

Section 106 Consultation  
Publication Form

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JUL 08 2016

**Project Name:** Nāpili Pump Station and Force Main Replacement Project

**Island:** Maui

**District:** Lahaina District

**TMK:** (2)4-2-004:048 (por.), 059 (por.), (2)4-3-005:037, (2)4-3-009:098,  
(2)4-3-016:017, and (2)4-4-001:094

**Permits:** N/A

**Applicant or Proposing**

**Agency:**

State of Hawaii, Department of Health, Environmental Division, Wastewater Branch

919 Ala Moana Boulevard, Room 309

Honolulu, Hawaii, 96814

Contact & Phone: Ms. Sue Liu, (808) 586-4294

**Approving**

**Agency:**

State of Hawaii, Department of Health, Environmental Division, Wastewater Branch

Contact & Phone: Ms. Sue Liu, (808) 586-4294

**Consultant:**

**Status: Comments due no later than August 7, 2016 to:**

919 Ala Moana Boulevard, Room 309

Honolulu, Hawaii, 96814

Attn: Ms. Sue Liu

Email: [wwb@doh.hawaii.gov](mailto:wwb@doh.hawaii.gov)

**Summary:**

The Department of Health (DOH) initiated Section 106 of the NHPA consultation with the State Historic Preservation Division (SHPD) in accordance with 36 CFR Part 800. In 1990, the U.S. Environmental Protection Agency (EPA) designated the DOH to act on EPA's behalf, pursuant to 36 CFR §800.2 (c) (4), when initiating Section 106 of the NHPA process in connection with projects funded under the Hawaii Clean Water State Revolving Fund (CWSRF).

The DOH is providing funding under the CWSRF to the County of Maui's (County), Department of Environmental Management (DEM) for the Nāpili Pump Station and Force Main Replacement Project. The proposed project will utilize federal funding and is considered an undertaking, as defined by Section 106 of the NHPA, 54 U.S.C. §306101 et seq., and 36 CFR Part 800.

The proposed project includes modifications to the County's Nāpili Wastewater Pump Stations (WWPS) Nos. 1 to 6 and replacement of the existing force mains that connect the individual pump stations to the gravity sewer system. The proposed actions will be located at Nāpili Pump Station Nos. 1 to 6, identified by Tax Map Keys (2)4-4-001:094, (2)4-3-009:098, (2)4-3-005:037, (2)4-3-016:017, (2)4-2-004:048 (por.), and (2)4-2-004:059 (por.), respectively, and within the Lower Honoapiʻilani Road right-of-way, owned by the County.

The DOH has engaged SHPD to determine the presence of potential sites of historic importance within the vicinity of the project area as well as the potential impact of the project on such sites, if present.

DAVID Y. IGE  
GOVERNOR OF HAWAII



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JUL 08 2016

VIRGINIA PRESSLER, M.D.  
DIRECTOR OF HEALTH

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

In reply, please refer to  
File

54-44 S106 ltr

June 22, 2016

Mr. Alan S. Downer, Administrator  
State Historic Preservation Division  
601 Kamokila Boulevard, Suite 555  
Kapolei, Hawai'i 96707

Dear Mr. Downer:

SUBJECT: National Historic Preservation Act, Section 106 Consultation  
Nāpili Pump Station and Force Main Replacement Project  
Honokahua Ahupua'a, District of Lāhainā, Island of Maui  
TMK Nos.: (2)4-2-004:048 (por.), 059 (por.), (2)4-3-005:037,  
(2)4-3-009:098, (2)4-3-016:017, and (2)4-4-001:094

On behalf of the U.S. Environmental Protection Agency (EPA), the State of Hawai'i, Department of Health, Wastewater Branch would like to invite you to participate in consultation for the Nāpili Pump Station and Force Main Replacement project, proposed by the County of Maui's (County), Department of Environmental Management (DEM).

The proposed project includes modifications to the County's Nāpili Wastewater Pump Stations (WWPS) Nos. 1 to 6 and replacement of the existing force mains that connect the individual pump stations to the gravity sewer system. The proposed actions will be located at Nāpili Pump Station Nos. 1 to 6, identified by Tax Map Keys (2)4-4-001:094, (2)4-3-009:098, (2)4-3-005:037, (2)4-3-016:017, (2)4-2-004:048 (por.), and (2)4-2-004:059 (por.), respectively, and within the Lower Honoapi'ilani Road right-of-way, owned by the County. **See Exhibit "A"**. The DEM will be coordinating all Special Management Area and Hawai'i Revised Statutes, Chapter 343 Environmental Assessment requirements with the County Departments of Planning and Public Works, respectively.

The proposed project will utilize federal funding through the Clean Water State Revolving Fund Program and is considered a federal action and undertaking, as defined by Section 106 of the National Historic Preservation Act (NHPA) of 1966, as

Mr. Alan S. Downer, Administrator  
State Historic Preservation Division  
June 22, 2016  
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defined by Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (2006). Therefore, compliance with applicable requirements of the NHPA is required for the project. The EPA has authorized the State of Hawai'i, Department of Health to act on its behalf regarding the NHPA Section 106 notification and consultation process. This letter is intended to initiate Section 106 consultation with the State Historic Preservation Division (SHPD) in accordance with Title 36, Code of Federal Regulations, Section 800.3.

### **Project Overview**

As previously discussed, the subject project includes modifications to the County's Nāpili WWPS Nos. 1 to 6 and replacement of the existing force mains that connect the individual pump stations. The proposed actions will be located at Nāpili Pump Station Nos. 1 to 6, identified by Tax Map Keys (2)4-4-001:094, (2)4-3-009:098, (2)4-3-005:037, (2)4-3-016:017, (2)4-2-004:048 (por.), and (2)4-2-004:059 (por.), respectively, and within the Lower Honoapi'ilani Road right-of-way, owned by the County.

### **Historical, Cultural, and Archaeological Background**

The project area is located along the northwestern coast of the island of Maui, approximately 200-275 feet inland from the coastline and at elevations between 50-80 feet above mean sea level on portions of land adjacent to the east and west sides of Lower Honoapi'ilani Road. The project site is situated in the Honokahua Ahupua'a, in the District of Lāhainā.

The Archaeological Monitoring Plan (AMP) prepared for the WWPS Nos. 5 and 6 components of the proposed project stated that the traditional district (or moku) of Kā'anapali, where the project area is located, consisted of five (5) major stream valleys (Honokōwai, Kahana, Honokahua, Honolua, and Honokōhau), all of which were extensively terraced for wet taro in early historic and later times. The AMP is included herein as **Exhibit "B"**.

An 1831 census estimated the population of the Kā'anapali district to be 2,982 people. Five (5) years later, the population was reduced to less than half, presumably due to introduced diseases. Refer to **Exhibit "B"**.

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State Historic Preservation Division  
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Whaling was the first commercial enterprise in Lāhainā, but it had collapsed by the 1860s. Commercial sugar cane production was the next large capitalist venture in West Maui, starting as early as 1863. The project area is located at the edge of previous sugar cane enterprises. This area was an important center of commercial ranching and, subsequently, pineapple production. Refer to **Exhibit “B”**.

In the late 19th century, lands in West Maui became part of the Campbell Estate, and the Honolua Ranch was established. Cattle ranching was continued by Henry Perrine Baldwin, who later acquired the lands from the Campbell Estate. In addition to ranching, other early commercial activities included coffee farming. Refer to **Exhibit “B”**.

David T. Fleming became manager of Honolua Ranch in the early 1910's. Mr. Fleming was well-versed in pineapple production and gradually began shifting the ranch's initiative to pineapple production. As a result, a major commercial pineapple industry emerged in West Maui during the 1920s. The plantation communities of Honokahua and Nāpili were established and further developed as pineapple operations grew. The population of the Lāhainā area increased with the successful economic operations of the pineapple plantation. Refer to **Exhibit “B”**.

In 1962, Baldwin Packers merged with Maui Pineapple Company to form Maui Land and Pineapple Company, Inc. As a result, a majority of the Honolua Ranch lands were converted for resort development, a process that continues to this day. Refer to **Exhibit “B”**.

### **Summary of Archaeological Sites within the Area of Potential Effect (APE)**

The Area of Potential Effect (APE) was established based upon the proposed alignment of the project that will be evaluated for impact to historic sites. Refer to **Exhibit “A”**.

The AMP covering the land affected by one (1) segment of the proposed project (WWPS Nos. 5 and 6) was completed by Scientific Consultant Services, Inc. in 2015. This AMP covers all anticipated ground disturbing subsurface activities associated with the force main replacement project in the area of WWPS Nos. 5 and 6. Based on the findings of previous archaeological studies conducted in the vicinity, it was determined that the project area has the potential for yielding intact or previously disturbed cultural materials including, human skeletal remains; Pre-Contact

Mr. Alan S. Downer, Administrator  
State Historic Preservation Division  
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Traditional-type, and Plantation Era cultural deposits in subsurface context. Thus, a program of Archaeological Monitoring was recommended to be conducted within the vicinity of the project area in order to identify, document, and record any historic properties inadvertently identified, and to provide appropriate mitigation methods, as necessary. The AMP was reviewed and accepted by the SHPD via letter dated December 24, 2015. Refer to **Exhibit "B" and Exhibit "B-1"**.

The AMP for WWPS Nos. 5 and 6 noted the following for the Archaeological Monitoring Program based on all available background information:

1. There is a low probability of the inadvertent finding of intact or previously disturbed traditional Native Hawaiian burials.
2. There is a low to moderate probability of finding subsurface evidence of traditional Native Hawaiian activities including: hearths, postholes, midden deposits, and other occupation debris (e.g., stone tool waste, discarded fishing gear).
3. There is a moderate to high probability of finding subsurface evidence of encountering Historic Plantation Era cultural materials associated with agricultural and habitation activities.

The AMP was prepared in accordance with the SHPD administrative rules and governing standards for Archaeological Monitoring, Hawai'i Administrative Rules (HAR) Section 13-279. The firm conducting the archaeological monitoring program will use the guidelines outlined in the AMP during monitoring implementation phase of the project. Refer to **Exhibit "B"**.

It is noted that archaeological monitoring is likewise anticipated to be required for the remainder of the project alignment (WWPS Nos. 1-4). As such, AMPs will be prepared for the remaining segments of the proposed project's alignment and will be submitted to SHPD for review and acceptance.

Archaeological Monitoring Reports documenting the project findings and interpretation, following SHPD guidelines for archaeological monitoring reports, will be submitted to SHPD within 180 days of the completion of the work covered under each AMP. If cultural features or deposits are identified during fieldwork, the sites will

Mr. Alan S. Downer, Administrator  
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be evaluated for historical significance and assessed under State and Federal Significance Criteria.

### **Consultations**

Section 106 consultation activities are being initiated via this letter.

Section 106 consultation letters have been sent out to the following organizations and individuals:

Aha Moku O Maui Inc.  
Friends of Moku'ula, Inc.  
Kuloloi'a Lineage – I ke Kai 'o Kuloloi'a  
Na Aikane O Maui  
Nekaifes Ohana  
Office of Hawaiian Affairs  
Lahaina Hawaiian Civic Club  
Department of Hawaiian Home Lands  
Hawaii Maoli  
Historic Hawaii Foundation  
Hui Malama I Na Kupuna O Hawaii Nei  
Hui O Waa Kaulua  
Kuleana Kuikahi  
Lahaina Restoration Foundation  
Lahaina Honolua-Senior Citizens Club  
Maui County Cultural Resources Commission  
Maui/Lanai Island Burial Council  
Na Kupuna O Maui  
State Historic Preservation Division

We welcome any comments you may have on this proposed project. We are particularly interested in any information you may have on the historic and cultural sites that have been recorded in the area or any other historic or cultural sites about which you may have knowledge. In addition, if you are acquainted with any person or organization that is knowledgeable about the proposed project area, or any descendants with ancestral lineal or cultural ties to or knowledge or concerns for, and cultural or religious attachment to the proposed project area, we would appreciate receiving their names and contact information.

Mr. Alan S. Downer, Administrator  
State Historic Preservation Division  
June 22, 2016  
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Please provide any written comments you may have within 30 days from the date of this letter. Please address any written comments you may have to the following:

Sue S. Liu, Environmental Engineer  
State of Hawaii  
Department of Health, Wastewater Branch  
919 Ala Moana Boulevard, Room 309  
Honolulu, Hawai'i 96814

We appreciate your assistance with this request. Should you have any questions, please feel free to contact Bryan Esmeralda of Munekiyo Hiraga at (808) 244-2015.

Sincerely,



SINA PRUDER, P.E., CHIEF  
Wastewater Branch

SL:lmj

Attachments

cc: Albert Hahn, County of Maui, Department of Environmental Management  
Alan Unemori, Warren S. Unemori Engineering, Inc.  
Sheila Uyeoka, HDR, Inc.  
Mike Dega, Scientific Consultant Services, Inc.  
Bryan Esmeralda, AICP, Munekiyo Hiraga

**SECTION 106 CONSULTATION LIST FOR PROPOSED  
NĀPILI PUMP STATION AND FORCE MAIN REPLACEMENT PROJECT**

- |     |   |     |   |
|-----|---|-----|---|
| 1.  | Mr. Ke'eaumoku Kapu<br>Chief Executive Officer<br><b>Aha Moku o Maui Inc.</b><br>P.O. Box 11524<br>Lāhainā, Hawai'i 96761   | 11. | <b>Hui Malama I Na Kupuna O Hawaii Nei</b><br>P.O. Box 365<br>Hoolehua, Hawai'i 96729   |
| 2.  | Ms. Blossom Feiteira<br>Executive Director<br><b>Friends of Moku'ula, Inc.</b><br>505 Front Street, Suite 221<br>Lāhainā, Hawai'i 96761                                   | 12. | <b>Hui O Waa Kaulua</b><br>525 Front Street<br>Lāhainā, Hawai'i 96761   |
| 3.  | Mr. Leslie Apiu Aipalena Kuloloio<br>Kupunakāne<br><b>Kulolo'i'a Lineage – I ke Kai 'o Kulolo'i'a</b><br>469 Ma'alo Street<br>Kahului, Hawai'i 96732                      | 13. | Kuleana Kuikahi<br>P.O. Box 11524<br>Lāhainā, Hawai'i 96761   |
| 4.  | Ms. Uilani Kapu<br>Treasurer<br><b>Na Aikane O Maui</b><br>562A Front Street<br>Lāhainā, Hawai'i 96761  | 14. | Theo Morrison, Executive Director<br><b>Lahaina Restoration Foundation</b><br>120 Dickenson Street<br>Lāhainā, Hawai'i 96761  |
| 5.  | Ms. Maraëa K. Nekaifes<br><b>Nekaifes Ohana</b><br>212 Hiipali Loop<br>Kula, Hawai'i 96790-7273   | 15. | May Fujiwara<br><b>Lahaina Honolulu-Senior Citizens Club</b><br>P.O. Box 1086<br>Lāhainā, Hawai'i 96761   |
| 6.  | Dr. Kamana'opono M. Crabbe, Ph.D.<br>Ka Pouhana, Chief Executive Officer<br><b>Office of Hawaiian Affairs</b><br>560 N. Nimitz Hwy., Suite 200<br>Honolulu, Hawai'i 96817 | 16. | <b>Maui County Cultural Resources Commission</b><br>c/o County of Maui, Department of Planning<br>2200 Main Street, Suite 315<br>Wailuku, Hawai'i 96793                       |
| 7.  | <b>Lahaina Hawaiian Civic Club</b><br>P.O. Box 10965<br>Lāhainā, Hawai'i 96761  | 17. | Kapulani Antonio, Chair<br><b>Maui/Lanai Island Burial Council</b><br>c/o State Historic Preservation Division<br>601 Kamokila Boulevard, Suite 555<br>Kapolei, Hawai'i 96707 |
| 8.  | Jobie Masagatani, Chair<br><b>Department of Hawaiian Home Lands</b><br>P.O. Box 1879<br>Honolulu, Hawai'i 96805   | 18. | Patty Nishiyama<br><b>Na Kupuna O Maui</b><br>320 Kaeo Place<br>Lāhainā, Hawai'i 96761  |
| 9.  | Maile Alau, Executive Director<br><b>Hawaii Maoli</b><br>P.O. Box 3866<br>Honolulu, Hawai'i 96812   | 19. | Alan S. Downer, Administrator<br><b>State Historic Preservation Division</b><br>601 Kamokila Boulevard, Suite 555<br>Kapolei, Hawai'i 96707                                   |
| 10. | Kiersten Faulkner, Executive Director<br><b>Historic Hawaii Foundation</b><br>680 Iwilei Road, Suite 690<br>Honolulu, Hawai'i 96817                                       | 20. | Morgan Davis<br><b>State Historic Preservation Division – Maui</b><br>130 Mahalani Street<br>Wailuku, Hawai'i 96793   |

## **EXHIBIT A.**

### **Area of Potential Effect (APE) Maps**



Source: Google Earth and Warren S. Unemori Engineering, Inc.

# Nāpili Wastewater Pump Station and Force Main Replacement Project

## Overall Area of Potential Effect Map



Prepared for: State of Hawai'i, Department of Health





**KEY**  
 Area of Potential Effect

**WWPS No. 1  
 TMK (2)4-4-001:094**



**Nāpili Wastewater Pump Station and Force Main  
 Replacement Project**  
 Area of Potential Effect Map - WWPS No. 1 Component

Source: Google Earth and Warren S. Unemori Engineering, Inc.

Prepared for: State of Hawai'i, Department of Health



W:\UE\Napili 5.6 WWPS FM\Applications\Figures\APE-WWPS1



Source: Google Earth and Warren S. Unemori Engineering, Inc.

# Nāpili Wastewater Pump Station and Force Main Replacement Project

## Area of Potential Effect Map - WWPS No. 2 Component



Prepared for: State of Hawai'i, Department of Health

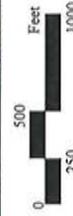




Source: Google Earth and Warren S. Unemori Engineering, Inc.

# Nāpili Wastewater Pump Station and Force Main Replacement Project

## Area of Potential Effect Map - WWPS No. 3 Component



Prepared for: State of Hawai'i, Department of Health





Source: Google Earth and Warren S. Unemori Engineering, Inc.

# Nāpili Wastewater Pump Station and Force Main Replacement Project

## Area of Potential Effect Map - WWPS No. 4 Component



Prepared for: State of Hawai'i, Department of Health





# Nāpili Wastewater Pump Station and Force Main Replacement Project

## Area of Potential Effect Map - Force main No. 5 and No. 6 Components



Prepared for: State of Hawai'i, Department of Health



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## **EXHIBIT B.**

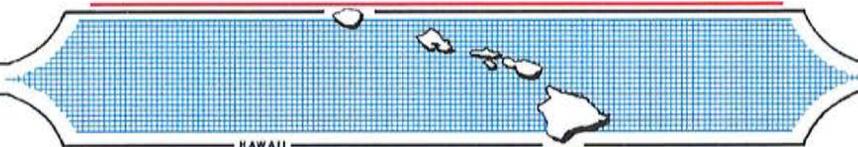
### **Archaeological Monitoring Plan for WWPS Nos. 5 and 6 Component**

**AN ARCHAEOLOGICAL MONITORING PLAN  
FOR THE NAPILI No. 5 & 6 WWPS FORCE MAIN REPLACEMENT  
HONOKAHUA AHUPUA`A, LĀHAINĀ (KĀ`ANAPALI) DISTRICT,  
ISLAND OF MAUI, HAWAII**  
[TMK (2) 4-2-04: portion of 48 (Lot 3-A-1 of Kapalua Makai Subdivision No. 4) and  
TMK (2) 4-2-04: portion of 59 (Lot A-1-A-2 of Kapalua Development (Large-Lot)  
Subdivision)]

Prepared by:  
**Cathleen A. Dagher, B.A.**  
and  
**Michael F., Dega, Ph.D.**  
December 2015  
**FINAL**

Prepared for:  
**Warren S. Unemori Engineering, Inc.**  
2145 Wells St, Suite 403  
Wailuku, HI 96793

**SCIENTIFIC CONSULTANT SERVICES Inc.**



1347 Kapiolani Blvd., Suite 408 Honolulu Hawai'i 96814

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## INTRODUCTION

Scientific Consultant Services, Inc. (SCS) has prepared this Archaeological Monitoring Plan (AMP) in advance of ground-altering activities associated with the Napili No. 5 & 6 WWPS Force Main Replacement Project located in Honokahua Ahupua`a, Lāhainā (Kā`anapali) District, Island of Maui, Hawai`i. The Napili Pump Station No. 5 is associated with TMK: (2) 4-2-04: portion of 48 (Lot 3-A-1 of Kapalua Makai Subdivision No. 4) and the Napili Pump Station No. 6 is associated with TMK (2) 4-2-04: portion of 59 (Lot A-1-A-2 of Kapalua Development (Large-Lot) Subdivision) (Figures 1-3). The Napili Pump Station 5 area is owned by Maui Land and Pineapple Company while the Napili Pump Station 6 area is owned by the Kapalua Resort Association.

This County of Maui project entails replacing the aging force mains for both Napili No. 5 and No. 6 Wastewater Pump Stations (WWPS). The Napili No. 5 force main starts at the Napili No. 5 WWPS just off Lower Honoapiilani Road and daylights at a transition force main at the intersection of Lower Honoapiilani Road and Napili Place. The existing Napili No. 6 force main was installed by Kapalua Utilities Company through part of their private parcel (fronting the existing tennis courts), and is shown within the confines of Lower Honoapiilani Road, which is where the current force main will be routed. The Napili No. 6 WWPS was transferred from Kapalua Resort to the County of Maui (WWRD) in 1986. Note that Lower Honoapiilani Road is currently a County of Maui Right-of-Way (ROW). It was transferred from the Hawaii-Department of Transportation (HDOT) to the County when the upper portion of Honoapiilani Highway was constructed to extend to the main entrance of the Kapalua Resort.

This AMP covers all ground disturbing subsurface activities associated with the force main replacement project. A program of Archaeological Monitoring is being conducted due to the potential for the inadvertent discovery of pre- and post-Contact cultural materials, including human skeletal remains and cultural deposits, in subsurface strata.

This AMP has been written in accordance with the rules of the State Historic Preservation Division (SHPD) and will ensure that if human skeletal remains are identified during subsurface work, appropriate and lawful protocol concerning the inadvertent discovery of human remains (pursuant to Hawaii Administrative Rules (HAR) §13-300-40a, b, c), is followed. This AMP will also ensure that if cultural deposits are identified, the work will satisfy reporting requirements outlined in HAR §13-279-5(5) through (6). The following text provides more



Figure 1: USGS Topographic (Napili 1997; 1:24,000) Map Showing Project Area Location.

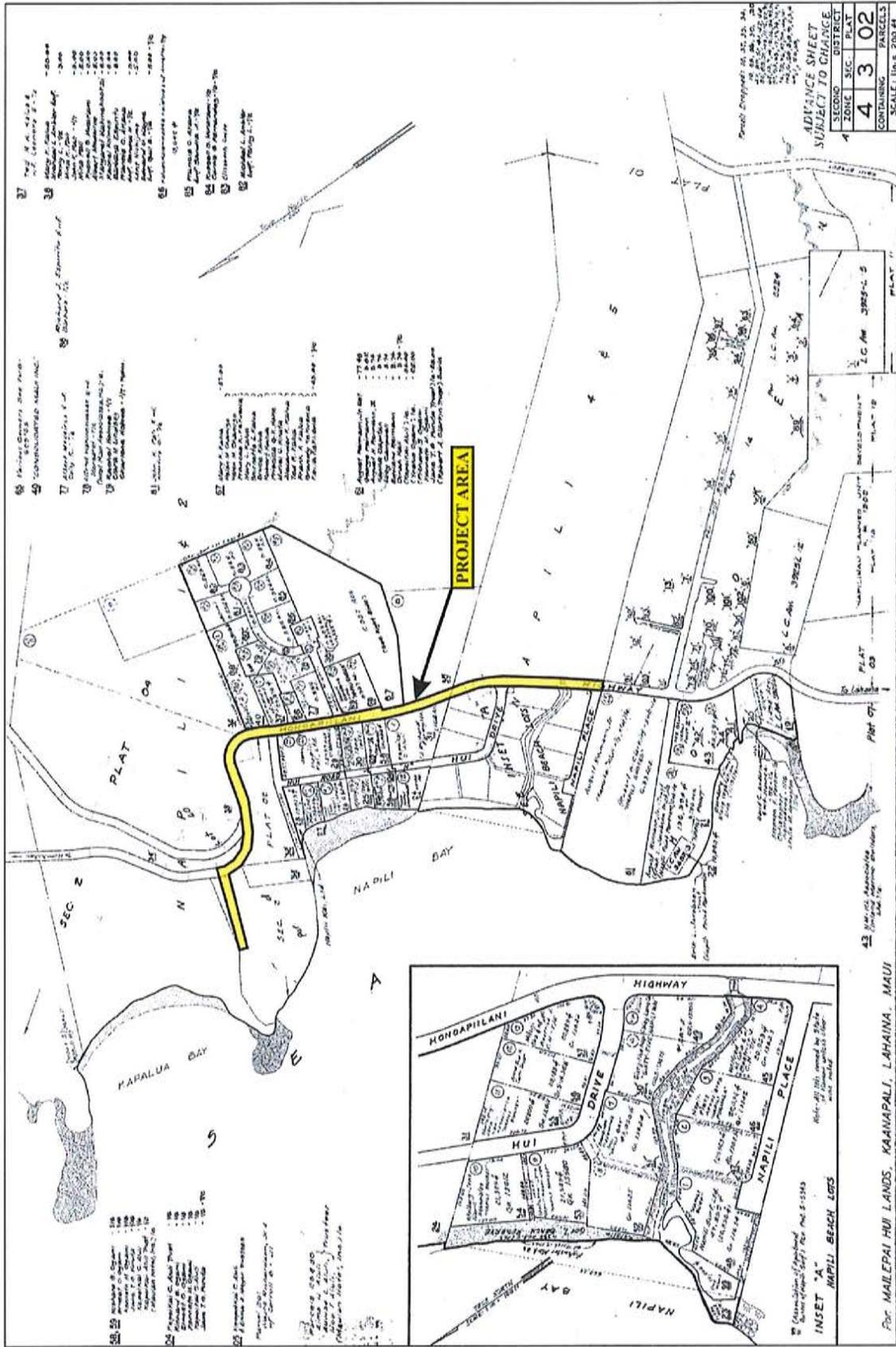


Figure 2: Tax Map Key Showing Project Area Location.



Figure 3: Google Earth Satellite Image Showing Project Area Location.

detailed information on the reasons for monitoring, potential site types to be encountered during excavation, monitoring conventions, and methodology.

## **ENVIRONMENTAL SETTING**

### **PROJECT AREA LOCATION**

The project area is located along the northwestern coast of the island of Maui, approximately 200-275 feet inland from the coastline and at a variable c. 50-80 feet above mean sea level (amsl) on portions of lands adjacent to the east and west flanks of Lower Honoapiilani Road (see Figures 1-3). The Napili No. 5 force main starts at the Napili No. 5 WWPS just off Lower Honoapiilani Road and daylights at a transition force main at the intersection of Lower Honoapiilani Road and Napili Place. The existing Napili No. 6 force main occurs on the private Kapalua Utilities Company parcel near the current tennis courts.

### **PROJECT AREA SOILS**

According to Foote *et al.* (1972: Maps 91 & 92) the project area is primarily associated with the Kahana Series, specifically Kahana silty clay (KbB, KbC; Figure 4). These are well-drained soils in upland Maui derived from the in situ weathering of igneous rocks. Often associated with sugar cane and pineapple cultivation, as well as home sites, they carry a distinctive profile: dark reddish brown silty clay c. 14 inches thick, with a 50 inch subsoil composed of dark reddish brown silty clay. Saprolitic bedrock/bedrock occur beneath the soil layers. The only difference between the two types of Kahana silty clays (KbB and KbC) are that the former occurs on 3-7% slopes while the latter on 7-15% slopes. Also occurring in the area are patches of rough stony lands (rRS), which are comprised of steep, stony gulches with soil deposits less than 20 inches thick overlying bedrock and stones covering 2 to 3 percent of the ground surface.

### **CLIMATE**

Temperatures in this portion of Maui range from the high 50 degrees Fahrenheit, during the winter months, to the high 90 degrees Fahrenheit in the summer (Armstrong *et al.* 1980: 64). According to Giambelluca *et al.* (2013), mean rainfall in the project area averages 41.4 inches annually. Typically, most with most of this rainfall occurs during the winter months, between November and March (Armstrong *et al.* 1980:62).

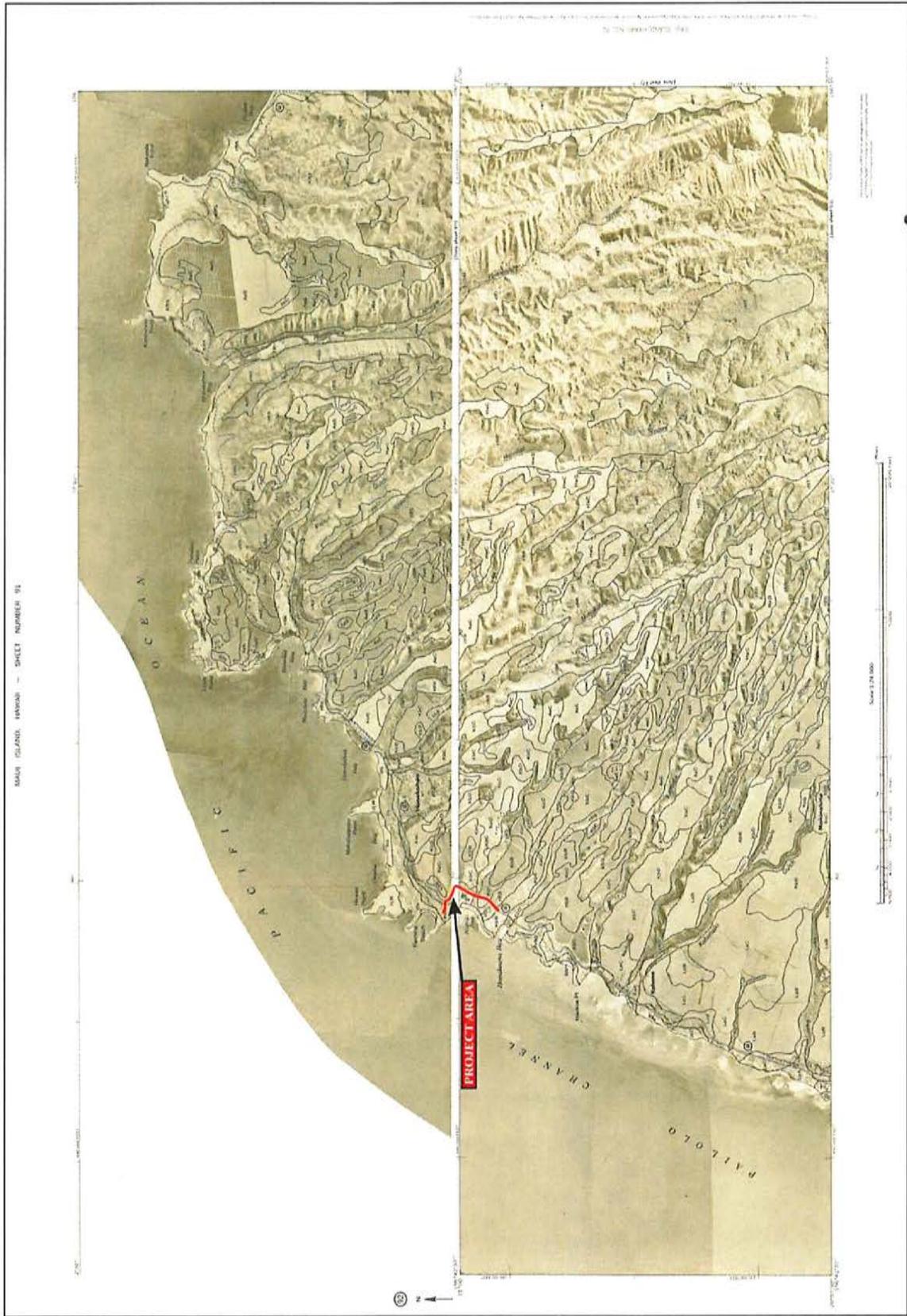


Figure 4: USDA Soil Survey Map (Foote *et al.* 1972: Sheet 91&92) Showing Soil Types within and near Project Area.

## VEGETATION

As the project area is located within and near built environments, vegetation primarily consists of secondary growth and decorative biota. Plants within/near the project area include *koa haole* (*Leucaena leucocephala*), coconut (*Cocos nucifera*), papaya (*Carica* sp.), *Pothos* sp., *Hibiscus rosa-sinensis*, banana (*Musa* sp.), Octopus tree (*Schefflera actinophylla*), Cook's pine (*Araucaria columnaris*), and various grasses.

## CULTURAL HISTORICAL CONTEXT

The island of Maui ranks second in size of the eight main islands in the Hawaiian Archipelago. Pu'u Kukui, forming the west end of the island (1,215m above mean sea level), is composed of large, heavily eroded amphitheater valleys that contain well-developed permanent stream systems that watered fertile agricultural lands extending to the coast. The deep valleys of West Maui Mountains and their associated coastal regions have been witness to many battles in ancient times and were coveted productive landscapes.

## PAST POLITICAL BOUNDARIES

Traditionally, the division of Maui's lands into districts (*moku*) and sub-districts was performed by a *kahuna* (priest, expert) named Kalaiha'ōhia, during the time of the *ali'i* Kaka'alaneo (Beckwith 1940:383; Fornander places Kaka'alaneo at the end of the 15<sup>th</sup> century or the beginning of the 16<sup>th</sup> century [Fornander 1919-20, Vol. 6:248]). Land was considered the property of the king or *ali'i ai moku* (the *ali'i* who eats the island/district), which he held in trust for the gods. The title of *ali'i ai moku* ensured rights and responsibilities pertaining to the land, but did not confer absolute ownership. The king kept the parcels he wanted, his higher chiefs received large parcels from him and, in turn, distributed smaller parcels to lesser chiefs. The *maka'āinana* (commoners) worked the individual plots of land.

In general, several terms, such as *moku*, *ahupua'a*, *'ili* or *'ili'āina* were used to delineate various land sections. A district (*moku*) contained smaller land divisions (*ahupua'a*) which customarily continued inland from the ocean and upland into the mountains. Extended household groups living within the *ahupua'a* were therefore, able to harvest from both the land and the sea. Ideally, this situation allowed each *ahupua'a* to be self-sufficient by supplying needed resources from different environmental zones (Lyons 1875:111). The *'ili'āina* or *'ili* were smaller land divisions next to importance to the *ahupua'a* and were administered by the chief who controlled the *ahupua'a* in which it was located (*ibid*:33; Lucas 1995:40). The *mo'o'āina* were narrow strips of land within an *'ili*. The land holding of a tenant or *hoa'āina*

residing in a *ahupua`a* was called a *kuleana* (Lucas 1995:61). The project area is located in the *ahupua`a* of Honokahua, which translated literally means “sites bay” (Pukui *et al.*:163).

### TRADITIONAL SETTLEMENT PATTERNS

The Hawaiian economy was based on agricultural production and marine exploitation, as well as raising livestock and collecting wild plants and birds. Extended household groups settled in various *ahupua`a*. Traditionally, there were primarily two types of agriculture, wetland and dry land, both of which were dependent upon geography and physiography. River valleys provided ideal conditions for wetland *kalo* (*Colocasia esculenta*) agriculture that incorporated pond fields and irrigation canals. Other cultigens, such as *kō* (sugar cane, *Saccharum officinarum*) and *mai`a* (banana, *Musa* sp.), were also grown and, where appropriate, such crops as *uala* (sweet potato, *Ipomoea batatas*) were produced. This was the typical agricultural pattern seen during traditional times on all the Hawaiian Islands (Kirch and Sahlins 1992, Vol. 1:5, 119; Kirch 1985). Between A.D. 600 and A.D. 1100, sometimes referred to as the Developmental Period, the major focus of permanent settlement continued to be the fertile and well-watered windward valleys, such as those in the West Maui Mountains (Kirch 1985).

A general settlement model based on archaeological evidence has been suggested for the Kā`anapali District (Chapman and Kirch 1979; Kirch 1985). This model includes coastal marine foraging and fishing with more upland agricultural pursuits. In typical native Hawaiian fashion, dating at least from the later pre-Contact period (if not earlier), people in this area would have moved between the coast and the upland agricultural fields, exploiting the full range of resources available within their *ahupua`a*. Semi-permanent and permanent habitation probably occurred in both coastal and upland settings.

There are six bays located on Maui’s west shore whose names begin with the word *hono*. These bays and coves are collectively known as *Hono a Pi`ilani* (the bays beginning with Hono, ruled by Kihapi`ilani), which referred to a vision predicting the prominence of Kihapi`ilani over his brother, Lonoapi`ilani in ruling Maui in the early 1600s (Clark 1980; Cordy 2000; Manu 1884 in Sterling 1998). Kapalua is situated along this coast between Honokahua and Honokeana. The coastal and marine environments adjacent to the project area would have provided rich resources for traditional subsistence foragers and fishermen in ancient times.

Early archaeological surveys identified seven religious shrines (*heiau*) from Mahinahina to Honokōhau Ahupua`a (Thrum 1909; Walker 1931). The closest *heiau* reported near the

project area by these early surveys was located in Honokahua Ahupua`a (Kahauiki Heiau, Walker Site No. 16). *Heiau* often indicate the presence of political power and the appropriate population to support it.

Traditionally, trails extended from the coast to the mountains, linking the two for both economic and social reasons. Kā`anapali District is noted for an *alaloa* (a path or trail) that reportedly encircled the entire island. Traditional accounts attribute the construction of this trail to the *ali`i* Pi`ilani in the early 1500s. Following the death of Pi`ilani, the construction of the trail was completed by Kiha-a-Pi`ilani, son of Pi`ilani (Ashdown 1970:5). Walker (cited in Sterling 1998:46) wrote:

The north end of Maui also is traversed by a paved trail. Sections of it can be seen from Honolua to Honokohau to Kahakuloa. It is paved with beach rocks and has a width of four to six feet... This trail is also spoken of as the Kihapiilani Trail.

A large *luakini heiau* (*heiau* for human sacrifice) that was only built by paramount chiefs, was reportedly located on a cliff on the east side of Honokōhau Valley, some 60 m above the seashore (Honokōhau Ahupua`a, east of the Honokahua Burial Site). Most significantly, Kamakau (in Sterling 1998:55) reported oral history accounts of a ‘death pit’ at ‘Waiuli’ (also Honokōhau Ahupua`a), near Honokōhau and Honolua, into which dead commoners from Lahaina to Kahakuloa, as well as Moloka`i, were thrown. He said:

Waiuli was a death pit wherein the dead bodies of commoners were thrown. . . . At Waiuli directly back of Honokohau, Honolua, and Honokahua is a deep pit which was used as a burial place for bodies of the common people from Lahaina to Kahakuloa. The body of anyone from those regions who died on Moloka`i [*and Lanai*] was brought back and thrown into that pit. . .

A *ko`a* (fishing shrine, Walker Site No. 17), located “[*makai*] to Honolua Park along the shore” (Honolua Ahupua`a), was described by Walker (Sterling 1998:53). He also reported oral history accounts of a *hōlua* (slide or sledding ramp) at Honolua Ahupua`a that was destroyed by the time of his survey (1920s–30s) by commercial agriculture.

Kamakau recounts the results of a war between Kauhi-pumai-kahoaka (or Kauhi-`aimoku-a-Kama) and Kamehameha-nui in 1735, both children of Kekaulike. Alapa`i of Hawai`i Island had joined forces with Kamehameha-nui and a year was spent preparing for the

war “which swept the country” (Kamakau 1961:74). Alapa`i tactics included drying up some of the main streams, which in turn dried up the brooks and taro patches. This reduced food not only for Kahui’s forces, but also the *maka`āinana*. His fighting force consisted of 8,440 warriors from all of the six districts of Hawai`i Island (*ibid*). Honokahua and Honolulu Bays north of the project area became the gathering place for the forces of Peleioholani who had arrived from O`ahu with only 640 men to assist Kauhi. While attempting to unite its warriors with those of Kauhi, Peleioholani became surrounded by the army of Alapa`i. Kamakau (1961:73-74) recorded:

The hardest fighting, even compared with that of Napili and at Honokahua in Ka`anapali, took place on the day of the attack at Pu`unēnē [in Honolulu]. Pele-ioholani was surrounded on all sides, *mauka* and *makai*, by the forces of Alapa`i, led by Ka-lani-`opu`ū and Keoua. The two ruling chiefs met there again, face to face, to end the war and became friends again, so great had been the slaughter on both sides.

Fornander (1969:142) stated:

The fortune of the battle swayed back and forth from Honokawai to near into Lahaina; and to this day heaps of human bones and skulls, half buried in various places in the sand, attest the bitterness of the strife and the carnage committed...

## EARLY HISTORIC

The traditional district of Kā`anapali, where the project area is located, consisted of five major stream valleys (Honokōwai, Kahana, Honokahua, Honolulu, and Honokōhau), all of which were extensively terraced for wet taro (*lo`i*) in early historic and later times (in Honokōhau, well into the 1930s). Honokahua Valley, just east of the project area, was described as having wet taro (*lo`i*) lands, although of no great abundance (according to Handy quoting D.L. Fleming, in Sterling 1998:52). Sweet potatoes were reportedly grown between Honokōhau and Kahakuloa Ahupua`a, presumably on lower *kula* lands and, south of the project area, Kahana Ahupua`a was known as a place of salt gathering for the people of Lāhainā (old spelling for village; Sterling 1998).

Most of the *ahupua`a* on the coast have been overshadowed by the famous roadstead and village that served as the capitol of the Hawaiian Kingdom after the conquest of Kamehameha until 1855. The ethnographic and historic literature, often our only link to the past, reveal that the lands around Lāhainā were rich agricultural areas irrigated by aqueducts originating in well-

watered valleys with permanent occupation predominately on the coast. Crops cultivated included coconut, breadfruit, paper mulberry, banana, taro, sweet potato, sugar cane, and gourds.

### **THE MĀHELE**

In the 1840s, traditional land tenure shifted drastically with the introduction of private land ownership based on Western law. While it is a complex issue, many scholars believe that in order to protect Hawaiian sovereignty from foreign powers, Kamehameha III was forced to establish laws changing the traditional Hawaiian economy to that of a market economy (Kame`eleihiwa 1992:169–70, 176; Kelly 1983:45, 1998:4; Daws 1962:111; Kuykendall 1938 Vol. I:145). The Māhele of 1848 divided Hawaiian lands between the king, the chiefs, the government, and began the process of private ownership of lands. The subsequently awarded parcels were called Land Commission Awards (LCAs). Once lands were thus made available and private ownership was instituted, the *maka`āinana* (commoners)—if they had been made aware of the procedures—were able to claim the plots on which they had been cultivating and living. These claims did not include any previously cultivated but presently fallow land, *`okipū* (on O`ahu), stream fisheries, or many other resources necessary for traditional survival (Kelly 1983; Kame`eleihiwa 1992:295; Kirch and Sahlins 1992). If occupation could be established through the testimony of two witnesses, the petitioners were awarded the claimed LCA and were issued a Royal Patent after which they could take possession of the property (Chinen 1961:16). There were no awarded LCAs recorded in the Māhele land books for the project area.

### **HISTORIC LAND USE**

An 1831 census estimated the entire population of Kā`anapali District to be 2,982 people, which was reduced to less than half (1,341) only five years later probably due to introduced diseases (Schmitt 1973). Whaling (centered on Lahaina Town) was the first commercial enterprise in West Maui, but it had more or less collapsed by the 1860s. Commercial sugar cane production was the next large capitalist venture in West Maui, starting as early as 1863, and it was focused between Kā`anapali and Lahaina.

The area in and around the project area, which was located at the margins of sugar cane enterprises in West Maui (Dorrance and Morgan 2000), was most important as a center of commercial ranching (cattle raising) and, subsequently, pineapple production.

In the later 19<sup>th</sup> century, lands in West Maui became part of the Campbell Estate. This was also the time that the Honolua Ranch was first established. Cattle ranching began then and

was continued by Henry Perrine Baldwin, who acquired the lands from the Campbell Estate in 1890 (Fredericksen and Frederickson 2003). In addition to ranching, other early commercial activities included coffee farming.

David T. Fleming became manager of Honolua Ranch in 1911 (or 1912). Fleming was well-versed in pineapple production from the Ha'iku area and gradually began shifting the ranch's initiative to pineapple production. The Honolua Ranch/Baldwin Packers complex shifted from Honolua to Honokahua in 1915, and a pineapple cannery was constructed. A major commercial pineapple industry emerged in West Maui during the 1920s. The plantation communities of Honokahua and Nāpili emerged and developed as Honolua Ranch/Baldwin Packers pineapple operations grew. The population of the Lahaina area increased with the successful economic operations of the pineapple plantation. Baldwin Packers merged with Maui Pineapple Company in 1962 to form Maui Land and Pineapple Company, Inc. After this time, much of the Honolua Ranch lands were converted for resort development, a process that continues to this day. Both the Ritz-Carlton Kapalua and the Residences at Kapalua Bay are part of this ongoing process.

### **PREVIOUS ARCHAEOLOGY**

The following sampling of studies illustrates the types of sites and features that may be encountered in the project area (Figure 5). While not an exhaustive survey of every previous archaeological project in and around the current project area, it does include all major (large-scale) studies. Relevant information from older, classic references can be found above (TRADITIONAL AND HISTORIC SETTING).

The first archaeological survey done on Maui was conducted by Winslow Walker in 1930, under the auspices of the Bishop Museum. Walker (1931) focused on monumental sites, mostly coastal *heiau*, during his early survey of Maui. Walker (1931) noted four sites in the general vicinity project area: a destroyed unnamed *heiau* at Kahana point (State Site 50-50-01-12), an unnamed *heiau* that was washed away at Mailepai Point (State Site 50-50-01-13), and the destroyed Hihoho Heiau, which was located along a country road near Kalaeoka`ea Point (State Site 50-50-01-14). Another unnamed *heiau* was located on the bluff between `Alaeloa Point and Papaua Point (State Site 50-50-01-15) (Walker 1931).

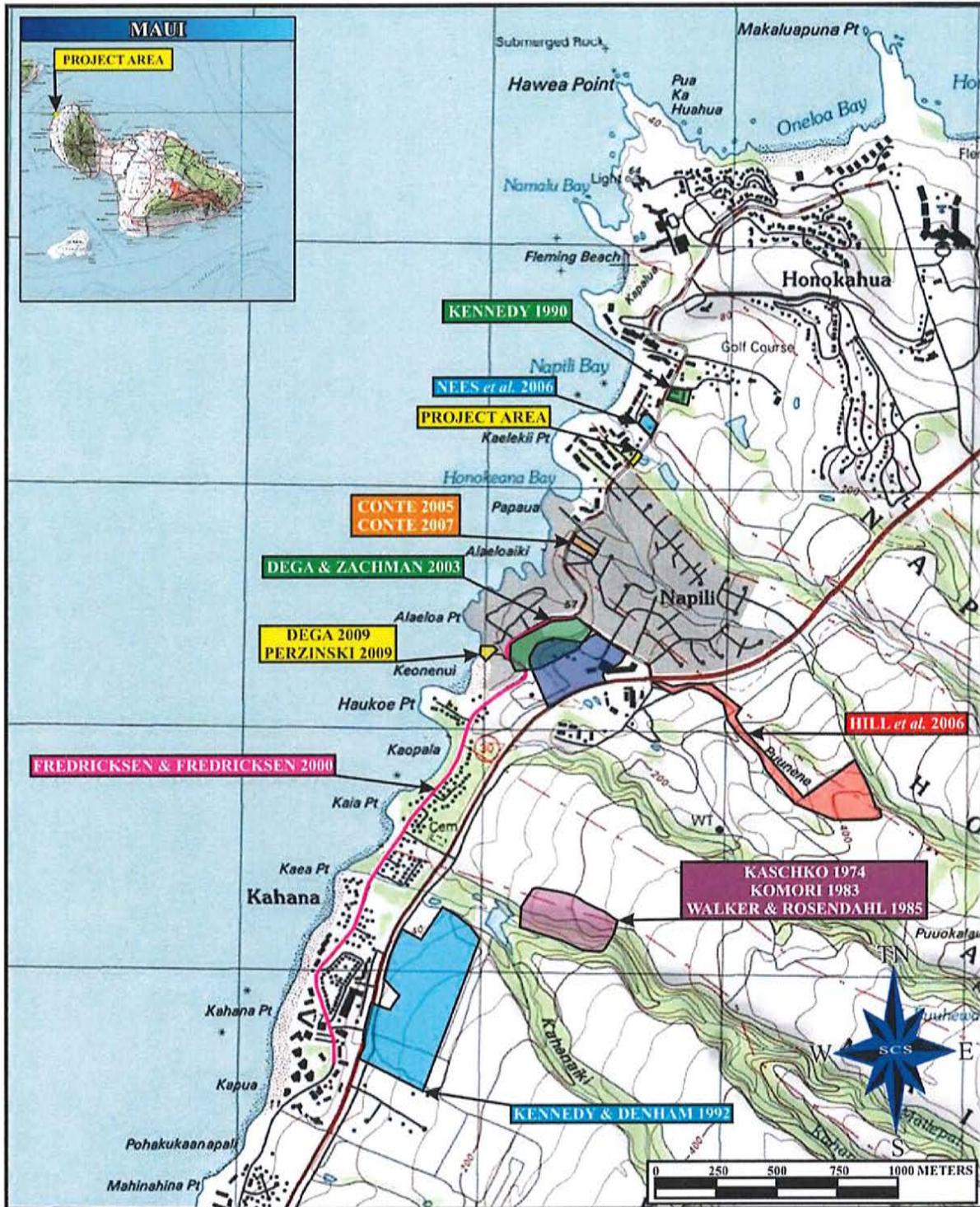


Figure 5: USGS Topographic (Napili 1997; 1:24,000) Map Showing Location of Previous Archaeological Studies.

A fair number of archaeological investigations have been conducted over the years in the Nāpili/Honokahua area of Maui, resulting almost unanimously in the documentation of both pre-Contact and Historic Period deposits. The majority of these cultural deposits were identified as human burials, habitation plots, and refuse pits. Classes of artifacts and midden found in association with these features included coral abraders, basalt flakes, volcanic glass debitage, and marine shell debris.

In 1973 the Bishop Museum (Kirch 1973a) conducted archaeological research at Hāwea Point, Lāhainā District. A site complex (State Site 50-50-01-1346) comprised of eight features was identified and recorded. State Site 50-50-01-1346 was interpreted as a temporary Hawaiian settlement for marine exploitation and was dated to *c.* A.D. 1500. A total of 4.0 m<sup>2</sup> was excavated State Site 50-50-01-1346. Several formal tools were recovered in excavation, including one unfinished bone fishhook, one bone fishhook blank, one shell adze fragment, ten coral abraders, one sea urchin abrader, and three dog tooth ornaments. Midden was recovered from the surface and from excavation, and consisted of marine shells, sea urchins, fish bone, and *kukui* nut shell (*Aleurites moluccana*). One radiocarbon determination of 327 ± 80 B.P. was obtained for a buried *imu* (cooking pit). Calibration yielded three possible calendric dates, indicating a maximum (*i.e.*, conservative) range for occupation of the site of between roughly A.D. 1400 and 1700.

Bishop Museum conducted a subsequent archaeological survey of the Honolua Development (Kirch 1973b) during which nine archaeological sites were identified, including a cave shelter on the cliff face of Hāwea Point (Site 50-50-01-1347) and a stone terrace platform, which was located on a promontory overlooking Oneloa Bay (Site 50-50-01-1348). During this survey the Honokahua Burial Site (Site 50-50-01-1342) was first recorded. Several additional sites were located by Kirch at Fleming Beach Park along Honokahua Stream; these included a house site, terrace, enclosure, and midden deposits (Site 50-50-01-1345).

Walker and Rosendahl (1985) conducted archaeological testing of 3.7 acres of land located in Kahana Ahupua`a, Lāhainā District [TMK: (2) 4-3-001] prior to the construction of a desilting basin. The scope of the survey included focusing on the previously identified Bishop Museum Sites 50-MA-D10-4, 50-MA-D10-5, and 50-MA-D10-6 (Komori 1983). The survey resulted in the re-interpretation of the function of these sites. Based on their findings, Walker and Rosendahl (1985) re-interpreted the sites as pre-Contact inland agricultural area that had been re-used during the Historic Period for commercial sugarcane and pineapple cultivation

Kennedy (1990) conducted an archaeological inventory survey of TMK: (2) 4-3-002:068 and 069, located at Napili, Lāhainā District, island of Maui. No historic properties were identified

Archaeological Consultants of Hawaii (Kennedy and Denham 1992) conducted an archaeological inventory survey, with subsurface testing, of 50 acres located at TMK: (2) 4-3-001; 031, Kahana Ahupua`a, Lāhainā District, Maui Island. Two historic properties were identified during the inventory survey. State Site 50-50-03-2878, a two-tiered platform, which contained a traditional-type burial associated with the late pre-Contact/early-post-Contact Period. State Site 50-50-03-2879, a petroglyph boulder, was interpreted as re-located to its current site at an undetermined time when the sugar cane fields were being cleared.

Archaeological Consultants of Hawaii (Kennedy *et al.* 1992) conducted an archaeological inventory survey, with subsurface testing, at TMK: (2) 4-3-003:108 and 110, `Alaeloa Ahupua`a, Lāhainā District, Maui Island. No historic properties were identified.

Xamanek Researches (Fredericksen and Fredericksen 2009) conducted an archaeological inventory survey of approximately 1.4 miles along the Lower Honoapi`ilani Road improvements corridor locate in [TMK: (2) 4-3-003; 4-3-005; 4-3-010; and 4-3-015, Lāhainā District, Maui Island. Three historic properties were identified during the survey. State Site 50-50-03-4797, pre-Contact habitation site which yielded a radiocarbon date of 1420 to 1660AD; -4798, a retaining wall and shoulder barrier wall associated with the construction of Lower Honoapi`ilani Road; and -4799, a retaining wall associated with the construction of Lower Honoapi`ilani Road.

Scientific Consultant Services, Inc. (Dega and Zachman 2003) conducted Archaeological Inventory Survey in advance of residential development on a 2.57-acre parcel in Napili, Alaeloa Ahupua`a, Lāhainā (formerly Ka`anapali) District, Island of Maui, Hawai`i (TMK 4-3-003:025). No historic properties were identified

CRM Solutions Hawai`i, Inc. (Conte 2005) conducted an archaeological inventory survey of 0.779 acres of land located at 5190 Lower Honoapi`ilani Road Mailepai Ahupua`a, Lāhainā District, Maui Island [TMK: (2) 4-3-003:043]. No historic properties were identified. Subsequently, CRM Solutions Hawai`i, Inc. (Conte 2007) conducted a program of archaeological monitoring during off-site construction related to TMK: (2) 4-3-003:043, Mailepai Ahupua`a, Lāhainā District, Maui Island. No historic properties were identified.

Pacific Consulting Services, Inc. (Nees *et al.* 2006) conducted an archaeological inventory survey-level investigation of two adjacent lots in Nāpili, Nāpili 4-5 Ahupua`a, Lāhainā (formerly Ka`anapali) District, Maui. No historic properties were identified.

Cultural Surveys Hawai`i, Inc. (Hill *et al.* 2006) conducted an archaeological inventory survey-level investigation of a 12.26 acre subdivision in `Alaloa and Honokeana Ahupua`a, Lāhainā District, Maui [TMK: (2) 4-3-004:011 and 4-3-001:028]. No historic properties were identified.

Subsequently, CRM Solutions Hawai`i, Inc. (Conte 2007) conducted a program of archaeological monitoring during off-site construction related to TMK: (2) 4-3-003:043 (Mailepai Hui Land Lots 51-C-4-A, B, and C), Lāhainā District, Maui Island. No historic properties were identified.

Following an informal archaeological field inspection, Scientific Consultant Services, Inc. (Dega 2009) conducted a program of archeological monitoring on a 0.29 Acre Parcel in Nāpili, `Alaeloa Ahupua`a, Lāhainā District, Maui Island, Hawai`i [TMK: (2) 4-3-003:096]. No historic properties were identified.

## **FIELDWORK EXPECTATIONS**

In sum, Archaeological Monitoring may lead to the identification of intact or previously disturbed pre- Contact Period cultural deposits associated with temporary or permanent habitation areas, human skeletal remains (isolated find spots or *in situ*, articulated individuals), and Historic Period cultural deposits associated with the Planation Era.

## **MONITORING RATIONAL**

The criteria used for determining the need for Archaeological Monitoring was primarily based on the findings of previous Archaeological Monitoring investigations. Based on the findings of previous archaeological studies conducted in the vicinity the current project area has the potential for yielding intact or previously disturbed cultural materials including, human skeletal remains; pre-Contact Traditional-type, and Plantation Era cultural deposits in subsurface contextd. Thus, a program of Archaeological Monitoring will be conducted of the current project area in order to identify, document, and record any historic propeties inadvertently identified, and to provide appropriate mitigation methods, as necessary.

### **POTENTIAL SITE TYPES TO BE ENCOUNTERED**

Based on all available background information (*i.e.*, project area location, history, and archaeology), expected findings in of this Archaeological Monitoring program include:

- (1) There is a low probability of the inadvertent finding of intact or previously disturbed traditional Native Hawaiian burials.
- (2) There is a low to moderate probability of finding subsurface evidence of traditional Native Hawaiian activities including: hearths, postholes, midden deposits, and other occupation debris (*e.g.*, stone tool waste, discarded fishing gear).
- (3) There is a moderate to high probability of finding subsurface evidence of encountering Historic Plantation Era cultural materials associated with agricultural and habitation activities.

### **MONITORING CONVENTIONS AND METHODOLOGY**

This Archaeological Monitoring Plan has been outlined in accordance with the DLNR/SHPD Administrative rules governing standards for Archaeological Monitoring (HAR §13-279). The CRM firm conducting the archaeological monitoring program will use the following guidelines during monitoring during the project:

1. The presence of a qualified archaeologist will be required to monitor construction activities within the project area on a full-time basis. These activities include any disturbance of the original ground surface including subsurface excavations, excavations for utilities, and the like. There will be one monitoring archaeologist per each piece of excavating equipment.
2. When cultural materials or isolated features are identified, excavation will cease in the area of the find so that the monitoring archaeologist is able to sample and record all necessary information. Documentation will include stratigraphic profile maps, photos, artifact and sample collections, and locational mapping. In the event that recording has not been completed by the end of the work shift, the area will be temporarily non-accessible until recording is complete.
3. If an archaeological site, or multiple features indicating a site, is encountered within the project corridor, the monitoring archaeologist will consult with the SHPD to determine the necessary course of action. If extensive recording or other intensive tasks are required, additional archaeologists may be brought in to expedite the work.

4. If additional archaeological field personnel are required, the Archaeological Monitor will notify SHPD and the client before the additional field personnel are brought to the project.
5. If human burials are encountered, work will cease in the vicinity and the area will be secured from further activity. The SHPD office will be immediately notified and procedures from Hawai'i Revised Statutes (HRS), Chapter 6e, Section 43 and Administrative Rules Chapter 13-300 shall be followed. HRS 6.E-43.6, Procedures Relating to Inadvertent Discoveries, will be complied with if the remains are to be removed.
6. To ensure that the construction crew is aware of this Monitoring Plan, a coordination meeting will be held with the construction team and monitoring archaeologist prior to initiation of the project. The construction crew will be informed as to the possible presence of human burials, and how to proceed if they observe such remains. The archaeologist shall emphasize that all historic finds, including objects such as bottles, are the property of the landowner and may not be taken or otherwise disposed of without the written consent of the landowner in consultation with the State Historic Preservation Division. At this time it will be made clear that the archaeologist must be on site for all ground disturbance activities.
7. The Archaeological Monitor will provide all coordination with the contractor, State Historic Preservation Division, and other agencies involved in the project.
8. As necessary, the archaeological monitor will provide verbal reports will be made to the SHPD and any other agencies requested.
9. An acceptable report documenting the results of the fieldwork shall be prepared for submittal to the State Historic Preservation Division no later than 180 days after the completion of fieldwork.

### **LABORATORY ANALYSIS**

All retrieved artifact samples collected during the project will be cleaned, sorted, and analyzed in appropriate facilities. Representative artifacts will be photographed, and classified (qualitative analysis), and all metric measurements and weights will be recorded (quantitative analysis). All representative plan view sketches and profiles illustrating the location and morphology of identified sites/features/deposits and stratigraphic profiles will be drafted in the office of the contracted archaeological firm. All data was recorded on standard laboratory forms which also include number and weight (as appropriate) of each constituent category. Collected samples amenable to dating will be submitted for specialized radiocarbon analysis. While primary emphasis for radiocarbon dating is placed on charcoal samples, the use of other materials such as marine shell or non-human bone materials is not precluded.

## **CURATION**

If requested by the landowners, the archaeological consultants will curate all recovered materials in the office of the contracted archaeological firm (except human remains and associated burial items) until a permanent, more suitable curation locale is identified. The landowner(s) may request to curate all recovered materials once analysis has been completed.

## **REPORTING**

An Archaeological Monitoring Report documenting the project findings and interpretation, following SHPD guidelines for Archaeological Monitoring reports, will be submitted within 180 days of the completion of fieldwork. This time line is requested to account for any radiocarbon age determinations (typically 60 days), if necessary.

If cultural features or deposits are identified during fieldwork, the sites will be evaluated for historical significance and assessed under State and Federal Significance Criteria. The Archaeological Monitoring report will be drafted until accepted by SHPD and will be submitted to both SHPD and to the client.

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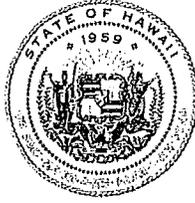
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**EXHIBIT B-1.**

**Letter Dated December 24, 2015 from  
State Historic Preservation Division  
Accepting the Archaeological  
Monitoring Plan for WWPS Nos. 5 and 6  
Component**

DAVID Y. IGE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

December 24, 2015

Michael F. Dega, Ph.D.  
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Honolulu, Hawaii 96814  
Via email to: [mike@scshawaii.com](mailto:mike@scshawaii.com)

Log No: 2015.04091  
Doc No: 1512MD43  
Archaeology

Aloha Dr. Dega:

**SUBJECT: Chapter 6E-8 and 6E-42 Historic Preservation Review -  
Draft Archaeological Monitoring Plan for the Napili Force Main Replacement  
Honokahua Ahupua'a, Lāhainā District, Island of Maui  
TMK (2) 4-2-004:048 and 059 (both por.)**

Thank you for the opportunity to review the draft plan titled *An Archaeological Monitoring Plan for the Napili No. 5 & 6 WWPS Force Main Replacement, Honokahua Ahupua'a, Lāhainā District, Island of Maui, Hawai'i* [TMK: (2) 4-2-004: portion of 48 (Lot 3-A-1 of Kapalua Makai Subdivision No. 4) and TMK (2) 4-2-004: portion of 59 (Lot A-1-A-2 of Kapalua Development (Large-Lot) Subdivision)] (Dagher and Dega November 2015), which we received on November 23, 2015. This plan was developed for Warren S. Unemori Engineering, Inc. on behalf of the County of Maui.

The proposed project will entail: replacing the aging force mains for both Napili No. 5 and No. 6 wastewater pump stations, including a portion of Lower Honoapiilani Road.

One qualified archaeological monitor per each piece of ground altering machinery will be present for this project. The draft monitoring plan meets the requirements specified in Hawai'i Administrative Rule §13-279 and is accepted. **For the final version**, please correct the Ahupua'a on page 4. Please send one hardcopy of the document, clearly marked **FINAL**, along with a copy of this review letter and a text-searchable PDF version on CD to the Kapolei SHPD office, attention SHPD Library. Please contact me at (808) 243-4641 or [Morgan.E.Davis@hawaii.gov](mailto:Morgan.E.Davis@hawaii.gov) if you have any questions or concerns about this letter.

Mahalo,

Morgan E. Davis  
Lead Archaeologist, Maui Section

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