STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Engineering Division

January 24, 2014

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

REQUEST ACCEPTANCE OF THE FINAL ENVIRONMENTAL ASSESSMENT AND APPROVAL FOR THE ISSUANCE OF A FINDING OF NO SIGNIFIGANT IMPACT (FONSI) FOR KAWAIHAE SMALL BOAT HARBOR (SOUTH) ROADWAY AND WATERLINE IMPROVEMENTS, KOHALA, ISLAND OF HAWAII

BACKGROUND:
This project represents Phase 2 of the implementation of the planning and construction of improvements associated with the Kawaihae Small Boat Harbor (SBH) South development. Phase 1 of the SBH development includes a main floating dock and gangway, comfort station, outdoor shower, vehicle and boat trailer parking, boat washdown area, and electrical and water improvements. Construction of Phase 1 is currently on-going and completion is scheduled for July 2014.

Prior to Phase 1, the shell of the SBH began with the construction of the entrance channel and west breakwater, which were completed in 1950. Construction of the west breakwater extension and east revetted mole was completed in 1998.

PROJECT DESCRIPTION:
The project consists of improving an existing compacted coral road that leads to the SBH facility. The existing coral road connects into the Kawaihae Harbor South Gate entrance road and extends in a southerly arc west of Akuni Pule Highway and parallel to the shoreline to the SBH (See Exhibit 1 – Proposed Project Site Plan). The road is approximately 3,750 feet long and will be widened to 24 feet with a 3-inch thick layer of asphalt concrete atop a 6-inch deep layer of untreated aggregate base course. The connection of the new 24-foot wide roadway to the existing paved entrance road will be improved with pavement curves for driver comfort and vehicular maneuverability, and marked with standard pavement 4-inch wide double-yellow centerline striping and 12-inch wide white stop bar. Surface drainage will be directed off the roadway via pavement cross slopes to roadway edges and managed by 5-foot wide vegetated earthen swales, which will convey drainage longitudinally to 6-foot diameter drywells for percolation into the ground. This natural filtration is anticipated to remove suspended solids and debris in the runoff.

The project also includes two new potable waterlines (4-inch for domestic and 8-inch for fire protection), which would be connected to an existing Hawaii County Department of Water Supply 12-inch waterline along Akuni Pule Highway. The new water lines would be connected to the existing water line with new isolation butterfly valves, run westerly down the South Gate entrance road, then turn southward following the alignment of the improved roadway down to the SBH.

PREVIOUS DOCUMENTS:

Date	Details	Reference
1985	An EIS for the development of Kawaihae Harbor is prepared and accepted by the HDOT–Harbors Division.	HDOT 1985
1994	USACE prepares and issues a *Final Environmental Assessment for Kawaihae Harbor for Light-Draft. Vessels* with the DLNR-DOBOR as the lead state agency.	USACE 1994
2003	USACE on behalf of DLNR-DOBOR contracts with AECOM (M&E) to complete a Master Plan for the Kawaihae SBH.	M&E Pacific 2003
2008	An EA is subsequently prepared by AECOM (M&E) and a FONSI issued in 2008 for Phase I implementation of the 2003 Kawaihae SBH Master Plan improvements. The proposed Phase I improvements include construction of a boat launch ramp with loading docks, a floating dock with mooring blocks, a comfort station with outdoor shower, a boat wash down area, and various parking areas.	M&E Pacific 2008
2011	HDOT-Harbors Division completes the Commercial Harbors 2035 Master Plan Update. This document is primarily focused on the commercial/military aspects of the Kawaihae Harbor under the jurisdiction of HDOT-Harbors Division. However, this current road/waterline project (Phase II) is shown as a "conceptual perimeter roadway alignment" in Figure 4.2 of that Master Plan document.	HDOT 2011
2013	HDOT – Harbors Division completes a *Draft Environmental Assessment* for infrastructure improvements to Kawaihae Harbor including dredging. (Publication of the Final EA is currently pending.)	HDOT 2013
2013	This current Draft EA document published in the December 8, 2013 Office Of Environmental Quality Control Environmental Notice .	

EIS Environmental Impact Statement

PROJECT OVERVIEW:

Project Location

The project is located at Kawaihae Harbor on the northwest coast of Hawaii and is located 28 miles north of Kona International Airport at Keahole.

Existing Use

The project area is located within the Coral Flats area of Kawaihae Harbor. The Coral Flats is a peninsula of land created from coral spoils of the original dredging of the harbor in the 1950s.

Coral Flats extends out from the southern end of the Kawaihae Harbor property. The area is used for a number of recreational resources.

Currently the construction of Kawaihae SBH (South) Phase 1 is on-going and is located at the western end of the Coral Flats area. Nearby facilities also include canoe clubs, a surf club, and other users. The US Army owns and operates a landing ramp and an easement authorized by Governor's Executive Order (EO) No. 1759, which allows them to conduct military operations and transfer troops, vehicles, explosives and other goods.

Land Ownership

The project area is on land executive ordered to the State of Hawaii, Department of Transportation.

Project Timeframe and Costs

The project cost is estimated to be $2.5 million and take approximately 9 months to construct.

SUMMARY OF AFFECTED ENVIRONMENT

Soil and Climate

Soil type according to the *Soil Survey of the Island of Hawaii* is fill land. The fill is coralline spoil material from the dredging of the Harbor. The average temperature is 75.7°F the annual rainfall is less than 10 inches.

Flood and Tsunami Hazards

The project site is located in Zones VE, AE, and X, as determined by the Federal Emergency Management Agency Flood Insurance Rate Maps (FIRM) FEMA 2004.

- Zone VE (along the shoreline) regions are special flood hazard areas that correspond to the One-hundred year coastal floodplains extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. Zone VE areas are subject to high velocity waters, including coastal and tidal inundation or tsunamis. Whole-foot base flood elevations derived from the detailed hydraulic analyses have been determined at selected intervals within this zone.

- Zone AE (closer to the SBH facilities and at the eastern end of the project area) regions are special flood hazard areas that correspond to the one-hundred-year floodplains. Whole-foot base flood elevations derived from the detailed hydraulic analyses have been determined at selected intervals within this zone.

- Zone X (inland of zone AE) regions are other flood hazard areas of minimal flood hazard corresponding to areas outside of the five-hundred-year floodplain. Base flood elevations or depths have not been determined for Zone X areas.

Per the Hawaii County Code Chapter 27 – Flood Plain Management, any new construction, substantial improvements or ground alterations within the AE,VE and A Zones will be subject to the requirements of Chapter 27. While complete mitigation of potential flooding and tsunami events on the proposed facilities is not feasible within the current methods of design and construction, care and consideration will be applied to the design of the facility to minimize property damage and to protect public safety. The proposed improvements will not worsen the effects of storm or tsunami events within the harbor area. Due to the nature and purpose of the proposed facilities, there are no practicable alternatives to building within this flood zone. Accordingly, a flood zone variance will be obtained under provisions of Section 27-27, which requires the approval of the Director of Public Works for the County of Hawaii.

Archaeological and Cultural

The Puukohola Heiau National Historic Park (Site Number 10-05-4139) is located near Mahukona Gulch to the south of the project site. The Puukohola Heiau National Historic Park is a 77-acre area that includes several historic landmarks, including the submerged Haleokapuni Heiau (shark heiau), the Mailekini Heiau, the Puukohola Heiau, and the James Young Homestead historic settlement. The proposed project site is located within an area that has previously been altered and disturbed and is located completely within the harbor basin protected by the East and West breakwaters.

An archaeological inventory survey (AIS) was conducted at the end of November 2013 at the request of the State Historic Preservation Division, which expressed concern that the prior fill process to create the Coral Flats may have covered historic properties and burial sites. Several test pits were excavated down to the water table or sterile sediments along an area near the roadway alignment, which focused on the former (1933) shoreline. No finds were encountered during the AIS—nothing on the surface or in any of the trenches.

The proposed project will not result in a negative impact to any historical or cultural resources.

Visual Resources

The project site is located in a generally undeveloped portion of the SBH and is contiguous to a commercial, industrial port facility. The site was previously graded during previous improvement projects and the existing breakwater construction to install a revetment and unpaved access road along the shoreline. The immediate area around the project site is populated by various medium-sized trees and scrub brush. The only other land-based structures in or near the project area include a fenced area for boat and equipment storage, a small elevated lookout with handrails and retaining wall, a short wooden ramp for access to a small floating dock. These structures were a part of the YMCA Center, which is being demolished as part of the SBH project approvals.

While scraping and trenching will be visible from some public right-of-ways during the construction phase, these visual impacts will be temporary and not significant. Disruptions will be minor and short term and will result primarily from activities associated with the installation of the pavement for the access road and trenching for the water lines. The proposed project will not significantly alter visual resources in the area, post-construction. The project involves only

horizontal construction with no structures impacting view corridors from public rights-of-ways, the National Park areas, heiau or public beaches. Therefore, no visual impact mitigation measures are proposed.

Flora and Fauna

There are no rare, endangered, or threatened species that use the project area as a critical habitat. Green sea turtles feed in the harbor area, though they do not nest in the area because access to land areas is difficult.

Water Resources

Island of Hawaii (EPA 2000). The project area lies within the Mahukona aquifer system, which has a sustainable yield of approximately 17 million gallons per day (mgd). Mahukona's sustainable yield represents only 11 percent of the Kohala Aquifer's total sustainable yield. Mahukona's low yield is attributed to the low amount of precipitation in the area. Figures provided in the 2005 *County of Hawai'i General Plan* indicate that the average consumption of the South Kohala District is 3.9 mgd. The County of Hawaii Department of Water Supply (DWS) Waimea and Lalamilo systems supply water to the South Kohala District (including the project site). The six wells of the Lalamilo system service the area from Kawaihae to Mauna Lani, with an average daily consumption of 3 mgd (County of Hawaii 2005a). An existing 12-inch DWS water main runs along Akoni Pule Highway to the north of this project site. A 2-inch water line taps off the water main near the Makeahua Gulch, where it is metered by a 2-inch DWS water meter and adjacent backflow preventer. The 2-inch water line runs from the highway and towards the existing SBH facilities, partially overland and partially buried, then taps off into a 1-inch service water line at a DLNR-owned and maintained water meter and backflow preventer at the east end of the SBH. The proposed water lines will connect with the existing County waterline along Akoni Pule Highway.

Based on water demand estimates completed in 2008, the maximum daily demand at the new SBH facilities of approximately 0.0003 mgd, which is small compared to the overall demand in the area. This anticipated use translates to approximately 2,685 gallons per day. During the Phase I design in 2008, a response letter from the County of Hawaii DWS dated May 2, 2008 confirmed the presence of an existing backflow assembly connected to the meter; therefore, installing a new backflow prevention device will not be necessary. For Phase 2, a new 4 inch domestic waterline and 8 inch fire line is proposed. Both waterlines will connect into the existing 12 inch waterline along Akoni Pule Highway near the South Gate. The 2008 Final EA for Phase I further notes that "the proposed facility is not anticipated to adversely affect the water supply or demand of other County water customers in the Kawaihae area."

SUMMARY OF MAJOR IMPACTS:

Short Term: There will be some dust, increased traffic, and noise during construction.

Long Term: There will be no long-term impacts.

ALTERNATIVES CONSIDERED:

Under the no-action alternative, the proposed improved access roadway and the two waterlines would not be built and the environmental impacts that would have resulted from the proposed action would not occur. The on-going improvements and this proposed Phase 2 improvements are consistent with the proposed improvements described in the 2003 Master Plan. Other than the no-action alternative, no other viable alternatives to the project are being considered at this time.

PROPSED MITIGATION MEASURES:

Provisions will be made in the project specifications to control and minimize the temporary adverse effects as follows:

- National Pollutant Discharge Elimination System permit will be obtained and a Site-Specific Construction Best Management Practice plan for storm water discharge during construction activities.
- During construction, water spraying and other measures required by the State and County laws will be utilized to control dust in the area.

FINDINGS AND REASONS SUPPORTING ANTICIPATED DETERMINATION:

In accordance with HRS Chapter 343, this EA characterizes the technical, social, and environmental issues related to the Kawaihae SBH Phase 2 project. It identifies potential project impacts to the environment and their significance. The proposed project should not result in any significant impacts to the environment either during the construction phase or once operational; therefore, the State of Hawaii DLNR is anticipating a FONSI.

This determination is based on thirteen (13) significance criteria listed in HAR §11-200-12 of the EIS Rules. The specific criteria used in making this determination are addressed below:

1. *Involves an irrevocable commitment to loss or destruction of any natural or cultural resource:*

Construction of the proposed facilities will not irrevocably commit to loss or destruction of natural or cultural resources. To date, no cultural resources have been identified within the project site. An AIS for the project was completed and no finds were encountered during the survey. As a standard practice, if previously unknown resources are uncovered during the course of construction, the contractor will stop work immediately and notify the SHPD who will determine the appropriate treatment.

2. *Curtails the range of beneficial uses of the environment:*

The proposed actions will not curtail the range of beneficial uses of the environment. The proposed actions to enhance infrastructure at the SBH will encourage the intended use of the site consistent with the approved 2003 Kawaihae SBH Master Plan and with the 2011 Commercial Harbors 2035 Master Plan Update.

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:*

The proposed harbor facilities are consistent with the State's goals and objectives as described in the relevant sections of the EA.

4. *Substantially affects the economic or social welfare of the community or state:*

The proposed actions will not substantially affect social welfare of the community in a negative manner. There will be no road or lane closures during the construction of the facilities. The proposed actions will improve the economic and social welfare of the affected communities by providing a safe, enhanced facility dedicated for light-draft vessel and recreational water-related activities.

5. *Substantially affects public health:*

The proposed activities will not substantially affect public health in a negative manner. Paving the roadway and providing water service to the SBH will make both commercial activity and light-draft activity safer for all users of the Kawaihae boating community. During construction, environmental pollutants will be mitigated to regulated levels by using appropriate BMPs and construction methods and as part of the issuance of an NPDES permit from DOH

6. *Involves secondary impacts, such as population changes or effects on public facilities:*

The SBH facilities will not lead to secondary impacts such as population changes or effects on public facilities beyond those discussed in the 2005 *County of Hawai'i General Plan.* The increased consumption of potable water by the installation of water lines

7. *Involves a substantial degradation of environmental quality:*

The proposed project will not degrade the environmental quality of the project site. The existing quality of the project site will remain. The proposed construction will take place within a defined portion of the project site and will not affect the environmental quality of the area.

8. *Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger action:*

Installation of the proposed boating facilities will not have a cumulative effect on the environment. The facilities constructed with this project will not require commitment for larger action but will constitute the culmination of the SBH improvements.

9. *Substantially affects a rare, threatened, or endangered species, or its habitat:*

The proposed project will not substantially affect any rare, threatened, or endangered species or its habitat. The project site is not a known critical or nesting habitat for rare, threatened, or endangered species.

10. *Detrimentally affects air or water quality or ambient noise levels:*

The proposed projects will not substantially degrade environmental quality. Any notable adverse effects on air and water quality and ambient noise levels will be short-term and construction-related only. Air quality and noise levels will not exceed DOH standards. This project will not result in long-term adverse effects. On completion of construction activities, air and water qualities will revert to prior levels. Any increase in ambient noise levels is anticipated to be minor in comparison to the noise levels in the surrounding community, and is not considered significant.

11. *Affects or is likely to suffer damage by being located in an environmentally sensitive zone such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters:*

The proposed project is located along an existing revetted shoreline that is located within a designated flood plain and tsunami excavation zone. The proposed action will not detrimentally affect the area in or near the project area; however, the proposed facilities may potentially be damaged should a tsunami or flooding occur. The project site is located in a volcanic hazard zone of 9 (areas with the lowest risk); however, it is in an area that may experience some seismic activity and that may be exposed to hurricanes and strong winds.

Although damage may occur to the facilities during occasions of severe hurricanes, earthquakes, lava flows, and flooding, no practical mitigation measures are currently available for a project of this nature. The proposed project will comply with all current applicable building codes and regulatory design standards and no features of this project involve the construction of buildings for human habitation.

12. *Substantially affects scenic vistas and view planes identified in county or state plans or studies:*

Activities associated with the installation of the proposed facilities are not anticipated to change or alter the character of the site, except as intended by the 2003 Kawaihae SBH Master Plan. This project involves horizontal infrastructure development and not vertical construction, resulting in limited impacts to scenic views.

13. *Requires substantial energy consumption:*

The SBH project facilities will not require energy consumption other than a small amount of energy associated with pumping of potable water through the water system.

Request Acceptance of The Final Environmental Assessment
And Approval For The Issuance Of a Finding of No Significant
Impact (FONSI) For Kawaihae Small Boat Harbor (South)
Roadway and Waterline Improvements, Kohala, Island of Hawaii

RECCOMENATIONS:
That the Board:

1. Accept the Final Environmental Assessment for the Proposed Kawaihae Small Boat Harbor (South) Waterline and Access Road Improvement project.

2. Based on the review of the Final Environmental Assessment and the comments received during the 30-day comment period to the Draft Environmental Assessment in addition to our responses, find that the project will not have a significant effect on the environmental and cultural resources of the area and approve the issuance of a finding of no significant impact (FONSI) for the proposed project.

3. Authorize the Chairperson to publish a FONSI for the proposed project in the Office of Environmental Quality Control's The Environmental Notice. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.

Respectfully submitted,

CARTY S. CHANG
Chief Engineer

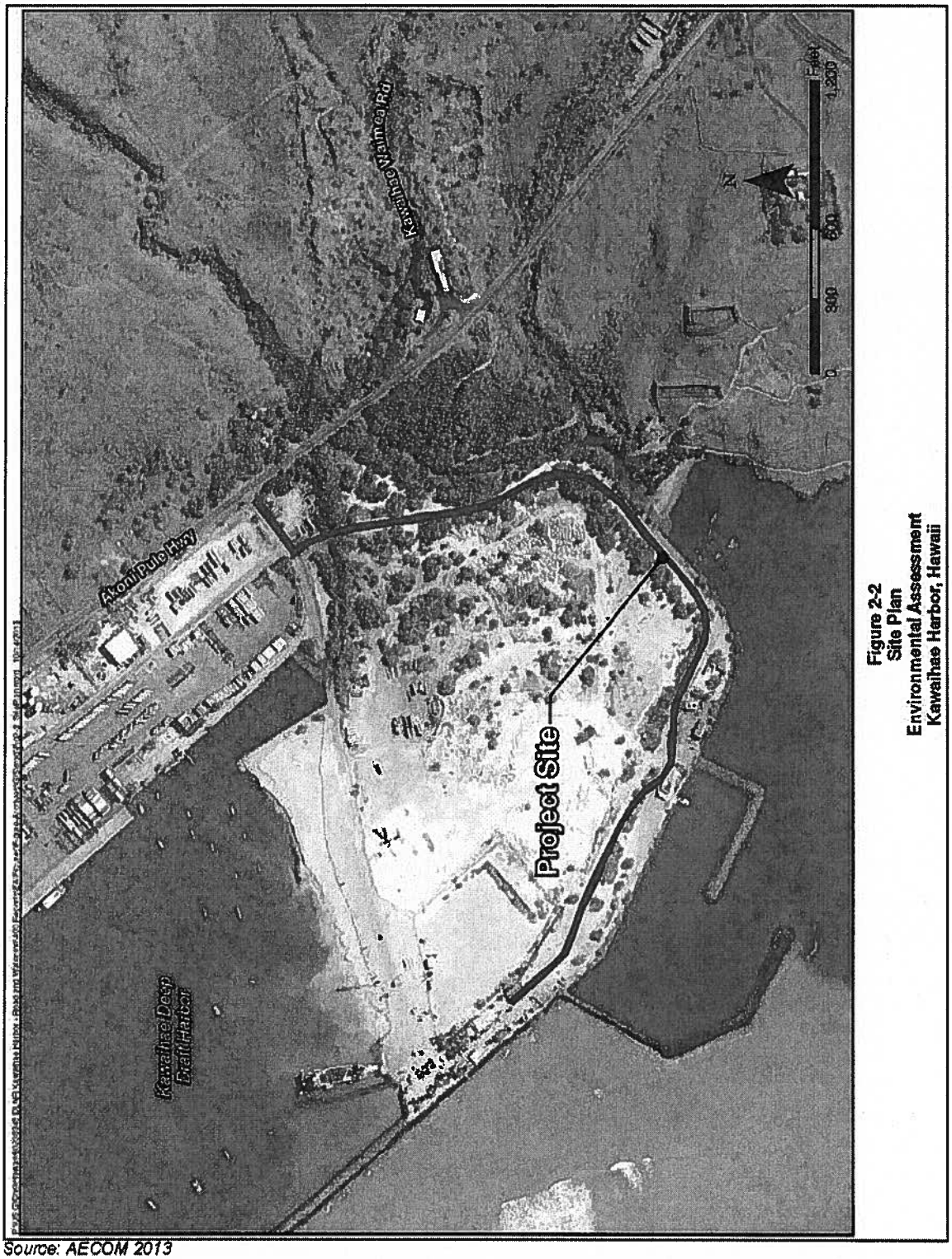
Requested by:

EDWARD R. UNDERWOOD, Administrator
Division of Boating and Ocean Recreation

Approved For Submittal:

WILLIAM J. AILA, JR., Chairperson

Figure 2-2: Site Plan



Source: AECOM 2013

EXHIBIT 1