fur traders, whalers, sandalwood traders, and later freight vessels, Native Hawaiians became the dominant force as draymen, transporting cargo between the harbor and the town and then to outlying sections of the islands. Many of the boys who dived for coins, tossed by the passengers of the great Matson liners docked at Honolulu Harbor, were Native Hawaiians. Some of the “divers” later became championship swimmers and surfers.

The most well-known musician who lived in Kaka‘ako is probably Don Ho. Born Ronald Ho Tai Loy in 1930 on Ilaniwai Street of Kaka‘ako, he first sang in a band at his family’s bar, Honey’s, in Kāne‘ohe in 1959. In the next few years, he played numerous shows at Honolulu and Waikīkī bars and lounges, and began to record songs on records, including his signature song “Tiny Bubbles.” He appeared on television variety shows beginning in 1971, and had his own TV show, the “Don Ho Show,” from 1976 to1977 (Hawaiian Music History 2011).

Not all Native Hawaiians in Kaka‘ako were famous musicians. Mrs. Eleanor Nahiapo Wilson Heavy, a Hawaiian-English-Chinese woman, was born in Kaka‘ako in 1912 and lived there until 1938 (UH 1978:340–405). Her home was on Pohukaina and South streets, and she attended Muriel Kindergarten in Kaka‘ako. She used to help her mother collect herbs such as *pōpolo* (black night shade, *Solanum nigrum*), for colds and congested chest, and the *‘uhaloa* (small, downy, American weed, *Waltheria indica* var. *americana*) root, for colds as well. The people in Kaka‘ako at this time still went to the medicinal *kahuna*; the hospital was a place where you would go when there was no hope left.

Her mother traveled to the Squattersville area to gather *limu, wana* or *‘ina* (sea urchins), squid, and *‘ōpae* (shrimp) for the family’s meals. Mrs. Heavy also remembered that they used Hawaiian salt to embalm bodies. They would stuff the *‘ōkole* (buttocks) with salt, working it in with ti leaves. They also put salt in cuts under the armpit, and within the mouth, nose, and ears. The body then could be viewed by relatives at the undertakers for several days. The body was later put into a

coffin for burial at the Catholic Cemetery or at the Kawaiaha‘o Church cemetery, both on King Street.

Mary Kauhane Naito, born in Kaka‘ako in 1920 (UH 1978: 877–912), also recalled life in Squattersville, the lifestyle of the people, and being evicted from the area when their family home was torn down.

Mr. David Tai Loy Ho, Chinese-Hawaiian, was born in Kaka‘ako in 1910 (UH 1978:405– 465). As a child he made money picking *kiawe* beans, selling newspapers, and diving for coins at Honolulu Harbor when the large tourist cruise lines came into port. His home was on the corner of Queen and Cooke streets. The best place to pick the beans was the private property of the Ward Estate, between Queen and King streets. He and his brothers would sneak under the wire fence and load up on the *kiawe* beans near the Ward horse stables. The *kiawe* beans were sold to be used as horse and cattle feed.

Mr. Ho says that there were not many Chinese in the area:

> Well, the Chinese people who lived there were all storekeepers. Well, let's see, they were laundry men and storekeepers. The two storekeepers right on the corner there. The barbers were Japanese. The poi men were Chinese; the poi men were all Chinese because I guess they got the poi from the Chinese who lived on the farms. The Chinese planted rice and later on, they changed to taro because rice came from California […] They lived right in the buildings [stores], right in the back. They'd eat; they have a little stove in the back. Live with their family. [UH 1978:413–414]

7.2 **Japanese**

Mr. Yonoichi Kitagawa, of Japanese descent, was born in Kaka‘ako in 1913 (UH 1978:670–751). His father was a fisherman. He had several jobs, but remembers most fondly being a coach for football, gymnastics, and boxing. He surfed at Stone Wall near the Kewalo Basin and went spear-fishing for fish and lobsters in the waters offshore. At the drydocks of the Inter-Island shipyards, where he was a machinist, he remembers the different jobs:

> Usually, the Filipinos were what we call scrapers, and do the scraping of the barnacles and so forth. Japanese and Hawaiian, part-Hawaiian, Chinese were more shipwrights or boiler makers, you know. We had boiler making shop, too. And machine shop would be all mixed. Hawaiians, Japanese. Sheet metal were all Japanese. […] Supervisors were mixed. Hawaiians and Japanese. Crew or gang foreman were mostly mixed. [UH 1978:700]

Keisuke Masuda, Japanese, came to the Kaka‘ako area in 1915 (UH 1978:818–876). His father was a fisherman who had his own boat and used to stay out on the ocean up to a week at a time to catch the red snappers. As a watchman, he worked for the Hawaiian Tuna Packers Company in 1931. At the tuna cannery, he recalled:

> Well, during the cannery season, actually they start around May, June, July, August, September. Was about five months is the most *aku* season, see, when they catch plenty. *Aku* coming in. So somebody have to stay nighttime. You don't know when the boats come in, see. Sometime the boats come in about 1, 2 o‘clock in the morning, see. So when the boat come in late, I have to go call—mostly Filipinos,

> see—to clean the fish. Have to clean the fish, and wash it, and then put ‘em in a tray, stack ‘em in car, and put ‘em in the boiler, where they cook the fish. Steam the fish in it. [UH 1978:831]

7.3 **Chinese**

Francis Zane was one of the few Chinese living in Kaka‘ako (UH 1978:1147–1183). His family moved there in 1909 when he was about ten years old. His father worked for various companies, the E. Hall and Son Company, the Bank of Hawai‘i, and the Soda Water Works in Honolulu. Francis made extra money for the family by selling newspapers and by diving for coins in Honolulu Harbor. On the way to the harbor, he would pass the marshy areas near the base of Ward Avenue. He noted,

> And you know Ward Street, coming down. Before you reach the Fisherman Wharf, coming down? It’s on the right side. They used to have a place, where they used to make salt. Gee, you pass it when the sun shine, that’s salt, eh, burn your eye, you know, from the salt [...] red salt, white salt. [UH 1978:1178]

Section 8 Community Consultation

8.1 Introduction

Throughout the course of this assessment, an effort was made to contact and consult with Native Hawaiian Organizations (NHO), agencies, and community members including descendants of the area, in order to identify individuals with cultural expertise and/or knowledge of the *ahupua‘a* of Kaka‘ako. CSH initiated its outreach effort in June 2020 through letters, email, telephone calls, and in-person contact.

8.2 Community Contact Letter

Letters (along with a map and an aerial photograph of the project) were mailed with the following text (Figure 43 and Figure 44):

> At the request of Howard Hughes Corporation (HHC), Cultural Surveys Hawai‘i, Inc. (CSH) is conducting a cultural impact assessment (CIA) for the Ala Moana Boulevard Elevated Pedestrian Walkway Project, Honolulu Ahupua‘a, Honolulu (Kona) District, O‘ahu, TMK parcels [1] 2-1-001:129 (por.) and 2-1-058:132 and 133 (por.). The project area is depicted on a portion of the 1998 Honolulu U.S. Geological Survey (USGS) topographic quadrangle map (Figure 1) and a 2016 Google Earth Aerial Imagery photograph (Figure 2).
>
> **Proposed Project**
>
> The proposed project is the construction of an elevated pedestrian walkway/overpass spanning Ala Moana Boulevard and connecting Ward Village with the Kewalo Basin and harbor areas. This project is a partnership between public and private entities. Hawai‘i Department of Transportation (HDOT) will procure and administer construction and own the bridge while HHC will contribute the *mauka* (upland, toward the mountain) right-of-way and secure the *makai* (seaward, toward the sea) landing right-of-way from the Hawaii Community Development Authority, fund design, historic preservation review, and environmental review, and maintain non-structural improvements.
>
> **Purpose of the CIA**
>
> As mentioned, this project is a joint public-private partnership that will be utilizing a mixture of federal, state, and private funds, and will be constructed on state and privately owned land. As such, this project, the Ala Moana Boulevard Elevated Pedestrian Walkway, is subject to State of Hawai‘i environmental (Hawai‘i Revised Statutes [HRS] §343) and historic preservation (HRS §6E) review. While the CIA is specifically carried out to comply with Hawai‘i State environmental review under HRS §343, the CIA consultation effort and outreach will generally dovetail with the project’s federal and state environmental and historic preservation review consultation.

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June 2020

Aloha,

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As outlined in the implementation guidelines for HRS §343, the purpose of this CIA is to gather information about the project area and the surrounding area through research and interviews with individuals who are knowledgeable about this area in order to assess potential impacts as a result of the proposed project to cultural resources, cultural practices, and beliefs. We are seeking your *kōkua* and guidance regarding the following aspects of our study:

- **General history as well as present and past land use of the project area**
- **Knowledge of cultural sites which may be impacted by future development of the project area—for example, historic and archaeological sites, as well as burials**

Figure 43. Consultation letter (page one)

KAKAAKO 268 – CIA for Ala Moana Boulevard Elevated Pedestrian Walkway Project

Page 2

- **Knowledge of traditional gathering practices in the project area, both past and ongoing**
- **Cultural associations of the project area, such as *mo‘olelo* and traditional uses**
- **Referrals of *kūpuna* or elders and *kama‘āina* (Native-born) who might be willing to share their cultural knowledge of the project area and the surrounding *ahupua‘a* lands**
- **Any other cultural concerns the community might have related to Hawaiian or other ethnic cultural practices within or in the vicinity of the project area**

If you contribute to this effort and with your permission, we would like to use your name in the report to give you proper credit.

Due to the current situation with COVID-19, Cultural Surveys Hawai‘i has temporarily halted in-person consultation as a necessary precaution. We are available to speak with you over the phone, by video chat, or you may also submit a written statement regarding the project, project area, and/or your knowledge of the area. If you prefer to submit a written statement, CSH is able to provide a questionnaire that you may use as a guideline or you may answer the questionnaire directly. Please choose what is convenient for you, though the questionnaire is not necessary. A pre-stamped envelope will be provided to send your statement back to us.

In following the stay-at-home order, we are working primarily from home and are available at any time through email. If you would prefer to meet in person, we can schedule a date to meet with you after the stay-at-home order has been lifted. Your patience, understanding, and cooperation is greatly appreciated and we pray for the safety of you and your loved ones.

If you are interested in participating in this study, please contact Kamuela Kaapana by email at kkaapana@culturalsurveys.com or by phone at (808) 262-9972.

Mahalo nui loa,

Kamuela Kaapana
Cultural Researcher

Figure 44. Consultation letter (page two)

As outlined in the implementation guidelines for HRS §343, the purpose of this CIA is to gather information about the project area and the surrounding area through research and interviews with individuals who are knowledgeable about this area in order to assess potential impacts as a result of the proposed project to cultural resources, cultural practices, and beliefs. We are seeking your *kōkua* and guidance regarding the following aspects of our study:

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As stated in the consultation letter, due to the COVID-19 pandemic and other state/city mandates, consultation interviews were conducted by either phone, video-chat (such as ZOOM), and/or filling out a questionnaire. These options were provided to the individuals, groups, and organizations as the best options to promote safety amongst all parties.

8.3 **Community Contact Table**

Below in Table 4 are names, affiliations, dates of contact, and comments from NHOs, individuals, organizations, and agencies contacted for this project. Results are presented below in alphabetical order.

Table 4. Community contact table

Name	Affiliation	Comments
Bjur, Moana	Executive Director, Conservation Council of Hawai‘i	Letter and figures sent via USPS 25 June 2020
Christensen, Makani	Representative, Aha Moku – O‘ahu (Kona District)	Letter and figures sent via USPS 25 June 2020
Daniels, Sheri-Ann	Executive Director, Papa Ola Lokahi	Letter and figures sent via USPS 25 June 2020 Ms. Daniels replied 28 June that she would get back to CSH with response.
De Fries, John	Executive Director, Native Hawaiian Hospitality Association	Letter and figures sent via USPS 25 June 2020
Del Toro, Benjamin	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Del Toro, Daniel	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Del Toro, Rachel	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Del Toro, Samuel	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Farden, Hailama	President, Association of Hawaiian Civic Clubs	Letter and figures sent via USPS 25 June 2020
Friends of Kewalos		Letter and figures sent via USPS 25 June 2020 Statement received by Ron Iwami on 1 September 2020
Higgins, Collette	Hawaiian Historian (Leper Hospital in Kaka‘ako)	Letter and figures sent via USPS 25 June 2020
Hilo, Regina	Burial Sites Specialist, SHPD	Letter and figures sent via USPS 25 June 2020

Name	Affiliation	Comments
Historic Hawaii Foundation		Letter and figures sent via USPS 25 June 2020
Hussey, Sylvia	Ka Pouhana, CEO, Office of Hawaiian affairs	Letter and figures sent via USPS 25 June 2020
Kai, G. Umi	President, ‘Aha Kāne	Letter and figures sent via USPS 25 June 2020
Kaleikini, Ali‘ikaua	Cultural descendant and *kama‘āina* of Wai‘anae	Letter and figures sent via USPS 25 June 2020
Kaleikini, Haloa	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Kaleikini, Kala	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Kaleikini, Mahiamoku	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Kaleikini, Moehonua	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Kaleikini, No‘eau	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Kaleikini, Paulette	Cultural Descendant/Cultural monitor and practitioner Owner of ‘Ōiwi Cultural Resources	Letter and figures sent via USPS 25 June 2020
Kaleikini, Tuahine	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Keana‘āina, Betty	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Keana‘āina, Kīhei	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Keana‘āina, Luther	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Keana‘āina, Noelani	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Keana‘āina, Regina	Cultural Descendant	Letter and figures sent via USPS 25 June 2020

Name	Affiliation	Comments
Keana‘āina, Vicky	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Keana‘āina, Wilsam	Cultural Descendant	Letter and figures sent via USPS 25 June 2020
Kekaula, Ashford	Cultural Descendent	Letter and figures sent via USPS 25 June 2020
Keli‘ipa‘akaua, Justin	Lineal Descendent	Letter and figures sent via USPS 25 June 2020
Keohokalole, Adrian	Cultural Descendent	Letter and figures sent via USPS 25 June 2020
Keohokalole, Dennis Ka‘imi	Cultural Descendent	Letter and figures sent via USPS 25 June 2020
Keohokalole, Joseph M. Keaweaheulu	Cultural Descendent	Letter and figures sent via USPS 25 June 2020
Keohokalole, Emalia	Cultural Descendent	Letter and figures sent via USPS 25 June 2020
Kuloloio, Manuel Makahiapo	Lineal Descendent	CSH emailed on 18 August 2020 to Mr. Kuloloio to see if still interested in participating in a meeting and if so to set one up. Mr. Kuloloio called CSH on 19 August 2020 to set up a meeting via Zoom. CSH conducted Zoom/Phone interview on 20 August 2020 with Mr. Kuloloio.
Lewis, Kūhiō	CEO, Council For Native Hawaiian Advancement	Letter and figures sent via USPS 25 June 2020
Nāone, Anita	President, Hawaiian Civic Club of Honolulu	Letter and figures sent via USPS 25 June 2020
Norman, Kaleo	Cultural Descendent	Letter and figures sent via USPS 25 June 2020
Norman, Keala	Lineal Descendant	Letter and figures sent via USPS 25 June 2020
Norman, Keli‘inui	Cultural Descendent	Letter and figures sent via USPS 25 June 2020

Name	Affiliation	Comments
Norman, Theodore	Cultural Descendent	Letter and figures sent via USPS 25 June 2020
Olds, Nālani	Cultural Descendent	Letter and figures sent via USPS 25 June 2020
Paik, Kaleo	Interim Chair, Aha Moku – O‘ahu ‘Aha Wahine	Letter and figures sent via USPS 25 June 2020
Puahala, Roth	President, Ke One o Kākhuihewa	Letter and figures sent via USPS 25 June 2020
Tam, Ryan	Chair, Ala Moana – Kaka‘ako Neighborhood Board	Letter and figures sent via USPS 25 June 2020
Williams-Solomon, Leilani	President, Native Hawaiian Chamber of Commerce	Letter and figures sent via USPS 25 June 2020
Wong, Hinaleimoana	Chair & Kona Representative, O‘ahu Island Burial Council	Letter and figures sent via USPS 25 June 2020

8.4 *Kama‘āina* Interviews

8.4.1 Manuel Kuloloio

On 20 August 2020, Cultural Surveys Hawai‘i, Inc. (CSH) conducted a video/phone interview with Mr. Manuel Kuloloio regarding the Ala Moana Boulevard Elevated Pedestrian Walkway project, to share his *‘ike* (knowledge) of the *ahupua‘a* (land division from mountain to sea) of Kaka‘ako and Honolulu, any cultural practices that exist within the area, as well as any concerns for the proposed project.

Mr. Kuloloio, originally born in Maui, has familial ties to the lands and sea of Kaka‘ako. He is also recognized as a cultural descendent within the *‘ili ‘āina* (land area) of Kaka‘ako and extending to the surrounding areas of Waikīkī and Honolulu.

Prior to the interview, Mr. Kuloloio provided CSH with resources, which included a map of Kaka‘ako (Rockwood 1810) and two personal documents containing information about the Kaka‘ako area. In one particular document (Kuloloio 2010), Mr. Kuloloio shares an array of history associated with *ke kai o Kuloloia* (the sea of Kuloloia), testimonies previously submitted by family members, as well as other information. In regard to one testimony, John Papa ‘Ī‘ī, a family member of Mr. Kuloloio, notes the boundary of *ke kai o Kuloloia*, which extends from Nu‘uanu Stream to Kaka‘ako. Along this boundary, the testimony depicts the royal residences of Native Hawaiians:

> […] Namahana, Keopulani, Kamehameha, Keli‘imaikai, Kuihelani, Liliha, Kalaniakua, Kalanimoku, Kalaimamahu, Kekumanoha, Kekuaiwa, Kina‘u, Kaiwikokoole, Kekuaokalani, Ka‘oleoku, and Hewahewa and his Kahunas along Kuloloia. Ii shows Hale ‘O Lono, House of the Gods, and the shipyard of Nihoa contiguous to Kuloioia. [Kuloloio 2010:2]

In addition to these royal households, Mr. Kuloloio shared a map produced by Paul Rockwood (1810) entitled "Honolulu in 1810" which, along with the royal households mentioned above, also indicates the houses of various warriors and fishermen, and other information like farm fields and an overlay of current street names. In his document (Kulololio 2010), Mr. Kuloloio also imparts information about the Kaka‘ako region and the sea of Kuloloia by referencing *‘ike* that his ancestors once shared. Henry Enoka Palenapa Kekahuna, a Hawaiian scholar and family member, wrote *Hawaiian Place Names of O‘ahu*. Within this resource, Kekahuna mentions several Kaka‘ako place names, their location, and/or history:

> **Kaka-‘ako**, the land on the ‘Ewa side of Ke-walo to Ku-lolo-ia Stream, where the Honolulu Ironworks and Fort Armstrong are now. There were formerly scattered dunes of white sand there.
>
> **Kuai**, a canoe landing place that extended from where the Honolulu Iron Works is now, to where the former point of Fort Armstrong was, in Kaka-‘ako, before the land was filled in.
>
> **Ku-lolo-ia**, was a beautiful sand beach below Hale-kauila St., extending as far as the present Bishop Street. A big pond also named Ku-lolo-ia, adjoined Hale-kauila St. at a point above the present Honolulu Iron Works at Kaka-‘ako. A stream from it flowed down right where the old Inter-island dry-dock was.
>
> **Ka-pawa**, a fishpond that was once above Ku-lolo-ia Beach, right where Pier 5 is now.
>
> [Kuloloio 2010:4]

Along with the various *mo‘olelo* (story) and *‘ike* in the document, Mr. Kuloloio shared a *mo‘olelo* with CSH in regard to fresh water. He recalled a story from the memoir *Yes! A Memoir of Modern Hawaii* by Walter A. Dods, Jr., retired CEO of First Hawaiian Bank, and shared that as the developers of the First Hawaiian Bank building were filling in the land to set the foundation, the fill kept disappearing. Mr. Dods said there was a big underwater stream running along Bishop Street to the harbor. Mr. Kuloloio added that many maps of the area indicate the land is "filled land," however, the land in Kaka‘ako has scattered sand dunes, according to Kekahuna and recently verified by the development of Kamehameha Schools Kaiāulu Master Plan.

This *mo‘olelo* of a lava tube and other potential *‘auwai* (irrigation ditch)—whether from farm lands or modern development—plays an important role in the health of the shore and ocean areas. Mr. Kuloloio shared that the lava tubes and any other *‘auwai* type system have the potential to bring fresh water to the shore. One key indicator that can be noticed is the growth of green *limu* (seaweed), like *limu ‘ele‘ele* (long, filamentous, green, edible seaweed, *Enteromorphia prolifera*) and *limu pālahalaha* (sea lettuce, *Ulva fasciata* and *Monostroma oxyspermum*). Mr. Kuloloio, who learned to gather *limu* from his father and his grandmother, also learned that *limu* that are especially green indicate a nearby fresh water source.

Mr. Kuloloio also shared an *‘ōlelo no‘eau* (Hawaiian proverb or poetical saying) that mentions the *kai of Kuloloia*. It reads as follows:

> *Ka i‘a maunu lima o Kuloloia*.
>
> The hand-baited fish of Kuloloia.

> Small eels (*pūhi ‘ōlio*) that were caught by placing bait on the open palm of one hand with the fingers held wide apart. When the eels came up to take the bait, the fingers were clenched into a tight fist, grabbing the eels tightly by the heads.
>
> [Pukui 1983:194]

Although Mr. Kuloloio did not remember his family catching eels this way, he did share a *mo‘olelo* that when the tides were low, his father and other family members would often not wear any gloves while gathering from the *papa* (reef) and would stick their bare hands in the *papa*, moving the hands from side to side and vertically up the crevices, when it was *mālo‘o*, at very low tide, while looking for *i‘a* (marine animals) like *pāpa‘i* (general term for crab), *pai‘ea* (an edible crab, found where the *‘a‘ama* are found, but with a harder shell and shorter legs fringed in front with short, stiff hair), *‘a‘ama* (a large, black, edible crab; Grapsus grapsus tenuicrustatus), *‘ōkala* (a species of cowry; Cypraea granulate), *hā‘ue‘ue/hā‘uke‘uke* (an edible variety of sea urchin; *Colobocentrotus atratus*), *loli* (sea cucumber, *Holothuria* spp.). This could possibly be another meaning of the *‘ōlelo no‘eau*. Many *kānaka lawai‘a* (fishmen) know that when you turn over or stick your hand in the *papa*, you need to be careful as you do not know what is in there. There could be *wana* (sea urchin, *Diadema paucispinum* and *Echinothrix diadema*) or *puhi* (eel, *Gymnothorax ruepelliae*) that can quickly cause you harm.

Mr. Kuloloio shared his experience with burials and *iwi kūpuna* (ancestral remains) within the area. He mentioned several burials sites that should be considered in regard to this project. Some burial sites are State Inventory Historic Places (SIHP) #s 50-80-14-07659, -6377, -07657, and -0770. Mr. Kuloloio explained that these burials are within the area of potential effect or within the project area. Mr. Kuloloio recalled past projects within the Kaka‘ako/Honolulu/Waikīkī area in which he and others who claim cultural descendancy had been consulted regarding *iwi kūpuna* including Howard Hughes Ward Village Whole Foods cultural preserve area, Sheridan Street WalMart, Alexander & Baldwin Waihonua, and Kawaiaha‘o Church burials. One key point that Mr. Kuloloio wanted to emphasize is that owing to the documented presence of *iwi kūpuna* in this area definitely indicates the previous use, habitation, occupancy, and cultural significance of this place. He said *kūpuna* did not just bury their loved ones in random places as if haphazardly. Our Hawaiian people buried their loved ones where they lived, in an area of familial affinity, a special place, a sacred space.

Regarding any concerns or comments about the project and its effect on cultural practices or beliefs, one of the main concerns Mr. Kuloloio stressed was the presence of *iwi kūpuna* and the possibility of impacting *‘ilina* (burials) that may be within or in the vicinity of the project area. As he continuously mentioned throughout the interview, there are burials around Kaka‘ako, Waikīkī, and the greater Honolulu area. It is important to have archaeological/cultural monitors in place during demolition, any field work, and subsurface construction as well as to maintain and follow SHPD (State Historic Preservation Division) approved and proper protocols in the treatment of *iwi kūpuna*. He also mentioned the importance of *‘auwai* and freshwater flow. It is possible that freshwater flows through the area which is vital to the health of the sea and sea life as well as those who utilize the sea for cultural practices or sustainability. Lastly, Mr. Kuloloio recommended some resources that CSH should access and utilize in the report, such as the reported map which identifies the Victoria Ward Estate *‘auwai* that once ran from the home down to Kewalo Harbor. Currently, there are two areas encircled with galvanized fencing in the Area of Potential Effect

where remnants of this cement *‘auwai* have been exposed. There is Kepā Maly’s document on fishing practices which also includes *limu* gathering at Kuloloia for the Honolulu Area for Rapid Transit, traditional cultural properties, and a documentary by Hawaiian filmmaker Victoria Keith called *Hawaiian Survival and the Sea.*

8.5 **Written Testimony**

8.5.1 Friends of Kewalos

On 1 September 2020, CSH received a written statement from Ron Iwami, President of Friends of Kewalos. The statement is included below:

> I would like to submit comment on behalf of Friends of Kewalos, a community nonprofit group dedicated to *Protect, Preserve, and Malama Kewalo Basin Park and surrounding shoreline areas to ensure the recreational user continues to have access and the ability to enjoy the ocean for future generations to come.*
>
> Many of us have been recreating in this area for decades, it is a **lifestyle** of living in the most beautiful place and with the most beautiful People on Earth. Kewalos has become our little bit of “Country in the City”. A place we escape the hustle and bustle of city living. Our sanctuary. It contributes immensely to our health and well being.
>
> As the years have gone by many changes have occurred, some good, and some not so good. We, as a community, had little choice but to adapt to these changes.
>
> Getting to this proposed Elevated Pedestrian Walkway for Kewalo Basin, we totally understand the safety aspect of it, to move people safely across a busy boulevard. However, the reason HH is pushing this, is the Walkway will be another selling point for their condos across the boulevard. At the same time, we are deeply concerned about the impact of droves of people coming across from all their luxury condos for the benefit of their owners. How will it impact our little bit of “Country in the City” and in turn our **lifestyle.?**
>
> Like all the past developments in this area and for that matter all over Hawaii, the people have adapted to these changes as best as they can. However, I must lament, our Hawaiian Lifestyle from the days of my youth is slowing disappearing. As they say, all for the “*sake of progress*”, but is it?
>
> Mahalo for this opportunity to comment,
>
> Ron Iwami
>
> President, Friends of Kewalos

Section 9 Traditional Cultural Practices

Timothy R. Pauketat succinctly describes the importance of traditions, especially regarding the active manifestation of one's culture or aspects thereof. According to Pauketat,

> People have always had traditions, practiced traditions, resisted traditions, or created traditions […] Power, plurality, and human agency are all a part of how traditions come about. Traditions do not simply exist without people and their struggles involved every step of the way. [Pauketat 2001:1]

It is understood that traditional practices are developed within the group, in this case, within the Hawaiian culture. These traditions are meant to mark or represent aspects of Hawaiian culture that have been practiced since ancient times. As with most human constructs, traditions are evolving and prone to change resulting from multiple influences, including modernization as well as other cultures. It is well known that within Hawai‘i, a "broader 'local' multicultural perspective exists" (Kawelu 2015:3) While this "local" multicultural culture is deservedly celebrated, it must be noted that it has often come into contact with "traditional Hawaiian culture." This contact between cultures and traditions has undoubtedly resulted in numerous cultural entanglements. These cultural entanglements have prompted questions regarding the legitimacy of newly evolved traditional practices. The influences of "local" culture are well noted throughout this section and are understood to represent survivance or "the active sense of presence, the continuance of native stories, not a mere reaction, or a survivable name. Native survivance stories are renunciations of dominance, tragedy and victimry" (Vizenor 1999:vii). Acknowledgement of these "local" influences helps inform nuanced understandings of entanglement and of a "living [Hawaiian] contemporary culture" (Kawelu 2015:3). This section strives to articulate traditional Hawaiian cultural practices as were practiced within the *ahupua‘a* in ancient times, and the aspects of these traditional practices that continue to be practiced today by interviewees; however, this section also challenges "tropes of authenticity" (Cipolla 2013) and acknowledges the multicultural influences and entanglements that may "change" or "create" a tradition.

This section integrates information from Sections 3–6 in examining cultural resources and practices identified within or in proximity of the project area in the broader context of the encompassing Kaka‘ako landscape. Excerpts from interviews are incorporated throughout this section where applicable. It should be noted that although listed below, some cultural practices are not occurring in the specific bounds of the project area and the project itself does not directly impact the continuation of these cultural practices.

9.1 *Nā Ilina* (Burials)

According to *kama‘āina*, there have been *ilina* and/or *iwi kūpuna*) who have shown themselves around Ala Moana Boulevard and Kamake‘e Street (Souza et al. 2002). It has been said by *kama‘āina* of Kaka‘ako that the area known as Kewalo, *makai* of the project area, was known to be an area where *kauwā* (outcast, pariah, slave class) were drowned by holding their heads under the water (Ishihara et al. 2015).

Historically, the Kaka‘ako area and consequently the project area, remained outside the two most intensely populated and cultivated areas on southeastern O‘ahu—Waikīkī and Honolulu (Kou). *Kama‘āina* of the area shared a *mo‘olelo* of sacrificial drowning at the waters of Kewalo Basin and at an inland pond located at the current Blaisdell Center. According to a *kama‘āina*, *ali‘i*

associated with two sacrificial *heiau*—Kānelā‘au Heiau on the slopes of Punchbowl Crater and a *heiau* near the former coastline at the Kawaiaha‘o Church—required that members of the low *kauwā* caste be strangled underwater to ensure the victim’s body remained intact without excessive blood and bruises.

9.2 **Marine Resources**

Native Hawaiians used the marshes and wetlands for salt making and farming of fishponds along with some limited wetland agriculture. The shoreline was used for collection of marine food resources for home consumption and as a way to earn income, a common practice today. Most of the *kama‘āina* of Kaka‘ako until the twentieth century were Native Hawaiians. They were *kanaka lawai‘a* (fishermen) who lived in scattered *hale* (houses) along the coast. Most of the *kama‘āina* who lived in this region of Kaka‘ako were the caretakers of the saltpans and fishponds.

9.2.1 *Nā Lawai‘a*

In Kaka‘ako,deep sea fishing was probably not exercised as much in ancient times but there was a time, not so long ago, when most of the jobs revolved around fishing. Deep sea fishing became a cultural practice to most of Hawai‘i’s ethnic groups and is still a major practice today with deep sea fishing boats moored at Kewalo. Mr. Yonoichi Kitagawa was born in Kaka‘ako in 1913 (UH 1978:670–751). His father was a fisherman. At the drydocks of the Inter-Island shipyards, where he was a machinist, he remembers the different jobs:

> Usually, the Filipinos were what we call scrapers, and do the scraping of the barnacles and so forth. Japanese and Hawaiian, part-Hawaiian, Chinese were more shipwrights or boiler makers, you know. We had boiler making shop, too. And machine shop would be all mixed. Hawaiians, Japanese. Sheet metal [workers] were all Japanese. . . . Supervisors were mixed. Hawaiians and Japanese. Crew or gang foreman were mostly mixed. [UH 1978:700]

Keisuke Masuda came to the Kaka‘ako area in 1915 (UH 1978:818–876). Mr. Matsuda grew up around the ocean as his father was a fisherman who had his own boat and used to stay out on the ocean up to a week at a time to catch the red snappers. Being a watchman for the Hawaiian Tuna Packers Company in 1931 he recalled his experience at the tuna cannery.

> Well, during the cannery season, actually they start around May, June, July, August, September. Was about five months is the most *aku* season, see, when they catch plenty. *Aku* coming in. So somebody have to stay nighttime. You don’t know when the boats come in, see. Sometime the boats come in about 1, 2 o‘clock in the morning, see. So when the boat come in late, I have to go call—mostly Filipinos, see—to clean the fish. Have to clean the fish, and wash it, and then put ‘em in a tray, stack ‘em in car, and put ‘em in the boiler, where they cook the fish. Steam the fish in it. [UH 1978:831]

9.2.2 *Ka Pa‘akai* (Salt)

According to LCA documents, the majority of the land in Kewalo and Kukuluāe‘o was used to produce *pa‘akai*. Hawaiians used *pa‘akai* to flavor food, preserve fish by salting, for medicinal purposes, and for ceremonial purposes. Salt was also traded with other islands (Kamakau 1992:409).

The export of salt declined in the late nineteenth century. Thrum (1924:116) states that the apex of the trade was in 1870, but by 1883, he noted that “pulu, salt and oil have disappeared entirely” from the list of yearly exports (Thrum 1884:68). By 1916, only one salt works, the Honolulu Salt Company, was still in operation. Salt continued to be manufactured for local use; the Kaka‘ako Salt Works appears on maps as late as 1891 and a page in Victoria Ward’s ledger for 1883 notes a yearly income of $651.50 received from her “Salt Lands” in Kukuluāe‘o (Hustace 2000:50).

Mr. Francis Zane (UH 1978) recalled saltpans being near what is currently known as Ward Avenue, near the Fisherman Wharf, saying that you could easily see the salt during the day.

> And you know Ward Street, coming down. Before you reach the Fisherman Wharf, coming down. It’s on the right side. They used to have a place, where they used to make salt. Gee, you pass it when the sunshine, that’s salt, eh, burn your eye, you know, from the salt. Red salt, white salt. [UH 1978:1178]

9.2.3 Leisure Water Activities

Also along this area were people who clustered around the *ali‘i* and *kahuna* (priest) complexes at Honuakaha village and coconut grove and the beach *makai* of the grove. With the advent of commerce with visiting fur traders, whalers, sandalwood traders, and later freight vessels, Native Hawaiians became the dominant workforce as draymen, transporting cargo between the harbor and the town and then to outlying sections of the islands. When ships would sail in and dock, many of the passengers would throw coins into the water. Young boys would then dive for these coins for leisure and fun. Eventually, some of these divers later became championship swimmers and surfers.

Mr. David Tai Loy Ho, born in Kaka‘ako in 1910, made money picking *kiawe* (Algaroba tree, *Prosopis pallida*) beans, selling newspapers, and diving for coins at Honolulu Harbor when the large tourist cruise lines came into port (UH 1978:405–465).

9.3 Agricultural Resources

Despite intense dredging and land reclamation in Kaka‘ako, knowledge of *lā‘au lapa‘au* and customs of gathering plants for medicinal and agricultural purposes continue to be passed on by Hawaiians of Kaka‘ako.

Mrs. Eleanor Nahiapo Wilson Heavy, who lived in Kaka‘ako from 1912 until 1938, used to help her mother collect herbs. These *la‘au lapa‘au* that Mrs. Wilson Heavy gathered were used to help with various ailments. One plant called *pōpolo* was used to treat a cold and congested chest. The root from an *‘uhaloa plant* could also be used for colds. The people in Kaka‘ako at this time still went to the medicinal *kahuna* for aid in time of sickness or for herbal treatments. Mrs. Wilson Heavy shared that one would only go to the hospital when there was no hope left (UH 1978:340–405).

9.4 Lifestyle in Kaka‘ako

Mary Kauhane Naito was born in Kaka‘ako in 1920 (UH 1978: 877–912). Her father worked at the Hawaiian Electric powerhouse. Their family lived for a time in Squattersville, and they were one of the families evicted when the houses were torn down. Although she remembered that Kaka‘ako was mainly a district of poor people, she talked of her birthplace with pride:

> I going tell I’m proud because I come from Kakaako because we had good people. We get along with one another. You know? And if there’s a Palama team going, and Kakaako team go, we still stick together. You know. Regardless of what, we still stick. And we all born and raise in Kakaako. . . . That’s why I’m not ashamed to say that I came from Kakaako because all the people in Kakaako was good. [UH 1978:911]

Section 10 Summary and Recommendations

CSH undertook this CIA at the request of the Howard Hughes Corporation. The research broadly covered the *‘ili ‘āina* of Kaka‘ako as well as the *ahupua‘a* of Honolulu (Kou) and, more directly, the traditional cultural practices affecting the project area of the proposed pedestrian overpass between Kamake‘e Street and Ward Avenue over Ala Moana Boulevard at Kewalo Basin.

10.1 Results of Background Research

Background research for this study yielded the following results, presented in approximate chronological order:

Kaka‘ako, an *‘ili ‘āina*, of Waikīkī, is located between two of the most intensely populated and historically cultivated areas in southeastern O‘ahu, Waikīkī and Honolulu (also known as Kou). The Kaka‘ako area consisted of marshes, some wetlands, tidal flats and shoreline with access to marine resources of the fringing reefs. Native Hawaiians utilized the tidal flats for salt making, the uplands for farming, and the shoreline and reefs for harvesting fish, shellfish, and *limu* in fishponds.

Pu‘ukea Heiau was located in the *‘ili* of Kukuluāe‘o according to Kamakau (1991:24). Pu‘ukea means “white hill” and is also the name of a smaller land division within Kukuluāe‘o ‘Ili that is mentioned in at least two Land Commission Awards (LCA); LCA 1502 (not awarded) and 1504. LCA 1504 is located near the junction of Halekauwila and Cooke streets. There is a possibility the *heiau* platform or the area it was built on was one of the few elevated locations in the flat, low-lying swamp that surrounded it.

A trail traversed the Kaka‘ako area, ultimately connecting Waikīkī to Honolulu. ‘Ī‘ī (1959:89) described the middle trail (close to the current alignment of Queen Street) extending from Kālia to Kukuluāe‘o as passing “along the graves of those who died in the smallpox epidemic of 1853, and into the center of the coconut grove of Honuakaha. On the upper side of the trail was the place of Kinau, the father of Kekauonohi.” The ancient trails are now replaced by public streets.

In 1840, Hansen’s disease was first reported and officially identified in 1853. In 1865, a hospital in the Kalihi Ahupua‘a was established to help examine anyone who may have contracted the disease. Confirmed patients were exiled to Kalaupapa on Moloka‘i. In 1881, a receiving station was built in Kaka‘ako for patients who had contracted the Hansen’s disease. This station was located in a block now bounded by Ala Moana, Auahi, Coral, and Keawe streets, and was under the direction of Saint Marianne Cope (Griffin et al. 1987:55).

Much of the coastal land in the Kewalo and Kūkuluāe‘o areas were used to produce salt, even historically, as a large commercial enterprise. Native Hawaiians used *pa‘akai* to flavor food, to preserve food such as fish, for ceremonial practices, and for medicinal purposes. Salt is no longer produced in the area, however archaeological excavations on the *mauka* side of Ala Moana Boulevard. have uncovered the remains of the salt ponds from that commercial activity

During an 1853 smallpox epidemic, patients were isolated at a temporary quarantine camp in Kaka‘ako (Thrum 1987:98). Victims of the disease were buried at Honuakaha Cemetery, near the junction of Quinn Lane and South Street (Griffin et al. 1987:13).

Throughout the past 150 years, Kaka‘ako has been heavily modified by historic filling of the area for land reclamation. Ala Moana Boulevard. is located approximately at the former sandy shoreline and to *makai* of the project area. The shallow reef, where it enclosed a deeper section of water, was dredged to form the Kewalo Basin Harbor in the mid-1880s. Dredged materials were used to fill areas *mauka* of Ala Moana Boulevard. and to create fill land for the construction of wharfs and piers around the harbor for predominantly commercial *aku* fishing sampans and the old Coral Tuna cannery. The *aku* fishing and canning industry is no longer at Kewalo Basin but has been replaced by commercial deep sea fishing charter boat industry.

The Kakaako area has been found to have many burial sites, some isolated *iwi kūpuna* and some in small cemeteries. Immediately *mauka* of the Kewalo Basin Harbor, *iwi kūpuna* were discovered in sand deposits beneath the roadway at the intersection of Ala Moana Boulevard and Kamake‘e Street (Souza et al. 2002)

10.2 **Results of Community Consultations**

CSH contacted, by mail and email, appropriate Native Hawaiian organizations and government agencies, and reached out to community members including known cultural and lineal descendants of Kaka‘ako to identify individuals with cultural expertise and/or knowledge of the project area and vicinity. Of the individuals contacted, CSH received feedback from the individuals below:

1. Manuel Makahiapo Kuloloio, Lineal Descendant
2. Ron Iwami, President, Friends of Kewalos

The cultural knowledge, of participants who contributed through consultation, was voiced and their concerns are presented in a cultural context as follows:

1. Mr. Kuloloio stressed the presence of *iwi kūpuna* and the possibility of impacting *‘ilina* during the project. Mr. Kuloloio shared insight on various burials that are within the area of potential effect or within the project area. These burials sites are State Inventory Historic Places (SIHP) #s 50-80-14-07659, -6377, -07657, and -0770.
2. Mr. Kuloloio also shared the importance of *‘auwai* and lava tubes which help bring fresh water to the ocean which is vital in maintaining the health of the sea and sea life. Fishing and other ocean-practices were conducted around this area. Damage to an *‘auwai* or lava tube system can affect the ocean and its cultural practices.
3. Mr. Iwami understands the safety aspect of the Elevated Pedestrian Walkway but is concerned the walkway will grant easier access to individuals with no real connection to Kewalo. Mr. Iwami is concerned that scores of people, specifically from nearby luxury condos, will utilize this walkway to access Kewalo and impede on local residents that use Kewalo recreationally and who consider it a sanctuary.

10.3 **Cultural Impact Assessment**

No traditional cultural activities have been identified as currently occurring in the project area. However, the past traditional activity of burying *iwi kūpuna* in sandy soil deposits that are confirmed to be present in the project area (Farley et al. 2020) must be considered. At any time *kūpuna* are identified as present in the project area, their presence alone activates various on-going cultural activities at the precise location of the *iwi*.

The traditional cultural activities will include but may not be limited to religious ceremony, protective measures for the *iwi* and decision making to address disposition of the iwi. These traditional cultural practices are attached to the *iwi* and are also protected by modern law under the Hawaii Revised Statutes (HAR) and Hawaii Administrative Rules (HAR).

Current archaeological and geotechnical investigations find that the natural sandy deposits traditionally used for human burial are present in the project area. To insure the laws that protect the traditional cultural practices associated with burial are implemented immediately upon the discovery of *iwi kūpuna*, project construction workers and all other personnel involved in the construction and related activities of the project should be informed of the possibility of cultural finds especially human remains.

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Appendix A Notice of Consultation

AFFIDAVIT OF PUBLICATION

IN THE MATTER OF
NOTICE OF CONSULTATION

STATE OF HAWAII)
) SS.
City and County of Honolulu)

Doc. Date: JUL - 8 2020 # Pages: 1
Notary Name: Patricia K. Reese First Judicial Circuit
Doc. Description: Affidavit of Publication
Notary Signature JUL - 8 2020 Date
PATRICIA K. REESE NOTARY PUBLIC No. 86-467 STATE OF HAWAII

Lisa Sakakida being duly sworn, deposes and says that she is a clerk, duly authorized to execute this affidavit of Oahu Publications, Inc. publisher of The Honolulu Star-Advertiser, MidWeek, The Garden Island, West Hawaii Today, and Hawaii Tribune-Herald, that said newspapers are newspapers of general circulation in the State of Hawaii, and that the attached notice is true notice as was published in the

Honolulu Star-Advertiser 1 times on:
07/08/2020
MidWeek 0 times on:
The Garden Island 0 times on:
Hawaii Tribune-Herald 0 times on:
West Hawaii Today 0 times on:
Other Publications: 0 times on:

And that affiant is not a party to or in any way interested in the above entitled matter.

Lisa Sakakida

Subscribed to and sworn before me this 8th day of July A.D. 20 20

Patricia K. Reese, Notary Public of the First Judicial Circuit, State of Hawaii
My commission expires: Oct 07, 2022

Ad # 0001286486

PATRICIA K. REESE NOTARY PUBLIC No. 86-467 STATE OF HAWAII

ICS

NOTICE OF CONSULTATION
SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT OF 1966 AS AMENDED (2006)
ALA MOANA BOULEVARD ELEVATED PEDESTRIAN WALKWAY
HONOLULU AHUPUAA, HONOLULU (KONA) DISTRICT, OAHU
FEDERAL-AID PROJECT NO. BLD-092-1(029)
TAX MAP KEYS: ALA MOANA BLVD. RIGHT-OF-WAY; 2-3-001:129; 130; 2-1-058: 129; 132; 133; 134; AND 2-3-037: 001

Notice is hereby given that the Federal Highway Administration (FHWA) and State of Hawaii Department of Transportation, Highways Division (HDOT) propose a pedestrian safety project. This federally federal funded HDOT project is considered a federal action and undertaking, as defined by Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (2006).

The proposed project would build a new, elevated mauka-makai oriented walkway over Ala Moana Boulevard to remove pedestrian traffic out of the existing at-grade Ward Avenue and Kamakee Street intersections. HDOT is proposing the project to provide a safe and efficient way for pedestrians to cross over the busy highway and reduce vehicle-pedestrian accidents at these intersections.

The new elevated walkway would be accessible via both stairway and an American with Disabilities Act (ADA) path that connects to the Ala Moana Boulevard sidewalks and other pathways on either side of the structure. On the makai side of the bridge, an observation deck area is proposed as part of the design to allow users to capture both upland views of Kakaako and the makai view of the harbor channel. Lighting would be needed for the elevated walkway, ADA paths or sidewalks leading to the structure, and under the structure along Ala Moana Boulevard.

A central pier to support the walkway structure would be placed in the highway median. At this time, no utilities are expected to be relocated. Construction is anticipated to start in January 2022 and be completed by June 2023. Night work may be required to minimize impacts on traffic from lane closures.

The elevated walkway's footprint or locations of ground disturbance are shown as the project area in the map below. However, the proposed Area of Potential Effects (APE), where construction access, staging, and potential noise or visual changes may be experienced is shown as the larger APE boundary. In all the APE is about 1 acre. It would follow Ala Moana Boulevard for about 1,500 feet from the Ward Avenue crosswalk to Kamakee Street crosswalk, while on the makai side, the proposed APE reaches to the wharf's sidewalk (near the boat slip). The mauka edge of the APE would follow the Ala Moana Boulevard right-of-way, except where the staging area would occur. The staging area reaches to the full limits of the Ward Village property boundary on the mauka side of Ala Moana Boulevard. The staging area is a grassy lawn, and a paved parking lot for Kakaako Farmers Market, Ward Consolidated Theaters and other nearby businesses.

Pursuant to Section 106 of the NHPA, Native Hawaiian Organizations and Native Hawaiian descendants with ancestral, lineal or cultural ties to, cultural and historical property knowledge of and/or concerns for, and cultural or religious attachment to the proposed project area are requested to contact HDOT. Other individuals and organizations with demonstrated legal, economic or historic preservation interest in the undertaking are asked to contact HDOT and share information you may have on historical and cultural sites that you may have knowledge of within the proposed APE. We welcome any information within 30 days of notice.

Interested participants are requested to contact Ms. Michelle Kwan, Project Engineer, via email at Michelle.S.Kwan@hawaii.gov or by U.S. Postal Service to Hawaii Department of Transportation, Design Branch, Design Section, Highways Division, 601 Kamokila Boulevard, Room 609, Kapolei, Hawaii, 96707.

Please respond by August 8, 2020.

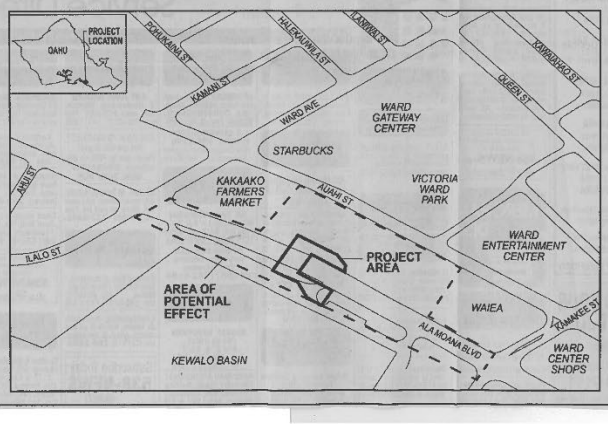


Figure 45. Notice of Consultation Section 106 of the National Historic Preservation Act

APPENDIX C
PEDESTRIAN AND BICYCLIST TRAFFIC ASSESSMENT

WILSON OKAMOTO
CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

10589-01
October 7, 2020

Mr. Lee Cranmer
The Howard Hughes Corporation
1240 Ala Moana Blvd, Suite 200
Honolulu, Hawaii 96813

Subject: Ala Moana Boulevard Pedestrian Bridge Assessment

Dear Mr. Cranmer,

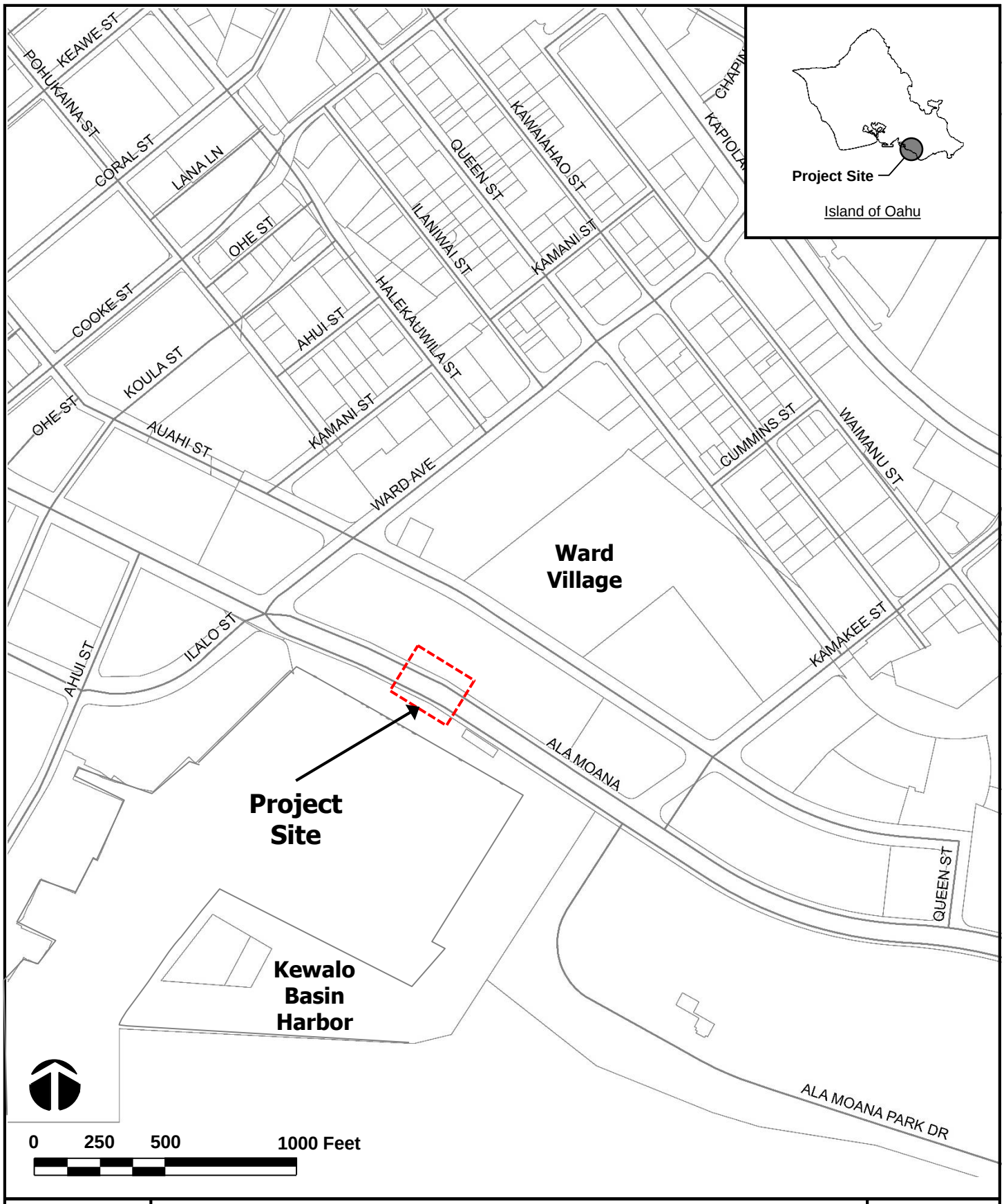
As requested, we have conducted an assessment of the proposed pedestrian bridge crossing Ala Moana Boulevard between Ward Avenue and Kamakee Street. While the bridge crossing enhances circulation and mobility between both sides of Ala Moana Boulevard, this assessment identifies and defines the primary design parameters of the bridge to accommodate anticipated future pedestrian and bicycle demands. The following is a summary of our assessment.

Project Description

The proposed project entails the construction of an elevated pedestrian bridge crossing Ala Moana Boulevard (see Figure 1). The proposed project is expected to provide a safe and secure link between the uses north and south of the roadway, improve pedestrian connectivity, and facilitate access to existing and planned bicycle facilities in the project vicinity. For the purpose of this report, the assessment conservatively included the completion of proposed developments on both sides of the roadway including those associated with the Ward Village master plan and redevelopment of the areas surrounding the Kewalo Basin Harbor.

Existing Conditions

The site for the proposed project is located along Ala Moana Boulevard within the Kakaako Community Development District. The proposed pedestrian bridge is expected to cross Ala Moana Boulevard approximately midblock between the intersections with Kamakee Street and Ward Avenue. To the south of Ala Moana Boulevard is the existing Kewalo Basin Harbor, a commercial boat harbor that houses several commercial fishing fleets, charters and excursion vessels, parks and beaches, and other uses, while north of the project site is the existing Ward Village. Currently, nearby pedestrian crossings at this segment of Ala Moana Boulevard are facilitated by crosswalks and protected pedestrian phases at the signalized intersections with



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ALA MOANA BOULEVARD ELEVATED PEDESTRIAN WALKWAY

LOCATION AND VICINITY MAP

FIGURE 1

Kamakee Street and Ward Avenue. However, pedestrian connectivity is limited by the widely-spaced intersections with more than 1,300 feet between Kamakee Street and Ward Avenue.

Field investigations conducted in Year 2018 indicate that during the AM peak period, 55 pedestrians were observed crossing Ala Moana Boulevard at the intersection with Kamakee Street while 24 pedestrians were observed crossing Ala Moana boulevard at the intersection with Ward Avenue. During the PM Peak period, 65 pedestrians were observed crossing Ala Moana Boulevard at Kamakee Street while 53 pedestrians were observed crossing Ala Moana Boulevard at the intersection with Ward Avenue. A minimal number of bicyclists were observed along this segment of Ala Moana Boulevard given the high volume of vehicular traffic and the limited bicycle facilities available in the vicinity. For the purpose of this assessment, the PM peak hour volumes were used since pedestrian volumes were observed to be higher during this peak period.

Other Developments

The proposed project is located within the Kakaako Community Development District where a number of projects are on-going or under development planning. The major developments in the immediate vicinity are detailed below.

Ward Village

Ward Village is a master-planned community encompassing approximately 60 acres north of the project site. Implementation of the master plan is currently on-going with the entire development expected to be completed by Year 2027. The Ward Village master plan entails the redevelopment of the area that previously housed the former Ward Warehouse and Ward Center, including the surrounding uses, into a mixed-use neighborhood with pedestrian-friendly spaces and thoughtful streetscape design. The developments in the immediate vicinity of the proposed pedestrian bridge include the following:

- Block C West: entails the development of 350 residential units and various amenities
- Block B: entails the development of 350 residential units
- Block H: entails the construction of a mixed-use development with 600 residential units, 30,000 square feet (sf) retail uses, and 15,000 sf restaurant uses.
- Block I: entails the construction of a mixed-use development with 566 residential units, 30,500 sf retail uses, and 27,784 sf restaurant uses.
- Block N-East entails the construction of a mixed-use development with 751 residential units, 7,500 sf retail uses, and 7,500 sf restaurant uses.
- Block N-West entails the construction of a mixed-use development with 506 residential units, 18,152 sf retail uses, and 5,000 sf restaurant uses.

Kakaako Makai Area

The Kakaako Makai area comprises areas south of Ala Moana Boulevard between Forrest Avenue to the west and Ala Moana Park Drive to the east. There are multiple jurisdictions overseeing this area including the Office of Hawaiian Affairs (OHA), Hawaii Community Development Authority (HCDA), and the City and County of Honolulu. Over the years, there have been various development plans considered for this area which were expected to include a wide mix of land uses. For the purpose of this report, the most recent land use proposals for the parcels adjacent to the proposed pedestrian bridge were used as the basis for the assessment. These uses include:

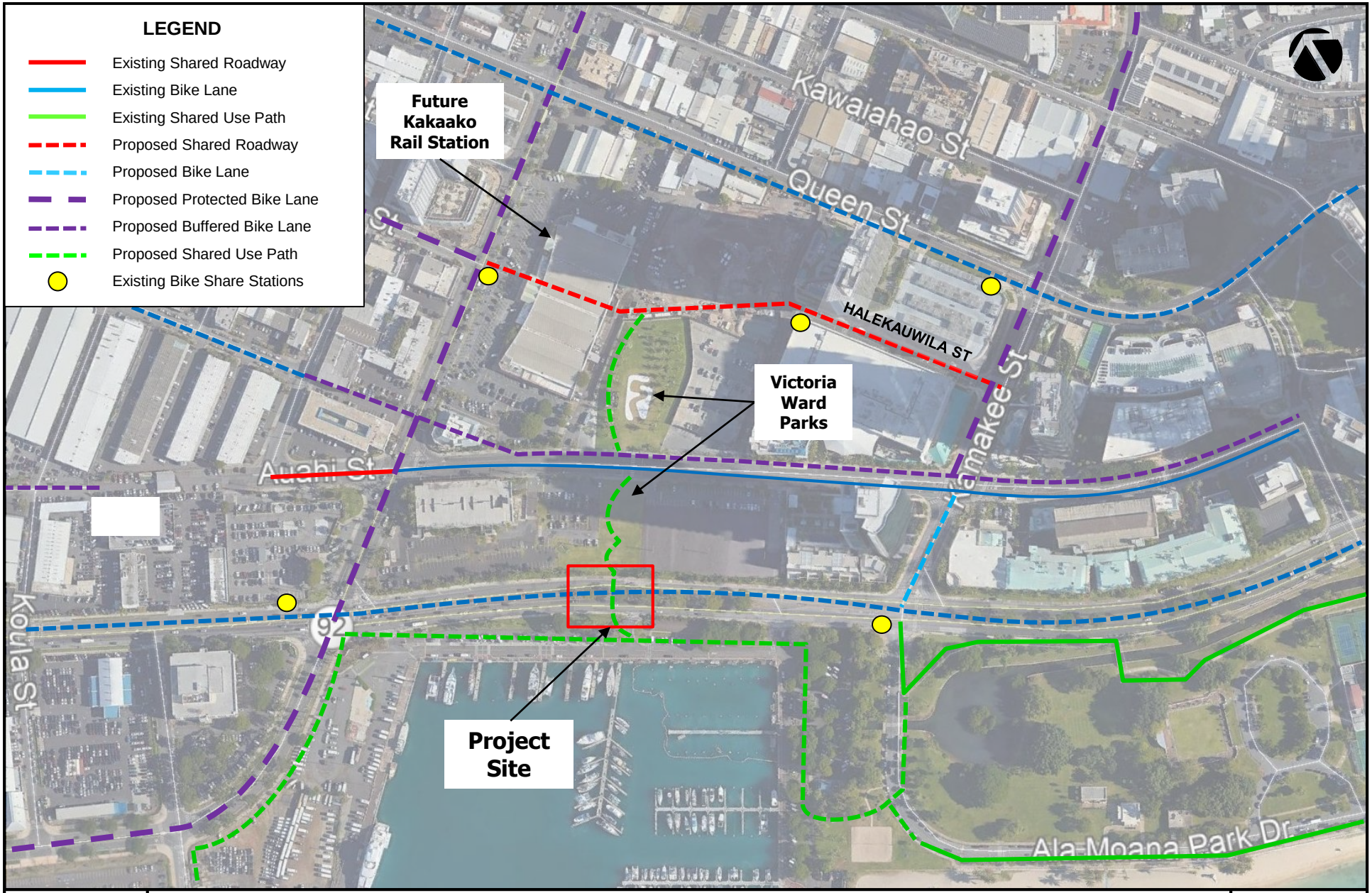
- Parcel A: approximately 153,000 sf of restaurant uses and 110,700 sf of retail uses.
- Parcel B: approximately 20,000 sf of commercial uses

Bicycle Improvements

A number of bicycle improvements are planned in the vicinity of the proposed pedestrian bridge. In conjunction with the Ward Village master plan, improvements are planned along Auahi Street (referred to as the "Auahi Street Promenade" project) to incorporate enhanced multimodal facilities along that roadway including converting the existing bike lanes to buffered bike lanes. That improvement is intended to provide additional separation between bicyclists and motorized traffic. In addition, the overall Ward Village master plan also incorporates green spaces (referred to as the "Victoria Ward Mauka and Makai Parks") that are expected to include shared-use paths that will connect to the proposed pedestrian bridge. A number of bicycle improvements are also planned by the City and County of Honolulu in the vicinity of the project. As included in the Oahu Bike Plan (Updated 2019) published by the City and County of Honolulu Department of Transportation Services, these include the installation of a protected bike lane along Ward Avenue between Ala Moana Boulevard and South King Street and a shared-use path along the Kewalo Basin Harbor access roadway that is expected to connect to an existing shared-use path within the Ala Moana Regional Park. The implementation of these facilities including the proposed project is expected to expand the existing bicycle network in the vicinity. Figure 2 depicts the existing and planned bicycle improvements in the vicinity.

The Honolulu Rail Transit Project

The City and County of Honolulu is currently developing a fixed guideway transit system that will extend from Kapolei to the central Honolulu area thereby providing an alternate mode of travel through the Kakaako area. In the vicinity of the proposed project, the guideway alignment is expected to run along Halekauwila Street, cross over to Queen Street and then follow that



WILSON OKAMOTO CORPORATION

ALA MOANA BOULEVARD ELEVATED PEDESTRIAN WALKWAY

EXISTING AND PROPOSED BIKE FACILITIES

FIGURE 2

roadway to Waimanu Street with the Kakaako Rail Station expected to be located near the southeast corner of Ward Avenue and Queen Street, approximately 2,000 feet from the proposed pedestrian bridge.

Projected Volumes

The projected pedestrian and bike volumes used for the purpose of analysis were based on an assessment of the anticipated interactions between the existing and planned uses in the vicinity of the project. As previously discussed, the existing uses include the commercial uses within Ward Village and recreational uses within Ala Moana Beach Park and the Kewalo Basin Harbor. The Ward Village and Kakaako Makai developments will create additional attractive destinations in the vicinity that are anticipated to increase crossing traffic between the uses north and south of Ala Moana Boulevard. The proposed pedestrian bridge is expected to facilitate some of this increased interaction and could potentially enhance it since the bridge will provide more convenient and safer connections.

The synergy between uses on the north and south side of Ala Moana Boulevard was estimated based on the interaction between complimentary uses for mixed-use developments. Although the existing and planned uses in the vicinity are separate developments, these uses may still have the same interaction characteristics as a mixed-use development with internal capture of trips between complementary uses. The internal capture of trips typically accounts for trips that visit more than one destination within the same area, typically through non-motorized modes such as walking or via bicycles without adding additional vehicular trips to the external roadways. It should be noted that for the purpose of this assessment, the study area was limited to developments within a quarter-mile radius of the proposed elevated pedestrian walkway. A quarter-mile (an approximately 5-minute walk) generally represents the average maximum distance pedestrians are willing to walk to/from a destination.

The methodology for calculating internal trip capture is outlined in the "Trip Generation Handbook, 3rd Edition," 2017, published by the Institute of Transportation Engineers (ITE). This methodology results in an internal trip capture percentage based on an assessment of complementary land uses by number of development units, trip generation rates, and the relative distance between any given pair of land uses. For the purpose of this assessment, the adjacent uses were grouped based on their location and relative distances with internal capture rates calculated separately for each group (see Figure 3). The trip generation calculations used for the internal capture trip assessment were based on the accepted techniques included in the "Trip Generation, 10th Edition," 2017 also published by ITE. ITE trip generation rates are developed empirically by correlating the vehicle trip generation data with various land use characteristics such as the number of vehicle trips generated per square feet of development or dwelling unit. The site-generated trips attributed to internal capture were converted to person trips as prescribed

Internal Capture Rates	
From Area 1 to Area 2	25%
From Area 1 to Area 3	20%
From Area 1 to Area 4	15%

WILSON OKAMOTO CORPORATION

ALA MOANA BOULEVARD ELEVATED PEDESTRIAN WALKWAY

INTERNAL CAPTURE RATES

FIGURE 3

by the "Trip Generation Handbook". It should be noted that the ITE Trip Generation manual is based primarily on vehicle trips at this time as there is limited data on project-specific trip generation based on person trips. However, trip generation rates based on vehicle trips may be converted to person trips by mode using the applicable mode share and vehicle occupancy representing conditions associated with the characteristics of the study area. Table 1 below summarizes the pedestrian and bicycle trips attributable to interactions between existing and proposed compatible land uses in the vicinity of the pedestrian bridge by development during the PM peak period. It should be noted that the pedestrian volumes also include trips attributable to transit use in the vicinity, including those associated with the completion of the nearby rail station in conjunction with the Honolulu Rail Transit project.

Table 1: Projected PM Peak Hour Multimodal Trips By Development and By Mode

Development	Pedestrians	Bicycle
Block C West	7	2
Block B	7	2
Block I	25	6
Block H	20	5
Block N East	12	3
Block N West	9	2
Parcel A	4	1
Parcel B	60	15

In addition, the proposed pedestrian bridge is expected to provide enhanced pedestrian circulation in the project vicinity as a result of the availability of an elevated pathway that eliminates delays associated with traffic signal cycle changes and provides more convenient access to midblock destinations. As such, a portion of the existing pedestrians currently crossing Ala Moana Boulevard at the intersections with Ward Avenue and Kamakee Street are expected to divert to the new pedestrian bridge. With the anticipated interaction between the Ward Village and Kakaako Makai developments, as well as the shift in pedestrian traffic, 243 pedestrians and 36 bicyclists are expected to utilize the proposed pedestrian bridge during the PM peak hour. Over the course of a day, this would translate to a mix of approximately 2,100 pedestrians and bicyclists. It should be noted that for the purpose of this assessment, conservative estimates for non-motorized traffic was assumed in an effort accommodate fluctuations in demand.

Quality of Service Methodology and Assessment

The quality of service assessment performed in this study is based upon the procedures presented in the "Highway Capacity Manual", Transportation Research Board, 2010 for off-street pedestrian and bicycle facilities. An off-street facility is defined as facilities that are (1) used only by non-motorized modes and (2) are not considered as part of an urban street or transit facility. The pedestrian and bicycle quality of service measures for off-street facilities varies from those for on-street facilities since on the quality of service for on-street facilities are influenced by the traveler's perception of comfort and safety with respect to motorized traffic in the vicinity. Since the influence of motorized traffic is absent from off-street facilities, the quality of service for off-street facilities is instead based upon the interactions of facility users with each other. The quality of service is based on the concept of Level of Service (LOS) ranging from LOS "A" through "F" with LOS "A" representing the best operating conditions and LOS "F" the worst operating conditions (see the attachment for the LOS definitions). Since the factors used in evaluating off-street facilities are influenced by the facility type, two assessment alternatives were conducted for this study that are discussed below.

Alternative 1: Shared-Use Path

The proposed bridge is expected to accommodate a mix of pedestrian and bike traffic similar to a shared-use path. As such, the first assessment alternative determined a LOS for the proposed bridge based on the shared-use path methodology. The quality of service for a shared-use off-street path is based on the LOS for pedestrians along that path which evaluates the number of events during which a pedestrian either meets an oncoming bicyclist or is passed by a bicyclist. As the number of encounters increase, the pedestrian LOS decreases.

The anticipated bike traffic along this facility is expected to be 36 bikes per hour with these bikes split fairly equally by direction. Given the projected pedestrian volume of 243 pedestrians per hour (also split fairly equally in direction), a pedestrian is anticipated to meet or be passed by a bike every 1.5-2 minutes. This results in a pedestrian level of service of LOS "A" during the PM peak hour. Although not every pedestrian will encounter a bike, it will not be an uncommon occurrence and as such, the effective width of the proposed bridge should take into account the necessary space to facilitate these occurrences.

Alternative 2: Exclusive Pedestrian Path

Although the proposed pedestrian bridge is anticipated to carry a mix of pedestrian and bike traffic, the assessment of the bridge could also be based on an equivalent pedestrian volume that accounts for the additional space that a bike would occupy. As such, for the purpose of this assessment, each bike was assumed to be equivalent to two pedestrians based on the additional space it occupies.

The quality of service for pedestrians along exclusive pedestrian pathways is based on pedestrian volumes and specific environmental conditions related to effective walkway widths. The effective width of a walkway is the portion of a walkway that can be used by pedestrians exclusive of any obstructions and the associated shy distances. The shy distance relates to the buffer that pedestrians give themselves from linear objects along the walkway such as curbs or other protrusions. Table 2 below provides typical fixed-object effective widths found along on- and off-street facilities.

Table 2: Typical Fixed-Object Effective Widths Along On- and Off-Street Facilities

Fixed Object	Effective Width (ft)
Street Furniture	
Light pole	2.5–3.5
Traffic signal poles and boxes	3.0–4.0
Fire alarm boxes	2.5–3.5
Fire hydrants	2.5–3.0
Traffic signs	2.0–2.5
Parking meters	2.0
Mail boxes (1.7 ft x 1.7 ft)	3.2–3.7
Telephone booths (2.7 ft x 2.7 ft)	4.0
Trash cans (1.8 ft diameter)	3.0
Benches	5.0
Bus shelters (on sidewalk)	6.0–7.0
Public Underground Access	
Subway stairs	5.5–7.0
Subway ventilation gratings (raised)	6.0+
Transformer vault ventilation gratings (raised)	6.0+
Landscaping	
Trees	3.0–4.0
Planter boxes	5.0
Commercial Uses	
Newsstands	4.0–13.0
Vending stands	Variable
Advertising and store displays	Variable
Sidewalk cafés (two rows of tables)	7.0
Building Protrusions	
Columns	2.5–3.0
Stoops	2.0–6.0
Cellar doors	5.0–7.0
Standpipe connections	1.0
Awning poles	2.5
Truck docks (trucks protruding)	Variable
Garage entrance/exit	Variable
Driveways	Variable

Source: Pushkarev and Zupan (*9*).

Source: Pushkarev and Zupan as cited in the *Highway Capacity Manual, 2010*

With an equivalent pedestrian volume of 315 pedestrians per hour, the pedestrian bridge would only require a minimum width of 4-5 feet to maintain a quality of service of LOS "A." Even with the inclusion of shy distances and other obstructions along the bridge, the walkway width

resulting from this assessment methodology would barely meet the requirements for American with Disabilities Act (ADA) or Complete Streets minimums. In addition, the calculated width based on an exclusive pedestrian path does not account for the area required to accommodate a bicyclist passing other users along the walkway. As such, assessment alternative 1 should be used to determine the minimum width for the pedestrian bridge.

Minimum Width

As discussed in the preceding sections, the minimum width for the proposed pedestrian bridge should follow guidelines for shared-use paths. Technical guidance published by a variety of agencies such as the American Association of State Highway Transportation Officials (AASHTO), United States Access Board, and the National Association of City Transportation Officials (NACTO) recommends a minimum 10 feet width for shared-used paths. This recommendation is supported by the State of Hawaii Department of Transportation's guidance for shared-use paths and the City and County of Honolulu's Complete Streets Design Manual. However, it should be noted that these references do not specifically address the need to consider intrusions into this minimum width since the typical example refers to paths where paved shoulders or buffers can be provided alongside the path. For the purpose of the proposed pedestrian bridge, the minimum width of the walkway along the proposed bridge is recommended to be at least 10 feet wide which is only inclusive of shy distances. If there are additional protrusions into the path such as utilities, railings, landscaping, or other decorative features, the minimum width should be increased accordingly to accommodate these additional obstructions. Table 2 above provides guidance regarding the recommended additional widths based on the type of anticipated obstructions.

Conclusion

The proposed Ala Moana Boulevard Pedestrian Bridge is expected to provide a safe and secure link to the existing and planned uses between the Kewalo Basin Harbor, Ala Moana State Recreational Park, and Ward Village and enhance pedestrian connectivity in the vicinity. With the development of the adjacent parcels, pedestrian crossings are expected to increase as those developments create attractive destinations in the vicinity and enhanced pedestrian connections become available. As such, two assessment alternatives were considered based on the methodologies included in the Highway Capacity Manual to define the primary design parameters of the proposed bridge to accommodate the anticipated crossing traffic demand. As previously discussed, conservative estimates for non-motorized traffic was assumed in an effort to accommodate fluctuations in demand. To accommodate the anticipated mix of pedestrian and bicycle traffic, a minimum width of 10 feet is recommended which is only inclusive of shy distances. The minimum width should be increased accordingly if there are additional protrusions into the path such as utilities, railings, landscaping, or other decorative features. In addition, consideration should be given to providing a temporary connection to the Kewalo Basin

Harbor access road to facilitate bicycle connections to the proposed project until the planned bicycle improvements in the project vicinity are completed.

Should you have any questions, please contact me at 808-946-2277.

Sincerely,

Cathy Leong, P.E.

Enclosures: LOS Definitions
Capacity Analysis Calculations

LEVEL OF SERVICE DEFINITIONS

PEDESTRIAN LEVEL-OF-SERVICE CRITERIA FOR WALKWAYS

The following descriptors show the LOS criteria for exclusive pedestrian walkways.

At LOS A, pedestrians freely move in the desired path without needing to adjust their movements in response to pedestrians. Walking speeds are freely selected and conflicts between pedestrians are unlikely. This level represents an average space of greater than 60 ft^2/p.

At LOS B there is sufficient area for pedestrians to select walking speeds freely to bypass other pedestrians and avoid crossing conflicts. At this level, pedestrians must occasionally adjust his/her path to avoid conflicts. This level represents an average space greater than 40 ft^2/p and up to 60 ft^2/p.

At LOS C there is sufficient space for normal walking speeds, and for bypassing other pedestrians. Crossing movements may cause minor conflicts and pedestrian must frequently adjust his/her path to avoid conflicts. This level represents an average space greater than 24 ft^2/p and up to 40 ft^2/p.

At LOS D the pedestrian's speed and ability to pass slower pedestrians are restricted. There is a high probability of conflict requiring frequent changes in speed and position. This level represents an average space greater than 15 ft^2/p up and up to 24 ft^2/p.

At LOS E the pedestrian's speed is restricted, resulting in a limited ability and capacity to pass slower pedestrians. This level represents an average space greater than 8 ft^2/p and up to 15 ft^2/p.

At LOS F the pedestrian's speed is severely restricted, resulting in frequent contact with other users. This level represents an average space less than 8 ft^2/p.

"Highway Capacity Manual," Transportation Research Board, 2010.

LEVEL OF SERVICE DEFINITIONS

PEDESTRIANS LEVEL-OF-SERVICE CRITERIA FOR SHARED-USE PATHS

The following descriptors show the LOS criteria for paths shared between pedestrians and bicyclists. The level of service is based on the number of events per hour during which a pedestrian either meets an oncoming bicyclist or is passed by a bicyclist.

LOS A describes optimum conditions with conflicts with bicyclists rare. At this level, there are less than or equal to 38 meeting or passing events per hour.

LOS B describes good conditions with few conflicts with bicyclists. At this level, there are greater than 38 and up to 60 meetings or passing events per hour.

LOS C describes operations with greater than 60 and up to103 meeting or passing events per hour. At this level, it may be difficult to walk two abreast.

LOS D describes operations with greater than 103 and up to 144 meeting or passing events per hour. At this level, a pedestrian may encounter frequent conflicts with bicyclists.

LOS E describes operations with greater than 144 and up to180 meeting or passing events per hour. At this level, conflicts with bicyclists are frequent and disruptive.

LOS F describes operations with greater than 180 meeting or passing events per hour. At this level, there is significant user conflicts diminishing the overall experience along the walkway.

"Highway Capacity Manual," Transportation Research Board, 2010.

Equations to Calculate Number of Bicycle Passing and Meeting Events for Shared-Use Paths

Total number of events, *F*

$$F = (F_p + 0.5F_m)$$

where F_p = number of passing events and F_m = number of meeting events

$$F_p = \frac{Q_{sb}}{PHF}(1 - \frac{S_p}{S_b})$$

$$F_m = \frac{Q_{ob}}{PHF}(1 + \frac{S_p}{S_b})$$

Q_{sb} = bicycle demand in the same direction
Q_{ob} = bicycle demand in the opposite direction
S_p = mean pedestrian speed on path (mi/hr); 2.39 mi/hr
S_b = mean bicycle speed on path (mi/hr); 7 mi/hr

$$F_p = \frac{18}{0.75}(1 - \frac{2.39}{7})$$

$$F_m = \frac{18}{0.75}(1 + \frac{2.39}{7})$$

$$F = \left(15.82 + (0.5 * 32.18)\right)$$

$$F = 31.91$$

"Highway Capacity Manual," Transportation Research Board, 2010.

Equations for an Exclusive Pedestrian Path

Average Pedestrian Space, A_P

$$A_p = \frac{S_p}{v_p}$$

where S_p = pedestrian speed and;

v_p= pedestrian Flow per unit width

$$v_p = \frac{v_{15}}{15 * W_E}$$

and v_{15} = pedestrian flow rate during peak 15 min and W_E= effective walkway width

$$v_{15} = \frac{v_h}{4 * PHF}$$

$$W_E = \frac{A_P * V_{15}}{15 * S_P}$$

For LOS "A", the average pedestrian space should be greater than 60 ft^2/p
V_{15} = 105 p
S_p = 210 ft/min

$$W_E = \frac{60 * 105}{15 * 210}$$

$$W_E = 2\ ft$$

"Highway Capacity Manual," Transportation Research Board, 2010.

APPENDIX D
VISUAL AND AESTHETIC RESOURCES TECHNICAL MEMORANDUM

Ala Moana Boulevard Elevated Pedestrian Walkway Visual and Aesthetic Resources Technical Memorandum —Draft

October 2020

Consultant Quality Control Form

Version	Title	Date	Originator/ Drafted by	Reviewed by	Approved by	Notes, as required
0	Visual and Aesthetic Resources Technical Memorandum	8/06/2020	Ryan Weston	Jan Reichelderfer	Jan Reichelderfer	
1		10/15/2020				

Summary

This Visual and Aesthetic Resources Technical Memorandum provides an assessment of changes in visual resources, visual character, and visual quality as a result of the proposed Ala Moana Elevated Pedestrian Walkway Project (the “project”). This assessment uses the U.S. Department of Transportation Federal Highway Administration’s Guidelines for the Visual Impact Assessment of Highway Projects to evaluate changes to the natural, cultural, and project environments and how those changes would be perceived by viewers.

The project and viewers are discussed below; however, in the aggregate and upon completion, the project would have similar visual elements such as vegetation, materials, colors, form, and shape as existing visual elements and would be compatible with the existing conditions. Thus, viewers would generally not experience adverse negative visual impacts and, the project would be visually compatible with the existing natural, cultural, and project environments.

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1 INTRODUCTION

1.1 Overview

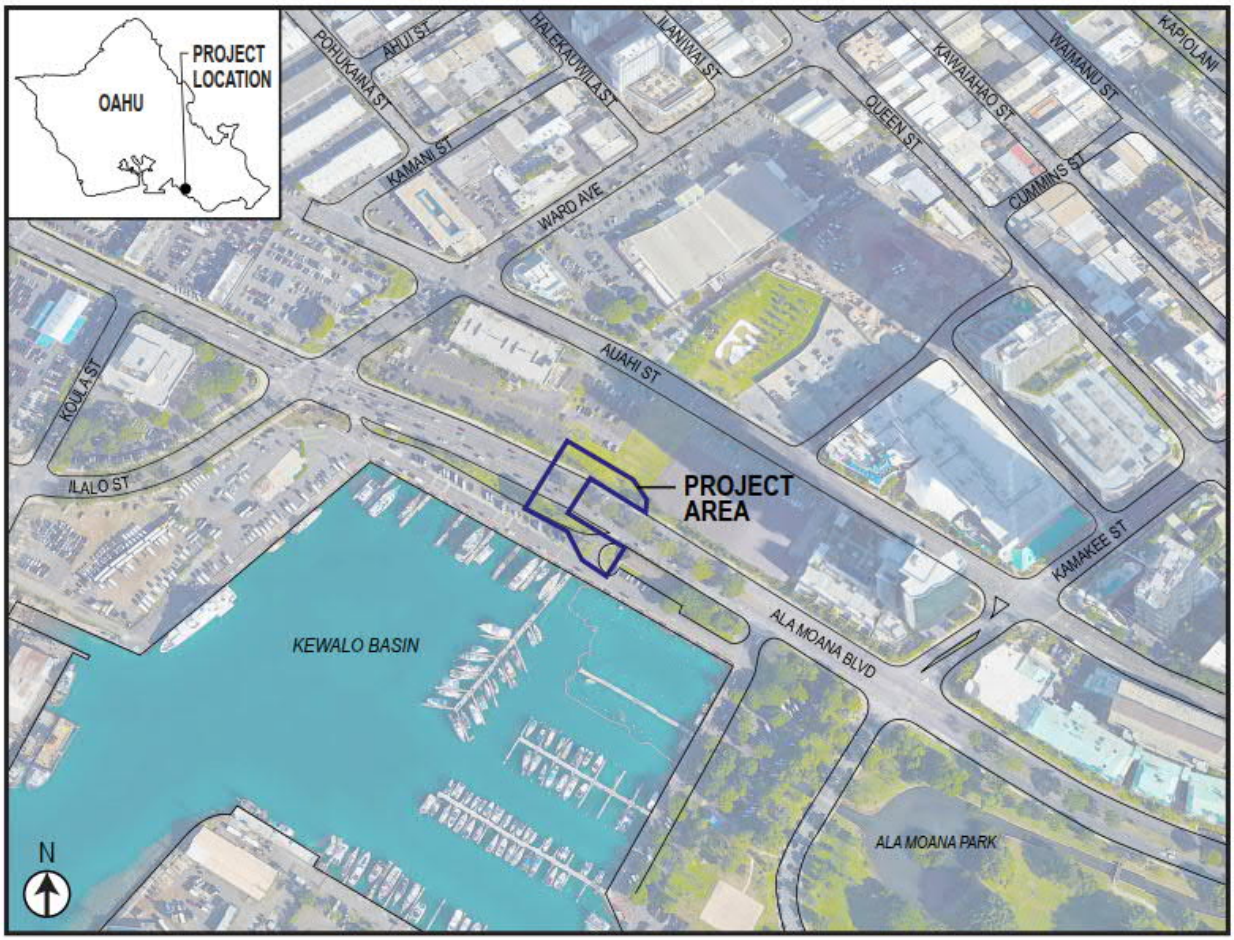
Pedestrian Safety has been a significant issue in urban areas of Honolulu. In the stretch of roadway bounded by Kamakee Street and Ward Avenue, Ala Moana Boulevard consists of 3 lanes in each direction plus turn lanes with a landscaped median. The speed limit is 35 mph. At the project site on January 29, 2019, a truck killed 3 pedestrians and injured 5 as they were waiting on a pedestrian island to cross Ala Moana Boulevard. In reaction to this incident and the growing concern for pedestrian safety, the Hawaii House of Representatives passed House Resolution 145 and House Concurrent Resolution 162, requesting State, City and private entities to examine pedestrian safety measures, including, but not limited to, a pedestrian bridge.

The proposed project is a partnership between public (FHWA, HDOT) and private (Victoria Ward Limited) to construct an elevated 'land bridge' for pedestrians from the mauka side Ward Village and surrounding urban development. The elevated pedestrian walkway will allow pedestrians to safely walk or bike across Ala Moana Boulevard; connecting urban areas on the mauka side and oceanfront uses at Kewalo Basin, Kewalo Basin Park, Ala Moana Regional Park, Kakaako Waterfront Park, and other recreational areas on the makai side.

The analysis and results will be documented to comply with local and state policies, standards, and regulations, and federal guidelines, and regulations, including the National Environmental Policy Act (NEPA). The visual quality analysis will evaluate impacts from the construction and operations of the project and will identify mitigation measures as needed.

Figure 1-1 shows the project location.

Figure 1-1 Ala Moana Elevated Pedestrian Walkway Project



1.2 Purpose of technical memorandum

The project would be seen by motorists traveling along Ala Moana Boulevard, bicyclists and pedestrians, recreationists, and neighbors. This Visual and Aesthetic Resources Technical Memorandum follows the U.S. Department of Transportation Federal Highway Administration's (FHWA) Guidelines for the Visual Impact Assessment of Highway Projects (FHWA 2015) for an abbreviated visual impact assessment. It identifies the viewer groups that would see the changes to the visual environment, documents how they would perceive those changes to the visual environment and assesses whether it would result in changes to the existing visual quality.

2 PROJECT DESCRIPTION

The proposed project would build a new, elevated mauka-makai oriented walkway over Ala Moana Boulevard and would increase safety by moving pedestrians from the

existing at-grade Ward Avenue and Kamakee Street intersections to the elevated pedestrian walkway.

The new elevated pedestrian walkway would be accessible via both stairway and an American with Disabilities Act (ADA) path that connects to the Ala Moana Boulevard sidewalks on either side of the proposed structure. A central pier to support the walkway structure would be placed in the highway median.

No utilities are expected to be relocated; however, lighting would be needed for the elevated land bridge, ADA paths or sidewalks leading to the structure, and under the structure along Ala Moana Boulevard.

2.1 Project visual design features

Several visual design features and actions would be included with the project. These design features would ensure that the project would comply with local codes and regulations, enhance visual quality and aesthetics, and promote safety. Design features include the following:

- Plant suitable vegetation where appropriate per local landscape codes within project limits and in adjoining rights-of-way. The project will include extensive planters integrated into structural elements which will provide natural visual elements throughout.
- Use shielding in exterior lighting to ensure that light sources (such as bulbs) do not shine directly toward the roadway, recreational area, or sensitive natural areas.
- Design project to be compatible with the existing visual character and of the adjacent recreational and commercial/retail areas. Use aesthetic treatments to comply with applicable local design standards and enhance the cultural environment and cultural order. These treatments could include façade treatments and public art and the use of colors and finishes such as concrete or stainless steel that would provide long-lasting, low-maintenance visual elements.

2.2 Regulations, criteria, and guidelines

This section summarizes the regulatory context of the project, identifies the project's Area of Visual Effect (AVE), summarizes coordination and data sources, and

describes the methodology used to assess impacts to visual quality and aesthetic resources.

The following summarizes the federal, state, and local regulatory context for this visual impact assessment.

2.2.1 County

2.2.1.1 General Plan

The General Plan (revised 2002) provides broad statements on the objectives and policies of the City and County of Honolulu with regard to the overall physical and economic development of the island, as well as to the health and safety of the island's residents. Some of the policies advocate providing or facilitating:

- Pedestrian walkways for getting around Downtown and Waikiki and for trips to schools, parks and shopping centers.
- The redevelopment of Kakaako as a major residential, as well as commercial and light industrial area.

2.2.1.1 Special Management Area

HRS Chapter 205A outlines special controls, policies and guidelines for development within an area along the shoreline referred to as the Special Management Area (SMA), as designated by the 1975 Shoreline Protection Act. The SMA area is the most sensitive area of the coastal zone, and is much smaller than the Coastal Zone Management (CZM) area. An SMA permit is required for any development within the SMA.

The City's Department of Planning and Permitting administers the SMA permits for Oahu, but pursuant to HRS 206E-8.5 and HAR Chapter 15-150, the State Office of Planning administers and manages the SMA permits for the KCDD. An SMA permit from the CHH office of Planning and Permitting (DPP) will be required for the proposed project.

2.2.2 State

2.2.2.1 Kakaako Community Development District

The State Legislature created the Hawaii Community Development Authority (HCDA) in 1976 to guide the revitalization of underdeveloped urban communities in the State. Kakaako was the first designated Community Development District – Kakaako Community Development District (KCDD).

Lands makai of Ala Moana Boulevard were added to the KCDD boundaries in 1982. The project area is within the Makai Area of the KCDD. Work within the Makai Area must conform to the KCDD Makai Area Rules (Hawaii Administrative Rules, Title 15, Subtitle 4, Chapter 23). The KCDD Makai Area Rules supersede any provisions of the City's Land Use Ordinance or the City's Primary Urban Center Development Plan.

The Kakaako Community Development District Mauka and Makai Area Plans and Rules are designed to guide the redevelopment of this former warehouse area into a vibrant pedestrian-oriented urban community. The Mauka and Makai Area Plans establish the general redevelopment goals and objectives for each respective area, while the Mauka and Makai Area Rules specify regulations.

Under the most recent KCDD Makai Area Plan adopted in October 2005, the overall vision for the Kakaako Makai Area is "to create an active, vibrant area through a variety of new developments, including an expansive waterfront park, maritime uses along the harbor, restaurants, markets and entertainment along Kewalo Basin, a children's museum, educational and research facilities, residential and commercial developments. In addition, the provision of public open spaces, cultural facilities and amenities will distinguish the Kakaako Makai Area as a place dedicated and attractive to the people of Hawaii." However, residential development in the KCDD Makai Area is not permitted per HRS 206E-31.5 (2006). The proposed project supports the urban design principles and elements of the Makai Area Plan by serving as a safe pedestrian and bicycle facility.

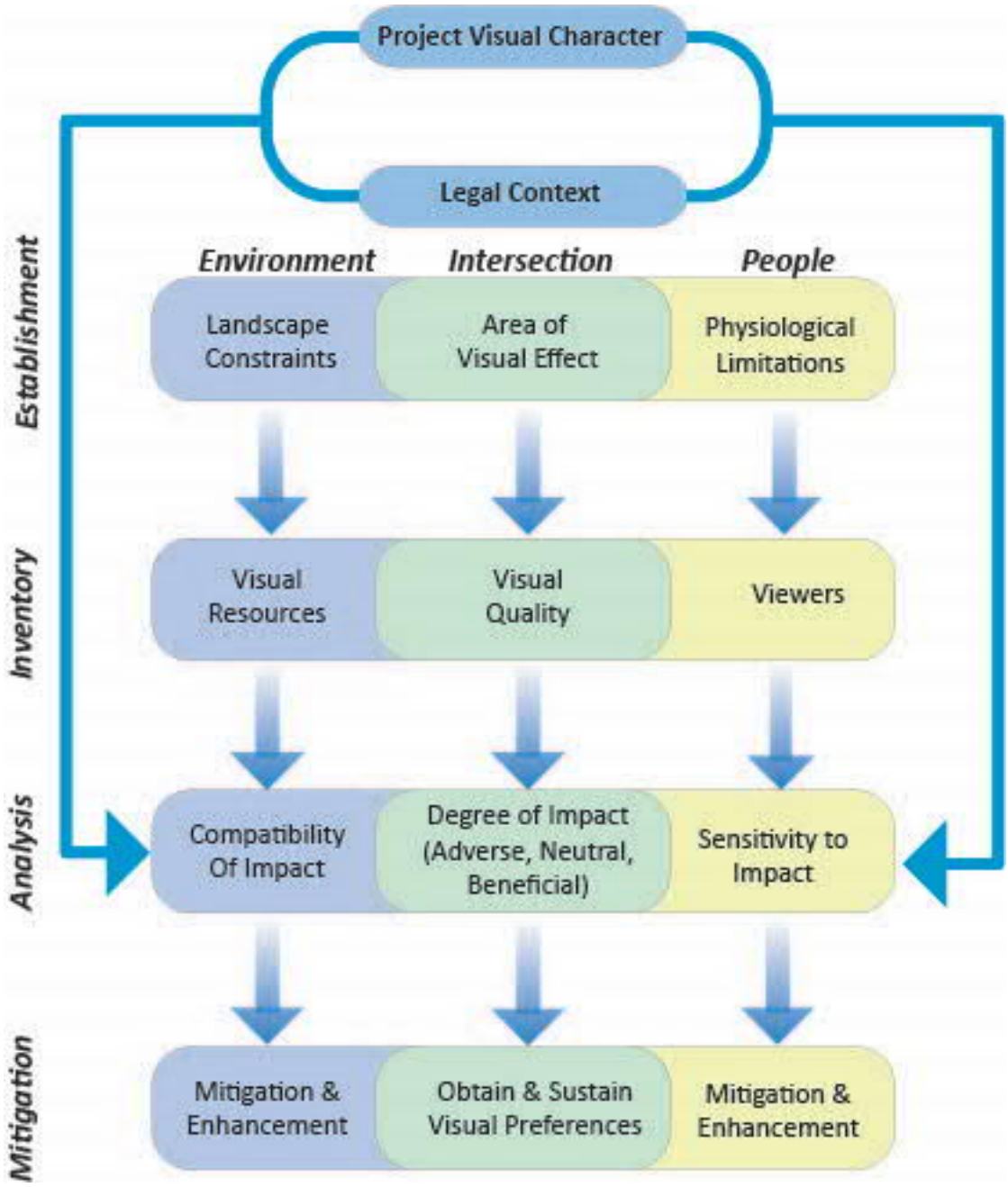
2.2.2.2 Coastal Zone Management (CZM).

The objectives and policies of the Hawaii Coastal Zone Management (CZM) Program are designed to protect and manage Hawaii's valuable coastal areas and resources. The proposed action is located within the State's CZM area, which covers the entire State. Pursuant to 15 CFR 930.32, federally-permitted, licensed or assisted activities undertaken in or affecting Hawaii's coastal zone must be consistent with the CZM objectives and policies.

2.2.3 Federal

This project uses FHWA's *Guidelines for the Visual Impact Assessment of Highway Projects* (FHWA 2015) hereafter referred to as the "FHWA guidelines." The FHWA guidelines are a broadly-accepted approach to analyzing visual impacts, particularly for transportation projects. The FHWA guidelines use changes in visual character and viewer group sensitivity to assess changes in visual quality. The VIA process is performed in four phases: Establishment, Inventory, Analysis, and Mitigation in which visual effects occur as a result of an interaction between viewers and the environment that surrounds them. These guidelines provide a framework of phases for the visual impact assessment process, as shown in Error! Reference source not found.**2-1**.

Figure 2-1 Visual Impact Assessment Process



The FHWA guidelines provide direction on determining the appropriate level of assessment for projects with visual impacts; from no analysis for projects with no noticeable physical changes to expanded VIAs for projects with highly adverse physical impacts. This project is likely to have the following characteristics:

- The project is expected to result minor visual changes to the physical characteristics of the existing environment within the Ala Moana Boulevard corridor.
- The project would be expected to be compatible with the existing visual character of the Ala Moana Boulevard corridor.
- Conventional mitigation, such as architectural treatments, could be potentially used to address visual changes.
- Because the project is expected to create minor changes to the existing environment, direct and indirect impacts from the project to visual resources are anticipated to be minimal, so the project is not anticipated to contribute to adverse cumulative impacts to visual resources.
- The project is expected to be compatible with local aesthetic guidelines and permit requirements.

Because the project would likely pose only minor physical changes with little to no adverse physical impacts, the project would result in an Abbreviated VIA Memorandum that briefly describes project features, impacts, and mitigation requirements.

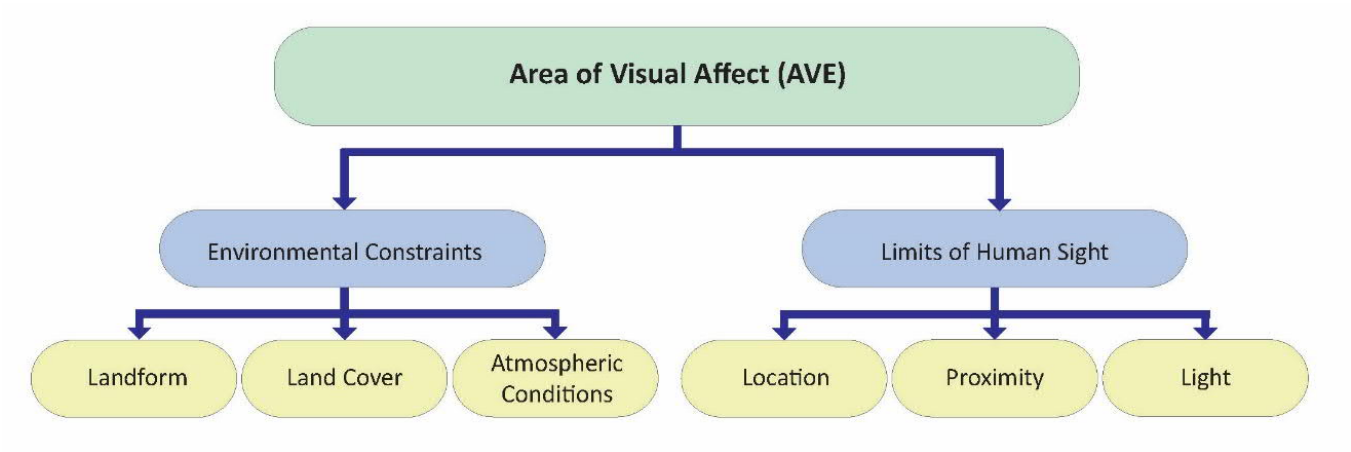
2.3 Establishment phase

The primary purpose of the establishment phase is to define the Area of Visual Effects (AVE) or the study area. The AVE is the area that can be seen from the project (limits of human sight), which is influenced by the physical constraints of landform, land cover, and atmospheric conditions (FHWA 2015). In addition, the establishment phase sets an understanding of the character of the proposed project.

2.3.1 Area of Visual Effects

The project's study area, or what the FHWA terms as the Area of Visual Effect (AVE), is the area people can see in the landscape. It is determined by the physical constraints of the environment and the physiological limits of human sight. These concepts are described below and illustrated in the diagram in Error! Reference source not found.**-2**.

Figure 2-2 Components of the Resource Study Area (AVE)



2.4 Physical Constraints

The visual environment is physically constrained by landform, land cover, and atmospheric conditions.

- Landform: Landform is the topographic features of the project. Mountains, hills, valleys, and plains provide a visual perspective for some viewers and obscure views for other viewers. It is the visual element least likely to change with the project.
- Land cover: Land cover is vegetation and human-made structures that exist on the landform. The land cover often determines the physical constraints of the visual environment. It can either obscure views (fences, walls, and trees) or enhance them (decks or viewing platforms).
- Atmospheric conditions: Atmospheric conditions can obscure or reduce project visibility. Atmospheric conditions typical of Hawaii include bright sun, trade winds and moderate humidity. Atmospheric conditions generally affect distant objects the most.

2.5 Physiological Constraints

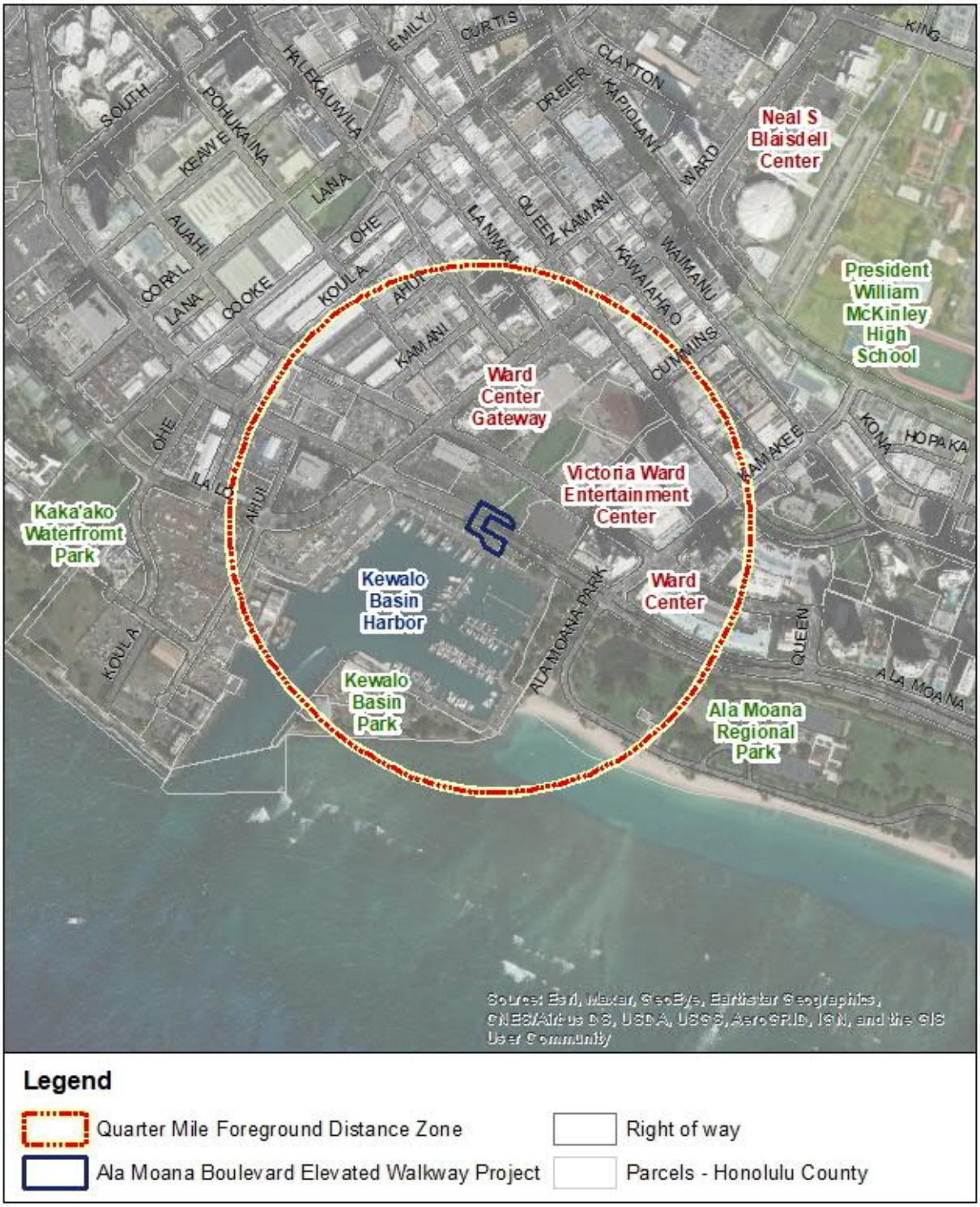
The visual environment is also limited by distance, or proximity, from which viewers can see the project with any discernable detail. Proximity can be defined using three distinct zones; foreground, middle ground, and background.

- Foreground: Comprises views from 0 miles (project limits) to 0.25 miles. Changes to the visual environment are mostly discernible in this zone. Foreground views tend to be the most affected by changes in visual quality, and views are generally not limited by atmospheric conditions. Views of this project will primarily consist of views from the foreground distance zone. Specific foreground views are identified and discussed in the analysis phase.
- Middle-ground: Comprises views from 0.25 mile to 3.0 miles. In the middle ground, changes in visual details may be discernible but landform (hills and mountains), land cover (buildings, structures, fences, signage, and other physical objects), and existing vegetation generally restrict line-of-sight views for most viewers. Some views of the project may be available from elevated locations but may be affected by atmospheric conditions.

- Background: Comprises views beyond 3.0 miles. Project details and changes to visual quality are generally difficult to discernible from this distance, and atmospheric conditions can easily affect or obscure views.

The AVE for the project is the area within which viewers are close enough to visually distinguish project elements and have clear views of project elements (i.e., the materials types, colors and shapes, architectural components of the elevated land bridge). Views based on landform within the middle-ground distance zone may be available in some locations; however, land cover such as vegetation, buildings, fences, walls, signs, and other structures would likely obscure most views where available. Due to the physical and physiological constraints of the surrounding landform and land cover, no views of the project are anticipated from the background distance zone; therefore, the AVE for this project will be limited to the foreground distance zone. (See Error! Reference source not found.**-3**.)

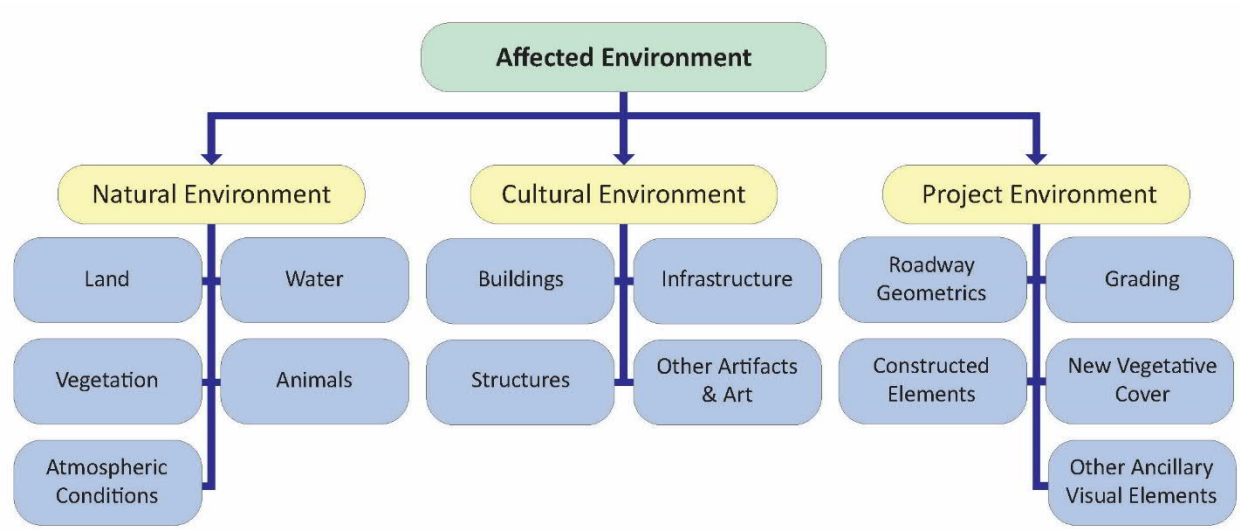
Figure 2-3 Project AVE



3 INVENTORY PHASE

The purpose of the inventory phase is to examine what people like or dislike seeing in the AVE. Visual quality is a relationship between viewers and their environment, or what people like or dislike seeing. To carry out this phase, preparers first identified the affected environment of the AVE through a review of planning documents, an electronic desktop review (Google Earth, Google Street View, ArcView GIS, and other digital programs) and existing conditions site photos. This review will help to establish the natural, cultural and project environments, as shown in **Figure 3.1**.

Figure 3-1 Components of the Affected Environment



3.1 Affected environment

The affected environment is the existing visual character of the AVE. The visual character for the AVE was assessed through an inventory of visual resources, divided into three categories (FHWA 2015):

- **Natural**: Land, water, vegetation, animals, and atmospheric conditions (devoid of build environment) determines the natural environments. Viewers evaluate if the environment is harmonious or inharmonious.

- **Cultural**: Buildings, infrastructure, structures, artifacts, and art determines cultural environments. Viewers evaluate if the environment is orderly or disorderly.

- **Project**: Constructed elements, grading, vegetation, and ancillary visual elements associated with the project development. Viewers evaluate if the environment is coherent or incoherent.

The natural, cultural, and project environments were assessed for the project and discussed below. **Table 3-1**.

Table 3-1 Affected environment of the AVE

Visual Character	Affected environment of the AVE
Natural	Land within the AVE of the highway ranges from 5 to 10 feet in elevation. Available views are primarily limited to the coastal plain with views of the mountains in the background; however, views in most locations are contained by human-made elements (buildings, fences, signs, etc.), trees, palms, and tropical vegetation lining the roadway. Natural elements such as native and ornamental landscaping are associated with human development on the mauka side of the Ala Moana Blvd. Where roads are located close to the water views of the ocean and harbor area are available on the makai side. As the project is limited to the foreground distance zone atmospheric conditions do not typically affect the viewing environment. In the urban environment, animals are primarily limited to personal pets and birds.
Cultural	Development within the AVE is located in the Kakaako area of Honolulu. It is characterized by commercial, retail, and residential urban development. Human-made structures range from a single story to multiple 40+ story condominium buildings. Concrete and asphalt roadways and parking areas are ubiquitous throughout the area. Glass, metal, concrete, and stone are pervasive building materials. Brightly colored and electrified advertising signage is common. Large numbers of vehicles utilize nearby surface parking lots and parking structures. Additionally, there is recreational and commercial boat traffic on Kewalo Basin Harbor. Overhead utility lines and streetlights are located throughout the AVE. Art and decorative elements are at harbor and park entrances and are associated with many of the commercial, retail, and residential buildings. There are also a series of fish sculptures in the vegetated area between Ala Moana Blvd. and the harbor.
Project	The project is located on Ala Moana Blvd. between Ward Ave and Kamakee St/Ala Moana Park Dr. The walkway would span across six lanes and a vegetated median. Vehicular traffic is common on Ala Moana Blvd as well as other local roads. Road signs and lane and crosswalk striping are common. Parking areas between the project and Kewalo Basin Harbor may also be revised with the project.

NOTES: AVE = Area of Visual Effect

3.2 Affected population

Viewers can generally be categorized into two distinct groups: travelers and neighbors. Both travelers and neighbors may be further subdivided to establish viewer preference and their sensitivity to changes in visual resources (FHWA 2015). Although each viewer will have individual preferences and sensitivities, FHWA guidelines recognize three basic responses to visual environments:

- When viewing the natural environment, viewers evaluate the natural harmony of the existing scene, determining if the composition is harmonious or inharmonious.
- When viewing the cultural environment, viewers evaluate cultural order, determining if the composition is orderly or disorderly.
- When viewing the project environment, viewers evaluate the coherence of the project, determining if the project's composition is coherent or incoherent.

3.2.1 Types of neighbors

The AVEs for the project includes the following types of neighbors (FHWA 2015):

- **Residential**: Residential neighbors include single-family, multi-family, and others. Their visual preference tends toward maintaining existing landscape character and they are not generally interested in change. Depending on location, residential viewers prefer natural harmony and cultural order.

- **Recreational**: Recreational neighbors participate in recreation and tend to be transitory. Their visual preference tends to be the status quo and they are leery of changes that may cause adverse impacts to their activity, although they may be willing to entertain improvements if they improve or enhance the recreational experience. Recreational viewers prefer natural harmony with some project coherence.

- **Civic**: Civic neighbors provide or receive services from a governmental organization, such as a local, state, or federal agency or the military. Workers and employees can be considered permanent, while visitors and those who receive services are transitory. Depending on the agency's mission, views to and from the institution may or may not be desirable. If agencies have substantial public interactions, views may be important, and their visual preferences tend to be similar to institutional neighbors. Civic viewers strongly prefer cultural order but may also be interested in project coherence and natural harmony depending on civic agency and project location.

- **Retail**: Retail neighbors are merchants or shoppers that sell goods or services to the public. Merchants tend to be permanent while shoppers are transitory, although shoppers may frequent the same location. Shoppers tend to focus on the shopping experience with few distractions. Retail viewers depend on good project coherence and natural harmony.

- **Commercial**: Commercial neighbors occupy commercial property and use office buildings, warehouses, and other commercial structures. Visual preference varies depending on the business, but those with many visitor's mimic retail customers. Commercial viewers depend on cultural order and good project coherence.

3.2.2 Types of travelers

The AVEs for the project includes the following types of travelers (FHWA 2015):

- **Motoring**: Motorists travel in vehicles propelled by engines such as cars, trucks, buses, motorcycles, or boats. A variety of engine types, sizes, and fuel sources help propel travelers at higher speeds in comparison to other modes. Drivers primarily focus on activities associated with driving and prefer project coherence. Passengers are typically less engaged with driving tasks and prefer natural harmony and cultural harmony.

- **Bicycling**: Bicycles or other similar self-propelled devices, or electric bicycles and electric scooters, that travel through a site at a higher speed than pedestrians but

much slower than vehicular travel. Bicyclists also have a slight preference for project coherence.

- **Pedestrian**: Pedestrians use self-propelled means (walking, wheelchair, or other mobility aid) to move through a site on roadways, sidewalks, or trails. Pedestrians have a slight preference for cultural order over natural harmony and project coherence.

Error! Not a valid bookmark self-reference. describes the affected populations within the AVE

Table 3-2 Affected populations within the AVE

Affected population within the AVE		Visual preference
Neighbors	Residential- located in developed areas on the mauka side of Moana Blvd.	Project Coherence, Cultural Order
	Recreational- Located in Moana Regional Park, Kewalo Basin Park, Kewalo Basin Harbor, Point Panic, Victoria Ward Park, and other recreation areas.	Cultural Order, Natural Harmony
	Commercial/Retail- primarily located in developed areas on the mauka side of Moana Blvd. Viewers would include those from the Kakaako Farmers Market	Project Coherence, Cultural Order
	Civic- located in the Hawaii Department of Health building northwest of the site	Cultural Order, Natural Harmony
Travelers	Motorist – Located on Ala Moana Blvd and other local roads within the AVE and from boats in the harbor.	Project Coherence, Cultural Order
	Bicycling/Pedestrian- located on pedestrian walks, pathways, and trails.	Project Coherence, Cultural Order

3.3 Existing visual quality

Error! Reference source not found. is a photograph of Ala Moana Boulevard looking west near the proposed project site. The view shows the existing roadway and existing vegetation. As shown, the natural environment in this highly developed area is limited to maintained landscaping associated with the roadway and adjacent developments. The natural environment is harmonious, especially at the regional park.

Figure 3-2 View on Ala Moana Blvd: Looking west

Error! Reference source not found. is a photograph from the eastern portion of Kewalo Basin Park looking north toward the project site. The photograph shows Kewalo Basin Harbor and the urban development on the mauka side of the proposed project. The cultural environment is orderly and consistent with viewer expectations for a mixed-use development near the harbor and ocean. The AVE contains commercial, retail, residential, civic, recreational, and transportation uses. Concrete, glass, metal, plastic, asphalt, and other human-made materials and lighting are ubiquitous. The area is well maintained and while the area is visually busy with human-made buildings, vehicles, boats, signage, advertising, and electric lighting, the cultural environment remains orderly.

Figure 3-3 View from Kewalo Basin Park: Looking north to Kakaako urban area

The terrain upland of the harbor within the AVE is relatively flat varying between approximately 5 and 8 feet in elevation. Asphalt, concrete, signage, utilities, and other roadway elements are located on Ala Moana Boulevard and other local roads (see **Figure 3-2**). Views of construction fencing, construction sites, and construction activities from the development of properties north of the project site are available from Ala Moana Boulevard; however, these visual elements are assumed to be temporary. The project environment is coherent with the context of the AVE.

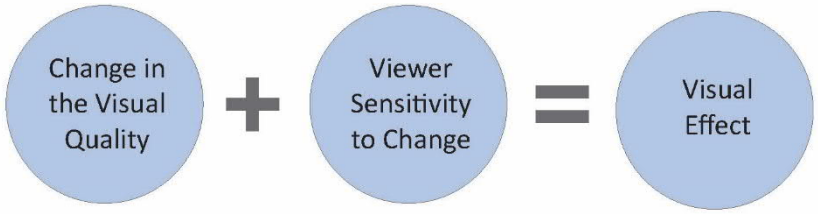
4 ENVIRONMENTAL IMPACTS

The existing affected environment can be altered by the visual character of grading, constructed elements, vegetative cover, infrastructure, and other ancillary visual elements associated with the proposed project that interact to form a composition. (FHWA 2015) These elements can be visually integrated into the existing visual context or can create elements that contrast with the visual character.

Viewers will evaluate the project to determine if the project's composition is compatible or incompatible with the existing visual landscape. This analysis determines visual effects by evaluating changes to the existing visual quality and predicting viewer sensitivity to those changes (see **Figure 4.1**). The visual effect is expressed by summarizing the compatibility of the proposed project against existing conditions and

the viewer sensitivity to that impact. Viewer sensitivity is a combination of the viewer's exposure and awareness of the change in visual quality caused by the project.

Figure 4-1 Visual Effect



This analysis determines visual resource effects by assessing changes to the existing visual character, determining if changes are compatible or incompatible, and predicting viewer sensitivity to the changes in visual quality; and determining if changes in visual quality are negligible, positive, or negative.

Neutral changes are those that are compatible with the existing visual environment, reflecting little visual change, and which viewers perceive as harmonious, orderly, and coherent with the existing visual environment. Beneficial changes to the visual environment result where visual quality is improved through the enhancement of visual resources or where visual experiences are improved by the creation of new or improved views of resources that viewers perceive as improving the harmony, order, and coherence of the existing visual environment. Negative changes to the visual environment can result when visual quality is degraded through incompatible visual elements or by blocking or altering views in a negative manner that can be perceived as inharmonious, disorderly, and incoherent. The level of change is determined by how much the project improves or degrades the visual landscape and ranges from general improvements or negative changes to great improvements to severe declines in the existing visual quality (FHWA 2015).

4.1 Alternatives

This section describes the visual changes anticipated to occur as a result of the Project Alternatives, and specifically any changes to the overall visual quality of the AVE. Impacts on visual quality are discussed in terms of activities during construction and long-term impacts once the project is built.

4.1.1 No-Build Alternative

The No-Build alternative would retain the existing road alignment and pedestrian facilities in their existing conditions and configuration. The roadway comprises of 3 lanes in each direction with a speed limit of 35 mph plus turn lanes. The road is divided by a landscaped median. Highway operations would continue as they currently are, with no change to existing lane configurations or widening of current infrastructure.

There would be no construction or long-term impacts on visual quality for neighbors or travelers. Visual quality and viewer sensitivity would not change and would be considered neutral to natural harmony, cultural order, and project coherence.

4.1.2 Build Alternative

Mauka of Ala Moana Boulevard, Victoria Ward Limited (VWL) is developing the 60-acre master-planned Ward Village, which is expected to create at least 4,500 new residential condominiums. Additionally, the Honolulu Rail Transit's Kakaako Station will be located nearby with an entrance from Ward Ave at Halekauila Street, where 2,650 pedestrians and cyclists are projected to access the station each day (HART, 2011). The proposed elevated pedestrian walkway over Ala Moana Boulevard would connect existing pedestrian traffic and the pedestrians generated by these future developments to Kewalo Basin, Kakaako Waterfront, and Ala Moana Regional Parks, Kewalo Basin Harbor and other recreational, civic, commercial, and retail amenities on the makai side of Ala Moana Boulevard.

Pedestrian traffic from Ward Avenue and Kamakee Street intersections would be separated from at-grade highway vehicular traffic. The new elevated land bridge would span Ala Moana Boulevard with a central pier to support the walkway structure in the highway median. The walkway will be accessible via both stairway and an American with Disabilities Act (ADA) path that connects to the Ala Moana Boulevard sidewalks on either side of the structure.

Extensive planting beds will provide new natural visual elements on both on top of and on the sides of the structures that will bring natural elements to the constructed features. Lighting would be installed on the elevated land bridge, ADA paths or sidewalks leading to the structure, and under the structure along Ala Moana Boulevard. At this time, no utilities are expected to be relocated.

4.1.2.1 Build Alternative Construction Impacts

Construction equipment and activities would be noticeable throughout the active construction period. For this project, construction equipment is likely to include drilling equipment, excavators, loaders, lifts, backhoes, bulldozers, compactors, mixers, pump trucks, and cranes. This equipment is often brightly colored to promote visibility and safety. Other sources of visual changes during construction would include staging areas, material storage, trailers, fencing, vehicular and pedestrian detours, construction signing, flashing safety lights, and work lighting. Lights may be used to safely illuminate the workspaces, which could cause spillover light onto adjacent parcels. Visual detractions from construction activities would be removed upon completion of project construction.

Construction of the project is expected to last approximately 18 months. Other than construction vehicles using adjacent roads for haul routes, construction activities would occur within the Ala Moana Boulevard right-of-way for SR 518. Some trees and vegetation would be removed during construction. Construction activities would be associated with the elevated land bridge structure and improvements, retaining walls, grading, and pedestrian areas. These activities would be visible to travelers and pedestrians on Moana Boulevard and other roadways with views of the project. Adjacent neighbors may have views of construction activities.

Existing pedestrian crosswalks and facilities at Ward Avenue and Kamakee Street intersections would be maintained during construction. To reduce potential street closures for that would disrupt daytime vehicular traffic, construction may occur during the nighttime hours and on weekends. Nighttime hours would likely require construction and safety lighting (including flashing lights); however, existing nighttime lighting is already pervasive in this area from the street and adjacent development.

Construction activities would be temporary but very visible to travelers and neighbors. Visual changes from construction would include lighting, human-made structures and materials, bright colors, and vehicle movement. The temporary addition of these visual elements would reduce the project coherence as viewed by travelers and neighbors. Therefore, during construction, travelers would perceive that the visual quality of this AVE would be temporarily degraded.

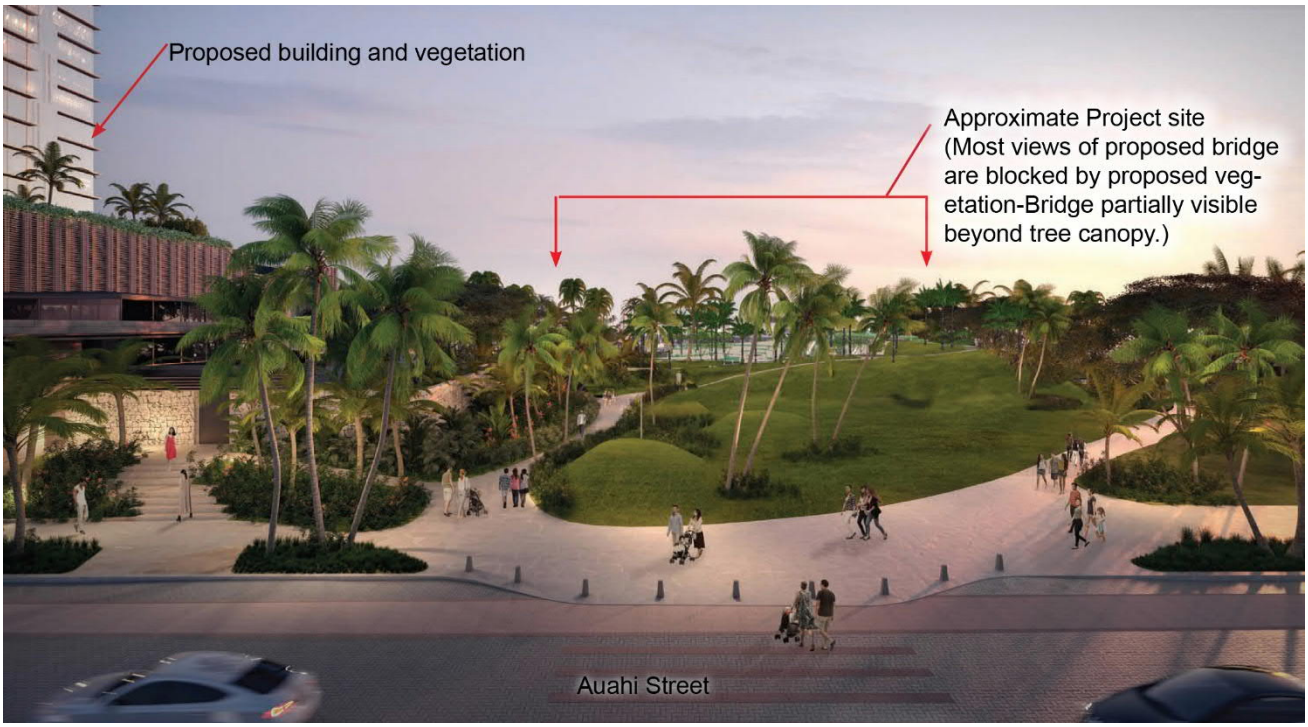
4.1.2.2 Build Alternative Long-Term Impacts

The project will be compatible with the existing natural, cultural, and project environments as the material and visual character of the existing roadway would substantially remain as the proposed project incorporates asphalt, concrete, signage, lighting, and large planting areas. Although the form and scale of the elevated land bridge would increase exposure for travelers, pedestrians, and bicyclists, the grade-separated walkway would reduce vehicular congestion and would reduce pedestrian conflicts and improve safety conditions where pedestrians are crossing the highway and increase project coherence and cultural order.

Commercial, retail, recreational, and residential viewers in close proximity to project improvements from the mauka side would view the walkway within the background of the harbor and ocean. Viewers would typically be sensitive to change with natural visual elements; however, human-made elements, lighting, overhead utility lines, and other visual elements associated with the walkway are also common throughout the AVE. Any potential views of the project would become routine as these views would be of long duration. Neighbors will likely have a moderate sensitivity to visual changes associated with the project.

Error! Reference source not found. shows a photosimulation of the proposed pedestrian bridge, stairway, ADA ramp structures, and vegetation from Victoria Ward Park. It also represents typical residential and retail/commercial viewers along and Auahi Street. While this view is somewhat elevated it illustrates what typical viewers would see. Structural human-made elements would likely be more obscured by existing and proposed vegetation for viewers at ground level and viewers from a higher elevation (i.e. higher floors in high rise buildings) would likely see more of the structural elements but their focus and attention would likely tend to be drawn more to the harbor, beaches, and ocean beyond.

Figure 4-1 Photosimulation from Victoria Ward Park



Source: Victoria Ward Limited

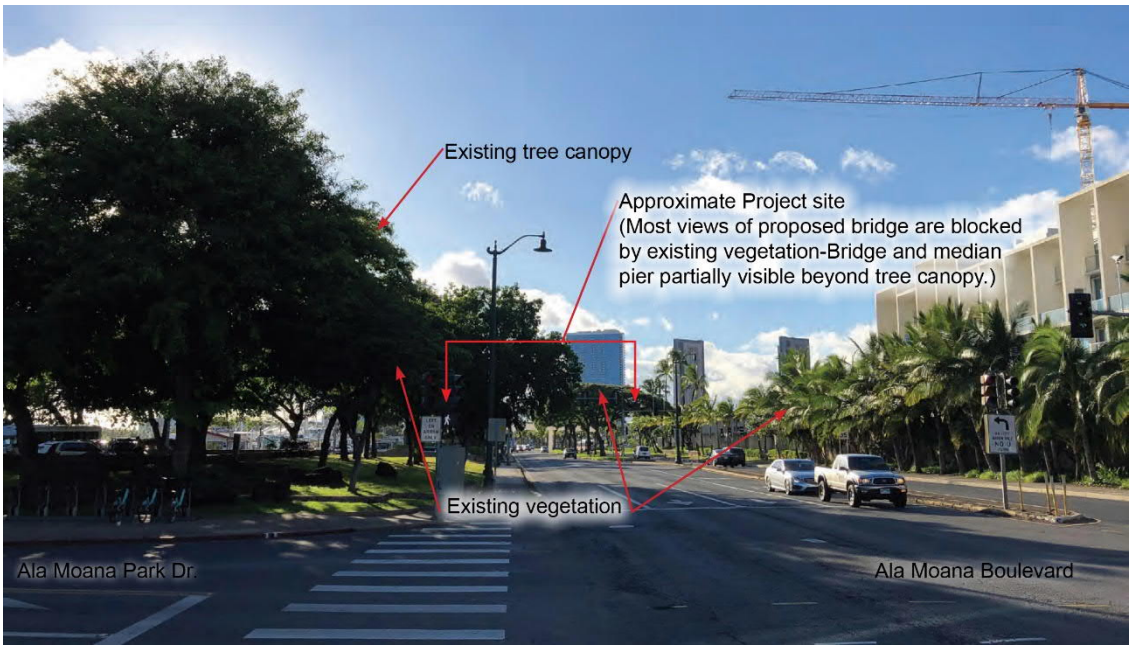
Viewers on the makai side of the existing roadway would include recreational viewers at Ala Moana Regional and Kewalo Basin Parks, Kewalo Basin Harbor, and other areas. Viewers from the makai side would view the project with the existing Kakaako area urban development in the background. Human-made materials, signage, lighting, and other materials (See **Figure 3.3**) associated with the project are common within this visual context.

Recreational neighbors tend to prefer the status quo visually and they are leery of changes that may cause adverse impacts to their activity, although they may be willing to entertain improvements if they improve or enhance the recreational experience. The elevated pedestrian walkway would increase safety and access to and from parking areas and increase views to the harbor, beaches, and ocean.

Proposed landscape areas and extensive planters will increase natural visual elements and existing trees in the parks, developments, and roadways will likely obscure or block views of the project for most recreational viewers. Because views of the project will largely be obscured by existing vegetation, recreational viewers, particularly those viewers from Ala Moana Regional Park, would have a low sensitivity to changes in existing visual conditions. Error! Reference source not found. shows the existing view from the Ala Moana Regional Park and a photosimulation of the project from this location. The pedestrian bridge, stairway, and ADA ramp structures are only partially visible behind existing tress.

Figure 4-2 Existing view and photosimulation along Ala Moana Boulevard at Ala Moana Regional Park

Existing view



Source: PBR & Associates Inc. Hawaii and Victoria Ward Limited
Photo simulations of proposed structural elements as seen from Ala Moana Regional Park Entrance.

Natural elements (proposed landscaping) and proposed materials, colors, forms, heights, and shapes of the project would be similar to the existing roadways, buildings and adjacent development within the AVE. Significant adverse impacts are not expected. This project would be compatible with the existing visual conditions. Viewers would have an overall low sensitivity to visual changes and the project would blend visually with the existing natural, cultural, and project environments.

Error! Reference source not found. identifies the expected viewer sensitivity (in terms of exposure and awareness) to the visual changes. Error! Reference source not found. shows the existing view for motorists traveling northwest on Moana Boulevard and a photosimulation of the view with the construction of the elevated land bridge.

Table 4-1 Viewer sensitivity

Viewer type		Viewer sensitivity		
		Exposure	**Awareness**	**Overall sensitivity**
Neighbor	Residential	Existing vegetation and land cover obscure or block views of the project for some residents from high rise condominium towers (40+ stories) as close as 700 feet east of the project. The number of residents with long-duration views of the project component would be moderate.	Attention and focus would likely be of the harbor, beaches, and ocean. Awareness would not be high as views would become routine over time.	Low
	Commercial/ Retail	The number of retail viewers may be high with views from adjacent shopping malls, entertainment areas, and businesses to the north, west, and east, but views would be of short duration. Worker numbers, with moderate to long-duration views would be low. Surface parking lots are adjacent to the project and parking structures are within approximately 250 feet.	Attention would be low as viewers focus on work and commercial/ retail activities. Most views would be over SR 518, within the visual context of a state route.	Low
	Recreational	A variety of recreational activities within the AVE are available from organized sports in Ala Moana Regional Park to beachgoers at Kewalo Basin Park and sport fishing and scuba diving charters in the harbor. Pedestrian safety and access to and from recreational activities, retail uses, and parking will be increased and proposed pedestrian amenities will provide new recreational opportunities. Exposure will also vary but recreational viewers tend to be focused on their recreational activities and are transitory with short duration.	Awareness of the project would depend on proximity and available views. Most recreational viewers would be from ground or water level and would be highly affected by vegetation and land cover.	Moderate

Viewer type		Viewer sensitivity		
		Exposure	**Awareness**	**Overall sensitivity**
	Civic	Civic viewers would be visitors and workers from the Hawaii Department of Health: Environmental Management Division building to the west of the project. Visitor views would be transitory and of short duration. Workers would have longer duration views.	Attention and focus of visitors and workers would primarily be on work/civic activities.	Moderate
Traveler	Motorist	Large numbers of motorists would have views of the project from Ala Moana Boulevard and local roads. Motorists would also include viewers traveling on Kewalo Basin Harbor. Motorist views would be of short duration.	Motorists, particularly drivers, would primarily be focused on driving. Motorists would be aware of the project component but focused on driving.	Low
	Bicycle/ Pedestrian	Moderate numbers of bicycle/pedestrian viewers may travel between parking areas, commercial/retail, and recreational areas. The project would improve safety and circulation for these viewers. Views of the project for bicycle/pedestrian viewers not utilizing the project would primarily be obscured by existing vegetation and land cover.	Bicyclists and pedestrians using the project would be focused on traveling and would expect to see the features of this project component.	Low

4.1.2.3 Visual quality

The AVE of the Ala Moana Elevated land bridge is highly developed on the mauka side. Existing vegetation is primarily located along the right of way, in parking lot islands, and as ornamental landscapes associated with existing buildings. The median in Ala Moana Boulevard includes grass and trees east of the project site but the median ends at the project site. Tropical trees, shrub beds, and grass areas exist between the roadway and the Kewalo Harbor Parking areas. More extensive areas of vegetation, open lawn, sports areas, and views of the lagoon, canal, and beach/ocean exist in Ala Moana Regional Park at the east end of the AVE. Proposed planting beds and trees will help the project with natural harmony.

New visual elements would be added to the cultural environment of the AVE. These elements, including the elevated land bridge, structural elements, and pedestrian amenities. The visual elements and materials would be consistent with the scale, materials, and visual character of surrounding mauka side urban development. While the scale of the walkway would be larger than existing development on the makai side, the character and materials are similar to other developments. Additionally, for sensitive recreational viewers at Ala Moana Regional Park, most of the elevated land bridge would be screened or blocked by existing vegetation. The visual character of the cultural environment would remain orderly. See **Error! Reference source not found.**.

The project modifications would add new visual elements to the existing project environment. Directional and roadway signage, lane striping, street, and pedestrian lighting and signage, and utilities would be added; however, these elements are ubiquitous in the existing project environment. New visual elements introduced by the project would not be an adverse visual impact to existing project viewers or environments. Cultural orderliness and project coherence would be improved by separating pedestrian and vehicular traffic. Therefore, the overall visual impacts to the AVE would be beneficial.

Figure 4-3 Photosimulation from Ala Moana Boulevard

Source: Victoria Ward Limited

5 MITIGATION

Error! Reference source not found.**2 and 4.3** illustrate proposed aesthetic features associated with the project. In general, the Ala Moana Boulevard Pedestrian Walkway project would be consistent and compatible with the existing visual and aesthetic

resources. Viewers would have a low to moderate sensitivity to visual changes, and the project would blend visually with the existing natural, cultural, and project environments. Natural elements such as vegetation would largely be unaffected, and materials, colors, forms, heights, and shapes of the project would be similar to the existing human-made structures and roadways. Because the natural environment will remain harmonious, the cultural environment will remain orderly and the project environment will remain coherent, no significant adverse long-term impacts are expected; therefore, no visual quality mitigation measures are anticipated as a result of the proposed project.

5.1 Mitigation measures for construction impacts

No mitigation for construction impacts would be warranted due to the short-term nature of construction for this project; however, during the construction phase, the project would implement the following actions to minimize temporary impacts on visual quality and aesthetics:

- Preserve existing vegetation where possible and minimize the clearing of mature trees. Use existing hard/paved areas for project staging where practical.
- Limit construction to daylight hours whenever possible. Include directional work and safety lighting to direct lights toward work areas and away from residential areas where nighttime construction is necessary. Shield light sources to avoid light spillover.
- Screen views of construction equipment and materials from pedestrians and residential areas, as practical.
- Restore landscaping disturbed by construction-related activities after completion of work.

6 REFERENCES

Federal Highway Administration (FHWA). 2015. *Guidelines for the Visual Impact Assessment of Highway Projects.* U.S. Department of Transportation.

Honolulu Authority for Rapid Transit (HART), 2011. *Station Access and Modal Interface Report*, August 2011.