



Final Environmental Assessment/
Environmental Impact Statement Preparation Notice

KEWALO BASIN REPAIRS PROJECT

Kaka'ako Ahupua'a, Kona District, Island of O'ahu, Hawai'i

Prepared for Hawai'i Community Development Authority
Prepared by Helber Hastert & Fee, Planners

March 2010



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ACRONYMS AND ABBREVIATIONS

§	Section
BMP	Best Management Practices
CDD	Community Development District
CO	carbon monoxide
CZM	Coastal Zone Management Program
DBEDT	Department of Business, Economic Development and Tourism
DOH	Department of Health
DP	Development Plan
EIS	Environmental Impact Statement
EISPN	Environmental Impact Statement Preparation Notice
°F	Fahrenheit
FEA	Final Environmental Assessment
FIRM	Flood Insurance Rate Map
FL	Fill Land, mixed
HAR	Hawai'i Administrative Rules
HCDA	Hawai'i Community Development Authority
HRS	Hawai'i Revised Statutes
LUC	Land Use Commission
LUO	Land Use Ordinance
mllw	mean lower low water
msl	mean sea level
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
O ₃	ozone
OP	Office of Planning
PIFSC	Pacific Island Fisheries Science Center
PM _{2.5} / PM ₁₀	particulate matter 2.5 microns/10 microns or less in diameter
PUCDP	Primary Urban Center Development Plan
SDOT	State Department of Transportation
SMA	Special Management Area
SO ₂	sulfur dioxide
TMK	Tax Map Key
UH	University of Hawai'i

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1.0 INTRODUCTION AND SUMMARY

1.1 Introduction

This Final Environmental Assessment (FEA)/Environmental Impact Statement Preparation Notice (EISPN) has been prepared in accordance with the provisions of Hawai'i Revised Statutes (HRS) Chapter 343 and Hawai'i Administrative Rules (HAR) Title 11, Department of Health, Chapter 200. It supports a proposal by the Hawai'i Community Development Authority (HCDA) to undertake repairs and improvements at Kewalo Basin. See Figure 1 for Project Location and Figure 2 for Project Area and Vicinity Map.

Section 343-5, HRS, establishes nine “triggers” that require environmental review under the statute. The specific trigger for environmental review of the proposed project is the use of state lands and funds. The project area and associated harbor infrastructure are owned by the State of Hawai'i, which will also fund the repairs and improvements. Based on the significance criteria set forth in Section 11-200-12 of the EIS Rules, the HCDA determined that the proposed action requires the preparation of an EIS. The proposed action would occur within the Special Management Area, which is regulated by the State of Hawai'i, Department of Business, Economic Development & Tourism (DBEDT), Office of Planning. The project compliance with HRS Chapter 343 will also fulfill future SMA Use Permit application requirements.

1.2 Project Summary

Project Name:	Kewalo Basin Repairs Project
Project Location:	Kaka'ako Ahupua'a, Kona District, Island of O'ahu, Hawai'i (Honolulu Judicial District)
Proposing Agency:	Hawai'i Community Development Authority 461 Cooke Street Honolulu, HI 96813 Phone: (808) 594-0300 Mr. Anthony Ching, Executive Director
EIS Preparer:	Helber Hastert & Fee, Planners 733 Bishop Street, Suite 2590 Honolulu, Hawai'i 96813 Phone: (808) 545-2055 Scott Ezer / Gail Renard
Accepting Authority:	Governor, State of Hawai'i
Proposed Action:	Repair and/or replacement of wharf infrastructure at Kewalo Basin harbor, including fixed piers, supporting piles, dockside utilities, and bulkheads

Introduction and Summary

Petition Area Tax Map:	(1) 2-1-058: pors. 001, 002, 035, 095
Land Owner	State of Hawai‘i, Hawai‘i Community Development Authority
Existing Land Uses:	Boat harbor
State Land Use District:	Conservation (<i>pending State Land Use Commission boundary interpretation</i>)
Primary Urban Center Development Plan:	Harbor
Zoning:	Kaka‘ako Community Development District (CDD)
Special Management Area (SMA):	Within the SMA administered by State Office of Planning (due to location within Kaka‘ako CDD)
Flood Insurance Rate Map Zone:	Fastlands adjacent to the harbor are within Special Flood Hazard Areas subject to inundation by the 1% annual chance flood. Fastlands to the east, west and south of the harbor are within Zone A (no base flood elevations determined). Fastlands to the north and east of the harbor are in Zone AE (base flood elevation of 4 feet determined) (See Figure 5).
Determination:	The Hawai‘i Community Development Authority has determined that the proposed action requires the preparation of an Environmental Impact Statement, based on the significance criteria set forth in Chapter 200, Title 11, State of Hawaii Department of Health.

1.3 Project Location

The project area is located in the Ahupua‘a of Kaka‘ako, Island of O‘ahu (Honolulu Judicial District), and consists of approximately 22 acres of submerged lands (see Figure 1). Figure 3 shows the project’s Tax Map parcels. O‘ahu’s primary visitor destination area of Waikiki is located approximately 1.5 miles to the east and the downtown central business district of Honolulu is a little over one mile to the northwest. The commercial, retail, residential, and industrial area of Kaka‘ako is located north and west of the project area. Primary vehicular access to the harbor is via Ala Moana Boulevard. Major landmarks in the vicinity are Ala Moana Beach Park to the east, Kewalo Basin Park to the south, and Ward Warehouse retail mall to the north.

The HCDA regulates planning and zoning for the 600-acre Kaka‘ako Community Development District (“Kaka‘ako CDD”), in which Kewalo Basin is located. Kewalo Basin is a mixed-use harbor consisting of 143 boat slips that are used for commercial (fishing and excursion) and pleasure craft. It has historically been an instrumental part of Honolulu’s



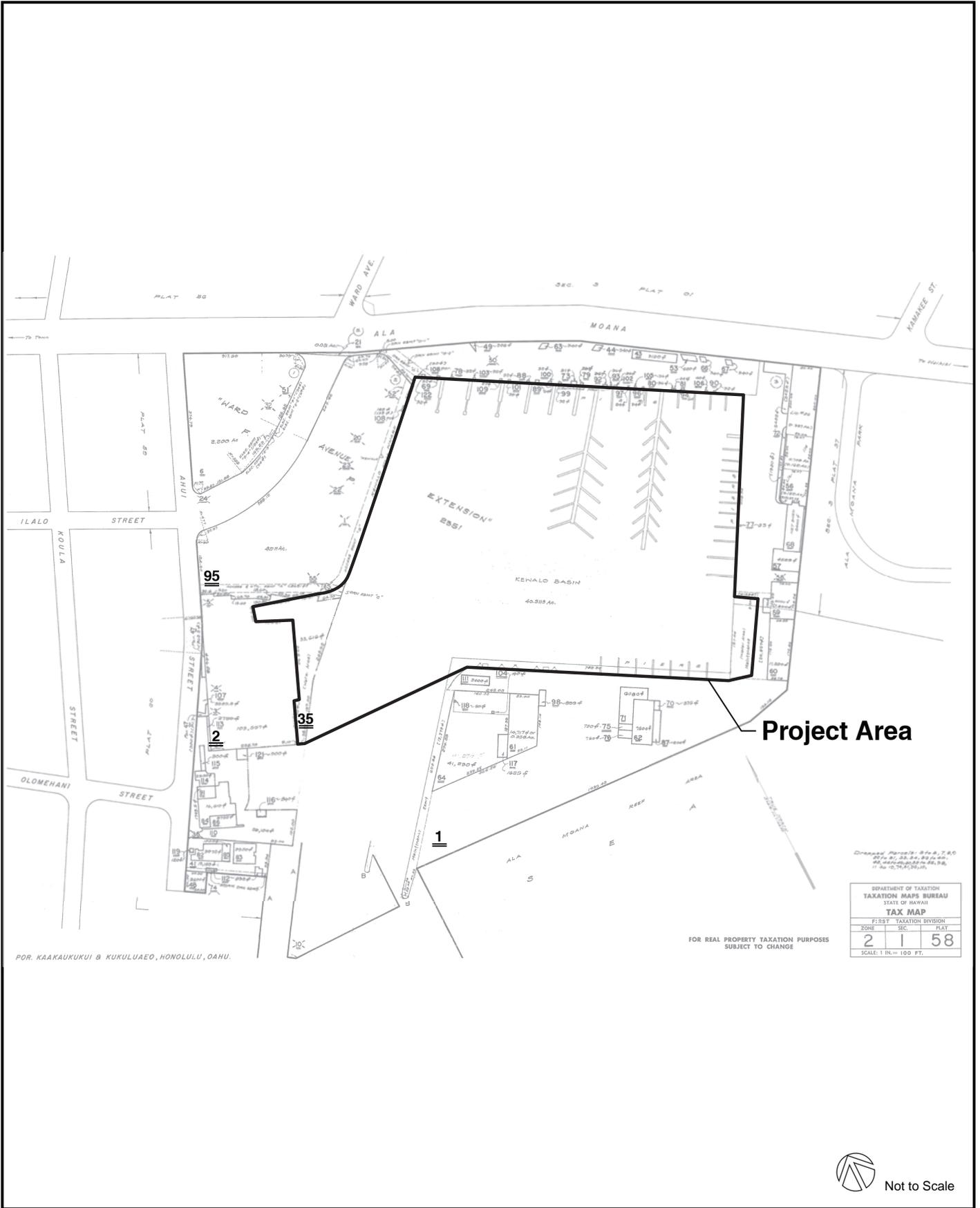
Kewalo Basin Repairs Project Environmental Impact Statement Preparation Notice
Location Map
 Hawai'i Community Development Authority

Figure 1



Kewalo Basin Repairs Project Environmental Impact Statement Preparation Notice
Project Area and Vicinity
 Hawai'i Community Development Authority

Figure 2



Kewalo Basin Repairs Project Environmental Impact Statement Preparation Notice

Figure 3

Tax Map Plat 2-1-58
Hawai'i Community Development Authority

Introduction and Summary

waterfront, serving as a small boat commercial harbor for intra-state commercial activities supplementing the inter-state commerce of larger harbors administered by the State of Hawai'i Department of Transportation (SDOT) Harbors Division. Previously controlled by the SDOT Harbors Division, Kewalo Basin and the surrounding State-owned fastlands were transferred to HCDA by Act 86 in 1990, and jurisdiction of the harbor was transferred on March 1, 2009. The harbor's submerged lands are now managed by Almar Management under contract to HCDA.

Land uses immediately surrounding the harbor include the Kewalo Basin Park, a National Oceanic and Atmospheric Administration (NOAA) Pacific Island Fisheries Science Center (PIFSC) facility, and a net drying shed on the peninsula enclosing the harbor to the south; the former Fisherman's Wharf restaurant, Honolulu Marine, Inc. shipyard, Kewalo Keiki Fishing Conservancy, John Dominis Restaurant, and the University of Hawai'i (UH) Kewalo Marine Laboratory on the west (see Figure 2 for locations).

The 5-acre Kewalo Basin Park was developed by HCDA and opened in September 1990. It is located on the peninsula that forms the harbor's southern boundary. Vehicular access is via Ala Moana Boulevard and includes parking for 110 cars. It is a popular site for surfing and fishing and its pedestrian promenade provides access to the waterfront.

NOAA PIFSC administers scientific research and monitoring programs that support conservation and management of marine resources. At Kewalo Basin, NOAA PIFSC maintains a shoreside research facility that includes offices, laboratories, a machine shop and storage for research equipment. The NOAA PIFSC compound also includes portable buildings for its Coral Reef Ecosystem Division, and saltwater wells for holding marine life such as pelagic fish, Hawaiian monk seals, and sea turtles. This use is scheduled to be consolidated with other NOAA facilities at its planned Ford Island Pacific Regional Center in 2013.

An 8,400-square foot open-sided pavilion ("net shed") is located south of the NOAA facility, adjacent to the Kewalo Basin Park. This facility was originally constructed as a place for commercial skipjack tuna ("aku") fishermen to dry their fishing nets. Due to changes in the fishing fleet at Kewalo Basin as well as changes in equipment (nylon nets are now used), this facility is no longer needed as a net drying shed. Currently, it is used for storage of the park's landscaping equipment and by a public charter school ("Halau Ku Mana") as a learning laboratory.

In January 2010, HCDA selected Advanced Restaurant Management (under "Kewalo Wharf, LLC") to lease the 7,400-square foot building that formerly housed the Fisherman's Wharf Restaurant, an iconic Honolulu nautical-themed restaurant. The lease conditions require the new restaurant operator to feature a menu and décor acknowledging the unique history of Kewalo Basin.

Introduction and Summary

Honolulu Marine, Inc. operates on the west side of the harbor, and performs repair and maintenance of fishing boats, barges, tugs, and U.S. Navy boats. Honolulu Marine will relocate from its current location to a site at Honolulu Harbor near Ke‘ehi Lagoon in 2013.

The Kewalo Keiki Fishing Conservancy is a non-profit organization that uses the cove area and adjacent lands seaward of Honolulu Marine, Inc.’s facilities to teach children fishing skills, conservation principles, and Hawaiian cultural traditions for the preservation of ocean resources.

The John Dominis restaurant is a 30+ year old waterfront seafood restaurant that is scheduled to close in April 2010. Its new owner, Ocean Investments LLC plans to demolish the existing structure and build a complex with a restaurant and meeting facilities.

The UH Kewalo Marine Laboratory is located at the seaward-most point on the west side of the harbor entrance channel. This facility includes a three-story, 17,400-square foot laboratory building used by full-time research teams and visiting investigators.

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2.0 PROJECT DESCRIPTION

2.1 Project Objectives and Need

The various piers and docks in Kewalo Basin were constructed incrementally over many decades, and most of the structures have been repaired, renovated and/or demolished and replaced since their original construction. Consequently, the existing structures range in age from approximately 12 to 15 years (catwalk piers on the ‘Ewa side of the Mauka Wharf reconstructed in the late 1990’s) to nearly 50 years (the finger piers on the Diamond Head side of the Mauka Wharf). Based on the results of a 2007 condition study commissioned by HCDA of selected structures within the harbor, there appears to be extensive deterioration of the structures’ topside elements, evidenced primarily by corrosion damage on the undersides of the pier decks.

Due to the deteriorated condition of the pier decks and other facilities within the harbor, HCDA proposes to repair or replace the existing harbor infrastructure. In addition to addressing the condition of the existing infrastructure, HCDA recognizes that demand for slips will increase as O‘ahu’s population grows over the next 20-30 years.

The resulting proposed action is intended to meet the following objectives:

- provide modernized berthing and mooring infrastructure and supporting pier-side utilities in Kewalo Basin harbor
- accommodate existing harbor users, including commercial fishing and excursion enterprises
- optimize berthing and mooring capacity of harbor

2.2 Project Description

In developing the scope of the proposed action, HCDA considered a number of alternatives, with input from various stakeholders comprising the Kewalo Basin Stakeholder Advisory Group (e.g., longliner, commercial fishermen, tour/excursion, recreational boaters, SDOT, Department of Land and Natural Resources, etc.). A discussion of alternatives considered, including alternatives that do not meet the objectives of the proposed action, is provided in Chapter 5.0.

The proposed action involves demolition and removal of all existing submerged structures, including Piers A, B, C and D (“Herringbone Pier”), the Front Row (Mauka Wharf) commercial vessel slips adjacent to Ala Moana Boulevard, and the Makai Wharf slips. The full build out redevelopment concept for Kewalo Basin increases moorage densities within the harbor, provides modernized amenities to boaters, improves operational efficiencies within the basin, and better integrates the berthing and mooring facilities with shore-side utilities and infrastructure.

Project Description

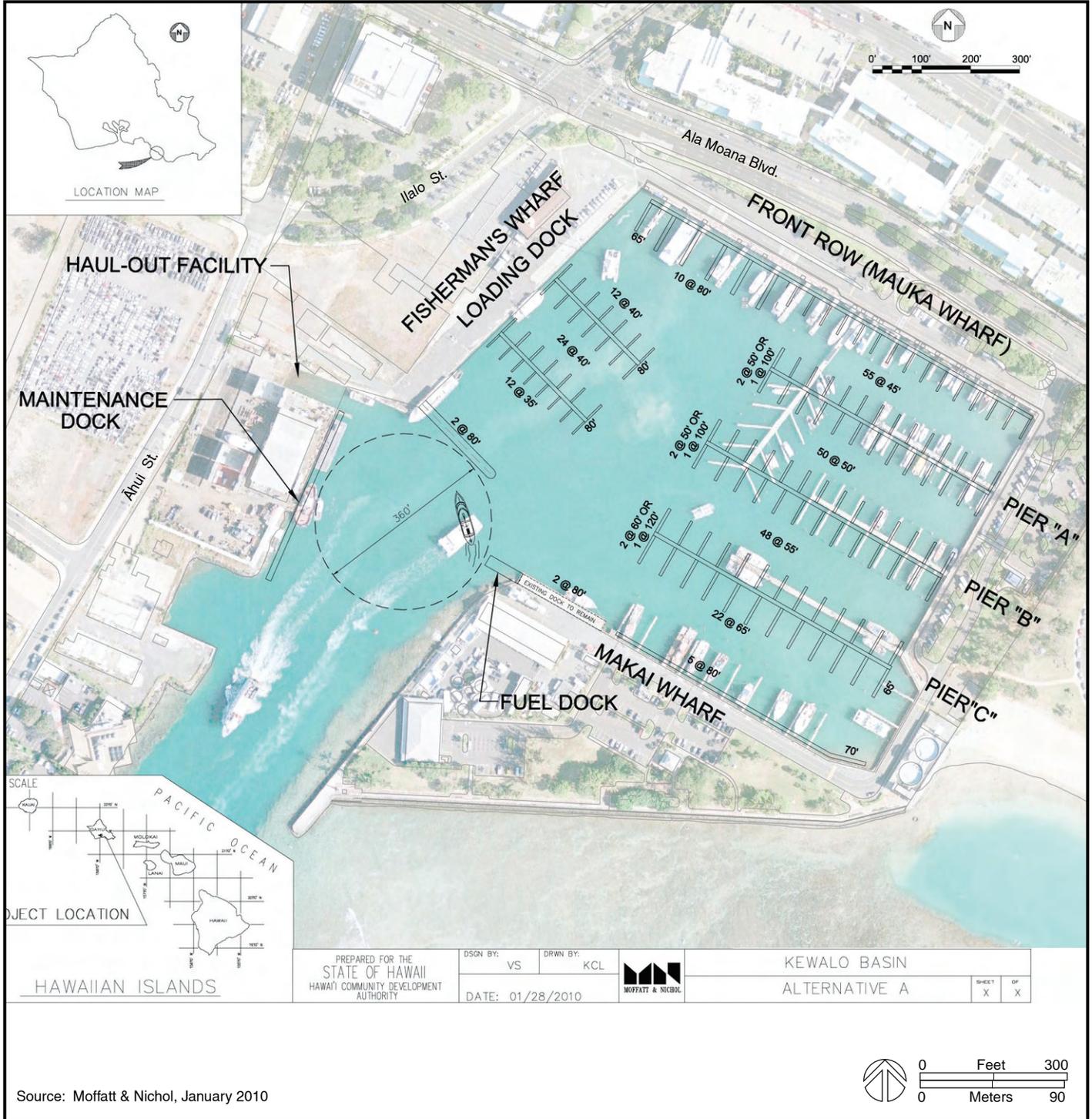
The proposed project includes the following key features (see Conceptual Buildout Plan in Figure 4):

- 250 slips ranging in dedicated lengths from 35 ft. to 120 ft., with a total length of moorage of approximately 13,100 ft. The structures represent an aerial coverage of 75,800 sq. ft., or about 7.7% of the harbor footprint.
- Replacement of Piers A, B and C with longer piers to compensate for the removal of the Herringbone Pier (Pier D);
- Reconstruction of the Front Row (Mauka Wharf) slips with reconfigured lengths and widths to optimize their usability and the capacity of the harbor;
- Construction of a longitudinal berth adjacent to the Makai Wharf;
- Construction of two new finger piers for small- to medium-sized commercial vessels extending from the Fisherman's Wharf loading dock;
- Construction of a single jetty pier at the *makai* end of the Fisherman's Wharf loading dock;
- Construction of a fueling dock pier, extending 'Ewa of the existing *makai* loading dock;
- Construction of a dedicated marine maintenance dock adjacent to the current Honolulu Marine Kewalo Shipyard facility;
- Maintenance and/or upgrade of the existing boat haul-out facility *mauka* of the current Honolulu Marine Kewalo Shipyard facility; and
- Modernization of the water and electric utilities that service the new slips. Proposed improvements include increasing the power to some of the larger slips from typical 30 ampere (amp) outlets, to 50/100/dual 100 amp service;
- Provide septic handling systems at the improved facility for the disposal of onboard septic waste directly into the municipal sanitary system. This may include a dock-based, mechanical pump-out station.
- Provide water supply and fire-fighting capabilities at the improved facility.

The new piers will either be fixed or floating; this will be determined in the upcoming design phase. Both fixed and floating piers will require the demolition of existing supporting piles and the installation of new piles. The number of new piles required will be determined by the type of piers (fixed or floating) constructed.

2.3 Project Schedule

Due to the availability of funding, the project will be implemented in phases over time; however, this HRS 343 document addresses the environmental effects of the full buildout project. The HCDA board of directors authorized the expenditure of \$4.9 million for major harbor improvements in 2009, which will be used to construct the initial phase of the project. By mid-2011, the design of the first phase will be completed and the required development entitlements and permits obtained, after which a construction contract may be



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Figure 4

Conceptual Buildout Plan

Hawai'i Community Development Authority

Project Description

awarded. Construction of the initial phase could be completed within a nine-month period (i.e., by the end of 2012).

The initial phase of the project represents approximately one-third of the full project scope, and will likely involve demolition of Piers B, C, and D, and replacement of their slips in fixed or floating piers. The exact configuration of the replacement piers will be determined by HCDA in consultation with the Kewalo Basin Stakeholder Advisory Group. Pier A would likely remain until it is replaced in a later construction phase, as its condition is still adequate.

Full buildout of the project is dependent on the future availability of funding; however, assuming a similar level of expenditure is authorized every 3-4 years, the project could easily be completed within 10 years.

2.4 Use of Public Lands or Funds

The project will occur on and above State-owned fastlands and submerged lands and State funds will be used to construct the project. Therefore, it is subject to the State's environmental review process. Chapter 7.0 discusses the rationale for preparing an EIS for the proposed action. This FEA/EISPN was prepared in compliance with Chapter 343, HRS, as amended, and the EIS regulations promulgated by Chapter 200 of Title 11, Hawai'i Department of Health (DOH).

3.0 AFFECTED ENVIRONMENT, SUMMARY OF IMPACTS AND PROPOSED MITIGATION MEASURES

The following is a description of the existing environment, preliminary assessment of potential impacts and potential measures to mitigate potential adverse impacts resulting from the proposed project. The affected resource areas are organized into major categories: the natural environment and the human environment.

3.1 Natural Environment

3.1.1 Climate

Honolulu's climate and that of the project area are typical of the leeward coastal lowlands--characterized by mild temperatures, abundant sunshine, infrequent severe storms, moderated humidity, and persistent north easterly trade winds. For most of Hawai'i there are two seasons, summer from May to October and winter from November to April. August is the warmest month, with an average high of 89° Fahrenheit (°F) and a low of 75°F, while the coolest month is February with an average high of 81°F and an average low of 65°F. Typically, the most rainfall occurs between the months of November and April. The mean annual rainfall is approximately 23 inches. The relative humidity ranges between 56 and 72 percent. Prevailing trade winds are from the northeast throughout most of the year, with occasional "Kona" winds bringing warm humid air from the south (EDAW, Inc. 2009).

3.1.2 Geology, Topography, and Soils

Geology. There are four major geomorphic provinces on the island of O'ahu: Ko'olau Range, Wai'ananae Range; Schofield Plateau, and Coastal Plain. The project area lies within the Honolulu coastal plain, which is primarily composed of marine sediments deposited on lavas when the sea levels were higher during the mid-Pleistocene era (Stearns 1985).

Topography. The topography of the fastland areas surrounding the project site is flat, with elevations between 5 and 6 feet above mean sea level (msl). The project will not alter the topography of the fastland areas.

Soils. The project area does not include any areas with exposed soils. The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) (formerly Soil Conservation Service) classifies the fastlands within the project site as "Fill Land, mixed" (FL). The NRCS describes Fill Land as consisting of areas filled with material dredged from the ocean or other sources. It typically occurs near Pearl Harbor and in Honolulu adjacent to the ocean, and is used for urban development. Because the project will have minimal disturbance to the fastland areas (generally limited to localized repairs to existing bulkheads and connecting floating docks to existing bulkheads), no adverse impacts to soils are expected.

3.1.3 Marine Resources

Bathymetry, Geology and Sediments. Kewalo Basin is a man-made, medium-draft harbor created by dredging the submerged reef and filling areas that form the south and east sides of the harbor basin. Its dredged depth is 20 feet; however natural siltation may have reduced the available draft in some parts of the harbor. The entrance channel, at the southwest corner of the harbor, is approximately 200 feet wide and 20 feet deep. A 150-foot jetty extends toward the southwest from the triangular filled area that forms the south boundary of the harbor and east boundary of the entrance channel. This jetty provides additional protection of the entrance channel.

An inner reef area with an average depth of 3 feet below mean lower low water (mllw) extends 1,500 feet east and west and about 900 feet south from shore.

A bathymetric survey of the harbor is being conducted for the project and will be described in the Draft EIS, which will also discuss the marine geological setting and characteristics of harbor sediments.

Waves and Coastal Processes. The entrance channel to Kewalo Basin is exposed to storm-generated waves from the south and west, which can make navigation difficult for small craft using the harbor. Navigational problems in the harbor are caused by: cross-currents generated in the channel in front of the existing jetty; peaking and breaking waves in the entrance channel; and cross-currents in the outer portion of the channel, caused by littoral currents along the outer edge of the reef, which create eddy currents (U. S. Army 1975). Because the construction activities will be limited to the confines of the harbor, no impacts to waves and coastal processes outside the entrance channel are anticipated.

Marine Biota. Marine biological resources are subject to regulation by Federal and State statutes. The proposed action has the potential to impact marine biological resources (e.g., benthic communities, fishes, marine mammals, and turtles), particularly during the construction period. Marine biological assessments, including surveys for benthic, fish and protected species, are being conducted for the proposed action. The assessments will include characterization of the marine environment within as well as outside the harbor mouth. The findings of the assessments will be reported in the Draft EIS and appropriate mitigation measures or best management practices (BMPs) will be coordinated with the resource and regulatory agencies having jurisdiction over the specific resources.

3.1.4 Natural Hazards

According to City and County of Honolulu Department of Emergency Management Evacuation Map 19, the project area is located within a coastal evacuation zone (i.e., for tsunami or storm surge events); the *mauka* boundary of the evacuation zone near Kewalo Basin is Ala Moana Boulevard (<http://www.honolulu.gov/dem/maps19.htm> accessed March 11, 2010). Evacuation Map 19 includes a note that the maximum rise of water level

within Kewalo Basin should not exceed four feet; however, all vessels should be secured, removed, or put out to sea due to the probability of strong currents and wave action.

Fastlands adjacent to the harbor are designated within Special Flood Hazard Areas subject to inundation by the 1% annual chance flood (see Figure 5). Fastlands to the east, west and south of the harbor are within Zone A (no base flood elevations determined). Fastlands to the north and east of the harbor are in Zone AE (base flood elevation of 4 feet determined).

3.1.5 Groundwater and Marine Water Resources

Groundwater Resources. The project site is not located over a source of drinking water and is not expected to affect groundwater resources. The project area does not include any surface water resources.

Marine Waters. The project area includes marine waters. The State of Hawai‘i classifies the marine waters of Māmalā Bay as Class A. Objectives of Class A waters are “...that their use for recreational purposes and aesthetic enjoyment be protected. Any other use shall be permitted as long as it is compatible with the protection and propagation of fish, shellfish, and wildlife, and with recreation in an on these waters. These waters shall not act as receiving waters for any discharge that has not received the best degree of treatment or control compatible with the criteria established for this class” (§11-54-3, HAR).

Honolulu Harbor/Shore Areas is listed on the State DOH’s Final 2004 List of Impaired Waters in Hawai‘i, prepared under the Clean Water Act as a §303(d) Listed Waterbody, which identifies “*waters which will not attain applicable water quality standards with technology-based controls alone (e.g., water quality limited).*” Primary pollutants identified by DOH in Kewalo Basin were nutrients, suspended solids, turbidity, and trash.

Harbor water quality sampling is being conducted as part of the EIS process and will be reported in the Draft EIS. The project will result in short-term impacts to marine water quality due to construction activities such as pile-driving. These activities are likely to increase turbidity in the immediate project area due to resuspension of sediments into the water column. The construction contractor will implement BMPs to minimize water quality impacts to the marine environment. Specific BMPs and mitigation measures will be determined in consultation with federal and state regulatory agencies during later permitting processes.

3.1.6 Terrestrial Biological Resources

All terrestrial areas within the project area consist of existing hardened wharf facilities. No terrestrial protected species (flora or fauna) are known to exist in the project area and none are expected to be adversely impacted by the proposed harbor improvements.



LEGEND

 Special Flood Hazard Areas Subject to Inundation by the 1% Annual Chance Flood

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations Determined.

ZONE AE Base Flood Elevations Determined.

Source: Panel 365 of 395 Map Number 15003C0365F
Federal Emergency Management Agency, September 30, 2004.



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Flood Insurance Rate Map (FIRM)
Hawai'i Community Development Authority

Figure 5

3.2 Human Environment

3.2.1 Roadways and Traffic

The project is expected to have short-term construction period impacts on roadways in the immediate vicinity, due to the transport of construction equipment and personnel. Because the improved pier facilities would not generate significant volumes of new vehicle trips, the project is not expected to have a significant impact on the adjacent roadways. A traffic assessment is being conducted for the project and its findings will be included in the Draft EIS.

3.2.2 Harbor Operations

Kewalo Basin is a commercial and recreational boat harbor first developed in the 1920s with construction of the Kewalo Basin Wharf, which presently fronts the former Fisherman's Wharf restaurant site. This was followed by construction of the *mauka* bulkhead and the Waikiki bulkhead. The current harbor area of approximately 22 acres has been maintained since the harbor was dredged and expanded during World War II, and the Makai revetment constructed in 1955. The Makai revetment enclosed the harbor and provides sheltering from Kona storms. The harbor is considered a medium-draft facility with minimum water depth of 20 feet.

Historically, the harbor has catered predominantly to commercial operations, and today, the harbor's tenants include a mix of commercial fishing, charter tour, pleasure craft, and research vessel operators. The commercial fishing fleet includes both holders of annual permits as well as transient vessels that hold permits of up to 90 days. Charter tour operators include fishing, parasailing, sailing, passenger cruise, and beach catamarans that operate out of Waikiki. Since Almar Management assumed management of the harbor in 2009, harbor occupancy has increased from less than 60 vessels to nearly 130 vessels as of March 2010.

Activities within the harbor generally begin before sunrise, with the departure of charter fishing vessels that return either at about noon or 4:00 PM. At about 8:00 a.m., the parasailing operators depart, returning in about one hour. These operators typically run 10-12 excursions per day. At about 9:00 a.m., the SCUBA diving charters begin departing. These operators runs 2-3 excursions per day, each about 3-4 hours long, with the last run returning by about 5:00 p.m. Diving charters also run night dives that generally return by 9:00 p.m. The beach catamarans depart at about 8:00 a.m. and return at sunset. There is a larger cruise operator ("Starlet"), which makes 2-3 runs per day, beginning at about 9:00-10:00 a.m., with the last run returning after sunset. There is no set schedule for transient fishing boat arrivals or departures.

The Draft EIS will evaluate the proposed action's potential impacts on harbor operations.

3.2.3 Noise

Temporary noise impacts will occur due to construction of the project by pile-driving associated with construction of new piers. The total number of piles to be driven and the duration of construction will depend on the final design, which is in progress. State Department of Health noise regulations and conditions for construction activities will be complied with during project construction. In the long term, increases in noise associated with peak hour traffic generated by the project should not impact noise-sensitive areas because traffic volumes are not predicted to significantly increase as a result of the proposed action. An environmental noise assessment is being prepared for the proposed action, and its findings will be included in the Draft EIS.

3.2.4 Air Quality

Ambient air quality pertains to the purity of the general outdoor atmosphere, external to buildings, to which the general public has access. The U.S. EPA has established national ambient air quality standards for six criteria pollutants: carbon monoxide, nitrogen dioxide, lead, ozone, and particulate matter. In addition to these pollutants, the State of Hawai'i has an ambient air standard for hydrogen sulfide. State air quality standards are generally more stringent than national standards.

The State DOH is responsible for regulating and monitoring pollution sources to ensure that the levels of criteria pollutants remain well below the state and federal ambient air quality standards. The DOH collects data on selected pollutants from a statewide network of monitoring stations. There are six air quality monitoring stations on the island of O'ahu. The two monitoring stations closest to the project area are the Honolulu station (approximately one mile to the north) and the Sand Island station (approximately one mile to the northwest). The Honolulu station is located in downtown Honolulu on Punchbowl Street in a busy commercial, business and government district. This station collects and monitors samples of sulfur dioxide (SO₂), carbon monoxide (CO), and particulate matter that are 10 microns and 2.5 microns or less in diameter (PM₁₀ and PM_{2.5}). The Sand Island station is located in a light industrial, commercial and recreational area about two miles downwind of downtown Honolulu near the entrance to the Sand Island State Recreation Area. This station collects and monitors samples of ozone (O₃) and particulate matter that is 2.5 microns or less in diameter (PM_{2.5}).

According to the State DOH's annual air quality data summary (State of Hawai'i 2008) in 2008, criteria air pollutant levels were well below state and federal ambient air quality standards at all state and local air quality monitoring stations.

The Proposed Action is not expected to significantly impact ambient air quality. Air quality data from the monitoring station nearest the Project Area and overall ambient air quality data for the State of Hawaii indicate that the Project Area is currently well within Federal

and State standards. The Proposed Action will not include new air pollution sources that require additional air quality permits. The principal source of short-term air quality impacts will be construction activity, including construction vehicle emissions and particulate emissions associated with earth moving operations. These impacts will be minor and of short duration. All construction activities will comply with the provisions of Hawaii Administrative Rules, §11-60.1-33 (Fugitive Dust).

3.2.5 Infrastructure and Utilities

The following utilities and services are currently available for harbor users: potable water, electricity (for purchase), comfort stations, used oil/oily waste disposal, and ice (for purchase). Fueling of vessels is done via pumper truck. There is currently no wastewater disposal infrastructure for onboard wastewater. Boats are required to pump out wastewater no closer than 3 miles offshore.

The project is not expected to adversely affect infrastructure and utility systems. Some utility systems serving the boat slips will be upgraded, including electrical, water, and wastewater; however none of the upgrades are expected to detrimentally affect current utility customers or require off-site upgrades to source, generation, transmission, or treatment facilities.

3.2.6 Public Services and Facilities

Although the proposed action would increase the intensity of activities at the harbor, the harbor and its existing activities are already served by State Department of Public Safety, and City police and fire protection services. The Draft EIS will include a more detailed description of the public facilities and services that may be affected by the proposed action.

3.2.7 Socio-Economic Characteristics

The project does not involve a substantial increase in the overall small boat slip capacity on O‘ahu or the State, and it will have negligible effects on the population of the island and the State. The proposed action is likely to have beneficial effects on the State’s economy, as it would create construction period jobs and increase long-term opportunities for marine-related commercial operators.

3.2.8 Recreational Resources

The south shore of O‘ahu in the vicinity of the project area provides many important land- and water-based recreational resources (see Figure 2). There are numerous surf breaks created by the shallow reef that extends east from the Kewalo Basin entrance channel to the end of Ala Moana Beach Park, the closest being “Kewalos,” located just east of the channel. There are also several surf breaks to the west of the entrance channel, fronting the Kaka‘ako Waterfront Park. “Point Panic,” just west of the entrance channel, is a popular break for body surfing. Access to the surf breaks closest to Kewalo Basin is via Kewalo Basin Park and Kaka‘ako Waterfront Park. Other nearby ocean recreational activities taking place

Affected Environment, Impacts and Mitigation

further off-shore include sailing, fishing, diving, canoe paddling, and parasailing. Kewalo Basin itself provides access to ocean-based recreational activities such as charter and sport fishing, SCUBA diving, parasailing, and a variety of ocean cruises and sailing opportunities.

Located on the peninsula that forms the harbor's southern boundary, the adjacent 5-acre Kewalo Basin Park is a public park that includes a waterfront pedestrian promenade, comfort station, shower facilities, observation and picnic areas, and parking. The park shares its vehicular access from Ala Moana Boulevard with Kewalo Basin harbor.

West of the harbor, the Kaka'ako Waterfront Park and Kaka'ako Makai Gateway Park provide over 36 acres of public park space. The 30-acre Kaka'ako Waterfront Park extends along the shoreline from the Kewalo Basin entrance channel west to the storm water facility at the end of Keawe Street. The University of Hawai'i John A. Burns School of Medicine forms the park's *mauka* boundary. Constructed on a former landfill site, the park consists of a rolling landscape, with a waterfront pedestrian promenade, comfort stations, amphitheater, and observation areas. The six-acre Kaka'ako Makai Gateway Park is located *mauka* of Kaka'ako Waterfront Park and provides a view corridor from Ala Moana Boulevard to the Waterfront Park. A two-acre passive recreation area and four-acre playing field are located in the Gateway Park.

Over 70 acres in size, the City and County's Ala Moana Regional Park is located adjacent to and east of Kewalo Basin. This urban regional park provides a beach area popular with families for recreation, exercise and socializing. The surrounding reef protects the nearshore waters from strong surf, creating calm water conditions appropriate for swimming, stand-up paddling, and water play. The park includes exercise equipment, tennis courts, gateball field, softball field, lawn bowling, concessions, restrooms, showers, lagoons, designated picnic areas, and parking. It is highly utilized throughout the day by local residents and visitors, and is especially popular for picnics and gatherings on weekends and holidays. At the east end of the park, a peninsula known as "Magic Island" extends seaward. Magic Island (officially "Aina Moana Beach Park"), created from fill material in the 1960s, has a breakwater-protected lagoon at its seaward end.

The State-owned Ala Wai Boat Harbor is located west of Ala Moana Regional Park and provides 699 berths. It includes areas used by Hawai'i Yacht Club, Waikiki Yacht Club, and Royal Hawaiian Ocean Racing Club.

The Draft EIS will evaluate the proposed action's potential impacts on nearby recreational resources.

3.2.9 Scenic and Visual Resources

The City and County of Honolulu's Primary Urban Center Development Plan (PUCDP) identifies the panoramic views from Kewalo Basin toward the Ko'olau Range and Punchbowl as views that should be preserved. The proposed project is not expected to impede these significant vistas because it continues the existing uses within the harbor, and will not include any structures on fastlands.

3.2.10 Archaeological, Historic and Cultural Resources

Assessments of the project's potential impacts on archaeological, historic, and cultural resources and cultural practices are being conducted and will be reported in the project's Draft EIS. Because the lands along the margins of Kewalo Basin, *makai* of Ala Moana Boulevard, consist of modern fill land, the project is not expected to adversely affect archaeological resources.

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4.0 RELATIONSHIP TO LAND USE PLANS, POLICIES AND CONTROLS

4.1 STATE

4.1.1 Hawai'i State Plan

The Hawai'i State Plan, embodied in Chapter 226, HRS, serves as a guide for the future long-range development of the State. The State Plan provides a basis for determining priorities, allocating limited resources, and improving coordination of State and County plans, policies, programs, projects, and regulatory activities. The Plan is comprised of three parts: Part I identifies the State's long-range goals, objectives, policies and priorities; Part II establishes a statewide planning system to coordinate and implement the Plan; and Part III establishes priority guidelines to address areas of statewide concern.

The following goals, objectives, policies, and priority guidelines of the Hawai'i State Plan may be relevant to the proposed action. A discussion of the project's consistency with the applicable State Plan goals, objectives, policies, and priority guidelines will be included in the Draft EIS.

Section 226-6 Objectives and policies for the economy – in general.

- (a)(1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawai'i's people.
- (a)(9) Foster greater cooperation and coordination between the government and private sectors in developing Hawai'i's employment and economic growth opportunities.
- (a)(10) Stimulate the development and expansion of economic activities which will benefit areas with substantial or expected employment problems.
- (a)(11) Maintain acceptable working conditions and standards for Hawai'i's workers.

Section 226-8 Objective and policies for the economy--visitor industry.

- (b)(4) Encourage cooperation and coordination between the government and private sectors in developing and maintaining well-designed, adequately serviced visitor industry and related developments which are sensitive to neighboring communities and activities.

Section 226-10 Objective and policies for the economy--potential growth activities.

- (b)(1) Facilitate investment and employment in economic activities that have the potential for growth such as diversified agriculture, aquaculture, apparel and textile manufacturing, film and television production, and energy and marine-related industries.

Section 226-11 Objectives and policies for the physical environment--land-based, shoreline, and marine resources.

- (b)(3) Take into account the physical attributes of areas when planning and designing activities and facilities.

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(b)(6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawai'i.

(b)(8) Pursue compatible relationships among activities, facilities, and natural resources.

Section 226-12 Objective and policies for the physical environment--scenic, natural beauty, and historic resources.

(b)(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.

(b)(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawai'i's ethnic and cultural heritage.

Section 226-13 Objectives and policies for the physical environment--land, air, and water quality.

(b)(2) Promote the proper management of Hawai'i's land and water resources.

(b)(3) Promote effective measures to achieve desired quality in Hawai'i's surface, ground, and coastal waters.

(b)(4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawai'i's people.

Section 226-14 Objective and policies for facility systems--in general.

(b)(1) Accommodate the needs of Hawai'i's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.

(b)(2) Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.

(b)(3) Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.

(b)(4) Pursue alternative methods of financing programs and projects and cost-saving techniques in the planning, construction, and maintenance of facility systems.

Section 226-16 Objective and policies for facility systems--water.

(b)(6) Promote water conservation programs and practices in government, private industry, and the general public to help ensure adequate water to meet long-term needs.

Section 226-17 Objectives and policies for facility systems--transportation.

(b)(6) Encourage transportation systems that serve to accommodate present and future development needs of communities.

(b)(12) Coordinate intergovernmental land use and transportation planning activities to ensure the timely delivery of supporting transportation infrastructure in order to accommodate planned growth objectives.

Section 226-23 Objective and policies for socio-cultural advancement--leisure.

(b)(3) Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance.

Section 226-25 Objective and policies for socio-cultural advancement—culture.

(b)(2) Support activities and conditions that promote cultural values, customs, and arts that enrich the lifestyles of Hawai'i's people and which are sensitive and responsive to family and community needs.

Section 226-104 Population growth and land resources priority guidelines.

(3) Ensure that adequate support services and facilities are provided to accommodate the desired distribution of future growth throughout the State.

(b)(8) Support the redevelopment of Kaka‘ako into a viable residential, industrial, and commercial community.

(b)(13) Protect and enhance Hawai‘i’s shoreline, open spaces, and scenic resources.

4.1.2 State Functional Plans

The Statewide planning system requires the development of State Functional Plans which are approved by the Governor of Hawai‘i. The State Functional Plans guide the implementation of State and County actions in the areas of agriculture, conservation lands, education, energy, health, higher education, historic preservation, housing, recreation, tourism, water resources development, transportation, employment, and human services. The proposed project is consistent with the following objectives, policies and implementing actions of the respective State Functional Plans. A discussion of the proposed project’s relevancy with the applicable State Functional Plans objectives, policies and implementing actions will be included in the Draft EIS.

State Transportation Functional Plan

Issue Area I: Congestion

Policy I.A.1: Increase transportation capacity and modernize transportation infrastructure in accordance with existing master plans and laws requiring accessibility for people with disabilities.

Issue Area II: Economic Development

Objective II.A: Development of a transportation infrastructure that supports economic development initiatives.

Policy II.A.1: Support State economic development initiatives.

Policy II.A.2: Support tourism and economic development.

State Recreation Functional Plan

Issue Area II: Mauka, Urban and Other Recreation Opportunities

Policy II-B(1): Involve the public in the planning, development, and operation of recreational facilities and programs.

Issue Area IV: Resource Conservation and Management

Policy IV-B(1): Enhance water quality to provide high-quality ocean recreation opportunities.

Policy IV-B(2): Protect, preserve, restore, and enhance recreational fishery resources.

State Tourism Functional Plan

Issue Area II: Physical Development

Objective II.A: Development and maintenance of well-designed visitor facilities and related developments which are sensitive to the environment, sensitive to neighboring communities and activities, and adequately serviced by infrastructure and support services.

Policy II.A.1: Maintain high standards of overall quality of existing visitor destination and attraction areas.

Policy II.A.2: Enhance tourism product and encourage continued development.

State Conservation Lands Functional Plan

Issue Area II: Management

Policy IIA(1)b: Review existing and future uses of public lands and forest reserves.

Implementing Action IIA(1)c: Evaluate applications for use of conservation lands and other uses to prevent adverse impacts on aquatic resources.

Policy IIC(1): Expand marine and fresh water fishing areas and promote fishing opportunities.

Policy IIC(2): Expand and enhance outdoor recreation opportunities and other resource uses.

4.1.3 State Land Use Law

The State Land Use Law, Chapter 205, HRS, is intended to preserve, protect and encourage the development of lands in the State for uses that are best suited to the public health and welfare of Hawai'i's people. The State Land Use Commission (LUC) classifies all lands in the State into four land use districts: Urban, Agricultural, Conservation, and Rural. The applicant submitted a letter to the LUC on February 9, 2010 to request interpretation of the Urban and Conservation District boundaries pertaining to Kewalo Basin. Determination of the land use classification, which is currently pending LUC review, will be addressed in the Draft EIS. The project will require a State Conservation District Use Permit from the Board of Land and Natural Resources if the LUC determines that Kewalo Basin is in the Conservation District.

4.1.4 Hawai'i Coastal Zone Management Program

The National Coastal Zone Management Program was created through passage of the Coastal Zone Management Act of 1972. Hawai'i's Coastal Zone Management (CZM) Program, adopted as Chapter 205A, HRS, provides a basis for protecting, restoring and responsibly developing coastal communities and resources. The objectives and policies of the Hawai'i CZM Program encompass broad concerns such as impact on recreational resources, historic and archaeological resources, coastal scenic resources and open space, coastal ecosystems, coastal hazards, and the management of development. A discussion of the project's consistency with the following objectives and policies of the CZM Program will be included in the Draft EIS.

(1) *Recreational Resources*

Objective:

Provide coastal recreational opportunities accessible to the public.

Policies:

(A) *Improve coordination and funding of coastal recreational planning and management; and*

(B) *Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:*

(i) *Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*

(ii) *Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;*

(iii) *Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*

(iv) *Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*

(v) *Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;*

(vi) *Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;*

(vii) *Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and*

(viii) *Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, county planning commissions; and crediting such dedication against the requirements of Section 46-6, HRS.*

(2) *Historic Resources*

Objective:

Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

(A) *Identify and analyze significant archaeological resources;*

(B) *Maximize information retention through preservation of remains and artifacts or salvage operations; and*

(C) *Support state goals for protection, restoration, interpretation, and display of historic resources.*

Relationship to Land Use Plans, Policies and Controls

(3) *Scenic and Open Space Resources*

Objective:

Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

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

(4) *Coastal Ecosystems*

Objective:

Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

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

(5) *Economic Uses*

Objective:

Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

- (A) Concentrate coastal dependent development in appropriate areas;*
- (B) Ensure that coastal dependent developments such as harbors and ports, and coastal related development such as visitor facilities and energy generating facilities, are located, designed, and*

Relationship to Land Use Plans, Policies and Controls

- constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and*
- (C) *Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:*
- (i) Use of presently designated locations is not feasible;*
 - (ii) Adverse environmental effects are minimized; and*
 - (iii) The development is important to the State's economy.*

(6) *Coastal Hazards*

Objective:

Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence and pollution.

Policies:

- (A) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;*
- (B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint pollution hazards;*
- (C) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and*
- (D) Prevent coastal flooding from inland projects.*

(7) *Managing Development*

Objective:

Improve the development review process, communication and public participation in the management of coastal resource and hazards.

Policies:

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

(8) *Public Participation*

Objective:

Stimulate public awareness, education, and participation in coastal management.

Policies:

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

(9) Beach Protection

Objective:

Protect beaches for public use and recreation.

Policies:

- (A) Locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion;*
- (B) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and*
- (C) Minimize the construction of public erosion-protection structures seaward of the shoreline.*

(10) Marine Resources

Objective:

Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

Policies:

- (A) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;*
- (B) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;*
- (C) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;*
- (D) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and*
- (E) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.*

4.2 City and County of Honolulu

Pursuant to Act 153, Session Laws of Hawai'i 1976, HCDA has the overriding authority to supersede the County's ordinances and adopted land use policies, including the County's

General Plan, development plan and zoning controls. HCDA maintains jurisdiction for land use planning and zoning authority within the Kaka‘ako CDD, and regulates development in the Makai Area through the agency’s adopted development plan (i.e., the *Kaka‘ako Makai Area Plan*) and development rules (HAR Chapter 15-23, Kaka‘ako Community Development District Rules for the Makai Area). See Figure 6 for Kaka‘ako CDD boundaries.

4.2.1 General Plan

The *General Plan for the City and County of Honolulu* (adopted 1977) and last amended in October 2002, is a statement of the long-range social, economic, environmental, and design objectives for the general welfare and prosperity of the people of O‘ahu. The Plan is also a statement of the broad policies that facilitate the attainment of the objectives of the Plan. Eleven (11) subject areas provide the framework for the City’s expression of public policy concerning the needs of the people and functions of government. These areas include population; economic activity; the natural environment; housing; transportation and utilities; energy; physical development and urban design; public safety, health and education; culture and recreation; and government operations and fiscal management. The objectives and policies of the *General Plan* that are relevant to the proposed project are as follows. A discussion of the project’s consistency with the following objectives and policies of the *General Plan* will be included in the Draft EIS.

I. Population

Objective B: To plan for future population growth.

Policy 2: Provide adequate support facilities to accommodate future growth in the number of visitors to O‘ahu.

II. Economic Activity

Objective A: To promote employment opportunities that will enable all the people of O‘ahu to attain a decent standard of living.

Policy 1: Encourage the growth and diversification of O‘ahu’s economic base.

Policy 2: Encourage the development of small businesses and larger industries which will contribute to the economic and social well-being of O‘ahu residents.

Objective D: To make full use of the economic resources of the sea.

Policy 1: Assist the fishing industry to maintain its viability.

Policy 2: Encourage the development of aquaculture, ocean research, and other ocean-related industries.

III. Natural Environment

Objective A: To protect and preserve the natural environment.

Policy 7: Protect the natural environment from damaging levels of air, water, and noise pollution.

Policy 8: Protect plants, birds, and other animals that are unique to the State of Hawai‘i and the island of O‘ahu.

Policy 10: Increase public awareness and appreciation of O‘ahu’s land, air, and water resources.



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 Hawai'i Community Development Authority

Figure 6

Relationship to Land Use Plans, Policies and Controls

Objective B: To preserve and enhance the natural monuments and scenic views of O‘ahu for the benefit of both residents and visitors.

Policy 1: Protect the Island’s well-known resources: its mountains and craters; forests and watershed areas; marshes, rivers, and streams; shoreline, fishponds, and bays; and reefs and offshore islands.

Policy 2: Protect O‘ahu’s scenic views, especially those seen from highly developed and heavily traveled areas.

Policy 4: Provide opportunities for recreational and educational use and physical contact with O‘ahu’s natural environmental.

VII. Physical Development and Urban Design

Objective B: To develop Honolulu (Wai‘alae-Kāhala to Hālawā), ‘Aiea, and Pearl City as the Island’s primary urban center.

Policy 8: Foster the development of Honolulu’s waterfront as the State’s major port and maritime center, as a people-oriented mixed-use area, and as a major recreation area.

Policy 9: Facilitate the redevelopment of Kaka‘ako as a major residential, as well as commercial and light-industrial area.

VIII. Public Safety

Objective B: To protect the people of O‘ahu and their property against natural disasters and other emergencies, traffic and fire hazards, and unsafe conditions.

Policy 2: Require all developments in areas subject to floods and tsunamis to be located and constructed in a manner that will not create any health or safety hazard.

X. Culture and Recreation

Objective B: To protect O‘ahu’s cultural, historic, architectural, and archaeological resources.

Policy 2: Identify, and to the extent possible, preserve and restore buildings, sites, and areas of social, cultural, historic, architectural, and archaeological significance.

Policy 5: Seek public and private funds, and public participation and support, to protect social, cultural, historic, architectural, and archaeological resources.

Objective D: To provide a wide range of recreational facilities and services that are readily available to all residents of Oahu.

Policy 2: Develop and maintain a system of regional parks and specialized recreation facilities.

Policy 8: Encourage ocean and water-oriented recreation activities that do not adversely impact on the natural environment.

Policy 12: Provide for safe and secure use of public parks, beaches, and recreation facilities.

Policy 13: Encourage the safe use of O‘ahu’s ocean environments.

XI. Government Operations and Fiscal Management

Objective A: To promote increased efficiency, effectiveness, and responsiveness in the provision of government services by the City and County of Honolulu.

Policy 3: Ensure that government attitudes, actions, and services are sensitive to community needs and concerns.

4.2.2 City and County of Honolulu Primary Urban Center Plan

The City and County of Honolulu's Development Plan (DP) program provides a conceptual scheme framework for implementing the objectives and policies of the *General Plan* on an areawide basis. Eight (8) geographical DP areas have been established on O'ahu, of which community-oriented plans have been established for each area, including the Primary Urban Center DP area where Kewalo Basin is located. The eight (8) community-oriented plans respond to specific conditions and community values of each region, and are intended to help guide public policy, investment, and decision-making over the next 20 years.

The *Primary Urban Center Development Plan* (PUCDP) was adopted in 2004 and is codified as Ordinance No. 04-14, Revised Ordinances of Honolulu. The Primary Urban Center encompasses O'ahu's most diverse and populous region, extending from Kahala to Pearl City along O'ahu's southern coastline. The PUCDP's vision statement and implementing policies support retaining the qualities that attract both residents and visitors, while encouraging growth and redevelopment to accommodate the projected increases in jobs and residential population.

This section provides an overview of the vision and guidelines of the *PUCDP* as it relates to the proposed project. Although conformance with the *PUCDP* is not required for projects within the Kaka'ako Community Development District, the proposed project is consistent with the following concepts expressed in the *PUCDP*. Discussion of how the project is consistent with the vision, land use policies, principles, and guidelines of the *PUCDP* will be included in the Draft EIS.

- *Protects and enhances Honolulu's natural, cultural and scenic resources, through the active management and improvement of coastal waters and the enhancement of culturally- and historically-important sites.*
- *Identifies significant panoramic views, including mauka view corridors from the shoreline such as at Kewalo Basin, that should be preserved.*
- *Maintains the PUC as O'ahu's primary employment center and center for many commercial, industrial and transportation-related functions.*
- *Supports attractions that are of interest to both residents and visitors in the Ala Moana/Kaka'ako/ Downtown corridor, such as opportunities for State-sponsored waterfront commercial and cultural attractions around the Kewalo Basin area.*
- *Recognizes the recommendation of the O'ahu Commercial Harbors 2020 Master Plan for Kewalo Basin to gradually transition to ocean-based tourist activities, and HCDA's role in the development of shoreside land uses.*

The PUCDP Significant Panoramic Views Map (Map A:1) identifies the panoramic views from Kewalo Basin and Kewalo Peninsula toward the Ko‘olau Range and Punchbowl as significant *mauka-makai* views that should be preserved. The proposed project is limited to improvements within the existing harbor, and is not expected to obstruct or impede panoramic views from public vantage points at Kewalo Basin.

The PUCDP Land Use Map for the PUC-Central area (Map A:5) illustrates the desired long-range land use pattern for the region. Kewalo Basin is identified with a harbor symbol on the PUC-Central Land Use Map (see Figure 7).

4.2.3 City and County of Honolulu Land Use Ordinance

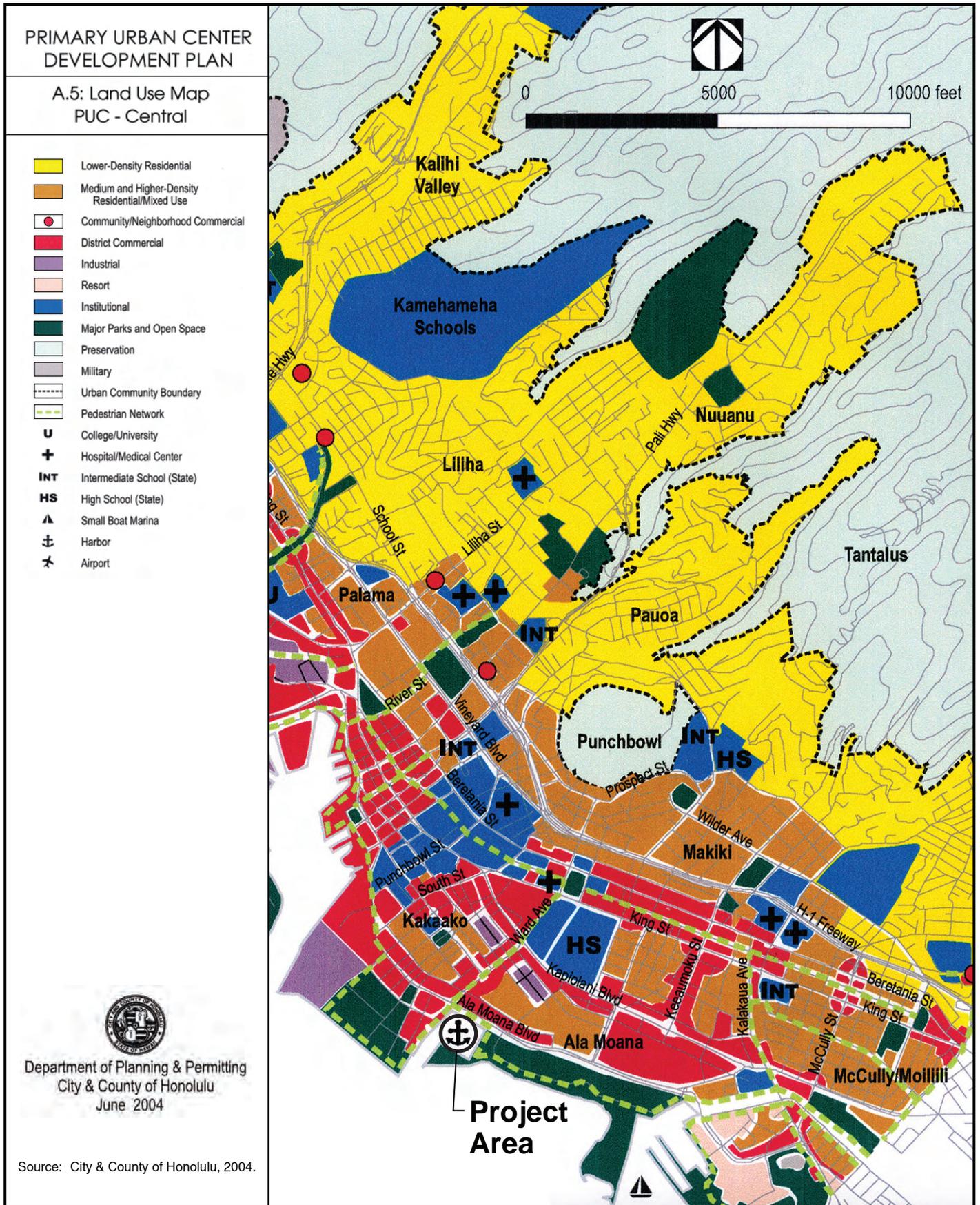
The City and County of Honolulu Land Use Ordinance (LUO) regulates land use in accordance with adopted land use policies, including the General Plan and Development Plans. The provisions are also referred to as the zoning ordinance. Zoning designations are shown on the zoning maps for the City. Under the current LUO zoning, Kewalo Basin and the surrounding Kaka‘ako Makai Area is identified as the “Kaka‘ako Community Development District.” Development within the Kaka‘ako CDD is regulated by HCDA, such that the provisions of the LUO do not apply to properties within the Kaka‘ako CDD (HAR Section 15-23-8 (f)).

4.2.4 City and County of Honolulu Special Management Area and Shoreline Setback

The Hawaii Coastal Zone Management Program embodied in Chapter 205A, HRS contains the general objectives and policies upon which all Counties within the State have structured specific legislation creating Special Management Areas (SMA). Any development within the SMA requires an SMA Use Permit. SMA Use permits on O‘ahu are typically administered by the City and County of Honolulu Department of Planning and Permitting pursuant to Chapter 25, Revised Ordinances of Honolulu, as amended, except for the designated Community Development Districts (Kaka‘ako and Kalaeloa) which are administered by the State of Hawai‘i OP.

In accordance with Section 206E-5, HRS, OP has the administrative authority to process SMA and Shoreline Setback reviews for development within the designated Community Developments Districts. Any activity within the SMA boundary that meets the definition of “development” in these designated areas requires coordination and/or approval from the OP, CZM Program (HAR Chapter 15-150). The proposed project is located within the boundaries of the SMA (see Figure 7), and will require a SMA Use Permit from the State Office of Planning (OP). All phases of the proposed project will be in accordance with the rules and regulations of the SMA. A discussion of the Project’s consistency with the objectives and policies of the CZM Program will be included in the Draft EIS.

OP is also responsible for administering the State's Shoreline Setback law within the designated Community Development Districts. The shoreline setback area is defined as the



Kewalo Basin Repairs Project Environmental Impact Statement Preparation Notice

Figure 7

PUC Central Development Plan Land Use Map

Hawai'i Community Development Authority

land area located 40 feet inland of the certified shoreline. Any development or related activity (including the removal of sand, rocks and soil) is prohibited within the shoreline setback area. The proposed project will comply with the shoreline setback rules and will not involve any development or related activities within the shoreline setback area.

4.3 Other

4.3.1 O'ahu Commercial Harbors 2020 Master Plan

The *O'ahu Commercial Harbors 2020 Master Plan* (1997) is the State of Hawai'i Department of Transportation's long-range guide for the development and maintenance of safe, efficient and economically viable harbor facilities at O'ahu's commercial ports. The Plan addresses O'ahu's harbors – including Honolulu, Kewalo Basin and Barbers Point harbors – as dependent harbors, whose activities are closely entwined. Recommendations for Kewalo Basin presented in the 2020 Master Plan include a gradual transition to ocean-based tourist activities following the consolidation of commercial fishing operations to Honolulu Harbor (i.e., new fishing village at Pier 36-38) and Ke'ehi Lagoon. Navigation improvements (i.e., jetties and channel dredging) addressing issues of cross currents, eddies and high surf at the Kewalo Basin channel entrance that affect vessel maneuverability and harbor access are also recommended. A discussion of the Project's consistency with the objectives and policies of the 2020 Master Plan will be included in the Draft EIS.

4.3.2 Kaka'ako Makai Area Plan

The Hawai'i State Legislature created the HCDA in 1976 to plan for and guide the timely revitalization of underdeveloped communities in the State, and designated the Kaka'ako area as the Authority's first Community Development District. Operating under legislative mandate, HCDA is responsible for conducting comprehensive planning, administering land use and zoning regulations, and directly promoting economic development in designated community development districts, including the Kaka'ako and Kalaeloa CDDs.

In 1982, following an intensive five-year planning process, HCDA adopted the *Kaka'ako Community Development District Plan* to serve as the basis for public and private development in Kaka'ako. The development plan was subsequently amended to include the Kaka'ako waterfront area, and is currently comprised of two documents that set forth the development objectives and rationale for the future redevelopment of the area: the *Kaka'ako Mauka Area Plan* (covering the area mauka of Ala Moana Boulevard) and the *Kaka'ako Makai Area Plan* (covering the lands makai of Ala Moana Boulevard). As originally established in 1982, the Makai Area included approximately 133 acres between Kewalo Basin and Pier 4. The boundaries of the Makai Area, and the content of the *Makai Area Plan*, have been modified over the years. In 1987, the State Legislature modified the Makai Area boundaries to include all lands makai of Ala Moana Boulevard from Ala Moana Park to Aloha Tower, expanding the Makai Area from 133 acres to 227 acres. In 1990, the acreage of the Makai Area was reduced to 221 acres when waterfront property adjacent to Aloha Tower was reassigned to

the Aloha Tower Development Corporation (note: HCDA retained jurisdiction of the Hawaiian Electric Company (HECO) property makai of Nimitz Highway). The Makai Area boundary was most recently revised in 2006. The current boundaries encompass 220 acres, spanning the land area from Kewalo Basin and Honolulu Harbor makai of Ala Moana Boulevard, and the HECO property in the vicinity of Aloha Tower/Pier 6 (see Figure 6 for current boundaries of the Kaka'ako CDD Makai Area).

The *Kaka'ako Makai Area Plan* (2005) sets forth the overall vision for the Makai Area: “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” (HCDA 2005, 22). In addition to the future development of residential, commercial and recreational amenities, the Plan assumes the continued use of the active waterfront. The *Makai Area Plan* supports maritime activities along Honolulu's waterfront, specifying that Kewalo Basin has been “set aside for the public to view and enjoy the working wharf aspect of the waterfront” (HCDA 2005, 23). According to the Plan, Kewalo Basin should continue to support fishing and tourist-related boating activities, although existing fishing services along the west edge of the harbor should be relocated to minimize potential conflicts with future entertainment, restaurants, residential and retail uses planned adjacent to the harbor.

HCDA is currently working with the Kaka'ako Makai Community Planning Advisory Council (CPAC) and other stakeholders to update the *Kaka'ako Makai Area Plan*. The planning process is expected to be completed by December 2010.

4.3.3 Kaka'ako Makai Community Planning Advisory Council Vision and Guiding Principles

The Kaka'ako Makai CPAC was convened in 2007 as an advisory group to work with HCDA and “meaningfully participate in the development, acceptance, and implementation of any future plans for the development of Kaka'ako Makai” (HCR 30, 2006). The Vision Statement and Guiding Principles developed by and adopted by the CPAC puts forth the desired future for Kaka'ako's waterfront lands. A discussion of the Project's consistency with the CPAC's future vision and guiding principles for the Kaka'ako Makai area will be included in the Draft EIS.

The Vision for Kaka'ako Makai recognizes the makai area as the community's gathering place:

“Kaka'ako Makai is the community's gathering place. A safe place that welcomes all people, from keiki to kūpuna, with enriching cultural, recreational and educational public uses. A special place that continues the shoreline lei of green with scenic beauty, connects panoramic vistas mauka to makai, and encourages ecological integrity of land, air and sea. Kaka'ako Makai honors, celebrates and preserves its historic sense of place, Hawaiian cultural values and our unique island lifestyle for present families and future generations.”

The Guiding Principles establish guidance for social, economic, cultural and environmental conditions that should be considered when planning for the area. The Guiding Principles address 14 specific topic areas, including coastal and marine resources, expanded park and green space, public accessibility, and uses at Kewalo Basin. The guiding principles for the Kaka‘ako Makai area that are applicable to the proposed project are listed as follows:

Community Gathering Place

Establish Kaka‘ako Makai as a gathering place where community and culture converge in response to the natural scenic beauty of the green shoreline open space.

(2) Provide enriching public recreational, cultural and educational opportunities for residents and visitors alike through Kaka‘ako Makai’s scenic coastal and marine environment, the Native Hawaiian cultural heritage, compatible facilities and activities, and historic sites and settings.

Hawaiian Culture and Values of the Abupua‘a

Base the framework for planning, decision-making and implementation of the Kaka‘ako Makai master plan on Native Hawaiian values and traditional and customary rights and practices protected by the State.

(2) Incorporate the abupua‘a concept and spirit of caring for, conserving and preserving the self-sustaining resource systems necessary for life, including the land that provides sustenance and shelter, the natural elements of air, wind and rain extending beyond the mountain peaks and streams of pure water, and the ocean from the shoreline to beyond the reef where fish are caught.

(4) Assure that the planning of collective or individual traditional features, settings, and activities will be overseen by Hawaiian historic and cultural experts to prevent misinterpretation or exploitation.

Open View Planes

Protect, preserve and perpetuate Kaka‘ako Makai’s open view planes from the mountains to the sea as an inherent value of the Hawaiian abupua‘a and an important public asset for residents, visitors and future generations.

(1) Ensure planning and development safeguards to identify, document, retain, restore and protect Makai-Mauka and Diamond Head-‘Ewa open view planes to the Ko‘olau mountains, Diamond Head (Leahi) and the Wai‘anae Mountains as seen from the view vantage areas and vicinities of Kaka‘ako Makai’s public lands and Kewalo Basin Harbor.

Coastal and Marine Resources

Preserve, restore and maintain Kaka‘ako Makai’s valuable coastal and marine resources for present and future generations.

(1) Enable the monitoring, protection, restoration, and conservation of natural coastal and ocean resources, including reef and marine life, through responsible stewardship and sustainable practices.

Relationship to Land Use Plans, Policies and Controls

(2) Protect and sustain the coastal environment for cultural uses including fishing, ocean gathering, surfing and ocean navigation.

Expanded Park and Green Space

(1) Implement the Hawaiian values of the ahupua'a and malama 'aina by preserving shoreline open space, protecting scenic coastal and marine resources, and respecting the natural interaction of people, land, ocean and air.

Public Safety, Health and Welfare

Ensure that Kaka'ako Makai is a safe and secure place for residents and visitors.

(1) Keep public use areas safe day and night for public comfort and enjoyment.

(2) Ensure that exposure to land and ocean is environmentally safe for people and marine life by assuring timely investigation, determination, and remediation of contaminants.

(3) Ensure that Kaka'ako Makai remains free and clear of elements, activities and facilities that may be potentially harmful to the natural environment and public well-being, including laboratories containing and experimenting with Level 3 or higher bio-hazardous pathogens and/or biological toxins known to have the potential to pose a severe threat to public health and safety.

Public Land Use Legislation – Public Use of Public Lands in the Public Interest

Recognize and respect the effort and intent of the Hawaii State Legislature to uphold the greater public interest by ensuring and sustaining public uses on Kaka'ako Makai State public lands for the greater public good.

(2) Demonstrate commitment to serve the highest needs and aspirations of Hawaii's people and the long-term good of Hawaii's residents and future generations through community-based planning.

(3) Restore the site-dependent use of Kewalo Basin Cove to the Kewalo Keiki Fishing Conservancy.

Kewalo Basin

Ensure that Kewalo Basin Harbor's unique identity is retained with continued small commercial fishing and excursion boat uses, keiki fishing and marine conservation, marine research and education, and accessible green park open space expanding the lei of green between Ala Moana Park and Kaka'ako Waterfront Park.

(1) Enable continued functional commercial boating uses at Kewalo Basin Harbor and preserve the beneficial relationships between the existing small commercial fishing and excursion boat businesses and land-based maritime support service businesses.

(2) Ensure that Kewalo Basin will continue as a State of Hawaii commercial harbor and valuable public facility asset by repairing, maintaining and enhancing the harbor for small commercial fishing and excursion boat use.

(3) Ensure the protected use of Kewalo Basin Cove for the Kewalo Keiki Fishing Conservancy keiki fishing and marine conservation programs.

Site Design Guidelines: A Hawaiian Sense of Place in Landscape, Setting and Design

Ensure that Kaka'ako Makai's public use facilities are compatible in placement, architectural form, and functional design within the landscape of the shoreline gathering place.

(1) Identify, protect, preserve, restore, rehabilitate, interpret and celebrate Kaka'ako Makai's historic sites, facilities, settings, and locations.

(2) Maintain the quality of coastal environmental elements including natural light, air and prevailing winds.

(3) Mandate sustainability principles, conservation technologies, and green building standards for buildings, grounds and infrastructure.

Community/Government Planning Partnership

The Kaka'ako Makai CPAC places the public interest first and foremost, and will strive to uphold the greater good of the community in partnership with the HCDA as the public oversight agency by:

(1) Openly working with the community, the HCDA and the HCDA's planning consultants as guaranteed by government commitment to ongoing community representation and involvement throughout the master planning process.

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5.0 ALTERNATIVES CONSIDERED

This section has been prepared following guidance provided by HAR §11-200-17 (F).

In addition to the Proposed Action, several alternatives were considered and evaluated for their feasibility and their ability to meet project objectives:

- No Action Alternative (i.e., status quo)
- In-Kind Replacement
- Alternative Layout
- Other Alternatives

5.1 No Action Alternative

The No Action Alternative assumes that the harbor would continue to be utilized in its present arrangement and condition. Under this alternative, no capital expenditures would be made to carry out any long-term recapitalization of the aging and deteriorating structures within the harbor. Based on its current state of disrepair, this alternative is not considered a feasible approach since it does not safeguard the users of the harbor facilities (tenants and customers) or preserve the capital investment within the harbor. Most importantly, the No Action alternative would not meet the project purpose and objectives and thus cannot be considered a “reasonable” alternative.

5.2 In-Kind Replacement

The In-Kind Replacement alternative would demolish the existing piers and replace them in their present layout. This would involve removal and replacement of only the above-water components (e.g., longitudinal beams and deck panels). This would not achieve the project objectives of optimizing the capacity of the slips in the harbor and thus cannot be considered a “reasonable” alternative.

5.3 Alternate Layouts

HCDA also considered a number of alternate configurations of the harbor’s pier infrastructure. These alternate layouts were presented to the Kewalo Basin Stakeholder Advisory Group, which provided input and suggestions. The Kewalo Advisory Group identified potential variations of the harbor design, which would result in slightly different total slips and lineal feet of berthing than the proposed action. These alternate layout alternatives are discussed below.

5.3.1 Makai Wharf Finger Piers

In this alternate layout, two finger piers extending *manka* into the harbor from the Makai Wharf would be constructed in lieu of Pier “C.” The other elements of the proposed action

Alternatives Considered

would remain. Under this alternative, a total of 223 slips would be constructed, or 27 fewer slips than under the proposed action. This alternative would employ similar construction methodology to the proposed action, with similar environmental impacts. Because this alternative involves fewer slips and lineal feet of berthing, it is likely that the overall construction period would be shorter, resulting in reduced intensity of noise, marine water quality and biological impacts. Operational period traffic volumes generated from the harbor users would also be reduced from the proposed action, due to the smaller number of slips. This alternative will not be carried through detailed environmental analysis in the Draft EIS because the Draft EIS will evaluate potential impacts of the maximum development scenario (i.e., 250 slips as in the proposed action).

5.3.2 Large Excursion Vessel Berth

A second alternate layout for the harbor berthing and mooring infrastructure involved accommodation of a 250-foot excursion vessel in the harbor. In consideration of the navigability of such a large vessel, and due to limited space within the harbor, the only practical areas to moor her would be alongside the proposed Maintenance Dock situated adjacent to the current Honolulu Marine facility, or alongside the Fisherman's Wharf Loading Dock. The former location would change the intended use of the Maintenance Facility and limit the opportunities of the commercial and pleasure craft tenants to provide necessary maintenance to their vessels; the latter location would require dedicating the Fisherman's Wharf Loading Dock to a single large vessel in lieu of the proposed finger piers, resulting in a decrease of 52 slips for the full buildout of the project.

Furthermore, the use of the channel would likely need to be restricted to one-way vessel traffic while a vessel of this size is transiting, and access in or out of the harbor would be effectively halted while the vessel was performing turning maneuvers inside the basin, either on arrival or prior to departure. Vessels typically require an area between 2 to 3 times the vessels' length in diameter to turn themselves around. The lower range is suitable for vessels equipped with bow and/or stern thrusters that provide increased maneuverability. Without making further density reductions by shortening Piers A, B and C, the available room between the ends of the proposed piers and the Fisherman's Wharf Loading Dock is approximately 500 feet, or 2 times the design length of the proposed 250-foot excursion vessel. For comparison purposes, the *O'ahu Commercial Harbors 2020 Master Plan* states that the Star of Honolulu, a 235' excursion vessel that previously operated from the Honolulu Marine facility, was "barely able to turn around in Kewalo Basin" (SDOT 1997). This vessel currently operates from Pier 8 at Honolulu Harbor.

Its operational considerations notwithstanding, this alternative would likely result in impacts to upland support areas and traffic circulation that differ from those of the proposed action in the following ways:

- Extensive land support areas would be required to accommodate tour buses needed to transport its passengers. For example, according to the *O'ahu Commercial Harbors*

Alternatives Considered

2020 Master Plan, a fully loaded Star of Honolulu would accommodate 1,500 passengers—equivalent to 34 bus loads of 45-passenger buses (SDOT 1997).

- While most of the harbor-related vehicular ingress and egress to/from the harbor is via the three access points along Ala Moana Boulevard, the fleet of tour buses serving a 250-foot excursion vessel would likely access the west side of the harbor via Ahui Street.

Accommodating a 250-foot excursion vessel would cause potential adverse impacts to the commercial enterprises operating out of Kewalo Basin and would result in loss of revenue to the HCDA. Accordingly, this alternate layout would not meet the project purpose and objectives and thus cannot be considered a reasonable alternative.

5.4 Other Alternatives

HAR §11-200-17 (F) provides examples of types of alternatives to the proposed action that should be described in the Draft EIS, including the following.

5.4.1 Postponing the Project Pending Further Study

A number of technical studies have been and are being undertaken for the project. A recent (2007) condition study of selected Kewalo Basin pier structures indicated the need for repair and/or replacement of harbor infrastructure. Postponing the project would exacerbate and accelerate the deterioration of harbor infrastructure, causing potential adverse impacts to the commercial enterprises operating out of Kewalo Basin and loss of revenue to the HCDA.

5.4.2 Alternative Locations for the Proposed Project

Another of the alternative examples provided in HAR §11-200-17 (F) is the consideration of alternative locations for the proposed project. This is essentially a variation of the No Action alternative where the proposed harbor facilities are constructed at another location. While it is hypothetically possible that the project could be developed elsewhere, it would require that the HCDA secure development rights or control over another waterfront site and either redevelop or construct a new harbor facility. It is not reasonable to expect HCDA to acquire another site to provide modernized, upgraded harbor infrastructure while there is the potential to improve the facility currently under its jurisdiction. Therefore, this alternative will not be carried through the EIS analysis.

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6.0 REQUIRED PERMITS AND APPROVALS

Table 1 summarizes the permits and approvals required for the proposed development.

Table 1 Required Permits and Approvals	
Permit/Approval	Authority
Department of the Army Permit (Section 10 Rivers and Harbors Act)	U.S. Army Corps of Engineers
Department of the Army Permit (Section 404 Clean Water Act)	U.S. Army Corps of Engineers
National Pollutant Discharge Elimination System (NPDES) Permit	State Department of Health
Coastal Zone Management Consistency Certification	State Department of Business, Economic Development & Tourism, Office of Planning (DBEDT OP)
Special Management Area Use Permit	DBEDT OP
Conservation District Use Permit (<i>potentially required</i>)	State Board of Land and Natural Resources

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7.0 DETERMINATION

The Governor, the accepting authority, has determined that the proposed action requires the preparation of an EIS, based on the significance criteria set forth in Section 11-200-12 of Title 11, Chapter 200, Administrative Rules, State Department of Health. The reasons supporting this determination are described below according to these significance criteria.

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

The proposed project will take place within an existing small boat harbor, currently utilized by commercial and pleasure craft. While the project will increase the berthing and mooring capacity of the harbor, all the improvements would take place within the existing harbor footprint. Construction activities have the potential to impact natural resources in the marine environment. The extent of these potential impacts are being evaluated and will be reported in the Draft EIS. Although the loss or destruction of significant cultural resources is not expected due to the types and locations of proposed improvements, archaeological and cultural impact assessments are being conducted and will be reported in the Draft EIS.

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

The proposed action would not curtail the range of beneficial uses of the environment, as the proposed action would allow for the continuation of existing uses in Kewalo Basin, and would take place wholly within the footprint of the existing harbor. It would increase the opportunities for existing and potential harbor users in the future by providing expanded and modernized facilities.

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

In general, the proposed action does not conflict with the policies, goals or guidelines expressed in Chapter 344 HRS. Because the proposed action involves in-water work, there will be short-term impacts to the marine environment that cannot be avoided. Some of the construction period impacts will be minimized through the implementation of BMPs that will be identified in consultation with federal and state resource agencies. Long-term beneficial impacts to the community would offset adverse impacts.

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

The proposed project will create a number of short-term and long-term employment opportunities in Honolulu. Short-term employment will consist primarily of construction-related jobs generated by the proposed development. Long-term employment opportunities will result from additional harbor- and marine-related jobs resulting from the additional slip capacity.

Determination

Because the proposed harbor improvement will take place entirely within the footprint of the existing harbor and continue the existing uses within Kewalo Basin, the proposed action is not expected to substantially affect the social welfare of the immediate Kaka'ako community or the State as a whole.

5) *Substantially affects public health;*

The proposed project is not anticipated to substantially affect public health relative to air, noise, and water quality.

Air quality in the vicinity of the project site would primarily be affected by vehicular emissions associated with additional traffic. Because the increase in traffic volumes associated with the proposed action is not considered significant, project-related vehicular emissions and off-site impacts from electrical demand and solid waste disposal generated by the project are also expected to be insignificant. Potential air quality impacts will be mitigated by complying with the State Department of Health (DOH) Administrative Rules, Title 11, Chapter 60, Air Pollution.

Ambient noise levels in the vicinity of the project site will primarily be affected by construction activities such as pile driving. Mitigation measures such as the use of properly muffled construction equipment and incorporation of State DOH construction noise limits pursuant to the provisions of the State DOH Administrative Rules, Title 11, Chapter 46, Community Noise Control are applicable to the project. In the long-term, ambient noise levels would be associated with increases in traffic noise levels. Because the project-related traffic noise impacts are expected to be insignificant, the associated noise levels are also expected to be insignificant.

The project area is not located over an underground source of drinking water (State of Hawai'i, 1999) and therefore would not impact drinking water quality.

Kewalo Basin is connected to the marine waters of Māmalala Bay. The State of Hawai'i classifies the marine waters of Māmalala Bay as Class A. Objectives of Class A waters are "...that their use for recreational purposes and aesthetic enjoyment be protected. Any other use shall be permitted as long as it is compatible with the protection and propagation of fish, shellfish, and wildlife, and with recreation in an on these waters. These waters shall not act as receiving waters for any discharge that has not received the best degree of treatment or control compatible with the criteria established for this class" (§11-54-3, HAR). The project will result in short-term impacts to marine water quality due to construction activities such as pile-driving. These activities are likely to increase turbidity in the immediate project area. Water quality sampling is being conducted as part of the EIS process and will be reported in the Draft EIS.

Determination

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

The proposed project is not anticipated to cause substantial secondary impacts. The additional boat slips proposed (107) are not expected to trigger a substantial change in population or lead to significant increases in demand for public facilities. The number of additional slips (107) is equivalent to less than 5% of the total number of small boat slips in state- and privately-owned harbors and marinas on O‘ahu (Hawai‘i Ocean Industry webpage, accessed 2010). The forthcoming Draft EIS will address the potential direct impacts of the proposed action, as well as the potential indirect and cumulative impacts associated with the project.

7) Involves a substantial degradation of environmental quality;

Most of the environmental impacts anticipated from the proposed action would occur during the construction period and be temporary in nature. They would primarily be potential impacts to the marine environment (e.g., harbor water quality, acoustical effects on marine biota and surrounding noise sensitive land uses). However, most project impacts are likely to be short-term and, with the incorporation of mitigation measures during the construction period, will not result in long-term degradation of environmental quality.

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

The forthcoming Draft EIS will address the potential direct impacts of the proposed action, as well as the potential indirect and cumulative impacts associated with the project.

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

Terrestrial fauna at the project area are likely to consist of exotic avian and mammalian species common to urban settings. Marine biological surveys are being conducted to identify marine species that may be impacted by the proposed action, including protected species and their habitats. The likely impacts to protected species will be evaluated in the forthcoming Draft EIS. HCDA has conducted preliminary consultation with state and federal resource and regulatory agencies, and will work with the relevant agencies to establish adequate BMPs and mitigation measures to minimize adverse impacts to protected species.

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

During construction, dust and noise from construction activities will be unavoidable. Potential air quality impacts will be mitigated by complying with the State DOH Administrative Rules, Title 11, Chapter 60, Air Pollution. With regard to noise, mitigation measures such as the use of properly muffled construction equipment and incorporation of State DOH construction noise limits pursuant to the provisions of the State DOH

Determination

Administrative Rules, Title 11, Chapter 46, Community Noise Control are applicable to the project.

Air quality in the vicinity of the project site will primarily be affected by vehicular emissions associated with additional traffic. Because the preliminary traffic assessment indicated that additional vehicle trips associated with the project would be insignificant, it is likely that the project would have insignificant impacts to ambient air quality.

Ambient noise levels in the vicinity of the project site will primarily be affected by increased traffic noise levels. A noise study is being conducted for the Draft EIS and will address construction period and operational period noise impacts. Because the preliminary traffic assessment indicated that additional vehicle trips associated with the project would be insignificant, it is likely that the project would have insignificant impacts to ambient noise quality.

Potential water quality impacts to nearshore coastal waters during construction of the project will be mitigated by adherence to federal, state and city water quality regulations and applicable permits.

11) Affects or is likely to suffer damage by being located in an environmentally sensitive area;

Because the construction and operational activities will take place in or near marine waters, the proposed action has the potential to affect this environmentally sensitive area. The Draft EIS will assess impacts to marine biological resources and identify potential mitigation.

12) Substantially affects scenic vistas and viewplanes identified in county or state plans or studies;

The proposed project is not expected to have a significant adverse impact on the significant vistas identified in the City and County of Honolulu's Primary Urban Center Development Plan. As it continues the existing uses within the harbor, the proposed project will not impede panoramic views of the Ko'olau Range and Punchbowl from Kewalo Basin.

13) Requires substantial energy consumption;

The proposed project will unavoidably result in additional energy consumption in the course of construction and operation. However, the proposed action will not introduce new land uses or operations with significant energy demands, such as manufacturing or heavy industry.

8.0 CONSULTATION

8.1 Agencies, Citizen Groups and Individuals Consulted During the Assessment Process

Federal

U.S. Army Corps of Engineers
U.S. Department of Commerce, NOAA National Marine Fisheries Service

State

Department of Land and Natural Resources, Office of Conservation and Coastal Lands
Department of Business, Economic Development and Tourism, Office of Planning
Department of Business, Economic Development and Tourism, Land Use Commission

City

Department of Planning and Permitting

Other

Kewalo Basin Stakeholder Advisory Group

8.2 Agencies and Community Groups to be Consulted During EIS Process

Federal

U.S. Army Corps of Engineers, Honolulu District
U.S. Department of Commerce, NOAA National Marine Fisheries Service
NOAA Pacific Island Fisheries Science Center
U.S. Fish and Wildlife Service
U.S. Coast Guard
U.S. Environmental Protection Agency

State

Department of Business, Economic Development and Tourism (DBEDT)
DBEDT, Office of Planning
Department of Health
Department of Land and Natural Resources
DLNR Historic Preservation Division
Department of Public Safety
Department of Transportation
Office of Hawaiian Affairs
University of Hawai'i

Consultation

UH Environmental Center

City

Board of Water Supply
Department of Design and Construction
Department of Environmental Services
Department of Facility Maintenance
Department of Planning and Permitting
Department of Parks and Recreation
Department of Transportation Services
Fire Department
Police Department

Elected Officials

State Senator Brickwood Galuteria, Senate District #12
State Representative Tom Brower, House of Representatives District #23
Councilmember Charles Djou
Councilmember Rod Tam
Ala Moana/Kaka‘ako Neighborhood Board No. 11

Utility Companies

HECO
Hawaiian Telcom

Citizen Groups, Individuals, and Consulted Parties

Almar Management
Friends of Kewalo Basin Park Association
Honolulu Marine, Inc.
Kaka‘ako Improvement Association
Kaka‘ako Makai Community Planning Advisory Council
Kamehameha Schools/Bishop Estate
Kewalo Basin Stakeholder Advisory Group
Kewalo Keiki Fishing Conservancy
Kewalo Wharf, LLC
Ocean Investments, LLC

9.0 REFERENCES

- City and County of Honolulu. *General Plan*. 1992 (amended).
- City and County of Honolulu. *Primary Urban Center Development Plan*. 2002.
- EDAW, Inc. *Kaka'ako Community Development District Draft Mauka Area Plan Supplemental Environmental Impact Statement*. Prepared for HCDA. May 2009.
- Hawai'i Community Development Authority. *Kakaako Community Development District Makai Area Plan*. October 2005.
- Hawai'i Community Development Authority. *Kaka'ako Community Development District Makai Area Plan Amendment Final Environmental Assessment*. Prepared by Wilson Okamoto Corporation. July 2005.
- Hawai'i Community Development Authority. *2009 Annual Report*. 2009.
- Hawai'i Community Development Authority. *Waterfront Business Plan*. 2002.
- Hawai'i Ocean Industry. Harbor and Ramp Facilities List.
<<http://www.hawaiiocan.com/Directories/Marina%20Facilities/index.html>>
accessed March 8, 2010.
- Kaka'ako Makai Community Planning Advisory Council. Report to the HCDA. January 2008.
- State of Hawai'i. Department of Business, Economic Development and Tourism. *State Tourism Functional Plan*.
- State of Hawai'i, Department of Health, Clean Air Branch. *State of Hawai'i Annual Summary 2008 Air Quality Data*. August 2009.
- State of Hawai'i, Department of Health, Safe Drinking Water Branch. Island of O'ahu Underground Injection Control Areas map. September 1999.
- State of Hawai'i, Department of Land and Natural Resources. *State Recreation Functional Plan*. 1991.
- State of Hawai'i, Department of Land and Natural Resources. *State Conservation Lands Functional Plan*.

References

- State of Hawai'i Department of Transportation. *Final Environmental Impact Statement for the O'ahu Commercial Harbors 2020 Master Plan Immediate Phase*. Prepared by Will Chee - Planning, Inc. September 1999.
- State of Hawai'i Department of Transportation, Harbors Division. *O'ahu Commercial Harbors 2020 Master Plan*. 1997.
- State of Hawai'i. Department of Transportation. *State Transportation Functional Plan*. 1991.
- State of Hawai'i, Office of State Planning. *The Hawai'i State Plan*. 1991.
- Stearns, Harold T. *Geology of the State of Hawai'i*. 1985.
- U.S. Army Engineer Division, Pacific Ocean. Technical Report H-75-15 Wave and Current Conditions for Various Modifications of Kewalo Basin, Honolulu, O'ahu, Hawai'i. Prepared by Michael L. Giles. September 1975.
- U.S. Department of Agriculture Soil Conservation Service. *Soil Survey of Islands of Kana'i, O'ahu, Moloka'i and Lāna'i, State of Hawai'i*. Map 62, August 1972.
- U.S. Federal Emergency Management Agency (FEMA), National Flood Rate Map, Flood Insurance Rate Map. Map No. 1503C0365F (accessed March 3, 2010). September 30, 2004.