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PETER T. YOUNG
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COMMISSION ON WATER RESOURCE MANAGEMENT

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LAND
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

ENGINEERING DIVISION
PO BOX 373
HONOLULU, HAWAII 96809

July 28, 2005

TO: Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control

FROM: Peter T. Young, Chairperson
Board of Land and Natural Resources

Subject: **Finding of No Significant Impact (FONSI) for the Mānele Small Boat Harbor Ferry System Improvements, TMK 4-9-17:6 and approximate 2-acre portion of 4-9-17:2; Lāna'i Island, Maui County**

The State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of Boating and Ocean Recreation (DBOR), has reviewed the comments received during the 30-day public comment period which began on March 23, 2005. The agency has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the next available *Environmental Notice*.

Enclosed are a completed OEQC Publication Form and four (4) copies of the Final EA.

Should you have any questions, please contact Mr. Eric Hirano, Chief Engineer at extension 7-0230.

EY:ek
Enclosures

c: Bow Engineering and Development, Inc.
M. Hirano, Munekiyo & Hiraga, Inc.

2005-08-08-OS- LA· FONSI MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS

FINAL ENVIRONMENTAL ASSESSMENT

MĀNELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS
LĀNA'I ISLAND, HAWAI'I

This environmental document has been prepared pursuant to
Chapter 343, Hawaii Revised Statutes

Proposing Agency:

State of Hawai'i
Department of Land and Natural Resources
Division of Boating and Ocean Recreation
333 Queen Street, Suite 300
Honolulu, Hawai'i 96813

Prepared By:

Bow Engineering & Development, Inc.
1953 South Beretania Street, PH-A
Honolulu, Hawai'i 96826

August 2005

SUMMARY INFORMATION

PROJECT:	Mānele Small Boat Harbor Ferry System Improvements Project DLNR No. B31XM82A
PROPOSING AGENCY:	State of Hawai'i Department of Land and Natural Resources Division of Boating and Ocean Recreation 333 Queen Street, Suite 300 Honolulu, Hawai'i 96813
CONTACT:	Eric Hirano Ph. No. (808) 587-0230
FEDERAL AUTHORITY:	Federal Transit Administration (FTA)
LOCATION:	Mānele Bay, Lāna'i, Maui County, Hawai'i
TAX MAP KEY:	(2)4-9-17:6 (Executive Order 2141) (2)4-9-17:2 (2- acre Portion)
LAND AREA:	16 acres (12.5 acre port) 2-acre adjacent parcel
LANDOWNER:	State of Hawai'i, Department of Land and Natural Resources Division of Boating and Ocean Recreation; Castle & Cooke Resorts (2-acre portion)
EXISTING USE	Mānele Small Boat Harbor
STATE LAND USE DESIGNATION:	Conservation (*Limited Subzone*) and Urban Urban (2-acre portion)
COMMUNITY PLAN: LAND USE DESIGNATION:	Lāna'i Community Plan (1998) Conservation Project District (2-acre portion)
EXISTING ZONING:	N/A [4-9-17:6] Lanai Project District I (Mānele) (Open space PD-L/1) [2-acre portion]
SPECIAL MANAGEMENT AREA:	Within SMA
ANTICIPATED DETERMINATION	Finding of No Significant Impact (FONSI)

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PREFACE

This Final Environmental Assessment (EA) has been processed as a Finding of No Significant Impact (FONSI) by the State of Hawai'i, Department of Land and Natural Resources, Division of Boating and Ocean Recreation. As a result, the preparation of an Environmental Impact Statement (EIS) is not required.

To facilitate the readers' ability to distinguish revisions made to the Draft EA, substantive changes and additions are underlined. Text that has been deleted is indicated by a ~~strikethrough~~.

1 INTRODUCTION

1.1 PURPOSE OF THE ENVIRONMENTAL ASSESSMENT

The evaluation of projects to determine their effects on the environment is required by the Hawai'i Revised Statutes (HRS), Chapter 343. An Environmental Assessment (EA) is a "written evaluation to determine whether an action may have a significant effect" (HRS §343-2). The agency with primary responsibility over the project (the proposing agency) is required to prepare an EA and makes a final determination according to significant impacts, or lack of significance. As stated in HRS §343-1:

> An environmental review process will integrate the review of environmental concerns with existing planning processes of the State and counties, and alert decision makers to significant environmental effects which may result from the implementation of certain actions. ...The process of reviewing environmental effects is desirable because environmental consciousness is enhanced, cooperation and coordination are encouraged, and public participation during the review process benefits all parties involved and society as a whole.

As described above, the basic purpose of an EA is to provide information to the public and decision makers on proposed actions. The EA must also disclose: potential significant adverse environmental impacts, the expected primary and secondary consequences, and the cumulative as well as the short and long-term effects of the action.

1.2 OVERVIEW

The State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of Boating and Ocean Recreation (DBOR), with funding assistance from the Federal Transit Administration (FTA), plans to construct ferry terminal infrastructure improvements at the Mānele Small Boat Harbor located in Mānele Bay on the south coast of Lāna'i. The proposed infrastructure improvements would replace existing facilities located within the area of the Mānele Small Boat Harbor, and would include: a new comfort station; administrative office; covered waiting areas; paved access roads; multi-use parking areas; water mains and fire hydrants; sewage pump station and force main; drainage system; vessel sewage pump out facility; fuel line; telephone and electrical utilities; street lights; and landscaping.

1.3 FEDERAL AND STATE AUTHORITY

The proposed action will utilize funding from both fedeal and state agencies, including the FTA and State of Hawai'i DLNR (DBOR). According to the FTA grant, 80 percent of the project will be funded by FTA funds, and 20 percent will be funded by the State. Because there is both federal and state funding for the project, it is subject to both federal and state environmental laws and regulations.

Environmental review procedures required by the State of Hawai'i include compliance with HRS §343, and Hawai'i Administrative Rules (HAR), Title 11, Department of Health. A categorical

exclusion (CE) under 23 Code of Federal Regulations (CFR) §771.117(d)(10) has been granted for the Mānele Small Boat Harbor Ferry System Improvement Project. Therefore, the project is exempt from environmental review pursuant to the National Environmental Policy Act (NEPA). The CE action cited above is for the "construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks and related street improvements)" which would not cause significant impacts. While the Mānele Small Boat Harbor Ferry System Improvement project does not include bus facilities, the CE applies to the proposed project in the construction and improvement of a transit hub and amenities in an open area.

1.4 PUBLIC INVOLVEMENT

A community meeting was held at the Lanai Elementary School Library on February 19, 2004 to discuss proposed improvements to the Mānele Small Boat Harbor. A Mānele Small Boat Harbor Advisory Group meeting was held at the Mānele Small Boat Harbor on February 19, 2004, prior to the community meeting. Both the community and the advisory group reported widespread support for the proposed improvements. In addition, a community workshop was held at the October 20, 2004 Lāna'i Planning Commission Meeting.

The Mānele Small Boat Harbor Ferry System Improvement project was presented to the public for another time at the March 16, 2005 Lāna'i Planning Commission Meeting; no substantive comments were received at this meeting. During the 30-day circulation period of the Draft EA, the project was again included as an agenda item at the April 20, 2005 meeting. Comments generated from this meeting are included in Appendix B. *Draft Environmental Assessment Comment Letters.*

1.5 PURPOSE AND NEED FOR THE PROJECT

The proposed improvements are intended to serve the following purposes:

- Improve existing ferry facilities and infrastructure at the Mānele Small Boat Harbor to provide a more efficient, hospitable, and safer transit system for resident commuters and tourists.
- Improve ferry facilities to encourage increased ferry ridership.
- Improve parking conditions and safety for resident commuters and tourists.
- Improve ferry facilities to be compliant with County of Maui, State, and Federal rules and regulations.

2 PROJECT DESCRIPTION

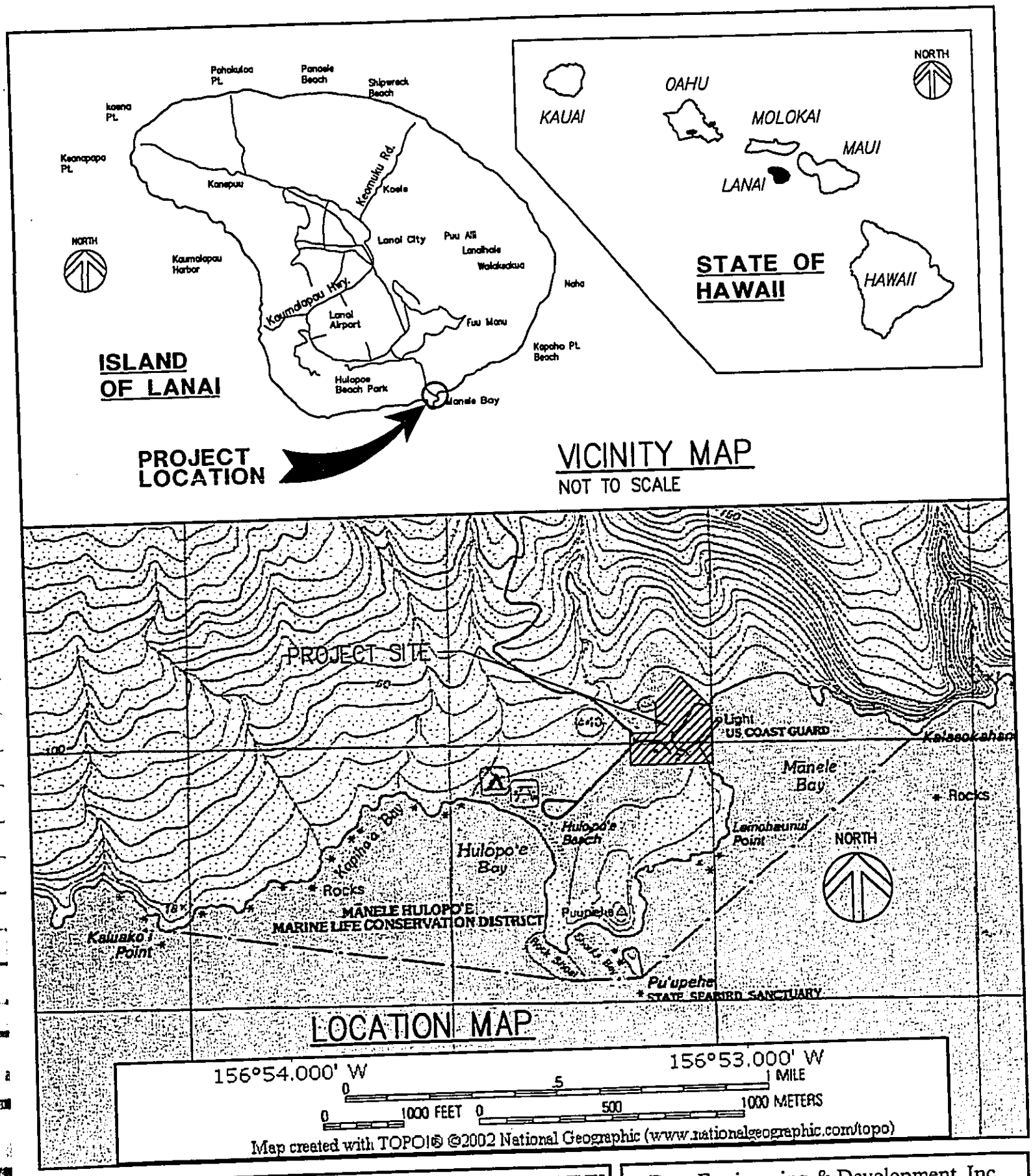
2.1 ENVIRONMENTAL SETTING

PROJECT LOCATION

The proposed project would be located at the Mānele Small Boat Harbor located in Mānele Bay on the south coast of Lāna'i, approximately 7 miles from Lāna'i City, and 11 miles from the Lāna'i Airport (see Figure 1). Lāna'i is located in Maui County, approximately 8 miles west of the island of Maui. The proposed improvements would be constructed within the existing area of the Mānele Small Boat Harbor. The 12.5-acre project parcel is owned by the State of Hawai'i, Department of Land and Natural Resources, Division of Boating and Ocean Recreation; a 2-acre portion of the project site to be used for the proposed multi-use parking is currently owned by Castle & Cooke Resorts; the 2-acre portion would be created via subdivision and would be transferred to the State for development. Construction of the proposed infrastructure improvements would occur on the parcels identified as Maui County Tax Map Key (TMK) (2)4-9-17:6 and a 2-acre portion of TMK (2)4-9-17:2 (see Figure 2).

EXISTING CONDITIONS

The existing Mānele Small Boat Harbor was originally constructed in 1965. The harbor provides small boat slips, a rock groin for the Lāna'i ferry and chartered vessels, unpaved parking areas, a comfort station, harbor master's office, and boat ramp with a loading dock (for existing facilities, see Figure 3). The Trilogy Excursions company maintains an office and picnic building on the project site adjacent to the existing parking area. Current access to the harbor is via Mānele Road and unpaved internal roadways. The existing parking lot is an unpaved level area at an elevation of approximately 16 to 17 feet mean sea level (msl). Most of the site has been previously disturbed and slopes towards the ocean (*makai*), with elevations ranging from 4 to 25 feet msl. There is an existing siltation basin located on the northeastern portion of the project site that collects storm flows and runoff from the adjacent hill located to the northeast of the active harbor facilities. While the siltation basin helps prevent extensive runoff from *mauka* (mountain) portions of the project from entering the harbor, there is no existing drainage system for the parking areas and active harbor facilities, and runoff empties directly into the harbor. There are small areas of landscaping vegetation surrounding the harbor master's office and comfort station, and several trees planted over the extent of the site, including monkeypod, banyon, coconut, and *kiawe* trees. The area of the proposed multi-use parking consists of extensive *kiawe* trees and is located in a predominantly level area of depression approximately 2 feet below surrounding areas.



F-1

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS
ENVIRONMENTAL ASSESSMENT
FOR THE DEPARTMENT OF LAND AND NATURAL RESOURCES

VICINITY AND LOCATION MAP

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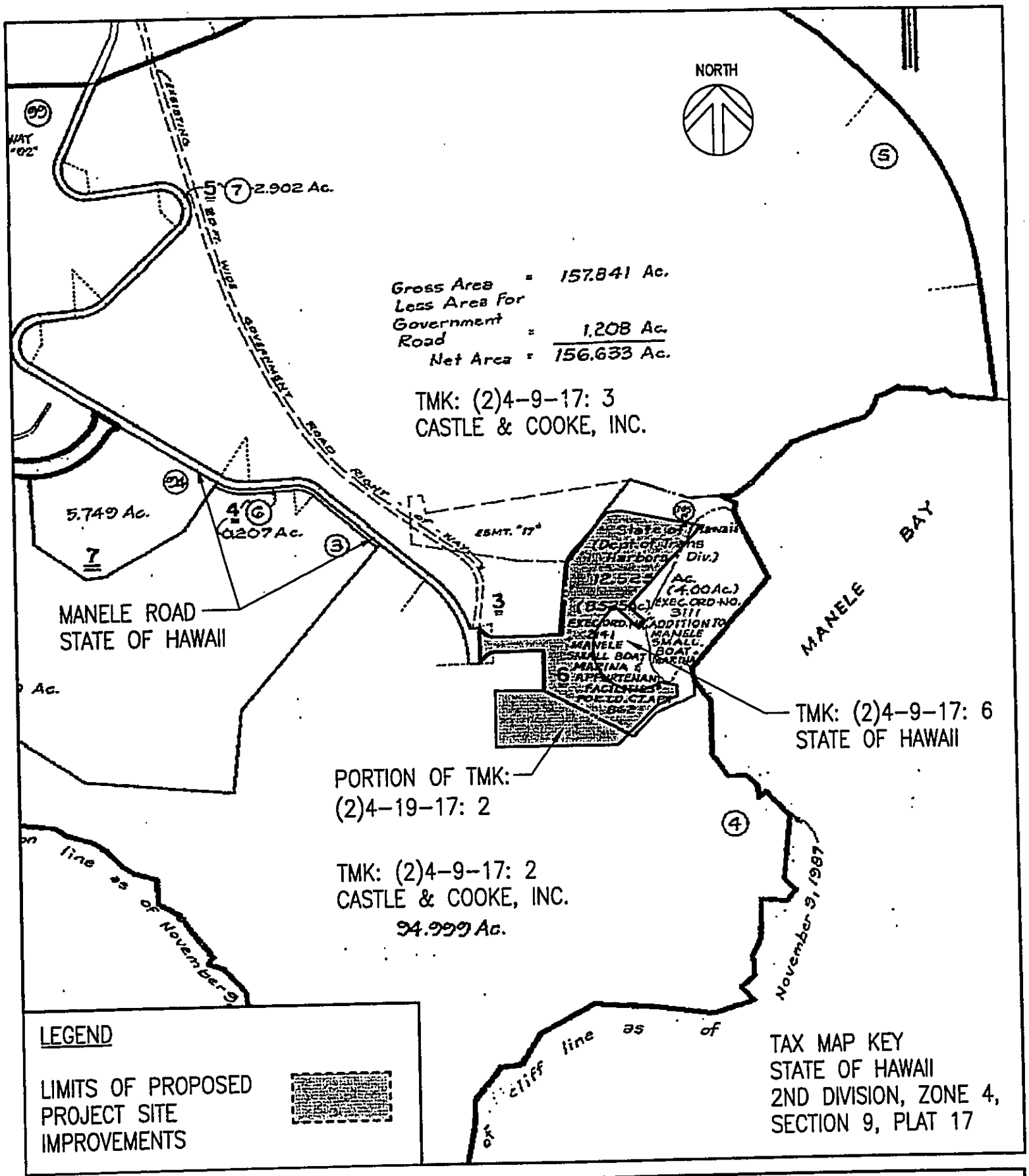

F-2

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS
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LANDOWNERSHIP MAP

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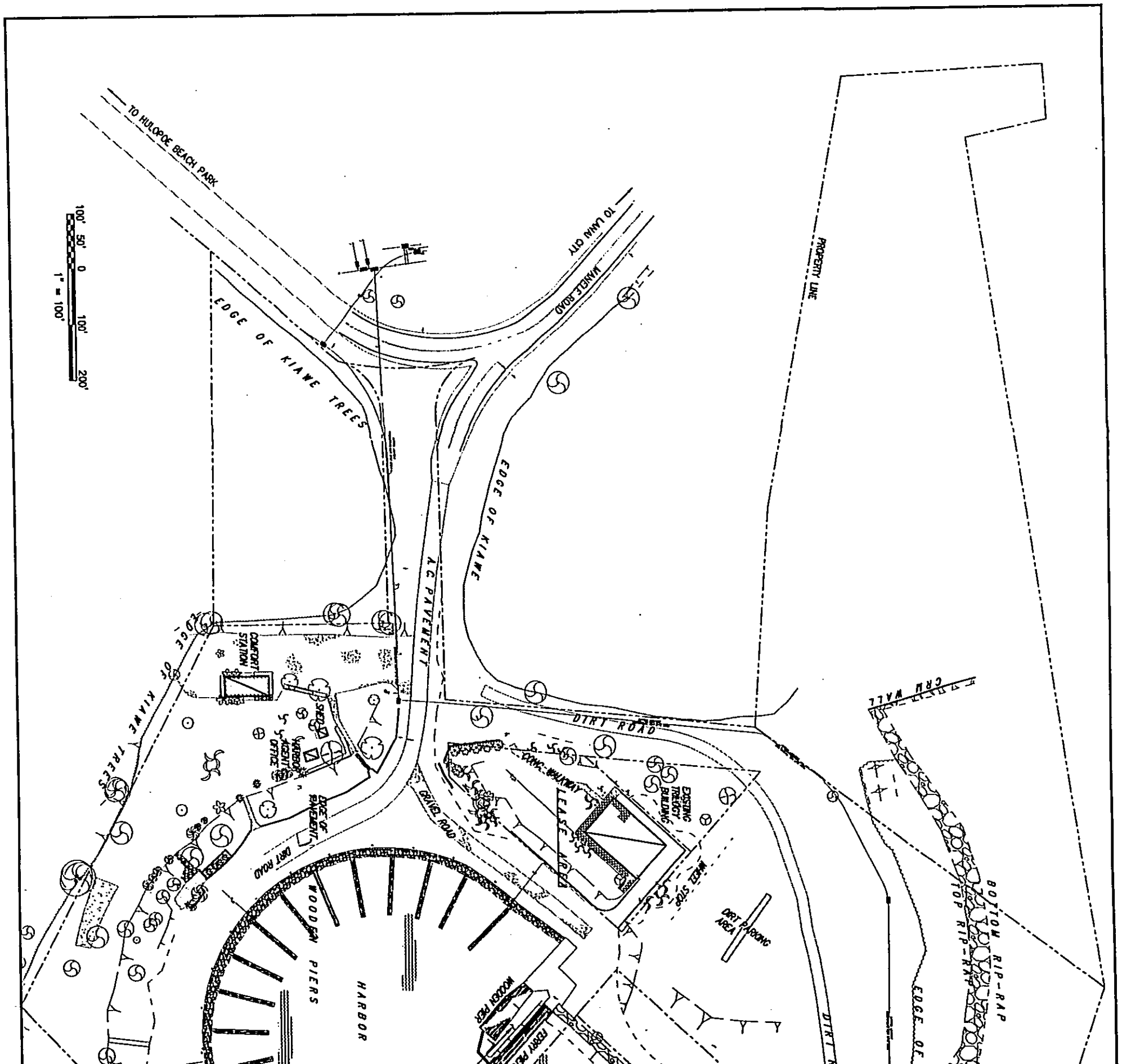
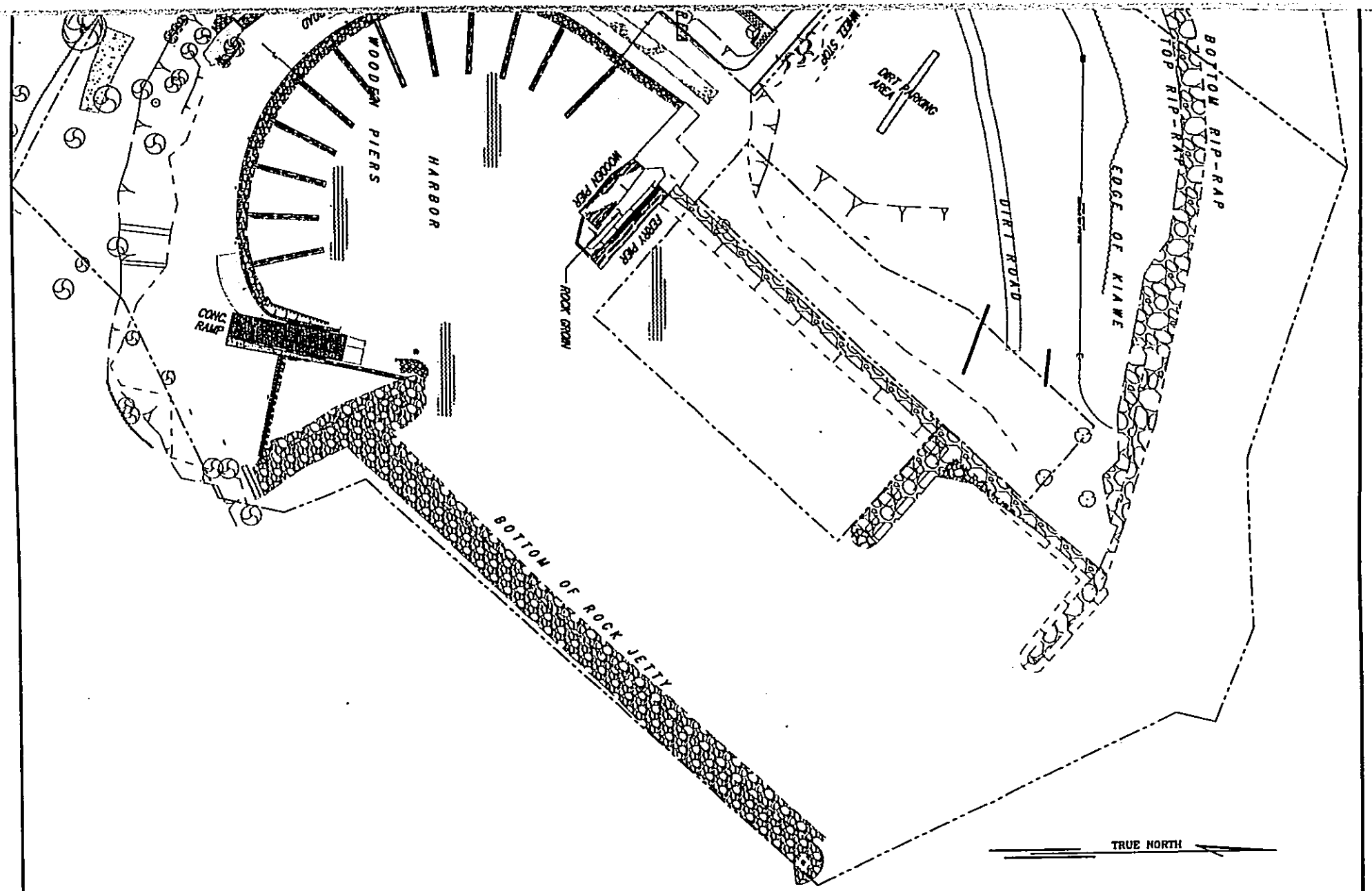

TO HULOPOE BEACH PARK
TO LANAI CITY
MANELE ROAD
EDGE OF KIAWE TREES
EDGE OF KIAWE TREES
EDGE OF KIAWE TREES
AVENUE
100' 50' 0 100' 200'
1" = 100'
PROPERTY LINE
COMFORT STATION
SHED
HARBOR AGENT OFFICE
EDGE OF PAVEMENT
DIRT ROAD
GRAVEL ROAD
CONC. WALKWAY
EXISTING TRILOGY BUILDING
LEASE AREA
WATER STOP
DIRT PARKING AREA
DIRT ROAD
DIRT ROAD
STONE WALL
WOODEN PIERS
HARBOR
WOODEN PIER
FERRY PIER
TOP RIP-RAP
BOTTOM RIP-RAP
EDGE OF



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MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS
ENVIRONMENTAL ASSESSMENT FOR
DEPARTMENT OF LAND AND NATURAL RESOURCES

EXISTING CONDITION

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The existing ferry system at the Mānele Small Boat Harbor currently serves resident-commuters and tourists traveling between the islands of Maui and Lāna'i. The Expedition ferry operates five daily round trips between the Mānele and Lahaina Small Boat Harbors. Ferry facilities at the Mānele Small Boat Harbor are in disrepair or non-existent. The ferry dock, passenger station, passenger and vehicle queuing areas, unpaved parking lot and access road, drainage, and waste disposal system are considered substandard. In addition, the Mānele Small Boat Harbor lacks basic amenities, including passenger shelter, utilities, and landscaping.

Surrounding land uses include Hulopo'e Beach Park, the Manele Bay Hotel and golf course, and undeveloped lands to the west; an existing siltation basin to the north and east; and ocean and harbor activities to the south.

2.2 DESCRIPTION OF THE PROPOSED ACTION

As proposed, the Mānele Small Boat Harbor Ferry System Improvements would consist of construction and operation of ferry terminal improvements at the Mānele Small Boat Harbor (see Figure 4). Major features to be developed at the harbor include the following:

- additional comfort station;
- administrative office;
- paved access roads and parking areas;
- ADA compliant pedestrian walkway along waterfront;
- water mains and fire hydrants;
- sewage pump station and force main;
- vessel sewage pump out facility;
- telephone utilities;
- electrical utilities and street lights;
- installation of a fuel line under the concrete pavement from the site of the potential future fuel storage tank to the ferry dock;
- covered waiting area;
- ferry pier boardwalk improvements;
- multi-use parking, including boat trailer parking and dry storage area;
- landscaping; and,
- mini park.

The proposed improvements would be located within the existing area of the Mānele Bay Small Boat Harbor and the adjacent 2-acre parcel, and would replace existing facilities. The existing comfort station would remain, and an additional comfort station would be located adjacent to the ferry loading and unloading area. The proposed facilities would be compliant with the Americans with Disability Act (ADA), and the existing comfort station would be renovated to be ADA compliant.

DRAINAGE

The project includes the construction of storm drainage improvements that would redirect a large portion of the stormwater runoff from emptying into the harbor and into drain inlets and silt basins. Due to existing elevation constraints, runoff generated from an area of approximately

58,310 square feet from the roadway along the harbor would drain through culverts directly into the harbor.

WATER AND WASTEWATER

The extension of water and sewer services would occur from existing facilities serving Hulopo'e Beach Park located on Mānele Road. An 8 inch waterline would be installed to replace the existing 2 inch waterline, and would connect at a new water meter located on the north side of Mānele Road at the entrance to the harbor. The proposed water line would provide service to the new comfort station, administrative office, covered waiting area, boat wash-down area, Trilogy's building, various hose bibs along the piers, site fire hydrants, and irrigation throughout the site.

A closed-system vessel sewage pump out facility would be located near the harbor slips for use by harbor vessels. The wastewater pump station would be located at the southern end of the main driveway accessing the small boat harbor. A proposed force main would then transport the wastewater into a manhole up the roadway to intersect with Mānele Road. The wastewater would be transported via gravity flow down Mānele Road towards Hulopo'e Beach Park to the existing pump station and treatment plant. There is adequate capacity at the wastewater pump station and wastewater treatment plant for the additional flow generated from the proposed Mānele Small Boat Harbor Improvements project (Colin Lam, *personal communications*, 2004). The existing cesspools would be pumped out, backfilled, and abandoned in place in accordance with State Department of Health rules and regulations.

CIRCULATION AND PARKING

There would be two main circulation routes provided within the harbor. The first route would provide access to the passenger parking area, Trilogy building, loading/unloading for the ferry, and the mini park. The second route would be primarily used by vehicles with boat trailers. Access to the ferry loading area would be one-way traffic only. All other access would be two-way traffic.

Concrete walkways would be located throughout the site to provide access to the various facilities. Curbed ramps and cross-walks would be provided to aid pedestrian traffic.

There would be several paved parking areas located throughout the site. This includes: 7 stalls at the administrative office and existing comfort station (2 Accessible); 13 parallel stalls along the finger piers near the boat ramp (1 Accessible); 1 Accessible stall and 1 Accessible boat/trailer stall at the existing boat ramp; 8 stalls along the waterfront by the Ferry loading area near the mini park (including 4 Accessible and 4 bus); 99 stalls in the upper parking area; 29 multi-use boat/trailer stalls and overflow parking; and 26 multi-use boat/trailer storage stalls. The multi-use parking area would be located on the 2-acre portion of the project and would be available for public use.

LIGHTING

All facilities would be lighted for nighttime use. Parking lots areas would be lit with street lamps operated by a timer and would shut off after the last ferry departure and as to be determined by

the Harbor Master. Low level footpath lighting would be used for the harbor sidewalk and surrounding the comfort station and harbor agent's office. Also, the launching ramp would be equipped with a timered light for use by early morning fishermen (see Appendix D for the preliminary electrical basis for design).

LANDSCAPING AND IRRIGATION

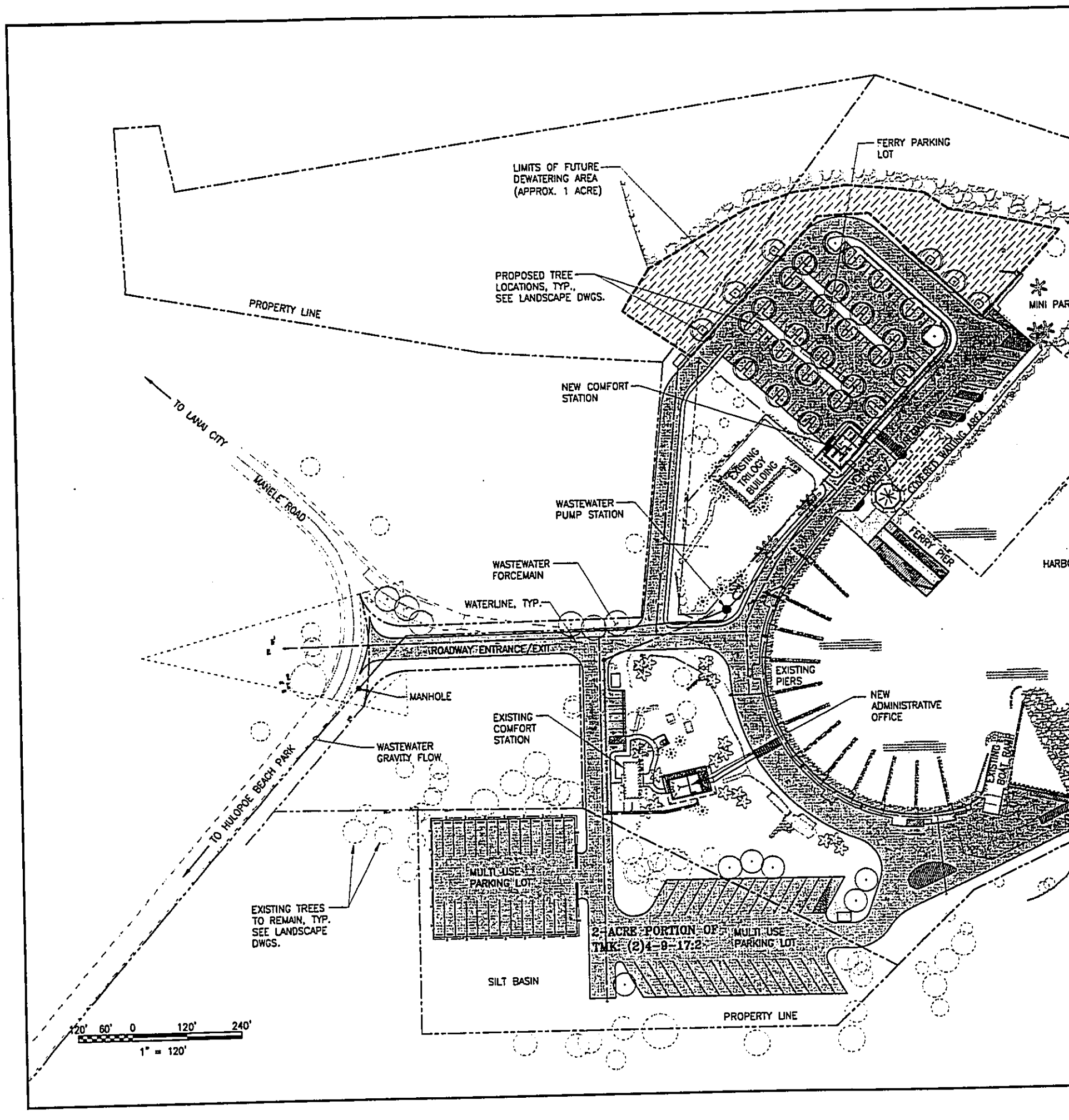
Included in the proposed action is landscaping with mostly native drought and wind tolerant plants, including native grasses and shrubs, native canopy trees, and coco palms. The proposed landscaping plan also includes the use of bio-swales planted with native drought tolerant grasses for stormwater collection adjacent to building and parking area. While landscaped areas will be irrigated via automatic irrigation system, frequent irrigation will only be required during the initial establishment period. Once established, irrigation can be limited to supplemental watering during periods of extended drought (see Appendix E for the preliminary Landscaping Plan).

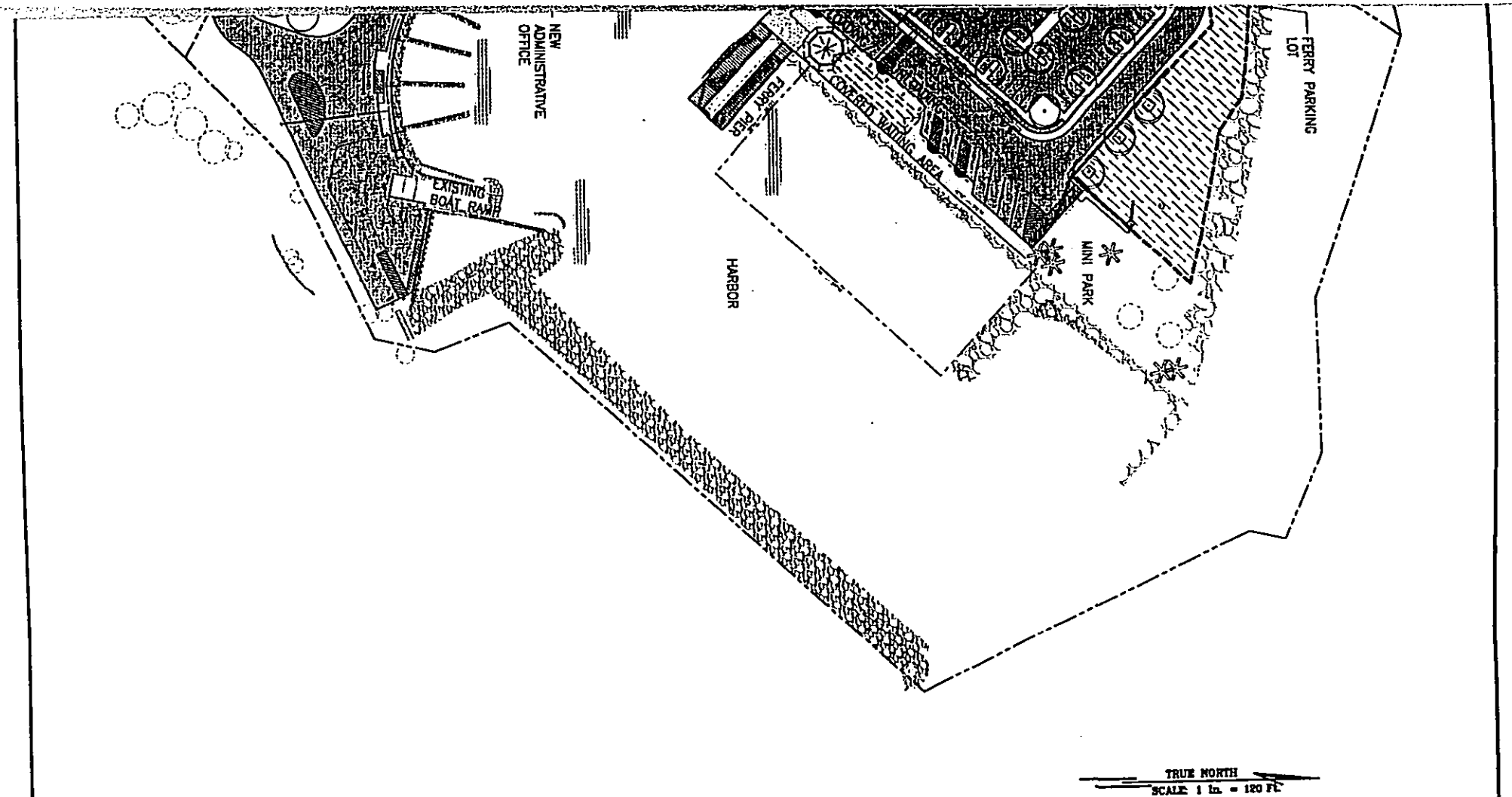
MAINTENANCE EASEMENT

The U.S. Army Corps of Engineers, Honolulu District, requires a permanent easement at the Mānele Small Boat Harbor for a contractor's work and operation area (CWOA) and dewatering site for maintenance dredging for future maintenance work at the harbor. As part of the Local Cooperation Agreement, executed between the U.S. Army Corps of Engineers and the State of Hawai'i, the State agreed to provide all lands, easements, and rights-of-way for subsequent maintenance of the Mānele Small Boat Harbor. The proposed project includes a CWOA and dewatering area of approximately 1-acre (see Figure 4). The dewatering site would be under laid with "grass-pave" soil stabilizing product and finished with grass. An irrigation system would be installed under the "grass-pave." The "grass-pave" would allow dewatering without distress to the area. Cars would be allowed to park in this area when not in use as the CWOA and/or dewatering site. A portion of the CWOA would be located in the proposed mini park adjacent to the harbor.

2.3 PROJECT PHASING AND CONSTRUCTION COST

Construction of the ferry terminal improvements is scheduled to begin during early 2006. The actual start date will be dependent on obtaining the required permits and approvals. The ferry operations would remain active during construction. The project would be constructed in one phase for the duration of approximately one year. The estimated construction cost for the Mānele Small Boat Harbor Ferry System Improvement project is $6,500,000, with a federal contribution of 80 percent and State contribution of 20 percent of the total construction cost. It is anticipated the subdivision of the adjacent lands owned by Castle & Cooke Resorts to create the 2-acre parcel for transfer to the State of Hawai'i would take approximately 8 to 12 months to complete.


LIMITS OF FUTURE DEWATERING AREA (APPROX. 1 ACRE)
PROPOSED TREE LOCATIONS, TYP., SEE LANDSCAPE DWGS.
PROPERTY LINE
FERRY PARKING LOT
MINI PAR
NEW COMFORT STATION
TO LANAI CITY
MANELE ROAD
EXISTING TRILOGY BUILDING
COVERED WAITING AREA
WASTEWATER PUMP STATION
FERRY PIER
HARBO
WASTEWATER FORCEMAIN
WATERLINE, TYP.
ROADWAY ENTRANCE/EXIT
EXISTING PIERS
NEW ADMINISTRATIVE OFFICE
MANHOLE
EXISTING COMFORT STATION
EXISTING BOAT RAMP
WASTEWATER GRAVITY FLOW
TO HULOPOE BEACH PARK
MULTI USE PARKING LOT
EXISTING TREES TO REMAIN, TYP. SEE LANDSCAPE DWGS.
2 ACRE PORTION OF TMK: (2)4-9-17:2
MULTI USE PARKING LOT
SILT BASIN
PROPERTY LINE
120' 60' 0 120' 240'
1" = 120'



F-4

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS
ENVIRONMENTAL ASSESSMENT FOR
DEPARTMENT OF LAND AND NATURAL RESOURCES

PROPOSED SITE PLAN

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3 DESCRIPTION OF THE AFFECTED ENVIRONMENT

The intent of this chapter is to describe the existing physical and social environment which is affected by the proposed action. Potential impacts which may result from implementation of the proposed action and mitigation measures to minimize the adverse impacts are described below.

3.1 CLIMATE

The climate of Mānele Bay can be characterized as hot and dry. Rainfall occurs seasonally during the winter storms, generally from December through March, and annual rainfall averages less than 15 inches. Daily temperatures range from the upper 50 degrees Fahrenheit to low 90 degrees during the summer. Prevailing winds blow from a northeast direction at an average 15-20 miles per hour. The harbor is generally protected from the occasional southerly winds, though high gusting winds can generate surf that comes over the breakwater. The north winds sweep over the mountain behind the harbor and accelerate up to 50 to 65 miles per hour, creating onshore dust conditions and choppy marine conditions.

3.2 TOPOGRAPHY AND SOILS

Most of the site has been previously disturbed and slopes *mauka* to *makai*, with elevations ranging from 4 to 25 feet mean sea level (msl). The existing parking lot is an unpaved level area at an elevation of approximately 4 feet above adjacent areas. There is an existing siltation basin located on the northeastern portion of the project site that collects storm flows and runoff from the adjacent hill located to the northeast of the active harbor facilities. While the siltation basin helps prevent extensive runoff from *mauka* (mountain) portions of the project from entering the harbor, there is no existing drainage system for the parking areas and active harbor facilities, and runoff empties directly into the harbor. There are small areas of landscaping vegetation surrounding the harbor master's office and comfort station, and several trees planted over the extent of the site, including monkeypod, banyon, coconut, and *kiawe* trees. The area of the proposed multi-use parking consists of extensive *kiawe* trees and is located in a predominantly level area of depression approximately 2 feet below surrounding areas.

According to the *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* (Soil Conservation Service, 1973) the soils in the project area are classified as Sandy alluvial land (rSL) and Jaucas sand, 0 to 15 percent slopes (JaC). The sandy alluvial land is prevalent over most of the proposed project site, and the Jaucas sand soil type is located in the area of the proposed trailer storage parking area.

The sandy alluvial land is subject to flooding during the rainy season, with slopes in most places 0 to 5 percent, but in places it is as much as 15 percent. For the Jaucas sand, permeability is rapid and runoff is slow with a slight water erosion hazard. In addition, workability is slightly difficult because the soil is loose and lacks stability for use of equipment.

IMPACTS AND MITIGATION MEASURES

Implementation of the proposed action would result in the clearing, grubbing, grading of approximately 8 acres, and would include ~~15,540~~ 13,420 cubic yards of cut and ~~21,032~~ 9,380

cubic yards of fill. Excavated soil would be used for fill where appropriate. The ferry parking lot would be raised approximately 2 to 3 feet above existing grade. In addition, cut and fill would be required to create a relatively level area for the multi-use parking area.

A geotechnical soils report ~~shall be~~ has been prepared and includes data regarding the nature, distribution, and engineering characteristics of existing soils, the subsurface conditions at the site, and recommendations for the limits for the proposed grading and the fill material to be used and the manner of placing it (Geotechnical Engineering Exploration, Manele Small Boat Harbor Improvements, April 28, 2005). All measures set forth in the site geotechnical report shall be adhered to during project construction. As required by the report, a qualified geotechnical engineer shall be retained for construction monitoring to ensure the details of the Geotechnical Engineering Exploration report are implemented.

There would be a short-term increase in soil erosion during construction since grading associated with construction of the proposed facilities would result in the exposure of bare soil to potential erosion. Though the project would result in large amounts of grading, this would not result in a significant impact due to soil erosion and offsite sediment transport with implementation of best management practices in accordance with Maui County requirements.

All grading operations would be conducted in compliance with dust and erosion control requirements of Maui County. Engineering measures to control soil erosion and storm runoff would be implemented by the contractor during construction. An erosion control plan and drainage plan shall be submitted prior to grading activities and shall specify best management practices in accordance with Maui County Code (MCC) Chapter 20.08 *Soil Erosion and Sedimentation Control*. Prior to the initiation of construction, the County would review proposed grading and construction plans for consistency with County requirements and good engineering practice.

Included in the proposed action is landscaping with mostly native drought and wind tolerant plants. Following construction of the project, vegetative cover and paving over areas that were previously exposed dirt would reduce the potential for sediment from stormwater runoff from entering the harbor. In addition, the proposed onsite percolation and catch basin drainage system, bio-swales, silt basins, dry wells, and existing undisturbed areas would function to trap stormwater and sediment before entering the harbor. For a discussion of drainage on the project site, see Section 3.3, *Water Quality and Marine Environment* below.

3.3 WATER QUALITY AND MARINE ENVIRONMENT

Coastal waters in the vicinity of Mānele Bay were classified "AA" in State Department of Health water quality regulations (Hawai'i Department of Health, 1987). The objective of Class AA waters is that their waters remain in their natural pristine state as nearly as possible. According to HAR §11-54-3(c)(1), Class AA waters shall encounter "an absolute minimum of pollution or alteration of water quality from any human-caused source or actions." The coastal waters at the Mānele Small Boat Harbor have been classified as Class A (HAR §11-54-6(2)(B)). The objective of Class A waters is that their waters be protected for recreational purposes and aesthetic enjoyment. According to HAR §11-54-3(c), Class A 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 State of Hawai'i has designated the marine communities within the Mānele and Hulopo'e bays as the Mānele Hulopo'e Marine Life Conservation District. These marine water resources are managed by the State Department of Land and Natural Resources.

The existing project site stormwater drainage system currently consists of sheet flow and percolation. Because the Mānele Small Boat Harbor is located right at the water's edge and there is currently no existing drainage system, there is no buffering of pollutant release and siltation effects during storm events when runoff empties directly into the harbor.

The Hawai'i Department of Health Environmental Management Division, Clean Water Branch has collected water quality data in Mānele Harbor for bacterial pollution and turbidity in the past. However, due to logistical complications, water quality monitoring on the island of Lāna'i has been temporarily discontinued and no recent water quality data is available (Okubo, Watson, *personal communications*, 2005).

The U.S. Environmental Protection Agency (EPA) circulated Underground Injection Control (UIC) regulations on December 7, 1999 which prohibit the construction of new large-capacity cesspools, effective April 5, 2000. In addition, the EPA required that existing large capacity cesspools must be upgraded or closed by April 5, 2005. Cesspools are a public health and environmental concern because they allow untreated sewage to percolate directly to soil and groundwater, increasing the likelihood of releasing disease-causing pathogens and other contaminants, such as nitrate, to groundwater, streams, and the ocean. With implementation of the cesspool ban, cesspool owners are required to find a waste disposal alternative, such as connection to a municipal sewer, or installation of an onsite wastewater treatment unit (such as a septic system). Non-residential cesspools are covered under the UIC program if they are used for the disposal of sanitary waste and have the capacity to serve 20 or more persons per day. The existing comfort station at the project site is currently served by an underground cesspool.

IMPACTS AND MITIGATION MEASURES

With implementation of the proposed action, the existing cesspools would be pumped out, backfilled, abandoned in place, and the existing comfort station would be connected to a private sewer system. As required by the EPA, the proposed action would require notification of the EPA and the Hawai'i Department of Health (DOH) UIC programs of the intent to close the existing cesspool consistent with HAR Title 11, Chapters 23 and 62. In addition, a closed-system vessel sewage pump out facility would be located near the harbor slips for use by harbor vessels. Currently, the ferry and other vessels that bring passengers to the Mānele Small Boat Harbor must dispose of their black water (marine head waste) at an alternate harbor or pump their black water in the three-mile zone between Maui and Lāna'i, as allowed by Federal Law. Therefore, the proposed vessel sewage pump out facility may result in beneficial impacts to marine water quality between Maui and Lāna'i.

Construction activities disturbing one or more acres are regulated under the National Discharge Elimination System (NPDES) stormwater program and are required by the State to obtain a

NPDES permit. Prior to the initiation of grading, the project applicant shall prepare and implement a stormwater pollution prevention plan and best management practices designed to reduce potential impacts to water quality during construction of the project. The best management practices shall identify the most effective erosion, sedimentation, and turbidity control measures to reduce the amount of soil and sediment accumulation in the coastal waters as a result of construction activities. The following mitigation measures ~~may include, but not be limited to, the onsite use of the following best management practices~~ shall be required:

- Best Management Practices shall be implemented to ensure that water quality and marine resources are protected and preserved.
- Maintain storage areas that keep construction materials, equipment, and maintenance supplies (e.g., fuels, lubricant, paints, solvents, and adhesives) out of the rain and/or protected from the wind to minimize contact of these materials with stormwater.
- Avoid paving during wet weather.
- Employ soil stabilization practices designed to prevent the loss of disturbed soil through the use of vegetation and/or geotextiles.
- Retain ground cover until the last possible date.
- Properly and promptly dispose of all loosened and excavated soil and debris material from drainage structure work.
- No construction materials shall be stockpiled in the aquatic environment.
- All construction-related materials shall be placed or stored in ways to avoid or minimize disturbance to the aquatic environment.
- All construction-related materials shall be free of pollutants.
- Avoid fertilizers and biocides, or apply only during periods of low rainfall to minimize chemical runoff.
- Extreme care shall be taken to ensure that no debris, petroleum products, or deleterious materials or wastes be allowed to fall, flow, leach, or otherwise enter the water.
- Any turbidity and siltation generated from activities proposed shall be minimized and contained in the immediate vicinity of construction through the use of effective silt containment devices and the curtailment of construction during adverse weather conditions.

Specific best management practices would be determined during design and construction phases. With implementation of NPDES permit requirements, best management practices, and mitigation measures listed above, the construction of the project would not result in a violation of water quality standards. For a discussion of impacts due to soil erosion and offsite sediment transport, see Section 3.2, *Topography and Soils* above.

Implementation of the proposed ferry system improvements would result in approximately 4.6 acres of new impervious surface due to paving (roadways, parking lot, trailer storage, etc.), walkways, and proposed buildings (administrative office, comfort station, and covered waiting area), or approximately 28.9 percent lot coverage over the entirety of the site.

According to engineering calculations, this new impervious surface would result in approximately 7.0 cubic feet per second (cfs) of additional stormwater being discharged from the project site (above existing discharge of approximately 9.1 cfs of stormwater) during a 10-year

storm event. Calculations for the storm drainage plan are in conformance to the County of Maui's "Rules for the Design of Storm Drainage Facilities in the County of Maui," November 1995. The storm runoff rate [cubic feet per second (cfs)] is based on a 10-year recurrence interval. A summary of the drainage calculations is provided in the table below.

Drainage Area	Existing (cfs)	Proposed Improvements (cfs)	Difference (Exist-Proposed)
To the Ocean	6.4	3.8	2.6
To the Drainage Channel	0.4	2.2	(-)1.8
Runoff Collected on-site	2.3	10.1	(-)7.8
Total On-site	9.1	16.1	(-)7.0

The project includes the construction of storm drainage improvements that would redirect a large portion of the drainage from directly emptying into the harbor and into drain inlets and silt basins. Of the total 16.1 cfs of stormwater, 10.1 cfs would be directed to onsite percolation and catch basin drainage systems and dry wells, and would eventually percolate through the soil. Approximately 2.2 cfs of stormwater from the proposed parking area would be directed into the drainage channel that currently serves as the overflow for the existing sediment basin located north of the project site. The proposed landscaping plan also includes the use of bio-swales planted with native drought tolerant grasses for stormwater collection adjacent to building and parking area (see Appendix E for the Landscaping Plan). Due to elevation constraints, areas located directly adjacent to the harbor slips, including the proposed sidewalk area along the harbor and the sidewalk beyond the ferry loading area would drain directly into the harbor via culverts. As required by the County, a drainage plan and report shall be prepared for the proposed ferry system improvements project.

Adverse effects to water quality from stormwater flows would be minimized by project-specific mitigation features such as the onsite catch basin drainage system and dry wells and use of bio-swales in the landscaping plan. However, there would be approximately 58,310 square feet of paved area that would result in stormwater discharge (approximately 3.8 cfs) into the harbor. Although the paved surface and the total runoff would increase under the proposed improvements, the total runoff flowing directly into the ocean would decrease by 2.6 cfs, as runoff would be collected into the proposed drainage system.

While siltation and stormwater runoff would be greatly reduced from existing conditions, the project discharge could result in some adverse water quality effects to coastal waters due to pollutants transported in stormwater runoff from the impervious roadway surface. To minimize these adverse effects, the following mitigation measures are recommended in efforts to reduce the delivery of pollutants to water resources.

- Regularly collect and remove road debris and repair potholes along the harbor frontage;
- Maintain and clear culverts entering the harbor of debris.

Because stormwater discharges are not regulated unless associated with an industrial activity, this discharge would not require an NPDES permit (Dennis Lau, *personal communications*,

2005). As noted above, because implementation of the project would disturb more than 1 acre, a construction NPDES permit would be required.

In addition, the proposed project includes installation of a fuel line under the concrete pavement from the site of the potential future fuel storage tank to the ferry dock. Because of the potential for the fuel tank to be constructed at some future time, the fuel line was included as part of the project description to prevent disruption to traffic if and when the fuel system is approved for installation. While construction of the fuel storage and dispensing facility is not a part of this project, the environmental effects potential future construction of the tank must be considered in this analysis. Because the specific attributes of the fuel storage and dispensing facility are unknown at this time, they are not included in this assessment. However, construction of the fuel storage and dispensing facility would be subject to Maui County fire codes and regulations, in addition to permitting requirements (Lt. Scott English, *personal communications*, 2005). Compliance with existing regulations and requirements of the County fire code for construction of the fuel tank would avoid potential adverse effects due to fuel spills.

3.4 NATURAL HAZARDS

There is no flood insurance map or flood hazard classification for the project area from the U.S. Federal Emergency Management Agency (FEMA). There is an existing drainage channel and silt basin located north of the project site that was constructed to reduce flooding and erosion impacts from waters running down the mountain to the harbor. The entirety of the project site is subject to potential tsunami inundation.

IMPACTS AND MITIGATION MEASURES

Construction of the proposed ferry system improvements would not result in increased flooding or hazards from flooding in surrounding areas. In addition, because proposed facilities would be constructed in accordance with Maui County Building Code, there would be a less than significant impact. Prior to the initiation of construction, the County would review proposed grading and construction plans for consistency with County requirements and good engineering practice. Once plans were approved by the County, implementation of the approved plans would be monitored during periodic building inspections. No significant environmental effects would result, and no mitigation would be necessary.

3.5 VEGETATION AND FAUNA

The vegetation cover type within the vicinity of the project is *kiawe-ilima* forest characterized by widely scattered *kiawe* trees and a shrub layer of *ilima*. The project site predominantly consists of active ferry and harbor facilities, unpaved dirt parking lot and roadways, and small areas of landscaping vegetation surrounding the harbor master's office and comfort station, with several trees planted over the extent of the site, including monkeypod, banyon, coconut, and *kiawe* trees. The area of the proposed multi-use parking consists of extensive *kiawe* trees.

This area provides habitat for common animals, including, but not limited to, birds, mongoose, and axis deer. No known endangered plants or animals are expected to occur on the project site.

Impacts and Mitigation Measures

Implementation of the proposed action would result in the removal of existing vegetation, including several trees interspersed on the site and the *kiawe* grove where the multi-use parking would be located. Birds and other common animals frequenting the area may move to nearby undisturbed areas during construction and would probably return when disturbances cease. Because none of the existing plant and tree species is considered significant habitat resources, no significant wildlife would be present, and no mitigation would be necessary.

3.6 Historical, Archaeological and Cultural Resources

This cultural impact assessment follows the methodology and protocol set forth by the Office of Environmental Quality Control's (OEQC) *Guidelines for Assessing Cultural Impacts* (November 19, 1997) and is compliant with Section 343-2, Hawai'i Revised Statutes (as amended by Act 50). The purpose of a cultural impact assessment is to identify traditional cultural practices and resources which could be affected by a proposed action.

Methodology

Information obtained through interviews and documentary research was used in assessing the potential impact of the proposed development on existing cultural practices and beliefs. The tasks undertaken include: (1) identifying individuals with expertise concerning the types of cultural resources, practices, and beliefs found in the area; (2) conducting informal interviews with identified individuals; (3) conducting documentary research; (4) identifying the cultural resources, practices, and beliefs located in the project area; and (5) assessing the impact of the proposed action and mitigation measures.

Mr. Darrel Stokes, Director of Conservation and Cultural Resources, and Mr. Angel Allas, director of Island Operations for Castle & Cooke Resorts, were contacted for references to individuals recommended for consultation. Interviews were conducted in person and via telephone. Sol Kaopuiki was identified as *kupuna* with extensive historical and cultural knowledge of the area. Literature, historic documents, and previous archaeological studies were also reviewed, including a 1999 study by International Archaeological Research Institute, Inc. (IARII) entitled *Archaeology on a South Coast Landscape*; and a 1987 report also by IARII, Archaeological Inventory Survey of the Hulopo'e Bay and Mānele Bay Areas. Information surrounding the general history of Lāna'i was obtained from several sources, including the Lāna'i Community Plan, and *The Story of Lāna'i*, an unpublished manuscript by George C. Munro, 1981.

Historical Perspective

Early History

There are several surviving cultural traditions that recount different versions of creation and the birth of the island of Lāna'i. The most common tradition is derived from a chant by Pakui, a historian during the time of Kamehameha I; according to this chant, after the birth of the island of Maui, Papa returned to Kahiki, and Wakea took Kaulawahine for his wife. From this union,

Lāna'i-kaula was born. Another tradition says that Lāna'i was found and adopted by a chief from Kahiki. An alternate version describes how Lāna'i grew from a piece of coral thrown into the ocean by the famous fisherman Kapuhe'euanui (Maui County, 1998).

According to Hawaiian oral history, the first inhabitant of Lāna'i was Kaululā'au, who was banished there by this father for destroying breadfruit trees in Lahaina. Based on genealogical records, the settlement of Lāna'i may have occurred around 1400, nearly 1,000 years after the arrival of the first Polynesians in Hawai'i (Maui County, 1998).

Legend describes the island of Lāna'i as occupied with evil spirits prior to the arrival of Kaululā'au. Through his cunning, Kaululā'au drove away the evil spirits from Lāna'i and made the island inhabitable. Because of its proximity, Lāna'i has always been closely aligned with Maui, and was commonly under the rule of Maui chiefs (Maui County, 1998).

Traditional Land Use History

From early times Lāna'i was considered an out-district of Maui under the rule of lesser chiefs who were controlled by a more powerful Maui ruler. There were 13 separate land divisions, or *ahupua'a* (land division usually extending from the uplands to the sea), within the island of Lāna'i that were controlled by *konohiki*, or land managers.

The project area is in the Pālāwai and Kama'o *ahupua'a*, which meet at about the middle of Mānele Beach. As described in previous archaeological and historical surveys, a few traditions refer to the general region of the project area, particularly concerning Pu'upehe, the rock islet off the Mānele peninsula. These stories refer to people living in the Mānele area, and emphasize the value of Mānele Bay as a harbor, in addition to suggesting that chiefly residence was located in this area. The place name Mānele, or sedan chair used to carry royalty, also carries implications of *ali'i* association (IARII, 1999).

Hulopo'e and Mānele represent the only sizable bay areas with substantial sandy beach areas on the south coast. There are limited records surrounding habitation and events in the south coast area of Lāna'i in the 19th century. In 1854, the Mormon Church established a mission at Mānele, and the bay was used as the main port of entry by the Mormon and others in Lāna'i. There is some indication that a native population of about 50 to 60 people lived in the Pālāwai *ahupua'a* around 1860, but it was deserted in the 1870s (IARI, 1999).

Kenneth P. Emory conducted an archaeological survey of the island of Lāna'i in 1921, and noted that the sand of the peninsula at Mānele may have been used as burial grounds (IARII, 1987).

According to *kupuna* and long-time resident Sol Kaopuiki, the area was used as a harbor and fishing area. A fishing trail extends along the coast from Hulopo'e westward toward Kapiha'a. In addition, the greater project area was used as a staging area to ship cattle to the neighboring island of Maui. However, as noted by Kaopuiki, because the proposed project boundaries do not include historic sites, no concerns regarding potential impacts to historic or cultural resources from project implementation were indicated.

CULTURAL, HISTORIC, AND ARCHAEOLOGICAL RESOURCES

In 1987, International Archaeological Research Institute, Inc. (IARII) conducted an archaeological inventory survey of a 422-acre parcel which included the *mauka* portion of the proposed project area. There are three clusters of settlement sites in the Mānele Bay area, two on the coastal flats (Site 157 in Pālāwai and Site 1525 in Kama'o) and one site (Site 78) on the rocky slope on the east side of the bay. There is a *heiau*, or temple, and several *ko'a* (fishing shrines) located in Site 157, and while no traditional name has been recorded, it could have been a *heiau* for *makahiki* collection or for other tribute, given its inland location of Mānele Bay (IARII, 1999). The Pālāwai cluster at Mānele Bay (Site 1525) may have been a permanent coastal habitation based on fishing, and is located in close proximity to the proposed project area. While both of these sites have been subjected to considerable disturbance, it is probably that the settlements were quite extensive during the late pre-contact period, and could have been an area inhabited by some of the island's chiefs (IARII, 1999). Site 1523 is also located in close proximity to the project area, and is recorded as a coastal site complex behind the Mānele Bay breakwater that appears to have functions related to fishing (IARII, 1987). International Archaeological Research Institute infers that this site was probably a more specialized, temporary use which functioned to support the larger habitation complex (1987).

Formal consultation with the State Historic Preservation Division (SHPD) has been conducted regarding potential impacts to cultural resources in the project area. The Historic Preservation Review responses are included in Appendix A and Appendix B.

IMPACTS AND MITIGATION MEASURES

Due to the close proximity of historic settlement sites to the proposed project area and lack of subsurface testing or data recovery, historic sites and/or site remnants may be present in the subsurface deposits of the *mauka* portion of the proposed project area. As noted above, consultation with SHPD has been conducted and is included in Appendix A and Appendix B.

The following recommendations are included based on consultation with SHPD and consultation with community members. It is emphasized that sensitivity to cultural concerns be employed when dealing with burial issues.

- A qualified archaeological monitor shall be present during all ground-altering activities located in the *mauka* portion of the proposed project area in order to document any historic properties which may be encountered during the proposed undertaking and to provide mitigation measures as necessary. An acceptable archaeological monitoring plan shall be submitted to the State Historic Preservation Division for review, prior to the commencement of any ground-altering activities. An archaeological monitoring plan must contain the following nine specifications:

  (1) The kinds of remains that are anticipated and where in the construction area the remains are likely to be found;
  (2) How the remains and deposits will be documented;
  (3) How the expected types of remains will be treated;

(4) The archaeologist conducting the monitoring has the authority to halt the construction in the immediate area of the find in order to carry out the plan;
(5) A coordination meeting between the archaeologist and construction crew is scheduled, so that the construction team is aware of the plan;
(6) What laboratory work will be done on remains that are collected;
(7) A schedule of report preparation;
(8) Details concerning the archiving of any collections that are made; and
(9) An acceptable report documenting the findings of the monitoring activities shall be submitted to the State Historic Preservation Division for review upon 180 days following the completion of the proposed undertaking.

- The State Historic Preservation Division (Maui and O'ahu offices) will be notified via facsimile upon the onset and completion of the proposed undertaking.

3.7 AIR QUALITY

The Department of Health, Clean Air Branch, monitors the ambient air in the State of Hawai'i for various gaseous and particulate air pollutants. The U. S. Environmental Protection Agency (EPA) has set national ambient air quality standards (NAAQS) for six criteria pollutants: carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, ozone, and particulate matter (PM_{10} and $PM_{2.5}$). Hawai'i has also established a state ambient air standard for hydrogen sulfide. The primary purpose of the statewide monitoring network is to measure ambient air concentrations of these pollutants and ensure that these air quality standards are met.

There are no monitoring stations on the island of Lāna'i; the closest monitoring station to the project area is located on Maui, mainly to monitor air quality impacts from agricultural activities. In the year 2003, the State of Hawai'i was in attainment for all federal ambient air quality standards. In general, air quality in Hawai'i is rated as "good" with little potential to affect public health (Clean Air Branch, 2003).

Due to the lack of an existing all-weather surface on the roadway and parking areas, there is substantial soil loss due to wind erosion.

IMPACTS AND MITIGATION MEASURES

Construction of the proposed ferry system improvements could result in temporary air quality effects, including exhaust emissions from construction vehicles and dust generated by short-term construction related activities. Components of construction emissions include employee trips, exhaust emissions from construction equipment, and fugitive dust emissions. Grading of the project area could generate airborne dust particulates.

Dust control measures such as watering and sprinkling shall be implemented as needed to minimize wind-blown dust. To minimize construction-related exhaust emissions, project contractors shall ensure that all internal combustion engines are maintained in proper working order. In addition, the work shall be in conformance with the air pollution control standards contained in HAR, Title 11, Chapters 59, "Ambient Air Quality Standards," and Chapter 60, "Air Pollution Control."

With construction of paved surfaces and landscaped areas, wind-blown dust in the project area would be greatly reduced. There would be no long-term adverse air quality impacts associated with the proposed action.

3.8 NOISE

Surrounding noise levels in the vicinity of the project site are considered relatively low. Existing noise sources are from harbor and vehicular traffic, in addition to natural conditions due to wind. There are no surrounding noise sensitive uses in the near vicinity.

IMPACTS AND MITIGATION MEASURES

Noise impacts from a project can be categorized as those resulting from construction and those from operational activities. Construction noise would have a short-term effect; operational noise would continue throughout the lifetime of the project. Implementation of the proposed ferry system improvements could temporarily increase noise levels during construction above maximum allowable limits. However, there are no noise sensitive land uses in the project vicinity.

Construction-period noise would be minimized by project compliance with HAR Chapter 11-46, "Community Noise Control" of the State Department of Health. Furthermore, construction shall be confined to 8:30 a.m. to 3:30 p.m., Monday through Friday. No construction work shall occur on Saturdays, Sundays, and holidays without prior notice. The contractor shall submit a noise pollution control plan when applying for a construction permit.

There would be no increase in operational noise due to implementation of the proposed ferry system improvements.

3.9 AESTHETIC AND VISUAL RESOURCES

The project site consists of harbor and ferry system facilities, including small boat slips, a rock groin for the Lāna'i ferry and chartered vessels, unpaved parking areas and roadways, a comfort station, administrative office, and boat ramp with a loading dock. During the rainy season, there are ponding and mud conditions on the unpaved parking and circulation areas, creating an unimproved and degraded visual appearance. The site is relatively isolated—harbor viewers are limited to ferry and boat passengers entering the harbor, and motorists approaching the harbor via the entrance road. Due to the surrounding vegetation and its location on the waterfront, land-based views into the site are limited. Views from the harbor seaward consist of scenic ocean views and views of the Maui silhouette in the distance.

IMPACTS AND MITIGATION MEASURES

The proposed ferry system improvements would include additional buildings and features from those currently existing facilities; while these additional features would result a more substantially developed facility, they would be considered common and appropriate to the area by most viewers. The construction of the ferry system improvements and landscaping would improve the overall visual character of the project site. The ferry passenger covered waiting area

would provide an attractive central feature to the Mānele Small Boat Harbor (see Appendix C for architectural drawings). Landscaping and sidewalks along the harbor docks would provide a pedestrian-friendly appearance. While paved roadways and parking areas may result in a more developed aesthetic, the existing mud and dust conditions at the project site would be eliminated. Since the proposed project would be consistent with the existing uses of the area, implementation of the project would not degrade the existing visual character of the site or surroundings.

All facilities would be lighted for nighttime use. Parking lots areas would be lit with street lamps operated by a timer and would shut off after the last ferry departure and as to be determined by the Harbor Administrator. Low level footpath lighting would be used for the harbor sidewalk and surrounding the comfort station and the administrative office. Also, the launching ramp would be equipped with a timered light for use by early morning fishermen. The proposed project would introduce additional lighting to the project site that could produce nighttime glare effects. Because of the isolated nature of the project site and unlit night sky ideal for nighttime star visibility, this was cited as a major concern by Lāna'i residents. Project design would reduce nighttime glare effects with low level footpath lighting and timered lights. All lighting would be properly shaded to eliminate light trespass and preserve the isolated and dark environmental of the Mānele Bay area. Therefore, potential light and glare impacts from project lighting would be less than significant.

3.10 SOCIAL CHARACTERISTICS

Surrounding land uses in the project vicinity include Hulopo'e Beach Park, the Manele Bay Hotel and golf course, ocean and harbor activities, and undeveloped lands.

Population

The County of Maui consists of the islands of Maui, Moloka'i, Lāna'i, and Kaho'olawe. The year 2000 population in Maui County consisted of 128,094 persons, while Lāna'i City supported a population of 3,164 (Census 2000). Maui County has experienced consistent growth since the 1970s, with a population of 100,374 persons in 1990 and an average annual growth rate of 2.8 percent from 1990 to 2000 (SSDAN, 2000). Population forecasts as set forth in the *Lāna'i Community Plan* indicate a projected population of approximately 4,968 residents by the year 2010 (Maui County, 1998).

Economy

The island of Maui is the economic, governmental, and business hub for the County. The median family income in 2000 in Maui County was $55,277, while the median family income for Lāna'i was $49,209. Due to the small population and limited economic base, Lāna'i has limited employment opportunities and services. Therefore, residents must travel to the island of Maui to obtain basic social and health services. Some residents commute to the island of Maui on a daily basis for employment. Due to the high cost of air travel, resident commuters are extremely dependent on the ferry services and the significantly lower costs.

The existing ferry system at the Mānele Small Boat Harbor currently serves resident-commuters and tourists traveling between the islands of Maui and Lāna'i. The Island of Lāna'i is highly

dependent on sea transportation for the provision of goods and services to sustain the local economy. Visitor day trips to Lāna'i from Maui are provided by several tour operators. The Expedition ferry operates five daily round trips between the Mānele and Lahaina Small Boat Harbors. This daily visitor traffic from Maui generates employment opportunities for Lāna'i residents.

Recreation

The Mānele Small Boat Harbor and Hulopo'e Beach Park are important recreational facilities for residents and visitors to the island of Lāna'i. Hulopo'e and Mānele represent the only sizable bay areas with substantial sandy beach areas on the south coast.

The Mānele Small Boat Harbor is used for various recreational and commercial boating activities. There are numerous fishing expeditions that originate from the harbor, and commercial tour boats visit the area from Lahaina, Maui, for daily tours. The bay waters are protected by a breakwater, where local residents occasionally use nets to catch fish. Permissible fishing activities within the harbor are regulated under HAR Title 13, Subtitle 4 Fisheries, Part II Marine Fisheries Management Areas, Chapter 53 Mānele Harbor, Lāna'i. Additional fishing areas are located west of the project area along the rocky coastline.

IMPACTS AND MITIGATION

Implementation of the proposed action would not displace any residents or businesses since construction would occur within the existing footprint of the small boat harbor facilities and adjacent open space. While construction employment would be created during the project construction phase, needed employees could be expected to be provided by the local labor pool, without the importation of significant amounts of new labor.

Construction activities would cause temporary disruption to harbor activities. The existing ferry system facilities would be upgraded to include paved and landscaped sidewalks along the harbor, an improved mini-park at the end of the harbor, shaded waiting areas for ferry passengers, and paved access roads and parking to reduce ponding and muddy conditions during the rainy season. These improvements would enhance the experience for residents and visitors using the Mānele Small Boat Harbor, and would therefore not have a significant impact on recreation resources. Further, the ferry system improvements and enhanced traveling experience for residents and visitors would make the harbor a more attractive destination, and could increase use of ferry services.

3.11 UTILITIES AND PUBLIC SERVICES

Electrical

There are currently no electric services provided to the Mānele Small Boat Harbor. Onsite generators provide for harbor electricity needs.

Water and Wastewater

The Mānele Small Boat Harbor currently contains two facilities that connect to wastewater systems. The existing comfort station is served by two individual cesspools. The Trilogy building is served by an individual septic tank and leach field. There is an existing water meter serving the project site.

Solid Waste

There is one landfill on Lāna'i located one mile south of the airport access road. Solid Waste collection for the project site is handled by a private collection company.

Police and Fire

There is one police station located within Lāna'i City under the Maui County Police Department. The Maui County Fire department has one fire station on Lāna'i. There is no fire protection system at the harbor.

Utilities

The proposed project includes extension of electric utilities for the administrative office, existing and new comfort stations, covered waiting area, and lighting for footpaths, parking areas, and streets. As described in Section 3.9 above, lights at parking areas and the launching ramp would be operated by a timer to minimize extraneous energy use. The extension of water and sewer would occur from existing facilities serving Hulopo'e Beach Park located on Mānele Road. An 8 inch waterline would be installed to replace the existing 1.5 inch waterline, and would connect at a new water meter located on the north side of Mānele Road at the entrance to the harbor. The proposed water line would provide service to the new comfort station, administrative office, covered waiting area, boat wash-down area, Trilogy's building, various hose bibs along the piers, site fire hydrants, and irrigation throughout the site. Proposed buildings and landscaping at the project site would be designed with water saving considerations, including, but not limited to:

- Installation of water efficient fixtures;
- Low-volume flush toilets and urinals;
- Landscaping with native drought tolerant plant species (see Appendix E for the proposed Landscaping Plan.

While landscaped areas will be irrigated via automatic irrigation system, frequent irrigation will only be required during the initial establishment period. Once established, irrigation can be limited to supplemental watering during periods of extended drought.

A closed-system vessel sewage pump out facility would be located near the harbor slips for use by harbor vessels. Wastewater sewer services would be provided to the existing and proposed comfort station and the administrative office. In addition, a wastewater stub would be provided at the Trilogy building for future potential connection to the sewer system. The wastewater pump station would be located at the southern end of the main driveway accessing the small boat

harbor. A proposed force main would then transport the wastewater up the driveway to intersect with Mānele Road. The wastewater would be transported via gravity flow down Mānele Road towards Hulopo'e Beach Park to the existing pump station and treatment plant. The existing cesspools would be pumped out, backfilled, and abandoned in place. The existing domestic water demands at the small boat harbor and ferry terminal are approximately 10,104 gallons per day (gpd) (not including existing irrigation demands). Implementation of the ferry terminal improvements would result in the increased use of irrigation water, with a maximum daily irrigation of 10,207 gpd, for a total daily irrigation and domestic water demand of 20,131 gpd. There is adequate capacity at the wastewater pump station and wastewater treatment plant for the additional flow generated from the proposed Mānele Small Boat Harbor Ferry System Improvements (Colin Lam, *personal communications*, 2004).

Service Systems

The proposed improvements would not result in an increase in service demands from police and fire protection or other public services. Roadway widths and emergency vehicle access ways would be reviewed during the building permit review. Standard recommended measures from the Department of Health Solid and Hazardous Waste Branch to reduce adverse impacts due to solid waste include: (1) the recycling of green-waste during clear and grub activities; (2) maximizing the recycling of construction and demolition wastes; (3) the use of locally produced compost in the landscaping of the project; and (4) the provision of recycling facilities in the design of the project.

In conclusion, no significant adverse impacts to existing utilities and public services are expected, and no mitigation would be necessary.

3.12 TRAFFIC AND TRANSPORTATION

Current access to the harbor is via Mānele Road and unpaved internal roadways. Mānele Road is a two-lane state highway with generally low volume traffic. The existing parking lot is an unpaved level area at an elevation of approximately 16 to 17 feet msl.

IMPACTS AND MITIGATION

The proposed ferry system improvements would have short-term temporary impacts on circulation and parking at the Mānele Small Boat Harbor that may create temporary delays. Visitors, recreationists, and ferry passengers could be inconvenienced by congestion and delays during construction. Impacts to the public would be minimized by providing temporary parking areas and notification of any temporary closures. Emergency services (police, fire, and ambulance services) and area residents would be given adequate notice of potential delays prior to construction.

A temporary construction staging area shall be located at a legally designated site to minimize illegal parking and ensure safety. Because Mānele Road provides access to the harbor and Hulopo'e Beach Park, and because the majority of construction would occur onsite, traffic disruption along Mānele Road would be minimal and would result in a less than significant impact.

There would be no direct increase in operational traffic due to implementation of the proposed ferry system improvements. The improved facilities of the proposed project may result in increased ferry passengers on existing ferry services. The proposed project includes paved access roads, parking areas, and utilities designed to accommodate the existing and future ferry ridership and harbor activities. Due to the 149 passenger maximum carrying capacities of the ferry vessels and low volume of traffic along Mānele Road, the anticipated increase in traffic would not create a significant impact on level of service on Mānele Road.

3.13 LAND USE CONTROLS

Sate and County policy, and land use and community plans and controls are established to address the long-term physical, social, economic, and environmental needs in Hawai'i. State and County land use controls for the Mānele Small Boat Harbor Ferry System Improvements are described below.

STATE

State of Hawai'i, Land Use Commission – State Land Use Districts

The HRS Chapter 205 establishes four major land use district in which all lands in the State are placed. These districts include: urban, rural, agricultural, and conservation. The majority of the project site is located within the "Conservation" District Limited ("L") Subzone classification; the approximate 2-acre portion to be used as a boat trailer storage parking is located within the Urban district (see Figure 5). Land uses within the Urban District are regulated by Maui County, while the State Department of Land and Natural Resources regulates land uses in the Conservation District. The proposed multi-use parking is a permitted land use in the Urban District.

Conservation districts include areas necessary for preserving scenic areas of value for recreational purposes such as the Mānele Small Boat Harbor. The objective of the Limited subzone is to "limit uses where natural conditions suggest constraints on human activities" (HAR §13-5-12). Areas covered by this district include land susceptible to floods and soil erosion, lands undergoing major erosion damage and requiring corrective attention by the county, state, or federal governments; and lands necessary for the protection of the health, safety, and welfare of the public by reason of the land's susceptibility to inundation by tsunami.

The State land at Mānele Bay Small Boat Harbor was set aside for "construction, operation and maintenance of a Small Boat Marina and appurtenant facilities..." by Governor's Executive Order (EO) No. 2141 dated June 2, 1964. This apparently predates establishment of the State land use district designation, and there is no existing Conservation District Use Permit on file (Sam Lemmo, *personal communications*, 2005). Section 13-5-37 of the Hawai'i Administrative Rules states:

> This chapter shall not prohibit the continuance of, or repair of nonconforming uses as defined in this chapter. The burden of proof to establish that the land use or structure is legally nonconforming shall be on the applicant. If a nonconforming structure is or destroyed by any means to an extent of more than fifty per cent of its replacement

> cost at the time of destruction, it shall not be reconstructed except in conformity with the provisions of this chapter. Repairs or reconstruction of the nonconforming structure shall not exceed the size, height or density of the structure that existed immediately prior to October 1, 1964 or at its inclusion into the conservation district.

Because the proposed project has been judged a major expansion and renovation of the existing non-conforming land use, it would therefore be subject to compliance with the existing rules and regulations governing Conservation District lands. The proposed use would be consistent with identified public purpose uses permitted in the limited subzone as described below:

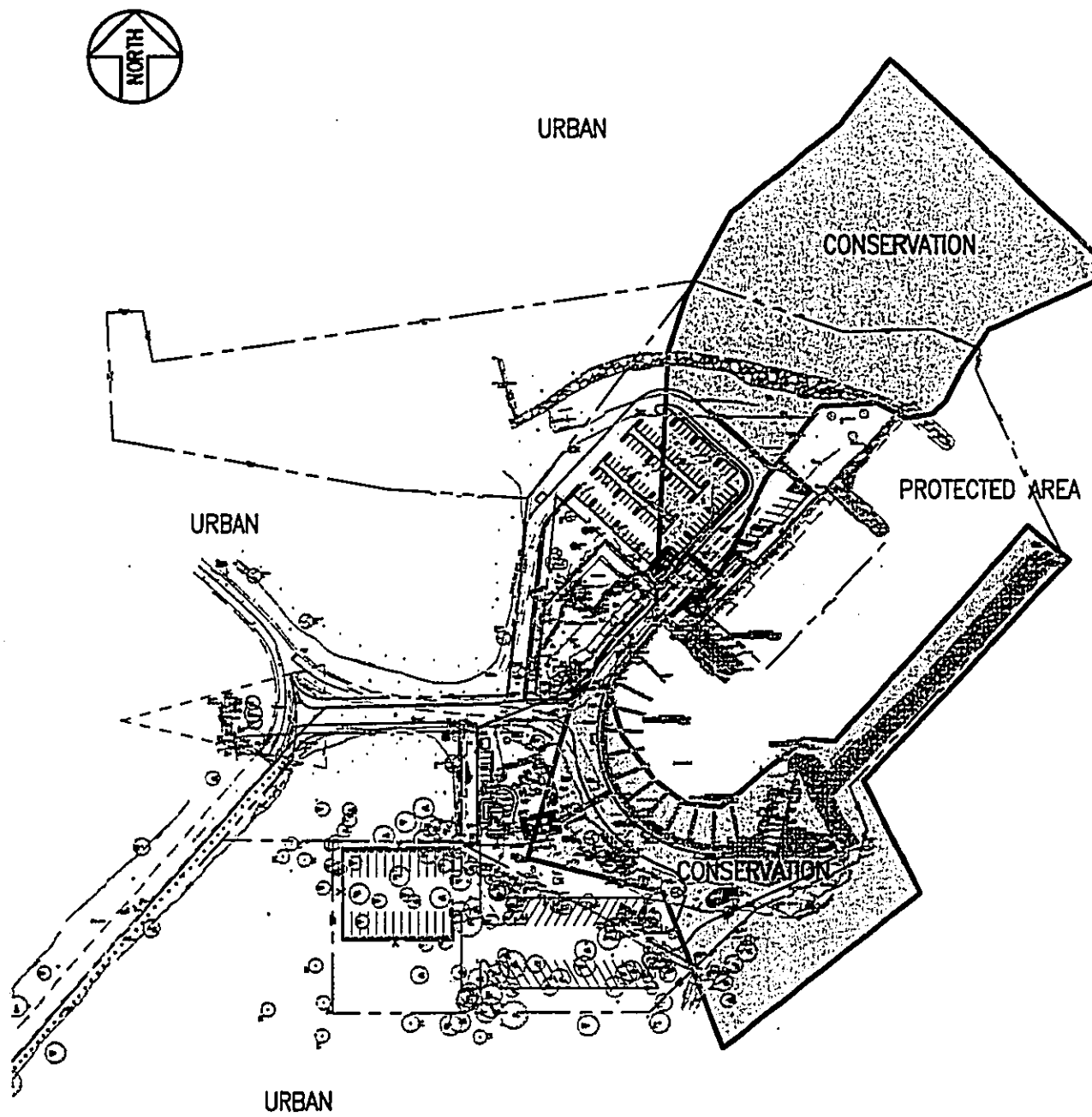
> Land uses undertaken by the State of Hawaii or the counties to fulfill a mandated governmental function, activity, or service for public benefit and in accordance with public policy and the purpose of the conservation district. Such land uses may include transportation systems, water systems, communications systems, and recreational facilities (Section 13-5-22 HAR).

Therefore, a Conservation District Use Application (CDUA) and permit would be required.

Coastal Zone Management Program (Special Management Areas)

In October 1972, the Congress passed the Coastal Zone Management Act for the purpose of establishing a national program for the management, beneficial use, protection, and development of land and water resources of the coastal areas of the United States. The Hawaii Coastal Zone Management (CZM) Program (HRS Chapter 205A) was promulgated in 1977 in response to the Federal Coastal Zone Management Act of 1972. The objectives and policies of the CZM are to provide recreational resources; protect historic, scenic, and coastal ecosystem resources; provide economic uses; reduce coastal hazards; and manage development in the coastal zone.

The CZM outlines controls and policies within an area along the shoreline called the Special Management Area (SMA). The objectives of the SMA were "the maintenance, restoration, and enhancement of the overall quality of the coastal zone environment, including, but not limited to, its amenities and aesthetic values, and to provide adequate public access to publicly owned or used beaches, recreation areas and national reserves." The purpose of the SMA Permit is to regulate any use, activity or operation that qualifies as a "development" and is administered at the County level. The entirety of the project site is located within the SMA boundary. Therefore, an SMA permit would be required from the Lānaʻi Planning Commission for the proposed action.



NOTE:
NOT TO SCALE.
ZONING BOUNDARIES ARE SHOWN ONLY AS AN APPROXIMATION.

LEGEND

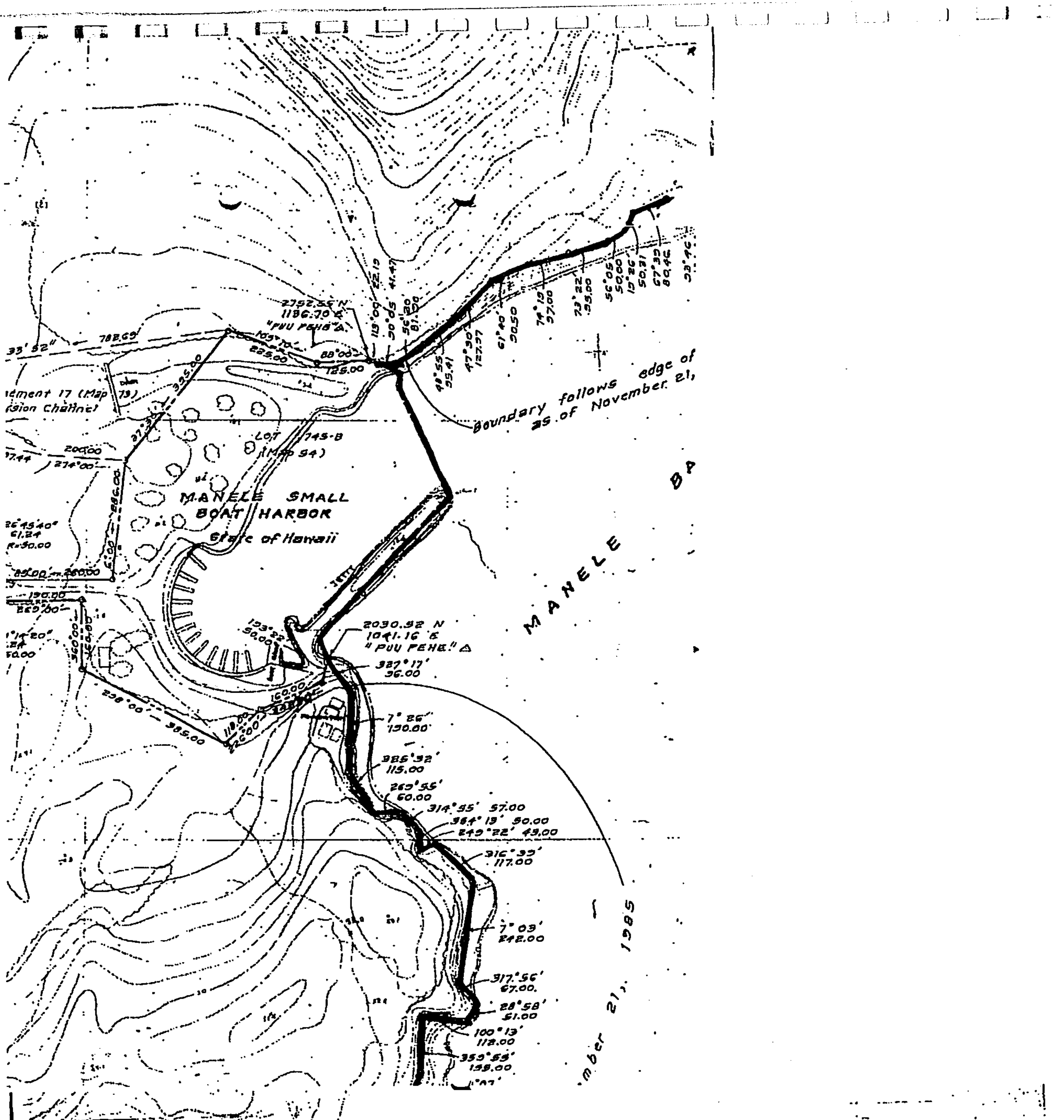
CONSERVATION DISTRICT

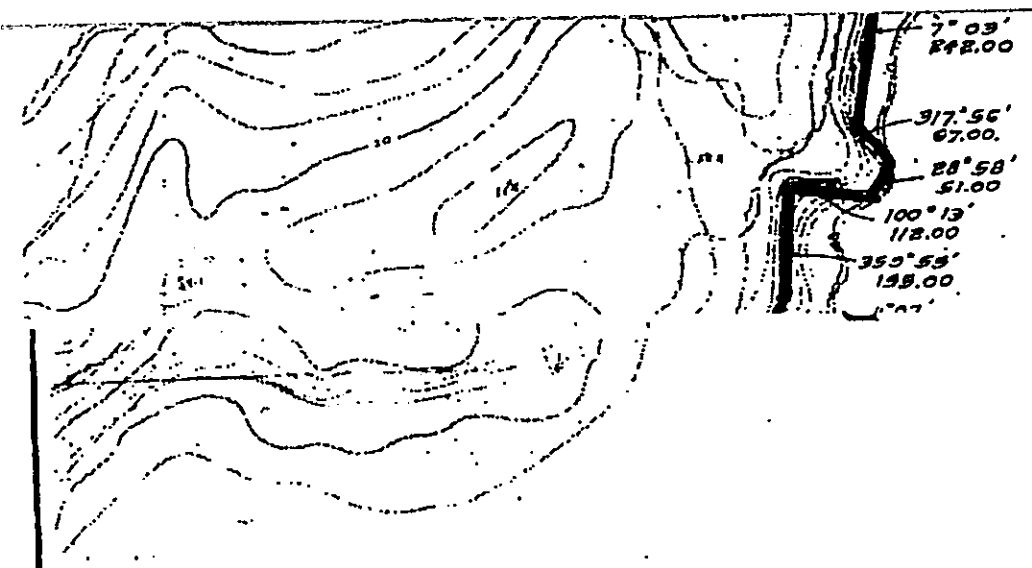
F-5

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS
ENVIRONMENTAL ASSESSMENT
FOR THE DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE LAND USE DESIGNATION

Bow Engineering & Development, Inc.
CIVIL ENGINEERS PLANNERS
1953 S. BERETANIA STREET, PH-A
HONOLULU, HI 96826
Telephone (808) 941-8853
Telecopier (808) 945-9299
Email: bbow@bowengineering.com


MANELE SMALL
BOAT HARBOR
State of Hawaii
LOT 745-B
(Map 94)
MANELE BA
Boundary follows edge of
as of November 21, 1985
2752.55 N
1186.70 E
"PUU PEHE A"
2030.92 N
1041.16 E
"PUU PEHE" △
JETTY
337° 17'
36.00
7° 26'
130.00
285° 32'
115.00
260° 55'
60.00
314° 55' 57.00
344° 19' 90.00
249° 22' 43.00
316° 33'
117.00
7° 03'
242.00
317° 56'
67.00
28° 58'
51.00
100° 13'
112.00
359° 55'
139.00



mber 21, 198

LOCATION OF SHORELINE AFFECTING LOT 760 OF LAND COURT APPLICATION 862 ALONG HULOPOE BAY AND MANELE BAY

ISLAND OF LANAI, HAWAII

TAX MAP KEY: 4-9-02:1

Owner: Castle & Cooke, Inc.
Address: 130 Merchant Street
Honolulu, Hawaii

The shoreline as located and certified and delineated in red is hereby confirmed as being the actual shoreline as of FEB 21 1986

Chairperson, Board of Land and Natural Resources

SURVEY OFFICE COPY

F.B. 1145

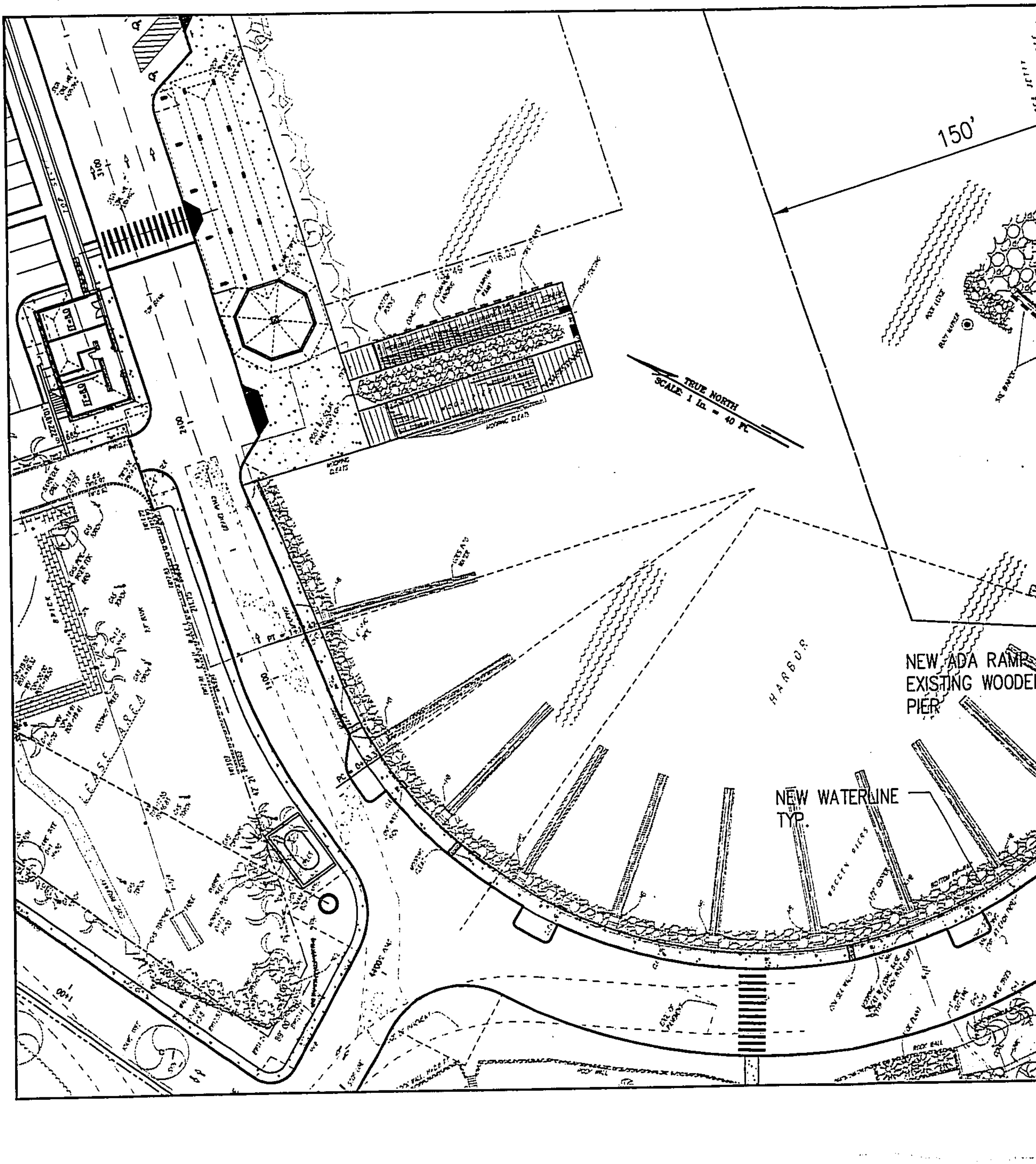
1001 Bishop Street
Honolulu, Hawaii
January 27, 1986

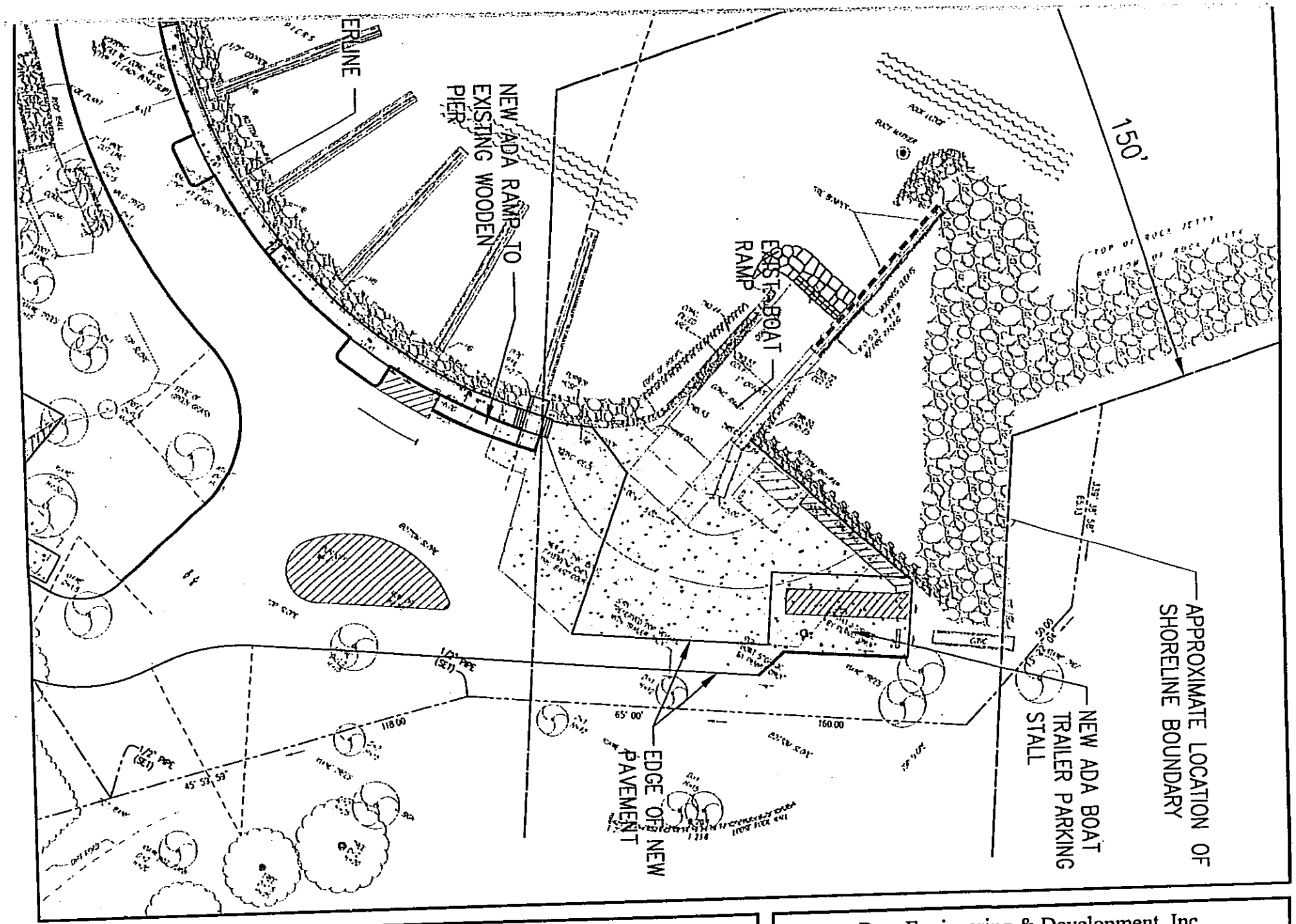
LAURANCE M. MASUDA
REGISTERED PROFESSIONAL LAND SURVEYOR
No. 4722
HAWAII U.S.A.

This work was prepared by me or under my supervision.

M & E PACIFIC, INC.

Laurance M. Masuda
Registered Land Surveyor
Certificate No. 4722


150'
TRUE NORTH
SCALE: 1 in. = 40 Ft.
HARBOR
NEW ADA RAMP
PIER
NEW WATERLINE
TYP.



F-7

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS
ENVIRONMENTAL ASSESSMENT FOR
DEPARTMENT OF LAND AND NATURAL RESOURCES

SHORELINE SETBACK LINE

Bow Engineering & Development, Inc.
CIVIL ENGINEERS PLANNERS
1953 S. BERETANIA STREET, PH-A
HONOLULU, HI 96826
Telephone (808) 941-8853
Telecopier (808) 943-9299
Email: bbow@bowengineering.com

The proposed action requires compliance with the Shoreline Setback Rules of the Lāna'i Planning Commission. The Shoreline Setback area is the area between the shoreline and the shoreline setback line established by the County. Structures or portions of a structure are not permitted in the shoreline setback area without a variance, and conditions must be imposed to maintain safe lateral access to and along the shoreline or adequately compensate for its loss; to minimize risk of adverse impacts on beach processes, to minimize risk of structures failing and becoming loose rocks or rubble on public property; and to minimize adverse impacts on public views to, from, and along the shoreline. Because most of the proposed project improvements would occur outside of the shoreline setback area (located within 150 feet inland from the designated shoreline), and only minor landscaping and lighting improvements would occur within the shoreline setback area, the shoreline setback variance application has been withdrawn (see Figure 6 and 7). A shoreline setback determination and approval application to allow the minor improvements within the shoreline setback area has been filed with Maui County. ~~Because the proposed project activities are located adjacent to the shoreline setback area, a shoreline setback variance would be required (see Figure 6).~~

The following discussion evaluates the consistency of the proposed Mānele Small Boat Harbor Ferry System Improvements with the applicable objectives and policies of Chapter 205A, HRS. The policies of Chapter 205A, HRS, the consistency of the proposed ferry system improvements with those policies, and the reasoning for the conclusion are set forth in the table below.

Policy compliance is often a matter of interpretation. The Lāna'i Planning Commission is the ultimate arbiter of public policy for the project, and their judgment regarding the project and a specific policy may be different from that set forth in this report.. Therefore, the following policy evaluation should be viewed as preliminary, with the ultimate decision to be made by the appropriate appointed and elected officials.

Consistency of the Proposed Mānele Small Boat Harbor Ferry System Improvements Project with Objectives and Policies of Chapter 205A, HRS

Objective or Policy	Consistency	Discussion
Objective: (1) Recreational resources; (A) Provide coastal recreational opportunities accessible to the public. Policy: (B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by: (i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas; (v) Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources; (vi) Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;	Yes	As described in Section 3.10 above, the Mānele Small Boat Harbor is used for various recreational and commercial boating activities. The proposed action would improve existing ferry facilities and infrastructure at the Mānele Small Boat Harbor to provide a more efficient, hospitable, and safer transit system for resident commuters and tourists. To protect coastal waters, the proposed action is required to obtain a NPDES permit to reduce potential impacts to water quality during construction of the project.

Objective or Policy	Consistency	Discussion
(2) Historic resources; (A) Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture. Policy: (A) Identify and analyze significant archaeological resources; (B) Maximize information retention through preservation of remains and artifacts or salvage operations; and (C) Support state goals for protection, restoration, interpretation, and display of historic resources.	Yes	Due to the close proximity of historic settlement sites to the proposed project area and lack of subsurface testing or data recovery, historic sites and/or site remnants may be present in the subsurface deposits of the *mauka* portion of the proposed project area. Consultation with SHPD has been conducted and is included in Appendix A. Mitigation measures to protect historic resources have been included in Section 3.6 above.
(3) Scenic and open space resources; (A) Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources. Policy: (B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline.	Yes	The construction of the ferry system improvements and landscaping would improve the overall visual character of the project site and would be consistent with the existing uses of the area. In addition, all lighting would be properly shaded to eliminate light trespass and preserve the isolated and dark environmental of the Mānele Bay area (see Section 3.9 above).
(4) Coastal ecosystems; (A) Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems. Policy: (E) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.	Yes	The proposed action is required to obtain a NPDES permit to reduce potential impacts to water quality during construction of the project. Adverse effects to water quality from stormwater flows would be minimized by project design mitigation features such as the onsite catch basin drainage system and dry wells and use of bio-swales in the landscaping plan (see Section 3.3 above).
(5) Economic uses; (A) Provide public or private facilities and improvements important to the State's economy in suitable locations. Policy: (B) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area.	Yes	As described in Section 3.10 above, the Island of Lāna'i is highly dependent on sea transportation for the provision of goods and services to sustain the local economy. The proposed action would improve existing ferry facilities and infrastructure at the Mānele Small Boat Harbor to provide a more efficient, hospitable, and safer transit system for resident commuters and tourists.
(6) Coastal hazards; (A) Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.	Yes	The proposed project would be constructed to minimize the potential for erosion, subsidence, pollution, and damage from storm waves, flooding, or tsunami.

Objective or Policy	Consistency	Discussion
(7) Managing development; (A) Improve the development review process, communication, and public participation in the management of coastal resources and hazards.	Yes	A community meeting and Mānele Small Boat Harbor Advisory Group meeting were held on February 19, 2004 to discuss proposed improvements to the Mānele Small Boat Harbor. In addition, a community workshop was held at the October 20, 2004 Lāna'i Planning Commission Meeting. Additional review ~~will~~ occurred during the public comment period for the EA, and will also occur during the public hearing before the Lāna'i Planning Commission during the SMA permit, ~~Shoreline Setback Variance,~~ and Conditional Permit process.
(8) Public participation; (A) Stimulate public awareness, education, and participation in coastal management. Policy: (A) Promote public involvement in coastal zone management processes.	Yes	See above.
(9) Beach protection; (A) Protect beaches for public use and recreation.	N/A	The proposed project would not have a direct impact on public beaches or the shoreline; the project area would continue to be used as a recreational resource with project implementation.
(10) Marine resources; (A) Promote the protection, use, and development of marine and coastal resources to assure their sustainability. Policy: (A) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial.	Yes	As evaluated in this EA, adverse environmental impacts from implementation of the proposed action would be minimized through project design and mitigation measures contained in this document. The ferry system improvements would provide a more attractive and efficient transit system for resident commuters and tourists, which would encourage continued and increased passengers.

COUNTY LAND USE PLANS AND POLICIES

Maui County General Plan

The *Maui County General Plan* (1990) is a long range, generalized planning policy document to guide development of the County. It serves as a basis for an implementation program to effectuate desired changes and improvements in the social, economic, and environmental atmosphere of the County. Topics addressed in the General Plan include goals and policies regarding population, land use, the environment, cultural resources, economic activity, housing and urban design, transportation, social infrastructure, and government.

Lāna'i Community Plan

The *Lāna'i Community Plan* (1998), one of nine Community Plans for Maui County, reflects anticipated conditions in the Lāna'i region and advances planning goals, objectives, policies and implementation considerations to guide decision-making in the region through the year 2010. The *Lāna'i Community Plan* recognizes the values and unique attributes of Lāna'i, and provides specific recommendations to address the goals, objectives, and policies contained in the County General Plan in order to enhance the region's overall living environment.

The *Lāna'i Community Plan* identifies the need to improve air and sea transportation services to and from the island of Lāna'i as a primary concern. The provision of expanded services is regarded as a means of reducing public inconvenience and providing opportunities for improving efficiencies for small businesses (Maui County, 1998). The following discussion evaluates the consistency of the proposed project with applicable goals and policies of the Community Plan.

Consistency of the Proposed Mānele Small Boat Harbor Ferry System Improvements Project with Adopted Objectives and Policies in the Lāna'i Community Plan

Goal or Policy	Consistency	Discussion
Lāna'i Community Plan Goals, Objectives and Polices		
Economic Activity		
Goal Create a stable and diverse economic climate which is consistent and compatible with Lāna'i's rural island lifestyle. Objectives and Policies 1. Ensure the long-term viability of the island's visitor industry, and maintain its position as the island's primary economic stimulus.	Yes	As described in Section 3.10 above, the Island of Lāna'i is highly dependent on sea transportation for the provision of goods and services to sustain the local economy. The proposed action would improve existing ferry terminal and infrastructure at the Mānele Small Boat Harbor to provide a more efficient, hospitable, and safer transit system for resident commuters and tourists.
Land Use		
Goal Maintain and enhance Lāna'i's rural atmosphere, respecting its vast open space character and small island town environment which are unique in the State of Hawai'i. Objectives and Policies 13. Ensure that coastal land uses are compatible with management, protection and restoration needs of Lāna'i's coastal resources.	Yes	The proposed ferry terminal improvements would occur at existing harbor facilities and would be constructed in an architectural style compatible with the surrounding area (see Appendix C).

Goal or Policy	Consistency	Discussion
Environment		
Goal Protect and enhance Lāna'i's land, water and marine environmental resources to perpetuate resource values which may be enjoyed and respected by future generations of Lāna'i residents and visitors. Objectives and Policies 1. Manage, protect, and where appropriate, restore Lāna'i's coastal resources. 2. Protect and manage coastal water quality through best management land treatment practices.	Yes	As evaluated in this EA, adverse environmental impacts from implementation of the proposed action would be minimized through project design and mitigation measures contained in this document. To protect coastal waters, the proposed action is required to obtain a NPDES permit to reduce potential impacts to water quality during construction of the project. Adverse effects to water quality from stormwater flows would be minimized by project design mitigation features such as the onsite catch basin drainage system and use of bio-swales in the landscaping plan (see Section 3.3).
Cultural Resources		
Goal Identify, preserve and where appropriate, restore and promote cultural resources and practices which reflect the rich and diverse heritage found on Lāna'i. Objectives and Policies 3. Recognize the importance of historically and archaeologically sensitive sites and encourage their preservation. 8. Preserve and protect native Hawaiian rights customarily and traditionally exercised for subsistence, cultural, and religious purposes in accordance with Article XII, Section 7, of the Hawai'i State Constitution, and the Hawai'i Supreme Court's PASH opinion, 79 Haw. 425 (1995).	Yes	Current cultural practices including fishing would continue with implementation of the proposed action. Due to the close proximity of historic settlement sites to the proposed project area and lack of subsurface testing or data recovery, historic sites and/or site remnants may be present in the subsurface deposits of the *mauka* portion of the proposed project area. Consultation with SHPD has been conducted and is included in Appendix A and B. Mitigation measures to protect historic resources have been included in Section 3.6 above.
Physical Infrastructure		
Goal Provide adequate, reliable and well-designed public infrastructure systems in a timely fashion to meet the social, economic and public safety and welfare needs of the Lāna'i community. Objectives and Policies 8. Ensure that planning, design, operation of, and access to airports and harbor facilities address the needs of the island's residents.	Yes	The proposed ferry system improvements would provide a safer and more pleasurable transit experience for commuting residents and visitors. Island residents provided feedback on the design of the harbor Master Plan at the Community meeting and Mānele Small Boat Harbor Advisory Group meeting held on February 19, 2004.
Implementing Actions 6. Provide adequate parking, public telephone and pier lighting facilities at Manele Small Boat Harbor. 8. Implement adequate land-side support areas for small boating facilities in accordance with the recommendations of the Manele Boat Harbor Advisory Committee.	Yes	The proposed project includes construction of paved parking areas, and the provision of utilities such as water, wastewater, electricity (for lighting of facilities), and public telephone.

Zoning Designation

There is no County zoning designation for the 16-acre harbor parcel. The two-acre portion of the project is located within Lāna'i Project District I (Mānele) (Open space PD-L/1): The 2-acre acre portion of the project site to be used for the proposed multi-use parking is currently owned by Castle & Cooke Resorts as part of a larger parcel; the 2-acre portion would be created via subdivision and would be transferred to the State for development.

Lands designated as Open Space typically consist of gulch areas or are inappropriate for development due to environmental, physical, or scenic constraints. The area of the proposed multi-use parking consists of extensive *kiawe* trees and is located in a predominantly level area of depression approximately 2 feet below surrounding areas. There are no environmental or other constraints precluding development at this site.

The opinion of Corporation Counsel (May 22, 1998) found that "lands designated as Open Space must remain free of structures and impervious surfaces and the use and enjoyment of the land must not involve buildings and other structures" (see Appendix A letter from Maui County Department of Planning). However, MCC Section 19.070, Open space PD-L/1 establishes more recent zoning standards for the open space district in the Lanai Project District I. Permitted uses in the open space district pursuant to this section include: (1) drainage, utility, and erosion control systems, landscape planting and water reservoirs; and (2) accessory uses and structures. The proposed drainage basin in the 2-acre open space district is a permitted use. However, to allow the multi-use parking lots within the open space district, an application for a Conditional Permit will be made to the Maui Planning Department for Lāna'i Planning Commission's review and recommendation to the County Council for approval. The proposed multi-use parking lots are not a permitted use in the existing designation (MCC Chapter 19.70.070).

Conditional Permit Justification

The intent of the Conditional Permit is to provide the opportunity to consider establishing uses not specifically permitted within a given use zone where the proposed use is similar, related, or compatible to those permitted uses.

Recommendation to the County Council to grant a Conditional Permit may be determined by the appropriate Planning Commission pursuant to MCC Chapter 19.40.070, if the reasons justifying the Conditional Permit exist and that the proposed use would not be significantly detrimental to the public interest, convenience and welfare and will be in harmony with the area in which it is to be located. Justification for the Conditional Permit for the multi-use parking lots is noted as follows:

The proposed use is similar, related or compatible to those permitted uses.

> Although the permitted uses in the Open space PD/L-1 district are limited to drainage, utility, and landscape planting, it is noted that MCC Chapter 19.07 establishes two (2) open space district categories: OS-1, a passive open space category; and OS-2, an active open space category. Permitted uses in the OS-2 category includes outdoor recreation and park. Special uses, upon the approval of the appropriate Planning Commission pursuant

to MCC 19.510.070, includes facilities associated with a principal use or approved special use, such as required off-street parking. The multi-use parking lots are associated with an active recreational use provided by the adjacent boat launching ramp and small boat harbor. In this context, the proposed multi-use parking lots is considered compatible with the Project District's Open Space permitted uses.

The proposed use will not be detrimental to the public interest, convenience and welfare.

The proposed use is ancillary to the public boat launching ramp and the small boat harbor, which are essential transportation and recreational facilities for the residents of Lāna'i. The proposed multi-use parking lot will not be detrimental to the public interest, convenience and welfare.

The proposed use is in harmony with the area in which it is to be located.

The multi-use parking lots have been identified as a needed facility by the harbor user groups on Lanai and are in harmony with the adjacent facilities of the Mānele Small Boat Harbor.

Lanai Project District 1 (Manele) Phase II Application

A Project District Phase II approval will be required from the Lāna'i Planning Commission for the proposed multi-use parking facility improvements. Criteria considered in the assessment of a Phase II approval are set forth in Chapter 19.45 of the Maui County Code. Conformance to the criteria for the Phase II assessment is noted as follows:

1. Phase I Approval:

   Approval for Phase I of the Lanai Project District 1 (Manele) was passed by the County Council in September 1986 (Ordinance No. 1578). This ordinance was codified as Chapter 19.70 of the Maui County Code.

2. Site Plan:

   The site plan for the proposed project within the 2-acre portion of the project district boundaries is presented in Figure 4. Conditional Permit approval for the multi-use parking lots is being sought concurrently.

3. Infrastructure Services for Project:

   Infrastructure services to the proposed multi-use parking lots would be provided as summarized below.

   (a) **Access:** Access to the multi-use parking lots would be provided by a driveway off of the harbor entrance road and a driveway off of the internal harbor circulation road.

(b) **Water**: Domestic water and fireflow requirements will be verified at the time of the building permit application process. Existing lines servicing the Mānele Small Boat Harbor would be extended underground to the multi-use parking lots.

(c) **Wastewater**: No sewer services to the multi-use parking lots would be required.

(d) **Drainage Improvements and Erosion Control**: Onsite runoff due to the development would be conveyed to a silt basin near the proposed improvements. The proposed grading plan and drainage plan for the proposed improvements and BMPs followed during construction would be designed to produce no adverse effects from runoff to adjacent properties. All drainage improvements will conform to County standards and will be coordinated with the Department of Public Works and Environmental Management.

4. Landscape Plan:

The proposed landscaping plan would be in compliance with planting requirements pursuant to MCC, Sections 19.36.070, Fences and Landscaping and 19.36.090, Lighting (see Appendix E).

5. Proposals for Recreational and Community Facilities:

The proposed multi-use parking lots would be a public recreational facility for community use and benefit.

6. Overall Lot Coverage:

There are no standards governing lot coverage in the open space PD-L/1 district. Construction of the multi-use parking lots would result in the paving of approximately 1.2 acres, or 55 percent lot coverage on the 2-acre parcel.

7. Maximum Density:

Not applicable.

Based on the above assessment, the proposed project meets the assessment criteria for a Project District Phase II approval.

4 NECESSARY PERMITS AND APPROVALS

A listing and brief description of the regulatory permits and approvals necessary to implement the proposed Mānele Small Boat Harbor Ferry System Improvement project (in addition to certification of the EA and issuance of a FONSI) is provided below. State agencies other than DLNR are required to use the DLNR environmental document when considering the environmental effects of the proposed improvement project.

- Preparation of a Special Management Area Use Permit Assessment.
- Preparation of a Shoreline Setback ~~Variance~~ Determination application.
- Grading permit.
- Building permit.
- Subdivision of TMK (2)4-9-17:2 to create a 2-acre parcel for inclusion in the project.
- Conditional Permit to allow use of multi-use parking lot in the Open space PD-L/1 district for the 2-acre parcel within the Lanai Project District I (Mānele) currently owned by Castle & Cooke Resorts.
- Project District Phase II and Phase III approvals related to the Conditional Permit.
- Conservation District Use Application (CDUA).
- HAR Section 11-55 requires that prior to construction activities that disturb one or more acres of total land area, a general National Pollutant Discharge Elimination System (NPDES) permit application shall be required. The purpose of the NPDES is to prevent potential impacts to water quality during construction.
- In accordance with Chapter 19.52.070, Maui County Code, a variance would be required to allow shade tree planting numbers below Maui County standards in the multi-use parking lot.

5 ALTERNATIVES TO THE PROPOSED ACTION

This chapter considers alternatives to the proposed action, including the No Action Alternative. The alternatives were rejected for their inability to meet the project objectives or because attainment of the objectives were achieved at a higher cost, either financially or environmentally.

5.1 NO ACTION ALTERNATIVE

Under the No Action Alternative, the project area would continue to be served by the existing facilities located at the harbor. The ferry dock, passenger station, passenger and vehicle queuing areas, unpaved parking lot and access road, drainage, and waste disposal system would remain in substandard conditions. This alternative would not meet any of the project objectives, including:

- Improve existing ferry facilities and infrastructure at the Mānele Small Boat Harbor to provide a more efficient, hospitable, and safer transit system for resident commuters and tourists.
- Improve ferry facilities to encourage increased ferry ridership.
- Improve parking conditions and safety for resident commuters and tourists.
- Improve ferry facilities to be compliant with County of Maui, State, and Federal rules and regulations.

5.2 REDUCED PAVED AREA ALTERNATIVE

This alternative represents an earlier Master Plan for the harbor (2000), and does not include the 2-acre adjacent parcel for additional boat trailer storage parking from the proposed action. All other improvements would be similar to those under the proposed action. This alternative would result in a reduced area of paved impervious surfaces than the proposed action. Potential adverse impacts to air quality, water quality, and noise during construction would be similar to the proposed action. In addition, adverse water quality impacts due to stormwater runoff would be similar to the proposed action since runoff from this parking area would be directed to onsite catch basins for percolation. However, the Reduced Paved Area Alternative would not address community comments to direct the boat trailer parking away from the ferry activities due to safety concerns. Therefore, the following objective would not be met:

- Improve parking conditions and safety for resident commuters and tourists.

6 FINDINGS AND DETERMINATION

As set forth in HAR, Title 11, Department of Health, Chapter 200, §11-200-12, in considering the significance of potential environmental effects, an agency must "consider every phase of a proposed action, the expected consequences, both primary and secondary, and the cumulative as well as the short-term and long-term effects of the action." The proposed action is not expected to have a significant effect on the environment. The recommended preliminary determination for the Mānele Small Boat Harbor Ferry System Improvements is a Finding of No Significant Impact (FONSI). The findings supporting this determination are discussed below.

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

The proposed ferry system improvements would be constructed at the existing harbor facilities, and on an adjacent 2-acre parcel currently in open space covered with extensive *kiawe* trees. The harbor area is already developed with basic harbor facilities. No important natural communities occur within the project area. While there is the potential for discovery of burial sites or other historic or cultural remains during construction, mitigation measures contained in Chapter 3 would reduce the adverse effects of these potential impacts. No natural or cultural resources were identified at the proposed project site.

(2) Curtails the range of beneficial uses of the environment.

The proposed improvements would not curtail the range of beneficial uses at the project site; the area is dedicated to harbor and ferry system activities, including recreational use, and these uses and facilities would be enhanced with project implementation. There would be a loss of open space with development of the adjacent 2-acre parcel with multi-use parking. In addition, there would be an increase in developed uses with the proposed paving and additional facilities. However, the project includes landscaping and project design that would improve the overall visual character of the project site. The covered waiting area and comfort station would provide an attractive central feature to the Mānele Small Boat Harbor. Landscaping and sidewalks along the harbor docks would provide a pedestrian-friendly aesthetic.

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

The proposed project is consistent with the environmental goals, policies, and guidelines established in HRS Chapter 344. The project goal is to improve existing ferry facilities and infrastructure at the Mānele Small Boat Harbor to provide a more efficient, hospitable, and safer transit system for resident commuters and tourists. These facilities also provide an area for public recreation and improve the quality of life for residents and visitors.

The following guidelines from the "Parks, Recreation, and Open Space" and "Transportation" sections of the State Environmental Policy (HRS Chapter 344) apply to the proposed ferry system improvements project:

(4) Parks, recreation, and open space.

(A) Establish, preserve and maintain scenic, historic, cultural, park and recreation areas, including the shorelines, for public recreational, educational, and scientific uses.

(C) Promote open space in view of its natural beauty not only as a natural resource but as an ennobling, living environment for its people.

(6) Transportation.

(A) Encourage transportation systems in harmony with the lifestyle of the people and environment of the State.

(4) Substantially affects the economic or social welfare of the community or state.

The proposed action would have a positive effect on the economic and social welfare of the Lāna'i community. Proposed improvements would support the recreation and inter-island transportation needs of the local community, as well as inter-island residents and visitors.

(5) Substantially affects public health.

Construction activities may temporarily increase fugitive dust and noise levels in the project vicinity. However, these impacts would cease upon completion of construction. No long term negative impact on public health is anticipated with implementation of the proposed action. All buildings and supporting infrastructure would be constructed in accordance with all health, safety, and accessibility (ADA) regulations.

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

The proposed action is intended for use by the existing population and to accommodate normal growth and demand for ferry system use. The proposed action is not expected to generate population change on a magnitude that would create secondary demands and impacts on public facilities and services.

(7) Involves a substantial degradation of environmental quality;

There would be no long-term impacts associated with the proposed action. Construction activities may temporarily increase dust, noise, and traffic inconvenience in the project vicinity. However, these impacts would cease upon completion of construction. The project includes an increase in impervious surfaces, which would increase stormwater runoff; however, project design includes the construction of storm drainage improvements that would redirect a large portion of the drainage from emptying into the harbor. Most of the stormwater would be directed to onsite percolation and catch basin drainage systems, and would eventually percolate through the soil. The proposed landscaping plan also includes the use of bio-swales planted with native drought tolerant grasses for stormwater collection adjacent to building and parking area. Mitigation measures included in Chapter 3 would minimize potential construction-related impacts.

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

The proposed action is limited to construction of ferry system improvements to rectify deficiencies in the existing facilities. The proposed action would provide an enhanced experience for users of the ferry system and small boat harbor, but would not involve a commitment for larger action.

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

The proposed improvements would occur at the existing harbor facilities, and on an adjacent 2-acre parcel currently in open space covered with extensive *kiawe* trees. The harbor area is already developed with basic harbor facilities. No important natural communities occur within the project area. There are no known rare, threatened, or endangered species, or evidence of its habitat, in the project area.

(10) Detrimentally affects air or water quality or ambient noise levels.

Construction activities would have a short-term effect on air quality, water quality, and ambient noise levels. Mitigation included in Chapter 3 would minimize these potential impacts. No additional long-term impacts would occur.

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

There is no flood insurance map or flood hazard classification for the project area from the U.S. Federal Emergency Management Agency (FEMA). There is an existing drainage channel and silt basin located north of the project site that was constructed to reduce flooding and erosion impacts from waters running down the mountain to the harbor. The entirety of the project site is subject to potential tsunami inundation. Prior to the initiation of construction, the County would review proposed grading and construction plans for consistency with County requirements and good engineering practice.

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

The proposed ferry system improvements would be consistent with the existing uses of the area, implementation of the project would not degrade the existing visual character of the site or surroundings. Proposed improvements would not obstruct views from any recognized view corridor or scenic roadway.

(13) Requires substantial energy consumption.

There would be energy consumption associated with construction of the proposed ferry system improvements. Stormwater in the drainage system would flow via gravity to the proposed catch basins. Additionally, energy will be used to operate the buildings (e.g. for indoor lights and electrical appliances), outdoor lighting, and the sewage pump station. It is anticipated that most buildings would be designed to take advantage of natural ventilation. The administrative office would be equipped with a small air conditioning unit. The amount of energy that would be consumed with project implementation is not considered substantial.

7 INDIVIDUALS, COMMUNITY GROUPS, AND AGENCIES CONSULTED

7.1 CONSULTATION

Preliminary consultation with agencies, organizations, and individuals were conducted during preparation of the Draft EA. Agencies, organizations, and individuals followed by an asterisk (*) provided written comments, as included in Appendix A:

State of Hawai'i, Department of Land and Natural Resources, Office of Conservation and Coastal Lands*
State of Hawai'i, State Historic Preservation Division*
County of Maui, Department of Planning*
Mānele Harbor Advisory Committee
Lanai Planning Commission

Lāna'i Community Members
Sol Kaopuiki

COMMUNITY MEETING

A community meeting was held at the Lanai Elementary School Library on February 19, 2004 to discuss proposed improvements to the Mānele Small Boat Harbor. A Mānele Small Boat Harbor Advisory Group meeting was held at the Mānele Small Boat Harbor on February 19, 2004, prior to the community meeting. Both the community and the advisory group reported widespread support for the proposed improvements. Concerns highlighted by the advisory committee included: existing parking lot problems; existing loading area is dangerous; lack of trailer parking; drainage concerns; and the need for gradual fee increases. The following individuals were present:

Members Present:

Ken Kauffman	Boat owner
Micheal Lopez Sr.	Trilogy
Ron McOmber	Lanaians for Sensible Growth
Jeff Menze	Castle & Cooke
Ralph Sakamura	Boat owner
Darrel Stokes	Trailer Boater

State Representatives:

Eric Hirano	DLNR Engineer
Sherry Menze	DLNR Boating Manele Harbor Agent
Albert Morita	DLNR DOCARE
Steve Molmen	DLNR Property Manager
Steve Thompson	DLNR Acting Administrator
Eric Yuasa	DLNR Engineer

Guests Present:

Bill Bow	Bow Engineering
Steve Lichter	Boat Trailer Owner
John Irons	Boat Owner
Steve Knight	Expeditions
Randy Coons	Trilogy
Eric Dixson	Trilogy LCS
Steve Gelakoski	Trilogy
Gerrit Cormany	Castle & Cooke
Jason Allen	Royal Lanai Yacht Club
Madeline Callahan	Royal Lanai Yacht Club
Jim Clemens	Royal Lanai Yacht Club
Sally Clemens	Royal Lanai Yacht Club
Hans Larsen	Royal Lanai Yacht Club
Victoria Larsen	Royal Lanai Yacht Club

The Mānele Small Boat Harbor Ferry System Improvement project was presented to the public for another time at the March 16, 2005 Lāna'i Planning Commission Meeting; no substantive comments were received at this meeting. During the 30-day circulation period of the Draft EA, the project was again included as an agenda item at the April 20, 2005 meeting. Comments generated from this meeting are included in Appendix B, *Draft Environmental Assessment Comment Letters.*

7.2 ENVIRONMENTAL ASSESSMENT PREPARATION

This Draft Environmental Assessment (EA) was prepared for the Department of Land and Natural Resources by RMBJ Consulting and Bow Engineering & Development, Inc. The following consultants were involved in the preparation of this document:

Raadha M. B. Jacobstein	Project Manager, RMBJ Consulting
William H. Q. Bow, P.E.	President, Bow Engineering & Development, Inc.
Ezra Lum	Project Engineer, Bow Engineering & Development, Inc.

REFERENCES

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Lau, Dennis, 2005. Department of Health, Clean Water Branch. Personal communications with Raadha M. B. Jacobstein regarding NPDES requirements for the project.

Lemmo, Sam, 2005. Administrator, Office of Conservation and Coastal Lands. Personal communications with Raadha M. B. Jacobstein regarding CDUA requirements for the project. February 8, 2005.

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Okubo, Watson, 2005. Environmental Health Specialist, Clean Water Branch, Environmental Management Division, Hawai'i Department of Health. Personal communications with Raadha M. B. Jacobstein regarding water quality in the Mānele Bay area. January 26, and February 4, 2005.

U.S. Department of Agriculture, Natural Resources Conservation Service (formerly Soil Conservation Service, Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. August 1972.

APPENDIX A

CORRESPONDENCE

APPENDIX A

The following correspondences include preconsultation requests and response from the project applicant and the following agencies:

DLNR, Historic Preservation Division	February 25, 2005
DLNR, Office of Conservation and Coastal Lands	February 9, 2005
County of Maui, Department of Planning	February 7, 2005
County of Maui, Department of Planning	October 22, 2004
DLNR, Land Division to Castle & Cooke Resorts	October 4, 2004
DLNR to Maui County Department of Planning	September 30, 2004
DLNR, Historic Preservation Division	July 30, 2004
Governor Linda Lingle to Federal Transit Administration	June 9, 2004
Castle & Cooke Resorts, LLC to DLNR	May 24, 2004
DLNR, Historic Preservation Division	May 21, 2004
DLNR preconsultation to Historic Preservation Division	undated
DLNR preconsultation to Castle & Cooke Resorts	April 30, 2004
DLNR preconsultation to Castle & Cooke Resorts	April 27, 2004
DLNR to Department of Transportation	April 27, 2004
DLNR to Statewide Transportation Planning Office	April 23, 2004
DLNR, Historic Preservation Division	April 12, 2004
DLNR Engineering Division to Historic Preservation Division	April 5, 2004
Department of Transportation to Castle & Cooke Resorts	February 19, 2004
Castle & Cooke Resorts to Governor Linda Lingle	January 26, 2004

LINDA LINGLE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

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

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

YVONNE Y. IZU
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

February 25, 2005

05 MAR 07 PM 01:03 ENGINEERING

MEMORANDUM

LOG NO: 2005.0372
DOC NO: 0502MK29

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

FROM: Melanie A. Chinen MN
Administrator, State Historic Preservation Division

SUBJECT: **National Historic Preservation Act Section 106 Review – Information Request Pertaining to the Proposed Improvements to Manele Bay Small Boat Harbor**
Kamao Ahupua'a, Lahaina District, Island of Lana'i
TMK (2) 4-9-017:006

Thank you for the opportunity to comment on the shift in plans regarding the boat trailer storage area at the Manele Small Boat Harbor, Lana'i. These changes have been the subject of numerous discussions between Mr. Eric Yuasa, DLNR, Dr. Melissa Kirkendall, DLNR-SHPD, and Cathleen Dagher, DLNR-SHPD.

We provided revised comments on the Manele Bay Small Boat Harbor Improvements project on May 21, 2004 (Log 2004.1598/Doc 0405CD36). Our original comments (Log 2004.1086/Doc 0404CD14) recommended a field inspection of the proposed improvement areas. On May 18, 2004, Dr. Melissa Kirkendall, SHPD Maui/Lana'i Islands Archaeologist, conducted the recommended field inspection of the two separate areas. Subsequent to this inspection we revised our comments and indicated that any "adverse effect" may be mitigated through a program of on-site archaeological monitoring, thus resulting in a finding of "no adverse effect."

Given the above information, we reiterate the following recommendations:

1) A qualified archaeological monitor will be present during all ground-altering activities located in the *mauka* portion of the proposed project area in order to document any historic properties which may be during the proposed undertaking and to provide mitigation measures as necessary. An acceptable archaeological monitoring plan will need to be submitted to the State Historic Preservation Division for review, prior to the commencement of any ground-altering activities. An archaeological monitoring plan must contain the following nine specifications: (1) The kinds of remains that are

anticipated and where in the construction area the remains are likely to be found; (2) How the remains and deposits will be documented; (3) How the expected types of remains will be treated; (4) The archaeologist conducting the monitoring has the authority to halt the construction in the immediate area of the find in order to carry out the plan; (5) A coordination meeting between the archaeologist and construction crew is scheduled, so that the construction team is aware of the plan; (6) What laboratory work will be done on remains that are collected; (7) A schedule of report preparation; (8) Details concerning the archiving of any collections that are made; and (9) An acceptable report documenting the findings of the monitoring activities shall be submitted to the State Historic Preservation Division for review upon 180 days following the completion of the proposed undertaking.

2) The State Historic Preservation Division (Maui and O'ahu offices) will be notified via facsimile upon the on-set and completion of the proposed undertaking.

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 Dr. Melissa Kirkendall at 243-5169 on Maui or Cathleen Dagher at 692-8023 at our Kapolei office.

MK:jen

c: Michael Foley, Director, Dept of Planning, 250 South High Street, Wailuku, HI 96793
Maui Cultural Resources Comm, Dept. of Plng, 250 S. High Street, Wailuku, HI 96793
Eric Hirano, Administrator, Engineering Division, DLNR, FAX 587-0283
Raymond Sukys, US Dept of Transportation, Federal Transit Administration,
201 Mission Street, Suite 2210, San Francisco, CA 94105
Eric Yuasa, Project Engineer, Engineering Division, DLNR, FAX 587-0283

LINDA LINGLE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

FEB - 9 2005

Corr. File No. LA-05-156a

Raadha M. B. Jacobstein
46-304 Nahewai St.
Kaneohe, Hawaii 96744

Dear Mr. Jacobstein:

Subject: Request for Determination of Permit Requirements in the Conservation District for the Manele Boat Harbor Ferry System Improvements Project. Lanai

Thank you for your January 11, 2005 letter. We have reviewed this matter and have determined that a Conservation District Use Application would be required for the subject harbor improvements. The proposed project has been judged a major expansion and renovation of the existing non-conforming land use, and would therefore be subject to compliance with the existing rules and regulations governing Conservation District lands.

Section 13-5-37 of the Hawaii Administrative Rules states: "This chapter shall not prohibit the continuance of, or repair of nonconforming uses as defined in this chapter. The burden of proof to establish that the land use or structure is legally nonconforming shall be on the applicant. If a nonconforming structure is or destroyed by any means to an extent of more than fifty per cent of its replacement cost at the time of destruction, it shall not be reconstructed except in conformity with the provisions of this chapter. Repairs or reconstruction of the nonconforming structure shall not exceed the size, height or density of the structure that existed immediately prior to October 1, 1964 or at its inclusion into the conservation district."

Based on this language, it appears that a new permit would be required.

The DLNR website has information that also may be of interest to you, at *www.hawaii.gov/dlnr/occl*. You can find our administrative rules and application forms on the website.

Should you have any questions on any of these matters, please feel free to contact me at 587-0381.

Aloha,

Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

Cc: Chairman's Office
DOBOR
Engineering

ALAN M. ARAKAWA
Mayor

MICHAEL W. FOLEY
Director

WAYNE A. BOTEILHO
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

February 7, 2005

Ms. Raadha M.B. Jacobstein
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Ms. Jacobstein;

RE: Preconsultation - Draft Environmental Assessment for the Proposed Manele Small Boat Harbor Ferry System Improvements located at TMK: 4-9-017:002, Manele, Island of Lanai, Hawaii (LTR 2005/0137)

The Maui Planning Department (Department) received your request for preconsultation comments in preparation of an Environmental Assessment (EA) as required by Chapter 343, HRS. The Department's comments are as follows:

1. Land Use Designations:

   a. State Land Use, Chapter 205, HRS: Parcel 6 is Conservation, and Parcel 2 (portion) is Urban.

   b. Lanai Community Plan: Parcel 6 is Conservation and Open Space, and Parcel 2 (portion) is Project District.

      Discuss the project's compliance with the objectives and policies of the community plan.

   c. Zoning, Title 19, Maui County Code (MCC): there is no County Zoning designation for Parcel 6, and Parcel 2 (portion) is located within the Lanai Project District I (Manele), Chapter 19.70, MCC. The subdistrict designation is Open Space PD-L/1.

      The proposed paved parking areas located on Parcel 2 (portion) are not a Permitted Use listed in Section 19.70.070, MCC. The proposed action is not accessory to a Permitted Use, and therefore, would not qualify as an Accessory Use or Structure.

Lands designated Open Space typically consist of gulch areas or are inappropriate for development due to environmental, physical, or scenic constraints. The EA should include a discussion of the physical environment of this area and provide further analysis justifying the proposed development.

Based on an opinion by Corporation Counsel (May 22, 1998), lands designated as Open Space must remain free of structures and impervious surfaces and the use and enjoyment of the land must not involve buildings and other structures. As such, any proposed development involving structures or impervious surfaces may only be constructed with a conditional permit or after a change in zoning.

Project District Phase II and III approvals are required in addition to the Conditional permit or Change in Zoning for the proposed action located on the 2-acre parcel.

d. Chapter 205A, HRS, Coastal Zone Management - the proposed action is located within the Special Management Area. As such, a SMA Permit is required. Discuss the project's compliance with the objectives and policies of Chapter 205A, HRS.

The proposed action requires compliance with the Shoreline Setback Rules of the Lanai Planning Commission. Provide a discussion and supporting documentation.

2. Provide a summary of the community meetings. Include dates, attendees, and comments in support and opposition, if any, of the proposed action.

3. Discuss the impacts of non-point source pollution to coastal waters from the significant increase of impervious surfaces. Include a discussion of mitigative measures.

4. Provide a discussion of alternative methods to decrease the area of impervious surfaces.

5. Discuss the mechanism and time frame to deed the 2-acre parcel from Castle & Cooke Resorts to the State of Hawaii.

6. Provide a landscape planting and irrigation plan.

7. Provide a proposed lighting plan.

8. Will the boat trailer storage areas be open to the public or provided on a rental basis?

9. The Department recommends consulting the Lanai Planning Commission for comments on the Draft EA. Please contact the Department for scheduling purposes.

Thank you for the opportunity to comment. Please include the Department on the Draft EA distribution list. Should you require additional clarification, please contact Ms. Kivette A. Caigoy, Environmental Planner, at 270-7735.

Sincerely,

MICHAEL W. FOLEY
Planning Director

MWF:KAC:do
c: Wayne A. Boteilho, Deputy Planning Director
Clayton I. Yoshida, AICP, Planning Program Administrator
Kivette Caigoy, Environmental Planner
Lanai Planning Commission
DLNR, Division of Boating and Ocean Recreation
General File
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04-57
Manele

ALAN M. ARAKAWA
Mayor

MICHAEL W. FOLEY
Director

WAYNE A. BOTEILHO
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

'04 OCT 27 A10:36 ENGINEERING

October 22, 2004

Mr. Eric T. Hirano, P.E.
Chief Engineer
State of Hawaii, DLNR
Engineering Division
Kalanimoku Building, Room 221
P. O. Box 373
Honolulu, Hawaii 96809

Dear Mr. Hirano:

RE: Manele Small Boat Harbor, TMK: 4-9-017:006

The Maui Planning Department appreciated you and your staff's efforts in conducting a workshop at the Lanai Planning Commission Meeting of October 20, 2004. The public comment and enthusiasm for the project has also been noted and reflects well on the proposed improvements. We look forward to assisting you in processing various County permits relative to the proposed improvements of the Manele Small Boat Harbor.

Again, our thanks to you and your staff for initiating a preliminary consultation with the public and decision makers of Lanai. Thank you for your cooperation. If additional information is required, please contact Mr. Thorne Abbott, Staff Planner, of this office at 270-7735.

Sincerely,

for MICHAEL W. FOLEY
Planning Director

MWF:TA:lar
c: Clayton I. Yoshida, AICP, Planning Program Administrator
Lanai Planning Commission
Thorne Abbott, Staff Planner
Project File
General File
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LINDA LINGLE
GOVERNOR OF HAWAII

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

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

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DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
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STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

October 4, 2004

Ref. No.:04MD-265

Mr. Gerrit Cormany, President
Castle & Cooke Resorts, LLC
100 Kahelu Avenue, 2nd Floor
Mililani, Hawaii 96789

Dear Mr. Cormany:

Subject: Proposed Dedication of Two Acres of Land for a Boat Trailer Parking and Boat Storage Area at Manele Small Boat Harbor; Manele, Lanai, TMK (2) 4-9-017:002 Portion.

Department of Land and Natural Resources (DLNR), Division of Boating and Ocean Recreation (DOBOR) has requested Land Divisions assistance with the proposed land dedication from Castle & Cooke Resorts, LLC, referenced above.

We have assigned the reference number noted at the top righthand corner of this letter. Use of this number will allow for more efficient processing of your request. Therefore, please use this number in all correspondence on this matter.

I have been assigned to process this request. Moreover, this letter briefly summarizes the proposed land dedication and discussions during our meeting on September 23, 2004.

Subject to Board of Land and Natural Resources (BLNR) approval and in return for DOBOR lease amendments, Castle & Cooke Resorts, LLC proposes to dedicate an approximate 2-acre parcel located adjacent to the State-owned Manele Small Boat Harbor, gratis. The proposed site will be improved by the State as public trailer boat parking and dry boat storage areas. State Land Use for the proposed site is Urban. Furthermore, Subject is located in Maui County's Lanai Project District 1 (Manele) with an Open land classification.

Prior to the dedication the DLNR, Land Division is requiring the following from Castle & Cooke Resorts, LLC, at no cost to the State:

1. Obtain subdivision approval of the proposed site from the County of Maui;

2. Provide to DLNR, Land Division a metes and bounds description of the proposed site;
3. Obtain all necessary entitlements from the County of Maui to allow for trailer parking and boat storage facilities as proposed by the State;
4. Title report covering the proposed site, subject to the review and approval of the Department;
5. Phase I Environmental Site Assessment covering the proposed site; and
6. Subject to BLNR approval, convey the site via the State's standard Warranty Deed, as amended, a template of which is enclosed.

If you have any questions, please feel free to contact me at 587-0385. Thank you.

Sincerely,

Gavin Chun
Project Development Specialist

cc: Central Files
District Files
Richard Mirikitani
Gary Yokoyama
DOBOR w/o attachments
Engineering w/o attachments

LINDA LINGLE
GOVERNOR OF HAWAII

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

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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 30, 2004

Mr. Michael Foley, Director
Department of Planning
250 High Street
Wailuku, Hawaii 96793

Dear Mr. Foley:

Subject: Manele Small Boat Harbor Ferry System Improvements, Lanai, Hawaii (TMK: 4-9-17:06)

The State Department of Land and Natural Resources, Division of Boating and Ocean Recreation proposes to construct a new comfort station, administrative office and covered waiting area; paved access roads, vehicle and trailer parking areas; water mains and fire hydrants; sewage pump station and force main; telephone and electrical utilities; street lights; ferry pier improvements; fueling station and landscaping at Manele Small Boat Harbor.

We would like to present our proposed concept plans to the Lanai Planning Commission for early consultation and public input. Please include the subject project on the October 20, 2004, Lanai Planning Commission meeting agenda.

Should you have any questions, please call Mr. Eric Yuasa, Project Manager in Honolulu at (808) 587-0254.

Sincerely,

Peter T. Young
Chairperson

c. Richard Rice
Eric Hirano
Clayton Yoshida
Kyle Ginoza

49905

LINDA LINGLE
GOVERNOR OF HAWAII

PY

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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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

HAWAI'I HISTORIC PRESERVATION DIVISION REVIEW

Log #: 2004.2632
Doc #: 0408CD51
Received: 30 July 2004

Applicant/Agency: Peter T. Young
Address: State of Hawaii
Department of Land and Natural Resources
Post Office 621
Honolulu, Hawaii 96809

SUBJECT: National Historic Preservation Act Section 106 Review – Review of New Project funding for the Proposed Maintenance Dredging of Existing Basins, Manele Small Boat Harbor [State/DLNR]
Ahupua`a: Palawai
District, Island: Lahaina, Lana`i
TMK: (2) 4-9-017:006

'04 SEP 14 AM 11:52 ENGINEERING

1. We believe there are no historic properties present, because:

_____ a) intensive cultivation has altered the land
_____ b) residential development/urbanization has altered the land
__✓__ c) previous grubbing/grading has altered the land
_____ d) an acceptable archaeological assessment or inventory survey found no historic properties
_____ e) other:

2. This project has already gone through the historic preservation review process, and mitigation has been completed ___.

__✓__ Thus, we believe that "no historic properties will be affected" by this undertaking

In the event that historic sites (human skeletal remains, etc.) are identified during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Office needs to be contacted immediately at 243-5169, on Maui, or at (808) 692-8023, on O`ahu.

Staff: P. Holly McEldowney Date: 9/02/04
P. Holly McEldowney
Deputy State Historic Preservation Officer

c: Michael Foley, Director, Dept of Planning, 250 S. High Street, Wailuku, HI 96793
Maui Cultural Resources Commission, Dept of Planning, 250 S. High Street, Wailuku, HI 96793

EXECUTIVE CHAMBERS

HONOLULU

LINDA LINGLE
GOVERNOR

June 9, 2004

Mr. Leslie T. Rogers, Regional Administrator
U.S. Department of Transportation
Federal Transit Administration, Region IX
201 Mission Street, Suite 2210
San Francisco, California 94105-1831

Dear Mr. Rogers:

Thank you for your assistance in providing the Federal Transit Administration (FTA) funds for the enhancement and improvement of the ferry operations at the USS Arizona Memorial on the island of Oahu, and at Kaunakakai, Maalaea and Manele Small Boat Harbors in the County of Maui.

I have committed the required local match for the above projects and have directed the Departments of Transportation and Land and Natural Resources to expeditiously implement these projects.

We look forward to a continuing partnership with FTA in this worthy endeavor to enhance and improve ferry operations in Hawaii.

Sincerely,

/s/ LINDA LINGLE

c: U.S. Senator Daniel Inouye
Rodney K. Haraga
Peter T. Young
Dan Davidson
Bruce Matsui
Julia Tsumoto
Steve Thompson
Eric Hirano
Juliet Kazanjian

RECEIVED

'04 MAY 26 A10 :35

DEPT. OF LAND
& NATURAL RESOURCES
STATE OF HAWAII

PY BOR EAUC

Island of Lana'i

CASTLE & COOKE RESORTS, LLC

May 24, 2004

Mr. Peter T. Young
Chairperson
Department of Land & Natural Resources
State of Hawaii
1151 Punchbowl Street
Kalanimoku Bldg., Room 130
Honolulu, Hawaii 96813

via Facsimile (808) 587-0390 and US Mail

'04 MAY 27 AM 11:19 ENGINEERING

Dear Mr. Young:

I was pleased to hear that the State submitted a grant to the Federal Transit Administration (FTA) for improvements at the Manele Bay Small Boat Harbor (MSBH). The proposed improvements are much needed and long overdue for this important transportation and recreation center on Lanai.

Castle & Cooke Resorts, LLC is prepared to work with the State in obtaining this grant. In that regard, we are prepared to convey to the State, for a nominal cost, approximately two acres of our land adjacent to MSBH if the FTA grant is approved. It is my understanding that this land will be used to create parking/storage for boats and boat trailers in order to alleviate congestion interfering with the ferry operation.

In addition, if the FTA grant is approved, you will be authorized to hook up to the existing water, sewer, electrical and telephone utilities at Manele Road.

We at Castle & Cooke look forward to working with you and your staff to make this exciting project a reality.

Sincerely,

Gerit Cormany

cc: Mr. Rod Haraga
Mr. Steve Thompson
Mr. Dan Davidson

P.O. Box 630310 • Lana'i City, Hawai'i 96763 • www.lanai-resorts.com
The Lodge at Koele • Telephone: (808) 565-7300 • Facsimile: (808) 565-4561
The Manele Bay Hotel • Telephone: (808) 565-7700 • Facsimile: (808) 565-2483

LINDA LINGLE
GOVERNOR OF HAWAII

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

DAN DAVIDSON
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DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

May 21, 2004

MEMORANDUM

LOG NO: 2004.1598
DOC NO: 0405CD38

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

FROM P. Holly McEldowney
Deputy State Historic Preservation Officer

SUBJECT: **REVISED National Historic Preservation Act Section 106 Review – Information Request Pertaining to the Proposed Improvements to Manele Bay Small Boat Harbor**
Kamao Ahupua`a, Lahaina District, Island of Lana`i
TMK: (2) 4-9-017:006

These are our revised comments pertaining to the Information Request for the proposed Improvements to Manele Bay Small Boat Harbor. Our previous comments recommended that no action be taken on the proposed undertaking until an archaeological field inspection has been conducted of the previously unaltered portions of the *mauka* portion of the proposed project area (SHPD DOC NO 0404CD14/LOG NO.: 2004.1086).

On May 18, 2004, Dr. Melissa Kirkendall, SHPD Maui/Lana`i Islands Archaeologist, conducted the recommended field inspection. Based on the findings of the field inspection we wish to revise our previous comments.

As we stated in our initial comments, an archaeological inventory survey has not been conducted of the existing harbor area, which comprises the *makai* portion of the project area. This area is located in a previously imported fill deposit and has undergone extensive previous land alterations making it very unlikely that historic sites are still present or will be impacted by the proposed undertaking. Consequently, we believe that "no historic properties will be affected" by the proposed undertaking within its *makai* portion.

In 1987 International Archaeological Research Institute, Inc. (IARII) conducted an archaeological inventory survey of a 422-acre parcel which included the *mauka* portion of the proposed project area. During the survey a total of 183 surface features were identified which were grouped into thirty-three historic sites. Subsurface testing was not conducted during the inventory survey phase; therefore, the subsurface extent of all of the sites was not determined. Data recovery was subsequently conducted at six sites. Our records indicate two habitation sites (SIHP 50-50-49-1525

and 1523) are located in close proximity to the proposed project area. As neither of these sites underwent subsurface testing or data recovery the extent of these sites has not been determined. Thus, we believe it is likely historic sites and/or site remnants may be present in the subsurface deposits of the *mauka* portion of the proposed project area, and that the proposed undertaking may have an "adverse effect" on them. We believe that such an "adverse effect" may be mitigated through a program of on-site archaeological monitoring, thus resulting in a finding of "no adverse effect."

Given the above information, we make the following recommendations:

1) A qualified archaeological monitor will be present during all ground-altering activities located in the *mauka* portion of the proposed project area in order to document any historic properties which may be encountered during the proposed undertaking and to provide mitigation measures as necessary. An acceptable archaeological monitoring plan will need to be submitted to the State Historic Preservation Division for review, prior to the commencement of any ground-altering activities. An archaeological monitoring plan must contain the following nine specifications: (1) The kinds of remains that are anticipated and where in the construction area the remains are likely to be found; (2) How the remains and deposits will be documented; (3) How the expected types of remains will be treated; (4) The archaeologist conducting the monitoring has the authority to halt the construction in the immediate area of the find in order to carry out the plan; (5) A coordination meeting between the archaeologist and construction crew is scheduled, so that the construction team is aware of the plan; (6) What laboratory work will be done on remains that are collected; (7) A schedule of report preparation; (8) Details concerning the archiving of any collections that are made; and (9) An acceptable report documenting the findings of the monitoring activities shall be submitted to the State Historic Preservation Division for review upon 180 days following the completion of the proposed undertaking.

2) The State Historic Preservation Division (Maui and O`ahu offices) will be notified via facsimile upon the on-set and completion of the proposed undertaking.

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 Dr. Melissa Kirkendall at 243-5169 on Maui or Cathleen Dagher at 692-8023 at our Kapolei office.

CD: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
Eric Hirano, Administrator, Engineering Division, DLNR
Raymond Sukys, US Dept of Transportation, Federal Transit Administration,
201 Mission Street, Suite 2210, San Francisco, CA 94105

LINDA LINGLE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
PO BOX 373
HONOLULU, HAWAII 96809

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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TO: Melanie A. Chinen, Administrator
Historic Preservation Division

FROM: Eric T. Hirano, Chief Engineer

SUBJECT: **Proposed Ferry System Improvements at Manele Small Boat Harbor, Lanai, Hawaii TMK: (2) 4-9-017:006**

We request your review and comment on the proposed revisions to the boat trailer parking and realignment of the roadway fronting the existing ferry dock. Please note that the trailer parking was moved slightly to the South from what was shown on the original site plan. Also, a field inspection was conducted by Dr. Melissa Kirkendall on May 18, 2004 and written comments were provided by memo dated May 21, 2004.

To expedite the review process, Mr. Eric Yuasa from the Engineering Division met with Ms. Sara Collins and Ms. Cathy Dagher from your office on November 18, 2004 to discuss the proposed changes and to provide them with the revised site plan. In addition, Mr. Yuasa has been coordinating the proposed changes with Dr. Kirkendall by phone and email.

Attachment A is the original site plan and Attachment B is the revised site plan, which shows the relocated trailer parking and roadway realignment.

Should you have any questions, please call Mr. Eric Yuasa, Project Engineer at 587-0254.

Attach.

PURSUANT TO CHAPTER 92, PART I, OF THE HAWAII REVISED STATUTES AS AMENDED; NOTICE IS HEREBY GIVEN OF A REGULAR MEETING OF THE LANAI PLANNING COMMISSION

Members: Reynold "Butch" Gima (Chair), Mary Catiel (Vice-Chair), Bradford Oshiro, Fairfax "Pat" Reilly, Bruno Amby, James Elliott, Donavan Kealoha, Dwight Gamulo, and Beverly Zigmond

AGENDA

DATE: **October 20, 2004, Wednesday**
TIME: **7:00 p.m.**
PLACE: **Lanai Library**
Lanai City, Lanai

A. CALL TO ORDER

B. INTRODUCTION OF NEW MEMBER- BEVERLY ZIGMOND

C. RESOLUTION THANKING ROLAND KAOPUIKI

D. APPROVAL OF THE AUGUST 18, 2004 MEETING MINUTES

E. WORKSHOP CONDUCTED BY THE DEPARTMENT OF LAND AND NATURAL RESOURCES (DLNR), DIVISION OF BOATING AND OCEAN RECREATION ON THE MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS

By letter dated September 30, 2004, Peter T. Young, Chairperson of the Department of Land and Natural Resources requested an October 20, 2004 workshop with the Lanai Planning Commission for early consultation and public input on DLNR's proposed concept plans for the Manele Harbor Ferry System Improvements project. The DLNR Division of Boating and Ocean Recreation proposes to construct a new comfort station, administrative office and covered waiting area; paved access roads, vehicle and trailer parking areas; water mains and fire hydrants; sewage pump station and force main; telephone and electrical utilities; street lights; ferry pier improvements; fueling station and landscaping at Manele Small Boat Harbor, Island of Lanai.

F. DIRECTOR'S REPORT

1. 2004 Hawaii Congress of Planning Officials (HCPO) Conference - September 8-10, 2004, Hilton Hawaiian Village Hotel.
2. 2005 Meeting Schedule

G. NEXT REGULAR MEETING DATE: November 17, 2004

H. ADJOURNMENT

EACH APPLICANT IS REQUESTED TO PROVIDE RESPONSIBLE REPRESENTATION AT THE MEETING.

AGENDA ITEMS ARE SUBJECT TO CANCELLATION.

ORAL OR WRITTEN TESTIMONY WILL BE RECEIVED ON EACH ANY AGENDA ITEM SUBJECT TO THE PROVISIONS OF CHAPTER 92, HAWAII REVISED STATUTES AND THE LANAI PLANNING COMMISSION RULES OF PRACTICE AND PROCEDURE.

WRITTEN TESTIMONY SHOULD BE SUBMITTED AT LEAST TWO BUSINESS DAYS BEFORE THE MEETING TO INSURE DISTRIBUTION TO THE BOARD. FIFTEEN (15) COPIES OF WRITTEN TESTIMONY ARE NEEDED IF TESTIMONY IS PRESENTED IMMEDIATELY PRIOR TO OR AT THE MEETING.

DOCUMENTS ARE FILE WITH THE PLANNING DEPARTMENT.

THE ADDRESS OF THE COMMISSION IS C/O THE MAUI PLANNING DEPARTMENT, 250 S. HIGH STREET, WAILUKU, MAUI, HAWAII 96793.

THOSE PERSONS REQUESTING SPECIAL ACCOMMODATIONS DUE TO DISABILITIES, PLEASE CALL THE MAUI PLANNING DEPARTMENT AT 270-7735 (Maui) OR 1-800-272-0117 (Molokai) OR 1-800-272-0125 (Lanai) OR NOTIFY THE MAUI PLANNING DEPARTMENT IN WRITING AT 250 S. HIGH STREET, WAILUKU, MAUI, HAWAII 96793 OR FAX NUMBER 270-7634; AT LEAST TWO (2) BUSINESS DAYS BEFORE THE SCHEDULED MEETING.

ANY FAXES SHOULD BE RECEIVED BY THE DEPARTMENT OF PLANNING BY 5:00 P.M. ON THE SECOND WORKING DAY BEFORE THE MEETING TO INSURE THAT IT IS CIRCULATED TO THE BOARD.

An Executive Session may be called in order for the Commission to consult with their attorney on questions and issues pertaining to the Commission's powers, duties, privileges, immunities and liabilities.

PLEASE NOTE: If any member of the Commission is unable to attend the scheduled meeting, please contact the Planning Department at least one day prior to the meeting date. Thank you for your cooperation. (S:\all\tremaine\102004.age)

LINDA LINGLE
GOVERNOR OF HAWAII

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

DAN DAVIDSON
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ERNEST Y.W. LAU
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LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

April 30, 2004

Mr. Gerrit C. Cormany
President
Castle and Cooke Resorts, LLC
PO Box 630310
Lanai City, Hawaii 96793-0310

Dear Mr. Cormany:

Subject: **Manele Small Boat Harbor Improvement Project, Lanai, Hawaii**

Per our phone conversation on April 30, 2004, I am transmitting the Concept Paper for Ferry System Improvements at Manele Small Boat Harbor, Island of Lanai and Kaunakakai Commercial/Small Boat Harbors, Island of Molokai; Part 5-Environmental, Finding Details/Justification Information to Support a Categorical Exclusion Under 49 CFR §771.117(d) (10) For the Manele Small Boat Harbor Improvements, Lanai, Hawaii. Both documents were sent to the State Department of Transportation Statewide Planning Office on April 23, 2004.

We have been informed by Mr. Ken Tatsuguchi, Programming Branch Manager from the State Department of Transportation Statewide Planning Office that the draft grant proposal for the subject project will be submitted to the Federal Transit Administration by today.

Should you have any questions, please call me at 587-1973.

Sincerely,

Stephen L. Thompson,
Acting Administrator.

c. Peter Young
Rodney Haraga

LINDA LINGLE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

APR 27 2004

Mr. Gerrit C. Cormany
President
Castle and Cooke Resorts, LLC
PO Box 630310
Lanai City, Hawaii 96793-0310

BOR-E 0572.04

Dear Mr. Cormany:

Subject: **Manele Small Boat Harbor Improvement Project, Lanai, Hawaii**

As a follow up to a phone conversation between Mr. Steve Thompson from our Division of Boating and Ocean Recreation and yourself, we would like to request the conveyance of the private land needed for the proposed trailer parking lot (see enclosure). The proposed trailer parking lot, which is partially on Castle and Cooke Resort land will be included in our Federal Transit Administration (FTA) grant application for design and construction funding for the subject project. Since, the proposed parking lot is located on private land, we are required by FTA to provide written documentation that the land will be conveyed to the State. Accordingly, we request a letter from your company stating the land will be conveyed to State at a nominal cost if the FTA grant is approved.

We understand that the value of the private land with proper documentation may be used to off set some of the State's cash contributions to the project cost. If our understanding is correct, then we will consider the value of the private land to be Castle and Cooke Resort's contribution to the project.

We also request your approval to hook up to the existing water, sewer, electrical and telephone utilities within Manele Road.

Should you have any questions, please contact Mr. Steve Thompson, Acting Boating Administrator at 587-1973.

Sincerely,

Peter T. Young,
Chairperson

4233

LINDA LINGLE
GOVERNOR OF HAWAII

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

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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April 27, 2004

BOR-E 0574.04

TO: THE HONORABLE RODNEY K. HARAGA, DIRECTOR
DEPARTMENT OF TRANSPORTATION

FROM: PETER T. YOUNG, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

SUBJECT: KAUNAKAKAI COMMERCIAL HARBOR, MANELE AND MAALAEA SMALL BOAT HARBOR IMPROVEMENTS, HAWAII

'04 APR 28 AM 08:00 ENGINEERING

We would like to thank you for the assistance provided by Ms. Julia Tsumoto and Mr. Ken Tatsuguchi from your Statewide Transportation Planning Office, and the opportunity to participate as a sub-recipient for Federal Transit Administration Funding. We look forward to making much needed improvements to the Kaunakakai Commercial, Manele and Maalaea Small Boat Harbors to support the existing inter-island ferry operations.

We are willing to implement subject projects (i.e., planning, design and construction). Based on our latest project cost estimate the total project cost and local match for the Kaunakakai Commercial Harbor is $3,314,761 and $662,952; Manele Small Boat Harbor is $5,808,828 and $1,161,766; Maalaea Small Boat Harbor is $200,000 and $40,000, respectively.

It is our understanding that the DOT, Harbors Division will provide the local match of $662,952 for Kaunakakai Commercial Harbor. Please call me right away to discuss the local match for the Manele and Maalaea Small Boat Harbors.

We have submitted the concept paper, conceptual plans and/or Categorical Exclusions for subject projects on April 23, 2004.

Should you have any questions, please call Mr. Stephen Thompson, Acting Boating Administrator at 587-1973.

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
COMMISSION ON WATER RESOURCE MANAGEMENT

STEPHEN L. THOMPSON
ACTING ADMINISTRATOR

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

DIVISION OF BOATING AND OCEAN RECREATION
333 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813

April 23, 2004

BOR-E 0573.04

TO: Julia Tsumoto, Statewide Transportation Planner
Statewide Transportation Planning Office

FROM: Steve Thompson, Acting Administrator
Division of Boating and Ocean Recreation

SUBJECT: Kaunakakai Commercial, Manele and Maalaea Small Boat Harbor Ferry System Improvements, Hawaii

We would like to thank you for your assistance and the assistance provided by Mr. Ken Tatsuguchi from your staff. We look forward to making much needed improvements to the Kaunakakai Commercial, Manele and Maalaea Small Boat Harbors to support the existing inter-island ferry operations.

We are transmitting six (6) sets of the following documents:

1. Concept Paper dated April 23, 2004 for Ferry System Improvements at Manele Small Boat Harbor, Islands of Lanai and Kaunakakai Commercial/Small Boat Harbors, Island of Molokai, State of Hawaii.

2. Concept Paper dated April 23, 2004 for Enhanced Commuter Ferry Operations through the Establishment of a Ferry Terminal at Maalaea Small Boat Harbors, Island of Maui, State of Hawaii.

3. Part 5 – Environmental Finding Details/Justification Information to Support a Categorical Exclusion Under 49 Cfr §771.117(D)(10) For the Manele Small Boat Harbor Improvements, Lanai, Hawaii

4. Part 5 – Environmental Finding Details/Justification Information To Support A Categorical Exclusion Under 49 Cfr §771.117(D)(10) For the Kaunakakai Commericaial/Small Boat Harbor Improvements, Molokai, Hawaii

Should you have any questions, please call Mr. Eric Yuasa, Project Manager at 587-0254.

LINDA LINGLE
GOVERNOR OF HAWAII

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
STATE PARKS

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

April 12, 2004

MEMORADUM

LOG NO: 2004.1088
DOC NO: 0404CD14

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 Manele Bay Small Boat Harbor Kamao Ahupua`a, Lahaina District, Island of Maui**
TMK: (2) 4-9-017:006

Thank you for the opportunity to provide comments for the Information Request pertaining to the proposed improvements to Manele Bay 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, water main and fire hydrant at the Manele Bay Small Boat Harbor.

An archaeological inventory survey has not been conducted of the existing harbor area, which comprises the *makai* portion of the project area. This area is located in a previously imported fill deposit and has undergone extensive previous land alterations making it very unlikely that historic sites are still present or will be impacted by the proposed undertaking. Consequently, we believe that "no historic properties will be affected" by the proposed undertaking within its *makai* portion.

In 1987 International Archaeological Research Institute, Inc. (IARII) conducted an archaeological inventory survey of a 422-acre parcel which includes the *mauka* portion of the proposed project area. During the survey a total of 183 surface features were identified which were grouped into thirty-three historic sites. Subsurface testing was not conducted during the inventory survey phase; therefore, the subsurface extent of all of the sites was not determined. Data recovery was subsequently conducted at six sites. Our records indicate two habitation sites (SIHP 50-50-49-1525 and 1523) are located in close proximity to the proposed project area. Neither of these sites underwent subsurface testing or data recovery. Given that the extent of these sites has not been determined, we are unable to ascertain at this time the effects this undertaking may have on historic sites.

Therefore, we recommend that no action be taken on the proposed undertaking until an archaeological field inspection has been conducted of the previously unaltered portions of the *mauka* portion of the proposed project area to determine whether it is likely that historic sites may be present in the subsurface deposits. Based on the findings of the field inspection, we may recommend additional archaeological field work.

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.

CD: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

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

APR -5 2004

TO: Holly McEldowney, Acting Administrator
Historic Preservation Division

FROM: Peter T. Young, Chairperson

SUBJECT: **Proposed Improvements to Kaunakakai and Manele Small Boat Harbors, on Molokai and Lanai, Hawaii**

We request your review and comment on the proposed improvements to Kaunakakai Small Boat Harbor (TMK: 5-3-01) on Molokai and Manele Small Boat Harbor (4-9-17:06) on Lanai by April 23, 2004. The Division of Boating and Ocean Recreation through the Engineering Division and its consultant BOW Engineering is in the process of completing the planning phase for improvements to Kaunakakai and Manele Small Boat Harbors. The planning phase needs to be completed by April 30, 2004, in order to qualify for approximately $5 million in Federal Transit Administration (FTA) funding that lapse on September 30, 2004.

The proposed improvements to Kaunakakai Harbor include the construction of a new comfort station/administrative office; sewer pump station and force main; water main and fire hydrant.

The proposed improvements at Manele Small Boat Harbor include the construction of a new comfort station; covered waiting area on the existing ferry pier; new administrative building; paved parking lot and access roads; water, sewer, electrical and telephone utilities; landscaping; and a new trailer parking area.

To expedite the review process, Mr. Eric Yuasa from the Engineering Division has scheduled a meeting with Ms. Cathy Dagher from your office on April 5, 2004 at 2:30 PM to discuss the Manele Small Boat Harbor project, and will deliver drawings for the Kaunakakai Small Boat Harbor to Ms. Sara Collins prior to the meeting.

Should you have any questions, please call Mr. Eric Hirano, Chief Engineer at 587-0230

DLNR
H9140

GOVERNOR'S REFERRAL
04:0203231

DIRECTOR'S OFFICE
DEPT. OF
TRANSPORTATION

2004 MAR -3 A 9:05

RECEIVED
'04 MAR -8 A11 :4
DEPT. OF LAND
& NATURAL RESOURCES
STATE OF HAWAII

PH

February 19, 2004

Mr. Gerrit C. Cormany
President
Castle & Cooke Resorts, LLC
PO Box 630310
Lanai City, Hawaii 96763-0310

Dear Mr. Cormany:

Thank you for your letter summarizing your understanding of my December 20, 2003 meeting with Mr. Murdock.

I am in full support of the improvements proposed for the Manele Small Boat Harbor and have instructed my departments of Land and Natural Resources (DLNR), and Transportation (DOT) to pursue this project as a high priority to secure any federal funds available.

They have since prepared and submitted a preliminary proposal to the Federal Transit Administration (FTA) for over $5 million in grant monies. While we are awaiting a response from FTA, our engineers have initiated the work to layout and proceed with the overall action plan.

We appreciate the support and assistance you have provided in this effort and look forward to a continuing partnership.

Sincerely,

LINDA LINGLE

bc: Hon. Rodney K. Haraga
Hon. Peter T. Young

Castle & Cooke Resorts, LLC
ISLAND OF LANA'I

GERRIT C. CORMANY
President

January 26, 2004

Honorable Governor Linda Lingle
Executive Chambers
Hawaii State Capitol
Honolulu, Hawaii 96813

Dear Governor Lingle,

This is a follow up to your meeting with David Murdock on December 30, 2003. It is my understanding that you discussed the Manele Small Boat Harbor with Mr. Murdock. The following points summarize my understanding of what was discussed.

- The current condition of the harbor and harbor infrastructure is in very bad shape
  - Roads and parking lot are rutted, dusty and rocky
  - Inadequate water and power
  - No sewer
  - Silt basin needs to be dug out and then maintained
  - Harbor needs to be dredged
- The harbor is the main transportation point for <u>local</u> Lanai residents and needs to be improved.
- We have long term plans for development at the harbor but they are economically <u>not</u> feasible at this time.
- In working with Senator Inouye's office, I have found that there is $15 million dollars of Federal money appropriated for support of ferry operations. Further, that money has been designated for Maui County.
- I have discussed this with Expeditions and we are attempting to discuss with Maui County utilizing some of those monies to improve the harbor. IT IS A PERFECT FIT.
- We have developed plans and costs to
  1. Extend the necessary infrastructure
  2. Pave the road and parking lot
  3. Minimally landscape the harbor area

1311 Fraser Avenue • P.O. Box 630310 • Lana'i City, Hawai'i 96763-0310
Tel. (808) 565-3816 • Fax: (808) 565-3881
E-Mail: gerrit_cormany@lanai-resorts.com • www.islandoflanai.com

4. Create some shade for residents waiting for ferry
5. Create better traffic flow through the harbor area

We are currently trying to work with DLNR to define our long-term development plans at the harbor and address these pressing needs. Your support of the efforts of your DLNR staff would be greatly appreciated. Additionally, the influence you could lend to obtaining these Federal funds for these vitally necessary improvements at the Manele Small Boat Harbor would be most helpful.

Thank you for your interest and support of Lanai.

Sincerely,

Gerit Cormany

APPENDIX B

DRAFT ENVIRONMENTAL ASSESSMENT COMMENT LETTERS

APPENDIX B

The following correspondence includes comments on the Draft EA from the following agencies:

Department of the Army, Civil Works Technical Branch	May 18, 2005
State of Hawaii, DLNR, Historic Preservation Division	April 25, 2005
County of Maui, Department of Planning (re:Lāna'i Planning Commission)	April 22, 2005
County of Maui, Department of Planning	April 22, 2005
State of Hawaii, Office of Environmental Quality Control	April 22, 2005
County of Maui, Department of Water Supply	April 21, 2005
Office of the Mayor, County of Maui	April 21, 2005
Environmental Center, University of Hawaii	April 21, 2005
Ocean Tourism Coalition	April 15, 2005
State of Hawaii, Department of Transportation	April 14, 2005
State of Hawaii, DLNR, Division of Aquatic Resources	April 12, 2005
County of Maui, Department of Parks and Recreation	March 31, 2005
State of Hawaii, DLNR, Division of Forestry and Wildlife	March 29, 2005
County of Maui, Department of Fire and Public Safety	March 28, 2005

04-97
Manele

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, HONOLULU
FORT SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF:

May 18, 2005

Civil Works Technical Branch
Engineering & Construction Division

Mr. William H.Q. Bow, P.E.
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Dear Mr. Bow:

This is in reference to your letter, dated March 22, 2005, requesting our review and comments on the Manele Small Boat Harbor (SBH) Ferry System Improvement Project. Thank you for allowing us to provide comments, to your letter, past the April 22, 2005 deadline.

Manele SBH was constructed and completed in 1965 under the authority of Section 107 of the U.S. Army Corps of Engineers' Continuing Authorities Program, in a joint venture with the State of Hawaii. As part of the Local Cooperation Agreement, executed between the U.S. Army Corps of Engineers, Honolulu District and the State of Hawaii for this project, the State agreed to provide all lands, easements and rights-of-way for subsequent maintenance of the project.

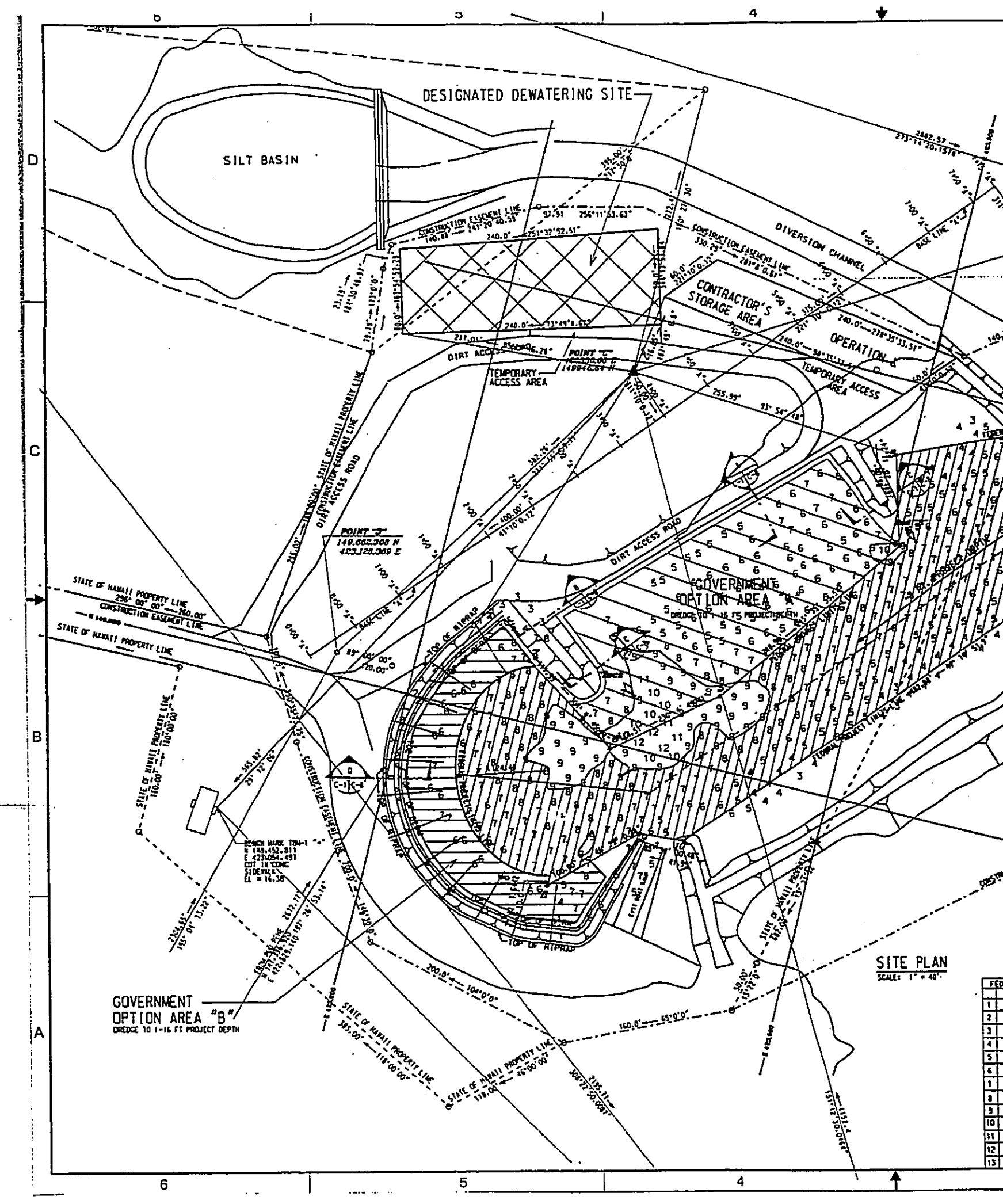
We wish to inform you that the U.S. Army Corps of Engineers, Honolulu District does, in fact, require a permanent maintenance easement at Manele SBH for a contractor's work and operation area (CWOA), and a dewatering site for maintenance dredging, including access roads/routes as necessary, for future maintenance work at the harbor. The CWOA and dewatering site that we have established in our currently ongoing maintenance dredging project at Manele SBH is convenient for our contractor and would be the preferred site in the future – a map from our construction drawings identifying the location of our current CWOA and dewatering site is enclosed. This area is in the location of your proposed parking lot(s) adjacent to the silt basin and rip-rap channel. We request that this area remain clear for our use as a permanent maintenance easement.

If you have any questions regarding this matter, please contact Mr. Patrick Tom of our Civil Works Technical Branch at 438-8874.

Sincerely,

for James L. Bersson, P.E.
Chief, Engineering & Construction Division

Enclosure


DESIGNATED DEWATERING SITE
SILT BASIN
DIVERSION CHANNEL
CONTRACTOR'S STORAGE AREA
OPERATION
TEMPORARY ACCESS AREA
DIRT ACCESS ROAD
POINT "C"
POINT "D"
GOVERNMENT OPTION AREA
GOVERNMENT OPTION AREA "B"
STATE OF HAWAII PROPERTY LINE
CONSTRUCTION EASEMENT LINE
TOP OF RIPRAP
SITE PLAN
SCALE: 1" = 40'

SURVEY NOTES:

1. HYDROGRAPHIC SURVEY COMPLETED BY U.S. ARMY CORPS OF ENGINEERS. PORTLAND DISTRICT ON JULY 28, 2003. BASE MAP, CONTROL POINT COORDINATES AND PROJECT LIMIT COORDINATES PROVIDED BY U.S. ARMY CORPS OF ENGINEERS. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL CONTROLS IN THE FIELD.
2. COORDINATES ARE HAWAII STATE PLANE COORDINATE SYSTEM, ZONE 2, NORTH AMERICAN DATUM OF 1927 (NAD 27).
3. AZIMUTHS ARE MEASURED FROM SOUTH.
4. ELEVATIONS ARE IN FEET REFERRED TO MEAN LOWER LOW WATER DATUM.
5. ELEVATIONS SHOWN ARE NEGATIVE (-) UNLESS OTHERWISE NOTED AS (+).

NOTES:
1. THIS PROJECT CONSISTS OF MAINTENANCE DREDGING ONLY. CONTRACTOR SHALL NOT DREDGE INTO HARD BOTTOM. NO OVERDEPTH DREDGING PAYMENT WILL BE MADE.
2. THE LOCATION AND TOP ELEVATION OF THE ORIGINAL HARD ROCK SIDE SLOPE IS NOT KNOWN AT ALL LOCATIONS. IF SAND SLUFFS INTO THE PROJECT AREA DUE TO ITS NATURAL ANGLE OF REPOSE, CONTRACTOR SHALL CONTINUE DREDGING UNTIL THE SIDE SLOPE IS STABILIZED AND THE DESIGN DEPTH IS MAINTAINED AT THE PROJECT LIMITS.
3. THE FEDERAL PROJECT LIMIT LINE IS LOCATED AT THE BOTTOM OF THE SIDE SLOPE DREDGE CUT.
4. AT NO TIME SHALL THE CONTRACTOR DISTURB THE TOE STONES OF THE BREAKWATER OR SHORELINE REVETMENTS.
5. DREDGE LIMITS IN ALL AREAS ARE 5 FEET HORIZONTALLY FROM THE DOCK FACES AND 5 FEET HORIZONTALLY FROM THE TOE OF ALL SHORELINE REVETMENTS, JETTIES, AND BREAKWATER STRUCTURES. AT NO TIME SHALL THE CONTRACTOR DREDGE CLOSER THAN 5 FEET HORIZONTALLY TO THE DOCK FACES, ENDS OR FINGER PIERS AND THE TOE OF ALL SHORELINE REVETMENTS, JETTIES, AND BREAKWATER STRUCTURES
6. CONTRACTOR SHALL DREDGE AT THE FEDERAL PROJECT LIMIT LINE UNTIL THE SIDE SLOPE HAS STABILIZED AND THE DESIGN DEPTH IS MAINTAINED AT THE PROJECT LIMIT.
7. DREDGE SPOILS SHALL BE DEWATERED AT THE DESIGNATED DEWATERING SITE AND HAULED TO THE COUNTY LANDFILL, LOCATED BETWEEN KAUMALAPAU HARBOR AND THE LANAI AIRPORT, FOR DISPOSAL. DREDGED SPOIL WATER SHALL NOT BE ALLOWED TO DRAIN INTO THE HARBOR OR COASTAL WATERS. DREDGED MATERIAL SHALL NOT BE STOCKPILED IN THE WATER. DEWATERING AND WORK AND STORAGE AREAS WILL BE RETURNED TO PRECONSTRUCTION ELEVATIONS AT THE CONCLUSION OF WORK.
8. CONTRACTOR SHALL PROVIDE AT LEAST THREE WEEKS NOTICE TO HARBOR AGENT PRIOR TO START OF DREDGING IN GOVERNMENT OPTION AREAS TO PERMIT RELOCATION OF EXISTING BOATS.
9. A MINIMUM OF ONE-HALF THE ENTRANCE CHANNEL WIDTH SHALL BE MAINTAINED AT ALL TIMES TO PERMIT ENTRY AND EXIT FROM THE HARBOR AND ACCESS TO THE LAUNCH RAMPS SHALL NOT BE BLOCKED.
10. CONTRACTOR MAY MOOR/ANCHOR FLOATING EQUIPMENT IN THE HARBOR DURING NON-WORKING HOURS, PROVIDED HARBOR USE IS NOT IMPEDED. CONTRACTOR SHALL COORDINATE WITH AND OBTAIN APPROVAL FROM THE HARBOR AGENT.
11. ALL WORK, EQUIPMENT AND DREDGE MATERIAL STOCKPILE SHALL BE CONTAINED WITHIN THE HARBOR PROPERTY BOUNDARY.
12. THE DISTANCE BETWEEN MANELE SMALL BOAT HARBOR AND THE COUNTY LAND FILL IS APPROXIMATELY THIRTEEN (13) MILES.

SITE PLAN
SCALE: 1" = 40'

FEDERAL PROJECT LINE COORDINATES		
	EASTING	NORTHING
1	424150.49	149906.15
2	423886.31	150060.56
3	423586.07	149529.17
4	423609.29	149846.36
5	423481.82	149668.30
6	423394.00	149594.82
7	423301.33	149657.71
8	423367.03	149454.94
9	423439.35	149524.01
10	423481.22	149527.25
11	423759.66	149890.39
12	423864.61	149897.37
13	424030.36	149800.49

GRAPHIC SCALE
NOTE: ALL UNITS ARE IN FEET (FT) UNLESS INDICATED OTHERWISE.
40 20 0 40 80FT
SCALE: 1" = 40'

REV LTR	ZONE	DESCRIPTION	DATE	BY	CHK	APVD
REVISIONS						

DESIGN BRANCH
HONOLULU ENGINEER DISTRICT

U.S. ARMY ENGINEER DIVISION
PACIFIC OCEAN
HONOLULU, HAWAII

PREPARED: LU | CHECKED: TS

MANELE SMALL BOAT HARBOR
MAINTENANCE DREDGING PROJECT

SITE PLAN

US Army Corps of Engineers

DATE: MAY 17, 2004 | LOCATION: LANAI, HAWAII

LOC CODE	DRAWING NUMBER				
	PREFIX	CLASS	TYPE	SEQUENCE	SHEET
7990-11		165	10	08	C-1

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

July 20, 2005

James L. Bersson, P.E.
Civil Works Technical Branch
Engineering & Construction Division
Department of the Army
U.S. Army Engineer District, Honolulu
Fort Shafter, Hawai'i 96858-5440

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear James Bersson;

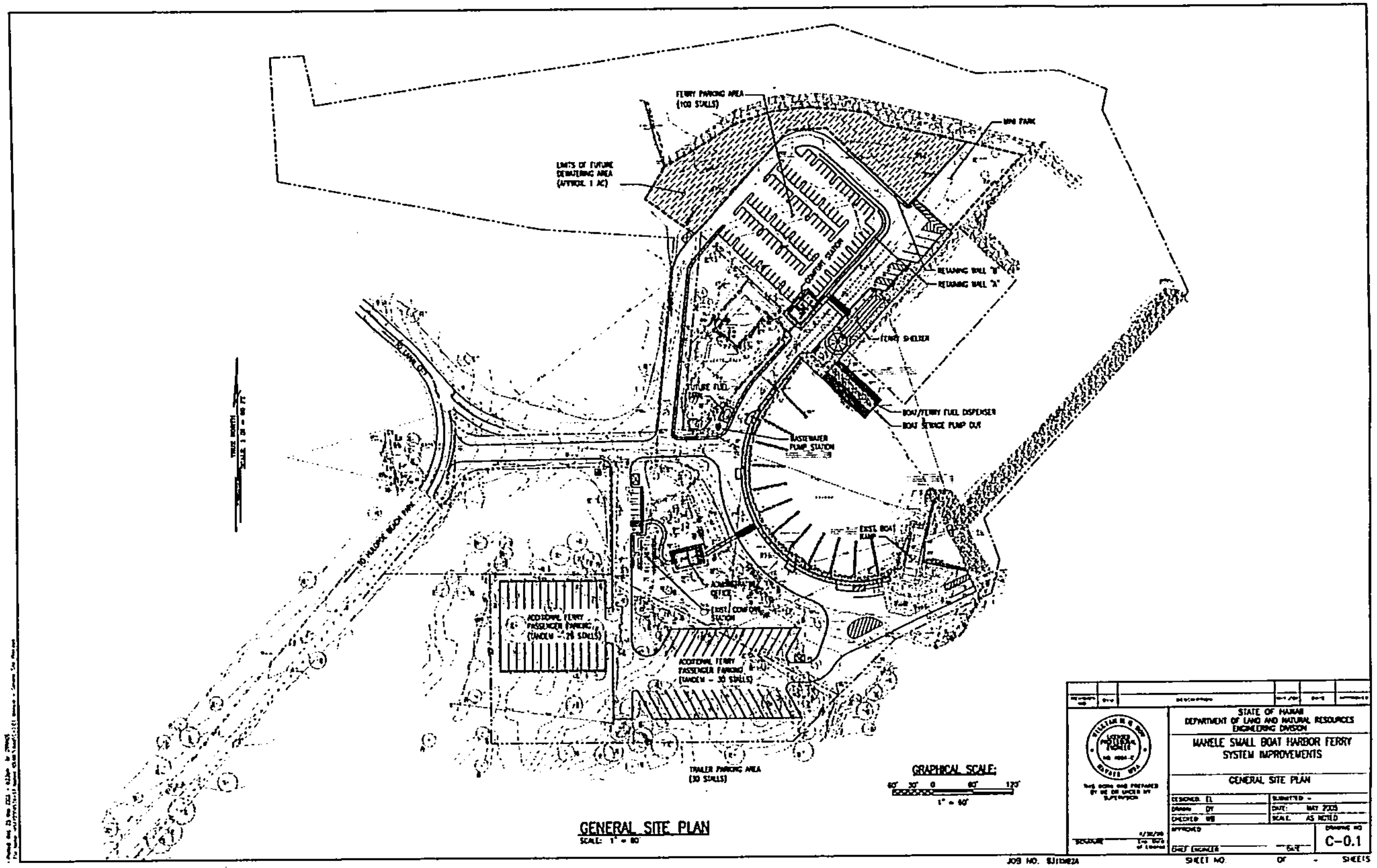
Thank you for your letter dated May 18, 2005 regarding your review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project. We offer the following response to your comment:

1. Maintenance Easement. As noted in the comment letter, the U.S. Army Corps of Engineers, Honolulu District, requires a permanent easement at the Mānele Small Boat Harbor for a contractor's work and operation area (CWOA) and dewatering site for maintenance dredging for future maintenance work at the harbor. As part of the Local Cooperation Agreement, executed between the U.S. Army Corps of Engineers and the State of Hawai'i, the State agreed to provide all lands, easements, and rights-of-way for subsequent maintenance of the Mānele Small Boat Harbor. The letter also includes a figure depicting the previous location of the designated dewatering site and CWOA. The proposed plan includes a similar CWOA and dewatering site of approximately 1-acre as depicted in the enclosed figure. The dewatering site would be under laid with "grass-pave" soil stabilizing product and finished with grass. An irrigation system would be installed under the "grass-pave." The "grass-pave" would allow dewatering without distress to the area. Cars would be allowed to park in this area when not in use as the CWOA and/or dewatering site. A portion of the CWOA would be located in the proposed mini park adjacent to the harbor. Chapter 2, *Project Description* of the Final EA will be modified to reflect the easement area.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner


FERRY PARKING AREA (100 STALLS)
MINI PARK
LIMITS OF FUTURE DEWATERING AREA (APPROX. 1 AC)
RETAINING WALL "B"
RETAINING WALL "A"
FERRY SHELTER
FUTURE FUEL
BOAT/FERRY FUEL DISPENSER
BOAT SERVICE PUMP OUT
WASTEWATER PUMP STATION
EXIST. BOAT RAMP
ADMINISTRATIVE OFFICE
EXIST. COMFORT STATION
ADDITIONAL FERRY PASSENGER PARKING (TANDEM - 28 STALLS)
ADDITIONAL FERRY PASSENGER PARKING (TANDEM - 30 STALLS)
TRAILER PARKING AREA (30 STALLS)
GRAPHICAL SCALE:
1" = 60'
GENERAL SITE PLAN
SCALE: 1" = 60'
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
MANELE SMALL BOAT HARBOR FERRY
SYSTEM IMPROVEMENTS
GENERAL SITE PLAN
DESIGNED EL
DRAWN DY
CHECKED WB
APPROVED
CHIEF ENGINEER
DATE: MAY 2005
SCALE: AS NOTED
C-0.1
SHEET NO. OF SHEETS

5424

LINDA LINGLE
GOVERNOR OF HAWAII

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

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

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

'05 MAY 02 AM08:30 ENGINEERING

APR 25 2005

MEMORANDUM

LOG NO: 2005.0775
DOC NO: 0504CD36

TO: Eric T. Hirano, Chief Engineer
Engineering Division

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

**SUBJECT: National Historic Preservation Act Section 106 Review – Request for Determination for the Proposed Ferry System Improvements to Manele Bay Small Boat Harbor
Kamao Ahupua`a, Lahaina District, Island of Lana`i
TMK: (2) 4-9-017:006**

Thank you for the opportunity to review and comment on the revised proposed Improvements to Manele Bay Small Boat Harbor. Based on the submitted document, we understand the proposed trailer parking area has been relocated to the south from what was shown on the original site plan.

On May 18, 2004, Dr. Melissa Kirkendall, SHPD Maui/Lana`i Islands Archaeologist, conducted a field inspection of the proposed project area, including the area in question. As our initial comments are still valid, they are paraphrased below.

Our records indicate an archaeological inventory survey has not been conducted of the existing harbor area, which comprises the *makai* portion of the project area. This area is located in a previously imported fill deposit and has undergone extensive previous land alterations making it very unlikely that historic sites are still present or will be impacted by the proposed undertaking. Consequently, we believe that "no historic properties will be affected" by the proposed undertaking within its *makai* portion.

In 1987 International Archaeological Research Institute, Inc. (IARII) conducted an archaeological inventory survey of a 422-acre parcel which included the *mauka* portion of the proposed project area. During the survey a total of 183 surface features were identified which were grouped into thirty-three historic sites. Subsurface testing was not conducted during the

inventory survey phase; therefore, the subsurface extent of all of the sites was not determined. Data recovery was subsequently conducted at six sites. Our records indicate two habitation sites (SIHP 50-50-49-1525 and 1523) are located in close proximity to the proposed project area. As neither of these sites underwent subsurface testing or data recovery the extent of these sites has not been determined. Thus, we believe it is likely historic sites and/or site remnants may be present in the subsurface deposits of the *mauka* portion of the proposed project area, and that the proposed undertaking may have an "adverse effect" on them. We believe that such an "adverse effect" may be mitigated through a program of on-site archaeological monitoring, thus resulting in a finding of "no adverse effect."

Given the above information, we make the following recommendations:

1) A qualified archaeological monitor will be present during all ground-altering activities located in the *mauka* portion of the proposed project area in order to document any historic properties which may be encountered during the proposed undertaking and to provide mitigation measures as necessary. An acceptable archaeological monitoring plan will need to be submitted to the State Historic Preservation Division for review, prior to the commencement of any ground-altering activities. An archaeological monitoring plan must contain the following nine specifications: (1) The kinds of remains that are anticipated and where in the construction area the remains are likely to be found; (2) How the remains and deposits will be documented; (3) How the expected types of remains will be treated; (4) The archaeologist conducting the monitoring has the authority to halt the construction in the immediate area of the find in order to carry out the plan; (5) A coordination meeting between the archaeologist and construction crew is scheduled, so that the construction team is aware of the plan; (6) What laboratory work will be done on remains that are collected; (7) A schedule of report preparation; (8) Details concerning the archiving of any collections that are made; and (9) An acceptable report documenting the findings of the monitoring activities shall be submitted to the State Historic Preservation Division for review upon 180 days following the completion of the proposed undertaking.

2) The State Historic Preservation Division (Maui and O`ahu offices) will be notified via facsimile upon the on-set and completion of the proposed undertaking.

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 Dr. Melissa Kirkendall at 243-5169 on Maui or Cathleen Dagher at 692-8023 at our Kapolei office.

CD: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
Eric Hirano, Administrator, Engineering Division, DLNR
Raymond Sukys, US Dept of Transportation, Federal Transit Administration
201 Mission Street, Suite 2210, San Francisco, CA 94105

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

July 20, 2005

Peter T. Young, Chairperson
State of Hawai'i
Department of Land and Natural Resources
Historic Preservation Division
601 Kamokila Boulevard
Kapolei, Hawaii 96707

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear Peter Young;

Thank you for your letter dated April 25, 2005 regarding your review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project and National Historic Preservation Act Section 106 Review. We acknowledge your statement that your initial comments are still valid. These comments were used to formulate mitigation measures to minimize adverse effects on cultural and historic resources for the proposed action. As recommended in your letter, an archaeological monitoring plan shall be submitted to the State Historic Preservation Division for review. Additional mitigation measures incorporated per your recommendations include having a qualified archaeologist present during ground disturbing construction activities; conducting coordination meetings between archaeologist and construction crew; reporting all finding to SHPD; and providing SHPD with the construction schedule, among other measures as described in Section 3.6, *Historical, Archaeological and Cultural Resources* of the Draft and Final EA.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

ALAN M. ARAKAWA
Mayor

MICHAEL W. FOLEY
Director

WAYNE A. BOTEILHO
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

April 22, 2005

Mr. Richard Rice
Division of Boating and Ocean Recreation
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Mr. William Bow
Ms. Raadha Jacobstein
46-304 Nahewai Street
Kaneohe, Hawaii 96744

Dear Mr. Rice and Mr. Bow:

RE: Draft Environmental Assessment for the Manele Small Boat Harbor Ferry System Improvement Project located at TMK: 4-9-017: 006 and 4-9-017: 002, Manele Bay, Island of Lanai, Hawaii (LTR 2005/0863)

At its regular meeting on April 20, 2005, the Lanai Planning Commission (Commission) reviewed the above-referenced document and provides the following comments:

1. Provide a discussion of the means to ensure funding for the long-term maintenance and operation of the facility, specifically the proposed drainage improvements and facility maintenance.

2. Provide a discussion of the types of trees proposed in the landscape planting plan. Further discuss the means by which the Proposing Agency will pursue with the landscape planting plan should the community express a preference of having less shade trees than as required by Chapter 19.36, Maui County Code (MCC) in the proposed parking lots.

3. Provide a discussion of any changes to the proposed action following the last presentation to the Lanai Planning Commission. As represented in the meeting, this discussion should include, at a minimum, the sewer pump out facility and on-site fuel storage facility.

4. In the event State funds do not meet the needs of the community for implementation, provide a discussion as to how this may affect project planning.

5. Various groups/agencies have an interest in the harbor and the related improvements. As such, discuss the arrangements or agreements that may be necessary between the various parties to ensure long term operations and maintenance of the improvements.

6. Provide a discussion as to how the harbor will remain available to the public for recreational uses following completion of the proposed project.

7. Various community members expressed an interest in establishing a permanent fuel dock at the facility. As such, the Commission is recommending the following:

   a. Provide a discussion of the environmental pros and cons of such a facility given the close proximity to coastal waters.

   b. Provide a discussion of the pros and cons of using permanent aboveground storage tanks (ASTs) versus a fueling truck.

   c. Consult with the Harbor Advisory Committee for further review and comments.

   d. Recommend obtaining a written confirmation from interested parties, such as, but not limited to, Lanai Oil Company and Expeditions.

Thank you for your cooperation. Should you require further clarification, please contact Ms. Kivette Caigoy, Environmental Planner, at 270-7735.

Sincerely,

MICHAEL W. FOLEY
Planning Director

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

July 14, 2005

Michael W. Foley, Planning Director
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawai'i 96793

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear Michael Foley;

Thank you for your letter dated April 22, 2005 regarding the Lanai Planning Commission review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project at the April 20, 2005 Commission meeting. We offer the following responses to your comments:

1. **Funding.** The Department of Land and Natural Resources, Division of Boating and Ocean Recreation is responsible for the maintenance of the Mānele Small Boat Harbor common areas. The funding for the long-term maintenance and operation of the proposed facilities would be obtained both through legislative appropriations and from the Boating Special Fund.

2. **Trees.** The types of trees for the proposed project are described in Appendix D, *Landscaping and Irrigation Plan* of the Draft EA and Appendix E of the Final EA. These include native canopy trees as listed in the Landscaping and Irrigation Plan. Trees would be planted in accordance with Chapter 19.36, Maui County Code, with one shade tree per five stalls in the ferry passenger parking lot. No trees would be placed in the multi-use parking lot, because the tree branches may interfere with the parking and/or storage of trailered boats. We acknowledge that a variance will be required in accordance with Chapter 19.52.070, Maui County Code. The required variance will be incorporated into the Final EA in Chapter 4, *Necessary Permits and Approvals*.

3. **Changes to the Proposed Action.** Based on public input, the boat sewage pump out facility at the end of the ferry dock for use by the commercial and recreational boaters will be added to proposed project facilities (see Section 2.2, *Description of the Proposed Action* of the Final EA).

   The onsite fuel storage facility will not be part of the scope of this project, as DLNR still needs to evaluate the viability of having the fuel system bid out as a concession. There are numerous operations, maintenance, and liability issues that need to be evaluated prior to the construction of the fuel storage and dispensing facility.

   Under the proposed project, a fuel pipe will be installed under the concrete pavement from the potential site of the fuel storage tank site to the ferry dock (see Section 2.2, *Description of the Proposed Action* of the Final EA). This will prevent disruption to traffic if and when the

fuel system is approved for installation.

4. **State Funding.** The State Legislature has already appropriated funding for implementation of the proposed project.

5. **Long-Term Operations.** The long-term operations and maintenance of the improvements at the Mānele Small Boat Harbor are the responsibility of the Division of Boating and Ocean Recreation.

6. **Public Use.** There would be no changes to operations at the harbor after the improvements are completed. The relationships that exist today between the commercial and recreational needs will not change.

7. **Onsite Fuel Dock.** As stated in Item #3 above, the Division of Boating and Ocean Recreation is aware of the community interest in a permanent fuel dock at the harbor, but there are numerous operations, maintenance, and liability issues that need to be worked out prior to considering construction of the fuel storage and dispensing facility. For a discussion of potential environmental impacts due to the future siting of the fuel storage facility, see Section 3.3, *Water Quality and Marine Environment* of the Final EA.

The Mānele Harbor Advisory Committee and Lāna'i community has been consulted during the planning and plan development phases, and will continue to be consulted during the design phase of the project.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

ALAN M. ARAKAWA
Mayor

MICHAEL W. FOLEY
Director

WAYNE A. BOTEILHO
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

April 22, 2005

Mr. Richard Rice
Division of Boating and Ocean Recreation
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Ms. Raadha Jacobstein
Bow Engineering & Development, Inc.
46-304 Nahewai St.
Kaneohe, Hawaii 96744

Dear Mr. Rice and Mrs. Jacobstein:

RE: Draft Environmental Assessment for the Manele Small Boat Harbor Ferry System Improvement Project located at TMK: 4-9-017: 006 and 4-9-017: 002, Manele Bay, Island of Lanai, Hawaii (LTR 2005/0863)

The Maui Planning Department (Department) has reviewed the above referenced document and provides the following comments:

1. Landscape Planting Plan (Drawing No. L-1.0). In accordance with Chapter 19.36, Maui County Code (MCC), one (1) shade tree per five (5) stalls is required for paved parking lots. As such, the landscape planting plan should be amended, or a variance shall be obtained in accordance with Chapter 19.520, MCC.

2. Drainage Alternatives

   a. In addition to the bioswales, the Department recommends exploring the possibility of using alternative technologies, such as pervious paving systems, to further reduce the stormwater runoff generated by the proposed improvements.

b. The proposed drainage plan should consider using oil/water separators to reduce the potential for petroleum contamination to underlying aquifers and nearshore coastal waters.

c. Consider an alternative design to the proposed drainage plan to manage more than the net increase in stormwater runoff.

3. Please find attached a copy of a letter from the Ocean Tourism Coalition received by the Department on April 15, 2005.

Thank you for your cooperation. Should you require further clarification, please contact Ms. Kivette Caigoy, Environmental Planner, at 270-7735.

Sincerely,

MICHAEL W. FOLEY
Planning Director

MWF:KAC:do
Enclosure
c: Wayne A. Boteilho, Deputy Planning Director
Clayton I. Yoshida, AICP, Planning Program Administrator
Kivette Caigoy, Environmental Planner
Thorne Abbott, Staff Planner
Lanai Planning Commission
TMK File
General File
K:\WP_DOCS\PLANNING\EA\DEAComments\2005\0863_Dept_ManeleHarbor.wpd

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
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Fax: (808) 945-9299

July 14, 2005

Michael W. Foley, Planning Director
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawai'i 96793

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear Michael Foley;

Thank you for your letter dated April 22, 2005 regarding the Maui Planning Department review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project. We offer the following responses to your comments:

1. **Landscape Planting Plan.** As described in Appendix E, *Landscaping and Irrigation Plan* of the Final EA, trees would be planted in accordance with Chapter 19.36, Maui County Code, with one shade tree per five stalls in the ferry passenger parking lot. No trees would be placed in the multi-use parking lot, because the tree branches may interfere with the parking and/or storage of trailered boats. We acknowledge that a variance will be required in accordance with Chapter 19.52.070, Maui County Code. The required variance will be incorporated into the Final EA in Chapter 4, *Necessary Permits and Approvals*.

2. **Drainage Alternatives.**

   a. Alternative methods to reduce the stormwater runoff generated by the proposed improvements were discussed during a meeting with the Maui County Department of Planning on March 1, 2005. This included semi-pervious paving materials such as a Grasscrete system. However, due to limited funding and personnel for maintenance of the proposed facilities, DLNR Division of Boating and Ocean Recreation requires the use of materials that would provide durability over the longest period of time without extensive maintenance. To offset the potential adverse impacts due to the increase in impervious surfaces, the proposed action includes a project design in which most of the stormwater would be directed to onsite percolation and catch basin drainage systems, landscaped areas, and/or the existing silt basin, and would eventually percolate through the soil. The proposed landscaping plan also includes the use of bio-swales planted with native drought tolerant grasses for stormwater collection adjacent to buildings and parking areas. Due to elevation constraints, areas located directly adjacent to the harbor slips, including the proposed sidewalk area along the harbor and the sidewalk beyond the ferry loading area would drain directly into the harbor via culverts.

   b. The bio-swales act as organic oil/water separators. The bio-swales are designed to filter the sediment and hydrocarbons through the grass and soil before the storm water percolates

into the ground and/or enters the harbor.

c. The present design redirects the stormwater runoff from approximately 4.5 acres, 77% of the project site, from flowing into the harbor. This is accomplished by re-grading site to drain toward the existing silt basin or to the new retention basins. In addition, the design includes construction of berms and interceptor ditches along the perimeter of the project site to divert stormwater runoff to the existing silt basin and to proposed retention basins, thereby cutting off the direct path of stormwater runoff. Due to elevation constraints, no alternative designs were available to re-direct the remaining runoff from areas located directly adjacent to the harbor slips, including the proposed sidewalk area along the harbor and the sidewalk beyond the ferry loading area from entering the harbor. The current plan would significantly improve the existing conditions and greatly reduce the siltation effects in the harbor.

3. **OTC letter.** We acknowledge receipt of the letter from the Ocean Tourism Coalition. The letter and our response will be included in the Final EA upon its completion.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

LINDA LINGLE
GOVERNOR OF HAWAII

GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186
E-mail: oeqc@health.state.hi.us

April 22, 2005

Mr. Peter Young, Chair
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawai'i 96809

Dear Mr. Young:

Subject: Draft EA for the Manele Small Boat Harbor Ferry System Improvements, Lāna'i

Thank you for the opportunity to review the subject document. We have the following comments.

1. One of the reasons for the improvements is to encourage increased ferry ridership. Please explain how the bigger in ridership might increase traffic, parking and other infrastructure needs.

Should you have any questions, please call Jeyan Thirugnanam at 586-4185.

Sincerely,

for

Genevieve Salmonson
Director

c: R. Jacostein

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

July 20, 2005

Genevieve Salmonson
State of Hawai'i
Office of Environmental Quality Control
235 South Beretania Street
Honolulu, Hawai'i 96809

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear Genevieve Salmonson;

Thank you for your letter dated April 22, 2005 regarding your review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project. We offer the following response to your comment:

1. Infrastructure. As noted in your comment letter, one of the objectives of the proposed project is to improve ferry facilities to encourage increased ferry ridership (see Section 1.5, *Purpose and Need* of the Draft and Final EA). The improved facilities of the proposed project may result in increased ferry passengers on existing ferry services. The proposed project includes paved access roads, parking areas, and utilities designed to accommodate the existing and future ferry ridership and harbor activities. Due to the 149 passenger maximum carrying capacities of the ferry vessels and low volume of traffic along Mānele Road, the anticipated increase in traffic would not create a significant impact on level of service on Mānele Road.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

ALAN M. ARAKAWA
Mayor

GEORGE Y. TENGAN
Director

JEFFREY T. PEARSON,
Deputy Director

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

April 21, 2005

Mr. William H.Q. Bow, P.E.
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu HI 96826

Dear Mr. Bow:

Project Name: Manele Small Boat Harbor Ferry System Improvements
TMK: 249017006 & 249017002p

Thank you for the opportunity to provide comments on this project proposal.

The project site as well as the entire Island of Lanai is served by a private water company. Major features of the proposal include the construction of additional comfort stations and new administrative office, pave access roads and parking area, utilities, and landscaping.

According to the applicant, the existing small boat and ferry terminal has an average domestic demand of about 10,104 gpd excluding irrigation demands. With the implementation of the ferry terminal improvements, the applicant estimated total daily domestic and irrigation demand of approximately 20,311 gallons.

Conservation
In order to conserve Lanai's limited water resources, we recommend that the applicant consider the use of brackish and/or reclaimed water for all non-potable uses including dust control during construction.

The applicant states that the project will install water efficient fixtures, low volume toilets and urinals as well as utilize native and drought tolerant plants. The application material states that landscaped areas will receive scheduled watering from an irrigation system which will tap into a potable water system. We understand that frequent irrigation will only be required during the establishment period, however, we strongly recommend that non potable water be utilized for landscape irrigation.

Additional water conservation measures include:

Maintain Fixtures to Prevent Leaks: A simple, regular program of repair and maintenance can prevent the loss of hundreds or even thousands of gallons a day. Refer to the attached handout, "The Costly Drip".

Limit Irrigated Turf: Limit irrigated turf to 25% or less of total landscaped area. Low-water use shrubs and ground covers can be equally attractive and require substantially less water that turf.

Look for Opportunities to Conserve Water: A few examples of these are as follows: When clearing driveways, etc. of debris, use a broom instead of a hose. When washing boats, use a hand-operated spray nozzle instead of an open hose. Additionally, check for leaks in faucets and toilet tanks

Pollution Prevention

Lanai is a single aquifer sector comprising four aquifer systems, in only one of which does potable groundwater occur. In order to protect ground and surface water resources, we recommend that the applicant adopt Best Management Practices (BMPs) designed to minimize infiltration and runoff from construction, vehicle operations as well as from daily activities. We ask the applicant to take precautionary measures during construction to prevent construction materials and debris and eroded soils from entering coastal waters. We have attached sample BMPs for reference. Additional mitigation measures are enumerated below and should be implemented during construction:

- Prevent cement products, oil, fuel and other toxic substances from falling or leaching into the water.
- Properly and promptly dispose of all loosened and excavated soil and debris material from drainage structure work.
- Retain ground cover until the last possible date.
- Stabilize denuded areas by sodding or planting as soon as possible. Replanting should include soil amendments, fertilizers and temporary irrigation. Use high seeding rates to ensure rapid stand establishment.
- Avoid fertilizers and biocides, or apply only during periods of low rainfall to minimize chemical run-off.
- Keep run-off on site.
- Construct drainage control features, such as berms
- Install silting basins where warranted
- Maintain drainage structures, detention, silting and debris basins

Should you have questions, please contact our Water Resources and Planning Division at (808) 270-7199.

Sincerely,

George Y. Tengan, Director
eam

encl: Selected BMP's from "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters"-EPA
The Costly Drip
Ordinance No. 2108 - A Bill for an Ordinance Amending Chapter 16.20 of the Maui County Code, Pertaining to the Plumbing Code

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Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
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Fax: (808) 945-9299

July 27, 2005

George Y. Tengan, Director
Department of Water
County of Maui
200 South High Street
Wailuku, Hawai'i 96793-2155

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear George Tengan;

Thank you for your letter dated April 21, 2005 regarding your review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project. We offer the following responses to your comments:

1. Conservation. The use of brackish and/or reclaimed water for all non-potable uses and landscape irrigation was considered for the Mānele Small Boat Harbor Improvement Project. However, it was determined infeasible due to the location of the water treatment plant at over one mile from the project site and no feasible alternate source for reclaimed water. In addition, no funds are available to transport the reclaimed water at such a distance. As noted in your comment letter, the project includes the use of water saving features, including water efficient fixtures, low-volume toilets, and the use of drought tolerant plants.

2. Pollution prevention. We acknowledge your request to incorporate additional mitigation measures to those already included in the Draft EA to minimize impacts to ground and surface water resources. Best Management Practices (BMPs) and mitigation measures not included in the Draft EA were incorporated into the Final EA Section 3.3, *Water Quality and Marine Environment*.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

ALAN M. ARAKAWA
MAYOR

200 South High Street
Wailuku, Hawaii 96793-2155
Telephone (808) 270-7855
Fax (808) 270-7870
e-mail: mayors.office@co.maui.hi.us

OFFICE OF THE MAYOR
County of Maui

April 21, 2005

TO: Bow Engineering and Development, Inc.
1953 South Beretania Street, PH-A
Honolulu, HI. 96826

Maui County Department of Planning
Attention: Kivette Caigoy
250 South High Street
Wailuku, HI. 96793

SUBJECT: **ENVIRONMENTAL REVIEW COMMENTS ON VARIOUS APPLICATIONS FOR THE MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS PROJECT, ISLAND OF LANA'I**

Aloha;

As Executive Assistant for Environmental Concerns to Mayor Alan Arakawa, I have reviewed the Draft Environmental Assessment (DEA) and applications for Special Management Area (SMA), Shoreline Setback Variance (SSV), and Conditional Use Permit (CUP) for the Manele Small Boat Harbor Ferry System Improvements, and offer the following comments:

Overall, the presentation of materials in these applications was among the most comprehensive I have reviewed, and I commend the thoroughness of those who prepared these documents. I agree that the improvements, as described, would warrant a Final EA determination of no significant environmental impacts, and are likewise consistent with Maui County General Plan and Lana'I Community Plan objectives, and with applicable State and Federal guidelines.

Appendix A of the DEA lists correspondences including "preconsultation requests and response from the project applicant and ...(various) agencies." While the letters from consulted agencies are apparent, direct responses to questions raised within them are not. Is it the applicant's understanding that these questions have been adequately addressed within the body of the environmental review applications? I draw special attention to the questions raised in the 2/7/2005 letter from the County of Maui Department of Planning. While I generally agree with drainage improvements, mitigative measures, and best management practices discussed, I suggest you consider using semi-pervious paving materials to the greatest practicable extent. 4.6 acres of new paved, impervious surfaces are

proposed, and while this could be an improvement on current hardpan, dust and gravel parking areas, it may also contribute to runoff of vehicle fluids. To this objective, it may also be useful to consider a grass or landscaped buffer between the roadway and the harbor.

It is my hope that new lighting for the harbor area is appropriately shielded to minimize ambient light pollution.

Mass clearing and grading should preferably be undertaken in the non-rainy season, to minimize possibility of storm runoff during a winter Kona storm.

Color Map C-2, the Conceptual Site Plan, does not show any tree plantings within, or surrounding the boat trailer storage lots. The Demolition Plan, C-1.0, indicates that 51 kiawe trees are to be removed. An effort should be made to bring shade to the boat trailer storage lots, which would help reduce radiant heat.

It appears that a shade house structure is anticipated as a ferry passenger waiting area, in the location where a single kiawe tree currently provides shade.

I did not see any indication when the shoreline certification took place. As the certified shoreline at Manele Harbor generally corresponds to the rock breakwater, it is unlikely there is seasonal or yearly variation, as occurs in many other Maui shorelines. However, as shoreline certifications only last one year, it will be useful to include in the Final EA document the date of the current certification.

Thank you for the opportunity to provide these comments. I appreciate your efforts in providing clear information to consulting agencies and members of our community. Should you have any questions, please contact me at (808) 270-7960.

Sincerely,

Robert Parsons
Maui County Environmental Coordinator

Cc: Mayor Alan Arakawa

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

July 14, 2005

Robert Parsons
Maui County Environmental Coordinator
Office of the Mayor
County of Maui
200 South High Street
Wailuku, Hawai'i 96793-2155

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear Robert Parsons;

Thank you for your letter dated April 21, 2005 regarding your review of the Draft EA and additional applications for the Mānele Small Boat Harbor Ferry System Improvement Project. We offer the following responses to your comments:

1. Appendix A. The issues raised in preconsultation letters received from various agencies as presented in Appendix A were addressed in the body of the environmental review as suggested in your review letter. The Draft EA includes an analysis of potential impacts due to an increase in impervious surfaces in Section 3.3, *Water Quality and Marine Environment,* and includes mitigation measures to minimize these impacts. A Reduced Paved Area Alternative was considered in Chapter 5, *Alternatives to the Proposed Action*, which would not include the 2-acre adjacent parcel for additional multi-use parking from the proposed action. However, the Reduced Paved Area Alternative would not address community comments to direct the boat trailer parking away from the ferry activities due to safety concerns, and to provide additional parking for ferry passengers. Additional alternative methods to decrease the area of impervious surfaces were considered during a meeting with the Maui County Department of Planning on March 1, 2005. This included semi-pervious paving materials such as a Grasscrete system. However, due to limited funding and personnel for maintenance of the proposed facilities, DLNR Division of Boating and Ocean Recreation requires the use of materials that would provide durability over the longest period of time without extensive maintenance. To offset the potential adverse impacts due to the increase in impervious surfaces, the proposed action includes a project design in which most of the stormwater would be directed to onsite percolation and catch basin drainage systems, landscaped areas, and/or the existing silt basin, and would eventually percolate through the soil. The proposed landscaping plan also includes the use of bio-swales planted with native drought tolerant grasses for stormwater collection adjacent to buildings and parking areas. Due to elevation constraints, areas located directly adjacent to the harbor slips, including the proposed sidewalk area along the harbor and the sidewalk beyond the ferry loading area would drain directly into the harbor via culverts.

2. Lighting. As described in Section 3.9, *Aesthetic and Visual Resources*, all lighting would be properly shaded to eliminate light trespass and preserve the isolated and dark environmental of the Mānele Bay area. In addition, parking lots areas would be lit with street lamps operated by a

timer and would shut off after the last ferry departure and as to be determined by the Harbor Master. The launching ramp also would be equipped with a timered light for use by early morning fishermen.

3. Clearing and Grading. If possible, mass clearing and grading shall not occur during the rainy season months of January through March.

4. Conceptual Site Plan. While trees will be planted to Maui County Code for the ferry passenger parking lot, no trees will be placed in the multi-use parking lot, because the tree branches may interfere with the parking and/or storage of trailered boats.

5. Shade Structure. This comment is acknowledged. A covered waiting area will be provided for ferry passengers.

6. Shoreline Certification. The project area shoreline map was certified in 1986. No improvements to the shoreline are included as a part of this project. Because most of the proposed project improvements would occur outside of the shoreline setback area, and only minor landscaping and lighting improvements would occur within the shoreline setback, the shoreline setback variance application has been withdrawn. A shoreline setback determination and approval application to allow the minor improvements within the shoreline setback area has been filed with Maui County.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

UNIVERSITY OF HAWAI'I AT MĀNOA
Environmental Center

April 21, 2005
EA 0312

Mr. Eric Hirano
Department of Land and Natural Resources
Department of Boating
333 Queen Street, Suite 300
Honolulu, Hawai'i 96813

Dear Mr. Hirano:

Draft Environmental Assessment (DEA)
Manele Small Boat Harbor Ferry System Improvements
Lana'i

The State of Hawai'i Department of Land and Natural Resources (DLNR) Boating Division proposes to improve Manele Small Boat Harbor (MSBH). These improvements include a new comfort station in addition to the previous comfort station; a new administrative office; covered waiting area, paved access roads and parking areas; conversion of a 1.5 inch waterline to a 8 inch waterline; a new water meter, sewage pump station and force main; pumping and backfilling cesspools; electrical utilities, lighting, and landscaping. The project is being financed federally and locally to comply with current code requirements. The cost of the project is estimated to be $6,500,000 and will require approximately 8 to 12 months for construction.

The Environmental Center conducted an in house review of this draft EA with the assistance of Kerry Halford.

General Comments

Although proposed harbor improvements are generally addressed in this draft EA, the document demonstrates a number of deeply troubling flaws, both in terms of omitted details relevant to potential impacts and with regard to process. In regards to basic informational content, a discussion of the additional storm water runoff due to additional pavement for parking and the associated environmental impacts on the surrounding ecosystem should have been included be in the draft EA. Regarding the EA process, required scoping and informational products derived from that process inappropriately have been postponed. In view of these shortcomings, we suggest that this draft EA be withdrawn and resubmitted once the noted deficiencies have been remedied.

2500 Dole Street, Krauss Annex 19, Honolulu, Hawai'i 96822-2313
Telephone: (808) 956-7361 • Facsimile: (808) 956-3980

Reports

On page 15 the draft EA states:

A geotechnical soils report shall be prepared to include data regarding the nature, distribution, and engineering characteristics of existing soils, the subsurface conditions at the site, and recommendations for the limits for the proposed grading and the fill material to be used and the manner of placing it. All measures set forth in the site geotechnical report shall be adhered to during project construction.

However, no mention of when the report will be submitted and processed is found in the draft EA. Likewise on page 17 of the draft EA is stated:

As required by the County, a drainage plan and report shall be prepared for the proposed ferry system improvements project

Both of these documents will provide information directly pertinent to the fundamental purpose of the EA, determination of potentially significant impacts. Furthermore, such data gathering is expressly required pursuant to the project scoping process described in §11-200-9(a)(1), HAR, as an initial responsibility of the proposing agency. Publication of the draft EA prior to the availability of these data for public review and critical analyses renders the draft EA essentially meaningless in fulfillment of the intent of §343-5, HRS, and §11-200-9, HAR. How can the impacts to water quality in the harbor be fully assessed without these studies? These investigations should have been included in the draft EA.

Thank you for the opportunity to review this Draft EA.

Sincerely,

John T. Harrison, Ph.D.
Environmental Coordinator

cc: OEQC
Raadha M.B. Jacobstein
James Moncur, WRRC
Kerry Halford

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

July 20, 2005

John T. Harrison
Environmental Center
University of Hawai'i
2500 Dole Street, Krauss Annex 19
Honolulu, Hawai'i 96822-2313

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear John Harrison;

Thank you for your letter dated April 21, 2005 regarding your review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project. We offer the following response to your comments:

1. Stormwater. This comment requests analysis of potential environmental impacts due to additional stormwater runoff from the proposed project. The Draft EA includes an analysis of potential impacts from stormwater flows in Section 3.3, *Water Quality and Marine Environment,* and includes mitigation measures to minimize these impacts. To offset the potential adverse impacts due to the increase in impervious surfaces, the proposed action includes a project design in which most of the stormwater would be directed to onsite percolation and catch basin drainage systems, landscaped areas, and/or the existing silt basin, and would eventually percolate through the soil. The proposed landscaping plan also includes the use of bio-swales planted with native drought tolerant grasses for stormwater collection adjacent to buildings and parking areas. Due to elevation constraints, areas located directly adjacent to the harbor slips, including the proposed sidewalk area along the harbor and the sidewalk beyond the ferry loading area would drain directly into the harbor via culverts. The current plan would significantly improve the existing conditions and greatly reduce the siltation effects in the harbor.

2. Geotechnical Soils Report. Project information regarding geology and soils were included in Section 3.2, *Topography and Soils* of the Draft EA. This included information regarding proposed clearing, grubbing, and grading of the site; the amount of cut and fill proposed; and the use of excavated soil where appropriate. The *Geotechnical Engineering Exploration, Manele Small Boat Harbor Improvements* (April 28, 2005) includes technical engineering requirements for construction of project features to ensure safe and adequate foundations based on subsurface conditions at the site. The report recommends that a qualified geotechnical engineer be retained for construction monitoring to ensure the specifications of the *Geotechnical Engineering Exploration* report are implemented. As stated in the Draft EA, adherence to measures set forth in the geotechnical report shall be required with project implementation. The Final EA has been revised to reflect issuance of the *Geotechnical Engineering Exploration* and requires compliance with recommended measures therein.

3. Drainage Plan. A summary of the preliminary drainage plan for the proposed project were

included in the Draft EA in Section 3.3, *Water Quality and Marine Environment*. Language in the Final EA was modified to match the information included in the Special Management Area Use Permit Application included with the Draft EA in order to clarify details of the preliminary drainage plan. As required by the County, a final drainage plan and report shall be prepared and submitted for the proposed ferry system improvements project.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

Ocean Tourism Coalition, (O.T.C.)
Shining Light on Ocean Tourism Concerns
P.O. Box 546
Lahaina, Hawaii 96767
(808) 205-1745 Phone (808) 661-0654 Fax
ally@hawaii.rr.com Email

April 15, 2005

Mr. Richard Rice, Administrator
State of Hawaii, Dept. of Land & Natural Resources
Division of Boating and Ocean Recreation
333 Queen Street, Suite 300
Honolulu, HI 96813

RE: Vessel Pump Out Facility at Manele Small Boat Harbor

Dear Mr. Rice:

It has come to our attention that the ferry infrastructure improvement project at Manele Small Boat Harbor may not include a vessel pump out facility at this point in the design phase. This would be a serious oversight in our opinion, but the good news is that it is not too late to include this important and vital feature. As you well know, Manele Small Boat Harbor is a major gateway to the Island of Lanai. Currently the ferry and other vessels that bring passengers to Lanai have very few options to dispose of their black water (marine head waste). The pump out facility at Lahaina Small Boat harbor is often broken and is completely inaccessible whenever a visiting cruise ship is in port. This leaves no alternative for these vessels, but to pump their black water in the three-mile zone between Maui and Lanai, which is allowed by Federal Law.

With all the controversy about vessels pumping their black water in Hawaiian waters, it is inconceivable that this important feature would not be part of the Manele Harbor Improvement project.
We urge you to include this feature into the current harbor improvement design at Manele Small Boat Harbor, and ask that it be a standard feature in any major small boat harbor improvement plans in the future.

Sincerely,

James E. Coon, President
Ocean Tourism Coalition
CC: Peter Young, Chair BLNR
Senator Roz Baker
Representative Kam Tanaka
Susan Sakai, MACZAC
Mayor Allan Arakawa
Butch Gima, Chair, Lanai Planning Commission
Naomi McIntosh, HIHWNMS

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

July 14, 2005

James E. Coon, President
Ocean Tourism Coalition
P.O. Box 546
Lahaina, Hawai'i 96767

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear James Coon;

Thank you for your letter dated April 15, 2005 regarding your review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project. We acknowledge your request to incorporate a vessel pump out facility as part of the proposed project.

We will incorporate a vessel pump out facility into proposed project facilities to be described in the Final EA, Section 2.2, *Description of the Proposed Action*. Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

LINDA LINGLE
GOVERNOR

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

RODNEY K. HARAGA
DIRECTOR

Deputy Directors
BRUCE Y. MATSUI
BARRY FUKUNAGA
BRENNON T. MORIOKA
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.1704

April 14, 2005

RECEIVED
APR 20 2005
BOW ENGINEERING & DEVELOPMENT, INC

Mr. William H.Q. Bow, President
Bow Engineering & Development, Inc.
1953 South Beretania, PH-A
Honolulu, Hawaii 96826

Dear Mr. Bow:

Subject: Manele Small Boat Harbor Ferry System Improvements Project
Special Management Area Use Permit Application (SMA),
Shoreline Setback Variance (SSV) and Conditional Permit (CP)
TMK: (2) 4-9-17: 6 and 2 acre portion of (2) 4-9-17: 2

In response to your request for our review of the applications for the subject project, we have the following comments:

1. We support the efforts of the Department of Land and Natural Resources (DLNR) to improve the small boat harbor.

2. We request that the path of the harbor entrance road and geometrics of the harbor road and Manele Road (Route 440) intersection be discussed further by DLNR staff and our Highways Division before your engineering and/or construction plans are finalized. The approach, curvature, sight distances and stops on each (Manele and harbor) road need to be reviewed and the necessary roadway documentations prepared.

   Your coordination with the DLNR staff to arrange a meeting with both our Highways Division Maui District Office and Right-of-Way Branch to discuss this matter will be appreciated.

Thank you for the opportunity to provide our comments.

Very truly yours,

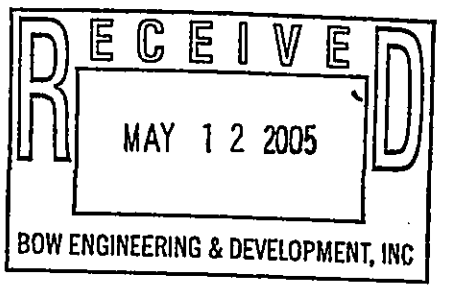
for RODNEY K. HARAGA
Director of Transportation

c: Richard Rice, Department of Land and Natural Resources
Eric Yuasa, Department of Land and Natural Resources
Kivette Caigoy, Maui Department of Planning

Bow Engineering & . .velopment, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

May 4, 2005



Rodney K. Haraga, Director of Transportation
State of Hawai'i
Department of Transportation
869 Punchbowl Street
Honolulu, Hawai'i 96813

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear Rodney Haraga;

Thank you for your letter dated April 14, 2005 regarding your review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project. We acknowledge your request for discussion between DLNR and the Highways Division regarding the harbor entrance road and intersection prior to finalizing engineering and construction plans. DLNR will meet with the Highways Division Maui District Office and Right-of-Way Branch to ensure proper review and documentation.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

LINDA LINGLE
GOVERNOR OF HAWAII

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

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF AQUATIC RESOURCES
1151 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

RECEIVED
APR 13 2005
BD ____ Return for scanning & filing
BOW ENGINEERING & DEVELOPMENT, INC.

E-MAILED
04-13-2005
to R Jacobstein & E. Yuasa

April 12, 2005

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Summary of Project

Title: Manele Small Boat Harbor Ferry System Improvements (SMA,SSV & Conditional Permit)

Proj. By: DLNR

Location: Manele Bay, Lanai

Brief Description:

As proposed, the ferry system improvements would consist of construction and operation of a ferry terminal at the Manele Small Boat Harbor. The improvements and modifications would replace the existing facilities at Manele Bay.

Comments:

Mitigation measures have been proposed by the applicant which should limit or prevent excessive impact to aquatic resource values within Manele Boat Harbor.

Significant long-term impacts adverse to aquatic resource values are not expected from the activities proposed (FONSI). However we suggest the following mitigation measures be incorporated to <u>insure</u> minimum impact to the aquatic environment.

A. Best Management Practices should be implemented to insure that water quality and marine resources are protected and preserved.

B. No construction materials should be stockpiled in the aquatic environment.

C. All construction-related materials should be placed or stored in ways to avoid or minimize disturbance to the

aquatic environment.

D. All construction-related material should be free of pollutants.

E. Extreme care must be taken to ensure that no debris, petroleum products, or deleterious materials or wastes be allowed to fall, flow, leach, or otherwise enter the water.

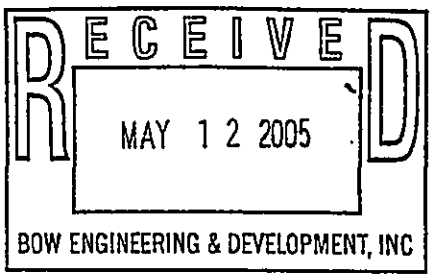
F. Any turbidity and siltation generated from activities proposed should be minimized and contained in the immediate vicinity of construction through the use of effective silt containment devices and the curtailment of construction during adverse weather conditions.

Richard Sixberry
Aquatic Biologist

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

May 4, 2005



Richard Sixberry, Aquatic Biologist
State of Hawai'i
Department of Land and Natural Resources
Division of Aquatic Resources
1151 Punchbowl Street
Honolulu, Hawai'i 96813

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear Richard Sixberry;

Thank you for your letter dated April 12, 2005 regarding your review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project. We acknowledge your request to incorporate additional mitigation measures to those already included in the Draft EA to minimize impacts to the aquatic environment.

We will incorporate your recommended measures into the Final EA, Section 3.3, *Water Quality and Marine Environment*. In addition, your letter and this response will be included in the Final EA upon its completion.

Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

04-57

ALAN M. ARAKAWA
Mayor

GLENN T. CORREA
Director

JOHN L. BUCK III
Deputy Director

(808) 270-7230
Fax (808) 270-7934

E-MAILED
04-06-2005
to E. Yuasa | R. Jalo

RECEIVED
APR - 5 2005
BOW ENGINEERING & DEVELOPMENT, INC

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2 , Wailuku, Hawaii 96793

March 31, 2005

Mr. William H.Q. Bow, P.E.
President
Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii, 96826

Dear Mr. Bow:

SUBJECT: Environmental Review for the Manele Small Boat Harbor Ferry System Improvements Project, TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lanai Island, Maui County

Thank you for the opportunity to review and comment on the Manele Small Boat Harbor Ferry System Improvements Project.

We have reviewed the proposed actions and have no comments or objections to offer. Should you have any questions, please call me or Patrick Matsui, Chief of Parks Planning and Development at (808)270-7387.

Sincerely,

GLENN T. CORREA
Director

c Patrick Matsui, Chief of Planning and Development
Kivette Caigoy, Maui County Department of Planning

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

May 4, 2005

Glenn T. Correa, Director
County of Maui
Department of Parks & Recreation
700 Hali'a Nakoa Street, Unit 2
Wailuku, Hawai'i 96793

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear Glenn T. Correa;

Thank you for your letter dated March 31, 2005 regarding your review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project. We acknowledge your statement that you do not have any comments or objections on the project at this time.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

04-57

LINDA LINGLE
GOVERNOR OF HAWII

RECEIVED
APR - 7 2005
BOW ENGINEERING & DEVELOPMENT, INC

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR FOR LAND

DEPUTY DIRECTOR FOR
THE COMMISSION ON
WATER RESOURCE MANAGEMENT

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND
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CONVEYANCES
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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE
COMMISSION
LAND MANAGEMENT
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

March 29, 2005

Raadha M. B. Jacobstein
46-304 Nahewai Street
Kaneohe, Hawaii 96744

Dear Raadha M. B. Jacobstein:

Subject: Manele Small Boat Harbor Ferry System Improvement Project

DOFAW has reviewed your letter dated March 22, 2005 regarding the potential impacts your project may have on our management programs and endangered species in particular. We have no objections to your project. Thank you for the opportunity to comment on the Manele Small Boat Harbor Improvements.

Sincerely yours,

Paul J. Conry
Administrator

C: Eric Yuasa, DLNR Engineering Division

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

May 4, 2005

Paul J. Conry, Administrator
State of Hawai'i
Department of Land and Natural Resources
Division of Forestry and Wildlife
1151 Punchbowl Street
Honolulu, Hawai'i 96813

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

Dear Paul J. Conry;

Thank you for your letter dated March 29, 2005 regarding your review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project. We acknowledge your statement that you do not have any objections on the project at this time.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner

ALAN M. ARAKAWA
MAYOR

CARL M. KAUPALOLO
CHIEF

NEAL A. BAL
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE AND PUBLIC SAFETY

200 DAIRY ROAD
KAHULUI, MAUI, HAWAII 96732
(808) 270-7561
FAX (808) 270-7919

March 28, 2005

Raadha M.B. Jacobstein
46-304 Nahewai Street
Kaneohe, HI 96744

Subject: Manele Small Boat Harbor Improvement Project TMK (2)4-9-017:002

Dear Raadha M.B. Jacobstein,

I have had the opportunity to review the above subject. At this time, the project details appear to meet any fire department concerns. The addition of an 8" water line for fire protection is a tremendous help. The road widths and emergency vehicle access ways will be looked at in detail during the building permit review. Please feel free to contact Lt. Scott English at 270-7122 if there are any concerns.

Sincerely,

Valeriano F. Martin
Captain
Fire Prevention Bureau

Bow Engineering & Development, Inc.
1953 S. Beretania Street, PH-A
Honolulu, Hawaii 96826

Telephone (808) 941-8853
Fax: (808) 945-9299

May 4, 2005

Valeriano F. Martin, Captain
County of Maui
Department of Fire and Public Safety
200 Dairy Road
Kahului, Hawai'i 96732

Subject: Comments on the Draft Environmental Assessment (EA)
Mānele Small Boat Harbor Ferry System Improvement Project
TMK (2)4-9-17:6 and 2-acre portion of (2)4-9-17:2; Lāna'i Island, Hawai'i

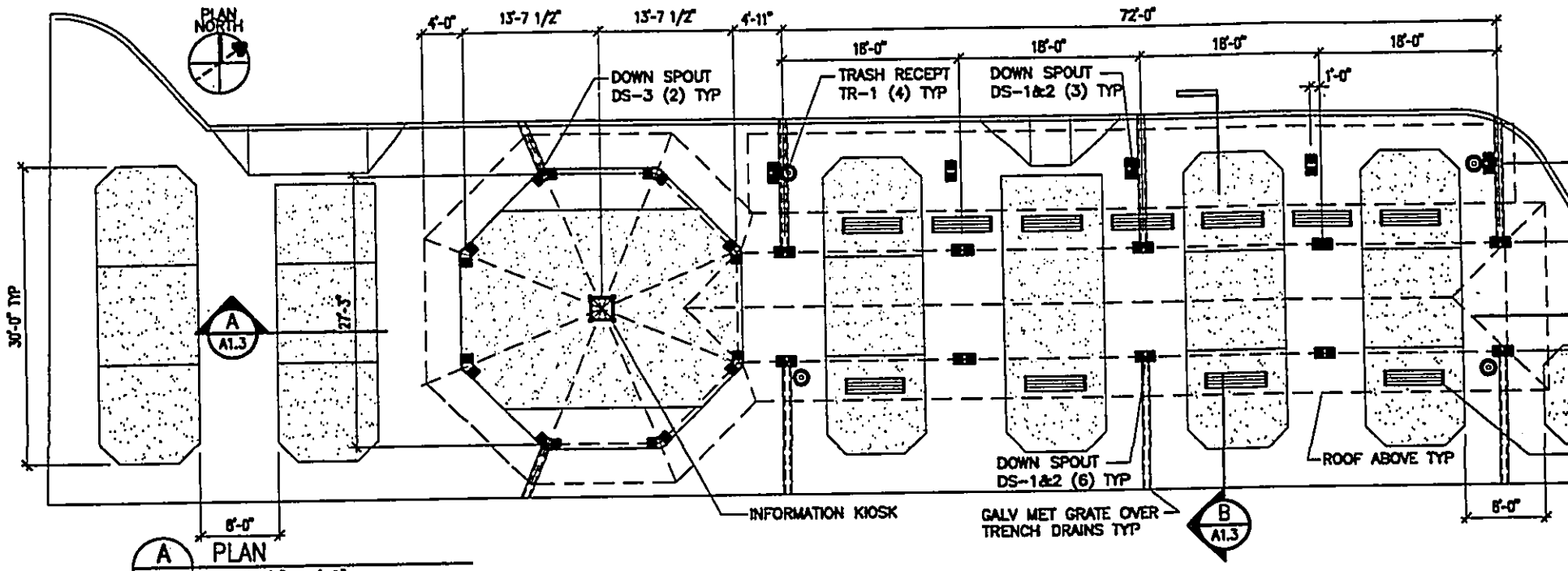
Dear Valeriano F. Martin;

Thank you for your letter dated March 28, 2005 regarding your review of the Draft EA for the Mānele Small Boat Harbor Ferry System Improvement Project. We acknowledge your statement that project details appear to meet fire department concerns at this time. As stated in your letter, evaluation of standard department requirements will be addressed during the building permit review.

Your letter and this response will be included in the Final EA upon its completion. Should you have any questions, do not hesitate to contact me at 236-0663.

Sincerely,

Raadha M. B. Jacobstein
Environmental Planner



A A1.2 PLAN
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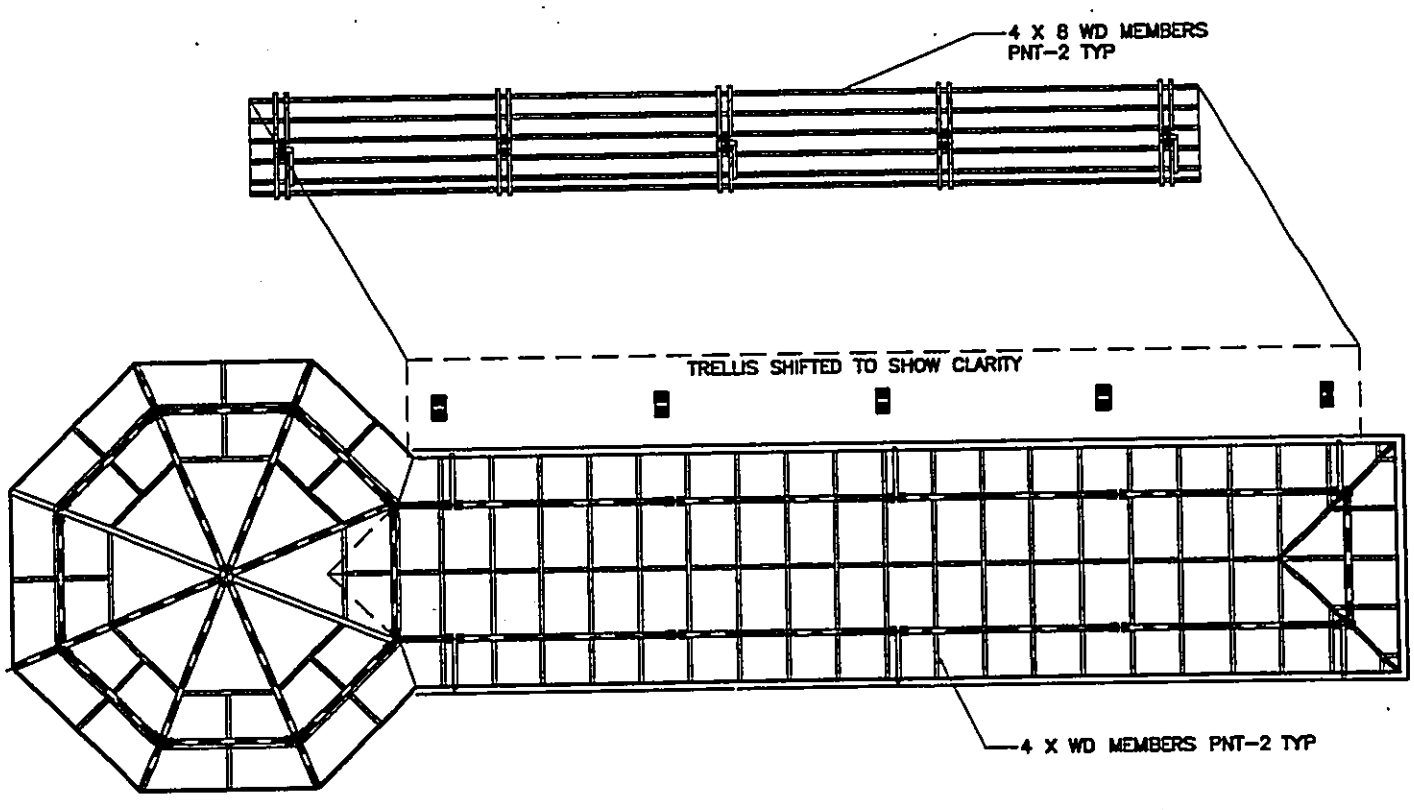

B A1.2 REFLECTED CEILING PLAN
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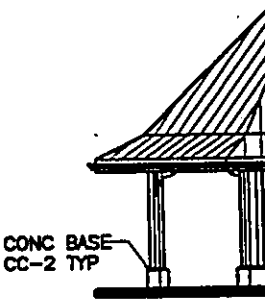

C A1.2 WEST
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D A1.2 NOR
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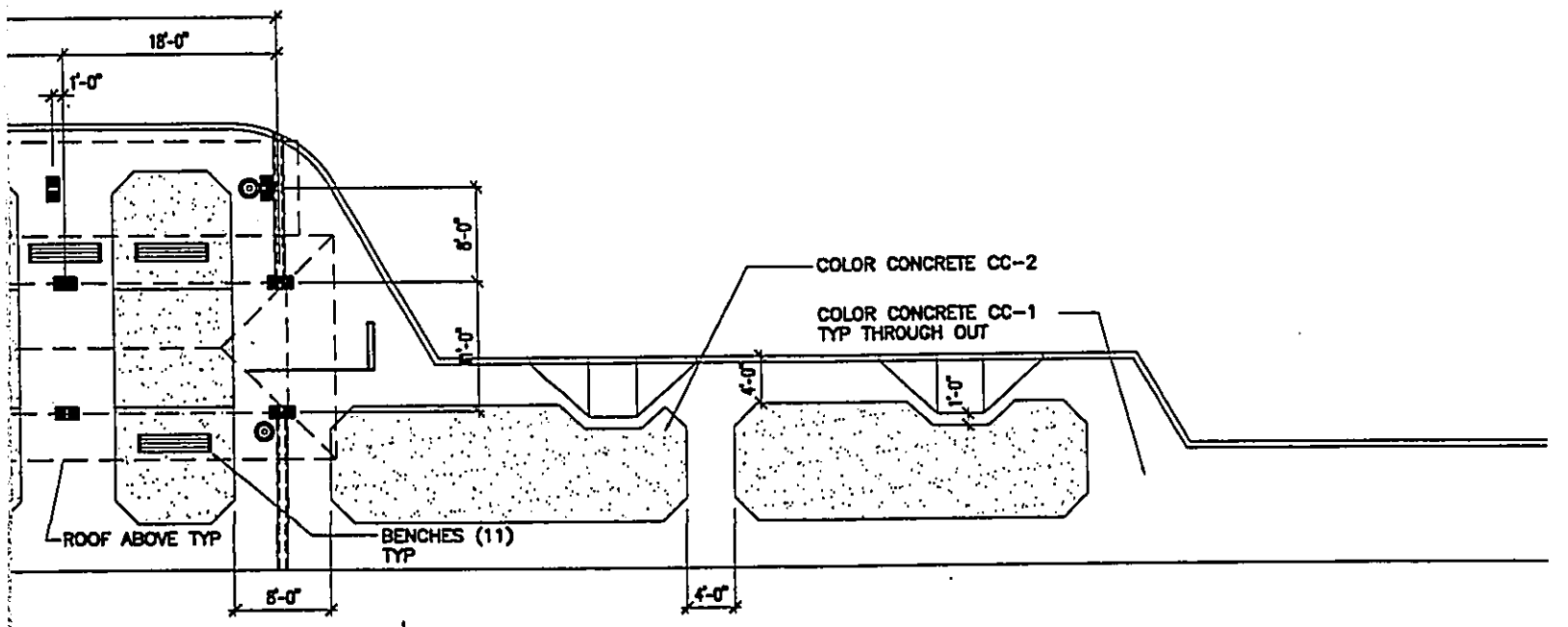

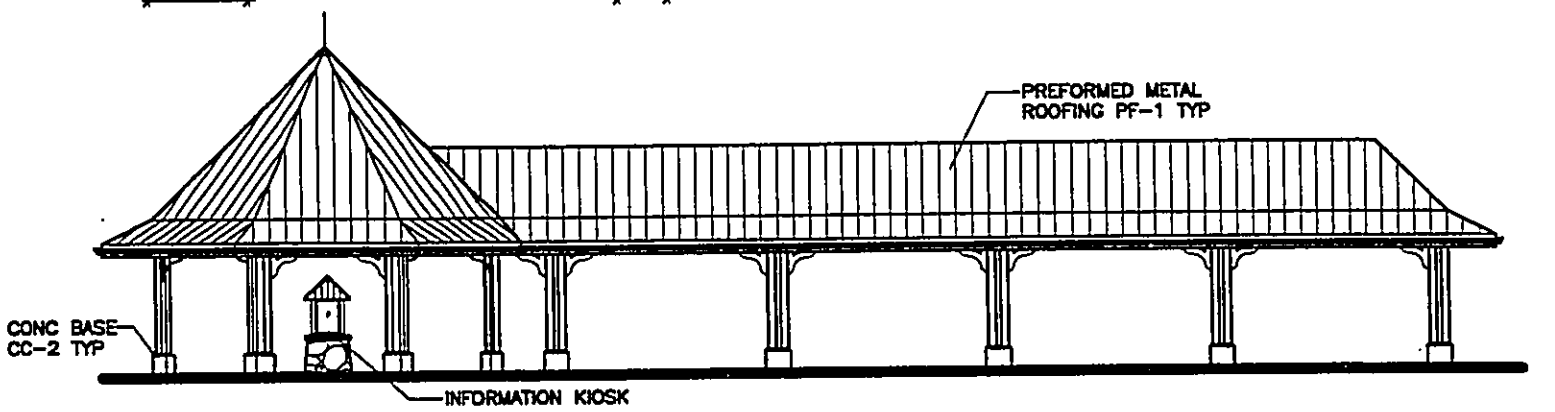

C / A1.2 WEST ELEVATION
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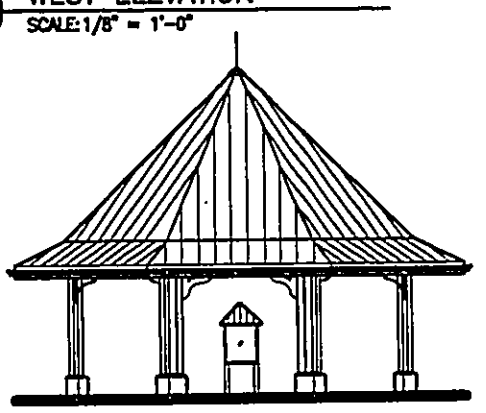

D / A1.2 NORTH ELEVATION
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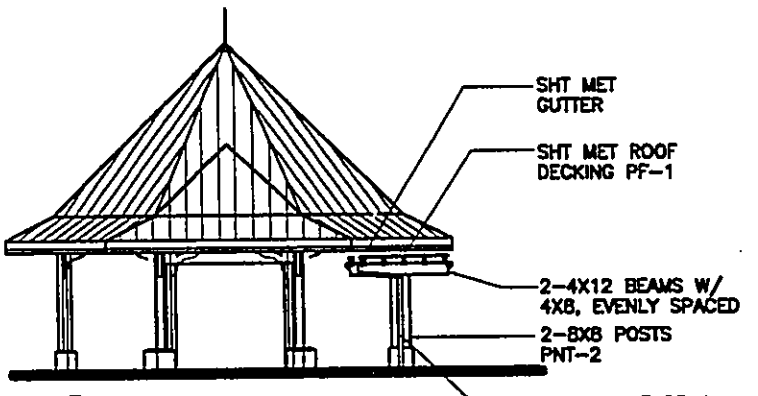


D / A1.2 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

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

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE — 4/30/06 Exp. Date of License

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

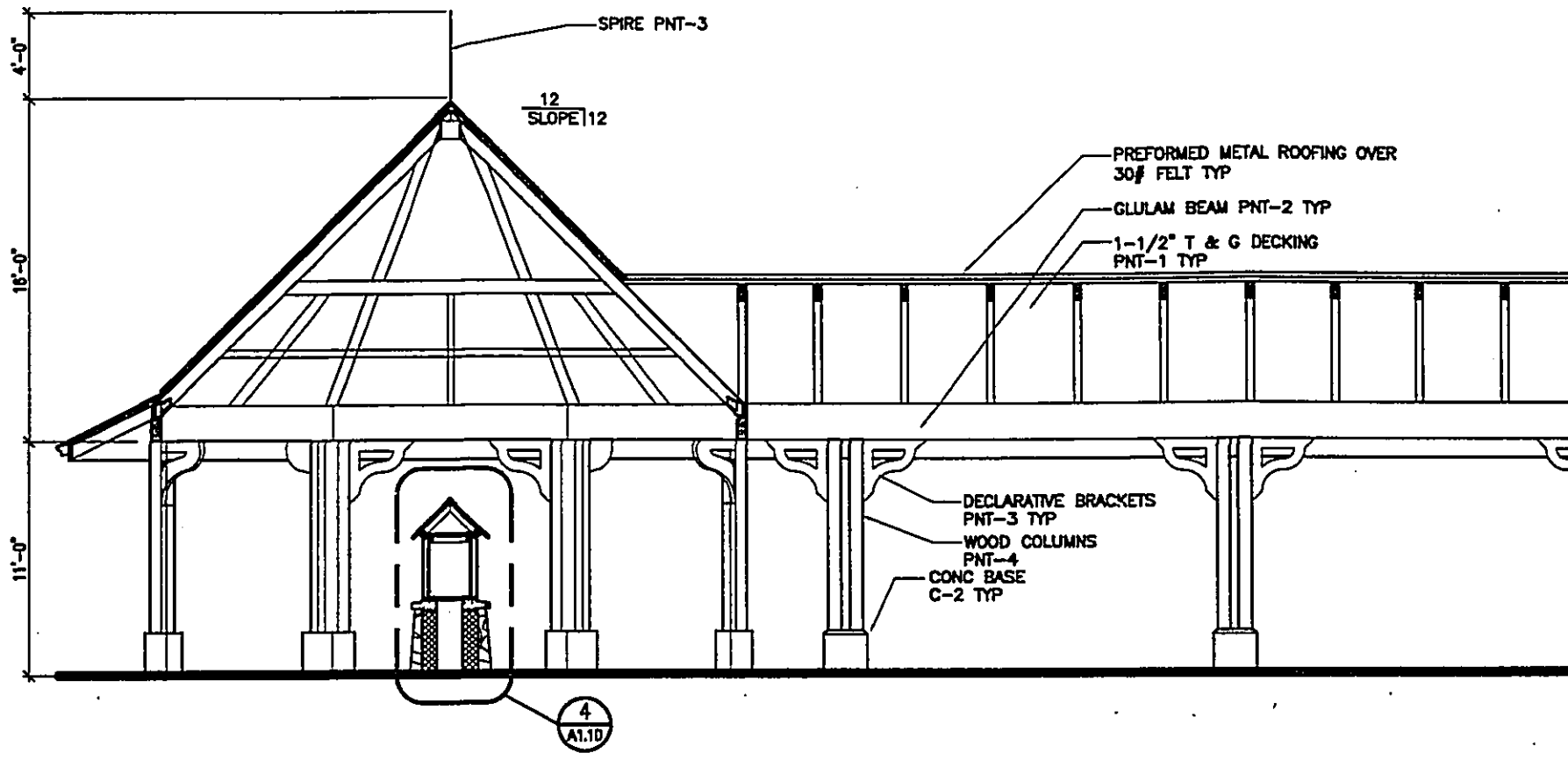
MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS

BOARDING STATION SHELTER PLANS, ELEVATIONS & SECTIONS

DESIGNED: JAA	SUBMITTED: --
DRAWN: JC	DATE: JULY. 2005
CHECKED: JAA	SCALE: AS NOTED

APPROVED: _____ _____
CHIEF ENGINEER — DATE

DRAWING NO. A1.2



KIOSK DETAIL

A A1.3 LONGITUDINAL SECTION

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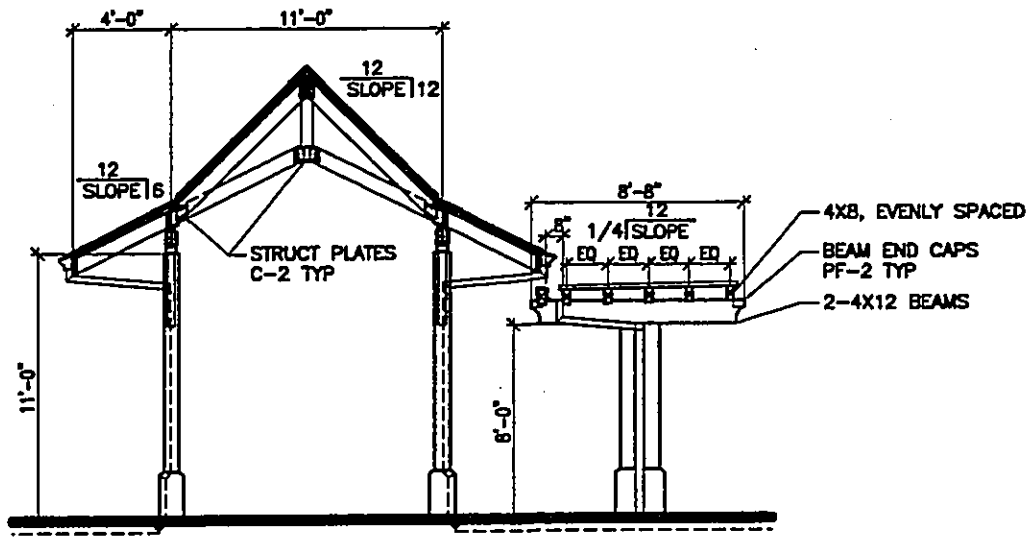

B A1.3 CROSS SECTION

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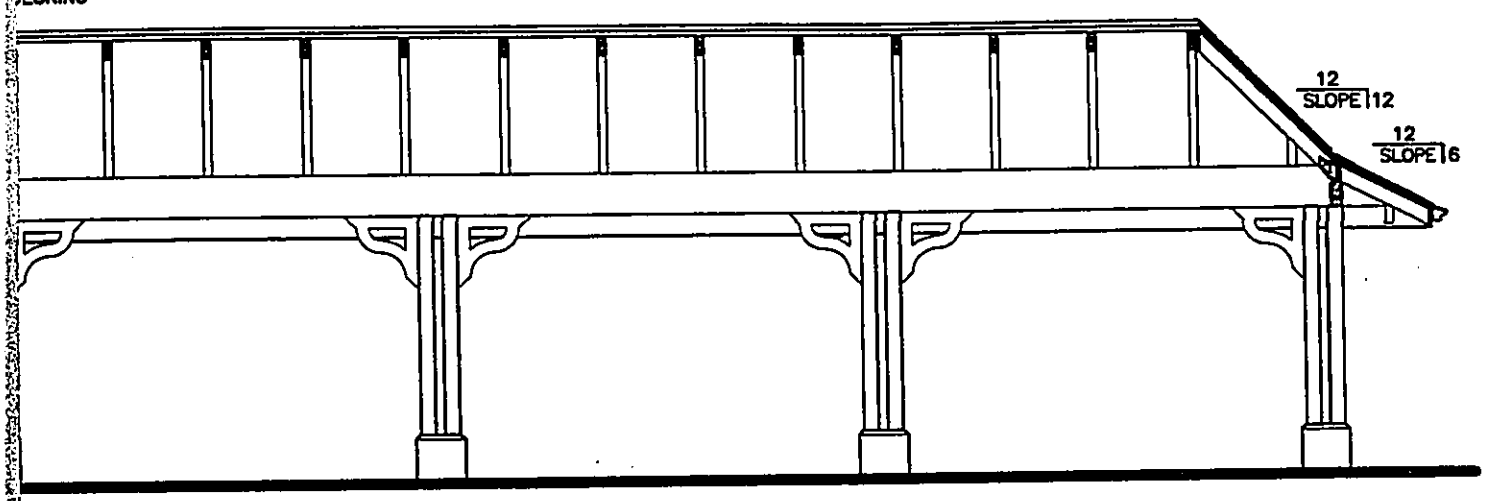
ECKING



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

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE

4/30/06
Exp. Date of License

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS

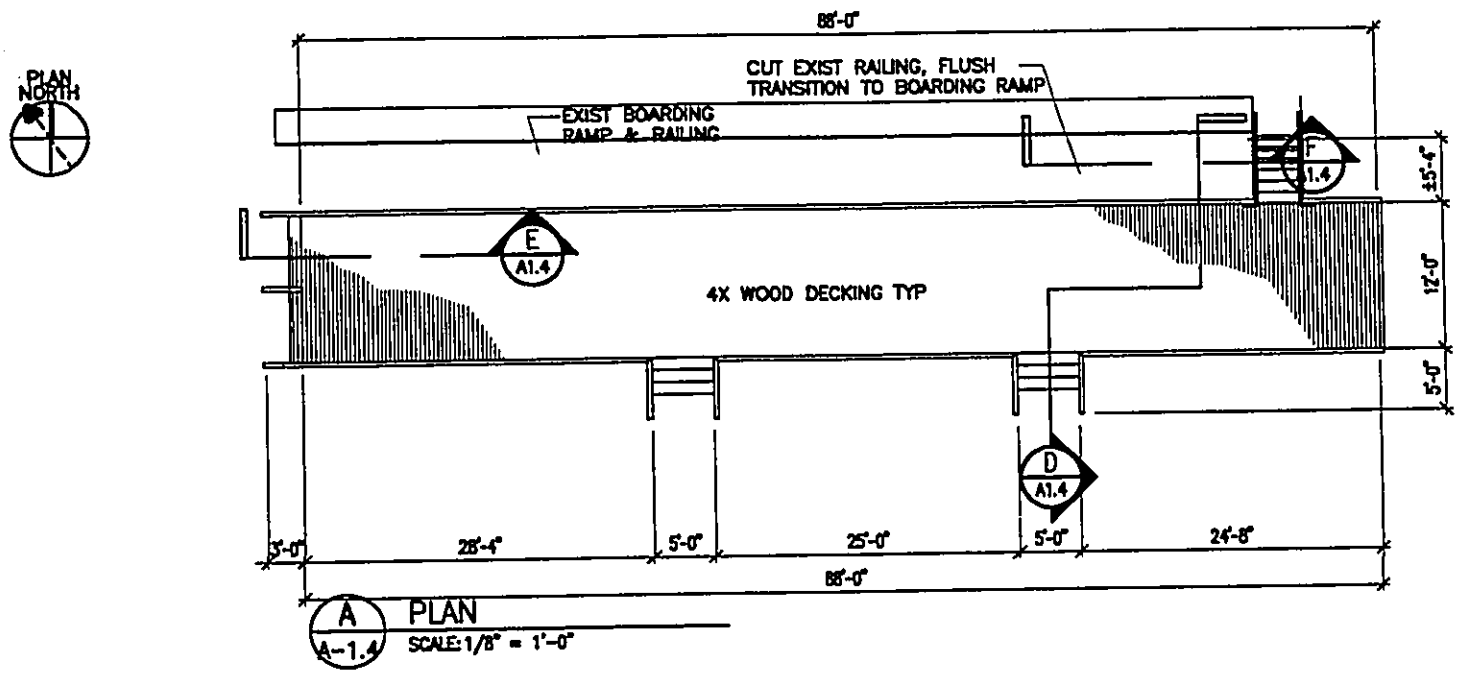
BOARDING STATION SHELTER PLANS, ELEVATIONS & SECTIONS

DESIGNED: JAA	SUBMITTED: –
DRAWN: JC	DATE: JULY. 2005
CHECKED: JAA	SCALE: AS NOTED

APPROVED:

CHIEF ENGINEER — DATE

DRAWING NO
A1.3



A A-1.4 PLAN
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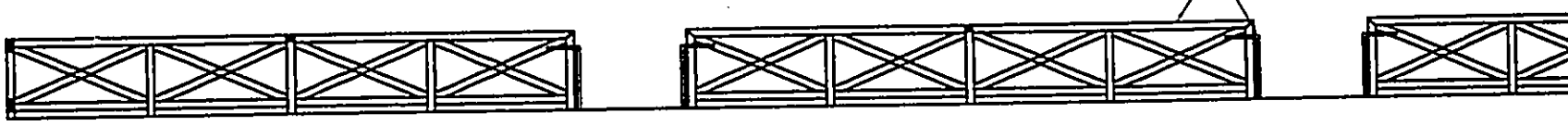
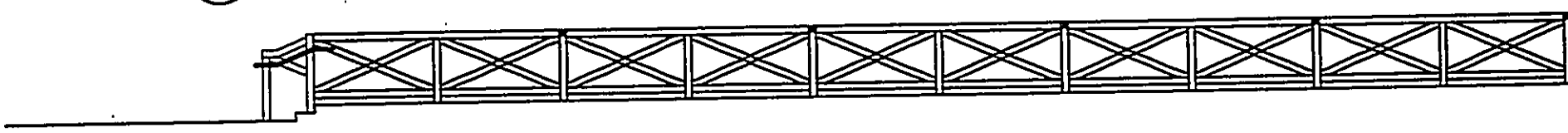


B A-1.4 SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



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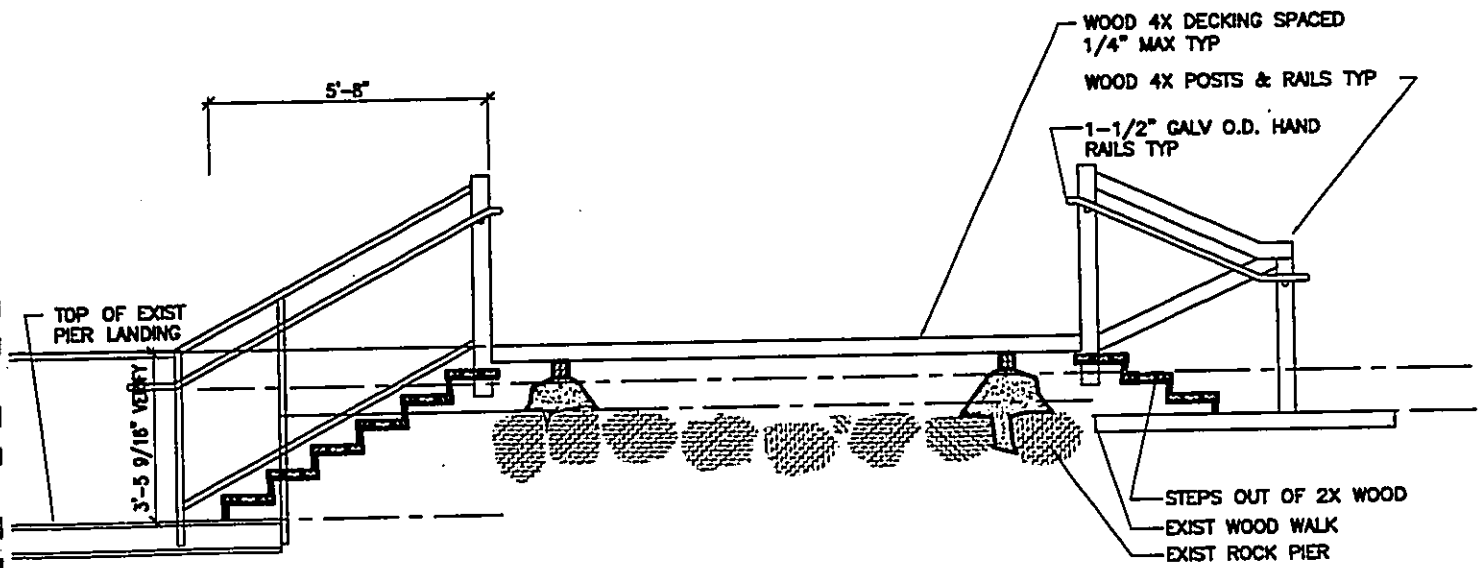

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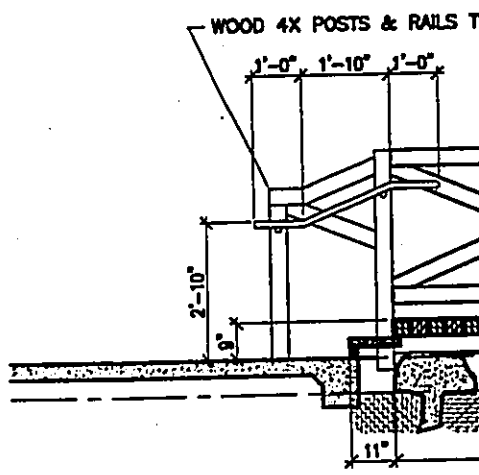

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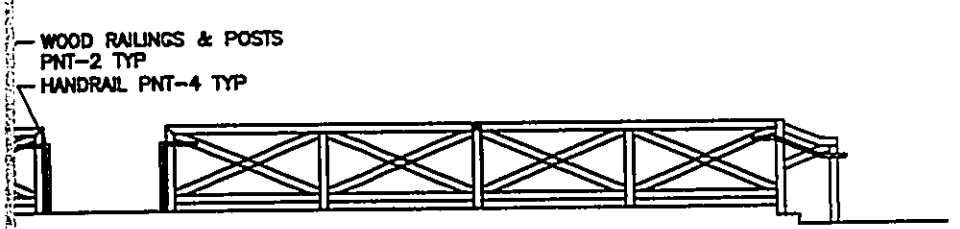

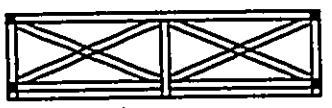

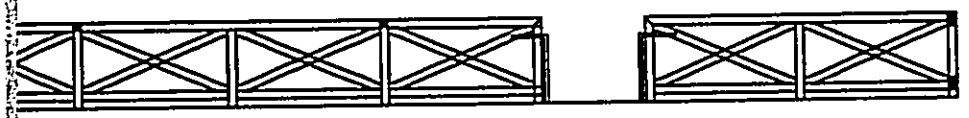

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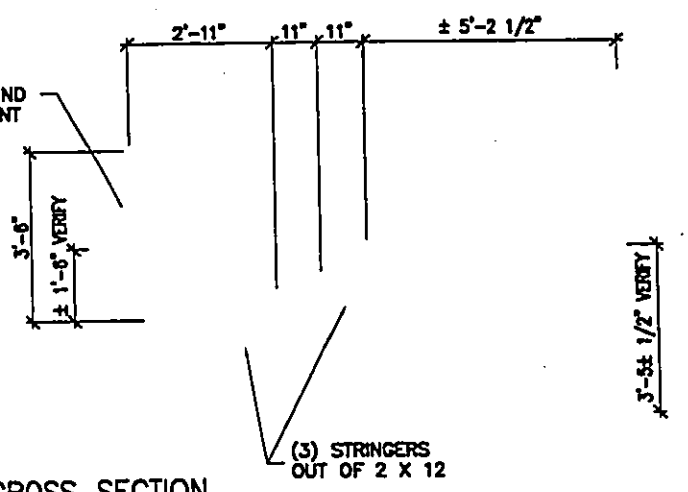
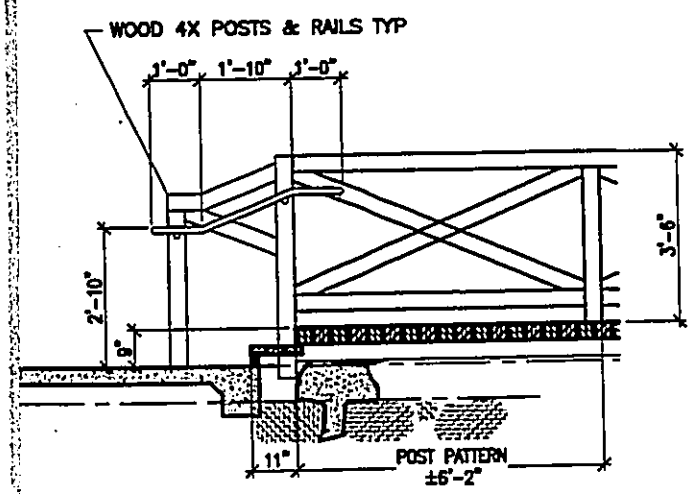




E / A-1.4 CROSS SECTION
SCALE:1/2" = 1'-0"

F / A-1.4 CROSS SECTION
SCALE:1/2" = 1'-0"

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS

BOARD WALK PLAN, ELEVATIONS & SECTIONS

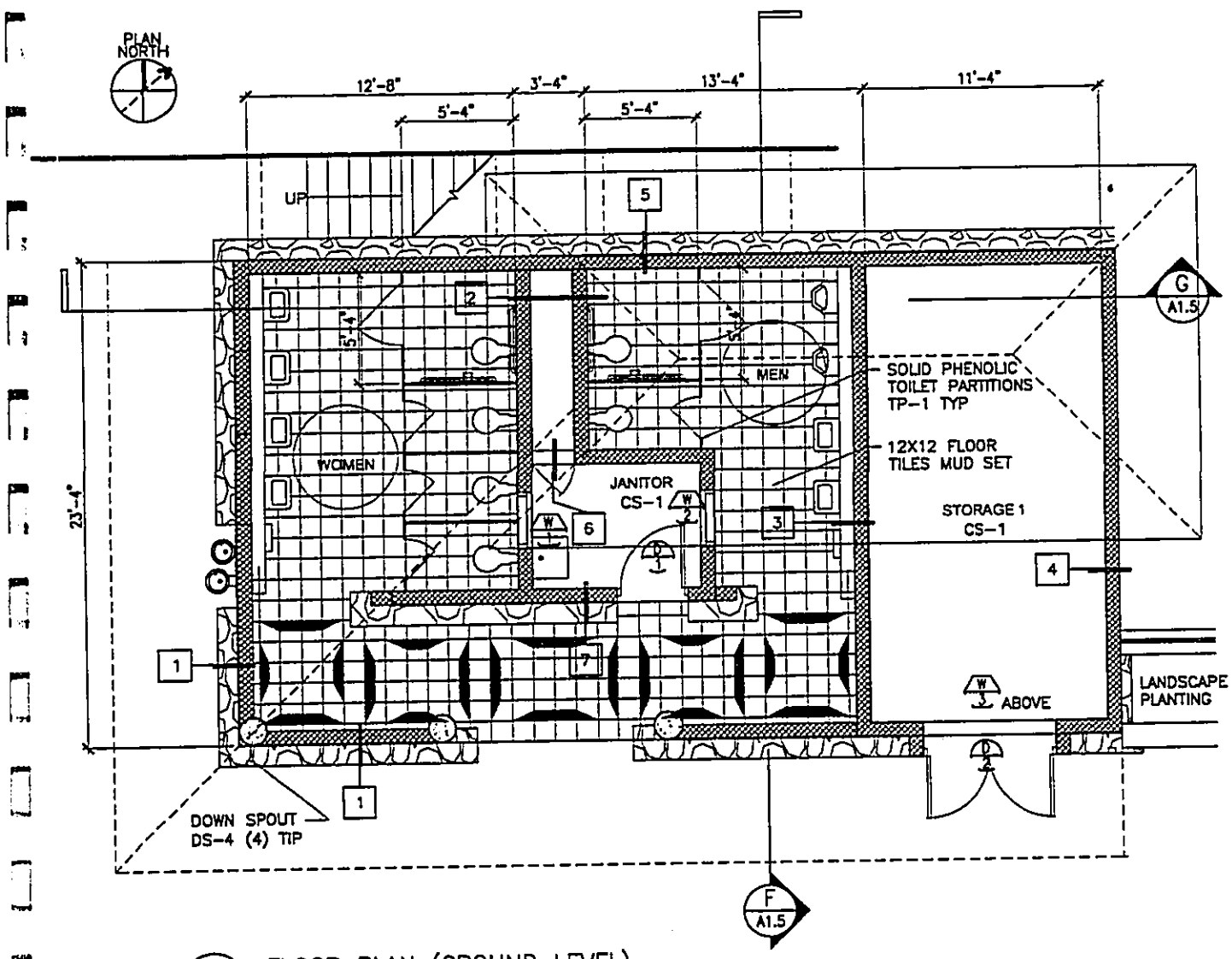
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE

4/30/06
Exp. Date of License

DESIGNED: JAA	SUBMITTED: –
DRAWN: JC	DATE: JULY. 2005
CHECKED: JAA	SCALE: AS NOTED
APPROVED:	DRAWING NO. A1.4
CHIEF ENGINEER	DATE

JOB NO. SHEET NO. OF SHEETS



A A1.5 FLOOR PLAN (GROUND LEVEL)
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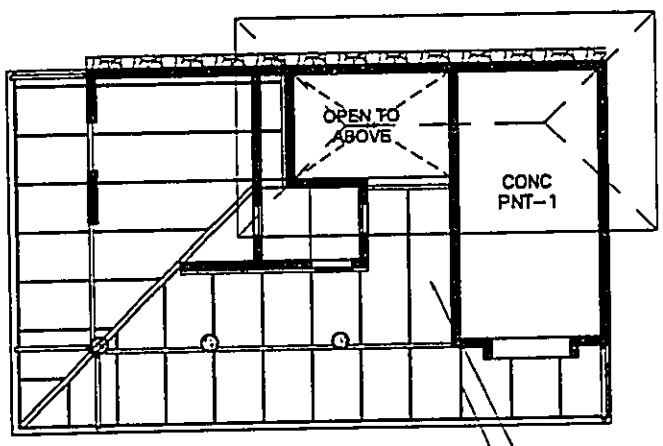

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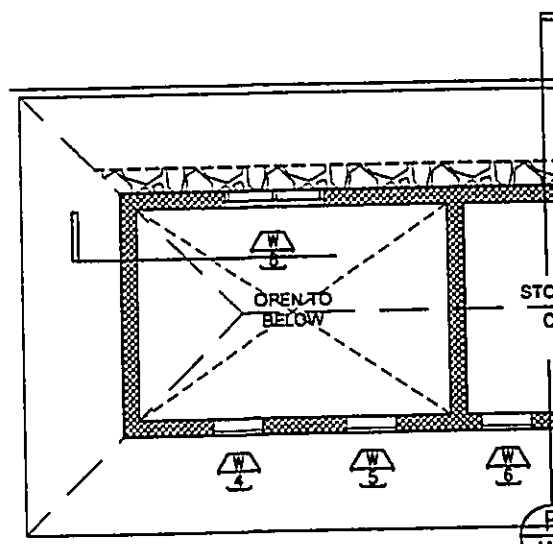

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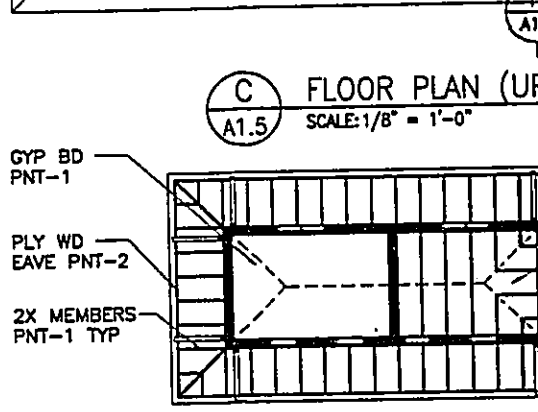

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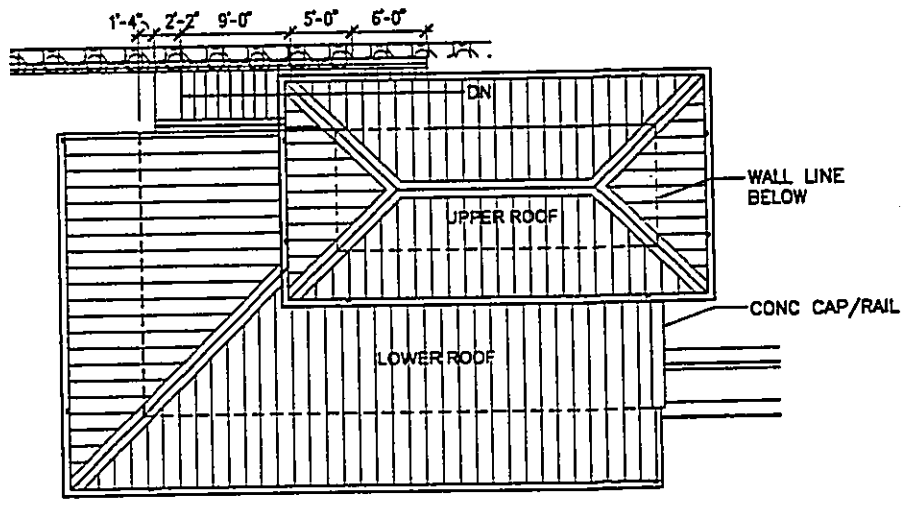

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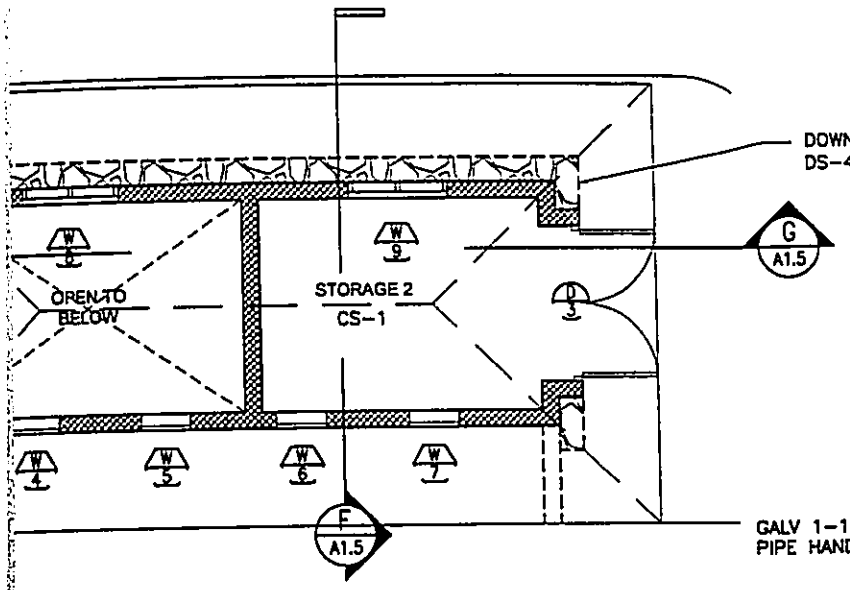

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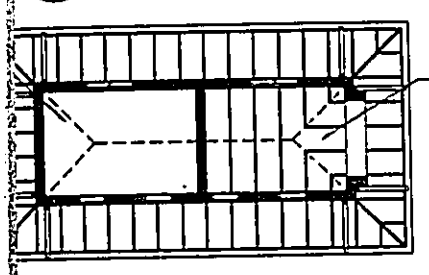

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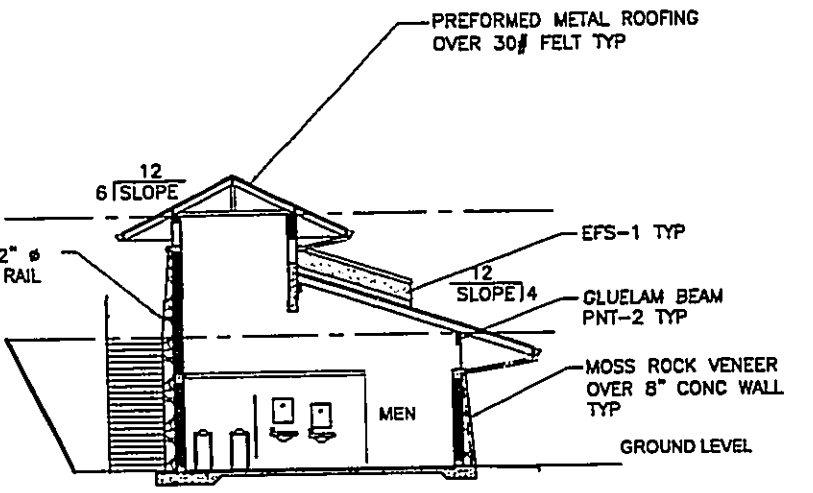

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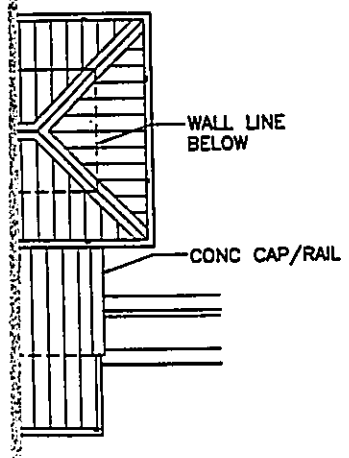

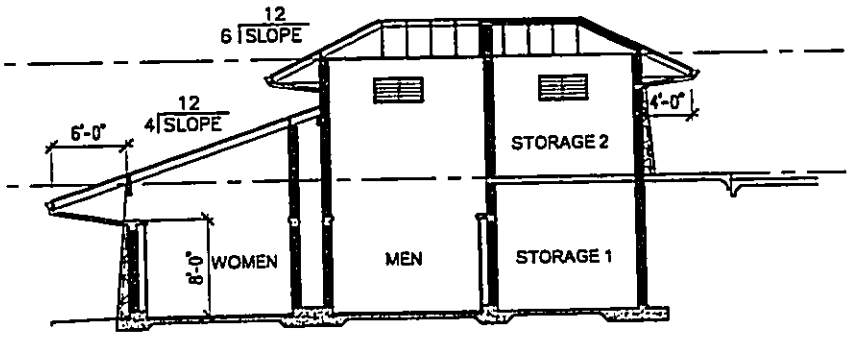

G A1.5 LONGITUDINAL SECTION
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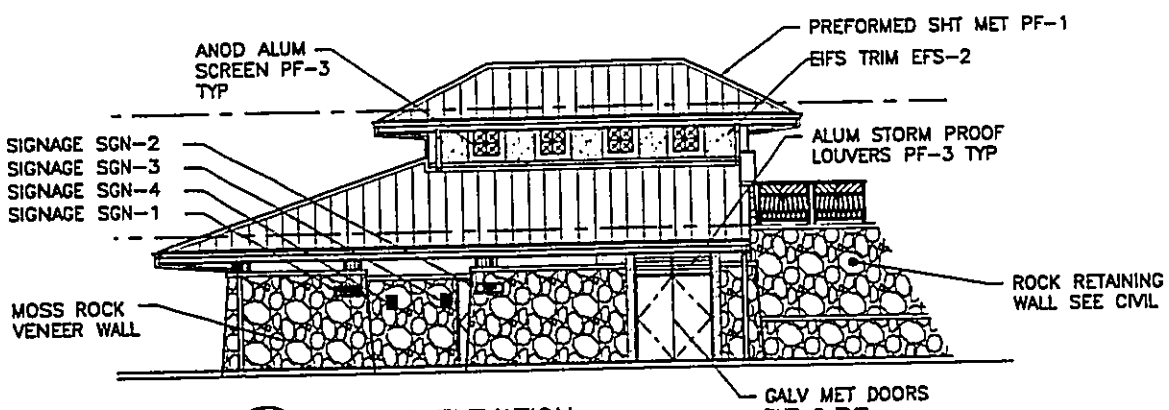
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS

COMFORT STATION PLANS, & SECTIONS

DESIGNED: JAA	SUBMITTED: –
DRAWN: JC	DATE: JULY. 2005
CHECKED: JAA	SCALE: AS NOTED
APPROVED:	DRAWING NO. A1.5
CHIEF ENGINEER / DATE	



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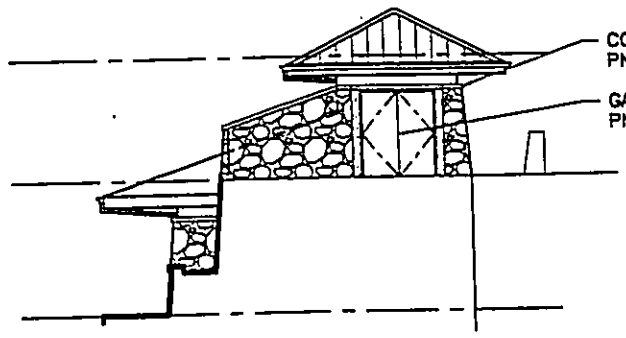

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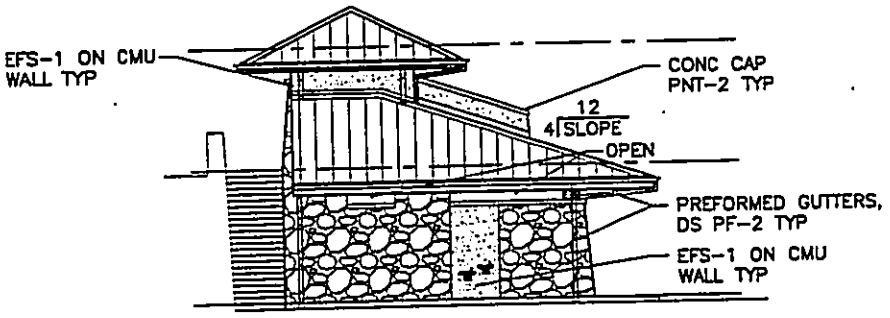

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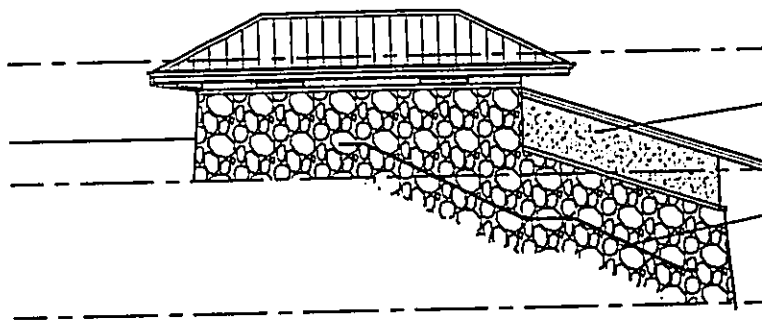

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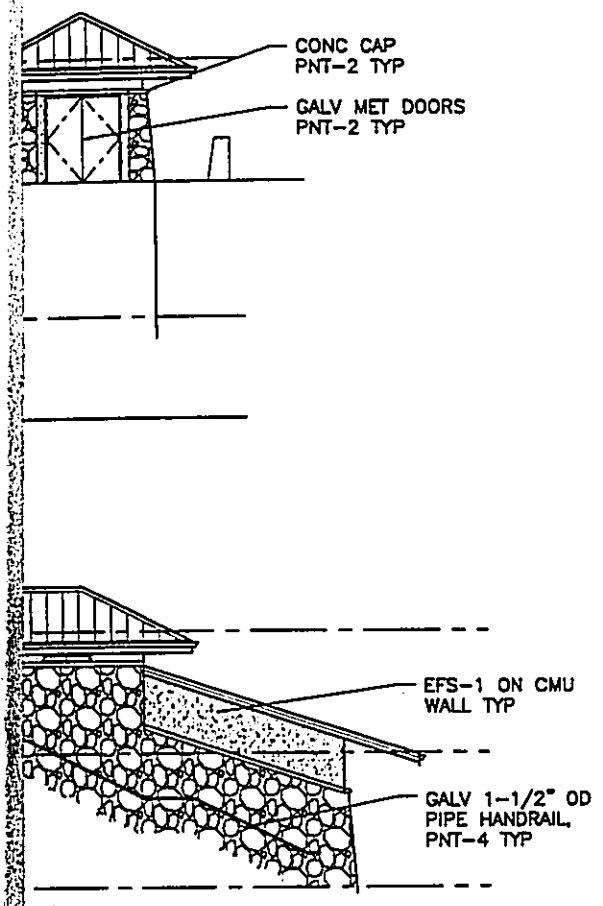

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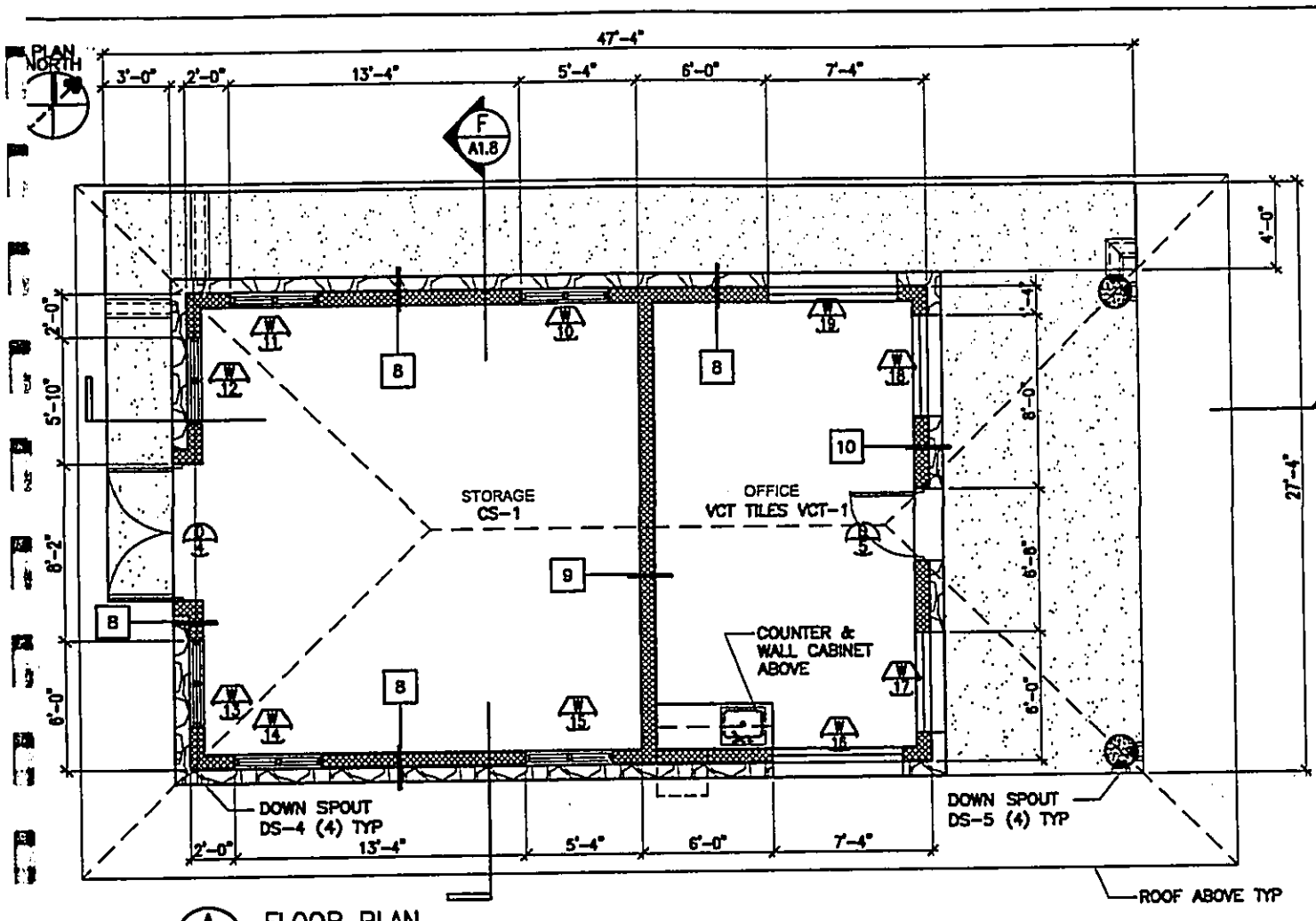
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS

COMFORT STATION ELEVATIONS

DESIGNED: JAA	SUBMITTED: –
DRAWN: JC	DATE: JULY. 2005
CHECKED: JAA	SCALE: AS NOTED
APPROVED:	DRAWING NO: A1.6

CHIEF ENGINEER — DATE



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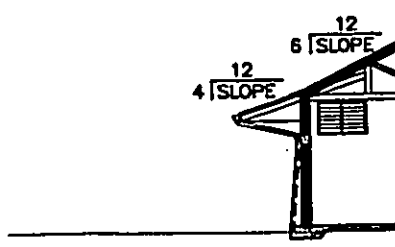

E A1.8 CROSS SECTION
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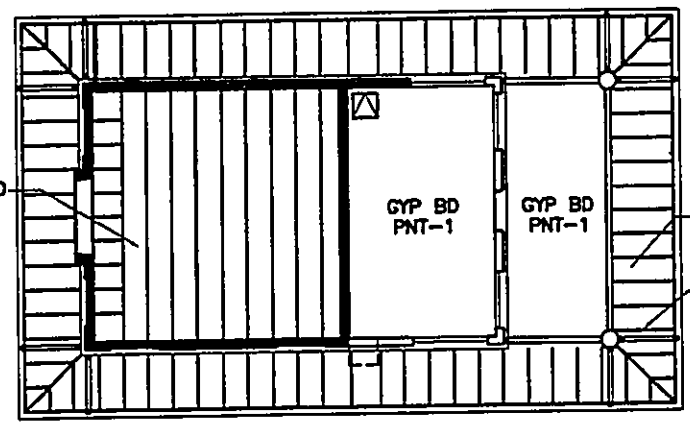
F A1.8 LONGITUDINAL SE
SCALE:1/8" = 1'-0"



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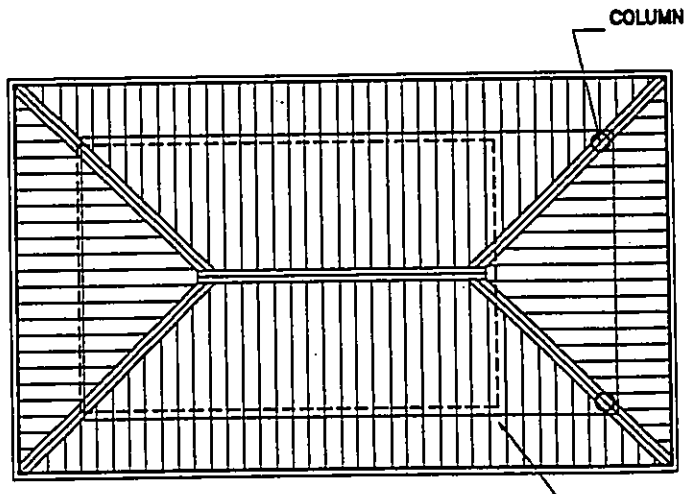

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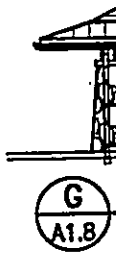

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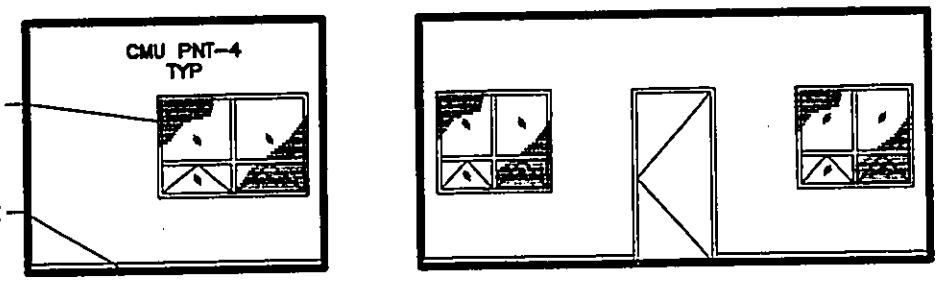

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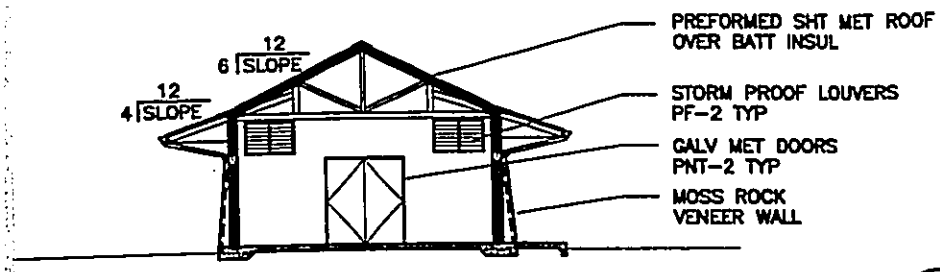

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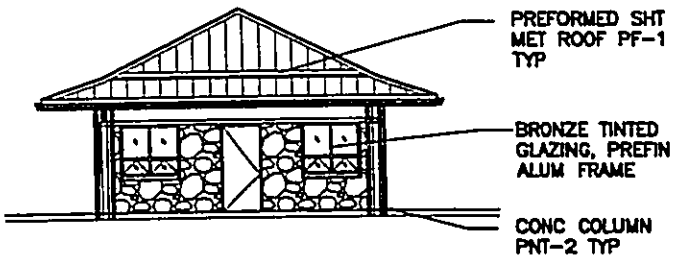

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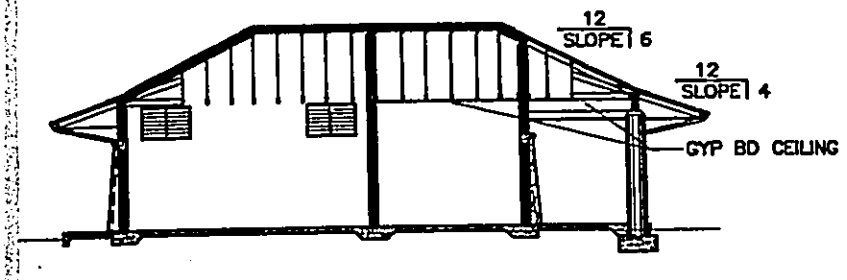

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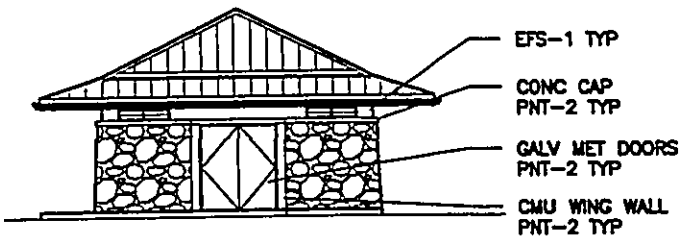
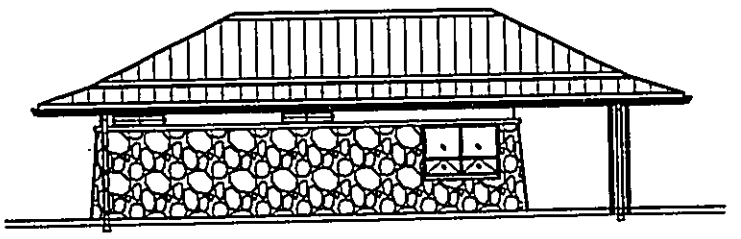


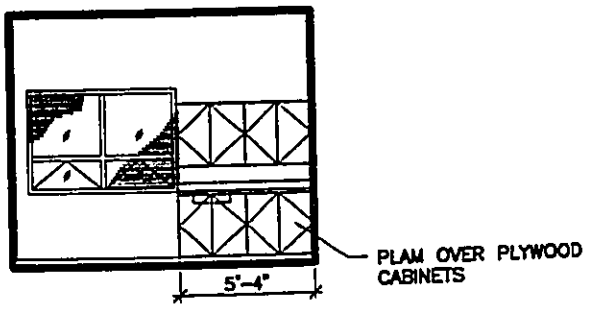
I A1.8 WEST ELEVATION
SCALE:1/8" = 1'-0"

COLUMN BELOW



G A1.8 SOUTH ELEVATION
SCALE:1/8" = 1'-0"

WALL BELOW



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

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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS

ADMINISTRATIVE OFFICE PLANS, ELEVATIONS & SECTIONS

DESIGNED: JAA	SUBMITTED: –
DRAWN: JC	DATE: JULY. 2005
CHECKED: JAA	SCALE: AS NOTED

APPROVED:
CHIEF ENGINEER DATE

DRAWING NO. A1.8

APPENDIX D

ELECTRICAL BASIS OF DESIGN

ELECTRICAL BASIS OF DESIGN

A. SCOPE OF WORK

Provide power, telephone and lighting systems to Harbor Office Building, Comfort Station, Ferry Shelter and improve lighting along roadways and parking lots.

1. POWER: Duct lines shall be extended from the existing electrical handhold to Harbor Office Building and existing Trilogy Building. Intermediate pull boxes will be provided. Conduit stub outs will be provided to future commercial areas. A 120/240v transformer will be installed to power the Harbor Office Building where the power and lighting needs of the Comfort Station, Ferry Station, roadway and parking lots will be connected. The existing Trilogy Building shall request electrical service from MECo that will meet the building needs.

2. TELEPHONE: Duct line will be extended from the existing Verizon handhold to Harbor Office Building and the vicinity of the existing Trilogy Building. There is an existing fiber optic cable that runs across the proposed Ferry boat parking lot. This cable is owned and maintained by Pacific Lightnet and will be protected during construction.

3. LIGHTING: Ferry parking lot, boat trailer parking and roadway will be provided with an 18 foot light pole with 100W high pressure sodium lamp. Some of these light poles will be "ON" at dusk and "OFF" at 10:00 p.m. The rest will be "OFF" at dawn and will serve as security lights. Lights near the dock will be a low profile bollard lights. It is not intended to light the dock fingers. At the boat ramp, a light pole controlled by a rotary timer switch will be provided.

4. LAMP: Light fixtures for the comfort station, harbor office and ferry shelter will be made of non-corrosive materials and will utilize high efficient lamps with energy saving ballast.

APPENDIX E

LANDSCAPING AND IRRIGATION PLAN

LANDSCAPE BASIS OF DESIGN

1. REFERENCES

Tropical Landscape Plants, Dr. Fred Rauch, 1996
Growing Native Hawaiian Plants, Heidi Leianuenue Bornhorst, 1996
A Native Hawaiian Garden, John L. Culliney and Bruce P. Koebele, 1999
Salt and Wind Tolerance of Landscape Plants for Hawaii, Bezona et al., 1996
Paspalum vaginatum: An alternative to Bermudagrass, George Ralish, hhtp://grove.ufl.edu/~turf/turfcult/ralish.html
Ocean Water as a Substitute for Postemergence Herbicides in Tropical Turf, Greg Wieco. Weed Technology ,Volume 17, Issue 4, pp: 788-791

2. DESIGN CRITERIA

A. Observe the cultural/ historical significance of Lanai Small boat Harbor and enhance much of the existing conditions with complimentary landscape features.

B. Use Best Management Practices and integrate innovative design solutions to address life cycle costs associated with future landscape maintenance.

C. Use Best Management Practices and integrate biological sustainable features into the storm water management for site runoff.

D. Provide erosion control with low maintenance installations of native groundcover plantings/ lava stone rubble/ mulch generated from clearing and grubbing.

E. Keep new landscape plantings relegated to native plant material suited to Lanai's coastal ecology.

F. Provide shade tree plantings in large paved areas to reduce the heat island effect.

G. Provide pedestrian circulation routes to connect to site facilities.

H. Provide passive recreation areas for harbor users.

3. LANDSCAPE CONCEPT

Lanai Small Boat Harbor landscaping has been designed to complement the existing coastal ecology of the surrounding area. Landscape features are expressed in an ecological/nautical theme to complement this facility's existing and proposed usage and architecture. These features include the following;

- Bio-swales for storm water collection. Native, no-mow ,drought tolerant Grasses such as Pili and Aki Aki, native to the Hawaiian Islands and important to early Hawaiian culture, are to be planted within the bio-swale to help reduce, slow, and cleanse the storm water runoff from the building and adjacent parking areas. A full irrigation system for this area is required for supplemental irrigation only. These areas will be zoned from an automatic controller with remote control valves and programmed to water only during periods of extended drought. If the user chooses, once established these areas do not require mowing and irrigation can be dropped to almost zero, with the grass browning and going dormant in conditions of drought.

- Native canopy trees are to be added to the parking lot area to reduce the heat island effect and provide shade and improve aesthetics to the ferry parking area. Tree plantings are at a ratio of 1 tree (25 gallon planting size) per 6 parking stalls to meet county standards.

- Coco palms are to be clustered as accent trees throughout the harbor area. This Polynesian introduced tree is symbolic of the tropical Hawaiian coastal area and the best choice of palm for the dry, salty, coastal conditions. These palms provide a distinctive vertical element to the landscape and with the exception of having to remove the nuts, will not significantly contribute to debris in the harbor area. The massing of coco palms is important in creating a sense of place here; coco palms at the oceanside are one of the most enduring images of the Hawaiian landscape.

- Circulation is to be enhanced with the addition of crushed coral paths and lava rock stepping stones. The two paths to be added are as follows:

    1. Lava rock stepping stones from the existing fish cleaning station to the new concrete walkway between the comfort station and new harbor master facility.

    2. Crushed coral path bordering the new triangular park area that leads to the breakwater point. This path is to improve the access to the point for activities such as fishing and whale watching.

- A triangular park area will be located at the northern tip of the harbor. This area will be grassed and native groundcovers will be planted along the breakwater edge. Groundcover plantings will be planted in a subtle imagery of a "fishhook" to enhance sense of place and reinforce the harbor's function and architecture. The three existing monkey pods will remain for shade. A path will be installed to improve circulation (discussed above) and a cluster of Coco palms will be introduced to mark the entrance to the site. At this time no site furnishings are to be provided, though this option should be considered. An automatic irrigation system will be provided for this area.

- The landscape around the new Harbor Master Facility will be improved. Many of the existing trees here are volunteers or have been planted without any organization; therefore some of the existing trees will be removed/ transplanted depending on condition and conflicts with the new facilities and to re-organize the site. Those to be removed will be turned to mulch to be used in planting areas. Coco palms will be clustered throughout this area to accent the existing coco palms and enhance the sense of place and Hawaiiana that is associated with this tree and Hawaii. Because of the extensive disturbance during construction, this area is to be regrassed and for maintenance consistency with the rest of the site, a full automatic irrigation system is to be installed. The main site irrigation controller is to be housed in the storage area of the new harbor master building. The lawn areas will be grassed with Seashore paspalum. This species of grass is extremely salt tolerant for this coastal application and maintains a tight knit density. Weed control is possible with salt water applications, because many of the lawn invading weed species cannot handle salt while the Seashore paspalum remains unaffected. Because seashore paspalum does not produce many seed heads, it is necessary to install by stolons.

- Signage and complementary landscape plantings are proposed for the north side of the roadway at the main entrance. The signage will identify the Manele Small Boat Harbor entrance and consist of a lava stone wall approximately 6' width, 4' height with raised metal letters. The sign will be positioned to be visible from both directions, though the site lines favor the view for traffic traveling in the northerly direction. (1) Sign will be placed within the site at the tee intersection near the waters edge to identify direction of travel, with arrows indicating Ferry Terminal and Harbor Master Building. (2) Signs will be included to identify specific areas (e.g. Boat Launch Ramp and Long Term Boat Storage). These signs will be painted on aluminum and pole mounted.

- The coastline and transition into the surrounding forest areas is to be visually and ecologically enhanced with native groundcover/shrub plantings. These following species are recommended because of their prostrate growth habits and their suitability to survive along Hawaiian seaside conditions:

    1. Ilima papa *Sida fallax*

2. Naio papa — *Myoporum sandwicense*
3. Aki Aki — *Sporbuolus virginicus*
4. Pohinahina — *Vitex rotundifolia*
5. Pa'u-o-hi'iaka — *Jacquemontia ovalifolia*
6. Naupaka — *Scaevola taccada*

- Some of the native or Polynesian introduced canopy tree/ large shrub and palm species that are suitable to survive along Hawaiian seaside conditions and are already existing within or adjacent to the harbor are listed below.

1. Kiawe — *Prosopis pallida*
2. Milo — *Thespesia populnea*
3. Kamani — *Calophyllum inophyllum*
4. Variegated Hau — *Hibiscus tiliaceus*
5. Kokio ke'o ke'o — *Hibiscus arnottianus* subsp. *punaluuensis*
6. Hala — *Pandanus tectorius*
7. Kou — *Cordia subcordata*
8. Alahee — *Psydrax odorata*
9. Acacia koaia — *Acacia koaia*
10. A'ali'i — *Dodonaea viscose*
11. Coco Palm — *Cocos nucifera*

4. IRRIGATION CONCEPT

The landscape areas will receive scheduled watering from an automatic irrigation system. The low maintenance plant palette chosen for this project is salt, wind and drought tolerant native plants well adapted to this coastal ecology. Their regular water demands will be low, and frequent irrigation will only be required during the initial establishment period, and then can be limited to supplemental watering during periods of extended drought. The following is a description of irrigation system components.

- Irrigation will tap into the existing potable water system with a 2" gate valve, BWS approved backflow preventor, and 2" main line. The mainline will travel throughout the sight in a continuous loop and connect to the remote control valves.

- Remote control valves will be connected via buried wires to a 120v automatic controller. This controller will be housed in the storage area of the new Harbor Master facility.

- The controller will be programmed to provide scheduled water to designated zones in the landscape. Length and intensity of watering will be dictated by the type of plantings within the zone. Coastal native plantings have been specifically chosen because of their suitability to this site's harsh coastal

conditions and their salt/drought tolerant nature. Once the initial establishment period for the landscape is over, irrigation scheduling can be adjusted at the controller to minimize water usage and conserve resources. A rain sensor will be integrated into the control system to ensure scheduled irrigation does not happen when it is raining.

- The plants will be watered by a series of spray heads, rotors, and bubblers, depending on their situation. For water conservation, shrubs and trees will be watered by low flow ground level bubblers, and most groundcover areas will be serviced by matched precipitation spray heads. Larger turf areas will be watered by rotors to achieve economical equipment spacing.

5. LIFE CYCLE COSTS AND LOW MAINTENANCE PROVISIONS

Through discussions with Harbor staff, it has been conveyed that the available budget and man-hours for landscape maintenance is negligible and any future landscaping design require low maintenance. To this end, this landscape concept has carefully considered life cycle costs and integrated low maintenance landscaping elements into the design. By life cycle costs we are referring to the inclusion of future costs of a design element by measure of projected maintenance cost and consumption of present and future resources. Some of the low maintenance measures we have proposed are initially more expensive to implement, but over time have a low associated life cycle cost, which works to recapture, then save dollars over time. The following is a list of the maintenance saving measures.

1. Native Plants

    - Limited supply due to few growers on Lanai make native plants more expensive.
    - Their suitability to Hawaiian conditions makes them prone to fewer environmental stresses that weaken a plant making it susceptible to disease.
    - Their growth habit fits in to the surrounding vegetation requiring minimal pruning to maintain aesthetic continuity.
    - They have cultural and ecological value (hard to assess dollar figure).

2. Lava stone rubble strips

    - More expensive than vegetative groundcovers
    - Require virtually no maintenance once installed.
    - When replacing areas of vegetation, rubble will eliminate the need for irrigation system, therefore saving water over time.
    - Used as buffer to hold back forest area from parking lot area to reduce edge maintenance.
    - Slows and captures siltation to reduce parking lot cleanup.

3. Plugs/ Stolons (Aki Aki and Seashore paspalum)

- More expensive than seed, less expensive than sod.
- Typically quicker grow in period.
- Must be used with certain grass species that are hybrids, or do not produce many seed (the latter being the case for Seashore paspalum and Aki Aki).
- Both these species are well suited to salt conditions, allowing them to grow where most cannot survive.
- Seashore paspalum will be stonized and can tolerate 100% salt water making it possible to use saltwater as a selective herbicide. This has both cost and ecological implications.
- Seashore paspalum maintains a dense vegetative cover in saline conditions to out-compete weed seeds from external sources.
- Aki Aki grass must be plugged and is a native species that after establishment will require no mowing and little to no irrigation depending on the aesthetic desired, equating to a savings of manpower and water resources.

4. Automatic Irrigation

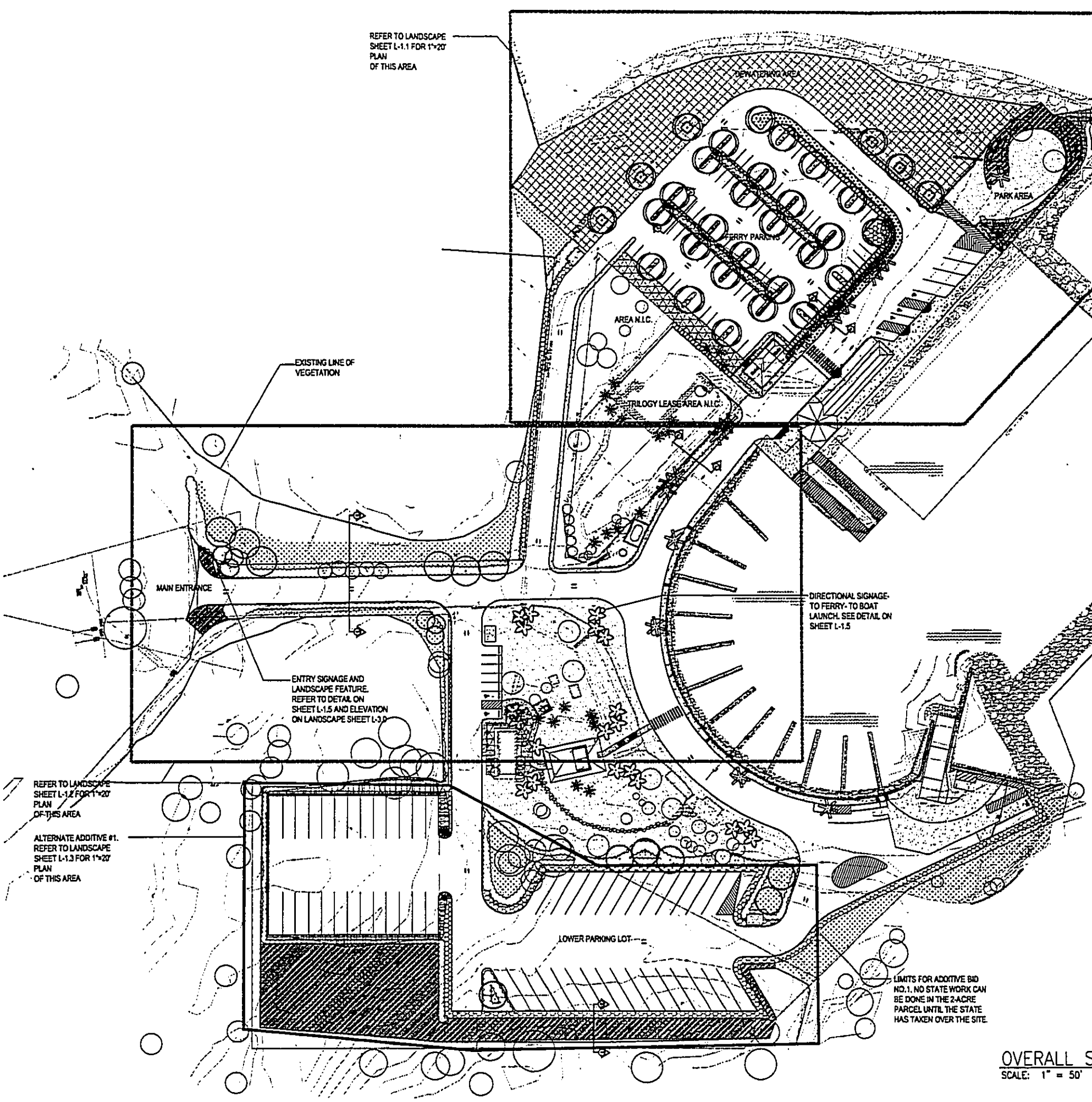
- Irrigations systems are an expensive alternative to using rainfall as the source for plant watering.
- Manele Harbor is too dry to implement and maintain a healthy landscape without supplemental watering, especially during the initial grow in period.
- The automatic controller with rain sensor will shut the system down during a rain event to save water.
- The automatic controller and remote control valves will make it possible to strictly schedule water delivery to the landscape, and requires very little training to operate.
- Eliminates man-hours spent hand watering and moving sprinklers.
- Suitable to the scale of this site.

5. Mulch

- Decomposes over time, needs to be replenished.
- Decomposition contributes to soil organic matter.
- Less expensive than most vegetative and non-vegetative groundcovers.
- Will be readily available after the clearing and grubbing of the existing site vegetation, no need to haul off-'site.
- Helps retain moisture and suppress weeds in planting areas, reducing water and maintenance man-hours.

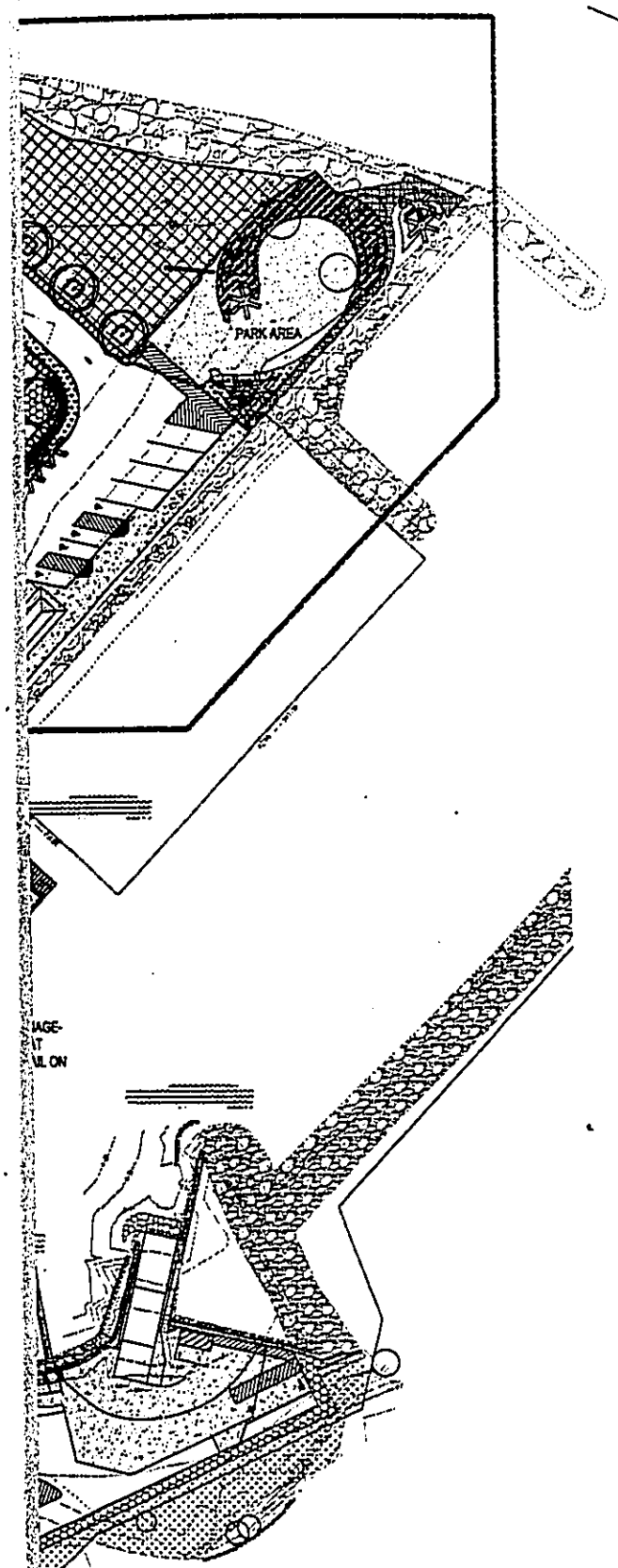
6. Bioswales

- More expensive than just grass.
- Helps slow the runoff from parking areas, helping prevent erosion/ sedimentation and allows filtration of water down into soil.
- Planted with Aki Aki grass and lined with lava rubble to reduce irrigation and maintenance costs.
- 'Green' solution to collecting water in drains and piping off-site.
- No curbing and drain inlets required



OVERALL S

SCALE: 1" = 50'



OVERALL SITE PLAN
SCALE: 1" = 50'

NORTH

PLANT SYMBOL LEGEND

GROUNDCOVERS		
	AKI AKI GRASS	SPORBUOLUS VIRGINICUS
	NAIO PAPA	MYOPORUM SANDWICENSE VAR.
	POHINAHINA	[illegible]ARDTUNDIFOLIA
	SEASHORE PASPALUM	PASPALUM VAGINATUM
TREES		
	EXISTING TREE TO REMAIN	
	KOU	CORDIA SUBCORDATA
	KIAWE	PROSOPIS PALLIDA
	KAMANI	CALOPHYLLUM INOPHYLLUM
	VARIEGATED HAU	HIBISCUS TILIACEUS
	MILO	THESPESIA POPULNEA
SHRUBS		
	BOUGAINVILLEA	BOUGAINVILLEA SP.
	KOKIO ULA	HIBISCUS KOKIO
	NAUPAKA	SCAEVOLA SERICEA
PALMS		
	FIJI FAN PALM	PRITCHARDIA PACIFICA
	MANILA PALM	VEITCHIA MERRILLII
	EXISTING PALM TO REMAIN	
NON-VEGETATIVE GROUNDCOVER		
	4" DEPTH WOOD CHIP MULCH	
	6" DEPTH LAVA STONE RUBBLE	

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JOEL H. KUROKAWA — LICENSED PROFESSIONAL LANDSCAPE ARCHITECT — No. 1043B — HAWAII, U.S.A.

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04/30/06
SIGNATURE EXPIRATION DATE
HAWAII DESIGN ASSOCIATES, INC.

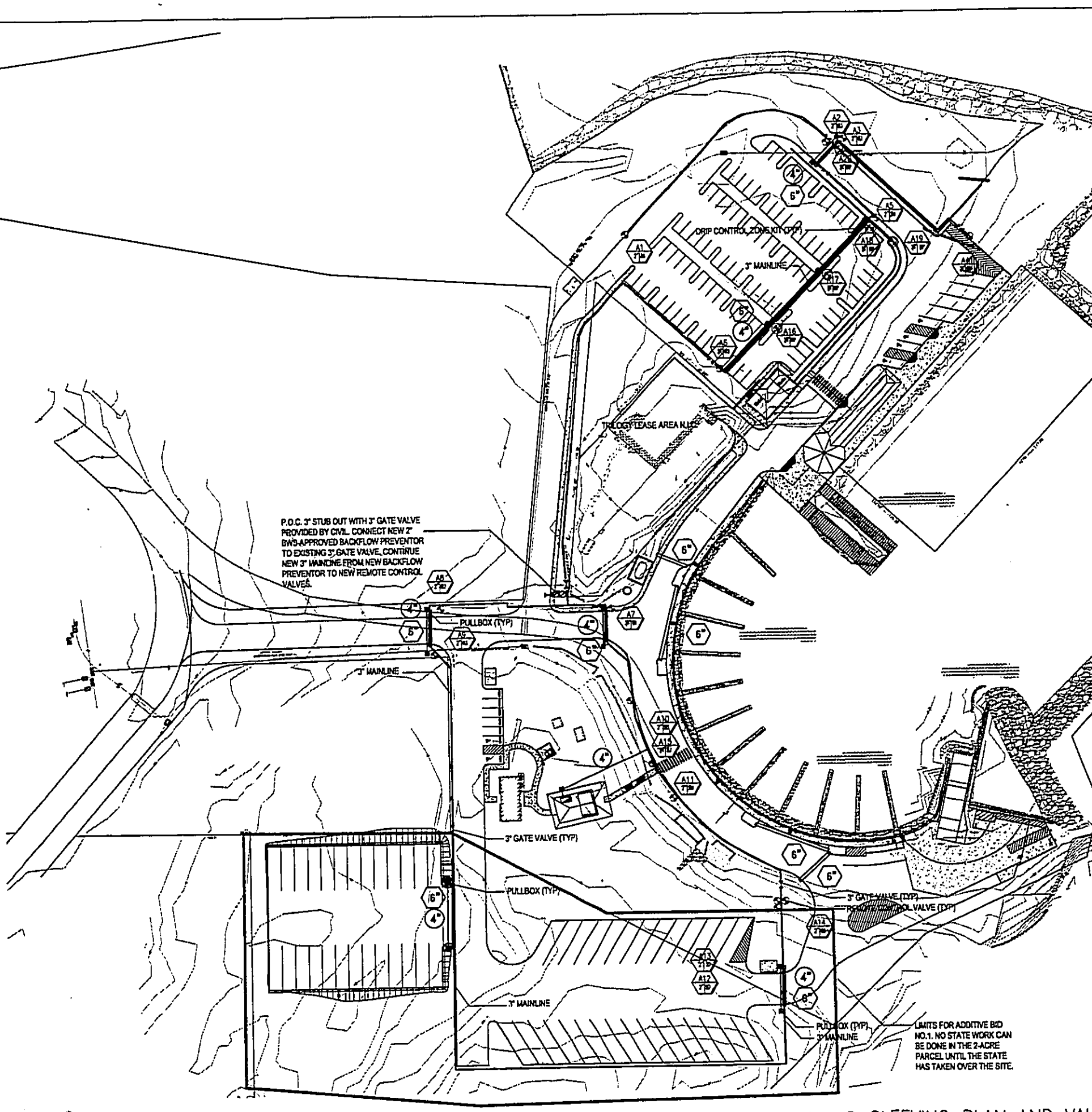
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS

LANDSCAPE PLAN

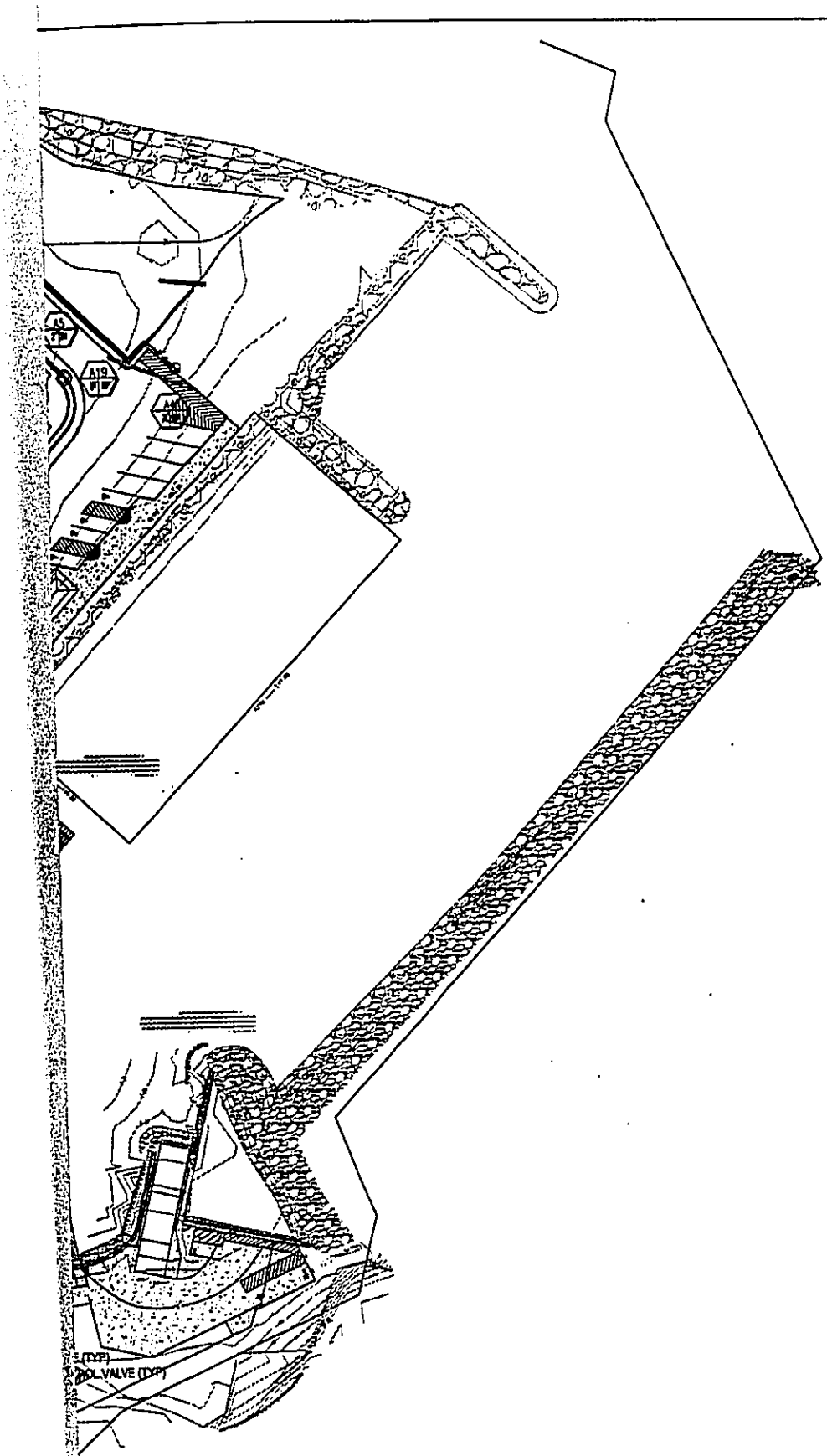
DESIGNED: PD	SUBMITTED: –
DRAWN: PD	DATE: JULY. 2005
CHECKED: JK	SCALE: AS NOTED
APPROVED:	DRAWING NO. L-1.0
CHIEF ENGINEER / DATE	

JOB NO. [illegible] SHEET NO. [illegible] OF [illegible] SHEET



IRRIGATION MAINLINE AND SLEEVING PLAN AND VAL

SCALE: 1" = 50'



LIMITS FOR ADDITIVE BID NO.1. NO STATE WORK CAN BE DONE IN THE 2-ACRE PARCEL UNTIL THE STATE HAS TAKEN OVER THE SITE.

EVING PLAN AND VALVE LAYOUT

NORTH

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

JOEL N. KUROKAWA
LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
No. 1063
HAWAII, U.S.A.

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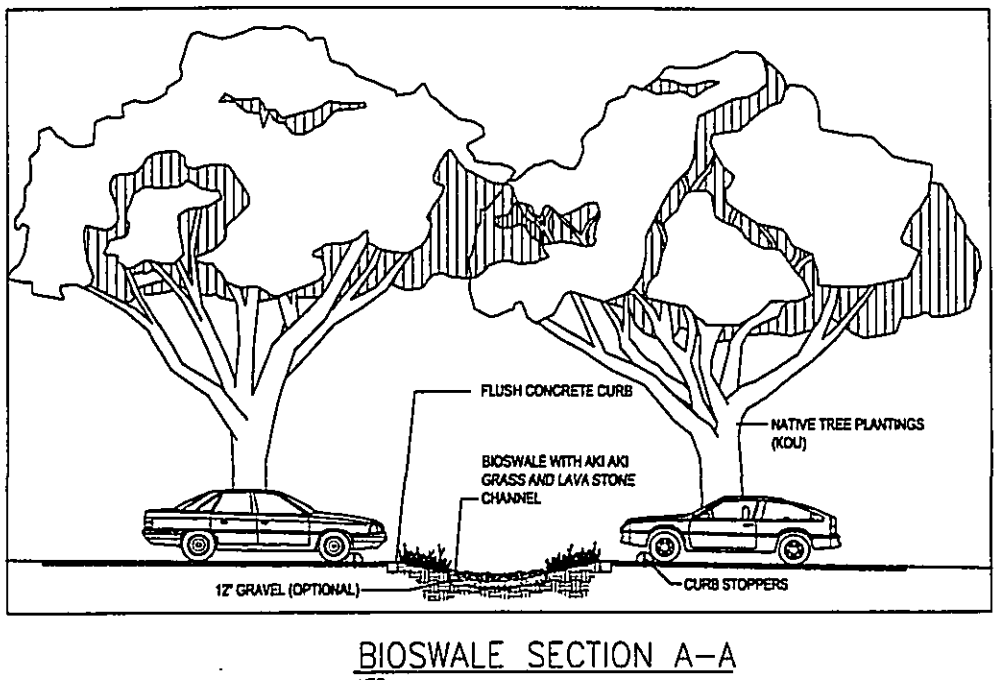
APPROVED:

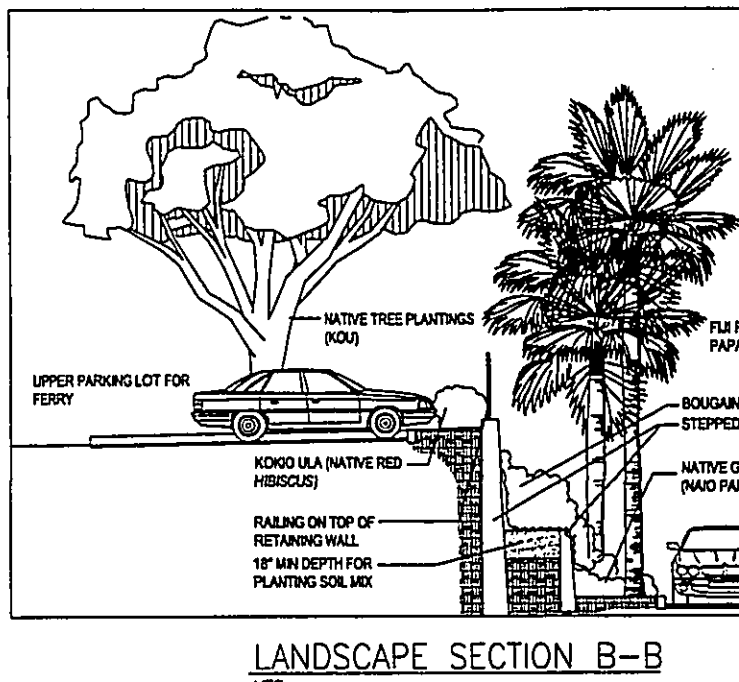
CHIEF ENGINEER DATE

DRAWING NO. L-2.0

JOB NO. DT1YH02A SHEET NO. OF SHEETS



BIOSWALE SECTION A–A
NTS



LANDSCAPE SECTION B–B
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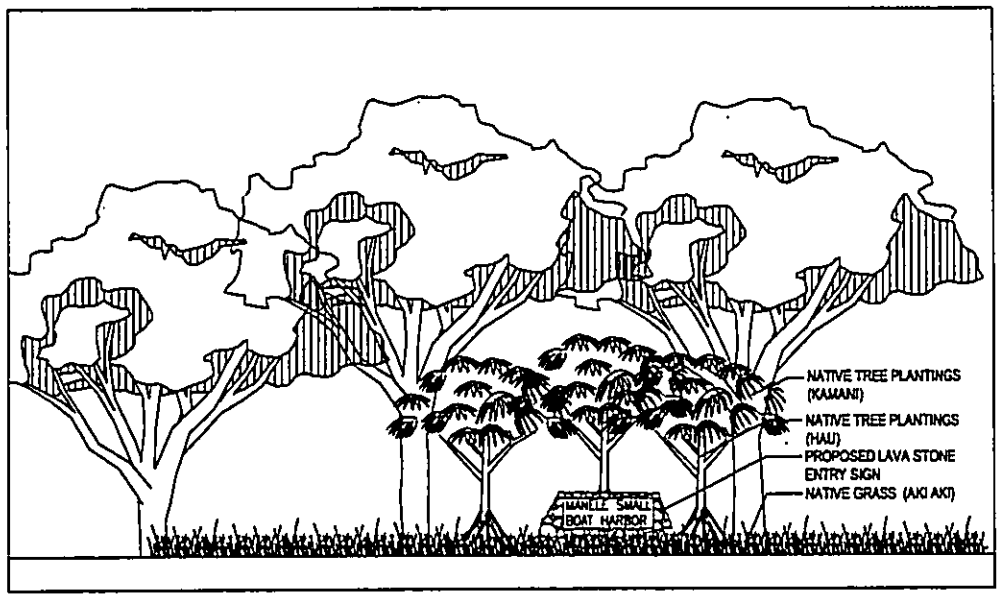

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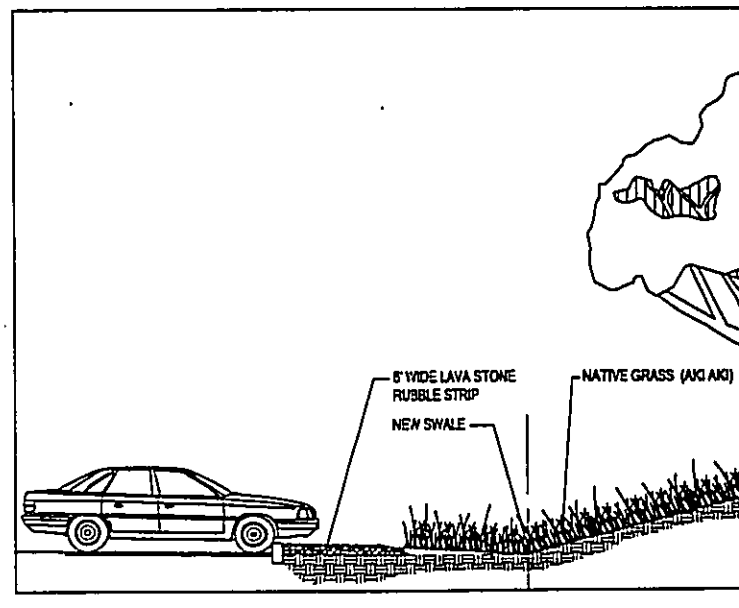

LANDSCAPE SECTION E–E
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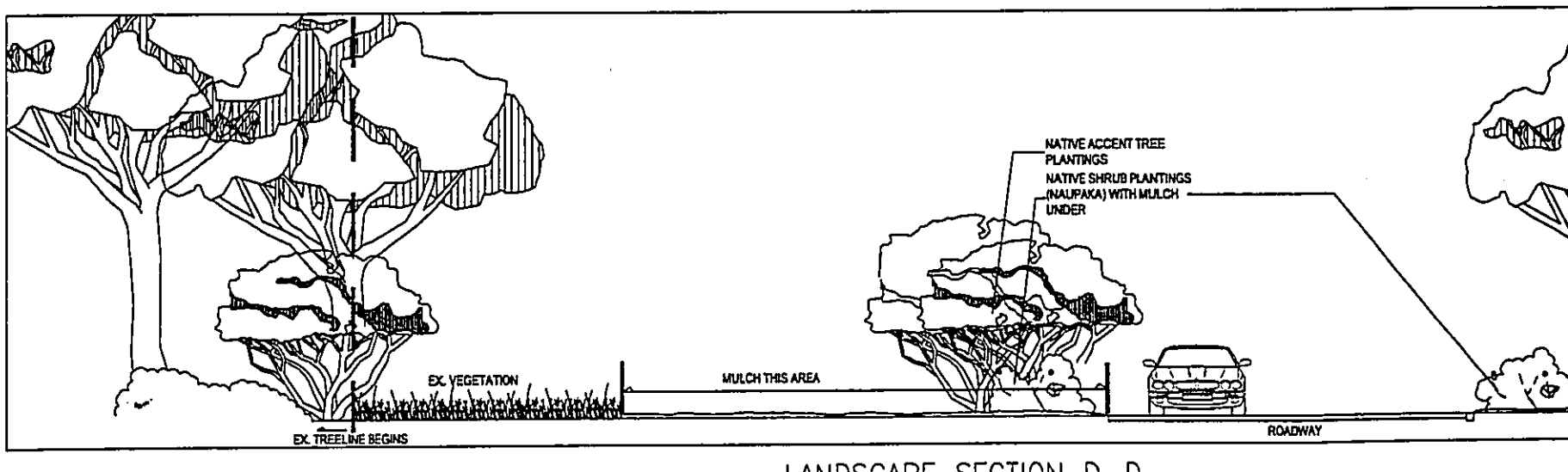

LANDSCAPE SECTION D–D
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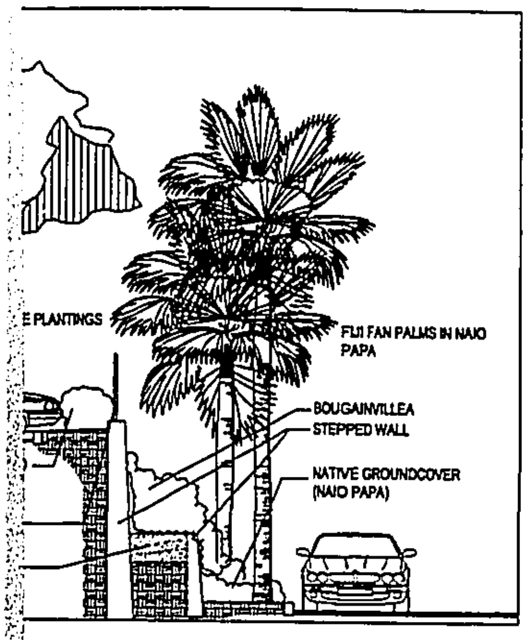

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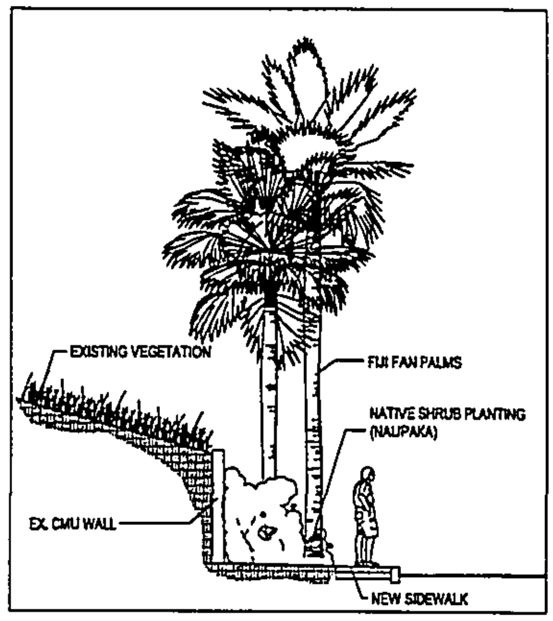

LANDSCAPE SECTION C–C
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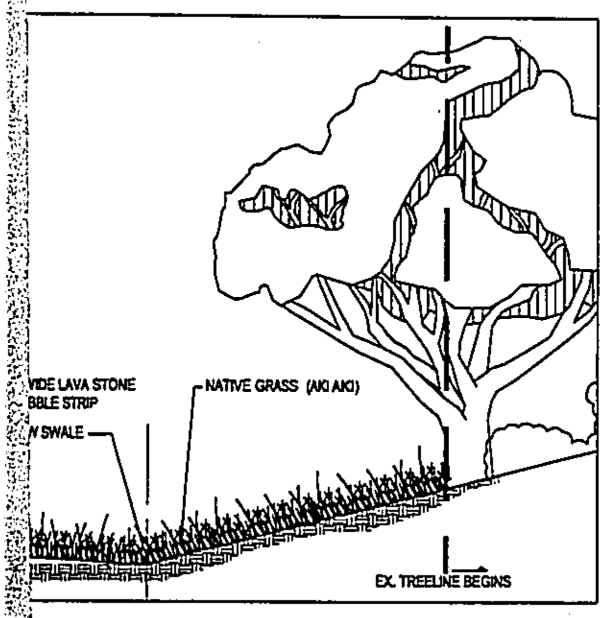

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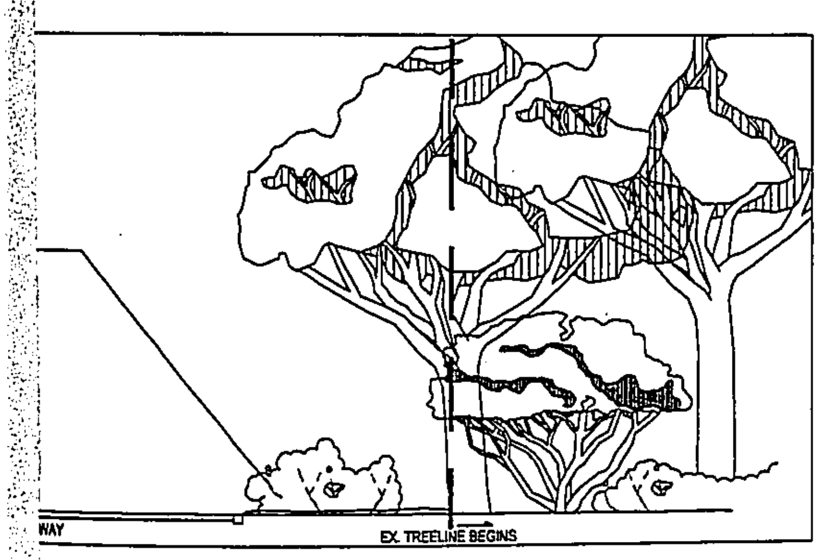

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DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

MANELE SMALL BOAT HARBOR FERRY SYSTEM IMPROVEMENTS

LANDSCAPE SECTIONS

JOEL H. KUROKAWA — LICENSED PROFESSIONAL LANDSCAPE ARCHITECT No. 10438 — HAWAII, U.S.A.

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