

FILE COPY

SEP 08 2011

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Mayor

DAVID C. GOODE
Director

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DEPARTMENT OF PUBLIC WORKS
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Engineering Division

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Highways Division

August 11, 2011

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

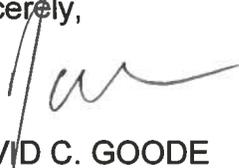
Dear Mr. Hooser:

**SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (DEA) FOR
PROPOSED MOLOKAI BASEYARD IMPROVEMENT
PROJECT; TMK: (2) 5-2-031:011, 012 AND 013, NAIWA,
MOLOKAI, HAWAII**

The County of Maui Department of Public Works has reviewed the Draft Environmental Assessment (EA) for the subject project and anticipates a Finding of No Significant Impact (FONSI). Please publish notice of availability for this project in the September 8, 2011 OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form, one (1) hard copy and one (1) pdf copy of the Draft EA. Please call Colleen Suyama of Munekiyo & Hiraga, Inc. at (808) 244-2015 if you have any questions.

Sincerely,


DAVID C. GOODE
Director of Public Works

DCG:jso

Enclosures

xc: Cary Yamashita, Engineering Division Chief
Colleen Suyama, Munekiyo & Hiraga, Inc.

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**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.

Project Name:	Proposed Molokai Baseyard Improvements
Applicable Law:	HRS, Chapter 343
Type of Document:	Draft Environmental Assessment
Island:	Molokai
District:	Molokai
TMK:	(2)5-2-031:011, 012 and 013
Permits Required:	Building Permit, Grading Permit, Noise Permit (as applicable), NPDES (as applicable)
Applicant or Proposing Agency:	County of Maui, Department of Public Works
Address	200 South High Street Wailuku, Hawaii 96793
Contact & Phone	Cary Y. Yamashita, Engineering Division Chief Phone No.: (808) 270-7745
Approving Agency/ Accepting Authority:	County of Maui, Department of Public Works
Address	200 South High Street Wailuku, Hawaii 96793
Contact & Phone	David Goode, Director Phone No.: (808) 270-7745
Consultant:	Munekiyo & Hiraga, Inc.
Address	305 High Street, Suite 104 Wailuku, Hawaii 96793
Contact & Phone	Colleen Suyama, Senior Associate Phone No.: (808) 244-2015

OFFICE OF ENVIRONMENTAL
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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.

The County of Maui, Department of Public Works (DPW) proposes to construct the Molokai Baseyard Improvements in order to relocate the existing baseyard in Kaunakakai to a new site on the island of Molokai, Hawaii. The project site is currently made up of three (3) parcels owned by the County of Maui, identified by TMK Nos. (2)5-2-031:011, 012 and 013 (Parcel 11, Parcel 12, and parcel 13, respectively) totaling approximately 2.45 acres. The project site is located in the Molokai Industrial Park subdivision approximately 2.9 miles northwest of Kaunakakai. The Molokai Baseyard improvements are proposed to be constructed in two (2) phases. Phase 1 will consist of a driveway entrance from Pueo Place, an administration building, vehicle storage area and parking lot located on Parcels 12 and 13 and a fuel storage and temporary retention basin on Parcel 11. Related improvements will include site clearing/grubbing, grading, retaining walls, off-site utility connections, landscaping and irrigation. Phase 2 will be located on parcel 11 and consist of removing the temporary retention basin, and construction of a maintenance shop building, bulk material bunkers, and truck wash area. Related improvements will include site grading, drainage system, retaining walls, asphalt paving, landscaping and irrigation. The perimeter of the subject properties will also be fenced.

Draft Environmental Assessment

PROPOSED MOLOKAI BASEYARD IMPROVEMENTS, MOLOKAI, HAWAII

Prepared for:

**County of Maui,
Department of Public Works**

August 2011

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Preface

The County of Maui, Department of Public Works (DPW) proposes to construct the Molokai Baseyard improvements in order to relocate the existing baseyard in Kaunakakai to a new site on the island of Molokai, Hawaii. The project site is currently made up of three (3) parcels owned by the County of Maui, identified by TMK Nos. (2)5-2-031:011, 012 and 013 (Parcel 11, Parcel 12, and Parcel 13, respectively) totaling approximately 2.45 acres. The project site is located in the Molokai Industrial Park subdivision at Naiwa, approximately 2.9 miles northwest of Kaunakakai. The Molokai Baseyard improvements are proposed to be constructed in two (2) phases. Phase 1 will consist of a driveway entrance from Pueo Place, an administration building, vehicle storage area and parking lot located on Parcels 12 and 13 and a fuel storage and temporary retention basin on Parcel 11. Related improvements will include, but not be limited to site clearing/grubbing, grading, retaining walls, off-site utility connections, landscaping and irrigation. Phase 2 will be located on Parcel 11 and consist of removal of the temporary retention basin and construction of a maintenance shop building, bulk material bunkers, and truck wash area. Related improvements for Phase 2 will include, but not be limited to site grading, drainage system, retaining walls, asphalt paving, landscaping, and landscape irrigation. The perimeter of the subject properties will also be fenced. The DPW has submitted a preliminary subdivision/consolidation application (SUB4 20080001) to consolidate the three (3) parcels into one (1) parcel.

Executive Summary

Project Name: Proposed Molokai Baseyard Improvements

Type of Document: Draft Environmental Assessment

Legal Authority: Chapter 343, Hawaii Revised Statutes

Agency Determination: Anticipated Finding of No Significant Impact

Applicable Environmental Assessment Review “trigger”: Use of County Owned Lands and Funds

Location: Island of Molokai
15 Pueo Place
Naiwa, Molokai, Hawaii
(TMK (2) 5-2-031:011, 012 and 013)

Landowner/Proposing Agency: County of Maui
Department of Public Works
200 S. High Street
Wailuku, Maui, Hawaii 96793
Contact: Cary Y. Yamashita, Engineering Division Chief
Phone No.: (808)270-7745

Approving Agency: County of Maui
Department of Public Works
200 S. High Street
Wailuku, Maui, Hawaii 96793
Contact: David Goode, Director
Phone No.: (808) 270-7845

Consultant: Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793
Contact: Colleen Suyama, Senior Associate
Phone No.: (808) 244-2015

Project Summary: The County of Maui, Department of Public Works (DPW) proposes to construct the Molokai Baseyard improvements in order to relocate the existing baseyard in Kaunakakai to a new site on the island of Molokai, Hawaii. The project site is currently made up of three (3) parcels owned by the County of Maui, identified by TMK Nos. (2)5-2-031:011, 012 and 013 (Parcel 11, Parcel 12, and Parcel 13, respectively) totaling

approximately 2.45 acres. The project site is located in the Molokai Industrial Park subdivision at Naiwa, approximately 2.9 miles northwest of Kaunakakai. The Molokai Baseyard improvements are proposed to be constructed in two (2) phases. Phase 1 will consist of a driveway entrance from Pueo Place, an administration building, vehicle storage area and parking lot located on Parcels 12 and 13 and a fuel storage and temporary retention basin on Parcel 11. Related improvements will include, but not be limited to site clearing/grubbing, grading, retaining walls, off-site utility connections, landscaping and irrigation. Phase 2 will be located on Parcel 11 and consist of removal of the temporary retention basin and construction of a maintenance shop building, bulk material bunkers, and truck wash area. Related improvements for Phase 2 will include, but not be limited to site grading, drainage system, retaining walls, asphalt paving, landscaping, and landscape irrigation. The perimeter of the subject properties will also be fenced. The DPW has submitted a preliminary subdivision/consolidation application (SUB4 20080001) to consolidate the three (3) parcels into one (1) parcel.

I. PROJECT OVERVIEW

I. PROJECT OVERVIEW

A. PROJECT LOCATION, EXISTING USE AND OWNERSHIP

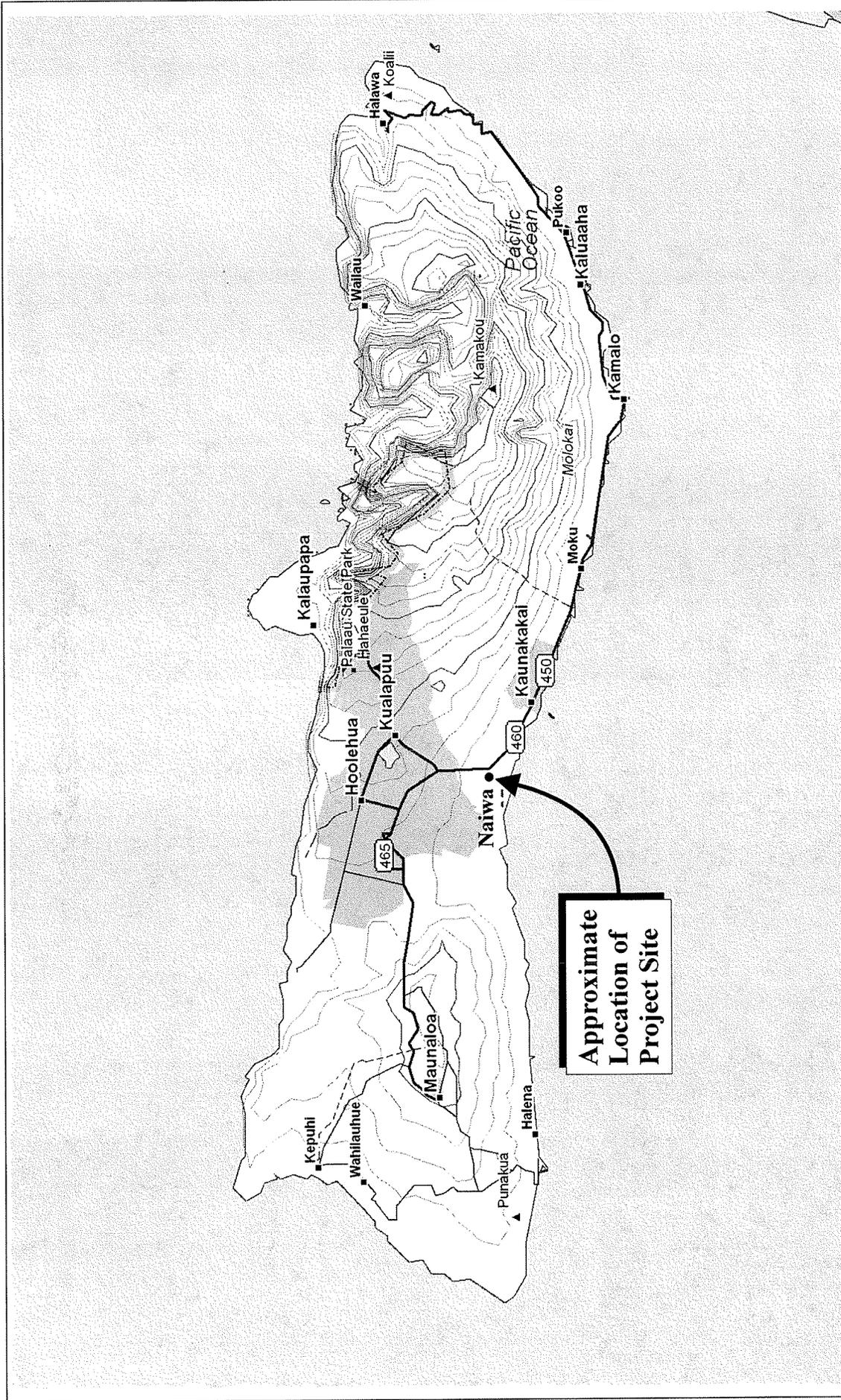
The County of Maui, Department of Public Works (DPW) proposes to construct the Molokai Baseyard improvements in order to relocate the existing baseyard in Kaunakakai to the new site consisting of approximately 2.45 acres of vacant land owned by the County of Maui at TMK Nos. (2)5-2-031:011, 012 and 013 (hereinafter referred as “Project Site”). The project site is located in the Molokai Industrial Park subdivision, approximately 2.9 miles northwest of Kaunakakai at Naiwa on the island of Molokai, Hawaii. See **Figure 1** and **Figure 2**. Access to the project site is off of Pueo Place and Ulili Street via Maunaloa Highway.

The project site is located in the State Urban District, designated as “Light Industrial” use on the Molokai Community Plan, zoned “M-2, Heavy Industrial” pursuant to Ordinance No. 1383, and located outside of the Special Management Area (SMA) for the island of Molokai. The Molokai Industrial Park subdivision was constructed after the zoning was granted.

B. PROPOSED ACTION

The proposed Molokai Baseyard improvements are proposed to be constructed in two (2) phases. Phase 1 will consist of a driveway entrance from Pueo Place, an administration building, vehicle storage area and parking lot located on Parcels 12 and 13 and a fuel storage and temporary retention basin on Parcel 11. See **Figure 3** and **Appendix “A”**. Related improvements will include, but not be limited to site clearing/grubbing, grading, retaining walls, off-site utility connections, landscaping and irrigation. Phase 2 will be located on Parcel 11 and consist of removal of the temporary retention basin and construction of a maintenance shop building, bulk material bunkers, and truck wash area. Related improvements for Phase 2 will include, but not be limited to site grading, drainage system, retaining walls, asphalt paving, landscaping, and landscape irrigation. The perimeter of the subject properties will also be fenced. The DPW has submitted a preliminary subdivision/consolidation application (SUB4 20080001) to consolidate the three (3) parcels into one (1) parcel.

The one-story administration building is approximately 3,840 sq. ft. containing offices, conference room, meeting/training room, storage, staff lunchroom and restrooms. See



Source: DeLorme Topo Quads

Figure 1



Molokai Baseyard Improvements Regional Location Map

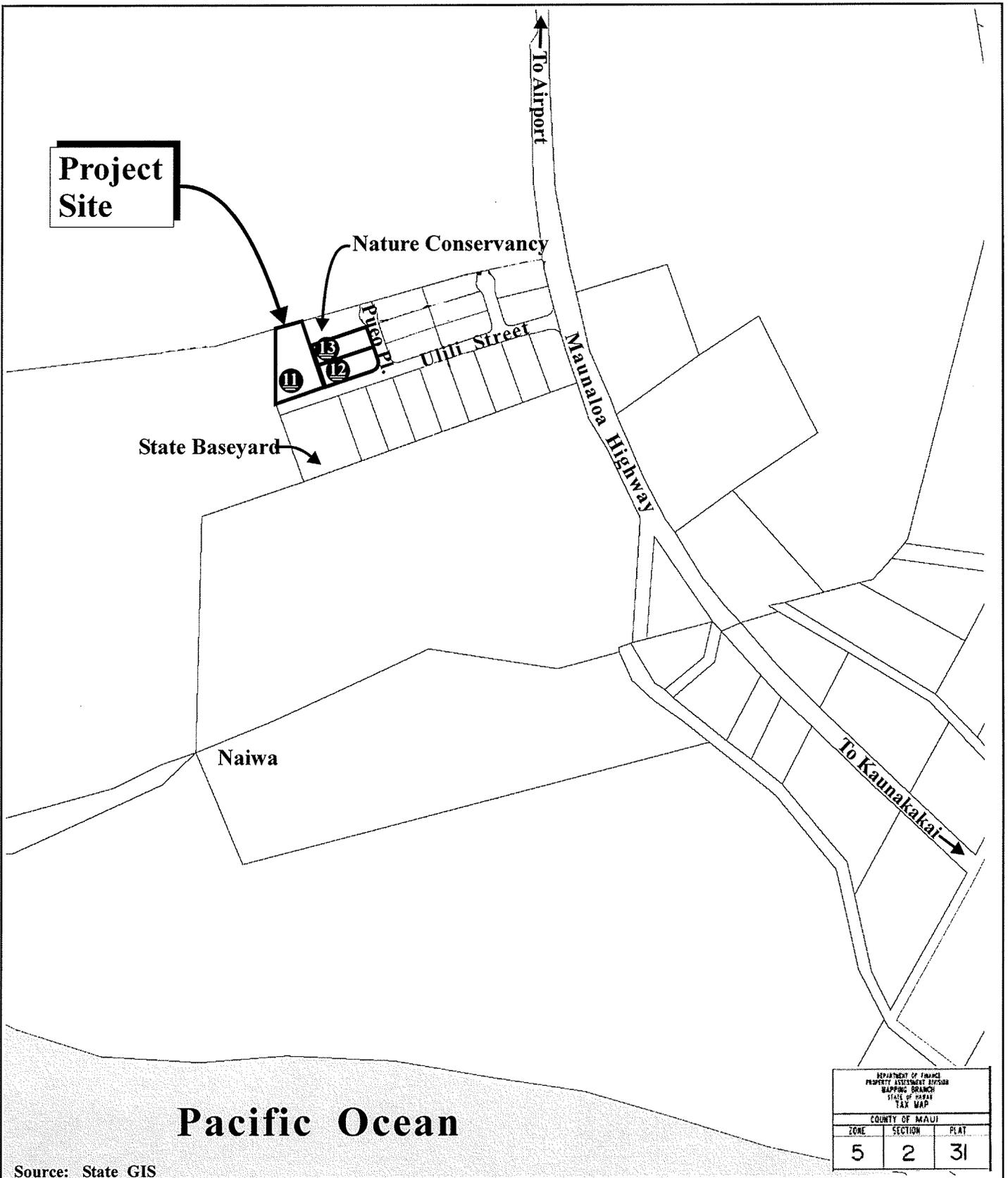
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Prepared for: County of Maui, Dept. of Public Works



MUNEKIYO & HIRAGA, INC.

COM/DPW Molokai\RegionalLocation

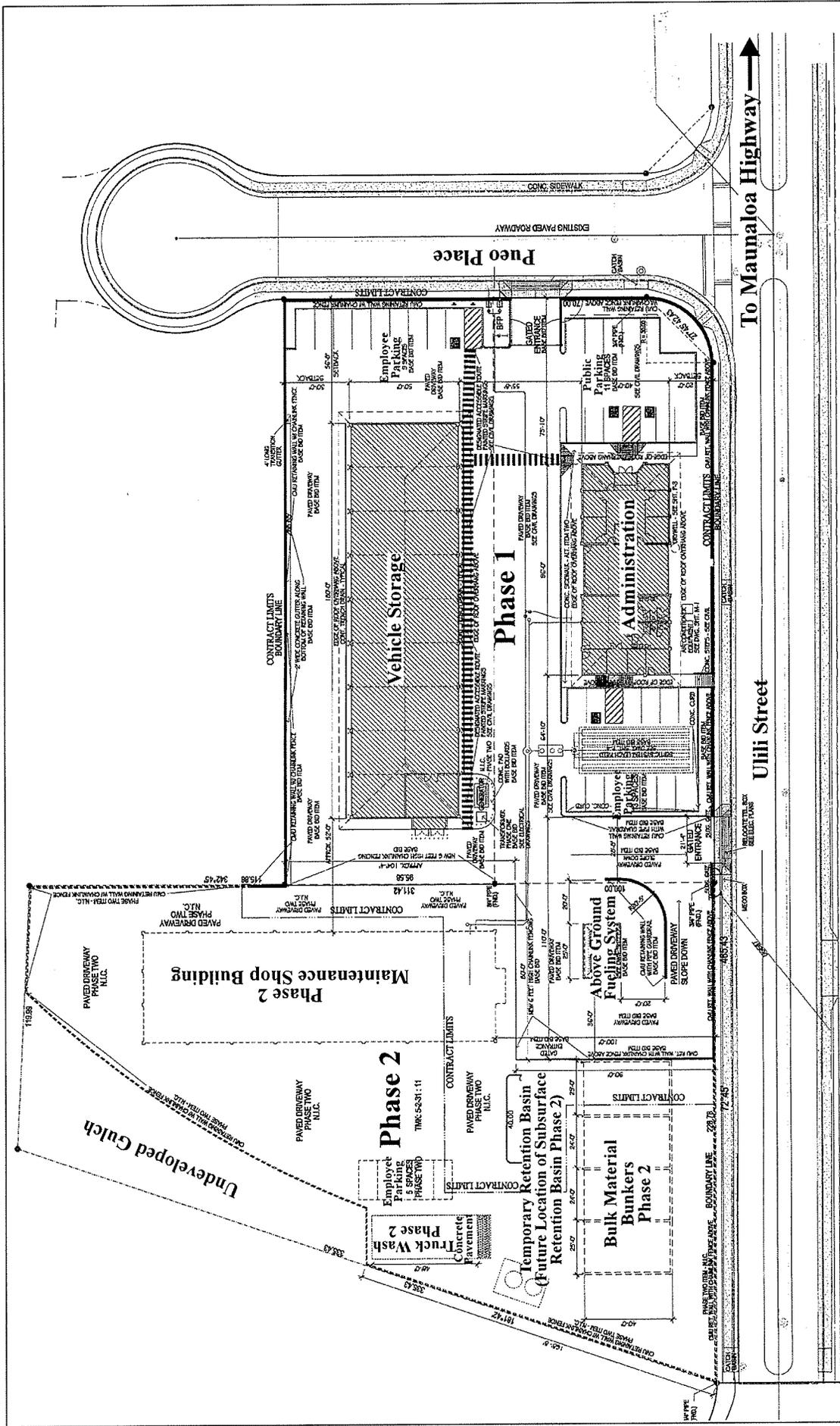


Source: State GIS

Figure 2 Molokai Baseyard Improvements
Site Location Map

NOT TO SCALE





Source: Hiyakumoto Architect, LLC

Figure 3



Molokai Baseyard Improvements Site Plan

NOT TO SCALE

Prepared for: County of Maui, Dept. of Public Works



MUNEKIYO & HIRAGA, INC.

Figure 4. The one-story covered vehicle storage building is approximately 9,000 sq. ft. See **Figure 5.** In Phase 2, the one-story maintenance shop building will be approximately 8,000 sq. ft. See **Figure 6.** Refer to **Appendix “A”**.

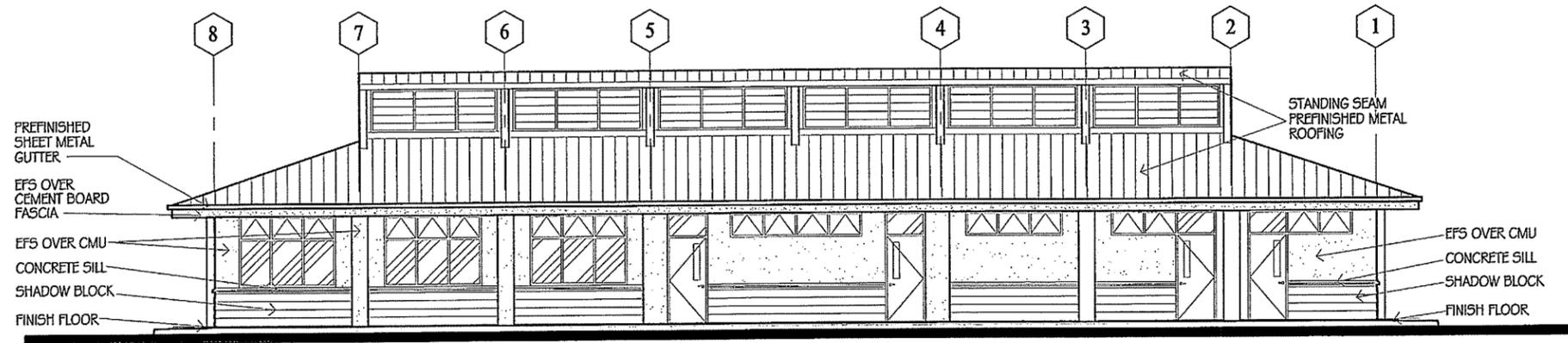
Given that County funds and County owned lands will be used for the proposed project, this Environmental Assessment (EA) has been prepared in accordance with the provisions of Chapter 343, Hawaii Revised Statutes and Department of Health Administrative Rule Chapter 200 of Title 11, Environmental Impact Statement Rules. Pursuant to Section 11-200-4, the approving agency for the EA is the DPW.

C. PROJECT NEED

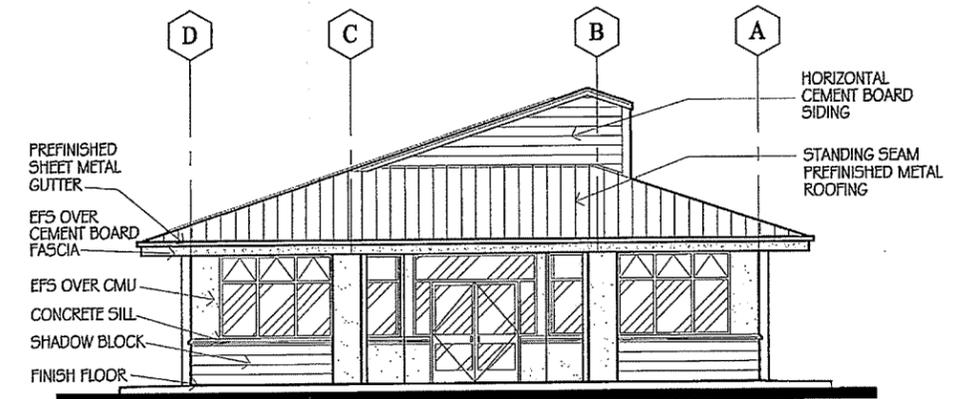
The proposed Molokai Baseyard improvements are necessary because the existing baseyard in Kaunakakai is located on State-owned lands. There are plans to expand the State facilities to include a new courthouse and library extension which will require relocation of the baseyard. The baseyard is used by the DPW to fuel, store and maintain their vehicles, store construction materials for their highway projects and provide office space for their administrative staff.

D. PROJECT FUNDING AND SCHEDULING

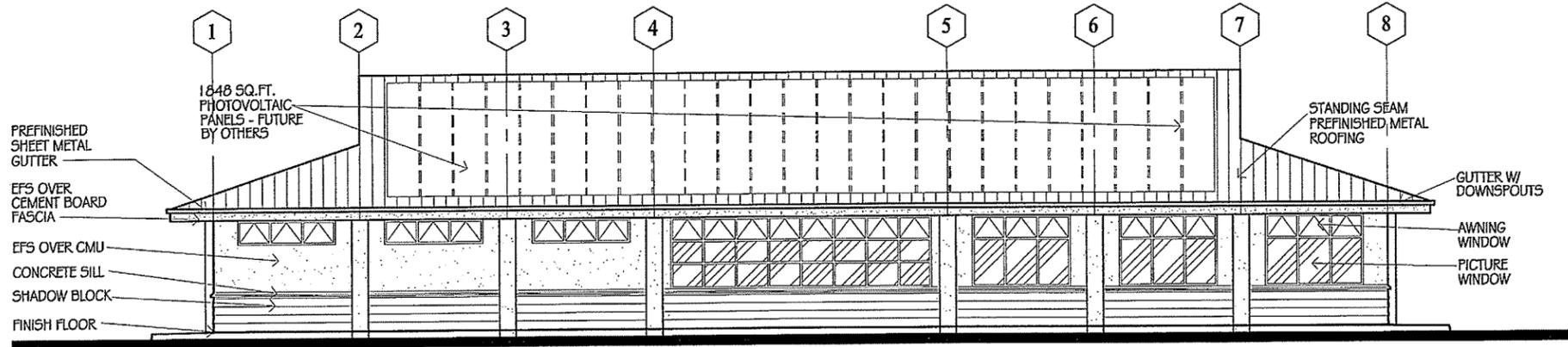
The estimated cost of the proposed project is \$3.7 million. It is estimated that the construction of Phase 1 will take approximately 14 months to complete. Phase 2 will be initiated after the completion of Phase 1 and when funding is obtained. Once initiated, the estimated construction period of Phase 2 is approximately eight (8) months. It is anticipated that Phase I will be initiated in January 2012 and that Phase II will be initiated in the 2012/13 fiscal period.



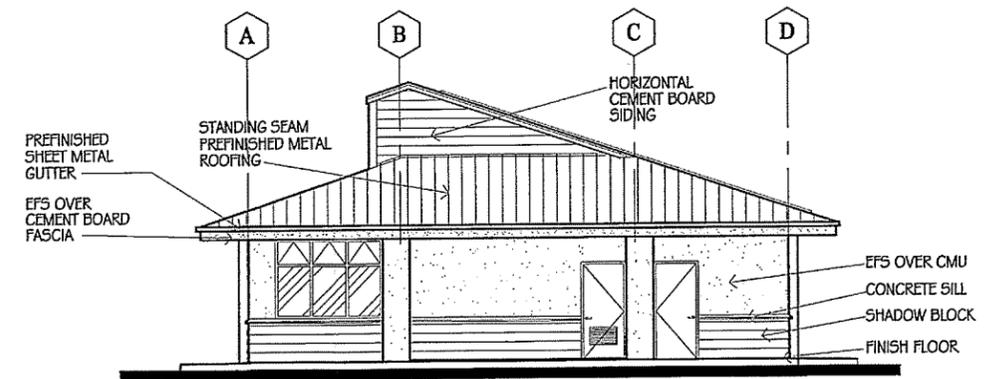
NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION

Source: Hiyakumoto Architect, LLC

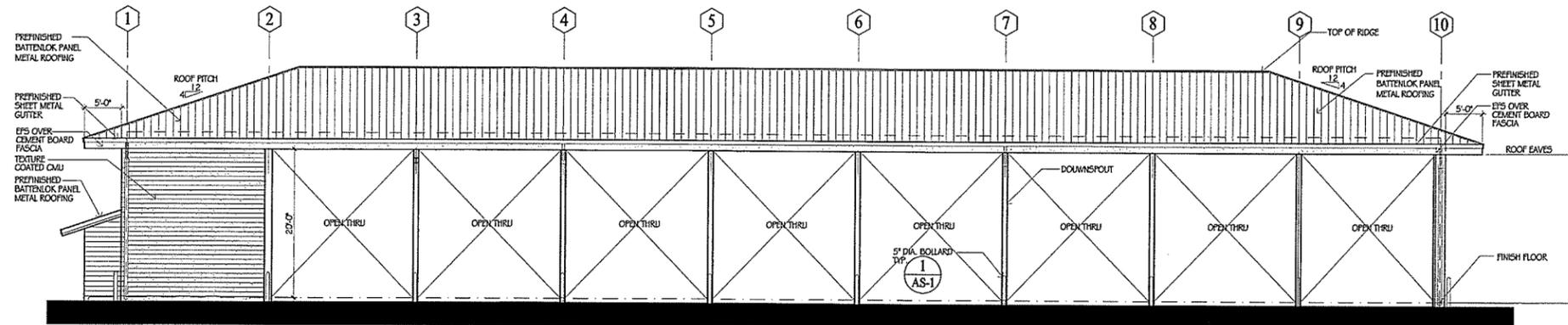
Figure 4

**Molokai Baseyard Improvements
Phase 1, Administrative Building Elevations**

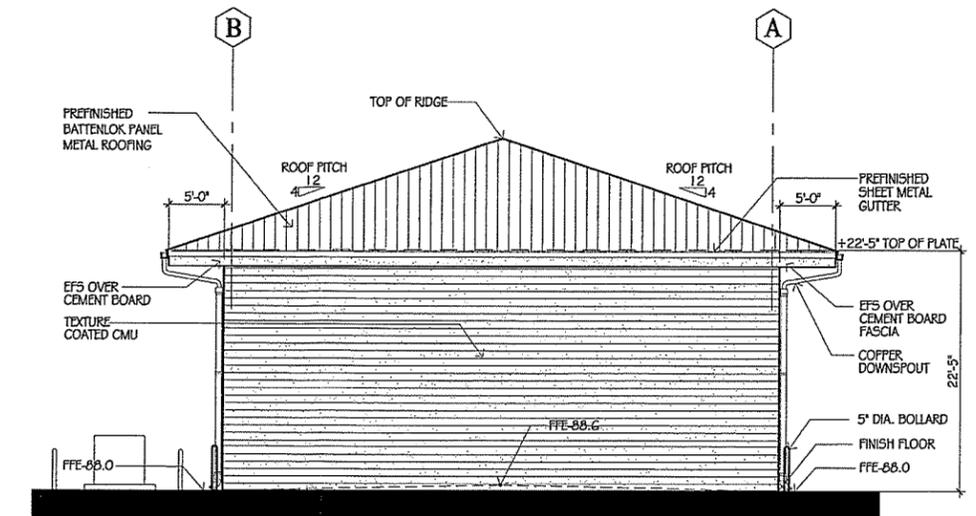
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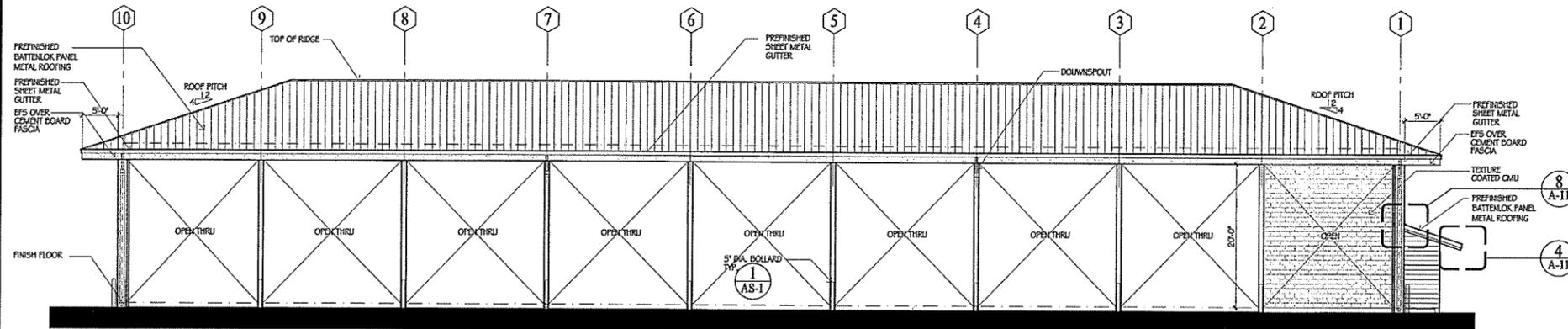
Prepared for: County of Maui, Dept. of Public Works



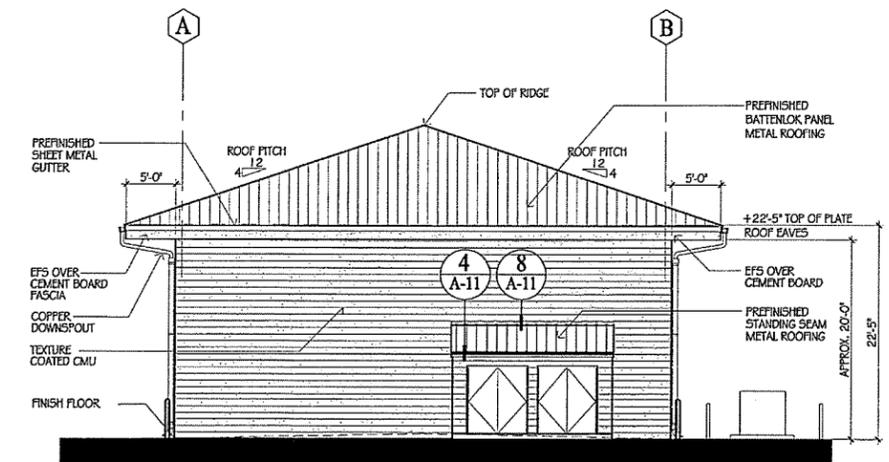
NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION

Source: Hiyakumoto Architect, LLC

Figure 5

**Molokai Baseyard Improvements
Phase 1, Vehicle Storage Building Elevations**

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Prepared for: County of Maui, Dept. of Public Works



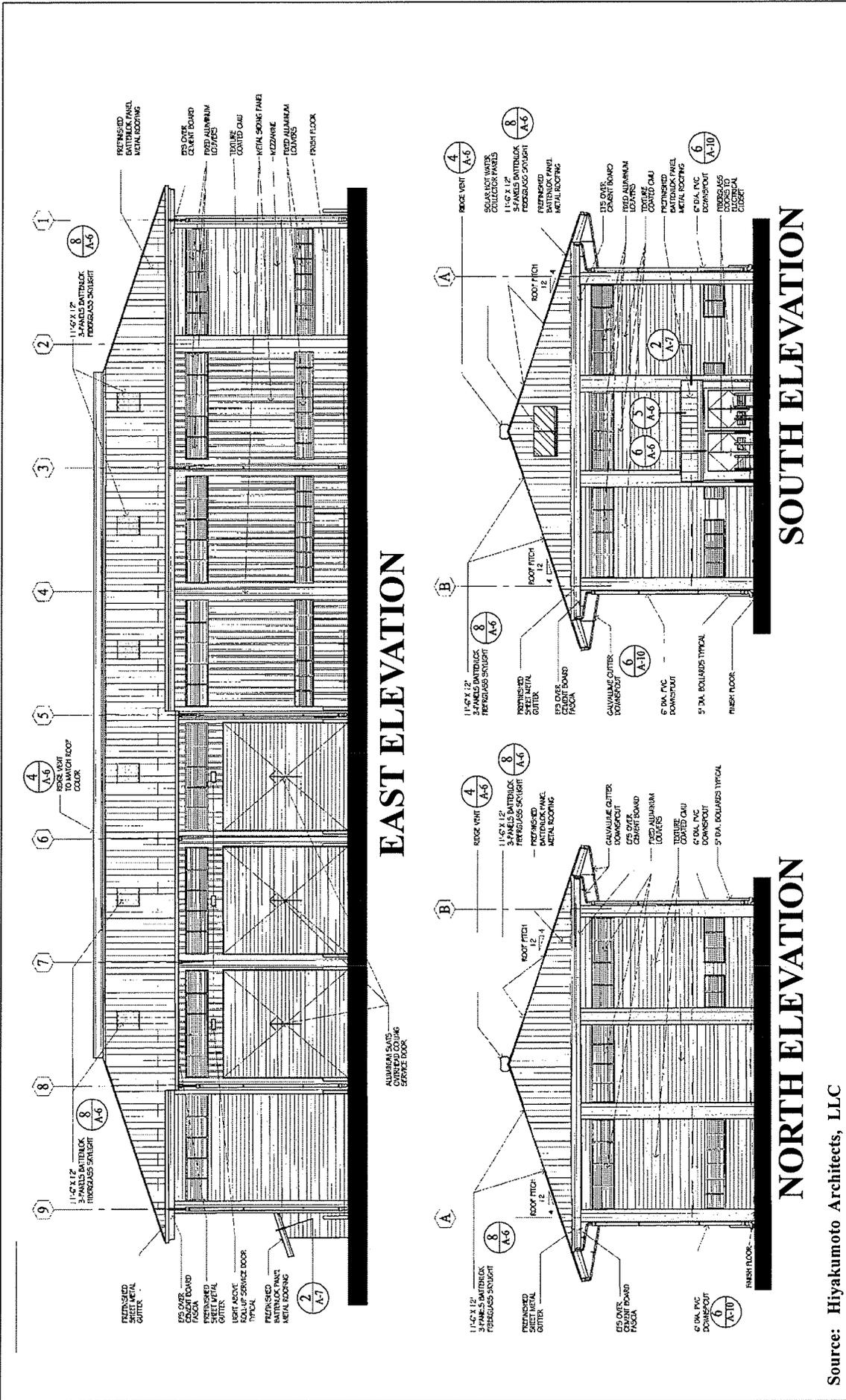


Figure 6

Molokai Baseyard Improvements
Phase 2, Maintenance Shop Elevations

Source: Hiyakumoto Architects, LLC

NOT TO SCALE

Prepared for: County of Maui, Dept. of Public Works



MUNEKIYO & HIRAGA, INC.

**II. DESCRIPTION OF THE
EXISTING
ENVIRONMENT,
POTENTIAL IMPACTS
AND PROPOSED
MITIGATION MEASURES**

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

A. PHYSICAL SETTING

1. Surrounding Land Uses

a. Existing Conditions

The proposed Molokai Baseyard improvements will be located in the existing Molokai Industrial Park subdivision at 15 Pueo Place approximately 2.9 miles northwest of Kaunakakai Town on the Island of Molokai, Hawaii. The project site consists of approximately 2.45 acres and is currently vacant and overgrown with grasses and shrubs. Nearby lots in the Molokai Industrial Park subdivision that are developed included the adjacent parcel to the north/northeast of the project site containing the Nature Conservancy offices and facilities and lots south across Uliuli Street containing the State of Hawaii baseyard. Also, lots on Noio Place have been developed with offices and warehouses. Less than half of the lots within the Molokai Industrial Park subdivision have been developed. Refer to **Figure 3** and see **Figure 7**.

The remaining lands in the immediate vicinity of the proposed Molokai Baseyard improvements surrounding the Molokai Industrial Park subdivision are undeveloped future industrial lands and vegetated with shrubs and grasslands typical of the area.

b. Potential Impacts and Proposed Mitigation Measures

The proposed Molokai Baseyard improvements are located on undeveloped lands within the existing Molokai Industrial Park subdivision. Lands in the vicinity of the Molokai Industrial Park subdivision are set aside for future industrial use. Given the location of the project site within the industrial park as well as surrounding uses, the proposed project is not anticipated to adversely impact surrounding land uses.



View North from Project Site Looking Toward Nature Conservancy with Pueo Place to the Right



View Southwest from Project Site Looking Toward Ulili Street and State of Hawaii Baseyard

Source: County of Maui

Figure 7 Molokai Baseyard Improvements Project Site Photos

Prepared for: County of Maui, Dept. of Public Works


MUNEKIYO & HIRAGA, INC.

COM\DPW Molokai\BY\ProjectSitePhotos

2. Climate, Topography and Soils

a. Existing Conditions

Hawaii's tropical location results in uniform weather conditions throughout the year. Climatic conditions on Molokai are characterized by mild and consistent year round temperatures, moderate humidity and steady northeasterly tradewinds. Variations in Molokai's weather are attributed to regional topographic and climatic conditions.

The proposed Molokai Baseyard improvements will be situated northwest of Kaunakakai Town in the central portion of the island on the southern slopes of the island of Molokai. Average annual rainfall in 2009 was approximately 9.3 inches in Kaunakakai. At the upper reaches of the watershed, there is greater rainfall, which averaged approximately 38.34 inches in 2009. The months of October through March are typically the wetter periods of the year, with April through September being typically the drier months. Mean temperatures in the area range from 69 degrees Fahrenheit in February to 86 degrees Fahrenheit in September (Maui County Data Book, 2010).

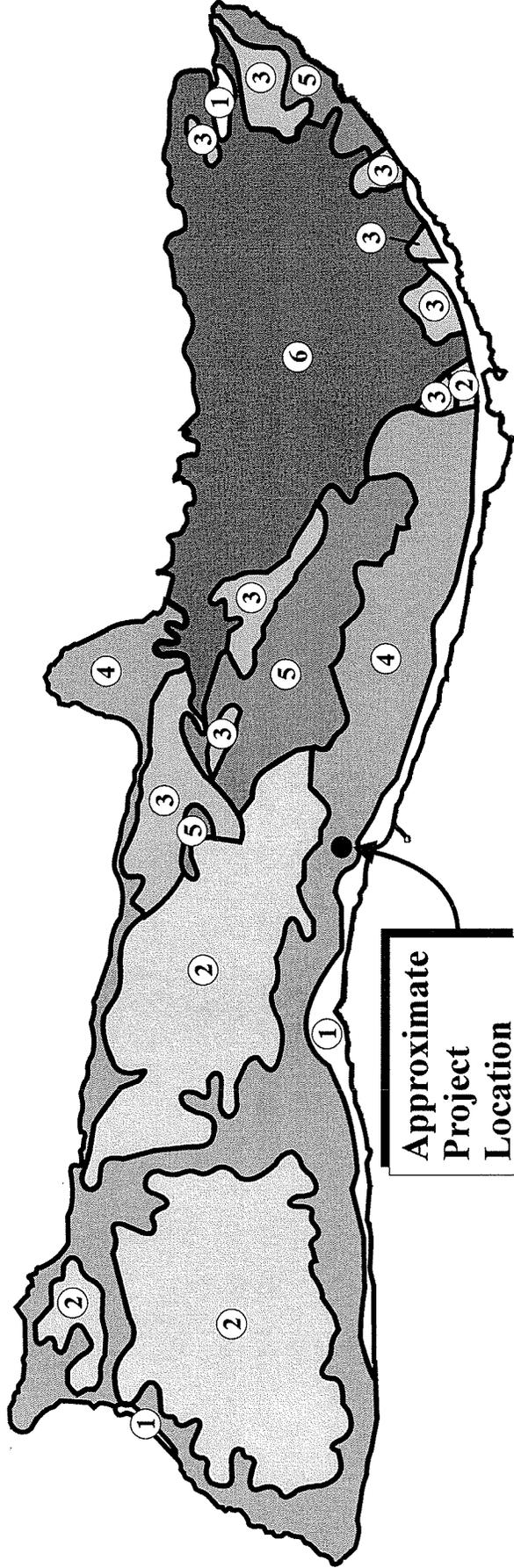
Wind conditions are predominantly characterized by northeasterly tradewinds. However, as these winds round the eastern tip of the island and veer west at the southern coast, they blow in an eastern direction.

Underlying the proposed project site are soils belonging to the Very stony land-Rock land association. See **Figure 8**. The Very stony land-Rock land association is characterized by gently sloping to very steep, rocky and stony land types, on uplands and in gulches and valleys.

The project site contains underlying soils from the very stony land, eroded, (rVT2) soil classification. The project site consists of areas where 50 to 90 percent of the surface is covered with stones and boulders, underlain by soft, weathered rock and bedrock. In most areas, soil material is about two (2) feet to bedrock. Slopes range from 7 to 30 percent. This land type is used for pasture and wildlife habitat. Pasture improvement is difficult due to the many stones (U.S. Department of Agriculture Soil Conservation Service, 1972). See **Figure 9**.

LEGEND

- | | |
|--|---|
| <ul style="list-style-type: none"> ① Jaucas-Mala-Pulehu Association ② Molokai-Lahaina Association ③ Kahanui-Kalae-Kanepuu Association | <ul style="list-style-type: none"> ④ Very stony land-Rock land Association ⑤ Rough broken land-Oli Association ⑥ Rough mountainous land-Amalu-Olokui Association |
|--|---|



Source: U.S. Department of Agriculture, Soil Conservation Service

Figure 8

Molokai Baseyard Improvements
Soil Association Map

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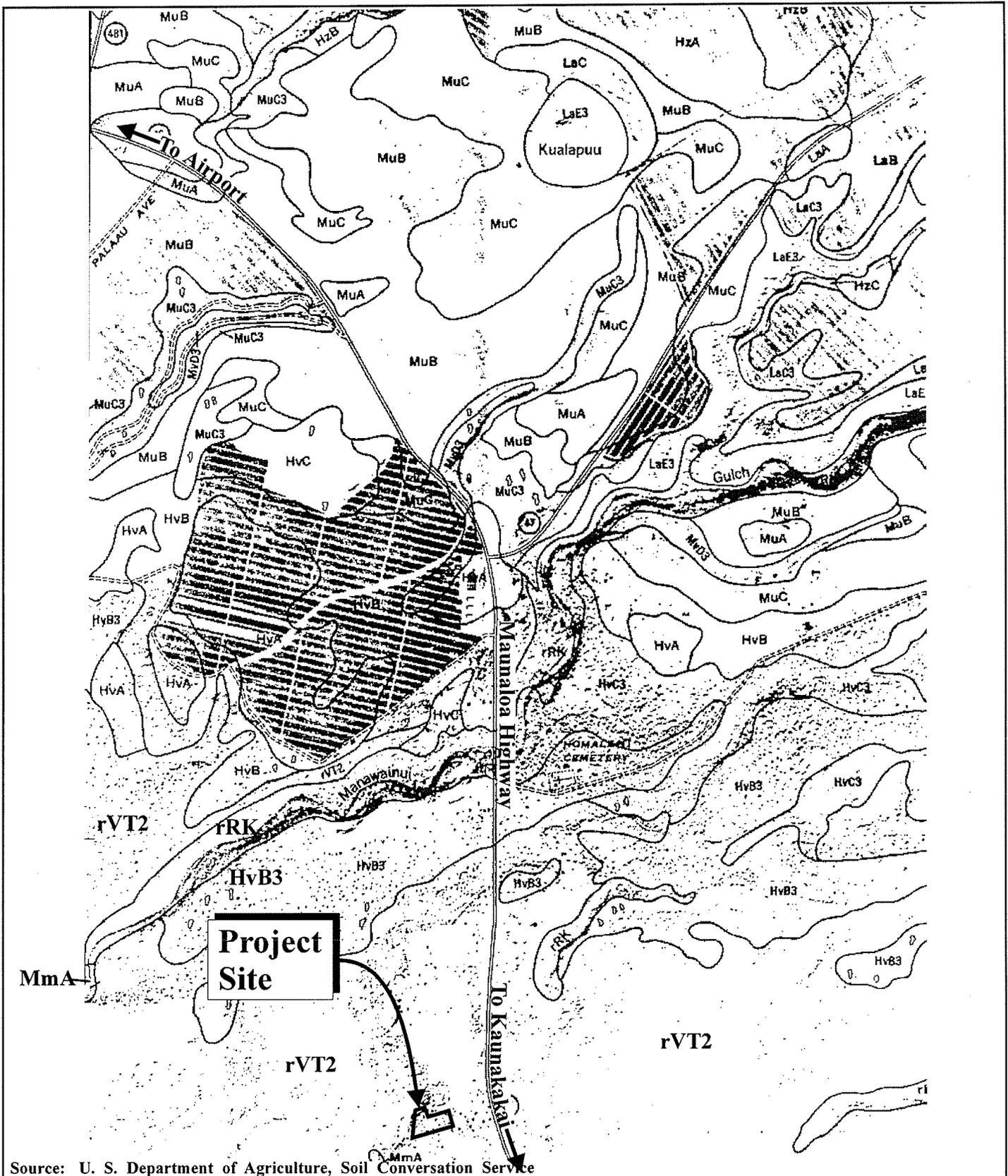


Prepared for: County of Maui, Dept. of Public Works



MUNEKIYO & HIRAGA, INC.

COMDPW MolokaiBYSols



Source: U. S. Department of Agriculture, Soil Conservation Service

Figure 9 Molokai Baseyard Improvements
Soil Classifications

NOT TO SCALE



The State Department of Agriculture has established three (3) categories of Agricultural Lands of Importance to the State of Hawaii (ALISH). The ALISH system classifies lands into "Prime", "Unique", and "Other Important Agricultural Land". The remaining lands are "Unclassified". Utilizing modern farming methods, "Prime" agricultural lands have the soil quality, growing season, and moisture supply needed to produce sustained crop yields economically, while "Unique" agricultural lands possess a combination of soil quality, location, growing season, and moisture supply currently used to produce sustained high yields of a specific crop. "Other Important Agricultural Land" includes those which have not been rated as "Prime" or "Unique". The Molokai Baseyard improvements are located on lands designated as "Unclassified" by the ALISH rating system.

b. Potential Impacts and Proposed Mitigation Measures

The proposed action is not anticipated to adversely impact existing climatic, topographic features or soils. The Molokai Industrial Park subdivision, including the project site, has been previously graded and disturbed. Minor grading activities will be carried out to prepare the site and retaining walls will be constructed to establish level building site elevations. These minor site alteration actions are not anticipated to adversely impact topography of the subject property or surrounding area.

3. Flood and Tsunami Hazards

a. Existing Conditions

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM), the project site is located in Flood Zone X (Unshaded). Flood Zone X is identified as an area of low flood risk and minimal flood hazard. See **Figure 10** and **Appendix "B"**. Specifically, the FEMA describes areas in Flood Zone X (unshaded) as areas determined to be outside the 2-percent annual chance floodplain. Further, the area is located outside of the tsunami inundation zone.

b. Potential Impacts and Proposed Mitigation Measures

The proposed project is not located in the flood hazard zone and there are no restrictions on development in Flood Zone X (unshaded). Moreover, the



Source: Federal Emergency Management Agency Map Number 1500030190E

Figure 10 Molokai Baseyard Improvements
Flood Insurance Rate Map

NOT TO SCALE



project site is located outside of the tsunami inundation area and evacuation zone. The proposed project is not anticipated to have any adverse impact from flooding.

4. Flora and Fauna

a. Existing Conditions

Vegetation in the vicinity includes common shrubs and grassland. There are no rare, threatened, or endangered plant species or habitats that have been identified within the project area. Refer to **Figure 7**.

Avifauna and mammals common to the project site and surrounding areas include introduced birds and feral animals (deer, goat, mongoose, wild pig).

b. Potential Impacts and Proposed Mitigation Measures

There are no known or identified habitats of rare or endangered species of flora, fauna, or avifauna located at the project site. The project site is located in the Molokai Industrial Park subdivision which was developed in the mid-1990's. The proposed Molokai Baseyard improvements are not anticipated to have an adverse impact upon the biological environment.

5. Historical and Archaeological Resources

a. Existing Conditions

A search of the Department of Land and Natural Resources, State Historic Preservation Division (SHPD) records indicates that the project site was previously graded during development of the Molokai Industrial Park subdivision. See **Appendix "C"**.

b. Potential Impacts and Proposed Mitigation Measures

By letter dated March 31, 2011, SHPD determined the project will have "no effect to historic properties". However, in the event historic properties are identified during the grubbing activities, work in the vicinity of the find shall cease, the find protected from additional disturbance, and the appropriate mitigation protocols implemented in coordination with the SHPD. Refer to **Appendix "C"**.

6. Cultural Assessment

a. Existing Conditions

(1) Historical Overview

During the pre-contact era, the Molokai population base was primarily concentrated at the island's windward coasts. The area was rich in ocean resources and the deep valleys with perennial streams supported a lifestyle based on subsistence agriculture, primarily associated with intensive taro production.

The 18th century saw great upheaval on Molokai as the island became subject to the ambitions of the rulers of neighboring islands. Political authority over Molokai passed back and forth between the chiefs of Maui and Oahu throughout the century, only ceasing with the unification of all the islands under Kamehameha I.

With the onset of western contact, a western influence began to permeate through the island's social environment. The result was a reduced reliance on subsistence lifestyles and an increased dependence on a plantation and ranching-based economy. As a result, the island of Molokai experienced a westward population movement from the windward coast to the leeward side of the island.

Several important changes for Molokai occurred in the 19th century. Herd animals were introduced at this time: cattle in 1833, followed by deer and sheep 30 years later. Cattle had profound socio-economic and, thus, cultural impacts through ranching activities. Sheep, on the other hand, had a notably adverse impact on the landscape because of their grazing (Wiesler and Kirch). The Molokai Ranch was founded at the end of the century, purchasing lands formerly owned by Kamehameha V.

The 19th century also saw the creation of the Hansen's Disease colony on Molokai by the government. The first habitants arrived at Kalawao on January 6, 1866 to live on approximately 800 acres purchased by the kingdom (De Loach). The association of Molokai and Hansen's Disease remains to this day.

During the westward movement, the island's political and commercial center developed in accordance with the population movement. The first western town was established at Pukoo, which included a County seat, a court house, a wharf, and several small stores. In 1925, Ualapue became the island's new major commercial center, where a new hospital was constructed. Finally in 1935, Kaunakakai was established as the political center and economic nucleus of the island.

In the 1920's, large pineapple plantations were established in the Maunaloa and Kualapuu areas, further strengthening the westward movement. However, in the 1970's and 1980's, both plantations ceased operations and the island's economy became primarily dependent on diversified agriculture and ranching activities with an emerging visitor industry (Molokai Community Plan, 2001).

(2) Geopolitical Organization

Prior to Western contact in Hawaii, land was divided into *moku*, or districts. Each of these was further subdivided into units called *ahupuaa*. Ideally, each *ahupuaa* was self-sufficient, running from *mauka*, the mountain, to *makai*, the ocean (MacKenzie). These divisions served as both cultural and settlement systems as traditional Hawaiian life was tied intimately to the land. Hunting, gathering, cultivation, and habitation took place within three (3) zones which characterized the *ahupuaa*: the *Mauka Zone*, the *Agricultural Zone*, and the *Coastal Zone*. The *Mauka Zone* provided access to a variety of trees, plants, and herbs for various needs, customs and practices. Planting of yams, sweet potato, sugar cane, taro, and other foods took place in the *Agricultural Zone*, where gradual slopes of land allowed terraces to be constructed for more efficient irrigation. The *Coastal Zone* and low-lying areas was where most of the *kauhale*, group of houses, were found, as well as temples, fishing shrines, and fishponds (Minerbi).

Molokai was traditionally divided into two (2) *moku*: Koolau district and Kona district, although there is some evidence of a third district having been used at some point (Wiesler and Kirch; Summers). The Koolau district was centered on the windward coast of the island, with the Kona district essentially comprising the remainder of Molokai. These *moku* were subdivided into *ahupuaa* which ranged in size

from 79 to 46,500 acres (Summers). Molokai is noted for having had some unusual *ahupuaa* which stretched from shore to shore, rather than the more usual *mauka* to *makai*; this is due to the shape of the central portion of the island (De Loach).

In 1859, the traditional *moku* divisions were eliminated and the entire island made into one district, called the Molokai district. Fifty years later, the island was redivided, this time into the Kalawao district, which is comprised of those areas known as Kalaupapa, Kalawao, and Waikolu and is administratively distinct from Maui County, and the remainder of the island, which is still designated as the Molokai district.

Western contact brought changes to the Hawaiian land system with the introduction of private ownership of land, a concept foreign to the native Hawaiians. A Board of Land Commissioners was established in 1845 to uphold or reject all private land claims of both foreigners and Hawaiians. The Commission adopted rules pertaining to the proof of claims, right of tenants, and commutation to the government in attempts to achieve the goal of totally partitioning undivided lands. All lands not claimed by February 1848 were to be forfeited to the government (MacKenzie).

Following the enactment of these rules, the *Mahele* division of 1848 divided all lands of Hawaii between the king and chiefs. Two (2) years later the *Kuleana* act completed the *Mahele* process by authorizing the Land Commission to award fee simple titles to native tenants for their land. These *kuleana* parcels, also known as Land Commission Awards (LCA), were generally among the richest and most fertile in the islands and came from the king, government, or chief's land. All claims and awards were numbered and recorded in the *Mahele* Book (MacKenzie). In addition, government lands were sold as "Royal Patent Grants" or "Grants" in order to meet the increasing costs of government. These grants differed from LCAs, as it was not necessary for the recipients to obtain an award for their land from the Land Commission (Chinen).

(3) Stories and Traditions of Molokai

As is frequently the case with the islands, Molokai is the subject of multiple creation stories. Some say that all of the islands were born of the god Wakea and his wives; Molokai being the off-spring of that god and his third wife, Hina, after his previous wives had given birth to Hawaii, Maui, Kahoolawe, and Lanai. A separate tradition gives the formation of all the islands as having resulted from pieces of coral tossed back into the sea by the fisherman Kapuheeuanui (Fornander).

The traditional history of Molokai is only extant in fragmentary form. It begins with Kamauaua, reputedly the first *alii-nui* of the island, who is thought to have lived sometime in the 13th century. There are subsequently many stories which suggest that the island was repeatedly subject to domination by the rulers of Hawaii and Maui, with lordship over Molokai passing back and forth between the kings of the other two (2) islands, as well as intervening periods of autonomy (Summers).

The famous kahuna, Lanikaula, is thought to have lived in the 16th century. He is reputed to have lived in seclusion, but to have been frequently visited by peoples from all the islands in search of his advice. It is said that he had an *aumakua* in the form of a small bird, who spoke to the wise man. Stories tell that Lanikula predicted the defeat of a powerful Mauian king who attempted to invade Hawaii from Molokai.

At some point towards the late 18th century, Molokai acquired a reputation as being an *aina hoomana*, a land of sorcery and the island was sometimes called *Molokai pule oo*, "Molokai of the potent prayers" (De Loach, Summers). This reputation is connected with the *kalaipahoa*, the poison-tree gods, whose introduction to Molokai are the subject of several legends. The poison-trees and their associated gods were thought to be so deadly that the mere touch of their wood or sap led to instant death and the *kalaipahoa* could be used to invoke fatal illness in people; conversely, the *kahuna* associated with the *kalaipahoa* was granted great wealth from his *akua* (Summers).

(4) Traditional and Customary Rights

The traditional and customary rights of Native Hawaiians can be broken down into access rights, gathering rights, burial rights, and religious rights.

Access

Native Hawaiians generally share the same access rights as the general public. However, they have the unique access rights to *kuleana* parcels and between *ahupuaa*. Access to *kuleana* parcels may involve access via ancient trails or expanded access not limited to any route. Additionally, the *Kuleana* Act granted unobstructed access within the *ahupuaa* to obtain items necessary to make the *kuleana* parcel productive. Access rights between *ahupuaa* involve access through ancient or well established trails (MacKenzie).

Gathering

In terms of gathering rights, the Hawaii Supreme Court has upheld gathering rights within an *ahupuaa* for firewood, house-timber, *aho* cord, thatch, and *ki*-leaf under three (3) conditions. The tenant must physically reside within the *ahupuaa*, the right to gather can only be exercised upon undeveloped lands within the *ahupuaa*, and the right must be exercised only for the purpose of practicing Native Hawaiian customs and traditions (MacKenzie).

Burial

According to traditional Hawaiian burial beliefs, following death, the *uhane*, or spirit, must remain near *na iwi*, or bones. Burial sites are chosen by Hawaiians for symbolic purposes in places for safekeeping. Often, bones were hidden in caves, cliffs, sand dunes, or deposited in the ocean. Today, federal and state laws protect both unmarked and marked burial sites. Island Burial Councils assist the State Historic Preservation Division with inventory and identification of unmarked Hawaiian burial sites and determine the preservation or relocation of native Hawaiian burial sites (MacKenzie).

Religious

Hawaiian religion and beliefs were intimately tied to the land. While some practices and traditions were lost over the years, basic Hawaiian religious concepts remain. The terms "*aloha aina*," love the land and "*malama aina*," care for and protect the land, convey the unity of humans, nature, and the gods in Hawaiian philosophy (Minerbi). Furthermore, Hawaiians honored and worshiped *aumakua*, deities, and *akua*, gods. There were numerous *akua* of farming, fishing, tapa making, dancing, sports, and any other activity of Hawaiian life. The concept of *mana* or sacred attachment to places, people, or things also remains as a significant aspect of Hawaiian religion (MacKenzie).

(5) **Local Resident Interviews**

Steven R. Arce, Jr.

Mr. Steven R. Arce, Jr. was born 67 years ago on Molokai. His mother, Anita Naeole Arce was Hawaiian and was born on Oahu but raised on Molokai. Mr. Arce's Hawaiian ancestry through his mother included his grandfather Eddie Kaholokai Naeole who was born in Kaupo, Maui and was hanai to the Naeole family and his grandmother Esther Lani Kaaihui who came from Kahakuloa, Maui.

Mr. Arce has lived most of his life on Molokai. Since April 1973 to the present, he has worked for the County of Maui Department of Public Works where he has risen from a laborer to the District Supervisor in the Highways Division.

Mr. Arce remembers the area as pasture lands where Molokai Ranch and Hawaiian Homes used to run cattle through the area. He also remembers hunting in the area but currently does not hunt in the area.

According to Mr. Arce, there is an old unpaved government road called Palaau Road that goes through the area to the beach. The roadway used to provide access to the Old Palaau Fish Pond which is no longer used and has not been maintained. The mangroves have encroached into the fish pond.

The Old Palaau Fish Pond is a series of four (4) fish ponds in the area consisting of Punakou, Waikane and Kolo. Near the Old Palaau Fish Pond, the area is flat and part of the wetlands where the old corn fields were located. There are old trails to the ocean in the area but unless you know where the trails are you can get lost. Road access to the beach was closed off by Molokai Ranch in the mid-1980s due to problems, such as illegal hunting.

Although the area is hot and dry and susceptible to fire, Mr. Arce did not note any cultural concerns associated with the area. Mr. Arce did note that there is a deep gulch on the north-west side of the project site that runs through the south-west corner of the State baseyard and exits across Palaau Road into the former corn fields and chicken farm next to the gulch.

Mr. Arce was unaware of any traditional uses or cultural practices in the area and did not express any concerns regarding the proposed project.

Dale Moore

Mr. Dale Moore was born on the mainland and moved to Molokai about 60 years ago to work on a project for Goodfellow Brothers. He has remained on Molokai since and continues to work for Goodfellow Brothers Molokai operations. While living on Molokai, Mr. Moore met and married Beverly Pauole whose father was Mitchell Pauole.

Mr. Moore is familiar with the area which is near the Goodfellow Brothers quarry site. Mr. Moore is unaware of any traditional access, uses or practices in the area that would be affected. The area contains a number of industrial type uses such as the Molokai Electric Plant, the Maui Asphalt Paving quarry site, the Gas Company and the State Baseyard. He did not express any concerns regarding the proposed County Molokai Baseyard in the Molokai Industrial Park.

b. Potential Impacts and Proposed Mitigation Measures

The nearby unpaved Palaau Road was used in the past for access to the ocean and the Old Palaau Fish Pond which is no longer in use, not maintained and overgrown with mangroves. Said access was closed off in the mid-1980s by

Molokai Ranch. There still remain trails in the area to the ocean but none are located on the project site. Interviews with Molokai residents familiar with the area noted the current industrial uses of the area and identified no traditional or cultural practices in the area. As such, it was found that no traditional or cultural resources will be adversely impacted by the proposed project.

7. **Air and Noise Quality**

a. **Existing Conditions**

Due to the isolation of the Molokai Industrial Park subdivision from Kaunakakai Town, the lack of major point sources of air pollution, and the prevailing tradewind conditions, the region has good air quality. The primary source of emissions in the area may be attributed to motor vehicles traversing Maunaloa Highway. However, these mobile sources have no adverse influence on air quality.

There are no significant noise generators in the vicinity of the project area. Noise generated in this locale may be attributed to traffic along Maunaloa Highway.

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

Airborne particulates, including dust, may be generated during site preparation and construction activities. However, dust control measures, such as regular watering and sprinkling, will be implemented as needed to minimize wind-blown emissions.

As with air quality, ambient noise conditions will be temporarily impacted by construction activities. Heavy construction equipment, such as bulldozers, front end loaders, and dump trucks and trailers will be the dominant source of noise during site construction. The contractor will coordinate with the State Department of Health to ensure that noise permits are obtained, as appropriate.

To mitigate temporary construction related impacts, Best Management Practices (BMPs) are proposed, as follows:

1. Control dust by means of water trucks or by installing temporary sprinkler systems or both if necessary.
2. Graded areas shall be thoroughly watered after construction activity has ceased for the day and for weekends and holidays.
3. All exposed areas shall be paved, grassed, or permanently landscaped as soon as finished grading is completed.
4. Time of construction will be minimized.
5. Only areas that are needed for new improvements will be cleared.
6. Early construction of drainage control features.
7. Construction of pit for proposed subsurface retention basins prior to mass grading of project site. The pit will be temporarily utilized as sediment catchment during construction.
8. Installation of dust control fence surrounding the project site.
9. Installation of silt fence, gravel bag berms or other approved sediment trapping devices at the downstream side of the grading area and sediment pit.
10. Temporary control measures shall be in place and functional prior to construction and shall remain operational throughout the construction period or until permanent controls are in place. Refer to **Appendix "B"**.

With the implementation of these BMPs, the proposed project is not expected to adversely impact local and regional air quality and ambient noise quality.

8. Water Quality

a. Existing Conditions

The project site is located south or downstream of Manawainui Gulch and west of an unnamed stream located across Maunaloa Highway. An unnamed drainage gulch is located at the northwest corner of the project site which will remain undeveloped. Stormwater runoff from the project site flow in a southerly direction onto Uili Street where the runoff is collected by an

existing underground drainage system which is conveyed to an existing retention basin 400 feet west of the project site.

b. Potential Impacts and Proposed Mitigation Measures

The proposed Molokai Baseyard improvements are not anticipated to adversely impact water quality. Areas where materials or supplies will be stored or handled that may pose potential threats to the environment, such as fuel storage or equipment maintenance areas, will be designed with special features to mitigate accidental spillage or release into the environment, such as double-lined fuel storage tanks and containment aprons around maintenance work areas. Onsite stormwater runoff generated by the proposed improvements will be collected and held in an onsite subsurface drainage retention basin. Further, appropriate BMPs will be implemented during construction to prevent runoff and potential pollutants from leaving the project site. Refer to **Appendix “B”**.

9. Scenic and Open Space Resources

a. Existing Conditions

The nearest state highway is Maunaloa Highway. The highway in this area travels south toward the coastline and Kaunakakai Town. There are no scenic view corridors in the project area.

b. Potential Impacts and Proposed Mitigation Measures

The proposed project is not anticipated to have a substantial, adverse impact to existing views. The proposed buildings will be low-rise single story, similar to other buildings in the Molokai Industrial Park subdivision. There are no anticipated adverse impacts to the visual resources of the surrounding environment as a result of the proposed project’s construction.

10. Chemicals and Hazardous Materials

a. Existing Conditions

The project site is a vacant industrial lot located in a developed industrial subdivision. The project site was used for cattle grazing in the past. The

project site was not used for agricultural cultivation and there is no evidence that chemicals or hazardous materials were stored within the project site.

b. Potential Impacts and Proposed Mitigation Measures

Since there is no evidence of chemicals and hazardous materials on the project site, no mitigation measures for chemicals and hazardous materials are required. Proposed fuel storage tanks at the project site will be double-lined and protected by a spill apron to contain accidental fuel spills.

11. Traditional Beach and Mountain Access

a. Existing Conditions

There are no known traditional beach and mountain access trails within or within the immediate vicinity of the project site. Former access to the shoreline from Palaau Road was discontinued by Molokai Ranch in the mid-1980s (S. Arce).

b. Potential Impacts and Proposed Mitigation Measures

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

B. SOCIO-ECONOMIC ENVIRONMENT

1. Population and Economy

a. Existing Conditions

The resident population of the island of Molokai (excluding Kalawao), as determined by the 2010 Census, was 7,255. In the year 2000, the resident population was 7,257, representing no increase in population during the ten year period (U.S. Census 2010). Molokai island population is projected to increase to 7,772 in 2020 and 8,395 in 2030 (Maui Planning Department, 2006).

On Molokai, there is still a large number of unemployed workers, compared to the rest of Maui County. In June 2011, the unemployment rate (not seasonally adjusted) was 8.1 percent for Maui County and 14 percent for

Molokai. The unemployment rate decreased 0.7 percent for Maui County, but increased 1.1 percent for Molokai, respectively, since June 2010 when it was 8.8 percent for Maui County and 12.9 percent on the island of Molokai (Hawaii Workforce Informer, August, 2011).

b. Potential Impacts and Proposed Mitigation Measures

Short-term economic benefit associated with construction expenditures is anticipated. The proposed project is for the relocation of the existing baseyard that employs 18 persons. The County of Maui, Department of Public Works does not anticipate any staff expansion in the near future as a result of the new baseyard, as such the proposed project is not a population generator. Thus, there are no anticipated long-term impacts on population parameters.

C. PUBLIC SERVICES

1. Police and Fire Protection

a. Existing Conditions

Police services on Molokai are provided by the Maui County Police Department. The Molokai station is located in the Mitchell Pauole Center in Kaunakakai.

Fire prevention, protection and suppression services are provided by the Maui County Department of Fire and Public Safety. The Fire Department maintains stations in Kaunakakai and Hoolehua, with a substation in Pukoo.

b. Potential Impacts and Proposed Mitigation Measures

The proposed Molokai Baseyard improvements are not anticipated to adversely impact police and fire protection services. The project site is located within the existing Molokai Industrial Park subdivision and currently within the service area of police and fire protection.

2. **Medical Facilities**

a. **Existing Conditions**

Molokai General Hospital, which is operated by the Queen's Health Systems, is the only major medical facility on the island. Licensed for 30 beds, the hospital located in Kaunakakai provides acute, emergency, and obstetrics care services. The hospital also houses the Women's Health Center, which offers mid-wife and maternity services to local residents.

Other medical facilities include the Molokai Family Health Center in Kaunakakai.

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

The proposed action is not anticipated to have adverse impacts on existing medical facilities or services on Molokai.

3. **Solid Waste**

a. **Existing Conditions**

Except for remote areas, single family solid waste collection service is provided by the County of Maui once weekly.

Solid waste is collected by County refuse collection crews and disposed at the County landfill at Naiwa. Commercial waste from private collection companies is also disposed of at the landfill.

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

The proposed Molokai Baseyard improvements are not anticipated to adversely impact existing solid waste services on Molokai. Solid waste from grubbing work to prepare the site for development will be disposed at an approved solid waste facility. Solid waste generated from the daily baseyard operations will be compatible to the existing baseyard and will be disposed of at the Molokai landfill.

4. **Recreational Resources**

a. **Existing Conditions**

The island of Molokai offers a wide range of recreational opportunities. Possible outdoor activities include bicycling, boating, camping, diving, fishing, golfing, hiking, horseback riding, hunting, surfing, swimming, tennis, and windsurfing. The surrounding vacant lands are used for hunting.

According to the cultural interview by Steve Arce, the nearby Palaa Road provided access to the shoreline until Molokai Ranch terminated access in the mid-1980s. Access to the shoreline is now through the former corn fields south of the project site near the State Baseyard. According to Mr. Arce you need to know the trails in the area or you could become lost.

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

The proposed Molokai Baseyard improvements are not anticipated to adversely impact the existing recreational facilities located in the vicinity. The project site is located approximately 0.7 mile from the shoreline and not expected to limit or compromise any existing shoreline recreational activity.

5. **Educational Facilities**

a. **Existing Conditions**

There are five (5) public schools on Molokai. Four (4) are public elementary schools, Kaunakakai, Kilohana, Kualapuu, and Maunaloa, providing elementary school education for children from Kindergarten through Grade 6. There is one (1) secondary school, Molokai High and Intermediate School, located in Hoolehua. School capacity, enrollment and projected enrollment are summarized in **Table 1**.

Table 1. Enrollment for Molokai Schools

School	Capacity for 2007-2008 School Year	Enrollment 2009-2010 School Year	Enrollment 2010-2011 School Year
Kaunakakai Elementary School (Grades K-6)	464	229	240
Kilohana Elementary School (Grades K-6)	209	105	88
Maunaloa Elementary School (Grades K-6)	121	61	69
Kualapuu Elementary School (Charter School-Grades K-6)	436	364	379
Molokai Intermediate School (Grades 7-8)	343	171	165
Molokai High School (Grades 9-12)	756	334	343

Source: State of Hawaii, Department of Education, 2011.

Private schools include Molokai Christian Academy (Grades K-12) and Molokai Mission School (Grades 1-8).

Molokai Education Center, a satellite facility of University of Hawaii - Maui College, offers post-secondary, vocational and technical University of Hawaii credit courses, and is located at the intersection of Alanui Ka Imi Ike and Kamehameha V Highway.

b. Potential Impacts and Proposed Mitigation Measures

The proposed project is not a population generator. As such, it is not anticipated to adversely impact existing education facilities or services on Molokai.

D. INFRASTRUCTURE

1. Roadways

a. Existing Conditions

The State of Hawaii's Maunaloa Highway links Kaunakakai Town with the western portion of the island. Maunaloa Highway becomes Kamehameha V Highway at Kaunakakai and extends toward the shoreline, providing access to eastern portions of Molokai. Access to the site is off of Maunaloa Highway from Ulili Street. Ulili Street and Pueo Place are improved with curbs, gutters, and sidewalks.

b. Potential Impacts and Proposed Mitigation Measures

The proposed Molokai Baseyard improvements are located in the Molokai Industrial Park subdivision. Traffic from the industrial subdivision was accommodated during review of the land use entitlement (Ordinance No. 1383) for the subdivision. Less than 50 percent of the subdivision lots have been developed.

It is anticipated the baseyard will operate from 7:00 a.m. to 3:30 p.m. and initially generate an average of 12 trips per day related to the baseyard operations with an additional five (5) trips when the repair shop is completed. The baseyard will have 18 employees who will use their personal vehicles to and from work.

The DPW Molokai Highways Division indicate there are no traffic concerns within the industrial subdivision on Maunaloa Highway. Traffic is free-flowing at all times. Traffic from the baseyard use by the County of Maui is consistent with the industrial use of the property and is not anticipated to adversely impact traffic on Ulili Street or Maunaloa Highway.

2. Water System

a. Existing Conditions

The County of Maui operates four (4) water systems at Ualapue, Kaunakakai, Kalae and Halawa on the island of Molokai. The water distribution system

for the Molokai Industrial Park Subdivision is from the private water system operated by Wai`ola O Molokai, Inc. The project site is located over the Manawainui Aquifer.

According to the Preliminary Engineering and Drainage Report (PEDR) prepared by R.T. Tanaka Engineers, Inc. (Tanaka), there are three (3) water service laterals to the project site, a single service lateral located on Ulili Street serving Parcel 11 and a double service lateral on Pueo Place serving Parcels 12 and 13. All laterals are connected to an existing 12-inch waterline on Ulili Street and Pueo Place. In addition, there are four (4) existing fire hydrants located in the vicinity of the project site, two (2) on Ulili Street and two (2) on Pueo Place about 220 feet apart. Refer to **Appendix “B”**.

b. Potential Impacts and Proposed Mitigation Measures

The PEDR calculated the estimated water demands for the proposed Molokai Baseyard Improvements as 60.6 gallons per minute (gpm) and 2,250 gpm for domestic and fire flow, respectively. The domestic demand is based on the use of low-flow plumbing fixtures. Irrigation water demand is estimated as 14.6 gpm.

Proposed improvements include the installation of two (2) one-inch water meters with a rated capacity of 100 gpm to accommodate the estimated domestic and irrigation water demand of 75.2 gpm. The existing fire hydrants are sufficient to deliver the 2,250 gpm fire flow required for the proposed project. Refer to **Appendix “B”**.

Appropriate Best Management Practices (BMPs) will be employed during construction in order to protect the integrity of groundwater and surface water resources in the vicinity of the project.

3. Wastewater System

a. Existing Conditions

Most regions of Molokai are not served by a wastewater treatment system. Residents situated beyond the Kaunakakai service area utilize either cesspools or septic systems. The County of Maui provides cesspool pumping services to readily accessible areas. There are no existing sewerlines at the

project site or in the vicinity as the project site is located outside of the Kaunakakai service area. The proposed Molokai Baseyard improvements will be serviced by an individual wastewater system (IWS). Refer to **Appendix “B”**.

b. Potential Impacts and Proposed Mitigation Measures

The IWS will be designed in accordance with the State of Hawaii Department of Health requirements, as such, the proposed Molokai Baseyard improvements are not anticipated to adversely impact wastewater conditions and/or infrastructure on Molokai. Refer to **Appendix “B”**.

4. Drainage

a. Existing Conditions

The existing drainage is managed by the overall subdivision drainage system. According to the PEDR, the storm runoff from the project site currently flows in a southerly direction onto Ulili Street where the runoff is collected by the existing catch basins and conveyed by underground culverts to an existing retention basin located approximately 400 feet west of the project site. The estimated volume of runoff from the project site to be accommodated by the existing system is approximately 15,590 cubic feet (cf). Refer to **Appendix “B”**.

b. Potential Impacts and Proposed Mitigation Measures

Based on a 50-year, one-hour storm occurrence, at developed condition, the total volume of stormwater runoff is estimated to be approximately 18,577 cf resulting in an excess volume of 2,987 cf from the existing condition. To accommodate the excess volume an onsite drainage retention basin is proposed in two (2) phases.

A temporary retention basin is proposed on Parcel 11 for the Phase I improvements. The temporary retention basin will be replaced with a permanent subsurface retention basin to be constructed during Phase 2. The subsurface retention basin will consist of 56 linear feet of four (4) 48-inch perforated pipes with crushed rock envelopes with a combined storage capacity of approximately 3,992 cf. The final underground retention basin

will be sized to handle more than the 2,987 cf of excess volume to be generated by the project.

The proposed drainage system will also include grated drain inlets to collect onsite runoff, unperforated pipes to convey the runoff to the retention basin, and drain manholes.

Operation and maintenance of the onsite drainage system will be by the DPW and include, but not be limited to the following:

1. Annual inspection of the drainage facilities and after major storms and, if necessary, initiate repairs, removal of debris at grated drain inlets.
2. Periodic inspection of the drainage system and, if necessary, remove debris and sediment build-up.
3. Prevent grass and landscape cuttings from entering the drainage system.
4. Clean parking areas to minimize the entry of debris and sediments into the drainage system.
5. Maintain healthy growth of grass lawns and landscaping to prevent soil erosion, thereby reducing sediments from entering the drainage system.

With the proposed drainage improvements and operation and maintenance plan, the proposed Molokai Baseyard improvements are not anticipated to have any adverse impact on neighboring and downstream properties. Refer to **Appendix "B"**.

5. Electrical and Telephone Service

a. Existing Conditions

Electrical, telephone and cable services are provided via an overhead distribution system located along Maunaloa Highway by Maui Electric Company, Ltd., Hawaiian Telcom and Oceanic Time Warner Cable, respectively. There are existing overhead and underground utilities along Ulili Street and Pueo Place to provide service to the project site.

b. Potential Impacts and Proposed Mitigation Measures

Electrical, telephone, and cable services will be tapped from the existing underground services. The onsite utilities will be installed underground. The proposed project will not adversely impact electrical, telephone, or cable services.

E. CUMULATIVE AND SECONDARY IMPACTS

Pursuant to Section 11-200-2 of the Hawaii Administrative Rules, Chapter 200, entitled Environmental Impact Statement Rules, a cumulative impact means:

The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

A key element in understanding the requirement for assessing cumulative impacts, therefore, is the need to recognize what constitutes “reasonably foreseeable actions”. Projects having relevance in this regard are the surrounding land uses in the Molokai Industrial Park subdivision, which is less than fifty percent occupied.

Prior to the construction of the Molokai Industrial Park, land use entitlements were required for a State District Boundary Amendment and Change in Zoning for the property which involved an in-depth analysis of the potential impacts on the surrounding land uses and community. The proposed Molokai Baseyard improvements are in compliance with these land use designations. The proposed project is located within the subdivision, and the entire subdivision was evaluated in the context of previous land use entitlements approvals. The proposed project is not part of a larger action beyond the build-out of the subdivision.

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 a project. Secondary impacts from highway projects, for example, can occur because they can induce development by removing one of the impediments to growth. The project will allow the County of Maui, Department of Public Works, to continue to provide existing services to the Molokai community.

With the proposed mitigation measures in place, the project is not anticipated to have a significant adverse impact on the physical environment. The project site has ready access to necessary infrastructure, such that extension of infrastructure systems will not be required. Furthermore, existing service limits will not be affected by project implementation. In summary, the proposed action is not anticipated to result in significant adverse secondary impacts.

III. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES AND CONTROLS

III. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES AND CONTROLS

A. STATE LAND USE DISTRICTS

Chapter 205, Hawaii Revised Statutes (HRS), relating to the Land Use Commission (LUC), establishes the four (4) major land use districts in which lands in the State are placed. These districts are “Urban”, “Rural”, “Agricultural”, and “Conservation”.

The proposed Molokai Baseyard improvements are located within the State “Urban” district. See **Figure 11**. The proposed improvements in the Urban District are permitted pursuant to Chapter 205, HRS.

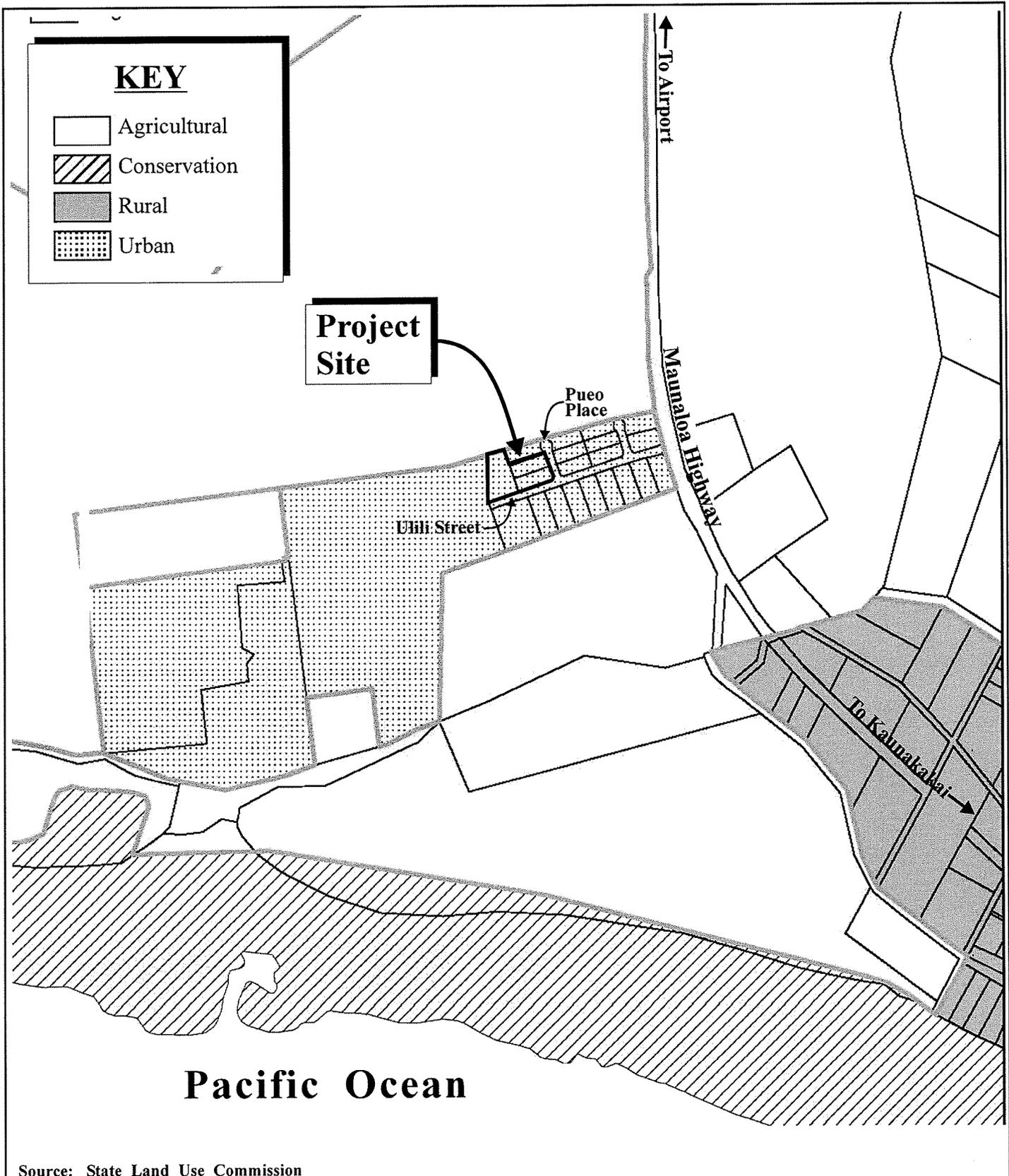
B. CHAPTER 226, HRS, HAWAII STATE PLAN

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-range development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. The proposed action is consistent with the following goals of the Hawaii State Plan:

- A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawaii’s present and future generations.
- A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.
- Physical, social, and economic well-being, for individuals and families in Hawaii, that nourishes a sense of community responsibility, of caring, and of participation in community life.

1. Objectives and Policies of the Hawaii State Plan

The proposed action is consistent with the following objectives and policies of the Hawaii State Plan:



Source: State Land Use Commission

Figure 11 Molokai Baseyard Improvements
State Land Use District Map

NOT TO SCALE



Chapter 226-11, HRS, Objectives and Policies for the Physical Environment - Land-Based, Shoreline, and Marine Resources.

226-11(b)(3), HRS: Take into account the physical attributes of areas when planning and designing activities and facilities.

Chapter 226-14, HRS, Objectives and Policies for Facilities Systems – In General.

226 -14(b)(1), HRS: Accommodate the needs of Hawaii’s people through coordination of facility systems and capital improvements priorities in consonance with state and county plans.

Chapter 226-16, HRS, Objectives and Policies for Facilities System – Water.

226-16(b)(1), HRS: Coordinate development of land use activities with existing and potential water supply.

Chapter 226-27, HRS, Objectives and Policies for Socio-Cultural Advancement-Government.

226-27(a)(1), HRS: Efficient, effective, and responsive government services at all levels in the State.

C. GENERAL PLAN OF THE COUNTY OF MAUI

The Maui County General Plan (1990 Update) sets forth broad objectives and policies to help guide the -range development of the County. As stated in the Maui County Charter:

The general plan shall 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 the 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. The Countywide Policy Plan was adopted

as Ordinance No. 3732 on March 24, 2010. Although not relevant to Molokai Island, the Maui Island Plan 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 proposed Molokai Baseyard improvements, the following goals, objectives, policies and implementing actions are illustrative of the project's 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.

Policies:

- Invest in infrastructure, facilities, and programs that foster economic diversification.

* * *

- Encourage work environments that are safe, rewarding, and fulfilling to employees.

IMPROVE PARKS AND PUBLIC FACILITIES

Goal: A full range of island-appropriate public facilities and recreational opportunities will be provided to improve the quality of life for residents and visitors.

IMPROVE PHYSICAL INFRASTRUCTURE

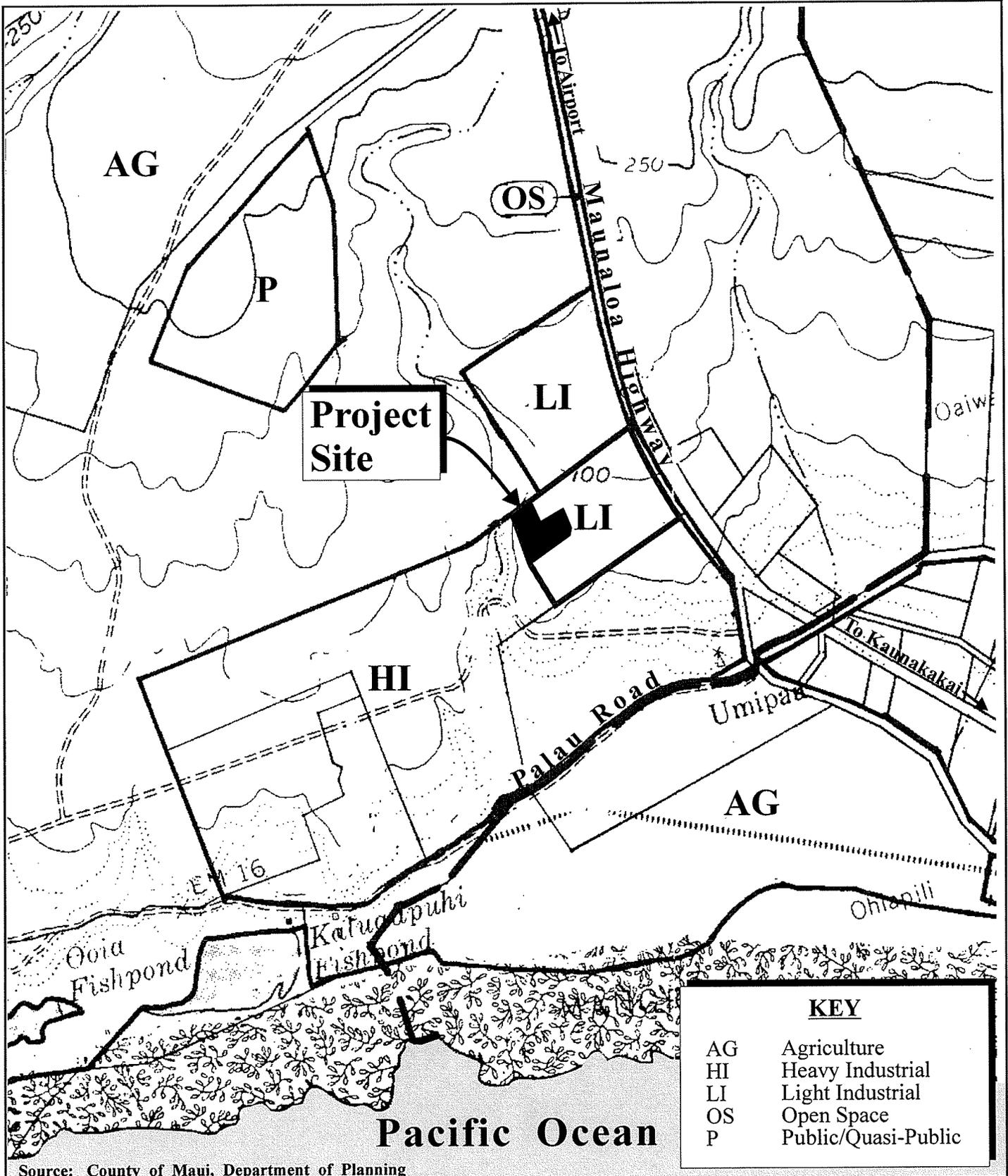
Goal: Maui County's physical infrastructure will be maintained in optimum condition and will provide for and effectively serve the needs of the County through clean and sustainable technologies.

In summary, the proposed Molokai Baseyard improvements are consistent with the themes and principles of the Countywide Policy Plan as noted above.

D. MOLOKAI COMMUNITY PLAN

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.

The proposed project is located within the Molokai Community Plan region. The project site is located within the Molokai Industrial Park subdivision which is designated “LI, Light Industrial”. See **Figure 12**. The 2001 update to the Molokai Community Plan, adopted by Ordinance No. 3022 on December 19, 2001, had redesignated the property to “LI, Light Industrial” from “HI, Heavy Industrial”. The next ten-year update of the Molokai Community Plan was initiated in 2010 by the Maui Planning Department and is currently in process.



Source: County of Maui, Department of Planning

Figure 12 Molokai Baseyard Improvements
 Molokai Community Plan Land
 Use Designation Map

NOT TO SCALE



Prepared for: County of Maui, Dept. of Public Works

MUNEKIYO & HIRAGA, INC.

COMDPW MolokaiBYCPLUD

The proposed project is consistent with the following goals, policies, and objectives, of the Molokai Community Plan:

LAND USE

Goal:

Enhance the unique qualities of the island of Molokai to provide future generations the opportunity to experience rural and traditional lifestyles.

Objectives and Policies:

Encourage the development of industrial uses in the Naiwa area while discouraging industrial use at Holumua.

ENVIRONMENT

Preserve, protect and manage Molokai's exceptional natural land and water resources to ensure that future generations may continue to enjoy and protect the island environment.

Objectives and Policies:

Protect and manage coastal water quality through best management land treatment practices.

Encourage the development of environmentally sensitive drainage master plans which consider development opportunities and constraints in flood prone areas, stream channels and gulches.

INFRASTRUCTURE

Culturally and environmentally sensitive infrastructure system, developed and maintained in a timely fashion, which protect and preserve the safety and health of Molokai's residents and visitors.

DESIGN

Limit building height throughout the island to two stories or thirty-five feet above grade, except in the Heavy Industrial area, where buildings may be forty feet in height and may exceed this height subject to design review by the County.

Encourage the siting of buildings so that the roofline is in context with surrounding terrain.

Consider existing topographical features in building design, building bulk, and height.

Choose materials and colors which blend with the landscape avoiding highly reflective materials

Require a landscape buffer between industrial uses and public roadways.

The Molokai Baseyard improvements are located within the Naiwa area and the height of the proposed structures are one-story and do not exceed thirty-five feet.

E. ZONING

The project site is zoned “M-2, Heavy Industrial”. The “M-2, Heavy Industrial” district allows uses in the “M-1, Light Industrial”, including uses permitted in the business districts. Offices, parking garages and automobile repairs are permitted in the business district and as such, the Molokai Baseyard improvements are permitted in the “M-2, Heavy Industrial” district.

F. COASTAL ZONE MANAGEMENT OBJECTIVES AND POLICIES

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. The proposed project is outside of the County of Maui’s Special Management Area (SMA). Nevertheless, this section addresses the project’s relationship to coastal zone management considerations, set forth in Chapter 205A, HRS.

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 a 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 non-point 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 project is not anticipated to result in adverse impacts to existing coastal or inland recreational resources. The project site is located approximately 0.7 mile from the shoreline and is not anticipated to limit or compromise any existing shoreline recreational activity.

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 archeological 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: The project site was disturbed during construction activities associated with development of the Molokai Industrial Park subdivision. By letter dated March 31, 2011, the State Historic Preservation Division (SHPD) determined “no effect to historic properties”. Refer to **Appendix “C”**.

Nevertheless, should any cultural or historical materials be uncovered during construction-related activities, work shall be halted in the area of the find and the SHPD shall be notified for determination of appropriate protocol to be implemented.

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 not part of a scenic view corridor to the shoreline or mountain. The baseyard structures will be one-story, similar to other structures built within the Molokai Industrial Park subdivision. No substantive adverse impacts to scenic or open space resources are anticipated to result from the proposed action.

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: The project site is located approximately 0.7 mile from the shoreline. Due to the distance of the project site from the shoreline, the proposed project is not anticipated to result in substantive, adverse impacts to coastal ecosystems. Best Management Practices (BMPs) will be implemented during the construction phase to mitigate the potential for adverse impacts to downstream coastal ecosystems. All

runoff generated by the proposed project will be retained onsite and will not have an adverse impact to downstream properties.

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 proposed project will have short-term economic impact from construction-related employment and services. The proposed project will allow the DPW to continue its baseyard operations at the new site and provide existing services to the Molokai community. There are no significant adverse economic impacts associated with the proposed project.

6. Coastal Hazards

Objective:

Reduce hazard to life and property from tsunamis, 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 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 project site is located in Flood Zone X, an area of minimal flood hazard and is located outside of the tsunami inundation zone. The project site does not contain any erosion or subsidence hazards.

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 of conflicting permit requirements; and
- (C) Communicate the potential short and -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: The proposed project will undergo agency and public review during the Chapter 343 environmental assessment review process. All aspects of development will be conducted in accordance with applicable Federal, State, and County standards. Early consultation with agencies and interested parties was conducted for formulation of this Draft EA.

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: As previously mentioned, public awareness and participation are being facilitated through the Chapter 343, HRS environmental assessment review process. The proposed project does not contradict the objectives of public awareness, education, and participation.

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: Due to its distance from the shoreline, the proposed project is not anticipated to affect local beach processes. Appropriate BMPs will be implemented during construction to mitigate impacts on downstream properties and the shoreline.

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: Due to the distance of the project from the shoreline, it is not anticipated to adversely impact marine resources. As stated previously, appropriate BMPs will be implemented during construction to mitigate impacts on downstream properties and the shoreline.

In addition to the foregoing objectives and policies, SMA permit review criteria pursuant to Act 224 (2005) provides that:

- (a) *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.*
- (b) *Subsection (a) shall not apply to Special Management Area use permits for structures with:*
- (2) *Artificial lighting provided by a government agency or its authorized users for government operations, security, public safety, or navigational needs; provided that a government agency or its authorized users shall make reasonable efforts to properly position or shield lights to minimize adverse impacts.*

Response: Although the project is located outside the Special Management Area, artificial lighting is limited to security lights at the baseyard and shall be appropriately shielded.

**IV. SUMMARY OF
ADVERSE
ENVIRONMENTAL
EFFECTS WHICH
CANNOT BE AVOIDED**

IV. SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

Project construction will result in a certain amount of unavoidable construction-related impacts. These impacts include noise-generated impacts and air quality impacts associated with the operation of construction equipment. Air quality will also be impacted by dust generated from site work. The construction-related impacts will be temporary and mitigated through implementation of appropriate BMPs.

The proposed action will involve a commitment of fuel, labor, funding, and material resources. However, the commitment of resources necessary to implement the proposed project will be justified, given the eventual benefits to be realized through the completion of the proposed Molokai Baseyard improvements.

In the long term, the construction of the proposed Molokai Baseyard improvements are not anticipated to create any significant, long-term adverse environmental effects.

V. ALTERNATIVES TO THE PROPOSED ACTION

V. ALTERNATIVES TO THE PROPOSED ACTION

A. PREFERRED ALTERNATIVE

The proposed project represents the preferred alternative based on the ownership of the property by the County of Maui and its location within entitled industrial lands. This alternative provides a cost-effective and a technically viable solution to address the current need for a new baseyard for the Department of Public Works' (DPW) Molokai operations.

B. DEFERRED OR NO ACTION ALTERNATIVE

The “deferred” or “no action” alternative would see the existing baseyard temporarily remain in its current site on State-owned lands until requested to vacate. The “deferred” or “no action” alternatives are considered inappropriate because the State has plans to expand the State facilities and lacks sufficient space to accommodate the County baseyard operations. It is prudent for the DPW to plan for the move in advance since it will require funding and months to construct the new baseyard. As such, the “deferred” or “no action” alternatives will leave the Molokai baseyard without an adequate site for its operations.

C. ALTERNATIVE SITE

The County of Maui considered a portion of the Swenson property at TMK (2)5-2-012:005 located at the juncture of Maunaloa Highway and Kalae Highway. Although the property has the proper land use entitlements, it would require subdivision of the portion to be utilized by the County of Maui. Also, major infrastructure improvements would be required such as providing an access off of the State highway and installation of a potable water system. The site is currently served by non-potable agriculture water. The additional permitting and need for infrastructure improvements would add time to the construction schedule and was considered too costly.

**VI. IRREVERSIBLE AND
IRRETRIEVABLE
COMMITMENTS OF
RESOURCES**

VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The proposed action is anticipated to result in the irreversible and irretrievable commitment of certain natural and fiscal resources, including land, fuel, labor, funding, and material resources. Funding of the project is being provided from the County's Capital Improvement Program. Development of the proposed project will involve the commitment of limited County-owned land on Molokai for use as a baseyard which will preclude use of the land for other County sponsored projects. Use of the project site as a baseyard is considered appropriate as it will ensure the continuation of the Department of Public Works' existing services to the Molokai community.

VII. SIGNIFICANCE CRITERIA ASSESSMENT

VII. 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 project will have significant adverse impacts to the environment. The following analysis is provided.

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

By letter dated March 31, 2011, the State Historic Preservation Division (SHPD) determined a “no effect to historic properties”. Refer to **Appendix “C”**. Nevertheless, in the event historic properties are encountered during grubbing activities, work will cease in the immediate area of the find, the find protected, and SHPD will be contacted to determine appropriate mitigation protocol. With the implementation of Best Management Practices (BMPs), adverse long-term impacts to natural resources are not anticipated as a result of the proposed action.

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

The proposed project and the commitment of land resources are not anticipated to curtail the range of beneficial uses of the environment. With proposed mitigation measures, such as implementation of BMPs, the proposed project should not result in adverse effects on 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 State's Environmental Policy and Guidelines are set forth in Chapter 344, Hawaii Revised Statutes (HRS). The proposed action does not contravene provisions of Chapter 344, HRS, court decisions, or executive orders.

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

The proposed action would provide a direct, short-term economic benefit to the community during the construction phase. In the long term, it will allow the DPW to continue to provide existing services to the Molokai community and preserve the jobs of the existing 18 employees who provide these services. There are no adverse long-term economic, cultural, or social welfare impacts associated with the proposed action.

5. **Substantially affects public health**

No adverse impacts to public health are anticipated to result from the proposed action.

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

The proposed action will ensure continued services provided by the DPW to the Molokai community and is not deemed a population generator. There are also no anticipated adverse effects upon public services, such as police, fire, medical, educational, or waste collection services.

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

During project implementation, appropriate measures, such as BMPs, will be utilized to mitigate potential short-term environmental impacts. The proposed action is not anticipated to substantially impact environmental quality.

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

The proposed action is to be located within an existing industrial subdivision and is not part of or linked to any larger action. The proposed project is not anticipated to create any considerable cumulative effect upon the environment.

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

There are no identified rare, endangered, or threatened species of flora, fauna, avifauna and their habitats within the project vicinity. Thus, impacts to rare,

threatened or endangered species of flora, fauna, avifauna and their habitats from the proposed action are not anticipated.

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

During the construction of the proposed Molokai Baseyard improvements, there may be short-term impacts to air and noise quality. Appropriate BMP's will be implemented to minimize these short-term impacts, which will not extend into the long term. As may be required, appropriate permits will be obtained from the State and County, such as NPDES permit and Community Noise permit, to ensure appropriate mitigation measures are implemented during construction.

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

The project site is located in Flood Zone X (unshaded), an area of minimal flood hazard, and outside of the tsunami inundation zone. Soils underlying the project site are not erosion prone and there are no geologically hazardous lands, estuaries, or coastal waters within or adjacent to the project site. No other foreseeable environmental effect are anticipated.

12. Substantially affects scenic vistas and viewplanes identified in County or State plans or studies

The proposed action is not anticipated to result in substantive, adverse impacts to identified scenic vistas or viewplanes. There are no scenic corridors in the area.

13. Requires substantial energy consumption

The proposed action will involve the short-term commitment of fuel for equipment, vehicles, and machinery during construction activities and continued electrical consumption during the operational phase. However, this is not anticipated to result in any substantial or adverse consumption of energy.

In summary, the proposed Molokai Baseyard improvements represents the continuation of existing services by the DPW. Necessary infrastructure and services are available to serve the project site. Further, the proposed Molokai Baseyard improvements are not anticipated to have a significant adverse impact on the environment.

Based on the foregoing findings, the proposed action is anticipated to result in a Finding of No Significant Impact (FONSI) determination by the DPW.

VIII. LIST OF PERMITS AND APPROVALS

VIII. LIST OF PERMITS AND APPROVALS

The following permits and approvals will be required prior to the implementation of the project.

State of Hawaii

1. National Pollutant Discharge Elimination System (NPDES) Permit, if required
2. Noise Permit, if required

County of Maui

1. Construction Permits (Grubbing and Grading Permit, Building Permit)
2. Subdivision Approval

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

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

The following agencies were consulted during the preparation of the Draft Environmental Assessment. Comment letters received, as well as responses to substantive comments are contained in this chapter.

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Fort Shafter, Hawaii 96858-5440
3. Loyal A. Mehrhoff, Field Supervisor
U. S. Fish and Wildlife Service
300 Ala Moana Blvd., Rm. 3-122
Box 50088
Honolulu, Hawaii 96813
4. Bruce Coppa, Director
Department of Accounting and General Services
1151 Punchbowl Street, #426
Honolulu, Hawaii 96813
5. Russell Kokubun, Chair
Department of Agriculture
1428 South King Street
Honolulu, Hawaii 96814-2512
6. Richard C. Lim, Director
State of Hawaii
Department of Business, Economic Development & Tourism
P.O. Box 2359
Honolulu, Hawaii 96804
7. Kathryn Matayoshi, Superintendent
State of Hawaii
Department of Education
P.O. Box 2360
Honolulu, Hawaii 96804
8. Heidi Meeker
Planning Division
Office of Business Services
Department of Education
c/o Kalani High School
4680 Kalaniana'ole Highway, #T-B1A
Honolulu, Hawaii 96821
9. Alapaki Nahale-a, Chairman
Department of Hawaiian Home Lands
P.O. Box 1879
Honolulu, Hawaii 96805
10. Loretta J. Fuddy, Acting Director
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawaii 96814

11. Alec Wong, P.E., Chief
Clean Water Branch
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawaii 96814
12. Patti Kitkowski
District Environmental Health
Program Chief
State of Hawaii
Department of Health
54 High Street
Wailuku, Hawaii 96793
13. Genevieve Salmonson, Acting Manager
Environmental Planning Office
Department of Health
919 Ala Moana Blvd., Suite 312
Honolulu, Hawaii 96814
14. Lene Ichinotsubo
Environmental Management Division
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 212
Honolulu, Hawaii 96814
15. William J. Aila, Jr., Interim Chairperson
State of Hawaii
**Department of Land and Natural
Resources**
P. O. Box 621
Honolulu, Hawaii 96809
16. 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
17. Morgan Davis
**Department of Land and Natural
Resources**
State Historic Preservation Division
130 Mahalani Street
Wailuku, Hawaii 96793
18. Glenn Okimoto, Director
State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813
19. Major General Darryll Wong, Director
Hawaii State Civil Defense
3949 Diamond Head Road
Honolulu, Hawaii 96813-4495
20. Gary Hooser, Director
Office of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, Hawaii 96813
21. Clyde Nāmuo, Administrator
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813
22. Jesse Souki, Director
State of Hawaii
Office of Planning
P. O. Box 2359
Honolulu, Hawaii 96804
23. Dan Davidson, Executive Officer
State of Hawaii
State Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804
24. University of Hawaii at Manoa
Environmental Center
2550 Campus Road, Crawford 317
Honolulu, Hawaii 96822
25. Teena Rasmussen, Coordinator
County of Maui
Office of Economic Development
2200 Main Street, Suite 305
Wailuku, Hawaii 96793
26. Anna Foust, Officer Management Officer
Maui Civil Defense Agency
200 South High Street
Wailuku, Hawaii 96793
27. Jeffrey A. Murray, Fire Chief
County of Maui
**Department of Fire
and Public Safety**
200 Dairy Road
Kahului, Hawaii 96732

28. Jo-Ann Ridao, Director
County of Maui
Department of Housing and Human Concerns
One Main Plaza
2200 Main Street, Suite 546
Wailuku, Hawaii 96793
29. Glenn Correa, Director
County of Maui
Department of Parks and Recreation
700 Halia Nakoia Street, Unit 2
Wailuku, Hawaii 96793
30. William Spence, Director
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawaii 96793
31. Gary Yabuta, Chief
County of Maui
Police Department
55 Mahalani Street
Wailuku, Hawaii 96793
32. David Goode, Director
County of Maui
Department of Public Works
200 South High Street
Wailuku, Hawaii 96793
33. Kyle Ginoza, Director
County of Maui
Department of Environmental Management
One Main Plaza
2200 Main Street, Suite 100
Wailuku, Hawaii 96793
34. Jo Anne Johnson Winer, Director
County of Maui
Department of Transportation
200 South High Street
Wailuku, Hawaii 96793
35. David Taylor, Director
County of Maui
Department of Water Supply
200 South High Street
Wailuku, Hawaii 96793
36. Honorable Danny Mateo, Council Chair
Maui County Council
200 South High Street
Wailuku, Hawaii 96793
37. Dan Takahata, Manager – Engineering
Maui Electric Company, Ltd.
P.O. Box 398
Kahului, Hawaii 96733
38. **Hawaiian Telcom**
60 South Church Street
Wailuku, Hawaii 96793

JUL 11 2011



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

REPLY TO
ATTENTION OF:

July 1, 2011

Regulatory Branch

POH-2011-00174

Munekiyo & Hiraga, Inc.
Attn: Colleen Suyama
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

We have received your request for the Department of the Army (DA) to review and comment on the proposed Molokai Baseyard Improvement project in Kaunakakai, Island of Molokai. We have assigned the project the reference number POH-2011-00174. Please cite the reference number in any correspondence with us concerning this project. We have completed our review of the submitted document and have the following comments:

Section 10 of the Rivers and Harbors Act of 1899 (Section 10) requires that a DA permit be obtained for certain structures or work in or affecting navigable waters of the United States (U.S.), prior to conducting the work (33 U.S.C. 403). Navigable waters of the U.S. are those waters subject to the ebb and flow of the tide shoreward to the Mean High Water Mark (MHW) and the Ordinary High Water Mark (OHWM) for non-tidal waters, and/or other waters identified as navigable by the Honolulu District. In addition, Section 10 permit is required for structures of work outside this limit if they affect the course, capacity, or condition of the water body.

Section 404 of the Clean Water Act of 1972 (Section 404) requires that a DA permit be obtained for the placement or discharge of dredged and/or fill material into waters of the U.S., including wetlands, prior to conducting the work (33 U.S.C. 1344). The area of the U.S. Army Corps of Engineers (Corps) jurisdiction under Section 404 extends to the Mean Higher High Water Mark (MHHWM) for tidal waters or the Ordinary High Water Mark (OHWM) for non-tidal waters, and to the upland boundary of any adjacent wetlands. Section 404 also regulates discharges of dredged material incidental to certain activities such as grading, mechanized land-clearing, ditching or other excavation activity, survey activities, and the installation of certain pile-supported structures.

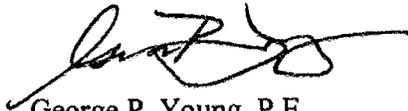
Based on the information provided, the project site appears to be absent of navigable waters subject to Corps jurisdiction. Therefore, Section 10 authorization may not be required. However, there is insufficient information provided to determine if the proposed project will involve activities under Section 404. Fill material, permanent or temporary, may include, but is not limited to: rock, dirt, sandbags, silt fences or concrete. To avoid unintentional violation to federal regulation and law, we advise you to contact our office prior to conducting any activity that may result in the discharge of dredged and/or fill material. Section 404 authorization may be required for this action.

When developing the Environmental Assessment, we recommend you conduct a thorough aquatic resource survey, describing information regarding any potential water bodies, including wetlands, drainage ditches, gulches, stream, etc., on-site, especially those that may be impacted by the proposed project. The survey should include descriptions of aquatic feature proposed for impact, flow duration and the flow path of each feature into navigable waters.

We recommend you contact the Corps to determine if any of the proposed work constitutes a "discharge of fill" and submit an application with associated drawings that meet our drawing recommendations found at <http://www.poh.usace.army.mil/EC-R/EC-R.htm>. Click on "Apply for a Permit" on the right-hand side, and then click on "Rec - Sect 404 Clean Water Act Drawings." Providing photographs of the parcel would also expedite our review. As a reminder, only the Corps has authority to determine if any of these features are or are not waters of the U.S. and, potentially subject to regulations under Section 404 of the Clean Water Act. A request for an approved JD can be submitted prior to, or concurrently with, an application for the proposed work. Also be advised that any tributaries discharging into this water body may also be subject to Corps jurisdiction.

Thank you for giving us the opportunity to review this proposal and for your cooperation with our regulatory program. Should you have any questions regarding our Regulatory Program or the permit application process, please contact Ms. Deserie Bala at (808) 438-9258 or via email at Deserie.M.Bala@usace.army.mil.

Sincerely,



George P. Young, P.E.
Chief, Regulatory Branch

August 12, 2011

George P. Young, P.E.
Chief, Regulatory Branch
Department of Army
U.S. Army Corps of Engineers
Honolulu District
Fort Shafter, Hawaii 96858-5440

SUBJECT: Early Consultation on the Proposed Molokai Baseyard Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and 013, Naiwa, Molokai, Hawaii (POH-2011-00174)

Dear Mr. Young:

Thank you for your letter of July 1, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the Molokai Baseyard Improvements. We acknowledge the department's determination that a Section 10 will not be required for the project while a Section 404 authorization may be required.

As recommended the Draft EA will include information on potential water bodies and aquatic resources that may be impacted by the proposed project.

Thank you again for your participation in the early consultation of the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to the Regulatory Branch for review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

CS:mge

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division
Kirk Tanaka, R.T. Tanaka Engineers, Inc.

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NEIL ABERCROMBIE
GOVERNOR



JUL 14 2011

BRUCE A. COPPA
COMPTROLLER

JAN S. GOUVEIA
DEPUTY COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

(P)1144.1

JUL 12 2011

Ms. Colleen Suyama
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Maui, Hawaii 96793

Dear Ms. Suyama:

Subject: Proposed County of Maui Molokai Baseyard at 15 Pueo Place,
TMK (2) 5-2-031:011, 012, 013, Naiwi, Molokai, Hawaii

Thank you for the opportunity to provide comments for the subject project. The project does not impact any Department of Accounting and General Services' projects or existing facilities on Molokai and we have no comments to offer at this time.

If you have any questions, please call me at 586-0400 or have your staff call Mr. Alva Nakamura of the Public Works Division at 586-0488.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Coppa".

BRUCE A. COPPA
State Comptroller

c: Mr. David Victor, DAGS Maui District Office



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

MARK ALEXANDER ROY

August 12, 2011

Bruce A. Coppa
State Comptroller
Department of Accounting and
General Services
P.O. Box 119
Honolulu, Hawaii 96810-0119

SUBJECT: Early Consultation on the Proposed Molokai Baseyard
Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and
013, Naiwa, Molokai, Hawaii

Dear Mr. Coppa:

Thank you for your letter of July 12, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard Improvements. We note your department's determination that the project does not impact any Department of Accounting and General Services' projects or existing facilities and that you have no further comments at this time.

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

A handwritten signature in black ink, appearing to read "Colleen Suyama", written in a cursive style.

Colleen Suyama
Senior Associate

CS:mge

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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JUL 14 2011

NEIL ABERCROMBIE
GOVERNOR

MAJOR GENERAL DARRYLL D. M. WONG
DIRECTOR OF CIVIL DEFENSE

EDWARD T. TEIXEIRA
VICE DIRECTOR OF CIVIL DEFENSE



PHONE (808) 733-4300
FAX (808) 733-4287

STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE DIRECTOR OF CIVIL DEFENSE
3949 DIAMOND HEAD ROAD
HONOLULU, HAWAII 96816-4495

July 12, 2011

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

Dear Ms. Suyama:

Early Consultation Request on the Proposed County of Maui
Molokai Baseyard at 15 Pueo Place,
TMK (2) 5-2-031:011, 012, 013, Naiwi, Molokai, Hawaii

Thank you for the opportunity to comment on the proposed Molokai Baseyard Improvement project. The proposed locations are located within Flood Zone X and outside tsunami evacuation zones. However, we recommend your consideration of measures to mitigate natural hazards risks as appropriate.

We defer to the Department of Land and Natural Resources on proposed mitigation actions pertaining to any archeological, historical, and cultural discoveries made during the Draft Environmental Assessment (DEA) process. We look forward to the opportunity to review and comment on the completed DEA.

If you have any questions please call Havinne Okamura, Hazard Mitigation Planner, at (808)733-4300, extension 556.

Sincerely,


EDWARD T. TEIXEIRA
Vice Director of Civil Defense



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

MARK ALEXANDER ROY

August 12, 2011

Edward T. Teixeira
Vice Director of Civil Defense
Department of Defense
Office of the Director of Civil Defense
3949 Diamond Head Road
Honolulu, Hawaii 96816-4495

**SUBJECT: Early Consultation on the Proposed Molokai Baseyard
Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and
013, Naiwa, Molokai, Hawaii**

Dear Mr. Teixeira:

Thank you for your letter of July 12, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard improvements. We acknowledge the project site is located within Flood Zone X and outside the tsunami inundation zones. As appropriate, we will consider measures to mitigate natural hazard risks.

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:tn

cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

OFFICE OF THE SUPERINTENDENT

July 11, 2011

Ms. Colleen Suyama, Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Subject: Early Consultation on the Proposed Molokai Baseyard
Naiwi, Molokai, TMK: 5-2-031: 11, 12 & 13

The Department of Education has no comment or concern.

Thank you for the opportunity to comment. If you have any questions, please call Heidi Meeker of the Facilities Development Branch at (808) 377-8301.

Very truly yours,

for Kathryn S. Matayoshi
Superintendent

KSM:jmb

c: Lindsey Ball, CAS, Hana/Lahainaluna/Lanai/Molokai Complex Areas
Randolph Moore, Assistant Superintendent, OSFSS



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

MARK ALEXANDER ROY

August 12, 2011

Kathryn S. Matayoshi
Superintendent
Department of Education
P.O. Box 2360
Honolulu, Hawaii 96804

SUBJECT: Early Consultation on the Proposed Molokai Baseyard
Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and
013, Naiwa, Molokai, Hawaii

Dear Ms. Matayoshi:

Thank you for your letter of July 11, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard Improvements. We note that your department has no comments at this time.

Thank you again for your participation in the early consultation of the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:mge

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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**STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE**

54 HIGH STREET
WAILUKU, HAWAII 96793

July 14, 2011

Ms. Colleen Suyama
Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

**Subject: Early Consultation on the Proposed County of Maui Molokai
Baseyard at 15 Pueo Place, Naiwi, Molokai, Hawaii
TMK: (2) 5-2-031:011, 012 and 013**

Thank you for the opportunity to review this project. We have the following comments to offer:

1. National Pollutant Discharge Elimination System (NPDES) permit coverage maybe required for this project. The Clean Water Branch should be contacted at 808 586-4309.
2. Please provide wastewater disposal method for this project. If you have any questions, please contact Roland Tejano, Environmental Engineer, at 808 984-8232.
3. The noise created during the construction phase of the project may exceed the maximum allowable levels as set forth in Hawaii Administrative Rules (HAR), Chapter 11-46, "Community Noise Control." A noise permit may be required and should be obtained before the commencement of work.

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.

Ms. Colleen Suyama
July 14, 2011
Page 2

Should you have any questions, please call me at 808 984-8230 or E-mail me at patricia.kitkowski@doh.hawaii.gov.

Sincerely,

A handwritten signature in cursive script that reads "Patti Kitkowski". The signature is written in black ink and is positioned above the printed name and title.

Patti Kitkowski
District Environmental Health Program Chief



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

MARK ALEXANDER ROY

August 12, 2011

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

SUBJECT: Early Consultation on the Proposed Molokai Baseyard Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and 013, Naiwa, Molokai, Hawaii

Dear Ms. Kitkowski:

Thank you for your letter of July 14, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard Improvements. We acknowledge the following, in the order of your comments:

1. A National Pollutant Discharge Elimination System (NPDES) permit coverage may be required for the project. Coordination with the Department of Health, Clean Water Branch will be carried out by the Department of Public Works (DPW) to determine permit requirements.
2. The wastewater disposal system will be an individual wastewater system involving a septic tank and leach field. Plans for the septic system will be submitted to the Department of Health for review and approval.
3. Pursuant to Hawaii Administration Rules (HAR), Chapter 11-46, "Community Noise Control", a noise permit may be required for the project. Coordination with the Department of Health will be carried out by the DPW to determine if a Noise Permit will be required.

Patti Kitkowski
August 12, 2011
Page 2

Thank you again for your participation in the early consultation of the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

CS:tn

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division
Kirk Tanaka, R.T. Tanaka Engineers, Inc.

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JUL 18 2011



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

July 15, 2011

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

Attention: Ms. Colleen Suyama, Senior Associate

Ladies and Gentlemen:

Subject: Early Consultation on Proposed County of Maui Molokai Baseyard

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 Forestry & Wildlife, Engineering Division, 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,


for Russell Y. Tsuji
Administrator



11 JUN 30 AM 11:04 ENGINEERING



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

June 30, 2011

MEMORANDUM

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

Maalene

FROM: Charlene Unoki, Assistant Administrator
 SUBJECT: Early Consultation for Proposed County of Maui Molokai Baseyard
 LOCATION: Island of Molokai
 APPLICANT: Munekiyo & Hiraga, Inc. on behalf of the County of Maui, Department of Public Works

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by July 12, 2011.

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: *[Signature]*
 Date: 7/5/11

DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

2011 JUL -5 P 3:01

RECEIVED
LAND DIVISION

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/CharleneUnoki

RE:EarlyConsultationMolokaiBaseyard
Hawaii.518

COMMENTS

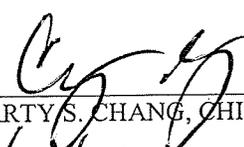
- () We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone ____.
- (X) **Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone X. The Flood Insurance Program does not have any regulations for developments within Flood Zone 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: 7/5/11 _____



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

June 30, 2011

MEMORANDUM

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

RECEIVED
LAND DIVISION
2011 JUL -6 P 2:59
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

Charlene

FROM: Charlene Unoki, Assistant Administrator
SUBJECT: Early Consultation for Proposed County of Maui Molokai Baseyard
LOCATION: Island of Molokai
APPLICANT: Munekiyo & Hiraga, Inc. on behalf of the County of Maui, Department of Public Works

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by July 12, 2011.

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: Paul D. Long
Date: 7/4/11



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

MARK ALEXANDER ROY

August 12, 2011

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

SUBJECT: Early Consultation on the Proposed Molokai Baseyard
Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and
013, Naiwa, Molokai, Hawaii

Dear Mr. Tsuji:

Thank you for your letter of July 15, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard Improvements. We acknowledge the project site is located within Flood Zone X and the Flood Insurance Program does not have any regulations for developments within this zone.

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your department for review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:mge

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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AUG 05 2011

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
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

August 4, 2011

Munekiyo & Hiraga, Inc.
Attention: Ms. Colleen Suyama
Senior Associate
30 High Street, Suite 104
Wailuku, HI 96793

Dear Ms. Suyama:

SUBJECT: Early Consultation for Proposed County of Maui Molokai Baseyard at
15 Pueo Place; TMK: (2) 5-2-031:011, 012 and 013, Naiwi, Molokai

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 comments.

In addition to the comments previously sent you on July 15, 2011, enclosed are comments from the Division of Aquatic Resources on the subject matter. Should you have any questions, please feel free to call Darlene Nakamura at 587-0417. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Y. Tsuji".

Russell Y. Tsuji
Land Administrator

Enclosure



RECEIVED
LAND DIVISION

AMX
SH



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

2011 JUL 26 P 3:12

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

June 30, 2011

DAR 3901

MEMORANDUM

TO:

DLNR Agencies:

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division -
- Historic Preservation

Charlene

FROM:

Charlene Unoki, Assistant Administrator

SUBJECT:

Early Consultation for Proposed County of Maui Molokai Baseyard

LOCATION:

Island of Molokai

APPLICANT:

Munekiyō & Hiraga, Inc. on behalf of the County of Maui, Department of Public Works



Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by July 12, 2011.

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:

[Signature]

Date:

7/22/11

RECEIVED

JUL 12 2011

Div. of Aquatic Resources
Maui

DIVISION OF AQUATIC RESOURCES - MAUI
DEPARTMENT OF LAND & NATURAL RESOURCES
130 Mahalani Street
Wailuku, Hawai'i 96793
July 22, 2011

To: Alton Miyasaka, Aquatic Biologist
From: *Sh* Skippy Hau, Aquatic Biologist
Subject: Early Consultation for Proposed County of Maui Molokai
Baseyard (DAR 3901)

(Charlene Unoki, Land; Due July 12, 2011)

Drainage and runoff from the baseyard should be retained, allowed to recharge, or directed into vegetation areas as much as possible.

According to the view on Google Earth, the location to the west appears to show a drainage contour.



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

MARK ALEXANDER ROY

August 17, 2011

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

SUBJECT: Early Consultation on the Proposed County of Maui Molokai
Baseyard at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and 013,
Naiwa, Molokai, Hawaii

Dear Mr. Tsuji:

Thank you for your letter of August 4, 2011, providing additional comments in response to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard. On behalf of the applicant, County of Maui, Department of Public Works (DPW), we wish to provide the following information in response to your comments.

There is an existing underground drainage system in the Molokai Industrial Park that conveys runoff to an existing retention basin west of the subject properties. A temporary onsite drainage retention basin and a permanent onsite subsurface drainage retention system will be provided to handle the increase in storm water runoff from the subject project.

Russell Y. Tsuji, Administrator
August 17, 2011
Page 2

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

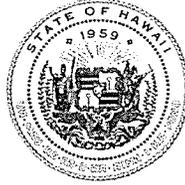
CS:lh

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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JUL 22 2011

NEIL ABERCROMBIE
GOVERNOR



GLENN M. OKIMOTO
DIRECTOR

Deputy Directors
JADE T. BUTAY
FORD N. FUCHIGAMI
RANDY GRUNE
JADINE URASAKI

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

IN REPLY REFER TO:
STP 8.0492

July 19, 2011

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

Dear Ms. Suyama:

Subject: Molokai Baseyard Project
Early Consultation for Draft Environmental Assessment (DEA)

Thank you for requesting the State Department of Transportation's (DOT) review of the subject project. DOT understands Maui County, Department of Public Works (DPW) proposes to construct the subject 2.45 acre project in two phases. Phase 1 will consist of a driveway entrance, administration building, vehicle storage area, parking lot, a fuel storage and temporary retention basin. Phase 2 will consist of removing the temporary retention basin, construction of a maintenance shop building, bulk material bunkers, and truck was area. Access to the project is from Uliuli Street.

Given the project's location, DOT is interested in the projects that fill in the lots of the Molokai Industrial Park and the additional traffic from each project contributing to the cumulative impact from traffic using Uliuli Street at State Route 460 (Mauna Loa Highway). The draft environmental assessment (DEA) should contain a traffic assessment report (TAR) discussing impacts and mitigation measures at the Uliuli Street-Mauna Loa Highway intersection from project and baseyard activities during the phased development to full and complete build out and occupancy. When the DEA is completed, the DOT requests that at least four (4) sets of printed copy and an electronic (CD) copy be provided for our further departmental review and comments.

DOT appreciates your advance notification and the opportunity to provide our comments. If there are any questions, including the need to meet with Highways Division staff, please contact Mr. David Shimokawa of the DOT Statewide Transportation Planning Office at (808) 831-7976.

Very truly yours,

A handwritten signature in black ink, appearing to read "Glenn M. Okimoto".

GLENN M. OKIMOTO, Ph.D.
Director of Transportation



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

MARK ALEXANDER ROY

August 12, 2011

Glenn M. Okimoto, Ph.D., Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

SUBJECT: Early Consultation on the Proposed Molokai Baseyard Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and 013, Naiwa, Molokai, Hawaii

Dear Mr. Okimoto:

Thank you for your letter of July 19, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard improvements. We acknowledge your traffic concerns from the Molokai Industrial Park and will follow-up with your department to address them in the Draft EA. In general, there are currently 18 full-time employees at the County DPW baseyard. The number of employees is expected to remain constant over the next few years. It is anticipated the project will generate approximately 18 vehicular trips a day related to the baseyard operations and five (5) additional trips related to the repair shop. The traffic generation is relatively minor and the existing roadways have free flowing traffic movements at all times.

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. We note your request for four (4) printed copies and an electronic copy of the Draft EA for review. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:tn

cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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

HRD11/5827

July 11, 2011

Colleen Suyama, Senior Associate
 Munekiyo & Hiraga, Inc.
 305 High Street, Suite 104
 Wailuku, Hawai'i

**Re: Pre-Draft Environmental Assessment Consultation
 Moloka'i Baseyard Improvements Project, Island of Moloka'i**

Aloha e Colleen Suyama,

The Office of Hawaiian Affairs (OHA) is in receipt of your June 22, 2011 letter requesting for comments ahead of a draft environmental assessment (DEA) which will be prepared to support the Moloka'i Baseyard Improvement Project (project) proposed by the County of Maui-Department of Public Works on 2.45 acres of land in the Moloka'i Industrial Park. The project will be completed in two phase with "Phase 1" constructing a driveway, administration building, vehicle storage area, parking lot, fuel storage and a new temporary retention basin and "Phase 2" constructing a maintenance shop, bulk material bunkers, truck was area and removing an exiting temporary retention basin.

The 2.45 acre project area consists of three separate tax map key (TMK) parcels, which the DPW will seek to consolidate into a single TMK parcel. Your letter describes the project area as being located outside of the Moloka'i Special Management Area, designated "Light Industrial" in the Moloka'i Community Plan and currently zoned "M-2 Heavy Industrial". We have no substantive comments to offer at this time. We look forward to reviewing the DEA and providing comments at that time. Please send one electronic copy and one hardcopy of the DEA to OHA attn: Compliance Program when it is available. Should you have any questions or concerns, 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- Molokai COC



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

MARK ALEXANDER ROY

August 16, 2011

Clyde W. Nāmu`o
Chief Executive Officer
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96804

SUBJECT: Early Consultation on the Proposed County of Maui Molokai
Baseyard at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and 013,
Naiwa, Molokai, Hawaii

Dear Mr. Nāmu`o:

Thank you for your letter of July 11, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard. We note and confirm the Office of Hawaiian Affairs has no comments at this time.

Thank you again for your participation in the early consultation of the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

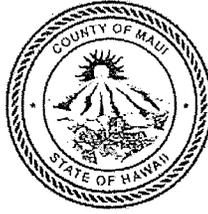
Colleen Suyama
Senior Associate

CS:lh

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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ALAN M. ARAKAWA
MAYOR



JUL 01 2011
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

June 29, 2011

Munekiyo & Hiraga, Inc.
Attn: Colleen Suyama , Senior Associate
305 High Street, Suite 104
Wailuku, HI 96793

**Subject: Early Consultation for Proposed County of Maui, Molokai Baseyard
15 Pueo Place, Molokai, HI
TMK (2) 5-2-031:011,012 and 013**

Dear Colleen,

Thank you for the opportunity to comment on this Early Consultation for the proposed project. At this time, the Fire Prevention Bureau has no specific comments. Once buildings are to be constructed we will be following the Uniformed Fire Code 1997 and County amendment for permit approvals.

If you have any questions, you may call me at 244-9161 ext. 25 or fax at 244-1363.

Sincerely,

A handwritten signature in cursive script that reads "Kono Davis".

Kono Davis
Lieutenant, Fire Prevention Bureau
313 Manea Place
Wailuku, HI 96793



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

MARK ALEXANDER ROY

August 12, 2011

Kono Davis, Lieutenant
Fire Prevention Bureau
Department of Fire and Public Safety
313 Manea Place
Wailuku, Hawaii 96793

SUBJECT: Early Consultation on the Proposed Molokai Baseyard Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and 013, Naiwa, Molokai, Hawaii

Dear Lt. Davis:

Thank you for your letter of June 29, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard improvements. We confirm that the buildings will be designed in compliance with the Uniformed Fire Code 1997, as amended and the Department of Fire and Public Safety may have further comments during the building permit review process.

Thank you again for your participation in the early consultation of the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

A handwritten signature in black ink, appearing to read "Colleen Suyama", written in a cursive style.

Colleen Suyama
Senior Associate

CS:mge

cc: Shayne Agawa, Engineer, Department of Public Works
Gerald Hiyakumoto, Architect

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DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
HOUSING DIVISION
COUNTY OF MAUI

JUL 08 2011

ALAN M. ARAKAWA
Mayor

JO-ANN T. RIDAO
Director

JAN SHISHIDO
Deputy Director

35 LUNALILO STREET, SUITE 102 • WAILUKU, HAWAII 96793 • PHONE (808) 270-7351 • FAX (808) 270-6284

July 1, 2011

Ms. Colleen Suyama
Senior Associate
Munekiyo & Higara, Inc.
305 High Stree, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

**Subject: Early Consultation on the Proposed County of Maui Molokai
Baseyard located at 15 Pueo Place, Naiwi, Molokai, Hawaii.
TMK (2) 5-2-031:011, 012 and 013**

The Department has reviewed the request for Early Consultation for the above subject project. Based on our review, we have determined that the subject project is not subject to Chapter 2.96, Maui County Code. At the present time, the Department has no additional comments to offer.

Please call Mr. Veranio Tongson Jr. of our Housing Division at (808) 270-1741 if you have any questions.

Sincerely,

WAYDE T. OSHIRO
Housing Administrator

cc: Director of Housing and Human Concerns



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

MARK ALEXANDER ROY

August 12, 2011

Wayde T. Oshiro
Housing Administrator
Department of Housing and Human Concerns
Housing Division
35 Lunalilo Street, Suite 102
Wailuku, Hawaii 96793

SUBJECT: Early Consultation on the Proposed Molokai Baseyard
Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and
013, Naiwa, Molokai, Hawaii

Dear Mr. Oshiro:

Thank you for your letter of July 1, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard improvements. We note your department's determination that the project is not subject to Chapter 2.96, Maui County Code and that the department has no further comments at this time.

Thank you again for your participation in the early consultation of the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

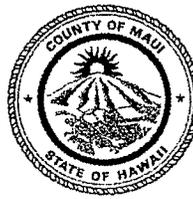
Colleen Suyama
Senior Associate

CS:mge

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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ALAN M. ARAKAWA
Mayor



JUL 12 2011 GLENN T. CORREA
Director

PATRICK T. MATSUI
Deputy Director

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

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

July 5, 2011

Colleen Suyama, Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street Suite 104
Wailuku, Hawaii 96793

Dear Ms. Colleen Suyama:

SUBJECT: Early Consultation on the Proposed County of Maui DPW Molokai Baseyard at 15 Pueo Place, TMK (2)5-2-031:011, 012, and 013, Naiwi, Molokai, Hawai'i.

Thank you for the opportunity to review and comment on the subject project. The Department of Parks & Recreation has reviewed the above and has no comments at this time.

Please feel free to contact me or Robert Halvorson, Chief of Planning and Development, at 270-7931, should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Glenn T. Correa".

GLENN T. CORREA
Director of Parks & Recreation

c: Robert Halvorson, Chief of Planning and Development

GTC:RH:as



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

MARK ALEXANDER ROY

August 12, 2011

Glenn T. Correa, Director
Department of Parks and Recreation
700 Hali`a Nakoia Street, Unit 2
Wailuku, Hawaii 96793

SUBJECT: Early Consultation on the Proposed Molokai Baseyard
Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and
013, Naiwa, Molokai, Hawaii

Dear Mr. Correa:

Thank you for your letter of July 5, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard improvements. We note that your department has no comments at this time.

Thank you again for your participation in the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be forwarded to your office for review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:mge

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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JUL 15 2011

ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director



RALPH M. 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
DEVELOPMENT SERVICES ADMINISTRATION

250 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
July 13, 2011

Ms. Colleen Suyama, Senior Associate
MUNEKIYO & HIRAGA, INC.
305 High Street, Suite 104
Wailuku, Maui, Hawaii 96793

Subject: EARLY CONSULTATION ON THE PROPOSED COUNTY OF
MAUI MOLOKAI BASEYARD, TMK: (2) 5-2-031:011, 012, 013

Dear Ms. Suyama:

We reviewed the subject application and have no comments at this time.

Please call Rowena M. Dagdag-Andaya at 270-7845 if you have any questions regarding this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "David C. Goode".

David C. Goode
Director of Public Works

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xc: Highways Division
Engineering Division



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

MARK ALEXANDER ROY

August 12, 2011

David Goode, Director
Department of Public Works
Development Services Administration
250 S. High Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation on the Proposed Molokai Baseyard Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and 013, Naiwa, Molokai, Hawaii

Dear Mr. Goode:

Thank you for your letter of July 13, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard improvements. We note that the Department of Public Works has no comments at this time

Thank you again for your participation in the early consultation of the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be forwarded to your department for review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

A handwritten signature in black ink, appearing to read "Colleen S.", written in a cursive style.

Colleen Suyama
Senior Associate

CS;tn

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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JUL 12 2011

ALAN M. ARAKAWA
Mayor



DAVID TAYLOR, P.E.
Director

PAUL J. MEYER
Deputy Director

DEPARTMENT OF WATER SUPPLY

COUNTY OF MAUI

200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauewater.org

July 6, 2011

Ms. Colleen Suyama, Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

RE: Project: Proposed County of Maui Molokai Baseyard
Address: 15 Pueo Place, Naiwi, Molokai, Hawaii
Applicant: County of Maui
TMK: (2) 5-2-031:011, 012, and 013
Description: Reconsolidation of three lots into one. Phase 1 will consist of construction of an administration building, vehicle storage area, parking lot located on parcels 12 and 13, and a fuel storage, as well as a temporary retention basin on parcel 11; Phase 2 will consist of removal of the temporary retention Basin, the construction of a maintenance shop building, bulk materials bunkers, and a truck wash area.

Thank you for the opportunity to comment on the referenced project.

The project site (site) is served by the Wai'ola O Moloka'i, Inc.'s private water system.

The site overlies the Manawainui aquifer which has a sustainable yield of 2 million gallons per day. The Department of Water Supply's goal is to protect the integrity of surface and groundwater resources. To achieve this, mitigation measures must be implemented to prevent any potential water pollution related impacts. Best management practices for construction should, therefore, be applied.

The DWS recommends that the County consider the following conservation measures in the project design, as well as during construction:

1. Utilize reclaimed or non-potable, if possible, for dust control, irrigation, and other potable uses.

"By Water All Things Find Life"

Ms. Colleen Suyama
Page 2
July 6, 2011

2. Water after 7:00 a.m. at night and before 10:00 p.m. in the morning.
3. Utilize low-flow fixtures and devices in faucets, showerheads, urinals, water closets, and hose bibs.
4. Prevent over-watering by automated systems – Provide rain-sensors on all automated irrigation controllers. Check and reset controllers at least once a month to reflect monthly changes in evaporation rates at the site. As an alternative, provide more automated, soil-moisture sensors on controllers.
5. Maintain fixtures to prevent leaks – A simple, regular program of repair and maintenance can prevent the loss of hundreds or even thousands of gallons per day.
6. Limit irrigated turf – Low-water use shrubs and ground cover can be equally attractive and require substantially less water than turf.
7. Select climate adapted native plant species for landscaping – Native plants adapted to the area conserve water and protect the watershed from degradation due to alien species.
8. Look for opportunities to conserve water – Here are a few samples:
 - 1) When clearing debris, use a broom instead of a water hose.
 - 2) Check for leaks in pipes, faucets, and toilets.

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

Sincerely,



David Taylor, P.E., Director

ayi

c: DWS Engineering Division
DWS WRPD Files

August 12, 2011

David Taylor, P. E., Director
Department of Water Supply
200 S. High Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation on the Proposed Molokai Baseyard
Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and
013, Naiwa, Molokai, Hawaii

Dear Mr. Taylor:

Thank you for your letter of July 6, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard improvements. We acknowledge the project site is served by the Wai'ola O Molokai, Inc.'s private water system and overlies the Manawainui aquifer.

By this letter, the Department of Water Supply's recommended conservation measures will be transmitted to the Department of Public Works for consideration and implementation within the proposed project.

Thank you again for your participation in the early consultation of the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be forwarded to your department for review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

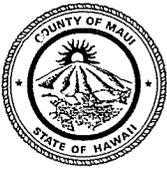


Colleen Suyama
Senior Associate

CS:mge

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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JUL 27 2011



POLICE DEPARTMENT
COUNTY OF MAUI

ALAN M. ARAKAWA
MAYOR

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

GARY A. YABUTA
CHIEF OF POLICE

OUR REFERENCE
YOUR REFERENCE

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

July 25, 2011

Ms. Colleen Suyama
Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, HI 96793

Dear Ms. Suyama:

SUBJECT: Early Consultation on the Proposed County of Maui Molokai Baseyard
at 15 Pueo Place; TMK (2) 5-2-031:011, 012, and 013

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

We have reviewed the information submitted for this project and have submitted our comments and/or recommendations. 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: William Spence, Planning Department

COPY

TO : GARY YABUTA, CHIEF OF POLICE, MAUI COUNTY
VIA : CHANNELS
FROM : LONNIE KA'AI, C.P.O., DISTRICT V
**SUBJECT : EARLY CONSULTATION ASSESEMENT FOR THE PROPOSED
COUNTY OF MAUI MOLOKAI BASEYARD**

*REVISED
07/27/11*

SYNOPSIS:

Sir, this communication is being submitted regarding the proposed construction of a County of Maui Molokai Base yard located at the west corner of Ulili Street and Pueo Place in Naiwa, Molokai(TMK (2) 5-2-031:011, 12, and 13.

Owner: County of Maui
Location: West corner of Ulili Street and Pueo Place in Naiwa
(TMK (2) 5-2-031:011)

ROAD ASSESEMENT:

Roadways in the area are most commonly used by County, State, MECO, Goodfellows Construction, and Nature Conservancy vehicles and personnel. However, there are times that public vehicles and personnel utilize said roadways to visit the electric and construction companies in that area. Ulili Street is a wide enough street that it could still accommodate two way traffic with proper positioning of cones should a lane closure be needed for construction.

POLICE ASSISTANCE:

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

NEIGHBORING PROPERTIES:

There are no residences in the area as this is an industrial area. Nearby businesses should not be affected so long dust and noise pollution be addressed during construction.

OTHER CONCERNS:

According to the assessment packet that I received, Ulili Street is noted as Uliuli Street on the map provided within said packet. Also the area in which the property is located is known as Naiwa and not Naiwi. Changes should be made accordingly.

PROJECT PLANNER:

Colleen SUYAMA of Munekiyo & Hiraga Inc.

FINAL ASSESSMENT:

After making checks in the above mentioned area, if the issues regarding traffic control, dust and noise pollutions are properly addressed, the project should be able to proceed as planned. Suggest project assessment be approved.


Officer Lonnie KA'AI E-3263
Community Police Officer
Molokai Patrol Division
071811 @ 1138 hours

ONCE THIS NOTED
OTHER CHECKS TO
BE MADE DURING CONSTRUCTION
AT LI CAMP & LO 12
07/13/14

NOTED. OFF. KA'AI IS
TO ENSURE CHECKS ARE
DONE DURING & PRIOR TO
CONSTRUCTIONS.


071911 @ 1004

August 12, 2011

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

SUBJECT: Early Consultation on the Proposed Molokai Baseyard Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and 013, Naiwa, Molokai, Hawaii

Dear Chief Yabuta:

Thank you for your letter of July 25, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard Improvements. The Draft EA will address construction related impacts noted in your letter. Further, the names, Uili Street and Naiwa have been corrected in the Draft EA.

Thank you again for your participation in the early consultation of the Chapter 343, Hawaii Revised Statutes (HRS) review process. The Draft EA will be forwarded to your department for further review and comment. A copy of your letter will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015

Very truly yours,



Colleen Suyama
Senior Associate

CS:tn

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division

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JUL 18 2011



July 15, 2011

Ms. Colleen Suyama, Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii, 96793

Subject: Early Consultation on the Proposed County of Maui Mōlokai Baseyard at 15
Puelo Place
15 Puelo Place
Tax Map Key: (2) 5-2-031:011, 012, and 013
Naiwi, Molokai, Hawaii

Dear Ms. Suyama,

Thank you for allowing us to comment on the Early Consultation for the subject project.

In reviewing our records and the information received, Maui Electric Company has no objections to the subject project at this time. We highly encourage the customer to submit an electrical service request so that service can be provided on a timely basis.

Should you have any questions or concerns, please call me at 871-2341.

Sincerely,

A handwritten signature in black ink, appearing to read "Kyle Tamori", with a long horizontal line extending to the right.

Kyle Tamori
Staff Engineer



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

MARK ALEXANDER ROY

August 12, 2011

Kyle Tamori, Staff Engineer
Maui Electric Company, Ltd.
P.O. Box 398
Kahului, Hawaii 96733-6898

SUBJECT: Early Consultation on the Proposed Molokai Baseyard Improvements at 15 Pueo Place, TMK (2) 5-2-031:011, 012 and 013, Naiwa, Molokai, Hawaii

Dear Mr. Tamori:

Thank you for your letter of July 15, 2011 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Molokai Baseyard improvements. We note that Maui Electric Company, Ltd. (MECO) has no objections to the project at this time. As the project progresses, the Department of Public Works will submit an electrical service request to MECO.

Thank you again for your participation in the early consultation of the Chapter 343, Hawaii Revised Statutes (HRS) review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be forwarded to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:mge

Cc: Shayne Agawa, Engineer, Department of Public Works, Engineering Division
Kirk Tanaka, R.T. Tanaka Engineers, Inc.

K:\DATA\COMDPW Molokai\BYMECO.DraftEA.ec\response\tr.doc

IX. REFERENCES

X. REFERENCES

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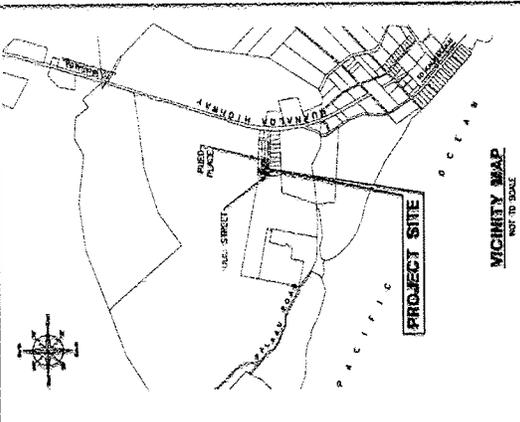
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APPENDIX A.

Project Plans



VICINITY MAP
NOT TO SCALE

LIST OF CIVIL DRAWINGS

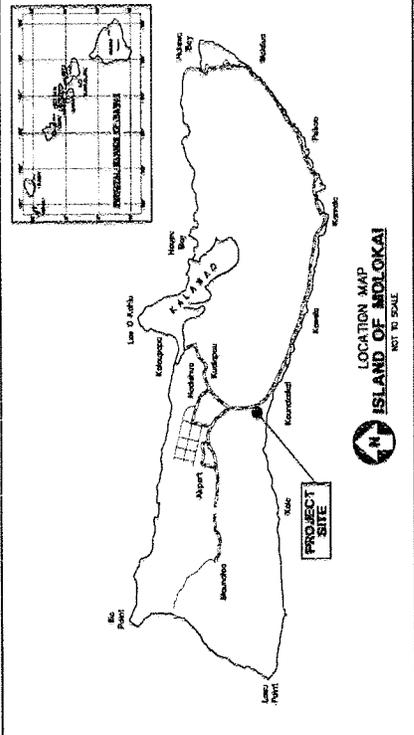
SHEET NO.	DESCRIPTION
C-1	GENERAL SITE PLAN
C-2	TOPOGRAPHIC SURVEY MAP
C-3	SWAPS PLAN, NOTE AND DETAILS
C-4	SITE AND WATER STATION PLAN
C-5	GRADING AND DRAINAGE PLAN
C-6/7/8	MISCELLANEOUS DETAILS
C-9	CONSTRUCTION NOTES AND TRAFFIC CONTROL PLAN

DESIGNED BY	ENGINEER	DATE	SCALE
CHECKED BY	DATE	SCALE	
APPROVED BY	DATE	SCALE	

STATE OF HAWAII
DEPARTMENT OF PUBLIC WORKS
DIVISION OF PUBLIC WORKS
1555 ALI'OLE DRIVE
HONOLULU, HAWAII

REGISTERED PROFESSIONAL ENGINEER
NO. 10000
EXPIRES 12/31/2000

PHASE ONE
GENERAL SITE PLAN



LOCATION MAP OF MOLOKAI
NOT TO SCALE

LEGEND AND ABBREVIATIONS:

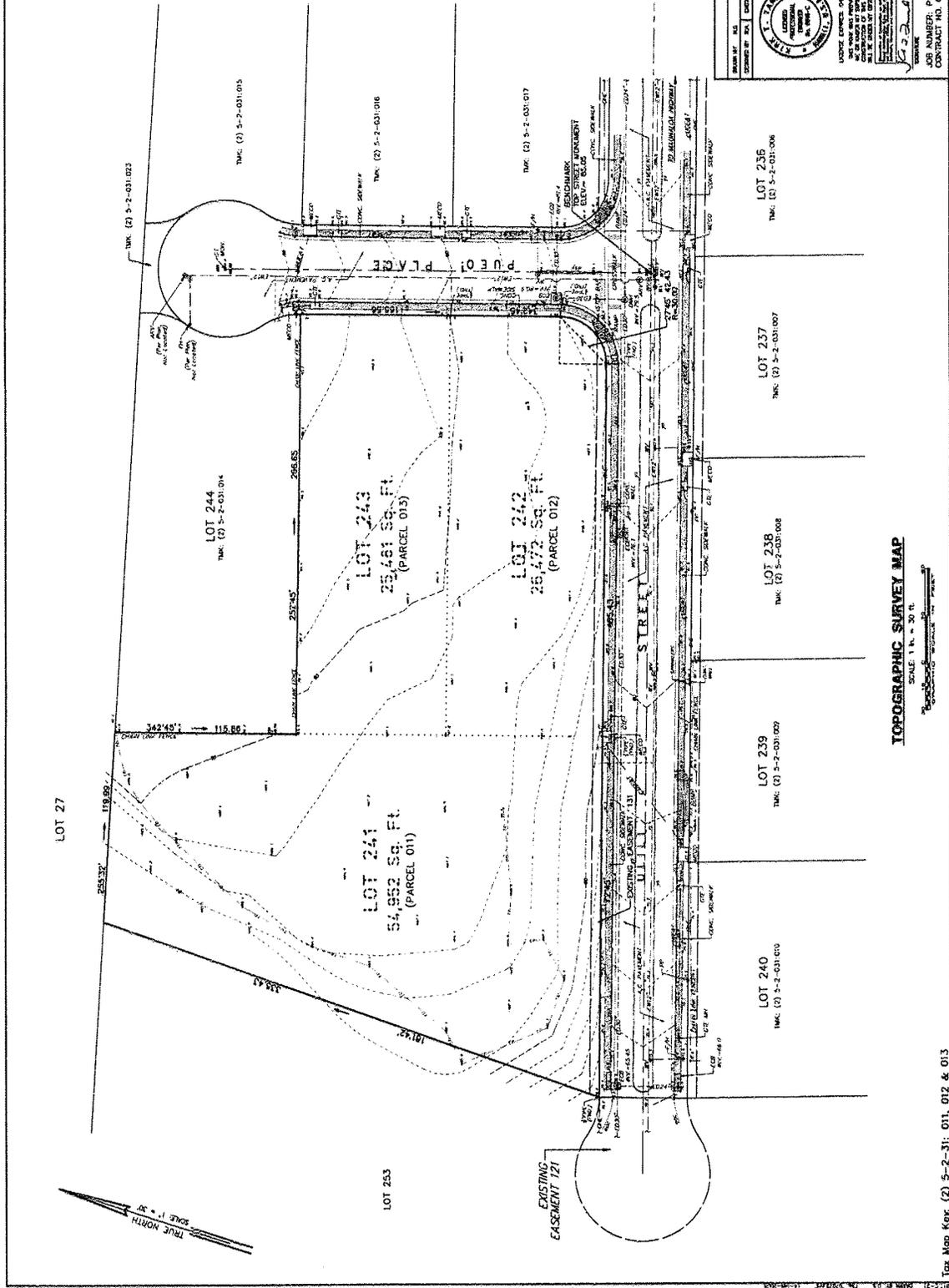
1/4"	EDGE OF PAVEMENT
1/8"	CURB
1/16"	CATCH BASIN
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1/64"	SEWER MANHOLE
1/128"	SEWER MANHOLE
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LEGEND:

- CONTOUR
- CENTER POINT ELEVATION
- WATERLINE & SIZE (APPROX. LOCATION)
- DRAINAGE & SIZE (APPROX. LOCATION)
- OVERHEAD ELIZ. LINE
- TOP BANK
- BOTTOM BANK
- POWER POLE
- POWER POLE
- WATER VALVE
- DOUBLE SOLID YELLOW STOPPING
- STOP STOPPING
- CATCH BASIN

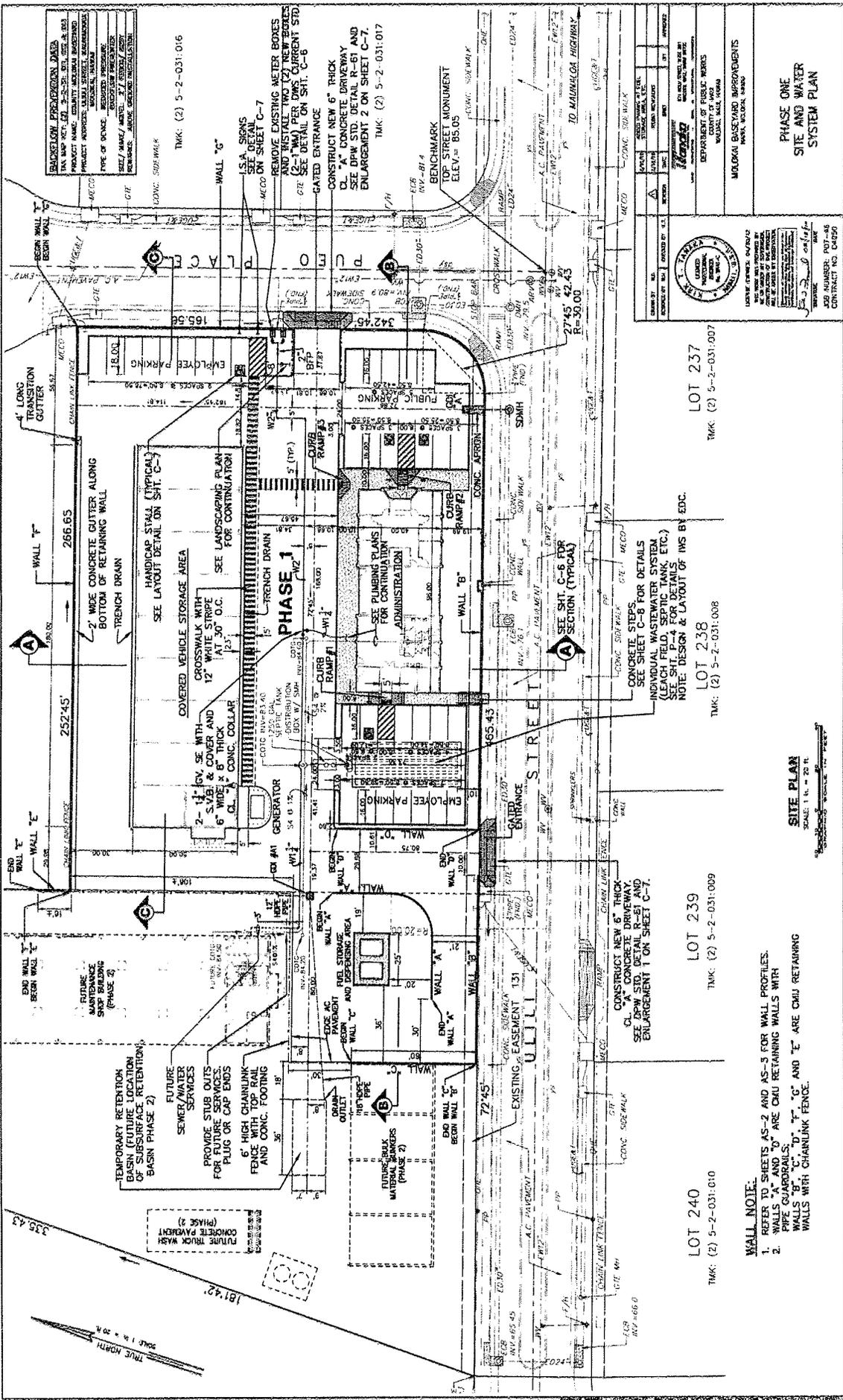
NOTES:

1. ELEVATION DATUM = APPROXIMATE SEA LEVEL.
2. ALL URSELE UTILITY STRUCTURES HAVE BEEN LOCATED AND SHOWN AS SHOWN ARE UNASSURED AND OBTAINED FROM EXISTING DATA FOR INFORMATION ONLY. HAVING BEEN OBTAINED FROM EXISTING DATA, THE COMPANY MAKES NO WARRANTY OR REPRESENTATION AS TO THE ACCURACY OF THE INFORMATION.



DATE BY: 04/15/10	DATE: 04/15/10	SCALE: 1" = 30'
DESIGNED BY: J.S.	REVISION: 1	BY: J.S.
DEPARTMENT OF PUBLIC WORKS MARYLAND BALTIMORE, MARYLAND		
MICHIGAN BASTYARD IMPROVEMENTS NORTH, MICHIGAN, MARYLAND		
PHASE ONE TOPOGRAPHIC SURVEY MAP		
JOB NUMBER: P07-10 CONTRACT NO. 04050		

TOPOGRAPHIC SURVEY MAP
SCALE: 1" = 30'



BACKGROUND INFORMATION DATA

THIS MAP SET, DTD. 3-23-20, IS IN ACCORDANCE WITH THE PROVISIONS OF THE MICHIGAN CONSTITUTION AND THE MICHIGAN LAND ACQUISITION ACT, P.A. 200-100, AS AMENDED.

PROJECT NAME: **MICHIGAN INDUSTRIAL PARK**

PROJECT ADDRESS: **MICHIGAN INDUSTRIAL PARK**

TYPE OF WORK: **REDEVELOPMENT**

DATE: **11/15/2019**

DESIGNER: **TRC ENGINEERS, INC.**

SCALE: **AS SHOWN**

DATE: **11/15/2019**

TMK: (2) 5-2-031:016

WALL "G"

REMOVE EXISTING METER BOXES AND INSTALL NEW METER BOXES. SEE DETAIL ON SHEET C-7.

CONSTRUCT NEW 6" THICK CONCRETE DRIVEWAY AND SEE DRAW STD. DETAIL R-61 AND ENLARGEMENT 2 ON SHEET C-7.

TMK: (2) 5-2-031:017

BENCHMARK TOP STREET MONUMENT ELEV. = 85.05

PHASE ONE SITE AND WATER SYSTEM PLAN

SCALE: 1" = 20' N.T.

DATE: 11/15/2019

PROJECT NO: 19-001

CONTRACT NO: 04850

JOB NUMBER: 19T-048

DATE: 11/15/2019

CONTRACT NO: 04850

SCALE: 1" = 20' N.T.

DATE: 11/15/2019

PROJECT NO: 19-001

CONTRACT NO: 04850

JOB NUMBER: 19T-048

DATE: 11/15/2019

CONTRACT NO: 04850

LOT 237
TMK: (2) 5-2-031:007

LOT 238
TMK: (2) 5-2-031:008

LOT 239
TMK: (2) 5-2-031:009

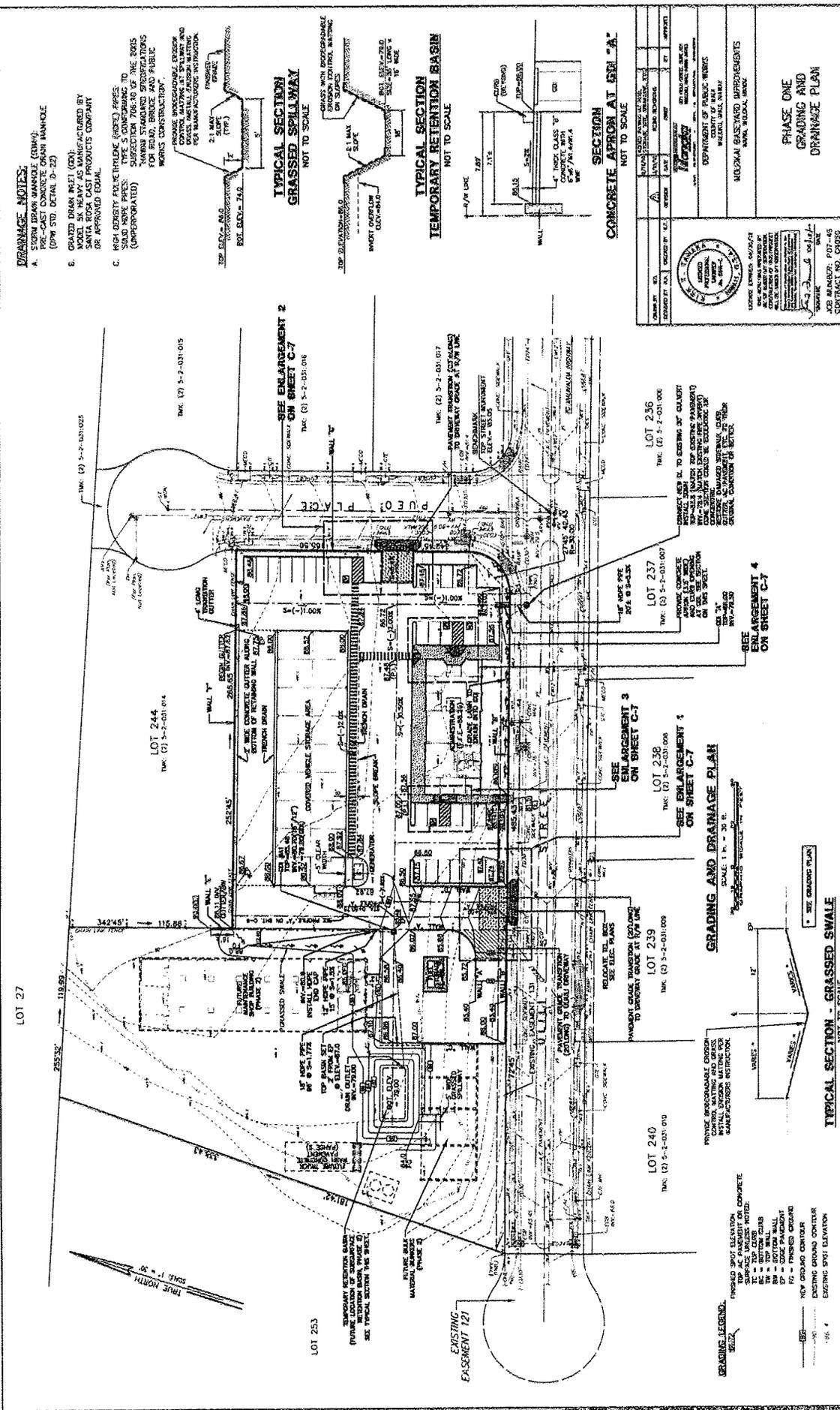
LOT 240
TMK: (2) 5-2-031:010

WALL NOTE.

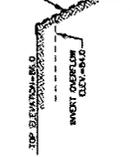
- REFER TO SHEETS AS-2 AND AS-3 FOR WALL PROFILES.
- WALLS "A" AND "D" ARE CMU RETAINING WALLS WITH PIPE GUARDRAILS.
- WALLS "B", "C", "E", "F", "G", "H", "I", "J", "K", "L", "M", "N", "O", "P", "Q", "R", "S", "T", "U", "V", "W", "X", "Y", "Z" ARE CMU RETAINING WALLS WITH CHAINLINK FENCE.

SITE PLAN
SCALE: 1" = 20' N.T.

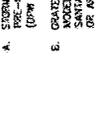
SHEET C-4 OF 9 SHEETS



DRAINAGE NOTES:
 A. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED BY SANTA ROSA CAST PRODUCTS COMPANY OR APPROVED EQUAL.
 B. GRADED DRAIN INLET (DI) SHALL BE CONSTRUCTED WITH 2" DIA. CONCRETE DRAIN HANDBOLE (OPM STD. DETAIL D-22).
 C. HIGH DENSITY POLYETHYLENE (HDPE) PIPES SHALL BE CONFORMING TO SUBSECTION 706.10 OF THE 2005 MARIQUETTA STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
 D. PROVIDE UNSCHEDULED EXPOSED CONTROL MATING AT ALL SWALE AND BASIN MANHOLES FOR INSPECTION AND MAINTENANCE.
 E. GRASS WITH UNDERDRAIN SHALL BE INSTALLED ON ALL SWALES.



DATE	BY	REVISION
10/15/14	JK	ISSUE FOR PERMIT
08/15/14	JK	REVISED PER COMMENTS
07/15/14	JK	REVISED PER COMMENTS

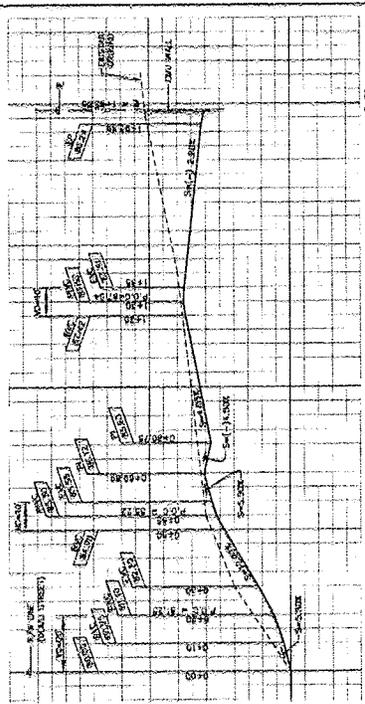


PHASE ONE
 GRADING AND
 DRAINAGE PLAN

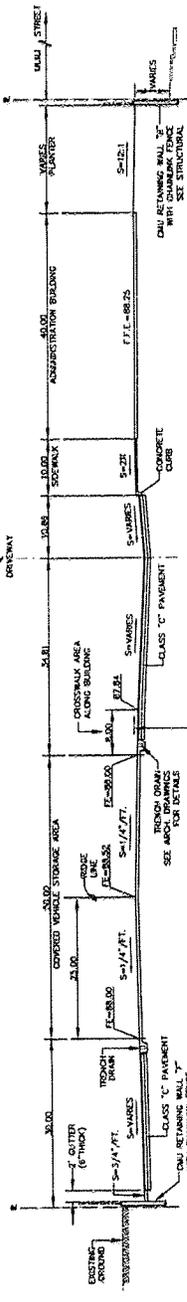
DEPARTMENT OF PUBLIC WORKS
 100000 BALSAMWOOD IMPROVEMENTS
 100000 BALSAMWOOD IMPROVEMENTS
 100000 BALSAMWOOD IMPROVEMENTS

PHASE ONE
 GRADING AND
 DRAINAGE PLAN

JOB NUMBER: P17-45
 CONTRACT NO. 04950

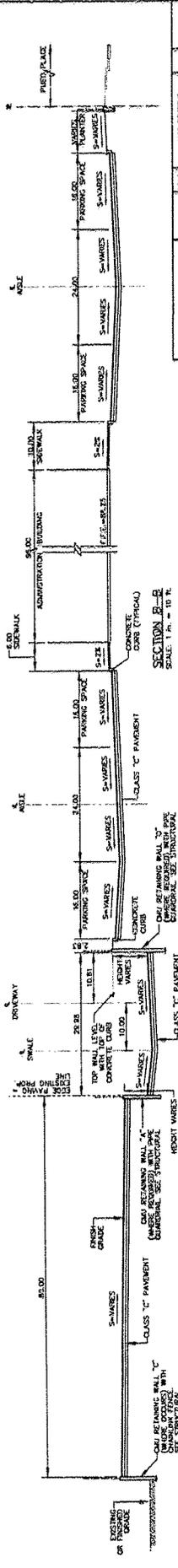


PROFILE "A" - ULLI DRIVEWAY
SCALE HORIZONTAL: 1" = 20'
SCALE VERTICAL: 1" = 4'



EXISTING WATER LATERAL MODIFICATION
SCALE AS NOTED

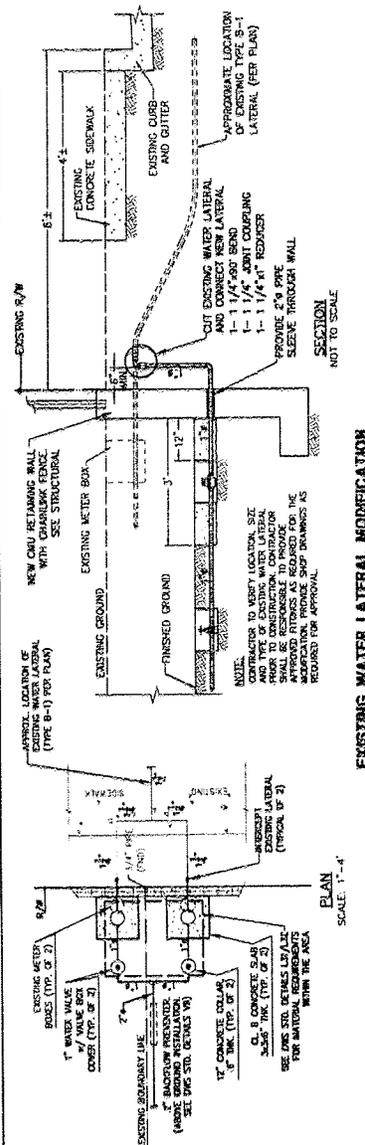
SECTION A-A
SCALE: 1" = 10'



CLASS "C" PAVEMENT TYPICAL SECTION
NOT TO SCALE

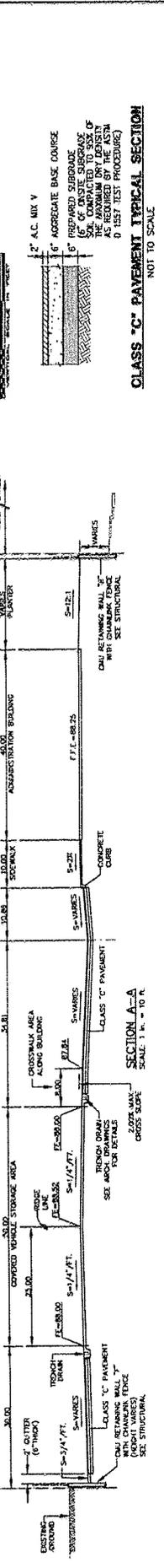
DATE: 08/11/03	DESIGNED BY: J.L. HUNTER	CHECKED BY: J.L. HUNTER	DATE: 08/11/03
PROJECT: ULLI DRIVEWAY LOCATION: 1000 ULLI DRIVE, MIAMI, FLORIDA 33136 CONTRACT NO. 00030			
PHASE ONE MISCELLANEOUS DETAILS			
PREPARED BY: J.L. HUNTER CHECKED BY: J.L. HUNTER DATE: 08/11/03			
CONTRACT NO. 00030			

SHEET C-6 OF 9 SHEETS

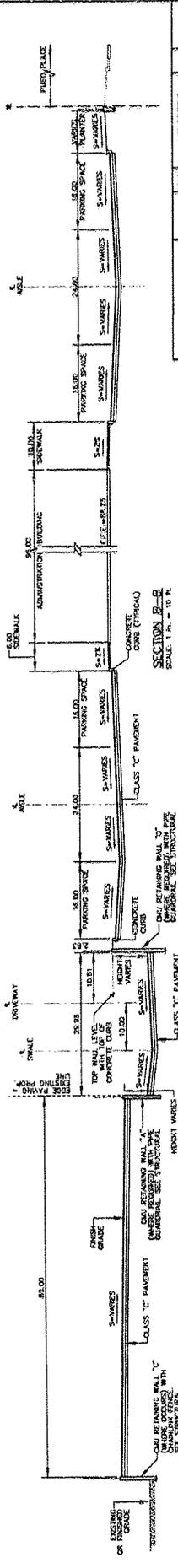


PLAN
SCALE: 1" = 4'

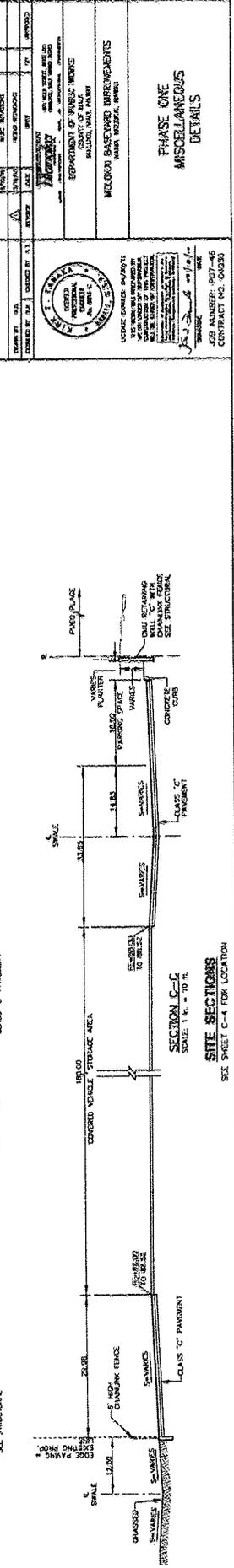
SECTION A-A
SCALE: 1" = 10'



CLASS "C" PAVEMENT TYPICAL SECTION
NOT TO SCALE

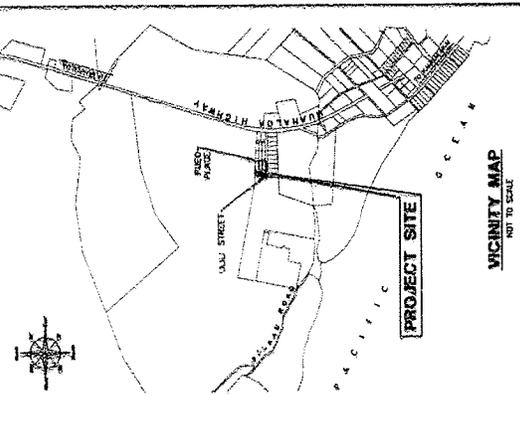


SECTION B-B
SCALE: 1" = 10'



SECTION C-C
SCALE: 1" = 10'

SITE SECTIONS
SEE SHEET C-4 FOR LOCATION



VICINITY MAP
NOT TO SCALE

LIST OF CIVIL DRAWINGS

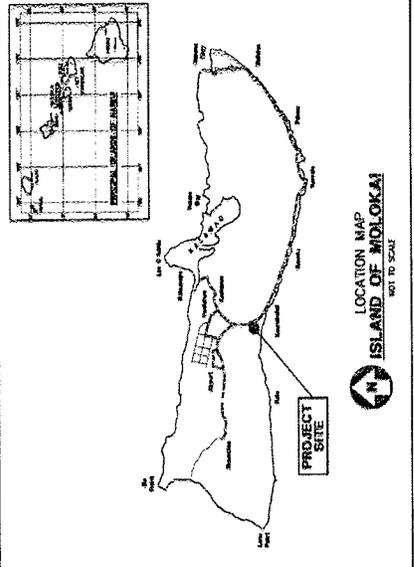
SHEET NO.	DESCRIPTION
C-1	GENERAL SITE PLAN
C-2	EXISTING SITE PLAN AND TOPOGRAPHIC SURVEY MAP
C-3	CONSTRUCTION NOTES AND TRAFFIC CONTROL PLAN
C-4	IMP'S PLAN, NOTE AND DETAILS
C-5	SITE PLAN AND DETAILS
C-6	GRADING AND DRAINAGE PLAN
C-7	PLAN AND PROFILE - DRAINAGE "A"
C-8	MISCELLANEOUS DETAILS

DATE: 10/15/2010
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]

DEPARTMENT OF PUBLIC WORKS
 DIVISION OF PUBLIC WORKS
 100 SOUTH WAI'OLENA
 HONOLULU, HAWAII

PHASE TWO
GENERAL SITE PLAN

PROJECT NO. [Number]
 CONTRACT NO. [Number]



LOCATION MAP
ISLAND OF MOLOKAI
NOT TO SCALE

LEGEND AND ABBREVIATIONS:

1/2" = 1'	NEW AC PAVEMENT	1/2" = 1'	NEW AC PAVEMENT
1/4" = 1'	EXISTING AC PAVEMENT	1/4" = 1'	EXISTING AC PAVEMENT
1/8" = 1'	NEW AC PAVEMENT	1/8" = 1'	NEW AC PAVEMENT
1/16" = 1'	NEW AC PAVEMENT	1/16" = 1'	NEW AC PAVEMENT
1/32" = 1'	NEW AC PAVEMENT	1/32" = 1'	NEW AC PAVEMENT
1/64" = 1'	NEW AC PAVEMENT	1/64" = 1'	NEW AC PAVEMENT
1/128" = 1'	NEW AC PAVEMENT	1/128" = 1'	NEW AC PAVEMENT
1/256" = 1'	NEW AC PAVEMENT	1/256" = 1'	NEW AC PAVEMENT
1/512" = 1'	NEW AC PAVEMENT	1/512" = 1'	NEW AC PAVEMENT
1/1024" = 1'	NEW AC PAVEMENT	1/1024" = 1'	NEW AC PAVEMENT
1/2048" = 1'	NEW AC PAVEMENT	1/2048" = 1'	NEW AC PAVEMENT
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1/162259275580423344959224256" = 1'	NEW AC PAVEMENT	1/162259275580423344959224256" = 1'	NEW AC PAVEMENT
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1/272225893959856026191113674315552" = 1'			

PERMITEE NOTES TO CONTROL DRAINAGE AND EROSION:

- CONTROL DUST BY MEANS OF WATER WAGONS OR BY INSTALLING TEMPORARY SPRINKLER SYSTEMS OR BOTH IF NECESSARY.
- CONSTRUCTION ACTIVITY HAS CEASED FOR THE DAY AND FOR THE WEEKEND AND HOLIDAYS.
- ALL EXPOSED AREAS SHALL BE PAVED, GRADED, OR PERMANENTLY STABILIZED WITHIN 7 DAYS.
- FOR THE WATER NECESSARY FOR DUST CONTROL AND IRRIGATION OF AREAS TO BE GRADED, THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR THE WATER NECESSARY FOR DUST CONTROL AND IRRIGATION.
- CONTRACTOR TO CONSTRUCT TEMPORARY DRAINAGE DITCHES OR SWALES AWAY FROM GRADED AREAS TO NATURAL DRAINAGEWAYS DURING CONSTRUCTION.
- CONTRACTOR TO MAINTAIN A SURVEILLANCE LOG, CROSSING CONTROL PLAN AND TEMPORARY SUB EROSION PROOF TO AN INSURANCE AGENT.
- SEE ALSO GRADING NOTES NO. 2 ON SHEET C-2, WHICH TO CONTROL SOIL EROSION DURING THE SITE LATEST DATE TO:

- UNPAVED TIME OF CONSTRUCTION.
- RETAIN EXISTING GROUND COVER UNTIL LATEST DATE TO CONSTRUCTION.
- EARLY CONSTRUCTION OF DRAINAGE CONTROL FEATURES.
- CONSTRUCTION AREAS WHEN GROUND COVER IS REMOVED, SHALL BE PROTECTED BY MEANS OF TEMPORARY STABILIZATION PERIOD TO PROVIDE FOR IMMEDIATE SPRINKLING AS NEEDED (INCLUDED).
- IN ACTIVE CONSTRUCTION ZONES (NEEDPANS AND HOLDAYS INCLUDED).
- ALL DIRT AND SANDS SHALL BE PROTECTED WITH EROSION CONTROL MATS AND BE STORED OR PLANTED IMMEDIATELY AFTER GRADING WORK HAS BEEN COMPLETED.
- INSTALLATION OF SILT AND DUST CONTROL FENCE IN LIEU OF TEMPORARY FENCES CAN BE USED.
- THE CONTRACTOR IS THE SOLE PARTY RESPONSIBLE FOR THE ADEQUACY OF ALL TEMPORARY CONTROL MEASURES TO PROTECT NEIGHBORING PROPERTIES AND WILL PROVIDE ADDITIONAL MITIGATION MEASURES AS NECESSARY AT NO ADDITIONAL COST TO OWNER.
- DUST CONTROL MEASURES SHALL NOT BE USED FOR STORM WATER CONTROL.
- STORM WATER CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO CONSTRUCTION AND REMOVED PRIOR TO PERMANENT CONTROL AREAS IN PLACE. THIS WILL INCLUDE CONSTRUCTION OF TEMPORARY SEPARATION BASINS THROUGHOUT THE SITE AND TEMPORARY BERMS AND/OR SWALES TO DIRECT DISCHARGES ASSOCIATED WITH THE OPERATION AND MAINTENANCE OF EQUIPMENT SHALL BE FIELD MONITORED BY THE CONTRACTOR. ANY MECHANICAL AND HYDRAULIC FAILURE TO LOCK, LEAK, OR LEANAGE OF MECHANICAL FLUIDS SHALL BE CONTAINED, PROPERLY DISPOSED AND NOT ALLOWED TO IMPACT THE OCEAN.
- DUST AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED NECESSARY TO PROVIDE MAINTAIN PROTECTION AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATELY NOTIFYING THE GRADING PERMIT, THE CONTRACTOR SHALL PROVIDE AND PROVIDE INFORMATION ON THE SOURCE OF WATER FOR DUST CONTROL, AND JUSTIFY THE NUMBER OF WATER TRUCKS TO BE USED TO CONTROL DUST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST EMISSIONS FROM THE PROJECT SITE. ALL CONSTRUCTION WORK SHALL CEASE EXCEPT FOR WATERING AND OTHER NECESSARY TO PROVIDE MAINTAIN PROTECTION AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATELY CLEANING THE ROADWAY OF MUD OR SILT TRACKED FROM THE PROJECT SITE.

- AN NPDES PERMIT FOR DISCHARGE OF STORM WATER ASSOCIATED WITH CONSTRUCTION OF THE PROJECT HAS BEEN OBTAINED BY THE HEALTH, CLEAN WATER BRANCH, OBTAIN COPY OF THE PROJECT SITE NO FROM OWNER PRIOR TO ANY LAND DISTURBANCE OF THE PROJECT SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE PERMIT AT LEAST 30 CALENDAR DAYS PRIOR TO START OF CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE PERMIT FROM THE STATE DEPARTMENT OF HEALTH, CLEAN WATER BRANCH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPLICATION FOR CONSTRUCTION OF THE PERMIT AT NO ADDITIONAL COST TO THE OWNER.

- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE PERMIT FROM THE STATE DEPARTMENT OF HEALTH, CLEAN WATER BRANCH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPLICATION FOR CONSTRUCTION OF THE PERMIT AT NO ADDITIONAL COST TO THE OWNER.

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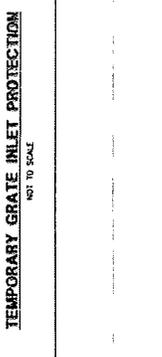
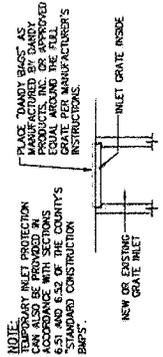
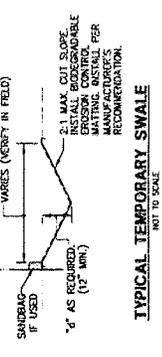
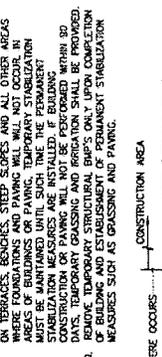
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BMPs NOTES

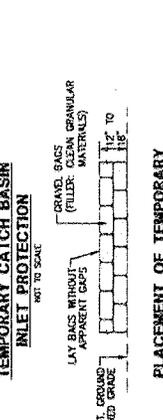
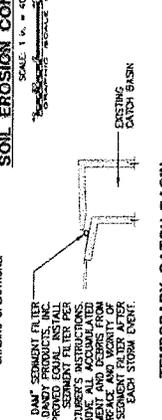
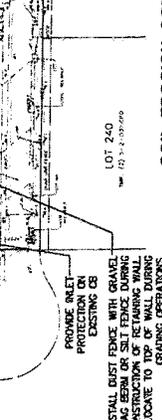
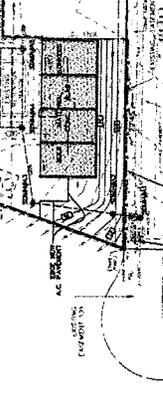
- APPLICABLE SECTIONS, WHETHER CALLED FOR OR NOT ON THIS PLAN, OF THE COUNTY STANDARD BEST MANAGEMENT PRACTICES (BMPs) SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. THE BMPs SHALL BE INSTALLED WITHIN 7 DAYS OF THE DEVELOPMENT OF THIS PROJECT. SECTIONS, BUT NOT LIMITED TO THE FOLLOWING ARE APPLICABLE:
- SECTION 6.04 - TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT
- SECTION 6.10 - SEEDING
- SECTION 6.30 - MATS, NETS & BURLAP
- SECTION 6.32 - PRESERVATION OF EXISTING VEGETATION
- SECTION 6.33 - PROTECTION OF STOCKPOLES
- SECTION 6.34 - TEMPORARY FABRIC DRIP INLET PROTECTION
- SECTION 6.35 - PROTECTION OF FLOOR AND GRAVEL DRIP INLET
- SECTION 6.36 - PROTECTION
- SECTION 6.37 - SEDIMENT FENCE (SILT FENCE)
- SECTION 6.38 - DUST CONTROL BARRIERS
- SECTION 6.39 - SOIL WASTE MANAGEMENT
- SECTION 6.40 - CONCRETE WASTE MANAGEMENT
- SECTION 6.41 - VEHICLE FUEL & MAINTENANCE MANAGEMENT

- RECOMMENDED SEQUENCE FOR IMPLEMENTING BMPs:
- CONSTRUCT TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT.
- COORDINATE LOCATION WITH OWNER.
- EXISTING RETENTION POND/USE AS SEDIMENT BASIN TO EXTENT POSSIBLE DURING GRADING. DIRECT STORM RUNOFF INTO THE POND. RUNOFF INTERCEPTORS MUST BE WORKED THROUGHOUT THE ENTIRE SITE TO ENSURE THEY ARE FUNCTIONAL AT ALL TIMES.
- CONSTRUCT RETAINING WALLS.
- COMPLETE GRADING AS PLANNED. MOOPY BMPs AS NEEDED. DISTURBANCE ALL CLEARED AND GRADED AREAS WHICH WILL NOT BE WORKED ON WITHIN 7 DAYS. TEMPORARY STABILIZATION MAY INCLUDE MULCHING WITH OR WITHOUT GRASS SEED.
- INSTALL UTILITY SERVICES AND DRAINAGE SYSTEM. PROVIDE INLET PROTECTION FOR NEW COVS.
- INSTALL THE TEMPORARY OR PERMANENT IRRIGATION SYSTEM.
- PLANT TEMPORARY OR PERMANENT VEGETATION ACCORDING TO THE LANDSCAPING PLAN (GRASS IF THERE IS NO LANDSCAPING PLAN) ON TERRACES, BENCHES, STEEP SLOPES AND ALL OTHER AREAS AREAS OF BUILDINGS OR PAVING. TEMPORARY STABILIZATION MEASURES MUST BE MAINTAINED UNTIL SUCH TIME THE PERMANENT STABILIZATION MEASURES ARE INSTALLED IF BUILDING DURING CONSTRUCTION.
- REMOVE TEMPORARY STRUCTURAL BMPs ONLY UPON COMPLETION OF BUILDING AND ESTABLISHMENT OF PERMANENT STABILIZATION MEASURES SUCH AS GRASSING AND PAVING.

- WHERE OCCURS
- SANDBAGS (IF USED)
- "2" AS REQUIRED (12" MIN.)



SOIL EROSION CONTROL PLAN



NOTES

- CONTROL MEASURES AS SHOWN ARE MINIMUM AND CONTRACTOR TO PROVIDE AND PLACE ADDITIONAL MEASURES AS REQUIRED TO OBTAIN MAINTAIN PROTECTION.
- INSTALL DUST FENCE AROUND CONSTRUCTION AREA WITH APPROVAL OF OWNER.

LEGEND

- DUST FENCE TO BE INSTALLED TOGETHER WITH SEDIMENT TRAPPING DEVICES SUCH AS SILT FENCE, FILTERING PRODUCTS.
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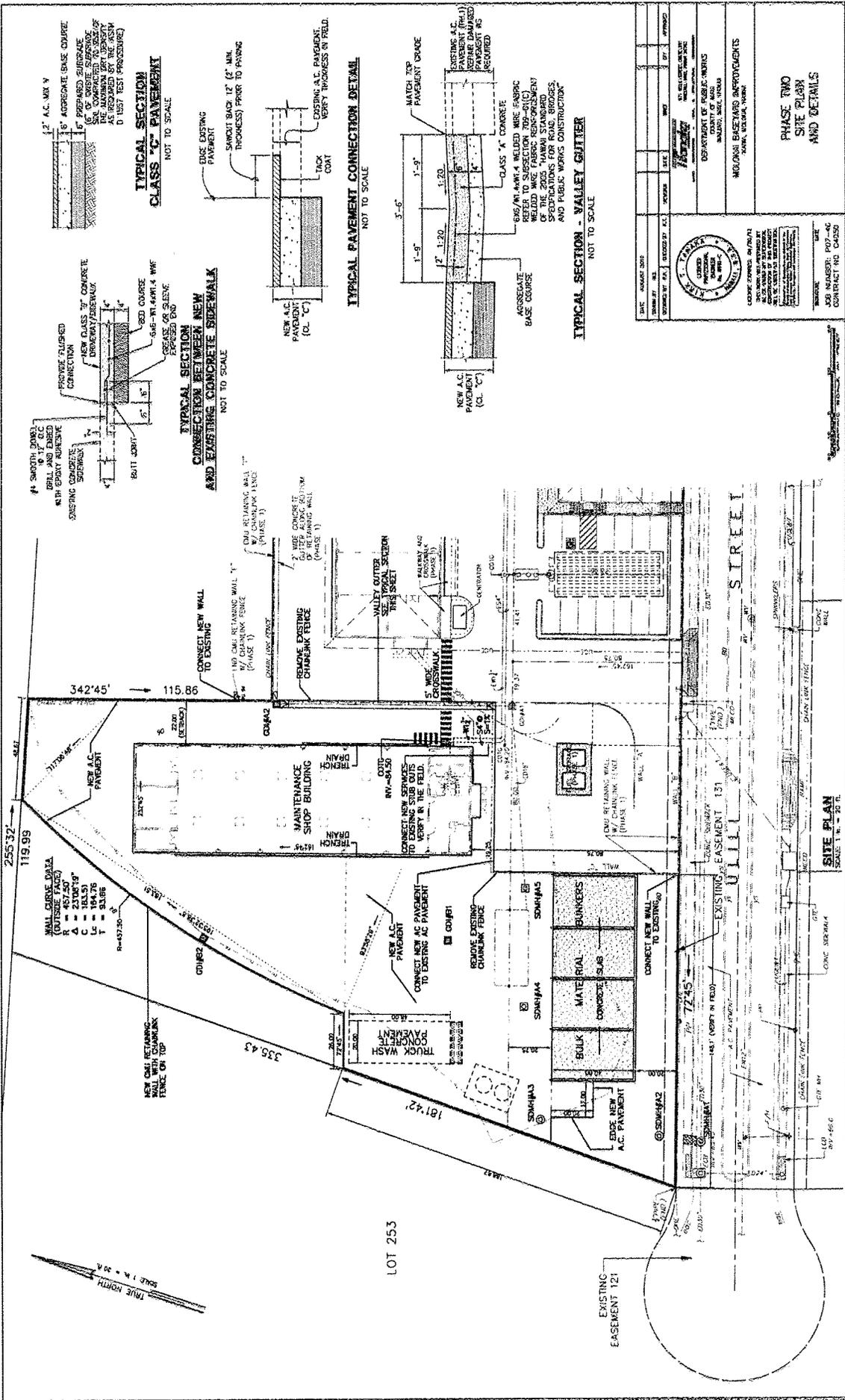
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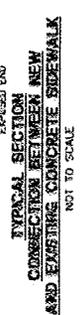
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TYPICAL SECTION - CLASS 'C' PAVEMENT
NOT TO SCALE



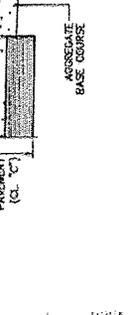
TYPICAL SECTION - VALLEY GUTTER
NOT TO SCALE



TYPICAL SECTION - CONNECTION BETWEEN NEW AND EXISTING CONCRETE SIDEWALK
NOT TO SCALE



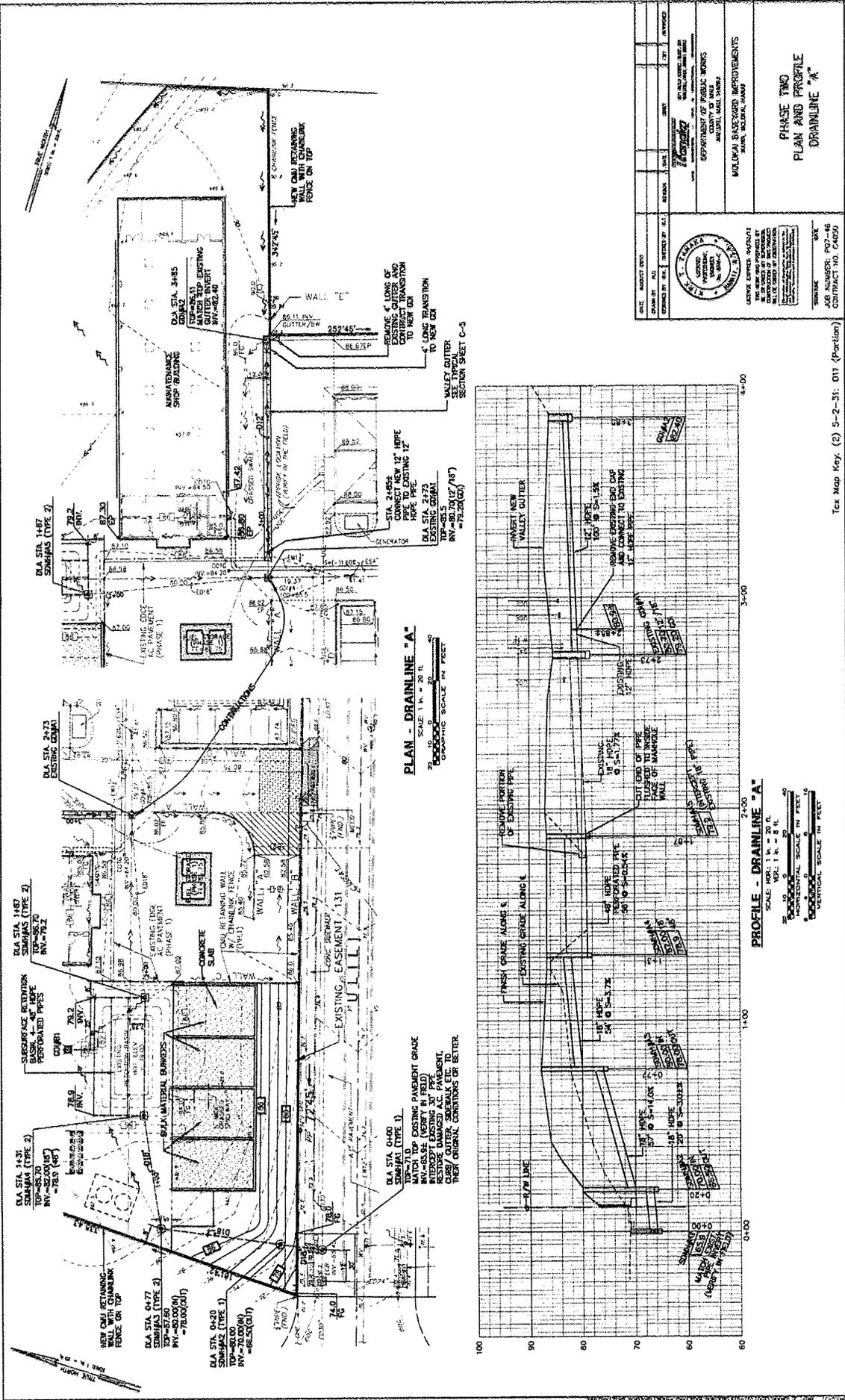
TYPICAL SECTION - CONNECTION DETAIL
NOT TO SCALE



TYPICAL SECTION - VALLEY GUTTER
NOT TO SCALE

DATE: JANUARY 2011	DESIGNED BY: J.C. JOHNSON	CHECKED BY: J.C. JOHNSON	SCALE: AS SHOWN
DEPARTMENT OF PUBLIC WORKS HONOLULU, HAWAII			
HONOLULU BASEWARD IMPROVEMENTS HAWAII, U.S.A.			
PHASE TWO SITE PLAN AND DETAILS			
JOB NUMBER: P07-4C	DATE: _____	CONTRACT NO. C4350	

SHEET 4-5 OF 8 SHEETS



PLAN - DRAINLINE "A"
 SCALE 1/8" = 20'
 GRAPHIC SCALE IN FEET

PROFILE - DRAINLINE "A"
 SCALE HOR. 1/8" = 20'
 SCALE VERT. 1/8" = 8'
 GRAPHIC SCALE IN FEET
 VERTICAL SCALE IN FEET

DATE	APPROVED BY	DESIGNED BY	CHECKED BY	DATE	DATE	DATE

THOMAS J. O'CONNELL
 LICENSE NO. 10000
 STATE OF MARYLAND

PROJECT: MALDEN BASEMENT IMPROVEMENTS
 LOCATION: MALDEN, MASSACHUSETTS

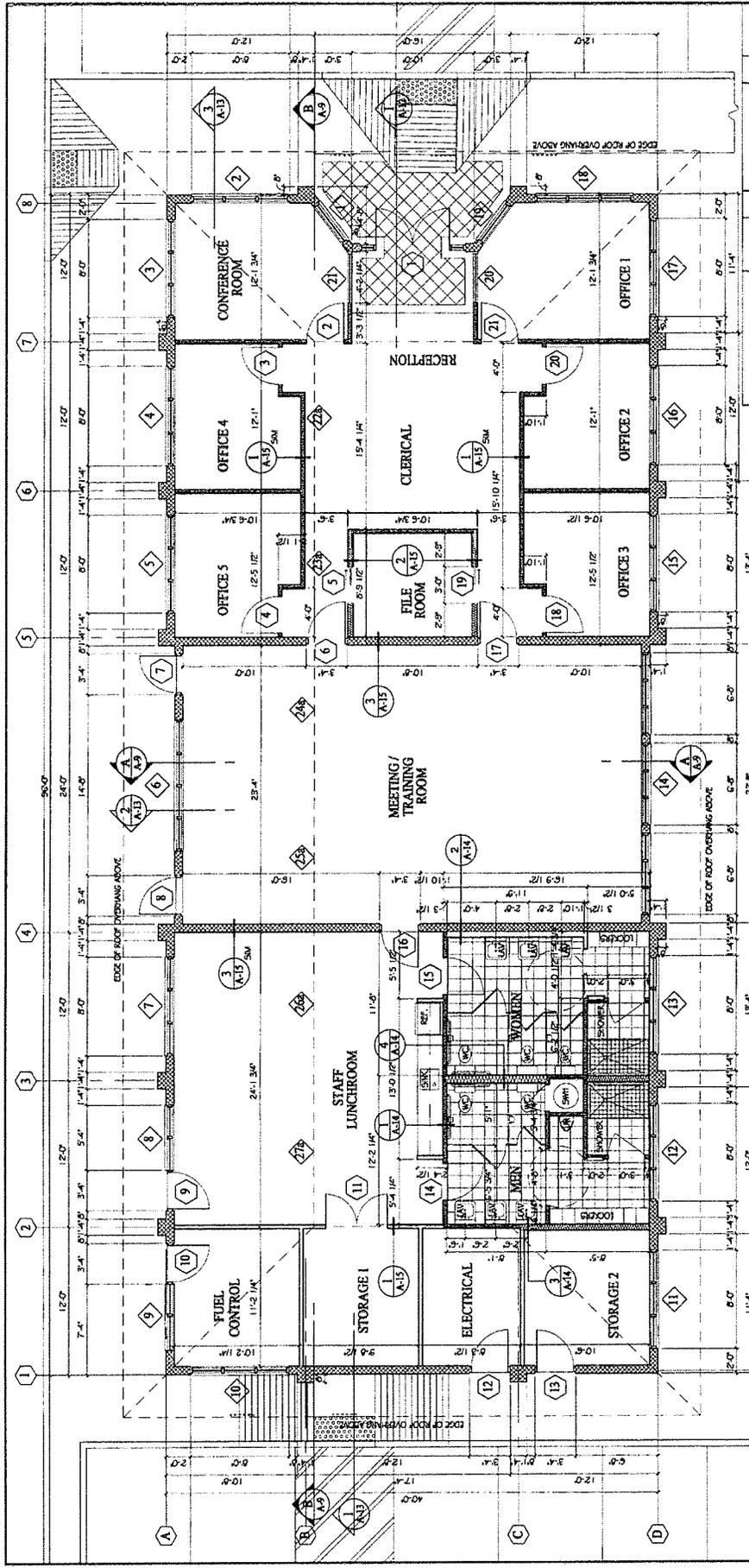
DEPARTMENT OF PUBLIC WORKS
 MALDEN, MASSACHUSETTS

PHASE TWO
 PLAN AND PROFILE
 DRAINLINE "A"

WORK PROVIDED BY: MALDEN
 JOB NUMBER: PD-46
 CONTRACT NO. C4650

SHEET C-7 OF 8 SHEETS

See Map Key: (2) 5-2-31: 011 (Partition)



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



DRAWN BY CHECKED BY DATE	DESIGNED BY DATE	REVISED BY DATE REVISION	PROJECT NO. SHEET NO. OF 64 SHEETS
RYUJIMOTO ARCHITECT, LLC P.O. BOX 572, WALLINGFORD, VT 05491 TEL: 802.249.1111 FAX: 802.249.1112 WWW.RYUJIMOTO.COM			
DEPARTMENT OF PUBLIC WORKS BUILDING DIVISION 101 ORANGE STREET, SUITE 200 WASHINGTON, VT 05691 TEL: 802.249.1111 FAX: 802.249.1112			
PHASE ONE ADMINISTRATION BUILDING FLOOR PLAN			
PROJECT NO. 107-06 CONTRACT NO. 107-06			



DATE: 10/1/06

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

SHEET NO. OF 64 SHEETS

PROJECT NO. 107-06

CONTRACT NO. 107-06

DATE: 10/1/06

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

SHEET NO. OF 64 SHEETS

PROJECT NO. 107-06

CONTRACT NO. 107-06

DATE: 10/1/06

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

SHEET NO. OF 64 SHEETS

PROJECT NO. 107-06

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DATE: 10/1/06

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PROJECT NO. 107-06

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DATE: 10/1/06

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

SHEET NO. OF 64 SHEETS

PROJECT NO. 107-06

CONTRACT NO. 107-06

DATE: 10/1/06

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

SHEET NO. OF 64 SHEETS

PROJECT NO. 107-06

CONTRACT NO. 107-06

DATE: 10/1/06

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

SHEET NO. OF 64 SHEETS

PROJECT NO. 107-06

CONTRACT NO. 107-06

DATE: 10/1/06

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

SHEET NO. OF 64 SHEETS

PROJECT NO. 107-06

CONTRACT NO. 107-06

DATE: 10/1/06

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

SHEET NO. OF 64 SHEETS

PROJECT NO. 107-06

CONTRACT NO. 107-06

DATE: 10/1/06

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

SHEET NO. OF 64 SHEETS

PROJECT NO. 107-06

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SHEET NO. OF 64 SHEETS

PROJECT NO. 107-06

CONTRACT NO. 107-06

DATE: 10/1/06

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

SHEET NO. OF 64 SHEETS

PROJECT NO. 107-06

CONTRACT NO. 107-06

DATE: 10/1/06

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

SHEET NO. OF 64 SHEETS

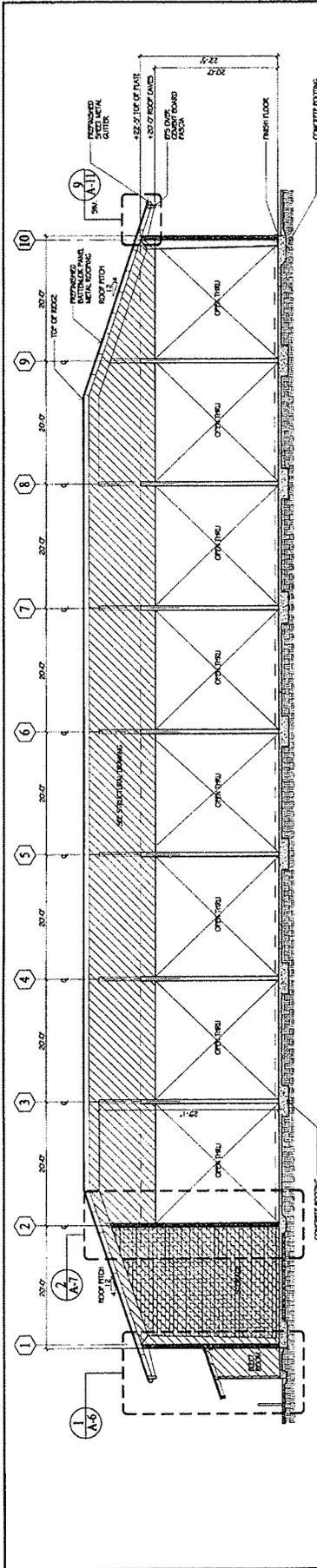
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CONTRACT NO. 107-06

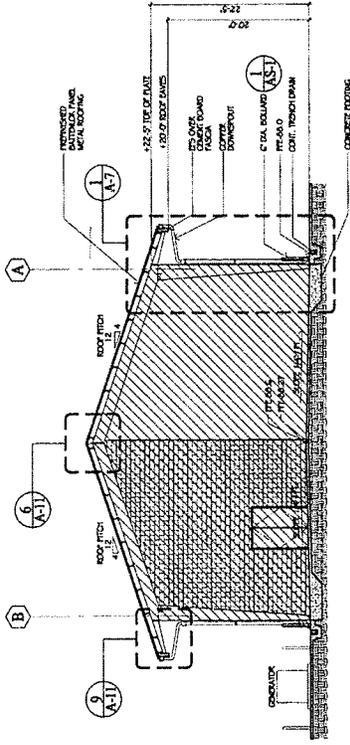
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SCALE: 1/4" = 1'-0"

SHEET NO. OF 64 SHEETS



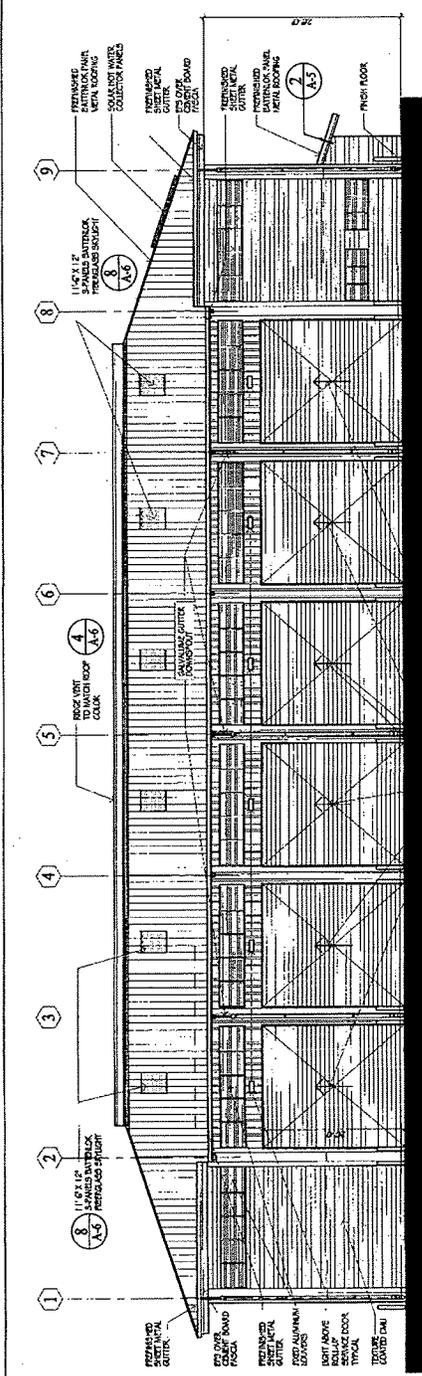
BUILDING SECTION
SCALE: 1/8" = 1'-0"



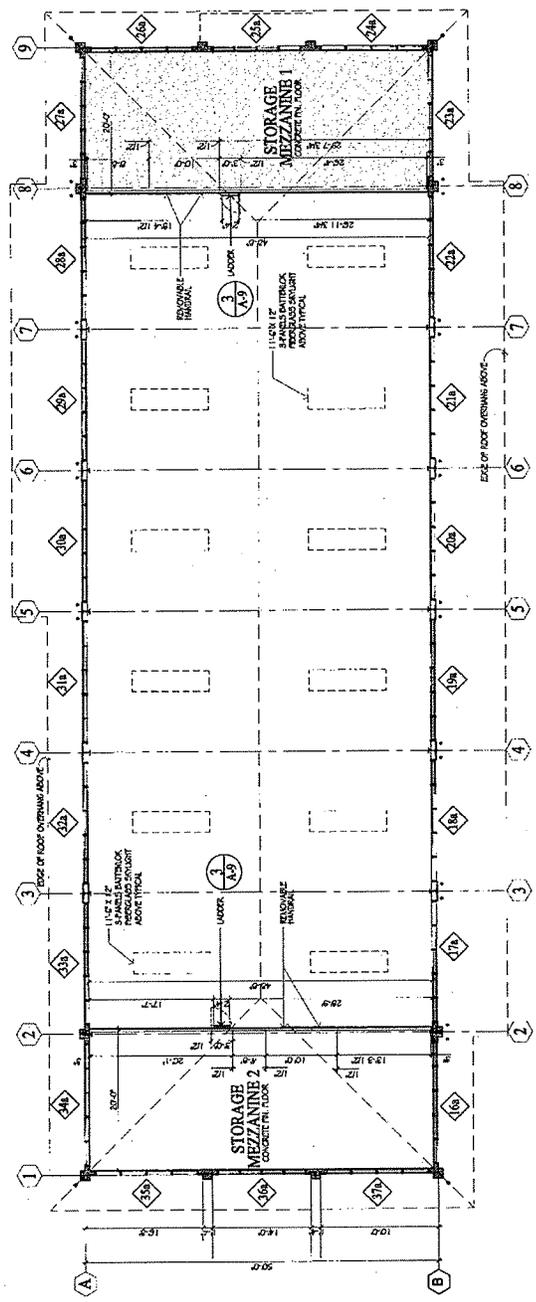
BUILDING SECTION
SCALE: 1/8" = 1'-0"

PROJECT:	DATE:	BY:	APPROVED:
CONTRACT:			
R. RYAKIMOTO PROFESSIONAL ENGINEER LICENSE NO. 10000 STATE OF HAWAII			
THE UNIVERSITY OF HAWAII DEPARTMENT OF CIVIL ENGINEERING 2150 KALI DRIVE HONOLULU, HAWAII 96825			
HONOLULU BASE/HAUL IMPROVEMENTS HAWAIIAN ISLANDS, HAWAII THESE SHEETS BY:			
PHASE ONE VEHICLE STORAGE BUILDING SECTIONS			
<i>Robert J. Jorgensen</i> ARCHITECT JOB NUMBER: PHT-48 CONTRACT NO. 0455			

SHEET A-3 OF 64 SHEETS



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



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

DESIGNED BY	DATE	BY	APPROVED
CHECKED	REVISION	DATE	BY

HPA KAWAKOTO ARCHITECT, LLC
 100 BOX 921, WAILUKU, HAWAII
 HAWAII

DEPARTMENT OF PUBLIC WORKS
 WAILUKU, HAWAII

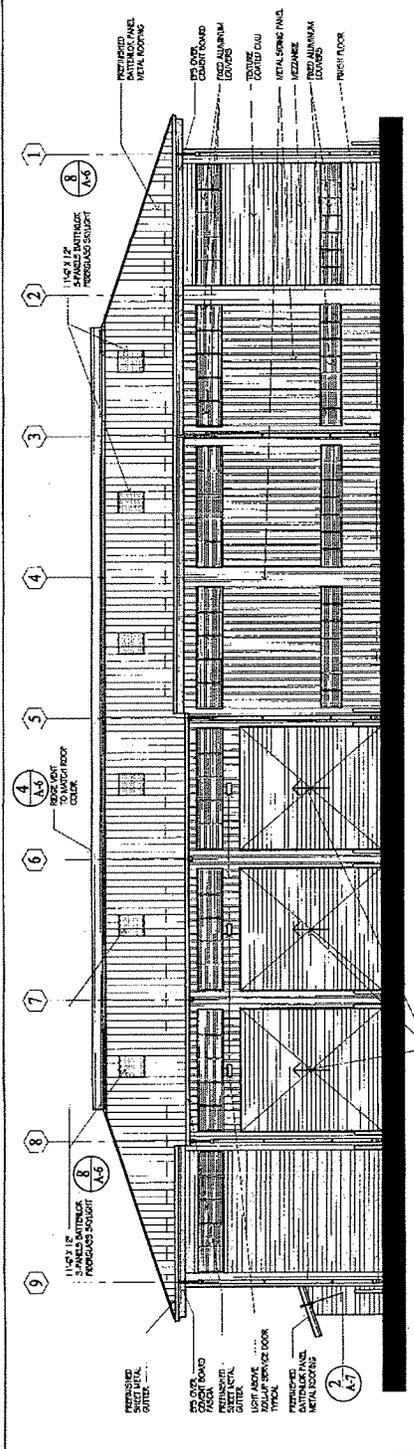
HAWAIIAN BASECAMP IMPROVEMENTS
 HAWAIIAN BASECAMP
 WAILUKU, HAWAII

PHASE TWO
MAINTENANCE SHOP
EXTERIOR ELEVATION
MEZZANINE PLAN

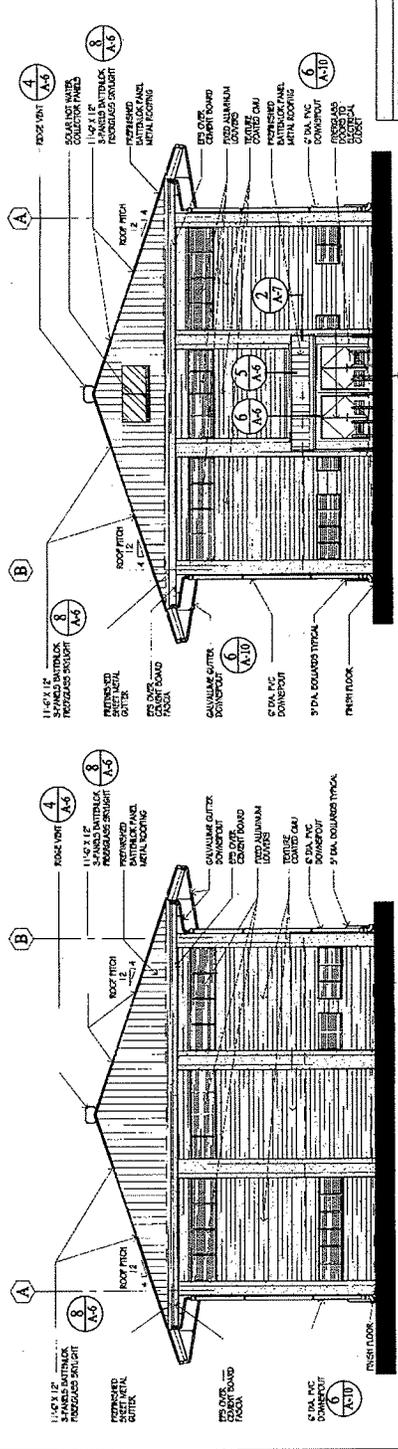
HAWAIIAN ARCHITECT ASSOCIATION
 100 SOUTH KULUWAHUA AVENUE
 HONOLULU, HAWAII 96813
 LICENSE NO. 1000

DATE: _____
 DRAWING NO.: _____
 CONTRACT NO.: _____

SHEET A.2 OF SHEETS

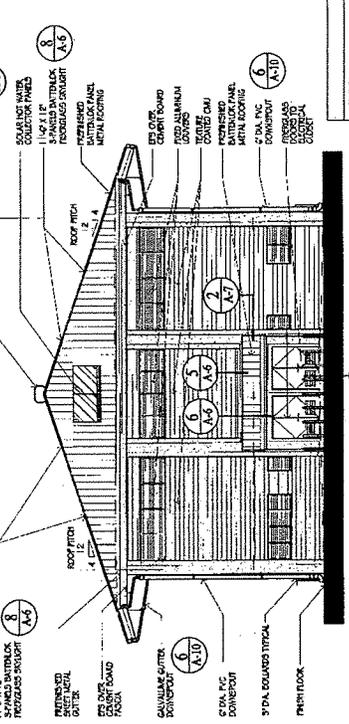


EAST ELEVATION
SCALE: 1/8" = 1'-0"



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

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



DESIGNED BY	DRAWN BY	CHECKED BY	DATE	SCALE	BY	APPROVED

W. HIRAYAMA ARCHITECT, LLC
 100 W. KAWAIAU AVENUE, SUITE 200
 WAIALEALE, HAWAII 96791
 PHONE: (808) 871-1111
 FAX: (808) 871-1112
 WWW.WHARCHITECT.COM

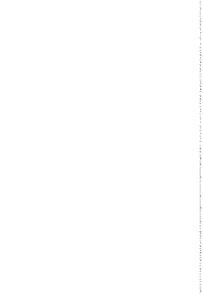
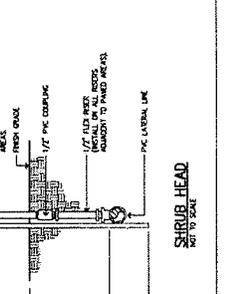
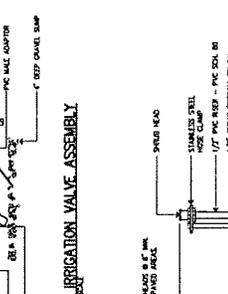
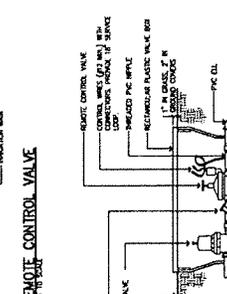
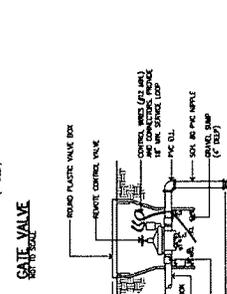
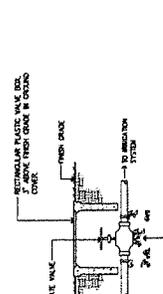
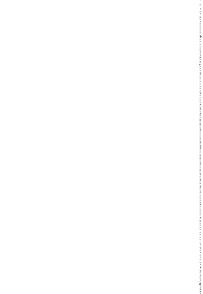
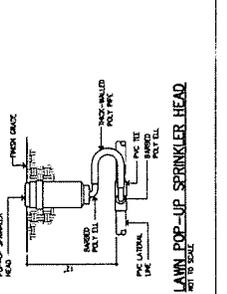
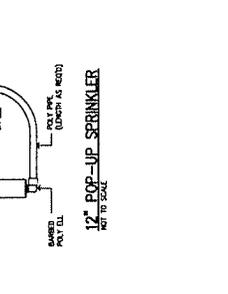
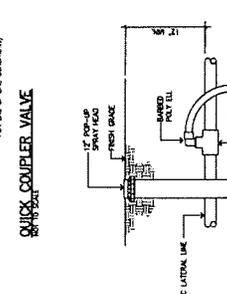
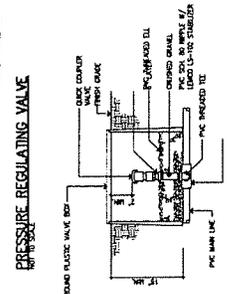
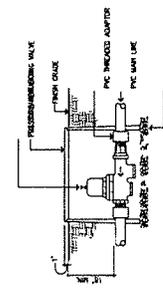
DEPARTMENT OF PUBLIC WORKS
 100 W. KAWAIAU AVENUE, SUITE 200
 WAIALEALE, HAWAII 96791
 PHONE: (808) 871-1111
 FAX: (808) 871-1112
 WWW.DPW.HAWAII.GOV

**PHASE TWO
 MAINTENANCE SHOP
 EXTERIOR ELEVATIONS**

CONTRACT NO. C-680
 SHEET A-3 OF 3 SHEETS

IRRIGATION LEGEND:

SYMBOL	DESCRIPTION	SIZE	TYPE	RADIUS	SPACING	DEPTH
1	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE WITH 3/8" ADAPTER	1/2"	1/2"	0"	24"	12"
2	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE MODEL NO. 80	1/2"	1/2"	0"	24"	12"
3	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE MODEL NO. 81	1/2"	1/2"	0"	24"	12"
4	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE MODEL NO. 82	1/2"	1/2"	0"	24"	12"
5	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE MODEL NO. 83	1/2"	1/2"	0"	24"	12"
6	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE MODEL NO. 84	1/2"	1/2"	0"	24"	12"
7	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE MODEL NO. 85	1/2"	1/2"	0"	24"	12"
8	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE MODEL NO. 86	1/2"	1/2"	0"	24"	12"
9	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE MODEL NO. 87	1/2"	1/2"	0"	24"	12"
10	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE MODEL NO. 88	1/2"	1/2"	0"	24"	12"
11	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE MODEL NO. 89	1/2"	1/2"	0"	24"	12"
12	NUMBERED 1/2" x 1/2" PVC SERIES SPARKER VALVE MODEL NO. 90	1/2"	1/2"	0"	24"	12"
13	BRASS GATE VALVE MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
14	PRESSURE REGULATING VALVE MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
15	ELECTRIC REMOTE CONTROL VALVE MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
16	DRIP IRRIGATION VALVE MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
17	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
18	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
19	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
20	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
21	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
22	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
23	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
24	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
25	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
26	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
27	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
28	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
29	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
30	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
31	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
32	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
33	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
34	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
35	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
36	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
37	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
38	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
39	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
40	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
41	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
42	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
43	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
44	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
45	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
46	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
47	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
48	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
49	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"
50	WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLER MODEL NO. 100-1/2" x 1/2" x 1/2"	1/2"	1/2"	0"	24"	12"



IRRIGATION NOTES

- RESPECT THE EXISTING SITE CONDITIONS AND VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO COMMENCING WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR MAINTAINING THESE CONDITIONS.
- IRRIGATION SYSTEMS SHALL BE INSTALLED AND SUBJECT TO THESE REGULATIONS. ALL SYSTEMS TO BE INSTALLED WITHIN THE PROPERTY LINE. ALL COMPONENTS OF IRRIGATION SYSTEMS ARE TO BE LOCATED AND INSTALLED WITHIN THE PROPERTY LINE. ADJUST ALL SYSTEMS TO ASSURE PROPER COVERAGE AND TO AVOID ANY CONTACT BETWEEN THE IRRIGATION SYSTEMS AND PLANTINGS, UTILITIES AND ARCHITECTURAL ELEMENTS.
- VERIFY THE ACCURACY OF THE WATER FLOW (GPM) AND WORKING PRESSURE (PSI) AT THE POINT OF CONNECTION TO THE EXISTING SYSTEM. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
- MINIMUM PSI AT _____ GPM _____ PSI
- CONTRACTOR SHALL COORDINATE WITH THE PROJECT GENERAL CONTRACTOR FOR THE INSTALLATION OF ALL IRRIGATION SLEEVES AND CONDUITS THROUGH ANY PLASTER WALLS, RETAINING WALLS AND/OR PAVED AREAS AS SHOWN ON PLAN.
- ALL SPRINKLER HEADS SHALL BE FIELD ADJUSTED TO MAXIMIZE COVERAGE AND EFFICIENCY AND TO MINIMIZE SPRAYING ONTO PAVED AREAS AND/OR WALLS.
- ALL SPRINKLER HEADS ON THE LOWER ELEVATIONS OF THE IRRIGATION CIRCUITS SHALL HAVE CHECK VALVES TO MINIMIZE DRIP HEAD DRAINAGE IN THE CONDUIT.
- CONTRACTOR SHALL MAKE NECESSARY FIELD ADJUSTMENTS TO IRRIGATION SYSTEM TO AVOID CONFLICTS WITH EXISTING UTILITIES, WALLS AND PLANTINGS.
- SPRINKLER HEADS ON ROOFS SHALL BE LOCATED AT A MINIMUM OF 6 INCHES FROM EDGES OF PAVEMENT AND 12 INCHES FROM WALLS.
- VALVES SHALL BE INSTALLED AT A MINIMUM OF 12 INCHES FROM EDGES OF PAVEMENT AND 12 INCHES FROM WALLS.
- ALL IRRIGATION VALVES SHALL BE INSTALLED AT A MINIMUM OF 12 INCHES FROM EXISTING EDGES, WALLS, BALUNES, ETC.
- WALL-MOUNTED AUTOMATIC IRRIGATION CONTROLLERS SHALL BE INSTALLED FOR MANUFACTURER'S RECOMMENDATIONS, COORDINATE PROGRAMMING AND IRRIGATION SCHEDULING WITH THE OWNER TO ACCOMMODATE SITE CONDITIONS AND PLANTINGS.

- ALL SURFACE DRAIN IRRIGATION LINES SHALL BE GRADED WITH #11 WIRE STRAPS (6 INCHES MINIMUM LENGTH) OF PVC POLYETHYLENE LINE SPACES SPACED EVERY 5 FEET BY CENTER, ALONG LINEAR PLANTINGS (E.G. ROSES) WHERE DRAIN LINES ARE TIGHT TO CENTER LINE (2' PLANTS).
- PROVIDE AND INSTALL TYPICAL VALVES (NUMBERED MODEL NUMBER 700-07-01, OR EQUAL) AT THE END OF EACH DRAIN IRRIGATION LINE AS NOTED ON PLAN.
- INSTALL ONE (1) DRAIN DITCH FOR 1/4-CALIBER SIZE SPRING (1) DRAIN PARTITION PER LARGER SIZE SPRINGS AND TYPICAL FOR THE DRAIN, AND TO LOCATIONS AS NOTED ON PLAN. SPRINGS SHALL BE INSTALLED WITHIN 12 INCHES OF CENTER LINE (2' PLANTS).
- PROVIDE AND INSTALL TYPICAL VALVES (NUMBERED MODEL NUMBER 700-07-01, OR EQUAL) AT THE END OF EACH DRAIN IRRIGATION LINE AS NOTED ON PLAN.
- INSTALL ONE (1) DRAIN DITCH FOR 1/4-CALIBER SIZE SPRING (1) DRAIN PARTITION PER LARGER SIZE SPRINGS AND TYPICAL FOR THE DRAIN, AND TO LOCATIONS AS NOTED ON PLAN. SPRINGS SHALL BE INSTALLED WITHIN 12 INCHES OF CENTER LINE (2' PLANTS).
- PROVIDE AND INSTALL TYPICAL VALVES (NUMBERED MODEL NUMBER 700-07-01, OR EQUAL) AT THE END OF EACH DRAIN IRRIGATION LINE AS NOTED ON PLAN.
- CONTRACTOR SHALL VERIFY AVAILABLE STATIC WATER PRESSURE.

DATE	REVISED	BY	DESCRIPTION

RUSSELL Y. GUSH
LANDSCAPE ARCHITECT
DEPARTMENT OF PUBLIC WORKS
MILWAUKEE, WISCONSIN
TEL: 224-1111

MILWAUKEE BOARD OF PUBLIC WORKS
MILWAUKEE, WISCONSIN
TEL: 224-1111

PHASE ONE IRRIGATION LEGEND, DETAILS & NOTES

PHASE ONE IRRIGATION LEGEND, DETAILS & NOTES

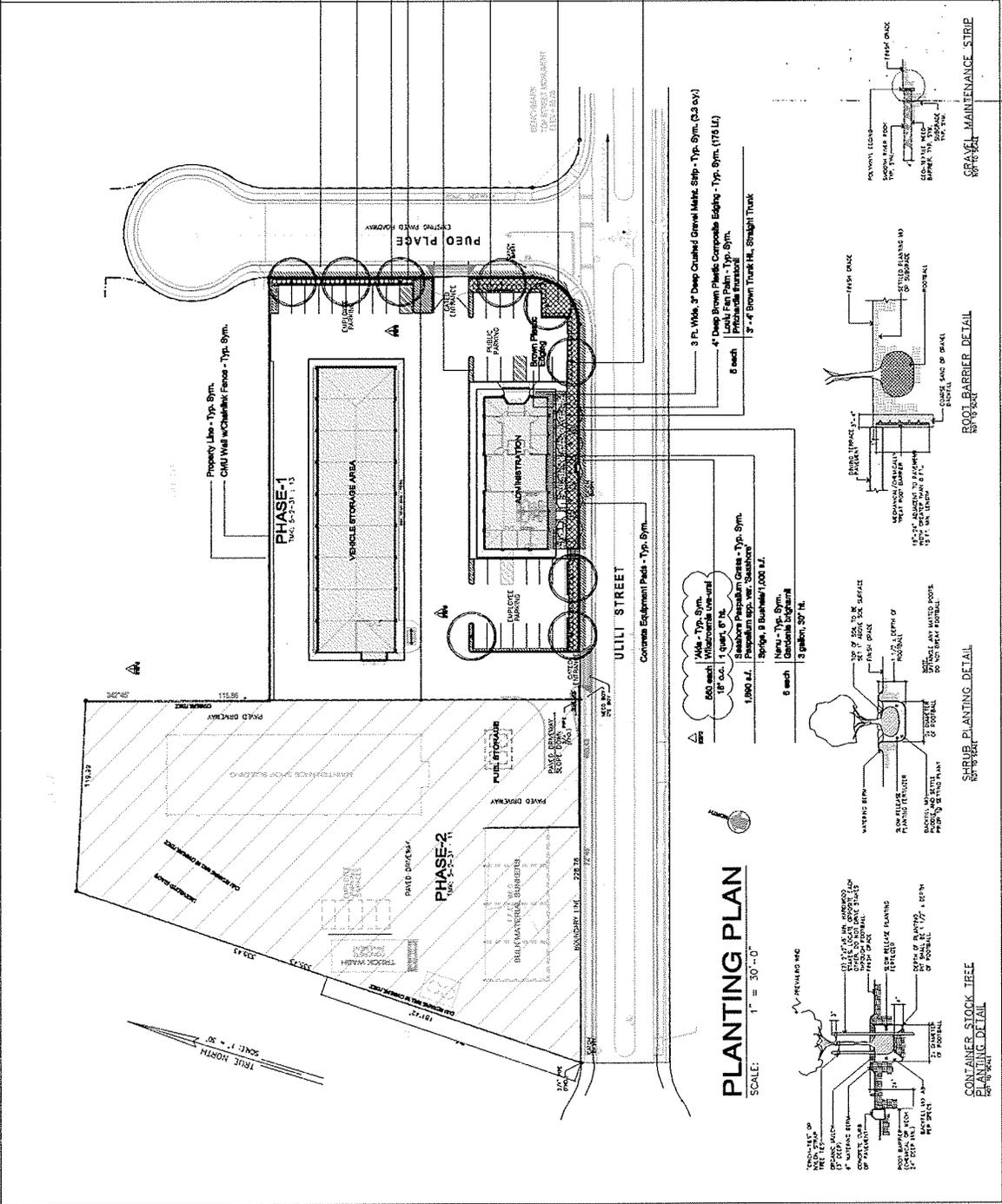
PHASE ONE IRRIGATION LEGEND, DETAILS & NOTES

PLANTING NOTES:

- CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UTILITIES AND UNDERGROUND UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF EXISTING UTILITIES AND UNDERGROUND UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF EXISTING UTILITIES AND UNDERGROUND UTILITIES.
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Planting Schedule - Typ. Sym.

- 40 each **Polestar - Typ. Sym.**
2.4' o.c. 1 gallon, 12" Ht.
- 24' Deep Road Barrier - Typ. Sym. (160 Lf)
- 3' Layer of Organic Mulch w/Weed Barrier Fabric Below - Typical (4.2 cy)
- 250 each **MMA - Typ. Sym.**
18" o.c. 1 quart 6" Ht.
- 82 each **Kochikoko - Typ. Sym.**
3.4' o.c. 1 gallon, 18" Ht.
- 2,300 sq. ft. **Island - Typ. Sym.**
18" o.c. 1 quart 6" Ht.
- 9 each **Mini - Typ. Sym.**
25' gallon, 6" Ht, 2.7' cal, 5.5' spread

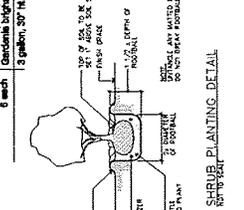
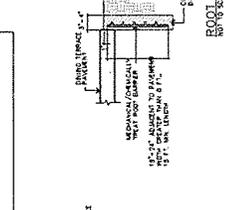
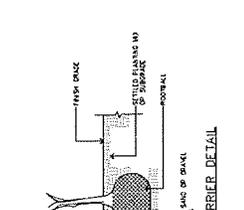
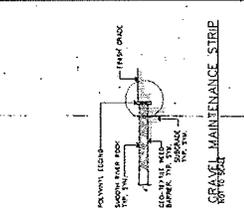


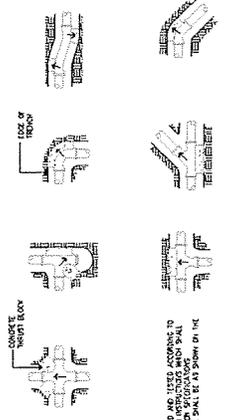
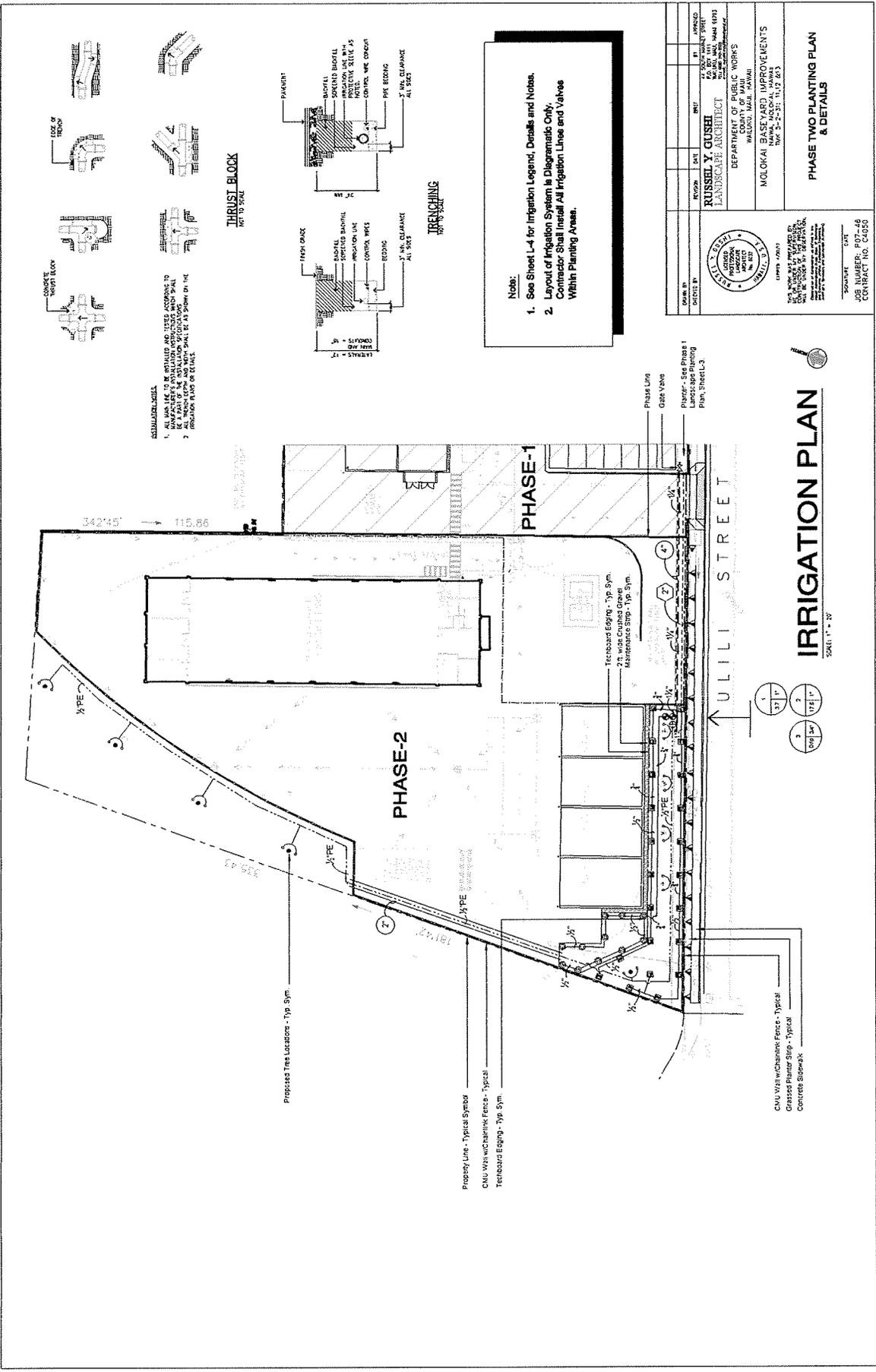
PLANTING PLAN
SCALE: 1" = 30'-0"

- 800 each **MMA - Typ. Sym.**
18" o.c. 1 quart 6" Ht.
Planting material to be installed in 1,000 sq. ft. of area.
- 8 each **Mini - Typ. Sym.**
25' gallon, 6" Ht.
- 3' P. Wide, 3" Deep Cracked Granite Mark Strip - Typ. Sym. (3.3 cy)
- 4" Deep Brown Plastic Composite Edging - Typ. Sym. (178 Lf)
- 5'-4" Brown Trunk Ht. Straight Trunk

RUSSELL Y. GUSHI
LANDSCAPE ARCHITECT
DEPARTMENT OF FIELD WORKS
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JOB NUMBER: P07-46
CONTRACT NO. C4050
SHEET L-3 OF 3 SHEETS





INSTALLATION NOTES

1. ALL MAIN LINES TO BE INSTALLED AND TESTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR IRRIGATION SHALL BE PART OF THE INSTALLATION CONTRACT.
2. EXISTING PIPES OR CEMENT SHALL BE AS SHOWN ON THE PLAN.

Notes:

1. See Sheet L-4 for Irrigation Legend, Details and Notes.
2. Layout of Irrigation System is Diagrammatic Only. Contractor Shall Install All Irrigation Lines and Valves Within Planting Areas.

DATE: 01/11/2011	BY: RYAN	NO. OF SHEETS: 3	SHEET NO.: 3
DRAWN BY: RYAN	CHECKED BY: RYAN	DATE: 01/11/2011	SCALE: 1" = 20'
RUSSELL Y. GUSHI LANDSCAPE ARCHITECT DEPARTMENT OF PUBLIC WORKS HONOLULU, HAWAII			
HONOLULU BASEYARD IMPROVEMENTS HONOLULU, HAWAII JOB NO. 32-2-31-11/2-05-3 CONTRACT NO. C4050			
PHASE TWO PLANTING PLAN & DETAILS			

IRRIGATION PLAN

SCALE: 1" = 20'

APPENDIX B.

Preliminary Civil Engineering and Drainage Report

PRELIMINARY
CIVIL ENGINEERING AND DRAINAGE REPORT
FOR
PROPOSED MOLOKAI BASEYARD IMPROVEMENTS

NAIWA, MOLOKAI, HAWAII

TAX MAP KEY: (2) 5-2-31:11, 12 & 13

PREPARED FOR:

MUNEKIYO & HIRAGA, INC.
305 HIGH STREET, SUITE 104
WAILUKU, HI 96793

PREPARED BY:



CIVIL ENGINEERING • LAND SURVEYING • CONSTRUCTION MANAGEMENT & INSPECTIONAL SERVICES

871 KOLU STREET, SUITE 201
WAILUKU, MAUI, HAWAII - 96793
JOB 11-023

JULY 2011

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I. INTRODUCTION:

The purpose of this preliminary study is to briefly assess and discuss the existing and anticipated infrastructural requirements for the development of Parcels 11 (Lot 241), 12 (Lot 242) and 13 (Lot 243) in support of an Environmental Assessment as required for development of the Molokai Baseyard. This preliminary report will also define the expected requirements for grading and Best Management Practices during site development.

II. LOCATION:

The project site is located in Naiwa, on the Island of Molokai, at the northwest corner of Ulili Street and Pueo Place intersection about 500 feet west of Maunaloa Highway. The property is designated as Parcels 11, 12 and 13 of Tax Map Key (2) 5-2-31 and has a total area of 106,905 square feet (2.454 ac.) See Figures 1, 2 and 7. The subject three (3) parcels will be consolidated into one (1) parcel prior to the completion of the project.

III. ACCESS:

A. EXISTING:

The project site is accessed from Ulili Street and Pueo Place, both of which are 56 feet wide rights-of-way under the jurisdiction of the County of Maui. Ulili Street is connected to Maunaloa Highway as show on Figure 3. The highway is under the jurisdiction of the State of Hawaii while the other thoroughfares are under the control of the County of Maui.

B. ANTICIPATED IMPROVEMENTS:

The baseyard improvements will include grading; paved parking area and associated work; construction of covered vehicle storage, administration and maintenance shop buildings; truck wash and bulk material bunkers and fuel storage facilities; perimeter walls and driveways.

IV. FLOODING HAZARD:

The site is located within Zone "X" as shown on Map No. 150030190E of the Flood Insurance Rate Map for the County of Maui as shown on Figure 4. Zone "X" is designated where the potential for flooding is minimal or where the areas were determined to be outside the 0.2% annual chances of flood plain. Hence, the proposed project does not need flood development permits as required by Chapter 19.62 of the Maui County Code.

V. SOILS AND TOPOGRAPHY:

A. SOILS:

According to the Soil Survey of Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii [2], soils at the project area are classified as very stony land, eroded (rVT2). See Figures 5 and 6. In most areas, soil material is about two (2) feet to bed rock.

B. TOPOGRAPHY:

Existing topographic map of the project is shown on Figure 7.

The project site is currently vacant and supports the growth of several noxious grasses.

Generally, the ground surface is nearly bare and slopes down from south to north at about 6.0 percent. Ground elevation ranges from about 70 to 95 feet above sea level.

VI. PROPOSED PROJECT:

The proposed site plan is shown on Figure 8. It includes covered vehicle storage area, administration and maintenance shop buildings, a truck wash area and bulk material bunkers. It also includes paved parking area containing thirty three (33) parking stalls. The parking stalls consist of four (4) spaces for persons with disabilities and 29 standard spaces. Surface improvements also include two (2) new concrete driveway aprons, one off Ulili Street and one off Pueo Place, concrete curb, signage, pavement marking, etc.

Other civil work will be for improvements to water, sewer and drainage systems. Anticipated requirements are briefly discussed in their respective sections of this report.

VII. WATER SYSTEM:

A. EXISTING:

There are existing waterlines that currently serve the project site and surrounding properties as shown on Figure 9. The existing system consists of a 12-inch waterline on Ulili Street and Pueo Place .

The project site is presently served by three water service laterals, one single service lateral located on Ulili Street serving Parcel 11 and a double service lateral located on Pueo Place serving Parcels 12 and 13 (Figure 7). All laterals are connected to the existing 12" water line.

There are four (4) existing fire hydrants (FH) across the street in front of the project site, two of which are located on Pueo Place about 220 feet apart. The other two fire hydrants are located on Ulili Street.

B. ANTICIPATED WATER REQUIREMENTS:

The domestic and fire flow requirements for the proposed project were prepared by Engineering Dynamics, Corp., the project's Mechanical Engineer. The expected water demands are 60.6 gallons per minute (gpm) and 2,250 gpm for domestic and fire flow, respectively. The domestic demand was based on the use of low-flow plumbing fixtures.

The irrigation water demand is 14.6 gpm in accordance with Landscape Irrigation Flow Calculations, prepared by Russel Y. Gushi, the project's Landscape Architect.

C. ANTICIPATED IMPROVEMENTS:

The proposed improvements include installation of two (2) 1" water meters to accommodate the projected water demand of 75.2 gpm. The two (2) 1-inch water meter that has a rated capacity of 100 gpm. See Figure 9.

Presently, the four (4) fire hydrants fronting the project site on Pueo Place and Uili Street provide fire protection for the project. All hydrants are connected to a 12-inch waterline which is sufficient to deliver the 2,250 gpm fire flow required for the proposed project. All hydrants are located across the street in front of the project site.

VIII. SEWER SYSTEM:

A. EXISTING:

There are no existing sewerlines at the project site and vicinity. An individual wastewater system (septic system, leach field, etc.) will be installed. The design of the individual wastewater system will be designed by the project's Mechanical Engineer.

B. ANTICIPATED IMPROVEMENTS:

The proposed onsite individual wastewater system is laid out on Figure 9.

IX. DRAINAGE:

A. GENERAL:

The preliminary Drainage Study, in general, is based on the requirements, formulas, charts and tables of the Rules of the Design of Storm Drainage

Facilities of the County of Maui [1] hereinafter referred to as Maui County Drainage Standards.

B. EXISTING DRAINAGE CONDITIONS:

The current drainage flow pattern is generally characterized by surface flow in a southerly direction discharging into Uili Street where the runoff is collected by the existing catch basins and then conveyed by underground culverts to an existing retention basin located about 400 feet west of the project site. A schematic of the existing drainage system is shown on Figure 12. Eventually, the runoff may be released to an unnamed drainageway (Figure 5).

C. DRAINAGE PLAN:

The existing drainage system on Uili Street and retention basin (Figure 12) was designed to handle the expected 50-year, 1-hour rainfall generated by the Industrial Park Subdivision. Based on the subdivision Drainage Report [8], the runoff coefficient ("C" factor) used in calculating the design runoff quantities was 0.70 which is lower than current County Drainage Standards. Hence, in order not to adversely impact the existing drainage facilities, we propose to retain the excess runoff volume onsite.

Based on our calculations (Exhibit A), the designed volume from the project site to be accommodated by the existing drainage system is about 15,590 cf whereas at developed condition, the new volume is approximately 18,577 cf resulting an excess volume of 2,987 cf. This excess volume will be the minimum storage capacity of the proposed onsite drainage retention basin.

The proposed drainage plan is shown on Figure 10. The drainage system primarily includes a subsurface retention basin. The basin's capacity is about 3,992 cf. The final underground retention basin will be sized to handle more than the excess volume that will be generated by the project.

The proposed drainage system also includes grated drain inlets to collect onsite runoff. The runoff will then be discharged to the existing drainage system on Ulili Street or to the retention basin via underground culverts.

D. STORM RUNOFF DISCHARGES:

Based on the preliminary calculations (Exhibit A), the project area, encompassing about 2.454 acre could generate 1-hour storm discharges as follows:

10-year runoff peak rate:

Existing = 2.31 cfs

Developed = 7.57 cfs

Increase = 5.26 cfs

50-year runoff peak rate:

Existing = 2.90 cfs

Developed = 9.83 cfs

Increase = 6.93 cfs

50-year runoff volume:

Existing = 15,590 cf

Developed = 18,577 cf

Increase = 2,987 cf

E. ANTICIPATED IMPROVEMENTS:

The Maui County Drainage Standards allows onsite retention of the additional runoff generated by the development when there is no existing drainage system or adequate outlet to connect the development's drainage system. Therefore, the planned drainage system includes a subsurface retention basin to impound the runoff volume increase that will be generated by the proposed project. The storage capacity of the retention basins must be at least equal to the 50-year, 1-hour runoff volume increase in accordance with the Maui County Drainage Standards. However, to ensure that the proposed project will not have adverse drainage effects on downstream properties and drainage facilities, the planned retention basins will be sized to retain more than the runoff volume increase.

The conceptual drainage plan will primarily consist of subsurface perforated pipes with crushed rock envelopes. It is schematically laid out on Figure 10, 14 and 14A, while the typical section is shown in Figure 15. Preliminarily, the proposed retention basin will consist of 56 linear feet of four (4) 48" perforated pipes with a combined storage capacity of about

3,992 cubic feet (cf) which is greater than the anticipated 50-year storm runoff volume increase of 2,987 cf. (See Exhibit A)

The proposed drainage system also includes grated drain inlets to collect onsite runoff; unperforated pipes to convey the runoff to the retention basin; and drain manholes.

F. OPERATION AND MAINTENANCE PLAN:

The operation and maintenance of the onsite drainage system will be handled by the owner. The recommended operation and maintenance activities will include, but not limited to:

1. Inspection of the drainage facilities annually and after major storms. Repair damages, if any. Remove debris, if any, at grated drain inlets to permit unimpeded flow.
2. Periodic inspection of the drainage system. Remove debris and sediment build-up, as required, specifically inside grated drain inlets upstream of the subsurface retention basins.
3. Preventing grass and landscape cuttings from entering the drainage system.
4. Cleaning of parking areas as often as possible to minimize the entry of debris and sediments into the drainage system.
5. Maintaining healthy growth of grass lawns and landscaping to prevent soil erosion; thereby, reducing sediments that might enter the drainage system.

G. CONCLUSION:

The proposed development will increase the existing storm runoff due to addition of impervious surfaces such as building roofs, pavement and concrete walkways. Despite the increase in runoff, the proposed development is not anticipated to create any adverse drainage effects on downstream properties and drainage facilities. The proposed drainage improvements include the impoundment of runoff volume greater than the anticipated 50-year, 1-hour runoff volume increase generated by the proposed development; thereby reducing the present storm runoff into the downstream properties. The proposed retention basin will also have the effect of reducing the potential for sediments contained in the runoff from entering neighboring properties and eventually the ocean.

The present drainage condition at the site will not be significantly altered. During high intensity storm and an overflow occurs, it will flow southward on the existing drainage system on Ulili Street or to the retention pond via underground culverts. (Figure 12)

X. GRADING AND SOIL EROSION CONTROL:

A. GRADING CONCEPT:

Grading for the proposed development area will be performed in compliance with the applicable requirements of the Maui County Grading Ordinance No. 2884 or Chapter 20.08 of the Maui County Code. The project area will be graded for the proper reception of the proposed

building, parking areas and other surface improvements. The proposed grading plan is shown on Figure 10.

Prior to commencing land disturbance activities, a grubbing and grading permit must be obtained from the Development Services Administration (DSA) of the Maui County Department of Public Works. Associated submittals for the permit application are grading plan; soil erosion control plan or Best Management Practices Plan; drainage plan; and drainage report.

B. BEST MANAGEMENT PRACTICES (BMPs):

The preliminary plan for temporary control of soil erosion and dust during site improvement is shown on Figure 11 and 11A. The BMPs will include the following:

1. Control dust by means of water trucks or by installing temporary sprinkler systems or both if necessary.
2. Graded areas shall be thoroughly watered after construction activity has ceased for the day and for weekends and holidays.
3. All exposed areas shall be paved, grassed, or permanently landscaped as soon as finished grading is completed.
4. Time of construction will be minimized.
5. Only areas that are needed for new improvements will be cleared.
6. Early construction of drainage control features.

7. Construction of pit for proposed subsurface retention basin prior to mass grading of project site. The pit will be temporarily utilized as sediment catchment during construction.
8. Installation of dust control fence surrounding the project site.
9. Installation of silt fence, gravel bag berms or other approved sediment trapping devices at the downstream side of the grading area and sediment pit.
10. Temporary control measures shall be in place and functional prior to construction and shall remain operational throughout the construction period or until permanent controls are in place.

The Contractor will also be required to submit a satisfactory soil erosion control plan to minimize soil erosion prior to an issuance of a grubbing and grading permit. Best Management Practices shall be in compliance with Section 20.08.035 of the Maui County Code (Ord. No. 2684) and "Construction Best Management Practices (BMPs) for the County of Maui" of the Department of Public Works & Waste Management, May 2001.

XI. ELECTRICITY/TELEPHONE/CATV:

There are existing overhead and underground electrical, telephone and CATV facilities along Ulili Street and Pueo Place. These facilities currently serve the nearby businesses.

Electrical/telephone/CATV services to the proposed project will be tapped from the existing nearby underground utility lines. The onsite utility services will

be installed underground and in accordance with the requirements of the respective utility companies and the County of Maui.

XII. CONSTRUCTION PLAN APPROVALS:

Approval of construction plans and appropriate permits for site grading and infrastructure improvements of the proposed project will be obtained from the Department of Public Works; Department of Environmental Management; Department of Water Supply; Fire Prevention Bureau; and State Department of Health, Wastewater Branch. The various infrastructures will be designed in compliance with the applicable requirements of these governmental agencies.

XIII. REFERENCES:

1. Rules for the Design of Storm Drainage Facilities in the County of Maui, Title MC-15, Department of Public Works and Waste Management, County of Maui, Chapter 4.
2. Construction Best Management Practices (BMPs) for the County of Maui, Department of Public Works and Waste Management, May 2001.
3. Soil Survey of Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii, prepared by U. S. Department of Agriculture, Soil Conservation Service, August 1972.
4. Erosion and Sediment Control Guide for Hawaii, prepared by U. S. Department of Agriculture, Soil Conservation Service, March 1981.
5. Rainfall-Frequency Atlas of the Hawaiian Islands, Technical Paper No. 43, U. S. Department of Commerce, Weather Bureau, 1962.
6. Flood Insurance Rate Maps for the County of Maui, June 1981.
7. Water System Standards, Department of Water Supply, County of Maui, 2002.

8. Drainage and Soil Erosion Control Report for Palaau Industrial Park - Phase I, (Subd. File No. 5.547), prepared by W. S. Unemori Engineering, Inc., May 1995.

EXHIBIT A

PRELIMINARY DRAINAGE CALCULATIONS

EXHIBIT "A"

PRELIMINARY DRAINAGE CALCULATIONS

I. REFERENCE:

"Rules for the Design of Storm Drainage Facilities in the County of Maui" [1], referred to as Maui County Drainage Standards. Plates and Tables as noted are found in the Standards.

II. METHODOLOGY:

A. Rational Method:

For drainage basins that have areas less than 100 acres, the peak discharge based on 1-hour storm will be determined by the Rational Method,

$Q = CIA$, in which:

Q = flow rate in cubic feet per second (cfs)

C = runoff coefficient for the drainage basin

I = rainfall intensity in inches per hour for a duration equal to the time of concentration

A = drainage area in acres

= 2.30 Ac.

The factors used in the application of the formula were taken from applicable tables and charts of the Maui Storm Drainage Standards.

1. Rainfall Values:

10-year, 1-hour rainfall = 2.0" (Plate 5)

50-year, 1-hour rainfall = 2.5" (Plate 8)

2. Time of Concentration, T_c: As determined from Plate 3.

Overall Project Site:

	Drainage Area A	Drainage Area B
Length of Flow	240 Ft.	380 Ft.
Average Slope	4.5%	6.0%
T _c (Existing)	9 min. (Bare Soil)	10 min.
	9 + 10 = 19 min.	
T _c (Developed Condition)	6.75 min. (Bare Soil) as an average between paved and law areas.	7.5 min.
	6.75 + 7.5 = 14.25 min.	

3. Rainfall Intensity, I: As determined from Plate 4

10-Year Storm: I = 3.35" (Existing)
= 3.70" (Developed)

50-Year Storm: I = 4.20" (Existing)
= 4.80" (Developed)

4. Runoff Coefficient, C: The runoff coefficients for the project area are as follows:

Unimproved Condition: C = 0.30 (Table 2)

Developed Condition: C = 0.17 (Lawn Area) (Table 2)
= 0.95 (Impervious Area) (Table 2)

Weighted C at Developed Conditions, C_w:

Lawn /Landscape Area = 0.17 Ac.

Impervious Area = 2.13 Ac.

$$C_w = \frac{0.17 \times 0.17 + 2.13 \times 0.95}{2.30}$$

$$= 0.89$$

III. STORM DISCHARGES CALCULATIONS:

A. Runoff Rate:

1. 10-Year, 1-Hour Storm

$$\text{Existing} = 0.30 \times 3.35 \times 2.30 = 2.31 \text{ cfs}$$

$$\text{Developed} = 0.89 \times 3.70 \times 2.30 = 7.57 \text{ cfs}$$

$$\text{Increase} = 7.57 - 2.31 = 5.26 \text{ cfs}$$

2. 50-Year, 1-Hour Storm

$$\text{Existing} = 0.30 \times 4.2 \times 2.30 = 2.90 \text{ cfs}$$

$$\text{Developed} = 0.89 \times 4.80 \times 2.30 = 9.83 \text{ cfs}$$

$$\text{Increase} = 9.83 - 2.90 = 6.93 \text{ cfs}$$

B. Runoff volume (50-year, 1-hour rainfall) are determined by using the formula:

$$\text{Volume} = \frac{1\text{-hr. Rainfall (")}}{12} \times C \times \text{Area}$$

1. Project Site Total Original Volume (V_0):

Using the existing Subdivision Drainage Report designed by W. S.

Unemori Engineering, Inc., revised May 3, 1995, Subd. File No. 5.547

$$\text{Value of C used} = 0.70$$

$$\text{50-yr., 1-hr. Rainfall} = 2.5"$$

$$\text{Project Site Area} = 106,905 \text{ s.f.}$$

Project Site Original Volume (V_o):

$$\text{Vol.} = \frac{2.5''}{12} \times 0.70 \times 106,905 \text{ (sf)}$$

$$= 15,590 \text{ cubic feet (cf)}$$

2. New Volume to be generated by development (V_n):

$$A = 2.30 \text{ Acs.}$$

$$= 100,188 \text{ s.f.}$$

$$C_w = 0.89$$

$$V_n = \frac{2.5''}{12} \times 0.89 \times 100,188$$

$$= 18,577 \text{ cf}$$

3. Excess Volume (V_e):

$$V_e = V_n - V_o$$

$$= 18,577 - 15,590$$

$$= 2,987 \text{ cf (Min. Volume to be retained onsite)}$$

IV. PROPOSED RETENTION BASIN:

A subsurface retention basin will be constructed on the site to handle the excess volume generated by the site improvement. Although, portion of the project site will be graded, it is not expected to increase the existing volume since the grading area will be grassed and there is no introduction of impervious areas at this time.

The capacity of the subsurface retention basin is about 3,992 cf which is greater than the excess volume of 2,987 cf. Thus the proposed subsurface retention basin is expected to reduce the original design volume by about 1,005 cf, calculated as follows:

$$\text{Original Design Vol., } V_o = 15,590 \text{ cf}$$

$$\text{New Volume, } V_n = 18,577 \text{ cf}$$

Post Development Vol. To Existing Drainage System (V_{POST}):

$$\begin{aligned} V_{\text{Post}} &= 18,577 - 15,590 \text{ (Subsurface Retention Basin capacity} \\ &\quad \text{before overflow)} \\ &= 2,987 \text{ cf} \end{aligned}$$

Volume Reduction (V_R):

Subsurface Retention Basin

4 - 48" diameter perforated pipe (HDPE) (Figure 15)

Total Capacity (V_c):

$$V_c = (\text{Pipe Capacity} + \text{Stone Capacity}) \times \text{Length of Pipe}$$

Where:

$$\text{Pipe Capacity} = 4\pi R^2 = 4\pi(2)^2 = 50.3 \text{ CF}$$

and:

$$\text{Stone Capacity} = (\text{Stone Void Ratio} = 35\% = 0.35;$$

$$50\% \text{ of Void Volume} = 50\% = 0.50)$$

$$= 0.50 \times [(31 \times 5.5) - 50.3] \times 0.35$$

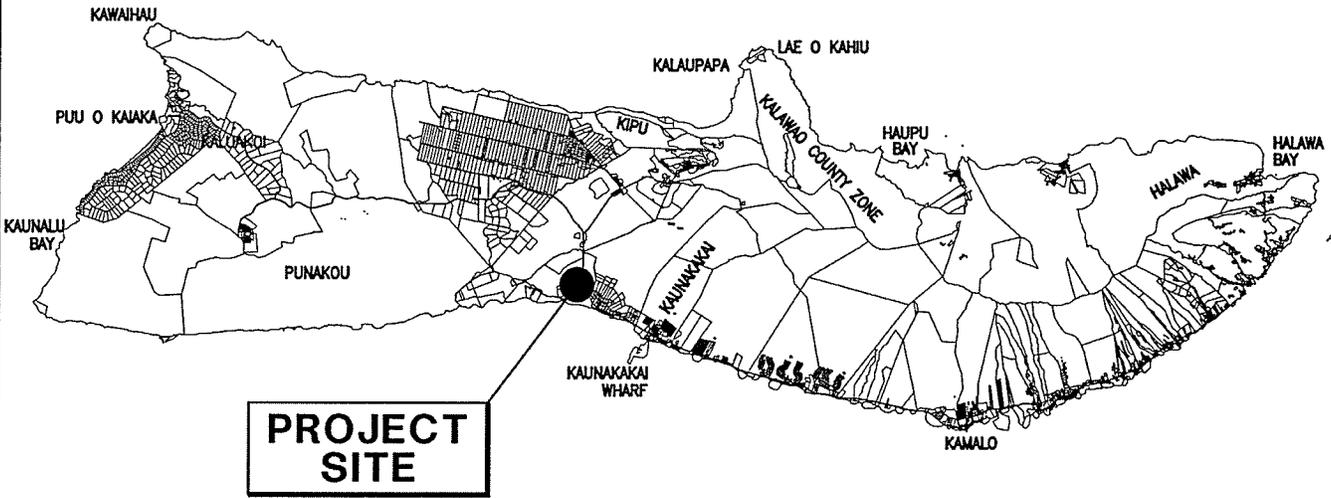
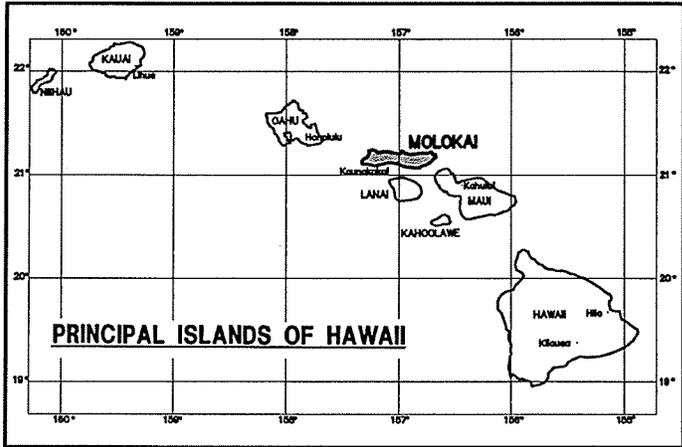
$$= 21.0 \text{ CF}$$

Total Capacity $V_C = (50.3 + 21) \times 56'$

$$V_C = 3,992 \text{ CF}$$

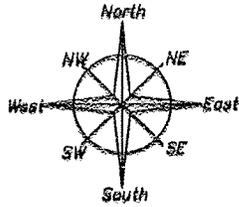
$$V_R = V_C - V_{POST} = 3,992 - 2,987 = 1,005 \text{ CF}$$

(FIG.1)
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LOCATION MAP
ISLAND OF MOLOKAI

FIGURE 1



PROJECT SITE

NOIO PLACE
PUEO PLACE

KAUNAKAKAI

ROAD

ULILI STREET

MAUNALOA HIGHWAY

TO MAUNALOA

MAUNALOA

HIGHWAY

TO KAUNAKAKAI

P A C I F I C

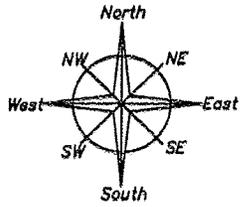
O C E A N

VICINITY MAP

NOT TO SCALE

FIGURE 2

(FIG. 2)
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PROJECT SITE

NOIO PLACE
PUEO PLACE

ULILI STREET

KAUNAKAKAI

ROAD

MAUNALO A HIGHWAY

TO MUANALOA

P A C I F I C

KEOWEA BEACH PARK

O C E A N

HOANA

MAUNALO A HIGHWAY

LIKE LIKE AVENUE

KAMANIANGI STREET

LEIWA AVENUE

LEIWA AVENUE

TO KAUNAKAKAI

STREET MAP

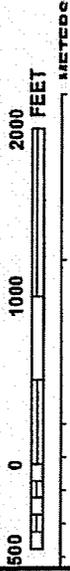
NOT TO SCALE

FIGURE 3

(FIG.3) Z:\DRAW1\2011\11-023\ENGG\REPORT EXHIBITS.dwg 18-JUL-2011 : Revised BY:Nancy



MAP SCALE 1" = 1000'



PANEL 0190E

FIRM
FLOOD INSURANCE RATE MAP

MAUI COUNTY,
HAWAII

PANEL 190 OF 825
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	MAUI COUNTY
NUMBER	150003
PANEL SUFFIX	0190 E

MAP NUMBER
1500030190E

MAP REVISED
SEPTEMBER 25, 2009

Federal Emergency Management Agency

DEPARTMENT OF LANDS & NATURAL RESOURCES
HAWAII

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

FIGURE 4

Custom Soil Resource Report
Soil Map

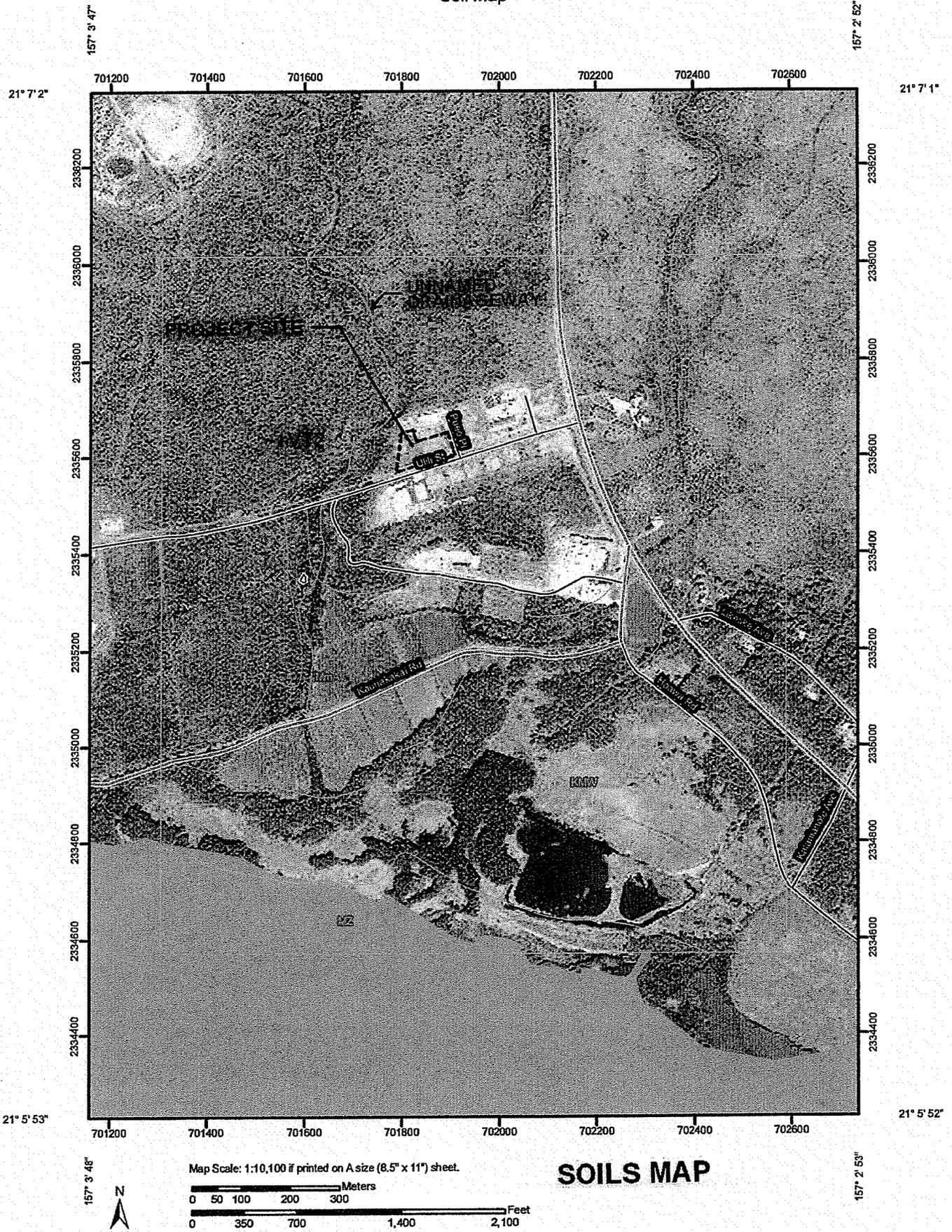
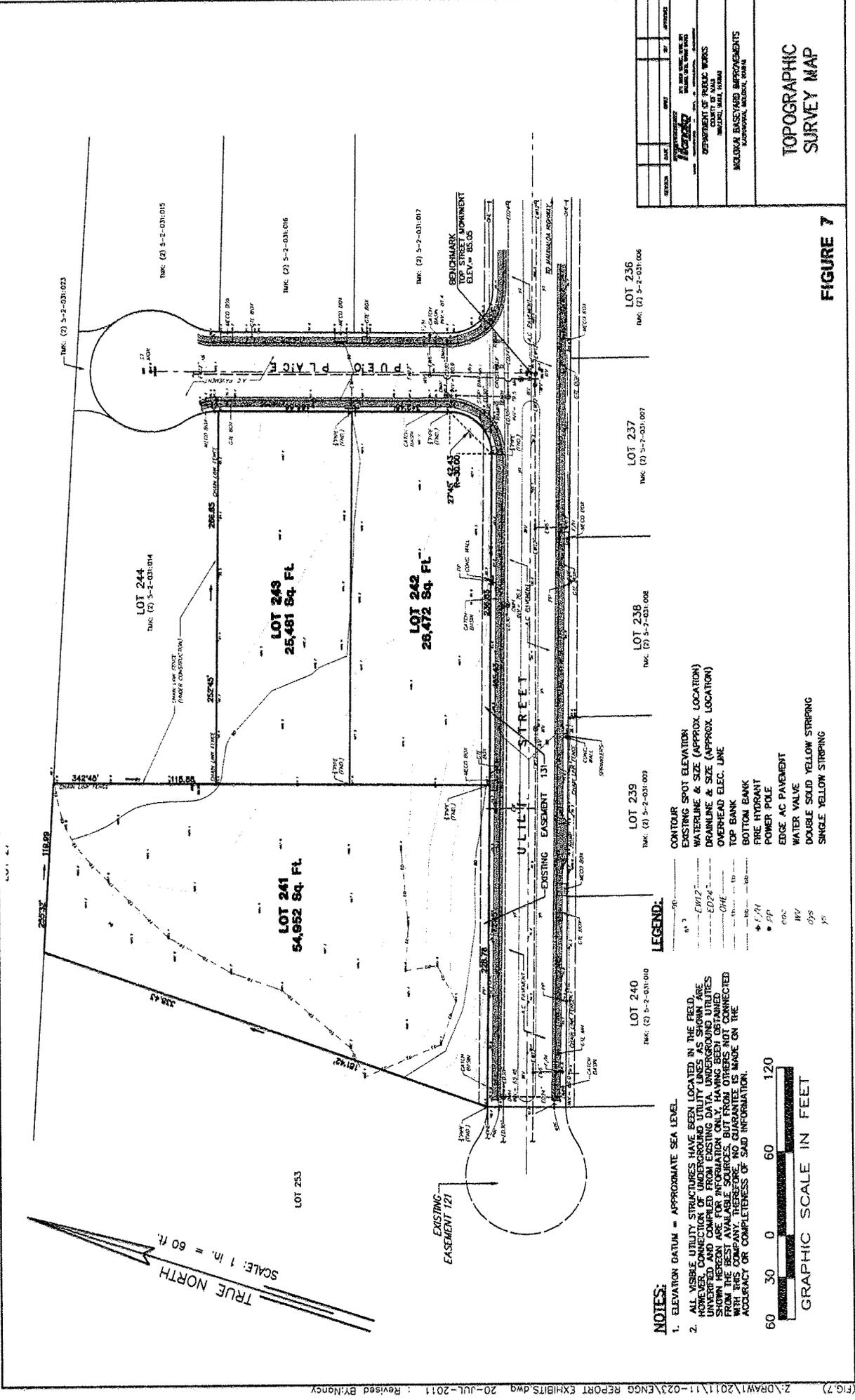
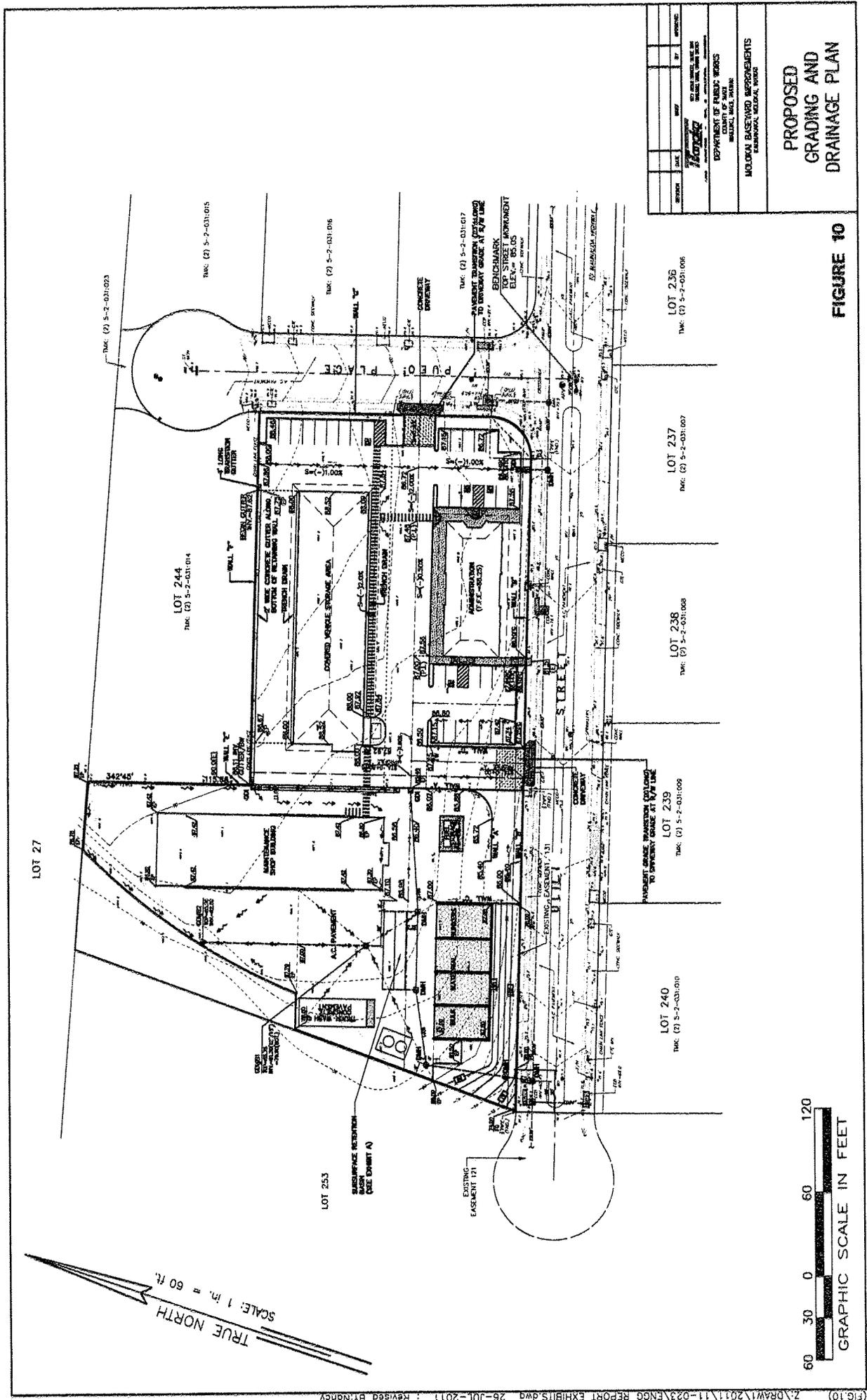


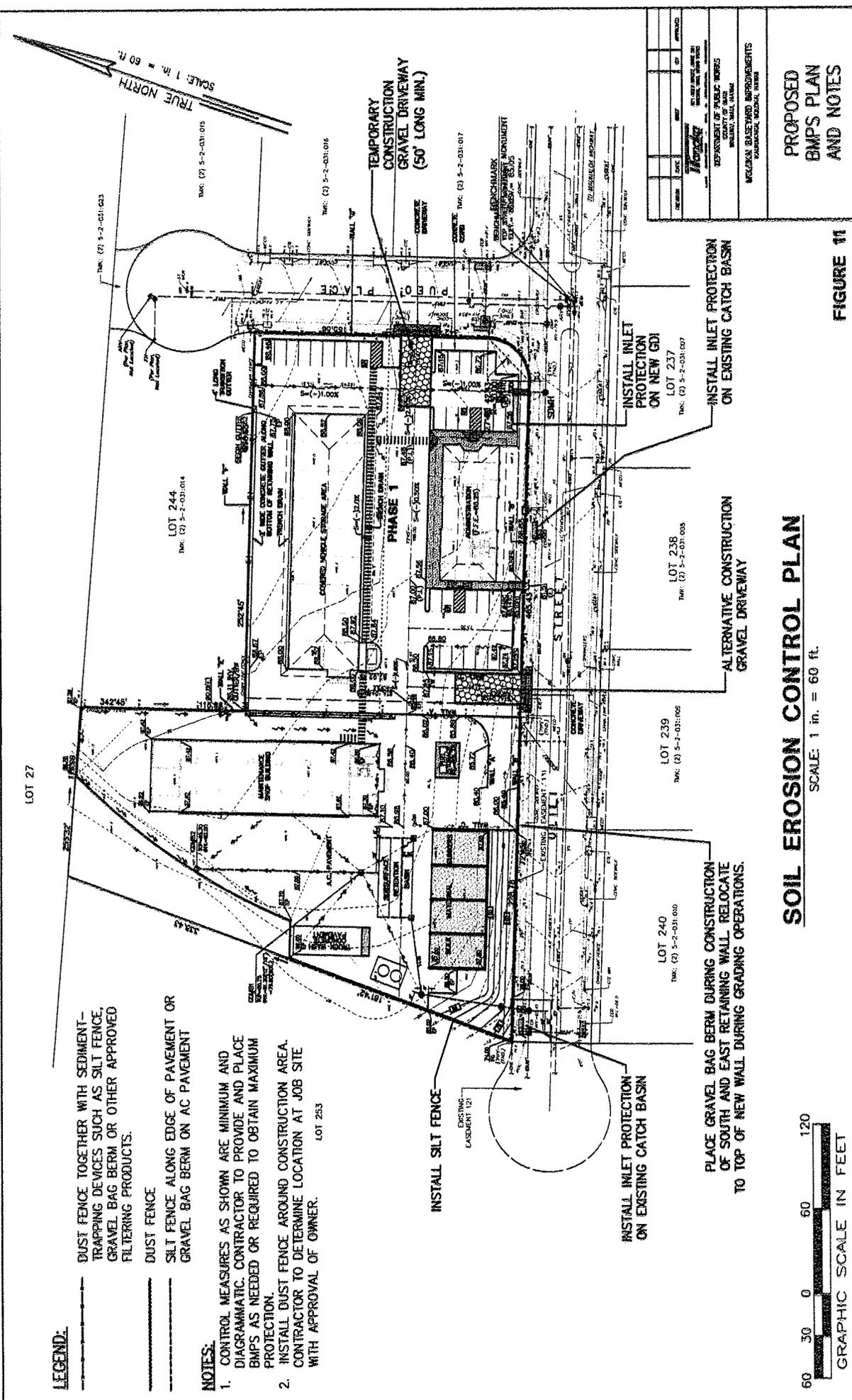
FIGURE 5

Map Unit Legend

Island of Molokai, Hawaii (HI950)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HvB3	Holomua silt loam, 3 to 7 percent slopes, severely eroded	8.0	1.3%
KMW	Kealia silt loam	112.7	18.3%
MmA	Mala silty clay, 0 to 3 percent slopes	66.4	10.8%
MZ	Marsh	43.0	7.0%
rRK	Rock land	5.9	1.0%
rVT2	Very stony land, eroded	379.4	61.7%
Totals for Area of Interest		615.3	100.0%







LEGEND:

- DUST FENCE TOGETHER WITH SEDIMENT-TRAPPING DEVICES SUCH AS SILT FENCE, GRAVEL BAG BERM OR OTHER APPROVED FILTERING PRODUCTS.
- DUST FENCE
- SILT FENCE ALONG EDGE OF PAVEMENT OR GRAVEL BAG BERM ON AC PAVEMENT

NOTES:

1. CONTROL MEASURES AS SHOWN ARE MINIMUM AND DIAGRAMMATIC. CONTRACTOR TO PROVIDE AND PLACE BMPs AS NEEDED OR REQUIRED TO OBTAIN MAXIMUM PROTECTION.
2. INSTALL DUST FENCE AROUND CONSTRUCTION AREA. CONTRACTOR TO DETERMINE LOCATION AT JOB SITE WITH APPROVAL OF OWNER.

SOIL EROSION CONTROL PLAN

SCALE: 1 in. = 60 ft.



DATE	BY	APP'D

CONSULTING ENGINEER
Hydro
 DEPARTMENT OF PUBLIC WORKS
 COUNTY OF HAWAII
 HONOLULU, HAWAII
 POLYMER BASED IMPROVEMENTS
 LABORATORY, HONOLULU, HAWAII

**PROPOSED
BMPs PLAN
AND NOTES**

FIGURE 11

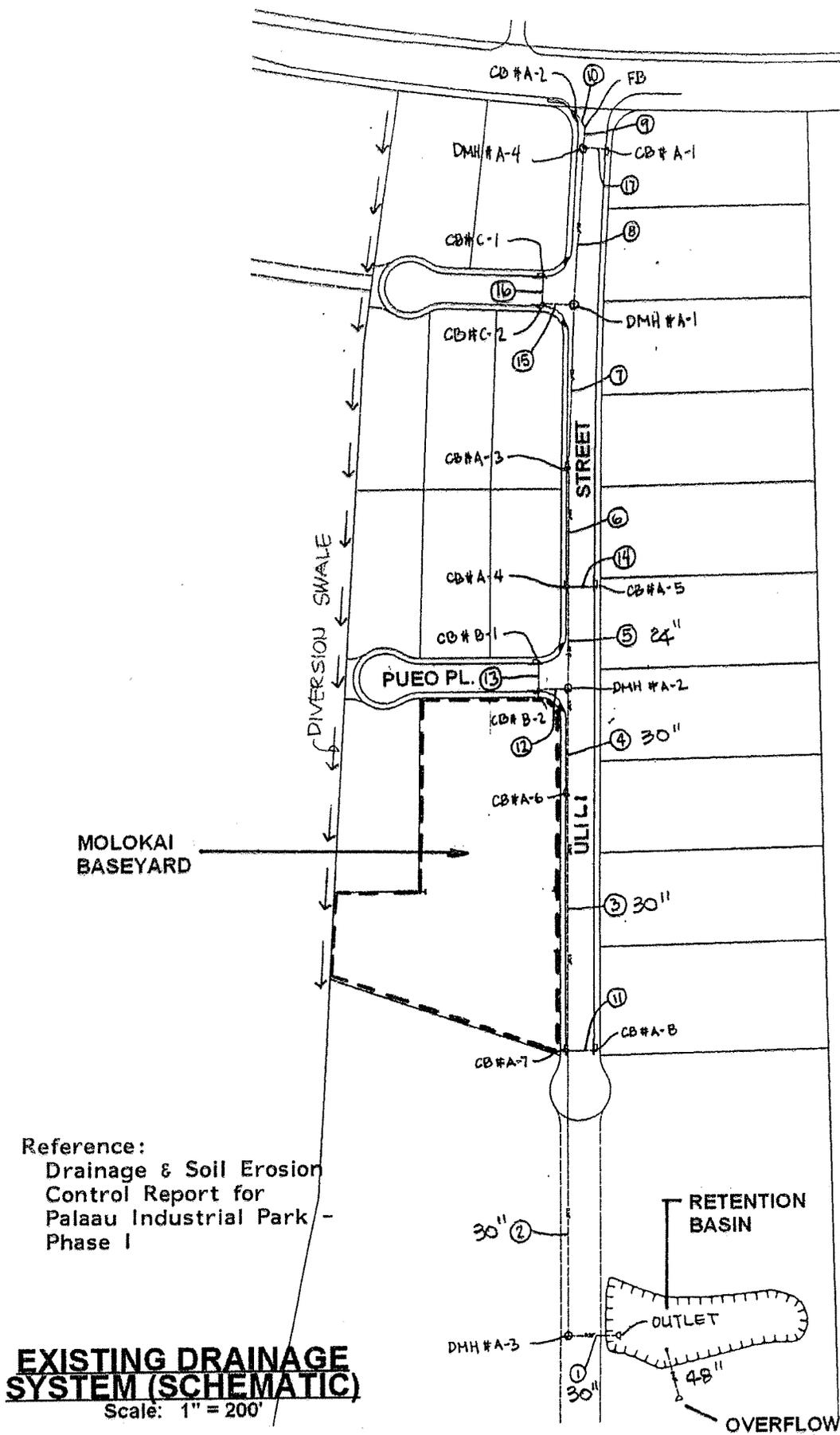
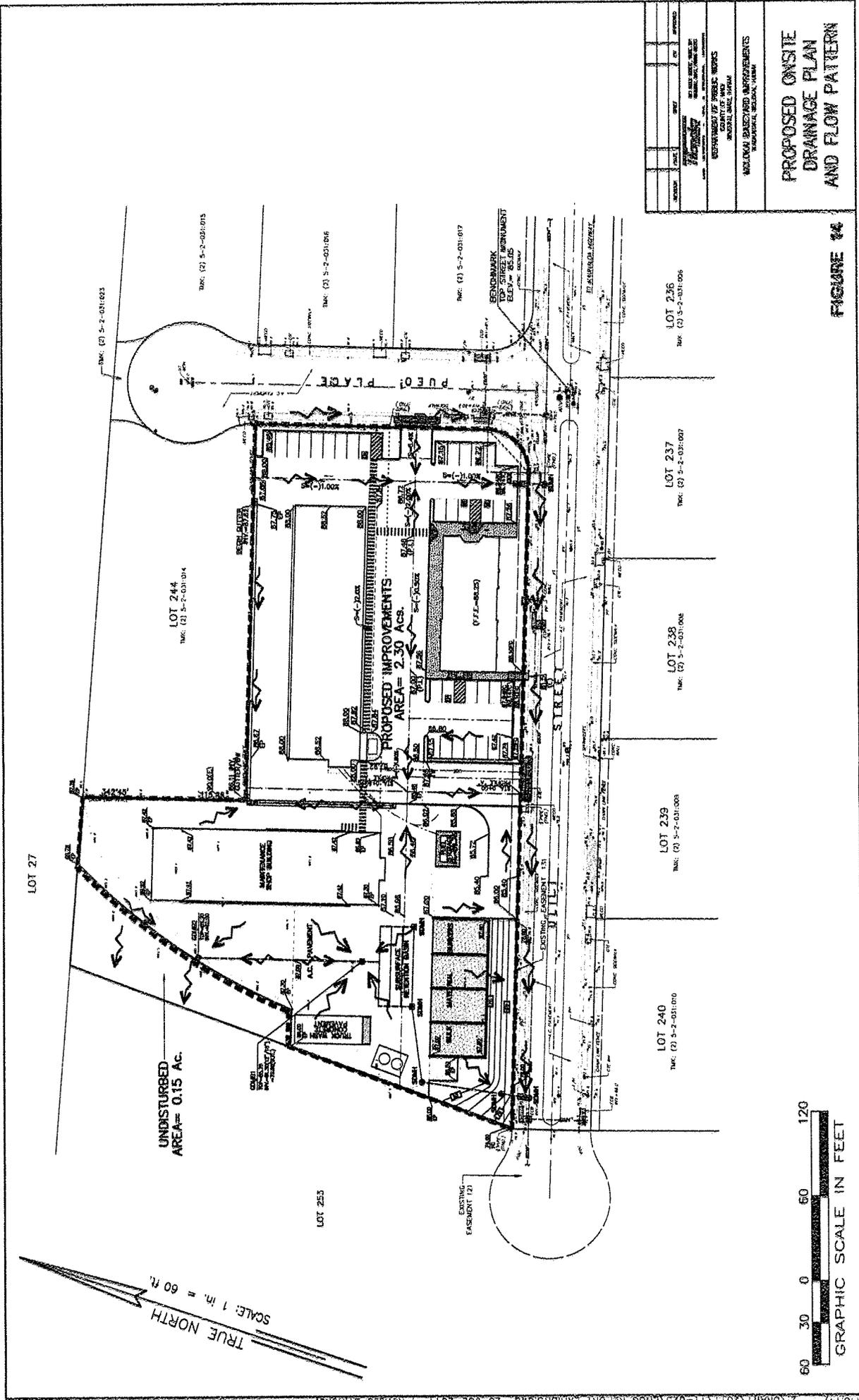


FIGURE 12



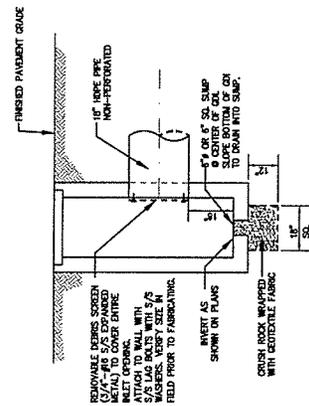
DATE	BY	CHK	APP

DEPARTMENT OF PUBLIC WORKS
 DIVISION OF STREETS AND SANITATION
 100 SOUTH MAIN STREET
 BOSTON, MASSACHUSETTS 02109

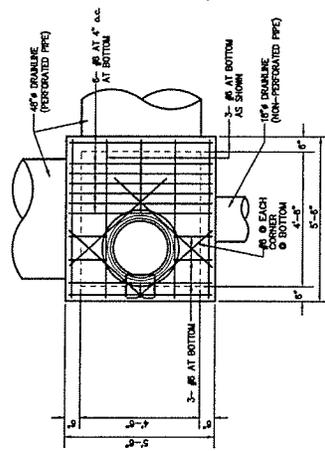
**PROPOSED ON-SITE
 DRAINAGE PLAN
 AND FLOW PATTERN**

FIGURE 14



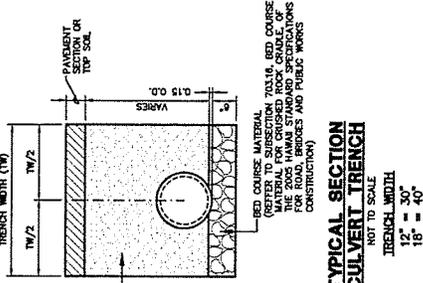


SECTION - GDI #B1
NOT TO SCALE

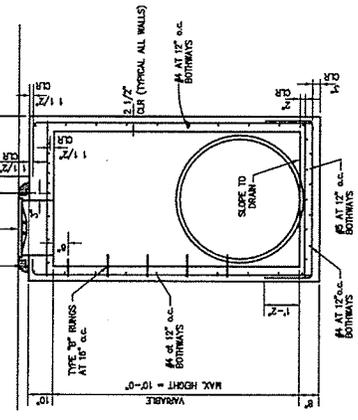


PLAN

- NOTES:**
1. TOP SLAB COULD BE PRE-CAST AT CONTRACTOR'S OPTION. REFER TO DET. D-13 FOR REINFORCING AT PIPES AND CORNERS.
 2. SEE DPW STD. DET. D-13 FOR REINFORCING AT PIPES AND CORNERS. NOT TO BE INSTALLED OVER A PIPE CONNECTION AND THE LOWEST RING SHALL NOT BE MORE THAN 2'-0\"/>
 - 3. CONNECTION AND THE LOWEST RING SHALL NOT BE MORE THAN 2'-0\"/>

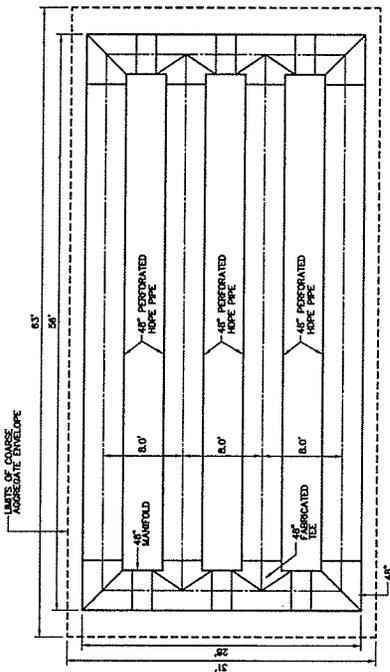


TYPICAL SECTION CULVERT TRENCH
NOT TO SCALE
TRENCH WIDTH
12\"/>

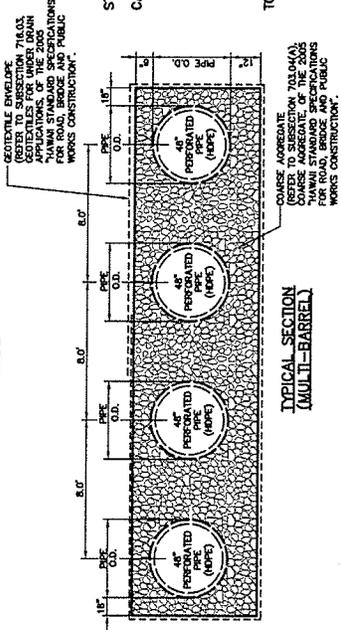


SECTION

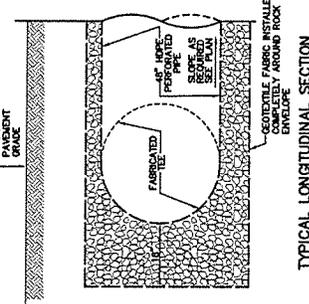
DETAIL - SDMH TYPE 2
(MODIFIED SHALLOW DRAIN MANHOLE FOR PAVEMENT AREA, DPW STD. DET. D-18)
NOT TO SCALE



PLAN



TYPICAL SECTION (MULTI-BARREL)



TYPICAL LONGITUDINAL SECTION

DETAIL - SUBSURFACE RETENTION BASIN
NOT TO SCALE

NOTE:
TO INSURE PROPER SUBMIT LAYOUT AND MATERIALS LIST TO INDICATOR TO BE PROVIDED TO THE CONTRACTOR. PROVIDE ALL PIPE FITTINGS AS NECESSARY. MATERIALS SHALL BE OF SAME MANUFACTURER.
AREA = 831.31'
= 1.943 S.F.
= 0.04 Acres

STONE VOID RATION = 35% = 0.35
CAPACITY PER LEAF FOOT:
PIPE CAPACITY = 4 T.M.
= 50.3 CF
STONE CAPACITY: SIZE OF VOID VOLUME
= 0.50 x (30x30) = 50.3x0.35
= 21.0 CF
CAPACITY/AF = 50.3+21.0
= 71.3
TOTAL CAPACITY = 71.3x56 = 3,992 CF

RECORD	DATE	BY	APPROVED
DEPARTMENT OF PUBLIC WORKS COUNTY OF HAWAII HONOLULU, HAWAII			
MOLOKAI BASEYARD IMPROVEMENTS HANA, MOLOKAI, HAWAII			
PROPOSED RETENTION BASIN MISCELLANEOUS DETAILS			

FIGURE 15

APPENDIX C.

**Department of Land and
Natural Resources, State
Historic Preservation Division
Letter Dated May 31, 2011**

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

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

GUY KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAN
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
KAUOOLAWA ISLAND RESERVE COMMISSION
LAND
STATE PARKS

March 31, 2011

Bert Ratte, Civil Engineer
County of Maui, DWP-DSA
Via fax to: (808) 270-7972

LOG NO: 2011.0610
DOC NO: 1103MD76
Archaeology

Dear Mr. Ratte:

**SUBJECT: Chapter 6E-8 Historic Preservation Review –
G&G 2011/0015, WTP 2011/0007, B 2011/0186-0188, Molokai Baseyard
Nā'iwa Ahupua'a, Moloka'i District, Island of Moloka'i
TMK: (2) 5-2-031:011-013**

Thank you for the opportunity to comment on the aforementioned project, which we received on March 4, 2011. Our review is based on reports, correspondence, maps and aerial photographs kept on file at the State Historic Preservation Division.

A search of our records indicates that the land of these parcels was previously graded during development of the Moloka'i Industrial Park subdivision. We previously reviewed an earlier grading permit application for this project and determined that no historic properties will be affected (*Log No. 24433, Doc No. 9911SC09*).

Based on the above information we determine that there will be **no effect to historic properties** by this project. In the event that historic properties, including concentrations of artifacts, human skeletal remains, subsurface cultural deposits, lava tubes, 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,

A handwritten signature in black ink, appearing to read "Morgan E. Davis".

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

Cc:

County of Maui, Department of Planning via fax to: (808) 270-7634
Maui County CRC, Department of Planning, 250 S. High Street, Wailuku, Hawaii 96793