ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

September 29, 2011

Mr. Gary Hooser, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Mr. Hooser:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR THE COMMUNITY PLAN AMENDMENT, DISTRICT BOUNDARY AMENDMENT, CHANGE IN ZONING, AND COUNTY SPECIAL USE PERMIT FOR THE EXISTING KIHEI ROCK CRUSHING FACILITY AND RELATED IMPROVEMENTS INCLUDING UPGRADE OF AN EXISTING WATERLINE, LOCATED AT 500 EAST WELAKAHAO ROAD, KIHEI, ISLAND OF MAUI, HAWAII; TMK: (2) 2-2-002:078 (CPA 2011/0001) (DBA 2011/0004) (CIZ 2011/0004) (CUP 2011/0006) (EA 2011/0004)

The Department of Planning (Department), on behalf of the Maui Planning Commission (Commission), has reviewed the Draft EA prepared in accordance with Chapter 343, Hawaii Revised Statutes (HRS) and Chapter 11-200, Hawaii Administrative Rules (HAR), for the subject project and anticipates a Finding of No Significant Impact (FONSI) determination. Please publish notice of availability for this project in the next available Office of Environmental Quality Control (OEQC) Environmental Notice.

We have attached a completed OEQC Publication Form, one (1) hard copy of the Draft EA, and one (1) CD copy of the Draft EA in PDF format.

Thank you for your cooperation. Should you need further clarification, please contact Staff Planner Kurt Wollenhaupt at kurt.wollenhaupt@mauicounty.gov or by (808) 270-1789.

Sincerely,

CLAYTON I. YOSHIDA, AICP
Planning Program Administrator

for WILLIAM SPENCE
Planning Director

Project Name: Existing Kihei Rock Crushing Facility

Publication Form
The Environmental Notice
Office of Environmental Quality Control

Instructions: Please submit one hardcopy of the document along a with determination letter from the agency. On a compact disk, put an electronic copy of this publication form in MS Word and a PDF of the EA or EIS. Please make sure that your PDF documents are ADA compliant. Mahalo.

Applicable Law:	Chapter 343, Hawaii Revised Statutes
Type of Document:	Draft Environmental Assessment
Island:	Maui
District:	Makawao
TMK:	(2) 2-2-002:078
Permits Required:	District Boundary Amendment, Community Plan Amendment, Change in Zoning, County Special Use Permit
Applicant or Proposing Agency:	Pacific Rim Land, Inc.
Address	P. O. Box 220, Kihei, Hawaii 96753
Contact & Phone	Blanca Lafolette, (808) 874-5263
Approving Agency/ Accepting Authority:	County of Maui Maui Planning Commission
Address	250 South High Street, Wailuku, Hawaii 96793
Contact & Phone	William Spence, (808) 270-7735
Consultant:	Munekiyo & Hiraga, Inc.
Address	305 High Street, Suite 104, Wailuku, Hawaii 96793
Contact & Phone	Mich Hirano, AICP, Principal, (808) 244-2015

Project Summary: Summary of the direct, indirect, secondary, and cumulative impacts of the proposed action (less than 200 words). Please keep the summary brief and on this one page.

Pacific Rim Land, Inc. (PRL) seeks a Community Plan Amendment (CPA) to the Kihei-Makena Community Plan's land use map, a Change in Zoning (CIZ), a State Land Use District Boundary Amendment (DBA), as well as a County Special Use Permit (CUP) for the existing Kihei Rock Crushing Facility (KRCF) site identified by Tax Map Key (2)2-2-002:078, Kihei, Maui, Hawaii. The purpose of the requested land use entitlements is to facilitate the existing heavy industrial use of this site with appropriate land use designations to establish the long-term use of the KRCF.

The project site is currently designated as "Agricultural" under the State Land Use District; "Agriculture" in the Kihei-Makena Community Plan; and "Agricultural" by Maui County Zoning.

The KRCF is located on a 14.5-acre parcel owned by PRL on the east side of Piilani Highway, approximately 200 feet south of the Kihei Wastewater Reclamation Facility. The KRCF crushes rock which is brought onto the site to make aggregate, as well as stockpiles and stores the aggregate which is used in road building and construction activities in South Maui. A small portion of the site also serves as a construction baseyard for trailers, stockpiles, and construction equipment.

The KRCF was originally established in 1979 for the construction of Piilani Highway. The site has been in continuous operation by Goodfellow Bros. since 1979. The facility has been operating under a State Land Use Special Use Permit and County Conditional Permit, which are valid until October 2016 and November 2017, respectively. No operational changes are proposed at this time. New improvements would be limited to an upgrade of the existing waterline to meet fire flow requirements for heavy industrial uses.

Draft Environmental Assessment

EXISTING KIHEI ROCK CRUSHING FACILITY AT TMK (2)2-2-002:078, KIHEI, MAUI, HAWAII

Prepared for:

Pacific Rim Land, Inc.

Approving Agency:

Maui Planning Commission

September 2011

MUNEKIYO HIRAGA, INC.

CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

Executive Summary

Project Name:	Existing Kihei Rock Crushing Facility
Type of Document:	Draft Environmental Assessment
Legal Authority:	Chapter 343, Hawaii Revised Statutes
Determination:	Anticipated Finding of No Significant Impact (FONSI)
Applicable Environmental Assessment review "Trigger":	Kihei-Makena Community Plan Amendment
Location:	Maui Island Kihei TMK No. (2) 2-2-002:078
Landowner:	Pacific Rim Land, Inc.
Applicant:	Pacific Rim Land, Inc.
Approving Agency:	County of Maui Maui Planning Commission 250 South High Street Wailuku, Hawaii 96793
Consultant:	Munekiyo & Hiraga, Inc. 305 High Street, Suite 104 Wailuku, Hawaii 96793 Contact: Mich Hirano, AICP, Principal Phone: (808) 244-2015
Project Summary:	Pacific Rim Land, Inc. (PRL) seeks a Community Plan Amendment (CPA) to the Kihei-Makena Community Plan's land use map, a Change in Zoning (CIZ), a State Land Use District Boundary Amendment (DBA), as well as a County Special Use Permit (CUP) for the existing Kihei Rock Crushing Facility (KRCF) site identified by Tax Map Key (2)2-2-002:078, Kihei, Maui, Hawaii. The purpose of the requested land use entitlements is to facilitate the existing heavy industrial use of this site with appropriate land use designations to establish the long-term use of the KRCF.

The project site is currently designated as "Agricultural" under the State Land Use District; "Agriculture" in the Kihei-Makena Community Plan; and "Agricultural" by Maui County Zoning. **Table 1** summarizes the land use changes requested by the applicant.

Table 1. Summary of Land Use Changes

Land Use Designation	Existing	Requested Changes
State Land Use District	Agricultural	Urban
Kihei-Makena Community Plan	Agriculture	Heavy Industrial
Maui County Zoning	Agricultural	M-2, Heavy Industrial

The KRCF is located on a 14.5-acre parcel owned by PRL on the east side of Piilani Highway, approximately 200 feet south of the Kihei Wastewater Reclamation Facility. The KRCF crushes rock which is brought onto the site to make aggregate, as well as stockpiles and stores the aggregate which is used in road building and construction activities in South Maui. A small portion of the site also serves as a construction baseyard for trailers, stockpiles, and construction equipment. It should be noted that the rock crushing activity occurs on an as-needed basis, typically every four (4) years for a duration of approximately four (4) months. Approximately 100,000 tons of rock are crushed and stock piled until used. Rock crushing operations are not taking place at this time. Current improvements on the property include a job site trailer, weigh station, employee parking, vehicle wash area, material storage areas, a rock crushing plant, site landscaping and a drainage basin. The project site is served by a private potable water system. R-1 water from the Kihei Wastewater Reclamation Facility is used for irrigation, dust control, and fire flow.

The KRCF was originally established in 1979 for the construction of Piilani Highway. Following completion of the Piilani Highway, construction in South Maui continued at an active pace and the site proved to be an optimum location for a rock crushing facility. The site has been in continuous operation by Goodfellow Bros. since 1979. The facility has been operating under a State Land Use Special Use Permit and County Conditional Permit, which are valid until October 2016 and November 2017, respectively. However, due to the

long standing operations of the facility and projected continued use of the site for the KRCF, PRL seeks to establish appropriate land entitlements for the property. No operational changes are proposed at this time. New improvements would be limited to an upgrade of the existing waterline to meet fire flow requirements for heavy industrial uses.

I. PROJECT OVERVIEW

I. PROJECT OVERVIEW

A. PROJECT LOCATION, CURRENT LAND USE, AND OWNERSHIP

Pacific Rim Land, Inc. (PRL) seeks a Community Plan Amendment (CPA) to the Kihei-Makena Community Plan's land use map, a County Change in Zoning (CIZ), a State Land Use District Boundary Amendment (DBA), as well as a County Special Use Permit (CUP) for the existing Kihei Rock Crushing Facility (KRCF) site in Kihei, Maui, Hawaii. See **Figure 1**. The 14.5-acre parcel (project site) is located on the east side of Piilani Highway at property identified by Tax Map Key (TMK) (2)2-2-002:078. See **Figure 2**. The project site is located approximately 200 feet south of the Kihei Wastewater Reclamation Facility. Access to the property is provided by East Welakahao Road through its intersection with Piilani Highway. There is also an exit driveway on the south side of the property providing access via a private access road connecting to Kanani Road.

The project site is designated "Agricultural" by the State Land Use Commission, "Agriculture" by the Kihei-Makena Community Plan, and "Agricultural" by Maui County zoning. The DBA application is to change the State Land Use designation from "Agricultural" to "Urban"; the CPA application is to change the land use designation from "Agriculture" to "Heavy Industrial", and the CIZ application is to change the underlying zoning from "Agricultural" district to "M-2, Heavy Industrial" district.

The project site was formerly comprised of portions of two (2) separate TMK parcels, TMK (2)2-2-002:054(por.) and TMK (2)2-2-002:069(por.). Final subdivision approval to consolidate the portions of the two (2) parcels into a new, separate parcel was approved in December 2009. A new TMK number, TMK (2)2-2-002:078, was assigned to the project site. It should be noted, however, that the TMK maps published in the State of Hawaii, Realty Atlas, 2010 do not yet show the new TMK number for the site. As a result, some of the technical studies prepared for the project site refer to the old TMK parcel numbers.

The KRCF site is owned by PRL and was originally established in 1979 for the construction of Piilani Highway. Following completion of the Piilani Highway, construction in South Maui continued at an active pace and the site provided to be an optimum location for a rock crushing facility. The site has been leased and in continuous operation by

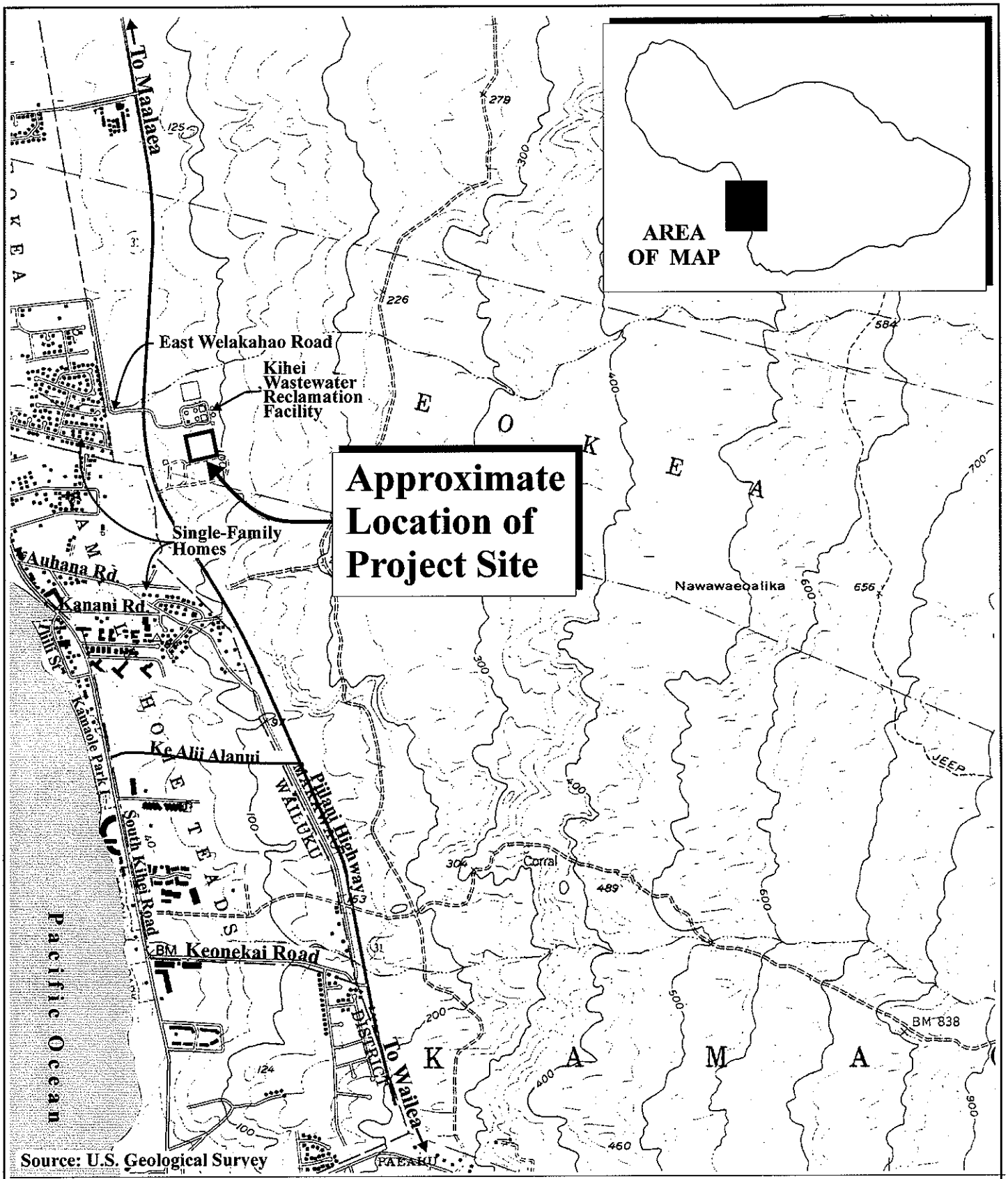


Figure 1 Kihei Rock Crushing Facility

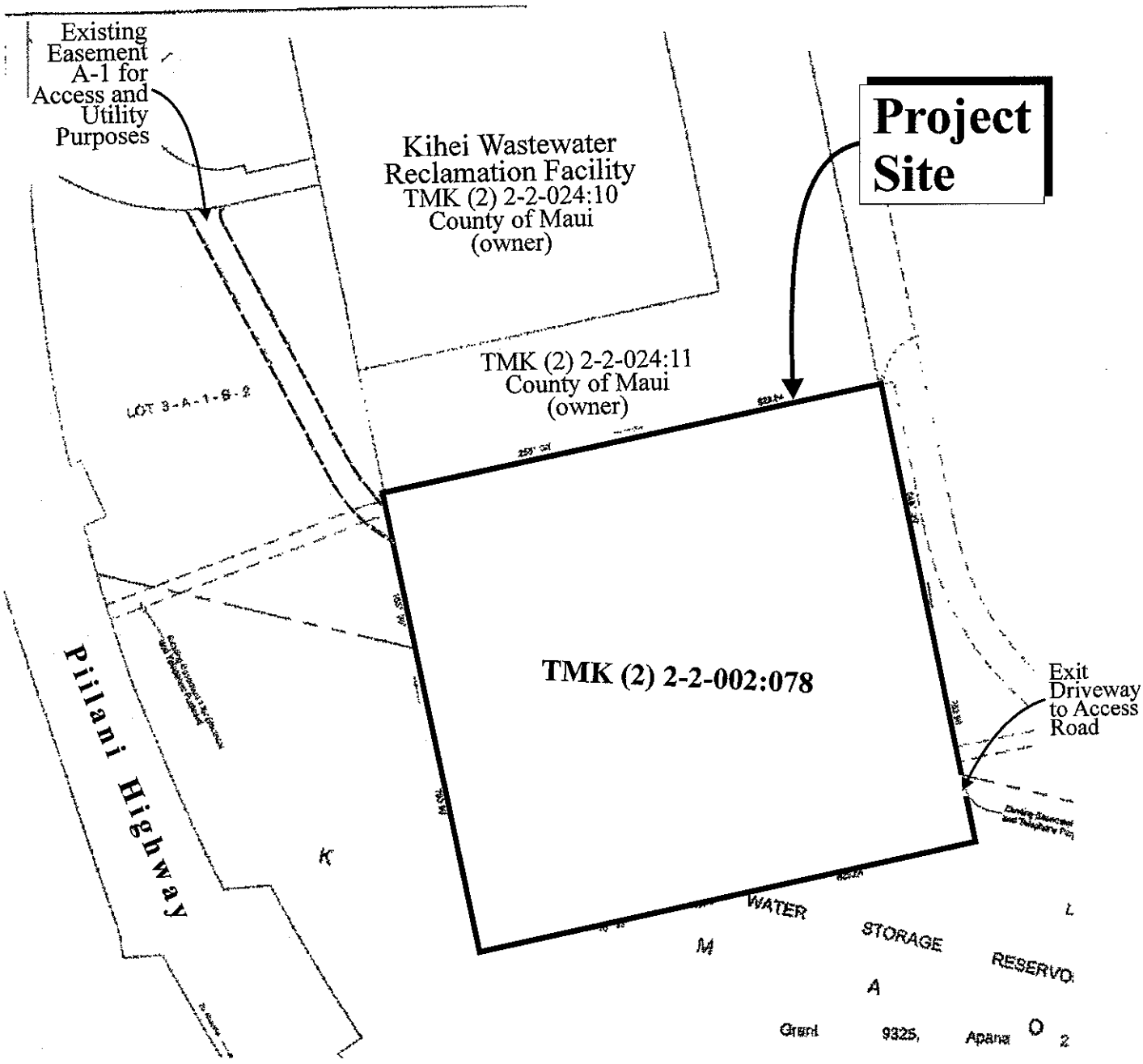
Regional Location Map

0 500 1000 2000 Feet

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/regional



Source: Pacific Rim Land, Inc.

Figure 2 Kihei Rock Crushing Facility

Property Location Map

NOT TO SCALE

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/BoundaryMap

Goodfellow Bros., Inc. (GBI) since 1979. GBI has a lease with PRL for the operation of the KRCF that expires in 2012. PRL and GBI will enter into negotiations for the renewal of the lease of the KRCF prior to the 2012 expiration date. The KRCF crushes rock which is brought onto the site to make aggregate, as well as stockpiles and stores the aggregate for use in road and other construction activities in South Maui. The facility has been operating under a State Land Use Special Use Permit (SUP) and County Conditional Permit (CP), which were issued to GBI and are valid until October 2016 and November 2017, respectively. See **Appendix "A"**. Consistent with the project conditions associated with the SUP, the KRCF does not engage in any quarry operations at the site. Furthermore, a 2.86-acre portion of the project site is used as a construction baseyard for the storage of construction material and vehicles. In compliance with SUP project conditions, the area used for the baseyard is less than four (4) acres.

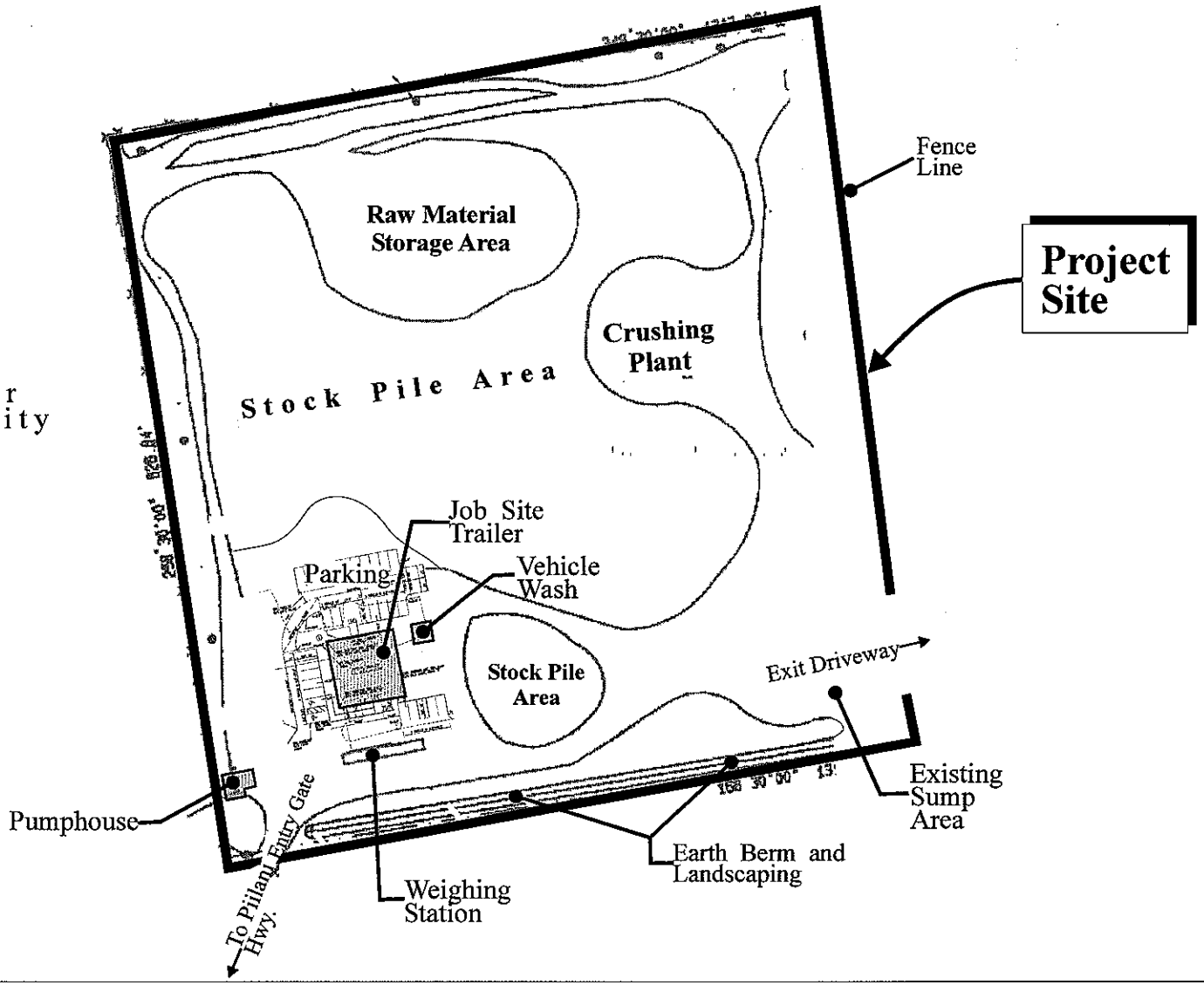
Rock crushing activity occurs on an as-needed basis, typically every four (4) years and for a duration of approximately four (4) months. Approximately 100,000 tons of rock are crushed and stock piled at the site until used. Although rock crushing has not been active since 2009, PRL and GBI plan for the long-term use of the site for rock crushing. Rock crushing activity will resume when current stockpiles of aggregate are exhausted.

Current improvements on the property include a job site trailer, a weigh station, employee parking, a vehicle wash area, material storage areas, a rock crushing plant, site landscaping and a sump area. A concrete truck wash area was previously located on the site, but is no longer present. See **Figure 3** and **Appendix "B"**. The project site is served by a private water system. The Kihei Wastewater Reclamation Facility is located north of the project site while Piilani Highway lies to the west. Agricultural land owned by Haleakala Ranch borders the property on the east and south. The adjacent agricultural land is used for cattle grazing and seed corn cultivation.

B. PROPOSED ACTION

As discussed previously, the applicant is preparing DBA, CPA, CIZ, and CUP applications for the existing KRCF site to establish the appropriate land use designations for the long-term use of the site for the KRCF operation. The DBA application is to change the State Land Use designation from "Agricultural" to "Urban"; the CPA application is to change the land use designation from "Agriculture" to "Heavy Industrial"; and the CIZ application is to

Kihei Wastewater
Reclamation Facility



Source: Goodfellow Bros., Inc.

Figure 3

Kihei Rock Crushing Facility

Site Plan

NOT TO SCALE

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/Site Plan

change the underlying zoning from "Agricultural" district to "M-2, Heavy Industrial" district. The requested land use changes for the project site are summarized in **Table 2**, below.

Table 2. Summary of Proposed Land Use Changes

Land Use Designation	Existing	Requested Changes
State Land Use District	Agricultural	Urban
Kihei-Makena Community Plan	Agriculture	Heavy Industrial
Maui County Zoning	Agricultural	M-2, Heavy Industrial

Since the Maui County Code, Section 19.26.020(28)(p) declares rock crushing or distribution to be a special use within the "M-2, Heavy Industrial" district, a CUP will also be required.

No operational changes are proposed at this time. New improvements would be limited to an upgrade of the existing waterline to meet fire flow requirements for heavy industrial uses.

C. PROJECT NEED

The KRCF was first established as a rock crushing facility and materials storage area for the construction of Piilani Highway. The rock crushing operation was to end upon completion of the Piilani Highway project (target completion date December 1980), and the site was to be restored to its former condition. However, construction in South Maui continued at an active pace and the site proved to be an optimum location for the rock crushing facility. It is close to the construction activity in South Maui, thereby minimizing long hauls and traffic congestion. The site also has good access to Piilani Highway. The cost efficiency provided by the location of the KRCF reduces construction costs and provides a benefit to the purchaser of these goods and services. As construction activity continues in Kihei, Wailea, and Makena, the need for a rock crushing facility and materials storage area in close proximity to new development remains. The KRCF will continue to support the construction industry and fulfill the need for a facility of this type in the South Maui area. The KRCF is the only rock crushing facility located in South Maui.

As previously mentioned, the KRCF has been operating under a SUP and County CP, which are valid until October 2016 and November 2017, respectively. However, due to the long standing operations of the facility and projected continued need for the KRCF, PRL seeks

to establish appropriate land entitlements for the property that are consistent with the rock crushing and baseyard uses that have been in place on the site for over 30 years.

The State Land Use Agricultural District is intended for the cultivation of crops, aquaculture, raising livestock, wind energy facilities, timber cultivation, and agriculture-support activities and as a reserve for land with significant potential for agriculture uses. Since 1979, the project site has been operated as a rock crushing facility which has been permitted through a SUP and County CP. The construction baseyard and storage use was approved in the 2003 time extension approval for the SUP. The existing KRCF is an industrial land use that is consistent with the intent of the State Land Use "Urban" District designation. A DBA to include the project site in the Urban District would remove the need for a SUP for the KRCF. Land across of Piilani Highway from the project site is already classified as "Urban" district. Because the KRCF has been in operation for over 30 years, the requested reclassification of the project site from the "Agricultural" district to the "Urban" district would not have a significant impact on agricultural endeavors on Maui.

The KRCF use is also consistent with the "Heavy Industrial" designation in the Kihei-Makena Community Plan. This designation allows for major industrial operations whose effects are potentially noxious due to noise, airborne emissions, or liquid discharges. It should be noted that the project site is not immediately adjacent to existing residential uses.

Within the Maui County Zoning code, the "M-2, Heavy Industrial" district generally allows for uses related to the manufacture or treatment of goods from raw materials. Rock crushing or distribution is designated as a special use in the M-2 district and a CUP is required for the location and operation of such facilities in this district. The "M-2, Heavy Industrial" zoning designation is more appropriate than the project site's current designation as "Agricultural". The purpose of the "Agricultural" district is to promote agricultural development and preserve and protect agricultural resources. Rock crushing is not identified as a special use in the "Agricultural" district and the KRCF is currently operating through a County CP.

The applicant seeks the aforementioned land use entitlements to establish the appropriate land use designations for the long-term use of the site for the KRCF.

The project site is located outside of the County of Maui's Special Management Area.

D. CHAPTER 343, HAWAII REVISED STATUTES REQUIREMENT

The proposed amendment to the Kihei-Makena Community Plan is a trigger for Chapter 343, Hawaii Revised Statutes (HRS) requirements. As such, based on the anticipated land use changes, the proposed action requires the preparation and processing of an Environmental Assessment (EA). This EA has been prepared in compliance with Department of Health, Hawaii Administrative Rules (HAR), Title II, Chapter 200, Environmental Impact Statement Rules.

E. IMPLEMENTATION TIME FRAME

This EA will act as the primary supporting technical document for PRL's DBA, CPA, and CIZ applications. In addition, PRL will concurrently request a CUP for the KRCF in compliance with the "M-2, Heavy Industrial" zoning regulations. The DBA, CPA, and CIZ would be effective upon approval by the County Council and Mayor. The KRCF is an existing operation and the applicant does not propose any new operational changes at the KRCF at this time. New improvements would be limited to an upgrade of the existing waterline to meet fire flow requirements for heavy industrial uses.

II. DESCRIPTION OF EXISTING CONDITIONS, POTENTIAL IMPACTS, AND PROPOSED MITIGATION MEASURES

II. DESCRIPTION OF EXISTING CONDITIONS, POTENTIAL IMPACTS, AND PROPOSED MITIGATION MEASURES

A. PHYSICAL ENVIRONMENT

1. Surrounding Land Uses

a. Existing Conditions

The project site is located east of Piilani Highway in Kihei in the vicinity of the intersection at East Welakahao Road. The County of Maui Kihei Wastewater Reclamation Facility is located to the north of the project site. Agricultural land owned by Haleakala Ranch borders the property to the east and south. The agricultural land is used for cattle grazing and a portion to the south of the project site is leased to the Monsanto Company for seed corn cultivation. To the west of the project site is Piilani Highway and beyond are single-family residences.

The larger coastal area of Kihei includes resort-oriented condominiums in proximity to South Kihei Road, as well as commercial centers, such as Azeka Shopping Center, Piilani Village Shopping Center, and Kihei Kalama Village. Approximately 0.70 mile to the southwest of the project site is Kamalii Elementary School. The County of Maui's Kihei Community Center and Aquatic Center are located less than one (1) mile northwest of the project site along Lipoa Street, across from Kihei Elementary School. Kalama Park, Kalepolepo Park, and Kamaole Beach Parks I, II, and III are among the other recreational facilities found in the Kihei area, west of the project site.

b. Potential Impacts and Proposed Mitigation Measures

The KRCF has been in operation since 1979 and is an established use in the area and does not impact adjacent land uses. The character of the land uses on the eastern side of Piilani Highway is predominantly open agricultural land used for cattle grazing and seed corn, and public/quasi-public lands established for use by the Kihei Wastewater Reclamation Facility. To mitigate potential impacts to visual resources from the west, the project site is setback approximately 400 feet and screened from Piilani Highway by a thick grove of kiawe trees.

2. Climate

a. Existing Conditions

Maui is characterized by a semi-tropical climate containing a multitude of individual microclimates. The mean annual temperature of the island at all locations near sea level is approximately 75 degrees Fahrenheit. A high proportion of the rainfall that Maui receives each year falls on the northeast facing shores leaving the south and southwest coastal areas relatively dry. The project site is located within one of these drier areas of the southwest coast.

The Kihei coast is generally sunny, warm, and dry throughout the entire year. Annual temperatures in the region average in the mid to high 70's (County of Maui, Office of Economic Development, March 2010). June through August are historically the warmer months of the year, while the cooler months are January through March. During the summer months, average daily temperatures in Kihei typically range from the low 70's to the high 80's.

Average rainfall distribution in the Kihei-Makena region varies from under 5.8 inches per year along the coastline to more than 20 inches per year in the higher elevations. Rainfall in the Kihei-Makena region is highly seasonal, with most of the precipitation occurring in the winter months (County of Maui, Office of Economic Development, March 2010).

Northeast tradewinds prevail approximately 80 to 85 percent of the time. Tradewinds originating from the northeast average 10 to 15 miles per hour during afternoons, with slightly lighter winds during mornings and nights. Between October and April, the southerly winds of Kona storms may be experienced (County of Maui, Office of Economic Development, March 2010).

b. Potential Impacts and Proposed Mitigation Measures

The KRCF has been in existence for over 30 years. New improvements would be limited to an upgrade of the existing waterline to meet fire flow requirements for heavy industrial uses. The proposed action to establish appropriate land entitlements is not anticipated to alter local micro-climates.

3. Topography and Soils

a. Existing Conditions

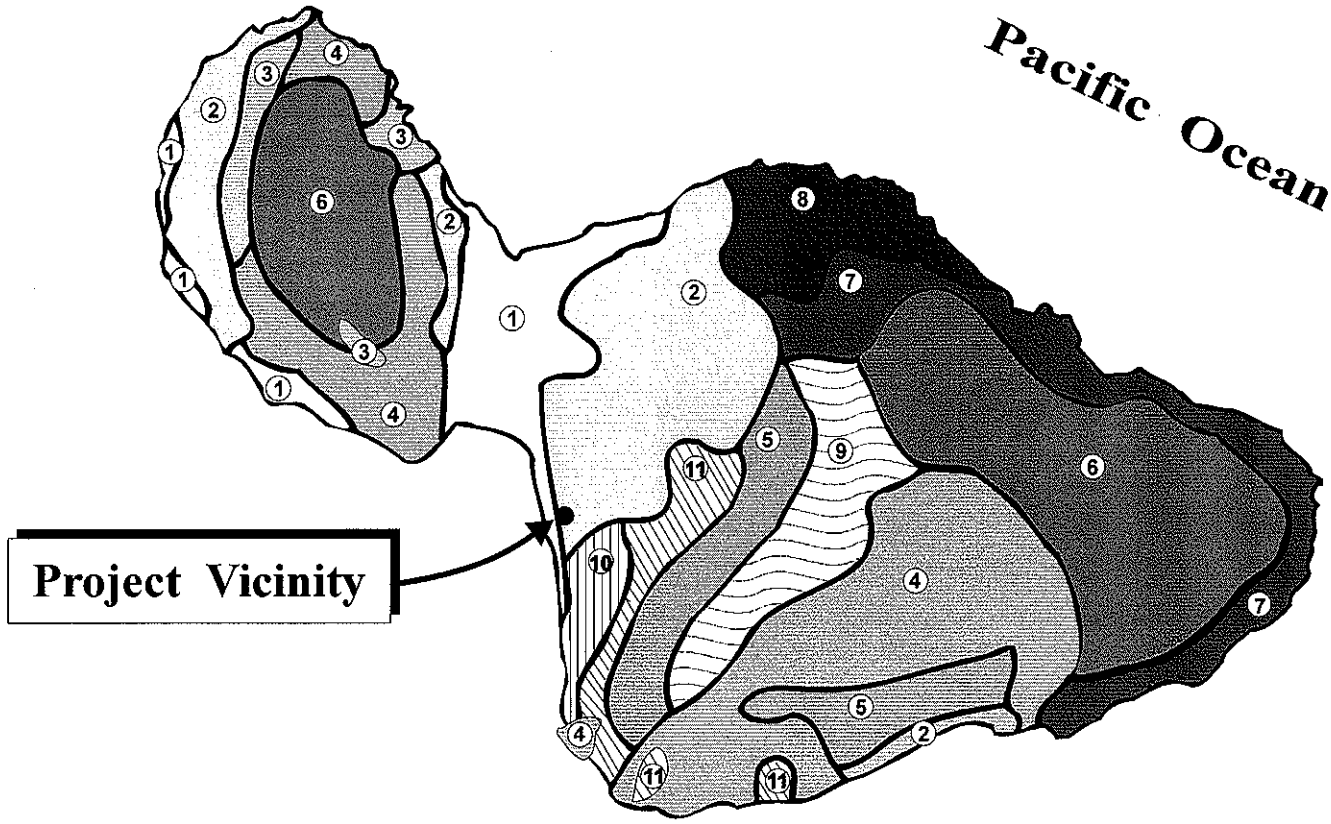
As discussed previously, the project site was developed for rock crushing uses in 1979. Current improvements on the property include a job site trailer with offices, a weigh station, employee parking, a vehicle wash area, material storage areas, a rock crushing plant, site landscaping, and a sump area. The topography is characterized with a slight slope in an easterly to westerly direction, an approximate average slope of 6.1 percent. See **Appendix "C"**.

Underlying the project site are soils belonging to the Waiakoa-Keahua-Molokai association. See **Figure 4**. The Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii characterizes the soils of the Waiakoa-Keahua-Molokai association as consisting of well-drained, moderately-fine textured soils on the low uplands. These soils are nearly level to moderately steep and are moderately deep and deep. The association makes up about 15 percent of the island.

According to the above-mentioned soil survey, the specific soil type underlying the project site is primarily Waiakoa Extremely Stony Silty Clay

LEGEND

- ① Pulehu-Ewa-Jaucas association
- ② Waiakoa-Keahua-Molokai association
- ③ Honolua-Olelo association
- ④ Rock land-Rough mountainous land association
- ⑤ Puu Pa-Kula-Pane association
- ⑥ Hydrandepts-Tropaquods association
- ⑦ Hana-Makaalae-Kailua association
- ⑧ Pauwela-Haiku association
- ⑨ Laumaia-Kaipoipoi-Olinda association
- ⑩ Keawakapu-Makena association
- ⑪ Kamaole-Oanapuka association



Source: USDA, Soil Conservation Service

Figure 4 Kihei Rock Crushing Facility
Soil Association Map

NOT TO SCALE

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/Soils

Loam (WID2). See **Figure 5**. WID2 erodes and has stones covering 3 to 15 percent of the surface. In most areas, about 50 percent of the surface layer has been removed by erosion. Runoff is medium, and the erosion hazard is severe.

b. Potential Impacts and Proposed Mitigation Measures

The KRCF is compatible with the property's underlying soil characteristics. There are no geologic or soil hazard limitations associated with the project site. The materials stored at the KRCF are limited to inorganic gravel and sand, with occasional concrete recycling. All materials entering the site are pre-screened to ensure that the facility does not accept or stockpile materials from polluting sources. As such, the materials being stored at the site do not differ substantially from the natural underlying soils and rocks. Nonetheless, the site is designed to minimize soil erosion through its existing stormwater and sump area.

New improvements to the site would be limited to upgrades of the existing waterline to meet fire flow requirements. Ground altering activity for waterline upgrades would be limited to the existing waterline trenches. As such, adverse impacts to topographic conditions are not anticipated as a result of the waterline improvements.

4. Agriculture

a. Existing Conditions

In 1977, the State Department of Agriculture developed a classification system to identify Agricultural Lands of Importance to the State of Hawaii (ALISH). The classification system is based primarily, though not exclusively, upon the soil characteristics of the lands. The three (3) classes of ALISH lands are: "Prime", "Unique", and "Other Important" agricultural lands, with all remaining lands termed "Unclassified".

When utilized with modern farming methods, "Prime" agricultural lands have a soil quality, growing season, and moisture supply necessary to produce sustained crop yields economically. "Unique" agricultural lands

Source: USDA Natural Resources Conservation Service

Figure 5

Kihei Rock Crushing Facility

Soil Classification Map

NOT TO SCALE

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/SoilClass

possess a combination of soil quality, growing season, and moisture supply to produce sustained high yields of a specific crop. "Other Important" agricultural lands include those that have not been rated as "Prime" or "Unique", but are of state-wide or local importance for agricultural use. As reflected by the ALISH map for the project region, the project site has been designated as "Unclassified". See **Figure 6**.

The University of Hawaii, Land Study Bureau (LSB) developed the Overall Productivity Rating, which classified soils according to five (5) levels, with "A" representing the class of highest productivity soils and "E" representing the lowest. These letters are followed by numbers which further classify the soil types by conveying such information as texture, drainage, and stoniness.

The project site is located on lands designated "E77". These lands have the lowest productivity rating by the LSB. The soil is coarse textured and very well-drained with nonstony lands. See **Figure 7**.

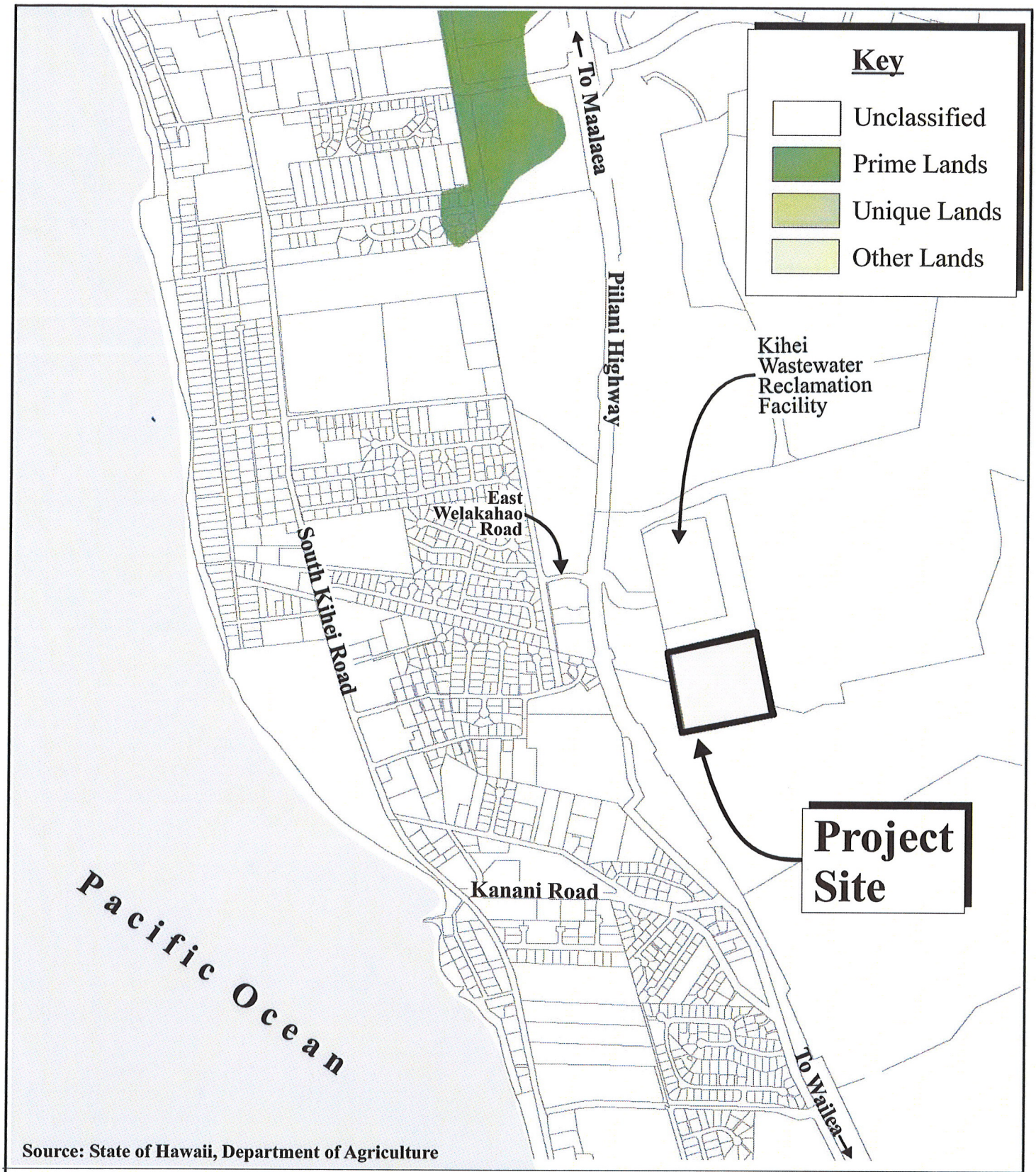
b. Potential Impacts and Proposed Mitigation Measures

Although the project site is designated for agricultural use by the State Land Use Commission, the Kihei-Makena Community Plan, and Maui County zoning, the site has not been in active agricultural use for over 30 years and has been used as a rock crushing facility since 1979. Furthermore, the State Department of Agriculture does not identify the site or surrounding areas as agricultural lands of importance and the University of Hawaii, LSB classifies the lands with a low productivity rating. Given these factors, the proposed action is not anticipated to present significant adverse impacts on agriculture.

5. Flood and Tsunami Hazards

a. Existing Conditions

As indicated by the Flood Insurance Rate Map (FIRM) for the area, the project site is located in Zone X (unshaded), which denotes an area of minimal flooding and low flood risk. See **Figure 8**. Specifically, the



Source: State of Hawaii, Department of Agriculture

Figure 6 Kihei Rock Crushing Facility

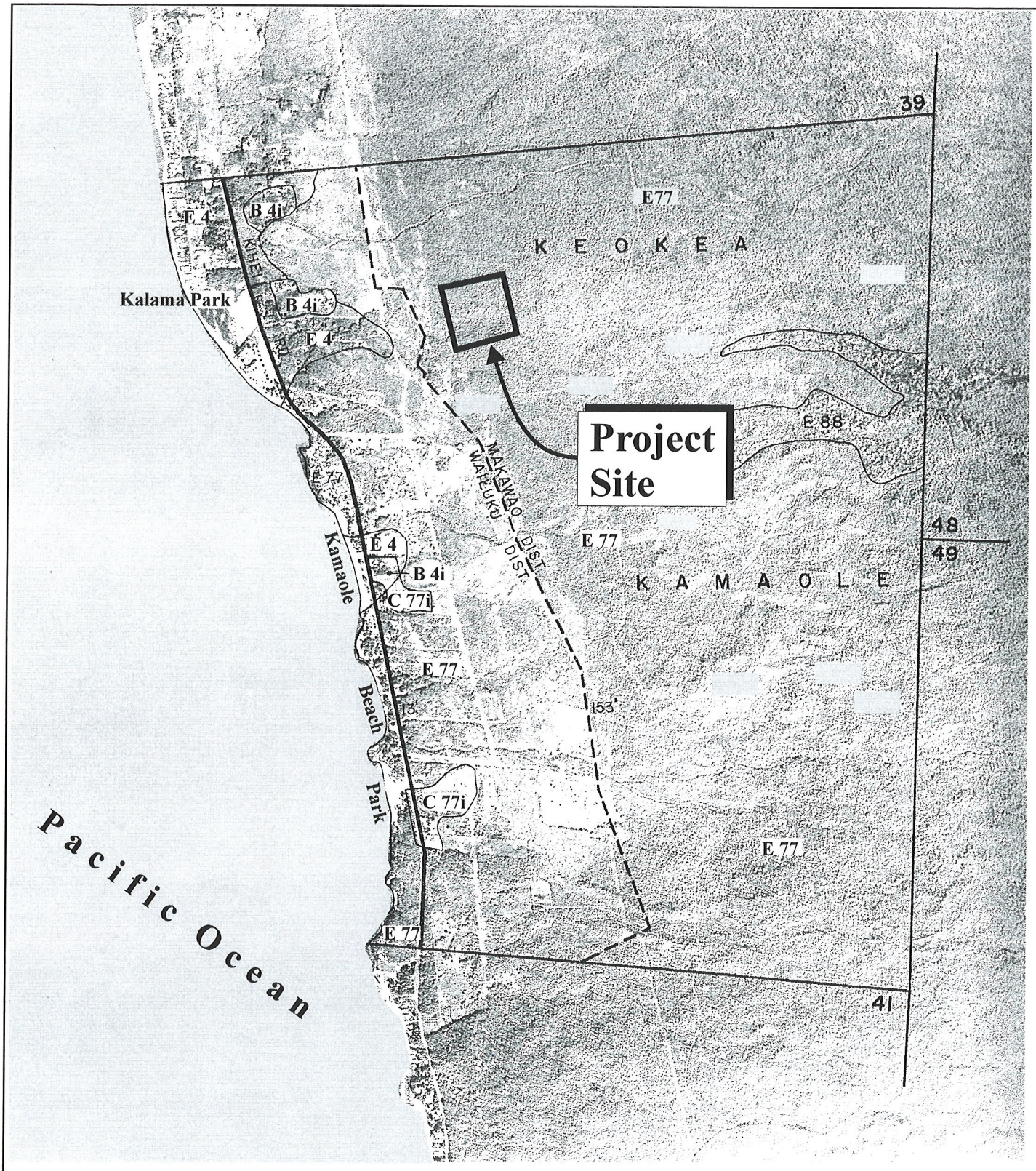
Agricultural Lands of Importance to the State of Hawaii

Approx. 0 .0625 .125 .25 Mile

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/ALISH



Source: University of Hawaii, Land Study Bureau

Figure 7 Kihei Rock Crushing Facility

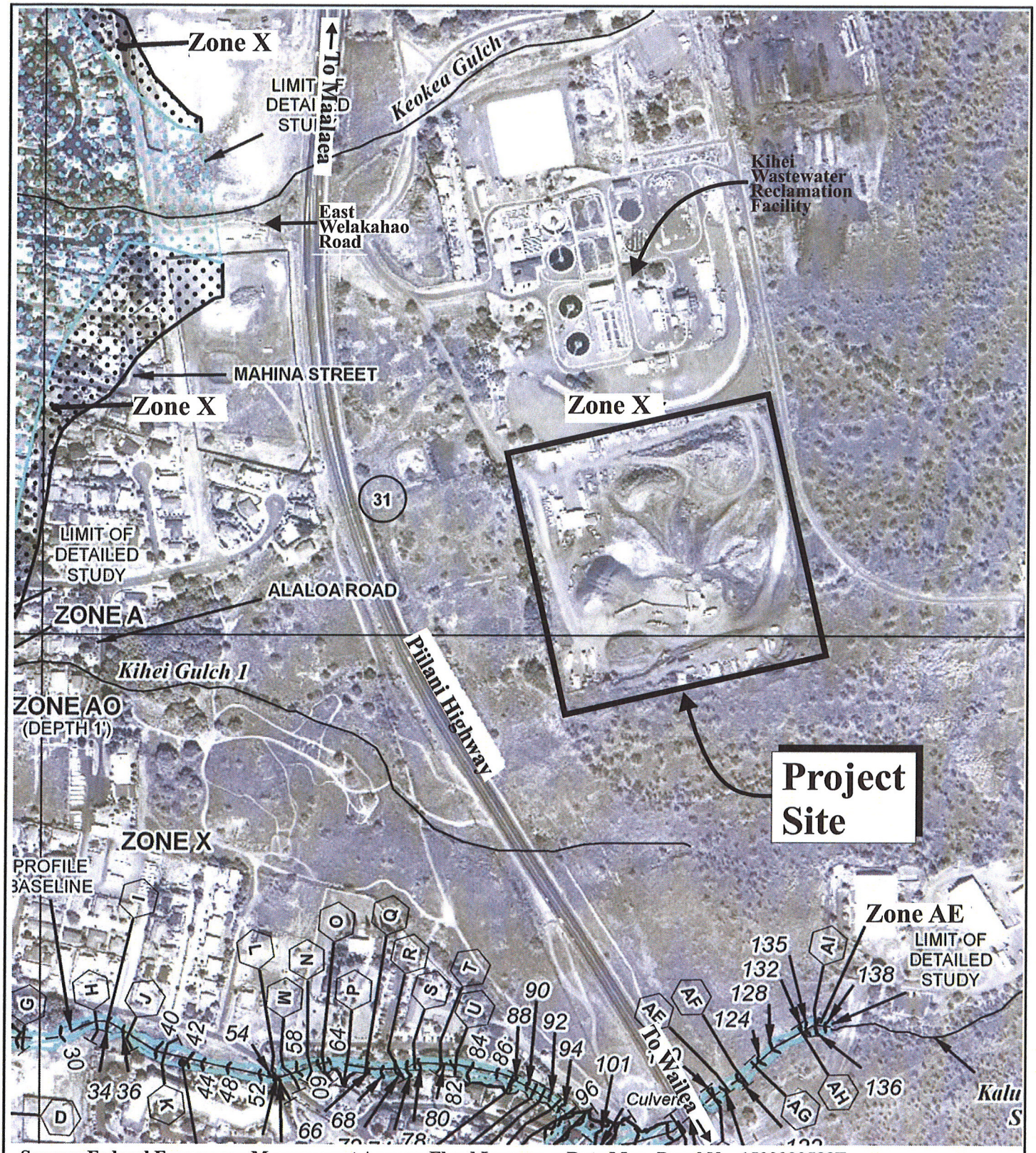
NOT TO SCALE

Land Study Bureau Overall Productivity Rating

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/LandStudyBureau



Source: Federal Emergency Management Agency, Flood Insurance Rate Map, Panel No. 1500030588E

Figure 8 Kihei Rock Crushing Facility

NOT TO SCALE

Flood Insurance Rate Map

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/FIRM

Federal Emergency Management Agency (FEMA) defines Zone X as areas outside the 500-year flood and protected by levee from 100-year flood.

In addition, the project site is located outside of the tsunami inundation area.

b. Potential Impacts and Proposed Mitigation Measures

There are no restrictions on development in areas with the Flood Zone X designation. Moreover, because the project is located outside of the tsunami inundation area, there are no threats to the surrounding areas from coastal wave action. No adverse impacts with regards to flood and tsunami hazards are anticipated as a result of the KRCF.

6. Flora and Fauna

a. Existing Conditions

A Biological Resources Survey was prepared for the project site and surrounding areas by Robert Hobdy. See **Appendix "D"**. The survey encompassed the 14.5-acre project site and 22.1 acres of undeveloped lands surrounding the KRCF. The entire survey area is bounded by the Kihei Wastewater Reclamation Facility to the north, on the east and south by open pasture lands, and on the west by Piilani Highway.

During pre-contact times, the project area would have supported a diverse dry forest/grassland with many native trees, shrubs, vines and grasses and a few seasonal herbs and ferns, as well as a complement of native birds and insects. While fragments of this diversity can still be observed in a few places between Kihei and Makena, the diversity of native species in the area was drastically reduced by periodic fires and by over a century of grazing by feral and domesticated herbivores and their replacement by aggressive non-native plant species. The project area now contains only some of the more common native species that have proven to be strong competitors to non-native species and more resistant to disturbance.

The 14.5-acre project site is highly disturbed, having been cleared and used as rock crushing and materials storage facility. The site is occupied by a variety of hardy weeds. Vegetation across the undeveloped lands surrounding the project site is fairly uniform, consisting of an almost continuous cover of buffelgrass (*Cechrus cilaris*) with scattered kiawe trees (*Prosopis pallida*). Besides the dominant buffelgrass and kiawe, only two (2) other species were found to be common in the survey area, 'ilima (*Sida fallax*) and 'uhaloa (*Walthera indica*). No officially listed threatened or endangered plants were found on the site and only two (2) native plant species were observed, both of which are common lowland species in Hawaii and other Pacific Islands.

The project site is not suitable in its present state for most native animals, and is far removed from remnant populations. No endangered mammal, bird or insect species were observed in the project area during the course of the survey. Furthermore, no unique or special habitats were found on the property. Two (2) species of feral mammals were observed in the project area during two (2) site visits. These included a single doe in the area south of the KRCF site and two (2) cats within the project site. Mongoose, rats, and mice, while not observed, would also be expected in the area surrounding the KRCF. In addition, 12 species of non-native birds and one (1) indigenous migratory bird species were observed in the study.

While the Biological Resources Survey did not tally insects in general, special attention was given to the native Sphingid moth, Blackburn's sphinx moth (*Manduca blackburni*). The Blackburn's sphinx moth, which is on the Federal Endangered species list, occurs on Maui but has not been found in the area. Its native host plants are species of 'Aiea (*Nathocestrum*) and a non-native alternative host plant is tree tobacco (*Nicotiana glauca*). While there are no 'aiea on or near the project area, tree tobacco plants do occur within the project site. Each of these trees was carefully examined and no Blackburn's sphinx moth or larvae were observed.

b. <u>Potential Impacts and Proposed Mitigation Measures</u>

Given that the flora and fauna at the project site are generally limited to non-native, abundant species and no new operational changes are proposed,

the KRCF is not anticipated to have a negative impact on the biological resources in the region.

7. Streams, Wetlands, and Reservoirs

a. Existing Conditions

There are no streams, wetlands, or reservoirs in the immediate vicinity of the project site. According to the U.S. Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory Map, the nearest wetland feature is a freshwater emergent wetland, which is located near the intersection of South Kihei Road and Waiohulu Street, approximately 0.75 mile to the north of the project site. The nearest drainageway to the project site is Waimahaihai Gulch, a non-perennial drainageway located over 1,200 feet from the project site. Waimahaihai Gulch is not listed by the State Department of Health as an impaired water.

b. Potential Impacts and Proposed Mitigation Measures

The project site is situated outside of the flood area attributable to the nearest wetland feature in the region. Moreover, in light of the scope of the project and its distance away from the closest stream or wetland feature, the KCRF is not anticipated to have any impact on streams, wetlands, or reservoirs in the region.

8. Archaeological and Historical Resources

a. Existing Conditions

An archaeological inventory survey report was completed for a 36.8-acre area that encompasses the project site in February 2005 by Scientific Consultant Services, Inc. See **Appendix "E"**. Survey Area A of the archaeological inventory survey covered the 14.5-acre KRCF site. The archaeological inventory survey comprised of a pedestrian survey and document review. The pedestrian survey found the site to be severely impacted by grading activities with large amounts of gravel and off-site fill materials being stored in the area. Only narrow slivers of unaltered land were observed. Due to the disturbed nature of the property, subsurface testing was deemed inappropriate. Document review involved a review of

previous archaeological work conducted in the surrounding area. No burial features or human remains were identified on the KRCF site or the remaining inventory survey area.

The archaeological inventory survey found one (1) historic site, a concrete reservoir, related to the former use of the property for cattle ranching. However, this site is not located within the KRCF property but further north in Survey Area B of the archaeological inventory survey. State Site 50-50-10-5647 consists of a rectangular, concrete-lined reservoir relating to historic and modern era ranching activities associated with the Haleakala Ranch Company. Use of the feature has been discontinued for some time, as kiawe trees are growing within the feature and have cracked the concrete seal of the reservoir basin.

b. Potential Impacts and Proposed Mitigation Measures

As noted previously, a historic site representative of past cattle ranching activities, was documented during the archaeological inventory survey of a 36.8-acre area encompassing the project site and beyond. However, this site is not located within the site boundaries of the KRCF. Nevertheless, the site was reviewed in accordance with accepted evaluative protocols. The following significance evaluations are broad criteria established for the State and National Register of Historic Places. These criteria area as follows:

Criterion A: Sites that are associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B: Sites that are associated with the lives of persons significant to our past.

Criterion C: Sites that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic value or that represent a significant and distinguishable entity, whose components may lack individual construction.

Criterion D: Sites which have yielded, or may be likely to yield, information important to prehistory or history.

Criterion E: Sites which have an important 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 groups' history and cultural identity (State of Hawaii criterion only).

The historic site identified during the archaeological inventory survey is considered significant under Criterion D, due to its potential to yield information important for understanding the history of the region. Information for this site has been recorded as part of the inventory survey investigation through location documentation, written descriptions, and photographs. Based on these findings, the report concluded that no further archaeological work is recommended, given that the site's significance has been recorded. This historic site is not within the KRCF property boundaries and will not be adversely impacted by the KRCF.

The archaeological inventory survey report was submitted to the State Historic Preservation Division (SHPD) for review. The SHPD concurred with the report's findings and recommendations and accepted the report in a letter dated June 20, 2005. See **Appendix "E-1"**. The SHPD declared the historic preservation review process for the property to be concluded and noted that "*development of the project areas will have 'no effect' on significant historic sites*".

Ground altering work associated with improvements to the waterline will be limited to the existing waterline trenches which have been previously disturbed. In accordance with Section 6E-43.6, Hawaii Revised Statutes and Chapter 13-300, Hawaii Administrative Rules, if any significant cultural deposits or human skeletal remains are encountered, work will stop in the immediate vicinity and the SHPD will be contacted.

9. Cultural Resources

a. Existing Conditions

The Kihei area is one which transitioned from a historically agrarian and marine economy to a sugar cane plantation to tourism in the present day.

In a cultural context, there were several fishponds along the Kihei coastline, most notably in Waiohuli, Keokea-kai, and Kalepolepo. These ponds were some of the most important royal fishponds on Maui and were reportedly rebuilt at least three (3) times over the centuries.

In addition, there were many trails in the area which extended from the coast to the mountains, which linked those regions for both economic and social reasons. For example, the Kalepolepo Trail began at the Kalepolepo fishpond and continued to the upland region of Waiohuli. Another significant trail, the King's Trail, extended along the coast from Lahaina in West Maui to Makena in South Maui.

As early as 1828, sugar cane was introduced to Maui, and by 1899, the Kihei Plantation Company was growing sugar cane in the plains above Kihei. The Kihei Plantation Company was later absorbed by the Hawaiian Commercial & Sugar Company (HC&S) in 1908. HC&S continued to cultivate sugar in what had been the Kihei Plantation Company fields into the 1960s.

Ranching also played a major role in the region. Ranch land extended from Ulupalakua on the slopes of Haleakala down to the shore in South Maui. Ranch lands were primarily owned by Haleakala Ranch, Ulupalakua Ranch, and Kaonoulu Ranch and were used for raising cattle.

More recently, a dependable water supply was brought to the area, which spurred the development of overseas investment in residential housing and vacation properties. Since that time, tourism has increased and, as a consequence, the South Maui area has recently been touted as one of the fastest growing regions in the state.

b. <u>Potential Impacts and Proposed Mitigation Measures</u>

A Cultural Impact Assessment was conducted for the project site in 2011. The assessment included background research regarding the history and settlement patterns in the area, as well as interviews with three (3) individuals with knowledge of the project area. See **Appendix "F"**.

Persons interviewed for the CIA recall that before the KRCF was established in 1979, the area was utilized as pasture land for cattle owned by Haleakala Ranch. The land then looked very much like the open pastureland in the surrounding area today. In general, ranch land extended through Ulupalakua and makai down to the shore, and was primarily owned by Haleakala Ranch, Ulupalakua Ranch, and Kaonoulu Ranch. Different men from Haleakala Ranch took care of different land sections. Haleakala Ranch's General Foreman, interviewed for the CIA, noted that the Ventura's took care of the Kamaole section of the Ranch's land, near the project site. Haleakala Ranch would allow its employees to traverse their land for hunting and the General Foreman recalls times when he would hunt deer in the area near the project site with friends and family.

Development in the Kihei area began with the development of Piilani Highway. Such development has included the KRCF, the Kihei R&T Park, golf courses, and the Kihei Wastewater Reclamation Facility. More recently, the Monsanto Company has come into the area to grow corn.

The persons interviewed for the CIA did not know of any cultural practices that have occurred or are continuing on or near the project site. Interviewees did not know of any cultural concerns that should be considered and did not believe beach or mountain access would be affected given the location of the site and the fact that surrounding lands have been privately owned.

10. Air and Noise Quality

a. Existing Conditions

The State of Hawaii, Department of Health maintains an air quality monitoring station in the Hale Piilani Park, approximately 3.25 miles north of the project site in Kihei. The monitoring station measures fine particulates, also known as particulate matter smaller than 2.5 micrometers in aerodynamic diameter ($PM_{2.5}$). Sources of fine particulates can include all types of combustion, including motor vehicles, power plants, and some industrial processes. In 2009, the 24-hour $PM_{2.5}$ levels recorded at the Kihei monitoring station averaged 3.9 micrograms per cubic meter of air. This level falls within the federal ambient air quality standard for $PM_{2.5}$,

which is 35 micrograms per cubic meter of air in a 24-hour period (State of Hawaii, Department of Health, 2010). The fine particulate level at the Kihei monitoring station is indicative of the good air quality in the region.

Emissions from point sources, including the Maui Electric Company (MECO) power plant and the HC&S sugar mill, as well as non-point sources such as sugar cane burning in the Central Maui region and automobile emissions along Piilani Highway, do not generate problematic concentrations of pollutants. The relatively high quality of air can also be attributed to the region's constant exposure to trade winds which quickly disperse concentrations of emissions.

The existing air quality at the project site is subject to dust, exhaust, and emissions related to the use of mechanical equipment associated with daily operations of the rock crushing and construction baseyard facility. Noise characteristics are predominantly established by the rock crushing activity, equipment operations, and traffic along Piilani Highway. The rock crushing operations do not produce or generate noxious odors.

Although the KRCF has been in existence for over 30 years, rock crushing operations have only been active since 2009. Noise from the rock crushing operation was previously covered under a Community Noise Permit No. M07-005, issued pursuant to the provisions of Chapter 342F, Hawaii Revised Statues and Chapter 11-46, Department of Health Administrative Rules. See **Appendix "G"**. The Noise Permit limited hours of rock crushing operations are from 7:00 a.m. to 6:00 p.m., Monday to Friday and from 9:00 a.m. to 6:00 p.m. on Saturday. The Community Noise Permit expired in February 2009. GBI will apply for a new Community Noise Permit prior to resuming rock crushing operations.

There have been no official complaints from adjacent landowners or the residential neighborhood of excessive noise or dust from the KRCF operations.

b. <u>Potential Impacts and Proposed Mitigation Measures</u>

Dust and exhaust impacts to air quality at the project site are mitigated by Best Management Practices (BMPs), which include regular sprinkling of

the site with water to control dust and regular scheduled maintenance on equipment to ensure operations are within manufactured specifications. R-1 water is used for dust control when any hauling takes place at the site. Trucks hauling materials from the KRCF are covered to minimize dust impacts. In addition, sprinklers on the rock crushing equipment are utilized when crushing activities take place. The KRCF operation does not adversely impact air quality with the use of the aforementioned BMPs.

The existing rock crushing operation does not produce or generate any noxious odors and future odors are not anticipated since no new uses are anticipated at the project site.

The project site is bordered by agricultural lands used for cattle grazing and seed corn cultivation, the Kihei Wastewater Reclamation Facility and Piilani Highway. The closest residential area and school are located approximately 0.15 mile to the west across the Piilani Highway. The noise from the KRCF operations does not adversely impact surrounding properties. As previously mentioned, noise associated with the operation of the KRCF is primarily characterized by rock crushing activity and equipment operations at the facility. Rock crushing operations occur on an as-needed basis and may exceed the maximum permissible sound levels established by the Department of Health's Community Noise Control regulations (Chapter 11-46, Hawaii Administrative Rules). As such, GBI will apply for a new Community Noise Permit prior to resuming rock crushing operations at the project site.

Air quality and ambient noise conditions may be temporarily impacted during the construction of upgrades to the existing waterline. Best Management Practices will be implemented to mitigate potential adverse impacts. BMPs may include dust control measures, such as regular use of sprinklers. Noise levels will be mitigated through regular maintenance of heavy equipment and limiting construction hours to normal daylight hours.

11. Scenic and Open Space Resources

a. Existing Condition

The slopes of Haleakala are visible from the project site, with the West Maui Mountains visible to the northwest. The County of Maui's Draft Maui Island Plan identifies Piilani Highway in the vicinity of the project site as a "medium" scenic corridor. The project site is not part of a valuable open space resource area.

b. Potential Impacts and Proposed Mitigation Measures

To mitigate potential impacts to visual resources from the west, the KRCF site is setback approximately 400 feet from Piilani Highway. In addition, a thick growth of kiawe trees provides a visual buffer between the site and Piilani Highway and the single-family residences across Piilani Highway. The maintenance of this landscape screening from Piilani Highway is in compliance with the project conditions associated with the State Land Use Commission Special Use Permit. Adverse impacts to scenic or open space resources resulting from the KRCF is not anticipated. No further improvements of the KRCF site is anticipated with the request for land use designation changes, with the exception of upgrades to the property's existing waterline.

12. Traditional Beach and Mountain Access

a. Existing Condition

There are no traditional beach or mountain access trails in or near the project site.

b. Potential Impacts and Mitigation Measures

The proposed actions will not adversely impact traditional beach or mountain trails or access.

13. Use of Chemicals

a. Existing Conditions

A large portion of the lands surrounding and within the project area was utilized for cattle grazing by Haleakala Ranch prior to the establishment of the KRCF. Since the area was used for cattle grazing, it is unlikely that agricultural pest control chemicals and fertilizers were used on the property. The existing landscaping at the site is minimal and herbicides are not used to control pests. Pesticides are expected to be used only as a treatment and not as a preventative measure. When used as treatment, application will be consistent with manufacturer's guidelines and will be conducted by a licensed commercial service provider.

b. Potential Impacts and Mitigation Measures

As the KRCF has been in continuous operation at the site for over 30 years, agricultural pest control chemicals and fertilizers have not been utilized on the property for an extended period of time. Hazardous materials related to past agricultural practices is unlikely to be detected on the property due to the cattle grazing history. The KRCF does not utilize chemicals or hazardous materials on-site. The KRCF pre-screens all materials entering the facility to ensure that it is not accepting and storing materials from polluting sources. Stormwater runoff generated by the improvements within the KRCF are retained by an existing sump area located in the southwesterly corner of the project site. No adverse impacts to surface, underground or marine resources are anticipated.

B. SOCIO-ECONOMIC ENVIRONMENT

1. Regional Setting

a. Existing Conditions

From a regional standpoint, the project site is located within the Kihei-Makena Community Plan region, which stretches from Maalaea in the north to La Perouse Bay in the south. With its dry and mild climate and proximity to recreation-oriented shoreline resources, the visitor-based economy has grown steadily over the years. The town of Kihei serves as

the commercial and residential center of the region with the master-planned communities of Wailea and Makena serving as the focal points for the majority of visitor activities. A number of internationally recognized luxury hotels and golf courses are located along the coastline at Wailea and Makena.

b. Potential Impacts and Proposed Mitigation Measures

The KRCF has been in operation for over 30 years, serving construction demand in proximity to the development in South Maui. The regional character of the Kihei area will not be adversely impacted by the long-term use of the KRCF.

2. Population and Demography

a. Existing Conditions

The population of the County of Maui has exhibited relatively strong growth over the past decade. The County's resident population grew by 20.9 percent between 2000 and 2010, compared to a 12.3 percent increase in the State of Hawaii as a whole during the same time period. Maui County's population increased from 128,094 residents in 2000 to 154,834 residents in 2010. Population on the island of Maui exhibited even stronger growth than the County as a whole, with a 22.8 percent population increase over the decade. Approximately 144,444 residents lived on the island of Maui in 2010 (U.S. Census Bureau, 2000 and 2010). Maui County's resident population is projected to rise to 174,450 people in 2020 and to 199,550 people in 2030 (County of Maui, June 2006).

The proposed project is located within the Kihei-Makena Community Plan region. Just as the populations of Maui County and Maui Island's have grown, the resident population of the Kihei-Makena region has also increased. The estimated population of the Kihei-Makena region in 2000 was 22,870, which comprised 19.4 percent of the island's population (County of Maui, June 2006). According to the 2010 Census, the resident population for the region was approximately 27,200, an increase of 19.1 percent over 10 years (U.S. Census, 2010). The population of the Kihei-

Makena region is projected to increase to 33,227 people in 2020 and to 38,747 people in 2030 (County of Maui, June 2006).

b. Potential Impacts and Proposed Mitigation Measures

The Kihei area currently contains a mix of land uses including residential, commercial, public/quasi-public, and industrial areas. The KRCF is an existing use that has been operating in the community for over 30 years. No significant impacts to population and demography are anticipated as a result of the long-term use of the site for the KRCF operations. The nearest residential area to the KRCF is located beyond a 400-foot setback and kiawe grove, across Piilani Highway from the site. Potential impacts of the site's operations are mitigated by dust control measures and Community Noise Permits, when applicable.

3. Economy and Labor Force

a. Existing Conditions

The economy of Maui is heavily dependent upon the visitor industry. The dependency on the visitor industry is especially evident in the Kihei-Makena region, which is one of the State's major resort destination areas. The foundation for the region's visitor strength lies in the availability of vacation rentals, world-class resorts, and recreational facilities throughout Kihei, Wailea, and Makena. Service support for the visitor industry is also found in Kihei, where numerous retail commercial centers are located.

The State and County economies have been impacted by the nation's recent economic recession, with the major industries of tourism, construction, and real estate being particularly hard hit due to, among other factors, reduction in discretionary income and tightening of credit. Unemployment rates in the State and County peaked in the summer of 2009. Since that time, the unemployment rate has slowly declined. In June 2011, the seasonally unadjusted unemployment rate in Hawaii stood at 6.8 percent. The unemployment rate on the island of Maui was higher at 8.1 percent. However, this represents a slight improvement from one (1) year ago, when the seasonally unadjusted unemployment rate on the island was 8.8 percent

in June 2010 (State Department of Labor and Industrial Relations, July 2011).

b. Potential Impacts and Proposed Mitigation Measures

Because the KRCF is an existing use and no new operational changes are proposed at the site, the proposed land use entitlements will not create short-term or long-term impacts on the economy or local labor force. Currently, 11 people are employed at the KRCF. Approval of the land use entitlement applications will help maintain these jobs in the Kihei region. In addition, the KRCF serves a critical support role to the construction industry as a whole in Kihei, Wailea, and Makena, as the only facility of its type in the region.

4. Housing

a. Existing Conditions

The project site is located in Kihei, the commercial and residential center of South Maui. A range of housing types exists within Kihei, including owner-occupied homes, apartments, and high-end single-family residents and condominiums for part-time residents.

Between 2000 and 2005, Maui County saw strong housing demand, fueled by a strong local economy, low mortgage interest rates, and mainland interest in Maui real estate market as an investment alternative. The participation of off-island investors in Maui Island's real estate market as an investment has been significant; in 2004, 37 percent of housing sales on the island were to buyers from outside the County. This figure was even higher in the Kihei-Makena Community Plan area, where 42 percent of homes sold were to off-island buyers. The *Socio-Economic Forecast* prepared for the Maui County General Plan 2030 in 2006 estimated housing demand on the island of Maui to grow by 2.3 percent annually between 2010 and 2015. Housing demand in the Kihei-Makena Community Plan Area was projected to grow at a slightly faster rate of 2.6 percent (Maui County Planning Department, 2006). It should be noted, however, that these demand estimates were prepared prior to the recent housing market downturn.

New residential construction on Maui has slowed in recent years as a result of the nationwide economic recession. Between 2000 and 2007, over 1,000 new residential building permits were issued annually in Maui County. In 2008 and 2009, residential building permits fell to just 750 and 390 permits, respectively. New construction continued to be slow in 2010 and the first half of 2011, when approximately 277 and 109 residential building permits were issued in the County, respectively (U.S. Census Bureau, 2011).

b. Potential Impacts and Proposed Mitigation Measures

The KRCF serves a community need for the construction industry in South and Central Maui by providing an accessible facility in close proximity to construction projects. The facility will be particularly valuable as the housing market and new construction rebound. As a long-established use in the community, the KRCF will not generate additional housing needs or have negative impacts on local housing conditions.

C. PUBLIC SERVICES

1. Police and Fire Protection

a. Existing Conditions

The headquarters of the County of Maui Police Department (MPD) are located at its Wailuku Station. The department consists of several patrol, support, administrative, and investigative divisions.

The MPD's Kihei Patrol, which covers the Kihei-Makena region, currently operates from a substation located at the Kihei Town Center, less than one (1) mile of the project site. The Maui Police Department has proposed a new Kihei Police Station near the intersection of Piilani Highway and Kanani Road, south of the KRCF site. The proposed Kihei Police Station will replace the substation at the Kihei Town Center. The new Kihei Police Station is anticipated to be completed in the next five (5) years.

The Police Department reports that there have been no service calls to the KRCF since it began operation. (See Maui Police Department's early consultation comments in Chapter VIII.)

Fire prevention, protection, and suppression services are provided by the County of Maui, Department of Fire and Public Safety. The Kihei Fire Station, which services the Kihei-Makena region, is situated on South Kihei Road near Kalama Park, approximately 0.6 mile northwest of the project site.

The Wailea Fire Station is located about 1.75 miles to the south of the project site. The Wailea Station services the area from Kamaole Beach Park II to Makena and provides back-up support for the Kihei Station when required.

b. Potential Impacts and Proposed Mitigation Measures

The KRCF is an existing use in the community and fire and police protection services are not anticipated to be extended nor adversely impacted as a result of the proposed action.

2. Medical Facilities

a. Existing Conditions

The only major medical facility on the island is the Maui Memorial Medical Center, which is located in Wailuku about ten (10) miles from the project site. The 231-bed facility provides general, acute, and emergency care services.

Clinics and offices are situated throughout the Kihei and Wailea areas, however these offer medical services on a lesser scale. Such clinics include Kihei Clinic and Wailea Medical Services, Kihei Pediatric Clinic, Kihei Physicians, the Kihei-Wailea Medical Center, Maui Medical Group, and Kaiser Permanente.

b. Potential Impacts and Proposed Mitigation Measures

The proposed actions are not anticipated to affect the service capabilities of emergency medical or general care operations. As noted previously, the project is an existing use and medical services are available in the Kihei-Wailea region.

3. Educational Facilities

a. Existing Conditions

The State Department of Education (DOE) operates three (3) schools in the Kihei area. Kihei Elementary School and Kamalii Elementary School each covers grades Kindergarten to 5, and Lokelani Intermediate School covers grades 6 to 8. Maui High School, which covers grades 9 to 12 and is located in Kahului, is the designated public high school for Kihei residents. However, it is noted that the DOE is currently undertaking the planning and land acquisition process for a proposed Kihei High School, which is anticipated to be completed in the next five (5) years. The actual and projected enrollments, as well as the capacity of the area schools, are shown in **Table 3** below.

Table 3. Enrollments at Department of Education Schools

School	Actual Enrollment SY 2009-2010	Capacity SY 2009-2010	Projected Enrollment SY 2015-2016
Maui High	1,815	1,701	1,946
Lokelani Intermediate	569	808	623
Kamalii Elementary	660	809	696
Kihei Elementary	870	923	988
Source: Department of Education, 2010.			

In addition, the Kihei Charter School for grades Kindergarten to 12 is also located in the region.

The University of Hawaii, Maui College, which is located in Kahului, is a branch of the University of Hawaii system. Maui College is the primary higher education institution serving Maui.

b. Potential Impacts and Proposed Mitigation Measures

The KRCF is an existing operation at the site for over 30 years. No expansion of operations is anticipated as a result of the land entitlement applications. As such, the KRCF will not have an impact on existing educational facilities in the region.

4. Recreational Facilities

a. Existing Conditions

Diverse recreational opportunities are available in the Kihei-Makena Community Plan region. Shoreline activities, such as fishing, surfing, jogging, picnicking, snorkeling, swimming, and windsurfing, are the predominant forms of recreation in the area. Numerous public park facilities exist within a relatively short driving distance of the project site, including Waipuilani, Kalama, and Kamaole I/II/III Beach Parks. Additionally, recreational resources available in Kihei, Wailea, and Makena include the Kihei Community Center and Aquatic Center, as well as resort-affiliated, world-class golf courses and tennis centers.

b. Potential Impacts and Proposed Mitigation Measures

As a long-established existing use, the KRCF will not place additional demands or have any other adverse effects on existing recreational resources in the area.

5. Solid Waste Disposal

a. Existing Conditions

Single-family residential solid waste collection service is provided by the County of Maui. Residential solid waste collected by County crews is disposed of at the County's Central Maui Landfill facility, located 4.0 miles southeast of the Kahului Airport. In addition to County-collected refuse, the Central Maui Landfill also accepts commercial waste from private collection companies. A new expansion to the Central Maui solid-waste landfill facility is planned to ensure continuing service capacity for island residents and visitors.

Privately owned facilities, such as the Maui Demolition and Construction Landfill and the Pohakulepo Concrete Recycling Facility, accept solid waste and concrete from demolition and construction activities. These facilities are located at Maalaea, near Honoapiilani Highway's junctions with North Kihei Road and with Kuihelani Highway. A County supported green waste recycling facility is located at the Central Maui Landfill.

b. Potential Impacts and Proposed Mitigation Measures

The KRCF solid waste is currently served by Aloha Waste, a private company and disposed of at the County of Maui's Central Landfill. As a long-established use, the project is not anticipated to affect the service capabilities of residential or commercial waste collection operations. In the *Public Facilities Assessment Update, County of Maui (2007)*, R. M. Towill Corporation projected that the Central Maui Landfill would have adequate capacity to accommodate commercial and residential waste through the year 2025.

D. INFRASTRUCTURE

1. Roadways

a. Existing Conditions

Access to the project site is provided by East Welakahao Road via Piilani Highway. There is also an exit driveway on the south side of the property

providing access via a private access road connecting to Kanani Road. The following is a summary of major roadways in the vicinity of the project site.

Piilani Highway

Piilani Highway is a two-way, four-lane State principal arterial, oriented in the north-south direction. Piilani Highway is a principal arterial connecting with Mokulele Highway/North Kihei Road in Kihei on the north end and Wailea Ike Drive on the south end. Piilani Highway has a posted speed limit of 40 miles per hour (mph) in the vicinity of the study intersection.

East Welakahao Road

East Welakahao Road is a two-way, two-lane County roadway, oriented in the east-west direction. East Welakahao Road provides access to the Kihei Wastewater Reclamation Facility and the project site. The intersection of East Welakahao Road and Piilani Highway is unsignalized, with East Welakahao Road as the stop-controlled approach. In response to State Department of Transportation (DOT) comments on the 1999 State Land Use Special Use Permit time extension request for the KRCF, the applicant carried out a traffic assessment of this intersection and made the following highway intersection improvements:

- A left-turn deceleration lane on Piilani Highway in the south-bound (Makena) direction; and

- An acceleration lane for south bound traffic on Piilani Highway coming from East Welakahao Road.

Kanani Road

Kanani Road is a two-way, two-lane County roadway, oriented in the east-west direction. The intersection at Kanani Road and Piilani Highway is signalized. A private access road connects the KRCF to Kanani Road, east of Piilani Highway. All southbound traffic leaving the KRCF utilizes this access route.

b. **Potential Impacts and Proposed Mitigation Measures**

A traffic assessment was conducted for the proposed project (see **Appendix "H"**). The assessment, which included 24-hour machine counts and peak hour turning movement counts at the Piilani Highway/East Welakahao Road intersection, found that all movements at the intersection currently operate at Levels of Service (LOS) A and B, with the exception of LOS D operation for the west bound left-turn movement during the AM and PM peak hours of traffic. The land use entitlements request is not anticipated to generate additional traffic entering or exiting the site. As such, adverse impacts to traffic conditions are not anticipated.

Separately, a Traffic Signal Warrant Study for the Piilani Highway/East Welakahao Road intersection was prepared in December 2010 (see **Appendix "H-1"**). The study was prepared in compliance with the conditions of the Conditional Permit, which requires the applicant to conduct a traffic signal warrant study for the intersection every two (2) years. It concluded that the Piilani Highway/East Welakahao Road intersection does not warrant the installation of a traffic signal system at this time.

2. **Water System**

a. **Existing Conditions**

The project site is serviced by an existing potable private water system owned by Maui Highlands Properties, LLC. The system's primary sources of water are two (2) wells constructed in the Keokea region. The wells have pumps rated at 260 gallons per minute to dispense water. The water drawn from the wells is conveyed by means of an existing underground 12-inch waterline to a reverse osmosis water treatment plant where it is treated and stored in an existing 600,000 gallon water tank located northeast of the project site. Water is conveyed to the KRCF site by means of an underground 6-inch waterline which is connected to an existing 12-inch outflow waterline from the existing 600,000 gallon tank. The existing water usage at the KRCF is approximately 400 gallons per day (gpd).

Fire protection for the site is provided by two (2) fire hydrants near the northern boundary of the parcel and one (1) fire hydrant located along the existing access driveway near the property's western boundary. These hydrants are connected to an existing 8-inch reclaimed waterline that is connected to the existing 18-inch reclaimed waterline. The 18-inch reclaimed waterline draws water from a storage tank southeast of the project site from the Kihei Wastewater Reclamation Facility and treated to State of Hawaii R-1 standards. The reclaimed water is also available for irrigation and is used for dust control.

b. Potential Impacts and Proposed Mitigation Measures

A Preliminary Engineering Report was prepared by Warren S. Unemori Engineering, Inc. for the proposed project. See **Appendix "C"**. Heavy industrial areas require a water supply for fire protection in the amount of 2,500 gallons per minute (gpm) and fire hydrant spacing at a maximum of 250 feet between hydrants. To meet the fire flow requirement, the existing 8-inch fire protection waterline will need to be upsized to a 10-inch waterline. In addition, fire hydrants would need to meet the maximum spacing requirements. If the land entitlements are granted, the applicant will upgrade the waterline within the property to meet fire flow requirements for heavy industrial areas. The applicant will also coordinate with the County of Maui Fire Prevention Bureau to ensure fire hydrant spacing meets the minimum requirements for the land use designation.

The Preliminary Engineering Report concluded that, with the exception of the fire protection system, the existing infrastructure on the project site is sufficient to support the proposed land use designations. There are no proposed operational changes at the KRCF. New improvements would be limited to infrastructure upgrades for fire flow to meet requirements for heavy industrial uses.

3. Wastewater System

a. Existing Conditions

An existing underground sewer system that is privately owned, operated, and maintained by Goodfellow Bros., Inc. services the existing office trailer

situated on the project site. The wastewater is collected by an underground gravity sewerline and conveyed to an existing wastewater pump station located on the project site. An existing 1½-inch force main conveys the wastewater from the pump station to an existing 10-inch gravity sewerline located mauka (east) of the adjacent Kihei Wastewater Reclamation Facility. The existing 10-inch gravity sewerline is connected to an existing wastewater pump station where it is pumped directly into the Kihei Wastewater Reclamation Facility for treatment.

b. Potential Impacts and Proposed Mitigation Measures

According to the Preliminary Engineering Report prepared by Warren S. Unemori Engineering, Inc. in July 2010, the project's existing wastewater utilities are adequate. The average wastewater contribution for the KRCF is approximately 500 gpd. Negative impacts to wastewater systems are not expected as a result of the KRCF. Refer to **Appendix "C"**.

4. Drainage System

a. Existing Conditions

Maui receives varying levels of rainfall in a given year depending on location. The annual rainfall in 2008 of the Kihei area was 5.84 inches (County of Maui, Office of Economic Development, March 2010). The project site slopes in an easterly to westerly direction, with an approximate average slope of 6.1 percent. The project site is designated by FEMA National Flood Insurance Program as within Flood Zone X, an area of minimal flooding.

Stormwater currently sheet flows across the site in an easterly to westerly direction where it is intercepted by an existing earth berm located along the western boundary and a portion of the southern boundary of the project site and is directed to an existing sump area in the southwestern corner of the site. According to a Preliminary Drainage Report prepared by Warren S. Unemori Engineering, Inc. in July 2011, the KRCF with the existing baseyard improvements currently generates approximately 42.6 cubic feet per second (cfs) of surface runoff during a 10-year recurrence interval, 1-hour duration storm. Because the proposed action is for land use

entitlements from agricultural to industrial designations, the drainage analysis conservatively assesses runoff conditions associated with the pre-development agricultural condition of the land. The surface runoff generated at the project site prior to the construction of the existing improvements was estimated to be 12.4 cfs for a 10-year recurrence interval, 1-hour duration storm. See **Appendix "I"**.

As previously mentioned, there is a vehicle wash area at the project site. Approximately two (2) or three (3) vehicles are washed each month at the project site's vehicle wash area. The vehicle wash water percolates into the ground and does not leave the GBI property.

b. **Potential Impacts and Proposed Mitigation Measures**

A Preliminary Drainage Report was prepared by Warren S. Unemori Engineering, Inc. for the proposed project. Refer to **Appendix "I"**. The report concluded that the existing improvements at the KRCF site generate a net increase of approximately 30.2 cfs of surface runoff during a 10-year recurrence interval, 1-hour duration storm. Stormwater sheet flows across the project site in an east to west direction where it is intercepted by an existing earth berm and directed to an existing sump area that is located in the southwesterly corner of the project site. The sump area, bound by earth berms, has an approximate storage capacity of 1.3 acre-feet. This sump is capable of retaining the increase in stormwater runoff volume generated by the existing improvements at the project site resulting from a 50-year recurrence interval, 1-hour duration storm, even though the Maui County Code only requires retention of a 10-year recurrence interval, 1-hour duration.

The requested land use designations will not impact the existing drainage of the project site. If the land entitlements are granted, the applicant will upgrade the waterline within the property to meet fire flow requirements for heavy industrial uses. However, no new operational changes are proposed at the project site and the proposed land use designations that require limited water system upgrades will not change the drainage patterns nor will adjoining downstream properties be adversely affected.

Natural site conditions and the characteristics of the operations at the KRCF help to minimize groundwater infiltration. The site is located on Waiakoa extremely stony silty clay loam, 3 to 25 percent slopes, eroded (WID2). Underlying the site is a layer of basalt rock, which results in very little infiltration to ground water. The materials stored at the KRCF are also limited to inorganic gravel and sand, with occasional concrete recycling. There are no topsoils or metal products stored at the site. As such, the materials being stored at the KRCF does not differ significantly from the natural underlying soil and rocks at the site. The KRCF pre-screens all materials entering the facility to ensure that they are not accepting and stockpiling materials from polluting sources. In addition to these natural conditions and operating practices, Goodfellow Bros., Inc., the KRCF operator, does implement BMPs to prevent pollution. Specifically, drainage improvements have been installed at the site to contain all project runoff. The site's active working area slopes to an on-site sump area. The project's makai border also has a vegetated berm that serves as additional filtration for water runoff. It should be noted, however, that the materials storage area is not paved because paving of the area would actually result in an increase in runoff. The natural conditions of the site, along with the type of materials stored and drainage improvements implemented, minimize runoff and groundwater infiltration.

E. CUMULATIVE AND SECONDARY IMPACTS

Cumulative impacts are defined as the impact on the environment which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.

The proposed project is not part of a larger action, nor would it occur within the context of such actions. It is noted, however, that the County of Maui's ongoing General Plan update process involves the formulation and adoption of a Maui Island Plan which will delineate urban and rural growth boundaries. The project site is located within the proposed Urban Growth Boundary of the draft Maui Island Plan. Other landowners in the vicinity may seek to have portions of their respective land holdings placed on the Maui Island Plan for purposes of defining future development potential in the Kihei region. The overall timeframe for the General Plan covers a planning horizon up to the year 2030.

In the General Plan context, future regional growth opportunity in surrounding lands in the Kihei region is envisioned. Specifically, owners of lands located mauka of Piilani Highway may pursue the development of their lands for residential, commercial, and industrial development. The KRCF, at approximately 14.5 acres in size, is much smaller in comparison to the potential large acreages of lands situated mauka of Piilani Highway poised for future urban growth. Based on the relatively small scale of the operation, coupled with the longer term planning implications for the Kihei-Makena Community Plan region and the fact that the KRCF is a long-established existing use, the project is not anticipated to contribute to larger cumulative impacts.

Secondary impacts are those which have the potential to occur later in time or farther in distance, but are still reasonably foreseeable. They can be viewed as actions of others that are taken because of the presence of the project.

The project is not anticipated to present significant adverse impacts on the physical environment. The KRCF has been in operation since 1979 and necessary infrastructure systems and services are currently and will continue to be provided to serve the project. As previously mentioned, the facility currently operates under a State Land Use Special Use Permit and County Conditional Permit. The proposed action is intended to obtain appropriate land use entitlements that correspond to the existing use and will allow for the continued long-term use of the site for the KRCF. Consequently, the proposed action is not anticipated to result in significant adverse secondary impacts.

III. RELATIONSHIP TO LAND USE PLANS, POLICIES, AND CONTROLS

III. RELATIONSHIP TO LAND USE PLANS, POLICIES, AND CONTROLS

A. STATE LAND USE DISTRICT

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission (LUC), establishes four (4) major land use districts in which all lands in the state are placed. These districts are designated as "Urban", "Rural", "Agricultural", and "Conservation". The project site is located within the "Agricultural" district. See **Figure 9**.

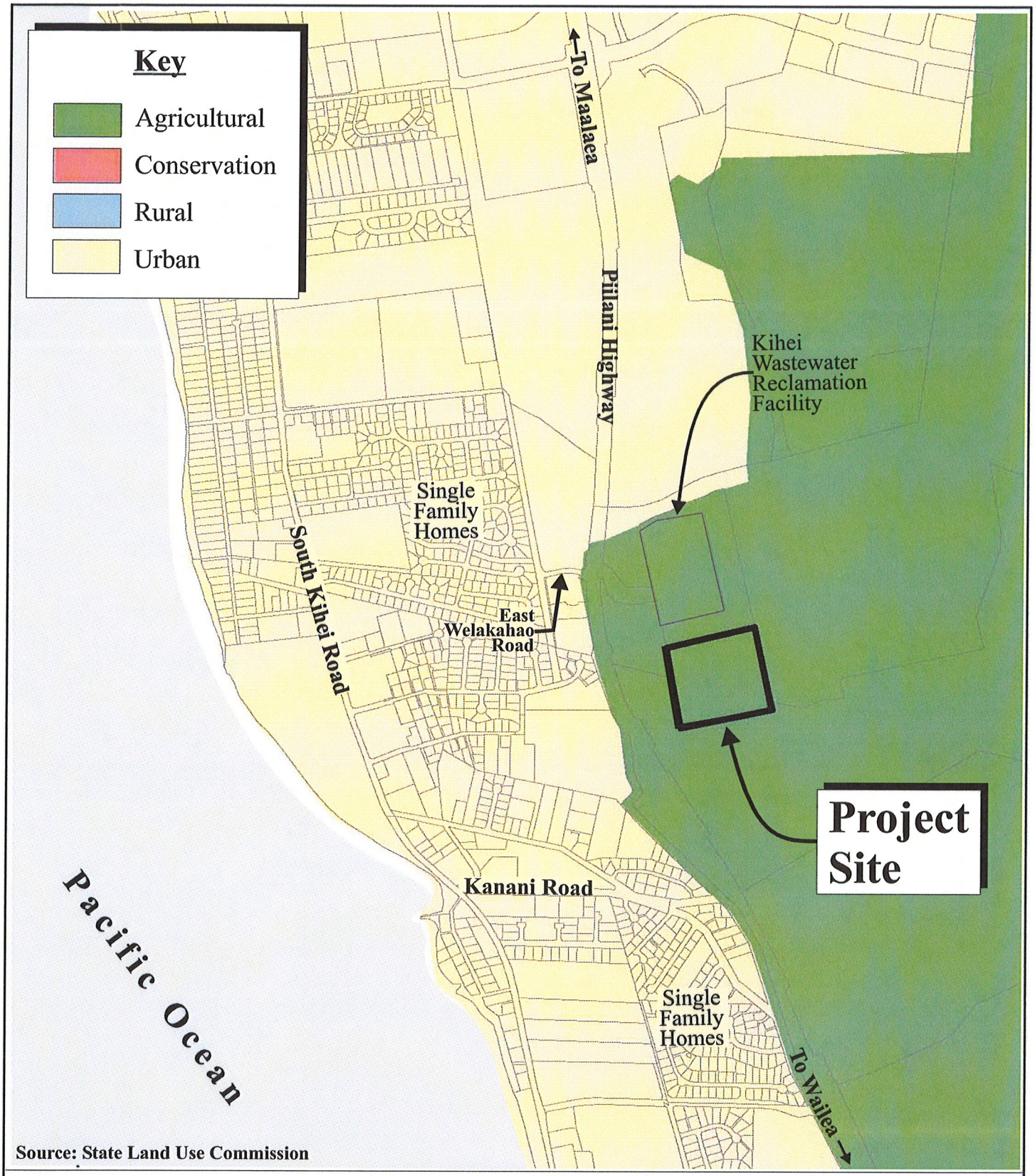
A State Land Use District Boundary Amendment (DBA) for the 14.5-acre project site for reclassification from the "Agricultural" district to the "Urban" district will be prepared as part of entitlement applications to enable the continued long-term operation of the KRCF without a State Land Use Special Use Permit. Criteria considered in the reclassification of lands are set forth in the State Land Use Commission Rules (Chapter 15-15-18, Hawaii Administrative Rules). Pacific Rim Land, Inc. will initiate the DBA for the project.

The proposed reclassification of the approximately 14.5-acre project site from "Agricultural" to "Urban" has been analyzed with respect to the LUC criteria, as discussed below.

(1) ***It shall include lands characterized by "city-like" concentrations of people, structures, streets, urban level of services, and other related land uses.***

Comment:

The site consists of a "city-like" concentration of people and structures, with employees working in the on-site offices and engaging in rock crushing activity and numerous contractors utilizing the KRCF in support of their construction projects. The project site is adjacent to Piilani Highway, a major thoroughfare in South Maui and in close proximity to the existing Kihei Wastewater Reclamation Facility and to residential subdivisions located on lands classified as "Urban." The project site is included in the proposed Urban Growth Boundary of the Draft Maui Island Plan, currently under review by the County Council's General Plan Committee. The KRCF was initially established to support the Piilani Highway project when it was under construction and continues to serve active construction projects in South Maui. The project site is currently served by adequate infrastructure and utilities, including



Source: State Land Use Commission

Figure 9 Kihei Rock Crushing Facility

State Land Use District Map

Approx. 0 .0625 .125 .25 Mile

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/SLUD

private water and wastewater system for the site. If land entitlements are granted, the applicant will upgrade the waterline within the project site to meet fire flow requirements for heavy industrial use.

(2) ***It shall take into consideration the following specific factors:***

a. Proximity to centers of trading and employment except where the development would generate new centers of trading and employment.

Comment:

The area proposed for reclassification is located in proximity to existing commercial and employment centers in Kihei. Numerous employment opportunities exist in the retail, resort, and service industries in the Kihei/Wailea area. It is noted that the Maui Research and Technology Park is located approximately one (1) mile to the north of the project site. In addition, the site's close proximity to construction activity throughout South Maui minimizes long hauls and traffic congestion from delivering aggregate materials to construction projects.

b. Availability of basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection.

Comment:

Basic services are located with the immediate and regional area, thus accessible to the project site. A private water system owned by Maui Highlands Properties, LLC provides potable water to the site. In addition, GBI, the operator of the KRCF, privately owns, operates, and maintains an existing underground sewer system that services the existing office trailer and ancillary structures at the project site. The area is located in close proximity to major roadways, such as Piilani Highway, Mokulele Highway, and South Kihei Road. Three (3) State Department of Education (DOE) schools are located in the Kihei area in addition to a charter school. Health care facilities as well as fire and police protection services are available throughout Kihei.

c. Sufficient reserve areas for foreseeable urban growth.

Comment:

The project site is included within the proposed Urban Growth Boundary of the Draft Maui Island Plan (MIP). This plan has defined the growth area on the island of Maui to the forecast horizon of 2030. The Draft MIP is currently under review by Maui County Council.

KRCF will support future urban construction projects and growth in South Maui. As noted previously, the site's proximity to construction projects in South Maui is an ideal location for rock crushing and aggregate material storage as it minimizes long hauls and traffic congestion.

(3) ***It shall include lands with satisfactory topography, drainage, and reasonably free from the danger of any flood, tsunami, unstable soil conditions, and other adverse environmental effects.***

Comment:

The project site ranges from approximately 94 feet to 146 feet in elevation and is suitable for the planned uses. In addition, it is situated within Zone X (unshaded), which denotes areas of minimal flooding. The site is not situated within any tsunami inundation zone. The project is an existing use and improvements are limited to upgrading of the waterline to meet fire flow requirements. The existing drainage pattern will not change as a result of the proposed action and adjoining downstream properties will not be adversely affected. No foreseeable adverse environmental effects are anticipated in conjunction with the project.

(4) ***Land contiguous with existing urban areas shall be given more consideration than non-contiguous land, and particularly when indicated for future urban use on state or county general plans.***

Comment:

The area proposed for reclassification has been operating as a heavy industrial use since the KRCF was established in 1979. The KRCF is currently permitted by a State Land Use Special Use Permit (SUP) and a County Conditional Permit (CP). Also, the project site is in close proximity to existing "Urban" district lands to the

west and north. Land immediately west of Piilani Highway is designated as "Urban", as is land 1,200 feet north of the project site beyond the Kihei Wastewater Reclamation Facility. The project site is located within and contiguous to the future Urban Growth Boundary proposed in the Draft Maui Island Plan. The "Agricultural" land separating the project site from existing "Urban" districts to the west is limited to Piilani Highway and an approximately 400 foot setback, established by a separate property not owned by PRL, that serves to as a visual barrier for the site. Additionally, the project site is located near the geographic center of the linearly developed South Maui area.

(5) ***It shall include lands in appropriate locations for new urban concentrations and shall give consideration to areas of urban growth as shown on the State and County plans.***

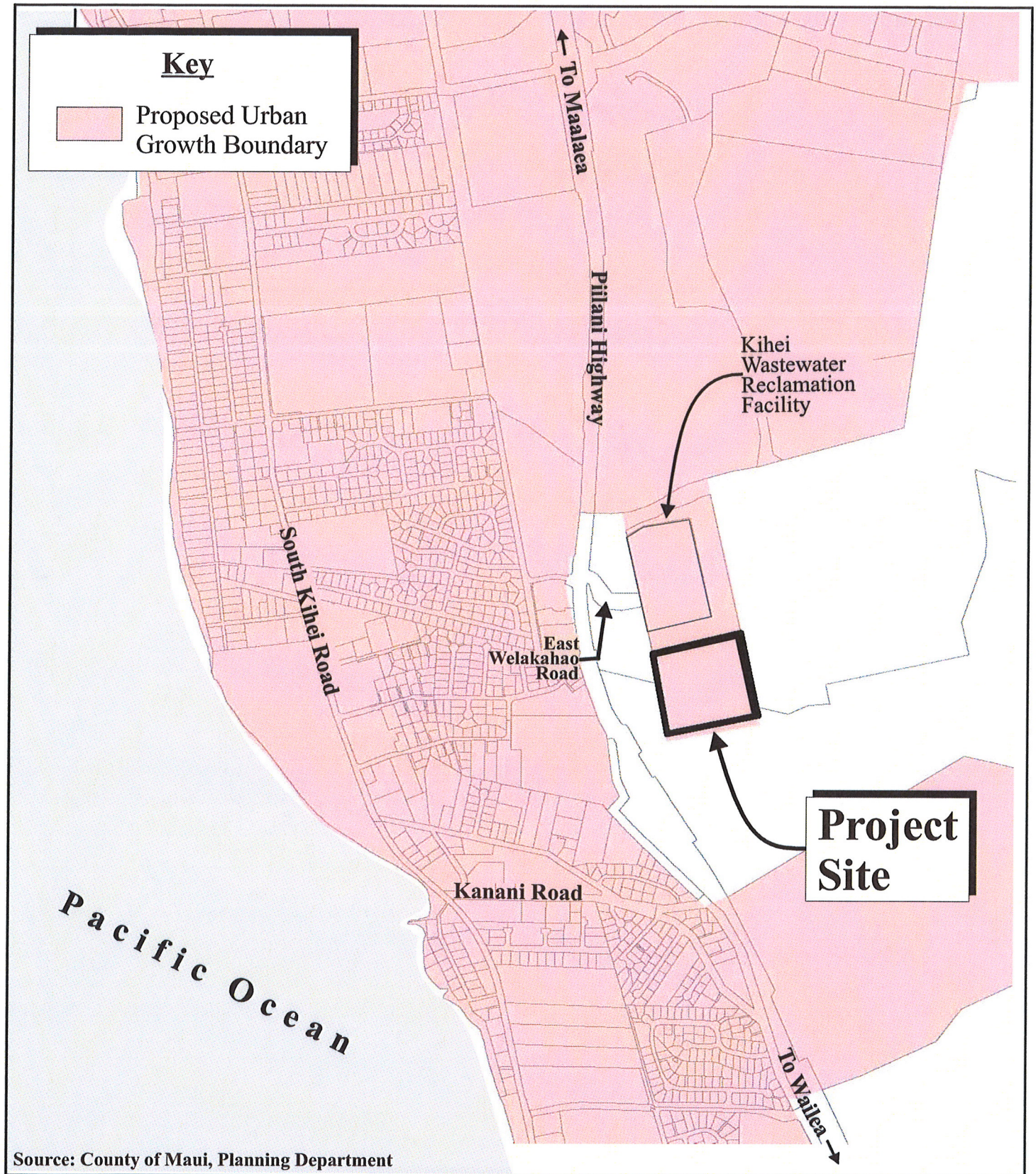
Comment:

The area proposed for reclassification has been operating as a heavy industrial use since the KRCF was established in 1979. The KRCF is currently permitted by a State Land Use Special Use Permit (SUP) and a County Conditional Permit (CP).

The project site is designated "Agriculture" by the Kihei-Makena Community Plan. However, PRL will seek a Community Plan Amendment for the property concurrently with the DBA to designate the property as "Heavy Industrial" to achieve consistency with the existing rock crushing and construction baseyard uses on-site.

It should also be noted that the project site is included in the Urban Growth Boundary (UGB) defined by the Draft Maui Island Plan (MIP), an integral component of the current update to the Maui County General Plan. See **Figure 10.** The intent of the UGB, in part, is to ensure that urban development occurs in proximity to available infrastructure systems.

The project area is in the vicinity of urban land use patterns, including the Kihei Wastewater Reclamation Facility and single-family residential uses to the west across from Piilani Highway. The lands proposed for reclassification are, therefore, located within an area suitable for new urban growth as evidenced by the existing urban uses in the vicinity of the project area and the UGB as reflected in the current version of the Draft MIP.



Source: County of Maui, Planning Department

Figure 10 Kihei Rock Crushing Facility

Draft Maui Island Plan
Urban Growth Boundary Map

Approx. 0 .0625 .125 .25 Mile

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/UGBM

(6) ***It may include lands which do not conform to paragraphs (1) to (5):***

When surrounded by or adjacent to existing urban development; and only when those lands represent a minor portion of this district.

Comment:

The project site is in conformance with paragraphs (1) to (5) above; the project site is also located adjacent to urban development, including the County Kihei Wastewater Treatment Facility to the north.

(7) ***It shall not include lands, the urbanization of which will contribute toward scattered spot urban development, necessitating unreasonable investment in public infrastructure or support services.***

Comment:

Existing "Urban" designated lands lie to the west across Piilani Highway and include various single-family subdivisions. The development of the project will not necessitate an unreasonable investment in public infrastructure or support systems as the KRCF is an existing use operating for over 30 years; permitted through a SUP and County CP. The proposed UGB of the Draft MIP establishes urban use areas east of the Piilani Highway for future urban growth envisioned to 2030 and includes the project site.

(8) ***It may include lands with a general slope of twenty percent (20%) or more if the commission finds that those lands are desirable and suitable for urban purposes and that the design and construction controls, as adopted by any Federal, State, or County agency, are adequate to protect the public health, welfare and safety, and the public's interest in the aesthetic quality of the landscape.***

Comment:

The project area has an average slope of approximately 6.1 percent and is suitable for the planned uses. Applicable governmental regulations will be followed to ensure the protection of public health, safety, and welfare.

B. HAWAII STATE PLAN

Chapter 226, HRS, also known as the Hawaii State Plan, is a long-range comprehensive plan which serves as a guide for the future long-term development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. Examples of State objectives and policies relevant to the project are as follows:

1. **Section 226-05, Objective and policies for population. To achieve this objective, it shall be the State policy to:**

    a. Manage population growth statewide in a manner that provides increased opportunities for Hawaii's people to pursue their physical, social, and economic aspirations while recognizing the unique needs of each county.

    b. Encourage an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires.

    c. Promote increased opportunities for Hawaii's people to pursue their socio-economic aspirations throughout the islands.

    d. Plan the development and availability of land and water resources in a coordinated manner so as to provide for the desired levels of growth in each geographic area.

2. **Section 226-26, Objectives and policies for the economy – in general. To achieve these objectives, it shall be the policy of this State to:**

    a. Strive to achieve a level of construction activity responsive to, and consistent with state growth objectives.

3. **Section 226-14, Objective and policies for facility systems–in general. To achieve this objective, it shall be the policy of this State to:**

    a. Reclaim and encourage the productive use of runoff water and wastewater discharges.

The KRCF is located in close proximity to existing public services and infrastructure and South Maui construction projects that depend on its services. The existing use is in consonance with the general economic objective to achieve a level of construction activity that is responsive to and consistent with state growth objectives. In addition, KRCF utilizes reclaim water from the Kihei Wastewater Reclamation Facility for dust control and the fire

flow system. To this end, the proposed action is in conformance with the above-noted objectives and policies of the Hawaii State Plan.

C. MAUI COUNTY GENERAL PLAN

As indicated by the Maui County Charter, the purpose of the general plan shall be to:

> *... indicate desired population and physical development patterns for each island and region within the county; shall address the unique problems and needs of each island and region; shall explain opportunities and the social, economic, and environmental consequences related to potential developments; and shall set forth the desired sequence, patterns and characteristics of future developments. The general plan shall identify objectives to be achieved, and priorities, policies, and implementing actions to be pursued with respect to population density; land use maps, land use regulations, transportation systems, public and community facility locations, water and sewage systems, visitor destinations, urban design, and other matters related to development.*

Chapter 2.80B of the Maui County Code, relating to the General Plan and Community Plans, implements the foregoing Charter provision through enabling legislation which calls for a Countywide Policy Plan and a Maui Island Plan (MIP). The Countywide Policy Plan was adopted as Ordinance No. 3732 on March 24, 2010. As mentioned previously, the MIP is currently in the process of review and formulation by the Maui County Council.

With regard to the Countywide Policy Plan, Section 2.80B.030 of the Maui County Code states the following.

The countywide policy plan shall provide broad policies and objectives which portray the desired direction of the County's future. The countywide policy plan shall include:

1. *A vision for the County;*
2. *A statement of core themes or principles for the County; and*
3. *A list of countywide objectives and policies for population, land use, the environment, the economy, and housing.*

Core principles set forth in the Countywide Policy Plan are listed as follows:

1. Excellence in the stewardship of the natural environment and cultural resources;

2. Compassion for and understanding of others;

3. Respect for diversity;

4. Engagement and empowerment of Maui County residents;

5. Honor for all cultural traditions and histories;

6. Consideration of the contributions of past generations as well as the needs of future generations;

7. Commitment to self-sufficiency;

8. Wisdom and balance in decision making;

9. Thoughtful, island appropriate innovation; and

10. Nurturance of the health and well-being of our families and our communities.

Congruent with these core principles, the Countywide Policy Plan identifies goals objectives, policies and implementing actions for pertinent functional planning categories, which are identified as follows:

1. Natural environment

2. Local cultures and traditions

3. Education

4. Social and healthcare services

5. Housing opportunities for residents

6. Local economy

7. Parks and public facilities

8. Transportation options

9. Physical infrastructure

10. Sustainable land use and growth management

11. Good governance

With respect to the KRCF, the following goals, objectives, policies and implementing actions are illustrative of the compliance with the Countywide Policy Plan:

STRENGTHEN THE LOCAL ECONOMY

Goal: Maui County's economy will be diverse, sustainable, and supportive of community values.

Objective:

Promote an economic climate that will encourage diversification of the County's economic base and a sustainable rate of economic growth.

IMPROVE PHYSICAL INFRASTRUCTURE

Goal: Maui County's physical infrastructure will be maintained in optimum condition and will provide for and effectively serve the needs of the County through clean and sustainable technologies.

Objective:

Improve water systems to assure access to sustainable, clean, reliable, and affordable sources of water.

Policies:

- Ensure that adequate supplies of water are available prior to approval of subdivision or construction documents.
- Improve the management of water systems so that surface-water and groundwater resources are not degraded by overuse or pollution.
- Explore and promote alternative water-source-development methods

Objective:

Direct growth in a way that makes efficient use of existing infrastructure and to areas where there is available infrastructure capacity.

Policy:

- Promote land use patterns that can be provided with infrastructure and public facilities in a cost-effective manner.

PROMOTE SUSTAINABLE LAND USE AND GROWTH MANAGEMENT

Goal: Community character, lifestyles, economies, and natural assets will be preserved by managing growth and using land in a sustainable manner.

Objective:

Improve land use management and implement a directed-growth strategy.

Policy:

- Direct new development in and around communities with existing infrastructure and service capacity, and protect natural, scenic, shoreline, and cultural resources.

In summary, the KRCF is consistent with the above-noted themes and principles of the Countywide Policy Plan.

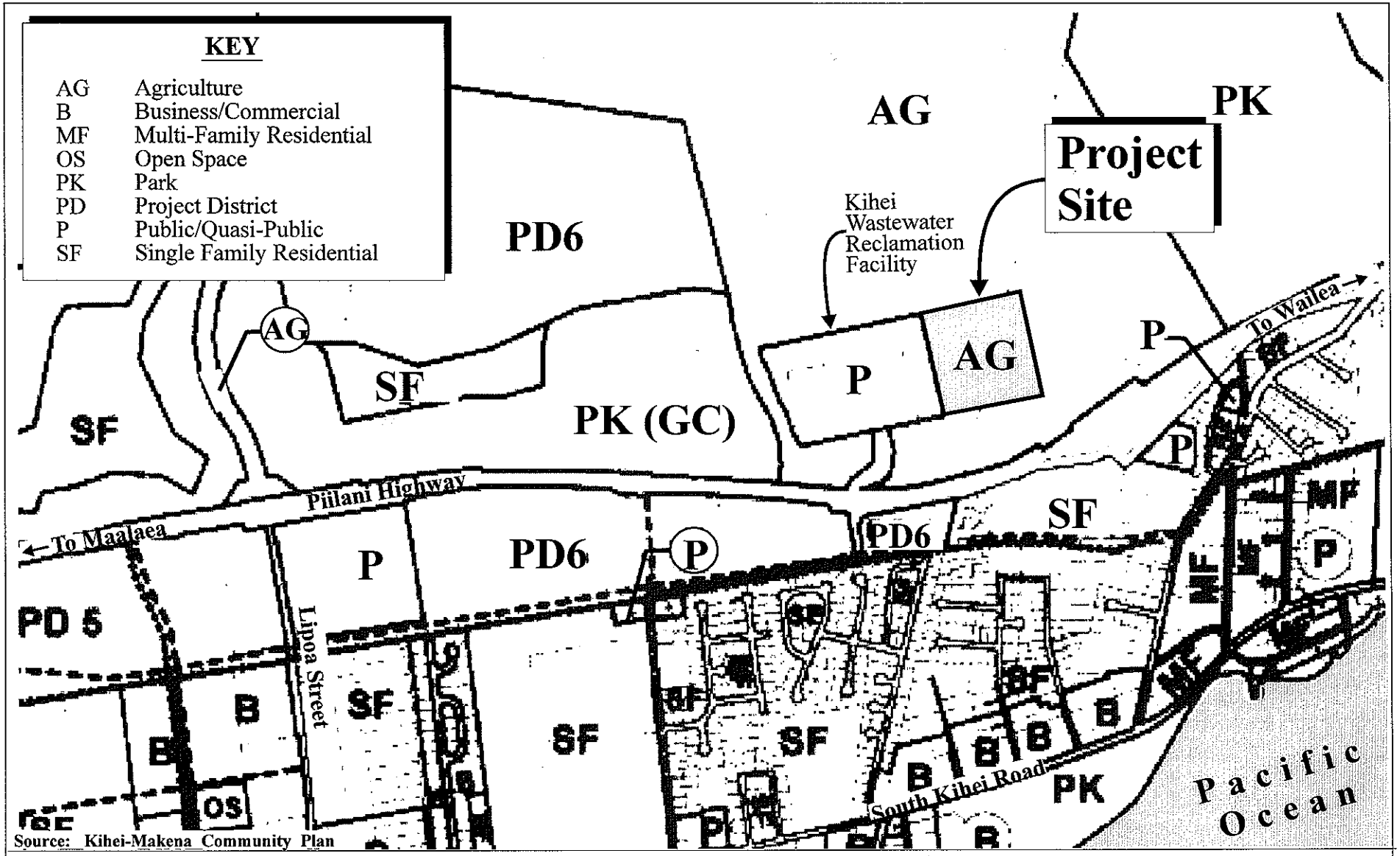
D. COUNTY OF MAUI COMMUNITY PLANS

Within Maui County, there are nine (9) community plan regions. From a General Plan implementation standpoint, each region is governed by a community plan which sets forth desired land use patterns, as well as goals, objectives, policies, and implementing actions for a number of functional areas including infrastructure-related parameters.

- **Kihei-Makena Community Plan**

  The KRCF project is located within the Kihei-Makena Community Plan region. The existing land use designations for the project area under the Community Plan are set forth in the Kihei-Makena Community Plan Land Use Map. See **Figure 11**. The lands underlying the project site are designated as "Agriculture" by the Kihei-Makena Community Plan.

  The proposed actions will involve a change to the Kihei-Makena Community Plan from "Agriculture" to "Heavy Industrial". The proposed actions are in conformance with the following, goals, objectives, and policies of the Kihei-Makena Community Plan:



Source: Kihei-Makena Community Plan

Figure 11

Kihei Rock Crushing Facility

Kihei-Makena Community Plan Map

NOT TO SCALE

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/CPM

LAND USE

Goal:

A well-planned community with land use and development patterns designed to achieve the efficient and timely provision of infrastructural and community needs while preserving and enhancing the unique character of Maalaea, Kihei, Wailea and Makena as well as the region's natural environment, marine resources, and traditional shoreline uses.

Objectives and Policies:

1. Identify priority growth areas to focus public and private efforts on the provision of infrastructure and amenities to serve existing residents and to accommodate new growth.

2. Establish a distribution of land uses which provides housing, jobs, shopping, open space, and recreation areas in close proximity to each other in order to enhance Kihei's neighborhoods and to minimize dependence on automobiles.

ECONOMIC ACTIVITY

Goal:

A diversified and stable economic base which serves resident and visitor needs while providing long-term resident employment.

Objectives and Policies:

1. Establish a sustainable rate of economic development consistent with concurrent provision of needed transportation, utilities, and public facilities improvements.

2. Establish balance between visitor industry employment and non-visitor industry employment.

PHYSICAL AND SOCIAL INFRASTRUCTURE

Goal:

Provision of facility systems, public services, and capital improvement projects in an efficient, reliable, cost effective, and environmentally sensitive manner which accommodates the needs of the Kihei-Makena

community, and fully support present and planned land uses, especially in the case of project district implementation. Allow no development for which infrastructure may not be available concurrent with the development's impacts.

Objectives and Policies:

1. Design drainage systems that protect coastal water quality by incorporating best management practices to remove pollutants from runoff. Construct and maintain, as needed, sediment retention basins and other best management practices to remove sediments and other pollutants from runoff.

As mentioned, the project site is currently designated "Agriculture" in the Kihei-Makena Community Plan Map, therefore, a Community Plan Amendment (CPA) will be sought for the parcel. PRL will initiate the CPA for the project. The proposed action is intended to provide consistency between the existing land use designations and the existing rock crushing and construction storage use at the site.

E. COUNTY ZONING

The project site is currently zoned "Agricultural" district by the Maui County Code (MCC). A Change In Zoning (CIZ) to establish the proposed "M-2, Heavy Industrial" zoning designation will be required for the project site. The project site boundaries represent the limits of the proposed County zoning designation. PRL will initiate the CIZ for the project.

Pursuant to MCC, Chapter 19.26.010(28)(p), a rock crushing facility in the "M-2, Heavy Industrial" district is a Special Use and a County Special Use Permit (CUP) will be required. As such, a CUP application has been prepared and submitted.

According to Chapter 19.30A.020 of the Maui County Code, agricultural lands that meet at least two (2) of the following criteria should be given the highest priority for retention in the agricultural district:

1. Agricultural Lands of Importance to the State of Hawaii (ALISH);

2. Lands not classified by the ALISH system whose agricultural land suitability, based on soil, topographic, and climatic conditions, supports the production of agricultural commodities, including but not limited to coffee, taro, watercress, ginger, orchard and flower crops, and non-irrigated pineapple. In addition, these lands shall include

lands used for intensive husbandry, and lands in agricultural cultivation in five of the ten years immediately preceding the date of approval of this chapter; and

3. Lands which have seventy-five percent (75%) or more of their boundaries contiguous to lands within the agricultural district.

In regards to Criterion "1", the project site holds an "Unclassified" designation on the ALISH map.

In regards to Criterion "2", the project site has not been in active agriculture use for over 30 years, since the KRCF was established in 1979. In addition, the project site is located on lands designated "E77" which is the lowest productivity rating by the University of Hawaii Land Study Bureau.

In terms of Criterion "3", the boundaries of the 14.5-acre project site border "Agricultural" designated lands on all sides. More than 75 percent of the project site's boundaries are contiguous to lands within the "Agricultural" district. Therefore, only one (1) of the three (3) criteria for retention in the "Agricultural" district exists for the subject property.

In summary, the agricultural designation underlying the project site does not qualify for retention in the agricultural district. The agricultural impact of this project is negligible in the context of the recent trends occurring on Maui. In the last 30 years, the closures of Wailuku Sugar and Pioneer Mill and, more recently, pineapple cultivation on Maui have significantly reduced the area of agricultural land being actively used for sugar cane and pineapple cultivation. These actions have greatly increased the supply of available large-scale agricultural lands. The proposed actions will ultimately involve the use of approximately 14.5 acres of land, which represents 0.0046 percent of the roughly 246,000 acres of State Agricultural district lands on the island of Maui.

F. COASTAL ZONE MANAGEMENT/SPECIAL MANAGEMENT AREA

The Hawaii Coastal Zone Management Program (HCZMP), as formalized in Chapter 205A, HRS, establishes objectives and policies for the preservation, protection, and restoration of natural resources of Hawaii's coastal zone. Although the project site is located outside of the County of Maui's Special Management Area (SMA), the project has been analyzed for consistency with the objectives and policies of the Coastal Zone Management Program. See **Figure 12**.

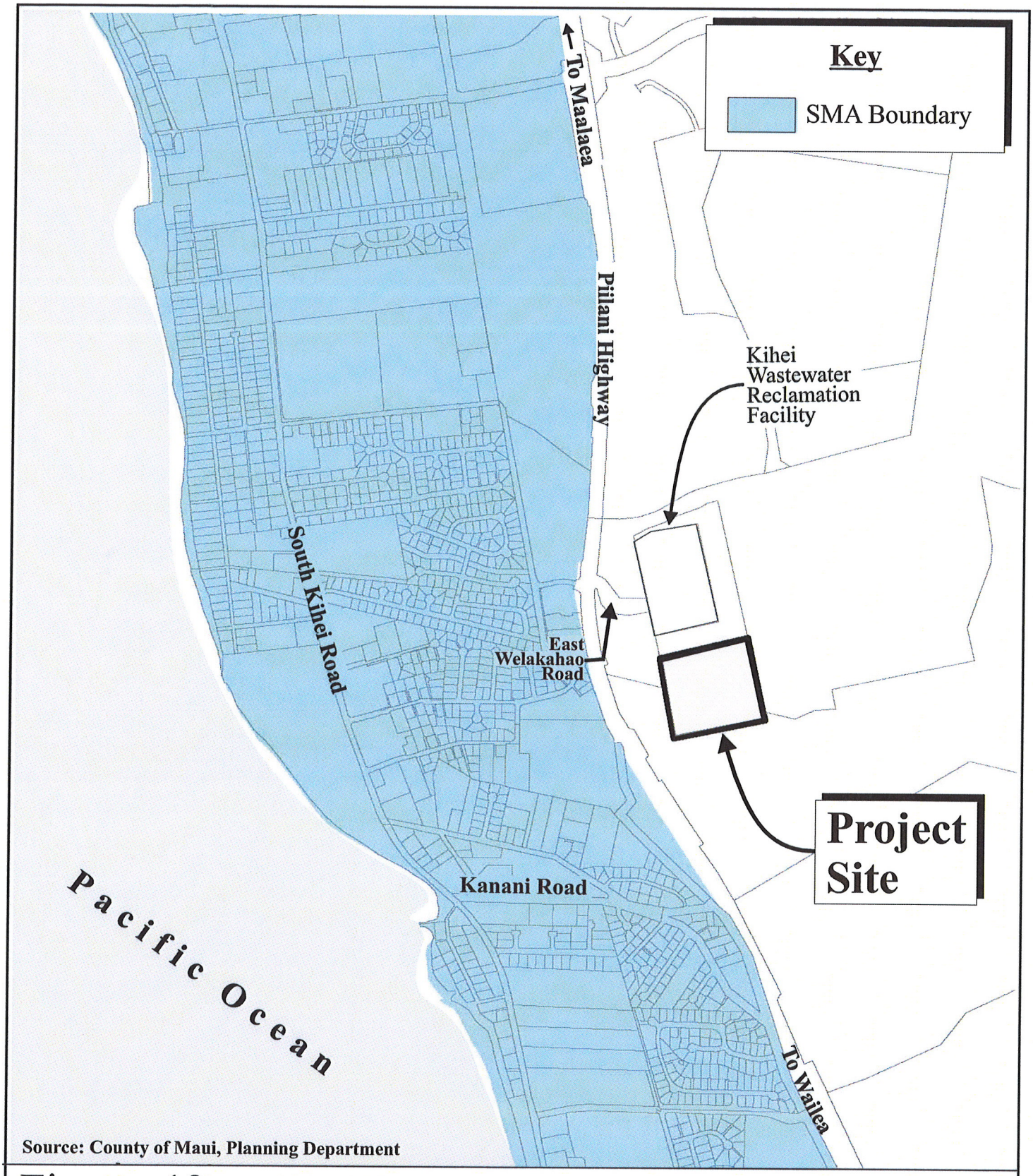


Figure 12 Kihei Rock Crushing Facility
Special Management Area Boundary Map

Approx.
0 .0625 .125 .25 Mile

Prepared for: Pacific Rim Land, Inc.

MUNEKIYO & HIRAGA, INC.

PacRim/GBIHI/SMA

As set forth in Chapter 205A, HRS, the following section addresses the project's relationship to applicable coastal zone management considerations:

1. **Recreational Resources**

Objective: Provide coastal recreational opportunities accessible to the public.

Policies:

a. Improve coordination and funding of coastal recreational planning and management; and

b. Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:

I. Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;

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

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

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

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

vi. Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;

vii. Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial

reefs for surfing and fishing; and

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

Response: The proposed actions are not anticipated to generate additional demands on existing public parks and beach areas. The project site is located approximately 0.5 mile from the coastline. Further, based on its location and development parameters and development context, the project is not anticipated to adversely impact coastal resources, including access to the shoreline.

2. **Historic Resources**

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

Policies:

a. Identify and analyze significant archaeological resources;

b. Maximize information retention through preservation of remains and artifacts or salvage operations; and

c. Support state goals for protection, restoration, interpretation, and display of historic resources.

Response: As noted previously, no significant impacts to cultural or historic resources are anticipated from the project. Refer to **Appendix "E"**, **Appendix "E-1"**, and **Appendix "F"**. Improvements will be limited to upgrading of the waterline to meet fire flow requirements. However, should human remains be inadvertently discovered during ground-altering activities in the future, work will promptly cease in the immediate area of the find, and the find will be further protected from damage. SHPD will be notified immediately and procedures for the treatment of inadvertently discovered human remains will be followed pursuant to Chapter 6E, HRS.

3. Scenic and Open Space Resources

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

Policies:

a. Identify valued scenic resources in the coastal zone management area;

b. Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;

c. Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and

d. Encourage those developments that are not coastal dependent to locate in inland areas.

Response: The project site is located along the lower slopes of Haleakala mauka of Piilani Highway. The KRCF is visually buffered from Piilani Highway by a 400 foot setback and a thick growth of kiawe trees. View corridors are not adversely affected by the existing operation.

4. Coastal Ecosystems

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

Policies:

a. Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;

b. Improve the technical basis for natural resource management;

c. Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;

d. Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and

e. Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

Response: With continued implementation of Best Management Practices (BMPs) at the KRCF, the proposed action is not anticipated to present significant, adverse effects on the nearby coastal ecosystems. Vehicle wash water does not leave the property or discharge into State waters. The materials stored at the KRCF are limited to inorganic gravel and sand, with occasional concrete recycling. All materials entering the site are pre-screened to ensure that the facility does not accept or stockpile materials from polluting sources. And as previously noted, the coastline is located approximately 0.5 mile away.

5. Economic Uses

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

Policies:

a. Concentrate coastal dependent development in appropriate areas;

b. Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and

c. Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:

   I. Use of presently designated locations is not feasible;

   ii. Adverse environmental effects are minimized; and

   iii. The development is important to the State's economy.

Response: The KRCF is not located at or near the coastline. Based on the regional need for a construction storage and rock crushing facility to support South

Maui construction projects, the proposed action to amend land use designations for the KRCF is considered appropriate. The proposed action does not contravene the objective and policies for economic use.

6. **Coastal Hazards**

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

Policies:

a. Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;

b. Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;

c. Ensure that developments comply with requirements of the Federal Flood Insurance Program; and

d. Prevent coastal flooding from inland projects.

Response: The property's existing drainage pattern will not change as a result of the proposed action and adjoining downstream properties will not be adversely affected by the proposed project. Stormwater generated by existing improvements at the KRCF are diverted and retained by an existing sump area in the southwestern corner of the site. The project is located in Flood Zone X (unshaded), as designated by FEMA Federal Flood Insurance Program, an area of minimal flooding. There are no restrictions or development in Flood Zone X (unshaded) with regards to the Federal Flood Insurance Program. Also, the project site is outside of the tsunami inundation area.

7. **Managing Development**

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

Policies:

a. Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;

b. Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and

c. Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

Response: Public input will be solicited in coordination with the processing of the Draft EA, pursuant to the Chapter 343, HRS EA review process. All aspects of the project will be conducted in accordance with applicable Federal, State, and County standards. Opportunities for review of the proposed action are also offered through the land use entitlements review process and public hearings for the DBA, CPA, CIZ, and CUP applications.

8. **Public Participation**

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

Policies:

a. Promote public involvement in coastal zone management processes;

b. Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and

c. Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.

Response: The EA document will be processed in accordance with Chapter 343, HRS, and opportunity for comment by agencies and the public will be provided. As noted above, the DBA, CPA, CIZ, and CUP processes will also address public dialogue and input.

9. **Beach Protection**

Objective: Protect beaches for public use and recreation.

Policies:

a. Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;

b. Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and

c. Minimize the construction of public erosion-protection structures seaward of the shoreline.

Response: The project is situated inland, approximately 0.5 mile from the shoreline. No adverse effect on beach processes is anticipated from the proposed action. Best Management Practices (BMPs) are implemented to mitigate adverse effects to the shoreline and coastal waters. For example, vehicle wash water does not leave the property or discharge into coastal waters. All materials entering the site are pre-screened to ensure that the facility does not accept or stockpile materials from polluting sources.

10. **Marine Resources**

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

Policies:

a. Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;

b. Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;

c. Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;

d. Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and

e. Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.

Response: The project is situated inland, away from the ocean and no adverse effect on marine or coastal resources is anticipated. Appropriate BMPs and erosion control measures are implemented to ensure that coastal resources are not adversely impacted by existing operations at the property. Vehicle wash water does not leave the property or discharge into coastal waters. All materials entering the site are pre-screened to ensure that the facility does not accept or store materials from polluting sources.

In addition to the foregoing objectives and policies, HRS Section 205A-30.5 Prohibitions, provides specifications for the limitation of lighting in Coastal Shoreline areas in relation to granting SMA permits.

No special management area use permit or special management area minor permit shall be granted for structures that allow artificial light from floodlights, uplights, or spotlights used for decorative or aesthetic purposes when the light:

(1) Directly illuminates the shoreline and ocean waters; or

(2) Is directed to travel across property boundaries toward the shoreline and ocean waters.

Response: The project is not located on or near the shoreline. Also, the operating hours of the KRCF are from 7:00 a.m. to 3:30 p.m. All existing outdoor lighting at the KRCF is shielded and directed downward. Outdoor lighting is limited to the property's two (2) access points at East Welakahao Road and at the rear driveway exit.

G. OTHER REGULATORY APPROVALS

Activities necessitating requirements for Department of the Army permitting and Section 401 Water Quality Certification are not anticipated. Additionally, there are no other Federal

permits or licenses required.

IV. ALTERNATIVES TO THE PROPOSED ACTION

IV. ALTERNATIVES TO THE PROPOSED ACTION

The applicant has evaluated a variety of options in defining the proposed action.

A. PREFERRED ALTERNATIVE

The proposed action, outlined in Section I. Project Overview, represents the preferred alternative. This alternative, which entails changes to the land use designations for the KRCF property, presents a viable, cost-effective opportunity to establish long-term use and achieve consistency between the existing rock crushing and baseyard use at the project site and the underlying land use designations. As previously mentioned, the KRCF is currently operating under a State Land Use Special Use Permit and a County Conditional Permit. The long-term use of the KRCF will meet the need for a facility of this type in the region and allow for continued support for the construction industry. Additionally, because of the nearby urban land use designation and the urban nature of the neighboring Kihei Wastewater Reclamation Facility, the KRCF is in de facto accord with existing land uses. The site is located in a geographically central area of South Maui, which provides convenient access to construction projects in Kihei, Wailea, and Makena and minimizes the need for long hauls.

B. NO ACTION ALTERNATIVE

As previously mentioned, the KRCF is an existing use that has been in operation since 1979. The no action alternative would entail the maintenance of existing land use designations. The KRCF would apply for time extensions for the State Land Use Special Use Permit and the County Conditional Permit under which it is currently operating. The State and County permits are set to expire in October 2016 and November 2017, respectively. This alternative would not provide a more permanent solution to consistency between the land use designations and the long-standing existing use at the project site.

C. POSTPONED ACTION ALTERNATIVE

Similar to the no action alternative, the postponed action alternative would not provide a more permanent solution to consistency between the land use designations and the long-standing existing rock crushing use at the project site.

D. ALTERNATIVE LOCATIONS

As another alternative, the KRCF could be relocated to a different location in South Maui. However, due to the limited supply of appropriately-sized vacant "M-2, Heavy Industrial" zoned land in Kihei, a relocated rock crushing facility would still require the applicant to go through a similar entitlement process to obtain the appropriate land use designations on an alternative site. Because the KRCF has been operating at the same location for over 30 years, the relocation of the facility would not represent the most cost-effective, efficient or compatible land use alternative. Additionally, because of the proximity to land with urban land areas and the urban nature of the neighboring Kihei Wastewater Reclamation Facility, the current site conforms practically to the existing land uses. Consequently, PRL selected the preferred alternative, since the KRCF is established and operating at the project site, and the land is already under their ownership.

V. SUMMARY OF UNAVOIDABLE IMPACTS AND COMMITMENTS OF RESOURCES

V. SUMMARY OF UNAVOIDABLE IMPACTS AND COMMITMENTS OF RESOURCES

The proposed actions are not anticipated to result in significant unavoidable construction-related environmental impacts as improvements are limited to upgrading of the waterline to meet fire flow requirements for the existing KRCF. Best management practices will be utilized during the waterline improvement to mitigate potential air and noise impacts associated with construction.

The project will commit approximately 14.5 acres of former agricultural land to permanent heavy industrial, urban use. However, the property is "Unclassified" by the Agricultural Lands of Importance to the State of Hawaii, land classification system and has been assigned the lowest productivity rating of "E77" by the Land Study Bureau. Furthermore, the property has not been in active agricultural cultivation for over 30 years since the KRCF was established in 1979. The potential for air quality and noise impacts associated with the continued operation of the KRCF is mitigated by appropriate BMPs. Future rock crushing activity at the site will also require and be regulated by provision of Community Noise Permits. Approval of the requested land use designations is not anticipated to have an adverse impact on scenic or open space resources nor will it adversely affect agricultural productivity in the region. Because no new operational changes are proposed and improvements are limited to waterline upgrades, the proposed action is not anticipated to affect public services or infrastructure capacity and services.

VI. SIGNIFICANCE CRITERIA ASSESSMENT

VI. SIGNIFICANCE CRITERIA ASSESSMENT

The "Significance Criteria", Section 12 of the Administrative Rules, Title 11, Chapter 200, "Environmental Impact Statement Rules", were reviewed and analyzed to determine whether the proposed actions will have significant impacts on the environment. The following criteria and preliminary analysis are provided:

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

   As mentioned in Chapter II of this document, cultural interviews for the project area concluded that no significant impacts to cultural practices are anticipated, while the archaeological inventory survey concluded that no historic properties would be affected. The archaeological inventory survey has been accepted by the State Historic Preservation Division (SHPD). Refer to **Appendix "E"** and **Appendix "E-1"**. Flora and fauna observed on the property were generally limited to non-native, abundant species, therefore, the proposed actions are not anticipated to have significant adverse impact on the biological resources in the area. The KRCF encompasses 14.5 acres of low-productivity agricultural land that has not been in active cultivation for over 30 years. Persons interviewed for the Cultural Impact Assessment did not know of any cultural practices that have occurred or are continuing on or near the project site.

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

   The KRCF has been established at the project site for over 30 years and will not curtail the range of beneficial uses of the environment.

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 actions do not conflict with the State's Environmental Policy and Guidelines as set forth in Chapter 344, Hawaii Revised Statutes (HRS).

   In pursuance of this State policy to conserve natural resources and enhance quality

of life, the KRCF implements various Best Management Practices to prevent degradation of environmental conditions.

4. **Substantially affects the economic welfare, social welfare, and cultural practices of the community or State.**

Because limited improvements are proposed for the KRCF, the proposed action will not generate significant short-term construction and construction-related employment benefits. However, from a long-term perspective, the KRCF will maintain approximately 11 jobs and will continue to support ongoing construction activity throughout South Maui and have a beneficial impact on the local economy as construction employment and spending increases. The KRCF plays an important role in the South Maui construction industry as it is the only rock crushing facility in the region.

5. **Substantially affects public health.**

The proposed actions are not anticipated to have any significant adverse impacts on public health.

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

The proposed action itself is not anticipated to add to resident population in the Kihei-Makena region, therefore, it is not anticipated to result in adverse secondary impacts. Necessary infrastructure systems and services already serve the KRCF and limited improvements are proposed.

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

The project is not anticipated to have a significant adverse impact upon the natural environment. Implementation of Best Management Practices (BMPs) mitigates adverse effects surrounding land uses and coastal environments. BMPs include regular sprinkling as a dust control measure and pre-screening of all materials entering the facility.

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

The proposed actions are not anticipated to have a cumulative adverse impact on the

environment, nor involve a commitment to larger actions. As previously noted, the project site has been in operation for over 30 years. The project is located adjacent to existing urban uses and is served by existing infrastructure and utility systems. The proposed land use amendments for the KRCF is not anticipated to have a significant adverse impact on the physical environment.

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

Flora and fauna found at the site were limited to non-native, abundant species. As such, the proposed actions are not anticipated to have significant negative impact on the biological resources in the area.

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

Dust and exhaust impacts to air quality from th KRCF operations are mitigated by Best Management Practices (BMPs), which include regular sprinkling of the site to control dust and regular scheduled maintenance on equipment to ensure operations are within manufactured specifications. Prior to resuming rock crushing activity at the site, GBI will apply for a Community Noise Permit.

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

The site is situated 0.5 mile inland of the shoreline and is not anticipated to have any adverse impact upon coastal waters or resources. The project site is situated within Zone X (unshaded), an area of minimal flooding. The site is not situated within a tsunami inundation zone.

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

The project is located on the mauka side of Piilani Highway, which is designated as a "Medium" scenic corridor in the Draft Maui Island Plan. The KRCF is visually buffered by a 400-foot setback from the Highway and a thick grove of kiawe trees. As such, adverse impacts to scenic or open space resources resulting from the project are not anticipated.

13. **Requires substantial energy consumption.**

The KRCF is an existing use that has been in operation since 1979. No operational changes are proposed. As such, additional consumption of energy is not anticipated for the proposed action. Furthermore, the project's central location in South Kihei, in close proximity to construction activity in the area, will result in lower long term transportation/fuel costs than other more distant locations.

In summary, the site is situated at an ideal and central location in South Maui adjacent to the Piilani Highway for convenient access, in close proximity to construction activity in Kihei, Wailea, and Makena and to compatible surrounding land uses, such as the Kihei Wastewater Reclamation Facility. The project site is served by adequate infrastructure systems and services. The proposed land use amendments for the KRCF is not anticipated to have a significant adverse impact on the physical environment. Based on the foregoing analysis, it is anticipated that the proposed action will result in a Finding of No Significant Impact (FONSI).

VII. LIST OF PERMITS AND APPROVALS

VII. LIST OF PERMITS AND APPROVALS

The following list of permits and approvals are anticipated to be required for project implementation:

1. **State of Hawaii**

   A. District Boundary Amendment

   B. National Pollutant Discharge Elimination System (NPDES) Permits, as applicable

   C. Community Noise Permit, as applicable

   D. Withdrawal of State Land Use Special Use Permit

2. **County of Maui**

   A. Community Plan Amendment

   B. Change in Zoning

   C. County Special Use Permit

   D. Withdrawal of County Conditional Permit

   E. Construction Permits, as applicable

VIII. PARTIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED; AND RESPONSES TO SUBSTANTIVE COMMENTS

VIII. PARTIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED; AND RESPONSES TO SUBSTANTIVE COMMENTS

The following agencies and persons were consulted during preparation of the Draft Environmental Assessment (EA). Names and positions reflect parties consulted at time of preparation. Agency comments and responses to substantive comments are included herein.

1. Ranae Ganske-Cerizo, Soil Conservationist
Natural Resources Conservation Service
U.S. Department of Agriculture
77 Hookele Street, Suite 202
Kahului, Hawaii 96732

2. George Young
Chief, Regulatory Branch
U.S. Department of the Army
U.S. Army Engineer District, Honolulu
Regulatory Branch
Building 230
Fort Shafter, Hawaii 96858-5440

3. Sandra Lee Kunimoto, Chair
Department of Agriculture
1428 South King Street
Honolulu, Hawaii 96814-2512

4. Theodore E. Liu, Director
State of Hawaii
Department of Business, Economic Development & Tourism
P.O. Box 2359
Honolulu, Hawaii 96804

5. Chiyome Fukino, M.D., Director
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawaii 96814

6. Alec Wong, P.E., Chief
Clean Water Branch
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawaii 96814

7. Patti Kitkowski
Acting District Environmental Health Program Chief
State of Hawaii
Department of Health
54 High Street
Wailuku, Hawaii 96793

8. Lene Ichinotsubo
Environmental Management Division
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 212
Honolulu, Hawaii 96814

9. Laura Thielen, Chairperson
State of Hawaii
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

10. Dr. Puaalaokalani Aiu, Administrator
State of Hawaii
Department of Land and Natural Resources
State Historic Preservation Division
601 Kamokila Blvd., Room 555
Kapolei, Hawaii 96707

11. Morgan Davis, Maui Archaeologist
Department of Land and Natural Resources
State Historic Preservation Division
130 Mahalani Street
Wailuku, Hawaii 96793

12. Michael Formby, Acting Director
State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813
cc: Fred Cajigal

13. Katherine Kealoha, Director
Office Of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, Hawaii 96813

14. Clyde Nāmuo, Administrator
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813

15. Abbey Seth Mayer, Director
State of Hawaii
Office of Planning
P.O. Box 2359
Honolulu, Hawaii 96804

16. Dan Davidson, Executive Officer
State of Hawaii
State Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804

17. Charmaine Tavares, Mayor
County of Maui
200 South High Street
Wailuku, Hawaii 96793

18. Deidre Tegarden, Director
County of Maui
Office of Economic Development
2200 Main Street, Suite 305
Wailuku, Hawaii 96793

19. Rebecca Lauricella, Acting Administrator
Maui Civil Defense Agency
200 South High Street
Wailuku, Hawaii 96793

20. Jeffrey A. Murray, Fire Chief
County of Maui
Department of Fire and Public Safety
200 Dairy Road
Kahului, Hawaii 96732

21. Lori Tsuhako, Director
County of Maui
Department of Housing and Human Concerns
One Main Plaza
2200 Main Street, Suite 546
Wailuku, Hawaii 96793

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

23. Kathleen Aoki, Director
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawaii 96793

24. Gary Yabuta, Chief
County of Maui
Police Department
55 Mahalani Street
Wailuku, Hawaii 96793

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

26. Cheryl Okuma, Director
County of Maui
Department of Environmental Management
One Main Plaza
2200 Main Street, Suite 100
Wailuku, Hawaii 96793

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

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

29. **Hawaiian Telcom**
60 South Church Street
Wailuku, Hawaii 96793

30. Greg Kauhi, Manager, Customer Operations
Maui Electric Company, Ltd.
P.O. Box 398
Kahului, Hawaii 96733

31. Pamela Tumpap, Executive Director
Maui Chamber of Commerce
313 Ano Street
Kahului, Hawaii 96732

32. Don Couch, President
Kihei Community Association
P. O. Box 662
Kihei, Hawaii 96753

OCT 13 2010

LINDA LINGLE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
DOH/CWB

10017PKP.10

October 11, 2010

Mr. Mich Hirano, AICP
Principal
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Hirano:

SUBJECT: Early Consultation Request for the Proposed Kihei Rock Crushing Facility
Kihei, Island of Maui, Hawaii
TMK: (2) 2-2-002:078

The Department of Health, Clean Water Branch (CWB), has reviewed the subject document and offers these comments on your project. Please note that our review is based solely on the information provided in the subject document and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

1. You are required to obtain a National Pollutant Discharge Elimination System (NPDES) general permit for discharges of storm water runoff associated with industrial activity. Because this is an existing facility, you must submit a Notice of Intent (NOI) form, including a Storm Water Pollution Control Plan, as soon as possible. The NOI forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

2. Concrete truck wash water is not allowed to be discharged into State waters or infiltrate into the ground.

3. Vehicle wash water is not allowed to be discharged into State waters.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 Water Quality Certification are required, must comply with the Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

If you have any questions, please visit our website at http://www.hawaii.gov/health/environmental/water/cleanwater/index.html, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

Joanna Seto

for ALEC WONG, P.E., CHIEF
Clean Water Branch

KP:ml

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Alec Wong, P.E., Chief
Clean Water Branch
Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, Hawaii 96801-3378

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078, DOH/CWB 10017PKP.10

Dear Mr. Wong:

Thank you for your letter, dated October 11, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility (KRCF). On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

1. The Department's standard comments, as listed on the website indicated in your letter, have been reviewed. We are enclosing a list of applicable comments as well as the applicant's response to each. See Exhibit "A".

2. We note the comment that a National Pollutant Discharge Elimination System (NPDES) general permit is required for discharges of storm water runoff associated with industrial activity. Goodfellow Bros., Inc. has obtained a NPDES Permit for construction activity at the KRCF site in the past. However, the KRCF does not engage in quarry operations and has not been required to obtain a NPDES general permit in the past. The primary business at the site is the regional offices for GBI's Maui construction activities. As a secondary operation on a limited basis, the company recycles aggregate materials with a crusher. In addition, storm water runoff generated by improvements at the KRCF are retained within an on-site sump. If a determination is made that GBI now needs a NPDES general permit, they will submit a Notice of Intent.

3. We acknowledge that concrete truck wash water is not allowed to be discharged into State waters or infiltrate into the ground. A concrete truck wash area previously existed on the site but is no longer present. The concrete truck wash area was lined with an impermeable liner. Concrete truck washing does not take place at the KRCF and Goodfellow Brothers, Inc., the site's operator, has

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • planning@mhplanning.com • www.mhplanning.com

indicated that there is no need for such a concrete truck wash area, since no concrete batching occurs at the project site.

4. We further acknowledge that vehicle wash water is not allowed to be discharged into State waters. Vehicle washing is limited to two to three vehicles a month. The vehicle wash water evaporates or percolates into the ground before leaving the property.

5. We confirm that all discharges related to the project activities, whether or not NPDES permit(s) and/or Section 401 Water Quality Certification are required, will comply with the State Water Quality Standards.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at (808) 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
Enclosure
cc: Blanca Lafolette, Pacific Rim Land, Inc. (w/enclosure)
Reed Ariyoshi, Warren S. Unemori Engineering, Inc. (w/enclosure)
F:\DATA\PacRim\GBIHI\ECL Response Letters\SOH CWB ecIresponse.ltr.doc

REVIEW OF STANDARD COMMENTS RELATING TO STATE ENVIRONMENTAL HEALTH CLEAN WATER PROGRAM

Clean Water Branch

- *Any project and its potential impacts to State waters must meet the State's: 1) Antidegradation policy, which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected; 2) Designated uses, as determined by the classification of the receiving State waters; and 3) water quality criteria (Hawaii Administrative Rules (HAR), Chapter 11-54).*

Response

The applicant acknowledges that the project must comply with the State's Antidegradation policy, Designated uses, and water quality criteria.

- *National Pollutant Discharge Elimination System (NPDES) permits are required for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, NPDES general permit coverage may be applied for by submitting a Notice of Intent (NOI) form: 1) storm water associated with industrial activities, as defined 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); 2) storm water associated with construction activities, including excavation, grading, clearing, demolition, uprooting of vegetation, equipment staging, and storage areas that result in the disturbance of equal to or greater than one (1) acre of total land area*; 3) treated effluent from leaking underground storage tank remedial activities; 4) once through cooling water less than one (1) million gallons per day; 5) hydrotesting water; 6) dewatering effluent; 7) treated effluent from petroleum bulk stations and terminals; 8) treated effluent from well drilling activities; 9) treated effluent from recycled water distribution systems; 10) storm water and certain non-storm water from a small municipal separate storm sewer system; and 11) circulation water from decorative ponds or tanks.*

**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 start of the construction activities.*

A separate NOI form for each type of discharge must be submitted at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl- index.html.

Response

The applicant acknowledges that a NPDES permit is required for discharges of wastewater, including storm water runoff, into State surface waters. Goodfellow Bros., Inc. has obtained a NPDES Permit for construction activity at the KRCF site in the past. However, the KRCF does not engage in quarry operations and has not been required to obtain a NPDES general permit in the past. The primary business at the site is the regional offices for GBI's Maui construction activities. As a secondary operation on a limited basis, the company recycles aggregate materials with a crusher. In addition, storm water runoff generated by improvements at the site are retained within an on-site sump. If a determination is made that GBI now needs a NPDES general permit, they will submit a Notice of Intent.

- *For types of wastewater discharges not listed above or wastewater discharging into Class 1 or Class AA waters, you may need to obtain an NPDES individual permit. Class 1 waters include, but is not limited to, all State waters in natural reserves, preserves, sanctuaries, and refuges established by the Department of Land and Natural Resources (DLNR) under Hawaii Revised Statutes (HRS), Chapter 195, or similar reserves for the protection of aquatic life established under HRS, Chapter 195.*

  An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge or start of construction activities. The NPDES application forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.

Response

The applicant acknowledges that an NPDES individual permit may be required for wastewater discharging into Class 1 or Class AA waters.

- *You must also submit a copy of the NOI or NPDES permit application to the State DLNR, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the CWB that SHPD has or is in the process of evaluating your project. Please submit a copy of your request for review by SHPD or SHPD's determination letter for the project along with your NOI or NPDES permit application, as applicable.*

Response

The applicant acknowledges that a copy of the NOI or NPDES permit application must be submitted to the State DLNR, State Historic Preservation District.

- *Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards.*

Response

The applicant acknowledges that all discharges related to project activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards.

- *Noncompliance with water quality requirements contained in HAR, Chapter 11-54 and/or permitting requirements specified in HAR, Chapter 11-55 may be subject to penalties of $25,000 per day per violation.*

Response

The applicant acknowledges that noncompliance with HAR 11-54 or 11-55 may result in penalties of $25,000 per day per violation.

OCT 21 2010

LINDA LINGLE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
DOH/CWB

10040PSS.10

October 20, 2010

Mr. Mich Hirano, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Subject: Early Consultation Request for the Proposed Kihei Rock Crushing Facility
Kihei, Island of Maui, Hawaii
TMK: (2) 2-2-002:078

Dear Mr. Hirano:

The Department of Health (DOH), Clean Water Branch (CWB) has reviewed the subject document and offers these comments on the project. Please note that our review is based solely on the information provided in the subject document and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.

   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.

   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. Pacific Rim Land, Inc. (PRL) is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of storm water associated with industrial activities into State surface waters. If the discharge would enter into Class A or Class 2 State waters, PRL shall apply for NPDES general permit coverage under HAR, Chapter 11-55, Appendix B by submitting the applicable Notice of Intent (NOI) forms.

8

3. PRL may be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of storm water runoff associated with construction activities, into State surface waters (HAR, Chapter 11-55, Appendix C). If the discharge would enter into Class A or Class 2 State waters, you may apply for NPDES general permit coverage by submitting the applicable Notice of Intent (NOI) forms.

   Coverage for storm water associated with construction activities is required for activities including excavation, grading, clearing, demolition, uprooting of vegetation, equipment staging, and storage areas 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 start of the construction activities.

   When applying for coverage for discharges of storm water associated with construction activity, the NOI must be submitted 30 calendar days before the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

4. For types of wastewater discharges not covered by an NPDES general permit, including runoff from the concrete truck wash and vehicle wash areas, or discharges to Class AA or Class 1 State waters, you would need an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.

5. Concrete truck wash water is not allowed to percolate into the ground.

6. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage is required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

10040PSS.10

If you have any questions, please visit our website at http://www.hawaii.gov/health/environmental/water/cleanwater/index.html, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

ALEC WONG, P.E., CHIEF
Clean Water Branch

SS:ml

c: DOH-EPO #I-3365 [via e-mail only]

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Alec Wong, P.E., Chief
Department of Health
Clean Water Branch
State of Hawaii
P.O. Box 3378
Honolulu, Hawaii 96801-3378

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)-2-2-002:078, DOH/CWB 10040PSS.10

Dear Mr. Wong:

Thank you for your letter, dated October 20, 2010, providing additional early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

1. The Department's standard comments, as listed on the website indicated in your letter, have been reviewed. Our response to your October 11, 2010 letter includes a list of applicable comments as well as the applicant's response to each.

2. We acknowledge and confirm the project will follow applicable requirements of the antidegradation policy (HAR, Section 11-54-1.1), designated uses (HAR, Section 11-54-3), and water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

3. We note the determination that the applicant is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharges associated with industrial activities into State surface waters. Goodfellow Bros., Inc. has obtained a NPDES Permit for construction activity at the KRCF site in the past. However, the KRCF does not engage in quarry operations and has not been required to obtain a NPDES general permit in the past. The primary business at the site is the regional offices for GBI's Maui construction activities. As a secondary operation on a limited basis, the company recycles aggregate materials with a crusher. In addition, storm water runoff generated by improvements at the KRCF are retained within an on-site sump. If

a determination is made that GBI now needs a NPDES general permit, they will submit a Notice of Intent.

4. The proposed project does not entail new improvements to the existing Kihei Rock Crushing Facility. However, if such improvements are proposed at some point in the future, we acknowledge that the applicant may be required to obtain a new NPDES permit for discharges of storm water runoff associated with construction activities into State waters, as applicable.

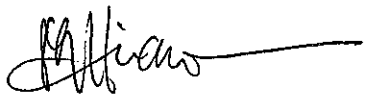
5. We acknowledge and confirm that, for types of wastewater discharges not covered by an NPDES general permit, including runoff from the concrete truck wash and vehicle wash areas, or discharges to Class AA or Class 1 State waters, a NPDES individual permit will be obtained, as applicable. Concrete truck wash no longer occurs at the KRCF and vehicle wash water does not leave the site.

6. We understand that concrete truck wash water is not allowed to percolate into the ground. A concrete truck wash area was previously located on the site, but is no longer present.

7. We acknowledge and confirm that all discharges related to the project construction activities, whether or not NPDES permit(s) and/or Section 401 Water Quality Certification are required, will comply with the State Water Quality Standards.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at (808) 244-2015.

Sincerely,



Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
Reed Ariyoshi, Warren S. Unemori Engineering, Inc.
F:\DATA\PacRim\GBIHI\ECL Response Letters\DOH CWB eclresponse.ltr.doc

OCT 20 2010

LINDA LINGLE
GOVERNOR OF HAWAII

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

LORRIN W. PANG, M. D., M. P. H.
DISTRICT HEALTH OFFICER

STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
54 HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2102

October 19, 2010

Mr. Mich Hirano, AICP
Principal
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Hirano:

Subject: **Early Consultation Request for the proposed Kihei Rock Crushing Facility**
TMK: (2) 2-2-002:078
Kihei, Maui, Hawaii

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

It is strongly recommended that the Standard Comments found at the Department's website: http://hawaii.gov/health/environmental/env-planning/landuse/landuse.html be reviewed, and any comments specifically applicable to this project should be adhered to.

Sincerely,

Patti Kitkowski

Patti Kitkowski
Acting District Environmental Health Program Chief

c EPO

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Patti Kitkowski
Acting District Environmental Health Program Chief
Maui District Health Office
Department of Health
State of Hawaii
54 High Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Ms. Kitkowski:

Thank you for your letter, dated October 19, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

The standard comments relating to Environmental Health programs, as listed on the department's website, have been reviewed. We are enclosing a list of applicable comments as well as the applicant's response to each. See **Exhibit "A"**.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
Enclosure
cc: Blanca Lafolette, Pacific Rim Land, Inc. (w/enclosure)
F:\DATA\PacRim\GBIH\ECL Response Letters\DOHMauiecIresponse.ltr.doc

REVIEW OF STANDARD COMMENTS RELATING TO STATE ENVIRONMENTAL HEALTH PROGRAMS

Environmental Planning Office

- *Identify the waterbody type and class, as defined in Hawaii Administrative Rules Chapter 11-54 (http://www.state.hi.us/health/about/rules/11-54.pdf), of all potentially affected water bodies.*

Response:

There are no streams, wetlands, or reservoirs in the immediate vicinity of the project site and the shoreline is approximately 0.5 miles away.

- *Identify any existing National Pollutant Discharge Elimination System (NPDES) permits and related connection permits (issued by permittees) that will govern the management of water that runs off or is discharged from the proposed project site or facility. Please include NPDES and other permit numbers; names of permittees, permitted facilities, and receiving waters (including waterbody type and class as in 1. above); diagrams showing drainage/discharge pathways and outfall locations; and note any permit conditions that may specifically apply to the proposed project.*

Response:

Goodfellow Bros., Inc. has obtained a NPDES permit for construction activity at the KRCF site in the past. However, the KRCF does not have any active NPDES permits.

- *Identify any planning documents, groups, and projects that include specific prescriptions for water quality management at the proposed project site and in the potentially affected waterbodies. Please note those prescriptions that may specifically apply to the proposed project.*

Response:

There are no existing water quality actions being undertaken at the project site.

- *Identify all potentially affected water bodies that appear on the current List of Impaired Waters in Hawaii Prepared under Clean Water Act.*

Response:

There are no streams, wetlands, or reservoirs in the immediate vicinity of the project site and the shoreline is approximately 0.5 miles away.

- *We suggest that each submittal identify and analyze potential project impacts at a watershed scale by considering the potential contribution of the proposed project to cumulative, multi-project watershed effects on hydrology, water quality, and aquatic and riparian ecosystems.*

  We also suggest that each submittal broadly evaluate project alternatives by identifying more than one engineering solution for proposed projects. In particular, we suggest the consideration of "alternative," "soft," and "green" engineering solutions for channel modifications that would provide a more environmentally friendly and aesthetically pleasing channel environment and minimize the destruction of natural landscapes.

Response:

Improvements are limited to upgrading of the waterline to meet fire flow requirements. As such, the proposed actions are not expected to significantly adversely impact hydrology, water quality and aquatic and riparian ecosystems in vicinity of the project site. There are no channel modifications proposed.

Hazard Evaluation & Emergency Response Office

- *A Phase I Environmental Site Assessment (ESA) should be conducted for developments or redevelopments. If the investigation shows that a release of petroleum, hazardous substance, pollutants or contaminants occurred at the site, the site should be properly characterized through an approved Hawaii State Department of Health (DOH)/Hazard Evaluation and Emergency Response Office (HEER) soil and or groundwater sampling plan. If the site is found to be contaminated, then all removal and remedial actions to clean up hazardous substance or oil releases by past and present owners/tenants must comply with chapter 128D, Environmental Response Law, HRS, and Title 11, Chapter 451, HAR, State Contingency Plan.*

Response:

The proposed action does not involve new operational changes at the KRCF. Improvements are limited to upgrades of the existing waterline. Given the project sites long term use as a rock crushing facility and baseyard, agricultural pest control chemicals and fertilizers have not been utilized on the property for an extended period of time. Hazardous materials related to past agricultural practices is unlikely to be detected due to the cattle grazing history. As such, a Phase I ESA has not been conducted.

Clean Air Branch

- *A significant potential for fugitive dust emissions exists during all phases of construction and operations. Proposed activities that occur in proximity to existing residences, businesses, public areas or thoroughfares, exacerbate potential dust problems. It is recommended that a dust control management plan be developed which identifies and addresses all activities that have a potential to generate fugitive dust. The plan, which does not require DOH approval, would help with recognizing and minimizing the dust problems from the proposed project.*

  Activities must comply with the provisions of Hawaii Administrative Rules, § 11-60-1-33 on Fugitive Dust. In addition, for cases involving mixed land use, we strongly recommend that buffer zones be established, wherever possible, in order to alleviate potential nuisance problems.

  The contractor should provide adequate measures to control the fugitive dust from the road areas and during the various phases of construction. Examples of measures that can be implemented to control dust include, but are not limited to, the following:

  a) Planning the different phases of construction, focusing on minimizing the amount of dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;
  b) Providing an adequate water source at the site prior to start-up of construction activities;
  c) Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;
  d) Minimizing dust from shoulders and access roads;
  e) Providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
  f) Controlling dust from debris being hauled away from the project site.

Response:

Improvements are limited to upgrading of the waterline. Dust control Best Management Practices are implemented to minimize the potential for dust-related impacts from site activities. These include regular watering and use of sprinklers on rock crushing equipment and when hauling takes place. Trucks hauling materials from the KRCF site are covered to minimize dust

Clean Water Branch

The applicant will respond separately to the Clean Water Branch's comments received in letters dated October 11, 2010 and October 20, 2010.

Solid and Hazardous Waste Branch

- *The state regulations for hazardous waste are in Chapters 11-260 to 11-280, Hawaii Administrative Rules (HAR). These rules apply to the identification, handling, transportation, storage and disposal of regulated hazardous waste. Generators, transporters and treatment, storage and disposal facilities of hazardous waste must adhere to these requirements or be subject to fines and penalties.*

  Response:

  The KRCF does not handle hazardous waste material.

- *Generators of solid waste are required to ensure that their wastes are properly delivered to permitted solid waste management facilities. Managers of construction and demolition projects should require their waste contractors to submit disposal receipts and invoices to ensure proper disposal of wastes.*

  Response:

  Aloha Waste, a private company, provides waste collection services for the project site.

- *HRS Chapter 342G encourages the reduction of waste generation, reuse of discarded materials, and the recycling of solid waste. Businesses, property managers and developers, and government entities are highly encouraged to develop solid waste management plans to ensure proper handling of wastes. Solid waste management plans should also seek to maximize waste diversion and minimize disposal. Such plans should include designated areas to promote the collection of reusable and recyclable materials.*

  Response:

  The applicant recognizes the benefits derived by responsible waste management and reduction measures. As part of the KRCF services, concrete is periodically recycled. As for facility operations, solid waste management opportunities, such as designation of reuse and recycling areas will be evaluated.

Noise, Radiation, and Indoor Air Quality Branch

- *Project activities shall comply with Chapter 11-39 (Air Conditioning and Ventilating) and 11-46 (Community Noise Control) of the Administrative Rules of the Department of Health.*

Response:

The applicant will comply with the applicable requirements of HAR Chapter 11-39, Chapter 11-45, and Chapter 11-46 regulating indoor air quality, and community noise control, respectively.

Rock crushing activity occurs on an as needed basis, typically every four years. Prior rock crushing activity was governed by a Community Noise Permit (M 07-005). A new Community Noise Permit will be obtained for the site prior to the resumption of rock crushing activity.

OCT 25 2010

LINDA LINGLE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

October 21, 2010

Mr. Mich Hirano, AICP, Principal
Munekiyo & Hiraga, Inc.
305 High Street Suite 104
Wailuku, Hawaii 96793

Dear Mr. Hirano:

Subject: Early Consultation Request for the Proposed Kihei Rock Crushing Facility

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR), Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Division of Aquatic Resources, Division of Forestry & Wildlife, Division of State Parks, Engineering Division, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Historic Preservation will be submitting comments through a separate letter. Should you have any questions, please feel free to call our office at 587-0414. Thank you.

Sincerely,

Russell Y. Tsuji
Administrator

54342

LINDA LINGLE
GOVERNOR OF HAWAII

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

RECEIVED
STATE PARKS DIV

'10 OCT -6 A10 :12

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

DEPT OF LAND & NATURAL RESOURCES

October 5, 2010

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
__Div. of Boating & Ocean Recreation
x Engineering Division
__Div. of ~~Forestry~~ & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
__Office of Conservation & Coastal Lands
__Land Division –

RECEIVED
LAND DIVISION
2010 OCT 11 A 11:09
DEPT. OF LAND & NATURAL RESOURCES STATE OF HAWAII

FROM: Charlene Unoki, Assistant Administrator
SUBJECT: Early Consultation Request for the Proposed Kihei Rock Crushing Facility
LOCATION: Island of Maui
APPLICANT: Munekiyo & Hiraga, Inc. on behalf of Pacific Rim Land, Inc.

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by October 20, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
(✓) We have no comments.
( ) Comments are attached.

Signed: _____
Date: 10/7/10

21

LD

LINDA LINGLE
GOVERNOR OF HAWAII

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

RECEIVED
LAND DIVISION
2010 OCT 20 P 2:55
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

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

October 5, 2010

MEMORANDUM

DAR 3403

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
~~Div. of Boating~~ & Ocean Recreation
x Engineering Division
Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
Office of Conservation & Coastal Lands
Land Division –

RECEIVED
OCT 6 2010
AQUATIC RESOURCES

FROM: Charlene Unoki, Assistant Administrator
SUBJECT: Early Consultation Request for the Proposed Kihei Rock Crushing Facility
LOCATION: Island of Maui
APPLICANT: Munekiyo & Hiraga, Inc. on behalf of Pacific Rim Land, Inc.

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by October 20, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
(x) We have no comments.
( ) Comments are attached.

Signed: _____
Date: 10-18-10

LINDA LINGLE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

October 5, 2010

RECEIVED
LAND DIVISION
2010 OCT 15 A 9:05
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

'10 OCT 05 PM02:01 ENGINEERING

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
__Div. of Boating & Ocean Recreation
x Engineering Division
__Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
__Office of Conservation & Coastal Lands
__Land Division –

FROM: Charlene Unoki, Assistant Administrator
SUBJECT: Early Consultation Request for the Proposed Kihei Rock Crushing Facility
LOCATION: Island of Maui
APPLICANT: Munekiyo & Hiraga, Inc. on behalf of Pacific Rim Land, Inc.

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by October 20, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
( ) We have no comments.
(X) Comments are attached.

Signed:
Date: 10/13/10

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/CharleneUnoki
RE:EarlyConsultKiheiRockCrushingFacility
Maui.520

COMMENTS

( ) We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone ___.

(X) **Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zones X. The Flood Insurance Program does not have any regulations for developments within Flood Zones X.**

( ) Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ___.

( ) Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

( ) Mr. Robert Sumitomo at (808) 768-8097 or Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of Planning and Permitting.

( ) Mr. Carter Romero at (808) 961-8943 of the County of Hawaii, Department of Public Works.

( ) Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.

( ) Ms. Wynne Ushigome at (808) 241-4890 of the County of Kauai, Department of Public Works.

( ) The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay a resource development charge, in addition to Water Facilities Charges for transmission and daily storage.

( ) The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

( ) Additional Comments: _____

_____

( ) Other: _____

_____

Should you have any questions, please call Ms. Suzie S. Agraan of the Planning Branch at 587-0258.

Signed: _____
CARTY S. CHANG, CHIEF ENGINEER

Date: 10/13/10

LINDA LINGLE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

October 5, 2010

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
__Div. of Boating & Ocean Recreation
x Engineering Division
X Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
_Office of Conservation & Coastal Lands
__Land Division –

RECEIVED
LAND DIVISION
2010 OCT 13 P 3:06
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

FROM: Charlene Unoki, Assistant Administrator
SUBJECT: Early Consultation Request for the Proposed Kihei Rock Crushing Facility
LOCATION: Island of Maui
APPLICANT: Munekiyo & Hiraga, Inc. on behalf of Pacific Rim Land, Inc.

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by October 20, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
(X) We have no comments.
( ) Comments are attached.

Signed: _____
Date: 10/12/10

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Russell Y. Tsuji, Administrator
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Mr. Tsuji:

Thank you for your letter, dated October 21, 2010, providing early consultation comments from the Division of Forestry and Wildlife, Division of Aquatic Resources, Division of State Parks and the Engineering Division on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

We acknowledge that the project site is located in the Federal Insurance Rate Map, Flood Zone X (unshaded), an area of minimal flood hazard, and that the Flood Insurance Program does not have any regulations for developments within Flood Zones X.

We further acknowledge that the Division of Forestry and Wildlife, Division of Aquatic Resources and the Division of State Parks have no comments on the proposed project.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at (808) 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
F:\DATA\PacRim\GBIHI\ECL Response Letters\DLNRTsujiecIresponse.ltr.doc

APR 06 2011

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

March 31, 2011

Mich Hirano, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

LOG NO: 2010.1270
DOC NO: 1103MD74
Archaeology

Dear Mr. Hiraga:

SUBJECT: **Chapter 6E-42 Historic Preservation Review –**
Request for Consultation re: CPA and CIZ for Kihei Rock Crushing Facility
Waiohuli Ahupua'a, Makawao District, Island of Maui
TMK: (2) 2-2-002:078

Thank you for the opportunity to comment on the aforementioned project, which we received on October 6, 2010. We apologize for the delay in our reply. Our review is based on reports, correspondence, maps and aerial photographs kept on file at the State Historic Preservation Division.

Pacific Rim Land, Inc., will be seeking a Community Plan Amendment to the Kiehi-Makena Community Plan's land use map, a County Change in Zoning and a State Land Use Boundary Amendment to the existing rock crushing facility. No ground-altering activities are being considered as part of these proposed changes.

Based on the information above, we determine that there will be no effect to historic properties by the proposed changes. In the event that historic properties, including concentrations of artifacts, human skeletal remains, subsurface cultural deposits, or structural remnants over 50 years in age are identified during the grubbing activities, please stop all work in the vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division, Maui Island Section immediately at (808) 243-1285. If you have questions about this letter please contact me at (808) 243-5169 or via email to: morgan.e.davis@hawaii.gov.

Aloha,

Morgan E. Davis
Lead Archaeologist, Maui Island Section
State Historic Preservation Division

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Morgan E. Davis, Lead Archaeologist
Maui Island Section
State of Hawaii
Department of Land and Natural Resources
State Historic Preservation Division
601 Kamokila Boulevard, Room 555
Kapolei, Hawaii 96707

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Ms. Davis:

Thank you for your letter, dated March 31, 2011, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter.

We acknowledge your determination that the proposed land use changes will have no effect to historic properties. No new operational improvements are proposed. However, the waterline within the property will need to be upgraded to meet the Fire Department's fire flow requirements for heavy industrial uses. Ground altering activity for the waterline replacement will be limited to existing waterline trenches which have been previously disturbed. In the event that historic properties are identified, the applicant will stop all work in the vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division, Maui Island Section.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at (808) 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
Reed Ariyoshi, Warren S. Unemori Engineering, Inc.
K:\DATA\PacRim\GBIHI\ECL Response Letters\SHPDecIresponse.ltr.doc

OCT 18 2010

LINDA LINGLE
GOVERNOR OF HAWAI'I

KATHERINE PUANA KEALOHA
DIRECTOR

STATE OF HAWAI'I
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 S BERETANIA ST. SUITE 702
HONOLULU, HAWAI'I 96813
Tel. (808) 586-4185
Fax. (808) 586-4186
Email: oeqc@doh.hawaii.gov

October 14, 2010

Mich Hirano
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawai'i 969793

Subject: Early Consultation Request for the Proposed Kihei Rock Crushing Facility at TMK (2) 2-2-002:078, Kihei, Maui, Hawai'i

Dear Mr. Hirano:

Thank you for your early consultation letter on September 29, 2010. Your letter identified the trigger(s) of Chapter 343, Hawaii Revised Statutes, and the approving agency for the required environmental study.

Your letter further states that you will be preparing a draft environmental assessment for the subject action on behalf of your client, Pacific Rim Land, Inc. Section 11-200-10, Hawaii Administrative Rules, requires that the environmental assessment shall contain, but not be limited to the following information:

A. Identification of applicant or proposing agency;
B. Identification of approving agency, if applicable;
C. Identification of agencies, citizen groups, and individuals consulted in making the assessment;
D. General description of the action's technical, economic, social, and environmental characteristics;
E. Summary description of the affected environment, including suitable and adequate regional, location and site maps such as Flood Insurance Rate Maps, Floodway Boundary Maps, or United States Geological Survey topographic maps;
F. Identification and summary of impacts and alternatives considered;
G. Proposed mitigation measures;
H. Agency determination or, for draft environmental assessments only, an anticipated determination;
I. Findings and reasons supporting the agency determination or anticipated determination;
J. Agencies to be consulted in the preparation of the EIS, if an EIS is to be prepared;

K. List of all permits and approvals (State, federal, county) required; and
L. Written comments and responses to the comments under the early consultation provisions of sections 11-200-9(a)(1), 11-200-9(b)(1), or 11-200-15, and statutorily prescribed public review periods.

Once your environmental study is complete, please coordinate with the Maui Planning Commission for the review and determination of your proposed action and submittal requirements to the Office of Environmental Quality Control for publication on the Environmental Notice.

Please feel free to call Herman Tuiolosega of my staff at (808) 586-4185 if you have further questions.

Sincerely,

KATHERINE PUANA KEALOHA
Director

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Gary Hooser
Office of the Director
Office of Environmental Quality Control
State of Hawaii
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)-2-2-002:078

Dear Mr. Hooser:

Thank you for your department's letter, dated October 14, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

The Environmental Assessment (EA) will be prepared in compliance with Section 11-200-10, Hawaii Administrative Rules, Environmental Impact Statement Rules. Following the completion of the EA, the applicant will coordinate with the Maui Planning Commission for the review and determination of the proposed action and submittal requirements to the Office of Environmental Quality Control for publication in the Environmental Notice.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft EA for the project. Should you have any questions or further comments, please contact me at (808) 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
F:\DATA\PacRim\GBIH\ECL Response Letters\OEQCeclresponse.ltr.doc

OCT 27 2010

PHONE (808) 594-1888

FAX (808) 594-1865

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

HRD10/5290

October 19, 2010

Mich Hirano
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawai'i 96793

RE: Pre- Enviromental Assessment consultation
Kihei Rock Crushing Facility
Kihei, Island of Maui

Aloha e Mich Hirano,

The Office of Hawaiian Affairs (OHA) is in receipt of your September 29, 2010 letter initiating consultation ahead of an environmental assessment (EA) to facilitate the continued operations of the Kihei Rock Crushing Facility (KRCF).

Based on the information contained within your letter, it is our understanding the KRCF was established on a 14.5 acre parcel (parcel) in 1979. Since this parcel is designated agricultural under the State land Use District and Maui County zoning, the heavy industrial operations of the KRCF have been permitted until 2017 via a Land Use Commission (LUC) special use permit and Maui County conditional permit. The parcel is also designated for agricultural use within the Kihei-Makena Community Plan (CP).

The owner of the parcel is seeking to establish appropriate land use entitlements and is preparing a District Boundary Amendment (DBA) application (Agriculture to Urban), Kihei-Makena Community Plan amendment (Agriculture-Heavy Industrial) and Maui County Change in zoning (CIZ) application (Agriculture to M-2, Heavy Industrial).

The amendment to the Kihei-Makena CP triggers the provisions of Chapter 343, Hawaii Revised Statutes. The Maui County Planning Commission will be the approving agency for the EA. We look forward to the opportunity to review the EA and offer specific comments on the CP amendment at that time.

Since the EA will be the primary support document for the DBA and CIZ, we would like to offer the following comments:

In general, OHA opposes reclassifications which result in the loss of agricultural lands with the potential to be productive to industrial use and urban development. One of the fundamental objectives of the State Agricultural Function Plan (1991) is to encourage and develop diversified agriculture throughout Hawai'i which will support our local economy and contribute to reducing our dependence on imported products. We firmly believe this objective can be obtained by protecting and prioritizing initiatives on agricultural lands with the highest potential for productivity.

The KRCF has been in operations for over thirty years. With this in mind, OHA acknowledges that if approved this reclassification will not have a significant impact on agricultural endeavors in Hawai'i.

Thank you for initiating consultation at this early stage and providing an opportunity to comment. Should you have any questions, please contact Keola Lindsey at 594-0244 or keolal@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Chief Executive Officer

C: OHA- Maui Community Resources Coordinator

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Clyde W. Nāmu`o, Chief Executive Officer
Office of Hawaiian Affairs
State of Hawaii
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Mr. Nāmu`o:

Thank you for your letter, dated October 19, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility (KRCF). On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

We acknowledge that the Office of Hawaiian Affairs (OHA) generally opposes reclassifications that result in the loss of agricultural lands that have the potential to be productive. However, because the KRCF has been in operation for over thirty years, we note that OHA acknowledges that the proposed reclassification will not have a significant impact on agricultural endeavors in Hawaii.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at (808) 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
F:\DATA\PacRim\GBIH\ECL Response Letters\OHAeclresponse.ltr.doc

OCT 29 2010

LINDA LINGLE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

October 27, 2010

Munekiyo & Hiraga, Inc.
305 High Street Suite 104
Wailuku, Hawaii 96793

Attention: Mr. Mich Hirano, AICP, Principal

Ladies and Gentlemen:

Subject: Early Consultation Request for the Proposed Kihei Rock Crushing Facility

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR), Land Division distributed or made available a copy of your report pertaining to the subject matter to the Commission on Water Resource Management for their review and comment.

The Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0414. Thank you.

Sincerely,

Charlene Unoki

Charlene Unoki
Assistant Administrator

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
WILLIAM D. BALFOUR, JR.
SUMNER ERDMAN
NEAL S. FUJIWARA
CHIYOME L. FUKINO, M.D.
DONNA FAY K. KIYOSAKI, P.E.
LAWRENCE H. MIIKE, M.D., J.D.

LENORE N. OHYE
ACTING DEPUTY DIRECTOR

RECEIVED
LAND DIVISION
2010 OCT 26 P 3:25
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

October 25, 2010

TO: Russell Y. Tsuji, Administrator, Administrator
Land Division

FROM: Lenore N. Ohye, Acting Deputy Director
Commission on Water Resource Management

SUBJECT: Kihei Rock Crushing Facility

FILE NO.: N/A
TMK NO.: (2) 2-2-002:078

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore, all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at http://www.hawaii.gov/dlnr/cwrm.

Our comments related to water resources are checked off below.

☐ 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.

☐ 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.

☐ 3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.

☐ 4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at http://www.usgbc.org/leed. A listing of fixtures certified by the EPA as having high water efficiency can be found at http://www.epa.gov/watersense/pp/index.htm.

☒ 5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at http://hawaii.gov/dbedt/czm/initiative/lid.php.

☒ 6. We recommend the use of alternative water sources, wherever practicable.

☐ 7. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

Permits required by CWRM:
Additional information and forms are available at http://hawaii.gov/dlnr/cwrm/resources_permits.htm.

☐ 8. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water.

☐ 9. A Well Construction Permit(s) is (are) required any well construction work begins.

☐ 10. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.

☐ 11. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.

☐ 12. Ground water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.

☐ 13. A Stream Channel Alteration Permit(s) is (are) required before any alteration(s) can be made to the bed and/or banks of a stream channel.

☐ 14. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is (are) constructed or altered.

☐ 15. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.

☐ 16. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.

☒ OTHER:

The document indicates that the facility is served by a private water system. Moreover, the proposed facility is adjacent to the regional wastewater reclamation facility, therefore would have non-potable treated water available. A portion of the discharge from the facility is injected via deep well on site.

If there are any questions, please contact Charley Ice at 587-0218.

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Russell Tsuji, Administrator
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Mr. Tsuji:

Thank you for the letter from the Department of Land and Natural Resources, dated October 27, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter.

We acknowledge your recommendation for the use of Best Management Practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Vehicle wash water does not leave the property or discharge into coastal waters. All materials entering the site are pre-screened to ensure that the facility does not accept or store materials from polluting sources.

We also note that reclaimed water is available from the adjacent Kihei Wastewater Reclamation Facility. The Draft Environmental Assessment (EA) will include a discussion of reclaimed water usage at the project site.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at (808) 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
Reed Ariyoshi, Warren S. Unemori Engineering, Inc.
F:\DATA\PacRim\GBIHI\ECL Response Letters\DLNRecIresponse.ltr.doc

OCT 22 2010

CHARMAINE TAVARES
MAYOR

JEFFREY A. MURRAY
CHIEF

ROBERT M. SHIMADA
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE AND PUBLIC SAFETY
FIRE PREVENTION BUREAU

313 MANEA PLACE • WAILUKU, HAWAII 96793
(808) 244-9161 • FAX (808) 244-1363

October 20, 2010

Munekiyo & Hiraga, Inc.
Attn: Mich Hirano
305 High Street, Suite 104
Wailuku, HI 96793

Subject: **Early Consultation Request**
Proposed Kihei Rock Crushing Facility
Kihei
TMK: (2) 2-2-002:078

Thank you for the opportunity to comment on this subject. At this time, the Fire Prevention Bureau provides the following comment:

- Based upon use, heavy industrial areas require a water supply for fire protection in the amount of 2500 gallons/minute and fire hydrant spacing at a maximum of 250 feet between hydrants.

Our office reserves the right to comment on all building permit applications for this area. All new structures over 700 square feet will require fire protection.

If you have any questions, you may call me at 244-9161 ext. 23 or fax at 244-1363.

Sincerely,

Captain Paul Haake
Fire Prevention Bureau

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Paul Haake, Captain
Fire Prevention Bureau
Department of Fire and Public Safety
County of Maui
313 Manea Place
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Captain Haake:

Thank you for your letter, dated October 20, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

We acknowledge that heavy industrial areas require a water supply for fire protection in the amount of 2,500 gallons/minute and fire hydrant spacing at a maximum of 250 feet between hydrants. If the land entitlements are granted, the applicant will update the existing 8-inch fire protection waterline to a 10-inch waterline to meet fire flow requirements. Coordination will be carried out with the Department of Fire and Public Safety to ensure fire hydrants will be installed to meet maximum spacing requirements.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
Reed Ariyoshi, Warren S. Unemori Engineering, Inc.
F:\DATA\PacRim\GBIHI\ECL Response Letters\DFPSecIresponse,ltr.doc

DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
COUNTY OF MAUI

OCT 07 2010

CHARMAINE TAVARES
Mayor

LORI TSUHAKO
Director

JO-ANN T. RIDAO
Deputy Director

2200 MAIN STREET • SUITE 546 • WAILUKU, HAWAII 96793 • PHONE (808) 270-7805 • FAX (808) 270-7165
MAILING ADDRESS: 200 SOUTH HIGH STREET • WAILUKU, HAWAII 96793 • EMAIL director.hhc@mauicounty.gov

October 5, 2010

Mr. Mich Hirano, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Hirano:

SUBJECT: Early Consultation Request for the Proposed Kihei Rock Crushing Facility at TMK (2) 2-2-002:078, Kihei, Maui, Hawaii

The Department of Housing and Human Concerns is in receipt of your letter dated September 29, 2010 requesting early consultation on the above subject project.

It is our understanding that the Kihei Rock Crushing Facility (KRCF) was originally established at this site in 1979. It is also our understanding that the purpose of this request is to facilitate the existing heavy industrial use of this site with appropriate land use designations and zoning, in order to establish the long-term use of the KRCF.

Based on the information provided in your letter, this project is not subject to the provisions of Maui County Code, Chapter 2.96, Residential Workforce Housing Policy.

Thank you for including the Department of Housing and Human Concerns in this early consultation.

Sincerely,

LORI TSUHAKO, LSW, ACSW
Director of Housing and Human Concerns

xc: Housing Division

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

JoAnn Ridao, Director
Department of Housing and Human Concerns
County of Maui
2200 Main Street, Suite 546
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Ms. Ridao:

Thank you for your department's letter, dated October 5, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

We acknowledge and confirm the Department of Housing and Human Concern's comment that the project is not subject to the provisions of Maui County Code, Chapter 2.96, Residential Workforce Housing Policy.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
F:\DATA\PacRim\GBIHI\ECL Response Letters\DHHCeclresponse.ltr.doc

OCT 13 2010

CHARMAINE TAVARES
Mayor

TAMARA HORCAJO
Director

ZACHARY Z. HELM
Deputy Director

(808) 270-7230
FAX (808) 270-7934

DEPARTMENT OF PARKS & RECREATION

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

October 7, 2010

Mich Hirano, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Request for the Proposed Kihei Rock Crushing Facility at TMK: 2-2-002:078, Kihei, Maui, Hawaii

Dear Mr. Hirano:

We have reviewed the Kihei Rock Crushing Facility project and have no comments or objections to the proposed project.

Thank you for the opportunity to review and comment on this matter. Please feel free to contact me or Mr. Patrick Matsui, Chief of Parks Planning and Development Division at 270-7387 should you have any other questions.

Sincerely,

TAMARA HORCAJO
Director of Parks & Recreation

c: Patrick Matsui, Chief of Parks Planning and Development

TH:PM:do

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Glenn Correa, Director
Department of Parks and Recreation
County of Maui
700 Hali`a Nakoa Street, Unit 2
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Mr. Correa:

Thank you for your department's letter, dated October 7, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

We acknowledge that the Department of Parks and Recreation has no comments or objections to the proposed project.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
GB\KiheiRock\ECL Response Letters\DPRecIresponse.ltr.doc

CHARMAINE TAVARES
Mayor
KATHLEEN ROSS AOKI
Director
ANN T. CUA
Deputy Director

OCT 2 0 2010

COUNTY OF MAUI

DEPARTMENT OF PLANNING

October 19, 2010

Mr. Mich Hirano, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Hirano:

SUBJECT: EARLY CONSULTATION IN PREPARATION OF A DRAFT ENVIRONMENTAL ASSESSMENT AND PROPOSED APPLICATIONS FOR THE KIHEI ROCK CRUSHING FACILITY LOCATED AT KIHEI, MAUI, HAWAII; TMK: (2) 2-2-002:078 (RFC 2010/0150)

The Department of Planning (Department) is in receipt of the above-referenced request for comment for the proposed project at the Kihei Rock Crushing Facility. The Department understands the proposed action includes the following:

- A request for District Boundary Amendment, Community Plan Amendment and Change in Zoning for consistency and long-term use. An Environmental Assessment (EA) will also be prepared pursuant to Chapter 343, HRS because of the proposed Community Plan Amendment;

- The Applicant (Pacific Rim Land, Inc.) has a State Land Use Commission Special Use Permit (SUP2 79/0003) and Conditional Permit (CP 2006/0010) for the property. These permits are set to expire in October 2016 and November 2017 unless requests for extension are made in a timely manner; and

- The property is 14.5-acres located on the east side of Piilani Highway, just south of the Kihei Wastewater Reclamation Facility.

Based on the foregoing, the Department provides the following comments in preparation of the Draft EA and the necessary applications:

1. The land use designations for TMK: (2) 2-2-002:078 are as follows:

   a. State Land Use – Agricultural
   b. Kihei-Makena Community Plan – Agriculture
   c. County Zoning - Agriculture
   d. Other – Located outside of the Special Management Area. It appears these designations have been confirmed by ZAED;

2. Provide State Land Use, Zoning, and Community Plan maps showing the subject property and the land use designations of surrounding properties. Please also identify surrounding land uses on this map;

3. The Department's Administration is currently drafting new legislation to create an M-3 Zoning District strictly for heavy industrial uses and to update the current M-1 and M-2 zoning codes. Please contact Joseph Alueta in Administration to discuss these proposed changes. You should include analysis of the proposed updates to the industrial codes as well as consider a change in zoning to the proposed M-3 zoning district;

4. The Draft Environmental Impact Statement should include a thorough discussion of how the proposed project implements the Countywide Policy Plan adopted in March 2010 as well as the Kihei-Makena Community Plan;

5. Discuss what odors and noises are created at the facility and how these may affect the general public. Also, provide the distance to the nearest residential or commercial area;

6. Rezoning the property to Heavy Industrial would still result in the use requiring a use permit from the Maui Planning Commission with approval by the Maui County Council (Council), per Section 19.26.020 (28) of the Maui County Code; and

7. The project site should be within the Urban Growth Boundaries when they are adopted by the Council. Currently, it appears the project site is located within the draft growth boundaries. If not within the growth boundaries the Department would not support your project.

Thank you for the opportunity to comment. Should you require further clarification, please contact Staff Planner Joseph Prutch at joseph.prutch@mauicounty.gov or at (808) 270-7512.

Sincerely,

CLAYTON I. YOSHIDA, AICP
Planning Program Administrator

for KATHLEEN ROSS AOKI
Planning Director

xc: Joseph W. Alueta, Administration
Joseph M. Prutch, Staff Planner
Department of Planning, Long Range Division
Project File
General File

KRA:CIY:JMP:atn
K:\WP_DOCS\PLANNING\RFC\2010\0150_KiheiRockCrushFac\PreConcult.doc

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Clayton Yoshida, Planning Program Administrator
Attention: Joseph Prutch
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Mr. Yoshida:

Thank you for your letter, dated October 19, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

1. We acknowledge that the land use designations for the proposed project are as follows:
   a. State Land Use – Agricultural
   b. Kihei-Makena Community Plan – Agriculture
   c. County Zoning – Agricultural
   d. Other - Located outside of the Special Management Area

2. The Draft Environmental Assessment (EA) will include State Land Use and Community Plan maps and identify surrounding land uses. However, the County of Maui's zoning maps are not readily accessible for reproduction. As such, the Draft EA will include the Zoning Confirmation Form, which confirms that the project site is zoned "Agricultural".

3. We acknowledge that the Department of Planning is currently drafting new legislation to create a M-3 Zoning District strictly for heavy industrial uses and to update the current M-1 and M-2 zoning codes. The proposed M-3 zoning district has not yet been adopted. As such, a Change in Zoning to the "M-2, Heavy Industrial" zoning district is currently proposed. However, should the County Council and Mayor adopt the proposed M-3 industrial district in its current draft

form, the applicant would like consideration for the Change in Zoning (CIZ) to the "M-3, Heavy Industrial" district. This would eliminate the need for the County Special Use Permit.

4. The Draft EA will include a discussion of how the proposed project implements the Countywide Policy Plan and the Kihei-Makena Community Plan.

5. The Draft EA will discuss the odors and noises that are created at the facility and mitigating measures, as applicable, to minimize any impacts to the general public.

6. We acknowledge that rezoning the property to the "M-2, Heavy Industrial" district would still result in the need for a County Special Use Permit (CUP) from the Maui Planning Commission. A CUP application will be submitted concurrently with the Community Plan Amendment and Change in Zoning applications. However, if the Council and Mayor approve the proposed M-3 industrial district, the applicant would like to modify the CIZ to the M-3 district.

7. We acknowledge that the project site is located within the Draft Maui Island Plan Urban Growth Boundary. A map of the draft Urban Growth Boundary will be included in the Draft EA. We further acknowledge that if the project is not within the growth boundary, the Department would not support the project.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
F:\DATA\PacRim\GBIHI\ECL Response Letters\DPLecIresponse.itr.doc

OCT 15 2010

POLICE DEPARTMENT

COUNTY OF MAUI

CHARMAINE TAVARES
MAYOR

OUR REFERENCE

YOUR REFERENCE

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

GARY A. YABUTA
CHIEF OF POLICE

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

October 13 2010

Mr. Mich Hirano, AICP
Principal
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, HI 96793

Dear Mr. Hirano:

SUBJECT: Early Consultation Request for the Proposed Kihei Rock Crushing Facility at TMK (2) 2-2-002:078, Kihei, Hawaii

This is in response to the request for comments on the above subject.

We have reviewed the information submitted for this project and have enclosed a copy of our comments. Thank you for giving us the opportunity to comment on this project.

Very truly yours,

Assistant Chief Danny Matsuura
for: Gary A. Yabuta
Chief of Police

c: Kathleen Ross Aoki, Planning Department

COPY

TO : **GARY YABUTA, CHIEF OF POLICE, COUNTY OF MAUI**

VIA : **CHANNELS** ACD 10/8/10

FROM : **BRAD HICKLE, POLICE OFFICER III, DISTRICT VI KIHEI**

SUBJECT : **EARLY CONSULTATION REQUEST FOR THE PROPOSED KIHEI ROCK CRUSHING FACILITY AT TMK (2) 2-2-002:078**

APPLICANT INFORMATION:

The applicant, Pacific Rim Land, Inc. is seeking a Community Plan Amendment (CPA), County Change in Zoning (CIZ) and a State Land use District Boundary Amendment (DBA) for the existing Kihei Rock Crushing Facility.

The Kihei Rock Crushing Facility is located on a 14.5 acre parcel on the east side of Piilani Highway approximately 200 feet south of the Kihei Water Reclamation Facility. The site was originally established in 1979 and is owned by the Pacific Rim Land, Inc. and has been continuously leased and operated by Goodfellow Bros since 1979. The facility has been operated under the State Land Use Special Use Permit and County Conditional Permit. These permits are valid until 2017. Due to the long standing operations of the facility and projected continual use of the site the landowner is seeking to establish appropriate land use entitlements for the property.

COMMENTS AND RECOMMENDATION:

I am familiar with the Rock Crushing site in Kihei. I do not anticipate the approval of the CPA, CIZ or DBA will affect Police services in the South Maui area. The site has been in operation since 1979 and after making checks I discovered there have been no Police calls for service to the facility.

DISPOSITION:

It is recommended that this document be returned to Munekiyo & Hiraga, Inc. with our comments for review and disposition.

Respectfully Submitted,

Officer Brad Hickle

10/06/10 15:00 hours

COMMENTS:
CONCUR WITH OFF. B. HICKLE'S COMMENTS. NO ISSUES AT PRESENT.
A/CAPT K. WONG #7440
10/07/10

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Gary A. Yabuta, Chief
Maui Police Department
County of Maui
55 Mahalani Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Chief Yabuta:

Thank you for your letter, dated October 13, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

We acknowledge that the Maui Police Department does not anticipate the approval of the requested land use designations will affect police services in the South Maui area, as the site has been in operation since 1979 and there have been no police service calls to the facility.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
F:\DATA\PacRim\GBIHI\ECL Response Letters\MPDecresponse.ltr.doc

OCT 20 2010

CHARMAINE TAVARES
Mayor

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

MICHAEL M. MIYAMOTO
Deputy Director

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

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

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

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

October 14, 2010

Mr. Mich Hirano, A.I.C.P.
MUNEKIYO & HIRAGA, INC.
305 High Street, Suite 104
Wailuku, Maui, Hawaii 96793

Dear Mr. Hirano:

SUBJECT: EARLY CONSULTATION REQUEST FOR THE PROPOSED KIHEI ROCK CRUSHING FACILITY; TMK: (2) 2-2-002:078

We reviewed your early consultation request and have no comments at this time.

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

Sincerely,

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

MMA:MMM:ls
xc: Highways Division
Engineering Division
S:\LUCA\CZM\prop_kihei_rock_crushing_facility_ec_22002078_ls.wpd

OCT 19 2010

CHARMAINE TAVARES
Mayor

CHERYL K. OKUMA, Esq.
Director

GREGG KRESGE
Deputy Director

TRACY TAKAMINE, P.E.
Solid Waste Division

DAVID TAYLOR, P.E.
Wastewater Reclamation
Division

COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2200 MAIN STREET, SUITE 100
WAILUKU, MAUI, HAWAII 96793

October 15, 2010

Mr. Mitch Hirano
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Hirano:

SUBJECT: **KIHEI ROCK CRUSHING FACILITY**
EARLY CONSULTATION
TMK (2) 2-2-002:078, KIHEI

We reviewed the subject application and have the following comments:

1. Solid Waste Division comments:

   a. None.

2. Wastewater Reclamation Division (WWRD) comments:

   a. None.

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

Sincerely,

CHERYL K. OKUMA
Director of Environmental Management

OCT 13 2010

CHARMAINE TAVARES
MAYOR

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

DEPARTMENT OF TRANSPORTATION

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

October 7, 2010

Mr. Mich Hirano
Munekiyo & Hiraga Inc.
305 High Street, Suite 104
Wailuku, Maui, Hawaii 96793

Subject: Proposed Kihei Rock Crushing Facility

Dear Mr. Hirano,

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

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

Sincerely,

Don Medeiros
Director

NOV 04 2010

CHARMAINE TAVARES
Mayor

JEFFREY K. ENG
Director

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

October 22, 2010

Mr. Mich Hirano, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

County of Maui

Re: Kihei Rock Crushing Facility
EA Early Consultation
TMK: (2) 2-2-002: 078

Dear Mr Hirano:

Thank you for consulting with the Department of Water Supply (DWS) on this EA Early Consultation.

System Infrastructure
We note the subject property is served by a private system, and no water meters have been issued to this parcel. Based on system per acre standards, anticipated water use for the project is 87,000 gpd. The two closest DWS lines are a 30-inch line approximately 580 feet to the west and an 18-inch line approximately 970 feet to the west. The two closest DWS fire hydrants are located to the west 683 feet (420) and 893 feet (419). Reclaimed water is available from the adjacent Kihei Sewage Treatment Plant. Reclaimed water should be considered as an alternative source for all non potable uses, if not already utilized on site.

Pollution Prevention
The project overlies the Kamole aquifer. DWS strives to protect water resources by encouraging adoption of Best Management Practices (BMPs) designed to minimize infiltration and runoff. The applicant should implement one ore more of these measures based upon the materials to be stockpiled. Mitigation measures for stockpiling of loose material such as rocks, gravel, sand and topsoil include the following:

1. Build a covered area. The area upon which the materials are stored should be paved.
2. Or: place temporary plastic sheeting over the material as illustrated (see attached graphic).
3. Or: pave the area and install a drainage system. Stormwater from the area shall be treated using a runoff treatment system.

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

Sincerely,

Jeffrey K. Eng, Director
bab

c: engineering division

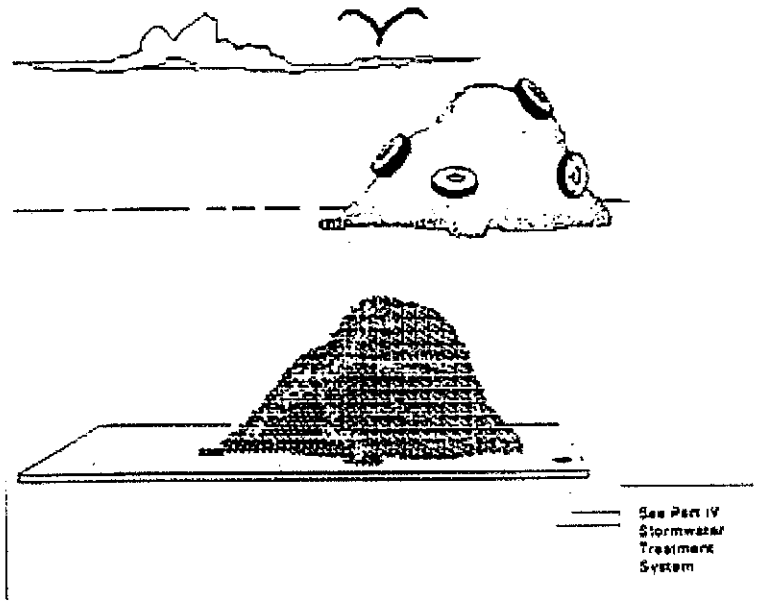
Attachment: Best Management Practices (BMPs) for Outside Storage of Raw Materials, Byproducts or Products

Best Management Practice for:
Outside Storage of Raw Materials, Byproducts or Products

If the raw material, byproduct or product is a liquid, see AST and container BMPs. This BMP is for:
- Loose material such as gravel, sand, topsoil, compost, sawdust, wood chips;
- Lumber and other building materials
- Concrete and metal products

The business is to select one of the following BMPs appropriate to the type of material:
1. Build a covered area. The area upon which the materials is stored should be paved.
2. Or: place temporary plastic sheeting over the material as illustrated (see graphic field).
3. Or: pave the area and install a drainage system. Stormwater from the area shall be treated using a runoff treatment system.

Signs shall be painted on strom drain inlets to indicate that they are not to receive liquid or solid wastes.



Reference: Water Quality, Best Management Practices Manual for Commercial and Industrial Businesses, City of Seattle 1989

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Dave Taylor, Director
Department of Water Supply
County of Maui
200 South High Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Mr. Taylor:

Thank you for your department's letter, dated October 22, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

We acknowledge that reclaimed water is available from the adjacent Kihei Wastewater Reclamation Facility for use at the Kihei Rock Crushing Facility (KRCF) site. R-1 water is currently used for irrigation, fire prevention, and dust control.

We acknowledge the recommended Best Management Practices (BMPs) to minimize infiltration and runoff. Natural site conditions and the characteristics of the operations at the KRCF help to minimize groundwater infiltration. The site is located on Waiakoa extremely stony silty clay loam, 3 to 25 percent slopes, eroded (WID2). Underlying the site is a layer of basalt rock, which results in very little infiltration to ground water. The materials stored at the KRCF are also limited to inorganic gravel and sand, with occasional concrete recycling. There are no topsoils or metal products stored at the site. As such, the materials being stored at the KRCF does not differ from the natural underlying soil and rocks at the site. The KRCF pre-screens all materials entering the facility to ensure that they are not accepting and stockpiling materials from polluting sources. In addition to these natural conditions and operating practices, Goodfellow Bros., Inc., the KRCF operator, does implement BMPs to prevent pollution. Specifically, drainage improvements have been installed at the site to contain all project runoff. The site's active working area slopes to an on-site sump area. The project's makai border also has a vegetated berm that serves as additional filtration for water runoff. It should be noted, however, that the materials storage area is not paved, as recommended in BMP No. 3 in your letter, because paving of the area would actually result in an

increase in runoff. The natural conditions of the site, along with the type of materials stored and drainage improvements implemented, minimize runoff and groundwater infiltration.

We appreciate the input provided by your agency and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
Reed Ariyoshi, Warren S. Unemori Engineering, Inc.
F:\DATA\PacRim\GBIHI\ECL Response Letters\DWSec\response.ltr.doc

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

OCT 06 2010

October 5, 2010

Mr. Mich Hirano, AICP
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Subject: Early Consultation Request for the Proposed Kihei Rock Crushing Facility
Kihei, Maui, Hawaii
Tax Map Key: (2) 2-2-002:078

Dear Mr. Hirano,

Thank you for allowing us to comment on the Early Consultation Request for the subject project.

In reviewing our records and the information received, Maui Electric Company may be requiring access and electrical easements for our facilities to serve the subject project site. With the addition of this project's anticipated electrical load demand, it will most likely have a substantial impact to our system. Thus, we highly encourage the customer to provide their Electrical Consultant's drawings and information for large Electrical Equipment (e.g. rock crusher, pumps, etc.) as soon as possible so that service can be provided on a timely basis. The information for the large Electrical Equipment shall contain information on motor's electrical characteristics and its starting inrush current.

Should you have any questions or concerns, please call me at 871-2341.

Sincerely,

Kyle Tamori
Staff Engineer

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

September 14, 2011

Kyle Tamori, Staff Engineer
Maui Electric Company, Ltd.
210 West Kamehameha Avenue
Kahului, Hawaii 96732

SUBJECT: Early Consultation Request for Kihei Rock Crushing Facility, Kihei, Maui, Hawaii, TMK (2)2-2-002:078

Dear Mr. Tamori:

Thank you for your letter, dated October 5, 2010, providing early consultation comments on the proposed land use applications for the Kihei Rock Crushing Facility. On behalf of the applicant, Pacific Rim Land, Inc., we offer the following information in response to the comments noted in your letter:

We acknowledge that Maui Electric Company (MECO) may require access and electrical easements to serve the project site. We also note your comment that the addition of the project's anticipated electrical load demand will most likely have a substantial impact to your system. However, the Kihei Rock Crushing Facility is an existing use that has been operating since 1979 and no new operational improvements are proposed for the project. As such, the proposed land use amendments and County Special Use Permit should not result in additional electrical load demands. Should the applicant decide to install new equipment in the future, they will provide information on any large electrical equipment that may be used at the site to MECO for review and assessment.

We appreciate the input provided by MECO and will include a copy of your letter in the Draft Environmental Assessment for the project. Should you have any questions or further comments, please contact me at 244-2015.

Sincerely,

Mich Hirano, AICP
Principal

MH:lh
cc: Blanca Lafolette, Pacific Rim Land, Inc.
Mark Rickard, ECM, Inc.
F:\DATA\PacRim\GBIHI\ECL Response Letters\MECOeclresponse.ltr.doc

IX. REFERENCES

IX. REFERENCES

County of Maui, Department of Planning, County of Maui 2030 General Plan Countywide Policy Plan, March 2010.

County of Maui, Draft Maui Island Plan, December 2009.

County of Maui, Kihei-Makena Community Plan, March 1998.

County of Maui, Planning Department, Socio-Economic Forecast: The Economic Projections for the Maui County General Plan 2030, June 2006.

County of Maui, Office of Economic Development, Maui County Data Book 2009, March 2010.

Flood Insurance Rate Map, Community Panel No. 150003 0265C, September 2009.

Munekiyo & Hiraga, Inc., Draft Environmental Assessment-Proposed Kihei Police Station, March 2009.

R.M. Towill Corporation, Public Facilities Assessment Update County of Maui, March 9, 2007.

Realtors Association of Maui, Facts and Figures website, http://www.mauiboard.com/facts_figures.html, 2008.

SMS, Maui County Community Plan Update Program: Socio-Economic Forecast, June 2006.

SMS, Hawaii Housing Policy Study Update, 2003.

State of Hawaii, Department of Business, Economic Development and Tourism (DBEDT), Hawaii Census 2000, Hawaii State Data Center Report and Tables, http://www.hawaii.gov/dbedt/census2k/hsdc-rt.html.

State of Hawaii, Department of Business, Economic Development and Tourism, State of Hawaii Data Book, 2005.

State of Hawaii, Department of Education, Draft Analysis of the Proposed Central Maui School Impact District, September 2010.

State of Hawaii, Department of Health, State of Hawaii Annual Summary 2009: Air Quality Data, September 2010.

State of Hawaii, Department of Labor and Industrial Relations, http://www.hiwi.org, July 2011.

State of Hawaii, Land Use Commission, http://luc.state.hi.us/, October 2006.

University of Hawaii, Land Study Bureau, Detailed Land Classification, Island of Maui, May 1967.
University of Hawaii at Hilo, Department of Geography, Atlas of Hawaii, Third Edition, 1998.

U. S. Department of Agriculture, Soil Conservation Service, The Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii, August 1972.

U.S. Census Bureau, Building Permit Estimates by County or Place, http://censtats.census.gov/bldg/bldgprmt.shtml, August 2011.

U. S. Census Bureau, Census 2010 Demographic Profile Summary File, Detailed Tables, Table DP-1, Maui County and Maui County Block Groups, Retrieved from http://factfinder2.census.gov/main.html.

U. S. Census Bureau, Census 2000 Summary File 1, Detailed Tables, Table DP-1, Maui County and Maui County Block Groups, Retrieved from http://factfinder2.census.gov/main.html.

APPENDIX A.

State Land Use Special Use Permit and County Conditional Permit

ALAN M. ARAKAWA
Mayor

MICHAEL W. FOLEY
Director

DON COUCH
Deputy Director

NOV 17 2006

COUNTY OF MAUI
DEPARTMENT OF PLANNING

November 13, 2006

Mr. Michael T. Munekiyo
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Maui, Hawaii 96793

Dear Mr. Munekiyo:

RE: Approval Of A State Land Use Commission Special Use Permit Time Extension And Amendment For The Goodfellow Bros., Inc., Rock Crushing Facility, TMK: 2-2-002:001 and 054, Kihei, Maui, Hawaii (SUP2 790003)

The Planning Department has re-reviewed the above-referenced application and has determined to grant a ten year (10) time extension on the above-referenced permit. This letter shall supersede my previous letter dated March 21, 2006. The following conditions as specified on your permit remain applicable.

STANDARD CONDITIONS:

1. That the Land Use Commission Special Use Permit shall be limited to the operation of rock crushing facility, construction baseyard, and material storage site, valid until October 31, 2016, subject to further extensions by the Maui Planning Director upon a timely request for extension filed at least ninety (90) days prior to its expiration. The Commission may require a public hearing on the time extension (Amended);

2. The permit holder or any aggrieved person may appeal to the Maui Planning Commission (MPC) any action taken by the Director on the subject permit no later than ten (10) days from the date the Director's action is reported to the MPC (Added);

3. That the conditions of this Land Use Commission Special Use Permit shall be enforced pursuant to Sections 205-12 and 205-13, Hawaii Revised Statutes (HRS). Failure to comply with one or more of the conditions herein shall result in a notice of violation issued by the appropriate enforcement agency, notifying the permit holder of the violation and providing the permit holder not more than sixty (60) days to cure the violation. If the permit holder fails to cure the violation within sixty (60) days of said notice, the appropriate enforcement agency shall issue an order which may require one or more of the following: that the violative activity cease; that the violative development be removed; that a civil fine be paid not to exceed $1,000.00 per violation; that a civil fine not to exceed $5,000.00 shall be issued if the violation is not cured within six (6) months of the issuance of the order. The order shall become final thirty (30) days after the date of its mailing or hand-delivery unless a written request for a hearing is mailed or delivered to the Department within said thirty (30) days. Upon receipt of a request for a hearing, the Department shall specify a time and place for the permit holder to appear and be heard. The hearing shall be conducted by the Planning Director or the Director's designee in accordance with the provisions of Chapter 91, HRS, as amended (Original Condition);

4. That the subject Land Use Commission Special Use Permit shall not be transferred without the prior written approval of the Commission. However, in the event that a contested case hearing preceded issuance of said Land Use Commission Special Use Permit, a public hearing shall be held upon due published notice, including actual written notice to the last known addresses of parties to said contested case and their counsel(Original Condition);

5. That the applicant, its successors and permitted assigns shall exercise reasonable due care as to third parties with respect to all areas affected by subject Land Use Commission Special Use Permit and shall procure at its own cost and expense, and shall maintain during the entire period of this Land Use Commission Special Use Permit, a policy or policies of comprehensive liability insurance in the minimum amount of ONE MILLION AND NO/100 DOLLARS ($1,000,000.00) naming the County of Maui as an additional named insured, insuring and defending the applicant and County of Maui

against any and all claims or demands for property damage, personal injury and/or death arising out of this permit, including but not limited to: (1) claims from any accident in connection with the permitted use, or occasioned by any act or nuisance made or suffered in connection with the permitted use in the exercise by the applicant of said rights; and (2) all actions, suits, damages and claims by whomsoever brought or made by reason of the non-observance or non-performance of any of the terms and conditions of this permit. Copies of a hold harmless agreement and the policy naming County of Maui as an additional named insured shall be submitted to the Department within ninety (90) calendar days from the date of transmittal of the decision and order (Original Condition);

6. That full compliance with all applicable governmental requirements shall be rendered (Original Condition);

Project Specific Conditions:

7. That no quarrying operations shall be permitted on the subject site (Original Condition);

8. That upon termination of baseyard and rock crushing operations, all equipment and materials shall be removed and the site shall be restored with suitable ground cover to prevent erosion from wind and rain and in a manner that would not adversely affect natural drainage patterns (Amended);

9. That appropriate measures shall be taken during the operation of the facility to mitigate impacts relative to dust and soil erosion by wind and water and increased ambient noise levels. Specifically, that the level of dust abatement measures as described in the project plans shall be fully implemented (Original Condition);

10. That the hours of operation of the rock crushing facility shall be limited to the period beginning at 6:30 a.m. and ending at 5:00 p.m. (Original Condition);

11. That the use of the site as a construction baseyard for the storage of construction material and vehicles shall be limited to not more than a four (4) acre portion of the site (Added);

12. That the applicant maintain the landscape screening of sight lines to the site from Piilani Highway in accordance with the landscape plan approved by the Planning Department (Amended);

13. That the applicant shall construct a left-turn pocket for operational and safety reasons as required by the State Department of Transportation, Maui Highways Division (Added); and

14. That the applicant monitor haulers to and from the Goodfellow Brothers rock crushing plant on the Piilani Highway for potential leakage of materials from their loads and maintain the driveway to the plant, removing loose aggregate and other debris associated with their operation, in accordance with the monitoring plan dated July 13,1999, and submitted to and approved by the State Department of Transportation, Maui Highways Division (Amended).

Thank you for your cooperation. If additional clarification is required, please contact Mr. Paul Fasi, Staff Planner, of this office at paul.fasi@co.maui.hi.us or 270-7814.

Sincerely,

MICHAEL W. FOLEY
Planning Director

MWF:PFF:bv

c: Clayton I. Yoshida, AICP, Planning Program Administrator
Aaron H. Shinmoto, PE, Planning Program Administrator (2)
Land Use Commission
DSA (2)
Project File
General File
K:\WP_DOCS\PLANNING\CP\2006\0010_KiheiRockCrushing\appvl2.wpd

ORDINANCE NO. 3500

BILL NO. 66 (2007)

A BILL FOR AN ORDINANCE GRANTING GOODFELLOW BROS., INC. A CONDITIONAL PERMIT FOR USES RELATING TO A ROCK CRUSHING FACILITY WITHIN THE COUNTY AGRICULTURAL DISTRICT FOR PROPERTY SITUATED AT KIHEI, MAUI, HAWAII

BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. Pursuant to Chapter 19.40, Maui County Code, and subject to the conditions imposed in Section 2 of this ordinance, a Conditional Permit is hereby granted to Goodfellow Bros., Inc. to operate offices, a rock crushing facility, and a construction baseyard facility, and to store aggregate and materials within the County Agricultural District. The site is identified for real property tax purposes by Tax Map Key Numbers: (2)2-2-002:054 (por.) and (2)2-2-002:069 (por.), comprising approximately 14.5 acres of land situated at Kihei, Hawaii.

SECTION 2. The granting of this Conditional Permit is subject to the following conditions:

1. That full compliance with all applicable governmental requirements shall be rendered.

2. That the Conditional Permit shall be valid for a period of ten (10) years from the effective date of this ordinance; provided that an extension of this Conditional Permit beyond this ten-year period may be granted pursuant to Section 19.40.090, Maui County Code.

3. That the Conditional Permit shall be nontransferrable unless the Council approves the transfer by ordinance.

4. That Goodfellow Bros., Inc., its successors and permitted assigns, shall exercise reasonable due care as to third parties with respect to all areas affected by the subject Conditional Permit and shall procure at its own cost and expense, and shall maintain during the entire period of this Conditional Permit, a policy or policies of comprehensive liability insurance in the minimum amount of ONE MILLION AND NO/100 DOLLARS ($1,000,000) naming the County of Maui as a named additional insured, insuring and defending Goodfellow Bros., Inc. and County of Maui against any and all claims or demands for property damage, personal injury, and/or death arising out of this Conditional Permit, including: (1) claims from any accident in connection with the permitted use, or

occasioned by any act or nuisance made or suffered in connection with the permitted use exercised by Goodfellow Bros., Inc. of said rights; and (2) all actions, suits, damages and claims by whomsoever brought or made by reason of the nonobservance or nonperformance of any of the terms and conditions of this Conditional Permit. A copy of the certificate of insurance naming County of Maui as a named additional insured shall be submitted to the Department of Planning within ninety (90) calendar days from the effective date of this ordinance.

5. That Goodfellow Bros., Inc. shall develop the property in substantial compliance with the representations made to the Maui County Council in obtaining the Conditional Permit. Failure to so develop the property may result in the revocation of the Conditional Permit pursuant to Section 19.40.080, Maui County Code.

6. That full compliance with the conditions of the Land Use Commission Special Use Permit (SUP2 79/2003) shall be rendered.

7. That Goodfellow Bros., Inc. shall continue to maintain the access intersection as per the approved monitoring plan to the satisfaction of the State Department of Transportation, Highways Division, Maui District Engineer (Maui District Engineer).

8. That Goodfellow Bros., Inc. shall continue to conduct a traffic signal warrant study at Piilani Highway and Welakahao Road every two years, according to the existing schedule, or as directed by the Maui District Engineer.

9. That when warranted, and at the direction of the Maui District Engineer, Goodfellow Bros., Inc. shall install traffic signals at the intersection of Piilani Highway and Welakahao Road at no cost to the State. In lieu of signalization or until such signalization is completed, Goodfellow Bros., Inc. shall direct left-turning trucks that want to enter Piilani Highway to the Piilani Highway and Kanani Road intersection. In this latter case, Goodfellow Bros., Inc. will develop and execute a maintenance plan for the intersection to the satisfaction of the Maui District Engineer.

SECTION 3. This ordinance shall take effect upon its approval.

APPROVED AS TO FORM
AND LEGALITY:

JAMES A. GIROUX
Deputy Corporation Counsel
County of Maui
S:\CLERICAL\LJN\ORD\CP\22002054cp.wpd

WE HEREBY CERTIFY that the foregoing BILL NO. 66 (2007)

1. Passed FINAL READING at the meeting of the Council of the County of Maui, State of Hawaii, held on the 16th day of November, 2007, by the following vote:

G. Riki HOKAMA Chair	Dennis A. MATEO Vice-Chair	Michelle ANDERSON	Gladys C. BAISA	Jo Anne JOHNSON	William J. MEDEIROS	Michael J. MOLINA	Joseph PONTANILLA	Michael P. VICTORINO
Aye	Aye	Aye	Aye	Aye	Aye	Aye	Aye	Aye

2. Was transmitted to the Mayor of the County of Maui, State of Hawaii, on the 16th day of November, 2007.

DATED AT WAILUKU, MAUI, HAWAII, this 16th day of November, 2007.

RECEIVED
2007 NOV 16 PM 4:16
OFFICE OF THE MAYOR

G. RIKI HOKAMA, CHAIR
Council of the County of Maui

JEFFREY T. KUWADA, DEPUTY COUNTY CLERK
County of Maui

THE FOREGOING BILL IS HEREBY APPROVED THIS 20th DAY OF NOVEMBER, 2007.

CHARMAINE TAVARES, MAYOR
County of Maui

I HEREBY CERTIFY that upon approval of the foregoing BILL by the Mayor of the County of Maui, the said BILL was designated as ORDINANCE NO. 3500 of the County of Maui, State of Hawaii.

ROY T. HIRAGA, COUNTY CLERK
County of Maui

Passed First Reading on November 2, 2007.
Effective date of Ordinance November 20, 2007.

RECEIVED
2007 NOV 21 PM 2:35
OFFICE OF THE
COUNTY CLERK

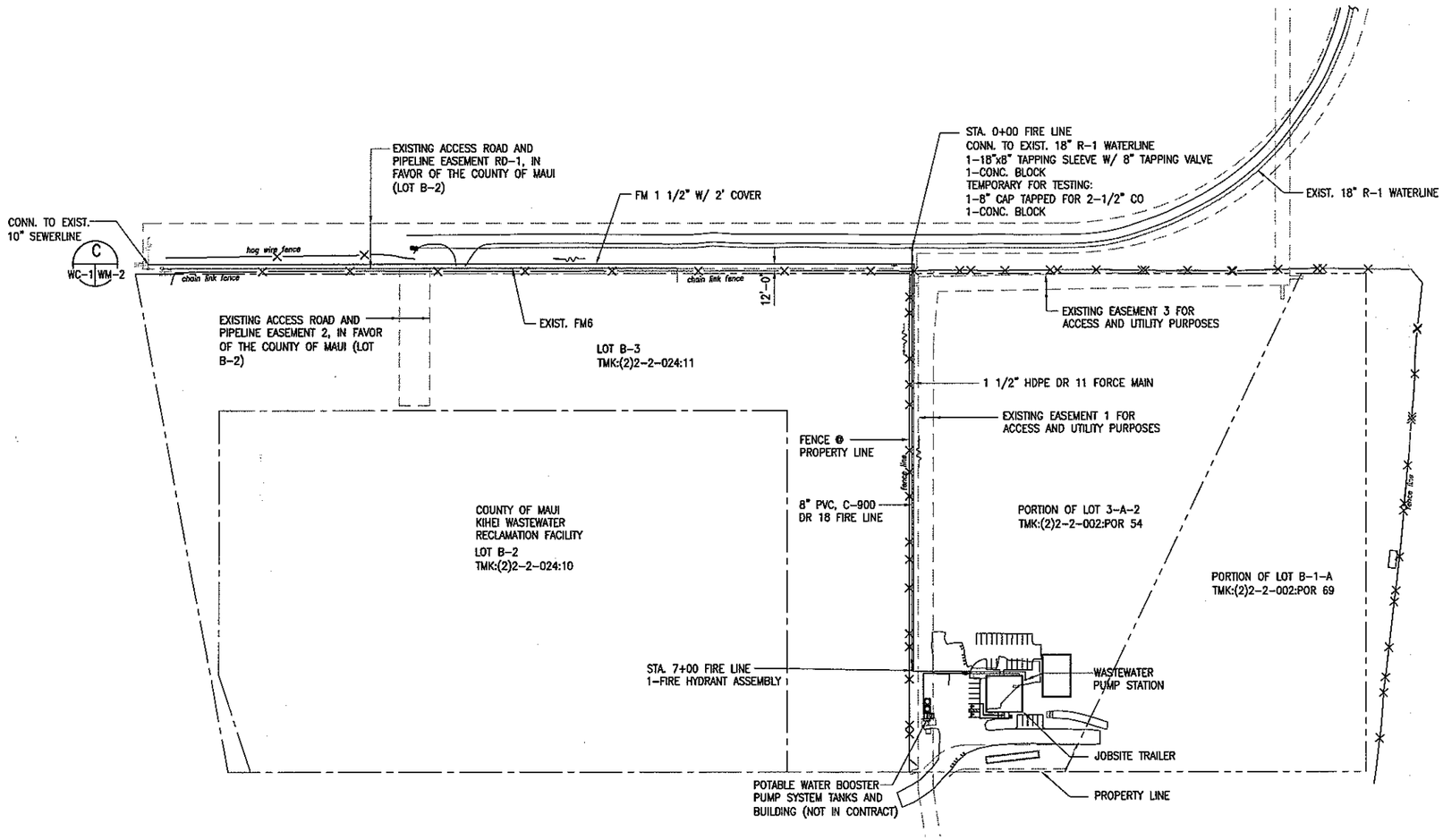
I HEREBY CERTIFY that the foregoing is a true and correct copy of Ordinance No. 3500, the original of which is on file in the Office of the County Clerk, County of Maui, State of Hawaii.

Dated at Wailuku, Hawaii, on

County Clerk, County of Maui

APPENDIX B.

Plans of Existing Kihei Rock Crushing Facility



NOTE: THE WASTEWATER SYSTEM IMPROVEMENTS ARE PRIVATELY OWNED AND MAINTAINED BY GOODFELLOW BROS., INC.

NORTH

GENERAL PLAN
SCALE: 1"=100'-0"

FILENAME: X:\2006\06-035\DRAWINGS\C-1 GENERAL PLAN.DWG Apr 09, 2009 - 2:01 PM

JOB NO. 0-06-035

0 1 2
LINE IS 2 INCHES AT FULL SIZE
(IF NOT 2-inches : Scale Accordingly)

DWG. NO. WC-1
SHEET 4 OF 10

IVAN K. NAKATSUKA LICENSED PROFESSIONAL ENGINEER No. 4759-C HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
EXP. 4/30/10

IVAN K. NAKATSUKA LICENSED PROFESSIONAL ENGINEER No. 4759-C HAWAII, U.S.A.
CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY SUPERVISION
EXP. 4/30/10

REVISION	DATE	BRIEF	MADE BY	APPROVED

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU, WAILUKU, HAWAII

GOODFELLOW BROS., INC.
GOODFELLOW BROS., INC. BASE YARD OFFICES
ON-SITE POTABLE WATER AND WASTEWATER SYSTEMS
KIHEI, MAUI, HAWAII

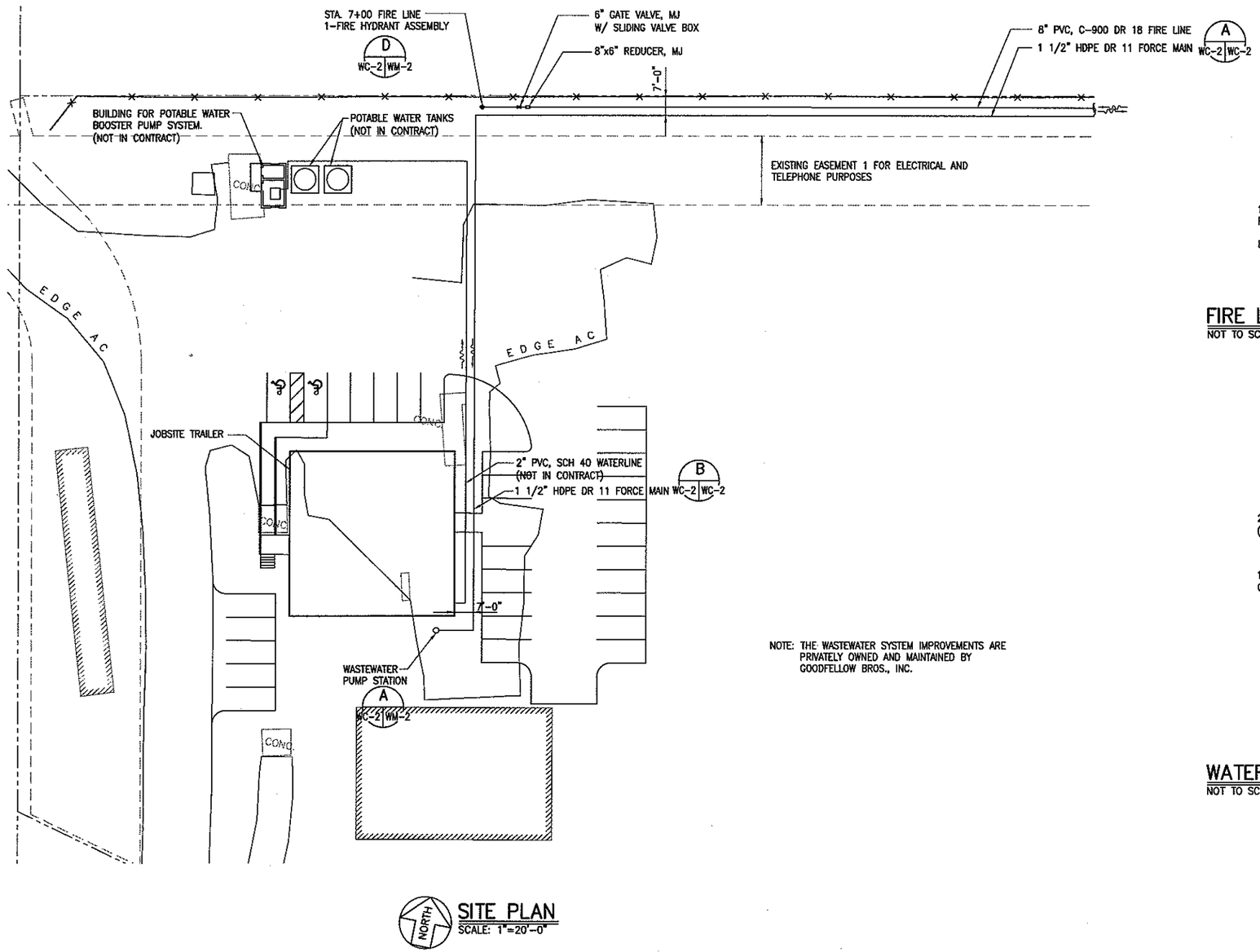
GENERAL PLAN

DESIGNED BY IKN DRAWN BY DL/LLA CHECKED BY IKN

APPROVED SUBMITTED BY

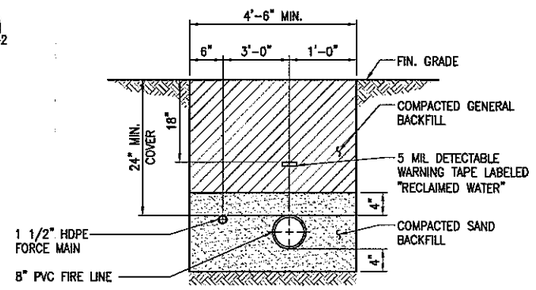
DATE FIRM MEMBER DATE

FILE	POCKET	FOLDER	NO.

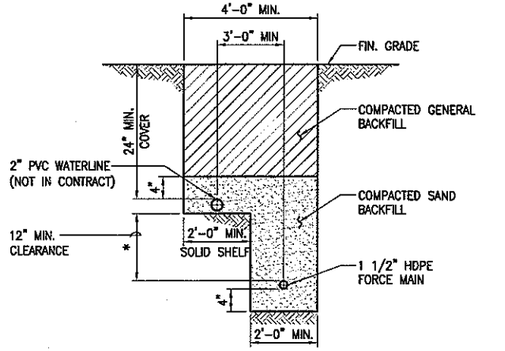


SITE PLAN
SCALE: 1"=20'-0"

NOTE: THE WASTEWATER SYSTEM IMPROVEMENTS ARE PRIVATELY OWNED AND MAINTAINED BY GOODFELLOW BROS., INC.



FIRE LINE/ FORCE MAIN TRENCH SECTION A
NOT TO SCALE
WC-2 WC-2



* IF THE MINIMUM CLEARANCE CAN NOT BE ESTABLISHED IN THE FIELD. THE CONTRACTOR SHALL EXCAVATE SEPARATE TRENCHES.

WATERLINE/ FORCE MAIN TRENCH SECTION B
NOT TO SCALE
WC-2 WC-2

IVAN K. NAKATSUKA LICENSED PROFESSIONAL ENGINEER No. 4759-C HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
EXP. 4/30/10

IVAN K. NAKATSUKA LICENSED PROFESSIONAL ENGINEER No. 4759-C HAWAII, U.S.A.
CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY SUPERVISION
EXP. 4/30/10

REVISION	DATE	BRIEF	MADE BY	APPROVED

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU, WAILUKU, HAWAII

GOODFELLOW BROS., INC.
GOODFELLOW BROS., INC. BASE YARD OFFICES
ON-SITE POTABLE WATER AND WASTEWATER SYSTEMS
KIHEI, MAUI, HAWAII

SITE PLAN

DESIGNED BY IKN | DRAWN BY DL/LLA | CHECKED BY IKN

APPROVED | SUBMITTED BY

DATE | FIRM MEMBER | DATE

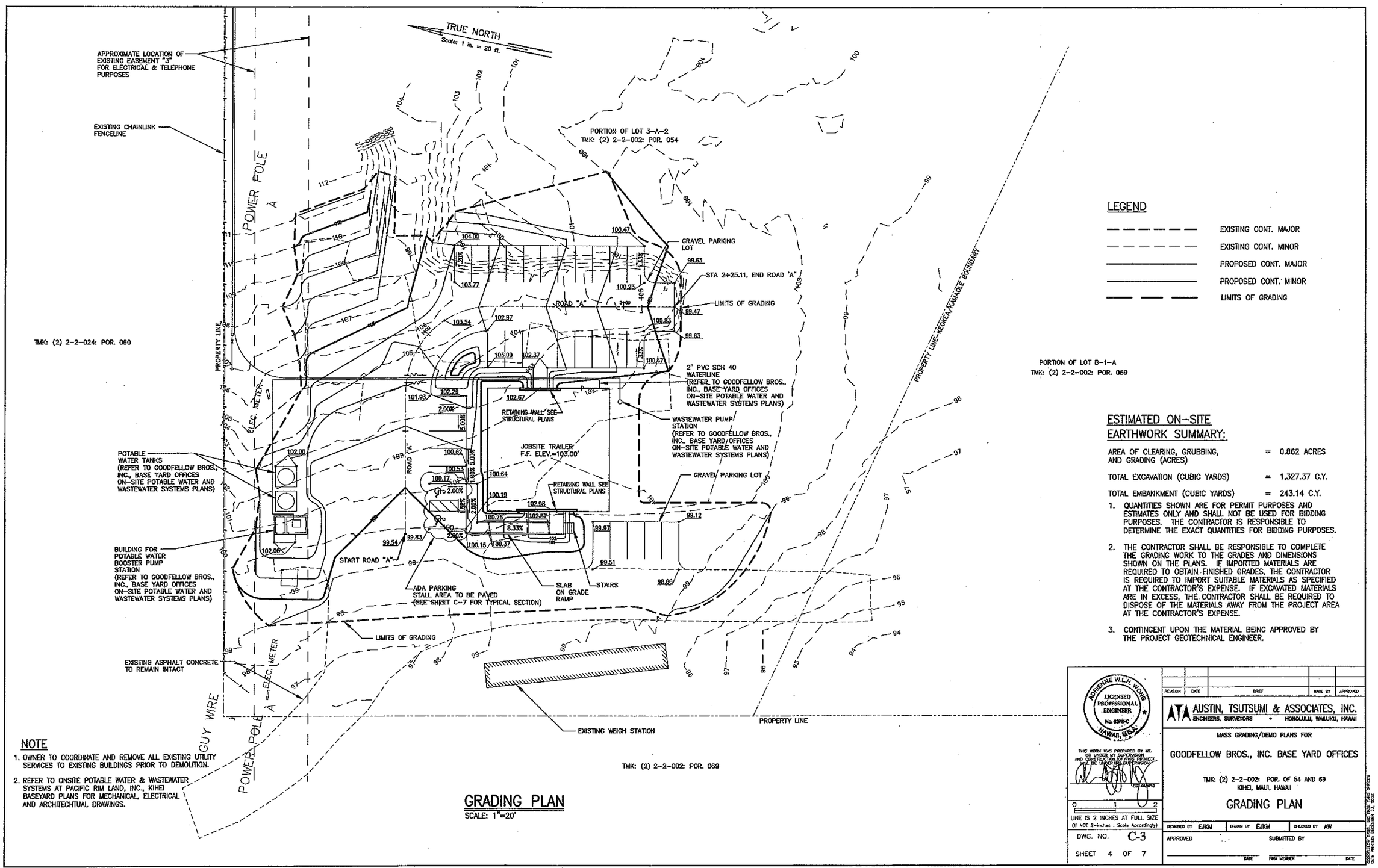
0 1 2
LINE IS 2 INCHES AT FULL SIZE
(IF NOT 2-inches : Scale Accordingly)

DWG. NO. WC-2
SHEET 5 OF 10

FILE	POCKET	FOLDER	NO.

FILENAME: X:\2006\06-035\DRAWINGS\C-2 SITE PLAN.DWG Apr 09, 2009-2:04 PM

JOB NO. 0-06-035



GRADING PLAN
SCALE: 1"=20'

NOTE
1. OWNER TO COORDINATE AND REMOVE ALL EXISTING UTILITY SERVICES TO EXISTING BUILDINGS PRIOR TO DEMOLITION.
2. REFER TO ONSITE POTABLE WATER & WASTEWATER SYSTEMS AT PACIFIC RIM LAND, INC., KIHEI BASEYARD PLANS FOR MECHANICAL, ELECTRICAL AND ARCHITECHTUAL DRAWINGS.

LEGEND
- EXISTING CONT. MAJOR
- EXISTING CONT. MINOR
- PROPOSED CONT. MAJOR
- PROPOSED CONT. MINOR
- LIMITS OF GRADING

ESTIMATED ON-SITE EARTHWORK SUMMARY:

AREA OF CLEARING, GRUBBING, AND GRADING (ACRES)	=	0.862 ACRES
TOTAL EXCAVATION (CUBIC YARDS)	=	1,327.37 C.Y.
TOTAL EMBANKMENT (CUBIC YARDS)	=	243.14 C.Y.

1. QUANTITIES SHOWN ARE FOR PERMIT PURPOSES AND ESTIMATES ONLY AND SHALL NOT BE USED FOR BIDDING PURPOSES. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE EXACT QUANTITIES FOR BIDDING PURPOSES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE THE GRADING WORK TO THE GRADES AND DIMENSIONS SHOWN ON THE PLANS. IF IMPORTED MATERIALS ARE REQUIRED TO OBTAIN FINISHED GRADES, THE CONTRACTOR IS REQUIRED TO IMPORT SUITABLE MATERIALS AS SPECIFIED AT THE CONTRACTOR'S EXPENSE. IF EXCAVATED MATERIALS ARE IN EXCESS, THE CONTRACTOR SHALL BE REQUIRED TO DISPOSE OF THE MATERIALS AWAY FROM THE PROJECT AREA AT THE CONTRACTOR'S EXPENSE.
3. CONTINGENT UPON THE MATERIAL BEING APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER.

ADRIENNE W.L.H. WONG
LICENSED PROFESSIONAL ENGINEER
No. 6978-O
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY SUPERVISION

EXP. 04/30/10

0 1 2
LINE IS 2 INCHES AT FULL SIZE
(IF NOT 2-inches : Scale Accordingly)

DWG. NO. C-3
SHEET 4 OF 7

REVISION	DATE	BRIEF	MADE BY	APPROVED

ATA AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU, WAILUKU, HAWAII

MASS GRADING/DEMO PLANS FOR

GOODFELLOW BROS., INC. BASE YARD OFFICES

TMK: (2) 2-2-002: POR. OF 54 AND 69
KIHEI, MAUI, HAWAII

GRADING PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
EJKM	EJKM	AW

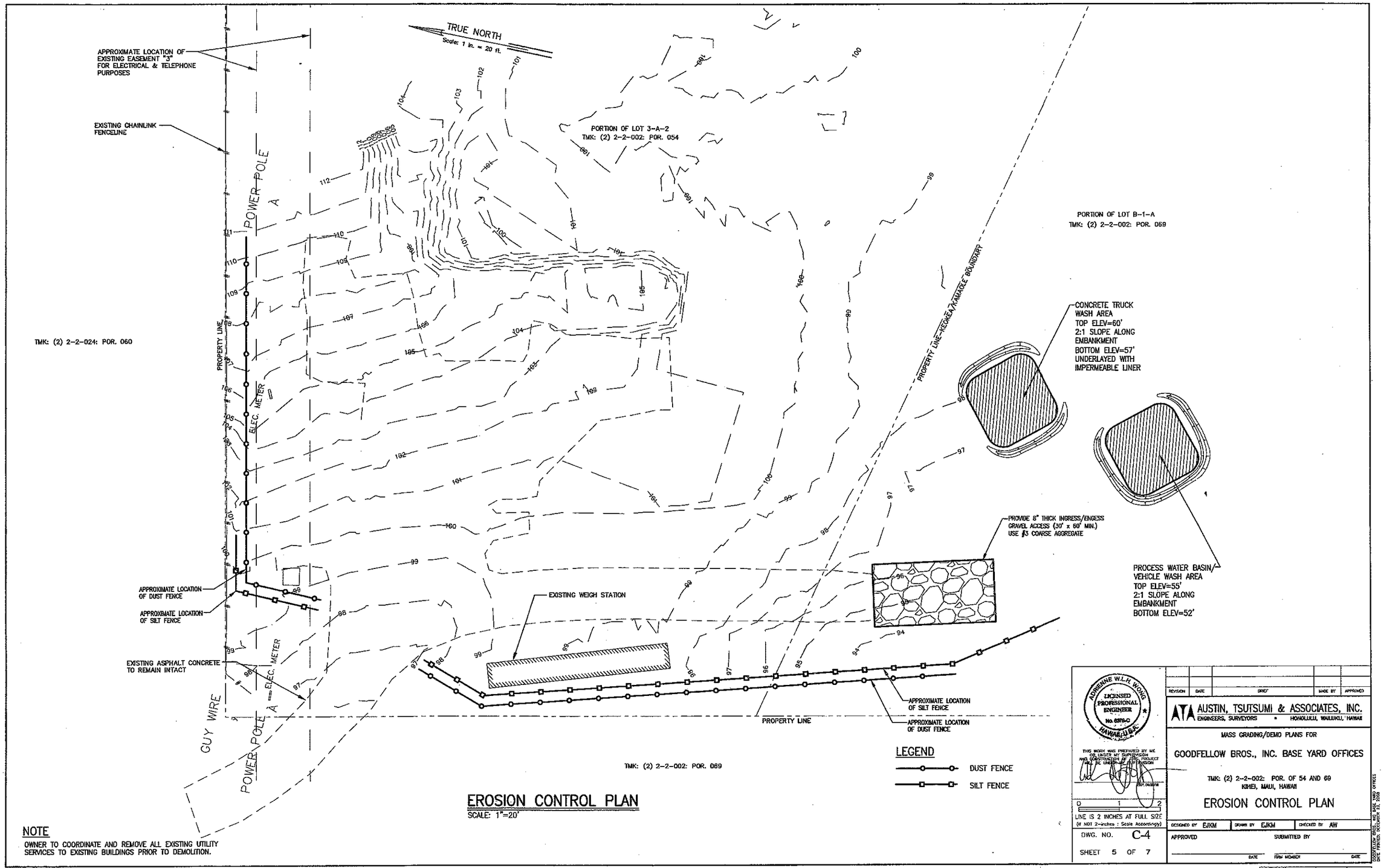
APPROVED SUBMITTED BY

DATE FIRM MEMBER DATE

GOODFELLOW BROS. INC. MAUI YARD OFFICES
DATE PRINTED: DECEMBER 23, 2008

FILE	POCKET	FOLDER	NO.

JOB NO. M-08-550
File Z:\2008\08-550\MASS GRADING_DEMO PLANS\Civil\C3-GRADING PLAN.DWG



EROSION CONTROL PLAN
SCALE: 1"=20'

NOTE
OWNER TO COORDINATE AND REMOVE ALL EXISTING UTILITY SERVICES TO EXISTING BUILDINGS PRIOR TO DEMOLITION.

ADRIENNE W.L.H. WONG
LICENSED PROFESSIONAL ENGINEER
No. 6576-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND DOCUMENTATION OF THIS PROJECT WAS DONE UNDER MY SUPERVISION

DEPT. DATE/TIME

0 1 2
LINE IS 2 INCHES AT FULL SIZE
(IF NOT 2-inches : Scale Accordingly)

DWG. NO. C-4
SHEET 5 OF 7

REVISION	DATE	DRWG	MADE BY	APPROVED

ATA AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU, WAILUKU, HAWAII

MASS GRADING/DEMO PLANS FOR

GOODFELLOW BROS., INC. BASE YARD OFFICES

TMK: (2) 2-2-002: POR. OF 54 AND 69
KIHEI, MAUI, HAWAII

EROSION CONTROL PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
EJKM	EJKM	AW

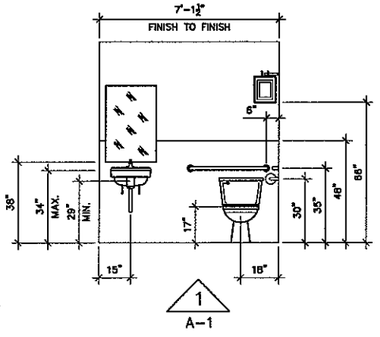
APPROVED SUBMITTED BY

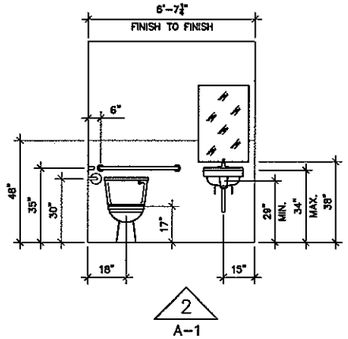
DATE FIRM MEMBER DATE

GOODFELLOW BROS. INC MASS GRADING/DEMO PLANS
DATE PRINTED: DECEMBER 23, 2008

FILE	POCKET	FOLDER	NO.

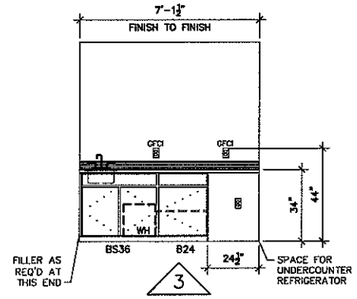
JOB NO. M-08-550
FN: Z:\2008\08-550\MASS GRADING_DEMO PLANS\CIVIL\C4-EROSION CONTROL PLAN.DWG

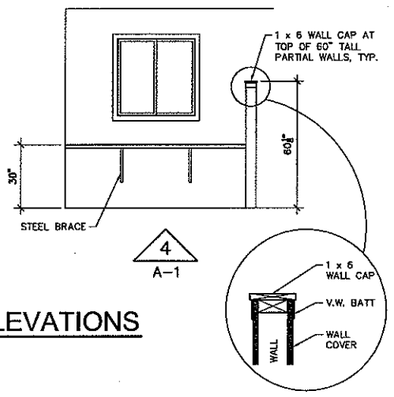




RESTROOM ELEVATIONS

3/8" = 1'-0"

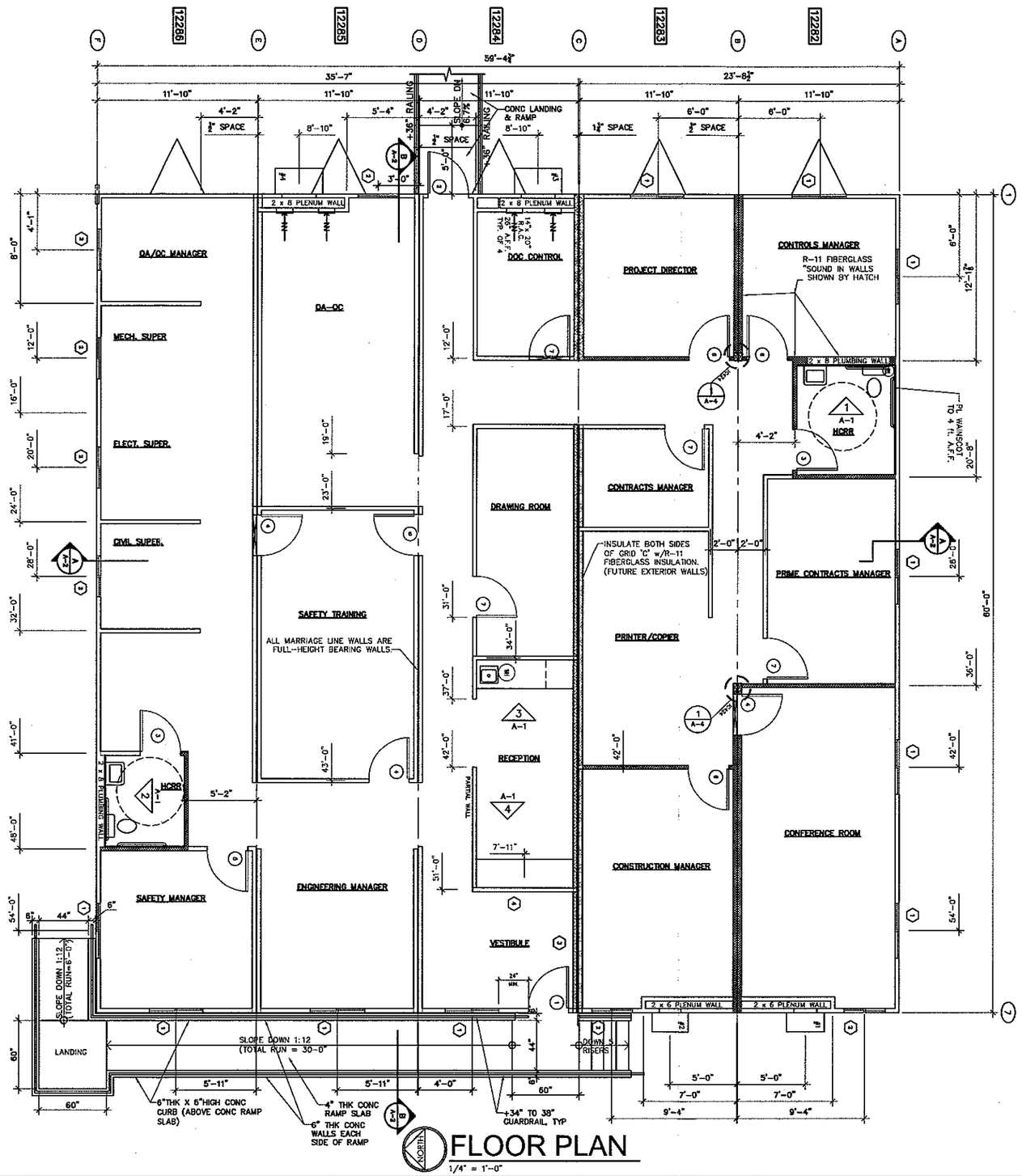




INTERIOR ELEVATIONS

3/8" = 1'-0"

		QTY.	SIZE	DESCRIPTION	LOCK	REMARKS
DOORS						
TAPE OVER KEYHOLES FOR SHIPPING	EXT. (1)	1	3⁰ 6⁸	INSULATED GALV. STEEL w/ STEEL JAMB AND WEATHERSTRIPPING	D53L KEYED	S.S., B.B., NRP, HINGES PAINT FINISH LCN 1461 CLOSER 6" x 34" LITE
	EXT. (2)	1	3⁰ 6⁸	INSULATED GALV. STEEL w/ STEEL JAMB AND WEATHERSTRIPPING	D53L KEYED	S.S., B.B., NRP, HINGES PAINT FINISH 6" x 34" LITE
	INT. (3)	2	3⁰ 6⁸	SOLIDCORE VINYLWRAP w/ WOOD JAMB	A40L PRIVACY	STANDARD HINGES VWCO FINISH
	INT. (4)	3	3⁰ 6⁸	SOLIDCORE VINYLWRAP w/ WOOD JAMB	A10L PASSAGE	STANDARD HINGES VWCO FINISH
	INT. (5)	6	3⁰ 6⁸	HOLLOWCORE VINYLWRAP w/ WOOD JAMB	A10L PASSAGE	STANDARD HINGES VWCO FINISH
	INT. (6)	3	3⁰ 6⁸	SOLIDCORE VINYLWRAP w/ WOOD JAMB	AL53 KEYED LEVER	STANDARD HINGES VWCO FINISH
	INT. (7)	3	3⁰ 6⁸	HOLLOWCORE VINYLWRAP w/ WOOD JAMB	AL53 KEYED LEVER	STANDARD HINGES VWCO FINISH
	INT. (8)	3	3⁰ 6⁸	FINISHED OPENING		VWCO FINISH
WINDOWS						
COVER EXTERIOR WINDOWS WITH OSB FOR SHIPPING	(1)	10	48 x 48	BEST BUILT – HORIZONTAL SLIDER – DUAL GLAZE WHITE VINYL FINISH – SOLAR BRONZE TINT NFRC .50 U-FACTOR– SHADING COEFFICIENT .38		
	(2)	7	36 x 48	BEST BUILT – HORIZONTAL SLIDER – DUAL GLAZE WHITE VINYL FINISH – SOLAR BRONZE TINT NFRC .50 U-FACTOR– SHADING COEFFICIENT .38		
	(3)	1	48 x 48	BLAZER – FIXED – SINGLE GLAZED – VWCO		
HEADER HEIGHT OF INTERIOR WINDOWS TO MATCH INT. DOORS	(4)	1	36 x 36	BLAZER – HORIZONTAL SLIDER – SINGLE GLAZED TEMPERED – VWCO		



FLOOR PLAN

1/4" = 1'-0"

DATE	REVISION	BY	DATE	REVISION	BY
3-5-04	R.A.D. REVIEW	JJR			
3-6-04	CUSTOMER REVISIONS	JJR			
03-11-04	ENGINEERING, RAD REVIEW	mTo			
03-12-04	CLEANUPS	mTo			

Stephen Tapp
Architect
2330 East Madison St., Seattle, WA 98112
Tel: (206) 320-0534 Cell: (206) 459-5151
Fax: (206) 374-2315
P.O. Box 1074, Puunene, Maui, HI 96784
Cell: (808) 344-4448

This work was reviewed by me and the construction of this project will be supervised by me.

Blazer INDUSTRIES, INC.
P.O. BOX 469 ■ AUMSVILLE, OR 97325-0469

MOBILE
60 x 60

OFFICE for:
GBI Base Yard Offices
Kihei, Maui

TITLE: Floor Plan
Issue Date:
DRAWN BY:
DATE:
JOB NO:

A-1

FASTENING SCHEDULE

WALLS:

PLATE–TO–STUD	MIN. OF 2– 10d x 3" BOX NAILS (SENCO KC27 OR EQUAL)
VW SHEETROCK	SENCO P15 STAPLES & GLUE
BOTTOM PLATE–TO–FLOOR	10d x 3" BOX NAILS @ 8" oc. (SENCO KC27 OR EQUAL)
DURATEMP SIDING–TO–STUD @ SIDEWALL	0.113 x 2" HDT DIPPED GALV BOX NAILS @ 6" EDGE, 12" IN FIELD ALL EDGES SUPPORTED (EXCEPT USE 4" oc @ TOP & BOTTOM)
DURATEMP SIDING–TO–STUD @ ENDWALL	0.113 x 2" HDT DIPPED GALV BOX NAILS @ 4" EDGE, 12" IN FIELD ALL EDGES SUPPORTED (EXCEPT USE 4" oc @ TOP & BOTTOM)
THREE STUD CORNER CONNECTION	10d x 3" BOX NAILS @ 12" (SENCO KC27 OR EQUAL)

MARRIAGE LINE CONNECTION: NOTE: ALL MARRIAGE LINES (DEFINED AS THE SPACE BETWEEN ADJOINING MODULES) MUST BE INSULATED AT THE ROOF, FLOOR AND WALLS ON SITE.

RIDGEBEAMS	1/2" BOLTS w/ 1 1/2" DIA. WASHERS @ 3'–0" oc AND 8" FROM EACH END (MINIMUM 2" EDGE DISTANCE)
RIM JOISTS	(2) 1/2" BOLTS w/ 1 1/2" DIA. WASHERS @ 2'–8" oc AND 8" FROM EACH END (MINIMUM 2" EDGE DISTANCE)

FLOOR:

2 x 8 FLOOR JOIST–TO–RIM	MIN. OF 4– 10d x 3" BOX NAILS (SENCO KC27 OR EQUAL)
CLASS "A" BOTTOM BOARD–TO–JOIST	16 ga. x 3/8" WIDE CROWN @ 12" MAX. EDGES ONLY
FLOOR DECKING–TO–2x JOIST	.113" x 2 3/8" RING SHANK @ 6" EDGE, 12" IN FIELD. (SENCO GE–24). USE CONSTRUCTION ADHESIVE (AFG01) ON JOISTS

ROOF:

RIM–TO–RAFTERS	4– 10d x 3" BOX NAILS (SENCO KC27 OR EQUAL)
ROOF RIM–TO–TOP PLATE	10d x 3" BOX NAILS @ 6" oc. (SENCO KC27 OR EQUAL)
LEDGER–TO–RIM	10d x 3" BOX NAILS @ 3" oc & 3 @ BUTT JOINTS (SENCO KC27 OR EQUAL)
2 x 4 NAILER–TO–RAFTER	3– 10d x 3" BOX NAILS (SENCO KC27 OR EQUAL)
SHEATHING–TO–ROOF MEMBERS	16 ga. x 1 3/4" STAPLES @ 4" EDGE, 12" IN FIELD (SENCO N–19) 2 1/2" oc AT BUILDING PERIMETER AND OVER WALL 'C'.

NOTE: SHEATHING TO BE INSTALLED PERPENDICULAR TO RAFTERS. OFFSET SHEATHING 4 ft. BLOCK EDGES OF ANY PIECES LESS THAN 24". BLOCK PANEL EDGES FOR 18'– 0" FROM WALLS '1' & '2'.

MATERIAL LIST

ROOF:

ROOFING. . . . . .SINGLE PLY MEMBRANE "DUROLAST" over ONE LAYER OF ATI AS FR–10 SLIPSHEET FOR A CLASS "C" RATING.
SHEATHING. . . . .7/16" A.P.A. RATED (24/16)
FRAMING. . . . . .2 x 6 D.F. #2 RAFTERS @ 24" oc
NAILERS. . . . . .2 x 4 D.F. #2 AT 24" oc FOR VENTING
LEDGERS. . . . . .2 x 4
RIMS. . . . . .1 1/2" x 24" MICROLLAM (LVL 2.0E)
INSULATION. . . . .R–19 CELLULOSE BLOW–IN
CEILING. . . . . .SUSPENDED T–BAR (PER UBC STD. 25–2)
VENTING. . . . . .(10) JV14 VENTS (SHIPPED LOOSE)
DRAINAGE. . . . .GUTTERS INSTALLED ON SITE BY OTHERS

WALLS:

SIDING. . . . . .5/8" DURATEMP w/ GROOVES @ 8" oc
SHEATHING. . . . .3/8" APA RATED @ ALL MARRIAGE LINES (GRID 'C' WALLS ARE FUTURE EXTERIOR WALLS AND WILL OVERLAP THE FLOOR AND ROOF RIMS
FASCIA. . . . . .1 x 6 CLEAR CEDAR
TRIM. . . . . .1 x 4 CLEAR CEDAR @ CORNERS / WINDOWS & MOD. LINES
FRAMING. . . .EXT: 2 x 4 D.F. "STANDARD" or "STUD" or BETTER STUDS @ 16" oc
INT: 2 x 4 D.F. STUDS @ 16" or 24" oc except PLUMBING WALLS 2 x 6 or 2 x 8
TOP PLATE. . . . .2 x 4 CONTINUOUS MICROLLAM
BOTTOM PLATE. . .2 x 4 D.F.
INSULATION. . .EXT: R–11 FIBERGLASS BATT
INT: R–11 FIBERGLASS BATT, FULL HEIGHT, IN BOTH WALLS ON GRID 'C'. (FUTURE EXTERIOR WALLS)
R–11 FIBERGLASS "SOUND" TO 8'–0" @ BOTH RESTROOMS, CONTROL MGRS. OFFICE, PROJECT DIRECTORS OFFICE, CONSTRUCTION MANAGERS OFFICE, AND CONFERENCE ROOMS.
INTERIOR FINISH. . .5/8" VINYLWRAP SHEETROCK AND PL WAINSCOT PER CODE IN RESTROOMS
BELT RAIL. . . . . .1 x 6 CLEAR CEDAR

NOTE: USE HOT DIPPED GALV. FASTENERS FOR ALL EXTERIOR SIDING AND TRIM

FLOOR:

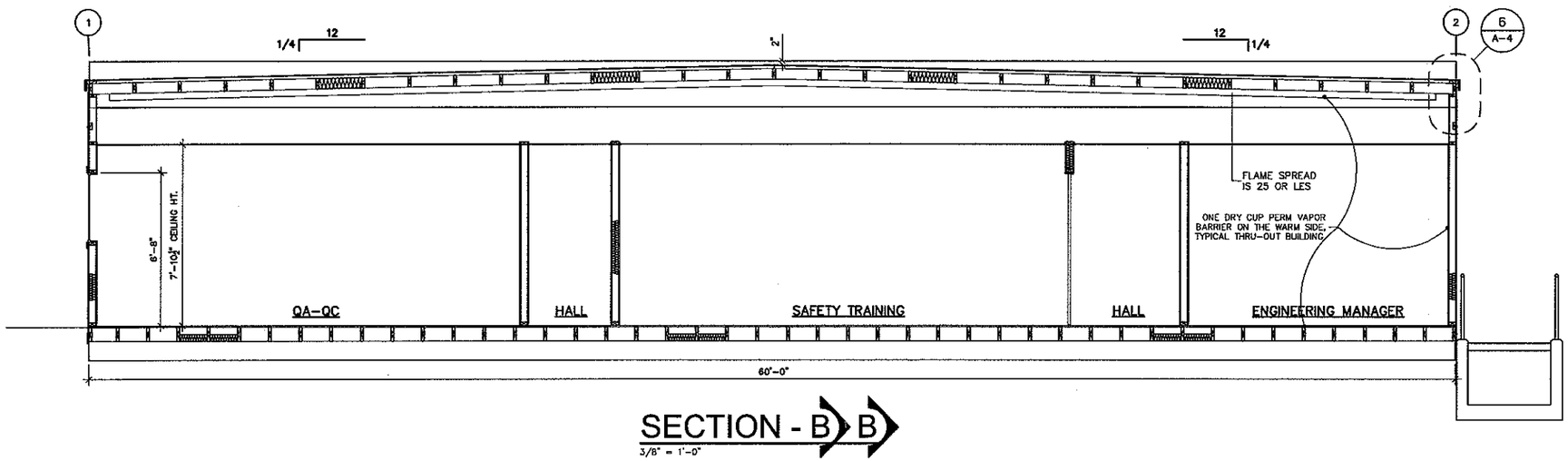
COVERING. .RR ONLY: CONGOLEUM "DIAMOND" SHEET VINYL ALL ELSE: 1/8" V.C.T. – "SHELTER WHITE"
DECKING. . . .1st: 19/32" A.P.A. RATED STURD–I–FLOOR 2nd: 1/4" ULTRAPLY
FRAMING. . . . . .2 x 8 D.F. #2 JOISTS @ 16" oc LIMIT SPLITS TO 5 3/8" @ CTR. BEAM
RIMS. . . . . .2 x 8 CONTINUOUS MICROLLAM
INSULATION. . . . .R–11 FIBERGLASS BATT
BOTTOM COVER. . .CLASS "A"

FRAME:

TYPE. . . . . .TRANSVERSE
MAIN RAIL. . . . . .10" JR. I–BEAM
AXLES. . . . . .4– BRAKE w/ 8:00 x 14.5 14 PLY TIRES
HITCH. . . . . .DETACHABLE

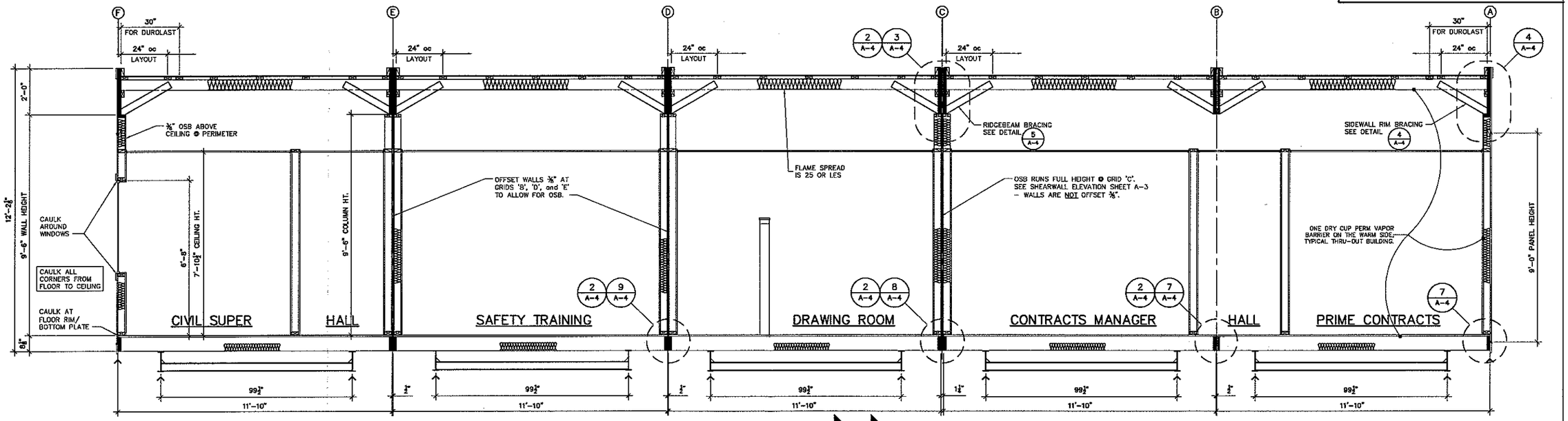
NOTE: FULL LENGTH 11ga. 10" C–CHANNEL CROSSMEMBERS FRONT AND REAR.

FASTENING REQUIREMENTS:
FLOOR JOIST TO I–BEAM.....5/16" x 3" LAGS @ 32" oc (ALTERNATE SIDE TO SIDE OF EACH I–BEAM)
END CROSSMEMBER CONNECTION TO END RIM JOIST... (9) 5/16" x 3" LAGS @ I–BEAM.



SECTION - B B

3/8" = 1'–0"



SECTION - A A

1/2" = 1'–0"

DATE	REVISION	BY	DATE	REVISION	BY
03-11-04	ENGINEERING, RAD REVIEW	mTo			

Stephen Tapp
Architect
2330 East Madison St., Seattle, WA 98112
Tel: (206) 320-0534 Cell: (206) 459-5151
Fax: (206) 374-2315
P.O. Box 1074, Puunene, Maui, HI 96784
Cell: (808) 344-4448

This work was reviewed by me and the construction of this project will be supervised by me.

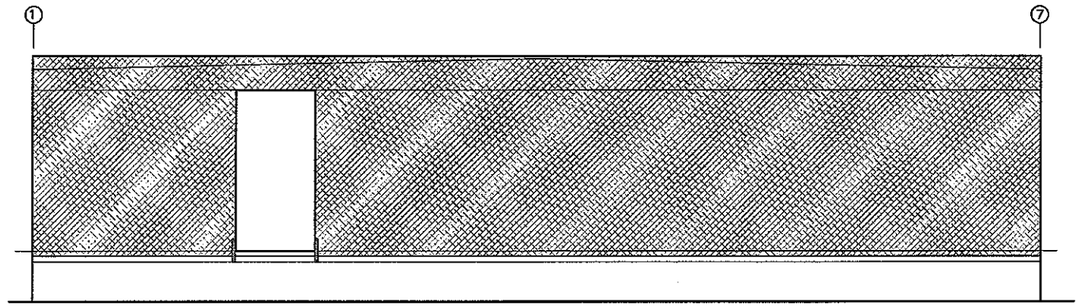
Blazer INDUSTRIES, INC. P.O. BOX 489 ■ AUMSVILLE, OR 97325-0489

MOBILE
60 x 60

OFFICE for:
GBI Base Yard Offices
Kihei, Maui

TITLE: Section
Issue Date:
DRAWN BY:
DATE:
JOB NO:

A-2

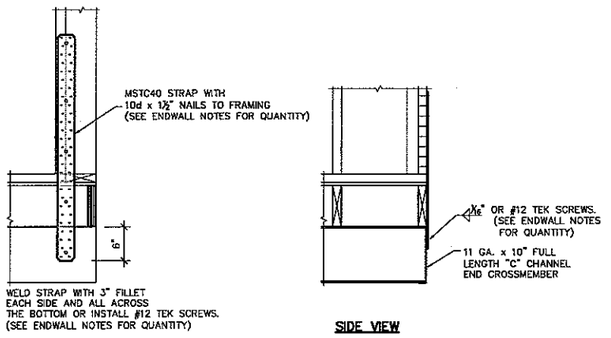


SHEARWALL @ GRID 'C'
1/4" = 1'-0"

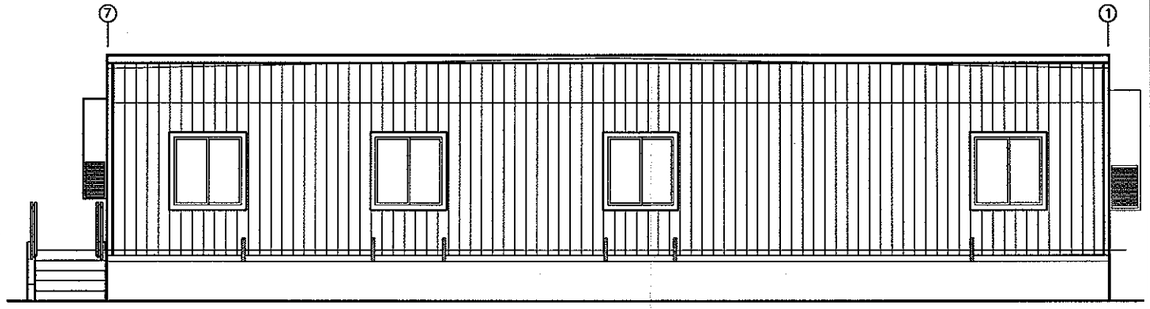
MOD. #12283
(MOD. #12284 IS MIRROR)

SHEARWALL FASTENING – BOTH WALLS

- SHEATHE WALLS WITH 3/8" APA RATED SHEATHING. ALL EDGES SUPPORTED. FASTEN w/16 GA. x 1¾" STAPLES @ 4"oc EDGE, 12"oc FIELD.
- SIMPSON ST2215 STRAPS FROM DOUBLE STUD TO RIM WHERE SHOWN w/8–10d x 1½" NAILS EA. END.



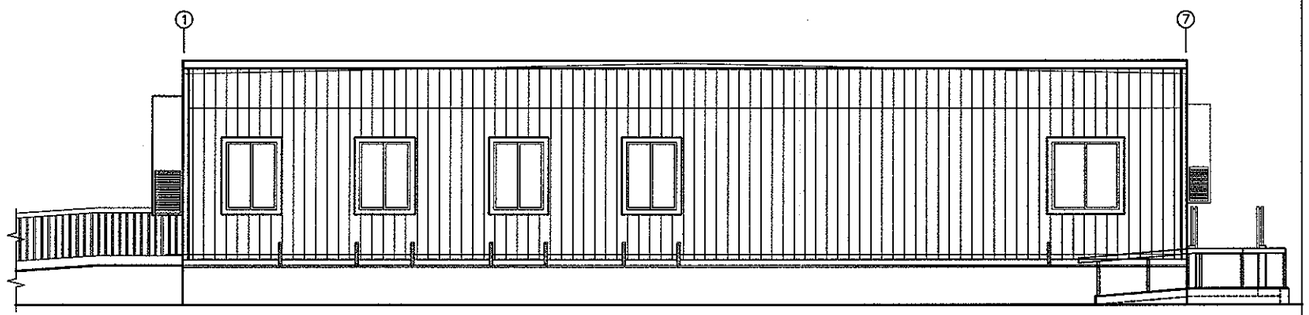
MSTA40 INSTALLATION DETAIL
1" = 1'-0"



WALL 'A' ELEVATION
1/4" = 1'-0"

WALLS 'A' & 'B'

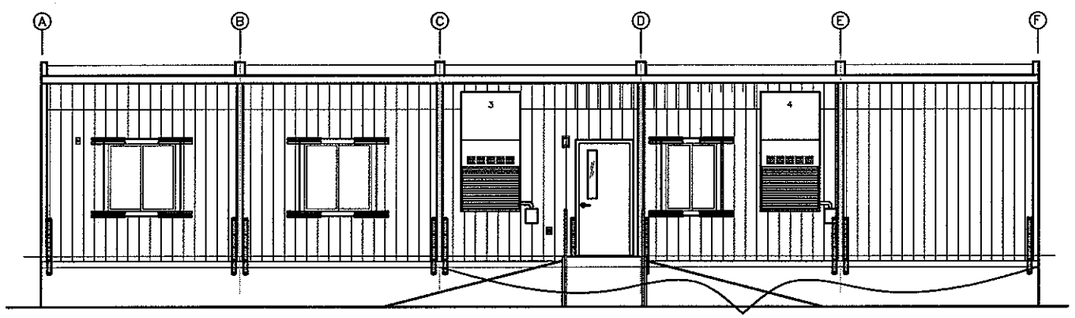
- SIMPSON ST2215 STRAPS FROM DOUBLE STUD TO RIM WHERE SHOWN w/8– 10d x 1 1/2" NAILS EA. END.



WALL 'F' ELEVATION
1/4" = 1'-0"

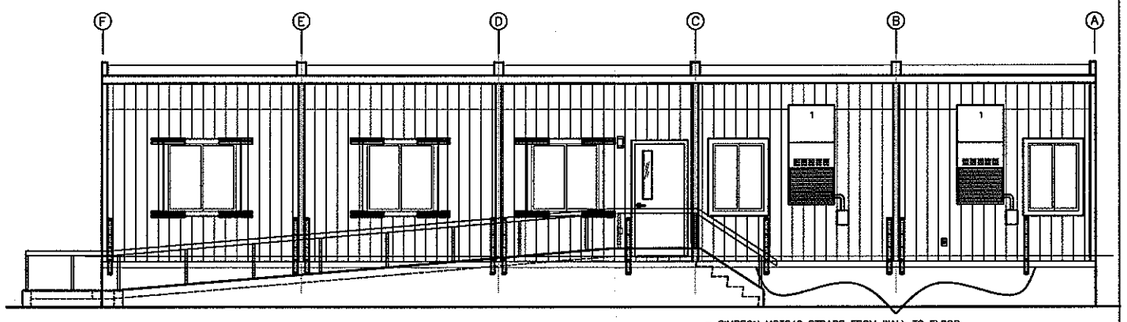
ENDWALL FASTENING – BOTH ENDWALLS

- 5/8" DURATEMP SIDING, ALL EDGES SUPPORTED. FASTEN w/0.113 x 2" HOT DIPPED GALV. NAILS @ 4"oc EDGE, 12"oc FIELD.
- SHEATHE INTERIOR OF ENDWALLS (EXCEPT WHERE DELETED) WITH 3/8" APA RATED SHEATHING. ALL EDGES SUPPORTED. FASTEN w/16 GA. x 1¾" STAPLES @ 4"oc EDGE, 12"oc FIELD.
- PROVIDE WINDOW BLOCKING EACH CORNER OF EACH WINDOW AT HEADER & SILL WHERE SHOWN. USE (2) 30 GA. x 1 1/2" x 24"± METAL STRAPS WITH 6–16 GA. x 1" WIDECROWN STAPLES EA. END.
- SIMPSON MSTC40 STRAPS FROM WALL TO FLOOR WHERE SHOWN w/19– 10d x 1 1/2" NAILS TO WALL AND 3" WELD OR 5– #12 TEK SCREWS TO FRAME.



WALL '1' ELEVATION
1/4" = 1'-0"

– NO INTERIOR SHEATHING REQUIRED IN THIS AREA ONLY.



WALL '7' ELEVATION
1/4" = 1'-0"

– SIMPSON MSTC40 STRAPS FROM WALL TO FLOOR w/30– 10d x 1 1/2" NAILS TO WALL AND 4" WELD OR 7– #12 TEK SCREWS TO FRAME IN THIS AREA ONLY.

DATE	REVISION	BY	DATE	REVISION	BY
03-11-04	ENGINEERING, RAD REVIEW	mTo			
03-12-04	CLEANUPS	mTo			

Stephen Tapp
Architect
2330 East Madison St., Seattle, WA 98112
Tel: (206) 329-0534 Cell: (206) 459-5151
Fax: (206) 374-2315
P.O. Box 1074, Puunene, Maui, HI 96784
Cell: (808) 344-4448

This work was reviewed by me and the construction of this project will be supervised by me.

Blazer INDUSTRIES, INC.
P.O. BOX 459 ■ AUMSVILLE, OR 97325-0459

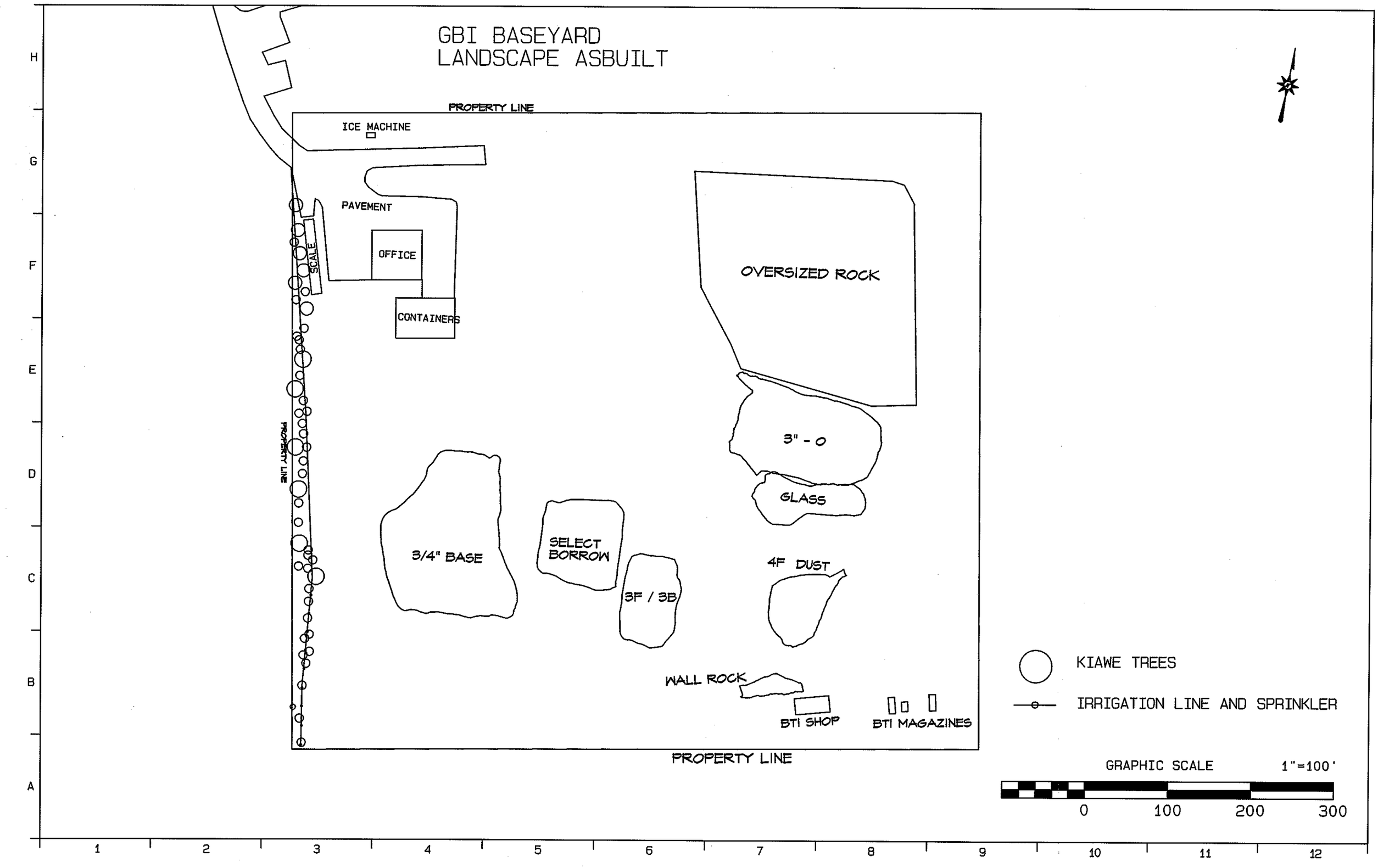
MOBILE
60 x 60

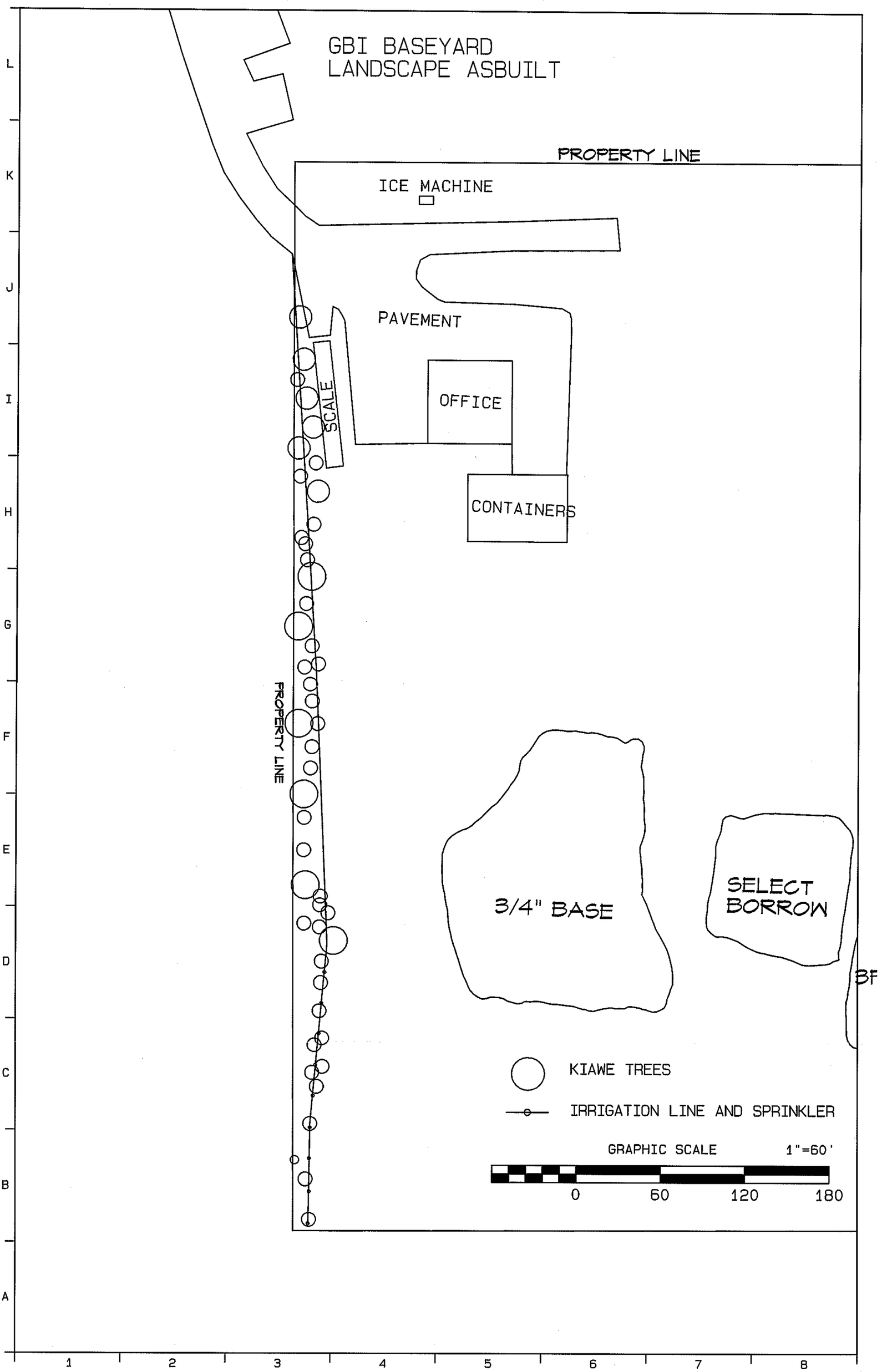
OFFICE for:
GBI Base Yard Offices
Kihei, Maui

TITLE:	Elevations
Issue Date:	
DRAWN BY:	
DATE:	
JOB NO:	

A-3

GBI BASEYARD
LANDSCAPE ASBUILT




GBI BASEYARD
LANDSCAPE ASBUILT
PROPERTY LINE
ICE MACHINE
PAVEMENT
OFFICE
SCALE
CONTAINERS
PROPERTY LINE
3/4" BASE
SELECT BORROW
BF
KIAWE TREES
IRRIGATION LINE AND SPRINKLER
GRAPHIC SCALE 1"=60'
0 60 120 180
L K J I H G F E D C B A
1 2 3 4 5 6 7 8

APPENDIX C.

Preliminary Engineering Report

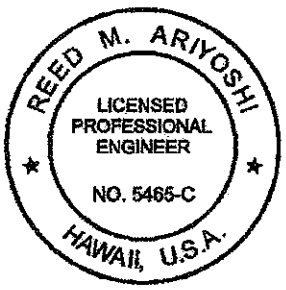
Established 1969

Preliminary Engineering Report

Goodfellow Bros., Inc. Baseyard

Kihei, Maui, Hawaii
TMK: (2) 2-2-02: 78

Prepared For: Goodfellow Bros., Inc.



WARREN S. UNEMORI ENGINEERING, INC.
Civil and Structural Engineers – Land Surveyors
Wells Street Professional Center – Suite 403
2145 Wells Street
Wailuku, Maui, Hawaii 96793

Date: July 2011

Table of Contents

Exhibits

Preliminary Engineering Report for
Goodfellow Bros., Inc. Baseyard

I. Background

Goodfellow Bros., Inc. currently occupies and operates a construction baseyard on Lot 1 of Goodfellow Bros., Inc. Consolidation (TMK: (2) 2-2-002:078). The subject parcel, encompassing a gross area of approximately 14.5 acres, is currently zoned for agricultural use in Kihei, on the island of Maui, and the State of Hawaii (See Exhibit A). This report briefly describes and evaluates the existing infrastructure in the project vicinity.

II. Project Location and Description

The project site is located east of Piilani Highway, approximately 850 feet southeast of the Piilani Highway / East Welakahao Road intersection. It is bordered by the County of Maui Kihei Wastewater Reclamation Facility to the north; and pastured land owned by Haleakala Ranch Company to the west, east and south (Lot 2 of Anawio Subdivision). The elevation of the site ranges from approximately (+) 146 feet to approximately (+) 94 feet M.S.L., sloping at approximately 6.1% in an easterly to westerly direction.

The subject parcel, which was formerly pasture land, currently serves as a baseyard for construction trailers, material stockpiles and construction equipment owned by Goodfellow Bros., Inc.

The proposed plan is to obtain a Change in Zoning, District Boundary Amendment, and Community Plan Amendment for the parcel to convert its designation from "Agricultural" (AG) to "Heavy Industrial" (M-2, HI).

III. Existing Infrastructure

a. Water System

The project site is serviced by an existing private potable water system owned by Maui Highlands Properties, LLC. The system's primary sources of water are two wells constructed in the Keokea region (See Exhibits B & C). The first well is approximately 570 feet deep and located at approximately 550 feet above sea level, while the second well is approximately 577 feet deep and located at approximately 552 feet above sea level. Both wells have pumps rated at 260 gpm to dispense water. The water drawn from the wells is conveyed by means of an existing underground 12-inch waterline to a reverse osmosis water treatment plant where it is treated and stored in an existing 600,000 gallon water tank located northeast of the project site. The floor elevation of the tank is at approximately 282 feet. Water is conveyed to the site by means of an underground 6-inch waterline which is connected to an existing 12-inch outflow waterline from the existing 600,000 gallon water tank. The average domestic water consumption of the facilities on the project site based on an average of water use billing records has been determined to be approximately 400 gpd.

Fire protection for the site is currently provided by two (2) fire hydrants (spaced approximately 150 feet apart) located near the northern boundary of the parcel and one (1) fire hydrant located along the existing access driveway to the project site near the westerly boundary. These hydrants are connected to an existing 8-inch reclaimed waterline that is connected to the existing 18-inch reclaimed waterline (operated by the County of Maui, Department of

Environmental Management – Wastewater Reclamation Division). Wastewater processed at adjacent Kihei Wastewater Reclamation facility is treated to State of Hawaii R-1 standards, stored in an existing open reservoir at the facility, and pumped to an existing 1.0 million gallon storage tank located southeast of the project site at an approximate elevation of 303 feet. The existing 18-inch reclaimed waterline is the outflow line from the storage tank.

b. Wastewater System

An existing underground sewer system privately owned, operated, and maintained by Goodfellow Bros., Inc. services the existing office trailers situated on the project site. The wastewater is collected by an underground gravity sewerline and conveyed to an existing wastewater pump station located in the project site. An existing 1½-inch force main conveys the wastewater from the pump station to an existing 10-inch gravity sewerline located mauka (east) of the adjacent Kihei Wastewater Reclamation Facility. The existing 10-inch gravity sewerline is connected to an existing wastewater pump station where it is pumped directly into the Kihei Wastewater Reclamation facility for the treatment. For a maximum occupancy of 25 employees, the wastewater contribution for the project site is approximately 500 gpd based on County wastewater flow standards. Assuming that average daily wastewater generated by the project site will be 90% of the aforementioned average domestic water consumption, the current wastewater contribution for the project is estimated to be approximately 360 gpd.

c. Drainage

According to our calculations, a 10-year recurrence interval, 1-hour duration storm formerly generated 12.4 cfs. of pre-development stormwater runoff on the project site. After the development of the project site into its current configuration, approximately 42.6 cfs of stormwater runoff is produced by the project site. The surface runoff sheet flows across the project site in an easterly to westerly direction into an existing sump area in the vicinity of the southwesterly corner of the project site. This sump has an approximate storage capacity of 1.3 ac.-ft. which is capable of retaining the increase in stormwater runoff volume resulting from a 50-year recurrence interval, 1-hour duration storm of approximately 0.6 ac.-ft.

d. Access

Piilani Highway is the main north-to-south arterial highway linking Kihei to other urban areas of Maui. Currently, the roadway is a four (4) lane highway that is owned and maintained by the State of Hawaii, Department of Transportation. Piilani Highway begins on its northern end at the end of Mokulele Highway and terminates on its southern end at its intersection with Wailea Ike Drive.

Access to the parcel is provided by an existing asphalt concrete paved driveway on the south side of East Welakahao Road, which, intersects and connects to Piilani Highway approximately 350 feet to the northwest of the driveway connection.

e. Electrical / Telephone

There are existing underground and overhead electrical and telephone distribution systems servicing the project site. Onsite underground lines are connected to overhead lines at a power pole located at the northwest corner of the project site.

IV. Proposed Improvements

a. General

Since the site will continue to be utilized as a construction baseyard (which is permitted by an existing Special Use permit), no changes to the existing topography or use within the project site are expected to occur due to the proposed change in zoning and land use designation from "Agricultural" to "Heavy Industrial." Any further or future development or alteration to the project site with the exception of the fire protection system will be required to mitigate its impact and/or improve the surrounding infrastructure to accommodate it.

b. Water System

Based on a requirement from the Department of Fire and Public Safety, the fire flow requirement based on Heavy Industrial zoning will be 2,500 gpm. The existing 8-inch fire protection waterline will need to be upsized to a 10-inch waterline and additional fire hydrants will need to be installed at intervals of 250 feet to satisfy the fire flow requirement for the project.

V. Conclusion

Given the characteristics of the project site and the extent of the existing infrastructure, it is our professional opinion that the existing infrastructure on the project site with the exception of the fire protection system is sufficient to support the proposed change in zoning. Proposed improvements to the existing fire protection system will ensure compliance with the applicable fire protection requirements for the project.

Report Prepared By:

Derek T. Ono

Report Checked By:

Reed M. Ariyoshi

V:\Projdata\10PROJ\10057\Reports\prelim engineering\GBIengrpt_rev.docx

EXHIBITS

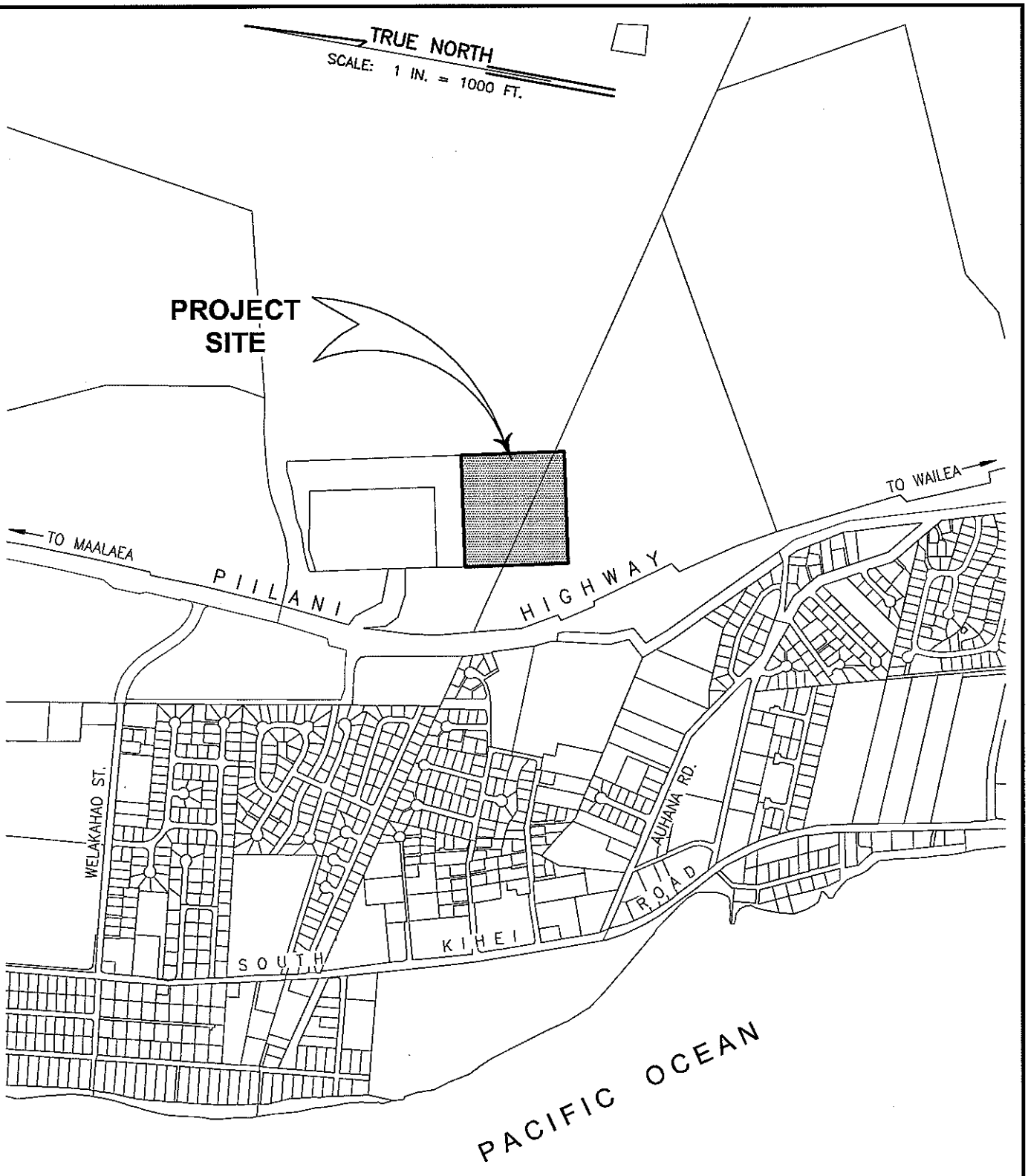


EXHIBIT A - LOCATION MAP

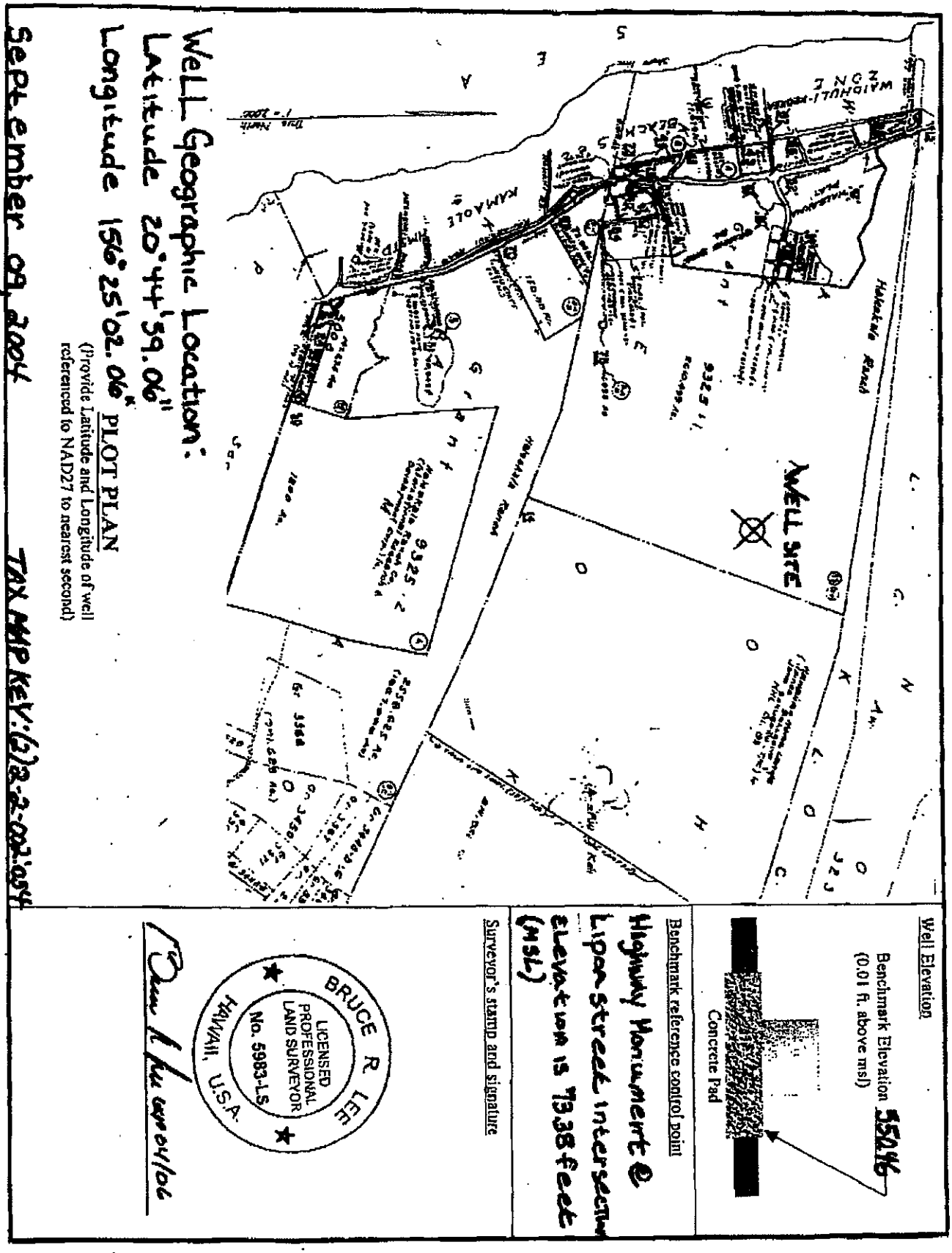
0 1000 2000 3000 4000

SCALE: 1 IN. = 1000 FT.

WARREN S. UNEMORI ENGINEERING, INC.
CIVIL & STRUCTURAL ENGINEERS / LAND SURVEYORS

November 1, 2010

V:\Projdata\10PROJ\10057\dwg\exhibits\Drainage Report\exb-locmap-00.dwg



Well Geographic Location:
Latitude 20°44'59.06"
Longitude 156°25'02.06" PLOT PLAN
(Provide Latitude and Longitude of well referenced to NAD27 to nearest second)

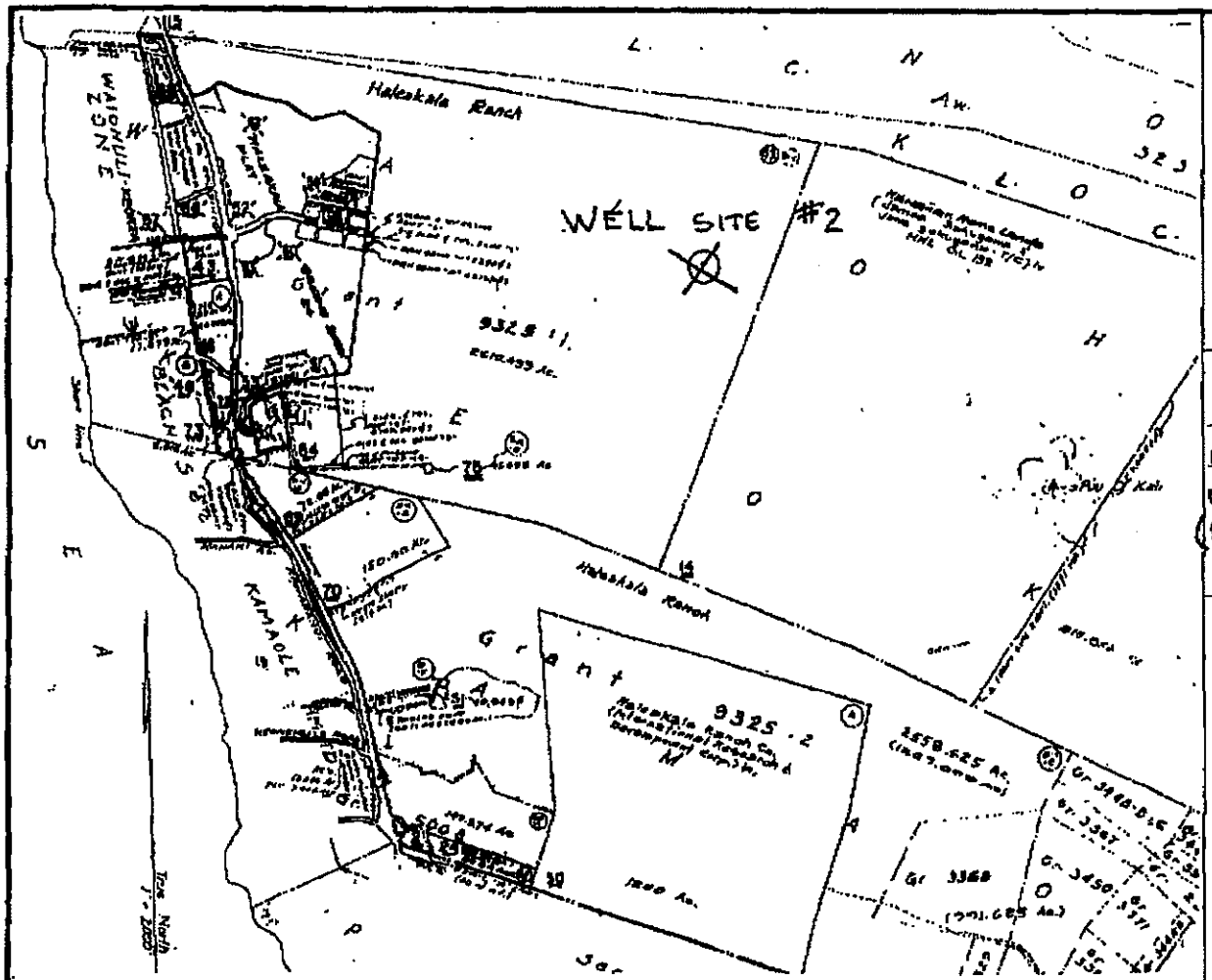
September 09, 2004

TAX MAP KEY: (2) 2-2-002:004

EXHIBIT B

#1

EXHIBIT C



WELL GEOGRAPHIC LOCATION:
LATITUDE : 20° 44' 59.24"
LONGITUDE: 156° 25' 01.59"

PLOT PLAN
(Provide Latitude and Longitude of well referenced to NAD27 to nearest second)

APRIL 4, 2005

TAX MAP KEY: (2) 2-2-002:054

Well Elevation

Benchmark Elevation 552.50
(0.01 ft. above msl)

Benchmark reference control point

HIGHWAY MONUMENT @ LIPOA STREET INTERSECTION
ELEVATION = 73.38 FEET (MSL).

Surveyor's stamp and signature

CARL R. MUSTO
LICENSED PROFESSIONAL LAND SURVEYOR
NO. 11443-LS
HAWAII, U.S.A.

Carl R. Musto exp 04/06

APPENDIX D.

Biological Resources Survey

BIOLOGICAL RESOURCES SURVEY

for the

GOODFELLOW BROS. BASEYARD & BUFFER LANDS

KIHEI, MAUI, HAWAII

by

ROBERT W. HOBDY
ENVIRONMENTAL CONSULTANT
Kokomo, Maui
January 2005

Prepared for: PACIFIC RIM LAND, INC.

BIOLOGICAL RESOURCES SURVEY
GOODFELLOW BROS. BASEYARD & BUFFER LANDS
KIHEI, MAUI

INTRODUCTION

The Goodfellow Bros. Baseyard & Buffer Lands Project lies on approximately 36.6 acres of undeveloped and partially developed lands in upper central Kihei from within the large ahupua'a of Keokea (TMK 2-2-02:054) and Kama'ole (TMK 2-2-02:069). It comprises three pieces of land: a 14.5 acre baseyard as well as undeveloped lands with 7.4 acres and 14.7 acre pieces. The whole area is bounded on the north by the Kihei Wastewater Treatment Plant, on the east and south by open pasture lands and on the west by the Pi'ilani Highway.

SITE DESCRIPTION

The terrain within the project area is gently to moderately sloping and is bisected by one small gully. Elevations above sea level range from 110 feet at the top to 40 feet at the lowest point along the highway. The area could be characterized as a semi-desert savannah. Rainfall averages only 10-12 inches per year with long hot summers (Armstrong,1983). Soils are of the Waiakoa extremely stony silty clay loam, 3-25% complex, neutral and 20-40 inches deep with many surface and subsurface stones (Foote, et al. 1972).

BIOLOGICAL HISTORY

In pre-contact times this area would have supported a diverse dry forest/grassland with many species of native trees, shrubs, vines and grasses and a few seasonal herbs and ferns, as well as a complement of native birds and insects. We can still observe fragments of this diversity in relictual pockets of native vegetation in a few places between Kihei and Makena. The diversity of native species in this area was drastically reduced by periodic fires and by over a century of browsing and grazing by feral and domesticated herbivores and their replacement by aggressive non-native plant species. The project area now contains only some of the commoner native species that have proven to be stronger competitors and more resistant to disturbance.

SURVEY OBJECTIVES

This report summarizes the findings of a flora and fauna survey of the proposed Goodfellow Bros. Baseyard & Buffer Lands Project which was conducted in January, 2005.

The objectives of the survey were to:

1. Document what plant, bird and mammal species occur on the property or may likely occur in the existing habitat.
2. Document the status and abundance of each species.
3. Determine the presence or likely occurrence of any native flora and fauna, particularly any that are Federally listed as Threatened or Endangered. If such occur, identify what features of the habitat may be essential for these species.
4. Determine if the project area contains any special habitats which if lost or altered might result in a significant negative impact on the flora and fauna in this part of the island.
5. Note which aspects of the proposed development pose significant concerns for plants or for wildlife and recommend measures that would mitigate or avoid these problems.

BOTANICAL SURVEY REPORT

SURVEY METHODS

A walk-through botanical survey method was used following a route to ensure complete coverage of the area. Areas most likely to harbor native or rare plants such as gulches or rocky outcroppings were more intensively examined. Notes were made on plant species, distribution and abundance as well as terrain and substrate.

DESCRIPTION OF THE VEGETATION

A total of 52 plant species were recorded from the entire 36.6 acre project area, reflecting a variety of habitats. The 14.5 acre baseyard area is highly disturbed, having been cleared and used for equipment and materials storage. It is occupied by a variety of hardy weeds. The vegetation across the undeveloped area is fairly uniform. It consists of an almost continuous cover of buffelgrass (*Cenchrus ciliaris*) with scattered kiawe trees (*Prosopis pallida*). The buffelgrass, following a wet winter season, was extremely dense and two to three feet deep, crowding out most other species. The kiawe trees are scattered throughout the whole area but sometimes form a closed canopy along the gully bottom. Some ridgetop areas where the buffelgrass is less dense support a variety of other herbaceous species many of which are ephemeral annuals in this dry locality. Some of the deeper gully bottoms have rock faces and ledges that support other species, but even in these habitats the buffelgrass is the

most common species. Besides the dominant buffelgrass and kiawe only two other species were found to be common within the project area, 'ilima (*Sida fallax*), and 'uhaloa (*Waltheria indica*).

DISCUSSION AND RECOMMENDATIONS

The vegetation throughout the project area is totally dominated by just two species, buffelgrass and kiawe that together comprise at least 95% of the biomass. Most of the rest of the plant species found are ephemeral annuals that all but disappear during the hot, dry summer and fall seasons.

Only two native plant species were found within the project area. Both of these are common lowland species in Hawaii and other Pacific islands. No officially listed Threatened or Endangered plants (U.S. Fish and Wildlife Service 1999) are found on the site, nor do any plants proposed as candidate for such status occur on the property.

No wetlands occur on the site. Nothing remotely approaching the three essential criteria that define a Federally recognized wetland, namely 1) hydrophytic vegetation 2) hydric soils and 3) wetland hydrology occur within this dry project area.

Because the vegetation on the site is dominated primarily by non-native plants and because there are no rare or protected native species within the project area, there is little of botanical concern and the proposed project is not expected to have a significant negative impact on the botanical resources.

PLANT SPECIES LIST

Following is a checklist of all those vascular plant species inventoried during the field studies. Plant families are arranged alphabetically within two groups: Monocots and Dicots. Taxonomy and nomenclature of the flowering plants (Monocots and Dicots) are in accordance with Wagner et al. (1999).

For each species, the following information is provided:

1. Scientific name with author citation
2. Common English or Hawaiian name.
3. Bio-geographic status. The following symbols are used:
   endemic = native only to the Hawaiian Islands; not naturally occurring anywhere else in the world.
   indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).
   non-native = all those plants brought to the islands intentionally or accidentally after western contact.
4. Abundance of each species within the project area:
   abundant = forming a major part of the vegetation within the project area.
   common = widely scattered throughout the area or locally abundant within a portion of it.
   uncommon = scattered sparsely throughout the area or occurring in a few small patches.
   rare = only a few isolated individuals within the project area.

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
MONOCOTS			
POACEAE (Grass Family)			
Cenchrus ciliaris L.	buffelgrass	non-native	abundant
Chloris barbata (L.) Sw.	feather fingergrass	non-native	uncommon
Cynodon dactylon (L.) Pers.	*manienie*	non-native	rare
Digitaria violascens Link	*kukae pua'a*	non-native	rare
Eleusine indica (L.) Gaertn.	wiregrass	non-native	rare
Eragrostis pectinacea (Michx.) Nees	carolina lovegrass	non-native	rare
Eragrostis tenella (L.) Beaux. Ex Roem.&Schult	----------	non-native	uncommon
Panicum maximum Jacq.	guinea grass	non-native	uncommon
Setaria verticillata (L.) P. Beauv.	bristly foxtail	non-native	rare
Tragus berteronianus Schult.	bertero goatgrass	non-native	uncommon
DICOTS			
ACANTHACEAE (Acanthus Family)			
Asystasia gangetica (L.) T. Anderson	Chinese violet	non-native	rare
AMARANTHACEAE (Amaranth Family)			
Amaranthus spinosus L.	spiny amaranth	non-native	uncommon
Amaranthus viridis L.	slender amaranth	non-native	rare
APOCYNACEAE (Dogbane Family)			
Cascabela thevetia (L.) Lippold	be-still tree	non-native	uncommon
ASCLEPIADACEAE (Milkweed Family)			
Asclepias physocarpa (E.Mey.) Schlecter	balloon plant	non-native	rare
ASTERACEAE (Sunflower Family)			
Bidens pilosa L.	spanish needle	non-native	rare
Pluchea carolinensis (Jacq.) G. Don	sourbush	non-native	uncommon

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
Pluchea indica (L.) Less.	Indian fleabane	non-native	rare
Synedrella nodiflora (L.) Gaertn.	nodeweed	non-native	rare
Tridax procumbens L.	coat buttons	non-native	rare
Verbesina encelioides (Can) Benth. & Hook.	golden crown beard	non-native	uncommon
Xanthium strumarium (L.)	*kikania*	non-native	rare
BORAGINACEAE (Borage Family)			
Heliotropium procumbens Mill.	----------	non-native	rare
BRASSICACEAE (Mustard Family)			
Lepidium virginicum L.	pepperwort	non-native	rare
CAPPARACEAE (Caper Family)			
Cleome gynandra L.	wild spider flower	non-native	rare
CONVOLVULACEAE (Morning Glory Family)			
Ipomoea triloba L.	little bell	non-native	rare
Merremia aegyptia (L.) Urb.	hairy merremia	non-native	rare
CUCURBITACEAE (Gourd Family)			
Cucumis dipsaceus Ehrenb. Ex Spach	hedgehog gourd	non-native	rare
EUPHORBIACEAE (Spurge Family)			
Chamaecyce hirta (L.) Millsp.	hairy spurge	non-native	uncommon
Chamaecyce hyssopifolia (L.) Small	----------	non-native	rare
Euphorbia heterophylla (L.)	kaliko	non-native	rare
Ricinus communis L.	castor bean	non-native	uncommon
FABACEAE (Pea Family)			
Crotalaria incana L.	fuzzy rattlepod	non-native	uncommon
Crotalaria pallida Aiton	smooth rattlepod	non-native	rare
Desmanthus pernambucanus (L.) Thellung	slender mimosa	non-native	rare
Desmodium tortuosum (SW.) DC	Florida beggarweed	non-native	uncommon

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
Erythrina variegata L.	*wiliwili*	non-native	uncommon
Leucaena leucocephala (Lam.) deWit	*koa haole*	non-native	uncommon
Macroptilium lathyroides (L.) Urb.	wild bean	non-native	rare
Neonotonia wightii (Wight & Arnott) Lackey	----------	non-native	rare
Prosopis pallida (Humb.&Bonpl.Ex.Willd.) Kunth	*kiawe*	non-native	common
MALVACEAE (Mallow Family)			
Abutilon grandifolium (Willd.) Sweet	hairy abutilon	non-native	rare
Malva parviflora L.	cheeseweed	non-native	uncommon
Malvastrum coromandelianum (L.) Garcke	false mallow	non-native	uncommon
Sida fallax walp.	*'ilima*	indigenous	common
Sida rhombifolia L.	----------	non-native	uncommon
NYCTAGINACEAE (Four - O'clock Family)			
Boerhavia coccinea Mill.	----------	non-native	rare
PORTULACACEAE (Purslane Family)			
Portulaca oleracea L.	pigweed	non-native	rare
SOLANACEAE (Nightshade Family)			
Nicandra physalodes (L.) Gaertn.	apple of Peru	non-native	rare
Nicotiana glauca R.C. Graham	tree tobacco	non-native	uncommon
Solanum lycopersicum L.	tomato	non-native	rare
STERCULIACEAE (Cacao Family)			
Waltheria indica L.	*'uhaloa*	indigenous	common

FAUNA SURVEY REPORT

SURVEY METHODS

A walk-through survey method was conducted in conjunction with the botanical survey. All parts of the project area were covered. Field observations were made with the aid of binoculars and by listening to vocalizations. Notes were made on species abundance, activities and location as well as observations of trails, tracks scat and signs of feeding. In addition an evening visit was made to the area to record crepuscular activities and vocalizations and to see if there was any evidence of occurrence of the Hawaiian hoary bat (*Lasiurus cinereus semotus*) in the area.

RESULTS

MAMMALS

Two species of feral mammals were observed in the project area during two site visits . Taxonomy and nomenclature follow Tomich (1986).

Axis deer (*Axis axis*) - A single doe was flushed from deep grass from the gully in the southern part of the project area. It had bedded down for the day in this undeveloped area. Deer are nocturnally active, mobilizing around dusk to feed within this type of area and likely within nearby fairways and lush landscaped areas under cover of darkness. Numerous deer are known to occupy the dry savannah pastures above Kihei.

Cats (*Felis domestica*) – Two cats were seen within the baseyard area. These are no doubt cared for by baseyard personnel.

Deep, dense grass cover prevented good visibility of other ground dwelling animals, but a significant population of mongoose, rats and mice would be expected. Mongoose feed on rats and mice as well as ground nesting birds. Mice and rats were not seen but their presence is virtually guaranteed by the abundant food supply in the form of grass seed and herbaceous vegetation.

A special effort was made to look for the native Hawaiian hoary bat by making an evening survey of the area. When present in an area these bats can be easily identified as they forage for insects, their distinctive flight patterns clearly visible in the glow of twilight. No evidence of such activity was observed though visibility was excellent.

BIRDS

There was good birdlife diversity in this normally dry area. An ample supply of grass and herbaceous plant seeds were available following a good winter wet season. Adult insects and caterpillars were also seen especially on the kiawe trees. Twelve species of non-native birds and one indigenous migratory bird species were seen, most taking advantage of this seasonal food supply. Taxonomy and nomenclature follow American Ornithologist's Union (1988), Berger (1981), Pratt et al.(1987) and Hawaii Audubon Society (1989).

Common mynah (*Acridotheres tristis*) – Many pairs of mynahs were seen throughout the area, feeding in the kiawe trees or transiting the area high above the trees especially during the evening. They are confident and assertive birds.

Barred dove (*Geopelia striata*) – Many barred doves were seen and heard in the kiawe trees. Their smaller size, striated body and white flashing tails feathers when taking flight distinguish this species from the spotted dove.

Gray francolin (*Francolinus pondicerianus*) – A few gray francolins were seen in ground openings and in kiawe trees, but their loud and distinctive calls were heard frequently throughout the area indicating a larger population than seen.

Spotted dove (*Streptopelia chinensis*) – This large dove was seen frequently throughout the area and transiting overhead. Their smooth flight and evenly modulated cooing are distinctive.

Nutmeg mannikin (*Lonchura punctulata*) – One flock of these small birds was seen resting in a kiawe tree.

American cardinal (*cardinalis cardinalis*) – Both sexes of this species were seen individually or in pairs throughout the area. Their bright color and distinctive calls are unmistakable.

Warbling silverbill (*Lonchura malabarica*) – One flock of these small pale-brown birds was seen feeding in the grassland.

Mockingbird (*Mimus polyglottus*) – Four mockingbirds were seen in the late afternoon flying between kiawe trees.

Cattle egret (*Bubulcus ibis*) – Several egrets were seen transiting the property in the evening heading toward their roosting area. This property is not habitat for these birds for feeding, roosting or nesting.

Golden plover (*Pluvialis dominica fulva*) – Several plovers flew into an open area in the evening to congregate for the night. Plovers can occupy almost all habitats except dense forests for feeding. Plovers are widespread and common in Hawaii during the fall and winter.

Japanese white-eye (*Zosterops japonica*) - A few white-eyes were seen feeding in the kiawe and their high pitched twittering was occasionally heard.

House finch (*Carpodacus mexicanus*) – A few pairs of these moderately-sized, light brown finches were seen in the kiawe trees.

Java sparrow (*Padda oryzivora*) – Two of these distinctive birds were seen in a kiawe tree. Their twittering can be distinguished at quite a distance.

Other bird species I could possibly expect to see in this area but which were not present include the black francolin (*Francolinus francolinus*), the house sparrow (*Passer domesticus*) and the barn owl (*Tyto alba*). No rare native bird species were seen.

INSECTS

While insects in general were not tallied, they were abundant throughout the area and fueled the elevated bird activity observed. One native Sphingid moth, Blackburn's sphinx moth (*Manduca blackburni*) has been put on the Federal Endangered species list and this designation requires special focus (USFWS 2000). Blackburn's sphinx moth occurs on Maui although it has not been found in this area. Its native host plants are species of 'Aiea (*Nothocestrum*) and a non-native alternative host plant is tree tobacco (*Nicotiana glauca*). There are no 'aiea on or near the project area. Tree tobacco plants were seen within much of the baseyard area. Each of these trees were carefully examined. No Blackburn's sphinx moth or their larvae were observed.

CONCLUSIONS

Fauna surveys are seldom comprehensive due to the short window of observation, the seasonal nature of animal activities and the unpredictable nature of their daily movements. This survey, however, should be considered fairly representative due to the abundance of food resources present throughout the area and the resulting level of animal use. While ideal for many types of non-native animals the habitat is not suitable in its present state for most native animals, and is far removed from remnant populations. No endangered mammal, bird or insect species were observed in the project area during the course of the survey. No unique or special habitats were found on the property. The proposed changes in land use should have no significant impact on the fauna in this part of Maui.

RECOMMENDATIONS

Some seabirds such as the Endangered dark rumped petrel (*Pterodroma phaeopygia sandwichensis*) and the commoner wedge-tailed shearwater (*Puffinus pacificus chlororhynchus*), nesting on the summit of Haleakala and the coastal sites of Wailea Point and Molokini respectively, leave their burrows before dawn and return after sunset. These birds can become attracted to and confused by bright lights, crash and be killed by vehicles or cats and dogs that find them. Young birds are especially vulnerable when they fledge in late fall and take their first tentative flights. It is recommended that all significant outdoor lighting in the development be hooded to direct the light downward.

ANIMAL SPECIES LIST

Following is a checklist of the animal species inventoried during the field work. Animal species are arranged in descending abundance within two groups: Mammals and Birds. For each species the following information is provided:

1. Common name
2. Scientific name
3. Bio-geographical status. The following symbols are used:
   - endemic = native only to Hawaii; not naturally occurring anywhere else in the world.
   - indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).
   - non-native = all those animals brought to Hawaii intentionally or accidentally after western contact.
   - migratory = spending a portion of the year in Hawaii and a portion elsewhere. In Hawaii the migratory birds are usually in the overwintering/non-breeding phase of their life cycle.

4. Abundance of each species within the project area:
   - abundant = many flocks or individuals seen throughout the area at all times of day.
   - common = a few flocks or well scattered individuals throughout the area.
   - uncommon = only one flock or several individuals seen within the project area.
   - rare = only one or two seen within the project area.

COMMON NAME	SCIENTIFIC NAME	STATUS	ABUNDANCE

MAMMALS

Axis deer	*Axis axis*	non-native	uncommon
Domestic cat	*Felis domesticus*	non-native	rare

BIRDS

Common mynah	*Acridotheres tristis*	non-native	common
Barred dove	*Geopelia striata*	non-native	common
Gray francolin	*Francolinus pondicerianus*	non-native	uncommon
Spotted dove	*Streptopelia chinensis*	non-native	uncommon
Nutmeg mannikin	*Lonchura punctulata*	non-native	uncommon
American cardinal	*Cardinalis cardinalis*	non-native	uncommon
Warbling silverbill	*Lonchura malabarica*	non-native	uncommon
Mockingbird	*Mimus polyglottus*	non-native	uncommon
Cattle egret	*Bubulcus ibis*	non-native	uncommon
Golden plover / Kolea	*Pluvialis dominica fulva*	indigenous/migratory	uncommon
Japanese white-eye	*Zosterops japonica*	non-native	rare
House finch	*Carpodacus mexicanus*	non-native	rare
Java sparrow	*Padda oryzivora*	non-native	rare

Literature Cited

American Ornithologist's Union 1983. Check-list of North American Birds. 6th edition. American Ornithologist's Union. Washington D.C.

Armstrong, R. W. (ed.) 1983. Atlas of Hawaii. (2nd. ed.) University of Hawaii Press.

Berger, A.J. 1981. Hawaiian Birdlife. (2nd ed.) University Press. Hon. Ha.

Foote, D.E. , E.L. Hill, S. Nakamura, and F. Stephens. 1972. Soil survey of the islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. U.S. Dept. of Agriculture, Soil Conservation Service. Washington, D.C.

Hawaii Audubon Society. 1989. Hawaii's Birds. (4th ed.) Hawaii Audubon Society, Honolulu.

Pratt, H.D., P.L. Brunner and D.G. Berrett. 1987. A Field Guide to the Birds of Hawaii and the Tropical Pacific, Princeton University Press.

Tomich, P.Q. 1986. Mammals in Hawaii. Bishop Museum Press, Honolulu.

U.S. Fish and Wildlife Service. 1999. Endangered and threatened wildlife and Plants. 50 CFR 17.11 & 17.12

U.S. Fish and Wildlife Service. 2000. Endangered and threatened wildlife and plants: determination of endangered status for Blackburn's sphinx moth from Hawaii. Federal Register 65(21): 4770-4779.

Wagner, W. L., D.R. Herbst, and S. H. Sohmer. 1999. Manual of the flowering plants of Hawai'i. Univ. of Hawai'I Press and Bishop Museum Press. Honolulu.

APPENDIX E.

Archaeological Inventory Survey

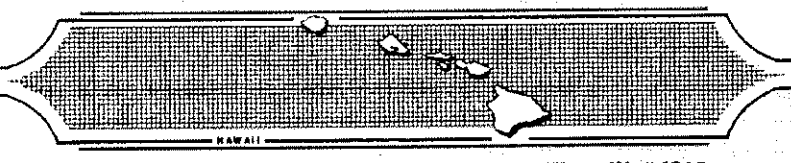
SCS Project 517-1

AN ARCHAEOLOGICAL INVENTORY SURVEY REPORT OF TWO PARCELS EQUAL TO APPROXIMATELY 36.8 ACRES OF LAND IN KEOKEA AHUPUA`A, KULA DISTRICT, ISLAND OF MAUI, HAWAI`I [TMK: 2-2-02: 54 AND 69]

Prepared by:
Lauren Morawski, B.A.
and
Micheal Dega Ph.D.
February 2005

Prepared jointly for:
Fred Hollenbeck
Pacific Rim Land
381 Huku Li`I Place, Ste. 202
P.O. Box 220
Kuhei, HI. 96753
&
Scott Meidell
Haleakala Ranch Company
529 Kealaloa Ave.
Makawao, HI 96768

SCIENTIFIC CONSULTANT SERVICES Inc.



711 Kapiolani Blvd. Suite 975 Honolulu, Hawai`i 96813

ABSTRACT

Scientific Consultant Services (SCS), Inc. conducted Archaeological Inventory Survey on two parcels totaling approximately 36.8 acres along Pi`ilani Highway in the town of Kihei, Keokea Ahupua`a, Wailuku (Kula) District, Maui Island, Hawai`i [TMK: 2-2-02: 56 and 69]. Pedestrian survey and subsurface testing (backhoe trenching) was completed prior to the purchase of the land by Pacific Rim Land Company. One historic site was identified and recorded during the surface survey. This feature, assigned State Site No. 50-50-10-5647, was identified as a historic concrete reservoir associated with ranching activities. No additional archaeological work is recommended within this parcel, and planned development can proceed without endangering significant historic and cultural resources.

TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

Scientific Consultant Services (SCS), Inc. conducted an Archaeological Inventory Survey in Kihei, Ahupua`a of Keokea, Kula District, Maui Island, Hawai`i (TMK:2-2-02:54 and 69). The survey covered two separate land parcels. Survey Area A, the Goodfellows Baseyard equals approximately 14.7 acres (Figures 1, 2, and 3). Survey area B consisted of approximately 22.1 acres (see Figure 3). Fieldwork was conducted in December 2005 by SCS personnel Randy Ogg, B.A. and Guerin Tome, B.A under the overall supervision of principle investigator Michael F. Dega Ph.D. One historic site, a concrete lined reservoir designated State Site No. 50-50-10-5647, was identified during the survey.

The Archaeological Inventory Survey work described in this report precedes the purchase and subsequent development of the parcels by Pacific Rim Land. Survey Area A, the Goodfellows' baseyard is currently being used as a construction staging area. Pedestrian survey of this parcel was conducted. The surface topography reflects high levels of disturbance from grading and large quantities of imported fill materials are being stored at this locus. Therefore, the Archaeological Inventory Survey did not focus on testing in the subterranean environment of this area. Survey Area B is a combination of lots subdivided for Haleakala Greens Subdivision and Kamaole-Kihei Water Subdivision. It is currently owned and maintained by Haleakala ranch. The surface topography of survey Area B was mechanically disturbed in areas adjacent to Pi`ilani Highway and in other limited areas in relation to fire fighting activities. In general this area was not as intensely disturbed as Area A. Due to the relatively undisturbed nature of this parcel, the Archaeological Inventory Survey focused in this area on subsurface testing for significant historic and/or traditional deposits and/or resources. A total of 35 Stratigraphic Trenches were mechanically excavated in the two parcels that comprise Survey Area B.

Objectives of the survey were to: (1) locate any and all surface features that may be of historical and/or archaeological significance, according to the guidelines established by the State Historical Preservation Division; (2) document the nature and extent of landscape modification; (3) test (excavate) for subsurface deposits of historical and/or archaeological significance.

One archaeological site was located and recorded during the survey. State Site 50-50-10-5647 consists of a rectangular, concrete-lined reservoir relating to historic and modern era ranching activities associated with the Haleakala Ranch Co. No further archaeological work is recommended in the project area and planned development can proceed without endangering significant historical and cultural resources. In the event that human remains are inadvertently

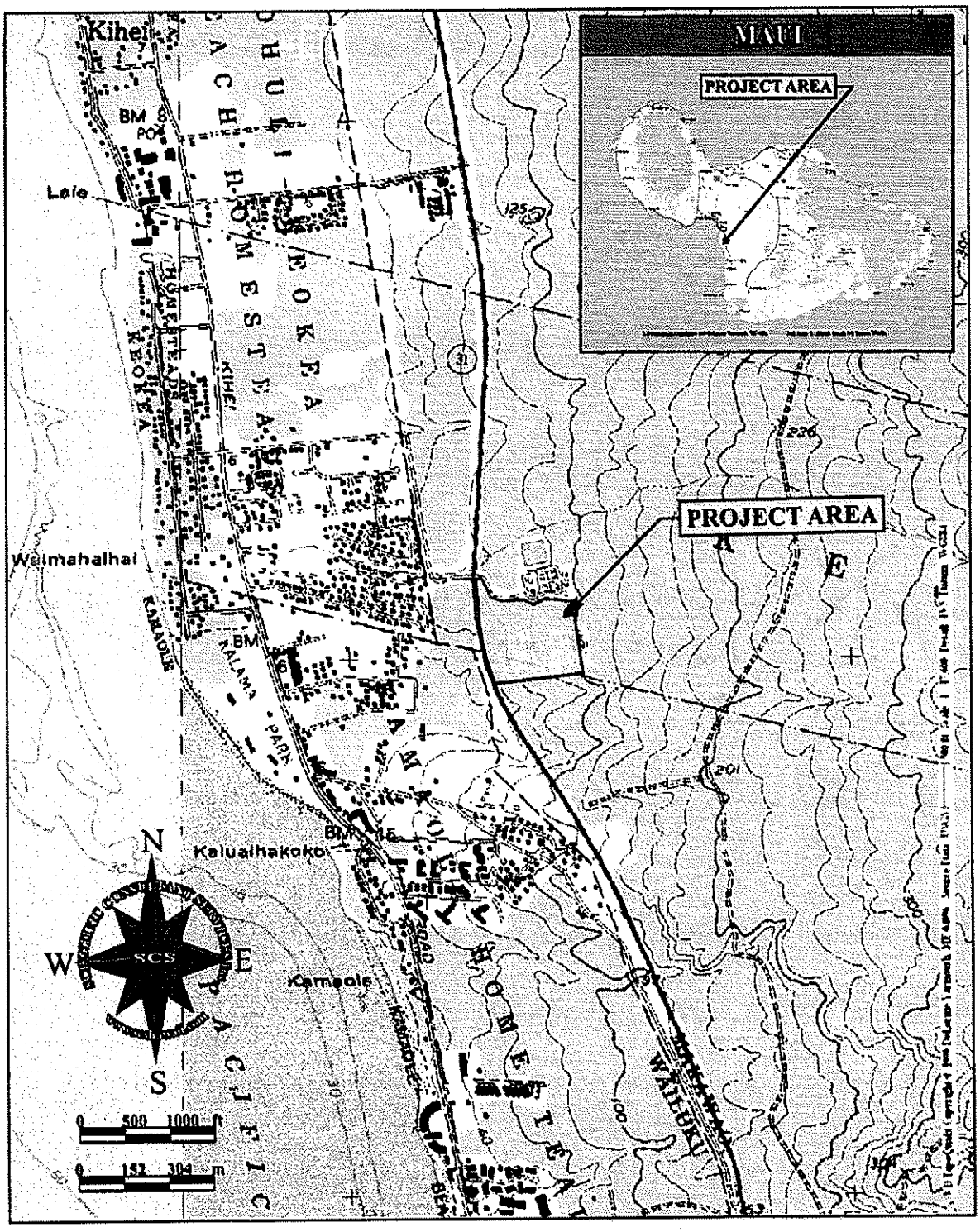


Figure 1: USGS Map of Project Area.

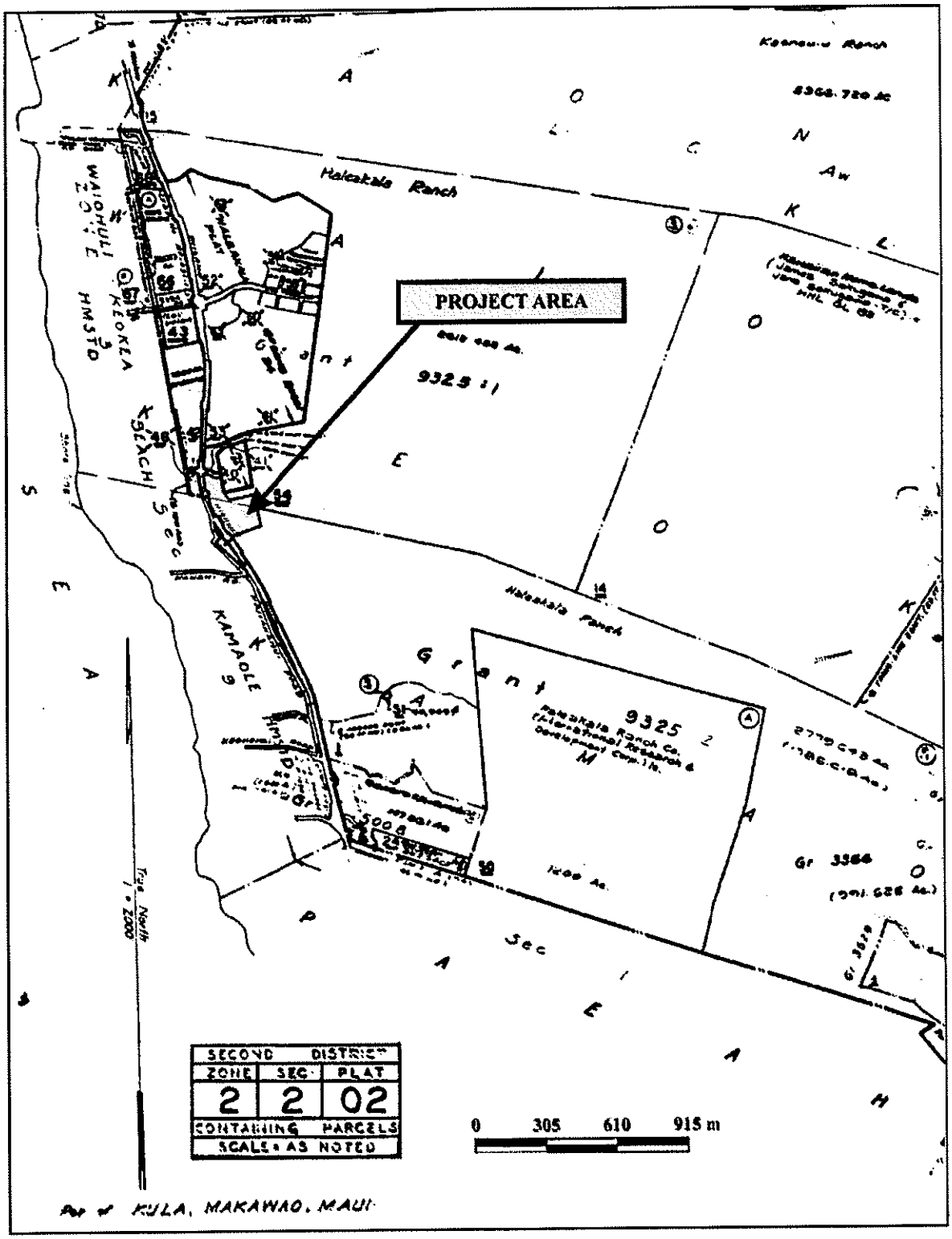


Figure 2: Tax Map Key [TMK: 2-2-02:56 and 69] of Project Area.

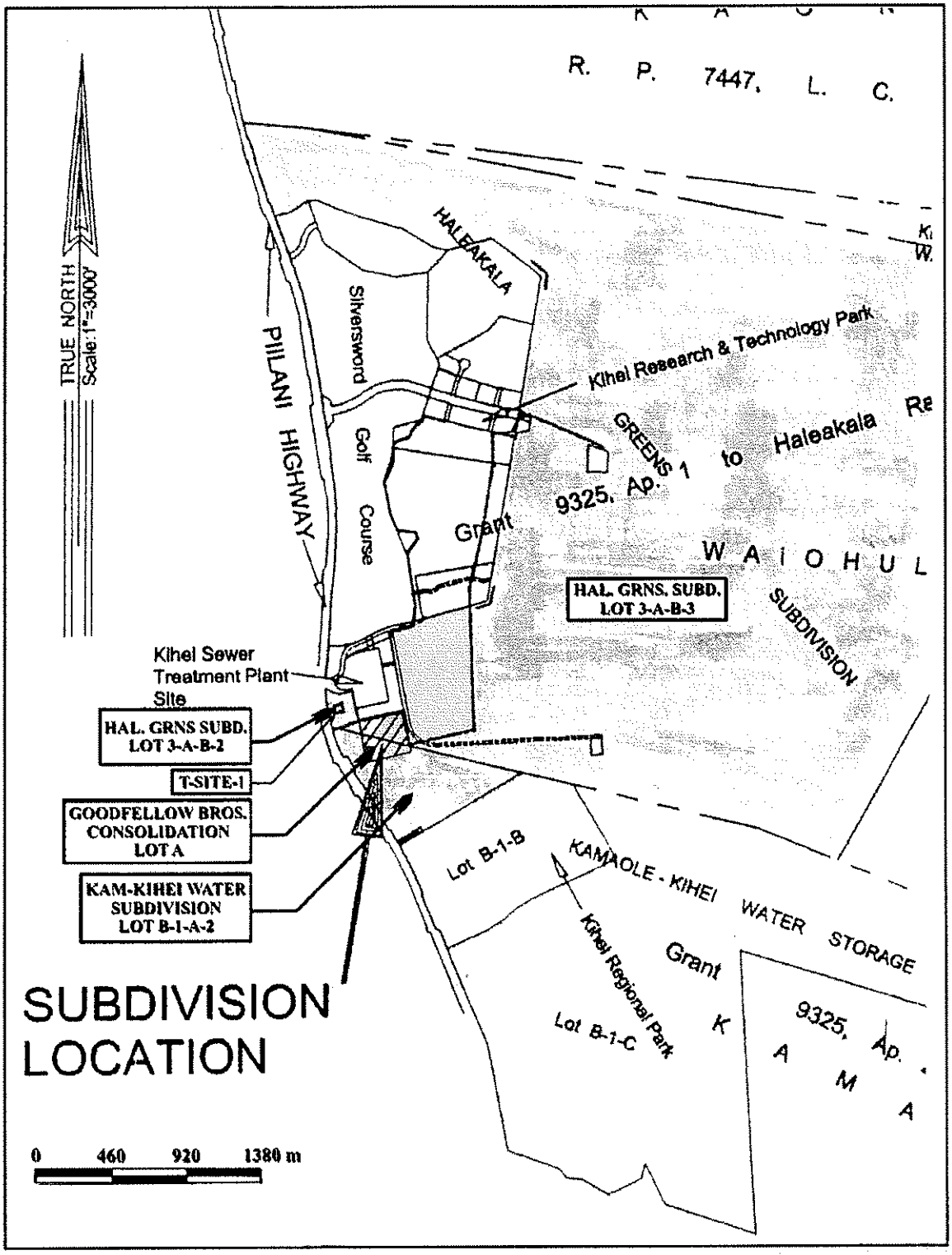


Figure 3: Project Area Map Overview Showing Survey Areas A and B.

discovered during excavation or grading activities, all construction should cease in the immediate area of the find and Hawai`i State Historic Preservation Division and Burial Sites program should be immediately notified.

ENVIRONMENTAL SETTING

The project area is located in Keokea Ahupua`a in the traditional district of Kula (now a portion of Wailuku District) Maui Island (see Figure 1). The project area consists of two adjoining parcels of undeveloped land within Kihei town [TMK: 2-2-02: 54 and 69]. These parcels consist of Lot A or the Goodfellow Brothers construction base yard (Survey Area A) and Lot 3-A-B-2 of the Haleakala Greens Subdivision combined with Lot B-1-A-2 of Kamaole-Kihei Water Subdivision (Survey Area B). The entire project area is located and bounded by Pi'ilani Highway to the west, by a paved road leading to the Kihei Wastewater Treatment Plant on the north, and by undeveloped land belonging to Haleakala Ranch to the east and south. Elevations throughout the project area vary from 80 to 140 feet above mean annual sea level.

Survey Area A, the Goodfellows baseyard, has been severely impacted. Small sections of non-impacted areas exist between graded areas, but are generally unsuitable for mechanical testing. Within Survey Area B, areas of impact are limited and generally less severe. At least one unpaved road or two-track bulldozer path is located in this portion of the project area. With the exception of the Goodfellows baseyard, surveyed areas paralleling Pi'ilani Highway appear to have received the highest level of impact within the surveyed portions of the project area. These areas exhibit numerous broken outcrops and bulldozer scarring on rocks and outcrops. Several 'push piles' of boulders intermingled with large pieces of burnt tree stumps, formed by bulldozers or other mechanical means, were located in the northern portion of the project area. It is likely these areas were altered and/or cleared during activities relating to fire fighting in the area. Areas south of the Goodfellows baseyard area and east of Pi'ilani Highway appear to be relatively non-impacted by mechanical activities and are enveloped in a dense ground cover of tall grasses and large *kiawe* trees of uniform size. A shallow natural drainage exists in the southern portion of the parcel.

Geologically, the project area is located on the lowermost portion of the Kula Dissected Uplands, the vast network of leeward (western) slopes of the dormant Haleakala volcano that comprises East Maui. The Kula District is situated in the rain shadow of Haleakala. This general area is a gently sloping transitional landscape between the steeper volcanic highlands to the east and the narrow coastal strip to the west. The local topography is relatively flat, with a

slight increase in slope to the east. Upon closer inspection, low, rounded mounds characterize the project area and hillocks—the remnants of weathered basalt outcrops—interspersed with shallow, ephemeral drainages and depressions.

Soils in the project area, defined as "extremely stony silty clay loam," are part of the Waiakoa Series of the central Maui uplands (Foote *et al.* 1972). These soils form on smooth, low uplands, and stones cover 3 to 15 percent of the ground surface. In most areas where this soil occurs, approximately 50 percent of the surface layer has been eroded. Runoff levels are average, and the erosion hazard is severe (Foote *et al.* 1972). For these reasons, soils in the project area are generally only good for pastureland and wildlife habitat. Low bedrock outcrops are commonly associated with these soils, and cultivation is usually impractical unless the stones are removed.

Annual rainfall in the project area—between 22 and 33 centimeters annually—is the lowest on Maui, making this region one of the driest in the Hawaiian Islands archipelago (Armstrong 1983). At the time of the present survey, the subject parcel was exceptionally dry and dusty, consistent with a period of prolonged drought in the area. In fact, because of this combination of low rainfall and fairly unproductive soils, the general area in which the subject parcel is located has been labeled the "barren zone" (Cordy 1977), a characterization that has been supported by numerous archaeological surveys in the area (see below).

Vegetation is dominated by xerophytic flora including *kiawe*, lowland shrubs, and grasses (Figures 4 and 5). Plant species include the following: *kiawe* (*Prosopis pallida*), *haole koa* (*Leucaena leucocephala*), *`uhaloa* (*Waltheria americana*), balloon plant (*Asclepias physocarpa*), *pa`aila* (*Ricinus communis*), Golden crown-beard (*Verbesina encelioides*), and *ilima* (*Sida fallax*). Various grasses and small (unidentified) weedy plants complete the floral inventory.

HISTORICAL BACKGROUND OF THE PROJECT AREA

While Kula is an arid region, a considerable population existed along its seashore—where fishing was excellent—and on the lower slopes of Haleakala at elevations high enough (at least 303 meters above mean annual sea level) to support dryland cultivation. There is no evidence—oral or written—of taro farming, but the sweet potato, or *`uala*, "was the staple of life here" (Handy and Handy 1972:511).

Figure 4: Project Area Vegetation.

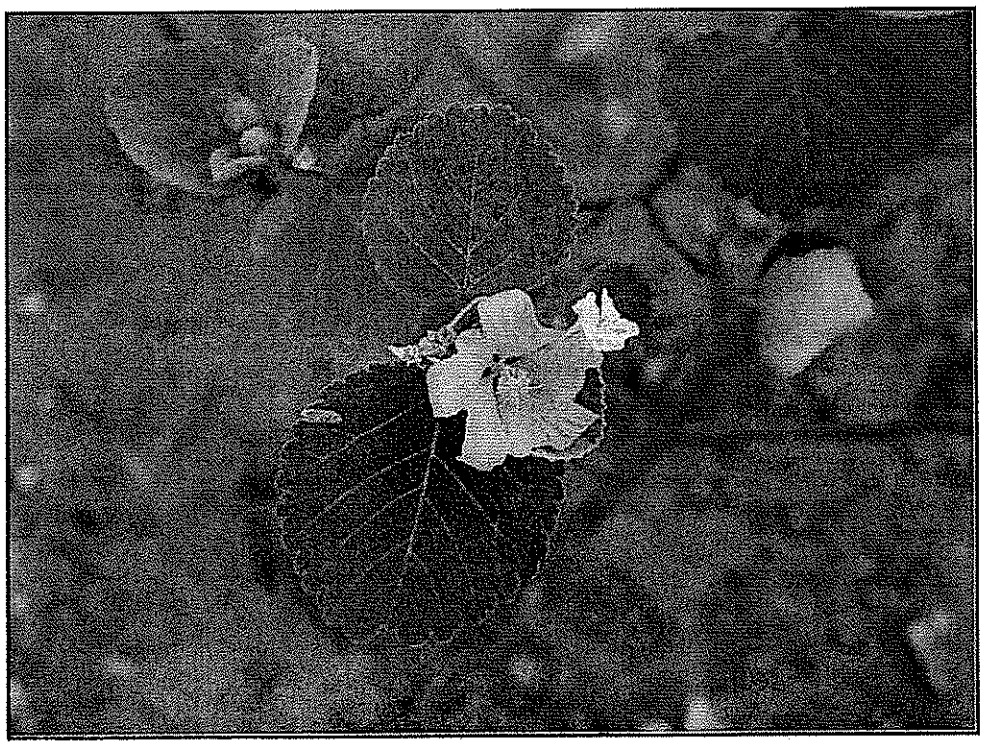


Figure 5: Flowering Plant on Project Area.

In the uplands of the Kula District, at elevations higher than *c.* 1,000 feet above mean annual sea level, traditional agriculture was based on dryland field systems. Handy and Handy (1972:488) write:

> The great bulk and altitude of Haleakala makes its southern flank practically a water less desert, and the southeast and west flanks relatively dry, so that there were no *lo`i* (pond fields) cultivation at all. The arid country below the west and south slopes of Haleakala, including Kula, Honua`ula, Kahikinui, and Kaupo, were dependent on sweet potato.

Handy and Handy (1972:131) also describe the planting methods in the drier sections of Kula:

> Where potatoes are planted in crumbling lava with humus, as on eastern Maui and in Kona, Hawaii, the soil is softened and heaped carelessly in little pockets and patches using favorable spots on slopes the crumbling porous lava gives ample aeration without much mounding. At lower, drier elevations, in the so-called barren zone, agriculture was a relatively minor component of the traditional subsistence economy.

The fact that few references to Kula District are found in traditional sources is likely an accurate reflection of its relative unimportance compared to the often-cited and better-known districts of Hana, Lahaina, Wailuku, and other population centers on Maui. Most references to Kula are minimal even when describing important battles and their participants. Other references allude to the difficulties of living in the fairly harsh environment of Kula. During a drought in the time of Kihaa Pi`ilani (*c.* A.D. 1500–1600s), people in this area were forced to subsist on weeds such as *laulele*, *pualele*, and *popolo* (Kamakau 1961). They could restore their crops only by obtaining potato slips from neighboring districts. However, sustained settlement did occur on the Kula slopes over time. By the 15th century, for example, large settlements were appearing in upcountry Kula and the building of religious temples flourished (Kolb *et al.* 1997).

Early historical accounts and archaeological evidence suggest that the barren zone was a transitional area in which people moved resources between the coast and the uplands to heights of *c.* 1,000 feet (above mean annual sea level). Large, permanent settlements—with clusters of habitations, *heiau,* petroglyphs, and large agricultural terraces and garden enclosures—have been documented in the uplands of Kula, above the 30-inch annual rainfall line (Kolb *et al.* 1997). Fishponds (three at Kalepolepo) and coastal *heiau* indicate a relatively sizable coastal population

relying on marine resources. Both the uplands and the coast were settled by at least A.D. 1200, if not earlier, and trails linking these areas, and crossing through the barren zone, have been identified in Waiohuli and Keokea (Kolb *et al.* 1997).

Although relatively general and of varying quality, early accounts of explorers, travelers, and missionaries can shed some light on traditional land use and lifestyles in the project area. Eight years after Captain James Cook's initial arrival, La Perouse sailed up the western coast of East Maui and stopped at Keone`o`io. La Perouse was greeted by 120 Native Hawaiians, who offered "...hogs, potatoes, bananas...taro, with cloth and some other curiosities..." (La Perouse 1798:345). He also noted that this part of the island was hot, dry, and rough, with soil "...wholly composed of lava and other volcanic matter" (La Perouse 1798). Water was scarce and the villagers drank from a shallow, brackish well.

Vancouver recorded his impressions of the southern and western coasts of Maui during his second visit in 1793:

> ...the part we were abreast of [east of Pohakueaea Point] at daylight in the morning, though terminating very abruptly in the ocean, and though its surface was very uneven, had yet a verdant and fertile appearance, and was seemingly in an advanced state of cultivation. From the number of villages and distinct houses, we were let to consider it as tolerably well inhabited [Vancouver 1884:850].

Cultivation of Irish potatoes in the Kula district began shortly before 1840, after which time Kula became known as "the potato district" because of its great success in their cultivation. During Kula's peak potato producing period of the 19th century, dryland gardens in the uplands extended all the way from Kula to Kaupo. The resulting deforestation adversely affected the amount of rainfall in the district and periods of drought became more common (Kolb *et al.* 1997). The *Honolulu Advertiser* describes the changes to Kula and the Kihei area:

> Before 1850 Kula was supplied with moisture naturally through the existence of a large forest. That forest was cut down when land was cleared in Kula to open farm plots in 1850. This was in answer to the demand for food in California during the gold rush... [and] by ranchers clearing for pasture. A secondary result of clearing forests was destruction of existing fresh water ponds in Kihei on the Maalaea Bay coast below Kula. When forest was cleared, water was free to rush down the mountains carrying soil

> from Kula and filling with mud the ponds for which Kihei was once famous [1962:A15].

Ranching was also present in Kula prior to the 1840s (Land Court Awards, State Archives). Large sections of Crown Land were leased for grazing cattle, and, by the 1880s, lower Kula consisted primarily of pastureland for ranching. Archaeological evidence of ranching is present near the subject parcel (see below). In 1888, Edwin H. Baily, Lorrin A. Thurston, W.H. Baily, and Henry P. Baldwin met in Honolulu and purchased Maui ranch lands owned by Charles Alexander for $50,000. The resulting ranch included 33,817 acres with 400 to 500 acres set aside for corn cultivation. Haleakala Ranch Company historically used the land in and around the project area for ranching activities.

There are no Land Commission Awards (LCA) for the subject property, which typically implies that the land was not formally settled at the time of the *Great Māhele* (1848). Again, this aligns with the 'barren zone' model of settlement in that it was not prime real estate. The subject parcel was, however, a portion (*apana* 1) of Royal Grant 9325 to Haleakala Ranch Company, Waiohuli-Keokea, Kula (Kihei), Maui.

Twentieth century activities in the Kula District included a significant World War II military presence along the beach of Ma`alaea Bay, a combat demolition training station at Kama`ole, two naval air stations at Pu`unene and Kahalui, and Army camps and hospitals in the Kula and Makawao areas. In particular, small, low walls and C-shaped rock formations—used as fighting positions by gunners—have been documented near the project area (see below).

PREVIOUS ARCHAEOLOGICAL RESEARCH

No previous archaeological studies have taken place within the project area proper, but several studies have been conducted nearby, in association with development of the Maui Research and Technology Park and the Elleair Maui Golf Club (Kennedy 1986; Hibbard 1994; Chaffee *et al.* 1997; McGerty *et al.* 2000; Sinoto *et al.* 2001; Tome and Dega 2002; Dega 2003; Monahan 2003) (Figure 6). Before describing these specific studies, it is first necessary to present a general picture of the previous archaeological research in the area.

Work by Cordy (1977) in the Kihei area resulted in a pre-Contact settlement model that divides the landscape into three environmental zones: coastal, transitional/barren, and inland. The current project area falls into the transitional/barren zone, which refers to "the slopes back of the coast with less than 30 inches of rainfall" (Cordy 1977:4). This barren zone is viewed as

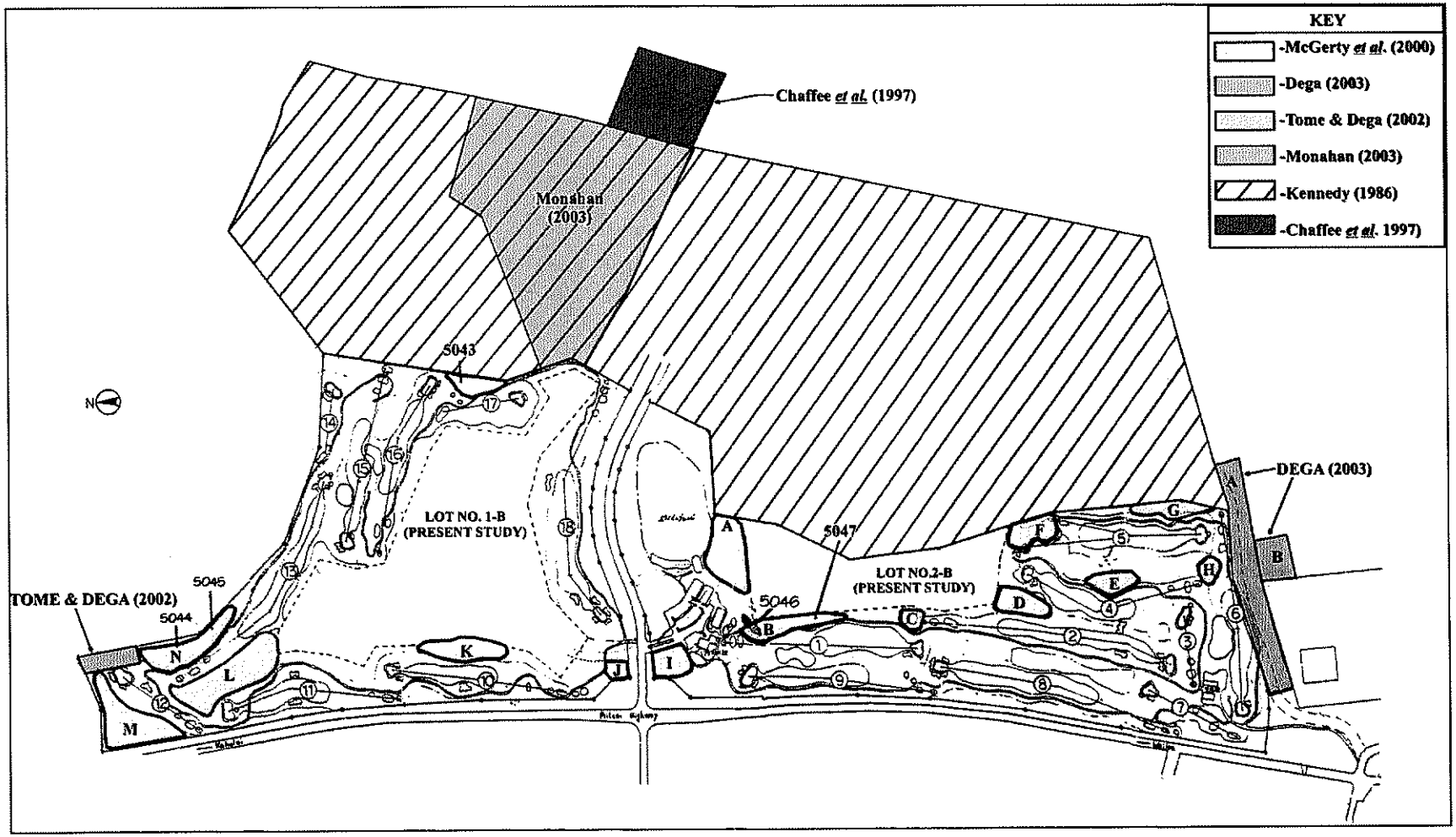


Figure 6: Previous Archaeological Studies Conducted in the Vicinity of the Project Area.

relatively marginal for permanent habitation because of its dryness, rocky soils, and dearth of natural resources, in general. Archaeological surveys in the barren zone around Kihei have confirmed these earlier suppositions about land use as there was very little evidence of pre-Contact Native Hawaiian settlement. Cox (1976) surveyed near the project area along the corridor of the Pi`ilani Highway and failed to notice a single site or significant feature. Kirch (1985) examined similar geographic settings to the south (towards Makena) and also failed to find any evidence of traditional Native Hawaiian activities in the barren zone. In fact, as Kennedy (1986) observes, this settlement pattern of avoiding the barren zone probably continued from ancient times through the early historic period, at least in the Waiohuli Ahupua`a, as all 27 LCAs for the *ahupua`a* were issued for land situated in the far upland reaches of the land unit. Dega's (2003) synthesis of previous archaeological studies in the Kihei area demonstrates that the coast was settled in traditional times, but that the density of human occupation was probably never great in this part of Maui.

Sterling (1998) discusses the numerous *heiau* in the Kula District. Thrum recorded seven. Pauhu at Waiohuli, and nearby Kaimupeelua. At Omaopio, two *heiau* of large size Mahia and Kaunuopahu, and another medium sized named Poonahoahoa was located near the upland ropad. Also mentioned are Mana *heiau* also near Omaopio had been used as a burial site. Additionally at Pulehu, Nininiwai *heiau* was still standing (Thrum in Sterling 1998)

Also in Sterling, three *heiau* recorded by Winslow Walker are mentioned within Keokea. Ahupua`a: Keahialoa *heiau* (Wallker Site 208), Molohai *heiau* (Walker Site 210), and Kaumiumimua *heiau* (Walker Site 211) (Walker in Sterling 1998).

Kennedy (1986) conducted an archaeological reconnaissance of the entire 150.032 acres of the then-proposed Maui Research and Technology Park (TMK:2-2-02, since changed to 2-2-24), situated immediately upslope (*mauka*) of the project area (see Figure 8). Kennedy's study, which did not include subsurface testing (excavation), concluded that no archaeological sites or features were located within the proposed site.

Chaffee *et al.* (1997) conducted an Archaeological Inventory Survey, including subsurface testing (excavation), of a portion of the Maui Research and Technology Park, within the area investigated by Kennedy (1986) (see Figure 8). Three sites consisting of ten archaeological features were identified. The features included remnant terraces, stone alignments, a mound, and a modified outcrop. All of the sites were interpreted as agricultural in function with the exception of a rock mound that may have functioned as a religious feature.

Monahan (2003) conducted an Archaeological Inventory Survey, including subsurface testing (excavation), of a 28.737-acre portion of the Maui Research and Technology Park, within the area investigated by Kennedy (1986), situated immediately upslope (*mauka*) of Lot No. 1-B (present project area) (see Figure 8). Other than one surface feature—a small arrangement of stacked boulders interpreted as a 'push pile,' this survey yielded no evidence of historic or prehistoric significance.

Directly north and adjacent to the project area, Theresa Donham conducted an archaeological reconnaissance of the Haleakala Greens Subdivision area (Hibbard 1994). She identified a low, circular rock mound, a historical site with multiple features on the crest of a prominent ridge, a linear rock mound or wall remnant, a rock-filled terrace outlined with a low, rock wall, and other modifications along a rock outcrop. Shell midden was observed on the surface inside an enclosure.

McGerty *et al.* (2000) surveyed fifteen selected areas within the Elleair Maui Golf Club, and identified five archaeological sites (State Site Nos. 50-50-10-5043, -5044, -5045, -5046, and -5047) containing a total of seven surface features (see Figure 8). The surface features were interpreted as agricultural terraces, perhaps dating from the pre-Contact period, and C-shaped rock formations (fighting positions) built during World War II training. Ten excavation units placed within these features yielded no cultural material.

Monahan (2004) surveyed a 56 acre parcel located near Elleair Golf Course. Four surface features, consisting of stacked basalt stones, were identified and recorded as individual sites. Three of these sites were interpreted as traditional Hawaiian temporary habitation and work areas. Unfortunately two of the sites failed to yield datable materials and the other returned a modern radiocarbon date (0+/- 50 BP).

Sinoto *et al.* (2001) conducted an Archaeological Inventory Survey of a parcel to the north to the subject property. No archaeological or historical sites or features were identified.

Tome and Dega (2002) conducted an Archaeological Inventory Survey along the northeastern flank of the Elleair Maui Golf Club property (see Figure 8). They identified a historical ranching corral and a short agricultural wall, collectively designated State Site No. 50-50-10-5233. No other structures or subsurface deposits were identified. No traditional Native Hawaiian sites or features were identified. Another Inventory Survey along the southern flank of

the Elleair Maui Golf Course (Dega 2003) failed to yield any archaeological or historical site or features (see Figure 8).

In summary, previous archaeological research has documented a fairly limited degree of human settlement in the Kihei barren zone, of which the present project area is a part. Archaeological reconnaissance and survey adjacent to, and nearby, the subject parcel, some of which included subsurface testing, have yielded a modest amount of evidence of both historical and traditional human activities. These include: agricultural terraces, possibly dating to the pre-Contact period, C-shaped rock formations interpreted as World War II-era training features, and a historical ranching corral and a short agricultural wall.

EXPECTED FINDINGS

Given several factors—previous archaeological findings in the area, geographic location and resources in the project area, and historical land use patterns in the area—expected findings of this Inventory Survey were as follows:

(1) There was a relatively low probability of finding pre-Contact evidence of traditional Native Hawaiian habitations or permanent settlement. Short-term or temporary camps might be discovered, perhaps associated with natural rock outcrops that occur throughout the area.

(2) Traditional agricultural features, such as rock-stacked terraces used to level the gentle slope, might also be found, especially in association with the natural rock outcrops.

(3) There was a relatively low probability of finding traditional Native Hawaiian burials due to the extremely stony and shallow soils in the area.

(4) There was a good chance of finding historical structures, such as rock walls, ranching corrals, or World War II-era rock formations.

METHODOLOGY

Two SCS archaeologists conducted pedestrian survey of the entire project area and conducted subsurface testing (backhoe trenching) of limited portions of the project area on consecutive days from December 27–29, 2004. All aspects of the work were photographed with a digital camera. The objectives of the pedestrian survey were to identify and document any and

all historical and/or archaeological features and to assess the nature and extent of landscape modification.

The pedestrian survey was conducted, and then determinations for appropriate areas for testing were made. Survey Area A, the Goodfellows baseyard, had been severely impacted by grading activities and large amounts of gravel and off-site fill materials are being stored in the area. Narrow slivers of unaltered land were observed. Due to the disturbed nature of this parcel Survey Area A was determined to be inappropriate for subsurface testing. In addition, information provided by construction personnel indicated the presence of a buried electrical line within Survey Area B, this area was not tested based on this information. This area is clearly demarcated on the plan view map (Figure 7).

Based on the results of the pedestrian survey, subsurface testing was conducted with Survey Area B. Thirty-five stratigraphic trenches (STs 1–35) were mechanically excavated across the parcel from the northwestern corner to the southern boundary of the project area (see Figure 7). Trench dimensions varied, but averaged 3.0 m to 6.0 m by 75 cm. All excavation was directed and monitored by an SCS archaeologist. The trenches were positioned to sample all portions of the project area that were suitable for testing. Soils from these trenches were not screened. All trenches were photographed upon completion. One representative soil profile was recorded within each trench. All stratigraphic changes were noted and soils and sediments were described in accordance with standard archaeological procedure (U.S. Dept. of Agriculture Soil Survey Staff 1951, 1962; Munsell 1990).

Laboratory work, conducted at SCS facilities in Honolulu, consisted of digitally drafting all maps and sketches, archiving digital images, and describing and documenting all recovered artifacts. No charcoal samples were collected since no significant buried cultural layers were encountered. All documentation pertaining to this project and all recovered artifacts are currently being curated at SCS facilities in Honolulu.

FINDINGS

OVERVIEW

As stated above, a total of 35 stratigraphic trenches were excavated using a backhoe (Table 1). Findings can be summarized as follows:

(1) One archaeological site was recorded within the confines of the project area. Site -5647 consisted of a reservoir located in the northern portion of the subject parcel.

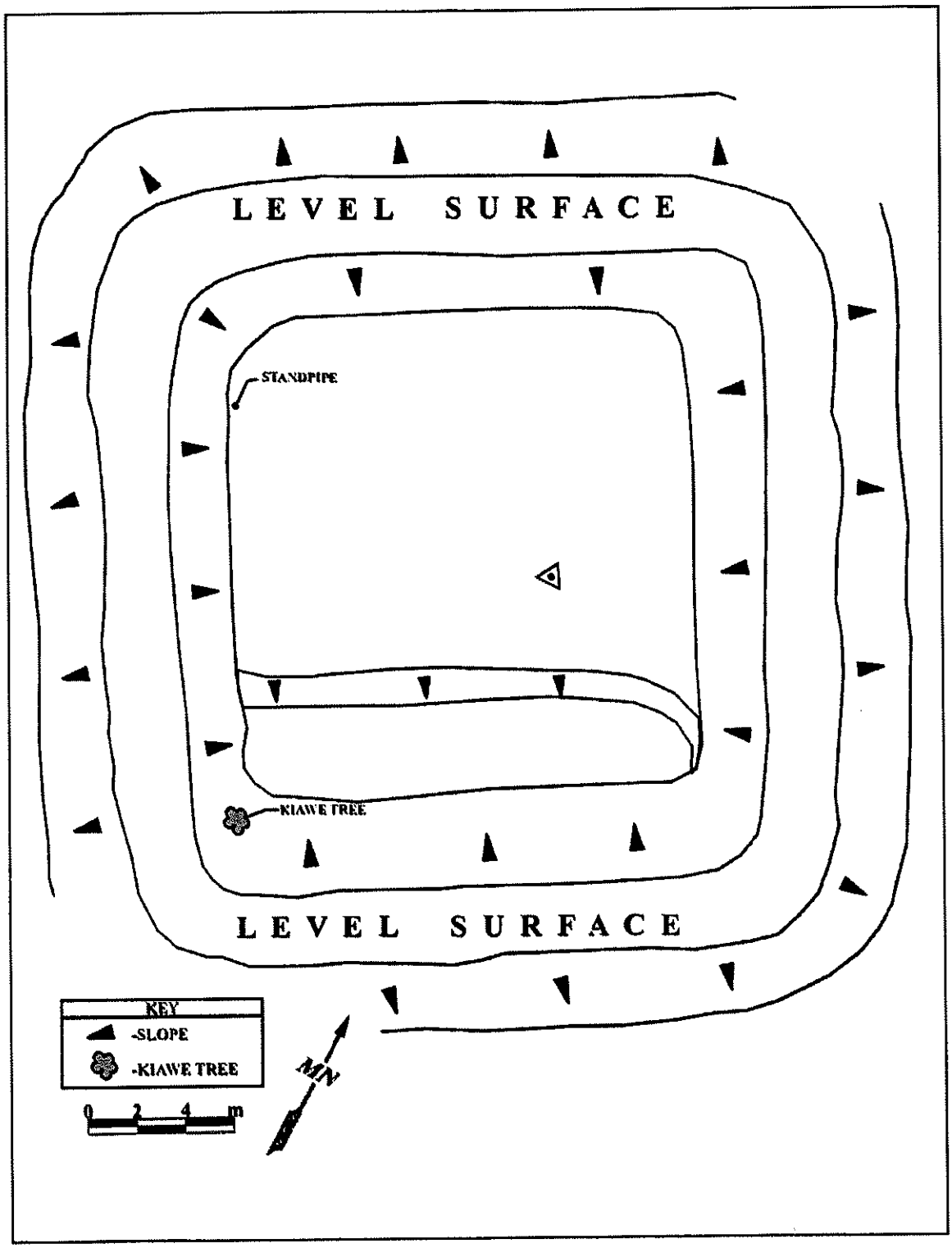


Figure 7: Plan View of Site 50-50-10-5647.

The reservoir most likely dates to 1927 or later and was constructed as to facilitate ranching activities.

(2) Excavation failed to yield any significant buried (subsurface) features or significant artifacts. All excavation units exposed natural, sandy deposits, some with well-defined bedding structures, but all units also yielded additional non-sandy layers. The water table was encountered at depths of approximately 1.58 m to 2.90 m below the present ground surface, averaging 2.05 m below the present ground surface.

(3) No traditional artifacts or buried cultural layers were recovered in any of the excavations.

(4) No human remains were recovered in any of the excavations.

SITE DESCRIPTION STATE SITE -5647

State Site No. -5647 consists of a rectangular concrete lined reservoir (Figures 8 and 9). The feature measures 39.0 m by 36.0 m on the exterior and 20.0 m by 19.0 m in the interior of the basin. The basin is a rectangular, nearly square, earthen mound. The interior has been 'sprayed' with concrete to form a watertight surface. The southeast end of the feature was excavated to a greater depth. A wooden post and wire fence surrounds the feature. PVC piping and a pipe fixture, ascribed with a 1973 date, formerly fed the reservoir and is likely associated with modern usage of the feature (Figure 10 and 11). Use of the feature has been discontinuous for some time now it as *kiawe* trees are growing within the feature and have cracked the concrete seal. Haleakala Ranch acquired the subject property in 1927, ranching activities commenced immediately afterwards and the feature was likely constructed shortly thereafter.

SOIL STRATIGRAPHY

Trenching exposed a relatively complex natural stratigraphy, with several markedly different sedimentary layers (*e.g.*, predominantly sand, predominantly silt, and predominantly clay) frequently present in a single excavation unit. Variation in the vertical and lateral distribution of sediments demonstrates that the project area has experienced several cycles of physiographic change through time (Figures 12 through 16). Soils layers paralleling Pi`ilani Highway predominately consist of sand and sandy silt, while layers to the east contain silt and silty clay. The main soil-stratigraphic units are described below.

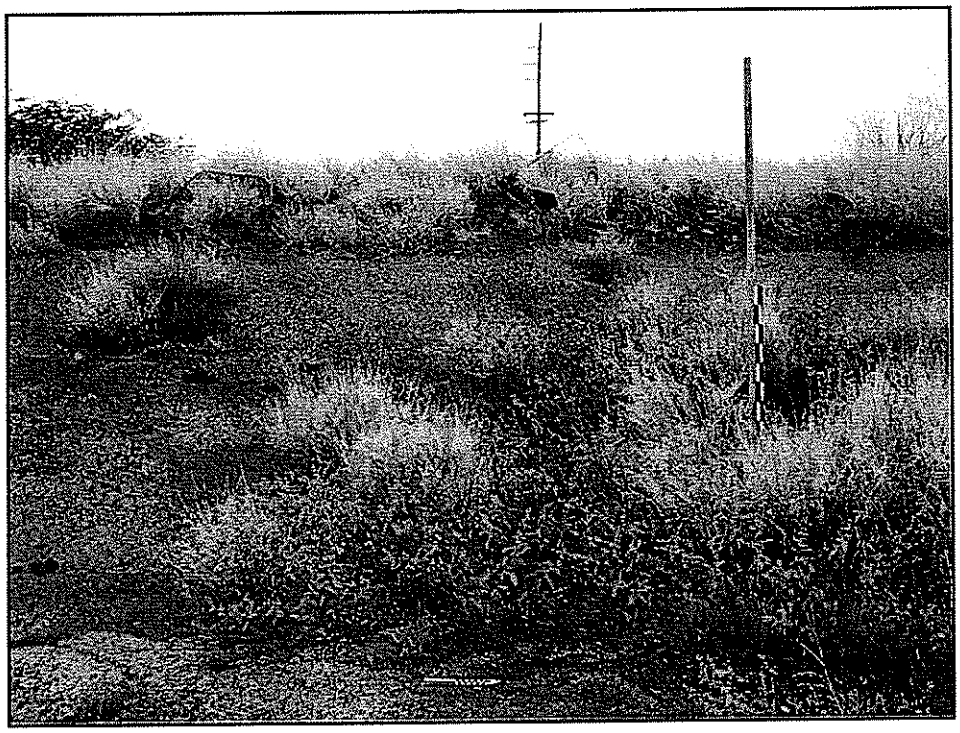


Figure 8: Overview of Site -5647.

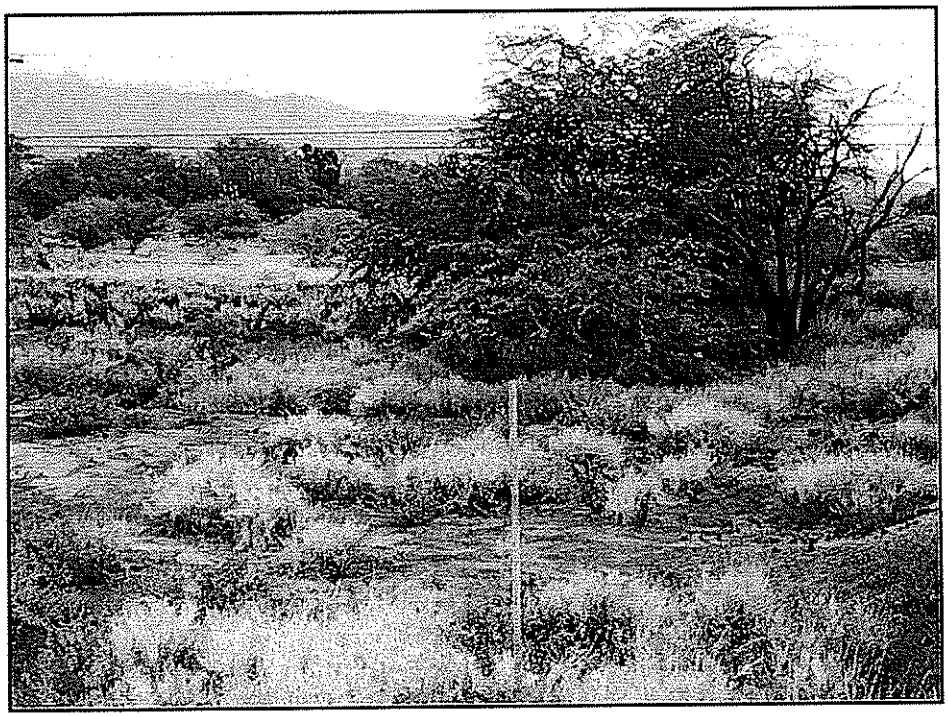


Figure 9: View of Site -5647 to the East.

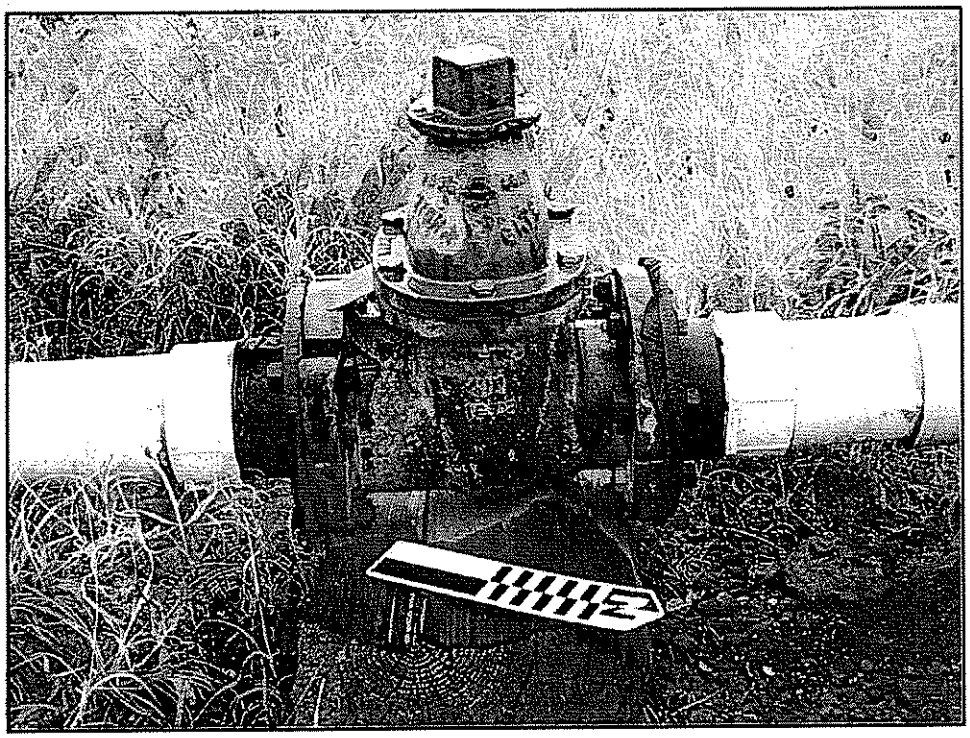


Figure 10: Site -5647 Fixture with Date 1973.

Figure 11: Site -5647 Fixture with PVC Pipe.

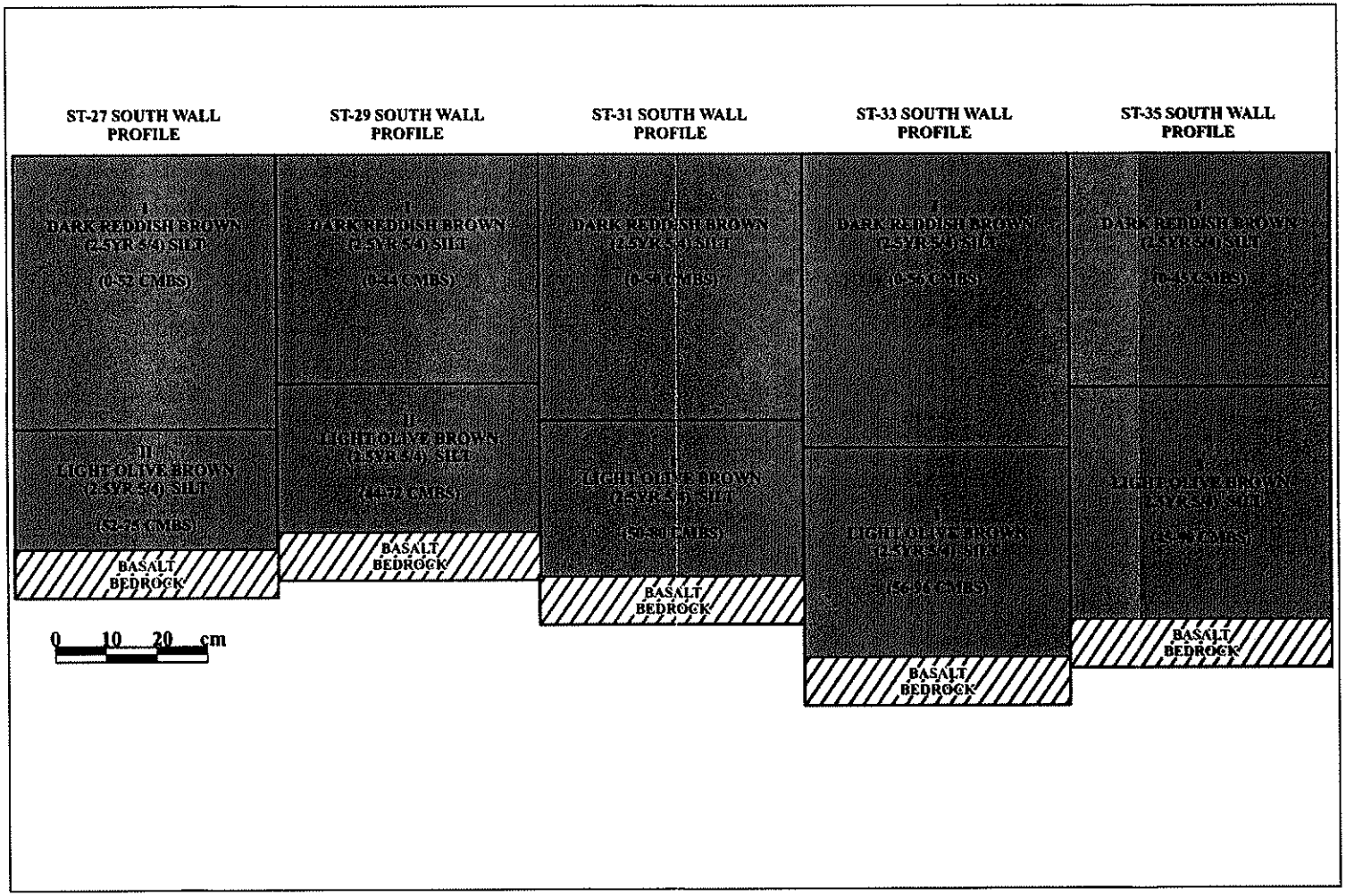


Figure 12: ST-27, 29, 31, 33, and 35 Profiles.

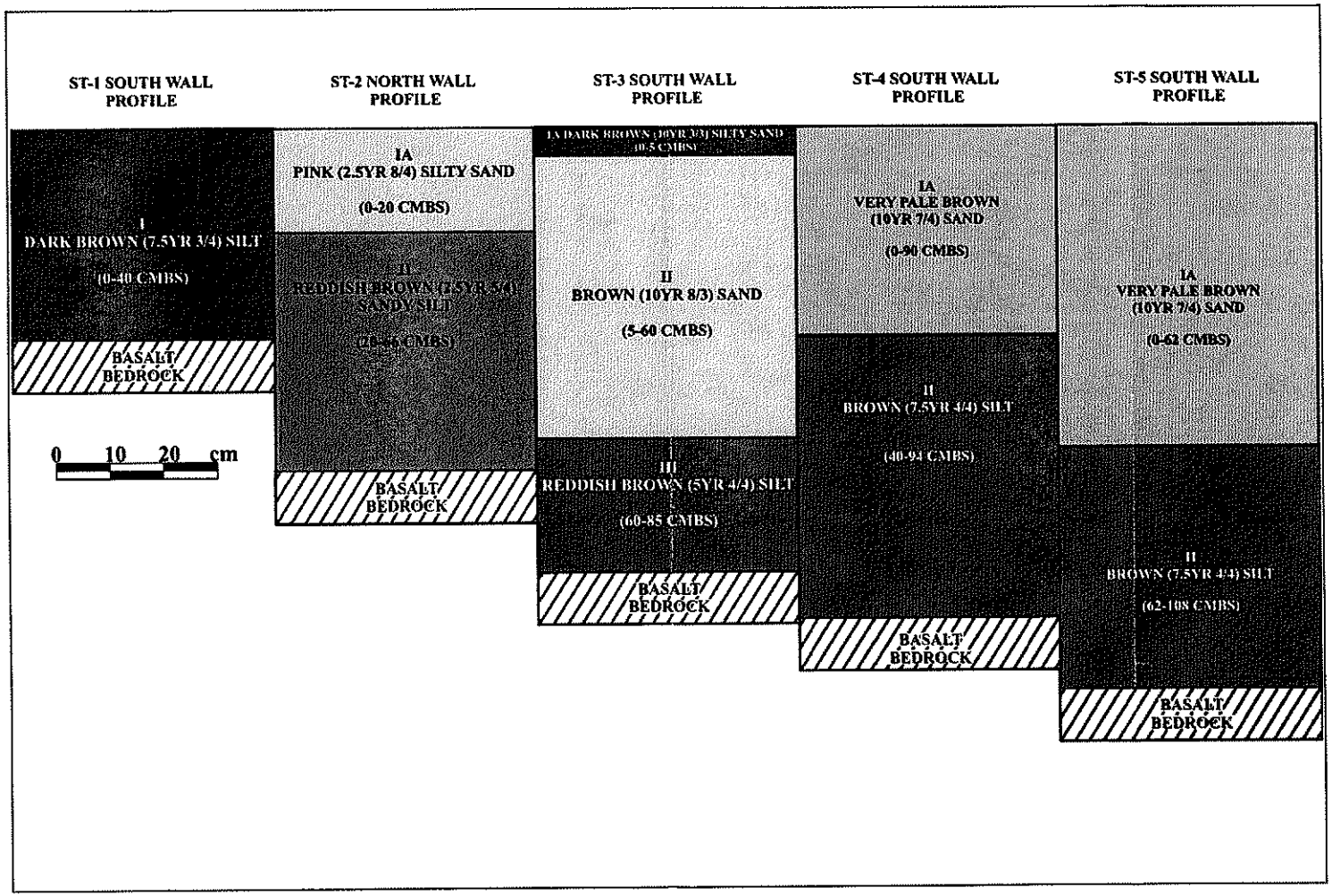


Figure 13: ST-1, 2, 3, 4, and 5 Profiles.

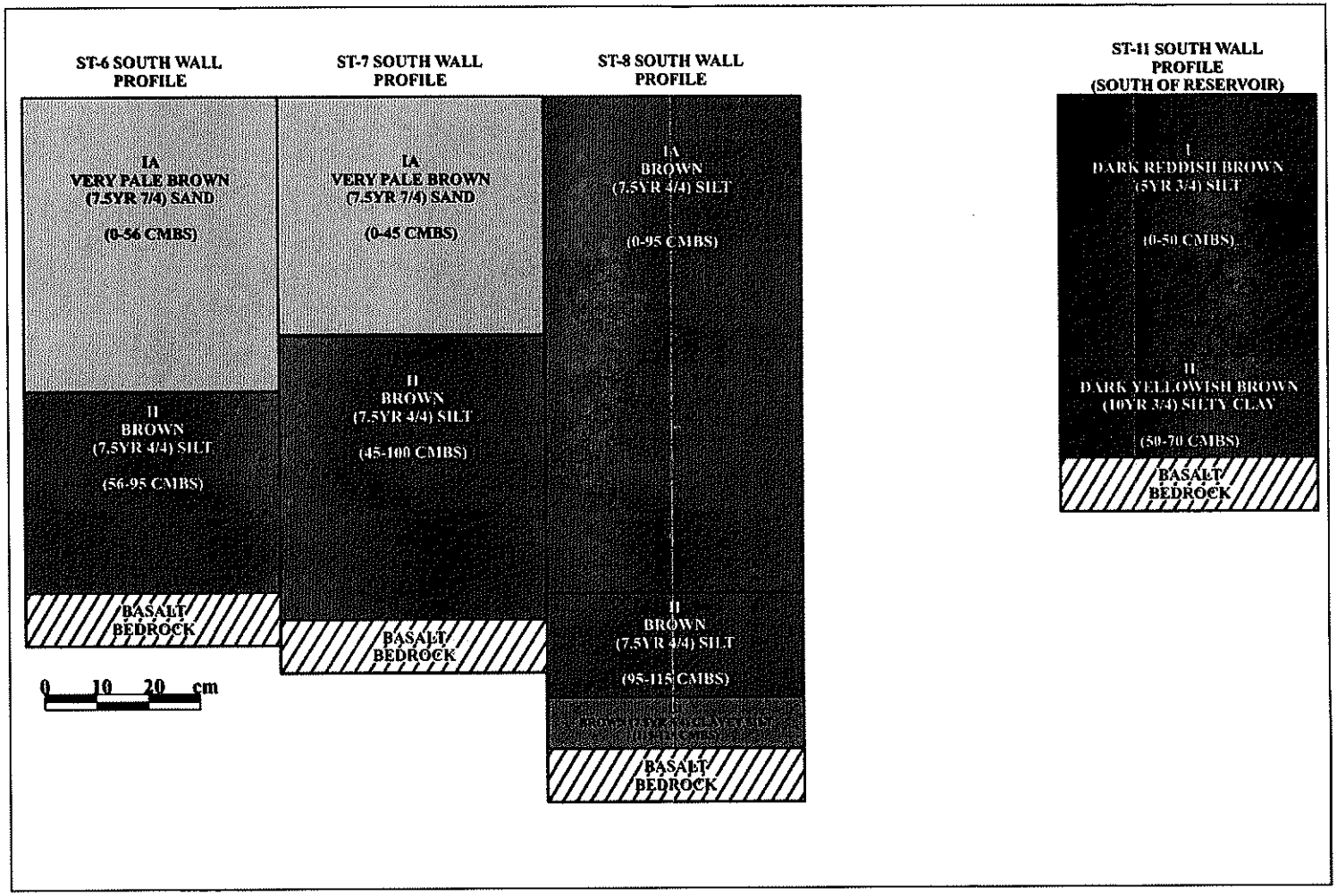


Figure 14: ST-6, 7, 8, and 11 Profiles.

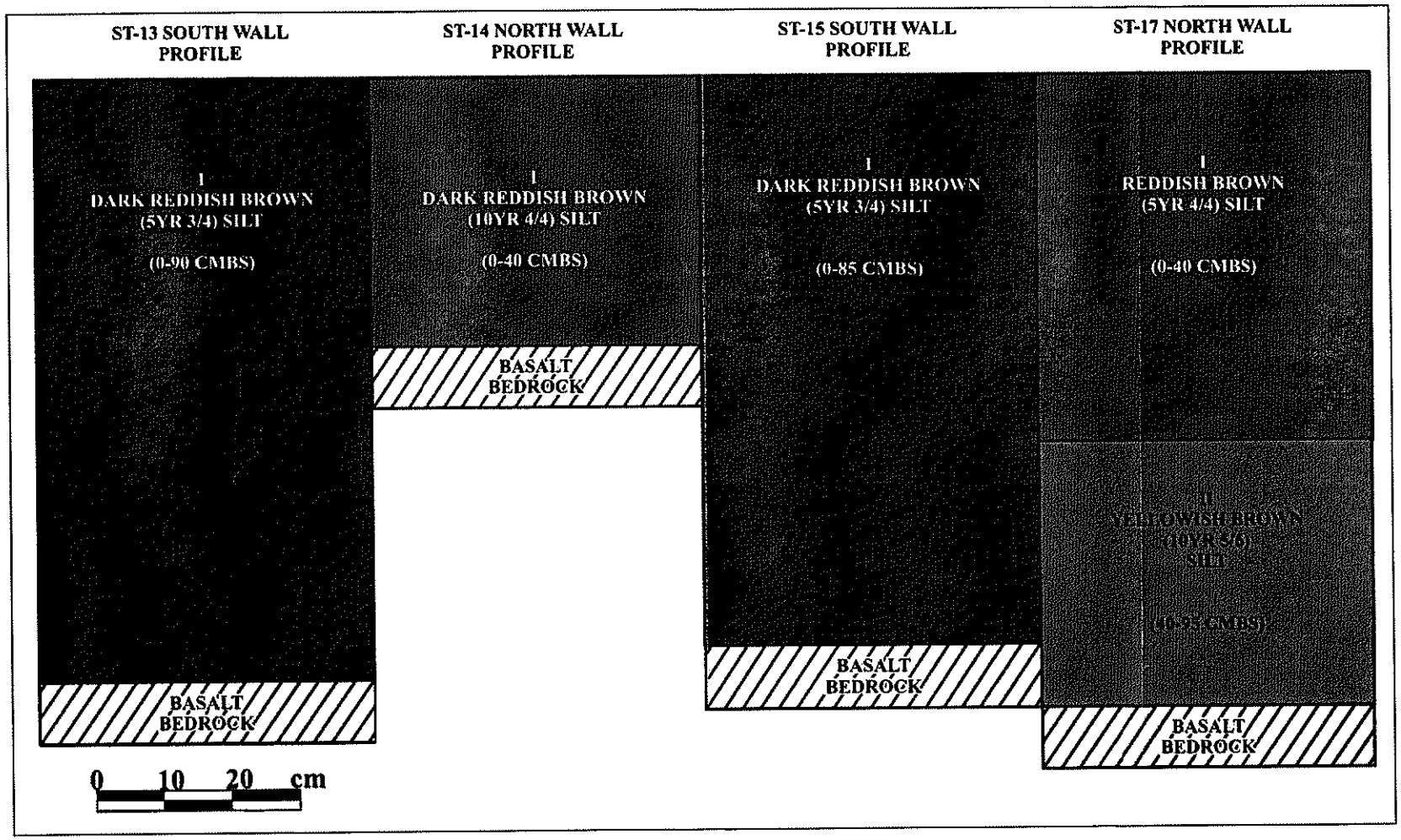


Figure 15: ST-13, 14, 15, 17 Profiles.

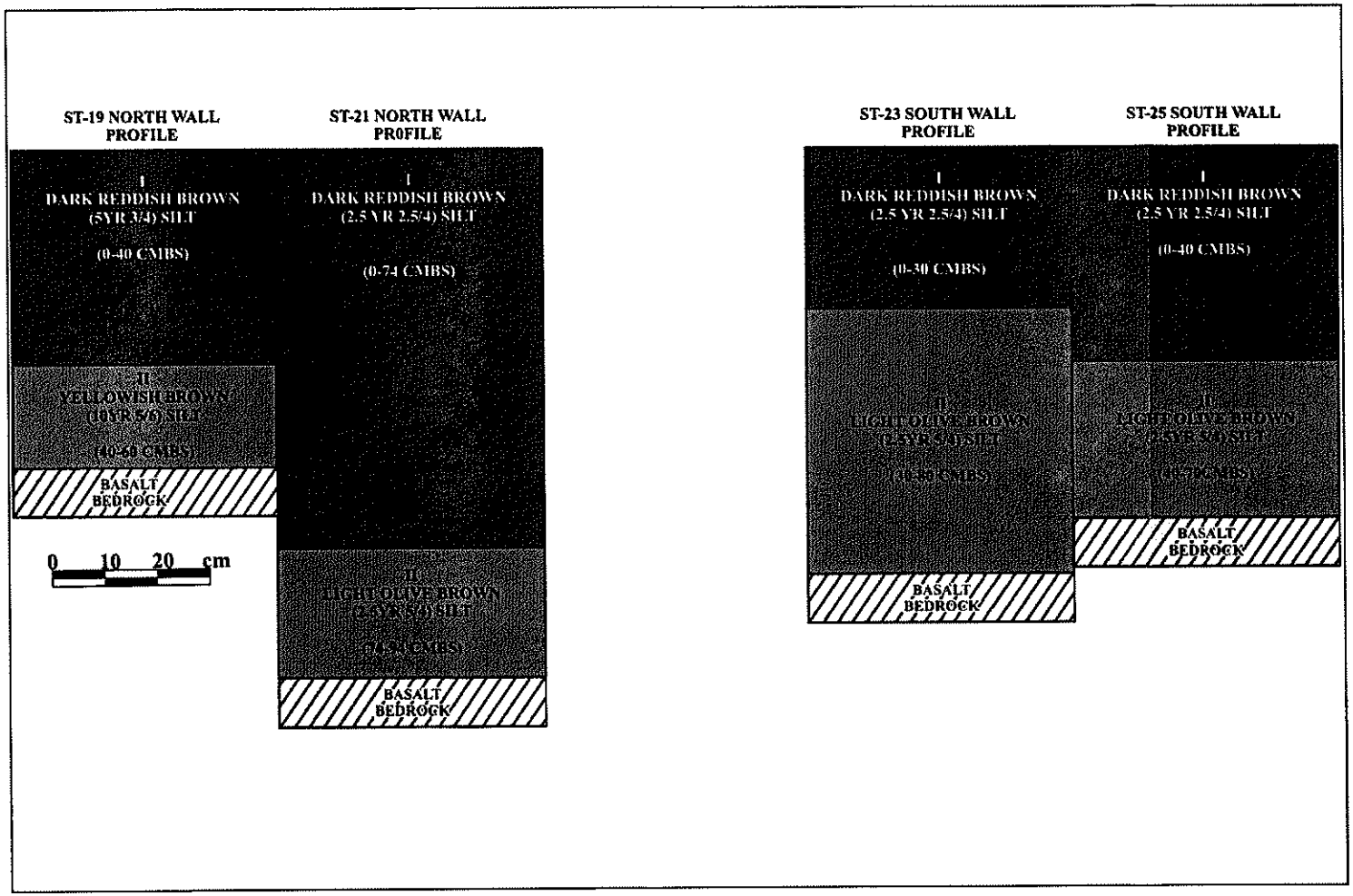


Figure 16: ST-19, 21, 23, and 25 Profiles.

Layer I: Semi-compact, very fine-grained silt that is variable in color from dark brown (10YR 3/3 and 7.5YR 3/4, 4/4), dark reddish brown (2.5YR 2.5/4, 5YR 3/4 and 10YR 4/4); gravel, small pebbles and cobbles are common; small roots and rootlets are common; contains no historic or modern debris.

Layer Ia: Semi-loose, very fine silty sand that is variable in color from dark (10YR 3/3) to pale brown (10YR 7/4) and pink (2.5YR 8/4); roots and rootlets are very common; sand is lithified in several units; contains no cultural materials.

Layer II: Semi-compact to compact, fine grained to course silty sand, silt, and silty clay that is variable in color from pale brown silty sand (10YR 8/3) brown silt (7.5YR 4/4) to dark, yellowish-brown silty clay (10YR 3/4); large percentage of *`a`a* pebbles and cobbles; roots were observed yet sparse in quantity; contains no cultural materials.

Layer III: Observed in only 3 stratigraphic units, ST-3, ST-8, and ST-18; semi-compact to compact, ranging from fine grained silt to silty clay, light brown (7.5YR 5/4) to reddish-brown (5YR 4/4) located directly above bedrock; no cultural material;

Table 1: Summery of Stratigraphic Trenches (ST) in Project Area

UNIT	SIZE (m)	DEPTH (cm)	Layers Present	Statigraphic Comments
ST-1	17.5 x 1.2	40	I	—
ST-2	13.9 x 0.5	66	Ia, II	—
ST-3	12.9 x 0.5	85	I, II, III	—
ST-4	10.8 x 0.5	94	Ia, II	—
ST-5	14.5 x 0.5	108	Ia, II	—
ST-6	112.0 x 0.5	95	Ia, II	Surface layer of loose sand
ST-7	15 x 0.5	100	Ia, II	—
ST-8	13 x 0.5	125	I, II, III	—
ST-9	14.5 x 0.5	117	Ia, II	Surface layer of lithified sand
ST-10	10.2 x 0.5	90	Ia, II	Surface layer of lithified sand
ST-11	16.3 x 0.5	70	I, II	—
ST-12	17.5 x 0.5	83	I, II	Limestone fragments observed in LI, large limestone boulder observed in LII
ST-13	16.7 x 0.5	90	I	—

ST-14	16.4 x 0.5	40	I	—
ST-15	13.5 x 0.5	40	I	—
ST-16	9.8 x 0.5	128	I, II	Lithified sand pebbles at base of Layer I
ST-17	13 x 0.5	95	I, II	—
ST-18	12.2 x 0.5	87	Ia, II, III	Layer I consisted of sandy silt
ST-19	18.3 x 0.5	60	I, II	—
ST-20	13.8 x 0.5	120	I, II	—
ST-21	16.5 x 0.5	94	I, II	—
ST-22	11.7 x 0.5	95	I, II	—
ST-23	15.8 x 0.5	80	I, II	—
ST-24	12.5 x 0.5	80	I, II	—
ST-25	15.0 x 0.5	70	I, II	—
ST-26	11.8 x 0.5	93	I, II	—
ST-27	10.7 x 0.5	75	I, II	—
ST-28	10 x 0.5	88	I, II	—
ST-29	10.9 x 0.5	72	I, II	—
ST-30	14 x 0.5	102	I, II	—
ST-31	12.9 x 0.5	96	I, II	—
ST-32	13.4 x 0.5	106	I, II	—
ST-33	11.5 x 0.5	96	I, II	—
ST-34	13.2 x 0.5	86	I, II	—
ST-35	13.2 x 0.5	90	I, II	—

DISCUSSION AND CONCLUSIONS

One site was identified during the survey. State Site -5647, a concrete reservoir associated with ranching activities commencing on the parcel as early as 1927. This type of site was expected at this locus based on the background history of the parcel.

SIGNIFICANCE ASSESSMENTS

State Site 50-50-10-5647, interpreted as a historic water reservoir feature associated with land use practices relating to the ranching era in Maui, is considered significant under Criterion D. This highlights its potential to yield information pertaining to the history and prehistory of the island of Maui, and to the state of Hawai`i as a whole.

RECOMMENDATIONS

The site identified in the Archaeological Survey is no longer considered to be significant under criterion D since documentation, analysis, and classification is complete. Based on the results of the archaeological Inventory Survey, it is unlikely that additional research would contribute significantly to furthering our understanding of Hawaiian prehistory or history.

No further archaeological work is recommended in the project area, planned development can proceed within this parcel without endangering significant historic and cultural resources.

REFERENCES

Armstrong, R.W. (Editor)
1983 *Atlas of Hawaii,* 2nd edition. University of Hawaii Press, Honolulu, Hawai`i.

Chaffee, D., B.B. Burgett, M.T. Carson, and R.L. Spear
1997 *An Archaeological Inventory Survey of a Portion of the Proposed Expansion of the Maui Research and Technology Park, Kihei, Maui Island, Hawaii (TMK: 2-2-2:54).* Prepared for Maui Research and Technology Park. SCS Inc, Honolulu, Hawai`i. On file at SHPD, Kapolei, Hawai`i.

Cordy, R.
1977 *Kihei Flood Control Project Archaeological Reconnaissance & Literature Search.* U.S. Corps of Engineers, Honolulu, Hawai`i.

Cox, D.
1976 *The Archaeology of Kula Maui from Pulehu Nui Ahupua`a to Kama`ole Ahupua`a: Surface Survey, Pi`ilani Highway.* Department of Transportaiton, Honolulu, Hawai`i.

Dega, M.
2003 *Archaeological Assessment Report on Approximately ¾-Acres of Land at Elleair Maui Golf Club in Kihei, Keokea Ahupua`a, Kula District, Island of Maui, Hawai`i [TMK:2-2-02:54].* SCS Inc, Honolulu, Hawai`i. On file at SHPD, Kapolei, Hawai`i.

Foote, D.E., E.L. Hill, S. Nakamura, and F. Stephens
1972 *Soil Survey of the Islands of Kaua`i, O`ahu, Maui, Molokai, and Lanai, State of Hawai`i.* USDA Soil Conservation Service, GPO, Washington, DC.

Handy, E.S., and E. G. Handy
1972 *Native Planters of Old Hawai`i.* Bishop Museum Bulletin 233. Bishop Museum Press, Honolulu, Hawai`i

Hibbard, D.
1994 *County of Maui, Historic Preservation Review of the Silversword Single Family Subdivision Development Waiohuli, Makawao District, Island of Maui. TMK:2-2-24: 12 & 13.* Letter Report. On file at SHPD, Kapolei, Hawai`i.

Kennedy, J.
1986 Letter Report Describing Archaeological Reconnaissance of Proposed Maui Research and Technology Park, to Mr. Joel R. Smolen, President, Arroyo Development Corporation. Dated February 11, 1986.

Kirch, P.V.
1985 *Feathered Gods and Fishhooks: An Introduction to Hawaiian Archaeology and Prehistory.* University of Hawaii Press, Honolulu, Hawai`i.

Kolb, M.J., P.J. Conte, and R. Cordy (Editors)
1997 *Kula: The Archaeology of Upcountry Maui in Waiohuli and Keokea.* Prepared for the Department of Hawaiian Home Lands.

La Perouse, J.S.G.
1798 *A Voyage Round the World.* J. Johnson, London.

McGerty, L., W.R. Fortini, and R.L. Spear
2000 *An Archaeological Inventory Survey of Areas within the Elleair Maui Golf Club, Kihei, Maui Island, Hawai`i [TMK: 2-2-24: Por 012 and 013].* Prepared for Elleair Maui Golf Club, LLC. SCS, Inc. On file at SHPD, Kapolei, Hawai`i.

Monahan, C.M.
2003 *An Archaeological Inventory Survey of 28.737 Acres of Land Located Within the Maui Research and Technology Park in the Ahupua`a Of Waiohuli, [Kula], District of Makawao, Maui Island, Hawai`i [TMK: 2-2-24: Por 13 & 9].* SCS, Inc. On file at SHPD, Kapolei, Hawai`i.

Munsell Color
1990 *Munsell Soil Color Charts.* Macbeth Division of Kollmorgen Instruments Corporation, Baltimore, MD.

Sinoto, A., L. Rotunno-Hazuka, and J. Pantaleo
2001 *An Archaeological Inventory Survey of the Proposed U.S. Post Office Facility Maui Research and Technology Park, Waiohuli Ahupua`a, Makawao, Maui, HI (TMK: 2-2-24: POR 08).* Aki Sinoto Consulting, Honolulu, Hawai`i.

Sterling, E.P.
1998 *Sites of Maui.* Bishop Museum Press, Honolulu, Hawai`i.

Tome, G., and M. Dega
2002 *Archaeological Inventory Survey on a One-Acre Parcel within the Elleair Maui Golf Club, Kihei, Waiohuli Ahupua`a, Kula District, Maui Island, Hawai`i [TMK: 2-2-24: por 12].* SCS, Inc. On file at SHPD, Kapolei, Hawai`i.

U.S. Dept. of Agriculture Soil Survey Staff
1951 *Soil Survey Manual.* U.S. Government Printing Office, Washington, DC.

1962 Supplement replacing *Soil Survey Manual* pp. 173-188. U.S. Government Printing Office, Washington, DC.

Vancouver, G.
1984 *A Voyage of Discovery to the North Pacific and Round the World.* Vol.III. Edited by W. Kaye Lamb. The Hakluyt Society, London.

APPENDIX E-1.

State Historic Preservation Division Acceptance Letter

Mike Dega	From [illegible]
o./Dept.	Cc.
Phone #	Phone #
Fax # 541-1193	Fax #

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

July 22, 2005

Mr. Glen Ueno
Department of Public Works and Environmental Management
Development Services Administration
250 South High Street
Wailuku, Hawaii 96793

LOG NO: 2005.1383
DOC NO: 0507MK08

Dear Mr. Ueno:

SUBJECT: Revised Chapter 6E-42 Historic Preservation Review - Construction Plan Review for the Proposed Haleakala Greens Subdivision (File No.: 2.2799) [County/DSA]
Waiohuli and Keokea Ahupua'a, Makawao District, Island of Maui
TMK (2) 2-2-002:054

Thank you for the opportunity to revise our original comments on the Construction Plan Review for the Proposed Haleakala Greens Subdivision (File No.: 2.2799) and we have provided comments on various actions for the above parcels. During the review of the inventory survey (Log2005.1188/Dc 0506MK190) we concurrently reviewed the above cited Construction Plan Review (Log 2005.1278/Doc 0506CD46). In the latter letter, we recommended an archaeological inventory survey to determine the effect of the proposed undertaking on historic sites. This inventory survey reviewed in Log 2005.1278 satisfies that recommendation.

The two areas included in the survey have most recently been utilized as the Goodfellow Brother's Baseyard/construction staging area (Area A), and Area B, which is a combination of lots subdivided for Haleakala Greens Subdivision and Kama'ole-Kihei Water Subdivision.

The survey adequately covered the project area documenting one historic property. SIHP 50-50-10-5647 consists of a rectangular, concrete lined reservoir, of historic antiquity (c. 1927) and associated hardware of modern construction. The site description is acceptable. Area A exhibited high levels of disturbance, and had been graded. Imported fill was placed over the surface. The topography of Area B was not quite as disturbed, thus subsurface testing concentrated in this area. Portions of Area B immediately adjacent to Pi'ilani Highway were, however, mechanically altered. Subsurface testing (35 stratigraphic trenches) were negative for evidence of cultural deposits.

We concurred that Site -5647 is significant under Criterion "D" and has yielded information pertaining to the history of Hawai'i and Maui. We also concurred that no further work is necessary on this parcel.

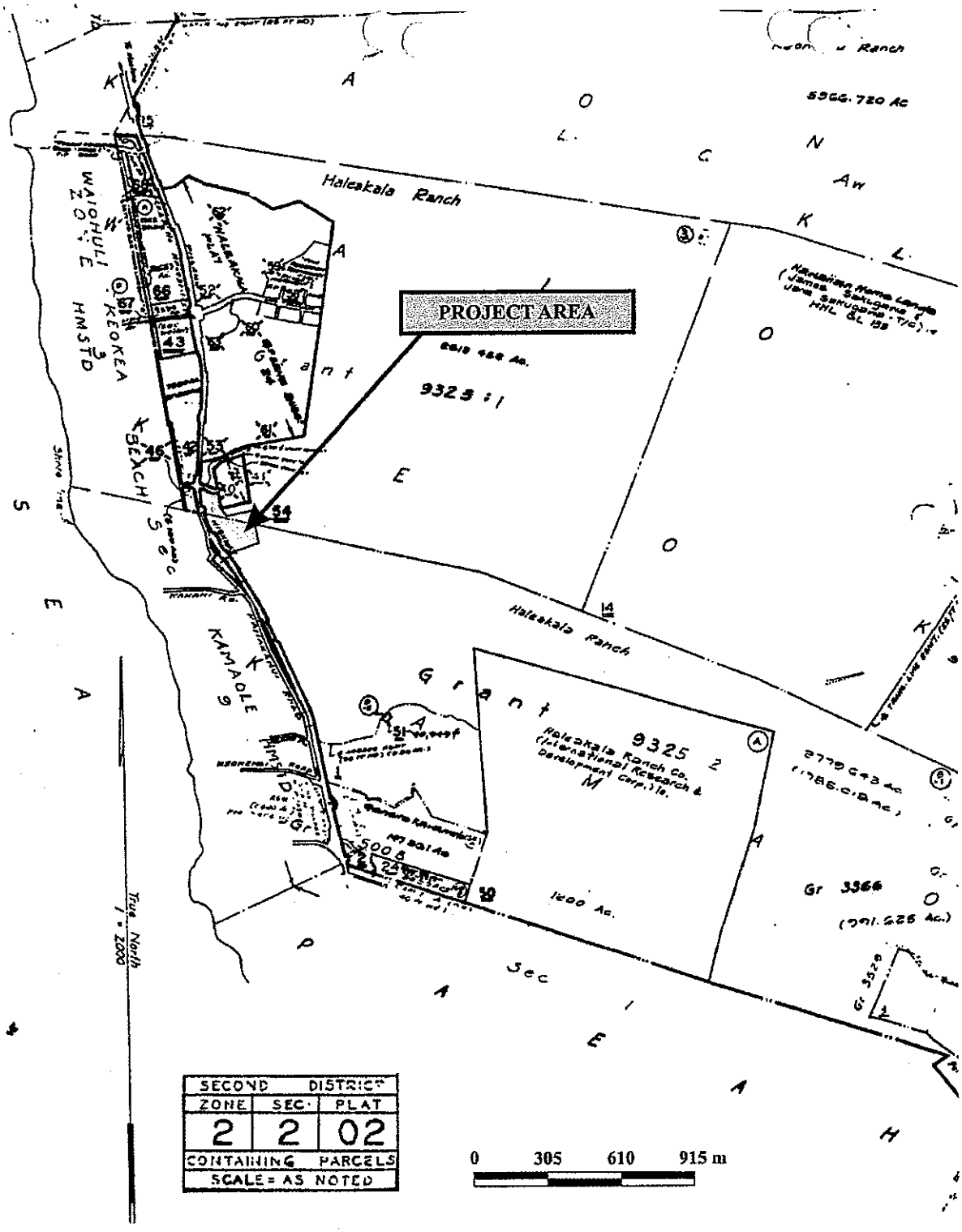
The historic preservation review process is concluded. Development of the project areas will have "no effect" on significant historic sites. As always, if you disagree with our comments or have questions, please contact Dr. Melissa Kirkendall (Maui/Lana'i SHPD 243-5169) as soon as possible to resolve these concerns.

Aloha,

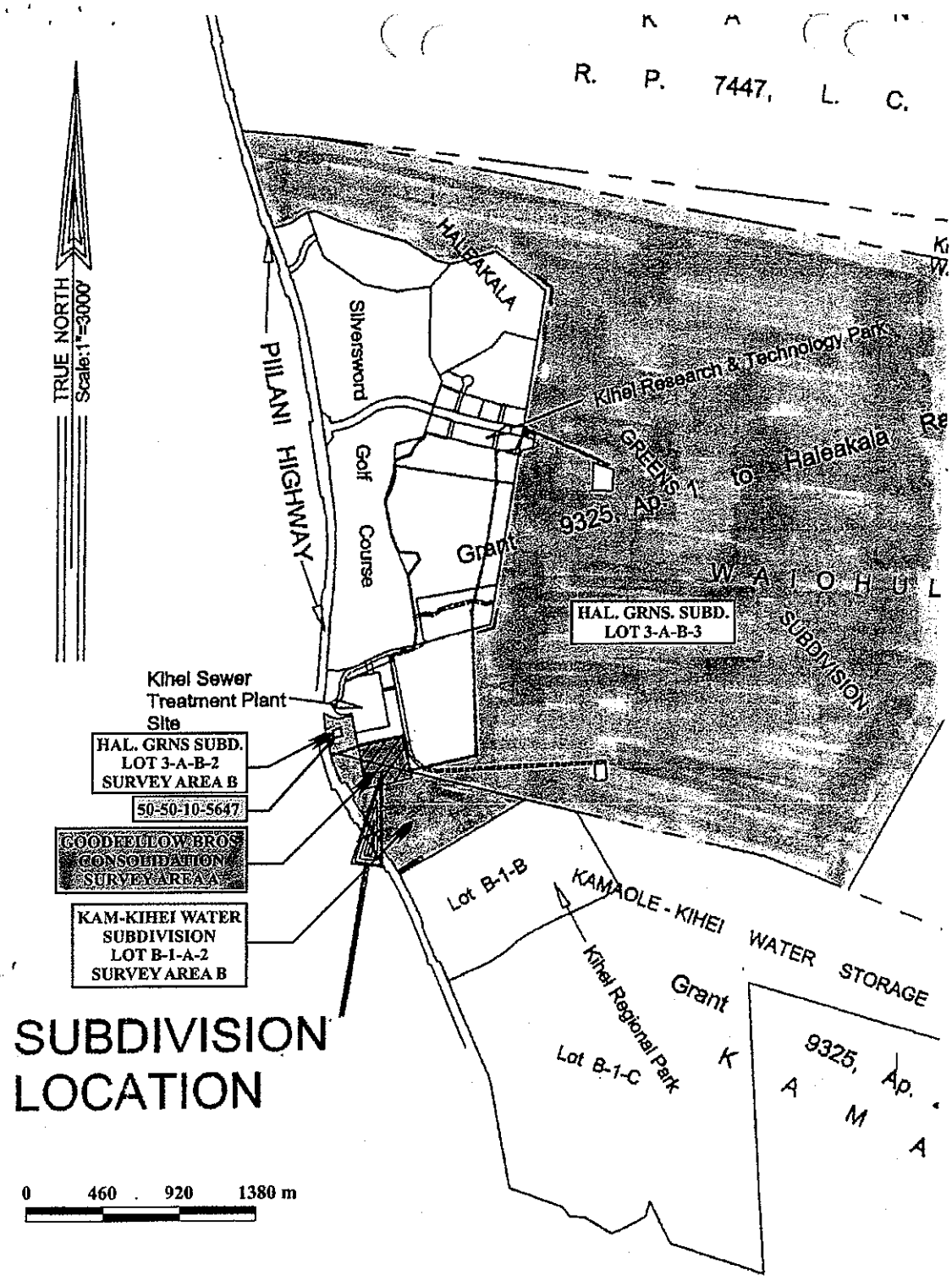
MELANIE A. CHINEN, Administrator
State Historic Preservation Division

MK: kf

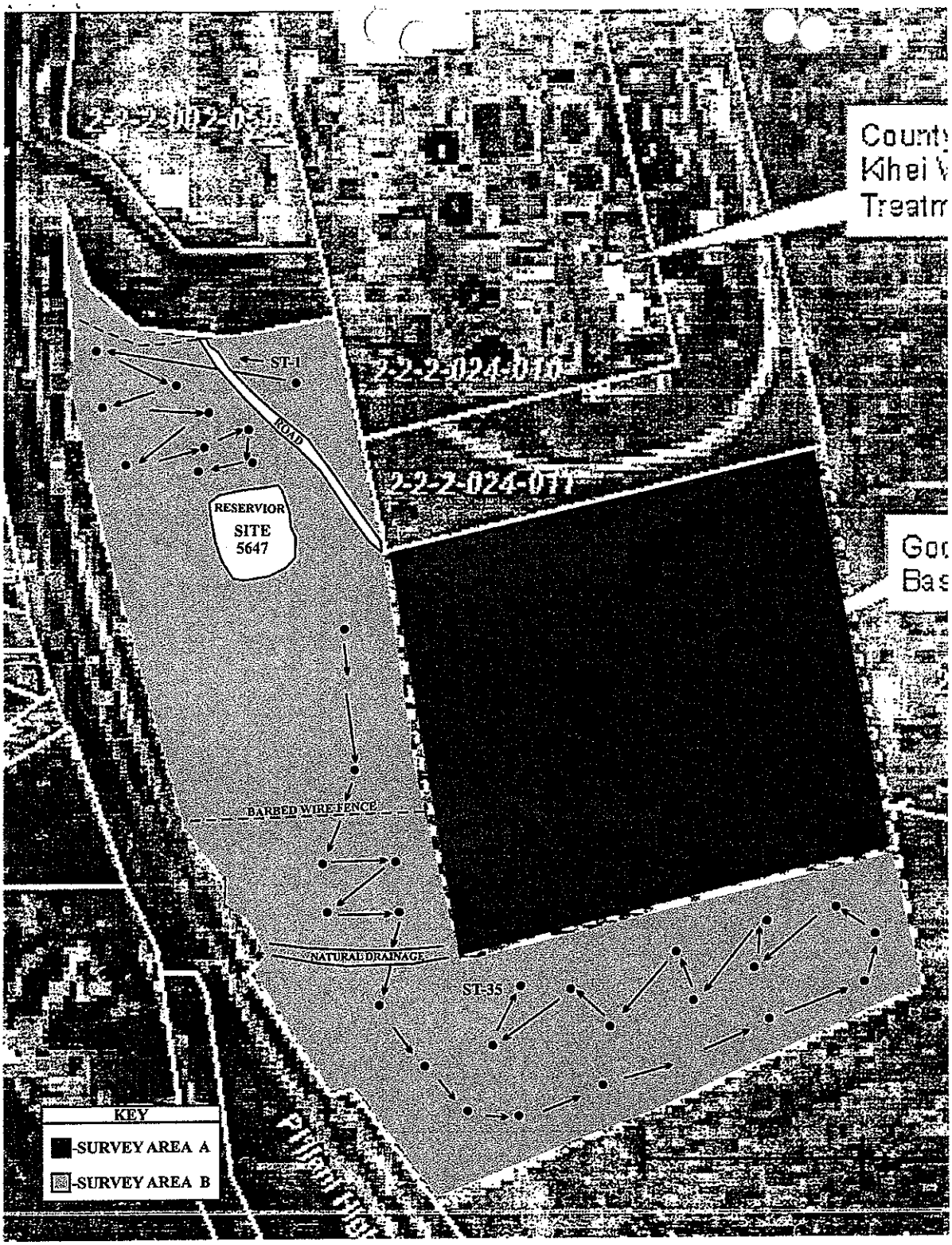
c: Bert Ratte, DPWEM, County of Maui, 250 S. High Street, Wailuku, HI 96793
Michael Foley, Director, Dept of Planning, 250 S. High Street, Wailuku, HI 96793
Maui Cultural Resources Commission, Dept. of Plng, 250 S. High Street, Wailuku, HI 96793
Dr. Mike Dega, SCS, FAX 597-1193



Por of KULA, MAKAWAO, MAUI



SUBDIVISION LOCATION


ST-1
ROAD
RESERVIOR
SITE
5647
BARBED WIRE FENCE
NATURAL DRAINAGE
ST-35
KEY
-SURVEY AREA A
-SURVEY AREA B

APPENDIX F.

Cultural Impact Assessment Interviews

PROPOSED KIHEI ROCK CRUSHING FACILITY
CULTURAL IMPACT ASSESSMENT

Interview with: Carolee "Doll" Aricayos

Interviewed by: Erin Mukai, Associate
Munekiyo & Hiraga, Inc.

Carolee "Doll" Aricayos smiles as she talks. She wears a modern black muumuu printed with yellow Hawaiian bamboo and a straw hat decorated with matching handmade flower lei. She explains that traditionally Hawaiian design such as quilt-making and dress-making incorporated only two (2) colors. Nowadays, she goes on, the younger generations like to add more color. She tells of the father and son who have designed her dress, and explains that by looking at the stalk of the bamboo one can differentiate the Hawaiian variety from the rest.

She has warmth about her that makes strangers gravitate to say hello. She has a rhythm in the way she walks, which may be attributed to her many years dancing hula. She is the middle child of twelve (12) children, making her number six (6). Her father would tell her she holds the family together; that she "balances the ship". She shares that her Hawaiian name is Kauanui, and explains that her father would liken her name to the *alanui* or the channels which connect together the Hawaiian Islands.

The interview with Doll Aricayos takes place on July 18, 2011, outside of the Starbucks coffee shop in Kukui Mall, Kihei.

Doll will make 66 this year. She was born on August 20, 1945 in Honokohua, Maui to Albert Naeole Kia and Elizabeth Keahi. Her father, Albert, was heavily involved in construction and helped build the tunnel on the pali heading to and from Lahaina. Doll remembers her father whenever she drives through the tunnel. The memory of her father, she explains, lives on in the things he has built. In that sense he is remembered forever.

Doll has been married to her husband Joseph Aricayos for 37 years and tells of his hard work carrying three (3) jobs at one time to support his family. The pair had met while working at the Kaanapali Beach Hotel. In 1982 she and her husband moved to Kihei. Doll explains that she had always gone out to Kihei while growing up to visit relatives who lived in the town. She reminisces on the fun she had while attending those relatives' parties, explaining that the parties would sometimes go for hours as Kihei was a different place back then with fewer homes meaning fewer neighbors.

Doll remembers how different the town was just a few decades ago: kiawe trees everywhere. She remembers the site of Goodfellow Brother's Kihei rock crushing facility as being pastureland for cattle owned by the ranches. Her cousins, the Boteilhos, used

to raise cattle upcountry in Omaopio and would sometimes bring their cattle to graze in the pasturelands below. She remembers that they would trade their meat for vegetables and explains that's how it used be back then. Doll even remembers Mr. Suda as once having grown cotton in the area. Even today, every now and then, one can find a cotton tree in Kihei left behind from the old days when Mr. Suda had tried to grow the plant.

She remembers her father warning her to never live or buy land in Kihei. She explains the area was once swamp land before her time as told to her by her father. She remembers rice fields and taro patches growing up. She explains that it was a different place back then, where water would travel freely down the mountain from upcountry.

Doll has witnessed the changes over the years as Kihei grew in size. It's quite a different place, she explains. Back then the only store was Azekas where they would sell everything you needed in a one stop shop. When asked if she knows of any cultural practices occurring or having occurred on or near the project site, Doll says she knows of none.

In ending Doll shares a story of a mermaid passed down from generations in song and legend. She tells of a mermaid who would travel through a lava tube from the south side of Maui to Hana during high tides.

K:\DATA\PacRim\GBIHI\DAricayosintsummary.wpd

PROPOSED KIHEI ROCK CRUSHING FACILITY
CULTURAL IMPACT ASSESSMENT

Interview with: Dan "Danny" Collier

Interviewed by: Erin Mukai, Associate
Munekiyo & Hiraga, Inc.

Danny Collier was born in Oahu on April 21, 1950; he will turn 61 this year. His father, John W. Collier, originally from Buffalo, New York, joined the US Navy at 17 and was later stationed at Pearl Harbor. Dan's mother, Florentina, was born in Kihei, Maui and met his father when he came to the island to work with Fong Construction. After meeting on Maui, his parents moved to Oahu. His dad began working at the Naval supply center and worked his way up to be manager where he handled all the mail for the Navy. Danny is part native Hawaiian on is maternal side and is also one of seven (7) children.

Danny currently lives in Wailuku with his wife, Carol, who he speaks of affectionately; "She's a good one, that one, she keeps me in check."

The interview with Danny Collier took place on February 9, 2011 at the office of Munekiyo & Hiraga, Inc. in Wailuku.

Danny is tall. Standing at least 6 feet tall, Danny's presence is immediately known as he walks into a room. Wearing an orange reflective vest from construction and green Goodfellow Brothers baseball hat he recalls his memories of when he first started work. After returning home from Iowa State on a football scholarship, Danny immediately began his career in construction. He explains that construction work provided good money and he was eager to start. A year and a half or so after working for a construction company on Oahu, Danny met a man by the name of Robert Ahsing who was starting a company called Maui Fencing Company. In 1971, Danny moved to Maui to be a part of this new venture.

Danny began working for Goodfellow Bros., Inc. (GBI) in 1980 and currently remains with the company. His deep appreciation for GBI is carried with him to this day. "They respect us and take care of us," he says. "Local guys have a say."

Uncomfortable with job titles, Danny does not offer up any about himself. What he does say, however, is that he is a "natural ground guy, a do everything guy." He describes his work as exciting and fast paced and that when he goes to bed at night he is always thinking ahead – about what is coming up, what needs to be done and how he can do it. Very humble and not one to talk about himself, it is difficult to get Danny to speak about

his position at the company. What can be gathered from the stories he shares is that he is well respected amongst his co-workers and peers. Several times Danny speaks of the importance of communication and safety on the jobsite. "Safety goes hand in hand with production," he says, and that, "communication is the most important." He uses the word 'mentor' with a sense of gratitude when talking of his past mentors. He elaborates on the value of practice and experience and says he tries to be a mentor whenever he can to the newcomers in the construction industry.

When speaking of the project site, Danny explains that when he started with the company in 1980, GBI was already occupying the site. GBI had constructed Piilani Highway and had set up a trailer office on the property as a convenient location close to the jobsite. He remembers that in addition to the office, there were other trailers and that the site was primarily used for storage of lumber and pipes. He was often at the site to organize and check inventory and supplies when not out on the field. Danny goes on to explain that although he started work for GBI in 1980, he is familiar with the area as his previous employer, Maui Fencing Company, had constructed the fencing surrounding the adjacent Kihei Wastewater Reclamation Facility. Before the site was occupied, Danny remembers the area as being pasture land for cattle and owned by Haleakala Ranch. He describes the land then as looking very much like the open pastureland in the surrounding area today.

Reminiscing of some of his favorite memories of the site, Danny tells of GBI's old company Christmas parties on the property. Back then, he says, the company would clean up the property and set up a tent where all the employees would gather for one night out of the year. There, they would *pulehu*, stir fry, drink, and celebrate. He was much younger then, Danny clarifies, and remembers the time as "good fun".

When asked if he knows of any cultural practices that have been or are currently being carried out on the property or surrounding area, Danny says he is not aware of any. He believes beach or mountain access will not be affected as the site is located some ways away from the ocean and that the surrounding lands have always been privately owned, either by the ranch or more recently, Monsanto. When asked what cultural concerns should be considered in the development plans, Danny says he feels there isn't really anything. He says he thinks the property has already been blessed. Danny goes on to explain that GBI has always been concerned about doing what is culturally right. "Steve Goodfellow has always been that way," he says.

K:\DATA\PacRim\GBIHI\DCollierintsummary.wpd

PROPOSED KIHEI ROCK CRUSHING FACILITY
CULTURAL IMPACT ASSESSMENT

Interview with: Kenneth "Blackie" Freitas

Interviewed by: Erin Mukai, Associate
Munekiyo & Hiraga, Inc.

Ranching runs deep through the hearts of the Freitas family. For Kenneth Freitas, ranching has been a part of his life for 53 years and the tradition of working for Haleakala Ranch has been passed down from his father, Ernest Freitas, and grandfather, Louis Freitas. In September of this year, Haleakala Ranch will celebrate its 123rd birthday. It's quite remarkable then that Kenneth has been with the company for little over half a century, almost half the age of the ranch itself.

The interview with Kenneth Freitas took place on July 6, 2011, in the office of Haleakala Ranch in Makawao.

Born in 1941 to Ernest and Cecilia Freitas, Kenneth, who goes by the name Blackie, grew up on Haleakala Ranch and today operates as the ranch's General Foreman. Inducted into the Paniolo Hall of Fame in 2009, Blackie is amongst the few paniolos statewide who have been recognized in their contribution of keeping Hawaii's paniolo heritage alive. He remembers much of the same buildings on the ranch today as being around when he was a young boy. He points to a house nearby and says he used to live there. He explains that housing for employees of the ranch was provided nearby and that the ranch also provided transportation for children of the ranch families to attend school. Blackie explains that Haleakala Ranch was very much and still remains a family: taking care of one another has always been a way of life.

Blackie remembers ranch land extending through Ulupalakua and makai, down to the shore. He elaborates that the land was primarily owned by Haleakala Ranch, Ulupalakua Ranch and Kaonoulu Ranch. He remembers that different men from Haleakala Ranch took care of different land sections. He remembers that the Ventura's took care of the Kamaole section, near the site of the Goodfellow Brothers' Rock Crushing Facility. Blackie tells of dry lower lands grown with kiawe trees near the project site. The area was used as pastureland for cattle. He remembers development in the Kihei area coming in with the development of Piilani Highway. He names the golf courses in the area, the Kihei R&T park and the Goodfellow Brothers rock crushing operations followed by the County's wastewater treatment plant. He mentions Monsanto coming in to the area more recently and comments on their vast fields of corn.

Blackie shares memories of times he would hunt deer in the area near the project site with friends and family. The ranch would allow its employees to traverse their land for hunting.

He says he still hunts to this day.

When asked if he know of any cultural practices that have occurred or are continuing on or near the project site, Blackie says that he, personally, knows of none. He says he does not know of any cultural concerns that should be considered in the development plans if the project proceeds and had no comments on beach or mountain access.

Blackie has no plans of retiring. "It's not my time to retire," he says, "what will I do?" "Everything has an ending – like a book," Blackie elaborates. Now is just not his time.

K:\DATA\PacRim\GBIHI\KFreitasintsummary.wpd

APPENDIX G.

Community Noise Permit

PERMIT NO. M 07-005

STATE OF HAWAII
DEPARTMENT OF HEALTH
NOISE, RADIATION & INDOOR AIR QUALITY BRANCH

COMMUNITY NOISE PERMIT FOR CONSTRUCTION ACTIVITIES

PURSUANT TO THE PROVISIONS OF CHAPTER 342F, HAWAII REVISED STATUTES, AND CHAPTER 11-46, HAWAII ADMINISTRATIVE RULES, THIS PERMIT IS HEREBY GRANTED TO:

GOODFELLOW BROTHERS, INC. (COMPANY OR INDIVIDUAL)

KEN GIFT - PROJECT MANAGER (NAME OF AUTHORIZED INDIVIDUAL)

AT 500 WELAKAHAO ROAD (LOCATION OF ACTIVITY)

DURING THE HOURS OF 7:00 A.M. TO 6:00 P.M., MONDAY THROUGH FRIDAY AND 9:00 A.M. TO 6:00 P.M., SATURDAY (EXCEPT SUNDAYS AND HOLIDAYS)

MARCH 6, 2007 (DATE ISSUED)

FEBRUARY 13, 2009 (EXPIRATION DATE)

THIS PERMIT IS GRANTED UPON THE EXPRESSED PROVISION THAT THE HOLDER WILL COMPLY WITH ALL THE RULES, REGULATIONS AND ORDERS OF THE DEPARTMENT AND THE CONDITIONS PRECEDENT TO THE GRANTING OF THIS PERMIT.

DIRECTOR OF HEALTH — By Daryn A. Yamada

SUPERVISOR, NOISE SECTION (TITLE)

SPECIAL RESTRICTIONS AND CONDITIONS:

*SEE GENERAL RESTRICTIONS AND CONDITIONS ON BACK.

APPENDIX H.

Traffic Assessment Report

AUSTIN, TSUTSUMI & ASSOCIATES, INC. CIVIL ENGINEERS • SURVEYORS
CONTINUING THE ENGINEERING PRACTICE FOUNDED BY H. A. R. AUSTIN IN 1934

KENNETH K. KUROKAWA, P.E.
TERRANCE S. ARASHIRO, P.E.
DONOHUE M. FUJII, P.E.
STANLEY T. WATANABE
IVAN K. NAKATSUKA, P.E.
ADRIENNE W. L. H. WONG, P.E., LEED AP

#11-506

April 8, 2011

Ms. Blanca Lafolette
Pacific Rim Land, Inc.
Park Plaza
1300 North Holopono Street
Kihei, Maui, Hawaii 96753

Dear Ms. Lafolette:

Subject: Traffic Assessment for the Goodfellow Bros., Inc. Baseyard Tax Map Key: (2) 2-2-002:078 Kihei, Maui, Hawaii

Austin, Tsutsumi & Associates, Inc. (ATA) has conducted a traffic assessment for the existing Goodfellow Bros., Inc. (GBI) baseyard site located in Kihei, Maui, Hawaii.

Project Description

The GBI baseyard site is currently located on a 14.5-acre parcel in Kihei on the island of Maui, specifically described as TMK: (2) 2-2-002:078. GBI currently has a County Conditional Permit and State Land Use Special Use Permit that allows for the baseyard's operations. GBI, through the Pacific Rim Land, Inc. (PRLI) is processing a State Land Use District Boundary Amendment from "Agricultural" to "Urban" and a change in zoning and a community plan amendment for the GBI baseyard site from "agriculture" to "heavy industrial". GBI has no plans to expand the baseyard's operations, buildings or staff.

Existing Roadways

Piilani Highway is generally a four-lane, undivided, north/south State arterial highway in the vicinity of site, providing access to Kihei, Wailea and Makena to the south from Kahului and Wailuku areas to the north. The posted speed limit on Pi'ilani Highway is generally 40 miles per hour (mph). The site location for the GBI baseyard is shown in Figure 1.

The GBI baseyard is currently located on the east side of Piilani Highway, adjacent and to the south of the Kihei Wastewater Reclamation Facility. Access for the GBI baseyard site is provided via two (2) intersections along Piilani Highway. The main access is provided by Old Welakahao Road, which services the Kihei Wastewater Reclamation Facility and branches to service the GBI baseyard on the northwest corner of the site. The Piilani Highway/Old Welakahao Road intersection is currently an unsignalized "T-intersection". In 2003, in response to comments received during the processing of a

REPLY TO:
501 SUMNER STREET, SUITE 521 • HONOLULU, HAWAII 96817-5031
PHONE (808) 533-3646 • FAX (808) 526-1267
EMAIL : atahnl@atahawaii.com

OFFICES IN:
HONOLULU, HAWAII
WAILUKU, MAUI, HAWAII
HILO, HAWAII

Ms. Blanca Lafolette
Pacific Rim Land, Inc.

April 8, 2011

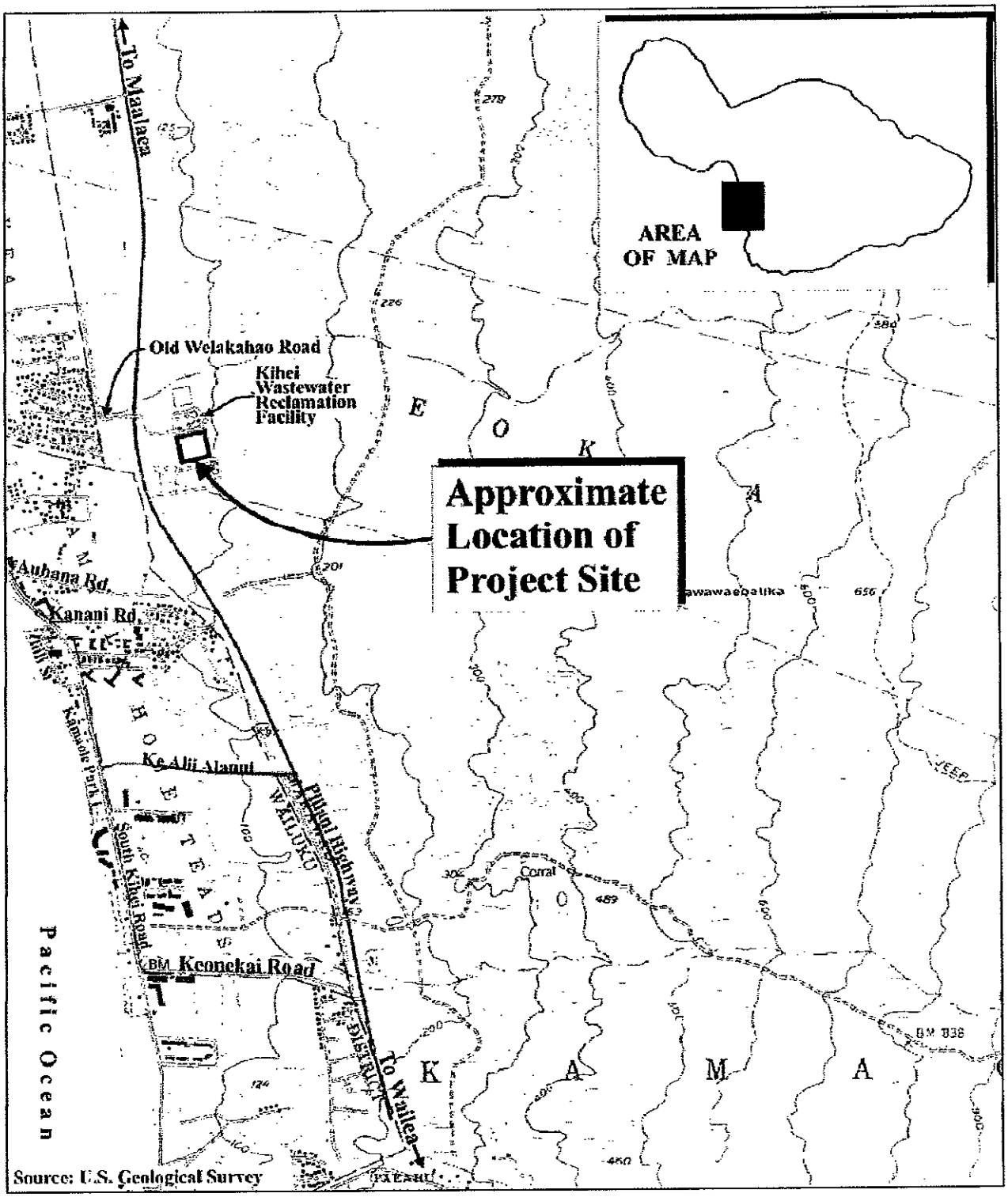
time extension of the State Land Use Special Use Permit, traffic improvements were implemented at the Piilani Highway/Old Welakahao Road intersection. The following traffic improvements are intended to address the change from "agricultural" land use to "heavy industrial" land use to accommodate activities at the GBI Baseyard:

- A southbound left-turn storage lane on Piilani Highway for vehicles entering the GBI baseyard; and
- A median acceleration lane along Piilani Highway for westbound left-turn vehicles exiting the GBI baseyard in the southbound direction.

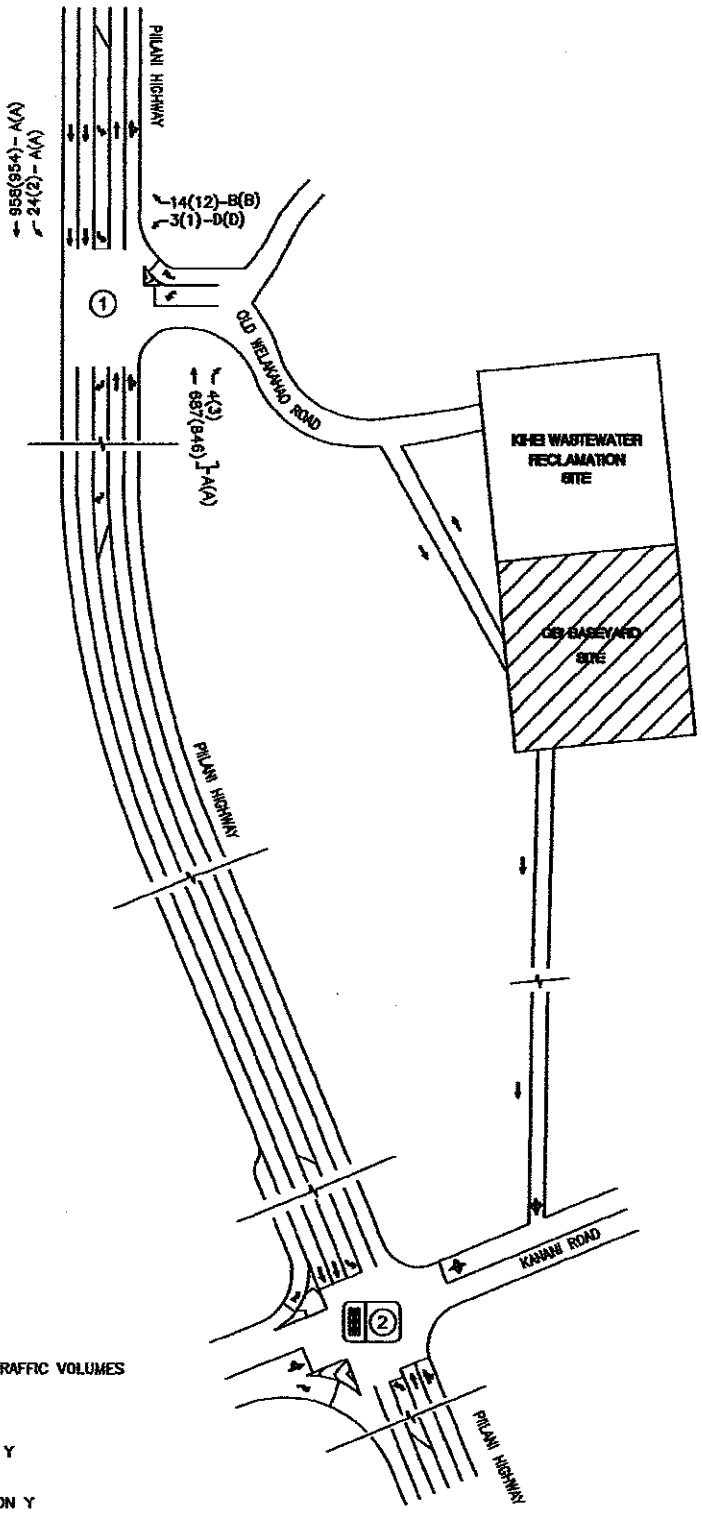
In addition to the main access at Old Welakahao Road, an exit driveway is provided on the southwest corner of the GBI baseyard site that is accessible via a private road that extends to the signalized Piilani Highway/Kanani Road intersection. This driveway helps to facilitate heavy vehicles exiting the GBI baseyard, heading southbound on Piilani Highway. Peak hour turning movement counts were not collected at the Piilani Highway/Kanani Road intersection, however based on estimates provided by GBI, heavy vehicles that utilize the Piilani Highway/Kanani Road intersection are infrequent, with a maximum of 12 exiting heavy vehicles per hour.

At the Piilani Highway/Old Welakahao Road intersection, 24-hour machine counts and peak hour turning movement counts were utilized to determine AM and PM peak hour volumes. The peak hours of traffic were determined to be from 7:00 AM to 8:00 AM during the AM peak hour and 4:00 PM to 5:00 PM during the PM peak hour. At the Piilani Highway/Old Welakahao Road intersection, all movements currently operate at LOS A and B, with the exception of LOS D operation for the westbound left-turn movement during the AM and PM peak hours of traffic. Based on the Traffic Signal Warrant Study for the Piilani Highway/Old Welakahao Road intersection, dated December 20, 2010, a traffic signal is currently not warranted. The existing lane configuration, peak hour traffic volumes, and levels of service are shown in Figure 2.

As shown in Figure 2, the turning movement volumes entering and exiting Old Welakahao Road are shared between the GBI Baseyard and the Kihei Wastewater Reclamation Facility. However, the trip volumes generated by the two sites are minimal, with only 28 total entering trips (24 of which make the entering southbound left-turn movement) and 17 exiting trips (3 of which make the exiting westbound left-turn movement) during the AM peak hour of traffic (worst case scenario).



GBI BASEYARD	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII	FIGURE
	LOCATION MAP	1



NORTH

NOT TO SCALE

NOTE:
THIS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY. DO NOT USE FOR DESIGN.

LEGEND

##(##) – AM(PM) PEAK HOUR OF TRAFFIC VOLUMES

X(X) – AM(PM) LOS

(Y) – SIGNALIZED INTERSECTION Y

(Y) – UNSIGNALIZED INTERSECTION Y

GBI BASEYARD

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

LEVELS OF SERVICE AND LANE CONFIGURATION EXISTING CONDITIONS 2011

FIGURE 2

Ms. Blanca Lafolette
Pacific Rim Land, Inc.

April 8, 2011

Study Scope

The focus of this traffic assessment will be on the trip generation potential of the Project to determine whether it meets the minimum trip generation criteria recommended by Institute of Transportation Engineers (ITE). The Manual of Transportation Engineering Studies, dated 2000, published by ITE, which states:

> *"... in lieu of other locally established thresholds, a traffic access/impact study should be conducted whenever a proposed development will generate 100 or more added (new) peak direction trips to or from the site during the adjacent roadway's peak hours or the development's peak hours."*

Trip Generation

The proposed State Land Use District Boundary Amendment from "Agricultural" to "Urban" and the change in zoning and community plan amendment of the GBI baseyard site from "agriculture" to "heavy industrial" anticipates no expansion of the baseyard's operations, buildings or staff. Therefore, additional traffic generated by the GBI baseyard is not anticipated as these are generally the major contributing factors to the amount of trips generated. The overall impact to trips entering/exiting the GBI baseyard site will remain unchanged as a result of zoning change. As stated on Page 2, traffic improvements are currently implemented at the Piilani Highway/Old Welakahao Road intersection to address the change from agricultural use of the land to the current industrial activities.

Conclusions

The following are the conclusions of the traffic assessment study:

- The GBI baseyard site will not expand its operations, buildings or staff, which are generally the major contributing factors to the number of trips generated.
- All movements at the unsignalized Piilani Highway/Old Welakahao Road intersection currently operate at LOS A and B, with the exception of LOS D operation for the westbound left-turn movement during the AM and PM peak hours of traffic.
- The proposed State Land Use District Boundary Amendment from "Agricultural" to "Urban" and the change in zoning and community plan amendment of the GBI baseyard site from "agriculture" to "heavy industrial" is not anticipated to generate additional traffic entering/exiting the site since the site allows for the same type of operation.

Ms. Blanca Lafolette
Pacific Rim Land, Inc.

April 8, 2011

- The preparation of a Traffic Impact Assessment Report **is not required** as the GBI baseyard **does not meet** the minimum trip generation criteria of 100 new trips in the peak direction which is recommended by ITE regarding the preparation of a Traffic Impact Assessment Report.

We appreciate the opportunity to prepare this traffic assessment for the Project. Should you require clarification, please do not hesitate to call me.

Sincerely,

AUSTIN, TSUTSUMI & ASSOCIATES, INC.

By 

KEITH K. NIIYA, P.E.
Chief Transportation/Traffic Engineer

KKN:TF:mt

Z:\2011\11-506\Goodfellow Bros Baseyard\Traffic Assmt Ltr 040811\GBI -Baseyard TA.docx

APPENDIX H-1.

Traffic Warrant Study

AUSTIN, TSUTSUMI & ASSOCIATES, INC. CIVIL ENGINEERS • SURVEYORS
CONTINUING THE ENGINEERING PRACTICE FOUNDED BY H. A. R. AUSTIN IN 1934

KENNETH K. KUROKAWA, P.E.
TERRANCE S. ARASHIRO, P.E.
DONOHUE M. FUJII, P.E.
STANLEY T. WATANABE
IVAN K. NAKATSUKA, P.E.
ADRIENNE W.L.H. WONG, P.E., LEED AP

KEN K. KUROKAWA, P.E.
President &
Maui Branch Manager

#10-526

December 20, 2010

Ms. Blanca Lafolette
Pacific Rim Land, Inc.
1300 N Holopono Street
Kihei, Maui, Hawaii 96753

Dear Ms. Lafolette:

Subject: Traffic Signal Warrant Study Update for Welakahao Road and Piilani Highway Kihei, Maui, Hawaii

This letter report documents the findings of a traffic signal warrant study performed for the Welakahao Road/Piilani Highway intersection.

I. INTRODUCTION

A traffic signal warrant study was conducted for Goodfellow Brothers, Inc. in compliance with Condition 8 of Ordinance 3500 dated November 20, 2007. The Conditional Use Permit states "Goodfellow Bros., Inc. shall continue to conduct a traffic signal warrant study at Piilani Highway and Welakahao Road every two years, according to the existing schedule, or as directed by the Maui District Engineer."

II. EXISTING CONDITIONS

A. Roadway System

Welakahao Road is a two-way, two-lane County roadway, oriented in the east-west direction. Welakahao Road provides access to the Kihei Waste Water Treatment Plant and the Goodfellow Baseyard.

Piilani Highway is a two-way, four-lane State principal arterial, oriented in the north-south direction. Piilani Highway is a principal arterial connecting with Mokulele Highway/North Kihei Road in Kihei on the north end and Wailea Ike Drive on the south end. Piilani has a posted speed limit of 40 mph in the vicinity of the study intersection.

REPLY TO:
1871 WILI PA LOOP, SUITE A • WAILUKU, MAUI, HAWAII 96793
PHONE (808) 244-8044 • FAX (808) 242-9163
EMAIL : atamaui@atohawaii.com

OFFICES IN:
HONOLULU, HAWAII
WAILUKU, MAUI, HAWAII
HILO, HAWAII

Welakahao Road/Piilani Highway intersection forms an unsignalized "T" intersection with Welakahao Road as the stop-controlled approach. The intersection functions as follows:

- The northbound approach, Piilani Highway, provides a through lane and a shared through/right-turn lane.
- The southbound approach, Piilani Highway, provides an exclusive left-turn lane and two through lanes.
- The westbound approach, Welakahao Road, provides a shared left-turn/ right-turn lane, with a channelized right-turn acceleration lane on Piilani Highway. The westbound left-turn movement is provided with an acceleration lane on Piilani Highway

B. Existing Traffic Volumes

Twenty-four-hour machine counts were conducted on all approaches between Thursday, September 2, 2010 to Friday, September 10, 2010. The 24-hour machine counts are enclosed.

C. Field Observations

During the AM peak hour of traffic, the intersection operated well as an unsignalized intersection, with approximately three vehicles queued. During the PM peak hour of traffic, the southbound left-turn lane would queue to approximately two to three vehicles and the westbound left-turn lane would queue to two vehicles. Traffic in the through lanes on Piilani Highway moved smoothly.

II. Traffic Signal Warrants

The Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition contains nine warrants for the installation of a traffic signal system. Only Warrant 1 (eight-hour volume), Warrant 2 (four-hour volumes), Warrant 6 (coordinated signal system), and Warrant 7 (crash experience) apply to the subject intersection.

A. Warrant 1 (eight-hour volumes)

The need for a traffic control signal shall be considered if, for each of any 8 hours of an average day, the vehicles per hour (vph) of the 100% columns of Condition A or B or the 80% columns of the combination of Conditions A and B in Table 4C-1 of the MUTCD exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.

Table 1 shows the traffic volumes at the approaches of Piilani Highway (2 or more lane approach on the major street) and Welakahao Road (1 lane approach on the minor street). They do not meet Condition A or B or A and B, therefore Warrant 1 (eight-hour volumes) is not satisfied.

Table 1: Warrant 1 Not Satisfied

Time			Minor Street E Welakahao Road WB	Major Street Piilani Highway NB + SB	Warrant 1 (Eight-hour volume) Condition A	Condition B	Condition A/B
7:00 AM	to	8:00 AM	20	1673	NO	NO	NO
8:00 AM	to	9:00 AM	36	1397	NO	NO	NO
9:00 AM	to	10:00 AM	27	1336	NO	NO	NO
10:00 AM	to	11:00 AM	23	1374	NO	NO	NO
11:00 AM	to	12:00 PM	18	1424	NO	NO	NO
12:00 PM	to	1:00 PM	23	1515	NO	NO	NO
1:00 PM	to	2:00 PM	17	1455	NO	NO	NO
2:00 PM	to	3:00 PM	13	1691	NO	NO	NO
3:00 PM	to	4:00 PM	26	1746	NO	NO	NO
4:00 PM	to	5:00 PM	21	1805	NO	NO	NO

*Welakahao Road WB volume >150 vehicles per hour (vph) or >120 vph
Piilani Highway NB volume + Piilani Highway SB volume >600 vph or >480

**Welakahao Road WB volume >75 vph or >60 vph
Piilani Highway NB volume + Piilani Highway SB volume >900 vph or >720 vph

B. Warrant 2 (four-hour volumes)

The need for a traffic control signal shall be considered if, for each of any 4 hours of an average day, the plotted points representing the vph on the major street (total of both approaches) and the corresponding vph on the higher-volume minor-street approach (one direction only) all fall above the 2 or more lanes & 1 lane curve in Figure 4C-1 of the MUTCD 2009.

Figure 1 shows the plotted approach volumes are below the required curve for 2 or more lane approach on the major street (Piilani Highway) and 1 lane approach on the minor street (Welakahao Road). Therefore Warrant 2 (four-hour volume) is not satisfied. The 24-hour machine traffic counts used for analysis are enclosed.

C. Warrant 6 (coordinated signal system)

The need for a traffic control signal shall be considered if on a two-way street, the adjacent traffic control signals are spaced far enough that they do not provide the necessary degree of vehicular platooning.

Travel time runs showed proper platooning of vehicles and therefore, Warrant 6 (coordinated signal system) is not satisfied.

D. Warrant 7 (crash experience)

The use of this warrant is applicable when the principal reasons for installing a traffic control signal are because of the severity and frequency of crashes. The need shall be considered if 5 or more reported crashes, of types susceptible to correction by a traffic control signal have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash.

State of Hawaii, Department of Transportation (HDOT) reviewed the accident data at the study intersection and found that there were less than 5 accidents that occurred at Old East Welakahao Road/Piilani Highway intersection in a 12-month period which could have been corrected by the installation of a traffic signal. Therefore, Warrant 7 (crash experience) is not satisfied. HDOT's letter is enclosed.

E. Other Warrants

The following warrants did not apply at this intersection:

- Warrant 3 Peak Hour – no schools/office discharging large numbers of vehicles over a short period of time.
- Warrant 4 Pedestrian Volume – no pedestrian crossing observed.
- Warrant 5 School Crossing – no school crossing observed.
- Warrant 9 Intersection Near a Grade Crossing – no railroad crossings.

III. CONCLUSION

The Welakahao Road/Piilani Highway intersection does not warrant the installation of a traffic signal system at this time.

If you have any questions or require additional information regarding the subject project, please contact me at 533-3646.

Sincerely,

AUSTIN, TSUTSUMI & ASSOCIATES, INC.

for By

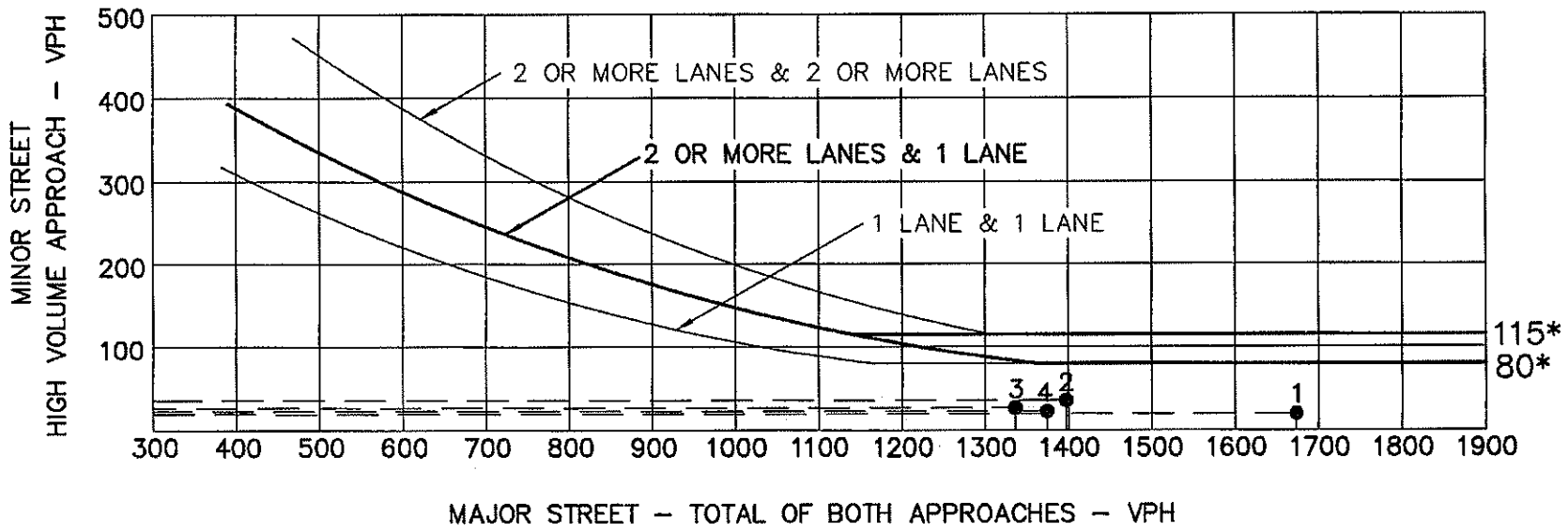
KEITH K. NIIYA, P.E.
Chief Traffic Engineer

KKN:lhy

Enclosures

Z:\2010\10-526\TRAFFIC\Reports\Submitted Drafts\Warrant Study 10-12-20

WARRANT 2: FOUR HOUR VEHICULAR VOLUME



* NOTE: 115 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

NODE	TIME	WELAKAHAO RD	PIILANI HWY
1	7:00 AM to 8:00 AM	20 VPH	1673 VPH
2	8:00 AM to 9:00 AM	36 VPH	1397 VPH
3	9:00 AM to 10:00 AM	27 VPH	1336 VPH
4	10:00 AM to 11:00 AM	23 VPH	1374 VPH

WELAKAHAO ROAD AND PIILANI HWY.	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS,SURVEYORS • HONOLULU,HAWAII **WARRANT 2 (FOUR-HOUR VOLUMES)**	FIGURE 1

LINDA LINGLE
GOVERNOR

HIGHWAY DESIGN BRANCH, ROOM 688A
BRIDGE DESIGN SECTION, ROOM 611
CADASTRAL DESIGN SECTION, ROOM 600
HIGHWAY DESIGN SECTION, ROOM 609
HYDRAULIC DESIGN SECTION, ROOM 636
TECHNICAL DESIGN SERVICE, 688

RIGHT-OF-WAY BRANCH, ROOM 691

TRAFFIC BRANCH, ROOM 602

MOTOR VEHICLE SAFETY OFFICE, ROOM 511

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION AT KAPOLEI
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

MICHAEL D. FORMBY
DIRECTOR

Deputy Directors
FRANCIS PAUL KEENO
JIRO A. SUMADA

IN REPLY REFER TO:
HWY-TS
2.6717

September 28, 2010

Ms. Zasha Jimenez
Austin, Tsutsumi & Associates, Inc.
1871 Wili Pa Loop, Suite A
Wailuku, Hawaii 96793

Dear Ms. Jimenez:

The Traffic Branch has conducted a traffic safety study for the intersection of Piilani Highway and Old East Welakahao Road under its Highway Safety Improvement Program (HSIP) of Title 23, United States Code, Section 148. This traffic safety study is protected under Title 23, U.S.C., Sections 402(k) and 409, and is intended for highway safety and educational purposes only.

We have studied the intersection of Piilani Highway and Old East Welakahao Road utilizing accident data from the 3 most recent years of data available. We have not found 5 or more accidents that occurred at this intersection in a 12-month period, which could be corrected by the installation of a traffic signal.

If there are any questions, please feel free to contact my Traffic Safety staff at 692-7684.

Very truly yours,

ALVIN TAKESHITA
Traffic Branch Head

APPENDIX I.

Preliminary Drainage Report

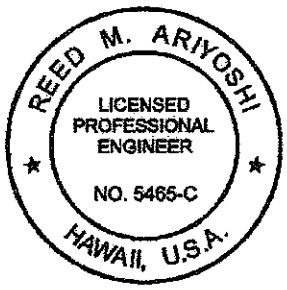
Established 1969

Preliminary Drainage Report

Goodfellow Bros., Inc. Baseyard

Kihei, Maui, Hawaii
TMK: (2) 2-2-02: 78

Prepared For: Goodfellow Bros., Inc.



WARREN S. UNEMORI ENGINEERING, INC.
Civil and Structural Engineers – Land Surveyors
Wells Street Professional Center – Suite 403
2145 Wells Street
Wailuku, Maui, Hawaii 96793

Date: July 2011

Table of Contents

Exhibits

Appendix

Preliminary Drainage Report for
Goodfellow Bros., Inc. Baseyard

I. Introduction

This report has been prepared to examine both the pre-development and post-development site drainage conditions for the subject development.

II. Proposed Project

a. Site Location

The project site is located in Kihei, on the island of Maui, in the State of Hawaii and is identified by Tax Map Key (2) 2-2-02: 78 (Lot 1 of Goodfellow Bros., Inc. Consolidation) (See Exhibit A). It is bordered by the Kihei Wastewater Reclamation Facility (County of Maui) to the north; and pasture land owned by Haleakala Ranch Company to the west, east and south (Lot 2 of Anawio Subdivision).

The project site encompasses an area of approximately 14.5 acres.

b. Project Description

The proposed plan is to obtain a Change in Zoning, District Boundary Amendment, and Community Plan Amendment for the parcel. Currently, the parcel is designated as "Agricultural" (AG). The proposed classification is "Heavy Industrial" (M-2, HI).

III. Pre-Development Conditions

a. Topography and Soil Conditions

The project site was formerly pasture land consisting mostly of brush with

scattered trees. The site slopes from an elevation of approximately (+) 144 feet M.S.L. from the east to approximately (+) 90 feet M.S.L. on the west for an approximate average grade of 5.8%.

According to the *Soil Survey of Island of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*,[1] prepared by the United States Department of Agriculture, Soil Conservation Service, the project site is underlain by Waiakoa extremely stony silty clay loam (WID2) (See Exhibit C). Waiakoa extremely stony silty clay loam is characterized as having medium runoff and severe erosion hazard.

b. Flood and Tsunami Zone

According to Panel 0588E dated September 25, 2009 of the Flood Insurance Rate Map,[2] prepared by the United States Department of Homeland Security, Federal Emergency Management Agency, the project site is entirely situated within Zone X (See Exhibit B). Zone X is designated as an area outside the 0.2% chance floodplain.

c. Drainage

According to our calculations, the surface runoff generated at the project site prior to construction of the existing baseyard improvements is approximately 12.4 cfs for a 10-year recurrence interval, 1-hour duration storm (See Appendix A). This surface runoff sheet flowed across the site in an easterly to westerly

---

[1] *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii.* August 1972. United States Department of Agriculture, Soil Conservation Service.
[2] *Flood Insurance Rate Map, Maui County, Hawaii.* Community-Panel Number 150003 0588E. September 25, 2009. U.S. Department of Homeland Security, Federal Emergency Management Agency.

direction and into the adjoining downstream properties (See Exhibit D).

IV. Post-Development Conditions

a. Topography

The project site is currently utilized by Goodfellow Bros., Inc. as a baseyard for construction activities. Minimal vegetal cover exists on the site project site. Generally, the project site slopes from an elevation of approximately (+) 146± feet M.S.L. to approximately (+) 94± feet M.S.L. in an easterly to westerly direction, with an approximate average slope of 6.1%.

b. Drainage

According to our calculations, the project site currently generates approximately 42.6 cfs of surface runoff during a 10-year recurrence interval, 1-hour duration storm (See Appendix A). This translates to a net increase of approximately 30.2 cfs. Stormwater currently sheet flows across the site in an easterly to westerly direction where it is intercepted by an existing earth berm located along the westerly and a portion of the southerly boundary of the project site and directed to an existing sump area that is located in the southwesterly corner of the project site (See Exhibit E). The sump area which is bound by the previously mentioned earth berms, has an approximate storage capacity of 1.3 ac.-ft., which is capable of retaining the increase in stormwater runoff volume resulting from a 50-year recurrence interval, 1-hour duration storm. Should the storage capacity of this existing sump area be exceeded, there is a provision for runoff overflow over the existing earth berm.

c. Hydrologic Calculations

The hydrologic calculations for drainage basins smaller than 100 acres are based on the "Rules for the Design of Storm Drainage Facilities in the County of Maui",[3] Title MC-15, Chapter 4 and the "Rainfall Frequency Atlas of the Hawaiian Islands",[4] Technical Paper No. 43, U. S. Department of Commerce, Weather Bureau:

Rational Formula used:

$$Q = c*i*A$$

where, Q = *rate of flow* (cubic feet per second)
C = *runoff coefficient*
I = *rainfall intensity* (inches per hour)
A = *area* (acres)

The hydrologic calculations for this project may be found in Appendix A.

[3] *Rules for the Design of Storm Drainage Facilities in the County of Maui.* July 1995. Department of Public Works and Waste Management, County of Maui.
[4] *Rainfall Frequency Atlas of the Hawaiian Islands, Technical Paper No. 43.* 1962. U.S. Department of Commerce, Weather Bureau.

d. Conclusion

Stormwater runoff from the developed project site will be directed to an existing sump area which has the capacity to mitigate the increased surface runoff volume. Therefore, it is our professional opinion that the adjoining downstream properties are not adversely affected by the development of the project site into a construction baseyard facility.

Report Prepared By:

Derek T. Ono

Report Checked By:

Reed M. Ariyoshi

V:\Projdata\10PROJ\10057\Reports\prelim drainage\GBIdrnrpt-00.docx

EXHIBITS

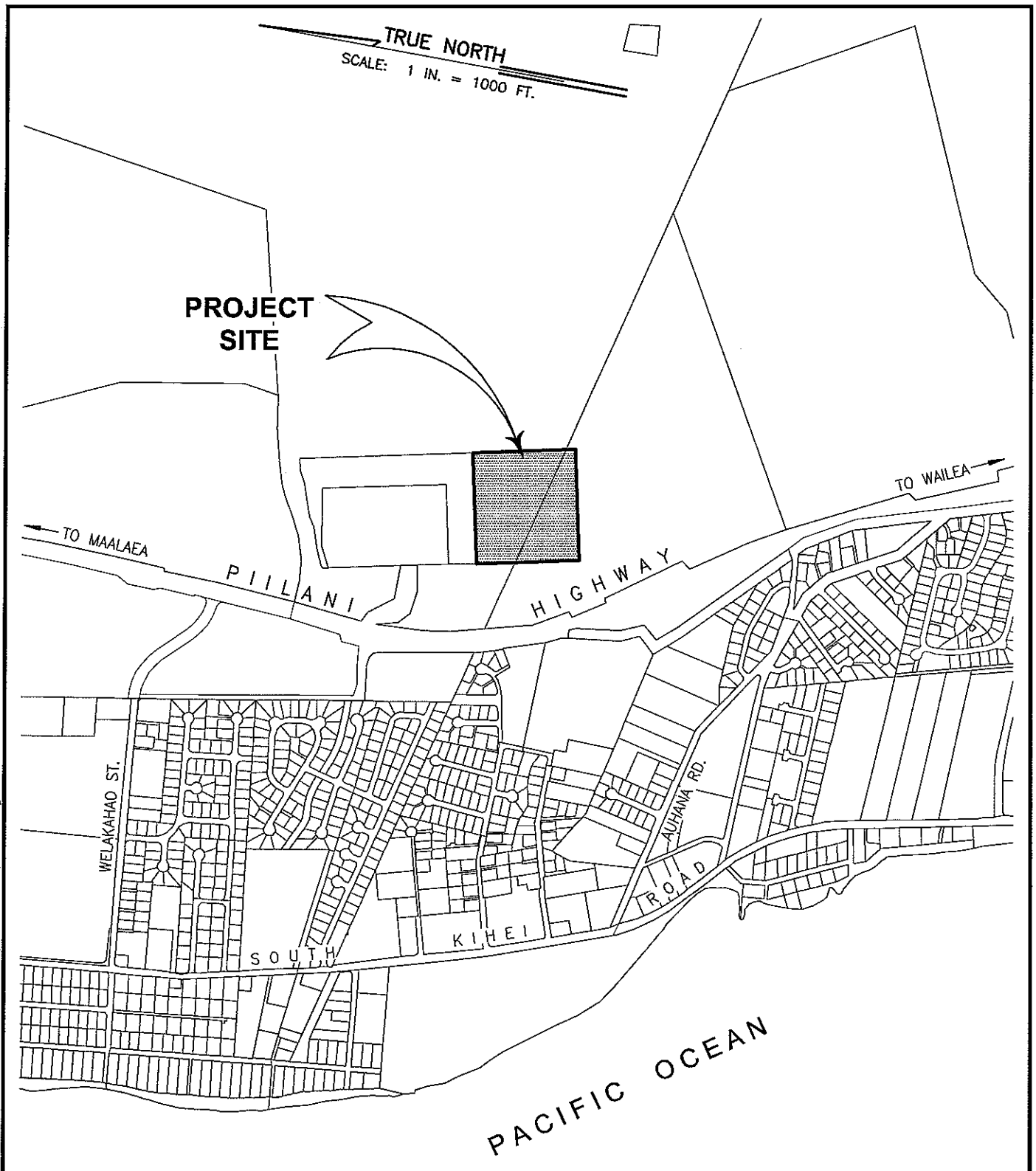


EXHIBIT A - LOCATION MAP

0 1000 2000 3000 4000

SCALE: 1 IN. = 1000 FT.

WARREN S. UNEMORI ENGINEERING, INC.
CIVIL & STRUCTURAL ENGINEERS / LAND SURVEYORS

November 1, 2010

V:\Projdata\10PROJ\10057\dwg\exhibits\Drainage Report\exb-locmap-00.dwg

EXHIBIT B - FLOOD INSURANCE RATE MAP

0 500 1000 1500 2000

SCALE: 1 IN. = 500 FT.

WARREN S. UNEMORI ENGINEERING, INC.
CIVIL & STRUCTURAL ENGINEERS / LAND SURVEYORS

November 1, 2010

V:\Projdata\10PROJ\10057\dwg\exhibits\Drainage Report\flood00.dwg

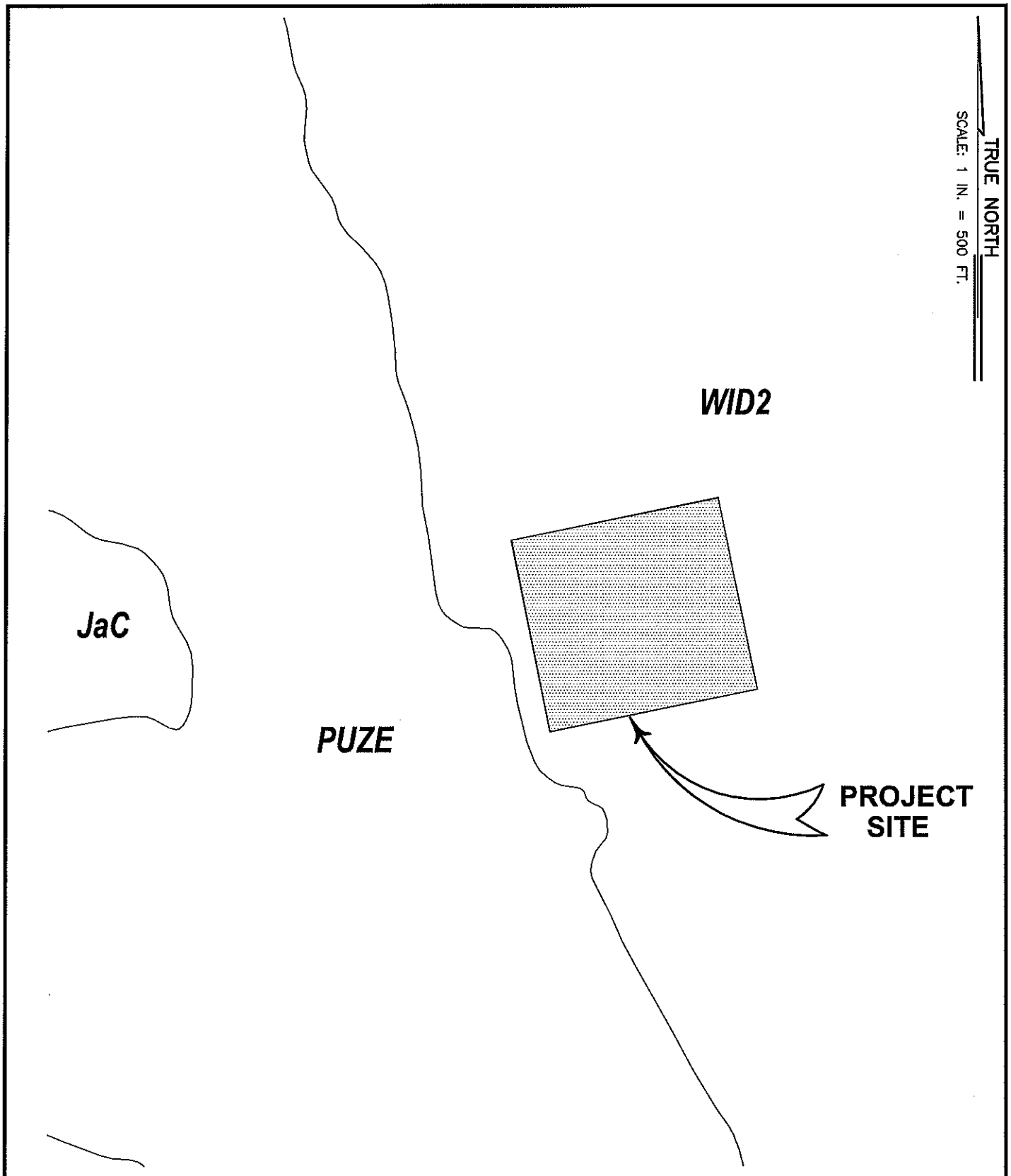


EXHIBIT C - SOIL SURVEY MAP

0 500 1000 1500 2000

SCALE: 1 IN. = 500 FT.

WARREN S. UNEMORI ENGINEERING, INC.
CIVIL & STRUCTURAL ENGINEERS / LAND SURVEYORS

November 1, 2010

V:\Projdata\10PROJ\10057\dwg\exhibits\Drainage Report\SOIL00.dwg

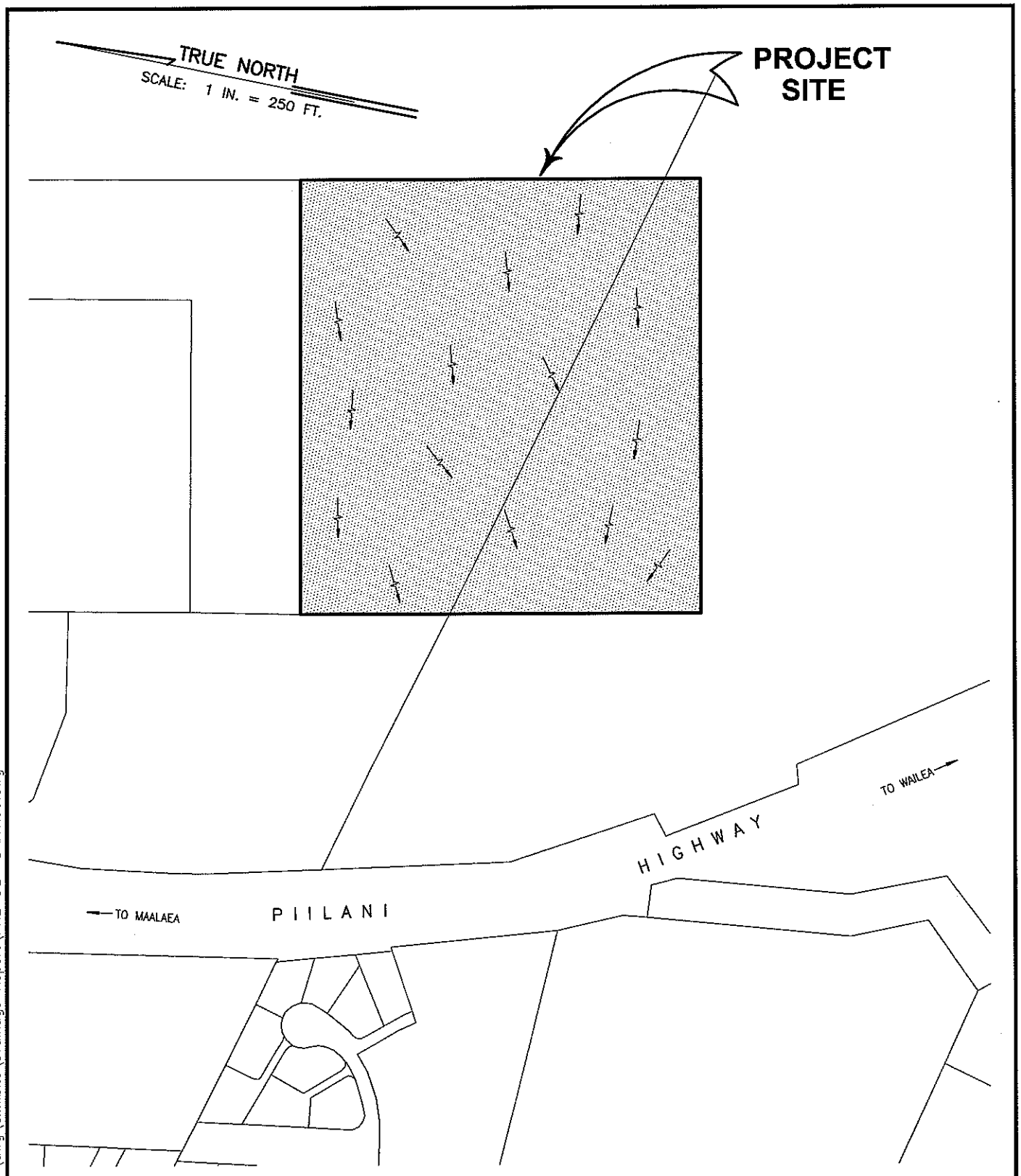


EXHIBIT D - PRE-DEVELOPMENT DRAINAGE PATTERN

0 250 500 750 1000

SCALE: 1 IN. = 250 FT.

WARREN S. UNEMORI ENGINEERING, INC.
CIVIL & STRUCTURAL ENGINEERS / LAND SURVEYORS

November 1, 2010

V:\Projdata\10PROJ\10057\dwg\exhibits\Drainage Report\PRE-DEV-DRAIN00.dwg

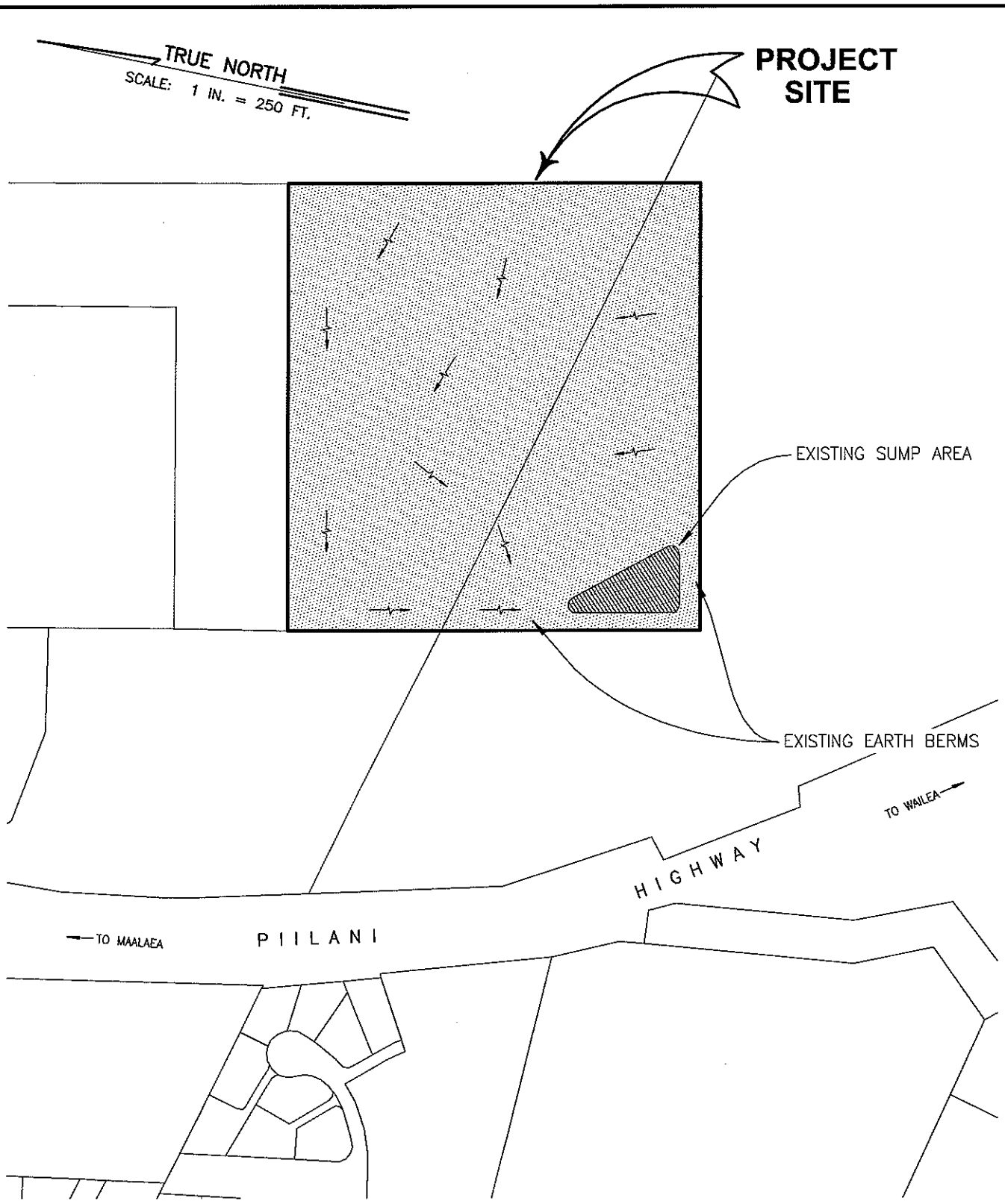


EXHIBIT E - POST-DEVELOPMENT DRAINAGE PATTERN

0 250 500 750 1000

SCALE: 1 IN. = 250 FT.

WARREN S. UNEMORI ENGINEERING, INC.
CIVIL & STRUCTURAL ENGINEERS / LAND SURVEYORS

November 1, 2010

V:\Projdata\10PROJ\10057\dwg\exhibits\Drainage Report\POST-DEV-DRAIN00.dwg

APPENDIX

Warren S. Unemori Engineering, Inc.
Civil & Structural Engineers · Land Surveyors
Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Surface Runoff

Project Name: Goodfellow Bros., Inc. Baseyard
Project No.: 10057
Engineer: Derek T. Ono
Date: 7/13/2011

Area

Description: Pre-development onsite

Area (A): 14.50 acres

Runoff Coefficient

Infiltration:	[Medium]	→	0.07
Relief:	[Rolling]	→	0.03
Vegetal Cover:	[Good]	→	0.03
Development:	[Agricultural]	→	0.15
	Composite Runoff Coefficient:		0.28

Time of Concentration

Runoff Length:	938	ft.
Start Elevation:	144	ft. M.S.L.
End Elevation:	90	ft. M.S.L.
Average Slope:	5.8	%
Time of Concentration (T_c):	25	minutes

Intensity

Project Location: Kihei, Maui, Hawaii
Design Storm: 10-year recurrence interval, 1-hour duration
Rainfall Depth: 2.0 in.
Intensity (I): 3.05 in./hr.

Flow Rate

$Q = C \cdot I \cdot A$

$= 12.4$ $ft.^3/sec.$

Warren S. Unemori Engineering, Inc.
Civil & Structural Engineers · Land Surveyors
Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Surface Runoff

Project Name: Goodfellow Bros., Inc. Baseyard
Project No.: 10057
Engineer: Derek T. Ono
Date: 7/13/2011

Area

Description: Post-development onsite

Area (A):	14.50	acres
Impervious Area:	0.61	acres
Gravel Area:	0.33	acres

Runoff Coefficient

Infiltration:	[Medium]	→	0.07
Relief:	[Rolling]	→	0.03
Vegetal Cover:	[None]	→	0.07
Development:	[Industrial]	→	0.55
		Composite Runoff Coefficient:	0.72
		Impervious Runoff Coefficient:	0.95
		Gravel Runoff Coefficient:	0.40
		Weighted Runoff Coefficient (C):	0.72

Time of Concentration

Runoff Length:	854	ft.
Start Elevation:	146	ft. M.S.L.
End Elevation:	94	ft. M.S.L.
Average Slope:	6.1	%
Time of Concentration (T_c):	10	minutes

Intensity

Project Location: Kihei, Maui, Hawaii
Design Storm: 10-year recurrence interval, 1-hour duration

Rainfall Depth:	2.0	in.
Intensity (I):	4.10	in./hr.

Flow Rate

$Q = C \cdot I \cdot A$

$= 42.6$ $ft.^3/sec.$

Warren S. Unemori Engineering, Inc.
Civil & Structural Engineers · Land Surveyors
Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Surface Runoff

Project Name: Goodfellow Bros., Inc. Baseyard
Project No.: 10057
Engineer: Derek T. Ono
Date: 7/13/2011

Area

Description: Pre-development onsite

Area (A): 14.50 acres

Runoff Coefficient

Infiltration:	[Medium]	→	0.07
Relief:	[Rolling]	→	0.03
Vegetal Cover:	[Good]	→	0.03
Development:	[Agricultural]	→	0.15
	Composite Runoff Coefficient:		0.28

Time of Concentration

Runoff Length:	938	ft.
Start Elevation:	144	ft. M.S.L.
End Elevation:	90	ft. M.S.L.
Average Slope:	5.8	%
Time of Concentration (T_c):	25	minutes

Intensity

Project Location: Kihei, Maui, Hawaii
Design Storm: 50-year recurrence interval, 1-hour duration
Rainfall Depth: 2.3 in.
Intensity (I): 3.53 in./hr.

Flow Rate

$Q = C \cdot I \cdot A$
$= 14.3$ $ft.^3/sec.$
Volume = 1.6 ac.-ft.

Warren S. Unemori Engineering, Inc.
Civil & Structural Engineers · Land Surveyors
Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Surface Runoff

Project Name: Goodfellow Bros., Inc. Baseyard
Project No.: 10057
Engineer: Derek T. Ono
Date: 7/13/2011

Area

Description: Post-development onsite

Area (A):	14.50	acres
Impervious Area:	0.61	acres
Gravel Area:	0.33	acres

Runoff Coefficient

Infiltration:	[Medium]	→	0.07
Relief:	[Rolling]	→	0.03
Vegetal Cover:	[None]	→	0.07
Development:	[Industrial]	→	0.55
		Composite Runoff Coefficient:	0.72
		Impervious Runoff Coefficient:	0.95
		Gravel Runoff Coefficient:	0.40
		Weighted Runoff Coefficient (C):	0.72

Time of Concentration

Runoff Length:	854	ft.
Start Elevation:	146	ft. M.S.L.
End Elevation:	94	ft. M.S.L.
Average Slope:	6.1	%
Time of Concentration (T_c):	10	minutes

Intensity

Project Location: Kihei, Maui, Hawaii
Design Storm: 50-year recurrence interval, 1-hour duration

Rainfall Depth:	2.3	in.
Intensity (I):	4.75	in./hr.

Flow Rate

$Q = C \cdot I \cdot A$

=	49.4	$ft.^3/sec.$
Volume =	2.2	ac.-ft.