DRAFT ENVIRONMENTAL ASSESSMENT

Kaunakakai Harbor Ferry System Improvements

Job No. B61XM82A

Kaunakakai, Molokai, Hawaii
TMK: 5-3-001:011

Prepared for:

State of Hawaii
Department of Land and Natural Resources
Engineering Division

Prepared by:

Wilson Okamoto Corporation

June 2010

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SUMMARY

Proposing Agency:	State of Hawaii Department of Land and Natural Resources 1151 Punchbowl Street Honolulu, Hawaii 96813
Accepting Agency:	State of Hawaii Department of Land and Natural Resources 1151 Punchbowl Street Honolulu, Hawaii 96813
EA Preparer:	Wilson Okamoto Corporation 1907 South Beretania Street, Suite 400 Honolulu, Hawaii 96826 Contact: John L. Sakaguchi, AICP, Senior Planner Tel: 808.946.2277; Fax: 808.946.2253
Project Location:	Kaunakakai, Molokai, Hawaii
Recorded Fee Owner:	State of Hawaii, Department of Transportation
Tax Map Key:	5-3-001: 011
Area:	1.94 acres approximately Total Tax Map Key parcel 113.265 acres
State Land Use Classification:	Urban
County Zoning:	Interim
Proposed Action:	Converting the existing 672-square foot ferry shelter into a restroom facility, constructing a 625-square foot ferry shelter on the west side of the converted building, constructing a below grade sewer lift station to pump wastewater; constructing a new 2,380-foot long 4-inch sewer force main (buried) from the lift station to a new transition manhole for connection to the existing County wastewater collection line in Kaunakakai Place; constructing a new 3,640-foot long 8-inch and 12-inch water line for fire protection with connection to an existing County water system near the intersection of Kaunakakai Place and Maunaloa Highway; constructing three new fire hydrants; rehabilitating an approximately 1,550-square foot section of the pile supported pier by removing and replacing the existing reinforced concrete deck with precast planks and removing 10 piles and placing 12 new piles. In addition, changes will be made to the parking rules in the ferry landing area.

Impacts:

No significant impacts are anticipated from the construction and operation of the Ferry System Site Improvements at the Kaunakakai Commercial Harbor.

Parties Consulted During Pre-Assessment:

Federal
US Army Corps of Engineers
US Fish and Wildlife Service

State of Hawaii
Department of Business, Economic Development and Tourism (DBEDT)
DBEDT, Strategic Industries Division
Department of Land and Natural Resources (DLNR)
DLNR, Historic Preservation Division
DLNR, Office of Coastal and Conservation Lands
DLNR, Commission on Water Resource Management
Department of Hawaiian Home Lands
Department of Health (DOH)
DOH, Environmental Management
DOH, Environmental Planning
Office of Hawaiian Affairs

County of Maui
Department of Fire and Public Safety
Department of Environmental Management
Department of Parks and Recreation
Department of Planning
Molokai Planning Commission
Police Department
Department of Public Works
Department of Transportation
Department of Water Supply

Officials
State Senator J. Kalani English
State Representative Mele Carroll
Councilmember Danny A. Mateo

Other
Maui Electric Co.
Maui Economic Opportunity
Young Brothers
Lahaina Cruise Company / Sea Link of Hawaii Inc.
Molokai Outdoors
Island Petroleum

PREFACE

Chapter 343, Hawaii Revised Statues (HRS), as amended, Environmental Impact Statements, requires that a government agency or a private developer proposing to undertake a project consider the potential environmental impacts of the proposed project by preparing an assessment. Use of public funds by a government agency for a project is among the criteria set forth in Chapter 343, HRS which requires preparation of an environmental assessment.

The Kaunakakai Harbor Ferry System Improvements will use funds provided by the US Department of Transportation Federal Transit Administration (FTA) and by the State of Hawaii Department of Transportation (DOT) and the Department Land and Natural Resources (DLNR) for design and construction of the Kaunakakai Harbor Ferry System Improvements. No other public agency is participating in funding the design or construction.

This Environmental Assessment (EA) has been prepared to meet the requirements of Chapter 343, HRS, as amended, and Hawaii Administrative Rules Title 11, State of Hawaii Department of Health, Chapter 200, Environmental Impact Statement Rules. A Finding of No Significant Impact (FONSI) is anticipated for the Ferry System Site Improvements project as discussed in Chapter 5.

The FTA has issued a Categorical Exclusion (CE) for the Kaunakakai Harbor Ferry System Improvements to meet the requirements of National Environmental Policy Act (NEPA) as amended, (Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975) which incorporates the Council on Environmental Quality (CEQ) regulations for implementing NEPA. The FTA CE action falls under 49 Code of Federal Regulations (CFR) §771.117(d)(10) "construction of bus transfer facilities (an open area consisting of passenger shelter, boarding areas, kiosks and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic."

In February 1990, the DOT issued an Environmental Assessment/Negative Declaration for the Strengthen Wharf Deck at Kaunakakai Harbor, Molokai, Job H. C. 3182.

In February 1992, the DOT issued an Environmental Assessment/Negative Declaration for The Ferry Passenger Shelter at Kaunakakai Harbor, Molokai, Job H. C. 3216.

In June 1992, the DOT issued an Environmental Assessment/Negative Declaration for the Kaunakakai Harbor Causeway Lighting Kaunakakai, Molokai, Job H. C. 3217.

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1. INTRODUCTION

1.1 Project Background

Kaunakakai Harbor consists of the pier island and causeway, and is both a commercial and recreational harbor. The northern portion of the Kaunakakai pier island contains the Commercial Harbor controlled by the State of Hawaii Department of Transportation, Harbors Division (DOT-HAR) and the southern portion of the Small Boat Harbor area is controlled by the State of Hawaii Department of Land and Natural Resources, Division of Boating and Outdoor Recreation (DOBOR)

The Kaunakakai Commercial Harbor is part of ten (10) harbors in Hawaii operated by DOT-HAR. The Kaunakakai Commercial Harbor is part of the Maui District, which also includes Kahului Harbor on Maui, and Kaumalapau Harbor on Lanai. Originally constructed in 1927 by the Territory of Hawaii, the Kaunakakai Commercial Harbor is owned and operated by the DOT. Facilities at the Harbor accommodate interisland cargo and fuel barges and commuter ferry service for daily passenger and visitor travel between the Lahaina Small Boat Harbor on Maui and Kaunakakai Harbor.

Construction of Kaunakakai pier island began in 1899 with the installation of a revetted mole which extended approximately 1,300 feet out from shore. A small landing on the seaward end of the mole could accommodate two boats. In 1921, this mole was extended another 700 feet from shore. A narrow gauge railroad track for cargo movement and a small storage shed were also installed in the same year. In 1927, the E. J. Lord Construction Company built a concrete wharf area with 3,945 square feet of open storage and 1,155 square feet of protected storage. In 1951, John F. Nichols Company lengthened the apron shoreward and placed a paved rock fill between the old pile support approach and the existing concrete extension. During this period, the Shell Oil Company also installed several oil storage tanks on the east end of the pier island. In 1956, a steel sheet pile bulkhead with a concrete cap was added on the makai pier section to reduce erosion of the rip-rap fill under the wharf. In 1969, the entire concrete decking of the pier island was replaced by the Kincaid Construction Company. In addition, a new freight shed and Harbor Master office with public restroom facilities were added.

The Kaunakakai pier island is on the western end of the approximately 1,950-foot long by 40-foot wide causeway, which becomes Kaunakakai Place at the eastern end of causeway as it connects to the main island. The causeway and Kaunakakai Place are undivided roadways with two 12-foot wide travel lanes, one lane in each direction. The causeway,

which is considered part of Kaunakakai Harbor, includes a 12-foot wide shoulder on the right side of the westbound lane and 4-foot shoulder on the right side of the eastbound lane. State Route 460, Maunaloa Highway, which begins at the end of the causeway, and Kaunakakai Place are under the control of the State of Hawaii Department of Transportation Highways Division.

The causeway is entirely constructed on fill land. The original design drawings included two culverts along the causeway which would have allowed water to pass from one side to the other. However, there is no indication these culverts were constructed.

The approximately 5.56-acre pier island is divided into the Commercial Harbor on the north side, about 3.91 acres, and the small boat harbor area on the south side, approximately 1.75 acres. The pier island and surrounding submerged lands encompasses approximately 113.265 acres (Tax Map Key: 5-2-003: 011). A portion of the pier island is constructed on piles and the remainder on fill land. The portion constructed on piles occupies about 0.898 acres and the fill land occupies about 4.662 acres of the total 5.56 acres. The pile supported portion is on the north side of the pier island and serves as the commercial harbor berthing area used to dock barges and other vessels while loading and unloading cargo.

The Kaunakakai Small Boat Harbor occupies 1.75 acres on the southern side of the pier island. This area includes the approximately 680 square-foot harbor master office/ restroom building, the Molokai Ice House, vehicle and boat trailer parking stalls, and storage facilities for the Clean Islands Council. A total of about 16 boats are docked at the small boat harbor. A single lane 12-foot wide small boat launch ramp and loading dock are located on the south side of the causeway about 250 feet north of the pier island.

The approximately 687-foot Commercial Harbor pier has a berthing area, which was originally dredged in the 1930's and has been currently dredged to a depth of (-) 24 feet Mean Lower Low Water. The turning basin is 600 feet wide by 1,500 feet long. Kaunakakai Harbor is considered a medium draft harbor. Figure 1.1 shows the Kaunakakai Harbor location map. Figure 1.2 shows the Harbor site map. Figure 1.3 shows the Harbor boundary map.

Cargo operations (containers, loose, palletized, and vehicles) are provided by Young Brothers, Limited and fuel barge operations by Sause Brothers at the Commercial Harbor. The Young Brothers barges operate from about 560 feet at the western end of the berthing

area. The Young Brothers cargo operations area occupies about 3.75 acres of the 3.91-acre Commercial Harbor space.

Young Brothers barge service is provided to Kaunakakai Harbor twice a week, Monday and Wednesday. On Monday, the barge arrives in the early morning hours and on Wednesday around 8:00pm. The Young Brothers yard is open four days per week according to the following:

Monday: 7:30 am to 2:30 pm	Wednesday: 1:00 pm to 4:30 pm
Tuesday: 7:30 am to 11:30 am	Thursday: 11:00 am to 2:30 pm

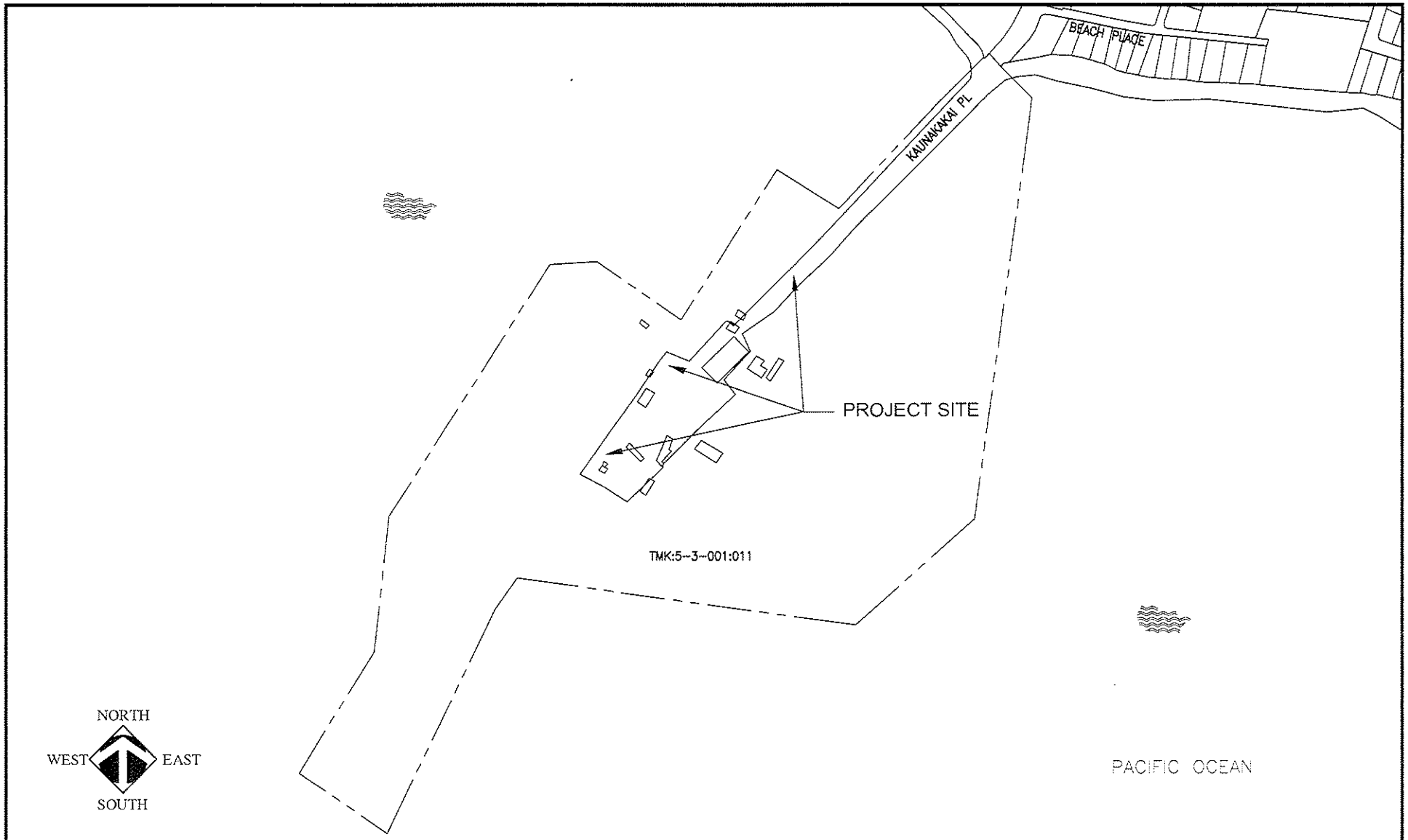
The Young Brothers yard area is a high security facility with access controlled at all times by the Facility Security Plan which has been approved by the US Coast Guard. Under this plan, access to the cargo is limited to those with a Transportation Workers Identify Card (TWIC).

Sea Link Hawaii operates one passenger ferry (Molokai Princess) vessel twice daily between the Kaunakakai Commercial Harbor and the Lahaina Small Boat Harbor. The 100-foot long Molokai Princess has a capacity of 149 passengers and provides service for commuters who typically have jobs on Maui and for those with other needs on Maui. The Molokai Princess departs Kaunakakai at 5:15 am for Lahaina and departs from Lahaina at 6:00 pm for return to Kaunakakai. The travel time is approximately 90 minutes between the two harbors. Typically, the ferry is open for boarding about 30 minutes before departure.

In addition to the commuter service, the Molokai Princess is also used for service to residents and tourists who visit Molokai. The Molokai Princess departs Lahaina at 7:15 am for Kaunakakai and departs from Kaunakakai at 4:00 pm for return to Lahaina. Ferry service is integral to the community and economic base of Molokai.

Over the years, the daily ferry service has averaged about 40 commuters and 50 tourists. Currently, the ferry carries an average of about 20-25 commuters and about 25 tourists.

Path: L:\WOA\7553-01 Kaunakakai Ferry\planning\figu Filename: SITE MAP Plot date: May 24, 2010-11:32:41am CAD User: mkamihara Xref Filename: | barO1_letter-landscape | Molokai_parcel |



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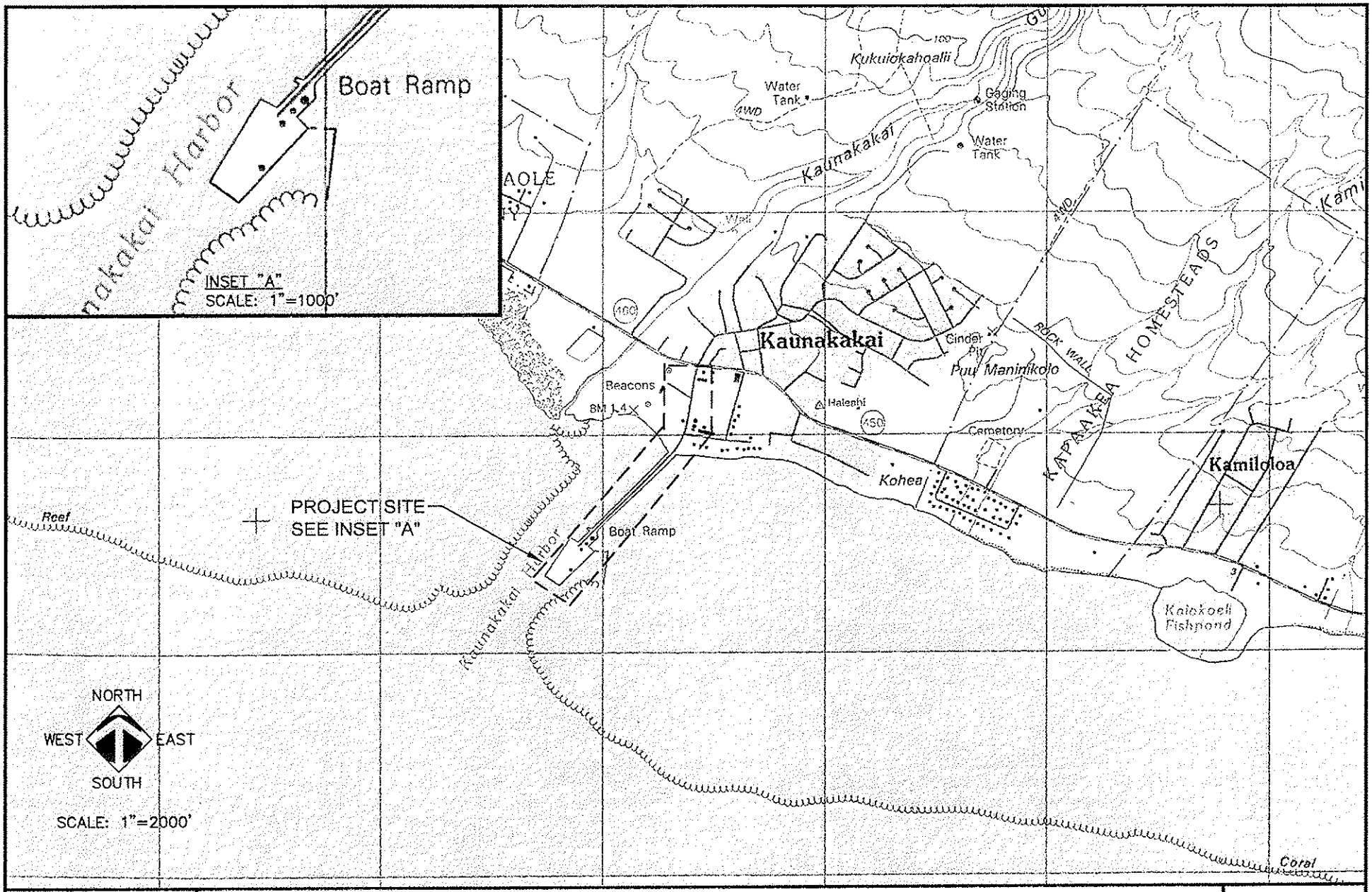
ENGINEERS PLANNERS

KAUNAKAKAI HARBOR FERRY SYSTEM IMPROVEMENTS, JOB NO. B61XM82A

PROJECT SITE MAP

FIGURE 1.2

Path: L:\WOA\7553-01 Kaunakakai Ferry\planning\figu Filename: LOCATION MAP Plot date: Mar 27, 2010-01:16:35pm CAD User: jsakaguchi Xref Filename: I bar01_letter-landscape I



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KAUNAKAKAI HARBOR FERRY SYSTEM IMPROVEMENTS, JOB NO. B61XM82A

PROJECT LOCATION MAP

FIGURE
1.1

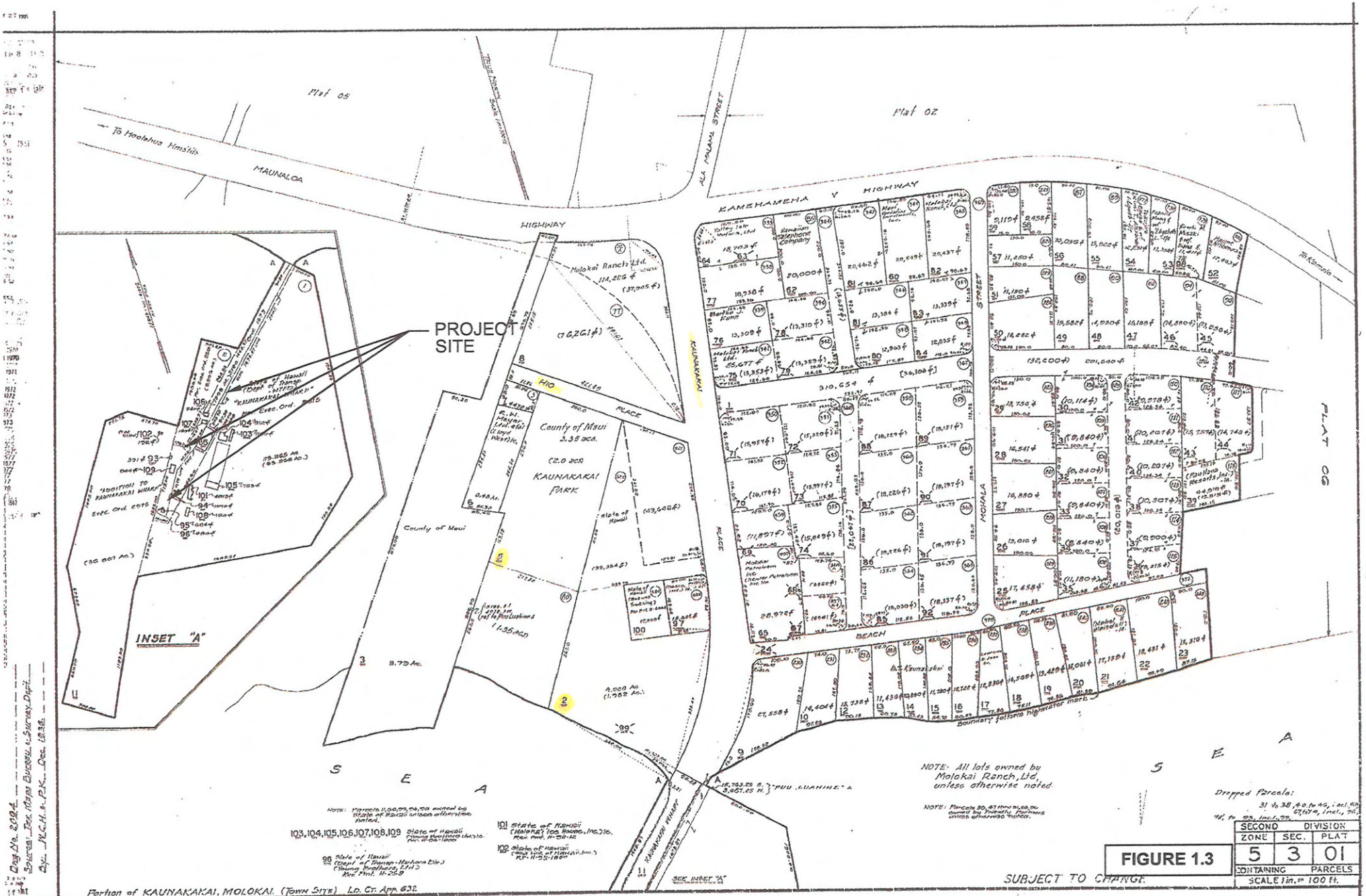


FIGURE 1.3

NOT TO SCALE

The State Land Use Commission designates the Kaunakakai wharf in the Conservation District, Resource subzone.

The Kaunakakai Harbor is part of the County of Maui Molokai Community Plan dated 2001.

The Kaunakakai pier island and causeway are not located within the County of Maui Special Management Area (SMA). The lands leading up to and surrounding the causeway are within the SMA.

Chapter 205A, Hawaii Revised Statutes, sets forth definitions related to the shoreline area, shoreline setback, and the conditions for granting a variance for a structure or activity otherwise prohibited. "Shoreline area" shall include all of the land area between the shoreline and the shoreline setback line and may include the area between mean sea level and the shoreline; provided that if the highest annual wash of the waves is fixed or significantly affected by a structure that has not received all permits and approvals required by law or if any part of any structure in violation of this part extends seaward of the shoreline, then the term "shoreline area" shall include the entire structure.

"Shoreline setback line" means that line established in this part or by the county running inland from the shoreline at a horizontal plane. "Structure" includes, but is not limited to, any portion of any building, pavement, road, pipe, flume, utility line, fence, groin, wall, or revetment.

§205A-46 Variances, states, (a) A variance may be granted for a structure or activity otherwise prohibited in this part if the authority finds in writing, based on the record presented, that the proposed structure or activity is necessary for or ancillary to: (6) Facilities or improvements by public agencies. The sewer force main and fire protection line would be facilities or improvements constructed by a public agency.

Hawaii Administrative Rules Title 11 Department of Health Chapter 54 Water Quality Standards, Section 11-54-03, Classification of Water Uses, shows the waters surrounding the Commercial Harbor are classified as: (c) Marine waters (2) Class A. Chapter 54 states, it is the objective of Class A waters 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 and on these waters. These waters shall not act as receiving waters for any discharge which has

not received the best degree of treatment or control compatible with the criteria established for this class.

The location of the Kaunakakai Commercial Harbor places it within the geographic jurisdiction of the Rivers and Harbors Act of 1899 which encompasses all navigable waters of the United States defined in 33 Code of Federal Regulations (CFR) Part 329 as, "those waters that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce." This jurisdiction extends seaward to include all ocean waters within a zone three nautical miles from the coast line (the "territorial seas").

Section 10 of the Rivers and Harbors Act (33 U.S.C. 401 *et seg)* requires authorization from the US Army Corps of Engineers for the construction of any structure in or over any navigable water of the United States, the excavation/dredging or deposition of material in these water or any obstruction or alteration in a "navigable water".

1.2 Purpose and Need

The State of Hawaii has long recognized the importance of ferry commuter service between Molokai and Maui. The ferry commuter service between the islands is vital to the economic and social well being of the County of Maui, as well as to the State of Hawaii. As such, in April 2004, the State of Hawaii Department of Land and Natural Resources (DLNR) recognizing that the existing commuter ferry operations from Molokai to Maui are vital to the economic base and social well being of the County of Maui, as well to the State, applied for a grant to the US Department of Transportation Federal Transit Administration (FTA) to design and construct ferry site improvements at the Kaunakakai Commercial Harbor. The initial FTA Grant No. HI-03-0034 executed on August 12, 2004 did not reflect certain market conditions, recent labor and building material price escalations and/or utility hook up fee. As a result, in June 2005, DLNR submitted a grant request for additional design/construction funding to the FTA.

As stated in the DLNR grant application, direct commuter air transportation service between Maui and Molokai has been discontinued and the available air service requires travelers from Maui to transit through Honolulu to reach Molokai. Ferry operations provide affordable direct inter-island transportation for access to employment, government, health services, and education for the residents of Molokai. Over the years, commuter ferry ridership has been subject to the overall economic conditions on Molokai and employment opportunities

on Maui. The closure of agriculture operations, once a primary economic industry on Molokai, has affected ferry ridership as Molokai residents have sought employment on Maui.

Given the existing ferry service is of such vital economic and social importance to the residents of Molokai and Maui, DLNR is proposing to undertake site improvements to the existing ferry shelter; to rehabilitate a portion of the pier; and to upgrade and improve the sewer, water, and fire protection systems at the Kaunakakai Commercial Harbor. The purpose of the improvements is to improve the facilities available to ferry users and to improve the supporting infrastructure.

A section of the pier over the pile supported section was previously rehabilitated to allow Young Brothers to load and unload heavy containers and other cargo from the barges. Subsequent to the work, Young Brothers has put into service larger barges in order to satisfy the cargo service demand on Molokai. However, to position the loading and unloading point on the larger barges on the rehabilitated portion of the existing pier will force the barge to dock too close to the ferry, and endanger the operation of the ferry.

Based on this, the improvements will also include rehabilitation of a section of the existing pile supported pier to provide greater separation between the cargo barge and the docked ferry by the addition of a new barge heavy loading/unloading position toward the western end of the pier. The separation is needed to provide a safe distance between the two vessels while both are docked at the commercial pier.

1.3 Project Site and Conditions

1.3.1 Project Site

The project site occupies areas at the eastern end and near the western end of the 687-foot long commercial pier. The project site at the eastern end encompasses the 9,615-square foot ferry landing area which includes the existing 625-square foot ferry shelter, about 7 vehicle parking stalls, a small landscape area adjacent to the shelter, and landscape planters. This area includes about 127 feet of pier space assigned to Molokai Princess at the eastern end of the commercial pier. A chain link security fence separates the ferry landing area from the Young Brothers cargo area. Although separated by the chain link fence, the ferry landing area and the existing ferry shelter are considered part of the Commercial Harbor. The ferry landing area Figure 1.4 shows the ferry area project site plan. Figure 1.5 shows project site photographs.

Vehicle access to the ferry landing area is controlled by a 22-foot wide double swing gate on the south side of the ferry shelter. A pedestrian gate on the north side of the shelter provides access when the vehicle gate is locked. Mini-tour buses, vans, and passenger vehicles use the area fronting the ferry to park while picking up and dropping off passengers.

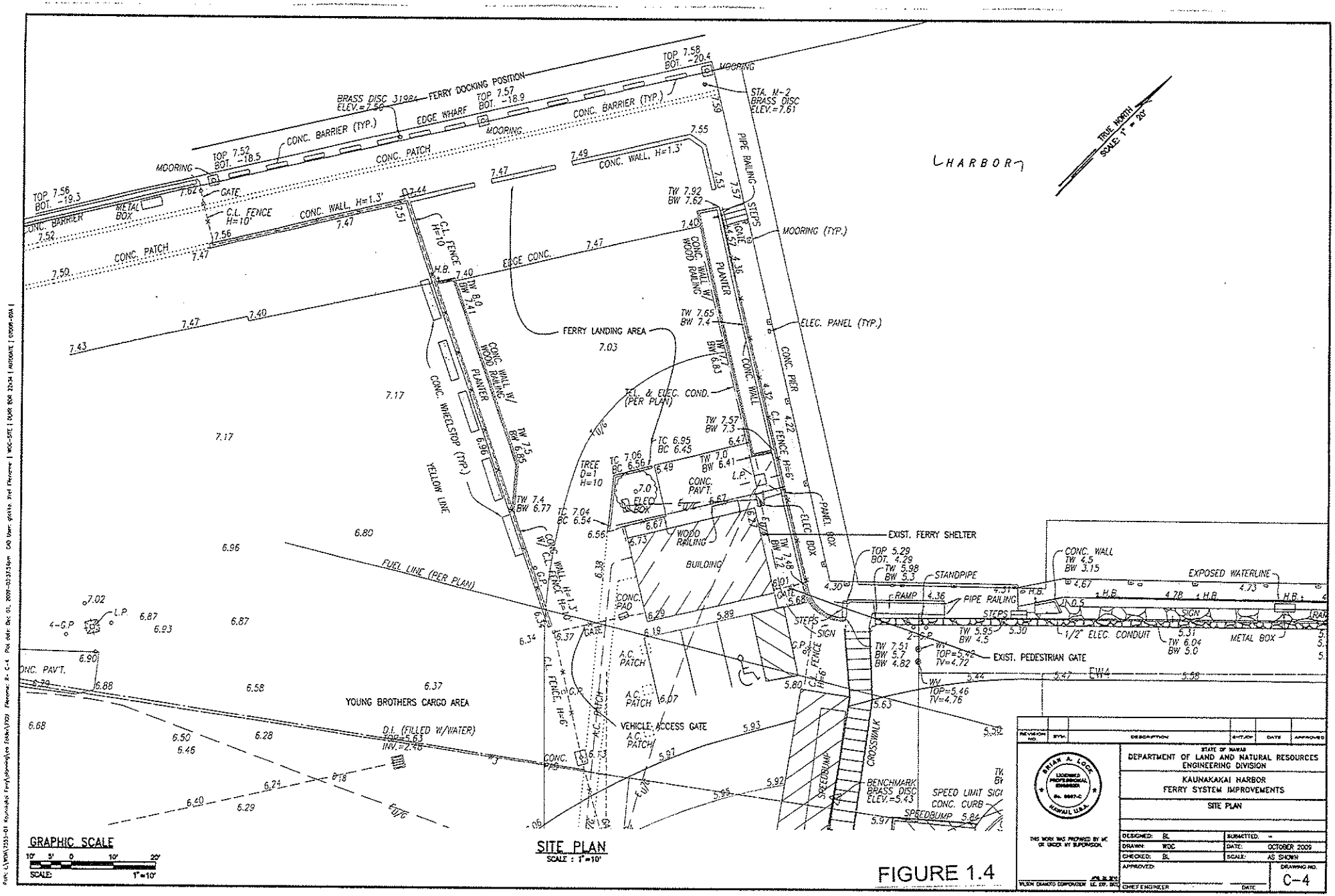
The ferry landing area is available through an ocean use permit issued by the DOT Harbors Division Maui District. The ocean use permit allows use of the ferry landing area by community groups, including canoe paddling groups which use the ocean area on the north side of causeway for canoe practice and events. The canoe paddling groups especially use the ferry landing area and ocean during June and July each year.

In February 1992, the DOT issued an Environmental Assessment/Negative Declaration for the existing Ferry Passenger Shelter at Kaunakakai Harbor, Molokai, Job H. C. 3216.

The project site at the western end of the commercial pier is located between 154 to 187 feet from the pier end. As discussed below, rehabilitation of the pile supported pier will occur in this portion of the commercial pier.

1.3.2 Existing Project Site Conditions

As previously discussed, the Kaunakakai pier island consists of fill land and a pile supported portion. The pile supported portion is on the north side of the Commercial Harbor and provides the area used to dock the barges while loading and unloading cargo and to dock the Molokai Princess. The portion of the Commercial Harbor occupied by the existing ferry shelter is on entirely fill land. The entire Commercial Harbor has been improved and overlaid with asphalt concrete (AC) paving or concrete. Landscaped planters, one tree, and a small grass area near the existing ferry shelter are the only vegetation within the Commercial Harbor.



SITE PLAN
SCALE : 1"=10'

FIGURE 1.4

REVISION NO.	BY	DESCRIPTION	APPROVED	DATE	APPROVED

BRIAN A. LOCK
LICENSED PROFESSIONAL ENGINEER
No. 9887-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

WILSON OKAMOTO CORPORATION

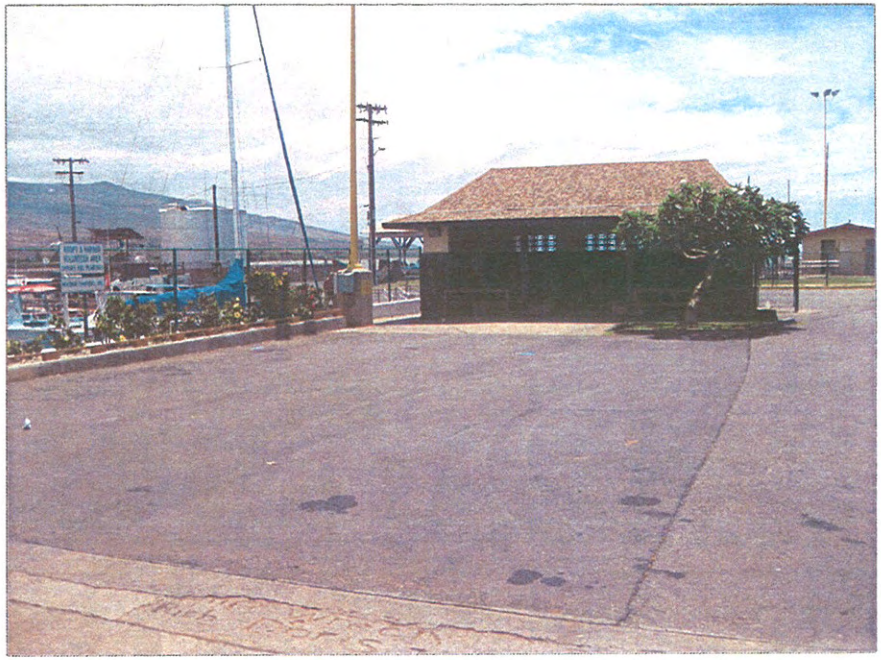
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

KAUNAKAKAI HARBOR
FERRY SYSTEM IMPROVEMENTS

SITE PLAN

DESIGNED:	BL	SUBMITTED:	-
DRAWN:	WOC	DATE:	OCTOBER 2009
CHECKED:	BL	SCALE:	AS SHOWN
APPROVED:		DRAWING NO.	C-4
CHIEF ENGINEER		DATE	

Molokai Princess docking position and ferry landing area



Existing ferry shelter

Young Brothers cargo barge and Molokai Princess docking positions

Causeway shoulder and concrete rubble masonry wall

FIGURE 1.5 Project Site Photographs

Young Brothers uses 560 feet of the pile supported pier for barge operations. Typically, the barge is docked with the stern facing north. In 1990, DOT strengthened an approximately 26-foot wide by 76-foot long section of the pile supported portion of the pier to allow loading and unloading of heavy loads onto the barge. In February 1990, the DOT issued an Environmental Assessment/Negative Declaration for the Strengthen Wharf Deck at Kaunakakai Harbor, Molokai - Job H. C. 3182.

The fuel hatches used to off load the fuel from the fuel barges are located about 140 feet from the east end of the commercial pier. One of the fuel lines from the hatches connects to the existing 3,000-barrel (126,000 gallons) above ground gasoline storage tank located on the south side of the causeway about 215 feet from ferry shelter. A fuel truck loading rack facility is used to pump fuel into delivery trucks which use the facility almost daily.

Two fuel lines, placed on concrete pedestals outside of the south side of the concrete rubble masonry wall of the causeway, connect to the Island Petroleum facility located south of the intersection of Kaunakakai Place and Beach Place, west of Kamehameha V Highway. The above ground fuel storage tank and the fuel lines are owned by Island Petroleum.

In addition to office and storage areas, the existing Harbor Master building contains restroom facilities, which include showers connected to a septic tank for treatment of the wastewater and a leachfield for disposal of the effluent. The wastewater treatment and disposal system, located west of the Harbor Master office building, was constructed in the early 1970s. Currently, the leachfield no longer functions properly and, as such, requires frequent maintenance.

The existing restroom facilities and the ferry landing are separated by the only access roadway to the Young Brothers yard. Ferry users must cross this access roadway, which carries truck traffic to the yard, to reach the restrooms. Also, the existing restrooms have one stall in the men's and women's facilities. At times, a long line develops after the ferry docks. Although restrooms are provided on the ferry, they are small and the passengers prefer using the larger restrooms on land.

Potable water for domestic consumption for the pier island is provided from the County of Maui Department of Water Supply system. The existing 4-inch water main will remain in use to service water demands without any changes. Water service is provided to: the Harbor Master building, a hose bibb adjacent to the existing ferry shelter, Young Brothers

warehouse, hose bibbs along each light post group, and to hose bibbs for the boat slips located on north side of causeway.

The electrical power system is provided by Maui Electric Company (MECO) from utility poles and overhead lines located along the causeway.

Telephone service is provided by the Hawaiian Telecom through overhead lines along the causeway.

The 1,950-foot long by 40-foot wide causeway provides the sole vehicle access to the Kaunakakai Commercial Harbor from Kaunakakai Place. The causeway includes two 12-foot travel lanes, one in each direction, a 12-foot shoulder on the north side and 4-foot shoulder on the south side. The concrete rubble masonry walls on each side form the outer edge of the causeway. The roadway elevation of the causeway is about 7 feet mean sea level (msl). The posted speed limit on the causeway is 15 miles per hour.

Kaunakakai Place at the mauka end of the causeway is part of Maunaloa Highway (State Route 460) controlled by the State of Hawaii Department of Transportation.

1.4 Project Description

1.4.1 Project Improvements

The Kaunakakai Harbor Ferry System Improvements include: converting the existing ferry shelter into restrooms, constructing a ferry shelter, constructing a sewer lift station and force main, constructing a fire protection line and fire hydrants, and rehabilitating a section of the commercial pier to provide compatibility between ferry operations and Young Brother barge operations. The specific improvements will include:

1. Converting the existing 672-square foot ferry shelter into restroom facilities, a storeroom and janitor room;
2. Constructing a 625-square foot ferry shelter on the north side of the converted building, including replacing the roof over the converted shelter to provide a compatible roof over both areas;
3. Constructing a below grade sewer lift station to pump wastewater from existing restrooms in the Harbor Master building and the converted ferry shelter restrooms;
4. Constructing related conduits for the lift station and other electrical service;

5. Constructing a new 2,460 foot long 4-inch sewer force main from the lift station to a transition manhole and constructing a gravity line connection to the existing County wastewater line in Kaunakakai Place;
6. Cleaning and abandoning in-place the existing septic and leachfield system;
7. Constructing a new 3,640-foot long 8-inch (320 feet) and 12-inch (3,320 feet) fire protection water line connecting to the existing County water line on Kaunakakai Place;
8. Constructing three new fire hydrants; and
9. Rehabilitating an approximately 1,550-square foot portion of the pile supported pier by removing and replacing the existing reinforced concrete deck with precast planks and removing 10 piles and placing 12 new piles to provide the necessary strength.

Figure 1.6 shows the project site plan. Figure 1.7 shows the ferry landing site plan. Figure 1.8 shows the shelter floor plan. Figure 1.9 shows the ferry shelter elevations.

The ferry shelter will not require any changes to the Young Brothers cargo area or to the vehicle access gate. However, construction of the ferry shelter will require a temporary access walkway through the Young Brothers yard area. Once construction has been completed, the temporary access will be removed. Thus, once construction is completed, the existing fence between the commercial pier and the existing comfort station will remain without changes.

The converted ferry shelter will contain 4 toilets and 1 wash basin for women, 2 toilets, 2 urinals, and 1 wash basin for men, a janitor's closet, and a storage room. The restrooms would be designed to meet the requirements related to access as set forth by the American with Disabilities Act (ADA). The existing restrooms in the Harbor Master building will remain with no changes.

The new ferry shelter would include a wall on the east side to provide protection from rain and wind conditions. The shelter would also include benches, similar to those in the existing shelter. Interior and exterior lighting would be provided for the shelter. Since the Molokai Princess departs before sunrise (5:15 am) and arrives after sunset (7:30 pm), exterior lighting of the ferry passenger loading area is needed for safety purposes. The exterior lighting would include downshielded fixtures to avoid attracting seabirds which might be in the area.

In addition to the ferry shelter improvements, to control vehicle congestion in the ferry landing area, the following operational measures would be implemented along with the improvements:

1. The double-swing vehicle gate would be relocated to the north about 20 feet and would be locked and closed except during ferry operation hours.

2 The ferry landing area would be designated as a 15-minute loading zone pick up and drop of passengers.

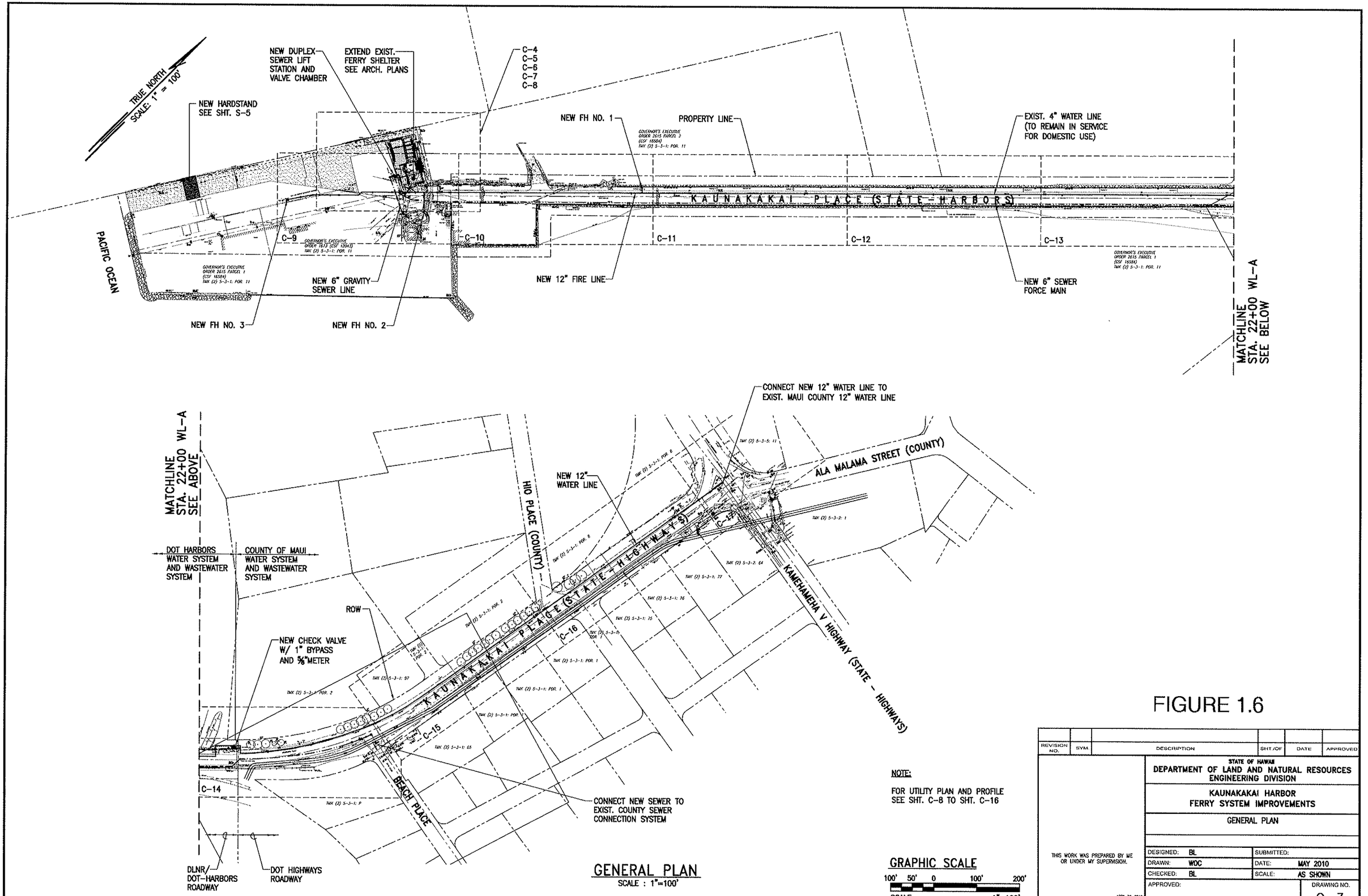
3. No parking would be permitted directly in front of the ferrying docking position.

4. If violations of the parking rules occur, the harbor agent may place written warning tags on the vehicles or request issuance of citations from officers of the County of Maui Police Department (MPD).

Figure 1.10 shows the pavement marking and parking plan.

Persons meeting passengers or dropping off passengers may park in the loading zone stalls in the ferry landing area, or in the 1 ADA stall outside of gate, or in the general DLNR parking lot.

Since the ferry landing area is considered part of the Commercial Harbor controlled by the DOT, the use of vehicles on the commercial harbor is controlled by Hawaii Administrative Rules (HAR) Title 19 Department of Transportation Chapter 43 Motor Vehicles. HAR §19-43-2, Jurisdiction of harbor master over vehicles, states any vehicle operating on any state pier or within any state commercial harbor facility shall be subject to the jurisdiction and control of the harbor master.



GENERAL PLAN
SCALE : 1"=100'

NOTE:

FOR UTILITY PLAN AND PROFILE SEE SHT. C-8 TO SHT. C-16

GRAPHIC SCALE

100' 50' 0 100' 200'

SCALE: 1"=100'

FIGURE 1.6

REVISION NO.	SYM.	DESCRIPTION	SHT /OF	DATE	APPROVED

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

KAUNAKAKAI HARBOR
FERRY SYSTEM IMPROVEMENTS

GENERAL PLAN

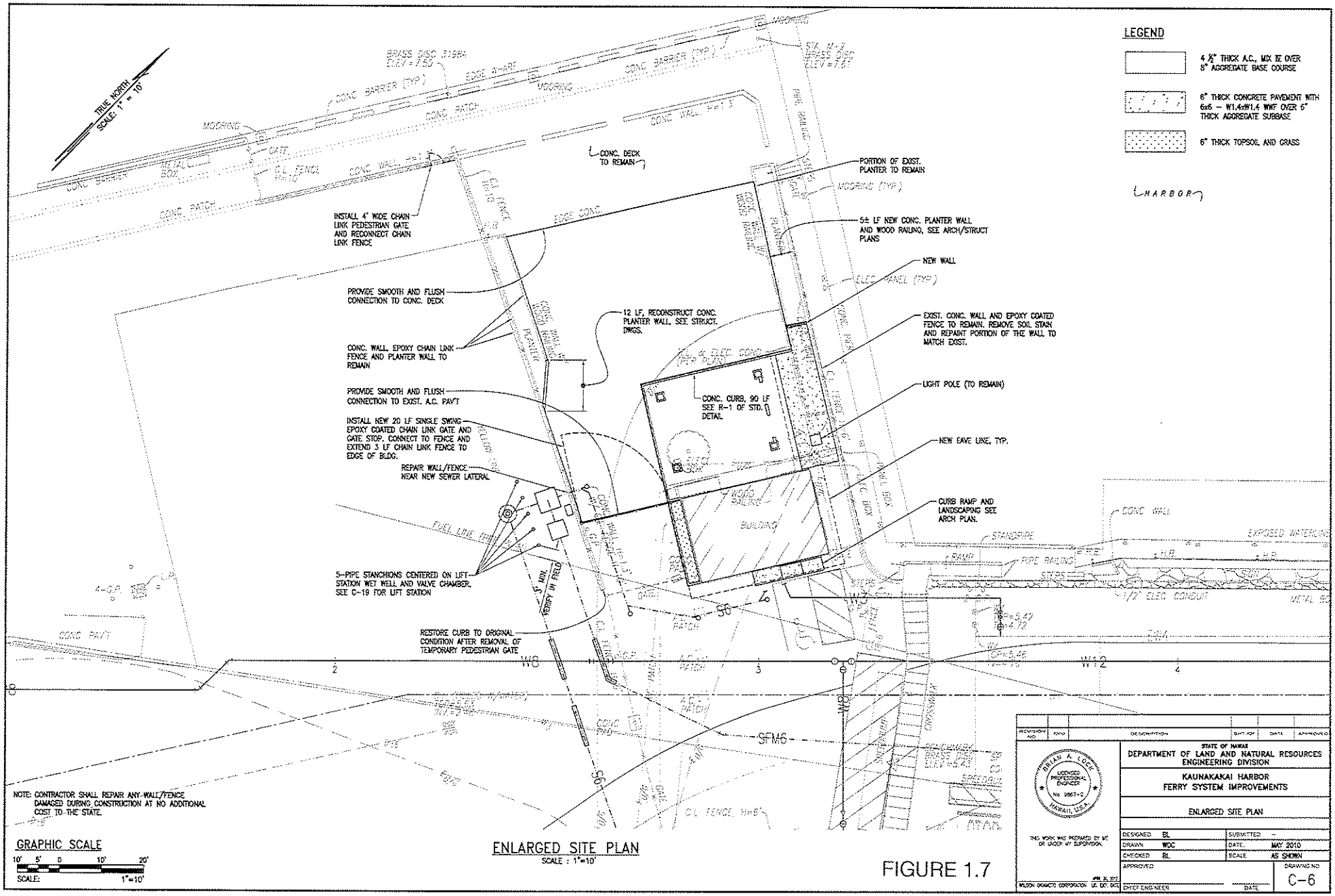
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

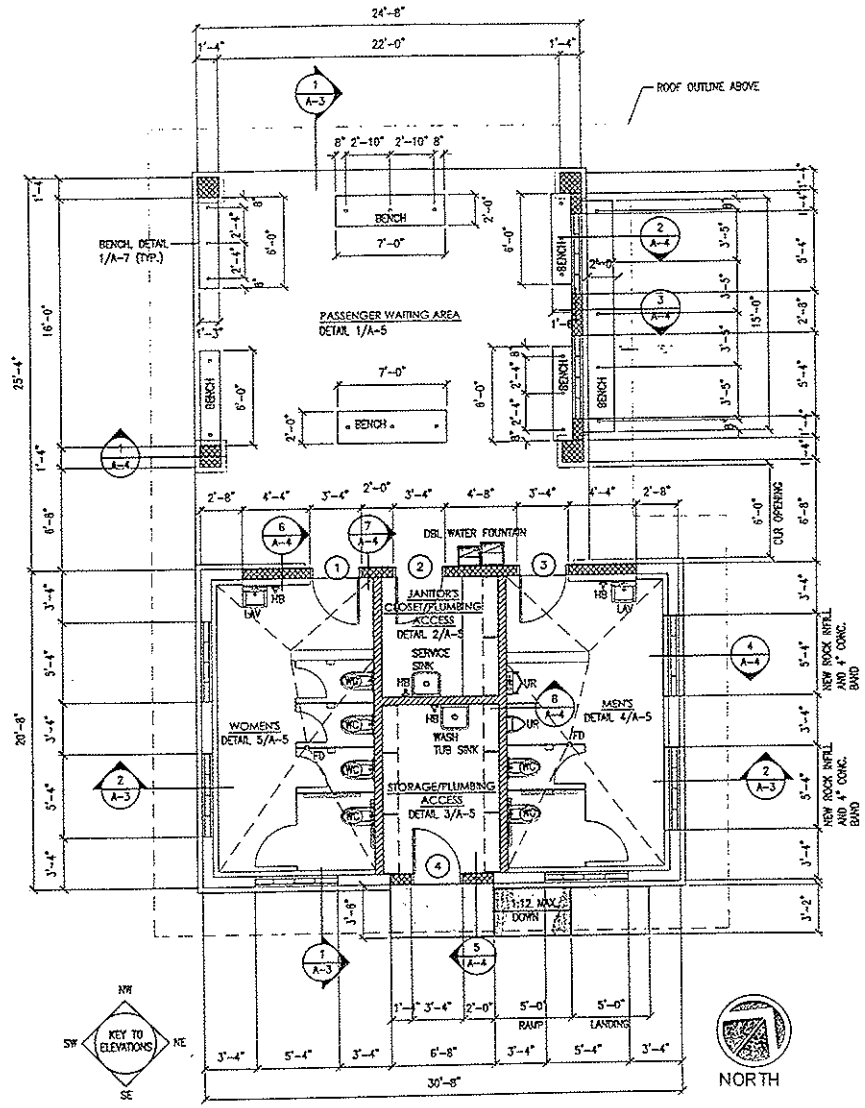
APRIL 30, 2012
WILSON OKAMOTO CORPORATION LIC. EXP. DATE

DESIGNED:	BL	SUBMITTED:	
DRAWN:	WOC	DATE:	MAY 2010
CHECKED:	BL	SCALE:	AS SHOWN
APPROVED:			DRAWING NO. C-3

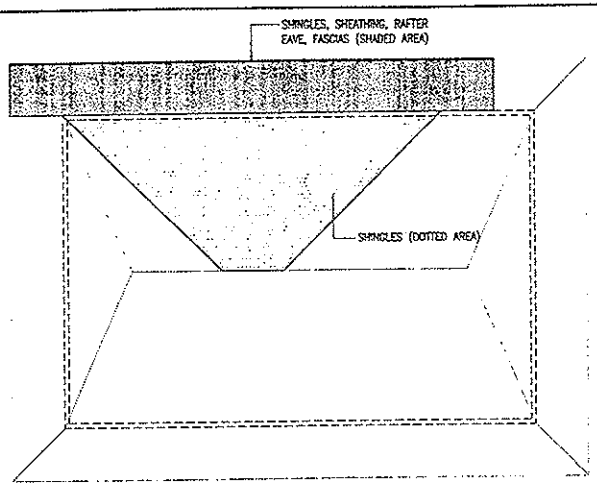
CHIEF ENGINEER DATE

Path: L:\WOA\7553-01 Kaunakakai Ferry\Civil\ Filename: C-3 Plot date: May 24, 2010-12:44:39pm CAD User: ekawashima Xref Filename: | WOC-SITE | DLNR BDR 22x34 | AUTODATE | 07008-09A |


LEGEND
4 ½" THICK A.C., MIX IE OVER 8" AGGREGATE BASE COURSE
6" THICK CONCRETE PAVEMENT WITH 6x6 – W1.4xW1.4 WWF OVER 6" THICK AGGREGATE SUBBASE
6" THICK TOPSOIL AND GRASS
HARBOR
TRUE NORTH
SCALE: 1" = 10'
INSTALL 4' WIDE CHAIN LINK PEDESTRIAN GATE AND RECONNECT CHAIN LINK FENCE
PROVIDE SMOOTH AND FLUSH CONNECTION TO CONC. DECK
CONC. WALL, EPOXY CHAIN LINK FENCE AND PLANTER WALL TO REMAIN
PROVIDE SMOOTH AND FLUSH CONNECTION TO EXIST. A.C. PAVT
INSTALL NEW 20 LF SINGLE SWING EPOXY COATED CHAIN LINK GATE AND GATE STOP. CONNECT TO FENCE AND EXTEND 3 LF CHAIN LINK FENCE TO EDGE OF BLDG.
REPAIR WALL/FENCE NEAR NEW SEWER LATERAL
5-PIPE STANCHIONS CENTERED ON LIFT STATION WET WELL AND VALVE CHAMBER, SEE C-19 FOR LIFT STATION
RESTORE CURB TO ORIGINAL CONDITION AFTER REMOVAL OF TEMPORARY PEDESTRIAN GATE
CONC. DECK TO REMAIN
12 LF, RECONSTRUCT CONC. PLANTER WALL, SEE STRUCT. DWGS.
CONC. CURB, 90 LF SEE R-1 OF STD. DETAIL
PORTION OF EXIST. PLANTER TO REMAIN
5± LF NEW CONC. PLANTER WALL AND WOOD RAILING, SEE ARCH/STRUCT PLANS
NEW WALL
EXIST. CONC. WALL AND EPOXY COATED FENCE TO REMAIN. REMOVE SOIL STAIN AND REPAINT PORTION OF THE WALL TO MATCH EXIST.
LIGHT POLE (TO REMAIN)
NEW EAVE LINE, TYP.
CURB RAMP AND LANDSCAPING SEE ARCH PLAN.
NOTE: CONTRACTOR SHALL REPAIR ANY WALL/FENCE DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE STATE.
GRAPHIC SCALE
10' 5' 0 10' 20'
SCALE: 1"=10'
ENLARGED SITE PLAN
SCALE : 1"=10'
FIGURE 1.7
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
KAUNAKAKAI HARBOR
FERRY SYSTEM IMPROVEMENTS
ENLARGED SITE PLAN
DESIGNED BL
DRAWN WOC
CHECKED BL
APPROVED
SUBMITTED –
DATE MAY 2010
SCALE AS SHOWN
DRAWING NO C-6
BRIAN A. LOCK LICENSED PROFESSIONAL ENGINEER NO. 9867-C HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
CHIEF ENGINEER
DATE

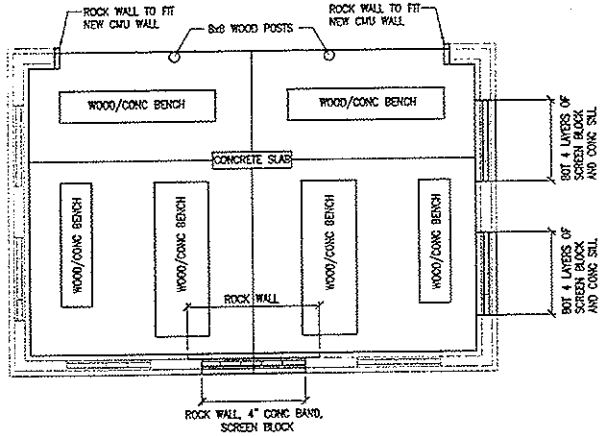


FLOOR PLAN
SCALE: 1/4"=1'-0"



ROOF DEMOLITION PLAN
SCALE: 1/4"=1'-0"

LEGEND:
1. ——— ALL HEAVY LINES INDICATE TO BE REMOVED.
2. ——— ALL LIGHT LINES INDICATE TO REMAIN.



FLOOR DEMOLITION PLAN
SCALE: 1/4"=1'-0"

REVISION NO.	SYMBOL	DESCRIPTION	BY/CHK	DATE	APPROVED

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

KAUNAKAKAI HARBOR
FERRY SYSTEM IMPROVEMENTS

FLOOR PLAN, DEMOLITION PLANS

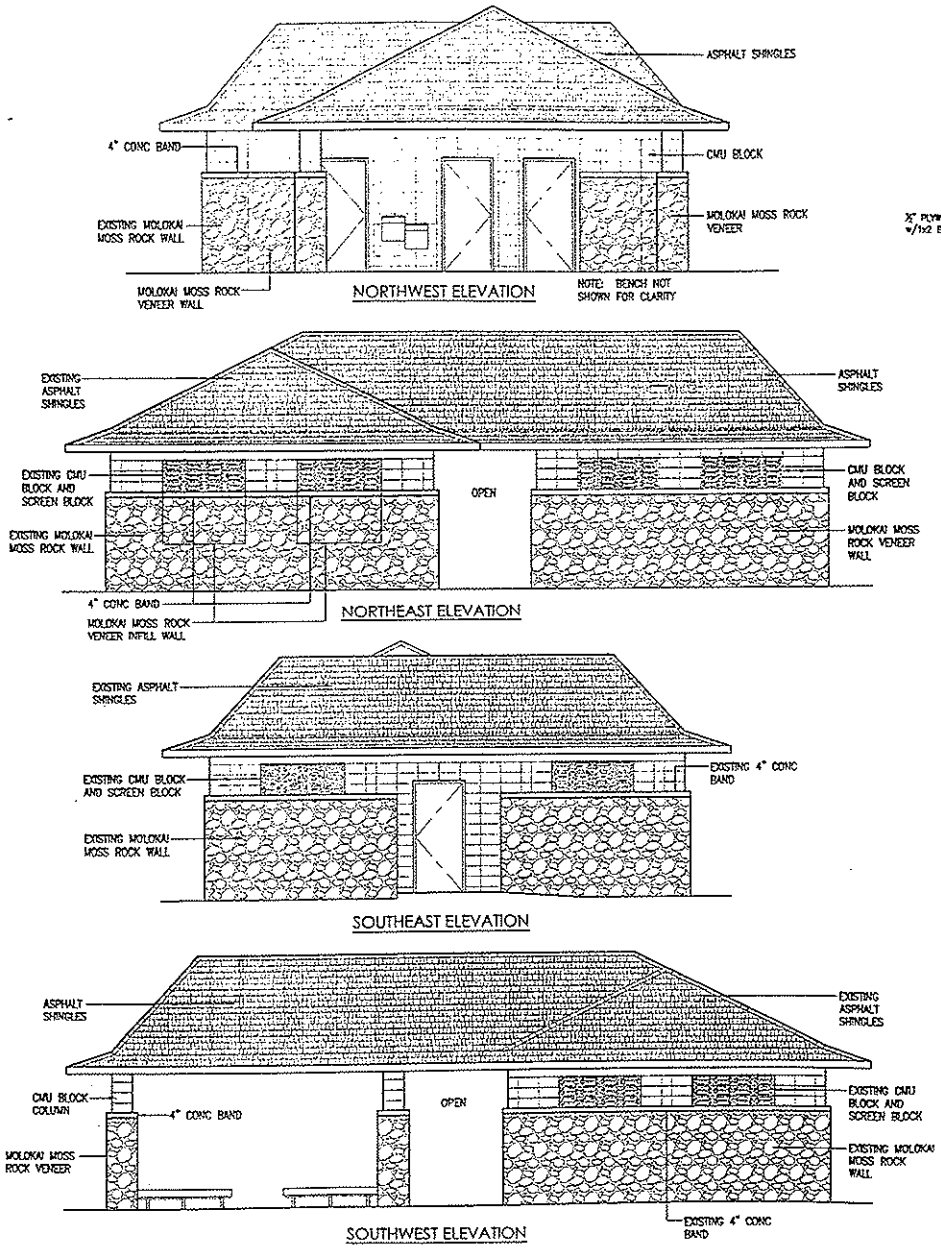
SHAUN S. TSUTSUMI
LICENSED PROFESSIONAL ARCHITECT
No. 7735
HAWAII, U.S.A.

This work was prepared by me or under my supervision and construction of this project shall be under my observation.

SIGNATURE
LICENSE EXPIRATION DATE: 04/30/10

DESIGNED:	TH	SUBMITTED:	
DRAWN:	CT	DATE:	NOVEMBER 2009
CHECKED:	SU	SCALED:	AS SHOWN
APPROVED:			DRAWING NO. A-1
CHIEF ENGINEER		DATE:	

FIGURE 1.8



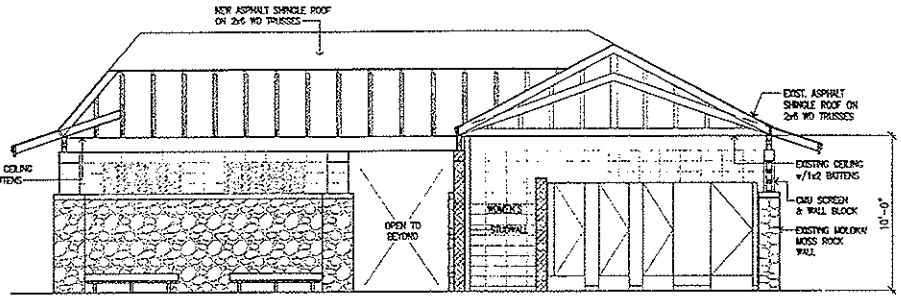
NORTHWEST ELEVATION

NORTHEAST ELEVATION

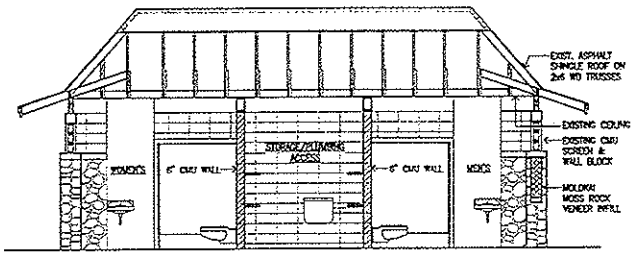
SOUTHEAST ELEVATION

SOUTHWEST ELEVATION

EXTERIOR ELEVATION
SCALE: 1/4"=1'-0"



1 A-3 LONGITUDINAL SECTION
SCALE: 1/4"=1'-0"



2 A-3 CROSS SECTION
SCALE: 1/4"=1'-0"

FIGURE 1.9

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

KAUNAKAKAI HARBOR
FERRY SYSTEM IMPROVEMENTS

EXTERIOR ELEVATIONS, BUILDING SECTIONS

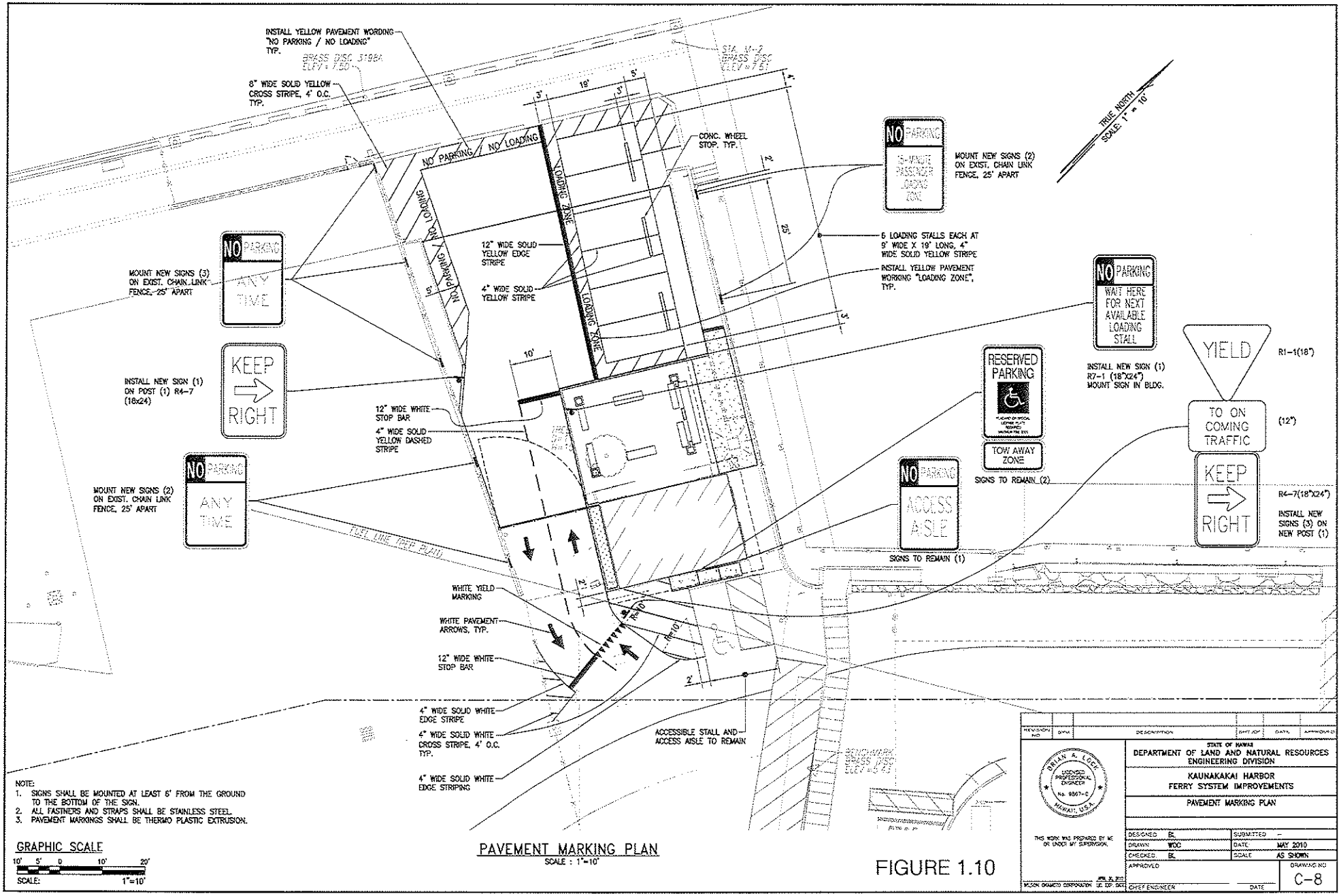
SHAUN S. USHIJIMA
LICENSED PROFESSIONAL ARCHITECT
No. 7735
HAWAII, U.S.A.

This work was prepared by me or under my supervision and construction of this project shall be under my observation.

SIGNATURE

LICENSE EXPIRATION DATE: 04/30/10

DESIGNED:	TH	SUBMITTED:	
DRAWN:	CT	DATE:	NOVEMBER 2009
CHECKED:	SU	SCALED:	AS SHOWN
APPROVED:			DRAWING NO. A-3
CHIEF ENGINEER		DATE	



NOTE:
1. SIGNS SHALL BE MOUNTED AT LEAST 6' FROM THE GROUND TO THE BOTTOM OF THE SIGN.
2. ALL FASTNERS AND STRAPS SHALL BE STAINLESS STEEL.
3. PAVEMENT MARKINGS SHALL BE THERMO PLASTIC EXTRUSION.

GRAPHIC SCALE
10' 5' 0 10' 20'
SCALE: 1"=10'

PAVEMENT MARKING PLAN
SCALE : 1"=10'

FIGURE 1.10

REVISION NO.	DATE	DESCRIPTION	SHT. NO.	DATE	APPROVED

BRIAN A. LOCK LICENSED PROFESSIONAL ENGINEER No. 9867-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

APR. 9, 2010

MUSON OKAMOTO CORPORATION LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

KAUNAKAKAI HARBOR
FERRY SYSTEM IMPROVEMENTS

PAVEMENT MARKING PLAN

DESIGNED: BL		SUBMITTED: –	
DRAWN: WOC		DATE: MAY 2010	
CHECKED: BL		SCALE: AS SHOWN	
APPROVED			DRAWING NO. C-8
CHIEF ENGINEER	DATE		

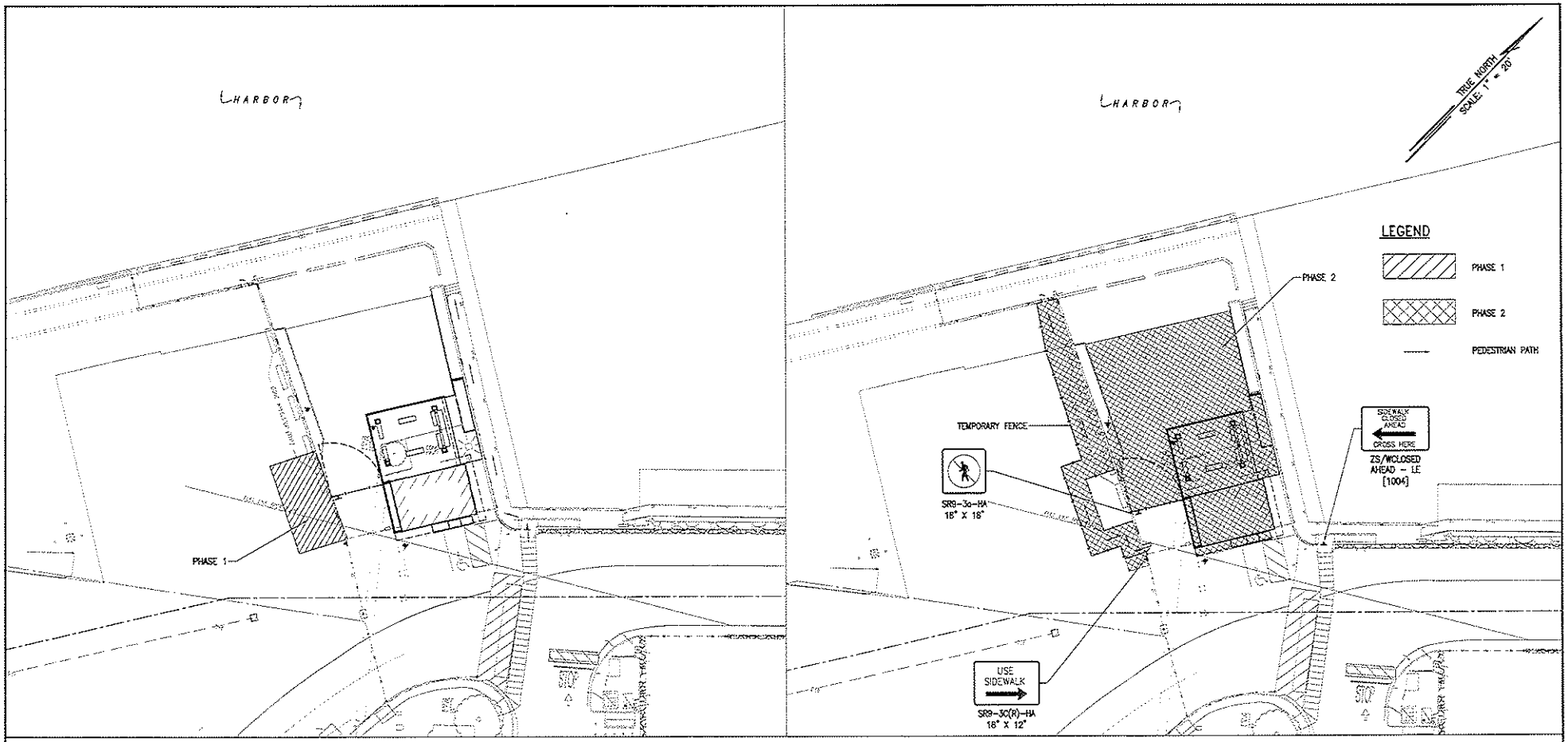
HAR §19-43-5 Traffic Controls, state all persons operating a motor vehicle on a state pier or within a state commercial harbor facility must comply with any lawful order, notice, signal or direction of any county police officer, state security guard, state law enforcement officer, or special police officer.

Note, overnight parking of passenger's vehicles for up to 72 hours is allowed anywhere in the DLNR open parking lot located across from the ferry shelter. No fees are charged. Overnight parking is not allowed in the three, 30 minute stalls reserved for harbor office customer parking in front of Harbor Master office.

During renovation of the existing ferry shelter and construction of the new ferry shelter, the contractor will secure the construction area to ensure the safety of the ferry users. To provide access to the Molokai Princess the sewer lift station will be constructed first (see Phase 1 in Figure 1.11). After Phase 1 is completed a 6-foot wide temporary pedestrian access will be established using a portion of the Young Brothers cargo area adjacent to the ferry landing area. The temporary access will include two 3-foot wide pedestrian gates, one at each end of the temporary access, and an 8-foot high chain link security fence to separate the pedestrians and the cargo yard. The existing 6-foot wide walkway located on the west side of the ferry landing area will also remain without changes and available for access to the ferry. In addition, an approximately 30-foot wide area fronting the Molokai Princess docking position will be designated as a temporary ferry landing area for loading and unloading ferry passengers. See Figure 1.11.

Converting the existing ferry shelter to restrooms and janitor closet would require excavation to connect the water and sewer lines to existing or new service laterals and construct conduits for electrical services to the lift station and other uses. The new sewer lift station and force main will be used to pump the wastewater flows to a transition manhole which will be connected to the existing County wastewater system by a gravity line. The underground lift station will be located in the Young Brothers yard near the existing security fence. Below grade lines will connect the existing restrooms in the Harbor master office and the new restrooms to the lift station. The new 4-inch force main will be located on the south side of the causeway. An approximately 5-foot deep trench with a 4-foot cover will be used for the force main trench.

Once the lift station and force main is completed, the existing septic tank will be pumped out, cleaned, the connecting lines plugged, and backfilled. The leachfield will also be cleaned and abandoned in-place.



PHASE 1
SCALE : 1"=20'

PHASE 2
SCALE : 1"=20'

GRAPHIC SCALE
10' 5' 0 10' 20'
SCALE: 1"=10'

FIGURE 1.11

REVISION NO	SHT	DESCRIPTION	SHT NO	DATE	APPROVED

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

KAUNAKAKAI HARBOR
FERRY SYSTEM IMPROVEMENTS

SEQUENCING PLAN

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

WILSON OKAMOTO CORPORATION

DESIGNED:	BL	SUBMITTED:	–
DRAWN:	WOC	DATE:	MAY 2010
CHECKED:	BL	SCALE:	AS SHOWN
APPROVED:			DRAWING NO: C-27
CHIEF ENGINEER		DATE	

A new 8-inch and 12-inch fire protection water line will be installed to provide fire protection for the Commercial Harbor, including the ferry shelter, the ferry and ferry landing area, and the above ground gasoline fuel tank located on the south side of the causeway. Since separate fire and domestic water mains are needed to comply with County of Maui requirements for protecting the potable water system from possible contamination due to suction backflow from the fire water main, the existing domestic water line will remain with no changes. The fire protection line will have its own meter and have a separate backflow prevention device.

The fire protection line and sewer force main would be placed in separate trenches which would be designed to be about 5 feet deep and 2 feet wide. The trenches would be designed to County of Maui standards which include an 8-inch base course and about 3 feet of cover. The fire protection line will be located within the 12-foot wide shoulder of the north side of the causeway and along Kaunakakai Place. The sewer force main would be located in the 4-foot shoulder on the south side of the causeway. Construction of the trenches and placement of the force main and fire protection line will not require closure of the travel lanes. In addition, although there may be temporary re-routing of access or detours, during construction of the force main and fire protection line, access will remain open to the boats docked in the small boat harbor north of the causeway.

Three new fire hydrants will be constructed to provide fire protection for the ferry shelter, the ferry and ferry landing area and other facilities at Kaunakakai Harbor. One fire hydrant will be located along the causeway east of the fuel tank. This hydrant will provide fire protection to the fuel tank and fuel truck loading facilities. The second hydrant will provide fire protection for the ferry shelter, the ferry and ferry landing area, and the Harbor Master office. The third hydrant will provide fire protection of portions of the cargo area and for the ferry when it docks near the western end of the pier during fuel barge operations at the fuel hatches.

Typically, construction of the 8-inch and 12-inch fire protection line will be done in segments so the new line can be hydrotested, which includes cleaning the line of debris, adding chlorine to disinfect the line, and testing to ensure the proper pressure can be maintained. This process may be repeated to ensure the line meets the County of Maui Department of Water Supply standards. Since the work can be done in segments, the effluent water from the testing can be disposed in using several methods: 1) the effluent can be placed in the next segment of trench; 2) the effluent can be used for dust control at an off-site location; 3) the effluent can be treated to neutralize the chlorine and disposed into nearby waters.

These methods of disposal will ensure the effluent water does not affect nearby areas. Should the hydrotest water be disposed into nearby State waters, a National Pollutant Discharge Elimination System (NPDES) permit for hydrotest waters disposal will be required. At this time, a hydrotest permit from the State of Hawaii Department of Health is not anticipated.

Seawater was considered as a water source for the fire protection system. Although seawater is readily available at the Commercial Harbor and causeway and would not use potable water, such a system has one major drawback. The fixed infrastructure of a seawater fire protection system requires frequent maintenance due to direct exposure of the piping to salt water. Depending on the specific design, the system requires below grade maintenance which is difficult to accomplish. Without this frequent maintenance, a seawater fire protection system will corrode until inoperable. An existing seawater fire protection system located on Kaunakakai Harbor has corroded beyond repair.

Although the County of Maui Fire Department indicated an ability to hook up their equipment and use a seawater system, the maintenance requirements of the fixed system to sustain an operable system outweighs its benefits. Moreover, should the seawater system fall into disrepair, the County Fire Department would lose its ability to effectively and efficiently fight fires on the harbor.

The pier rehabilitation improvements would include: removal of an about 1,550-square foot area (31 feet x 50 feet) of the existing pier deck; driving 12 new 20-inch octagonal precast piles with pile caps to support the replacement deck; removal of 8 of the existing piles by cutting them at the mud line, removal of 2 of the existing piles by cutting them to avoid damage to coral growing on them, and replacement of the of the deck with 7-1/2-inch thick precast concrete planks with 4-1/2-inch thick composite concrete topping. The pier rehabilitation including removing and replacing the deck and removing and replacing the piles would be done with equipment placed on the existing deck. During the pier rehabilitation, the Young Brothers barge will continue to use the pier for barge operations. Figure 1.12 shows the pier demolition plan. Figure 1.13 shows the replacement deck plan.

The precast reinforced replacement piles will be predrilled then driven into place with a pile driving machine. The piles will be hammered to the specified depth below the surface.

Best management practices (BMP) mitigation measures will be included in the construction drawings and specifications to protect marine resources, including the two piles with coral,

during construction of the improvements. First, the documents will include full water depth floating silt curtains which are to be used to enclose the work area to control turbidity during all in-water and over-water work. If a plume is observed outside of the silt curtain that is caused by the construction activity, the contractor is to stop the activity and take corrective action immediately. Work shall resume after correction has been made. A small boat may be used to place the floating silt curtain. Figure 1.13 shows the floating silt curtain.

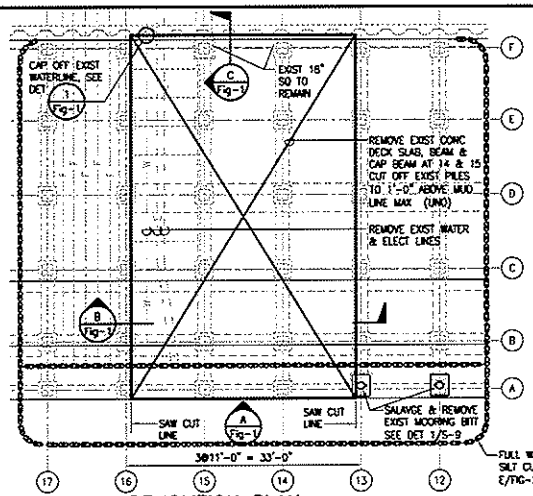
Second, the design drawing notes and contract specifications will state that no debris shall be allowed to enter the water from above or below the waterline. The contractor shall provide a temporary platform or other suitable positive means of capturing debris from construction and demolition operations. These facilities are to be in place prior to starting demolition work.

On March 12, 2007, the Department of the Army Corps of Engineers reissued all existing nationwide permits (NWPs), general conditions, and definitions with some modifications. As stated in the Federal Register, the effective date of the reissued NWPs was March 19, 2007. The pier rehabilitation improvements fall under NWP 3 Maintenance which includes (a) repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure, or fill authorized by 33 Code of Federal Regulations (CFR) 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification.

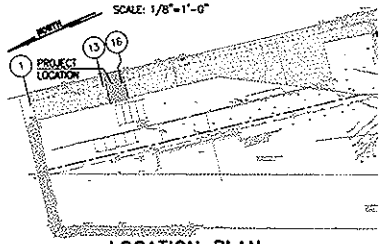
Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized.

Regulations (CFR) 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification.

Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized.

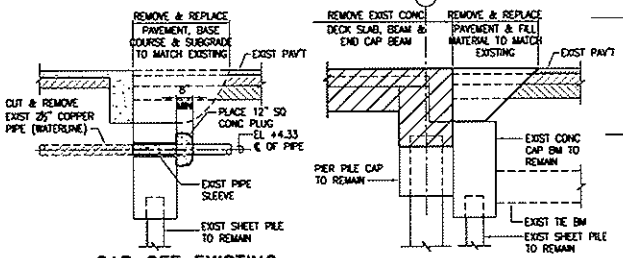


DEMOLITION PLAN



SCALE: 1"=100'-0"

LOCATION PLAN

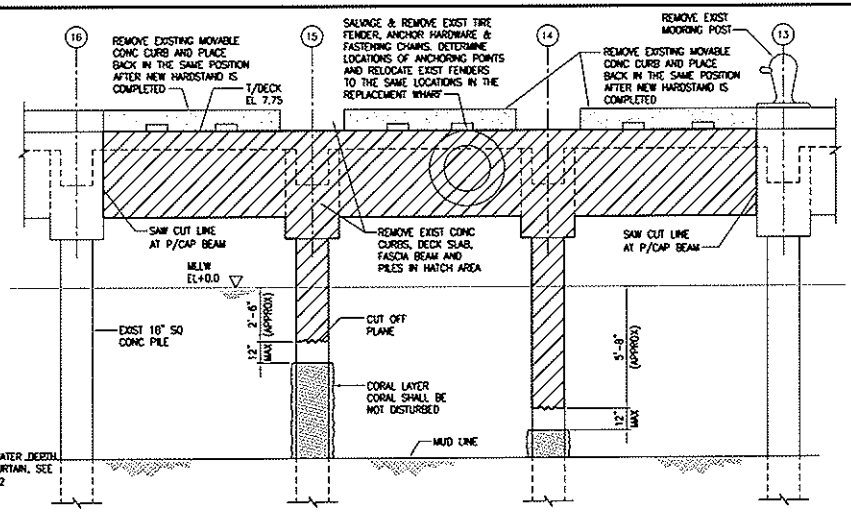


1 Fig-1 CAP OFF EXISTING WATERLINE DETAIL

SCALE: 3/8"=1'-0"

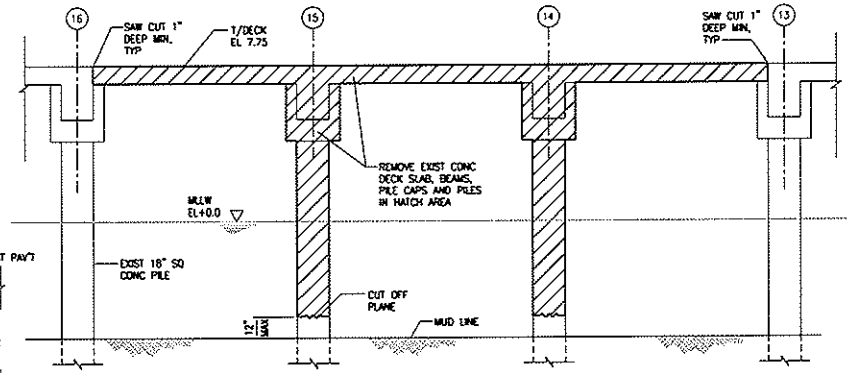
C Fig-1 SECTION

SCALE: 3/8"=1'-0"



A Fig-1 ELEVATION

SCALE: 3/8"=1'-0"



B Fig-1 SECTION

SCALE: 3/8"=1'-0"

GENERAL NOTES:

1. THIS PROJECT REQUIRES THE IMPLEMENTATION OF A BEST MANAGEMENT PRACTICES (BMP) PLAN DURING ALL DEMOLITION AND CONSTRUCTION WORK TO PREVENT AND/OR MINIMIZE ENVIRONMENTAL IMPACTS DURING THE CONSTRUCTION ACTIVITY. IF FOREIGN OBJECTS AND/OR MATERIALS ACCIDENTALLY FALL INTO THE HARBORS, THEY SHALL BE RETRIEVED AND DISPOSED OF AT NO COST TO THE GOVERNMENT. THE BMP PLAN SHALL ADDRESS THE USE OF DUST AND DEBRIS CONTAINMENT AND CATCHMENT DEVICES TO PREVENT ANY FOREIGN MATTER (E.G., CONSTRUCTION MATERIALS, DEBRIS, DUST, ETC.) FROM FALLING INTO THE HARBOR FROM THE WHARVES TO MINIMIZE FUGITIVE DUST.
2. THE CONTRACTOR IS RESPONSIBLE FOR SCAFFOLDING, BARRICADES, WORK PLATFORMS, AND SAFETY AT THE JOB SITE. TEMPORARY BRACING AND SHORING OF ELEMENTS AS REQUIRED FOR STRUCTURAL STABILITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DO NOT DRILL HOLES INTO CONCRETE TO SUPPORT SCAFFOLDING. ALL DAMAGES SHALL BE REPAIRED.
3. CONTRACTOR SHALL PROTECT EXISTING SURFACES AND OBJECTS TO REMAIN FROM DAMAGE. ANY ITEM TO REMAIN THAT IS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED OR REPAIRED TO MATCH EXISTING ADJACENT SURFACES AT NO ADDITIONAL COST.
4. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PROTECT THE NEW WORK AND EXISTING STRUCTURES DURING THE CONSTRUCTION.
5. OMISSIONS AND/OR CONFLICTS WITH THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.
6. THE CONTRACTOR SHALL COORDINATE ALL WORK TO ENSURE THAT THE CONSTRUCTION ACTIVITIES DO NOT INTERFERE WITH OPERATIONS OR SECURITY.
7. THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS RESULTING FROM HIS WORK DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COSTS FOR ANY NECESSARY REMEDIAL ACTION BY THE GOVERNMENT SHALL BE PAID BY THE CONTRACTOR. CONTRACTOR SHALL PROTECT ALL STORM DRAINS AND DECK OPENINGS TO PREVENT THE DISCHARGE OF FOREIGN MATERIALS TO THE HARBOR.
8. FIRE DEPARTMENT FIRE LANES, ACCESS TO ALL LAYDOWN AREAS AND CONSTRUCTION AREAS SHALL BE MAINTAINED AT ALL TIMES. EMERGENCY VEHICLES SHALL HAVE ACCESS AT ALL TIMES. DO NOT BLOCK EGRESS.
9. THE CONTRACTOR SHALL USE FULL WATER DEPTH SILT CURTAINS TO ENCLOSE THE WORK AREA TO CONTROL TURBIDITY DURING ALL IN-WATER AND OVER-WATER WORK. IF A PLUME IS OBSERVED OUTSIDE OF THE SILT CURTAINS THAT IS CAUSED BY THE CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL STOP THE ACTIVITY AND TAKE CORRECTIVE ACTION IMMEDIATELY. WORK SHALL RESUME AFTER CORRECTION HAS BEEN MADE.
10. NO DEBRIS SHALL BE ALLOWED TO ENTER THE WATER FROM ABOVE OR BELOW THE WATERLINE. THE CONTRACTOR SHALL PROVIDE A TEMPORARY PLATFORM OR OTHER SUITABLE POSITIVE MEANS OF CAPTURING DEBRIS FROM CONSTRUCTION AND DEMOLITION OPERATIONS. THESE FACILITIES SHALL BE IN PLACE PRIOR TO STARTING DEMOLITION WORK.
11. WASTEWATER FROM DEMOLITION WORK SHALL NOT BE DISCHARGED INTO THE SANITARY SEWER SYSTEM OR THE HARBOR. THE CONTACTOR SHALL CAPTURE ALL POLLUTANTS AND DISPOSE OF THEM OFF SITE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY GOVERNMENT UTILITY SYSTEM RESULTING FROM CONSTRUCTION OPERATIONS: ANY DAMAGE SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER. ANY SEWER REPAIR PERFORMED BY THE CONTRACTOR SHALL BE INSPECTED BY THE ENGINEER PRIOR TO BACKFILLING.
13. THE CONTRACTOR WILL BE RESPONSIBLE FOR REGULARTORY FINES OR PENALITIES THAT MAY BE IMPOSED BY ENVIRONMENTAL REGULATORY AGENCIES (EPA AND/OR STATE DOH) IN THE EVENT OF SEWAGE OVERFLOW OR SPILL RESULTING FROM CONSTRUCTION OPERATIONS.
14. THE CONTRACTOR SHALL REIMBURSE THE GOVERNMENT FOR ANY EMERGENCY RESPONSE EFFORT THAT MAY BE REQUIRED BY GOVERNMENT FORCES TO MITIGATE THE ADVERSE EFFECTS OF ANY SEWAGE OVERFLOW OR SPILL RESULTING FROM THE CONTRACTOR'S OPERATIONS.
15. ADJACENT BERTHS MUST REMAIN ACCESSIBLE AND OPERATIONAL.
16. ALL EXISTING UTILITIES, INCLUDING, BUT NOT LIMITED TO, COMMUNICATIONS AND ELECTRICAL LINES, CONDUITS, AND CABLES, UNLESS OTHERWISE INDICATED TO BE REMOVED/ABANDONED, SHALL BE PROTECTED FROM DAMAGES DURING CONSTRUCTION. ANY DAMAGES BY THE CONTRACTOR SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE GOVERNMENT.

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KAUNAKAKAI HARBOR, FERRY SYSTEM IMPROVEMENTS

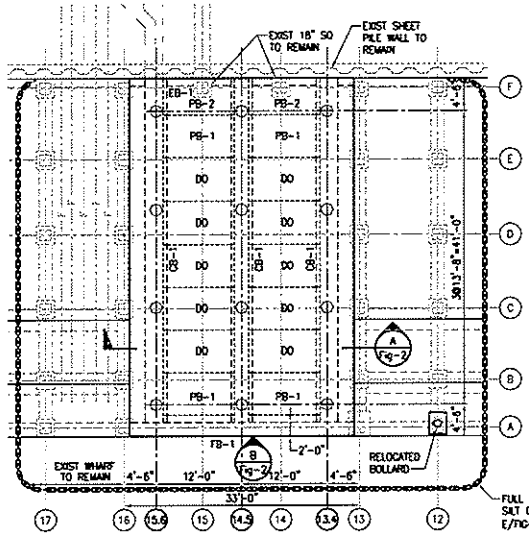
NEW CONCRETE HARDSTAND – DEMOLITION PLAN, SECTIONS AND DETAIL

Date: March 15, 2010

Figure 1.12

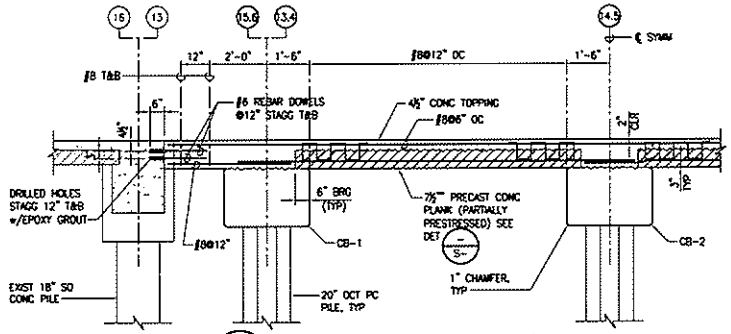
Sht. No.

Path: L:\WOA\7553-01 Kaunakakai Ferry\FIGURES_Struct\D Filename: Fig 1.12 Plot date: May 25, 2010 - 08:22:08am CAD User: cmorimoto. Xref Filename: | AUTOD



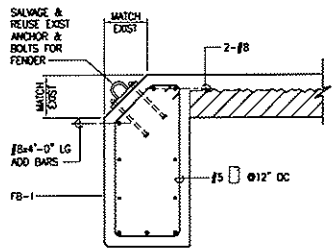
NEW DECK FRAMING PLAN

SCALE: 1/8"=1'-0"



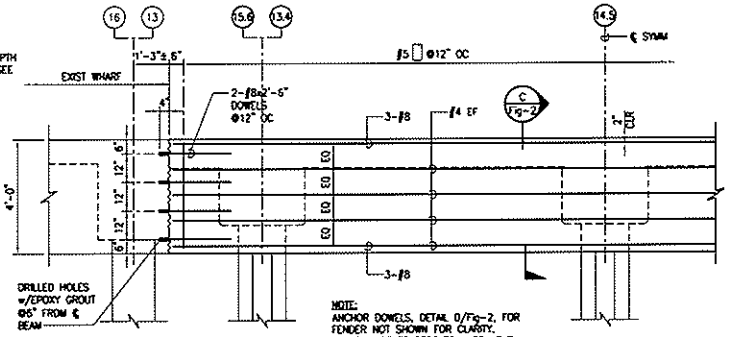
A TYPICAL DECK SLAB SECTION

Fig-2 SCALE: 1/2"=1'-0"



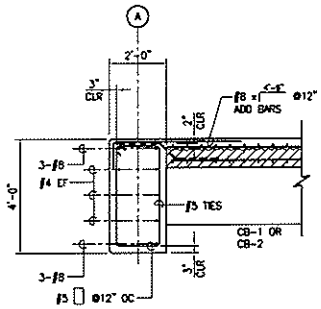
D FENDER ANCHOR DETAIL

Fig-2 SCALE: 3/4"=1'-0"



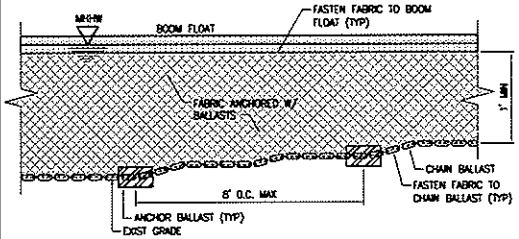
B FASCIA BEAM (FB-1) ELEVATION

Fig-2 SCALE: 1/2"=1'-0"



C SECTION

Fig-2 SCALE: 1/2"=1'-0"



NOTES:

1. FABRIC SHALL BE HIGH STRENGTH NYLON REINFORCED VINYL HIGH VISIBILITY YELLOW, 22 OZ/YD WEIGHT.
2. CHAIN BALLAST SHALL BE 5/16" GALVANIZED CHAIN (MIN. 1.1 LBS/FT).
3. ANCHOR BALLAST SHALL BE MINIMUM 50 LBS AT 8' O.C.
4. SILT CURTAIN SHALL BE INSTALLED PRIOR TO START OF CONSTRUCTION IN WATER WHICH MIGHT RESULT IN DISCHARGES TO STATE WATERS.

E SILT CURTAIN DETAIL

Fig-2 SCALE: NONE

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KAUNAKAKAI HARBOR, FERRY SYSTEM IMPROVEMENTS

NEW CONCRETE HARDSTAND – NEW DECK FRAMING PLAN AND SECTIONS

Date: March 15, 2010

Figure 1.13
Sht. No.

Path: L:\WOA\7553-01 Kaunakakai Ferry\FIGURES_Struct\D Filename: Fig 1.13 Plot date: May 25, 2010-08:23:20am CAD User: cmorimoto. Xref Filename: | AUTOD

The US Army Engineer District, Honolulu, would make the determination as to the applicability of NWP 3 for the pier rehabilitation.

1.5 Preliminary Cost Estimate

The budgeted construction cost is approximately $4.0 million which will be funded by the Federal Transit Administration (FTA) grant, the DOT, and by DLNR.

The FTA grant funding the building reconstruction does not allow revenue generating entities to occupy any portions of the building.

1.6 Project Schedule

Construction is expected to start in September 2010, pending approval of applicable permits, and should require about 9 months to complete. The exact start date will depend on the bid documents and contract terms.

2. DESCRIPTION of EXISTING ENVIRONMENT, IMPACTS and MITIGATION MEASURES

2.1 Geology and Soils

The Island of Molokai was formed during the early to middle Pleistocene Epoch (Ice Age) by basaltic and andesitic lava flows from two shield volcanoes: East Molokai Mountain and West Molokai Mountain. Prior to weathering and erosion, the West Molokai Mountain was a typical elongated basaltic shield-shaped dome. It was built over the northwest and east trending rifts, with a steep slope on the north side, where the lava flows plunged into deep water, and a gentle slope on the east side, where the lava flows banked against the East Molokai dome and formed the Hoolehua Plain.

The rising and receding of the ocean has caused a narrow fringing reef to form along part of the south shore of East Molokai. Inland of the fringing reef, a nearly continuous apron of alluvium lies along this south shore. In part, this alluvium represents an encroachment of terrestrial sediment due to accelerated erosion of the southern slopes. Most of Kaunakakai is located on these alluvium deposits.

As previously discussed, the causeway and area of the ferry shelter are constructed on fill lands.

The Soil Survey of Islands of Kauai, Oahu, Maui, Lanai, and Molokai prepared by the US Department of Agriculture Soil Conservation Service (now Natural Resources Conservation Service) shows soils in the area of Kaunakakai Place to be Kealia silt loam. This soil is poorly drained and has a high content of salt. Ponding occurs in low areas after a heavy rain. When the soil dries, salt crystals accumulate on the surface. The soil has a brackish water table that fluctuates with the tides; the water table is nearer the surface along the shoreline. Permeability is moderately rapid. Runoff is slow to very slow. The hazard of water erosion is no more than slight, but the hazard of wind erosion is severe when the soil is dry and the surface layer becomes loose and fluffy.

Impacts and Mitigation Measures

The project site is located on the south side of the central portion of Molokai. The County of Maui/Molokai is assigned seismic Zone 2B in the 1997 Uniform Building Code (UBC). As a comparison, seismic Zone 4, the zone with the most stringent building structural requirements, is assigned to the Big Island and the coastal areas of California. Originally enacted in 1927, the UBC was developed by the International Code of Building Officials to

guide construction of buildings, structures, and facilities throughout the US. The State of Hawaii and the counties in state, including the County of Maui, have adopted the UBC as the applicable code for constructing buildings, structures, and facilities. County of Maui uses the 1997 UBC.

The purpose of the seismic provisions in the UBC is primarily to safeguard against major structural failures and loss of life, not to limit damage or maintain functions. Structures are to be designed and constructed as a minimum to resist the effects of ground motions from seismic events. The site seismic hazard characteristics in the UBC are based on the seismic zone and proximity of a site to active seismic sources.

The ferry shelter will be designed and constructed to meet the requirements of latest version of the UBC. This will ensure that the ferry shelter can meet the seismic loadings established for Zone 2B and that the geological conditions at the project site do not adversely affect the building and facilities.

Construction of the ferry shelter and utility lines will require subsurface excavation for placement of the foundations and footings for the shelter and trenches for the utility lines. This will disturb surface and subsurface soils and displace the soils with on-grade slab foundation and footings which will be used for the shelter. However, this disturbance will typically be to depths of 3 to 3½ feet or less for the foundation and up to 4 to 5½ feet for the utility lines. This subsurface disturbance will not adversely affect the soils and geology of the area.

2.2 Water Resources and Flood Hazard

Surface Waters: The Kaunakakai Commercial Harbor is located off the southern coast of the central portion of Molokai. The Commercial Harbor elevation along the berthing pier is about 7.5 feet mean sea level (msl). The berthing area has been dredged to a depth of (-) 24 feet Mean Lower Low Water.

As previously discussed, the Kaunakakai Commercial Harbor location places it within the geographic jurisdiction of the Rivers and Harbors Act of 1899 which encompasses all navigable waters of the United States as defined in 33 CFR Part 329 as, "those waters that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport

interstate or foreign commerce." This jurisdiction extends seaward to include all ocean waters within a zone three nautical miles from the coast line (the "territorial seas").

Section 10 of the Rivers and Harbors Act (33 U.S.C. 401 *et seg)* requires authorization from the U.S. Army Corps of Engineers (Army Corps) for the construction of any structure in or over any navigable water of the United States, the excavation/dredging or deposition of material in these water or any obstruction or alteration in a "navigable water".

In addition, "Hawaii Administrative Rules Title 11 Department of Health Chapter 54 Water Quality Standards, Section 11-54-03, classification of water uses, shows the waters surrounding the Commercial Harbor are classified as (c) Marine waters. (2) Class A. It is the objective of Class A waters 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 and on these waters. These waters shall not act as receiving waters for any discharge which has not received the best degree of treatment or control compatible with the criteria established for this class.

According to the Flood Insurance Rate Map, Community-Panel Number 150003 0080 C, revised September 6, 1989, the Kaunakakai Commercial Harbor is located in Zone AE, defined as "areas of 100-year flood; base flood elevations and flood hazard factors determined." The base flood elevation is shown as +3 feet. The topographic survey shows the area of ferry shelter is at approximately + 7.5 feet.

Groundwater: The Commercial Harbor and causeway have been constructed on fill makai of the shoreline, an area which would not contain potable groundwater resources. As part of the Draft EA Pre-Assessment consultation for the Ferry System Improvements, in November 2009, the County of Maui Department of Water Supply indicated the lands mauka of the shoreline in the area of the causeway overlies the Kaunakakai aquifer which has a sustainable yield of 3 million gallons per day.

Impacts and Mitigation Measures

Surface Waters: The pier rehabilitation improvements would include: removal of an about 1,550-square foot area (31 feet x 50 feet) of the existing pier deck; driving 12 new 20-inch octagonal precast piles with pile caps to support the replacement deck; removal of 8 of the existing piles by cutting them at the mud line, removal of 2 of the existing piles by cutting

them above the coral growing on them, and replacement of the of the deck with 7-1/2-inch thick precast concrete planks with 4-1/2-inch thick composite concrete topping. The pier rehabilitation including the removing and replacing the deck and replacing and removing the piles would be done with equipment placed on the existing deck. Figure 1.12 shows the pier demolition plan. Figure 1.13 shows the replacement deck plan.

During construction of the pier improvements, best management practices (BMP) mitigation measures will be used to protect marine resources. First, a floating boom and silt curtain weighted at the bottom would be used as a BMP mitigation measure to collect silt and debris during placement and removal of the piles. A small boat maybe used to place the floating silt curtain. Second, the design drawing notes and contract specifications will include that the contractor shall not allow debris from the work area to enter the waters below the deck. These BMP mitigation measures would be put in-place prior to undertaking the rehabilitation. Figure 1.13 shows the floating silt curtain.

On March 19, 2007, as part of its regulatory role, the US Army Engineer District, Honolulu published a Public Notice For Federal Register Notice Announcing New Nationwide Permits (POH-2006-351) announced the reissuance of all existing nationwide permits (NWPs), general conditions, and definitions with some modifications. In addition, the Honolulu Engineer District has developed Regional Conditions (RCs) in order to provide additional protection for the aquatic environment by ensuring that the NWPs authorize only those activities with minimal adverse effects on the aquatic environment

Use of a floating boom and silt curtain in the area of the pier rehabilitation will meet the requirements of the Honolulu Engineer District Regional Condition 13, which states measures shall be incorporated into projects to minimize the degradation of water quality and impacts to fish and wildlife resources, includes the following applicable specific conditions:

> *1) Turbidity and siltation from project-related work shall be minimized and contained to the immediate vicinity of the project through the appropriate use of effective silt containment devices and the curtailment of work during adverse tidal and weather conditions.*
>
> *5) All project-related materials and equipment (dredges, barges, backhoes etc) to be placed in the water shall be cleaned of pollutants prior to use.*
>
> *9) Fueling of project-related vehicles and equipment should take place away from the water and a contingency plan to control petroleum products*

accidentally spilled during the project shall be developed. Absorbent pads and containment booms shall be stored on-site, if appropriate, to facilitate the clean-up of accidental petroleum releases.

10) Any under-layer fills used in the project shall be protected from erosion with suitable material (such as precast concrete amor or mat units) as soon after placement as practicable.

11) Any soil exposed near the water as part of the project shall be protected from erosion (with suitable material such as plastic sheeting, filter fabric etc.) after exposure and stabilized as soon as practicable (with vegetation matting, hydroseeding etc.).

In addition to the pier rehabilitation, the ferry shelter improvements would use temporary erosion control measures during construction to prevent runoff to nearby areas. These mitigation measures will include placement of a silt fence around the perimeter of the construction area to prevent surface runoff into adjacent areas. These measures will contain surface flows within the project site during the construction period. In addition, the contract specifications state that the contractor needs to implement best management practices during the construction to minimize runoff from the project site.

The water line and sewer system improvements would also use temporary erosion control measures such as a silt fence around the area of construction to prevent runoff to nearby areas. Use of a silt fence will prevent adverse impacts to surrounding area, including to surface waters.

Groundwater: The Commercial Harbor and causeway have been constructed on fill makai of the shoreline, an area which would not contain potable groundwater resources. Construction of the Ferry System Improvement on the fill lands will not create adverse impacts to groundwater resources.

The County of Maui Department of Water Supply has indicated the lands mauka of the shoreline in the area of the causeway overlies the Kaunakakai aquifer which has a sustainable yield of 3 million gallons per day. The Ferry Systems Improvements mauka of the shoreline include construction of separate trenches for the sewer force main and fire protection line on Kaunakakai Place between the end of the causeway and Maunaloa Highway. The trenches will be about 2 feet wide and 5 feet deep and include about 2 feet of cover over the line.

Trenches with a depth of about 5 feet will not have an adverse impact to groundwater resources in the area. In addition, during construction of the trenches, silt fences will be placed around the excavation, including the excavated material, to ensure surface runoff does not flow to surrounding areas and create adverse affects to groundwater resources.

2.3 Agricultural Lands

The Kaunakakai Commercial Harbor and causeway are constructed on fill land. No agricultural production has occurred on these lands.

Impacts and Mitigation Measures

Since the Kaunakakai Harbor Ferry System Improvements would not use lands classified as "prime" agricultural lands, use of the lands for the Ferry System Improvements will not create an adverse impact to the agricultural activity on Molokai.

2.4 Hazardous Waste

The Kaunakakai Commercial Harbor and causeway have been used for harbor operations and access since 1920s. The areas of the Ferry System Improvements show no records of hazardous waste disposal or releases.

The State of Hawaii Department of Health (DOH) Hazard Evaluation and Emergency Response (HEER) records show Kaunakakai Place and the surrounding areas to contain subsurface hazardous waste, most likely a petroleum fuel product. The source of the subsurface fuel is not clearly established, although the area near Kamehameha Highway included industrial uses and a former electrical power plant. Also, in the past, diesel fuel was used a dust suppressant on dirt roads prior to asphalt paving of the roads.

Impacts and Mitigation Measures

During construction of the Ferry System Improvements, the contract documents will require the contractor to construct a temporary silt fence or berm around the area when runoff could occur. Also, vehicle and equipment fueling is to be done in a designated area.

The Ferry System Improvements will not include construction of facilities which contain or use materials which could be considered hazardous. Based on these considerations, the Ferry System Improvements will not create adverse impacts from hazardous materials.

Trenching for the fire protection line and sewer force main would extend along Kaunakakai Place between the end of the causeway and the Maunaloa Highway–Kaunakakai Place

intersection. Based on the information from the HEER records, the excavated material from the trenching on Kaunakakai Place could contain petroleum contaminated soil.

Section 9 from the DOH Technical Guidance manual appendix discusses management of petroleum-contaminated soil, including stockpiling the soil and then returning the material into the excavations.

According to the DOH guidance, petroleum contaminated soil is to be excavated and segregated from clean soils. Once excavated, the contaminated soil must be placed under a liner and covered to prevent runoff to surrounding areas. The contaminated soil must be treated or disposed of in accordance with all applicable local, State, and Federal requirements.

As alternative to removal and disposal, DOH allows redeposition of the excavated contaminated material into the trench. The excavated soils should be stored under cover before re-deposition into the excavation. Excavated soil that is contaminated should not be placed into an excavation that is clean. Excavated soil with petroleum contamination that is re-deposited into the excavation should be provided with a cover of clean soil or a cap of asphalt or concrete once the work has been completed. The DOH guidance notes, if redeposition is chosen, be advised that this does not absolve any party from liability should the actions taken exacerbate potential health and environmental impacts.

The sewer force main and fire protection line will be located within the travelway of Kaunakakai Place and the trench covered with asphalt. Use of the DOH guidance procedures and the asphalt paving should result in no adverse impacts from contaminated soils during trenching for the fire protection line and sewer force main.

2.5 Biological Resources

Flora: The pile supported pier has been used for cargo operations since it was constructed. The entire Commercial Harbor, which includes the pile supported and fill land, has been improved and overlaid with asphalt concrete (AC) paving or concrete. Landscaped planters, a small grass area, and one tree are the only vegetation within the Commercial Harbor.

The causeway was constructed on fill land. No vegetation occurs on the causeway.

The Commercial Harbor and causeway contain no listed or candidate threatened or endangered botanical species as set forth by the US Department of the Interior Fish and Wildlife Service (USFWS).

Fauna: The Ferry System Improvements are located in previously improved areas that no longer contain vegetation which could be considered habitat to species of avifauna. Although the area of the improvements would not provide habitat, as part of the Draft EA Pre-Assessment consultation for the Ferry System Improvements, in November 2009, the USFWS stated, based on the pertinent information in their files, Newell's shearwater (Puffinus auricularis newelli) and the endangered Hawaiian petrel (Pterodroma phaeopygia sandwichensis) (collectively referred to as seabirds) have been observed in the vicinity of the proposed project. Threatened seabirds may traverse the project area at night during the breeding season (February 1 through December 15). Any outdoor lighting, particularly when used during each year's peak fledging period (September 15 through December 15), could result in seabird disorientation, fallout, injury and/or mortality. To minimize potential project impacts to seabirds, the USFWS recommended all outdoor lights associated with the project be shielded so the bulb can be seen only from below. In addition night-time construction involving unshielded outdoor lighting should be avoided.

Marine Resources: A biological reconnaissance survey was conducted to determine the presence of marine resources in the area of the pier rehabilitation. The survey was conducted by snorkeling in the marine waters to assess the relative abundance of species present in the project area. Appendix A contains the Biological Reconnaissance and Water Quality Study.

The marine resources survey included species of fishes, coral, and other macro-invertebrates. Specimens encountered were identified in the field and verified with various published texts. The survey area includes the area below the rehabilitation site identified as the direct impact area and indirect impact area. The direct impact area includes 12 individual deck piles located from the seaward, western side of the project area, extending east to the sheet pile under the deck (piles 14/15 A-F, respectively). The direct impact area also includes the bottom substrate extending from the eastern edge adjacent to the sheet pile under the pier deck out 18 m (59 ft) to the west. The indirect area includes the near (2-3 m; 6.6-9.8 ft) surrounding waters north and south of the project area, including the large partially submerged tire fenders framing the west side of the deck. See Figure 1.12 and Figure 1.13.

Species of macroalgae and marine animals observed in each of the three areas were recorded. Due to greater growth on the seaward deck piles, A14 and A15, the line intercept transect survey method was used to estimate relative abundance of coral and other encrusting marine organisms.

In general, the proposed project area has good water visibility (up to 7 m; 23 ft), few fishes, and most coral and macroalgae growth is limited to the outer 2 piles (A14 and A15) and the remnant of 2 cut-off piles (as described below). Corals on these piles are mostly limited to the seaward face of the piles, and the corals observed are common in Hawaiian waters. There is nearly no growth on the bottom between piles. The area of the anticipated direct impact does not appear to be more ecologically valuable than the near surrounding pier area.

In the direct impact area, the abundance of coral and macroalgal growth on the deck piles decreases from the seaward set of piles towards the east. The first, seaward, set of deck piles (A14 and A15) are heavily encrusted with corals, coralline algae, sponges, and other marine organisms while the 6th set of deck piles, to the east (F14 and F15), are nearly void of all growth. The seaward face of deck piles A14 and A15 are dominated by plate-like rice coral colonies (Montipora capitata and M. patula), various sponges, and encrusting plate-like red coralline algae. Small colonies of lace coral (Pocillopora damicornis) and corrugated coral (Pavona varians) are also found. Deck piles B14 and B15 host scattered small colonies of rice coral and encrusting plate-like red coralline algae, far less abundant than on piles A14 and A15.

A variety of littoral organisms are found adhered to the piles above the low tide line, including barnacles, limpets (opihi), and oysters. A few juvenile fishes are seen finding shelter among the encrusting algae including the three spot damselfish (Dascyllus trimaculatus) and the saddleback hogfish (Bodianus bilunulatus). The bottom substrate in the direct impact area is composed of mixed rubble, large concrete slabs and boulders. This area is void of coral and macroalgae growth, and is covered in a fine layer of silt. Debris, including metal scraps and concrete materials, litter the bottom.

Descending out to the west from under the deck area, the sea floor gradually slopes and drops off sharply at 12 m (39 ft) distant from the sheet pile wall. At this point, the substrate is coarse sand, with no coral or algal growth, and few fish.

Noteworthy in the direct impact area is the presence of two cut-off piles, located between the first two sets of piles (A14 and A15). These cut-off piles are remnants of previously existing full-length piles which have been cut below sea surface level and host colonies of plate-like rice coral, coralline algae, and macroalgae.

Located in the indirect impact area, the submerged portions of the tire fenders lining the western side of the deck are coated with a variety of sponges, green algae (Caulerpa taxifola, Halimedia sp.), brown algae (Padina sanctae-crucis, Ralfsia sp.), and red algae (Amansia glomerata). The invasive soft coral, Carijoa riisei is also found on the bottom side of several tire fenders, but is not pervasive.

No listed or candidate threatened or endangered botanical species as set forth by the US Department of the Interior Fish and Wildlife Service (USFWS) or the State of Hawaii Department of Land and Natural Resources (DLNR) were found during the marine resources biological survey.

Impacts and Mitigation Measures

Flora: As previously discussed, the area of the Ferry System Improvements has previously been developed and contains landscaped planters, a small grass area, and one tree.

The causeway was constructed on fill land. No vegetation occurs on the causeway.

Based on these considerations, construction of the Ferry System Improvements will not create an adverse impact to the flora of this area of Molokai.

The Commercial Harbor and causeway contain no listed or candidate threatened or endangered botanical species as set forth by the USFWS. Thus, construction of the Ferry System Improvements will not have an adverse impact to threatened or endangered botanical species.

Fauna: The Ferry System Improvements are located in previously improved areas that no longer contain vegetation which could be considered habitat to species of avifauna.

Threatened seabirds may traverse the project area at night during the breeding season (February 1 through December 15). Any outdoor lighting, particularly when used during

each year's peak fledging period (September 15 through December 15), could result in seabird disorientation, fallout, injury and/or mortality.

To minimize potential project impacts to seabirds, the USFWS recommended all outdoor lights associated with the project be shielded so the bulb can be seen only from below. In addition night-time construction involving unshielded outdoor lighting should be avoided.

As previously discussed, interior and exterior lighting of the ferry shelter would be provided as part of the Ferry System Improvements. The Molokai Princess departs from the Commercial Harbor before sunrise (5:15am) and arrives after sunset (7:30pm), as a result, exterior lighting of the ferry passenger loading area is needed for passenger safety purposes. The design plans and construction documents will include the use of down shielded lighting to avoid adverse impacts to seabirds.

Marine Resources: As previously discussed, the pier rehabilitation improvements would include: removal of an about 1,550-square foot area (31 feet x 50 feet) of the existing pier deck; driving 12 new 20-inch octagonal replacement piles with pile caps to support the replacement deck; removal of 8 of the existing piles by cutting them at the mud line, removal of 2 of the existing piles by cutting them at the water line, and replacement of the of the removed deck with 7-1/2-inch thick precast concrete planks with 4-1/2-inch thick composite concrete topping. The pier rehabilitation including the removing and replacing the deck and replacing and removing the piles would be done with equipment placed on the existing deck. See Figure 1.12 and Figure 1.13.

During construction of the pier improvements, best management practices (BMP) mitigation measures will be included in the construction drawings and specifications to protect marine resources. First, the design documents will include full water depth silt curtains are to be used to enclose the work area to control turbidity during all in-water and over-water work. If a plume is observed outside of the silt curtain that is caused by the construction activity, the contractor is to stop the activity and take corrective action immediately. Work shall resume after correction has been made. A small boat may be used to place the floating silt curtain. The silt curtain will separate the two piles with coral (A14 and A15) from the others to minimize the impact of debris on the coral. See Figure 1.13.

Second, the design drawing notes and contract specifications will include that the no debris shall be allowed to enter the water from above or below the waterline. The contractor shall provide a temporary platform or other suitable positive means of capturing debris from

construction and demolition operations. These facilities shall be in place prior to starting demolition work.

Use of a floating boom and silt curtain in the area of the pier rehabilitation will meet the requirements of the Honolulu Engineer District Regional Condition 13, which states measures shall be incorporated into projects to minimize the degradation of water quality and impacts to fish and wildlife resources, includes the following:

> *1) Turbidity and siltation from project-related work shall be minimized and contained to the immediate vicinity of the project through the appropriate use of effective silt containment devices and the curtailment of work during adverse tidal and weather conditions.*

The temporary platform below the deck of the pier rehabilitation area will contain debris and other material from entering the marine waters below the deck. The platform will need to be erected prior to removal of the deck, removed during pile placement and removal, and re-erected during deck replacement. This process will prevent debris and materials from entering the marine waters in the area of the pier replacement.

The biological survey showed the 8 (eight) piles to be removed do not have coral growing on them. The two outermost piles will be removed so there will be no disturbance to the coral found the piles. Thus, there will be no adverse effect to corals from the pile removal. See Appendix A.

Use of the floating boom and silt curtain will contain silt and debris within the area of the pile work. The platform below deck will contain debris from entering the marine waters. These mitigation measures will be used such that there will be no adverse effects to marine resources during the pier rehabilitation work.

2.6 Traffic

The 1,950-foot long by 40-foot wide causeway provides the sole vehicle access to the Kaunakakai Commercial Harbor from Kaunakakai Place. The causeway and Kaunakakai Place are undivided roadways with two 12-foot wide travel lanes, one lane in each direction. The causeway, which is considered part of Kaunakakai Harbor, includes a 12-foot wide shoulder on the right side of the on the southbound lane and 4-foot shoulder on the right side of the northbound lane. The concrete rubble masonry walls on each side form the outer edge the causeway. The roadway elevation of the causeway is about +7 feet mean sea level. The posted speed limit is 15 miles per hour.

State Route 460, Maunaloa Highway, which begins at the end of the causeway, and Kaunakakai Place are under the control of the State of Hawaii Department of Transportation Highways Division.

Vehicles and trucks use the causeway to access Commercial Harbor and surrounding uses. Trucks and commercial vehicles enter the Young Brothers cargo area through a vehicle gate located near the ferry shelter and must obtain clearance from the security guard in the adjacent guard shack. A designated pedestrian crosswalk located east of the ferry shelter provides a path for pedestrians to access the ferry landing area.

A total of 91 designated parking stalls are located in the general DLNR parking area in the small boat harbor area south of the Harbor Master building. The stalls are used by ferry passengers, boaters, and other visitors to the Commercial and small boat harbors.

The ferrying landing area is currently used for vehicle parking while waiting for passengers to arrive and depart. Since vehicles enter and exit through the single access point, this creates conflicts as entering vehicles must wait for exiting vehicles to leave before parking and loading or unloading passengers. This condition is compounded as vehicles can park in the ferrying landing area without restriction. Also, there is a mix of vehicle types using the ferry landing area which makes vehicle movements difficult in the available space.

Impacts and Mitigation Measures

Traffic impacts related to construction activities will occur while equipment and materials are moved to the Ferry System Improvements project site. However, this traffic will be short-term occurring during the 9 month construction period. Traffic impacts related to the construction period should not create an adverse affect to traffic on the causeway and Kaunakakai Place.

Once construction has been completed, as previously discussed, to control vehicle traffic and congestion in the ferry landing area, the following operational measures would be implemented along with the improvements:

1. The double-swing vehicle gate would be relocated to the north about 20 feet and would be locked and closed except during ferry operation hours.

2 The ferry landing area would be designated as a 15-minute loading zone pick up and drop of passengers.

3. No parking would be permitted directly in front of the ferrying docking position.

4. If violations of the parking rules occur, the harbor agent may place written warning tags on the vehicles or request issuance of citations from officers of the County of Maui Police Department (MPD).

See Figure 1.10.

Parking for persons meeting passengers or dropping off passengers will still be available in the general DLNR parking lot. One ADA stall will be available outside of the double swing gate adjacent to the renovated restroom facility.

Since the ferry landing area is considered part of the Commercial Harbor controlled by the DOT, the use of vehicles on the commercial harbor is controlled by Hawaii Administrative Rules (HAR) Title 19 Department of Transportation Chapter 43 Motor Vehicles. HAR §19-43-2, Jurisdiction of harbor master over vehicles, states any vehicle operating on any state pier or within any state commercial harbor facility shall be subject to the jurisdiction and control of the harbor master.

HAR §19-43-5 Traffic Controls, state all persons operating a motor vehicle on a state pier or within a state commercial harbor facility must comply with any lawful order, notice, signal or direction of any county police officer, state security guard, state law enforcement officer, or special police officer.

In the long-term, the improvements will not change the number of ferry operations or greatly increase passenger counts over current conditions and increased traffic is not anticipated.

2.7 Air Quality

The project site is located in the Kaunakakai District, an area characterized by residential and commercial development and almost no industrial facilities. This development generally indicates an absence of stationary and mobile sources of emissions which could affect ambient air quality.

Impacts and Mitigation Measures

Potential short-term adverse air-quality impacts during the construction phase include: 1) generation of fugitive dust from vehicle movements and soil excavation; and 2) exhaust emissions from on-site construction equipment and from construction workers' vehicles

traveling to and from the project site. These adverse impacts will be short-term during the period of construction.

Construction activities for the Ferry System Improvements need to comply with the provisions set forth in the Contract Specification Section 01560 - Environmental Controls which will govern the construction work. Section 01560 references the State of Hawaii, Department of Health, Administrative Rules, Chapter 59,Ambient Air Quality; Chapter 60, Air Pollution Control. The Contract Specifications include, for the duration of the contract, shall maintain all work areas within or without the project areas free from dust which would cause a hazard to the work, or operations of other Contractors, or to persons or property. Industry-accepted methods of stabilization suitable for the area involved, such as sprinkling or similar methods, will be permitted. Chemical or oil treating shall not be used. In addition, the area of the Ferry System Site Improvements is approximately 1.94 acres which will mean a relatively small area of disturbance.

Once construction has been completed, operation of the Ferry System site Improvements will not generate sufficient additional traffic to adversely affect air quality in the area.

2.8 Noise

The Ferry System Improvements are located within the lands controlled by the DOT. The primary noise source would be from vehicle traffic traveling along Kaunakakai Place, the causeway, and within the Commercial Harbor. However, the relatively low volume of vehicle traffic and the low speed limit on the causeway would not result in high noise levels in the area.

Impacts and Mitigation Measures

Construction activities such as grading, excavating for footings and foundations, and erecting the ferry shelter will create noise. The equipment used for these activities typically include pick up trucks, excavators, graders, rollers, backhoes, concrete delivery trucks, water tank trucks, hydraulic cranes, and forklifts. Noise generated by this equipment will be short-term during the period of construction. Once construction has been completed, the noise impact will no longer occur.

In addition, the pier rehabilitation will require removal of a portion of the existing pier deck, driving 12 new 20-inch octagonal piles with pile caps to support the replacement deck; removal of 8 of the existing piles by cutting them at the mud line, removal of 2 of the existing piles by cutting them at the water line, and replacement of the of the removed deck.

It is anticipated that construction activities will be conducted during normal working hours per State of Hawaii and County of Maui standards. The pier rehabilitation and ferry shelter are located in an industrial area. The pier rehabilitation work will be over 3,600 feet (about 0.7 miles) from Maunaloa Highway. Once construction is complete, there should be no additional noise to this area of Kaunakakai.

2.9 Archaeological and Cultural Resources

As previously discussed, most of the Kaunakakai Commercial Harbor, including the area of the ferry shelter improvements and the causeway, was constructed on fill land where there are no known historic sites. As such, on April 12, 2004, (LOG NO: 2004.1107; DOC NO: 0404SC09) the State of Hawaii Department of Land and Natural Resources State Historic Preservation Division (SHPD) determined that "no historic properties will be affected" by the improvements on these fill lands. Appendix B contains the SHPD letter.

As part of the April 12, 2004 letter, the SHPD stated, previous archaeological Inventory surveys conducted at nearby County of Maui Malama Park, which lies north of Kaunakakai Place, located several significant historic sites, including Site 50-60-03-630. SHPD stated, Site -630 is a large, subsurface deposit that underlies the County park and State of Hawaii parcels (TMKs 5-3-001:002 & 005), and probably extends under Kaunakakai Place and Hio Place. See Appendix B.

Impacts and Mitigation Measures

As previously discussed, on April 12, 2004, the SHPD stated that it had made a finding that "no historic properties will be affected" for the Ferry System Site Improvements constructed on fill lands, which would include the ferry shelter, the sewer force main, and fire protection lines located on the causeway. See Appendix B.

The SHPD determined that trenching on Kaunakakai Place for the sewer line (about 330 feet between the end of the causeway and sewer manhole locate near Beach Place) and for the fire protection line (about 1,328 feet between the end of the causeway and Maunaloa Highway) may have an "adverse effect" on Site -630. However, SHPD stated that such an "adverse effect" can be mitigated with the condition of on-site archaeological monitoring during construction of the sewer force main and fire protection line on Kaunakakai Place.

Based on this finding by the SHPD, an archeological monitoring plan will be submitted for review and approval by SHPD. The construction documents will include that the contractor

bid price include on-site archeological monitoring during excavation of the trenches for the sewer force main and fire protection line on Kaunakakai Place. See Appendix B.

2.10 Cultural Impact Assessment

On April 26, 2000, the Governor approved House Bill No. 2895 H.D.1 as Act 50 which amended Chapter 343 Hawaii Revised Statutes (HRS) to require a cultural impact assessment be included in the preparation of an Environmental Assessment.

A Cultural Impact Assessment/Study (CIA) was undertaken to gather information about traditional cultural practices, ethnic cultural practices, and pre-historic and historic cultural remains that might be affected by the proposed ferry improvements. Appendix C contains a summary of the Cultural Impact Assessment. The complete CIA report will be filed with the Department of Land and Natural Resources State Historic Preservation Division, the Office of Environmental Quality Control (OEQC), the Department of Land and Natural Resources.

Impacts and Mitigation Measures

A total of 19 community members (government agency or community organization representatives, or individuals such as residents, cultural and lineal descendants, and cultural practitioners) were contacted for the purposes of this CIA. Twelve people responded and five *kupuna* (elders) and/or *kamaaina* (native-born) were interviewed for more in-depth contributions to the CIA. During the consultations, community members voiced concern that the proposed Project may affect not only the character of Molokai but also the environmental integrity of the surrounding ecosystems on which people depend on for their livelihood. Community consultation yielded the following results:

All participants stated the Project area, its immediate vicinity, and Kaunakakai Ahupua'a are culturally and historically significant places to Native Hawaiians.

Four out of five participants reported the land area adjacent to and west of the causeway along Kaunakakai Place was the property and location of Lot Kamehameha V's home residence known as Malama. Princess Ruth Ke'elikolani was referenced as having frequented the home site. One participant stated ruins of Mahinahina Heiau still exists in the location of the Malama residence site.

Four participants indicated the area now known as Kaunakakai Wharf and its immediate vicinity, including the Project area, was an important landing site for canoes in the past, particularly as a resting place between Maui to Oahu. Kamehameha I and his warriors were

known to have visited Molokai often for this reason. One participant stated that fishing contests associated with the Makahiki games used to take place in the ocean area surrounding Kaunakakai Wharf.

Two participants reported that stones from two nearby *heiau* were used to build the existing Kaunakakai Wharf. One participant stated that Mahinahina Heiau was desecrated and the stones were used to build the old pier, and subsequently, the existing wharf.

Participants indicated the Kaunakakai Wharf and Project area, the shoreline, and ocean area in the wharfs immediate vicinity, are important places utilized extensively by residents of Molokai for the following cultural uses and practices.

All participants stated the Project area is part of an important resource-gathering area used daily by residents for fishing and limu (seaweed) collecting; and that coastal residents depend on these fishing grounds for their livelihood and subsistence. A variety of traditional fishing methods used within the waters in and around the Project area was described by participants. These included trolling, spear-fishing, throw net, *moemoe* or lay net, *auana* (night fishing), squidding using coconut spit, squidding with net, crabbing with net, and *kai'imu* (surrounding rocks with net and sticking a pole through to shake).

All participants described the lagoon and beach area surrounding Kaunakakai Wharf as the center for canoe paddling on the island of Molokai. The beach area adjacent to and west of Kaunakakai Place is the home site of three of the four canoe clubs on Molokai. The annual canoe paddling regatta for the Molokai Canoe Paddling Association takes place here in June and July.

Kaunakakai Wharf and the Project area were described by two respondents' as a dock site for Hokule'a, Hawaii's traditional voyaging canoe. During visits to Molokai, Hokule'a crew and the Molokai community use the existing ferry shelter and adjacent wharf areas for cultural and educational purposes.

Kaunakakai Wharf is used extensively by the community members for other recreational activities such as swimming, exercise and sport fishing. Most participants reported Kaunakakai Wharf and the Project area are also used as a venue to meet friends and for social and community gatherings, such as birthdays. Two participants stated Kaunakakai Wharf and the Project area is "Our Gathering Place."

Kaunakakai Wharf and the Project area were described by one participant as the beach of Kaunakakai Ahupua'a, an important element for the mental health and well-being of residents. The participant explained that the wharf is an important space for people to connect with the ocean and the environment. The wharfs close proximity to Kaunakakai Town caters to people who cannot drive, such as the elderly and the handicapped.

One participant was opposed to any dredging associated with the proposed Project because of his belief that it would primarily benefit non-locals who own nearly all vessels (e.g., yachts) that would use the deeper water.

Results from the community/cultural consultation findings for this CIA indicate that the study participants have concerns related to the Ferry System Improvements. However, since trenching for the sewer and fire protection lines would occur on the causeway and since mitigation measures will have been specified to control runoff during construction, there should be no adverse impact to the existing revetment protection along the causeway.

In addition, the sewer and fire protection line work on Kaunakakai Place is confined to the travel lanes and shoulders and does not extend into Malama Park or the area used by canoe clubs. There should be no adverse impacts to cultural practices which occur in these areas.

The participants also indicated concerns related to use of the ferry landing area during the canoe season (June and July) when club members and spectators use the area to watch the canoe paddlers. It should be noted, the designated construction site on the ferry landing area will need to be established to ensure the safety of the public during the construction period when equipment and materials will be exposed while work proceeds. The designated construction site is also to ensure sufficient space for the selected contractor to successfully complete the work in efficient manner with minimal effect on the work schedule.

It should also be noted an approximately 30-foot area adjacent to the ferry will remain open for access at all times of during the construction period. Lastly, renovation of the existing ferry shelter and construction of the ferry shelter addition could occur at times other than the canoe season. This would avoid the potential conflict between the uses. Moreover, once construction is completed, use of the ferrying landing area can occur with no changes.

2.11 Infrastructure

2.11.1 Water

The Kaunakakai Commercial Harbor is served by the County of Maui Department of Water Supply (DWS) water system. The DWS provides potable water service from an existing 4-inch line located within Kaunakakai Place and the causeway.

Impacts and Mitigation Measures

The existing 4-inch water line will remain with no changes and will continue to supply potable water to the existing service connections. In addition, potable water service from this line will be connected to the restrooms in the renovated ferry shelter.

Water demand for the restrooms in the renovated ferry shelter station is expected to be an average of about 800 gallons/day. This demand calculation was based on applicable Department of Water Supply (DWS) standards. This level of water usage will not have an adverse affect to the DWS water system

The 8-inch and 12-inch fire protection line will also use potable water. Since the need for fire protection is on an emergency basis, the expected water usage cannot be established.

Use of alternative water sources is not practicable for the project.

2.11.2 Wastewater

The Kaunakakai Commercial Harbor is not serviced by a County of Maui wastewater collection, treatment, and disposal system.

Wastewater generated at the Commercial Harbor consists of the existing restrooms in the Harbor Master office building. Flows from these restrooms are routed to a septic tank for treatment and then a leach field for disposal of the effluent. As previously discussed, the leach field is not functioning properly and another method of treatment and disposal is needed.

The existing restrooms in the Young Brothers yard have their own wastewater treatment and disposal system which will remain with no changes.

Impacts and Mitigation Measures

The Ferry System Improvements includes construction of the low pressure below grade sewer lift station and construction of a 4-inch approximately 2,400 foot long sewer force main which will be located within the 4-foot shoulder on the south side of the causeway. The force main will terminate in a transition sewer manhole which will be connected by a gravity line to the existing County of Maui manhole at the intersection of Beach Place and Kaunakakai Place.

A County of Maui force main connects the manhole to the force main and pump station located on Maunaloa Highway north of the Kaunakakai Place. The pump station is used to pump flows to the Kaunakakai Wastewater Reclamation Facility (WWRF) located near Maunaloa Highway and Kaunakakai Stream. The WWRF treats flows using contactors and clarifies and disposes of the effluent in 2 on-site underground injection wells and one off-site underground injection well.

The existing Kaunakakai WWRF has a capacity of 0.30 million gallons per day (300,000 gallons). Current flows are about 0.25 million gallons per day (250,000 gallons). The Ferry System Improvements is expected to generate about an average of about 800 gallons per day of wastewater flows from the restrooms in the renovated ferry shelter. Based on these findings, the Ferry System Improvements will not create an adverse effect to the Kaunakakai WWRF.

Once the lift station and force main is completed, the existing septic tank will be pumped out, cleaned, the connecting lines plugged, and backfilled. The leachfield will also be cleaned and abandoned in-place.

2.11.3 Solid Waste

Solid waste from the existing ferry shelter is collected and taken to a dumpster. A private commercial disposal company picks up the solid waste from the dumpster for disposal at the landfill

Impacts and Mitigation Measures

Solid waste disposal for the ferry shelter will continue to follow current disposal practices and procedures.

The construction documents include a requirement that the contractor provide a plan for construction waste reuse, recycling, and disposal.

2.11.4 Electrical and Communication

Electrical power service to the Kaunakakai Commercial Harbor is provided by Maui Electric Company (MECO) via overhead and underground lines. There is an existing MECO transformer located south of the causeway across from the Harbor Master building. Underground lines connect the transformer to service panels at the rear of the Harbor Master office.

Telephone service is provided by the Hawaiian Telephone Company through overhead lines along the causeway to the Harbor Master office and other facilities in the Commercial Harbor.

Impacts and Mitigation Measures

Electrical service to the Ferry System Improvements will be provided by an underground line to the below grade sewer lift station and to the restrooms and ferry shelter. The design of these facilities will be coordinated with MECO to meet the requirements related to electrical service.

3. RELATIONSHIP TO PLANS, POLICIES AND CONTROLS

3.1 Hawaii State Plan

The Hawaii State Plan, adopted in 1978 and revised in 1988, establishes the overall theme, goals, objectives, and priority guidelines to guide the future long-range development of the State. The Ferry System Improvements project supports and is consistent with the following State Plan objectives and policies:

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

> *(b) (6) Strive to achieve a level of construction activity responsive to, and consistent with, state growth objectives.*

The Ferry System Improvements will involve rehabilitation, renovation, and expansion facilities at an existing site. The Ferry System Improvements will increase the level of construction activity on Molokai during the period of construction which will enhance the state's growth objectives.

> *(b) (11) Maintain acceptable working conditions and standards for Hawaii's workers.*

The Ferry System Improvements will provide ferry users with a facility designed to current requirements which will enhance the existing facility. The Ferry System Improvements will also provide flexibility to barge operations and ensure a facility which will serve this important function for the residents of Molokai.

Section 226-14 Objectives and policies for facility systems – general.

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

The Ferry System Improvements have been planned to provide enhance facilities available to commuter and tourists using the ferry. In addition, the Ferry System Improvements will support the cargo operations at the Commercial Harbor.

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

(b) (2) Coordinate state, county, federal, and private transportation activities and programs toward the achievement of statewide objectives.

The Ferry System Improvements have been planned and coordinated with the US Department of Transportation Federal Transit Administration (FTA). The DLNR has coordinated the Ferry System Improvements design with the FTA to ensure compliance with the FTA grant.

Chapter 226-18 (4) Promote all cost-effective conservation of power and fuel supplies

(C) Adoption of energy-efficient practices and technologies.

The Ferry System Improvements will use natural light in the ferry shelter during daylight hours and ventilation of the restrooms. Thus, the Ferry System Improvements will be consistent with Chapter 226-18 (4). In addition to energy-efficient practices, water savings fixtures will be installed.

Chapter 344.4, Hawaii Revised Statutes

The Ferry System Improvements design includes use of natural light and ventilation for the ferry shelter and restrooms.

Based on these design considerations, the proposed project will be consistent with Chapter 344.4, Hawaii Revised Statutes, Guidelines to conserve the natural resources and enhance the quality of life, all agencies, in the development of programs, shall, insofar as practicable, consider the following guidelines (7) Energy. (A) Encourage the efficient use of energy resources.

3.2 2010 Master Plan for Kaunakakai Harbor

The 2010 Master Plan for Kaunakakai Harbor Molokai was prepared by the State of Hawaii Department of Transportation Harbors Division, Molokai Chamber of Commerce, Molokai Task Force, and Molokai Farm Bureau in February 1988. This is the most recent plan for Kaunakakai Harbor and states Kaunakakai Harbor could serve as a possible site for a passenger ferry system. The ferry system would augment the air passenger service to

Molokai. The Plan noted it is prudent to maintain the separation of pedestrian and cargo operations.

3.3 Land Use Plans and Policies

3.3.1 State Land Use District

The Hawaii Land Use Law of Chapter 205, Hawaii Revised Statutes, Land Use Commission, classifies all land in the State into four land use districts: Urban, Agriculture, Conservation, and Rural. The State Land Use Commission designation for the Kaunakakai Commercial Harbor is Conservation District, Resource subzone.

As part of the Pre assessment for this Draft EA, on November 4, 2009, the State of Hawaii Department of Land and Natural Resource Office of Coastal and Conservation Lands (OOCL), stated the Commercial Harbor and causeway are considered a non-conforming use. The OCCL also stated proposed improvements are considered routine repair and maintenance for a use of which no Conservation District Use Application (CDUA) permit is required. Additionally, the project is minor in scope and within the scope of Kaunakakai Commercial Harbor operations and maintenance.

3.3.2 Molokai Community Plan

The Molokai Community Plan was prepared in 1984 and amended in December 2001 by the adoption of Ordinance 3022, Bill No. 106 (2001). The purpose of the Molokai Community Plan is to advance planning goals, objectives, policies, and implementation considerations to guide decision making to 2010. The Community Plan is also a policy document for the long-range comprehensive development of the island of Molokai.

The County of Maui Molokai Community Plan dated 2001 provides goals, objectives and polices, and implementing actions for Infrastructure. The goal for Infrastructure is: culturally and environmentally sensitive infrastructure systems, developed and maintained in a timely fashion, which protect and preserve the safety and health of Molokai's residents and visitors.

The Community Plan under objective and policies states: encourage the expansion of Kaunakakai Harbor and under implementing actions: implement plans for the expansion of Kaunakakai Harbor. Thus, the Ferry System Improvements will be consistent with the Infrastructure goal, objectives and policies, and implementing actions of the Molokai Community Plan.

3.3.3 County of Maui Zoning

The County of Maui zoning designation is Interim. The Interim zoning designation is used until a formal designation can be adopted by the County of Maui. The permitted uses are limited in the Interim zone. However, publicly-owned buildings are a permitted use in the Interim zone. Also, since the Harbor was established beginning in 1899, the existing uses at the Harbor would be considered non-conforming. However, since the uses within in the Harbor are publicly owned, the Harbor would be consistent with the County of Maui zoning.

3.3.4 County of Maui Special Management Area

The Coastal Zone Management Act contains the general objectives and policies upon which all counties within the State have structured specific legislation which created Special Management Areas (SMA). Any "development" within the Special Management Area boundary requires a SMA Use permit (SMP) which is administered by the County of Maui.

The Commercial Harbor and causeway are not located within the County's SMA. The Ferry System Improvements at the Commercial Harbor and along the causeway will not require an SMP.

The portion of the sewer force main and fire protection line on Kaunakakai Place between the end of the causeway and Maunaloa Highway lie within the SMA. Chapter 205A-22 Hawaii Revised Statures, Definitions, sets forth that "development" does not include (13) installation of underground utility lines and appurtenant aboveground fixtures less than four feet in height along existing corridors.

The County of Maui Department of Planning SMA assessment application similarly sets for that "development" does not include (13) installation of underground utility lines and appurtenant aboveground fixtures less than four feet in height along existing corridors.

Based on the above definitions, construction of the sewer force main and fire protection line will be exempt from a SMP.

4. ALTERNATIVES TO THE PROPOSED ACTION

4.1 No Action Alternative

The No Action alternative would retain the existing ferry shelter, commercial pier barge loading/unloading area located within close proximity to the ferry docking area, and supporting infrastructure with no changes or improvements. Ferry users would need to continue crossing the access road to the Young Brothers cargo area to access the existing restroom facilities in the Harbor Master office building, including during periods when trucks are entering and leaving the cargo area.

The No Action alternative would also mean that the cargo barge would not have adequate separation from the docked ferry to ensure no damage occurs to either vessel while docked. Adjustments to the location of barge loading/unloading operations to provide sufficient separation distance between the docked ferry and cargo barge would require relocation of the loading/unloading zone into an area of the existing commercial pier which does not have sufficient strength to accommodate the heavy loads imposed by the loading/unloading ramp and loading vehicles. Since the commercial pier is the sole means of landing cargo containers on Molokai, loss of the use of the commercial pier would adversely affect the general welfare of Molokai. Based on these considerations, the No Action alternative is not considered a feasible alternative.

4.2 Alternative Site

Use of an alternative site for the ferry shelter and docking position for the ferry can be considered. This would require a re-assignment of a docking position for the ferry with sufficient depth and docking space to accommodate the vessel. In addition, a passenger access route with adequate horizontal clearance and vertical grade for handicap access would be necessary. In addition, sufficient space would be needed to site a ferry shelter facility with restrooms. Also, the ferry shelter site would need supporting infrastructure including water, sewer, and electrical connections.

At this time, docking space on the commercial pier is needed to accommodate the cargo and fuel barge operations. Thus, another docking position for the ferry is not possible along the existing commercial pier. Docking the ferry within the small boat harbor would require construction of another access route and securing the site to meet US Department of Homeland Security related to safety and access. Considering the space limitations for docking the ferry, an alternative site for the ferry shelter was not considered a feasible alternative.

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5. DETERMINATION

Short-term construction impacts include disruption to the Ferry System Improvements project site and surrounding areas during construction, decline in air quality from construction activities, and increase in noise levels. Once construction has been completed, the short-term adverse impacts will no longer occur.

Based on analysis of the anticipated impacts, a Finding of No Significant Impact (FONSI) is anticipated for the Kaunakakai Ferry System Improvements project. The significance criteria to make this determination are set forth below and in Hawaii Administrative Rules Title 11, State of Hawaii Department of Health, Chapter 200, Environmental Impact Statement Rules.

1) *Involve an irrevocable commitment to loss or destruction of any natural or cultural resources*;

The Kaunakakai Ferry System Improvements project site does not provide habitat for Federal or State of Hawaii listed or candidate threatened or endangered species of flora or fauna. The project site has been used for a harbor beginning in 1899. Thus, the Kaunakakai Ferry System Improvements project will not result in the loss or destruction of natural resources.

On April 12, 2004, the SHPD stated that it had made a finding that "no historic properties will be affected" for the Ferry System Site Improvements constructed on fill lands, which would include the ferry shelter, the sewer force main, and fire protection lines located on the causeway. See Appendix B.

The SHPD determined that trenching on Kaunakakai Place for the sewer line (about 300 feet between the end of the causeway and sewer manhole located near Beach Place and for the fire protection line (about 1,328- feet between the end of the causeway and Maunaloa Highway) may have an ·"adverse effect" on Site -630. However, SHPD stated that such an "adverse effect" can be mitigated with the condition of on-site archaeological monitoring during construction of the sewer force main and fire protection line on Kaunakakai Place.

Based on these findings, the Kaunakakai Ferry System Improvements is not expected to have loss or destruction of any natural or cultural resources.

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

The Kaunakakai Ferry System Improvements will use lands which have been used for a harbor since 1899. The ferry shelter will be the only above structure included in the improvements. The ferry shelter will occupy an area of 625 square feet adjacent to the existing ferry shelter which will be renovated to restrooms. Thus, the ferry shelter will not curtail the beneficial uses of the environment.

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

The Kaunakakai Ferry System Improvements project will not involve actions or activities which would adversely affect natural resources of the area. The Kaunakakai Ferry System Improvements will be consistent with the guidelines of Chapter 344, HRS, as it will provide a public facility to support the critical public service functions assigned to the DOT at Kaunakakai Harbor. As such, the Kaunakakai Ferry System Improvements will not conflict with the State's long-term environmental policies or goals as expressed in Chapter 344, HRS.

4) *Substantially affect the economic or social welfare of the community or state*;

The Kaunakakai Ferry System Improvements will be a public facility to be used by ferry users and the Molokai community. The Kaunakakai Ferry System Improvements are an integral part of the infrastructure on Molokai used by the community. The Kaunakakai Ferry System Improvements will not have an adverse effect to the economic or social welfare of the community.

5) *Substantially affect public health*;

The Kaunakakai Ferry System Improvements will serve ferry users and will also enhance cargo operations at the Commercial Harbor. The Kaunakakai Ferry System Improvements will support the ability of the DOT to conduct its mandated public function of proving infrastructure to service the transportation needs of residents and tourists on Molokai. Thus, the Kaunakakai Ferry System Improvements project will not have an adverse effect on public health.

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

The Kaunakakai Ferry System Improvements project will be a public facility used by the DOT to support its mission related to water transportation to and from Molokai. No additional personnel are expected to be required from Molokai or other parts of the state. Thus, construction of the Kaunakakai Ferry System Improvements will not create secondary impacts, such as population changes or effects on public facilities.

7) *Involve a substantial degradation of environmental quality*;

The Kaunakakai Ferry System Improvements are anticipated to result in short-term impacts to noise, air quality, and traffic during the period of construction. The Kaunakakai Ferry System Improvements project site does not contain Federal or State listed or candidate threatened or endangered species of flora or fauna.

Further, on April 12, 2004, the SHPD stated that it had made a finding that "no historic properties will be affected" for the Ferry System Site Improvements constructed on fill lands, which would include the ferry shelter, the sewer force main, and fire protection lines located on the causeway. See Appendix B.

The SHPD determined that trenching on Kaunakakai Place for the sewer line (about 300 feet between the end of the causeway and sewer manhole located near Beach Place and for the fire protection line (about 1,328 feet between the end of the causeway and Maunaloa Highway) may have an ·"adverse effect" on Site -630. However, SHPD stated that such an "adverse effect" can be mitigated with the condition of on-site archaeological monitoring during construction of the sewer force main and fire protection line on Kaunakakai Place.

Results from the community/cultural consultation findings for the Cultural Impact Assessment indicate that the study participants have concerns related to the Ferry System Improvements. However, since trenching for the sewer and fire protection lines would occur on the causeway and since mitigation measures will have been specified to control runoff during construction, there should be no adverse impact to the existing revetment protection along the causeway.

The participants was also indicated concerns related to use of the ferry landing area during the canoe season (June and July) when club members and spectators use the area to watch the canoe paddlers. It should also be noted an approximately 30-foot area adjacent to the ferry will remain open for access at all times of during the construction period. Lastly, renovation of the existing ferry shelter and construction of the ferry shelter addition could occur at times other than the canoe season. Moreover, once construction is completed, use of the ferrying landing area can occur with no changes from current conditions.

8) *Have a cumulative effect upon the environment or involves a commitment for larger actions*;

The Kaunakakai Ferry System Improvements do not involve a commitment to further actions to other DLNR projects on Molokai or in Hawaii. As a result, the Kaunakakai Ferry System Improvements will not have a cumulative effect upon the environment or involve a commitment by the State to larger actions on Molokai.

9) Affect a rare, threatened or endangered species;

The Kaunakakai Ferry System Improvements project site does not contain Federal or State listed or candidate threatened or endangered species of flora or fauna. However, the USFWS stated the Newell's shearwater, a species listed as threatened, and the Hawaiian petrel, a species listed as endangered, may traverse the Kaunakakai Ferry System Improvements project site at night during the breeding season (February 1 through December 15). Further, the USFWS included discussion related to the effect of outdoor lighting on the peak fledging period (September 15 to December 15) when the seabirds could become disoriented by the exterior lights resulting in fallout injury and mortality.

The Kaunakakai Ferry System Improvements will include exterior lighting for operational and security purposes. The need to provide shielded fixtures for these exterior lights will be included in the project building and site design to mitigate potential impacts to any seabirds.

10) *Detrimentally affect air or water quality or ambient noise levels*;

Operation of construction equipment would increase noise and exhaust emission levels in the immediate vicinity of the Kaunakakai Ferry System Improvements project site during the

construction period. Once operational, the Kaunakakai Ferry System Improvements will contribute no additional noise or air emissions to Kaunakakai Harbor or the local area.

11) *Affects or likely to suffer damage by being located in an environmentally sensitive area such as a floodplain, tsunami zone, beach, erosion-prone area, geographically hazardous land, estuary, fresh water or coastal water*;

According to the Flood Insurance Rate Map, Community-Panel Number 150003 0080 C, revised September 6, 1989, the Kaunakakai Commercial Harbor is located in Zone A4, defined as "areas of 100-year flood; base flood elevations and flood hazard factors determined." The base flood elevation is shown as +3 feet. The topographic survey shows the area of ferry shelter is at approximately + 7.5 feet.

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

The Kaunakakai Ferry System Improvements ferry shelter is sited adjacent to the existing shelter which will be renovated to restrooms. The ferry shelter will add another above grade structure adjacent to the renovated restrooms. There will be an approximately 6-foot separation between the ferry shelter and the renovated restroom. Although use of the causeway is not restricted, the Kaunakakai Ferry System Improvements will not affect scenic vistas and viewplanes from public roads. Further, the project site is not a scenic vista identified in the county of state plans or studies.

13) *Require substantial energy consumption.*

The Kaunakakai Ferry System Improvements is a public facility to be used by the public. It is planned and designed to use natural light and ventilation and minimize use of electrical power.

Based on these findings and the assessment of potential impacts from the Kaunakakai Ferry System Improvements, a Finding of No Significant Impact (FONSI) is anticipated. Further, based on Hawaii Administrative Rules Title 11, State of Hawaii Department of Health, Chapter 200, Environmental Impact Statement Rules, Subchapter 6, Section 11-200-9 (4), construction of the Kaunakakai Ferry System Improvements does not warrant the preparation of an environmental impact statement preparation notice.

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6. LIST OF PERMITS

Federal

- Department of the Army Permit

State

- National Pollutant Discharge Elimination System Storm Water Associated with Construction Activities
- Permit to Work Within the State Right-of-Way

County

- Shoreline Setback Variance
- Building permits

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7. CONSULTED PARTIES

7.1 Pre-Assessment Consultation

The following agencies were consulted during the pre-assessment phase of the Draft Environmental Assessment. Each agency was sent a copy of a project summary and a request for their written comments on the project. Of those you formally replied, some had no comments, while others provided substantive comments as indicated by the ✓ and ✓✓ respectively. All written comments and responses are reproduced in Appendix D.

Federal
US Army Corps of Engineers
US Fish and Wildlife Service ✓✓

State of Hawaii
Department of Business, Economic Development and Tourism (DBEDT)
DBEDT, Strategic Industries Division
Department of Land and Natural Resources (DLNR)
DLNR, Historic Preservation Division
DLNR, Office of Coastal and Conservation Lands ✓✓
DLNR, Commission on Water Resource Management
Department of Hawaiian Home Lands ✓
Department of Health (DOH)
DOH, Environmental Management
DOH, Environmental Planning
Office of Hawaiian Affairs ✓

County of Maui
Department of Fire and Public Safety
Department of Environmental Management ✓
Department of Parks and Recreation ✓
Department of Planning
Molokai Planning Commission ✓✓
Police Department ✓✓
Department of Public Works ✓✓
Department of Transportation ✓
Department of Water Supply ✓✓

Officials

State Senator J. Kalani English

State Representative Mele Carroll

Councilmember Danny A. Mateo

Other

Maui Electric Co. ✓✓

Maui Economic Opportunity

Young Brothers ✓

Lahaina Cruise Company / Sea Link of Hawaii Inc. Maui Molokai Ferry ✓✓

Molokai Outdoors

Island Petroleum

7.2 Agencies and Organizations to be Consulted on the Draft EA

The following is a list of agencies and organizations that will be consulted during the preparation of the Draft Environmental Assessment.

Federal

US Army Corps of Engineers

US Fish and Wildlife Service

National Marine Fisheries Service

US Coast Guard

State Agencies

Department of Business, Economic Development and Tourism

Department of Land and Natural Resources (DLNR)

DLNR, Historic Preservation Division

DLNR, Office of Coastal and Conservation Lands

Department of Hawaiian Home Lands

Department of Health (DOH)

DOH, Environmental Management

DOH, Environmental Planning

DOH, Office of Environmental Quality Control

Office of Hawaiian Affairs

University of Hawaii Water Resources Research Center

University of Hawaii Environmental Center

County of Maui Agencies
Department of Fire and Public Safety
Department of Environmental Management
Department of Parks and Recreation
Department of Planning
Molokai Planning Commission
Police Department
Department of Public Works
Department of Transportation
Department of Water Supply

Officials
Senator J. Kalani English, 6th District
Representative Mele Carroll, 13th District
Councilmember Danny A. Mateo

Other
Maui Electric Company
Hawaiian Telcom
Young Brothers
Lahaina Cruise Company / Sea Link of Hawaii Inc.
Molokai Outdoors

Molokai Public Library

8. REFERENCES

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Federal Emergency Management Agency. Flood Insurance Rate Map, Community-Panel Number 150003 0080 C, revised September 6, 1989

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State of Hawaii Department of Agriculture. Agricultural Lands of Importance to the State of Hawaii, Island of Molokai. January 1977.

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US Department of Agriculture Soil Conservation Service. *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii.* Issued August 1972.

U.S. Army Corps of Engineers Pacific Ocean Division. Marine Environment and Water Quality Surveys at Kaunakakai Harbor Molokai, Hawaii. Prepared by: Hawaii Planning Design and Research, Honolulu, Hawaii. March 1978.

APPENDIX A

Biological Reconnaissance and Water Quality Survey for Kaunakakai Harbor Ferry Improvements, AECOS, Inc.

March 29, 2010

AECOS No. 1211

Biological reconnaissance and water quality survey for Kaunakakai Harbor Ferry System Improvements, Kaunakakai, Molokaʻi, Hawaiʻi

Prepared by:

AECOS, Inc.
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March 29, 2010

Biological reconnaissance and water quality survey for Kaunakakai Harbor Ferry System Improvements, Kaunakakai, Molokaʻi, Hawaiʻi[1]

March 19, 2010 *AECOS* No. 1211

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Introduction

In November 2009, *AECOS,* Inc. biologists conducted water quality and aquatic biota surveys along the western side of Kaunakakai Pier in Molokaʻi, Hawaiʻi (Fig. 1). The Kaunakakai Harbor Ferry Systems Improvements project is proposed for Kaunakakai Pier on Molokaʻi by the State of Hawaiʻi, Department of Land and Natural Resources (DLNR). The pier rehabilitation project ("Project") includes removal and re-installation of pier decking and 12 piles at the southwest portion of the pier (an area of 1,500 ft^2 or 138 m^2). *AECOS,* Inc. was contracted to assess aquatic resources and water quality in the Project area. The purpose of this survey and the present report is to identify any sensitive biological resources in and around the pier that may be impacted by the improvements. This report includes results from a marine biological survey and water quality sampling in the Project area.

Project Area Description

Kaunakakai Harbor is located on the south central coast of the Island of Molokaʻi, Hawaiʻi. A 580-m (1,900-ft) causeway extends seaward (Fig. 2) in a southwest direction, connecting the 6.44-ac (2.61-ha) pier to the town of Kaunakakai. The harbor consists of a deep draft port (7.3 m or 24 ft deep) on

[1] Report prepared for Wilson Okamoto Corp., for use in project permitting. This document will become part of the public record for the project.

Figure 1. Project location at Kaunakakai Harbor on the island of Moloka'i.

Figure 2. Satellite image of Kaunakakai causeway, pier, and harbor. Arrow denotes pier deck replacement area.

the west side of the pier and a small boat harbor (3 m or 10 ft deep) off to the southeast side of the pier. The small boat harbor is protected by a boulder breakwater. The pier supports facilities for interisland barge cargo operations and a passenger ferry terminal (Fig. 3). The commercial harbor facility is managed by the Department of Transportation, Harbors Division, and the small boat harbor is managed by the Department of Land and Natural Resources, Division of Boating and Ocean Recreation (DOBOR).

Figure 3. Location of November 12, 2009 water quality sample stations.

Methods

Water Quality

On November 12, 2009, *AECOS* biologists measured field parameters and collected water samples at three water quality stations bracketing the proposed work area (Fig. 3, above). **Station 1** was located adjacent to dock piles number 13 and 14, directly in front of the proposed pier rehabilitation. **Station 2** was located on the seaward corner of the pier, at dock pile number 1. **Station 3** was located adjacent to the pier at dock pile number 38. Samples collected for laboratory analyses were collected in appropriate containers, placed on ice, and taken to the *AECOS*, Inc. laboratory. The following parameters were measured

in the laboratory: turbidity, total suspended solids, ammonia, nitrate-nitrite, total nitrogen, total phosphorus, and chlorophyll α. Dissolved oxygen (DO), pH, salinity, and temperature were measured with instruments in the field at the time of sample collection. Table 1 lists the instrumentation and analytical methods used for field and laboratory water analyses.

Table 1. Analytical methods used in water quality sampling for the Kaunakakai Harbor Ferry System Improvements.

Analysis	Method	Reference	Instrument
Ammonia	EPA 350M	Grasshoff et al. (1986)	Technicon AutoAnalyzer II
Dissolved Oxygen	SM 4500-O G	Standard Methods 20th Edition (1998)	YSI Model 550A DO meter
Nitrate + Nitrite	EPA 353.2 Rev 2.0	EPA (1993)	Technicon AutoAnalyzer II
pH	SM 4500 H+	Standard Methods 20th Edition (1998)	Hannah pocket pH meter
Salinity	Method 2520 B	Standard Methods 20th Edition (1998)	Age Model 2100 bench salinometer
Temperature	thermister calibrated to NBS cert. thermometer SM 2550 B	Standard Methods 20th Edition (1998)	YSI Model 550A DO meter
Total Nitrogen	persulfate digestion/EPA 353.2	Grasshoff et al (1986)/ EPA (1993)	Technicon AutoAnalyzer II
Total Phosphorus	persulfate digestion/EPA 365.1 Rev 2.0	Grasshoff et al. (1986)/EPA (1993)	Technicon AutoAnalyzer II
Total Suspended Solids	Method 2540D	Standard Methods 20th Edition (1998)	Mettler H31 balance
Turbidity	EPA 180.1 Rev 2.0	EPA (1993)	Hach 2100N Turbidimeter

D'Elia, C.F., P.A. Stendler, & N. Corwin. 1977. *Limnol. Oceanogr*. 22(4): 760-764.
EPA. 1979. Methods for Chemical Analysis of Water and Wastes. U.S. Environmental Protection Agency, EPA 600/4-79-020.
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Grasshoff, K., M. Ehrhardt, & K. Kremling (eds). 1986. Methods of Seawater Analysis (2nd ed). Verlag Chemie, GmbH, Weinheim.
Standard Methods. 1998. Standard Methods for the Examination of Water and Wastewater. 20th Edition. 1998. (Greenberg, Clesceri, and Eaton, eds.). APHA, AWWA, & WEF. 1220 pp.

Marine Biological Survey

AECOS biologists conducted a biological reconnaissance survey of marine resources at the proposed project site by snorkeling the marine waters in the

project area and assessing the relative abundance of species present in the area. The survey included the potential direct impact area and adjacent indirect impact areas. Marine plants, fishes, corals, and other macroinvertebrates were identified in the field and verified with various published texts. A listing of species of macroalgae (*limu*) and marine animals observed is presented as Appendix A.

Results

Water Quality

Results of standard water quality analyses are presented in Table 2. The sampling stations had very similar water temperature, dissolved oxygen (DO), chlorophyll α, and salinity. Water temperatures were nearly or exactly the same at all stations (26.6 to 26.8°C). DO ranged from 6.07 to 6.21 mg/l, representing saturation levels of 93 to 96%. Chlorophyll α levels in the water column give an indication of the amount of phytoplankton biomass present and were low at all three stations, ranging from 0.36 to 0.41 µg/L. Salinities were all close to 35 PSU (typical of seawater). However, total suspended solids (TSS), nutrients (ammonia nitrogen, nitrate-nitrite, total nitrogen, and total phosphorus), and turbidity were all slightly elevated at Station 2, at the end of the pier.

Table 2. Water quality characteristics at Kaunakakai Harbor, November 12, 2009.

STATION	Time Sampled	Temp. (°C)	Salinity (PSU)	pH --	DO (mg/l)	DO Sat. (%)	TSS (mg/L)
Station 1	1545	26.6	34.83	8.16	6.07	93	4.8
Station 2	1605	26.8	35.17	8.03	6.08	94	7.6
Station 3	1620	26.6	35.14	7.98	6.21	96	4.5

STATION	Turbidity (NTU)	Ammonia (µg N/L)	Nitrate-Nitrite (µg N/L)	Total N (µg N/L)	Total P (µg P/L)	Chl α (µg /L)
Station 1	1.06	<4	4	111	<4	0.41
Station 2	3.28	10	10	127	15	0.36
Station 3	0.94	<4	3	123	9	0.39

Biology, Direct Impact Area

The direct impact area includes 12 individual deck support pilings (piles 14A through F and 15A through F, Fig. 4) located between the western end of the wharf to a sheet pile wall under the pier deck to the east (Fig. 3, above). The direct impact area also includes the marine bottom under the pier in this same area.

Figure 4. View of the Project area under pier with pile 14B in foreground.

The seaward faces of deck piles 14A and 15A have high coral cover dominated by plate-forming and encrusting rice coral colonies (*Montipora capitata* and *M. patula*; Figs. 5 and 6). Various sponges, encrusting coralline algae (*Mesophyllum mesomorphum*), and small colonies of lace coral (*Pocillopora damicornis*), swelling coral (*Leptoseris incrustans*), and corrugated coral (*Pavona varians*) are also present. Of the nine stony coral taxa recorded by the survey, one resembles *Pocillopora molokensis*, although this species cannot be positively identified in the field by morphological observation alone (K. Stender, pers. comm.). Corals have a high degree of plasticity in growth form, most commonly resulting from variations in light intensity and wave movement. *P. molokensis* generally occurs in waters greater than 80 ft, while *Pocillopora meandrina* is a similar species common to shallow waters (Fenner, 2005). Therefore, our identification of the suspected *Poc. molokensis* is uncertain.

Figure 5. Coral and coralline red algae on seaward face of pile 14A.

Figure 6. The seaward face of deck pile 15A, dominated by *Montipora capitata, M. patula*, and red coralline algae.

To quantify coral growth observed on the seaward-most piles, 14A and 15A, the line intercept transect survey method was used to estimate percent coral cover (Fig. 7). On pile 14A, live coral growth was observed at 14 of 27 point-intercepts, yielding 52% coral cover; and live coral growth was observed at 17 of 27 point-intercepts for pile 15A, yielding 63% coral cover (Table 3).

Figure 7. Line intercept transect (vertical white tape) on pile 14A with *Montipora capitata* and *Pavona varians* corals.

Table 3. Percent coral cover estimates for piles 14A and 15A using the line intercept transect method.

Pile No.	Percent coral cover
14A	52%
15A	63%

A few reef fishes find shelter among the encrusting algae and branching corals of the seaward most deck piles, including juvenile Hawaiian domino damselfish (*Dascyllus albisella*), whitemouth moray (*Gymnothorax meleagris*), two-spot

hawkfish (*Amblycirrhitus bimacula*), raccoon butterflyfish (*Chaetodon lunula*), tear drop butterflyfish (*Chaetodon unimaculatus*), and Hawaiian hogfish (*Bodianus bilunulatus*).

A variety of littoral organisms occur adhering to the piles above the low tide line, including barnacles, periwinkle (*Littoraria pintado*), black nerite (*Nerita picea*), limpets ('*opihi*), and oysters (*Pinctada margaritifera*, *Dendostrea sandvicensis*).

Piles located under the deck exist in cave-like conditions of very little light. All deck piles other than the two seaward piles and two nearby cut-off piles have very limited biotic growth which progressively declines with distance under the pier. Bushy bryozoans, sponges, and barnacles have sparse cover on these piles. In the area by the sheet pile wall, small solitary tunicates and small colonies of orange cup coral (*Tubastraea coccinea*) are present on boulders and piles. Macro-invertebrates associated with the boulders are the regal slipper lobster (*Arctides regalis*) and the banded hinge-beak shrimp (*Cinetorhynchus fasciatus*). Two species of cardinalfishes (*Apogon kallopterus* and *Apogon* sp.) also occur here.

The bottom in the Project area is composed of mixed rubble and large concrete slabs and boulders. The bottom is coated in a layer of silt; coral and macroalgal growth are nearly absent. An abundance of debris—including metal scraps, electrical wire, and concrete pieces—litters the bottom. The bottom slopes away gradually from the sheet pile wall then drops off more sharply at 12 m (39 ft) distant from the sheet pile wall, at about the location of the B piles. At this point, the substratum is coarse sand, with no coral or algal growth evident on the bottom.

Noteworthy in the direct impact area is the presence of two vertical, cut-off piles located between the first two sets of piles (14 & 15A and 14 & 15B; Fig. 8). The tops of these piles are approximately 4 to 5 ft (1.2 to 1.5 m) below the water surface. These piles host rice coral colonies, coralline algae, and macroalgae, with abundances less than that on piles 14A and 15A.

Biology, Indirect Impact Area

The indirect impact area includes the marine environment to the north and south of the project area, including large, partially submerged tire fenders framing the west side of the deck (Fig. 9). The submerged portions of the tire fenders are covered with a variety of sponges, green algae (*Caulerpa taxifola, Halimedia discoidea*), brown alga (*Padina australis*), and red algae (*Amansia glomerata, Neosiphonia* sp., *Wrangelia* sp., *Amphiroa rigida*, *Dichotomaria marginata*, *Mesophyllum mesomorphum*, *Dasya iridescens*). The invasive,

snowflake coral (*Carijoa riisei*) is also found on the bottom side of several tire fenders, but is not pervasive in this area.

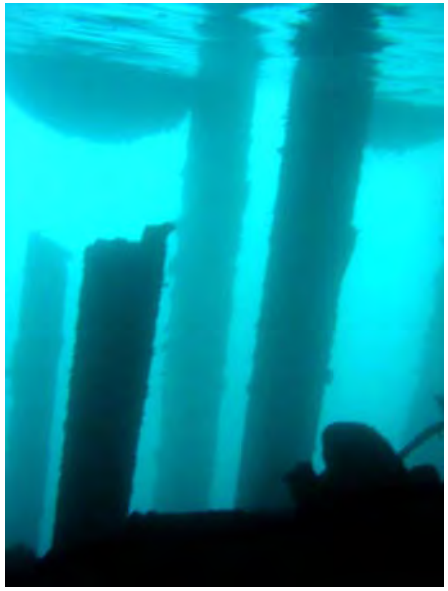

Figure 8. Cut off piles in the Project area located between piles 14A &14C and 15A & 15C. Full piles shown are piles 15A and 15B.

Discussion

Water Quality

State of Hawai'i, Water Quality Standards classify Kaunakakai Harbor as a Class A, marine embayment (HDOH, 2004). The objective of Class A waters is that their use for recreational purposes and aesthetic enjoyment be protected. Other uses are permitted, as long as these uses are compatible with the protection and

propagation of fish, shellfish, and wildlife, and with recreation in and on these waters.

Figure 9. Indirect impact area: surrounding waters and tire fenders.

The primary purpose of the water quality measurements was to characterize the existing aquatic environment, not to set baseline values or determine compliance with state water quality standards. The state criteria for all nutrient measurements, turbidity, and chlorophyll α are based on geometric mean values and a minimum of three separate samples per sampling station would be needed to compute a geometric mean. Thus, data as presented here from a single event cannot be compared with state water quality criteria to establish compliance with the regulations. Nonetheless, our results may be generally evaluated against the water quality criteria for embayment waters (Table 4) as long as limitations regarding a lack of representativeness are realized.

Water quality at the proposed project site as measured on November 12, 2009 showed temperatures, DO, pH, and salinity values as within normal ranges. Salinities of 35 PSU are evidence of an absence of fresh or brackish water inputs at that time. Turbidity and concentrations of ammonia and nitrate-nitrate were clearly elevated, with respect to the criteria, at Sta. 2, located off the seaward corner of the pier and exposed to more current and wave action than the other water quality stations. The wave action at Sta. 2 may have contributed to elevated turbidity and nutrients by resuspending bottom sediments. While TN

and TP values were low, they also were elevated at Sta. 2 relative to the stations further into the harbor. Note that none of these stations was located close to the shore (Fig. 2).

Table 4. State of Hawai'i water quality criteria for Class A embayments (HAR §11-54-6 (a)(3)).

Parameter units	Turbidity (NTU)	Total Nitrogen (µg N/l)	Nitrate + Nitrite (µg N/l)	Ammonia (µg N/l)	Total Phosphorus (µg P/l)	Chl. α (µg/l)
Geometric mean not to exceed given value	1.5*	200.00*	8.00*	6.00*	25.00*	1.50*
	0.40**	150.00**	5.00**	3.50**	20.00**	0.50**
Value not to be exceeded more than 10% of the time	3.00*	350.00*	20.00*	13.00*	50.00*	4.50*
	1.00**	250.00**	14.00**	8.50**	40.00**	1.50**
Value not to be exceeded more than 2% of the time	5.00*	500.00*	35.00*	20.00*	75.00*	8.50*
	1.50**	350.00**	25.00**	15.00**	60.00**	3.00**

* Wet criteria apply when the average fresh water inflow from the land equals or exceeds one percent of the embayment volume per day.

** Dry criteria apply when the average fresh water inflow from the land is less than one percent of the embayment volume per day.

The following additional criteria are applicable to both "wet" and "dry" conditions.

- pH shall not deviate more than 0.5 units from 8.1, except at coastal locations where and when freshwater may depress the pH to a minimum of 7.0.
- Dissolved oxygen shall not be less than 75% saturation.
- Temperature shall not vary more than 1 °C from ambient.
- Salinity shall not vary more than 10 percent from natural or seasonal changes.

Direct Impacts

Proposed rehabilitation to the existing Kaunakakai Pier facility includes pile removal and deck replacement. Piles 14A and 15A host dense algal and coral growth, with the greatest coral growth on the seaward facing sides of these piles. The proposed removal of the piles will directly impact coral colonies and other associated biota of these piles. The functional loss of coral on artificial substrates will require compensatory mitigation. The National Oceanic and Atmospheric Administration (NOAA) will require a comprehensive assessment on the biotic composition of the piles (i.e., abundance and size of corals that will be affected)

and will require mitigation for functions lost through impact. A Department of the Army Permit for the proposed project may be conditional, requiring that affected corals be transplanted back onto the new pilings. The interim loss of services to the biological community while they are removed also must be taken into account. To accomplish this will involve modeling survival success of transplanted corals (that is, project 25% versus 50% versus 75% survival outcomes) to determine further mitigation needs (D. Jayewardene, NOAA, pers. comm.). Considering the mandatory mitigation measures that would be imposed if the piles are removed, we recommend that existing piles supporting live coral growth be left in place if at all possible.

If impact avoidance by not removing piles is followed, care must be taken to minimize damage to coral during removal of the deck supporting portion of the piles above the waterline. The vertical extent of coral growth should be field verified and the piles marked by a biologist prior to construction to ensure that piles are cut well above the coral growth. The marking should include a safety margin above the coral growth based on requirements specific to the method of removal used.

A few pearl oysters (less than five) occur on piles 14A and 15A. The pearl oyster is protected throughout the State of Hawai'i and it is prohibited to "catch, take, kill, possess, remove, sell or offer for sale" a state protected species (HAR 13-83-1).

Indirect Impacts

Marine life occurring in the indirect impact area (tire fenders and surrounding waters) is limited to algal growth, sponges, cryptic invertebrates, and few fishes. Removal of the tires will result in loss of the existing tire fender community. However, if the proposed replacement piles include the addition of new tire fenders, algae will recolonize the new surfaces and fish will return quickly upon re-establishment of the biological assemblage.

During pier rehabilitation, indirect impacts to the surrounding waters could include construction runoff and suspension of fine sediments into the water column. Construction best management practices (BMPs) must be implemented to avoid runoff and inputs of chemicals and sediments into the harbor. Additionally, BMPs should be in place that prevent disturbance of the bottom sediments and, by deployment of silt curtains, limit the spread of disturbed fine sediment where disturbance cannot be avoided.

No endangered or threatened species (USFWS, 2009) were encountered during the marine survey. However, the waters in and around Kaunakakai Harbor are

within the Hawaiian Islands Humpback Whale National Marine Sanctuary. The Project within Kaunakakai Harbor will not directly affect humpback whales, but the sound generated from pile-driving may be substantial enough to cause an acoustic disturbance to protected species in offshore waters. Project plans should ensure that sound emanation from the project site is below the temporary threshold shift (TTS) of 180 to 190 dB re 1 microPascal/m (rms) for marine mammals (see Federal Register, 2005).

BMPs to protect marine mammals may include: 1) "soft-starts" with pile-driving starting at very low impact velocities and slowly building up to full energy in order to drive animals away from the area before full acoustic levels are reached; 2) halting pile-driving when protected species are within respective TTS ranges; 3) keeping vessels at least 100 yards from whales and at least 50 yards from other marine mammals and sea turtles; and 4) reducing vessel speeds to 10 knots or less when in the proximity of marine mammals and 5 knots or less when in areas of known or suspected turtle activity (*AECOS*, 2009).

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Appendix A.
Inventory of aquatic biota observed in waters of the Project area of Kaunakakai Pier, Kaunakakai, Moloka'i on November 12, 2009.

Appendix A. Inventory of aquatic biota observed in waters of the Project area of Kaunakakai Pier, Kaunakakai, Moloka'i on November 12, 2009.

PHYLUM, CLASS, ORDER, FAMILY *Genus species*	**Common name**
CHLOROPHYTA	GREEN ALGAE
Caulerpa taxifolia	
Halimeda discoidea	
PHAEOPHYTA	BROWN ALGAE
Padina australis	
RHODOPHYTA	RED ALGAE
Amansia glomerata	
Neosiphonia sp.	
Wrangelia sp.	
Amphiroa rigida	
Dichotomaria marginata	
Mesophyllum mesomorphum	
Dasya iridescens	
PORIFERA, CALCAREA, CLATHRINIDA	SPONGES
LEUCETTIDAE	
Leucetta solida	white leucetta
CHONDRILLIDAE	
Chondrosia chucalla	meandering sponge
MYCALIDAE	
Stylions sp.	orange stylions
CNIDARIA, ANTHOZOA	STONY CORALS
ACROPORIDAE	
Montipora capitata	rice coral
Montipora patula	sandpaper rice coral
AGARICIIDAE	
Leptoseris incrustans	swelling coral
Pavona varians	corrugated coral
FAVIIDAE	
Leptastrea pruinosa	spotted coral
POCILLOPORIDAE	
Pocillopora damicornis	lace coral
PORITIDAE	
Porites lobata	lobe coral

PHYLUM, CLASS, ORDER, FAMILY *Genus species*	Common name
DENDROPHYLLIIDAE	
Tubastraea coccinea	orange cup coral
CNIDARIA, ANTHOZOA, OCTOCORALLIA	SOFT CORALS & GORGONIANS
TELESTIDAE	
Carijoa riisei	snowflake coral
CNIDARIA, HYDROZOA, ANTHOATHECATA	
PENNARIIDAE	
Pennaria disticha	Christmas tree hydroid
PORIFERA, CALCAREA, CLATHRINIDA	SPONGES
LEUCETTIDAE	
Leucetta solida	white leucetta
CHONDRILLIDAE	
Chondrosia chucalla	meandering sponge
MYCALIDAE	
Stylions sp.	orange stylions
ANNELIDA, POLYCHAETA	BRISTLE WORMS
AMPHINOMIDAE	
Pherecardia striata	lined fireworm
SABELLIDAE	
Sabellastarte spectabilis	featherduster worm
MOLLUSCA, GASTROPODA	MOLLUSKS
NERITIDAE	
Nerita picea	black nerite, *pipipi*
LITTORINIDAE	
Littoraria pintado	dotted periwinkle
SIPONARIIDAE	
Siphonaria normails	false '*opihi*
VERMETIDAE	WORM SNAILS
Serpulorbis variabilis	variable worm snail
MOLLUSCA, GASTROPODA, CEPHALASPIDEA	
OXYNOIDAE	
Lobiger souverbii	bubble snail
MOLLUSCA, BIVALVIA	
PTERIIDAE	PEARL OYSTERS

PHYLUM, CLASS, ORDER, FAMILY *Genus species*	Common name
Pinctada margaritifera	black-lipped pearl oyster
ISOGNOMONIDAE	purse shells
Isognomon californicum	black purse shell
Isognomon perna	brown purse shell
OSTREIDAE	TRUE OYSTERS
Dendostrea sandvicensis	Hawaiian oyster
ARTHOPODA, CRUSTACEA	
CIRRIPEDIA	unid. barnacle
ARTHOPODA, CRUSTACEA, DECAPODA	
RHYNCHOCINETIDAE	
Cinetorhynchus fasciatus	banded hinge-beak shrimp
SCYLLARIDAE	
Arctides regalis	regal slipper lobster
GRAPSIDAE	
Grapsus tenuicrustatus	thin-shelled rock crab
CHORDATA, UROCHORDATA	TUNICATES
DIDEMNIDAE	
Didemnum sp.	white didemnid
BOTRYLLIDAE	
Botryllus sp.	ladder tunicate
PYURIDAE	solitary tunicate
VERTEBRATA, ACTINOPTERYGII	BONY FISHES
POMOCENTRIDAE	
Dascyllus albisella	Hawaiian domino damselfish
CIRRHITIDAE	
Amblycirrhitus bimacula	twospot hawkfish
CHAETODONTIDAE	
Chaetodon lunula	raccoon butterflyfish
Chaetodon unimaculatus	teardrop butterflyfish
MURAENIDAE	
Gymnothorax meleagris	whitemouth moray
APOGONIDAE	
Apogon kallopterus	iridescent cardinalfish
Apogon sp.	unid. cardinalfish
LABRIDAE	
Thalassoma duperrey	saddleback wrasse
Bodianus bilunulatus	Hawaiian hogfish
CARANIGADAE	
Caranax sp.	unid. jack

PHYLUM, CLASS, ORDER, FAMILY ***Genus species***	**Common name**
MULLIDAE	
Parupeneus insularis	island goatfish or *munu*
TETRAODONTIDAE	
Canthigaster jactator	Hawaiian whitespotted toby

APPENDIX B

Letter for State Historic Preservation Division Office

April 12, 2004

Post-it® Fax Note 7671 Date 12 pages T

To Eric Yuasa	From Steve Thompson
Co./Dept. Eng.	Co. BOR
Phone #	Phone # 7-1973
Fax # 7-0283	Fax # 7-1977

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

ERNEST Y.W. LAU
DEPUTY DIRECTOR - WATER

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

PY

April 12, 2004

MEMORANDUM

LOG NO: 2004.1107
DOC NO: 0404SC09

TO: Peter T. Young, Chairperson
Department of Land and Natural Resources

FROM: P. Holly McEldowney, Administrator and
Deputy National Historic Preservation Officer
State Historic Preservation Division

SUBJECT: **National Historic Preservation Act Section 106 Review – Information Request Pertaining to the Proposed Improvements to the Kaunakakai Small Boat Harbor**
Kaunakakai, Kona, Moloka'i
TMK: (2) 5-3-001:005 & 011

Thank you for the opportunity to provide comments for the Information Request pertaining to the proposed improvements to Kaunakakai Small Boat Harbor, which was received by our staff April 5, 2004. Cathleen Dagher and Sara Collins met with Eric Yuasa of the Engineering Division and the consultant, William Bow, to discuss the proposed undertaking and review preliminary plans. Based on the submitted document, we understand the proposed undertaking includes the construction of a new comfort station/administrative office, sewer pump station and force main, and a water main and fire hydrant.

The existing harbor facilities and pier are modern constructions, built out over the shallow, inshore area where there are no known historic sites. Consequently, we believe that "no historic properties will be affected" by any of the proposed improvements involving these areas. With regard to the proposed sewer and water line installations and connections with County of Maui system, we believe that the proposed actions may have an "adverse effect" on significant historic sites. Previously, an inventory survey conducted at nearby Malama Park located several significant historic sites, including 50-60-03-630. Site -630 is a large, subsurface cultural deposit that underlies the County park and State of Hawaii parcels (at TMKs 5-3-001:002 & 005), and probably extends under Kaunakakai Place and Hio Place. Consequently, trenching for water and sewer lines may have an "adverse effect" on Site -630. We believe that such an "adverse effect" can be mitigated with the condition of on-site archaeological monitoring during construction from the intersection of Kaunakakai and Beach Places to the County tie-ins for the sewer and water

connections. If archaeological monitoring is carried out in accordance with an approved archaeological monitoring plan, then we believe that a finding of "no adverse effect" with the condition of archaeological monitoring may be made for the subject undertaking. Any monitoring plan submitted should be prepared in accordance with Hawaii Administrative Rules 13-279.

Please note that we can only provide recommendations at this time. Any determinations must be made by the responsible Federal agency, in this case the Federal Transit Administration.

Should you have any questions, please contact Sara Collins at 692-8026.

SC:jen

c: Michael Foley, Director, Dept of Planning, 250 South High Street, Wailuku, HI 96793
Cultural Resources Commission, Planning Dept, 250 S. High Street, Wailuku, HI 96793
Raymond Sukys, US Dept of Transportation, Federal Transit Administration,
201 Mission Street, Suite 2210, San Francisco, CA 94105

Sara L
Collins/DLNR/StateHIUS
04/07/2004 03:42 PM

To: Eric T Yuasa/DLNR/StateHIUS@StateHIUS
cc: Eric T Hirano/DLNR/StateHIUS@StateHIUS, Holly McEldowney/DLNR/StateHIUS@StateHIUS, Melissa A Kirkendall/DLNR/StateHIUS@StateHIUS
bcc:
Subject: Manele & Kaunakakai Harbor Improvements

Eric -

Cathy Dagher and I have had a chance to look over the materials for the proposed harbor improvements. We plan to make the following recommendations.

(1) For the Kaunakakai work, we will recommend archaeological monitoring of the waterline trenching along Kaunakakai Place, from the intersection of Kaunakakai Place and Beach Place to the terminus at the County tie-ins by the Malama Park parking lot. This is because, as I mentioned, there is a substantial subsurface deposit recorded previously in the area.

(2) For the Manele work, we believe that the makai part of the project area is OK; we will recommend a determination that "no historic properties will be affected." For the mauka portion of the project area, we are requesting a site inspection at this time, because it doesn't seem that much ground alteration has happened in the past. If, after the site inspection, it seems that there is a potential for buried deposits, then we may recommend further archaeological work, such as monitoring.

Melissa Kirkendall of our Maui office would come over for this. While she probably can't go in the next week, I think that she would be available before April 30. Please contact her directly at 243-5169 to work out the timing on a site inspection.

(3) Given these preliminary findings, we can make the following recommendations for these projects. - The Kaunakakai improvements will have an "adverse effect" on historic properties but we believe that any "adverse effect" can be mitigated with the condition of archaeological monitoring in the areas mentioned above. Thus, our recommendation would be a finding of "no adverse effect" with the condition of monitoring.

- For the Manele improvements, we can recommend that "no historic properties will be affected" by activities in the makai part of the project area, but cannot provide an opinion yet on the mauka portion until a field inspection is carried out.

Finally, as we indicated at our meeting the other day, both of the proposed improvements are probably Federal undertakings, as defined in the regulations for Section 106 of the National Historic Preservation Act. Normally, the responsible Federal agency (in this case, the FTA) must carry out compliance with the Section 106 rules, which require notifying consulting parties such as us, OHA & other Native Hawaiian organizations. Consequently, you need to understand that our comments (as indicated in 3, above) are *not* clearances of any kind for NEPA or NHPA or any other applicable law; they can only be recommendations, at best. For information on the Section 106 process, and its requirements, here are some URLs:

A flowchart of the process: http://www.achp.gov/regsflow.html

A link to the Citizen's Guide to Section 106: http://www.achp.gov/citizensguide.html

The FTA's own website information on Section 106:
http://www.fta.dot.gov/transit_data_info/reports_publications/publications/environment/4805_5142_ENG_HTML.htm

If you have questions or concerns, please let me know. Otherwise, we'll finalize these review comments to go out early next week.

Sara
Sara L. Collins, Ph.D.
Branch Chief - Archaeology

State Historic Preservation Division
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601 Kamokila Boulevard
Kapolei, Hawai`i 96707
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APPENDIX C

Cultural Impact Assessment for the Kaunakakai Ferry System Improvements Project (Summary), Cultural Surveys Hawaii

March 2010

Cultural Impact Assessment for the Kaunakakai Ferry Systems Improvements Project, Kaunakakai Wharf, Kaunakakai Ahupua‘a, Moloka‘i District, Moloka‘i Island TMK: [2] 5–3–001:011 (por.)

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Prepared for

Wilson Okamoto Corporation

Prepared by

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(Job Code: KAUNAKAKAI 2)

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Management Summary

Reference	Cultural Impact Assessment for the Kaunakakai Ferry Systems Improvements Project, Kaunakakai Wharf, Kaunakakai Ahupua‘a, Moloka‘i District, Moloka‘i Island (TMK): [2] 5–3–001:011 (por.) (Fa‘anunu et al. 2010)
Date	March 2010
Project Number	Cultural Surveys Hawai‘i (CSH) Job Code: KAUNAKAKAI 2
Project Location	The proposed Project is located on portions of TMK: [2] 5–3–001:011, along Kaunakakai Place, from Kamehameha Highway and extending seaward to include the Kaunakakai Commercial/Small Boat Harbor. The Project area is depicted in Figure 1 and Figure 2.
Land Jurisdiction	State of Hawai‘i Department of Transportation (DOT) and Department of Land and Natural Resources (DLNR).
Agencies	State of Hawai‘i Department of Health/Office of Environmental Quality Control (DOH/OEQC)
Project Description	The proposed Project will involve improvements to the existing Maui to Moloka‘i ferry facilities and infrastructure at the Kaunakakai Commercial/Small Boat Harbor, also known as the Kaunakakai Wharf. Improvements will consist of the following activities: conversion of the existing ferry shelter into restroom facilities and extending the roofline to cover approximately 645-square-foot (sq. ft.) passenger waiting area; rehabilitation of approximately 1,720 sq. ft. of the commercial pier; the construction of a below grade sewer lift station near the shelter; and the installation of three fire hydrants. In addition, a 2,300-ft-long underground sewer force main and a 3,300 -ft.-long water line for fire protection will be installed within the causeway and along Kaunakakai Place towards the Maunaloa Highway intersection.
Project Acreage	0.329-acres
Area of Potential Effect (APE)	For the purposes of this study, the APE is defined as the entire approximately 0.329-acre Project area. While this investigation focuses on the Project APE, the study area includes the entire *ahupua‘a* (traditional land division) of Kaunakakai.
Document Purpose	This Cultural Impact Assessment (CIA) was prepared to comply with the State of Hawai‘i’s environmental review process under Hawai‘i Revised Statutes (HRS) Chapter 343, which requires consideration of the proposed Project’s potential effect on cultural beliefs, practices, and resources. Through document research and cultural consultation efforts, this report provides information, compiled to date, pertinent to the assessment of the proposed Project’s potential impacts to cultural beliefs, practices, and resources (per the *Office of Environmental Quality Control’s Guidelines for Assessing Cultural Impacts*) which may include Traditional Cultural Properties (TCPs) of ongoing cultural significance that may be eligible for inclusion on the State Register of

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	Historic Places. The document is intended to support the Project's environmental review and may also serve to support the Project's historic preservation review under HRS Chapter 6E-8 and Hawai‘i Administrative Rules Chapter 13-275.
Community Consultation	Hawaiian organizations, agencies, and community members were contacted in order to identify individuals with cultural expertise and/or knowledge of the Project area and its vicinity. The organizations consulted included the State Historic Preservation Division (SHPD), the Office of Hawaiian Affairs (OHA), and the Moloka‘i Island Burial Council (MIBC). Moloka‘i community and cultural organizations consulted included the Ho‘olehua Hawaiian Civic Club, ‘Aha Kiole, and the Moloka‘i Canoe Racing Association (MCRA). This effort was made by letter, e-mail, telephone, and in person. Initial contact letters with maps of the Project area were mailed to most informants.
Results of Background Research	Background research conducted for this Project yielded the following results: 1. The Project area is located on the central southern coast of Moloka‘i within the *ahupua‘a* Kaunakakai. Hawaiian texts tell of the old name of Kaunakakai, Kaunakahakai, which has been translated as "beach landing" (Pukui et al. 1974:95) or "resting-(on)-the beach" (Pukui, cited in Summers 1971:87). The place name has been interpreted variously by others as "current of the sea" (Ne 1982:74) and "to go along in company of four" (Kaunakahaka‘i) (Cooke 1949:83). 2. *Mo‘olelo* (legends, oral histories) concerning Kaunakakai generally refer to the area as a favored canoe landing and a victualling and resting place when traveling between islands. In both the Hawaiian literary texts of "Pele and Hi‘iaka" (Emerson 1993:86) and "Lā‘ieikawai" (Hale‘ole 1997:410), Kaunakakai is mentioned as a landing and resting place. 3. Traditional accounts also document Kaunakakai as a significant locus on the central leeward coast, serving as a location for holding councils and for ruling *ali‘i* (chief, ruler) to stay (Tuggle 1993:23). The presence of four *heiau* (temple, place of worship) (‘Ōpae‘ula, Pu‘upāpa‘i, Kamalae and Māhinahina) in close proximity to Kaunakakai and neighboring Kalama‘ula further support the contention that this area was a major social and political locale on Moloka‘i. 4. Kaunakakai's favorability was due in part to the environmental factors of wind direction, to the large natural channel through a fringing reef (which also provided for good fishing and a safe and calm anchorage inside the reef), to its central location on Moloka‘i, and to offshore fresh water springs (Remy cited in

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	Weisler 1989:11-12). The Kaunakakai Harbor pier extends out along the east side of the large natural channel through the reef that made Kaunakakai attractive for settlement. 5. A major aspect of the natural environment in the immediate vicinity of the Project area is the progradation of the coast. An examination of maps dating from 1882 to present indicates major changes in the shoreline configuration. Kanalei Shun's study of a project area 300 meters (m) to the west led him to posit that between 1882 and 1924 shoreline accretion in coastal Kaunakakai was roughly 2.4 m (8 feet) per year, but subsequently, the shoreline had changed little as of 1981 (Shun 1982:5). 6. Previous archaeological research has documented both pre- and post-Contact cultural deposits in the vicinity of the Project area (Komori 1983; Athens 1983; Landrum 1984; Tuggle 1993; Titchenal 1998). The area immediately adjacent to and west of the Project area (west of Kaunakakai Place and south of Hio Place) has been associated with a relatively early cultural layer; Māhinahina Heiau; a home of Kamehameha V known as Malama; and the early twentieth century Kala‘iakamanu Church. 7. Of note are the Komori (1983) and Athens (1983) archaeological studies, which document a pre-Contact traditional Hawaiian cultural layer (SIHP #50-60-03-630) in the immediate vicinity of the intersection of Kaunakakai Place and Hio Place. However, it was noted that in the eastern one-third of that Project area (closest to Kaunakakai Place and the area of present concern) archaeological deposits are either absent or highly disturbed (Athens 1983:82).
Results of Community Consultation	CSH attempted to contact 19 community members (government agency or community organization representatives, or individuals such as residents, cultural and lineal descendants, and cultural practitioners) for the purposes of this CIA. Twelve people responded and five *kūpuna* (elders) and/or *kama‘āina* (native-born) were interviewed for more in-depth contributions to the CIA. During the consultations, community members voiced concern that the proposed Project may affect not only the character of Moloka‘i but also the environmental integrity of the surrounding ecosystems on which people depend on for their livelihood. Community consultation yielded the following results: 1. All participants stated the Project area, its immediate vicinity, and Kaunakakai Ahupua‘a are culturally and historically significant places to Native Hawaiians:

	i. Four out of five participants reported the land area adjacent to and west of the causeway along Kaunakakai Place was the property and location of Lot Kamehameha V's home residence known as Malama. Princess Ruth Ke‘elikōlani was referenced as having frequented the home site. One participant stated ruins of Māhinahina Heiau still exists in the location of the Malama residence site. ii. Three participants stated that prior to Kamehameha V, the place was Kamehameha I's royal compound. iii. Four participants indicated the area now known as Kaunakakai Wharf and its immediate vicinity, including the Project area, was an important landing site for canoes in the past, particularly as a resting place between Maui to O‘ahu. Kamehameha I and his warriors were known to have visited Moloka‘i often for this reason. One participant stated that fishing contests associated with the Makahiki games used to take place in the ocean area surrounding Kaunakakai Wharf. iv. Two participants reported that stones from two nearby *heiau* were used to build the existing Kaunakakai Wharf. One participant stated that Māhinahina Heiau was desecrated and the stones were used to build the old pier, and subsequently, the existing wharf. v. Three participants made references to a historic church, called Kala‘iakamanu, which was once located in the vicinity of the Malama residence. vi. One participant recalled that Kaunakakai Wharf, particularly the area now known as the Commercial Pier, was used during World War II as a loading area for shipping pineapple to O‘ahu. vii. Two participants made references to the historical connection of the Kapu‘āiwa Coconut Grove, located near the Project area, with Kamehameha V. 2. Participants indicated the Kaunakakai Wharf and Project area, the shoreline, and ocean area in the wharf's immediate vicinity, are important places utilized extensively by residents of Moloka‘i for the following cultural uses and practices: i. All participants stated the Project area is part of an important resource-gathering area used daily by residents for fishing and *limu* (seaweed) collecting; and that coastal residents depend on these fishing grounds for their livelihood and subsistence. A variety of traditional fishing

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	methods used within the waters in and around the Project area was described by participants. These included trolling, spear-fishing, throw net, *moemoe* or lay net, *‘auana* (night fishing), squidding using coconut spit, squidding with net, crabbing with net, and *kai‘imu* (surrounding rocks with net and sticking a pole through to shake). ii. All participants described the lagoon and beach area surrounding Kaunakakai Wharf as the center for canoe paddling on the island of Moloka‘i. The beach area adjacent to and west of Kaunakakai Place is the home site of three of the four canoe clubs on Moloka‘i. The annual canoe paddling regatta for the Moloka‘i Canoe Paddling Association, which occurs during the weekends in June and July, utilize the ferry shelter for races. Canoe clubs also utilize the Project area for canoe practice everyday. Due to the geography of Moloka‘i Island, there are no alternative sites for this cultural practice. iii. Kaunakakai Wharf and the Project area was described by two respondents as a dock site for Hōkūle‘a, Hawai‘i’s traditional voyaging canoe. During visits to Moloka‘i, Hōkūle‘a crew and the Moloka‘i community use the existing ferry shelter and adjacent wharf areas for cultural and educational purposes. iv. Two participants indicated that two prominent surf breaks, Pahana Inn Break and Wharf Rights, are located directly east and west of the Kaunakakai Wharf. Therefore, the wharf and the Project area is used daily by surfers as an access point to the surf. v. Kaunakakai Wharf is used extensively by the community members for other recreational activities such as swimming, exercise and sport fishing. Most participants reported Kaunakakai Wharf and the Project area is also used as a venue to meet friends and for social and community gatherings, such as birthdays. Two participants stated Kaunakakai Wharf and the Project area is “Our Gathering Place.” vi. Kaunakakai Wharf and the Project area was described by one participant as the beach of Kaunakakai Ahupua‘a, an important element for the mental health and well-being of residents. The participant explained that the wharf is an important space for people to connect with the ocean and the environment. The wharf’s close proximity to Kaunakakai Town caters to people who cannot drive, such as the elderly

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	and the handicapped. vii. One participant was opposed to any dredging associated with the proposed Project because of his belief that it would primarily benefit non-locals who own nearly all vessels (e.g., yachts) that would use the deeper water. 3. A variety of native and non-native species of fish, invertebrates, and *limu* were reported by participants to be found in and around the Project area, including mullet (family Mugilidae), menpachi (genus *Myripristis)*, sardine (family Scombridae), squid (possibly *Sepioteuthus arctipinnis*), slipper lobster (family of decapod crustraceans), *moi* (*Polydactylus sexfilis*), Samoan crab (*Scylla serreta*), *akule* (*Trachurops crumenophthalmus*), *kole* (*Ctenochaetus strigosus*), *‘aholehole* (family Kuhliidae), *weke* (family Mullidae), *kūhonu* (*Portunus sanguinolentus*), *manini* (*Acanthurus sandvicensis)*, *‘ōpae* (infraorder Caridea), *‘ala‘eke* (*Portunus* species), *‘alamihi* (possibly *Metopograpsus thukuhar*), *‘ō‘io* (possibly *Albula vulpes*), *awa* (*Chanos chanos*), *pāpio* (family Carangidae),*‘ele‘ele* (*Enteromorpha prolifera*), ogo (*Gracilaria parvispora*), and gorilla ogo (*Gracilaria salicornia*). 4. The coastal area near the Project area was reported to be a habitat for the migratory *kōlea* bird (*Pluvialis dominica*). 5. Participants reported changes to the structure of the shoreline, water quality, and biodiversity in and around Kaunakakai Wharf. These changes were attributed to anthropogenic sources, as well as natural disasters. i. Three participants made references to decreased water quality in the waters surrounding the Project area. Words used to describe the quality of the water were: “silty,” “*haona*,” and “oily sheen in the water.” ii. One participant reported that gorilla ogo, *Gracillaria salicornia,* was abundant near the Project area. iii. One participant reported that Hurricanes ‘Iwa and ‘Iniki significantly changed the shoreline, the reef structure, and water levels of the Kaunakakai Harbor area. 6. The area surrounding Kaunakakai Place, including the Project area, was reported to be contaminated with petroleum and oil. One participant claimed that the soil adjacent to Kaunakakai Place is contaminated with oil from an old power plant in the 1960s. He reported that many ditches were dug and filled with oil in the land area adjacent to the Project area. One participant

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	also reported that the soil in the area near Kaunakakai Place is contaminated with petroleum and mentioned that tanks near the Kaunakakai Place have leaked before. 7. Due to the importance of the Kaunakakai Wharf and Project area to the daily lives of the Moloka‘i people, all participants voiced concerns over potential impacts the proposed development may have on the community. The concerns raised are listed as follows: i. Three community members were concerned that the construction for the proposed Project would negatively impact canoe paddling activities. ii. Two participants were concerned that construction for the proposed Project, particularly along Kaunakakai Place, would expose people and the marine environment to petroleum contaminants. One participant voiced concern that fish in and around the Project area should be protected. iii. All community members agreed that more restrooms were needed due to the high volumes of people using the wharf for a variety of cultural practices; however, one participant was concerned about sewage, potentially generated by the bathrooms of the proposed Project, and sewage contamination due to improper sewage disposal management. iv. Four out of five community members did not agree that the existing ferry shelter should be extended since the shelter is rarely used by ferry users. Participants were also worried that extending the shelter would take up parking space and worsen an already-existing congestion problem. v. Three participants did not feel that the fire hydrants were necessary due to lack of fires at the wharf, historically, and to the wharf’s proximity to seawater.
Recommendations	The following recommendations are based on a synthesis of all information gathered during preparation of the CIA. While most recommendations address cultural concerns, some recommendations, which reflect community concerns that the proposed development may affect the character of Moloka‘i and thus, the cultural identity of the place, are also included. To help mitigate the potential adverse impacts of the proposed Project on Hawaiian cultural beliefs, practices, and resources, recommendations should be faithfully considered. In addition, the development of the appropriate measures to address each concern should be implemented.

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	1. Archaeological monitoring, following an archaeological monitoring plan, is recommended for all initial ground disturbing activities, particularly along Kaunakakai Place. i. A qualified archaeologist should monitor all initial ground disturbance associated with the Project's construction. The monitor should also be aware of the potential finding of stones, possibly from Māhinehina Heiau, that were once incorporated into the constructions of the existing wharf. Should stones, believed to be associated with Māhinehina Heiau, be encountered, SHPD should be notified. ii. Personnel involved in development activities in the Project area should be informed of the possibility of inadvertent cultural finds, including human remains. Should cultural or burial sites be identified during ground disturbance, all work should immediately cease, and the appropriate agencies notified pursuant to applicable law. 2. Alternatives to the proposed Project should be considered if significant cultural resources, including human skeletal remains or burial sites, are encountered. 3. In light of the historical significance of area in and around the Project area, the following measures should be considered: i. Cultural monitoring should be conducted during all phases of development. ii. Personnel involved in development activities in the Project area should be informed of the possibility of inadvertent cultural finds, including human remains. Should cultural or burial sites be identified during ground disturbance, all work should immediately cease, and the appropriate agencies notified pursuant to applicable law. iii. One respondent expressed the need to better understand the history of Māhinehina Heiau and of the Malama Platform, formally located on what is now Malama Park, therefore, the park should be protected until further studies are conducted. 4. Due to concerns pertaining to petroleum contamination in the Project area, soil tests should be conducted for petroleum prior to any construction. Should petroleum contamination be verified, the proper authorities and measures should be instituted to ensure the safety of nearby residents and of the marine

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	environment. 5. Periodic monitoring of the sewage disposal system of the proposed Project should be conducted to ensure proper sewage management. 6. No dredging activities should be associated with the proposed Project. 7. Construction plans, particularly around the ferry shelter, should commence in September after the regatta season (June and July) to allow the Moloka‘i Community to proceed with their annual canoe paddling regatta. 8. Due to the value of the Kaunakakai Wharf, the construction of the proposed Project should be conducted in phases to provide the least impact on resident usage of the Kaunakakai Wharf and the surrounding area. 9. Consultation with community participants should continue throughout all phases of the proposed Project.

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APPENDIX D

Pre-Assessment Consultation Letters

7553-01

John Sakaguchi

11/10/09 BL LH

FILE

1/2

From: Paula_Levin@fws.gov
Sent: Tuesday, November 17, 2009 2:51 PM
To: John Sakaguchi
Cc: Dawn_Greenlee@fws.gov
Subject: Kaunakaki Harbor Ferry System Job# B61XM828

Attachments: BMPs-USFWS (12-24-08).pdf

BMPs-USFWS
12-24-08).pdf (10 ..

Dear Mr. Sakaguchi:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment, Pre-Assessment Consultation for Kaunakakai Harbor Ferry System improvements. RE: Job# B61XM828

Based on FWS' review of the documents and our discussion of Nov. 4, and 17th 2009, I understand that no increases in ferry operation are planned to be associated with this project, and that no work, including dredging or filling of aquatic habitat will be performed in the water. The work is only being performed on and under the existing structures, and measures such as floating boom with a silt curtain will be used to prevent debris falling into the aquatic environment from causing any harm to water quality and aquatic species. I am enclosing an additional list of our standard Best Management Practices to help you to ensure protection of the waters from construction activities.

(See attached file: BMPs-USFWS (12-24-08).pdf)

Additional recommendations/Best Management Practices to avoid impacts to Threatened and Endangered Species follow:

Based on the information you provided and pertinent information in our files, Newell's shearwater (Puffinus auricularis newelli) and the endangered Hawaiian petrel (Pterodroma phaeopygia sandwichensis) (collectively referred to as seabirds) have been observed in the vicinity of the proposed project threatened. Seabirds may traverse the project area at night during the breeding season (February 1 through December 15). Any outdoor lighting, particularly when used during each year's peak fledging period (September 15 through December 15), could result in seabird disorientation, fallout, injury and/or mortality. To minimize potential project impacts to seabirds, we recommend all outdoor lights associated with the project be shielded so the bulb can be seen only from below. In addition night-time construction involving unshielded outdoor lighting should be avoided.

Thank you again for the opportunity to review the project, and for your responsiveness to my inquiries.

Paula Levin
USFWS Pacific Islands
Coastal Conservation
(808)792-9417

2/2

U.S. Fish and Wildlife Service
Recommended Standard Best Management Practices

The Fish and Wildlife Service recommends that the following measures be incorporated into projects to minimize the degradation of water quality and adverse impacts to fish and wildlife resources.

1. Turbidity and siltation from project-related work shall be minimized and contained to within the vicinity of the site through the appropriate use of effective silt containment devices and the curtailment of work during adverse tidal and weather conditions.

2. Dredging/filling in the marine environment shall be scheduled to avoid coral spawning and recruitment periods and sea turtle nesting and hatching periods.

3. Dredging and filling in the marine/aquatic environment shall be designed to avoid or minimize the loss of special aquatic site habitat (coral reefs, wetlands etc.) and any ecological functions unavoidably lost as a result of the project shall be replaced.

4. All project-related materials and equipment (dredges, barges, backhoes etc) to be placed in the water shall be cleaned of pollutants prior to use.

5. No project-related materials (fill, revetment rock, pipe etc.) should be stockpiled in the water (intertidal zones, reef flats, stream channels, wetlands etc.);

6. All debris removed from the marine/aquatic environment shall be disposed of at an approved upland or ocean dumping site.

7. No contamination (trash or debris disposal, non-native species introductions attraction of non-native pests etc.) of adjacent marine/aquatic environments (reef flats, channels, open ocean, stream channels, wetlands, beaches, forests etc.) shall result from project-related activities. This shall be accomplished by implementing a litter-control plan and developing a Hazard Analysis and Critical Control Point Plan (HACCP – see http://www.haccp-nrm.org/Wizard/default.asp) to prevent attraction and introduction of non-native species.

8. Fueling of project-related vehicles and equipment should take place away from the water and a contingency plan to control petroleum products accidentally spilled during the project shall be developed. Absorbent pads and containment booms shall be stored on-site, if appropriate, to facilitate the clean-up of accidental petroleum releases.

9. Any under-layer fills used in the project shall be protected from erosion with stones (or core-loc units) as soon after placement as practicable.

10. Any soil exposed near water as part of the project shall be protected from erosion (with plastic sheeting, filter fabric etc.) after exposure and stabilized as soon as practicable (with native or non-invasive vegetation matting, hydroseeding etc.).

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7553-01
May 26, 2010

Ms. Paula Levin
Pacific Islands Office
Fish and Wildlife Service
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96813

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Ms. Levin:

Thank you for your November 17, 2009 e-mail comment letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

The Draft EA will include, based on the pertinent information in the Fish and Wildlife Service (FWS) files, Newell's shearwater (Puffinus auricularis newelli) and the endangered Hawaiian petrel (Pterodroma phaeopygia sandwichensis) (collectively referred to as seabirds) have been observed in the vicinity of the proposed project. Threatened seabirds may traverse the project area at night during the breeding season (February 1 through December 15). Any outdoor lighting, particularly when used during each year's peak fledging period (September 15 through December 15), could result in seabird disorientation, fallout, injury and/or mortality. To minimize potential project impacts to seabirds, the FWS recommended all outdoor lights associated with the project be shielded so the bulb can be seen only from below. In addition, night-time construction involving unshielded outdoor lighting should be avoided.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

(7553.01)

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

REF:OCCL:DH

Correspondence: MO-10-102

NOV - 4 2009

John Sakaguchi, AICP
Wilson Okamoto
1907 South Beretania Street
Artesian Plaza, Suite 400
Honolulu, Hawaii 96826

NOV 05 2009

Dear Mr. Sakaguchi,

SUBJECT: Kaunakakai Commercial Harbor Improvements, Kaunakakai, Island of Molokai

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) is in receipt of your letter, dated October 27, 2009, regarding the Kaunakakai Harbor Improvements located on the Island of Molokai.

According to your information, proposed improvements are being made to the existing Kaunakakai Commercial Harbor facilities. Most improvements (construction of restroom facilities, construction of 625 square foot shelter, construction a below grade sewer lift station and 2,400 long foot force main, closing the existing seawater septic and leachfield system, constructing a 3,300 long foot potable water line for domestic and fire protection, and rehabilitating an approximately 1,720 square foot area of the commercial pier to provide a hardstand for handling cargo and containers) will take place on fill land, however the piers' piles located in the water will also be replaced.

The OCCL notes work will occur in the State Land Use (SLU) Conservation District, Resource subzone. The site is currently managed by the State Department of Transportation, Harbors Division and is considered a non-conforming use. The OCCL notes the proposed project in the Conservation District is considered routine repair and maintenance for a use of which no Conservation District Use Application (CDUA) permit is required. Additionally, the project is minor in scope and within the scope of Kaunakakai Commercial Harbor operations and maintenance. Should you have any questions, please call Dawn Hegger, 808-587-0380, at the Office of Conservation and Coastal Lands.

Sincerely,

Samuel J. Lemmo, ADMINISTRATOR
Office of Conservation and Coastal Land

c: MDLO
Maui County Planning Department

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7553-01
May 26, 2010

Mr. Sammuel J. Lemmo, Administrator
State of Hawaii
Department of Land and Natural Resources
Office of Conservation and Coastal Lands
1151 Punchbowl Street
Honolulu, Hawaii 96813

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Mr. Lemmo:

Thank you for your November 4, 2009 comment letter (MO-10-102) on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

The Draft EA will state the Kaunakakai Harbor Ferry System Improvements project will occur in the State Land Use (SLU) Conservation District, Resource subzone. The Commercial Harbor and causeway is currently managed by the State Department of Transportation, Harbors Division and is considered a non-conforming use. The Draft EA will also note the proposed project in the Conservation District is considered routine repair and maintenance for a use of which no Conservation District Use Application (CDUA) permit is required. Additionally, the project is minor in scope and within the scope of Kaunakakai Commercial Harbor operations and maintenance.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

LINDA LINGLE
GOVERNOR
STATE OF HAWAI'I

STATE OF HAWAI'I
DEPARTMENT OF HAWAIIAN HOME LANDS
P.O. BOX 1879
HONOLULU, HAWAI'I 96805

KAULANA H. R. PARK
CHAIRMAN
HAWAIIAN HOMES COMMISSION
ANITA S. WONG
DEPUTY TO THE CHAIRMAN
ROBERT J. HALL
EXECUTIVE ASSISTANT

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November 24, 2009

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NOV 2
WILSON OKAMOTO CORPORATION

Mr. John Sakaguchi, AICP
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Sakaguchi:

Thank you for the opportunity to comment on the Draft Environmental Assessment, Pre-Assessment Consultation, for the Kaunakakai Harbor Ferry System Improvements.

The department notes the importance of the ferry service in providing transportation for residents to jobs in West Maui, as well as an alternative to moving cargo from Molokai. These services are critical to the well-being of our homesteaders and farmers.

We have no other comment to offer.

If you have any questions, please contact our Planning Office at 620-9519.

Aloha and mahalo,

Kaulana H.R. Park, Chairman
Hawaiian Homes Commission

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7553-01
May 26, 2010

Mr. Kauiana H.R. Park, Chairman
State of Hawaii
Department of Hawaiian Home Lands
P.O. Box 1879
Honolulu, Hawaii 96805

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Mr. Park:

Thank you for your November 24, 2009 comment letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

The Draft EA will state that the Department of Hawaiian Home Lands notes the importance of ferry service in providing transportation for resident s to jobs in West Maui and that these services are critical to the Department' homesteaders and farmers.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

7553-01
11/23/09
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PHONE (808) 594-1888
FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPIOLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

NOV 23 2009
WILSON OKAMOTO CORPORATION

HRD09/4255C

November 16, 2009

John Sakaguchi
Wilson Okamoto Corporation
1907 South Beretania St., Suite 400
Honolulu, Hawai'i 96826

RE: Request for comments and early consultation, proposed Kaunakakai pier replacement, Moloka'i, TMK: 5-3-01:11.

Aloha e John Sakaguchi,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated October 27, 2009. OHA has reviewed the project and offers the following comments.

OHA sees the necessity of this proposal. The current loading dock is clearly in a state beyond disrepair and bordering on a public nuisance. As such, we are pleased that some attention is being paid to address this situation and remedy the pier. We do express interest regarding best management practices geared towards endangered species and water quality issues.

Thank you for the opportunity to comment. If you have further questions, please contact Grant Arnold by phone at (808) 594-0263 or e-mail him at granta@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Administrator

C: Moloka'i CRC

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7553-01
May 26, 2010

Mr. Clyde Namuo, Administrator
State of Hawaii
Office of Hawaiian Affairs
711 Kapiolani Blvd. Suite 500
Honolulu, Hawaii 96813

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Mr. Namuo:

Thank you for your November 16, 2009 comment letter (HRD09/4255C) on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

Please note, the Kaunakakai Harbor Ferry System Improvements project is being proposed by the Department of Land and Natural Resources to improve existing ferry facilities and infrastructure at the Kaunakakai Commercial Harbor by converting the existing ferry shelter into restroom facilities, constructing an approximately 625-square foot shelter adjacent to the restrooms, and constructing related below grade wastewater and fire protection system improvements, and rehabilitating an approximately 1,720-square foot area of the commercial pier. Best management practices will be implemented to protect marine resources.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

CHARMAINE TAVARES
Mayor
CHERYL K. OKUMA, Esq.
Director
GREGG KRESGE
Deputy Director

TRACY TAKAMINE, P.E.
Solid Waste Division
DAVID TAYLOR, P.E.
Wastewater Reclamation
Division

7553-01
1/26/10
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COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2200 MAIN STREET, SUITE 100
WAILUKU, MAUI, HAWAII 96793

January 25, 2010

Mr. John Sakaguchi
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

RECEIVED
JAN 27 2010
WILSON OKAMOTO CORPORATION

SUBJECT: **KAUNAKAKAI HARBOR FERRY SYSTEM IMPROVEMENTS**
DRAFT ENVIRONMENTAL ASSESSMENT AND
PRE-ASSESSMENT CONSULTATION
TMK (2) 5-3-001:011, KAUNAKAKAI, MOLOKAI

We reviewed the subject project as a pre-application consultation and have the following comments:

1. Solid Waste Division comments:

   a. None.

2. Wastewater Reclamation Division (WWRD) comments:

   a. None. There is no County wastewater system in the immediate vicinity of the subject project.

If you have any questions regarding this memorandum, please contact Gregg Kresge at 270-8230.

Sincerely,

Cheryl K. Okuma, Director

WILSON OKAMOTO CORPORATION
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www.wilsonokamoto.com

7553-01
May 26, 2010

Ms. Cheryl K. Okuma, Director
County of Maui
Department of Environmental Management
2200 Main Street, Suite 100
Wailuku, Hawaii 96793

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Ms. Okuma:

Thank you for your January 25, 2010 comment letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

The Draft EA will note the Solid Waste Division and Wastewater Reclaimation Division had no comments to offer at this time. The Draft EA will state that there is no County wastewater system in the immediate vicinity of the project.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

CHARMAINE TAVARES
Mayor

TAMARA HORCAJO
Director
ZACHARY Z. HELM
Deputy Director
(808) 270-7230
FAX (808) 270-7934

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NOV 09 2009
WILSON OKAMOTO CORPORATION

DEPARTMENT OF PARKS & RECREATION
700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

November 2, 2009

Mr. John L. Sakaguchi
Wilson Okamoto Corporation
1907 Beretania Street, Suite 400
Honolulu, HI 96826

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
Kaunakakai Harbor Ferry System Improvements
TMK: 5-3-001:011

Dear Mr. Sakaguchi:

Our department has reviewed the reference Draft Environmental Assessment and we have no comment or objection to this project.

Should you have any questions or concerns, please feel free to contact me or Steve Grogan, Project Coordinator, at 270-6158.

Sincerely,

TAMARA HORCAJO
Director of Parks & Recreation

c: Patrick Matsui, Chief of Planning and Development Division

TH:PTM:sg

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WILSON OKAMOTO CORPORATION
1907 South Beretania Street
Artesian Plaza, Suite 400
Honolulu, Hawaii, 96826 USA
Phone: 808-946-2277
FAX: 808-946-2253
www.wilsonokamoto.com

7553-01
May 26, 2010

Ms. Tamara Horcajo, Director
County of Maui
Department of Parks & Recreation
700 Halia Nakoa Street, Unit 2
Wailuku, Hawaii 96793

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Ms. Horcajo:

Thank you for your November 2, 2009 comment letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

The Draft EA will note the County of Maui Department of Parks & Recreation had no comments or objections to this project.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

CHARMAINE TAVARES
Mayor
JEFFREY S. HUNT
Director
KATHLEEN ROSS AOKI
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

December 1, 2009

7553-01 JS
12/14/09 LH
BL

DEC 14 2009

Mr. John Sakaguchi, AICP
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Sakaguchi:

SUBJECT: MOLOKAI PLANNING COMMISSION (COMMISSION) EARLY CONSULTATION COMMENTS ON THE DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR THE PLANNED KAUNAKAKAI HARBOR FERRY SYSTEM IMPROVEMENTS PROJECT, LOCATED AT KAUNAKAKAI, ISLAND OF MOLOKAI, HAWAII; TMK: (2) 5-3-001:011 (RFC 2009/0261)

At its regular meeting on November 23, 2009, the Commission reviewed the above-referenced document. The Commission expressed that the community should be consulted prior to high cost projects being proposed on Molokai. In addition, the Commission provided the following comments and/or questions:

1. Overall, the Commission is against the expansion of the terminal ferry building;
2. A main concern of the Commission is traffic, particularly ingress and egress when the ferry is docked. Unless more parking and turn around area(s) are provided, the Commission is not in support of this project;
3. The Applicant should observe and assess traffic during times when the ferry is docked so that traffic is properly addressed in the Draft EA;
4. Explain the rationale behind installing a new eight inch (8") waterline for fire suppression, rather than installing salt water pumps. The Commission feels that salt water pumps are much more environmentally friendly and cost effective than installing the proposed eight inch (8") waterline;
5. Please clarify why the installation of the eight inch (8") waterline is not being applied for in a separate application;

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793
MAIN LINE (808) 270-7735; FACSIMILE (808) 270-7634
CURRENT DIVISION (808) 270-8205; LONG RANGE DIVISION (808) 270-7214; ZONING DIVISION (808) 270-7253

6. The utility storage area of the ferry shelter would be better used as a concessions area or for a use that can possibly generate income for the State Department of Land and Natural Resources (DLNR). Currently, the use of storage area appears to be minimal. If converting the storage area to a concessions area or use that can possibly generate income for the State DLNR is not possible, please provide the Commission with an explanation;

7. Please clarify the reason for constructing entirely new restrooms rather than renovating the existing restrooms;

8. Please explain the current economic health of the current Molokai Ferry Service System and provide an analysis as to whether the Ferry will remain financially viable in the future; and

9. Please clarify whether the proposed project will result in additional costs or fees services currently being provided at the harbor.

Thank you for the opportunity to comment on the proposed project. Should you require further clarification, please contact Staff Planner Danny Dias at danny.dias@mauicounty.gov or at (808) 270-7557.

Sincerely,

JOSEPH KALIPI, Chair
Molokai Planning Commission

xc: Clayton I. Yoshida, AICP, Planning Program Administrator
Danny A. Dias, Staff Planner
Molokai Planning Commission
2009/RFC File
General File

JSH:DAD:vb
K:\WP_DOCS\PLANNING\RFC\2009\0261_KaunakakaiHarbor\MoPCCommentsII.doc

WILSON OKAMOTO CORPORATION
ENGINEERS · PLANNERS · CONSULTANTS
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FAX: 808-946-2253
www.wilsonokamoto.com

7553-01
May 26, 2010

Mr. Joseph Kalipi, Chair
Molokai Planning Commission
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawaii 96793

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; Kaunakakai, Molokai, Hawaii
TMK: 5-3-001: 011
Response to Comment

Dear Mr. Kalipi:

Thank you for your December 1, 2009 comment letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project. Our responses follow:

1. The Draft EA will note Molokai Planning Commission is against the improvements to the ferry shelter which are intended to improve the facilities available to ferry users, improve the infrastructure needed at the Commercial Harbor, and to provide flexibility for cargo and fuel barges using the berthing area.
2. The Draft EA will include discussion of operational measures to control vehicle traffic and congestion in the ferry landing area fronting the ferry docking space.
3. The operational measures are based on discussion with various harbor users.
4. The Draft EA will discuss the need for a fire protection line to provide fire protection to the ferry while docked at its normal position and at its position during fuel barge operations, and the ferry shelter. The Draft EA will include a discussion of the use of sea water for fire protection.
5. The Draft EA will discuss the water line is part of the Ferry System Improvements project.
6. The Draft EA will note that the ferry shelter is being constructed with funds provided by a grant from the US Department of Transportation Federal Transit Administration (FTA). The FTA grant funds cannot be used to create space for commercial activities.

7. The Draft EA will state the existing restrooms in the Harbor Master building will remain without changes. However, ferry users currently need to cross the roadway to the Harbor Master building to use these restrooms, which are single users, accessible men's and women's restrooms. The new restrooms will house sufficient accessible and standard toilet stalls for ferry passengers.
8. The Molokai Princess is operated by Sea Link Hawaii, a private company. The Ferry System Improvements does not include a change to the level of ferry operations. The Draft EA will include information regarding ferry service.
9. The Draft EA will include that the Ferry System Improvements are being funded by a grant from the US Department of Transportation FTA, Department of Transportation Harbors Division and from funds provided by the State of Hawaii Department of Land and Natural Resources (DLNR), which does not include recovery of the construction costs though user fees.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

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CHARMAINE TAVARES
MAYOR

OUR REFERENCE
YOUR REFERENCE

POLICE DEPARTMENT
COUNTY OF MAUI

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

GARY A. YABUTA
CHIEF OF POLICE

CLAYTON N.Y.W. TOM
DEPUTY CHIEF OF POLICE

7553-01
11/24/09
LH
BL
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1/3
JS

November 24, 2009

Mr. John Sakaguchi, AICP
Senior Planner
Wilson Okamoto Corporation
1907 S. Beretania Street, Suite 400
Honolulu, HI 96826

RECEIVED
NOV 27 2009
WILSON OKAMOTO CORPORATION

Dear Mr. Sakaguchi:

SUBJECT: DEA Pre-Assessment Consultation; Kaunakakai Harbor Ferry System Improvements – Job No. B61XM82A

Thank you for your letter of October 27, 2009, requesting comments on the above subject.

We have reviewed the report. Please refer to a copy of the communication from Officer Lonnie Ka'ai for our comments and recommendations. Thank you for giving us the opportunity to comment on project.

Very truly yours,

Assistant Chief Danny J. Matsuura
for: GARY A. YABUTA
Chief of Police

c: Jeffrey Hunt, Maui County Planning Department

COPY

TO : GARY YABUTA, CHIEF OF POLICE, MAUI COUNTY

VIA : CHANNELS

FROM : LONNIE KA'AI, C.P.O., DISTRICT V 11/23/09

SUBJECT : EARLY CONSULTATION ASSESEMENT FOR THE PROPOSED KAUNAKAKAI HARBOR FERRY SYSTEM IMPROVEMENTS

SYNOPSIS:

On 111009 I was assigned by Captain J. REGO to submit this communication regarding the proposed improvements of the Kaunakakai Harbor Ferry System located at the Kaunakakai Pier on Kaunakakai Place in Kaunakakai Town, Molokai(TMK 5-3-001:011). John L. SAKAGUCHI, AICP Senior Planner, has requested an early assessment regarding the proposed construction of the structure at the above stated location.

PROPERTY:

Managed by: Hawaii Department of Transportation (HDOT)
Location: Kaunakakai Pier on Kaunakakai Place in Kaunakakai Town, Molokai (TMK 5-3-001:011)

ROAD ASSESEMENT:

There may some concerns regarding the roadway as the construction project shares the same driveway as Young Brothers Ltd. If there are construction vehicles, debris, or materials left on the roadway in said area it may cause traffic concerns for vehicles dropping off or picking up cargo from the pier.

There may be a need for some type of traffic control during freight days as there may be heavy traffic in the area of the construction site and Young Brothers Ltd.

NEIGHBORING PROPERTIES:

Checks made with, Albert RANIS, supervisor of Young Brothers Ltd. also located at the Kaunakakai Pier on the south side of the proposed construction area. RANIS related he has no concerns at this time as he had been contacted by state officials and was told that they will work with him to make the construction project run smoothly so it will not interfere with Young Brothers Ltd. operations.

Checks made in the area revealed no vessels used as dwellings. It appears that all vessels used as dwellings are docked on the east side of the pier, away from the construction site. There are, however, fishing vessels docked in the area of the construction site and workers should use caution as to avoid any damages to said vessels.

POLICE ASSISTANCE:

In the event traffic control officers are needed, police personnel may be requested to work off-duty to help with any traffic issues.

PROJECT PLANNER:

John L. SAKAGUCHI, AICP Senior Planner, may be contacted at (808) 946-2277.

FINAL ASSESSMENT:

After speaking with John L. SAKAGUCHI, he related all pier operations such as Young Brothers Ltd., Island Petroleum, and the Molokai Princess will be able to proceed as usual during the construction. Construction personnel will also be taking cautionary measures to protect land and property issues. At this time I don't see any major issues regarding this project as it should be able to proceed as planned.

Noted, Sgt. [signature] 111609 @ 1610 hrs.

Officer Lonnie KA'AI E-3263
Community Police Officer
Molokai Patrol Division
11/13/2009 @ 0728 hours

THIS IS A FAIR ASSESSMENT OF TRAFFIC CONCERNS FOR THE MOLOKAI PIER, THE MAIN HARBOR OPERATOR - YOUNG BROTHERS HAS NO CONCERNS, PER: SUPV. ALBERT RANIS. ONCE THE CONSTRUCTION STARTS SUGGEST THAT OFF DUTY OFFICERS BE USED FOR TRAFFIC AS CONGESTION WILL BE A PROBLEM DURING THE INITIAL STAGES. DULY NOTED.
Capt [signature] Rego
11/17/09 at 0830 hrs.

WILSON OKAMOTO CORPORATION
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Honolulu, Hawaii, 96826 USA
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FAX: 808-946-2253
www.wilsonokamoto.com

7553-01
May 26, 2010

Assistant Chief Danny J. Matsuura
Police Department
County of Maui
55 Mahalani Street
Wailuku, Hawaii 96793

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Assistant Chief Matsuura:

Thank you for your November 24, 2009 comment letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

Road Assessment
The Draft EA will state that the Police Department expressed concern regarding construction vehicles, debris or materials left on the roadway and the Young Brothers driveway. Further, traffic control may be needed during days when the Young Brothers cargo barge is being loaded and unloaded.

The Draft EA will include that the construction plans and specifications will include traffic control plans related to construction phasing along the causeway and an assigned contractor construction area.

Neighboring Properties
The Draft EA will note that the construction plans and specifications will require the contractor to work with Young Brothers and the Molokai Princess to ensure that construction activities do not interfere with barge and ferry operations. Barge and ferry operations must continue without interruption or interference by construction of the improvements. The details of the construction activities and working with Young Brothers, the Molokai Princess, and adjacent boat owners will need to be developed and implemented by the contractor selected for construction of the improvements.

Police Assistance
The Draft EA will note, that should traffic control be needed, police personnel may be requested by the contactor to work off-duty to help with any traffic issues.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

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CHARMAINE TAVARES
Mayor

MILTON M. ARAKAWA, A.I.C.P.
Director

MICHAEL M. MIYAMOTO
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955

7553.01

RALPH NAGAMINE, L.S., P.E.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

12/22/09

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

December 14, 2009

Mr. John L. Sakaguchi, A.I.C.P., Senior Planner
WILSON OKAMOTO CORPORATION
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Sakaguchi:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT, PRE-ASSESSMENT CONSULTATION FOR KAUNAKAKAI HARBOR FERRY SYSTEM IMPROVEMENTS; TMK (2) 5-3-001:011

We reviewed the subject application and have the following comment:

1. A detailed Traffic Impact Assessment Report (TIAR) must be provided for the project.

Please call Michael Miyamoto at (808) 270-7845 if you have any questions regarding this letter.

Sincerely,

MILTON M. ARAKAWA, A.I.C.P.
Director of Public Works

MMA:MMM:ls
xc: Highways Division
Engineering Division
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WILSON OKAMOTO CORPORATION
ENGINEERS · PLANNERS · CONSULTANTS

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rtesian Plaza, Suite 400
onolulu, Hawaii, 96826 USA
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AX: 808-946-2253
ww.wilsonokamoto.com

7553-01
May 26, 2010

Mr. Milton Arakawa, AICP, Director
County of Maui
Department of Public Works
200 South High Street
Wailuku, Hawaii 96793

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; Kaunakakai, Molokai, Hawaii
TMK: 5-3-001: 011
Response to Comment

Dear Mr. Arakawa:

Thank you for your December 14, 2009 comment letter (HRD09/4255C) on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

The purpose of the proposed improvements is to improve the facilities currently available to ferry users and to improve the supporting infrastructure. In the long-term, the improvements will not change the number of ferry operations or greatly increase passenger counts over current conditions and increased traffic is not anticipated. Based on this, a traffic impact assessment is not appropriate.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

CHARMAINE TAVARES
MAYOR

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
200 South High Street
Wailuku, Hawaii, USA 96793-2155

DON A. MEDEIROS
Director
WAYNE A. BOTELHO
Deputy Director
Telephone (808) 270-7511
Facsimile (808) 270-7505

7553-01
11/16/09
LH
JL
File
JS

November 9, 2009

NOV 13 2009

Mr. John L. Sakaguchi
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Subject: Draft Environmental Assessment, Kaunakakai Harbor Ferry System

Dear Mr. Sakaguchi,

Thank you for the opportunity to comment on this project. We have no comments to make at this time.

Please feel free to contact me if you have any questions.

Sincerely,

Don Medeiros
Director

WILSON OKAMOTO CORPORATION
1907 South Beretania Street
Artesian Plaza, Suite 400
Honolulu, Hawaii, 96826 USA
Phone: 808-946-2277
FAX: 808-946-2253
www.wilsonokamoto.com

7553-01
May 26, 2010

Mr. Donald Medeiros, Director
County of Maui
Department of Transportation
200 South High Street
Wailuku, Hawaii 96793

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Mr. Medeiros:

Thank you for your November 9, 2009 comment letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

The Draft EA will note the County of Maui Department of Transportation had no comments at this time.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

CHARMAINE TAVARES
Mayor

JEFFREY K. ENG
Director

ERIC H. YAMASHIGE, P.E., L.S.
Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

7553-01

11/14/09

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BL

File

November 4, 2009

Mr. John L. Sakaguchi, AICP, Senior Planner
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

RECEIVED
NOV 17 2009

Dear Mr. Sakaguchi:

RE: Draft Environmental Assessment, Pre-Assessment Consultation
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A
Kaunakakai, Molokai, Hawaii
TMK: 5-3-001:011

Thank you for the opportunity to comment on this Draft Environmental Assessment.

The project site is served by a 4-inch waterline, fire hydrant #4 and a 2-inch water meter on Kaunakakai Place. Storage is provided by the one million-gallon Kaunakakai tank northeast of the site.

During the building permit process, the applicant will be required to:

1. Submit calculations for fire, domestic and irrigation needs certified and stamped by a Hawaii licensed architect or engineer. Approved fire flow calculation methods currently used by the Department of Water Supply (DWS) are the "Guidance for Determination of Required Fire Flow" as published by the Insurance Services Office in 1974, 2001 and 2006, or "Fire Flow" as published by the Hawaii Insurance Bureau in 1991.
2. Provide service for domestic, irrigation and fire protection uses according to standards, as certified and stamped by a Hawaii licensed architect or engineer.
3. Install an approved back-flow prevention device. The applicant should contact our Engineering Division at 270-7835 or our Backflow and Cross-Connection Control section at 270-6132 to verify approved devices. These devices must be tested and certified annually.

"By Water All Things Find Life"

The Department of Water Supply is an Equal Opportunity provider and employer. To file a complaint of discrimination, write: USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington DC 20250-9410. Or call (202) 720-5964 (voice and TDD)

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The project site overlies the Kaunakakai aquifer which has a sustainable yield of 3 million gallons per day. The Department of Water Supply's goal is to protect the integrity of surface and groundwater resources. To achieve this, mitigation measures must be implemented to prevent any water pollution related impacts. Best management practices for construction should, therefore, be applied.

The DWS also encourages the applicant to consider the utilization of reclaimed or non-potable water for dust control, irrigation and other non-potable uses.

Should you have any questions, please contact our Water Resources & Planning Division at 244-8550.

Sincerely,

JEFFREY K. ENG, DIRECTOR
ayi
c: DWS Engineering Division

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www.wilsonokamoto.com

7553-01
May 26, 2010

Mr. Jeffrey Eng, Director
County of Maui
Department of Water Supply
200 South High Street
Wailuku, Hawaii 96793

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Mr. Eng:

Thank you for your November 4, 2009 comment letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

The Draft EA will state the project site is served by a 4-inch waterline, fire hydrant #4 and a 2-inch water meter located on Kaunakakai Place. Storage is provided by the Department of Water Supply (DWS) 1.0 million-gallon Kaunakakai tank located northeast of the site.

The Draft EA will note, during the building permit process, the applicant will be required to:

1. Submit calculations for fire, domestic and irrigation needs certified and stamped by a Hawaii licensed architect or engineer based on approved fire flow used by the DWS.
2. Provide service for domestic, irrigation and fire protection uses according to standards, as certified and stamped by a Hawaii licensed architect or engineer.
3. Install an approved back-flow prevention device. These devices must be tested and certified annually.

The Draft EA will include that the project site overlies the Kaunakakai aquifer which has a sustainable yield of 3 million gallons per day. The DWS goal is to protect the integrity of surface and groundwater resources. To achieve this, mitigation measures must be implemented to prevent any water pollution related impacts. Best management practices for construction should, therefore, be applied. The DWS also encourages the applicant to consider the utilization of reclaimed or nonpotable water.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

Maui Electric Company, Ltd. • 210 West Kamehameha Avenue • PO Box 398 • Kahului, Maui, HI 96733-6898 • (808) 871-8461

7553-01

10/31/09

EA

BL

October 28, 2009

RECEIVED
OCT 29 2009
WILSON OKAMOTO CORPORATION

FILE

Wilson Okamoto Corporation
Attn: Mr. John L. Sakaguchi, AICP, Senior Planner
1907 South Beretania Street
Artesian Plaza, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Sakaguchi,

Subject: Draft Environmental Assessment, Pre-Assessment Consultation for
Kaunakakai Harbor Ferry System Improvements
Kaunakakai, Molokai, Hawaii
Tax Map Key: (2) 5-3-001:011

Thank you for allowing us to comment on the project summary documents for the subject project.

In reviewing our records and information received, Maui Electric Company (MECO) has no objections to the proposed project at this time. However, please be advised that MECO has underground and overhead facilities within or near the project area. If the customer plans to pursue a new electric service or service upgrade, we highly encourage the customer's electrical consultant to submit the electrical demand requirements and project time schedule as soon as practical so that any work can be done on a timely basis.

If you have any questions or concerns, please call me at 871-2340.

Sincerely,

Ray Okazaki

Ray Okazaki
Staff Engineer

WILSON OKAMOTO CORPORATION
1907 South Beretania Street
Artesian Plaza, Suite 400
Honolulu, Hawaii, 96826 USA
Phone: 808-946-2277
FAX: 808-946-2253
www.wilsonokamoto.com

7553-01
May 26, 2010

Mr. Ray Okazaki, Staff Engineer
Maui Electric Company, Ltd.
210 West Kamehameha Avenue
Kahului, Hawaii 96733

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Mr. Okazaki:

Thank you for your October 28, 2009 comment letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

The Draft EA will note Maui Electric Company (MECO) had no objections to the proposed project. The Draft EA will also state MECO has underground and overhead lines within or near the Commercial Harbor.

The design electrical engineer will be notified regarding contact with MECO for this project.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

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FUE

Sea Link of Hawaii Inc.

Maui-Molokai Ferry

November 30th, 2009

Mr. John Sakayuchi
c/o Wilson Okamoto Corp

Dear Mr. Sakayuchi,

We are in support of the infrastructure improvements to Kaunakakai Harbor. Providing the improved water and sewage capabilities for the Harbor office, the general public and Young Brothers operations will not affect our current operations.

Our long term need for over 20 years continues to be the following.

1) A separate and secure area to berth the ferry without the need to move our vessel for barge traffic and special community events. This would also reduce the risk of collision for our vessel from out of control barges (we have been struck 3 times by barges).
2) An adequate shore power (i.e. 220 volt 3 phase) terminal near our vessel which will eliminate the need to run our ship's generator while at the dock. In the proposed improvements by DL&NR, I have noted that the pump lift station (which is located approximately 100' from the ferry berth) is already slated to have 208/120Y three phase service. It would take very little extra effort to run the conduit and wire the extra 100' for a shore power outlet for the ferry's use. After all, this project is supposed to be for the ferry system improvements.

We do hope in the future to have increased ridership where a larger terminal building and additional restroom facilities would be utilized by the ferry passengers.

Yours Truly,

David H. Jung
President

1036 Limahana Place, Suite 3E | Lahaina, Hawaii 96761 | Office: 808.667.9366 | Fax: 808.661.5709 | molokaiferry.com

WILSON OKAMOTO CORPORATION
ENGINEERS · PLANNERS · CONSULTANTS
1907 South Beretania Street
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www.wilsonokamoto.com

7553-01
May 26, 2010

Mr. David H. Jung, President
Sea Link of Hawaii Inc.
1036 Limahana Place, Suite 3E
Lahaina, Hawaii 96761

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Mr. Jung:

Thank you for your November 30, 2009 comment letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

The Draft EA will note that Sea Link of Hawaii supports the infrastructure improvements at Kaunakakai Harbor. The Draft EA will note that the improvements to the ferry shelter, pier, and supporting infrastructure will result in some temporary re-routing of access or detours, during construction of the ferry shelter improvements, force main and fire protection line, access will remain open to the ferry landing area.

Your comments regarding the long term needs related to berthing the ferry will be given to the Department of Transportation as part of the planning and design efforts at Kaunakakai Harbor.

At this time, provisions for 220 volt, 3 phase shore power for the ferry will not be included in the design drawings.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

YOUNG BROTHERS
Your Neighbor Island Partner

P.O. Box 3288
Honolulu, HI 96801-3288
Phone: (808) 543-9511
www.youngbrothershawaii.com

7553-01

October 29, 2009

JS

Mr. John L. Sakaguchi, AICP, Senior Planner
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, HI 96826

RECEIVED
NOV 02 2009
WILSON OKAMOTO CORPORATION

Dear Mr. Sakaguchi:

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A
Kaunakakai, Molokai, Hawaii; TMK 5-3-001:011

Thank you for your letter of October 27, 2009 soliciting our comments on the proposed Kaunakakai Harbor Ferry System Improvements project.

Young Brothers has no comments to offer at this time. Please feel free to contact me if you desire further information regarding our operations or if we can be of assistance in any other capacity. You may correspond with me at the above address or reach me by phone at (808) 543-9406.

Sincerely,

YOUNG BROTHERS, LIMITED

Jeffrey A. Low
Manager, Planning &Facilities

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7553-01
May 26, 2010

Mr. Jeffrey A. Low, Manager Planning & Facilities
Young Brothers, Limited
P.O. Box 3288
Honolulu, Hawaii 96801-3288

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Kaunakakai Harbor Ferry System Improvements
Job No. B61XM82A; TMK: 5-3-001: 011
Kaunakakai, Molokai, Hawaii
Response to Comment

Dear Mr. Low:

Thank you for your October 29, 2009 comment letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation on the Kaunakakai Harbor Ferry System Improvements, Job No. B61XM82A, project.

The Draft EA will note Young Brothers had no comments at this time.

We appreciate your participation in the Draft EA review process.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Suzuki, DLNR
R. Hiraki, DOT

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