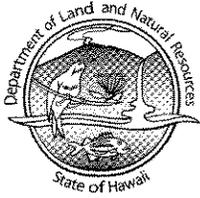


LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 3, 2004

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

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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

Author: LD-KC)

MEMORANDUM

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

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

SUBJECT: Finding of No Significant Impact (FONSI) to the Environment for The
Kawaihae Project, Kawaihae 1st, South Kohala, Island of Hawaii
TMK: (3) 6-1-03:15

The Department of Land and Natural Resources, Land Division, has reviewed the comments received during the 30-day public review period and the applicant's responses to these comments for the above referenced environmental assessment. Accordingly, we have determined that this project will not have a significant environmental effect and have issued a FONSI determination. Please publish this notice in your next scheduled publication of the Environmental Notice.

We have enclosed a completed OEQC Bulletin Publication Form and four (4) copies of the final environmental assessment.

If you have any questions, please feel free to contact Keith Chun at (808) 587-0431. Thank you.

Enclosures

cc: Land Board Member
Central Files
District Files

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

04 DEC -7 11:33

RECEIVED

**2004-12-23 FONSI
KAWAIHAE PROJECT**

DEC 23 2004

**FINAL ENVIRONMENTAL ASSESSMENT AND
FINDING OF NO SIGNIFICANT IMPACT**

RECEIVED

'04 DEC -7 P1:34

THE KAWAIHAE PROJECT

**OFF. OF ENVIRONMENTAL
QUALITY CONTROL**

Kawaihae 1st, South Hilo, Hawaii

DECEMBER, 2004

PREPARED FOR:

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

P.O. Box 621
Honolulu, Hawaii 96809-0621

PREPARED BY:

BRIAN T. NISHIMURA, PLANNING CONSULTANT

101 AUPUNI STREET
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HILO, HAWAII 96720-4221

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1. Introduction

1.1 Purpose

The State of Hawaii, Department of Land and Natural Resources (DLNR), is the owner of approximately 1.32 acres of land in Kawaihae 1st, South Kohala, Island of Hawaii, Tax Map Key: (3) 6-1-3: 15. The subject property is currently vacant and DLNR intends to submit a change of zone application to the Hawaii County Planning Department to allow for light industrial or mixed commercial/industrial uses. Once the property is rezoned, DLNR intends to offer a long-term lease or leases over the property for sale by public auction. The purpose of this Environmental Assessment is to comply with the requirements of Chapter 343, Hawaii Revised Statutes (HRS) which are triggered by the use of State land.

1.2 Identification of Proposing Agency

Mr. Peter Young is the Chairperson of the Board of Land and Natural Resources. The mailing address for the Department of Land and Natural Resources is P.O. Box 621, Honolulu, Hawaii 96809.

1.3 Identification of Approving Agency

In accordance with Chapter 343, HRS, the Department of Land and Natural Resources is the appropriate accepting authority of the Environmental Assessment.

1.4 Technical Description

Tax Map Key No. (3) 6-1-3: 15 is an undeveloped parcel consisting of approximately 1.32 acres of land situated within Kawaihae 1st, South Kohala, Island of Hawaii. The property is located approximately 1,200 feet northwest of the junction between the Kawaihae Road and the Akoni Pule Highway. (Please see the attached location map and tax plat map) The elevation of the subject property is approximately 10 to 35 feet above mean sea level with the gradient sloping in a southwest direction towards the ocean.

The subject property is currently vacant and zoned Open (O). DLNR will submit a change of zone application to the Hawaii County Planning Department to allow for light industrial or mixed commercial/industrial uses (i.e., MCX zoning district) which is consistent with the Industrial designation in the County General Plan. Upon approval of the change of zone request, DLNR intends to offer a long-term lease over the property by public auction.

The industrial-commercial mixed use district (MCX) is intended to "provide for areas of diversified businesses and employment opportunities by permitting a broad range of uses, without exposing non-industrial uses to unsafe and unhealthy environments. This district is intended to promote and maintain a viable mix of light industrial and commercial uses." (Section 25-5-130, Chapter 25, Zoning Code, Hawaii County Code) A complete list of uses permitted in the MCX district is provided in Appendix A.

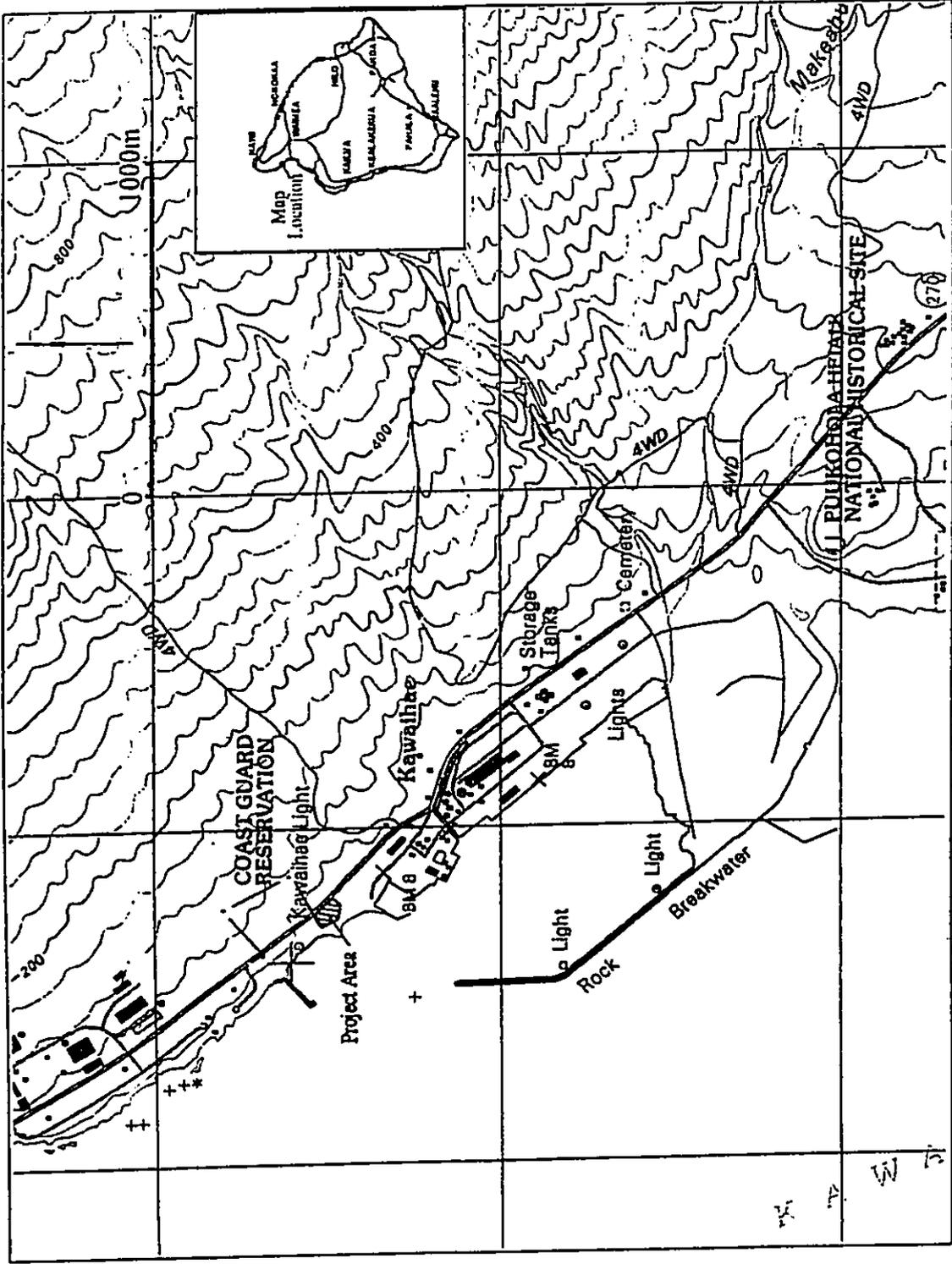
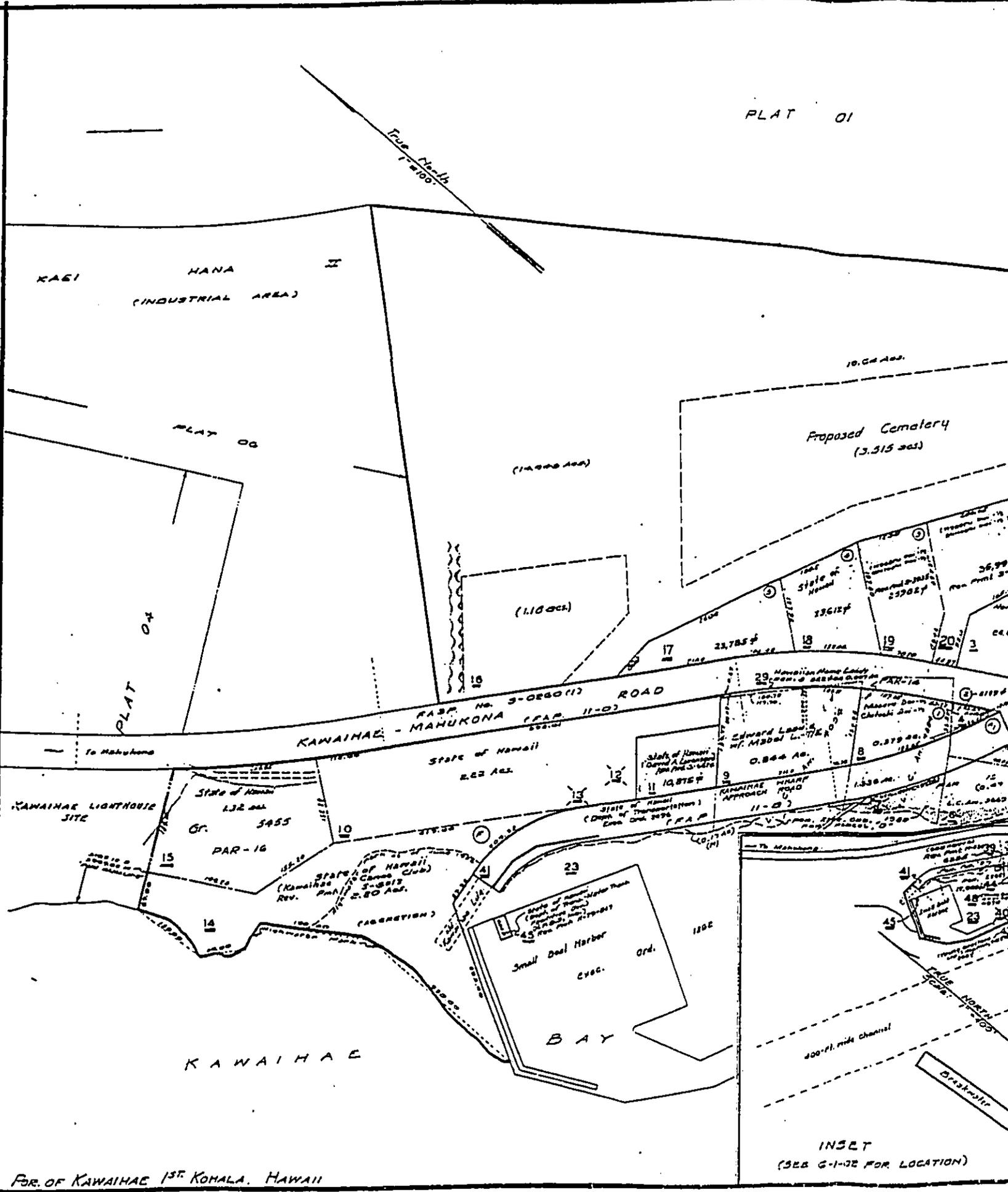


Figure 1. Portion of USGS Kawaihae Quadrangle showing Project Area

COR. 10.0
 APR 1946
 JUN 1946
 JUL 13 1946
 Dwy No. 2150
 Source: The Atlas of Hawaii, Dept. of
 By: H.N. Lilly, 1922

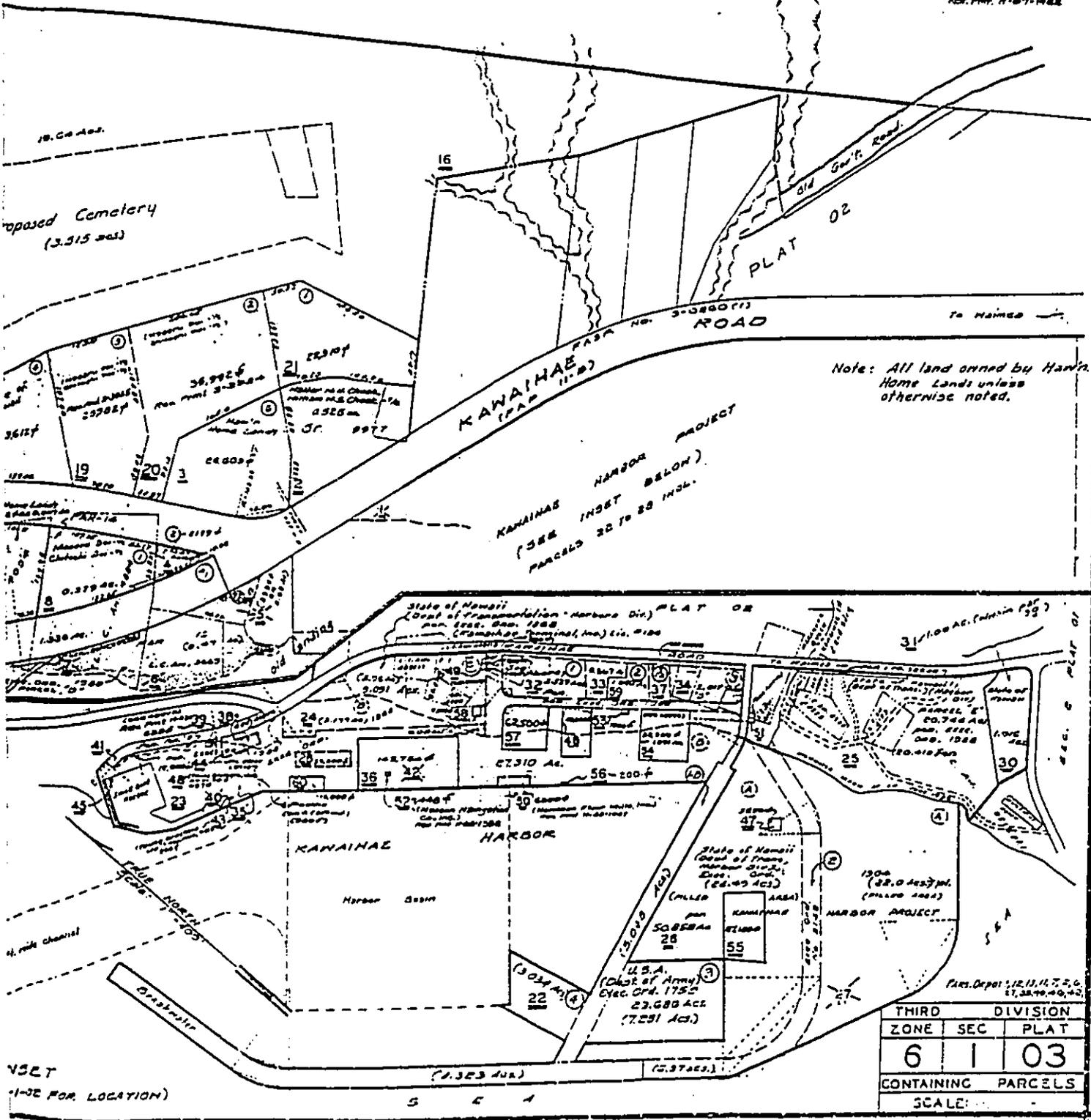


FOR OF KAWAIHAE 1ST. KOMALA. HAWAII

INSET
(SEE G-1-22 FOR LOCATION)

01

- 54 State of Hawaii (Anglo American Auto Auction) APN 2-3-48
- 32 (Standard Oil Co. of Calif.) 10. - H.L. No. H-27-1
- 39 (Young Brothers Ltd.) Ref. Plat. H-250
- 33 (Drexler Chemical Corporation) H. L. No. H-27-6
- 37 State of Hawaii 0.571 Ac.
- 49 (Takahe Nagamine aka Taka's Transportation) APN H-28-289
- 38 (HAWAIIAN COMPANY) 10 H.L. No. H-27-1
- 51 (Takahe Nagamine aka Taka's Transportation) Ref. Plat. H-250
- 55 (George Tamagami aka Tamagami Trusting) Ref. Plat. H-27-148



THIRD DIVISION		
ZONE	SEC	PLAT
6	1	03
CONTAINING PARCELS		
SCALE:		
PRINTED.....		

1.5 Project Background

1.5.1 Need for the Project

The subject property has remained vacant since it was acquired by the State of Hawaii in 1959 and originally intended for the development of the Kawaihae Harbor. The subject property, however, was not included in subsequent plans for the development of the harbor. The property has remained vacant and underutilized, and DLNR has received little interest in the property based on its current zoning. There has been interest, however, in the property for commercial uses due to the impressive site characteristics of the property which include proximity to the water and impressive views of the South Kohala coastline and are especially attractive to certain commercial operations such as a quality restaurant. DLNR believes that the mixed commercial/industrial (MCX) zoning district, which is consistent with the County's General Plan designation for the area, will allow the highest and best use of the property.

The Department of Land and Natural Resources is responsible for managing State-owned lands in ways that will promote the social, environmental and economic well-being of Hawaii's people and for insuring that these lands are used in accordance with the goals, policies and plans of the State. The public land trust obligation of the State requires a balance to ensure that sufficient lands are available for public use as well as taking advantage of opportunities to maximize revenues for the state. The state has addressed the need for public recreational opportunities in the area through Governor's Executive Order 4042 which conveyed the adjacent shoreline parcel (TMK: (3) 6-1-03: 14-approximately 4.67 acres) to the County of Hawaii, Department of Parks and Recreation. The approval of the proposed change of zone request will allow the highest and best use of the property and will enable the state to generate maximum revenue from the property.

Moreover, approval of the change of zone request will help to address the increasing demand for goods and services in the Kawaihae area spurred by the 43.7 percent district population growth rate between 1990 and 2000. In addition, the State's 2020 Master Plan for harbors recommends constructing an alternate passenger terminal at Pier 4, Kawaihae Harbor for accommodating ocean cruise passengers, and the Hawaii Superferry, which is scheduled to begin service to Kawaihae in 2006, will also bring additional passengers and vehicles to the project area on a regular basis. These additional passengers and vehicles anticipated at Kawaihae Harbor will increase the demand for commercial/industrial facilities.

To address this demand and allow the site to be put to productive use, DLNR will submit a change of zone application to the Hawaii County Planning Department to allow for light industrial or mixed commercial/industrial uses, i.e., MCX zoning district. Upon approval of the change of zone request, DLNR intends to offer a long-term lease over this site. However, because public land laws (HRS §171-13) require that the lease be sold by public auction and awarded to the highest bidder, the specific use of the site cannot be determined until after the lease is auctioned and awarded. Therefore, the impacts discussed in this Environmental Assessment are discussed in general terms based on potential impacts that could result from any of the uses permitted in the MCX zoning district.

1.5.2 Land Use Designations

The subject property is situated within the State Land Use Urban District. The County General Plan Land Use Pattern Allocation Guide Map (LUP AG) designation for most of the project area is Industrial. The County zoning designation for the property is Open (O). The project area is situated within the County's Special Management Area (SMA).

1.5.3 Listing of Permits and Approvals

Federal	None
State of Hawaii	
Department of Health	Underground Injection Control Approval of Drywells
Department of Transportation	Approval of Driveway Connection(s)
County of Hawaii	
County Council	Approval of Change of Zone Request
Department of Public Works	Approval of Project Construction Plans
Department of Water Supply	Approval of Project Construction Plans
Planning Department	Plan Approval Approval of Project Construction Plans
Planning Commission	Special Management Area Use Permit

1.6 Agency and Public Consultation

The following public and private organizations and individuals were consulted during the preparation of this environmental assessment:

United States Fish and Wildlife Services, Division of Ecological Services
State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division
State of Hawaii, Dept. of Land and Natural Resources, Division of Forestry and Wildlife
State of Hawaii, Department of Health
State of Hawaii, Department of Transportation
State of Hawaii, Office of Hawaiian Affairs
State of Hawaii, Department of Hawaiian Home Lands
County of Hawaii, Planning Department
County of Hawaii, Department of Public Works
County of Hawaii, Department of Environmental Management
County of Hawaii, Department of Water Supply
County of Hawaii, Police Department
County of Hawaii, Fire Department
Kawaihae Canoe Club

2. ENVIRONMENTAL SETTING

2.1 Physical Environment

2.1.1 Geology and Hazards

Environmental Setting

The project area is located on the lower southwestern slopes of the Kohala Mountain and consists of the Pololu volcanic series (Stems and Macdonald, 1946). The Pololu volcanic series consists mainly of basaltic lava flows.

The volcanic hazard as assessed by the United States Geological Survey for the project area is "9" which is the lowest risk designation on the island. (Heliker 1990) Zone "9" consists of the Kohala Mountain, which has not erupted in about 60,000 years and is the oldest volcano on the island.

The island of Hawaii is one of the most seismically active areas in the world and has experienced more than twenty large earthquakes (magnitude 6 or larger) over the past 166 years. (Wyss and Koyanagi, 1992) Magnitude 6 earthquakes can be expected to cause structural damage to non-reinforced buildings. The Building Code rating for the entire island of Hawaii is seismic Zone 4 which has the highest risk for seismic activity.

The Flood Insurance Rate Map (FIRM) designates the shoreline area of the parcel fronting the subject property (TMK: (3) 6-1-03: 14) as being in Flood Zone VE-10 which indicates a tsunami zone with a base flood elevation of 10 feet. The subject property is situated a minimum of 50 feet mauka of the shoreline and with an elevation range of 10 to 35 feet above mean sea level.

Impacts and Mitigation Measures

The proposed industrial or mixed commercial/ industrial use of the subject property will not expose the lessee(s) or the general public to any additional hazard risk that does not already exist. The volcanic hazard risk designation for the subject property is the lowest on the island. The Hawaii County Building Code requires that all new structures be designed to resist forces to seismic Zone 4 standards.

2.1.2 Soils

Environmental Setting

The soils of the project area consist of the Kawaihae series, as classified by the by the U.S. Department of Agriculture Soil Conservation Service (SCS) Soil Survey. (U.S. Soil Conservation Service 1973) The Kawaihae series consists of somewhat excessively drained, extremely stony soils that formed in volcanic ash. In a representative profile the surface layer is dark reddish-brown extremely stony very fine sandy loam over pahoehoe lava bedrock. Topsoil depth is 2 inches, subsoil depth is 33 inches and the bedrock depth is 20-40 inches. Permeability is moderate, runoff is medium, and the erosion hazard is moderate. The Agricultural Capability Subclass rating for soil is VIIs, non-irrigated which includes

soils having very severe limitations that make them unsuited for cultivation and that restrict their use largely to pasture or range, woodland, or wildlife.

Impacts and Mitigation Measures

The elevations of the subject property range from approximately 10 to 35 feet above mean sea level, gently sloping in a southwesterly direction towards the ocean. Potential erosion concerns will be addressed with all construction activities complying with the applicable requirements of the State Department of Health and the Department of Public Works.

2.1.3 Climate

Environmental Setting

The project area is situated along the northwest coast of the Island of Hawaii which is characterized as having a dry, arid climate. The annual rainfall along this leeward coast is approximately 10 inches. More than 75% of the annual rainfall occurs during the six month period between October and March.

The mean annual temperature is 77 degrees Fahrenheit. Northeasterly trade winds predominate most of the year although strong southwesterly winds during the winter generate much of the rainfall. The wind patterns are also marked by a strong diurnal shift, from daytime on-shore winds to nighttime off-shore winds. (University of Hawaii Press, 1983)

Impacts

The climatic conditions of the project area will not have a significant long term impact on the proposed project. The strong wind patterns of the area are a concern particularly during the period of construction. Contractors will be instructed to utilize best management practices to minimize dust impact.

2.1.4 Hydrology and Drainage

Environmental Setting

The primary drinking water in Hawaii is obtained from basal groundwater which results from rainwater percolating down through the soil and permeable volcanic rock. The fresh water accumulates in large lens-shaped bodies (commonly known as the Ghyben-Herzberg lens) and floats on the heavier salt water. In dry areas such as Kawaihae (approximately 10 inches of rainfall/year) the basal water is probably brackish to saline for a considerable distance inland. This is due to the limited freshwater recharge and the tidal influence in proximity to the shoreline.

The low rainfall and highly permeable substrate of the area also results in no perennial streams near Kawaihae. According to the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency dated September 16, 1988, the project area is situated within Flood Zone "X" (areas determined to be outside the 500 year flood plain).

Impacts and Mitigation Measures

The proposed use of the subject 1.32 acre parcel for industrial/commercial purposes is not anticipated to have any significant adverse impact on hydrology and drainage. Any potential impacts may be mitigated by complying with State and County regulations.

2.1.5 Water Quality

Environmental Setting

At its nearest point, the subject property is situated approximately 50 feet from the Pacific Ocean. A parcel designated for public recreational purposes, (Governor's Executive Order 4042, TMK (3) 6-1-03: 10) is situated between the project site and the ocean. The coastal waters of Kawaihae are classified "A" by the State of Hawaii. These waters are to be protected for recreational purposes and aesthetic enjoyment.

Impacts

The proposed project is not expected to have any direct impact on marine waters. Any additional runoff generated by the proposed project will be disposed on site.

2.1.6 Flora and Fauna

Environmental Setting

The subject property was previously utilized by Parker Ranch as a temporary holding area for cattle awaiting shipment off of the island. Parker Ranch owned the property between 1935 and 1959 and the property has remained vacant since the State acquired the property in 1959.

Botanical Consultant, Evangeline J. Funk, Ph.D., conducted a botanical survey of the subject 1.32 acre property on April 9, 2004. The findings of the botanical survey were provided in a letter report dated April 12, 2004 and stated, in part, the following:

"We found this site to be vegetated entirely by very few taxa of introduced trees and herbs. The kiawe trees (*Prosopis pallida*) are 20 to 35 feet in height and form an almost closed canopy. The ground cover is vegetative buffelgrass (*Cenchrus ciliaris*) which partly covers the rock and debris strewn surface. Other introduced plants include a couple of sea grape trees (*Coccoloba uvifera*) and an ironwood tree (*Casuarina equisetifolia*), a kakalaioa shrub (*Caesalpinia bonduc*), some hairy abutilon (*Abutilon grandifolium*) and several hairy morningglory vines (*Merremia aegyptia*).

"No species of concern or candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) were found during this survey and none were expected."

Although a faunal survey was not conducted, it is highly unlikely that any candidate, proposed, or listed threatened or endangered species would be found on the project site. This is due to the extensive prior disturbance of the project site which served as a temporary holding area for cattle awaiting shipment. Bird species commonly found in the area include Japanese White-eye and the House Sparrow, Cardinal, House Finch, Warbling Silverbill, Spotted Dove, and Barred Dove. The property probably supports rodent, cat and mongoose populations, although none were observed during several site visits to the area.

Impacts

Based on the extensive prior disturbance of the project site, it is highly unlikely that any candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended are present on the subject property. As such, the proposed project will not have any significant impact on any protected or native plant or animal species.

2.1.7 Air Quality

Environmental Setting

The air quality of the subject area is affected by pollutants derived from the volcanic emissions from the ongoing Kilauea eruption. Other sources of air pollutants to a limited degree include vehicle exhaust emissions along the Akoni Pule Highway. In general, however, the ambient air quality of the project area meets all federal and state standards as evidenced by its designation as an "attainment" area by the State Department of Health, Clean Air Branch.

Impacts and Mitigation Measures

Short term impacts will result from the construction activity involved with developing the subject property including dust and exhaust from machinery and vehicles. Given the temporary nature of the construction time period, the potential impacts of these construction activities should be minimal. In addition, the lessee(s) of the property will be required to comply with all applicable state and County requirements, including the requirements to utilize best management practices to minimize dust impact and comply with provisions of Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control," and Section 11-60.1-33, Fugitive Dust.

In addition, the uses allowed in the Industrial-Commercial Mixed District (MCX) are limited to those which will not expose non-industrial uses to unsafe and unhealthy environments. As such, the proposed action will not have a significant long term impact on the air quality of the surrounding area.

2.1.8 Noise

Environmental Setting

A Noise Study prepared for the Kawaihae Ten-Year Master Plan for the Department of Hawaiian Home Lands by Y. Ebisu & Associates in 1991 measured ambient noise levels at a site adjacent to the subject property (Kawaihae Lighthouse TMK: (3) 6-1-04: 1). The noise measurements taken on August 28, 1991 on the Kawaihae Lighthouse site (50 feet from the centerline of Akoni Pule Highway) produced an hourly sound level of 58.6 Leq (equivalent sound level). These noise levels are considered to be "moderate exposures" by federal standards and well within guidelines for commercial, industrial and other non-noise sensitive land uses.

Impacts and Mitigation Measures

Temporary noise impacts will occur from construction activities for the development of the property and are unavoidable. Mitigation measures can be taken, however, to minimize noise impacts including the use of mufflers and implementing construction curfew periods. All project activities must comply with the Administrative Rules of the Department of Health, Chapter 11-46, on "Community Noise Control".

2.1.9 Scenic Resources

Environmental Setting

The predominant scenic views in the vicinity of the project area are of the Pacific Ocean and the South Kohala coastline. The Kawaihae Bay and Harbor area are listed as site examples of natural beauty in the Hawaii County General Plan. The view from the Akoni Pule Highway, however, is obscured by the kiawe trees (20 to 35 feet in height) growing on the property.

Impacts

The value of the subject property will be enhanced by taking advantage of the scenic views of the Pacific Ocean and the South Kohala coastline. As such, it is unlikely that development of the subject property will adversely affect the scenic resources in the vicinity of the project area.

2.2 Social, Cultural and Economic Setting

2.2.1 Socio-Economic Characteristics

Setting

Hawaii County's population increased by more than 56,000 persons between 1980 and 2000. Between 1980 and 1990, Hawaii Island's population increased by 30.7 percent, and increased by 23.6 percent between 1990 and 2000. The April 1, 2000 population figure for Hawaii County was 148,677 according to census figures compiled by the County of Hawaii, Department of Research and Development.

The population of the South Kohala district increased tremendously from 4,607 in 1980 to 13,131 in 2000. Although the rate of growth has slowed from the 98.4 percent experienced between 1980 and 1990, the 43.7 percent district growth rate experienced between 1990 and 2000 exceeded the County's overall growth rate by nearly two to one.

The rapid population growth reflects the growth of employment opportunities in the region. The major economic activity for the South Kohala district is the tourism industry led by the three major destination resort complexes of the Mauna Kea Resort, Mauna Lani Resort and Waikoloa Beach Resort. The three major destination resorts can boast seven of the top fifteen employers in the County of Hawaii.

Kawaihae Harbor is one of the two deep-draft commercial harbors serving the Island of Hawaii. It is an important infrastructural component that facilitates and supports the economic activity and growth in the region. Over 98% of Hawaii's goods come through the

harbors, providing essential commodities such as food, clothing, building materials, automobiles and fuel for the growing businesses and industries within West Hawaii. (State Department of Transportation, Harbors Division, August, 1998)

An analysis of vacant land in the vicinity of the project site that is already zoned for industrial and/or commercial uses indicates that there are approximately 80 acres of vacant industrial zone lands in the Kawaihae region (excluding lands within the Department of Transportation harbor complex.) There are approximately 7 acres of vacant commercial zoned properties, and no mixed industrial/commercial (MCX) zoned lands (which is the zoning district that DLNR intends to seek for the subject property.)

Impacts

The proposed change of zone and subsequent availability of the subject property for industrial/commercial uses will help address a small portion of the demand for industrial/commercial parcels for the South Kohala district and in particular, the area surrounding Kawaihae Harbor. The subject property possesses a combination of unique characteristics which makes it ideally suited for addressing the demand for industrial/commercial uses in Kawaihae. The property is blessed with spectacular views of the ocean and the South Kohala coastline which enhance opportunities for commercial uses that are not attracted to the existing vacant industrial or commercial properties. In addition, the property has direct access from the Akoni Pule Highway as well as water commitments for three water units from the Department of Water Supply. The proposed action, in and of itself, will not generate growth, but will address demands generated in support of the growing population and economy in the region.

2.2.2 Adjacent Land Uses

Existing Setting

The project area is situated in a sparsely populated segment of the northwestern section of the South Kohala district. The Kawaihae Harbor and its industrial, recreational and commercial sport fishing activities is the predominant land use in the vicinity of the project area. There is a small commercial complex with restaurants, convenience store, gas station, and marine related businesses within the Kawaihae urban corridor. The Department of Hawaiian Home Lands has a partially developed 90 acre industrial park and small residential lot subdivision north of the project area.

The parcel situated immediately north of the subject property is the site of the Kawaihae Lighthouse. The parcel adjacent to the south and west of the subject property is state owned land reserved for public recreational purposes by Governor's Executive Order 4042. The site is being utilized by the Kawaihae Canoe Club for storage of their canoes and supplies. The property across the Akoni Pule Highway to the east of the subject property is vacant.

Impacts and Mitigation Measures

Aside from the government-owned parcels immediately adjacent to the north, south and west of the subject property, there are commercial and industrial zoned parcels directly across the street and also within 500 feet of the subject property. The proposed change of zone to allow the property to be leased for industrial/commercial uses will be in character with the majority

of the land uses along this section of the Akoni Pule Highway and is consistent with the County's long-range plans for the area as set forth in the County's General Plan. Any impacts on the surrounding properties due to noise and other disturbances caused by the proposed zoning change will be mitigated through careful construction management practices and compliance with federal, state and county regulations.

2.3 Public Facilities and Services

2.3.1 Roads

Existing Setting

The Akoni Pule Highway is a two-lane arterial that runs between Kawaihae to Hawi to the north. The roadway has two 12-foot wide lanes and paved shoulders. The roadway has an estimated capacity of 2,430 vehicles per hour total for both directions.

Impacts and Mitigation Measures

The proposed use of the subject 1.32 acre parcel for industrial/commercial purposes is not anticipated to have any significant adverse impact on the roads and traffic circulation in the area. Any potential impacts may be mitigated by complying with the requirements of the State Department of Transportation.

2.3.2 Water System

Existing Setting

The Department of Water Supply's Kawaihae-Lalamilo-Puako system provides water to the subject property. In a letter dated January 28, 2004, the Department of Water Supply indicated that, "Parcel 6-1-003:015 will have a total entitlement of three units of water."

Impacts

The proposed project will not have a significant adverse impact on the existing Department of Water Supply system serving the subject location.

2.3.3 Protective Services

Existing Setting

The closest County fire station is situated along the Queen Kaahumanu Highway approximately seven miles south of the project area. The police station is situated approximately 11 miles away in the town of Waimea.

Impacts

The proposed project is not anticipated to have any significant adverse impact on the existing service providers.

2.3.4 Schools

Existing Setting

The project area is served by Waimea Elementary School, Waimea Middle School and Honokaa High School.

Impacts

The proposed action, in and of itself, will not generate growth, but provides the necessary support to sustain a growing population and economy in the region. As such, the proposed use of the subject property for industrial/commercial uses will not have a significant adverse impact on the public schools serving the project area.

2.3.5 Power and Communication Systems

Setting

The project area is served by Hawaii Electric Light Company's (HELCO) power lines and Verizon Hawaii telephone lines along the Akoni Pule Highway.

Impacts

The proposed action will not have any significant adverse impact on the power and communication systems serving the region.

2.3.6 Wastewater

Setting

The project area is not situated within the service limits of the County wastewater disposal system. All wastewater generated will be disposed of by an individual wastewater system meeting with the approval of the State Department of Health.

Impacts

The proposed action will not have any significant adverse impact regarding wastewater disposal.

2.3.7 Solid Waste

Setting

There is no municipal collection system for solid waste in the County of Hawaii. Businesses rely on private firms to collect and dispose of waste at the County's landfill which is situated approximately 10 miles south of the project site on the mauka side of the Queen Kaahumanu Highway.

Impacts

The proposed action is not anticipated to have any significant adverse impact regarding solid waste.

2.4 Archaeology, Historic and Cultural Resources

Setting

An archaeological inventory survey of the subject property was conducted by Haun & Associates in July, 2004. The findings of this survey are summarized as follows:

“The survey identified one site with four features (Site 24180). The features consist of a stone wall, a stone alignment and an adjacent configuration of metal posts or stakes, a low terrace, and a series of intact and displaced concrete piers. Test excavations identified a mixed deposit covering portions of the project area containing portable remains from at least three temporal periods. The marine shell and volcanic glass flakes were probably deposited during prehistoric to early historic times. The square nail, and potentially some of the glass, probably was deposited during the 1800s to early 1900s. A flat iron on the wall south of the project area probably also dates to this period.

“Bottle glass and construction materials including concrete, aluminum, metal, and asphalt represent use of the project area during the 1900s, potentially by the U.S. military during WWII when the Kawaihae and Waikoloa region was used for military training. The temporary nature of the boat launch’s construction (see Figure 4) and the alignments of possible tent stakes would be expected for a military facility used in the 1940s.

“The mixed nature of the deposit is probably a result of both historic earthmoving activity and wave action. Haun et al. (2003) documented a pier a short distance north of the project area that was abandoned after it was damaged by a tsunami in 1946. The same event potentially damaged the nearby boat launch and displaced the concrete piers in the seaward portion of the project area.

“Site 24180 is assessed as solely significant for its information content. The site has yielded information important for understanding historic land use in the project area. The mapping, written descriptions, photography, and test excavations at the site adequately document it and no further work or preservation is recommended for the site.”

A complete copy of the Archaeological Inventory Survey of TMK: 3-6-1-03: 015 is provided as an addendum to this environmental assessment.

The South Kohala district and Kawaihae in particular, had a significant role in Hawaiian history. Writing about Kawaihae Kirch (1985) states:

“The port of Kawaihae, with its sheltered natural harbor, was an important calling point for many of the early European voyagers and traders. For about five years 1790-1794, it was the primary residence of Kamehameha I as he regrouped and prepared his forces for the ultimate conquest of Maui, Moloka’i, and O’ahu. Here at Kawaihae, on a prominent natural rise above the harbor, Kamehameha I constructed (or, most probably, rebuilt and expanded) a massive war temple (Luakini) named Pu’ukohola. It was on the altar of Pu’ukohola in 1791 that Kamehameha offered up the body of his arch-rival and cousin Keoua, as an offering to Kuku’ilimoku, his personal war god.”

Excerpts taken from Haun’s historical documentary research (Haun, 2004) provides the following:

“In the mid-1800s Kawaihae was a popular anchorage for foreign vessels. Hawaiian chiefs were actively involved in foreign trade, and food, sandalwood, firewood, *pulu*, and fresh water were exchanged for imported goods (Kelly 1974:36-77). These items were generally

brought from areas outside Kawaihae, but salt was one important trade good produced locally. A well-developed salt manufacturing system was maintained near the beach and each salt pan was said to be named (Kelly 1974:33-34). Apparently salt was an important traditional exchange item for Kawaihae residents as well, being traded to Kona and other parts of Kohala for food and *tapa*. (Barrère 1983:30 In Allen 1987:15)."

"Early 1900s land use in Kawaihae is described in oral historical interviews conducted by Hammett et al. (1991), Carlson and Rosendahl (1990), Maly (1999), and Orr (2003). William Akau moved to Kawaihae as a child in 1928. Water was obtained from a well near the Doi Chevron Station. Water was also obtained from the gulch near Pu'u Kohala when it was still a perennial stream. In about 1931, a water line from Waimea was built and the well was no longer used. Mr. Akau's grandfather used to raise fish for Parker Ranch in a pond where the old salt works were located. Mr. Akau and Mr. Eddie La'au, Jr. remember that people living along the coast south of Kawaihae used to come to Kawaihae by canoe to trade dried fish for dry goods and produce.

"In the 1930s, Kawaihae was a bustling place with twice weekly steamship arrivals. Cast iron street lamps illuminated the village streets at night. The ships anchored offshore and transferred goods using lifeboats until the concrete territorial pier (Site 23860) was constructed in 1937. Cattle were the principal export. The cows were driven down from Waimea early in the morning and kept in large corrals near the pier. There was a building with restrooms (Site 23859) at the pier and a building where the cowboys would spend the night before returning to Waimea. There were two dry docks in town that served the fishing fleet based at Kawaihae. Kawaihae families were fish retailers and wholesalers selling fish throughout the island and shipping fish to Honolulu. The hills behind the coastal village were planted with limes, mangos, tomatoes, melons, and other produce.

"Mr. Masaru Doi and Mr. Akau recounted events at Kawaihae during World War II. Barbed wire was stretched along the entire shoreline where a series of gun emplacements were established. A huge tent camp was built and the area was used for troop training. The soldiers mined the territorial pier with explosives. Fishing was greatly reduced and forbidden to people of Japanese descent. The Doi family began large-scale raising of pigs fed with the food waste from the military camp. Following the war Kawaihae town suffered from unemployment and was seriously damaged (sic) by a tidal wave in 1946. The wave destroyed the pier and it was never repaired; however, it continues to be depicted on the 1995 USGS Kawaihae Quadrangle map (see Figure 1), adjacent to the project area.

In 1955, construction of the Kawaihae Harbor began and it was completed in 1959 (Hammett et al. 1991). This radically changed the appearance of coastal Kawaihae, the flow of the ocean, the feeding habitat of several species of marine life, and the lifestyle of the people of Kawaihae Village and others who frequented the shores of the Kawaihae black sand beach."

Kimura International, Inc. interviewed Mr. David Houle, a Parker Ranch representative, while preparing a Phase I Environmental Site Assessment Report for the subject property. Mr. Houle stated that Parker Ranch built cattle pens on the property to hold the cattle for shipment to the other islands. (Kimura International Inc., April, 2004)

Impacts

The archaeological inventory survey report prepared by Haun and Associates stated that, "The mixed nature of the deposit is probably a result of both historic earthmoving activity and wave action." Physical as well as anecdotal evidence indicates that the subject property was probably utilized as a cattle holding area as well as a possible military camp over the past 70 years. Haun and Associates concluded that, "The mapping, written descriptions, photography, and test excavations at the site adequately document it and no further work or preservation is recommended for the site. In a letter dated September 1, 2004, the State Historic Preservation Division provided their comments on the subject archaeological inventory survey and stated, in part, the following:

"We agree with your significance assessment under Criterion D, as solely significant for its information content. The mapping, written descriptions, photography and test excavations sufficiently document the site and we agree that no further work is warranted.

"In general, the report meets the requirements of Title 13 §13-276 governing standards for archaeological inventory surveys and reports. We anticipate accepting it as final on the condition you send us a replacement page," (The requested revisions have been made and submitted to the State Historic Preservation Division via transmittal letter dated September 10, 2004.

The historical research and interviews with former residents of Kawaihae indicated that salt production, fishing and cattle export were important activities in Kawaihae. Approval of the subject request will not inhibit these activities from continuing. The state owned parcel fronting the subject property is reserved for public recreational purposes by Governor's Executive Order 4042. The site is being utilized by the Kawaihae Canoe Club for storage of their canoes and supplies and also provides public access to the shoreline. Based on the foregoing, the proposed action is not anticipated to have any impact on traditional and customary cultural practices.

3. SUMMARY OF POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES

3.1 Overview

As previously mentioned, DLNR intends to submit a change of zone application for the subject property to allow for light industrial or mixed commercial/industrial uses on the property, and subsequently offer a long-term lease or leases for such uses. However, because public land laws (HRS §171-13) require that the leases be sold by public auction and awarded to the highest bidder, the specific use or uses of the site cannot be determined until after the lease(s) are auctioned and awarded. Therefore, the impacts discussed in this Environmental Assessment are discussed in general terms based on potential impacts that could result from any of the uses permitted in the MCX zoning district.

3.2 Short Term Impacts

Construction Activity

Impacts: Short term impacts will result from the proposed construction activity related to developing the property for industrial/commercial uses including increased noise levels, dust and exhaust from machinery.

Mitigation: Given the relative short construction time period involved in developing a relatively small (1.32 acre) site, the potential impacts of the construction activities should be minimal. In addition, the lessee(s) of the property will be required to comply with all applicable state and County requirements including the State Department of Health regulations and any requirements to utilize best management practices to minimize impacts.

3.3 Long Term Impacts

Drainage:

Impacts: County requirements stipulate that, all development generated runoff be disposed on site and cannot be directed toward any adjacent properties.

Mitigation: The lessee(s) will be responsible for obtaining all necessary permits to comply with all drainage requirements, including any requirements to utilize best management practices to minimize any potential impacts.

4. ALTERNATIVES

4.1 No Action Alternative

The no action alternative would restrict the potential use of the subject property to open space or park use as permitted by the existing Open (O) zoning designation. DLNR has received little or no interest in the property based on the current zoning and the property remains underutilized. DLNR believes that allowing light industrial and/or commercial uses on the property would improve the utilization of the property. It should also be noted that DLNR, as the trustee of public lands, owes a fiduciary duty to the trust beneficiaries in its management of public lands. The proposed rezoning is in furtherance of DLNR's efforts to put its lands to the highest and best use and maximize revenues for the trust.

At the same time, DLNR recognizes the public benefits of retaining the Open designation of the shoreline area for public recreational use, and in furtherance of this, DLNR initiated the set aside of the adjoining parcel (TMK: (3) 6-1-03: 14) to the County of Hawaii, Department of Parks and Recreation, for public recreational purposes under Governor's Executive Order 4042. The site is approximately 4.67 acres in size and provides public access to the shoreline. A portion of this parcel is being utilized by the Kawaihae Canoe Club for storage of their canoes, but there is ample space available for expanded recreational use by the County. There has been no indication that the additional 1.32 acres provided by the subject property is necessary or even desired for public recreational purposes.

4.2 Alternative Uses

Alternative uses may be considered for the subject property. It should be noted however, that any change of zone request other than an industrial or industrial-commercial mixed use district would require an amendment to the County General Plan.

5. DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION

5.1 Significance Criteria

According to the Department of Health Rules (11-200-12), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. In making the determination, the Rules establish "Significance Criteria" to be used as a basis for identifying whether significant environmental impact on the environment if it meets anyone of the following thirteen criteria.

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

The proposed project involves the change of zone for a 1.32 acre parcel from open to industrial-commercial mixed use to allow the property to be utilized for industrial or mixed commercial/industrial uses. The prior use of the property as a holding pen for cattle as well as a military camp site has resulted in significant ground disturbing activity. As such, the subject property does not contain any existing natural or cultural resources that will be destroyed or irrevocably lost by the proposed action.

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

The proposed change of zone will enhance rather than curtail the range of beneficial uses of the environment. The development of the subject site for industrial/commercial uses is consistent with the other land uses already established within this area of Kawaihae.

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 action is consistent with the Environmental Policies established in Chapter 344, HRS, and the National Environmental Policy Act.

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

The proposed action will have a positive impact on the economic and social welfare of the community. The availability of the subject 1.32 acre parcel for industrial/commercial use and the parcel's unique site characteristics will provide an excellent opportunity for an industrial or commercial lessee. These site characteristics include proximity to the ocean and harbor, spectacular views of the South Kohala Coast, direct access from the highway and sufficient water commitments to support development. The proposed action, in and of itself, will not generate growth, but provides necessary support to sustain a growing population and economy in the region.

5. Substantially affects public health.

The proposed action will not have any substantial impact on public health. Potential noise, air, water and drainage impacts will be addressed through careful construction management practices and compliance with federal, state and County requirements.

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

The proposed project will not have any substantial secondary impacts because it is not a generator of growth. Rather, the proposed action will support and sustain a growing population and economy in the region.

7. Involves a substantial degradation of environmental quality.

The lessee(s) of the property will be required to comply with all federal, state and County requirements to protect environmental quality. As such, the proposed project will not involve a substantial degradation of environmental quality.

8. Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions.

As stated previously, the proposed action will not have any substantial secondary impacts and is consistent with the County's long range plans for the area. The proposed action does not involve a commitment for larger actions and will not induce other actions having a cumulative effect on the environment.

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

The project site has been extensively disturbed by previous uses and does not have any candidate, proposed, or listed threatened or endangered species on the property. As such, the proposed action will not have any substantial adverse effect on any rare, threatened or endangered species or its habitat.

10. Detrimentially affects air or water quality or ambient noise levels.

Short term impacts will result from the proposed action including increased noise levels, dust and exhaust from machinery involved in the construction of project improvements. However, any construction is not expected to be lengthy or extensive given the relatively small size of the parcel, and therefore, the potential impacts of these construction activities should be minimal. The lessee(s) of the property will be required to comply with all applicable federal, state and County requirements, including complying with State Department of Health regulations and any requirements to utilize best management practices to minimize all impacts.

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, freshwater, or coastal waters.

The project site is not situated in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, freshwater, or coastal waters.

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

The predominant scenic views in the vicinity of the project area are of the Pacific Ocean and the South Kohala coastline. The Kawaihae Bay and Harbor area are listed as site examples of natural beauty in the Hawaii County General Plan. The view from the Akoni Pule Highway, however, is obscured by the kiawe trees (20 to 35 feet in height) growing on the property. As such the proposed project will not substantially affect the scenic vistas and view planes of the area.

13. Requires substantial energy consumption.

The proposed project will not require substantial energy consumption,

5.2 Findings

Based on the foregoing information presented, it is determined that the proposed action to allow industrial/commercial uses on the project site will not have a significant effect. As such, a determination of a Finding of No Significant Impact for the proposed action is appropriate.

5.3 Reasons Supporting Determination

The nature and scale of the proposed action is such that no significant environmental effects are anticipated. Potential impacts, if any, can be mitigated through careful construction management practices and compliance with all governmental requirements including those of the State Department of Health and the County Department of Public Works.

REFERENCES

- Haun & Associates, 2004. Archaeological Inventory Survey, TMK: 6-1-03: 15, Land of Kawaihae 1, South Kohala District, Island of Hawaii
- Hawaii County Code. 1996, Ord. No. 96-160, sec. 2; ratified April 6 1999. Section 25-5-130, Chapter 25, Zoning Code, Hilo.
- Heliker, C. 1990. *Volcano and Seismic Hazards on the Island of Hawaii*. Washington: GPO
- Kimura International, Inc. Phase I Environmental Site Assessment Report, TMK: 6-1-03: parcel 15, Kawaihae, South Kohala, Hawaii, April, 2004
- University of Hawaii Department of Geography. 1983. *Atlas of Hawaii*. University of Hawaii Press, Honolulu.
- U.S. Soil Conservation Service. 1973. *Soil Survey of the Island of Hawaii, State of Hawaii*. Washington: U.S.D. A.
- Stearns, H.T. and Macdonald G.A. 1946. *Geology and Ground-Water Resources of the Island of Hawaii*. Bulletin 9, Hawaii Division of Hydrography. Advertiser Publishing Co., Ltd. Honolulu.
- Y. Ebisu & Associates. 1991. *Noise Study For The Kawaihae Ten Year Master Plan Kawaihae, South Kohala, Hawaii*. Prepared for the RM Towill Corporation

APPENDIX A
PERMITTED USES IN THE MCX ZONED DISTRICT
(Section 25-5-130, Chapter 25, Zoning Code, Hawaii County Code)

Section 25-5-132. Permitted uses.

(a) The following uses shall be permitted in the MCX district:

- 1) Agricultural products processing, minor.
- 2) Amusement and recreation facilities, indoor.
- 3) Art galleries, museums.
- 4) Automobile sales and rentals.
- 5) Automobile service stations.
- 6) Bars and nightclubs.
- 7) Broadcasting stations.
- 8) Business services.
- 9) Car washing.
- 10) Catering establishments.
- 11) Cemeteries and mausoleums, as permitted under chapter 6, article 1 of this code.
- 12) Churches, temples and synagogues.
- 13) Cleaning plants using only non-flammable hydrocarbons in a sealed unit as the cleaning agent.
- 14) Commercial parking lots and garages.
- 15) Community buildings, as permitted under section 25-4-11.
- 16) Convenience stores.
- 17) Data processing facilities.
- 18) Day-care centers.
- 19) Financial institutions.
- 20) Food manufacturing and processing.
- 21) Home improvement centers.
- 22) Kennels in sound attenuated buildings.
- 23) Laboratories, medical and research.
- 24) Manufacturing, processing and packaging establishments, light.
- 25) Medical clinics.
- 26) Meeting facilities.
- 27) Motion picture and television production studios.
- 28) Offices.
- 29) Photographic processing.
- 30) Photography studios.
- 31) Plant nurseries.
- 32) Public uses and structures, as permitted under section 25-4-11.
- 33) Publishing plants for newspapers, books and magazines, printing shops, cartographing, and duplicating processes such as blueprinting or photostating shops.
- 34) Repair establishments, minor.
- 35) Restaurants.

- 36) Retail establishments.
- 37) Sales and service of machinery used in agricultural production.
- 38) Schools, business.
- 39) Schools, photography, art, music and dance.
- 40) Schools, vocational.
- 41) Self-storage facilities.
- 42) Telecommunications antennas, as permitted under section 25-4-12.
- 43) Temporary real estate offices, as permitted under section 25-4-8.
- 44) Theaters.
- 45) Utility substations, as permitted under section 25-4-11.
- 46) Veterinary establishments in sound-attenuated buildings.
- 47) Warehousing.
- 48) Wholesaling and distribution operations.

(b) In addition to those uses permitted under subsection (a) above, the following uses may be permitted in the MCX district, provided that a use permit is issued for each use:

- 1) Crematoriums.
- 2) Major outdoor amusement and recreation facilities.
- 3) Yacht harbors and boating facilities.

(c) Buildings and uses normally considered directly accessory to the uses permitted in this section shall also be permitted in the MCX district.

APPENDIX B – REPRODUCTION OF COMMENTS MADE DURING THE PRE-ASSESSMENT CONSULTATION PERIOD

1. State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division, May 7, 2004.
2. State of Hawaii, Department of Health, District Environmental Health Program Chief, April 1, 2004.
3. State of Hawaii, Office of Hawaiian Affairs, April 14, 2004.
4. State of Hawaii, Department of Transportation, May 3, 2004.
5. County of Hawaii, Department of Water Supply, January 28, 2004.
6. County of Hawaii, Department of Public Works, Engineering Division, April 12, 2004.
7. County of Hawaii, Department of Environmental Management, April 2, 2004.
8. County of Hawaii, Fire Department, April 26, 2004.
9. County of Hawaii, Planning Department, April 13, 2004.
10. Kawaihae Canoe Club, July 6, 2004.

LINDA LINGLE
GOVERNOR OF HAWAII



DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

ERNEST Y.W. LAU
DEPUTY DIRECTOR - WATER



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

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
KAMOLELE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

May 7, 2004

Brian T. Nishimura, Planning Consultant
101 Aupuni Street, Suite 217
Hilo, Hawaii 96720-4221

LOG NO: 2004.1441-
DCC NO: 0405MM04

Dear Mr. Nishimura:

**SUBJECT: Chapter 6E-3 Historic Preservation Review [State/Dept. of Land and Natural Resources]
Pre-Environmental Assessment Consultation, Proposed Lease of State Land for Industrial
or Commercial/Industrial Uses
Kawaihae 1st, South Kohala, Hawaii Island
TMK: (3) 6-1-003:015**

Thank you for your letter dated March 31, 2004, and your request for our comments on the proposed change of zone for the subject property. We understand DLNR intends to offer a long-term lease for sale by public auction, and to rezone the property to allow for mixed commercial and industrial uses.

Earlier this year, at the request of Mr. Harry Yada of the Land Division, our Hawaii Island staff conducted a brief field inspection to determine if historic sites were present, or likely to be present on the subject property. Early maps of this area indicate there were habitation structures on the shoreline at Kawaihae during the early post-contact period, and the prevalence of cattle ranching and cattle-related commerce at Kawaihae strongly suggest there would be both a pre-contact and historic period component to any sites on the property. The property is covered with a fairly dense stand of kiawe, much of which has been pushed down by strong winds. Flooding and high winter surf has deposited large amounts of modern trash closer to the ocean, and within a deeply incised drainage channel along the south side of the property. Several archaeological features were noted, however, including a terrace, several walls, and the remnants of what may have been part of a pier. Deep soils were also noted, which suggests that significant buried cultural deposits may be present.

We recommend, therefore, that an archaeological inventory survey be undertaken to identify all historic sites, evaluate their significance and propose mitigation treatments, if needed. Such mitigation measures may be recommended to Hawaii County Planning as a condition of any rezoning approvals.

If we can provide further clarification about this review, please contact either MaryAnne Maignet (808) 327-3690 or Dr. Patrick McCoy (808) 692-8029.

Aloha,

P. Holly McEidowney
P. Holly McEidowney, Administrator
State Historic Preservation Division

MM:jen

c: Christopher J. Yuen, Director, Hawaii County Planning, 101 Pauahi Street, Suite 3, Hilo, HI 96720-3043

LINDA LINGLE
GOVERNOR



CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 916
HILO, HAWAII 96721-0916

April 1, 2004

Mr. Brian T. Nishimura
Planning Consultant
101 Aupuni Street, Suite 217
Hilo, Hawaii 96720-4221

Subject: Pre-Environmental Assessment Consultation
State of Hawaii, Department of Land & Natural Resources
Proposed Lease of State Land for Industrial or Commercial/Industrial Uses
Kawaihae 1st, South Kohala, Island of Hawaii
Tax Map Key: (3) 6-1-3:15

Underground Injection Systems (Ph. 586-4258) which receive wastewater or storm run-offs from the proposed development need to address the requirements of Chapter 23, Hawaii State Department of Health Administrative Rules, Title 11, "Underground Injection Control."

The Army Corps of Engineers should be contacted at (808) 438-9258 to identify whether a Federal license or permit (including a Department of Army permit) is required for this project. Pursuant to Section 401(a)(1) of the Federal Water Pollution Act (commonly known as the "Clean Water Act"), a Section 401 Water Quality Certification is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters...."

A National Pollutant Discharge Elimination System (NPDES) general permit coverage is required for the following activities:

- a. Storm water associated with industrial activities, as define in Title 40, Code of Federal Regulations, Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi);
- b. Construction activities, including clearing, grading, and excavations, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the commencement of the construction activities.
- c. Discharge of treated effluent from leaking underground storage tank remedial activities;

Brian T. Nishimura
Page 2
April 1, 2004

- d. Discharge of once through cooling water less than one (1) million gallons per day;
- e. Discharge of hydrotesting water;
- f. Discharge of construction dewatering effluent;
- g. Discharge of treated effluent from petroleum bulk stations and terminals;
- h. Discharge of treated effluent from well drilling activities;
- i. Discharge of treated effluent from recycled water distribution systems;
- j. Discharges of storm water from a small municipal separate storm sewer system;
- and
- k. Discharge of circulation water from decorative ponds or tanks.

The Clean Water Branch (CWB) requires that a Notice of Intent (NOI) to be covered by a NPDES general permit for any of the above activities be submitted at least 30 days before the commencement of the respective activities. The NOI forms may be picked up at our office or downloaded from our website at <http://www.state.hi.us/doh/eh/cwb/forms/genl-index.html>.

The applicant may be required to apply for an individual NPDES permit if there is any type of activity in which wastewater is discharged from the project into State waters and/or coverage of the discharge(s) under the NPDES general permit(s) is not permissible. An application for the NPDES permit is to be submitted at least 180 days before the commencement of the respective activities. The NPDES application forms may also be picked up at our office or downloaded from website at <http://www.state.hi.us/doh/eh/cwb/forms/indiv-index.html>.

Hawaii Administrative Rules, Section 11-55-38, also requires the owner to either submit a copy of the new NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD) or demonstrate to the satisfaction of the DOH that the project, activity, or site covered by the NOI or application has been or is being reviewed by SHPD. Please submit a copy of the request for review by SHPD or SHPD's determination letter for the project.

If you have any questions, please contact the CWB at 586-4309.

No future notification or consultation on the Environmental Assessment is needed at this time.

Sincerely,



Aaron A. Ueno
District Environmental Health Program Chief

PHONE (808) 594-1888



FAX (808) 594-1865

STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

HRD04-1341

April 14, 2004

Brian T. Nishimura, Planning Consultant
101 Aupuni Street, Suite 217
Hilo, HI 96720-4221

Subject: Pre-Environmental Consultation, State of Hawaii, Department of Land and Natural Resources – Proposed Lease of State Land for Industrial or Commercial/Industrial Uses, Kawaihae 1st, South Kohala, Island of Hawaii, TMK: (3) 6-1-03:15

Dear Brian:

Thank for your letter dated March 31, 2004 regarding the pre-environmental consultation for the State of Hawaii, Department of Land and Natural Resources' proposed lease of State land for industrial or commercial/industrial uses, located at Kawaihae 1st, South Kohala, Island of Hawaii, TMK: (3) 6-1-03:15. Your letter requests that the Office of Hawaiian Affairs (OHA) review and comment on the proposed project.

OHA staff doesn't have enough information on what type of industrial or commercial/industrial uses are proposed on the subject parcel to offer comments at this time. However, OHA looks forward to the opportunity to review and comment on the Draft Environmental Assessment for the project when it is finalized.

If you have questions or concerns please contact Matthew Myers, Policy Advocate at 594-1945 or matthewm@oha.org.

'O wau iho nō,

A handwritten signature in black ink, appearing to read "Clyde W. Nāmu'o".

Clyde W. Nāmu'o
Administrator

LINDA LINGLE
GOVERNOR



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

RODNEY K. HARAGA
DIRECTOR

Deputy Director
BRUCE Y. MATSUI
LINDEN H. JOESTING
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.1126

May 3, 2004

Mr. Brian T. Nishimura
Planning Consultant
101 Aupuni Street, Suite 217
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura:

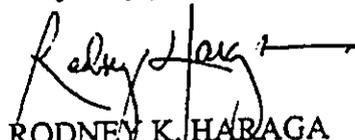
Subject: Proposed Lease of State Land by DLNR at Kawaihae, Hawaii
Pre-Environmental Assessment Consultation
TMK: (3) 6-1-3: 15

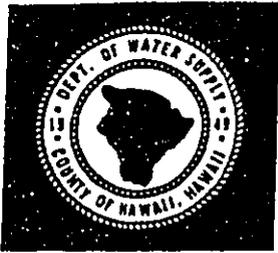
Thank you for your notice of the subject proposed lease of land by the Department of Land and Natural Resources and requesting our comments on the proposal. We have the following comments:

1. Our Highways Division should be consulted regarding any access onto Akoni Pule Highway.
2. From the information provided, we are unable to determine the scale and magnitude of the proposed development. The amount, type and mix of the uses and activities to be put on the subject site may require a Traffic Impact Analysis Report (TIAR) to determine any impacts to our roadway.
3. Please keep us listed and informed as a concerned party.

We appreciate the opportunity to provide our comments.

Very truly yours,


RODNEY K. HARAGA
Director of Transportation



DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII

345 KEKUANAOA STREET, SUITE 20 • HILO, HAWAII 96720

TELEPHONE (808) 961-8050 • FAX (808) 961-8657

January 28, 2004

Mr. Harry M. Yada
District Land Agent
State of Hawai'i
Department of Land and Natural Resources
75 Aupuni Street, Room 204
Hilo, HI 96720

RECEIVED
LAND DIVISION
HILO, HAWAII
2004 FEB -2 P 1:37

**REASSIGNMENT OF WATER UNITS TO TAX MAP KEY 6-1-003:015
IN CONNECTION WITH CONSOLIDATION ACTION
OF TAX MAP KEY 6-1-003:010, 011, AND 014**

This letter is to confirm that the Department of Land and Natural Resources (DLNR) can reassign two water units from the parcel resulting from the consolidation of Parcels 6-1-003:010, 6-1-003:011, and 6-1-003:014. The two water units will be reassigned to Parcel 6-1-003:015. Parcel 6-1-003:015 is contiguous to the parcel resulting from the consolidation of Parcels 6-1-003:010, 6-1-003:011, and 6-1-003:014. Parcel 6-1-003:015 will then have a total entitlement of three units of water. The parcel resulting from the consolidation of the three parcels will keep the existing service now being used for the benefit of Parcel 6-1-003:010 and will not be entitled to additional units. We will keep a record of this reassignment for our Customer Service Section.

Should there be any questions, please contact Mr. Lawrence Beck of our Water Resources and Planning Branch at 961-8070.

Sincerely yours,

Milton D. Pavao, P.E.
Manager

LEB:sco

copy – DWS Customer Service (Hilo)

Water brings progress

Harry Kim
Mayor



Bruce C. McClure
Director

Dixie Kaetsu
Managing Director

County of Hawaii
DEPARTMENT OF PUBLIC WORKS
101 Pauahi Street, Suite 7 · Hilo, Hawaii 96720-4224
(808) 961-8321 · Fax (808) 961-8630

Ronald K. Takahashi
Deputy Director

April 12, 2004

Brian T. Nishimura, Planning Consultant
101 Aupuni Street, Suite 217
Hilo, HI 96720- 4221

Subject: Pre-Environmental Assessment Consultation
State of Hawaii, Department of Land and Natural Resources
Proposed Lease of State Land for Industrial or Commercial Uses
TMK: (3) 6-1-003:015
Kawaihae 1st, South Kohala, Island of Hawaii

We received your request dated March 31, 2004. Please show the property in relation to the coastal flood zone in the submittals for change of zone in the study. We reserve the opportunity to further comment on the application for change of zone. Thank You.

If you have any questions, please contact Kiran Emler of our Kona office at 327-3530.

Galen M. Kuba, Division Chief
Engineering Division

KE

c: ENG-HILO/KONA

Harry Kim
Mayor



Barbara Bell
Director

County of Hawaii
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
25 Aupuni Street, Room 210 • Hilo, Hawaii 96720-4252
(808) 961-8083 • Fax (808) 961-8086

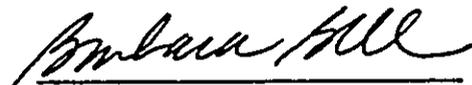
April 2, 2004

Mr. Brian T. Nishimura
Planning Consultant
101 Aupuni Street, Suite 217
Hilo, HI 96720-4221

Re: Pre-Environmental Assessment Consultation
State of Hawai'i Department of Land & Natural Resources – Proposed Lease of
State Land for Industrial or Commercial/Industrial Uses
TMK: (3)6-1-3:15
Kawaihae 1st, South Kohala, Island of Hawai'i

Thank you for your letter of March 31, 2004.

We have no comments to offer regarding the proposed project and there will be no need for further notification or consultation.


Barbara Bell
DIRECTOR

Harry Kim
Mayor



Darryl J. Oliveira
Fire Chief

Desmond K. Wery
Deputy Fire Chief

County of Hawai'i

FIRE DEPARTMENT

25 Aupuni Street • Suite 103 • Hilo, Hawai'i 96720
(808) 961-8297 • Fax (808) 961-8296

April 26, 2004

Mr. Brian T. Nishimura
Planning Consultant
101 Aupuni Street, Suite 217
Hilo, HI 96720-4221

Dear Mr. Nishimura:

RE: PRE-ENVIRONMENTAL ASSESSMENT CONSULTATION
STATE OF HAWAII, DEPARTMENT OF LAND & NATURAL RESOURCES
PROPOSED LEASE OF STATE LAND FOR INDUSTRIAL OR
COMMERCIAL/INDUSTRIAL USES
TAX MAP KEY: (3) 6-1-3: 15
KAWAIHAE 1ST, SOUTH KOHALA, ISLAND OF HAWAII

This responds to your request for comments on the above-referenced pre-environmental assessment consultation.

We have no comments to offer at this time regarding the project.

Thank you for the opportunity to comment.

Sincerely,


DARRYL OLIVEIRA
Fire Chief

NA:lk



Harry Kim
Mayor



Christopher J. Yuen
Director

Roy R. Takemoto
Deputy Director

County of Hawaii
PLANNING DEPARTMENT
101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720-3043
(808) 961-8288 • Fax (808) 961-8742

April 13, 2004

Brian T. Nishimura
101 Aupuni Street, Suite 217
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura:

**SUBJECT: Pre-Environmental Assessment Consultation Comments
Proposed Change of Zone for Sale of Long Term Lease of State Land for
Industrial or Commercial/Industrial Uses
State of Hawaii, Department of Land and Natural Resources (DLNR)
Kawaihae 1st, South Kohala, Island and County of Hawaii
Tax Map Key: (3) 6-1-003:015**

We are in receipt of your letter, dated March 31, 2004, requesting our pre-consultation comments in connection with your preparation of a draft Environmental Assessment for the proposed DLNR project.

We understand the DLNR intends to apply for a change of zone to allow for industrial or mixed commercial/industrial uses on the subject property and to subsequently offer a long-term lease for sale by public auction of the vacant property.

As mentioned in your letter, the subject 1.32-acre parcel is zoned Open by the County of Hawaii. The property is situated in the State Land Use Urban district and is in the Hawaii County Special Management Area (SMA). The Land Use Pattern Allocation Guide (LUPAG) map of the General Plan (GP) designates this general area as Industrial. There is a band of Open along the shoreline, as there is around most of the island, but this band cannot be precisely scaled off to a set width. It is meant to signify a policy that open space along the shoreline should be protected. Rezoning of this entire parcel to Industrial can be considered under the present LUPAG map designation, but consideration will have to be given to the effect that it may have on shoreline open space in the rezoning and SMA process.

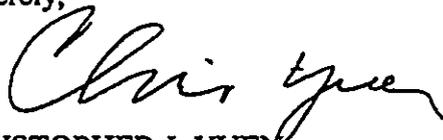
Brian T. Nishimura
Page 2
April 13, 2004

In view of the above, the DEA should be sure to include a detailed discussion on the inventory of land in the vicinity of the subject property that is currently zoned for industrial and mixed industrial/commercial uses. Included in this discussion should be a summary of the number of vacant lots and land area currently available as well as that currently in industrial and mixed industrial/commercial use.

Rule 9-4(10)A(iii), Planning Commission Rules of Practice and Procedure, identifies a change in the density or intensity of use of land as "development" in the SMA. Therefore, a Special Management Area Use Permit Assessment (SMAA) application shall be submitted and a determination issued prior to approval of a change of zone. In lieu of review under the SMAA process, the applicant may determine that the proposed use, activity or operation will: a) exceed \$125,000 in valuation; or b) have a significant adverse effect on the SMA. The applicant must then petition the Planning Commission for a Special Management Area Use Permit, which must be approved prior to any change of zone approval.

Thank you for the opportunity to comment on the proposed project. Should you have questions, please feel welcome to contact Larry Brown or Esther Imamura of my staff at 961-8288.

Sincerely,



CHRISTOPHER J. YUEN
Planning Director

LMB:mad/lmb

P:\WPWIN60\Larry\EA-EIS Comments\Nishimura-DLNR 6-1-3-15 PreDEA cmnts.doc

xc: DLNR
Planning Department – West Hawaii Office

BRIAN T. NISHIMURA, PLANNING CONSULTANT
101 Aupuni Street, Suite 217
Hilo, Hawaii 96720-4221
Phone: (808) 935-7692 Fax: (808) 935-6126 E-mail: btnishi@interpac.net

September 14, 2004

Mr. Christopher J. Yuen, Director
County of Hawaii
Planning Department
101 Pauahi Street, Suite 3
Hilo, Hawaii 96720-3043

Subject: Pre-Environmental Assessment Consultation Comments
Applicant: State of Hawaii, Department of Land and Natural Resources
TMK: (3) 6-1-003: 15

Dear Mr. Yuen:

Thank you for providing your comments regarding the subject matter in your letter dated April 13, 2004. Upon review of your comments, we have prepared the following response to address the issues raised in your letter.

1. **Open Space Along the Shoreline:** As stated in your letter, the Open designation along the shoreline on the County General Plan LUPAG Map "is meant to signify a policy that open space along the shoreline should be protected." The open space along the shoreline fronting the subject property will remain protected inasmuch as a parcel designated for public recreational purposes under the jurisdiction of the County of Hawaii, Department of Parks and Recreation, (Governor's Executive Order 4042, TMK (3) 6-1-03: 10) is situated between the project site and the shoreline.
2. **Inventory of Vacant Land Zoned Industrial, Mixed Industrial/Commercial, and Commercial Use:** The following is an inventory of vacant land in the vicinity of the subject property zoned for industrial, mixed industrial/commercial and commercial uses (based on information provided on the County's Real Property Tax website).

a. Vacant Industrial Zoned Lands (MG-1a)*:

Tax Plat	Area (Acres)	Comments
6-1-02	5.19	Eight vacant parcels ranging in size from .58 acre to .72 acre. Does not include a 1.7 acre parcel listed on the tax map as a cemetery.
6-1-06	66.99	Eight vacant parcels within the Kaei Hana Industrial Subdivision
6-1-04	6.94	A single vacant parcel
6-1-03	19.64	A single vacant parcel with mixed zoning (MG-1a, CV-10 and A-40a). Area zoned industrial not determined

* Does not include industrial zoned lands within the Kawaihae Harbor complex which are set aside to the Department of Transportation for harbor-related facilities.

b. Vacant Mixed Industrial/Commercial Zoned Lands (MCX): None.

c. Vacant Commercial Zoned Lands (CV-10):

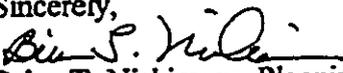
Tax Map Plat	Area (Acres)	Comments
6-1-02	4.52	Eight vacant parcels ranging in size from .19 acre to 2.11 acre.
6-1-03	2.48	Four vacant parcels excluding the 19.6 acre parcel with mixed zoning (MG-1a, CV-10 and A-40a).

d. Summary: Excluding the Department of Transportation harbor complex, there are approximately 80 acres of vacant industrial zoned lands in the Kawaihae region. There are approximately 7 acres of vacant commercial zoned properties, and no mixed commercial/industrial (MCX) zoned lands (which is the zoning district that DLNR intends to seek for the subject property.) MCX zoning and the site characteristics of the subject property will provide opportunities for commercial uses that are not attracted to the existing vacant industrial or commercial properties. For example, there has been interest in constructing a quality restaurant on the subject property to take advantage of the property's proximity to the ocean and spectacular views of the South Kohala coastline.

3. **Special Management Area Use Permit Assessment**: Your comment letter states that, "a Special Management Area Use Permit Assessment (SMAA) application shall be submitted and a determination issued prior to approval of a change of zone." In the event that the change of zone request is approved, DLNR intends to offer a long-term lease or leases over this site. However, because public land laws (HRS §171-13) require that the leases be sold by public auction and awarded to the highest bidder, the specific use or uses of the site cannot be determined until after the lease(s) are auctioned and awarded. As such, it would be premature to consider the SMAA application until the after the change of zone application is approved and the lease awarded to the highest bidder.

Thank you again for your comments during the pre-environmental assessment consultation period. We will be submitting a copy of the draft environmental assessment for your review shortly. Should you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,


Brian T. Nishimura, Planning Consultant

Copy – State of Hawaii, Department of Land and Natural Resources, Land Division



KAWAIHAE CANOE CLUB



DATE: July 6, 2004

TO: Brian T. Nishimura, Planning Consultant

FR: Manny Veincent, President

RE: Pre-Environmental Assessment Consultation
State of Hawaii, Department of Land & Natural Resources – Proposed Lease of
State Land for Commercial/Industrial Uses
TMK: (3) 6-1-3:15

Aloha Brian,

The State's proposal is fine with the Canoe Club.

We will want further notification or consultation on the proposed project. Further communication should be directed to me, Club President, at P. O. Box 856 Kamuela, HI 96743.

Thank you.

APPENDIX C - LETTER REPORT
APRIL 12, 2004
EVANGELINE J. FUNK, Ph.D.

botanical consultants

240 makee road honolulu, hawaii 96815 phone (808) 923-4193 fax (808) 923-4193

April 12, 2004

Mr. Brian T. Nishimura
Nishimura Planning
101 Aupuni Street, Suite 217
Hilo, Hawaii 96720

Dear Mr. Nishimura,

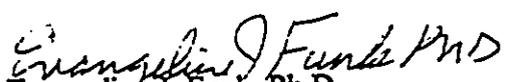
On April 9, 2004 we conducted a botanical survey of a 1.32 acre site located in Kawaihae, North Kona, Hawaii (TMK (3) 6-1-03: 15 Kawaihae, 1st, South Kohala)

We found this site to be vegetated entirely by very few taxa of introduced trees and herbs. The kiawe trees (*Prosopis pallida*) are 20 to 35 feet in height and form an almost closed canopy. The ground cover is vegetative buffelgrass (*Cenchrus ciliaris*) which partly covers the rock and debris strewn surface. Other introduced plants include a couple of sea grape trees (*Coccoloba uvifera*) and an ironwood tree (*Casuarina equisetifolia*), a kakalaioa shrub (*Caesalpinia bonduc*), some hairy abutilon (*Abutilon grandifolium*) and several hairy morningglory vines (*Merremia aegyptia*).

No species of concern or candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) were found during this survey and none were expected.

Thank you very much.

Yours truly,


Evangeline J. Funk, Ph.D.

Botanical

Wetland

Environmental Studies

**APPENDIX D – ARCHAEOLOGICAL INVENTORY SURVEY (REVISED
SEPTEMBER 10, 2004) AND COMMENT LETTER FROM THE STATE HISTORIC
PRESERVATION DIVISION DATED SEPTEMBER 1, 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

337 Rec'd 9-9-04
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

September 1, 2004

Dr. Alan Haun
Haun and Associate, Inc.
HCR 1 Box 4730
Kea'au, Hawai'i 96749

LOG NO: 2004.2655
DOC NO: 0408MM22

Dear Dr. Haun

SUBJECT: Chapter 6E-42 Historic Preservation Review, Archaeological Inventory Survey
(Haun, Henry and Orr, July 2004)
Lands of Kawaihae, South Kohala, Hawaii
TMK: (3) 6-1-003:015

Thank you for your cover letter dated July 9, 2004, and a copy of the above mentioned report (Report 337-061004) for our review, which we received July 13, 2004. The report was prepared for Mr. Brian Nishimura. Our comments are late and we apologize for any inconvenience this may cause you or your client.

The information presented in the historical and archaeological background sections of the report is quite complete and provides an excellent foundation on which to predict the types of historic properties that might be found in the 1.32-acre parcel. The review of previous archaeological research is likewise adequate to guide you in the interpretation and evaluation of site significance. There is one item in the historic background section, however, that we would recommend be re-examined. The item pertains to the Fair American incident, as it relates to John Young and his eventual relationship to the Kawaihae area. Your account, drawn from Rosendahl & Carter (1988), suggests Kealakekua Bay as the setting for the incident, rather than Kaupulehu. Are we misreading your text or is your source in error?

One site is identified in the survey (24180), which consists of a wall, a stone alignment, a low terrace, a configuration of metal posts/stakes, and a series of displaced and intact concrete piers. Test excavations indicate a deposit probably mixed by historic earthmoving activity and/or wave action. While marine shell and volcanic glass fragments in the mixed matrix may have originated from pre-contact use, an intact buried deposit is not indicated. The material remains located in this survey, coupled with the proximity of a temporary boat launch situated immediately north of the subject property, suggests use by the military during WWII.

We agree with your significance assessment under Criterion D, as solely significant for its information content. The mapping, written descriptions, photography and test excavations sufficiently document the site and we agree that no further work is warranted.

Dr. Alan Haun
Page 2

In general, the report meets the requirements of Title 13 §13-276 governing standards for archaeological inventory surveys and reports. We anticipate accepting it as final on the condition you send us a replacement page, if warranted, for the historic background section. In addition, a typo persists in the project area description (p. 1) and Figure 10 (p. 28) for Highway 270, which, according to our reference sources, should read *Akoni Pule* Highway.

If you have any questions about this review, please contact MaryAnne Maigret in our Hawaii Island office (808) 327-3690 or Dr. Sara Collins in Honolulu (808) 692-8026.

Aloha,



P. Holly McEldowney, Administrator
State Historic Preservation Division

c: Christopher J. Yuen, Director, Hawaii County Planning, 101 Pauahi Street, Suite 3, Hilo, HI
96720-3043

Haun & Associates

Archaeological, Cultural, and Historical Resource Management Services
HCR 1 Box 4730, Keaau, Hawaii 96749 Phone: 982-7755 Fax: 982-6343

September 10, 2004

Project 337

Dr. Holly McEldowney, Acting Administrator
State Historic Preservation Division
Department of Land and Natural Resources
601 Kamokila Boulevard, Room 555
Kapolei, Hawaii 96707

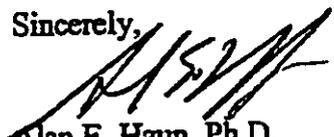
Subject: Replacement Pages for
Archaeological Inventory Survey Report
TMK: 6-1-03: 15, Land of Kawaihae 1
South Kohala, Island of Hawaii

Dear Dr. McEldowney:

Enclosed are replacement pages (3) for the subject report as requested in your letter of September 1, 2004 (Log No. 2004.2655, Doc. No. 0408MM22) and a submittal form.

If you have any questions or comments, please contact me at 982-7755.

Sincerely,


Alan E. Haun, Ph.D.
Principal Investigator

Encl. Replacement pages (3), Submittal Form

cc: Mary Anne Maigret
Brian Nishimura

ARCHAEOLOGICAL INVENTORY SURVEY
TMK: (3) 6-1-03: 015, LAND OF KAWAIHAE 1
SOUTH KOHALA DISTRICT, ISLAND OF HAWAII

By:

Alan E. Haun, Ph.D.

Dave Henry, B.S. and

Maria E. Ka'imipono Orr, M.A.

Prepared for:

Mr. Brian Nishimura
101 Aupuni Street, Suite 217
Hilo, Hawaii 96720-4221

July 2004

Haun & Associates

Archaeological, Cultural, and Historical Resource Management Services
HCR 1 Box 4730, Keaau, Hawaii 96749 Phone: 982-7755 Fax: 982-6343

SUMMARY

At the request of Mr. Brian Nishimura, Haun & Associates conducted an archaeological inventory survey of TMK: 6-1-03:15 a 1.32-acre parcel located in the Land of Kawaihae 1, South Kohala, Island of Hawaii. The objective of the survey was to satisfy historic preservation regulatory review inventory requirements of the Department of Land and Natural Resources-Historic Preservation Division (DLNR-HPD), as contained within Hawaii Administrative Rules, Title 13, DLNR, Subtitle 13, State Historic Preservation Rules.

The survey identified one site with four features (Site 24180). The features consist of a stone wall, a stone alignment and an adjacent configuration of metal posts or stakes, a low terrace, and a series of intact and displaced concrete piers. Test excavations identified a mixed deposit covering portions of the project area containing portable remains from at least three temporal periods. The marine shell and volcanic glass flakes were probably deposited during prehistoric to early historic times. The square nail, and potentially some of the glass, probably was deposited during the 1800s to early 1900s. A flat iron on the wall south of the project area probably also dates to this period.

Bottle glass and construction materials including concrete, aluminum, metal, and asphalt represent use of the project area during the 1900s, potentially by the U.S. military during WWII when the Kawaihae and Waikoloa region was used for military training. The temporary nature of the boat launch's construction (see *Figure 4*) and the alignments of possible tent stakes would be expected for a military facility used in the 1940s.

The mixed nature of the deposit is probably a result of both historic earthmoving activity and wave action. Haun et al. (2003) documented a pier a short distance north of the project area that was abandoned after it was damaged by a tsunami in 1946. The same event potentially damaged the nearby boat launch and displaced the concrete piers in the seaward portion of the project area.

Site 24180 is assessed as solely significant for its information content. The site has yielded information important for understanding historic land use in project area. The mapping, written descriptions, photography, and test excavations at the site adequately document it and no further work or preservation is recommended for the site.

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INTRODUCTION

At the request of Mr. Brian Nishimura Haun & Associates conducted of an archaeological inventory survey of the c. 1.32 acre TMK: 6-1-03: 15 located in the Land of Kawaihae 1, South Kohala District, Island of Hawaii (*Figure 1*). The objective of the survey was to satisfy current historic preservation regulatory review inventory requirements of the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD), as contained within Hawaii Administrative Rules, Title 13, DLNR, Subtitle 13, State Historic Preservation Rules (DLNR 2003).

The survey fieldwork was conducted on May 26, 2004 by a crew of three under the direction of Dr. Alan Haun. Approximately 3 person days were required to complete the field work portion of the project. Described in this final report are the project scope of work, field methods, background information, survey findings, and significance assessments of the sites with recommended treatments.

Scope of Work

Based on DLNR-SHPD rules for inventory surveys, the following specific tasks were determined to constitute an appropriate scope of work for the project:

1. Conduct background review and research of existing archaeological and historical documentary literature relating to the project area and its immediate vicinity—including examination of Land Commission Awards, *ahupua'a* records, historic maps, archival materials, archaeological reports, and other historical sources;
2. Conduct a high intensity, 100% pedestrian survey coverage of the project area;
3. Conduct detailed recording of all potentially significant sites including scale plan drawings, written descriptions, and photographs, as appropriate;
4. Conduct limited subsurface testing (manual excavation) at selected sites (a) to determine the presence or absence of potentially significant buried cultural deposits or features, and (b) to obtain suitable samples for radiocarbon age determination analyses;
5. Analyze background research and field data; and
6. Prepare and submit Final Report.

Project Area Description

The project area consists of a 1.32-acre parcel bounded on the northeast by Highway 270 (Akoni Pule Highway), on the southwest by a bare lava State Conservation Land easement, on the northwest by the Kawaihae Lighthouse site, and on the southeast by a shallow drainage, undeveloped land and the Kawaihae Canoe Club facility. The parcel varies in elevation from c. 10-20 ft.

The study parcel receives from 10-20" of annual rainfall (Juvik and Juvik 1998) and averages daytime temperatures of 80 degrees (Armstrong 1983). The parcel is relatively level, sloping slightly towards the ocean. Soils within the project area consist of Kawaihae very rocky very fine sandy loam (6-12% slopes). This soil series is characterized by a thin surface layer of reddish brown extremely stony sandy loam, over a dark reddish brown to dusky red stony silt loam (Sato et al. 1973:26). The soil in this area is underlain by Pleistocene Era pahoehoe bedrock associated with Pololu volcanics (Wolfe and Morris 2001). The vegetation within the parcel consists of *kiawe* (*Prosopis pallisa* [Humb. & Bonpl. Ex Willd.] HBK.) and grasses with scattered ironwood trees (*Casuarina equisetifolia* L; *Figure 2*).

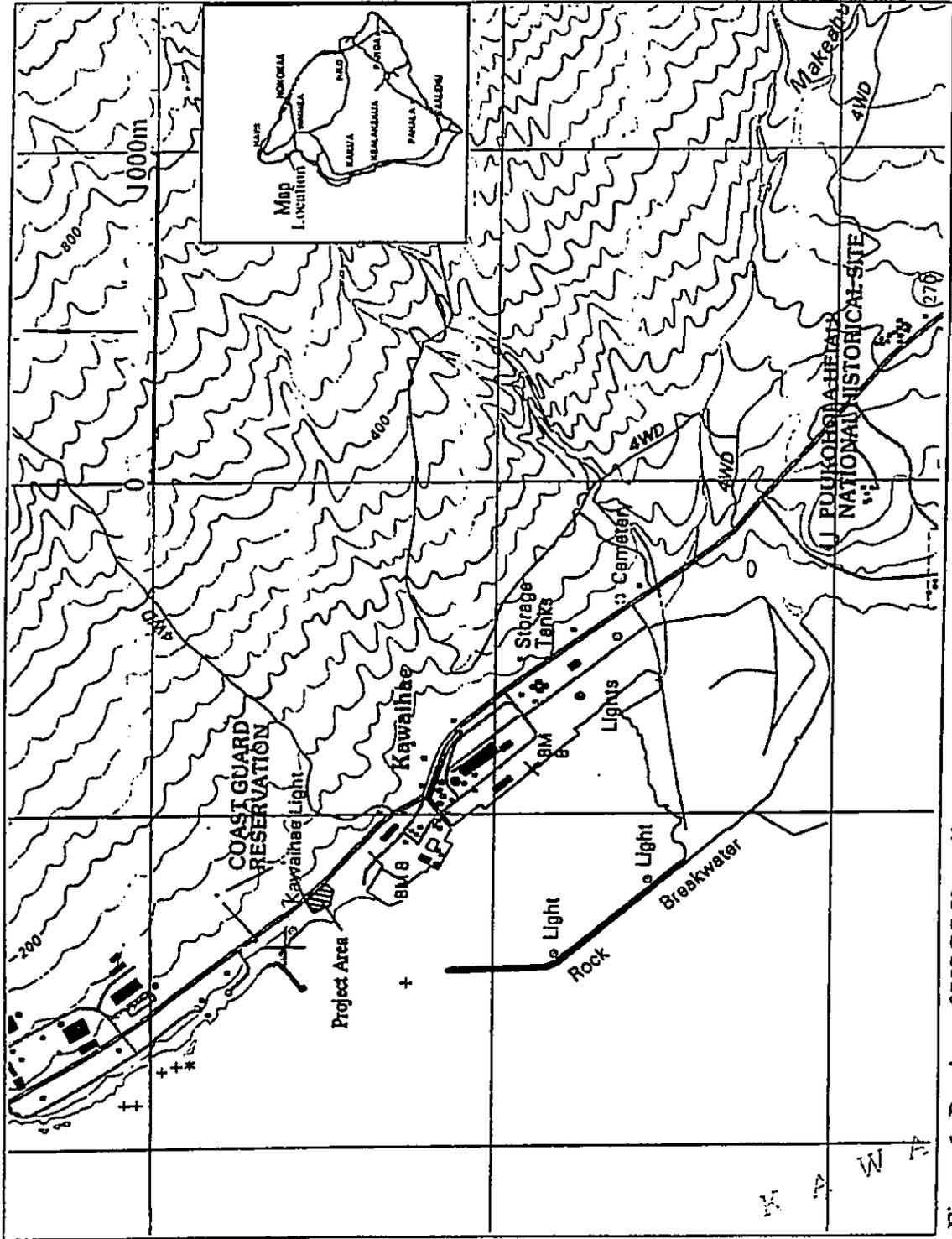


Figure 1. Portion of USGS Kawaihae Quadrangle showing Project Area

RECEIVED AS FOLLOWS



Figure 2. Project Area Vegetation, view to east



Figure 3. Remnant of Concrete Boat Launch, view to east-northeast

RECEIVED AS FOLLOWS



Figure 2. Project Area Vegetation, view to east

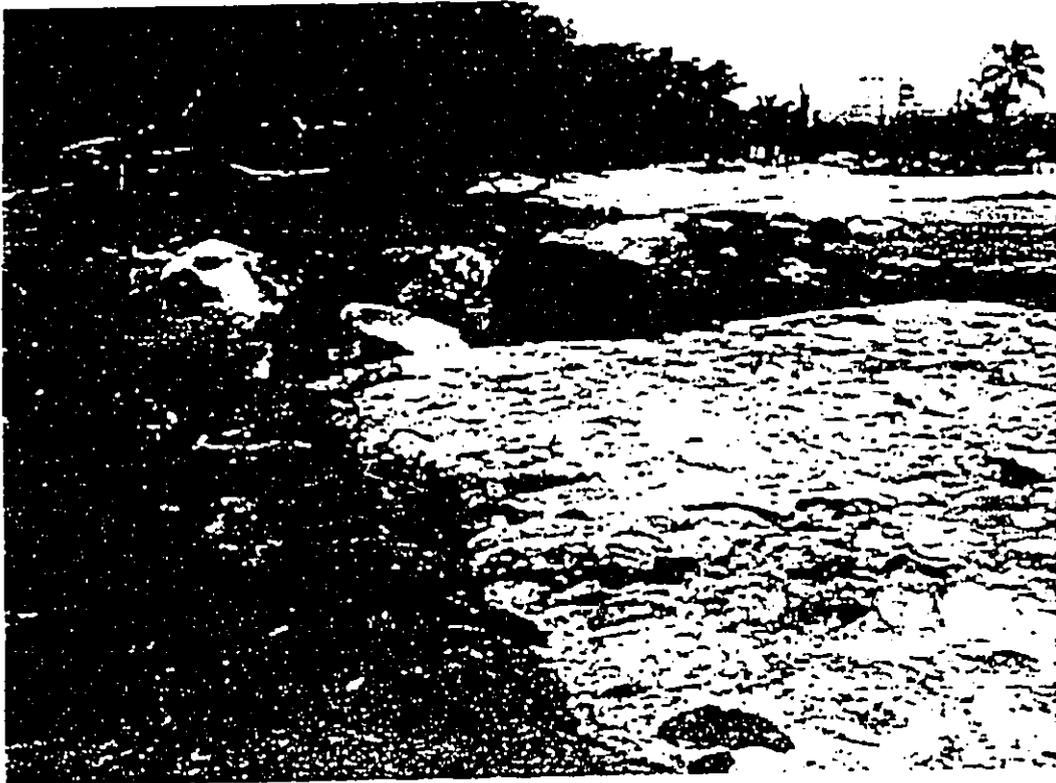


Figure 3. Remnant of Concrete Boat Launch, view to east-northeast

RECEIVED AS FOLLOWS

The seaward portions of the parcel have been disturbed by storm surf and/or high winds. Many of the *kiawe* trees in this area have been blown down and a large amount of modern debris is present. The rusted frame of a truck is present in the north-central portion of the parcel (see *Figure 10*). The adjacent State Conservation Land easement, located along the seaward portion of the parcel also shows evidence of disturbance. This bare lava area contains the remnants of a concrete boat launch and numerous waterworn basalt boulders are scattered over the surface. Debris present amidst the boulders included large fragments of concrete, milled lumber and metal.

The boat launch is located along the water's edge, west of the project area. The seaward portion is comprised of a concrete slab that is 4.0 to 5.0 m long by 3.5 m wide (*Figure 3* and see *Figure 10*). The area inland of the slab has been destroyed and is comprised of displaced slab fragments and boulders. One of the displaced slab fragments has a section of a perforated aluminum hinge imbedded into its underside. The north-northwest and south-southeast sides of the slab are bordered by raised berms comprised of bags filled with concrete that have been coated in mortar (*Figure 4*). These berms are 11.0 to 12.5 m long, 1.0 to 1.2 m wide, 0.4 to 0.6 m in height above the surface of the slab and 0.7 to 1.0 m in height above the surrounding ground surface.

As stated, a drainage forms a portion of the southeastern project area boundary. The portion of the drainage within the parcel varies in depth from 0.5 to 1.2 m (*Figure 5*). The inland portion of the drainage, outside the project area, is 2.0 to 2.5 m in depth as it passes beneath Highway 270.

Field Methods

The project area was subjected a 100% surface examination with surveyors spaced at 10 m intervals. Transects were oriented in a northwest by southeast direction, parallel to Highway 270. Ground surface visibility was good to excellent throughout the parcel. The sites were flagged with pink and blue flagging tape and their locations plotted on a scaled project area map with the aid of Garmin Global Positioning System (GPS) III+. The accuracy of the GPS device for a single point is +/- 15 m. This accuracy is increased to less than c. 3-5 meters by taking multiple points including property corners and overlying the plotted points on a scaled map using AutoCAD software. The sites were subjected to detailed recording consisting of the preparation of scaled plan maps, the completion of standardized site/feature forms, and photographic documentation.

Subsurface testing during the project consisted of the excavation of five 0.5 m diameter shovel tests and one 0.5 by 0.5 m test unit. The shovel tests were excavated in stratigraphic layers and were terminated on bedrock. The test unit was excavated in arbitrary levels within stratigraphic layers and was also terminated on bedrock. Standardized excavation records were prepared after the completion of each stratigraphic layer. The soil removed during excavation was screened through ¼" mesh. Following the excavations, a section drawing depicting the stratigraphy was prepared and the recovered cultural remains were transported to Haun & Associates' office for analysis.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Historical Documentary Research

The project area is situated in Kawaihae I (*Figure 6*). Kawaihae is literally translated as "the water [of] wrath (people are said to have fought for water from a pool in this arid area)" (Pukui et al. 1974:97). Traditional and legendary accounts contain many references to Kawaihae (Kamakau 1992). Maui *ali'inui* Kama-lala-walu ignored the advice of his counsel and sent his half-brother Ka-uhi-o-ka-lani (both sons of Kiha-a-Pi'ilani) to spy on Hawai'i island, to see how large the population was. They landed in Kawaihae.

Ka-uhi-o-ka-lani ran about that same evening and returned before the canoes were dismantled and placed in the house. The keepers of the gods at Mailekini were servants of Kama, and so they concealed the canoes of the spies. When Ka-uhi-o-ka-lani returned his

RECEIVED AS FOLLOWS



Figure 4. Concrete Boat Launch showing Concrete Bags. view to west



Figure 5. Shallow Drainage adjacent to Parcel. view to west-southwest

RECEIVED AS FOLLOWS

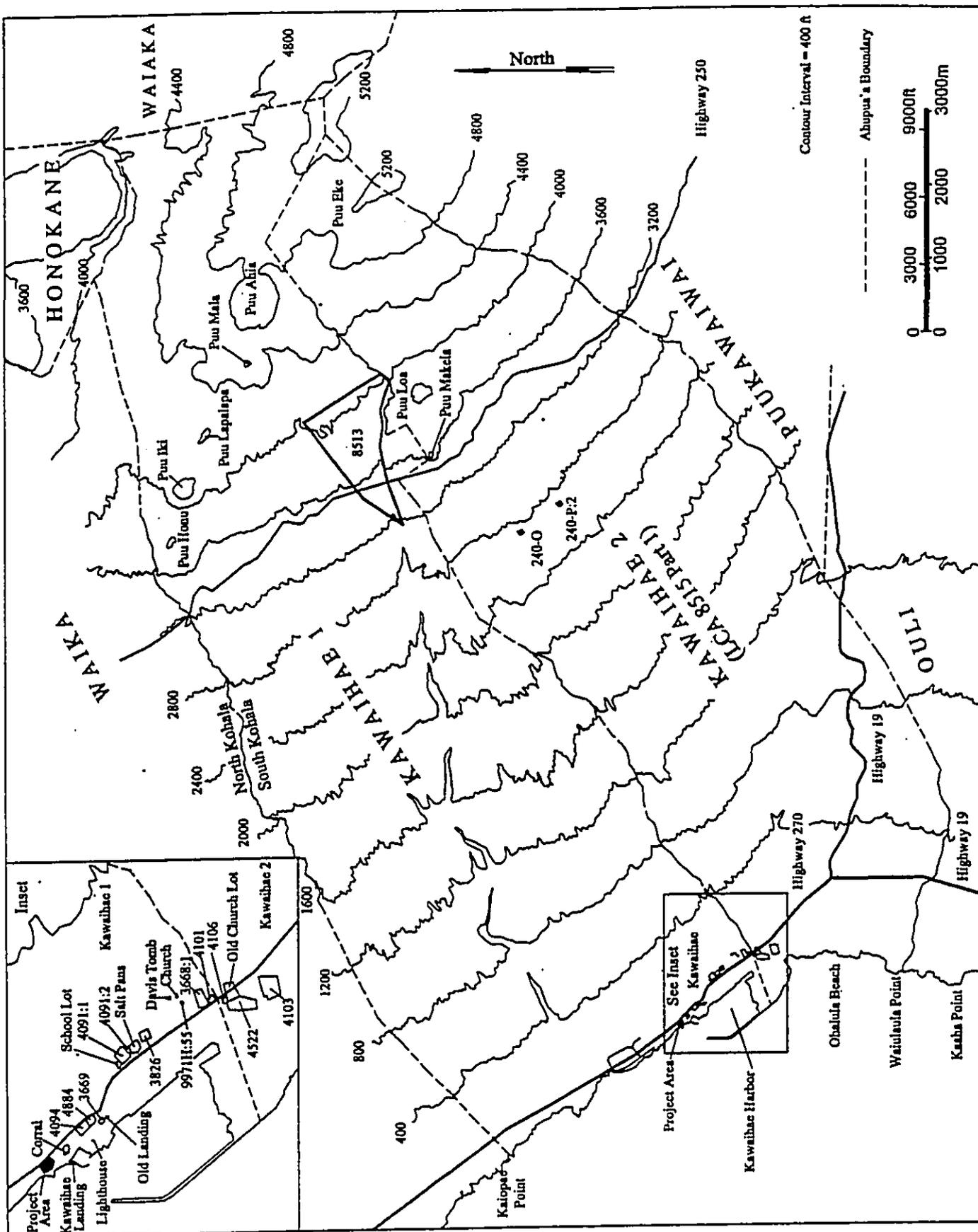


Figure 6. Ahupua'a Boundaries and Land Commission Areas

fellow spies and hosts asked, "where did you go?" "I went visiting from here to the lava bed and Kiholo, the pond. Then did you turn back?" "No, I went on to the long stretch of sand, to the small bay with a point on that side and one on this side. There are large inland ponds." "The sandy stretch is 'Ohiki, and this walled-in ponds are Kaloko and Honokohau. Then you came back?" No, I went on..." (Kamakau 1992:56).

The next morning the spies began a circuit of Hawaii. After they returned to Maui, they reported to Kama-lala-walu the following:

"We went all around Hawaii. There were many houses, but few men. We went to Kohala and found the men only on the shores...." The spies had seen the land of Kohala but had failed to see the people for on all of the fields where sports were held from inner Kohala to outer Kohala, from Kohala of the coastal cliffs to Kohala of the inland, a crowd of people gathered every day from morning to night to play. Kohala was known as a thickly-populated land. The spies thought that if Kohala was conquered, Kona, Ka'u and Puna would be easily taken, and they felt that Hilo and Hamakua would lend no assistance. This was true, for the chiefs of these districts were cousins of the chiefs of Maui (Kamakau 1992:56-57).

While most of the prophets and seers supported Kama-lala-walu's war on his cousins of Hawaii Island, children of his father's sister Pi'ikea and 'Umi-a-Liloa did not. Some warned that if he did go, he would die and not return to Maui alive. They landed at Kohala and began the destruction of the people of Kohala. Kanaloa-kua'ana, son of Keawe-nui-a-'Umi was captured and treated cruelly. "His whole skin was tattooed, his eyelids turned inside out and tattooed." He was renamed Ka-maka-hiwa.

From Kohala, Kama-lala-walu set forth for Kawaihae, and found no one there. The people had gone up to Waimea, for all observed the services at the heiau of Mailekini. Only those of lower Kawaihae and Puako remained. The battlefield was at Waimea. Kama-lala-walu's counselors said, "Waimea is not a battle site for strangers because the plain is long, and there is no water.... It is better to go to Kona..." (Kamakau 1992:58).

Kama-lala-walu did not take heed and listened instead to two old men of Kawaihae who gave him false information and suggested that he cut up his canoes before heading up to Waimea so that Maui warriors would not be tempted to retreat to Maui. Then they headed for the plains of Waimea. When they got there they looked back towards the sea and saw the men of Kona advancing toward them.

The lava bed of Kaniku and all the land up to Hu'ehu'e was covered with men from Kona. Those of Ka'u and Puna were coming down from Mauna Kea, and those of Waimea and Kohala were on the level plain of Waimea. The men covered the whole of the grassy plain of Waimea like locusts (Kamakau 1992:58).

The battle of Pu'u'oa'oaka commenced just outside these plains. The light-weighted lava rocks here contributed to the defeat of the Maui warriors who were used to heavier water-worn rocks. The Maui warriors retreated; some to Kawaihae, others to Kohala. And because of the lack of canoes, very few escaped alive. Ka-uhi-a-Kama, son of Kama-lala-walu who was killed on the plain of Puako, escaped to Kekaha, found a canoe and fled to Maui. He was saved by Hinau, the foster son of Lono-i-ka-makahiki. Many of the chiefs of Kona were relatives of Ka-uhi-a-Kama through his mother Kapu-kini-akua (Kamakau 1992:59-60).

After the death of Hawai'i Island *ali'inui* Lono-i-ka-makahiki, his children did not succeed him and Hawai'i Island was divided into smaller divisions (Kamakau 1992:61-63). The descendants of Kanaloa-kua'ana (Keawe, Ke'eaumoku, Kalani'opu'u and Keoua) later ruled Kohala, Kona and Ka'u. The descendants of Keawe-nui-a-'Umi ruled Hilo and Hamakua. This was not a peaceful period. The chiefs of Kona and Hilo fought each other for the various resources each area had. These wars lasted for several decades with the Hilo chiefs usually defeating the Kona-Kohala chiefs, especially during the reigns of Kua'ana, Kuahu'ia, Ka-lani-ku-kau-la'ala'a and Moku. Ke-aka-mahana (w) was the ruler of Kona during the wars with Hilo.

The rulers of Kona who succeeded Ke-aka-mahana were her daughter Keakea-lani and her son, Keawe [Ke-awe-i-kekahi-ali'i-o-ka-moku]...Keakea-lani was the ruler of Kona and Kohala. The Mahi clan were the war leaders, that is they were in charge...But the chiefs of Hilo were always victorious over those of Kona...after they won the battle of Hu'ehu'e the secret places and burial caves in Kona were broken open... In the battle of Mahiki, Ka-lani-ku-kau-la'ala'a and Moku were the chief war leaders of Hilo (Kamakau 1992:61-63).

After Moku the Hilo chiefs ceased to reign. Kohala *ali'inui* Keawe's half sister Ka-lani-kau-lele-ia-iwi was the mother of Alapa'i-nui-a-Ka-uaua, who went to live on Maui with his half sister, Ke-ku'i-apo-iwa-nui (wife of Ke-kau-like, Maui *ali'inui*) after his father's (Ka-uaua-nui-a-Mahi) death at the hands of the Hilo chiefs in the battle of Mahiki. When Alapa'i heard of Keawe's death and the unrest between the district chiefs, he went back to Hawai'i Island with plans to make war on all the chiefs. He captured the chiefs of Kohala and Kona, and became ruler of those districts. However, when his brother-in-law Ke-kau-like heard about Alapa'i's victory, Ke-kau-like made war on Alapa'i in order to return Kohala and Kona to their chiefs. He wasn't successful, but Ke-kau-like's warriors prevented Alapa'i from conquering the Hilo and Ka'u chiefs (Kamakau 1992:64-65). During these battles a lot of damage was done on the landscape.

The fighting began with Alapa'i at Kona. Both sides threw all their forces into the fight. Ke-kau-like cut down the trees throughout the land of Kona. Obligated to flee by canoe before Alapa'i, he abused the country people of Kekaha. At Kawaihae he cut down all the coconut trees. He slaughtered the country people of Kohala, seized their possessions and returned to Maui (Kamakau 1992:66).

In retribution, Alapa'i decided to carry the battle to Maui. While Alapa'i and his warriors were encamped in Kohala, Kamehameha was born to Ke-ku'i-apo-iwa (II) in Kapakai ('Ii, John Papa 1984:3), in the *ahupua'a* of Kokoiki, in the *moku* of North Kohala near the Mo'okini *heiau*. Kamakau (1992:67) says it was AD 1736; however, others say it was between 1753 and 1758 with more leaning towards 1753 (Cahill 1999:56-57). He was quickly taken by Kohala chief Nae'ole and hidden in Halawa (Kamakau 1992:67-69), his ancestral homeland (Williams 1919:121). Ke-ku'i-apo-iwa (II) was the daughter of Kekela and Ha'ae. Kamehameha's father was Keoua, younger brother of Ka-lani-'opu'u. Because of her weakened condition, Ke-ku'i-apo-iwa did not accompany the Alapa'i expedition to Maui. The infant Kamehameha was placed in the charge of Nae'ole and his younger sister Ke-ku-nui-a-lei-moku until he was five. He was then returned to Alapa'i who placed the child in the care of his wife, Ke-aka (Kamakau 1992:68-69).

Before Alapa'i reached Maui, a dying Ke-kau-like [Ka-lani-ku'i-hono-i-ka-moku] made his son Kamehamehanui his successor. Ke-kau-like died enroute to Kula (Kamakau 1992:69). When Alapa'i heard of his death, he decided not to make war on his sister's son. While visiting them on Maui Alapa'i heard that the O'ahu chiefs attacked his relatives on Molokai, so he went there to help (Kamakau 1992:70).

Alapa'i was said to have been a good ruler and loved by the common people, but his rule had come about by slaying *ali'inui* Ka-lani-nui-i-a-mamao [father of Kalani'opu'u and Keoua] and his brother Ka-lani-ke'e-au-moku, rightful *ali'inui* of Hawaii island, and taking control. This would be the cause of several battles between Alapa'i and his nephew, Kalani'opu'u (Kamakau 1992:75-78).

In 1754 Alapa'i became ill and moved to Kikiako'i in Kawaihae. As his illness progressed "at Kikiako'i in the *heiau* of Mailekini, Kawaihae, he appointed his son Keawe-opala to be ruler over the island" (Kamakau 1992:77). However, this was short-lived due in part to shifting allegiances of Keawe-opala's chiefs (i.e., his relative Ke'eaumoku) and *kahuna*, to go with Kalani'opu'u. "A canoe arrived from Kekaha and brought word to Ke'eaumoku that Ka-lani-'opu'u was at Kapalilua (in south Kona) and was coming to make war against Keawe-opala. Ke'eaumoku therefore made up his mind to join forces with Ka-lani-'opu'u" (Kamakau 1992:78). It was that same year that Kalani'opu'u, a lover of war, became *ali'inui* of Hawaii island (Kamakau 1992: 78-79). Kalani'opu'u was the son of Ka-lani-nui-i-a-mamao (ruling chief of Ka'u whom the *Kumulipo* was composed for) however, his biological father was said to be Pele-io-holani, *ali'inui* of Oahu (Kamakau 1992:110; see also 'Ii 1983). About 1759 Kalani'opu'u conquered East Maui from his wife's brother the Maui king Kamehamehanui (son of Kekaulike) by using Hana's prominent Pu'u Kau'iki as his fortress. He appointed one of his own Hawaii chiefs, Puna, as governor of Hana and Kipahulu. "Many chiefs from Hawaii at this time settled on Maui, some of them grand-

children of Keawe" (Kamakau 1992:79-80).

Conflict between Hawai'i chiefs continued. Ke'eumoku, son of Keawe-poe-poe rebelled against Kalani'opu'u and set up a fort at Pololū and Honokane. He was attacked by Kalaniopu'u so he moved to Maui. In 1766 Maui *ali'inui* Kamehameha-nui became ill in Hana and ceded his lands to his younger brother Ka-hekili-nui-'Ahu-manu (Kahekili), a fierce warrior and "manipulator." Following the death of Kamehameha-nui, Ke'eumoku "married" his widow Namahana, a cousin of Ku-nui-akea Kamehameha (Kamehameha I). Their daughter Ka'ahumanu, would later become a favorite wife of Kamehameha I (Kamakau 1992:79-84, 309).

Between 1775 and 1779 fighting continued between Kalani'opu'u and Kahekili. In 1775 Kalani'opu'u and his Hana forces raided and severely destroyed the neighboring Kaupo district, before continuing several more raids on Molokai, Lanai, Kaho'olawe and parts of West Maui. It was at the battle of Kalaeoka'ilio that Kamehameha, nephew and favorite warrior of Kalaniopu'u, was first recognized as a great warrior and given the name of Pai'ea (hard-shelled crab) by the Maui chiefs and warriors (Kamakau 1992:84). Kalani'opu'u returned again to Maui in 1776, but was severely defeated by Kahekili's warriors.

In January 1778 Cook landed in Waimea, Kauai and the culture of old Hawaii began its spiraling change (see Day 1992). Cook left Hawaii for several months, but returned later in the year. Kalani'opu'u was fighting Kahekili's forces in Wailua, Maui on November 19, 1778 when Cook's ship was sighted on his return trip to the islands. Kalani'opu'u visited Cook on the *Resolution*, while Kahekili visited Clerke on the *Discovery* (Kuykendall and Day 1976:16).

When Cook sailed into Kealakekua Bay on January 17, 1779, Kalani'opu'u was still fighting Kahekili on Maui. At this time Kahekili's brother Ka'eo-kulani was ruling chief of Kauai; Ka-hahana was ruling chief of Oahu and Molokai; Kahekili'ahumanu of western Maui, Lanai and Kaho'olawe; and Kalani'opu'u was ruling chief of Hawaii and Hana (Kamakau, 1992:84-86, 92, 97-98). On January 25th Kalani'opu'u visited Cook again at Kealakekua Bay, presenting him with several feather cloaks. In February Cook's plan to kidnap Kalani'opu'u as a hostage was thwarted and Cook was killed following a skirmish over a stolen cutter (Kuykendall and Day 1976:18).

Lieutenant King made the following observation when they entered Kawaihae Bay February 6, 1779:

Although the northwestern part of the bay which...is call'd Toe-yah-ya looks green and pleasant, yet as it is neither wooded or hardly any signs of culture, and a few houses. It has certainly some defect, and does not answer the purposes of what the natives cultivate (Beaglehole 1967:525 In Allen 1987:14).

A month later King made the following observations:

Along the NE side of the bay close to which we Saïld [sic], It is very little Cultivated, & we saw but few houses; the Peoples appearance shewd that they were the lowest Class that inhabited them [Beaglehole 1967:608 In Rosendahl & Carter 1988:19].

The off and on warring between the Hawaii and Maui forces continued, but Kalani'opu'u was aging. Kalanio'opu'u schemed for peace by having his son Kiwala'ō by Kalola, sister of Kahekili, and their twin half-brothers, go to Kahekili, who had the battles cease (Kamakau 1992:88-89; Desha 2000:49-50). Kalanio'opu'u declared his young son Ka-lani-kau-i-ke-a-ouli Kiwala'ō to be his heir; to his nephew Kamehameha he gave the war god, Ku-ka'ili-moku (Kamakau 1992:107). But even before the death of Kalani'opu'u in 1772, chiefs and *kahuna* were already taking sides between Kiwala'ō and Kamehameha.

Kamehameha and a few other chiefs were concerned about their land claims which Kiwala'ō did not seem to honor, so after usurping Kiwala'ō with a sacrificial ritual, Kamehameha retreated to his district of Kohala. While in Kohala, Kamehameha farmed the land growing taro and sweet potatoes (Handy and Handy 1978:531). After Kalani'opu'u died civil war broke out and the wars between Maui and Hawaii also continued (Kuykendall and Day 1976:23, 24; Handy and Handy 1978:528; King 1990).

In 1781, after Kahekili heard about the death of Kalani'opu'u, Kahekili, split his forces and sent them through Maui's south-eastern Kaupo Gap and the north-eastern Ko'olau Gap into Hana. After damming and diverting the supply of spring water to Pu'u Kau'iki, the Hawaii chiefs were finally defeated, and the Maui *ali'inui* regained control of Hana in 1782 (Kamakau, 1992:84-86; 115-116; Fornander 1900:Vol II 146-7, 150, 216). Following his Hana victory, Kahekili went on to gain control of all the islands except Hawaii, by trickery and warfare (Kamakau 1992:116, 128-141).

Kiwala`ō [Keōpūolani's father] was killed in 1782 (Cahill 1999:62), but the warring between the forces of Hawai'i Island districts continued. Demographic trends during the early historic period indicate a population reduction in some areas, yet show increases in others, with relatively little change in material culture (Kirch 1985:308, Kent 1983:13). There was a continuum of craft and status material, intensification of agriculture, *ali'i* (chief) controlled aquaculture, upland residential sites, and oral records which were rich in information. The Ku cult, along with its *luakini heiau*, and the *kapu* (restriction or regulation) system were at their peak, although western influence was already altering the cultural fabric of the islands.

In 1790, when Captain George Vancouver made his first stop in the Hawaiian Islands he was told that Kalaniopu'u was dead; Hawai'i was ruled by Keoua Kuahu'ula (half-brother of Kiwala`ō), his uncle Keawe-mau-hili, and Keoua's cousin, Kamehameha (Day 1984:77). Vancouver went on to trade with Kalanikūpule in Waikiki. He then found that the ruling chief of Kauai, Ka-umu-ali'i, was a mere child; his father Ka'eo was on Maui with Kahekili. Vancouver also noted a decrease in the population and the number of chiefs since the arrival of Cook (Kamakau 1992: 162-163).

During this same year the *Eleanora*, a fur-trading vessel, arrived at Kealahou Bay. Its sister ship, the *Fair American*, was becalmed off Kaupulehu where it was attacked and everyone on board was killed except for crewmember Issac Davis. As the attack was going on, *Eleanora's* boatswain John Young was on shore trading for supplies. Fearing retaliation by the crew of the *Eleanora*, Kamehameha detained Young and allowed his ship to sail without him. Kamehameha took both Davis and Young under his care (Kuykendall 1957:24-26 In Rosendahl & Carter 1988:20).

Young later served as Governor of Hawai'i Island (1802-1812) and maintained a residence at Kawaihae, located between Makahuna and Makeāhua gulches (Allen 1987:15).

Kame'eiamoku, one of the North Kona chiefs on Hawai'i, however, had previously been insulted by Metcalf and vowed revenge on the next ship that passed his way. By coincidence, it happened to be the *Fair American*, seeking land near Kawaihae Bay. The opportunity to avenge his insult by foreigners, the defenseless state of the vessel due to its small crew and inexperienced commander, and the value of the muskets and other iron implements on board sealed the vessel's doom. Metcalf and his crew were either killed or drowned. The only survivor was Isaac Davis, who, although wounded, jumped overboard and managed to reach a native canoe, whose occupant clubbed him into submission but for some reason spared his life. The *Fair American* was hauled ashore and Kamehameha later appropriated it, its guns, ammunition, and other articles of trade, as well as Davis himself (Rhodes 1993: Chapter III).

By 1790 Kamehameha I had gained enough control of the island of Hawaii that he could leave to join the war parties on Maui. Kamehameha also had at his disposal western weapons, and an armed schooner (n.a. 1967:5). Kamehameha brought a cannon from the *Eleanora* along with the expertise of Isaac Davis and John Young, who were now advisors and *aikane punahele* (favorites) of Kamehameha I (Kamakau 1992:147-148).

Finding their lives secure, and being watched closely and unable to escape, Young and Davis became reconciled to their lot. Their fortunes became quickly and closely linked to those of the king. They would play a significant role in Kamehameha's rise to dominance, and Young, especially, who quickly gained the king's trust and became his principal advisor, would be visited, consulted, or at least mentioned by every visitor to the islands for the next forty years (Rhodes 1993:Chapter III).

"At Kawaihae and Kealahou. Young and Davis built up an army and navy for Kamehameha along European lines, introduced firearms to Hawaiian warfare, and directed their use in Kamehameha's conquest of Maui, Lanai and Molokai" (n.a. 1967:5). His canoe fleet "beached at Hana and extended from Hamoa to Kawaipapa" to battle Kalanikūpule, son of Kahekili (who now ruled Oahu). After several battles along the East Maui coast, Kamehameha's forces reached Wailuku where the "great battle" took place. This would be the beginning of the end of independent ruling chiefs because of the inequity of battle strategy and weaponry (Kamakau 1992:147-148).

Back on Hawai'i Island in 1790, Keoua Kuahu'ula [twin brother of Keoua Pe'e'ale, sons of Kalaniopu'u and Kane-kapo-lei (Kamakau 1992:120)] ravaged Kamehameha's birthlands of Kohala. At the advice of Ka-pou-kahi, a *kahuna* from Kauai (Kelly 1974:6), Kamehameha personally helped to construct the heiau Pu'u Koholā in the summer of 1791, to assure his victory over his cousin, Keoua Kuahu'ula, who was sacrificed at the heiau (Day 1984:77; Kamakau 1992:154-157). John Young reportedly noted that "Kamehameha offered 11 human sacrifices at the dedication of the heiau. The principal offering was the body of Keoua Ku-ahu'ula" (Llopis & Sharp 1994:1). Pu'u Kohola Heiau is said to have been a reconstructed older Lono heiau from the time of Lonoikamakahiki (c. 1580) and Kama and "consecrated by Lono" (Kelly 1974:6). Kamehameha thought first of re-constructing Mailekini Heiau, which was on the slope of a hill named Pu'u Kohola, but his chief *kahuna* advised him to build a new one at the top of the hill instead.

"Kamehameha may have rebuilt an abandoned heiau there or constructed a new one, but the heiau platform he built in 1791 still dominates...Kawaihae" (n.a. 1967:6). "...the common people came in relays from all parts of Kamehameha's dominions to carry stone for the walls and platforms of the heiau. The workers are said to have camped by thousands on the neighboring hillsides" (n.a. 1967:7; see also Fornander 1996:328 [2]). "John Young later told Waimea's missionary Lorenzo Lyons that he had seen thirteen humans sacrificed on the altars of Pu'ukoholā during the ceremonies" (n.a. 1967:7).

Tradition holds that the present heiau on the "hill of the whale" overlooking Kawaihae Bay is located on the site of an earlier temple structure. Folklore centering around one of King Lonoikamakahiki's battles with his enemies on Hawai'i, at Kawaihae, as recounted by Fornander, mentions Mailekini and Haleokapuni and alludes to Pu'ukohola as a strategic point that the rebels hoped to occupy. There is a brief mention of a temple at Pu'ukohola, but no physical description [233]. Fornander makes two references to human sacrifices on the hill. First, he states that the rebel forces encamped at Haleokapuni, who planned to occupy Pu'ukohola and shower rocks down on the forces of Lono, "would not ascend Puukohola unless a man on the side of Lonoikamakahiki should be slain; then only would Puukohola be scaled for human sacrifices" [234]. He also relates that "This battle of Lonoikamakahiki at Puukohola was named the Kawaluna, because of the night strategy successfully executed by him on that occasion. Kanaloapulehu, having been made prisoner, was killed and laid upon the altar (lele)" [235]. We can only surmise that this means the altar of a temple on top of the hill. After winning his battles, Lono conducted religious services at certain temples in thanks and celebration; one of these observances was held at Pu'ukohola (Greene 1993: Chapter VII).

"At the time of the dedication of Pu'ukoholā heiau in 1791, the coastal region from Kawaihae to Puakō supported a sizable Hawaiian population" (n.a. 1967:8). [Note: During Fornander's time, someone who carried the stones was still alive and talked to him about it (Kelly 1974:6).]

After the death of his older brother [Kiwala-ō] Keoua lived in Ka'u, successfully fighting off Kamehameha's generals. Following the new strategy, Kamehameha sent Keoua's uncles, Keaweheulu and Kamanawa, to convince Keoua that Kamehameha was offering him a truly respectful peace. Apparently trustful at first, Keoua consented to go with them, but at some point on the trip to Kawaihae he evidently suspected he was being led into a trap. His canoes landed briefly at the sacred place of Luahinewai near Kiholo. There, in the beautiful fresh-water pool, he bathed.... After bathing he cut off the end of his...*omu'o*, an act which believers in sorcery call 'the death of Uli' and which was a certain sign that he knew he was about to die.... 'The death of Uli' refers to death caused by the vengeance of the sorcerer, since Uli is the goddess worshipped by sorcerers. The

part cut off is used for the purpose of sorcery so that those who do a man to death may themselves be discovered and punished.... Just as Keoua was stepping from the canoe onto the beach at Kawaihae, Keeaumoku and the other chiefs of Kamehameha's forces attached him and the occupants of his canoe (Kamakau 1961:156-157 in Kelly 1974:7).

[Note: At Kawaihae today a different version is told. Keoua is said to have been shot and killed by John Young and Issac Davis who stood a short distance back from the water's edge below Mailekini Heiau. This area now is known as Pelekani, meaning Britain or British, because of Young and Davis' action taken there (Kelly 1974:7).]

Two other significant *heiau* near Pu`u Kohola are Mailekini Heiau located west and downslope from Pu`u Kohola; and Hale O Kapuni, dedicated to the shark *aumakua*, which is located west and off shore from the two land *heiau*.

Mailekini Heiau is said to relate to 'inter-chieftom and inter-island warfare of the period before 1780 when it served as the principal temple of the ruling chief of Kohala' (Apple 1969:23). Mailekini continued to be important in the historic period, being restored by Kamehameha I contemporaneously with construction of Pu`u Kohola Heiau (Soehren 1964:11). Offshore from Mailekini is the location of a third *heiau* known as Hale O Kapuni. Reportedly Hale O Kapuni was associated with sharks, and remains of human sacrifices from Mailekini were placed here to feed them (Davies in Soehren 1964:12; Apple 1969:17-19). Soehren reports the structural portion of the *heiau* has been largely obliterated by tidal waves and siltation connected with construction of the harbor, but local residents continue to sight sharks in the general area. Of...note is the former residence of Kamehameha II, which was located near the beach, just below Pu`ukoholā Heiau (Allen 1987:16).

Hale O Kapuni is mentioned in the *Story of Lonoikamakahiki* as the place where all the chiefs encamped; it was located immediately below the residence of Pu`ukohola and Mailekini at Kawaihae (Fornander 1917(4):324 in Kelly 1974:27). [Note: Kelly (1974) mentions that in a visit to Kawaihae, resident Eddie Laau Sr. pointed out where the *heiau*, which is no longer visible, was located. It is now covered with silt that washes down from the coral fill. At least three white-tipped sharks circled in the vicinity that afternoon. Laau also stated that the "chair" of Kamehameha was not a chair, but a place Kamehameha use to "rest his arm on while standing on land, watching the sharks circle in the vicinity of Hale-o-Kapuni below" (Kelly 1974:27)].

On his second voyage to Hawaii in 1793, Vancouver counseled the chiefs to stop making war on each other. He gave Kamehameha some cows and sheep (at Vancouver's advice Kamehameha put a ten-year *kapu* on them). Vancouver went on to visit Kahekili in Lahaina and made the same request; then on to Waikiki to Kalanikūpule.

Young and Davis became an integral part of this early period of modern Hawaiian civilization, and for their efforts Kamehameha rewarded them by making them high chiefs and endowing them with large tracts of land on which they settled and raised families. This property was given particularly for their services in helping conquer the islands of Hawai'i, Maui, Moloka'i, and O'ahu. [28] The land given to Young and Davis included Mailekini and Pu`ukohola *heiau*. Near their homes in Kawaihae, Young and Davis raised fruits and vegetables new to Hawai'i from seeds procured from foreign ships. Their residence in this area made it a required port of call for sea captains who had to obtain Young's blessing before conducting business with the Hawaiian government. In 1793 Vancouver landed the first cattle in Hawai'i at this spot (Rhodes 1993: Chapter III).

In 1810, Issac Davis died and it was left to Young to carry on; he acquired the nickname "Olohana" which was a Hawaiian equivalent to sailor's cry "All hands!" He also adopted Davis' six children, raised them as his own, and held Davis' estate in trust for them (n.a. 1967: 9, 11).

Davis served as governor of O'ahu during the early years of the nineteenth century. In 1810 he negotiated terms of peace for Kamehameha with Ka'umu'ali'i, the king of Kaua'i.

bringing that island under Kamehameha's dominion. When Ka'umu'ali'i journeyed to Honolulu on board a foreign vessel to see Kamehameha, some lower chiefs conspired to kill him and proposed to Kamehameha that a sorcerer perform this deed. The king refused and even had the sorcerer slain. The chiefs then hatched a plot to kill Ka'umu'ali'i secretly as he journeyed into the interior. Learning of these plans, Davis warned Ka'umu'ali'i to return on board ship. Shortly thereafter, Davis died by poisoning, possibly in retaliation for this act of loyalty to Ka'umu'ali'i [30] Davis's grave is located at Kawaihae (Rhodes 1993: Chapter III).

After the conquest of O'ahu, Young was designated governor of Hawai'i Island, an office that primarily involved superintending tax gathering for the king. He governed Hawai'i from his home at Kawaihae from 1802 to 1812 while Kamehameha attended to royal business on other islands; Young later became the resident chief of Kohala, with frequent assignments to Honolulu and elsewhere (Rhodes 1993: Chapter III).

Coastal Kawaihae was developing into an important provisioning "port-of-call" by the early 1800s with sweet potatoes, yams and a variety of other crops, which were cultivated in the vicinity, particularly the uplands. By the mid-1800s ranching became a flourishing economic factor in the Kohala and North Kona areas with cattle being shipped out of Kawaihae (Rosendahl 1995:11).

Kawaihae's principal articles of trade in the period were salt and sweet potatoes, timber for ship repairs, high quality tapa...hogs, fowl, taro, sugar cane, breadfruit, melons, coconuts and bananas. Vessels replenished their water stores from either stream or springs. Among his private enterprise, Olohana conducted a thriving canoe-making venture and supervised the land he had received as a gift from Kamehameha which included the two *ahupua'a* of Ouli and Kawaihae 2nd. Young modified Mailekini *heiau* to serve as a protective fort for Kawaihae. Eyewitness accounts describe the fort as being mounted with twenty-two guns and had the appearance of the broadside of a European warship (n.a. 1967:12).

As business agent for Kamehameha, as well as chief of the area, Young supervised the trade with ships at this port, where local salt and sweet potatoes, timber for ship repairs, hogs, fowl, taro, sugar cane, breadfruit, muskmelons, coconuts, and bananas were traded for nails, iron, and finally, at Young's suggestion, for more sophisticated types of goods. A lucrative sandalwood trade also originated here; with Young supervising from his home the measuring and loading of trees. Young was involved in, or witness to, most of the significant events in the early years of the Hawaiian kingdom (Rhodes 1993: Chapter III).

In 1815 John Palmer Parker, an ex-seaman, made his home at Kawaihae where he began hunting cattle that roamed the slopes of Mauna Kea. By this time the Vancouver's cattle of 1793 had increased to destructive numbers and Parker was hired to thin the wild herds. Since people had not yet developed a taste for beef, Parker salted the meat with Kawaihae salt and tanned the hides to trade with ships that stopped at Kawaihae. He later built pens to confine the cattle and horses (n.a. 1967:14-15).

An 1819 map by Louis Duperrey during the Freycinet expedition (*Figure 7*), indicates 75 to 80 structures along Kawaihae Bay, stretching from Makeāhūa Gulch in the south to the present Kawaihae lighthouse in the north and showing houses laid out in three rows running parallel to the coast and extending inland to roughly 40 to 50 feet in elevation. The map indicated the location of John Young's house, as well as that of Liholiho and Ke'eaumoku (Rosendahl and Carter 1988:23). "Four years later Reverend William Ellis (1963:399) estimated the number of houses at Kawaihae Village to be around 100" (Allen 1987:14).

Kamehameha I died on May 8, 1819 in Kailua-Kona and once again the culture of Hawaii was to change radically.

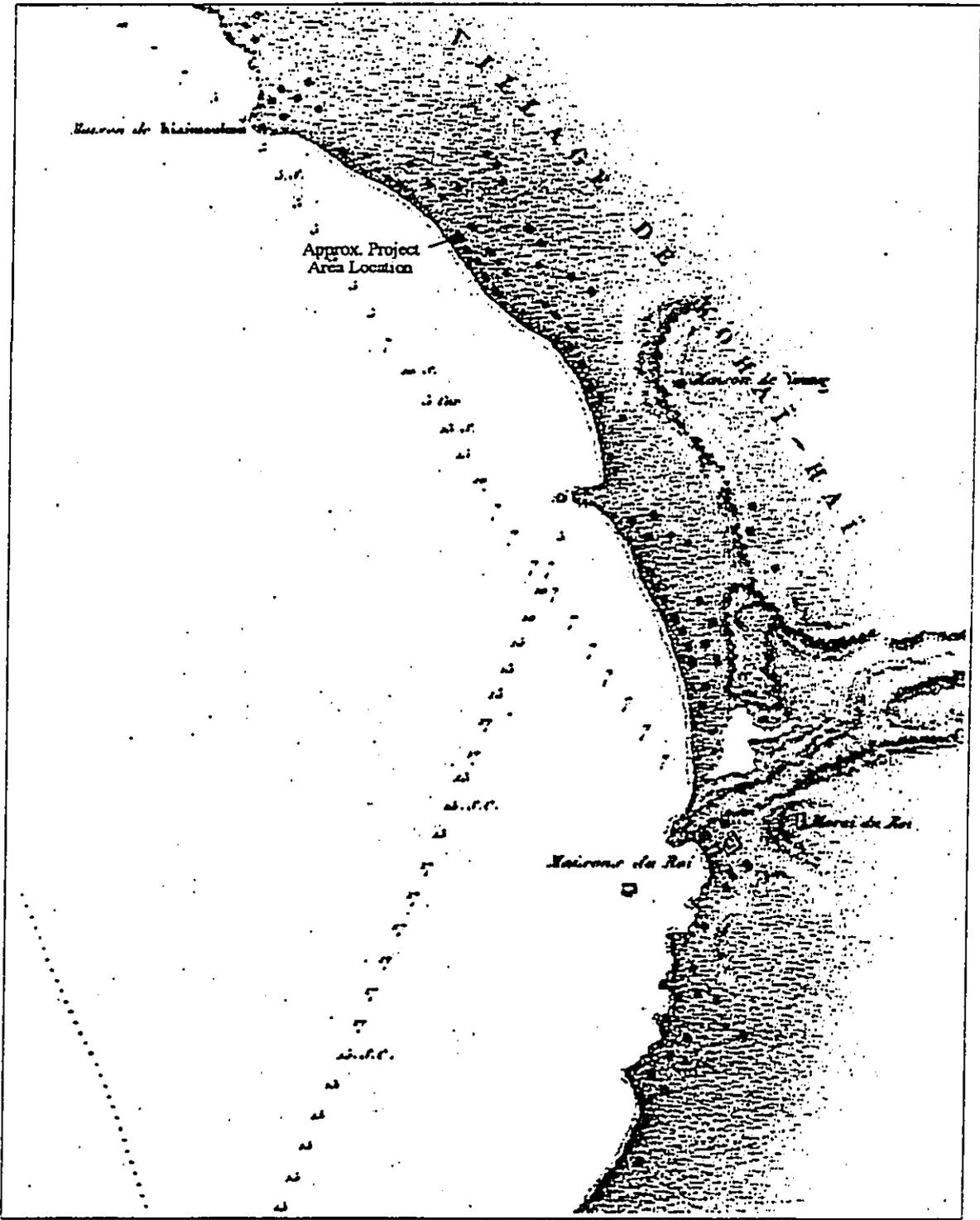


Figure 7. Portion of Duperrey's 1819 Map of Kawaihae

On the morning after his father's death, Liholiho left Kailua, which had been defiled by death, for Kawaihae in Kohala, as was the custom. During his absence, as was also the custom, the population committed all kinds of excesses, breaking the kapu with impunity. Although the usual mourning ceremonies on the death of a king took place, no sacrifices occurred to provide the old king with companions in the next world. During this mourning period, the dead chief's bones were secreted in a cave, the traditional action that ritually disassociated the mandate to rule from the dead king so that his heir could re-establish it on his return to the area. After the requisite ten days of seclusion had passed, Liholiho returned to assume power, at which time he was also supposed to re-establish the kapu system, something he did not do. Instead he left again for Kawaihae in the Kohala district, where he took up residence until October, probably hoping to avoid having to make some important decisions concerning land redistribution, requests by the ali'i to share in the sandalwood trade, and whether or not to break the kapu, an action he knew Ka'ahumanu and others favored (Greene 1993: Chapter V).

After Kamehameha's death, a degree of unrest existed among some of the principal chiefs regarding several economic matters, including the king's monopoly of the sandalwood trade. This tension in the political situation disturbed the elderly Young, who entreated de Freycinet to stress to the Hawaiians that peace and unity were essential for the future of the country and could only be attained by continuing loyalty to the Kamehameha dynasty. De Freycinet's draftsman, Jacques Arago, noted that this request of Mr. Young's could only have been dictated by generosity of sentiment; personal interest had no share in it: the poor old man has but a few days to live; extended on a bed of sickness, he perceives the rapid approach of death, and, little regarding his own sufferings, his last prayers are offered up for a country, which the beneficence of Tammeamah makes him grieve to leave a prey to the factions which are about to divide it (Rhodes 1993: Chapter III).

Six months after his death, his son and successor Liholiho, met with *kuhina nui* Ka'ahumanu, and a council of chiefs and chiefesses at Kawaihae. His advisors, which included his father's *kahuna* Hewahewa, convinced the new king Kamehameha II to abolish the *kapu* system. He signified his agreement by sitting down and eating with his mother Keōpūolani, breaking the *'ai kapu* (Oliver 1961:260; Kuykendall and Day 1976:41; Kamakau 1992:222-228).

Liholiho's cousin Kekuaokalani, caretaker of the war god Ku-Kailimoku, disagreed with the new edict and revolted. By December of 1819 the revolution was quelled. Kamehameha II sent edicts throughout the kingdom renouncing the ancient state religion, ordering the destruction of the *heiau* images and the *heiau* structures to be destroyed or abandoned and left to deteriorate, allowing the personal family religion, the *'aumakua* worship, to continue (Oliver 1961:260; King 1990; Kamakau 1992:222-228).

During this period, the sandalwood trade was wreaking havoc on the commoners who were weakening with the heavy production, exposure, and famine just to fill the coffers of the ali'i who were no longer under any control constraints (Oliver 1961:261; Kuykendall and Day 1976:42; Bushnell 1993:212). On a stopover in the Kohala district in the early 1800s Ellis wrote the following:

About eleven at night we reached Towaihae [Kawaihae], where we were kindly received by Mr. Young...Before daylight on the 22nd, we were roused by vast multitudes of people passing through the district from Waimea with sandal-wood, which had been cut in the adjacent mountains for Karaimoku, by the people of Waimea, and which the people of Kohala, as far as the north point, had been ordered to bring down to his storehouse on the beach, for the purpose of its being shipped to Oahu. There were between two and three thousand men, carrying each from one to six pieces of sandalwood, according to their size and weight. It was generally tied on their backs by bands of ti leaves, passed over the shoulders and under the arms, and fastened across their breasts.... (Kuykendall and Day 1976:42, 43, Ellis 1984:397)

The lack of control of the sandalwood trade was to soon create the first Hawaiian national debt as promissory notes and levies were initiated by American traders and enforced by American warships (Oliver 1961:261, 262). "In the 1820s, the sandalwood trade was at its peak and every tree found was cut for its

value. The forests of Kohala, which reached almost to the Kawaihae shore as late as 1815, contained an abundance of the coveted wood, presumably the dry land species" (n.a. 1967:16).

In 1825, Kuhina-nui Ka'ahumanu [King Kamehameha III was just a child] placed a *kapu* on cutting sandalwood trees. She saw what it was doing to the people; neglecting their crops and fishing and getting into debt (Brennan 1995:48). This was too late for Kawaihae. In 1820 the missionaries on the *Thaddeus* noted the "green slopes of Kohala" on arriving at Kawaihae; by 1832 missionary Lorenzo Lyons remarked that Kawaihae was "about as desolate a place as I have ever seen, nothing but barrenness, with here and there a native hut." and "scorched, withered and desolate Kawaihae...Between the denuded forest, and the wild cattle ravaging any re-growth, a growing community in Waimea diverted the streams, forever changing the Kohala leeward landscape and climate" (n.a. 1967:18).

Beef became a barter item (Brennan 1995:48); and in 1832, Kamehameha III sent a high chief to California to bring some *vaqueros* back to Hawaii to help with the training of horse and cattle handling. Although the cattle were being slaughtered by the thousands for their hides and tallow, their numbers were increasing beyond belief. Over 100,000 wild cattle were roaming the mountains of Waimea alone. Many crops were ruined by the hordes of cattle (Brennan 1995:51-54). The solution was for the *vaqueros* or *paniolo* as Hawaiians called them, to first train Hawaiian and *haole* men to be good horsemen or wrangler or cowboy (*paniolo*). This was the beginning of Hawai'i's cattle kingdom (Brennan 1995:70). Paniolo Jack Purdy and John Parker, Kamehameha III's chief cattle killer, partnered to furnish the king with badly needed beef for bartering with foreign ships (Brennan 1995:74).

In the mid-1800s Kawaihae was a popular anchorage for foreign vessels. Hawaiian chiefs were actively involved in foreign trade, and food, sandalwood, firewood, *pulu*, and fresh water were exchanged for imported goods (Kelly 1974:36-77). These items were generally brought from areas outside Kawaihae, but salt was one important trade good produced locally. A well-developed salt manufacturing system was maintained near the beach and each salt pan was said to be named (Kelly 1974:33-34). Apparently salt was an important traditional exchange item for Kawaihae residents as well, being traded to Kona and other parts of Kohala for food and *tapa* (Barrère 1983:30 In Allen 1987:15).

The Hawaiian culture was well on its way towards Western assimilation as industry in Hawaii went from the sandalwood trade, to a short-lived whaling industry, to cattle ranching, and the more lucrative, but insidious sugar industry. Sugar cane was grown on all islands and when Cook arrived, he wrote of seeing sugar cane plantations. The Chinese on Lanai are credited with first producing sugar as early as 1802. However, it was not until 1835 that sugar became established commercially, primarily to replace a waning sandalwood industry (Oliver 1961:263; Kuykendall and Day 1976:92). 1835 was also the year that John Olohana Young died at the age of 93 in Honolulu where he is buried at the Royal Mausoleum (n.a. 1967:19).

In the 1840s a political act of the Hawaiian Kingdom government would change forever, the land tenure system in Hawai'i and have far-reaching effects. The historic land transformation process was an evolution of concepts brought about by fear, growing concerns of takeovers, and western influence regarding land possession. King Kamehameha III, in his mid-thirties, was persuaded by his *kuhina nui* and other advisors to take a course that would assure personal rights to land. One-third of all lands in the kingdom would be retained by the king; another one-third would go to *ali'i* as designated by the king; and the last one-third would be set aside for the *maka'ainana* or the people who looked after the land. In 1846 he appointed a Board of Commissioners, commonly known as the Land Commissioners, to "confirm or reject all claims to land arising previously to the 10th day of December, AD 1845." Notices were frequently posted in *The Polynesian* (Moffat and Kirkpatrick, 1995). However, the legislature did not acknowledge this act until June 7, 1848 (Chinen 1958:16; Moffat and Kirkpatrick 1995:48-49), known today as *The Great Mahele*. In 1850, the Kingdom government passed laws allowing foreigners to purchase fee simple lands (Speakman 2001:91).

The 1840s also heralded other changes as well. The Hawaiian government, with the aid of the missionaries, encouraged the sugar industry as well as other enterprises such coffee, cotton, rice, potatoes, and silk worms (Speakman 2001: 93). Subsistence crops were ruined by displaced dirt and dust, natives were being asked to grow sugar cane on their lands in exchange for money, only to find themselves in-

debted, and forced to surrender homelands; land-use disputes between natives and other cultures ensued; and restrictions on government lands prevented subsistence hunting and gathering. Subsistence-based culture was eventually lost with the escalating dependence on purchased goods and the growing development related to sugar production (Tomonari-Tuggle 1988:50, 51).

During the Great Mahele, Kawaihae 2 was given to John Young (LCA 8515H). Kawaihae 1 was retained as government land. This Land Commission Award (LCA) and subsequent *kuleana* claims in Kawaihae 1 and 2 are listed in *Table 1*. The locations of all awarded parcels are shown in *Figure 6*.

The Waiihona 'Aina (2000) Mahele Database; which is a compilation of data from the Indices of Awards (Indices 1929), Native Register (NR n.d.), Native Testimony (NT n.d.), Foreign Register (FR n.d.) and Foreign Testimony (FT n.d.); lists twenty-two claims for 56 parcels within Kawaihae 1 and 2. Seventeen parcels were awarded to 15 claimants. There are no LCAs within the project area. The awarded *kuleana* parcels, except for the unusually large award to Kaukahi (LCA 240P, 34.58 ac), range from 0.06 to 5.2 acres in area with an average of 1.33 acres. Three awards consisted of two parcels and the rest consist of a single parcel.

The testimonies refer to fourteen *ili* land divisions. Only one, Makila, is mentioned twice. Most of the awarded parcels are concentrated in at the coast. Three inland parcels are situated between 2,700 ft and 4,000 ft elevation. LCA testimony mentions fourteen lots with at least 31 houses. Seven house lots were enclosed. Nine parcels are described as cultivated; however, no specific crops are named. The testimony describe a pier and warehouse (LCA 4884) owned by William French. 20 salt pas or beds, a chapel, and two animal pens for horses, goats, and cattle owned by L.B. Lincoln, a leather tanner.

Disease also had a devastating affect on the population and the landscape, killing *ali'i* and *maka'ainana* alike: measles epidemics in 1848 and 1849, was followed by the horrendous smallpox epidemic in 1853. Ten thousand people are said to have died of this disease in Hawaii (Kamakau 1992:411, 418). John Papa 'Ūi in *Fragments of Hawaiian History* (1984) talks about the impact of this disease and as *kahu* or guardian of several young *ali'i*; he had to take several of them off of Oahu island. They just kept sailing from island to island and usually were not allowed to land as Oahu was thought to be the source of the smallpox ('Ūi 1984:171). The people of Kawaihae were not spared during this period.

The people (of coastal Kawaihae) have nothing to eat half the time...sometimes they get one meal a day and sometimes they are entirely destitute (Mission Station Report 1841)... I could not refrain from weeping when I entered there (coastal Kawaihae)...it was a sad and desolate scene. In April one hundred communicants were present, many of them in the bloom of life – now there were but twenty-four, and not a youth among them (Mission Station Report 1835, cited in Hammatt & Shideler 1991a: 7).

While other places were getting established with growing sugar cane in the 1850s, Kawaihae was still involved in the whaling industry and the fledgling cattle ranching industry via Waimea; cattle were driven from Waimea to Kawaihae where they were shipped to Honolulu. Cattle pens were located across from the small boat harbor, but massive rock walls near the present Canoe Club are said by local consultants, to be remnants of older cattle pens (Allen 1987:15).

The extensive commerce of Kawaihae is indicated in an account in the *Pacific Commercial Advertiser* for January 29, 1857 (In Brundage 1971:22) which reports that 40-50 whaling ships had stopped at this port during the year and that exports included 1,500 barrels of salt beef, 5,000 barrels of sweet potatoes, fresh beef, pork, fowl, and beans, 1,200 bullock hides, 5,000 goat skins, 35,000 lbs of tallow, and 22,000 lbs of wool. Weekly service was provided by the inter-island 87-ton *Mary* by this time (Hammatt and Sheidler 1991a: 8).

By 1858 at least 2,119 foreigners lived in Hawaii. Many were merchants who traded and provided provisions, ranchers and missionaries who lived in various locations throughout the islands. "Foreigners engaged in agricultural pursuits with the idea of reaping a profit from the land, in contrast with the Hawaiians, who carried on...subsistence agriculture" (Coulter 1971:11). In the 1860s, the U. S. Civil War brought

Table 1. Land Commission Award Claims in Kawaihae (cont.)

LCA	Claimant	Apana claimed	Apana awarded	Other claims	Ahupua'a	M	Section No.	Land Use	Boundary Mahe	Boundary Kona	Boundary Makai	Boundary Kohala	Date Rec'd	Giver	Acres	Royal Patent	Sources	Comment	
1030	Kauai	5	0	0	Kawahae Ua	Makua		house lot	N/D	N/D	N/D	N/D	N/D	N/D	0.00	none	HT 144/4		
2400	Isa Kealahou	0	1	0	Kawahae (Wahana Ua)	Kauaia	1	half cultivated	konohiki	konohiki	konohiki	konohiki	Kam I times	Parents					
							2	half cultivated	konohiki	konohiki	konohiki	konohiki							
							3	half cultivated	konohiki	konohiki	konohiki	konohiki							
							4	cultivated	konohiki	konohiki	konohiki	konohiki							
							5	cultivated	Kekuwahine	Kaonaha	Kekuwahine	Kaonaha							
							6	house lot, enclosed, cultivated	konohiki	Kaonaha	Kekuwahine	Kaonaha				0.41	7632	HT 143/4	
							7	N/D	Kekuwahine	Kaonaha	Kekuwahine	Kaonaha							
							8	N/D	Kekuwahine	Kaonaha	Kekuwahine	Kaonaha							
2400	Kauai	5	2	0	Kawahae Ua	Makua							1833	N/D	34.56	7380	HT 144/4	Kaonaha is konohiki, awarded 2 apana	
							1	cultivated	konohiki	konohiki	konohiki	konohiki							
							2	N/D	N/D	N/D	N/D	N/D							
							3	cultivated	Kaonaha	Kaonaha	Kaonaha	Kekuwahine							
							4	house lot and chapel	Kaonaha	Kaonaha	Kaonaha	Kekuwahine							
							5	N/D	N/D	N/D	N/D	N/D							
5951	T C B Roke for John Young heirs	1	0	26	Kawahae			N/D	N/D	N/D	N/D	N/D	N/D	N/D					
3668	D. Manua	1	1	0	Kawahae	Kouka		house lot, enclosed	konohiki	Puuhua Stream	Kalamaukai	N/D	N/D	N/D	0.00	none	FR 76/2, NR 573/3	claimed ahupua'a	
3669	Makua	1	1	0	Kawahae	Pahou		house lot, enclosed, 2 houses, 3 self beds	see	see	see	French	1840	Kaonaha	3.28	5514	NR 148, HT 1/4		
3828	Puuhua	1	1	0	Kawahae	Kaliwa		house lot, enclosed, 2 houses, 2 self beds	pasture for ahupua'a	pasture for ahupua'a	pasture for ahupua'a	Painaka, Kawa	1841	N/D	0.25	5240	1/4		
4091	Kou	2	2	0	Kawahae	Kahupua		house lot, 3 houses, 3 self beds	pasture for ahupua'a	Kahupua	ahupua'a, Kalaone	French	Kam I times	grandparents	0.58	5246	NR 5/8, HT 5/4		
4094	Keponaka	2	1	0	Kawahae	Kaepu		house lot, enclosed	pasture for ahupua'a	French	sea	French	1840	Kam I	1.54	5217	NR 3/8, HT 3/4		
							1		pasture for ahupua'a	French	sea	pasture for ahupua'a, Ohoia							
							2		Hele	vacant land	Pelieu	Pai	N/D	N/D	1.10	5233	NR 5/8, HT 4/4		
4101	Kahana	1	1	0	Kawahae	Kaua		house lot, enclosed, 3 houses	Manua	Puuhua	sea	Manua	time of Kuamoo	Ochana (John Young)	0.19	6385	NR 4/8, HT 3/4		
4103	J.P. Kahanaka	1	1	0	Kawahae	Kahaku		house lot, enclosed, 4 houses	go't pasture	Koa & Puuhua Streets	sea	Mahana Stream, Lyons House	1835	N/D	1.34	4929	NR 2/8, HT 2/4		
4108	Kou	1	1	0	Kawahae	N/D		house lot, enclosed	stream	aka's lot	aka's lot	stream	1843	Kaonaha & Ochana (John Young)	0.90	5098	NR 4/8, HT 4/4		

Table 1. Land Commission Award Claims in Kawaihae (cont.)

LCA	Claimant	Apana claimed	Apana awarded	Other claims	Ahupua'a	III	Section No.	Land Use	Boundary Mauka	Boundary Kona	Boundary Māhala	Boundary Kohala	Date Rec'd	Giver	Acreage	Royal Patent	Sources	Comment
4322	Puna	1	1	0	Kawehāe	Pahukaniua		house lot 5 houses, plants pier, warehouse & houses, houses, enclosed	gov't pasture	Makahuna Stream	see	Pokunua	N/D	Ochana (John Young)	1.05	none	NR 618, NT 614	
4882h	Wm French	1	0	4	Kawehāe	N/D		warehouse & houses, houses, enclosed	N/D	N/D	N/D	N/D	?	?	0.00	none	FI 187, 172v2, 305, 330v3	see LCA 4884
4884	Wm French	1	1	0	Kawehāe	N/D		warehouse & houses, houses, enclosed	N/D	N/D	N/D	N/D	1838	Kuakini	1.34	69	FR 5v3, FT 187v2, NT 493v2	
827B	S. Kēhā	1	0	0	Kawehāe ūka	Kūlanalo		house lot 3 houses, 2 pens for horses, goats, & cattle, cubbyhole	N/D	N/D	N/D	N/D	N/D	N/D	N/D	none	NR 871v8	
8513	L.B. Lincoln	1	1	0	Kawehāe ūka	Kāwehāe			mountain	Koehāe	gov't lula	Leleho'oku	1839	Gov. Adams	5.20	3605	NR 25v3, FT 203, 288v3, 841v5, NT 144v4	leather tanner
8515h	John Young	1	1	several	Kawehāe Hāhā	N/D		N/D	N/D	N/D	N/D	N/D	N/D	N/D		1686, 8482	FR 6v3, NR 708v3, FT 324v3, NT 784v3	awarded Kawehāe 2
9971h	Wm Leleho'oku	1	1	many	Kawehāe	Kūlanalo		house lot 2 houses	vacant land	vacant land	beach	vacant land	1844	Kuakini	0.06	6892	NT 433- 439v10	
10232	O. Māe	1	0	0	Kawehāe	Kāwehāe		shell clam	N/D	N/D	N/D	N/D	1848	Māne	0.00	none	NR 1v8, NT 1v4, 27v4	
10903	Puna	14	0	0	Kawehāe	N/D		14 salt depressions	N/D	N/D	N/D	N/D	Ken I Emasi	N/D	0.00	none	NR 63v8, NT 7v4	
1804	Māne	1	0	0	Kawehāe	N/D		N/D	N/D	N/D	N/D	N/D	N/D	N/D	0.00	none	NR 83v8, NT 7v4	

about a boost for the sugar industry in Hawai'i as sugar plantations in the South were boycotted or destroyed. And while Rev. Lorenzo Lyons was busy building churches; *Imiola* in Waimea, *Hoku Loa* at Puakō and one at Kawaihae (n.a. 1967:18-19), Rev. Bond was getting involved in the sugar business.

In 1860, Rev. Bond engaged his "long-time acquaintance" (Stephenson 1977:7), Samuel N. Castle in founding the Kohala Sugar Company on lands owned by Bond and his neighbor Dr. James Wight. The first crop of the Kohala Sugar Company was harvested in January 1865 (KTF 1975:69). Kohala's transition was a reflection of what was happening elsewhere in Hawaii, as the sugar industry grew. The industry brought in tens of thousands of laborers from Asia, Europe, the Americas, Oceania, and Africa to work on the many plantations and mills that were being established on all major islands, which had a profound effect on life in Hawaii (Oliver 1961:123).

Maly (1999) presents excerpts from a variety of historic documents spanning the mid- to late 1800s. The documents describe road building efforts from Kawaihae to Kiholo and Waimea, and schools including one at Kawaihae Kai that was used until it was destroyed in 1946 by a tidal wave. Boundary Commission testimony cited by Maly, mentions Kawaihae residents who were bird catchers. Kawaihae had ancient fishing rights that extended out to sea.

During the late 1800s, and continuing into the 1900s there were many leases, subleases, and other land transactions, most involved Kahua and Parker Ranches (Carlson and Rosendahl 1990). A storm in 1872 destroyed all the wharves in Kawaihae (Hammatt et al. 1991). Jackson's 1883 map shows a number of houses, a jail, a lighthouse, a woolshed, a store, a church, a boathouse, and the graves of Davis and George Macy (Hammatt et al. 1991).

Figure 8 is a portion of Loebenstein's 1903 map of Kawaihae Bay. The map shows the *heiau* on Pu'u Kohala. To the north of Pohaukole Gulch, Fanny Young's house, Parker's house, a store, church, and Davis' grave are shown. Further north the old soap works, salt pans, a jail, a hotel, and another store are depicted near the wharf. Beyond the wharf to north, a shipping coral and the locations of the "old" and "new" lighthouses are shown.

Early 1900s land use in Kawaihae is described in oral historical interviews conducted by Hammett et al. (1991), Carlson and Rosendahl (1990), Maly (1999), and Orr (2003). William Akau moved to Kawaihae as a child in 1928. Water was obtained from a well near the Doi Chevron Station. Water was also obtained from the gulch near Pu'u Kohala when it was still a perennial stream. In about 1931, a water line from Waimea was built and the well was no longer used. Mr. Akau's grandfather used to raise fish for Parker Ranch in a pond where the old salt works were located. Mr. Akau and Mr. Eddie La'au, Jr. remember that people living along the coast south of Kawaihae used to come to Kawaihae by canoe to trade dried fish for dry goods and produce.

In the 1930s, Kawaihae was a bustling place with twice weekly steamship arrivals. Cast iron street lamps illuminated the village streets at night. The ships anchored offshore and transferred goods using lifeboats until the concrete territorial pier (Site 23860) was constructed in 1937. Cattle were the principal export. The cows were driven down from Waimea early in the morning and kept in large corrals near the pier. There was a building with restrooms (Site 23859) at the pier and a building where the cowboys would spend the night before returning to Waimea. There were two dry docks in town that served the fishing fleet based at Kawaihae. Kawaihae families were fish retailers and wholesalers selling fish throughout the island and shipping fish to Honolulu. The hills behind the coastal village were planted with limes, mangos, tomatoes, melons, and other produce.

Mr. Masaru Doi and Mr. Akau recounted events at Kawaihae during World War II. Barbed wire was stretched along the entire shoreline where a series of gun emplacements were established. A huge tent camp was built and the area was used for troop training. The soldiers mined the territorial pier with explosives. Fishing was greatly reduced and forbidden to people of Japanese descent. The Doi family began large-scale raising of pigs fed with the food waste from the military camp. Following the war Kawaihae town suffered from unemployment and was seriously damaged by a tidal wave in 1946. The wave destroyed the pier and it was never repaired; however, it continues to be depicted on the 1995 USGS Kawaihae Quadrangle map (see *Figure 1*), adjacent to the project area.

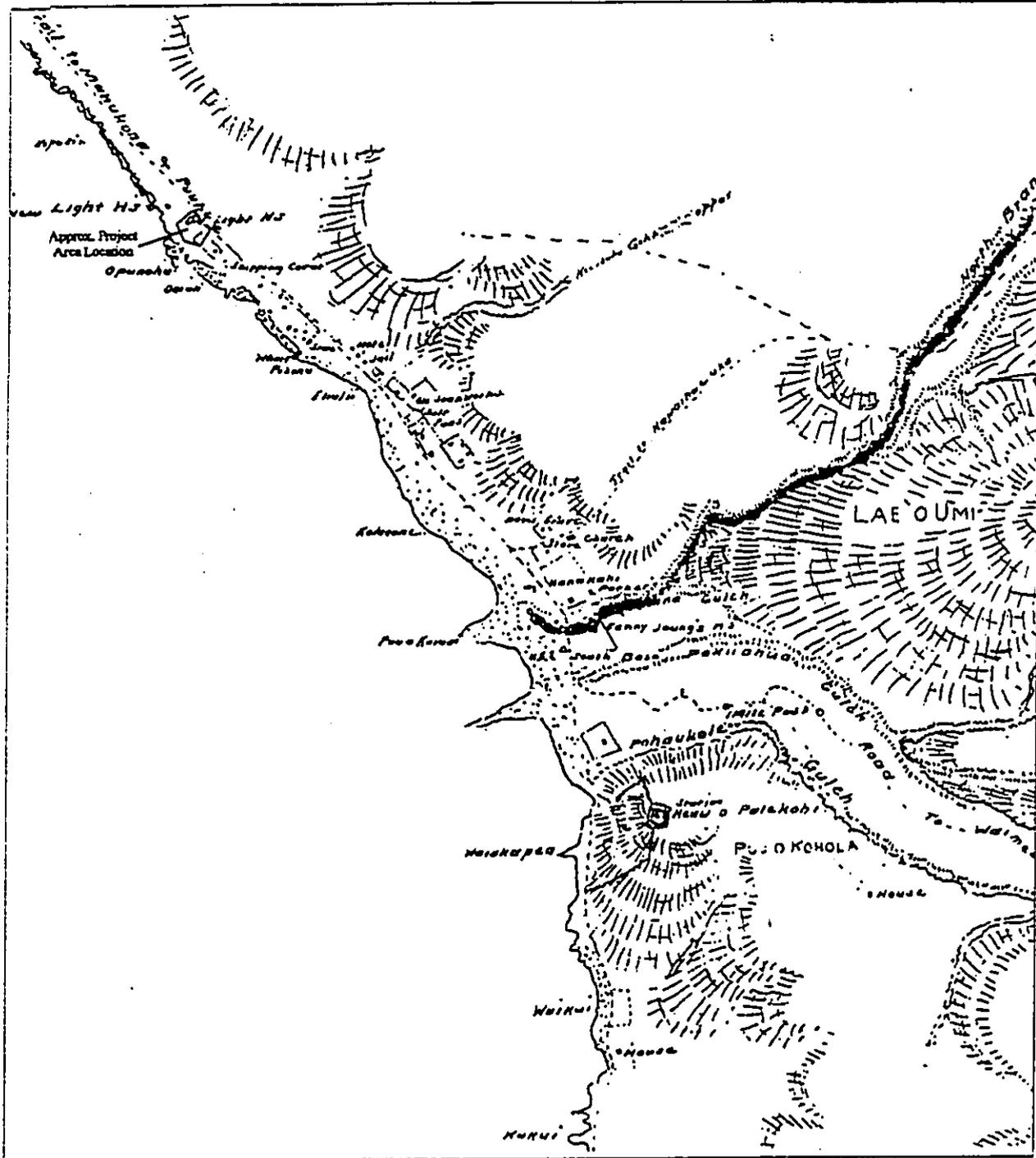


Figure 8. Portion of Loebenstein's 1903 Map of Kawaihae Bay (from Barrera and Kelly 1974)

In 1955, construction of the Kawaihae Harbor began and it was completed in 1959 (Hammatt et al. 1991). This radically changed the appearance of coastal Kawaihae, the flow of the ocean, the feeding habitat of several species of marine life, and the lifestyle of the people of Kawaihae Village and others who frequented the shores of the Kawaihae black sand beach.

Along with the rise of the tourism industry, and competing sugar markets abroad, the sugar companies saw a sharpening decline in business. The 1950s and 1960s were the bleakest years for the sugar industry and it was becoming apparent that the sugar industry was beyond salvage (Kent 1983:107-108). More changes were soon to take place on the landscapes of Hawaii. The lack of jobs in Kohala caused an exodus to O'ahu during the construction boom of the sixties. As an economic remedy, Kohala Sugar Company offered its employees an option to purchase lots in newly created subdivisions. On the heels of this offer, new jobs were being created in the tourist industry as Mauna Kea Hotel, followed a few years later by other hotels in Waikoloa, were built and occupied in the late 1960's and early 1970's (Tomonari-Tuggle 1988:59-62).

Records at the Bureau of Conveyances indicate that the project area was Territory of Hawaii property controlled by the Board of Harbor Commission under Executive Order 737. The order was cancelled in 1957 and the land was transferred to the Department of Hawaiian Homelands in 1967. The property records identify the area as the "Cattle Pen Site" probably due to its use for shipping cattle in the 1930s.

Previous Archaeological Research

A search of DLNR-SHPD archaeological report database and other sources identified 27 reports covering portions of Kawaihae and adjacent areas. *Table 2* summarizes the studies and *Figure 9* shows the project locations. At least seven previous studies included the project area (see *Figure 9*); however, none of them reported the historic features there. Not included in the table or figure are the early surveys by Thrum (1908), Stokes (Stokes and Dye 1991), and Reinecke (1930). Thrum (1908:42) reported the former presence of a *heiau* at Uli in Waimea.

In 1906, John Stokes, then Curator of Polynesian Ethnology at Bishop Museum, did fieldwork on the island of Hawai'i, documenting *heiau* and drawing plans of the better-preserved ones. Using Thrum's list as a guide, Stokes began his fieldwork in Kailua-Kona. "Once in the field, however, Stokes discovered that local Hawaiians could identify many more *heiau* than appeared on Thrum's list" (Stokes & Dye 1991:10). In the South Kohala District, Stokes recorded only two *heiau*, Mailekini and Pu'ukoholā, at Kawaihae. In addition, Stokes heard about four other *heiau* at Puakō, near the coast, but he was unable to gather any information about these sites from local informants (Stokes & Dye 1991).

During his 1930 survey conducted for the Bishop Museum, Reinecke examined the western coast of the island and, "walked along the coast from Kalahuipua'a [near Puako] to Kawaihae, but considered it not worth while to attempt a survey of this algarroba-covered [*kiawe*] coast unless... [he]... had a base there" (Reinecke 1930).

The surveys in *Table 2* cover nearly 17,000 acres identifying 510 sites with 1390 features. To aid in reconstructing settlement patterns, features were quantified by probable age and function, and the studies are ordered by elevation. Traditional Hawaiian features were categorized as habitation, agricultural, burial (including possible burials), ritual, trail, *ahu*, and wall. Features not assignable to these categories were categorized as miscellaneous/indeterminate. Traditional sites in this category include saltpans, *papamu*, fishponds, and pahoehoe excavations.

Density per acre values are given for sites, features, and habitation and agricultural features. Overall, the studies have identified 723 habitation features, 241 agricultural features, 83 burials, 23 ritual features, 13 trail segments, and 67 *ahu*, and 2,007 petroglyphs. Historic features, except walls, were not segregated by function. The majority of the walls are ranch-related.

Density values for surveys of at least 50 acres indicate the highest densities of habitation features between sea level and 280 ft elevation (0.36 features per acre). Agricultural feature density is also high near

Table 2. Summary of Previous Archaeological Work

Author	Land	Study Type*	Elevation (feet)	Area (ac)	No. of Sites	Sites/acre	No. of Feas	Feas/acre	Hab Feas	Hab Feas/acre	Ag Feas	Ag Feas/acre	Burial Feas	Ritual Feas	Trail	Ahu	Wall	Historic Feas	Misc/ Indel. Feas
Haun et al (1993)	Kawaihae 1	IN	0-10	0.8	4	5.00	4	5.00										4	
Apple (1978), Ladd (1988), Rosendahl and Carter (1988), Schuster (1992)	Kawaihae 2	IN	0-20	78.5	3	0.04	11	0.14						2				9	
Walker and Rosendahl (1989a) Rechman and Clark (2000)	Kawaihae 2	IN	0-75	8.7	6	6.00	20	2.30	12	1.38	6	0.69						2	
Sorehen (1964), Rosendahl (1981), Somers (1988), Carter (1989), Walker and Rosendahl (1989b), Carlson and Rosendahl (1990).	Kawaihae 2	FI/IN	5-280	371	148	0.40	476	1.28	134	0.36	128	0.35	43	4	5	55	18	50	39
Borthwick, Chiglojki, and Hammatt (2000)	Kawaihae 1	AS	35-300	18.89	0														
Book (1968), Allen (1987), Hammatt et al (1991)	Kawaihae 1	IN	0-1000	2600	147	0.08	491	0.19	384	0.15	25	0.01	31	2	7	12		24	6
Barrera and Kelly (1974), Luscomb (1974), Clark and Kirch (1983)	Kawalahe 1-2	RN	10-2600	3176	175	0.08	308	0.10	160	0.05	75	0.024	8	2				60	3
Hammatt and Shideler (1991)	Kawaihae 1	RN/AS	20-4800	10155	21	0.002	72	0.01	32	0.00	7	0.001	1	13	1			18	
Walker and Rosendahl (1995)	Kawaihae 1	IN	3550-3590	3.44	3	0.87	4	1.16	1	0.29								3	
Walker and Rosendahl (1994) Langlas (1994)	Kawaihae 1	IN	3600-4700	523	3	0.01	4	0.01										4	
				Total/Average	510	0.03	1390	0.55	723	0.37	241	0.21	83	23	13	67	18	174	48

* IN=Inventory Survey, FI= Field Inspection, AS= Assessment, RN=Reconnaissance Survey

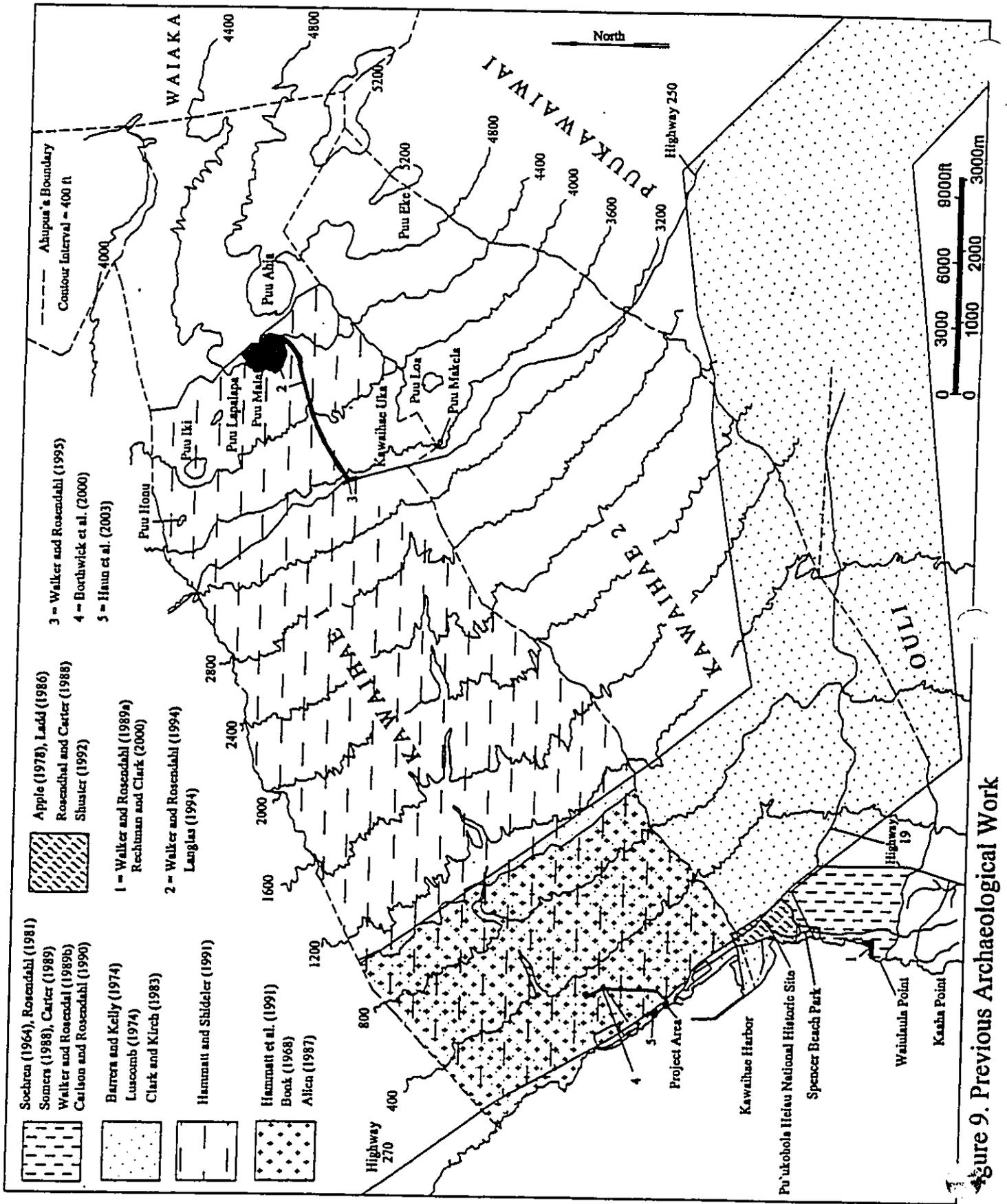


Figure 9. Previous Archaeological Work

the coast. Overall feature density ranges from 0.01 to 1.28 features per acre. Habitation feature density ranges from 0 to 0.36 features per acre with an average of 0.09. Agricultural feature density ranges from 0 to 0.35 features per acre with an average of 0.09. Burial and ritual sites are concentrated near the coast.

Only five radiocarbon dates are reported in the studies by Hammett et al. (1991) and Walker and Rosendahl (1995). The four Hammett et al. (1991) dates from habitation sites include a modern result, and three age ranges of A.D 1670-1935, 1510-1950, and 1330-1430. Walker and Rosendahl report a age determination on charcoal from an inland temporary habitation site that produced two potential age ranges of 1689-1734 and 1811-1925.

Clark (1987) proposed a settlement pattern model for the Kawaihae-Waimea region that consists of four zones as follows:

- Coastal Zone** Extends from the coast to between 200 m and 400 m inland with most sites below 30-45 m (98-148 ft) elevation. The Coastal Zone is subdivided into shoreline and inland sub-zones. Subsistence activity had a marine exploitation emphasis including fishing, collecting, and salt making. Agricultural crops included coconut, sweet potato, gourds, and other medicinal, utilitarian, and food plants. Archaeological features include "residential structures, community-oriented structures, burial monuments, agricultural features, military features [recent], and miscellaneous" (1987:247). Habitation sites include single use sites, extended and recurrent occupations, and permanently occupied sites. Habitation features include small walled shelters, caves, overhangs, terraces, platforms, and enclosures. The more intensively occupied habitation sites are clustered in neighborhoods sometimes larger wards.
- Intermediate Zone** Extends from the Coastal Zone to between 7.3 and 9.7 km inland at approximately 585 m (1,919 ft) elevation. Subsistence activity limited to small scale seasonal cultivation of alluvial flats near drainages and bird catching. Archaeological features include short-term occupation sites including midden scatters, fireplaces, small walled shelters, caves, and overhangs, which are typically situated near drainages.
- Kula Zone** Extends from the Intermediate Zone to between 7.3 and 9.7 km inland. It ranges in elevation from 585 m to 830 m (1,919-2,722 ft) in elevation, with small sections extending to as much as 975 m (3,198 ft) elevation. Subsistence activity is dominated by agriculture. The zone is divided into two primary sub-zones based on the nature of cultivation. Sub-zone 1 is defined by the presence of formal fields mound complexes, small terraces, modified outcrops, and animal and garden enclosures. Sub-zone 2 is characterized by the absence of formal fields and limited to planting swales, clusters of mounds, and modified outcrops. Irrigation ditches occur in both sub-zones. Crops included sweet potatoes, dry-land taro, gourds, and *wauke*. Habitation sites include single use sites, extended and recurrent occupations, and permanently occupied sites. Habitation features include small walled shelters, caves, overhangs, terraces, platforms, and enclosures. The more intensively occupied habitation sites are clustered in neighborhoods sometimes larger wards. Burial features are also present.
- Wilderness Zone** Zone extends inland from the *Kula* Zone to the mountain tops. The zone is divided into two sub-zones. Sub-zone 1 consists of areas that were exploited for a variety of resources including, wood, bark, birds, wild plants foods, fine-grained basalt for tool manufacture. Sub-zone 2 consists of the highest elevation areas that were not economically exploited and largely untouched except for some religious activity.

PROJECT EXPECTATIONS

Based on historical documentary evidence and previous archaeological work, prehistoric sites in the project area could include habitation sites, burials, salt pans, and ritual features. Habitation sites should consist of temporary and permanent habitations (walled shelters, platforms, terraces and enclosures). Pre-historic sites would be expected to date no earlier than the 1300s with most post-dating the 1600-1800s. Historic sites, except WWII military training features, primarily could include habitation sites, graves, port-related infrastructure, and ranching and farming features. Ranch-related features should be represented by roads and cattle walls and pens. The military training features should be represented by small coastal fortifications.

FINDINGS

The survey identified one site with four features (Site 24180). The features are comprised of a stone wall (Feature A), a stone alignment and an adjacent configuration of metal posts or stakes (Feature B), a low terrace (Feature C), and a series of intact and displaced concrete piers (Feature D). The distribution of the features is presented in *Figure 10* and the features are described below.

Feature A is a stone wall that is located along the northeastern and northern sides of the site, seaward of Highway 270 and south of the northern project area boundary. The extent of the wall is depicted on *Figure 10*. The wall originates 15.5 m outside the project area boundaries to the southeast, north of the drainage. It extends to the north-northwest from the boundary a distance of 64.0 m to where it encounters a paved asphalt ramp (discussed below). This portion of the wall is constructed of stacked cobbles and small to medium-sized boulders, ranging in width at the base from 1.3 to 1.4 m and at the top from 0.75 to 1.0 m (*Figure 11*). The height of this section of the wall ranges from 0.8 to 1.4 m. The wall is core-filled with cobbles and portions of it evidences faced sides.

Several historic cultural remains were found in association with the wall. A metal flat iron was noted on top of the wall near its southern end and a porcelain toilet tank cover was situated at the base of the wall on the western side, 8.0 m to the north-northwest of the iron. A concentration of clear window pane glass was observed on top of the wall, 2.0 m north-northwest of the tank cover.

The ramp present at the north-northwestern end of the first wall segment is 11.5 m long (northeast by southwest) and 4.3 to 9.5 m wide (*Figure 12*). It originates against the seaward side of Highway 270 and slopes down to the southwest, terminating at an area of level soil. The sides of the ramp slope down to the north and south, and the surface is paved with asphalt. No cultural remains were present at the ramp.

The wall continues to the west from the northwest corner of the ramp a distance of 20.6 m to where a 2.0 m wide gap is present. This wall section is also built of stacked cobbles and small boulders, similar in width to the first section. Portions of the wall at the eastern end have collapsed to the south, though the remaining part is intact, ranging in height 0.75 to 1.4 m.

The wall extends to the west from the gap a distance of 22.7 m to where it exits the northern project area boundary. It continues in this direction an additional 6.75 m to where it terminates at the edge of the coastal escarpment. The western half of the feature in this area is comprised of a free standing wall that is 1.2 to 1.4 m wide at the base, 0.7 to 1.0 m wide at the top and 1.0 to 1.1 m in height, and is built of stacked cobbles and small boulders with a core-filled cobble interior. The eastern half forms a terrace on the northern side of the wall, with the wall functioning to retain an area of level soil that is 15.3 m long (east-west) and 5.0 m wide. The retaining wall is 0.9 to 1.3 m in height and is faced. No cultural remains were noted along the northern portion of the wall or on the surface of the terrace.

Feature A is interpreted as an historic wall that functioned to enclose the remaining features of the site. Its historic interpretation is based on its appearance, on the presence of historic debris on and adjacent to the wall and its association with the other features of the site. Feature A is unaltered and in fair to good condition.

Feature B is a stone alignment and a series of metal posts situated in the south-central portion of the project area, seaward of the Feature A wall (*Figure 13*). The feature is located in a grassy, level area that angles slightly to the southeast. The main portion of the stone alignment is 24.2 m long (northwest by southeast), consisting of large cobbles and small boulders placed one course wide and one to two courses in height (*Figure 14*). The alignment turns to the northeast at the northwestern end, extending in this direction 4.85 m. The alignment is 0.3 to 0.6 m wide and 0.3 to 0.65 m in height. An exposed bedrock outcrop is located west of the northwest end of the alignment, measuring 5.9 m long (east-west), 0.4 to 0.7 m wide and 0.6 to 0.8 m in height. Several cobbles are piled on top of the outcrop along its southern side.

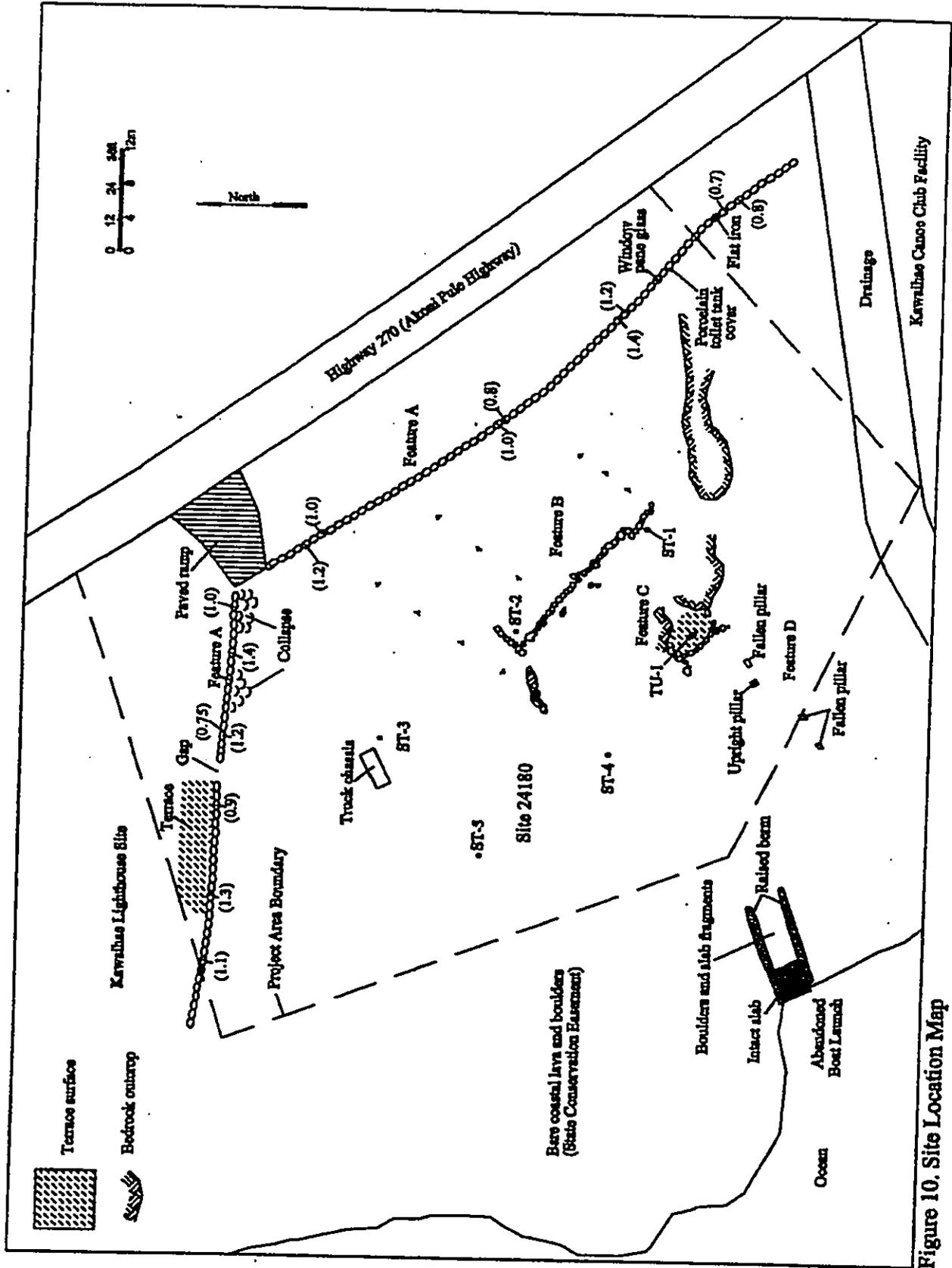


Figure 10. Site Location Map

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Figure 11. Site 24180, Feature A Wall, view to southeast

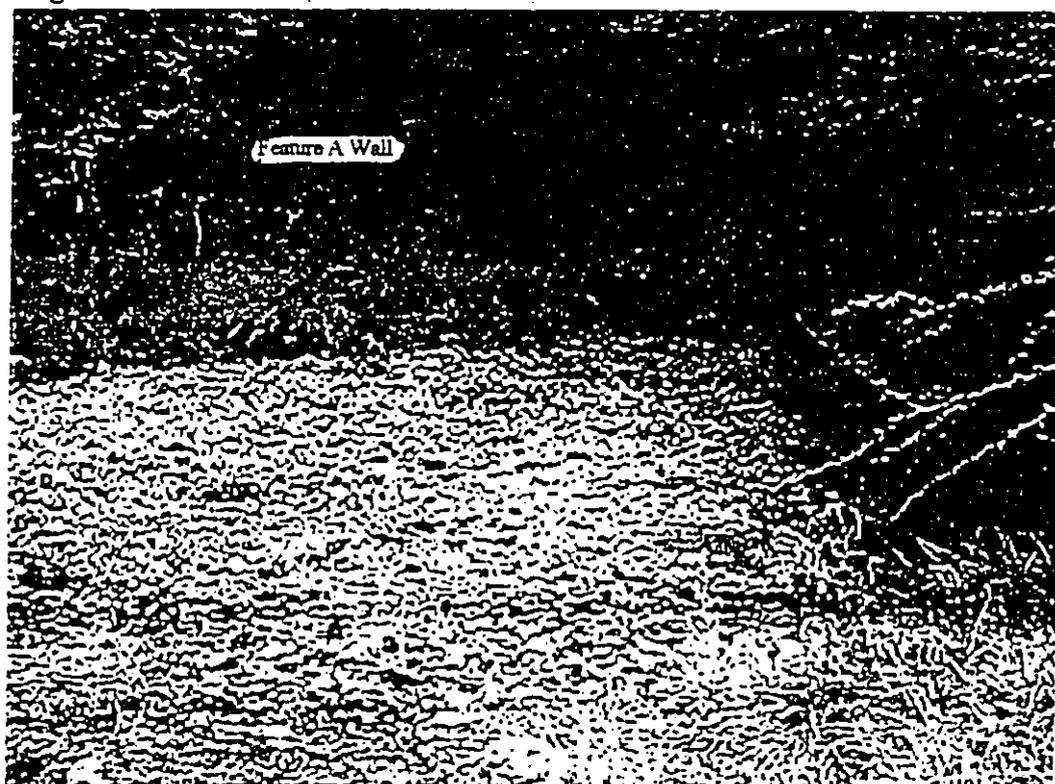


Figure 12. Asphalt Ramp, view to southwest

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Figure 14. Site 24180, Feature B Alignment, view to northwest

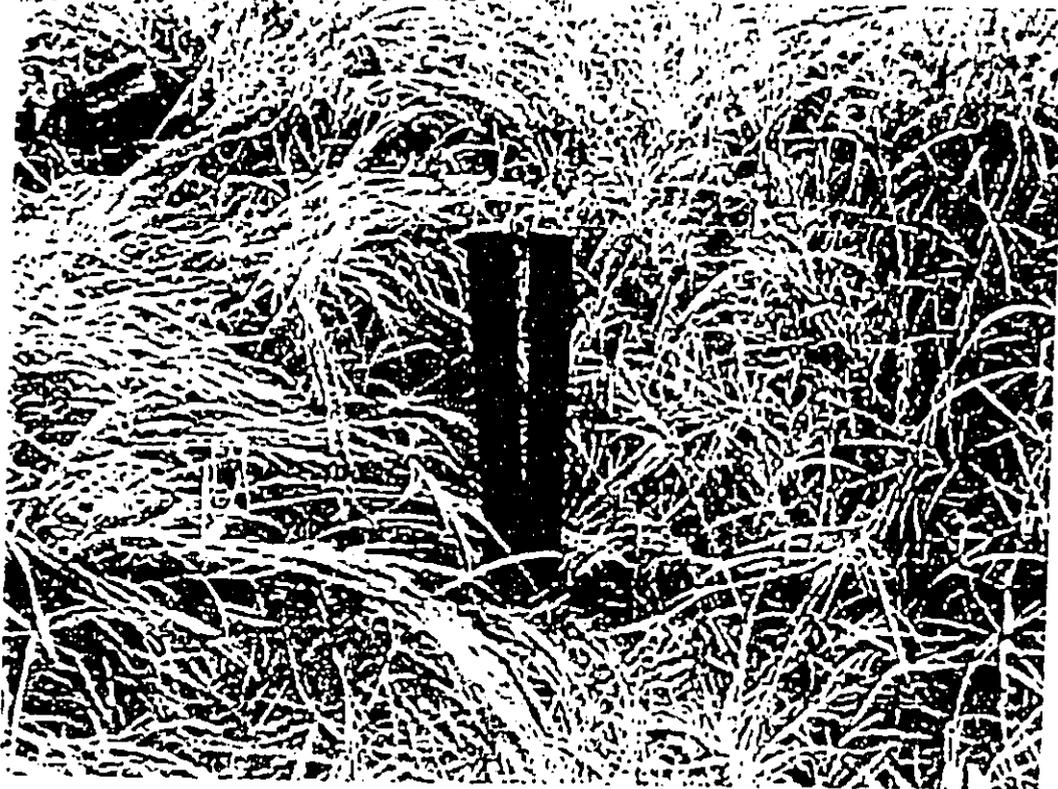


Figure 15. Site 24180, Feature B Metal Post, view to south-southwest

The metal posts or stakes are situated to the north and northeast of the stone alignment (see *Figure 13*). These posts are T-shaped in cross-section and are comprised of two joined sections of 1 1/2" angle iron that extend vertically out of the ground an average distance of 2.0 ft (0.6 m; *Figure 15*). A total of 12 posts were identified, placed in three linear alignments. The two northwestern-most alignments are 18.0 m long (northeast by southwest) and are spaced 8.9 m apart. The southeastern alignment is located 16.4 m to the southeast and is 11.1 m long (northeast by southwest). These three alignments form two rectangular configurations. No cultural remains were found in association with the feature.

Feature B is interpreted as the possible remnant of a World War II era encampment. The rectangular configuration of posts may have served as tents stakes with the stone alignment bordering the seaward side. Feature B is unaltered and in fair condition.

Feature C is a low, crude enclosure situated 12.8 m southwest of Feature B (see *Figure 13*). The terrace is roughly oval-shaped and is 6.6 m long (northwest by southeast) and 4.4 m wide, with several large *kiawe* trees growing out of the surface. A retaining wall extends along the southwest, northwest and southeast sides that is 0.3 to 0.45 m in height and comprised of one to three courses of small boulders and cobbles (*Figure 16*). The northeast and east sides abut a bedrock outcrop. The surface is comprised of a level soil deposit with no cultural remains present.

A 0.5 by 0.5 m test unit (TU-1) was excavated into the surface of the terrace (see *Figure 13*). This excavation revealed two soil deposits over bedrock (*Figure 17*). Layer I consisted of 0.39 to 0.4 m of a dark brown (10YR 3/3) silt with 20-30% gravel and pebble inclusions. Cultural remains from Layer I consisted of clear window pane glass (n=2, 2.4 grams), a fragment of metal (0.2 grams), 20 fragments of recent charcoal (6.1 grams), eight fragments of milky colored bottle glass (22.7 grams - *Figure 18*), three waterworn basalt pebbles (2.9 grams) and 12 marine shells (*Cypraea sp.*, n=6, 17.4 grams; *Nerita picea*, n=3, 1.7 grams; *Nerita polita*, n=2, 0.9 grams; *Purpura aperta*, n=1, 1.3 grams). The Layer II deposit consisted of 0.08 to 0.1 m of a dark reddish brown (5YR 3/4) silt with no cultural remains present.

Feature C is interpreted as the foundation for an historic structure possibly associated with the World War II occupation of the site. This is based on the presence of the historic debris recovered from Layer I and its close proximity to Feature B. Feature C is unaltered and in fair condition.

Feature D consists of an upright concrete pier and three fallen piers, located in the southwestern portion of the project area in a level soil area within a grove of *kiawe* trees. The distribution of the four piers is present in *Figure 10*. The upright pier is located 7.0 m southwest of Feature C. This pier is 1.33 m in height and measures 0.62 m by 0.85 m at the base and 0.6 by 0.73 m at the top (*Figure 19*). A 2" by 6" wooden board is imbedded horizontally through the pier and a 1" deep by 5" wide groove is formed around the sides of the pier. The seaward side of the board is 11" (0.28 m) long though the inland side is flush with the side of the pier and appears to have been burned off. A 1/2" threaded bolt extends vertically out of the top of the pier in each corner.

The first fallen pier is located adjacent to the upright pier 2.5 m to the east (see *Figure 19*). This pier is identical to the first, though no wooden board or bolts were noted. This pier is 1.55 m in length suggesting that the upright pier is imbedded c. 0.22 m into the ground.

The second fallen pier is located 7.4 m to the southwest of the upright pier, situated on the project area boundary in an area that appears to have been impacted by wave activity. This pier is partially buried in the ground with the exposed portion measuring 1.2 m in length, 0.8 m in width and 0.5 m in thickness. Though buried it appears to be roughly the same size as the upright pier.

The third fallen pier is located outside the parcel, 4.0 m southwest of the second fallen pier. This pier is exposed on the ground surface and appears different than the others. It is 1.3 m long and 0.5 m on each side. No bolts or wooden boards are present. Large amounts of modern debris is scattered around Feature D, likely deposited by storm activity.

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Figure 16. Site 24180, Feature C Terrace, view to east

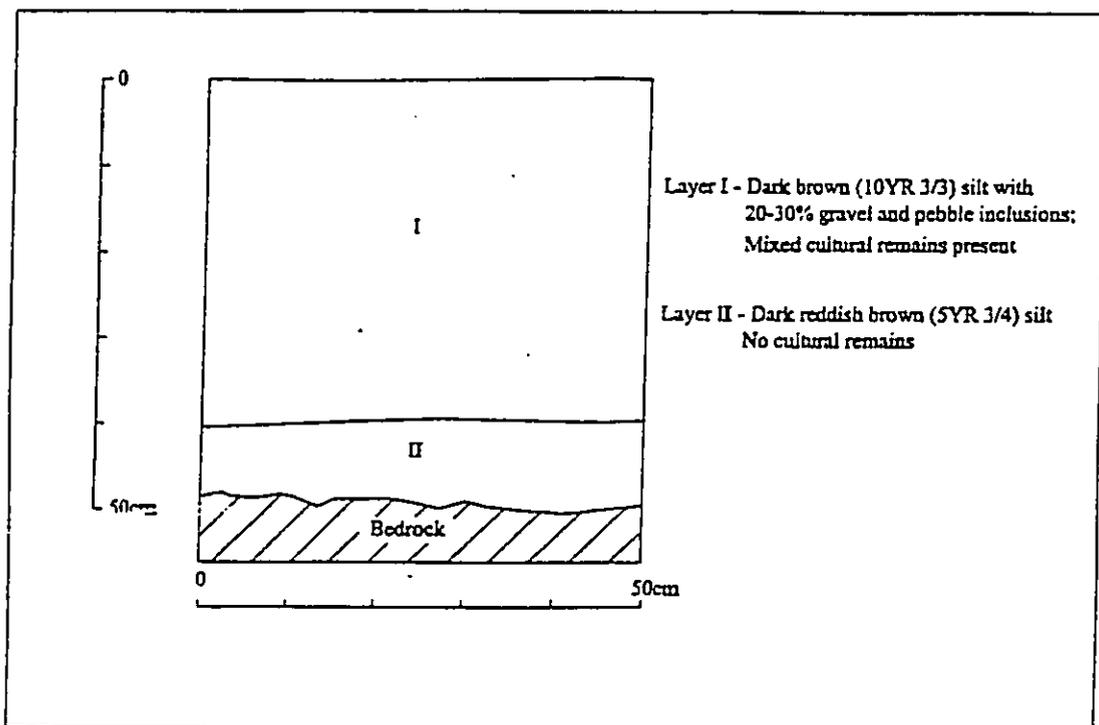


Figure 17. Site 24180, Feature C, TU-1 North Face Profile

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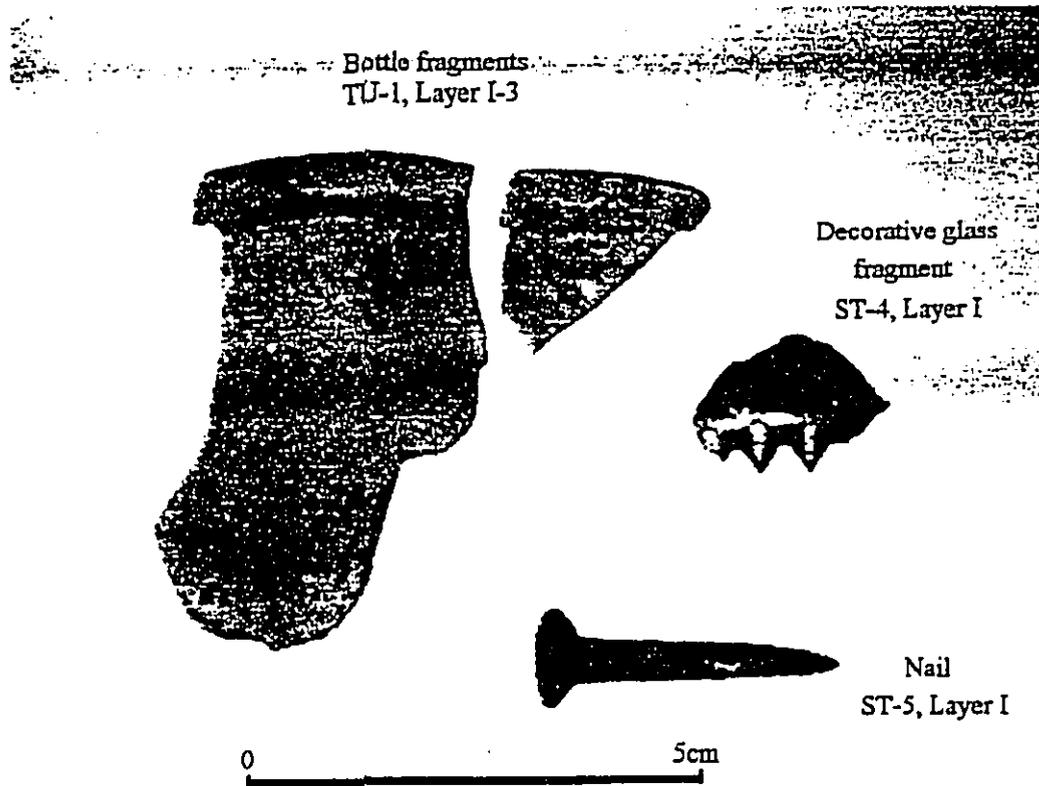


Figure 18. Historic Artifacts

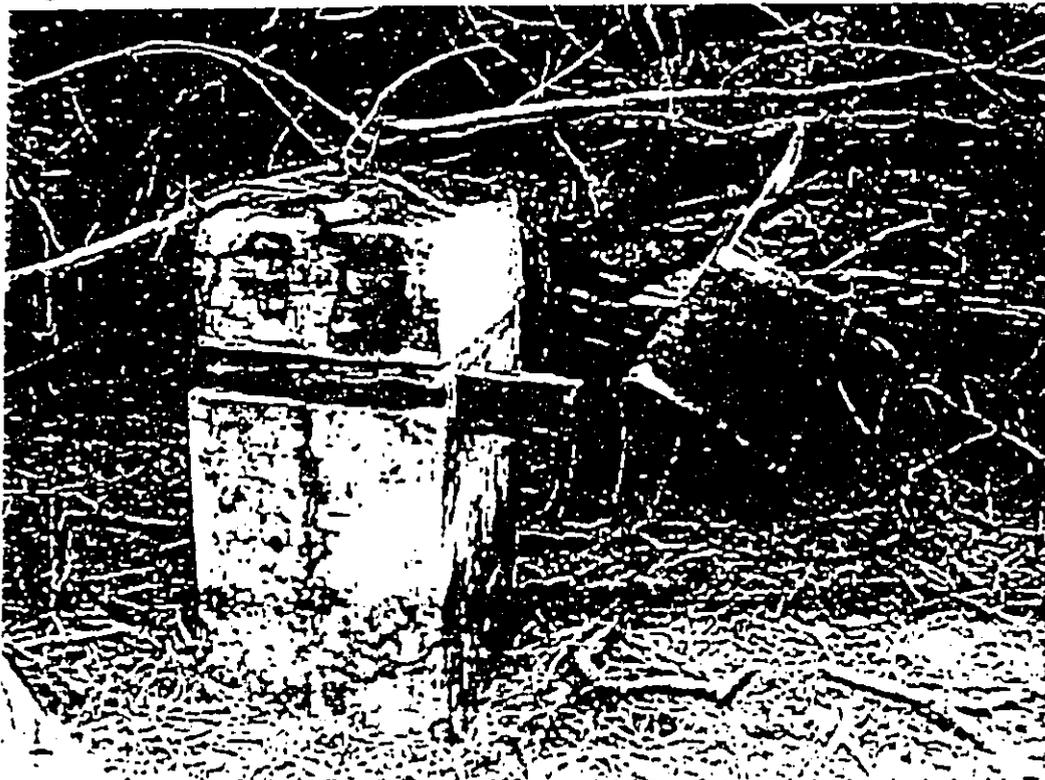


Figure 19. Site 24180, Feature D Upright and Fallen Piers. view to east

Feature D is interpreted as the foundation for an historic structure of undetermined function. As only one of the four piers are intact, it is impossible to determine the original size and shape of the structure. It is possible that this feature may be associated with the abandoned boat launch situated outside the parcel to the west. Feature D is altered and in poor to fair condition.

Subsurface testing was undertaken to determine if subsurface cultural deposits were present. A total of five 0.5 m diameter shovel tests (STs) were excavated (see *Figures 10 and 13*). The shovel tests were positioned in two parallel rows, with STs 1-3 bisecting the approximate center of the parcel and STs 4-5 located c. 20.0 m to the west. These excavations revealed identical soil stratigraphy which consisted of 0.23 to 0.67 m of a dark brown (7.5YR 3/4) silt with from 30 to 80% gravel and pebble inclusions (Layer I), over bedrock. The soil stratigraphy noted within the shovel tests is presented in *Figure 20*.

ST-1 was situated near the southern end of the Feature B alignment. Layer I in this location was 0.65 to 0.68 m in thickness. Cultural remains from Layer I consisted of 48 fragments of marine shell (*Cypraea sp.*, n=24, 34.8 grams, *Conus sp.*, n=1, 0.2 grams, *Nerita picea*, n=13, 4.3 grams, *Nerita polita*, n=3, 1.1 grams, *Tellina sp.*, n=2, 1.0 grams, *Stilifer linckiae*, n=1, 0.7 grams and unidentified marine shell fragments, n=4, 1.7 grams), a small waterworn basalt cobble (56.1 grams), a volcanic glass flake (11 mm long, 8 mm wide, 2 mm thick, 0.4 grams), two clumps of burned wood (10.9 grams), 10 fragments of charcoal (2.0 grams) and two fragments of rusted metal (2.5 grams).

ST-2 was located near the northwestern end of Feature B, 20.0 m north-northwest of ST-1. Layer I in this location was 0.27 to 0.31 m in thickness. Cultural remains from this ST consisted of 230 fragments of recent charcoal (167 grams), two fragments of *Cypraea sp.* shell (2.0 grams), a volcanic glass flake (14 mm long, 11 mm wide, 2 mm thick, 1.3 grams) and two fragments of brown bottle glass (2.4 grams).

ST-3 was situated 20.0 m north-northwest of ST-2 in an area of level grass. Layer I in this location consisted of 0.23 to 0.25 m and contained no cultural remains.

ST-4 was located 20.0 m west-southwest of ST-2. Layer I in this area was 0.4 to 0.46 m in thickness. Cultural remains from ST-4 consisted of five marine shell fragments (*Cypraea sp.*, n=3, 5.4 grams, *Cellana sp.*, n=1, 0.7 grams, *Mitra sp.*, n=1, 3.1 grams), one fragment of sea urchin body (0.1 grams), three waterworn coral pebbles (8.4 grams), one large fragment of recent charcoal (0.7 grams), a small metal grommet (0.7 grams), a fragment of brown bottle glass (0.9 grams), three fragments of clear window pane glass (2.9 grams) and a small molded glass object (2.9 grams). This glass object is 22 mm long, 13 mm wide and 7 mm thick with two 4 mm in diameter spiked projections (see *Figure 18*). It apparently is a decorative element from a glass vessel of undetermined shape.

ST-5 was situated 20.0 m north-northwest of ST-4 and 20.0 m west-southwest of ST-3. Layer I in this area was 0.4 to 0.41 m thick. Cultural remains from ST-4 consisted of nine marine shell fragments (*Cypraea sp.*, n=4, 4.9 grams, *Cellana sp.*, n=1, 0.3 grams, *Nassa sarta*, n=1, 0.2 grams, and three unidentified marine shell fragments 0.9 grams) and a round headed nail with a square shaft (4.0 grams). The head of the nail is 11 mm in diameter and the shaft 33 mm long and 3 mm square (see *Figure 18*).

The shovel testing within the parcel evidenced a mixed cultural deposit containing both indigenous and historic cultural remains. The indigenous remains consisted of marine shells, volcanic glass flakes and waterworn coral. The historic remains consisted of bottle and window pane glass, a small glass object, metal fragments, a nail, and what appears to be relatively recent charcoal because it consists of large, well preserved pieces including some that are not completely carbonized. The absence of cultural remains in ST-3 suggests this mixed deposit is situated in the south and southwestern portion of the parcel, in the general vicinity of Features B, C and D. The presence of the indigenous remains indicates that the parcel was pre-historically occupied, although no pre-contact surface remains or intact cultural deposits were identified. The historic debris represents the remnants of historic use of the area. This historic use may represent the remains of historic house sites that may have once existed within or near the project area, and/or the remnants of the World War II era use of the parcel.

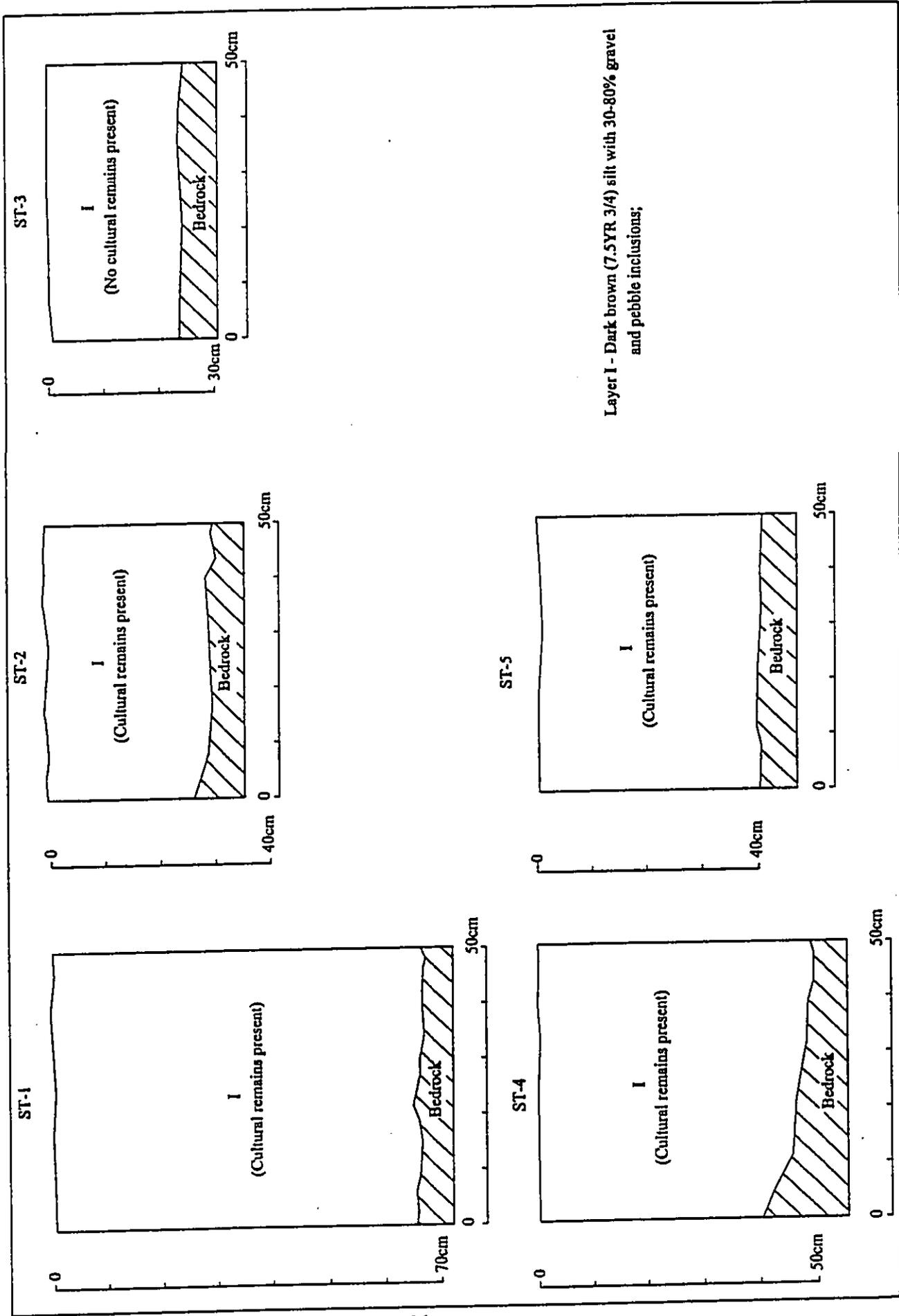


Figure 20. Shovel Test Stratigraphy

CONCLUSION

Discussion

Test excavations identified a mixed deposit covering portions of the project area containing portable remains from at least three temporal periods. The marine shell and volcanic glass flakes were probably deposited during prehistoric to early historic times. The square nail, and potentially some of the glass, probably was deposited during the 1800s to early 1900s. The flat iron on the wall south of the project area probably also dates to this period.

The bottle glass and construction materials including concrete, aluminum, metal, and asphalt represent use of the project area during the 1900s, potentially by the U.S. military during WWII when the Kawaihae and Waikoloa region was used for military training. The temporary nature of the boat launch's construction (see *Figure 4*) and the alignments of possible tent stakes would be expected for a military facility used in the 1940s.

The mixed nature of the deposit is probably a result of both historic earthmoving activity and wave action. Haun et al. (2003) documented a pier a short distance north of the project area that was abandoned after it was damaged by a tsunami in 1946. The same event potentially damaged the nearby boat launch and displaced the concrete piers in the seaward portion of the project area.

Significance Assessments

Pursuant to DLNR (2003) Chapter 275-6 (d), the initial significance assessments provided herein are not final until concurrence from the DLNR has been obtained. The site identified during the survey is assessed for significance based on the criteria outlined in the Rules Governing Procedures for Historic Preservation Review (DLNR 2003: Chap 275). According to these rules, a site must possess integrity of location, design, setting, materials, workmanship, feeling, and association and shall meet one or more of the following criteria:

1. Criterion "a". Be associated with events that have made an important contribution to the broad patterns of our history;
2. Criterion "b". Be associated with the lives of persons important in our past;
3. Criterion "c". Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;
4. Criterion "d". Have yielded, or is likely to yield, information important for research on prehistory or history; and
5. Criterion "e". Have an important traditional cultural value to the native Hawaiian people or to another ethnic group of the state due to associations with traditional cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts--these associations being important to the group's history and cultural identity.

Based on the above criteria, Site 24180 is assessed as solely significant under Criterion "d". The site has yielded information important for understanding historic land use in project area.

Recommended Treatments

The mapping, written descriptions, photography, and test excavations at the site adequately document it and no further work or preservation is recommended for the site.

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**APPENDIX E – REPRODUCTION OF COMMENTS MADE DURING THE 30-DAY
COMMENT PERIOD AND RESPONSES TO THE COMMENTS**

1. State of Hawaii, Office of Environmental Quality Control to Peter Young, Department of Land and Natural Resources dated October 12, 2004. Response letter from Brian T. Nishimura, Planning Consultant to Ms. Genevieve Salmonson, Director, Office of Environmental Quality Control dated November 18, 2004.
2. County of Hawaii, Planning Department to Brian T. Nishimura, dated October 29, 2004. Response letter from Brian T. Nishimura, Planning Consultant to Mr. Christopher J. Yuen, Director, Planning Department, dated November 18, 2004.

LINDA LINGLE
GOVERNOR OF HAWAII



GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186
E-mail: oaqc@health.state.hi.us

October 12, 2004

Peter Young
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Keith Chun

Dear Mr. Young:

Subject: Draft Environmental Assessment (EA)
Kawaihae Change of Zoning Project

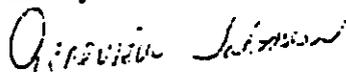
We have the following comments to offer:

Timeframe: What are the anticipated start and end dates of this project, and when do you anticipate the auction of this parcel?

Pre-assessment consultation letters: In Appendix B (Pre-Consultation correspondence) only the first page of the Department of Health's April 1st, 2004 has been reproduced. Please correct this in the final EA.

If you have any questions, call Nancy Heinrich at 586-4185.

Sincerely,


GENEVIEVE SALMONSON
Director

c: Brian Nishimura

BRIAN T. NISHIMURA, PLANNING CONSULTANT

101 Aupuni Street, Suite 217

Hilo, Hawaii 96720-4221

Phone: (808) 935-7692 Fax: (808) 935-6126 E-mail: btnishi@interpac.net

November 18, 2004

Ms. Genevieve Salmonson, Director
State of Hawaii
Office of Environmental Quality Control
235 S. Beretania St., Suite 702
Honolulu, Hawaii 96813

Subject: Draft Environmental Assessment
The Kawaihae Project

Dear Ms. Salmonson:

This is in response to your letter dated October 12, 2004, providing comments on the subject Draft Environmental Assessment. The responses to your comments are provided as follows:

1. **TIMEFRAME.** The change of zone application will be submitted to the Hawaii County Planning Department within a month of the completion of the HRS 343 Environmental Review process. The change of zone process is anticipated to take between 9-12 months to complete and the public auction is anticipated to take place within 12 months of the change of zone.

4. **PRE-ASSESSMENT CONSULTATION LETTERS.** The second page of the Department of Health's letter of April 1, 2004 will be included in the final EA.

Thank you for taking the time to comment on the proposed project.

Sincerely,



Brian T. Nishimura, Planning Consultant

- c. Mr. Keith Chun, Department of Land and Natural Resources, Land Division
Mr. Harry Yada, Department of Land and Natural Resources, Hawaii District Land Office

Harry Kim
Mayor



Christopher J. Yuen
Director

Roy R. Takemoto
Deputy Director

County of Hawaii

PLANNING DEPARTMENT

101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720-3043
(808) 961-8288 • Fax (808) 961-8742

October 29, 2004

Brian T. Nishimura
101 Aupuni Street, Suite 217
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura:

**SUBJECT: Draft Environmental Assessment Comments
Proposed Change of Zone for Sale of Long Term Lease of State Land for
Industrial or Commercial/Industrial Uses
State of Hawaii, Department of Land and Natural Resources (DLNR)
Kawaihae 1st, South Kohala, Island and County of Hawaii
Tax Map Key: (3) 6-1-003:015**

We are in receipt of your memo, dated October 6, 2004, transmitting the subject Draft Environmental Assessment for the proposed change of zone for the subject parcel.

We understand the DLNR intends to apply for a change of zone to allow for industrial or mixed commercial/industrial uses on the subject property and to subsequently offer a long-term lease for sale by public auction of the vacant property.

By this letter we confirm that the subject 1.32-acre parcel is zoned Open by the County of Hawaii. The property is situated in the State Land Use Urban district and is in the Hawaii County Special Management Area (SMA). The Land Use Pattern Allocation Guide (LUPAG) map of the General Plan (GP) designates this general area for industrial and open uses. The open designation is assigned to a band of land along much of the shoreline of Hawai'i County. Although this band appears to affect the makai portion of the subject lot, it cannot be precisely scaled to a set width. It is meant to signify a policy that open space along the shoreline should be protected. Although rezoning of this entire parcel to industrial or mixed commercial and industrial uses may be considered under the present LUPAG map designation, consideration must be given to the effect that it may have on the shoreline open space in the rezoning review

Hawai'i County is an equal opportunity provider and employer

process.

The following corrections should be made prior to publication of the Final EA.

1. Although historically referred to as the Kawaihae-Mahukona Road, the highway fronting the subject property is officially named Akoni Pule Highway.
2. The Tax Map Key (TMK) number for the adjacent shoreline parcel reserved for public recreational purposes by Governor's Executive Order 4042 (Part 4.1) is (3) 6-1-03:014.

We have reviewed the DEA and offer the following comments, which we feel must be addressed to support a Finding of No Significant Impact.

1. Although provided in Appendix B by your response to our pre-DEA comments, in support of the perceived shortage of land suitable for the uses permitted under MCX zoning, the discussion under Part 2.2.1 – "Socio-Economic Characteristics" should include an analysis of vacant land in the vicinity of the project site that is already zoned for industrial and/or commercial uses.
2. Part 2.1.9 – Scenic Resources discussion should mention Senate Concurrent Resolution No. 179 H.D. 1 (copy enclosed), which resolved that the State and County governments work in close collaboration to discourage subdivision and building development makai of the Kawaihae-Mahukona-Hawi Road (Akoni Pule Highway).
3. Parts 2.3 – "Public Facilities and Services" and 3. – "Summary of Potential Adverse Environmental Impacts and Proposed Mitigation Measures" should include a discussion on the range of potential impacts that can be anticipated with a change in zoning from Open to MCX. It is not reasonable to assume that such a change in permitted uses will not have any impact or create any additional burden on existing facilities and/or service providers.

For example, Part 2.3.2 – "Water System" should include some discussion on the potential adverse impacts on the future development of the adjacent parcel (TMK 6-1-003:014) if two of its three total water commitments available from the Department of Water Supply are assigned to the subject parcel.

Also, Part 2.3.3 – "Protective Services" should provide some discussion on the range of additional burden that would likely be placed on the existing emergency service providers (fire, police, medical) as a result of the change in permitted uses from Open to MCX.

4. Under part 4. – Alternatives, a discussion on the obvious alternative to the proposed action of retaining the Open zoning designation of the subject property for future expansion of the adjacent parcel designated for public shoreline recreational uses should be included.

Brian T. Nishimura
Page 3
October 29, 2004

5. The listing of permits and approvals in Part 1.5.3 should include the requirement for Special Management Area review pursuant to Rule 9 of the Planning Commission Rules of Practice and Procedure for any subsequent development of the subject property.

Thank you for the opportunity to comment on the proposed project. Should you have questions, please feel welcome to contact Larry Brown or Esther Imamura of my staff at 961-8288.

Sincerely,



CHRISTOPHER J. YUEN
Planning Director

LMB:lmb
P:\WPWIN60\Larry\EA-EIS Comments\Nishimura-DLNR 6-1-3-15 DEA cmnts.doc

Encl: SCR No. 179 H.D. 1

xc: DLNR w/Encl.
Planning Department – West Hawaii Office

SENATE CONCURRENT RESOLUTION

*This passed
both houses*

URGING THE RETENTION OF VIEW AND OPEN SPACE MAKAI OF KAWAIHAE-
MAHUKONA-HAWI ROAD FROM KAWAIHAE TO UPOLU POINT, HAWAII

WHEREAS, lands makai of the Kawaihae-Mahukona-Hawi Road are currently in a relatively undeveloped state; and

WHEREAS, the area contains Lapakahi State Historical Park, an ancient Hawaiian coastal settlement, and, Mookini Heiau State Monument, one of the most famous heiaus on the island; and

WHEREAS, the State Department of Transportation has previously recognized the value of makai views by requiring the location of all utility poles on the mauka side of Queen Kaahumanu Highway immediately south of the Kawaihae-Mahukona-Hawi Road; and

WHEREAS, existing State zoning does not provide for urban development on the vast majority of these lands; and

WHEREAS, the makai area lies in large measure within the Coastal Zone Management area administered by the State; and

WHEREAS, the makai area also lies within the Special Management Area administered by the County; now, therefore,

BE IT RESOLVED by the Senate of the Fourteenth Legislature of the State of Hawaii, Regular Session of 1988, the House of Representatives concurring, that the State and the County governments are urged to work together in a collaborative effort to ensure that the public view and open space currently existing makai of the Kawaihae-Mahukona-Hawi Road be preserved; and

BE IT FURTHER RESOLVED that the State and County governments work in close collaboration to discourage subdivision and building development makai of the Kawaihae-Mahukona-Hawi Road; and

S.C.R. NO.

179
S.L.S. 1

BE IT FURTHER RESOLVED that certified copies of this Concurrent Resolution be transmitted to the Chairperson of the Board of Land and Natural Resources, the State Land Use Commission, the Chairperson of the Hawaii County Council, the Mayor of Hawaii County and the Director of the Hawaii County Planning Department.

BRIAN T. NISHIMURA, PLANNING CONSULTANT
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November 18, 2004

Mr. Christopher J. Yuen, Director
County of Hawaii
Planning Department
101 Pauahi Street, Suite 3
Hilo, Hawaii 96720-3043

Subject: Draft Environmental Assessment Comments
Applicant: State of Hawaii, Department of Land and Natural Resources
TMK: (3) 6-1-003: 15

Dear Mr. Yuen:

Thank you for providing your comments regarding the subject matter in your letter dated October 29, 2004. Upon review of your comments, we have prepared the following response to address the issues raised in your letter.

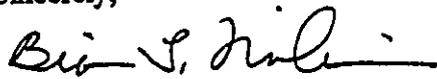
1. **Corrections:** All references to the Kawaihae-Mahukona Road will be changed to the Akoni Pule Highway. In addition, the adjacent parcel reserved for public recreational purposes will be identified as TMK: (3) 6-1-03: 014.
2. **Part 2.2.1 – Socio-Economic Characteristics:** This section will be amended to include an analysis of vacant land in the vicinity of the project site that is already zoned for industrial and/or commercial uses.
3. **Part 2.1.9 – Scenic Resources:** We acknowledge the value of the scenic views makai of the Akoni Pule Highway from Kawaihae to Upolu Point. We believe, however, that Senate Concurrent Resolution No. 179 H.D.1 was not intended to apply to the subject property. The subject property was an existing part of the Kawaihae urban node at the time the resolution was adopted as evidenced by the State Land Use Urban designation as well as the County General Plan Industrial designation. As such, we believe the resolution more appropriately applies to those undeveloped lands between the urban node of Kawaihae and Upolu Point
4. **Parts 2.3 - Public Facilities and Services:** The proposed change of zone of a 1.32 acre parcel from Open to Mixed Commercial/Industrial uses will not have a significant impact on existing public facilities and service providers. The subject property is situated within the existing urban node established for Kawaihae and will result in an increase of less than 10% of the existing commercially zoned property and less than 1% of the existing industrial zoned property. It should be noted that the Fire Department stated, "we have no comments to offer at this time regarding the project." The Police Department did not respond to our request for comments.

With regard to the water issue, the Department of Parks and Recreation has been assigned administrative responsibility for TMK 6-1-003: 014. The Department of Parks and Recreation did not object to the transfer of the water commitments and in fact, assisted the State's efforts in securing the transfer.

5. **Part 4-Alternatives:** The section on Alternatives will be revised to include a discussion to retain the Open designation for future expansion of the adjacent public shoreline recreational use.
6. **Part 1.53-Listing of Permits:** Section 1.5.3 will be revised to include the requirement for a SMA permit.

Thank you again for your comments on the draft environmental assessment. Should you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,



Brian T. Nishimura, Planning Consultant

- c. Mr. Keith Chun, Department of Land and Natural Resources, Land Division
Mr. Harry Yada, Department of Land and Natural Resources, Hawaii District Land Office