

# **A Cultural Impact Assessment to inform Environmental and Historic Preservation Compliance Review for the Department of Education Facilities Development Branch and Maui High School Facilities Project**

**McKinley Community School for Adults Maui Campus, Wailuku Ahupua'a, Wailuku Moku, Maui Mokupuni, Tax Map Key (TMK): [2] 3-8-007:098**



Prepared by:



Prepared for:





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This report was prepared by Nohopapa Hawai'i, LLC, for Bowers + Kubota Consulting, Inc.

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# TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b> .....	<b>2</b>
<b>LIST OF FIGURES</b> .....	<b>4</b>
<b>LIST OF TABLES</b> .....	<b>5</b>
<b>Study Summary</b> .....	<b>6</b>
<b>Introduction and methods</b> .....	<b>10</b>
He Leo Mahalo .....	10
Introduction .....	10
Project Description.....	10
Document Purpose.....	16
Regulatory Context .....	16
Methods.....	17
<b>Natural LANDSCAPE AND RESOURCES</b> .....	<b>21</b>
Cultural Landscape .....	21
<b>Cultural Landscape</b> .....	<b>25</b>
Wahi Kūpuna.....	25
Hawaiian Oral Traditions .....	31
Mo‘olelo and Ka‘ao .....	31
Oli, Mele, and ‘Ōlelo No‘eau.....	32
<b>Historical Landscape</b> .....	<b>35</b>
Early Historical Period.....	35
Mid to Late-1800s .....	39
1900s to Present Day .....	42
<b>Previous Archaeological Studies</b> .....	<b>46</b>
Previous Archaeological Research Within the Project Area .....	46
Previous Archaeological Research Within the Project Area Vicinity .....	51
Background Summary and Predictive Model .....	55
<b>Community Ethnography</b> .....	<b>57</b>
Mahalo .....	57
Summary of Community Mana‘o .....	57
<b>assessment of Cultural Impacts</b> .....	<b>63</b>
Background Research and Consultation Synthesis .....	63
Impact Assessment .....	65
Recommendations .....	66
Considerations.....	68
<b>References</b> .....	<b>70</b>



**Appendix A: Community Participation Letter..... 77**  
**Appendix B: Interview Themes and Questions ..... 79**  
**Appendix C: informed consent form ..... 82**  
**Appendix D: The environmental Council’s 1997 Guidelines for Assessing Cultural Impacts**  
**..... 84**  
**Appendix E: Act 50: A Bill for an Act Relating to EIS..... 88**



# LIST OF FIGURES

FIGURE 1. AERIAL IMAGERY DEPICTING THE LOCATION OF THE STUDY AREA AND PROJECT AREA TMK IN KAHULUI, WAILUKU AHUPUA‘A, MAUI..... 11

FIGURE 2. PORTION OF THE USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLE SHOWING THE LOCATION OF THE PROJECT AREA TMK IN KAHULUI, WAILUKU AHUPUA‘A, MAUI..... 12

FIGURE 3. AERIAL IMAGERY DEPICTING THE PROJECT AREA, DELINEATED IN YELLOW, IN KAHULUI, WAILUKU AHUPUA‘A, MAUI. .... 13

FIGURE 4. CURRENT DESIGN PLANS FOR THE PROPOSED PROJECT ILLUSTRATING THE FOOTPRINT AND ESTIMATED GROUND DISTURBANCE ASSOCIATED WITH THE MHS FACILITIES EXPANSION (BOWERS AND KUBOTA 2024). .... 14

FIGURE 5. AERIAL IMAGERY DEPICTING THE PROJECT AREA OVERLAIN WITH THE TMK OF THE PROJECT AREA (TMK [2] 3-8-007:098), AND SURROUNDING VICINITY. .... 15

FIGURE 6. OVERLAY OF SOIL SURVEY OF THE STATE OF HAWAI‘I (SATO ET AL. 1973), INDICATING SOIL TYPES WITHIN AND SURROUNDING THE PROJECT AREA (U.S. DEPARTMENT OF AGRICULTURE SOILS SURVEY GEOGRAPHIC DATABASE [SSURGO] 2001). .... 23

FIGURE 7. KALAMA’S 1837 MAP ENGRAVING OF THE ARCHIPELAGO ENTITLED “KA MOKUPUNI O HAWAII NEI” (*THE ISLANDS OF HAWAI‘I*) DEPICTING WAILUKU, MAUI (KALAMA 1837; FORBES 2012:150) .. 36

FIGURE 8. CLOSE-UP OF THE SEGMENT OF KALAMA’S 1837 MAP ENGRAVING OF THE ARCHIPELAGO ENTITLED “KA MOKUPUNI O HAWAII NEI” DEPICTING WAILUKU, MAUI (KALAMA 1837; FORBES 2012:150) ..... 37

FIGURE 9. CLOSE-UP OF A SEGMENT OF KALAMA’S 1838 MAP ENGRAVING OF THE ARCHIPELAGO DEPICTING THE LOCATION AND BOUNDS OF WAILUKU AHUPUA‘A (KALAMA 1838; FORBES 2012:150) ..... 38

FIGURE 10. CLOSE-UP OF AN 1885 HAWAII GOVERNMENT SURVEY MAP SHOWING THE PROJECT AREA IN WAILUKU AS PART OF GRANT 3343 IN A LANDSCAPE OF SAND HILLS DOTTED WITH FISHPONDS (DODGE AND ALEXANDER 1885) ..... 40

FIGURE 11. 1893 MAP OF THE SPRECKLESVILLE SUGAR PLANTATION FEATURING THE STUDY AREA, OUTLINED IN BLUE, ON MAUI’S CENTRAL PLAINS ..... 41

FIGURE 12. A 1929 MAP OF MAUI SHOWING CENTRAL MAUI PLAINS AND LOCATION OF THE PROJECT AREA AS UNDEVELOPED, WITH NATURAL TOPOGRAPHY, AND BOUNDED BY THE SETTLEMENT OF KAHULUI TO THE NORTH, AND INFRASTRUCTURE LIKE ROADS AND RAILROADS TO THE WEST, SOUTH, AND EAST (IAO AND WALL 1929). .... 43

FIGURE 13. A PHOTOGRAPH OF KAHULUI IN WAILUKU AHUPUA‘A TAKEN IN THE 1970S AFTER THE ESTABLISHMENT OF THE MHS CAMPUS IN 1972 (YELLOW ARROW), VIEW TO THE SOUTHWEST (BACON 1970S) ..... 44

FIGURE 14. A 1975 PHOTOGRAPH OF KAHULUI IN WAILUKU AHUPUA‘A, FEATURING THE MHS CAMPUS ESTABLISHED IN 1972 (YELLOW ARROW), VIEW TO THE WEST (BACON 1975). .... 45

FIGURE 15. AN AERIAL PHOTOGRAPH OVERLAIN WITH THE BOUNDARIES OF PREVIOUS ARCHAEOLOGICAL STUDIES, LABELED BY AUTHOR(S) AND YEAR, CONDUCTED IN THE PROJECT AREA AND VICINITY ..... 47



## LIST OF TABLES

TABLE 1. TABLE OF ENDEMIC AND INDIGENOUS PLANT SPECIES ASSOCIATED WITH THE PROJECT AREA .....	24
TABLE 2. WAHI KŪPUNA OF WAILUKU AHUPUA‘A, WAILUKU MOKU, MAUI .....	28
TABLE 3. PREVIOUSLY-IDENTIFIED HISTORIC PROPERTIES AND SHPD DETERMINATIONS IN THE PROJECT AREA AND VICINITY* .....	48
TABLE 4. COMMUNITY INTERVIEW PARTICIPANTS (IN ALPHABETICAL ORDER) .....	57

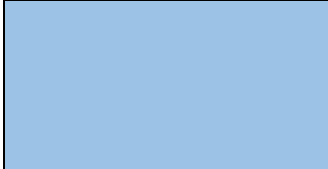
## STUDY SUMMARY

<b>Reference</b>	Cultural Impact Assessment to Inform Environmental and Historic Preservation Compliance Review for the Department of Education (DOE) Facilities Development Branch (FDB) Maui High School (MHS) Facilities Project, McKinley Community School for Adults Maui Campus, Wailuku Ahupua‘a, Wailuku Moku, Maui Mokupuni, Tax Map Key (TMK): [2] 3-8-007:098 (Hoerman et al. 2023)
<b>Date</b>	September 2023
<b>Land Jurisdiction</b>	The State of Hawaii is listed as the Fee Owner of the approximately 2.2 acre project area (County of Maui 2023).
<b>Project Proponent</b>	DOE-FDB
<b>Project Area</b>	The project area occupies a southern subsegment of TMK [2] 3-8-007:098, located at the Department of Education (DOE) Facilities Development Branch (FDB) and Maui High School (MHS) Facilities Project at MHS, 660 Lono Avenue, Kahului, Wailuku Ahupua‘a, Wailuku Moku, Maui.
<b>Project Area Acreage</b>	2.2 acres (95,832 square feet)
<b>Project Description</b>	<p>Proposed is the expansion of MHS facilities to include construction of two new buildings - a new one-story building for the DOE Maui District Mowing Facility (6,400 square feet), paved areas and a parking lot (an additional 11,600 square feet), and a new one-story building for the McKinley Community School for Adults Maui Campus (CSA; 9,125 square feet) and associated parking lot (18,450 square feet) - as well as one access routes for the DOE-FDB connecting each facility to West Papa Avenue, and electrical, communications, water, sewer, and drainage utilities for each building on an undeveloped tract of land adjacent to the existing high school. The CIA and LRFI studies will be used to inform an Environmental Assessment (EA) under Hawai‘i Environmental Policy Act (HEPA) Hawai‘i Revised Statutes (HRS) §343 and to initiate historic preservation compliance review under HRS §6E-8 and its implementing legislation Hawai‘i Administrative Rules (HAR) §275. Anticipated ground disturbance for the project is listed below.</p> <p><b>DOE Maui District Mowing Facility:</b>            Facility (6,400 square feet) - 64 feet long x 67 feet wide x 2 feet deep            Paved areas and a parking lot (11,600 square feet) - 141 feet long x 120 feet wide x 1.17 feet deep            Drainage utilities - 707 feet long x 2 to 3 feet wide x 4 to 7 feet deep, 65 feet long by 37 feet wide x 8.6 feet deep (detention system)            Water utilities - 385 feet long x 2 to 3 feet wide x 4 to 4.5 feet deep            Sewer utilities – 338 feet long x 2 to 3 feet wide x 6 to 7.5 feet deep</p> <p><b>McKinley Community School for Adults Maui Campus:</b>            Facility (CSA; 9,125 square feet) - 125 feet long x 73 feet wide x 4 feet deep            McKinley Community School for Adults parking lot (18,450 square feet) – 152.5 feet long x 121 feet wide x 1.17 feet deep            Drainage utilities - 345 feet long x 2 to 3 feet wide x 4 to 7 feet deep</p>



	<p>Water utilities - 297 feet long x 2 to 3 feet wide x 4 to 4.5 feet deep  Sewer utilities – 259 feet long x 2 to 3 feet wide x 6 to 7.5 feet deep  Access routes for the DOE-FDB connecting each facility to West Papa Avenue - 346 feet long x 24 feet wide x 1.17 feet deep  Fence – 1258 feet long x 1 feet wide x 3.5 feet deep</p> <p><b>Electrical/Communication Utilities:</b>  Primary Electrical, Fire Alarm, Communication - 273 feet long x 3 feet wide x 3 feet deep  Primary Electrical – 197 feet long x 16 feet wide x 3 feet deep  Secondary Electrical – 400 feet long x 16 feet wide x 3 feet deep  Communications – 341 feet long x 16 feet wide by x 3 feet deep  Fire Alarm – 386 feet long x 16 feet wide x 3 feet deep  Fire Alarm, Communications – 301 feet long x 16 feet wide x 3 feet deep  Lighting – 906 feet long x 16 feet wide x 3 feet deep</p>
<b>Document Purpose</b>	<p>This study was generated to inform an Environmental Assessment per the requirements of the Hawai‘i Environmental Policy Act and its implementing legislation Hawai‘i Revised Statutes (HRS) §343.</p> <p>The State constitution, as well as state laws and courts, require government agencies to “promote and preserve cultural beliefs, practices, and resources of native [sic] Hawaiians and other ethnic groups. Chapter 343 also requires environmental assessment of cultural resources, in determining the significance of a proposed project,” (State of Hawai‘i Environmental Council 1997). As noted by the State of Hawai‘i Environmental Council (1997), “[a] cultural impact assessment analyzes “the impact of a proposed action on cultural practices and features [collectively termed ‘cultural resources’] associated with the project area”.</p> <p>At the request of Bowers and Kubota, Nohopapa Hawai‘i, LLC, completed this CIA to fulfil environmental review requirements and inform an Environmental Assessment triggered by Hawai‘i Revised Statutes (HRS) §343.</p>
<b>Regulatory Context</b>	<p>The proposed project is a DOE state agency undertaking, an action that triggers an Environmental Assessment and Cultural Impact Assessment under Hawai‘i Revised Statutes (HRS) §343, and historic preservation compliance review under HRS §6E-8 and its implementing legislation Hawai‘i Administrative Rules (HAR) §275.</p>
<b>Methods</b>	<p>This CIA consisted of four primary tasks: (1) Ethnohistorical background research; (2) Community ethnographic interviews, summaries, and recommendations; (3) Cultural impacts assessment; (4) Results reporting. The study spanned a 4-month period from November 2023 through March 2024. Project personnel included: R. Kalena Lee-Agcaoli, M.A., Rachel Hoerman, Ph.D., and Kelley L. Uyeoka, M.A.</p>
<b>Consultation</b>	<p>Consultation for this CIA was conducted from November 2023 through March 2024. Consultation included identifying appropriate and knowledgeable individuals, conducting consultation through emails, phone calls, and/or Zoom interviews, summarizing participants’ mana‘o (<i>thoughts, ideas, beliefs, opinions</i>). A total of 24 individuals</p>

	<p>were invited to engage in consultation for this project. One individual responded confirming their interest to participate, and completed an interview.</p>
<p><b>Recommendations</b></p>	<p>See pp. 66–68</p>
<p><b>Considerations</b></p>	<p><i>“Please consider the words of someone who actually helped to establish the area as a living garden, a place of being in ‘āina. From a student who actually saw the benefits of this land being used as an agricultural class, [they] hope that it will again return to its former status.”</i></p> <p>- Clare Apana, consultation provided for this study</p> <p>Additionally, and from a space of wahi kūpuna stewardship and regulatory compliance expertise, Nohopapa Hawai‘i advises several considerations regarding the proposed project’s potential impacts to cultural resources (practices, features, and beliefs) associated with the project area and/or vicinity:</p> <p><b>1) Consultation early and often.</b> Should the footprint or other characteristics of the proposed project change significantly as it unfolds, <b>additional and expanded consultation is recommended</b> to ensure community members have the opportunity to provide input on updated potential impacts of the proposed project to cultural resources per the requirements of the Hawaii Environmental Policy Act and its implementing legislation Hawaii Revised Statutes (HRS) §343 and 1997 Environmental Council Guidelines for Assessing Cultural Impacts. Considering the proximity of iwi kūpuna as well as wahi kūpuna/historic properties to the project area and the large amount and scale of ground disturbance and alteration of the project area that is proposed, <b>we recommend continued community consultation for the duration of this project</b> from the design plan and execution phases to its completion. This would include <b>Community care of any iwi kūpuna revealed</b> in accordance with the best practices outlined by Apana.</p> <p><b>2) Carefully considered project design.</b> Project design should make every effort to limit ground disturbance. The design team should consider options for building the land up before developing it, avoiding the disturbance of natural dune sediments and fill that are known to contain iwi kūpuna. As shared by Apana: “[B]uild something that would honor them, like building something that actually respects the ‘āina and builds sustainably for the ‘āina momona. The ‘āina momona of the children here. Apana stressed the recommendation, “They should actually build buildings that go above ground and have the infrastructure without digging into the ground. It has never been done in a school except for these portables. It’s never been done to actually design it so that you didn’t ground disturb.”</p> <p>These measures, which are optimal under the auspices of a project, additionally benefit the project timeline and budget.</p>



**3) Cultural monitoring alongside archaeological monitoring** is appropriate for this location given the sensitive nature of the dune deposits as well as professional best practices.



# INTRODUCTION AND METHODS

## He Leo Mahalo

Mahalo to all the individuals involved with this project. We are grateful to Jared Chang and Matthew Fernandez of Bowers + Kubota for the opportunity to complete this cultural impact assessment for the DOE FDB Facilities Improvement Project at MHS. Mahalo to Stacy Naipo from the State Historic Preservation Department (SHPD) for helping us retrieve reports for the project area. Additionally, Nohopapa Hawai'i would like to mahalo Clare Apana for sharing her time and insight related to this project. Without her willingness to share personal recollections and stories, this important project would not have been possible. The mana'o that was shared will help to mālama Wailuku for future generations to better understand, appreciate, and cherish the uniqueness of this place.

## Introduction

At the request of Bowers and Kubota, Nohopapa Hawai'i completed a Literature Review and Field Inspection (LRFI) Study, and Hawai'i Revised Statutes (HRS) §6E Consultation supporting environmental and historic preservation compliance review for the Department of Education (DOE) Facilities Development Branch (FDB) and Maui High School (MHS) Facilities Project, 660 Lono Avenue, Kahului, Wailuku Ahupua'a, Wailuku Moku, Maui (TMK: [2] 3-8-007:098). The State of Hawai'i is listed as the Fee Owner of the roughly 2.2 acre project area (Figure 1, Figure 2, Figure 3, County of Maui 2023). Note, throughout this report, the entirety of TMK [2] 3-8-007:098 is referred to as the "study area." The "project area" refers to the location of the proposed project and its associated ground disturbance.

## Project Description

Proposed is the expansion of MHS facilities to include construction of two new buildings - a new one-story building for the DOE Maui District Mowing Facility (6,400 square feet) plus paved areas and a parking lot (an additional 11,600 square feet) and a new one-story building for the McKinley Community School for Adults Maui Campus (CSA; 9,125 square feet) and associated parking lot (18,450 square feet) - as well as one access routes for the DOE-FDB connecting each facility to West Papa Avenue, and electrical, communications, water, sewer, and drainage utilities for each building on an undeveloped tract of land adjacent to the existing high school (Figure 4 and Figure 5). Ground disturbance estimates include:

### **DOE Maui District Mowing Facility**

Facility (6,400 square feet) - 64 feet long x 67 feet wide x 2 feet deep

Paved areas and a parking lot (11,600 square feet) - 141 feet long x 120 feet wide x 1.17 feet deep

Drainage utilities - 707 feet long x 2 to 3 feet wide x 4 to 7 feet deep, 65 feet long by 37 feet wide x 8.6 feet deep (detention system)

Water utilities - 385 feet long x 2 to 3 feet wide x 4 to 4.5 feet deep

Sewer utilities - 338 feet long x 2 to 3 feet wide x 6 to 7.5 feet deep

Lighting - 906 feet long x 16 feet wide x 3 feet deep

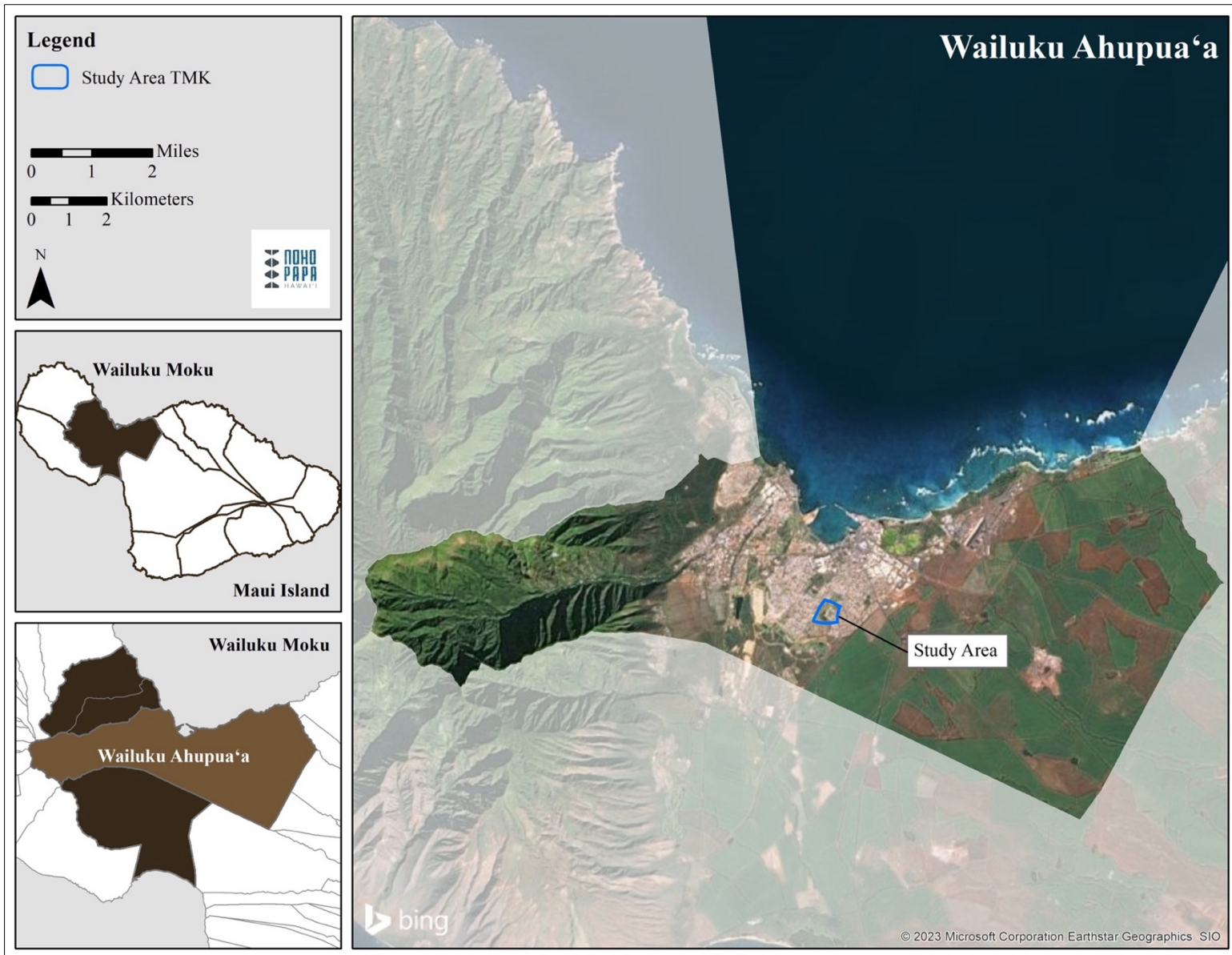


Figure 1. Aerial imagery depicting the location of the study area and project area TMK in Kahului, Wailuku Ahupua'a, Maui.





Figure 2. Portion of the USGS 7.5-minute topographic quadrangle showing the location of the project area TMK in Kahului, Wailuku Ahupua‘a, Maui.





Figure 3. Aerial imagery depicting the project area, delineated in yellow, in Kahului, Wailuku Ahupua‘a, Maui.



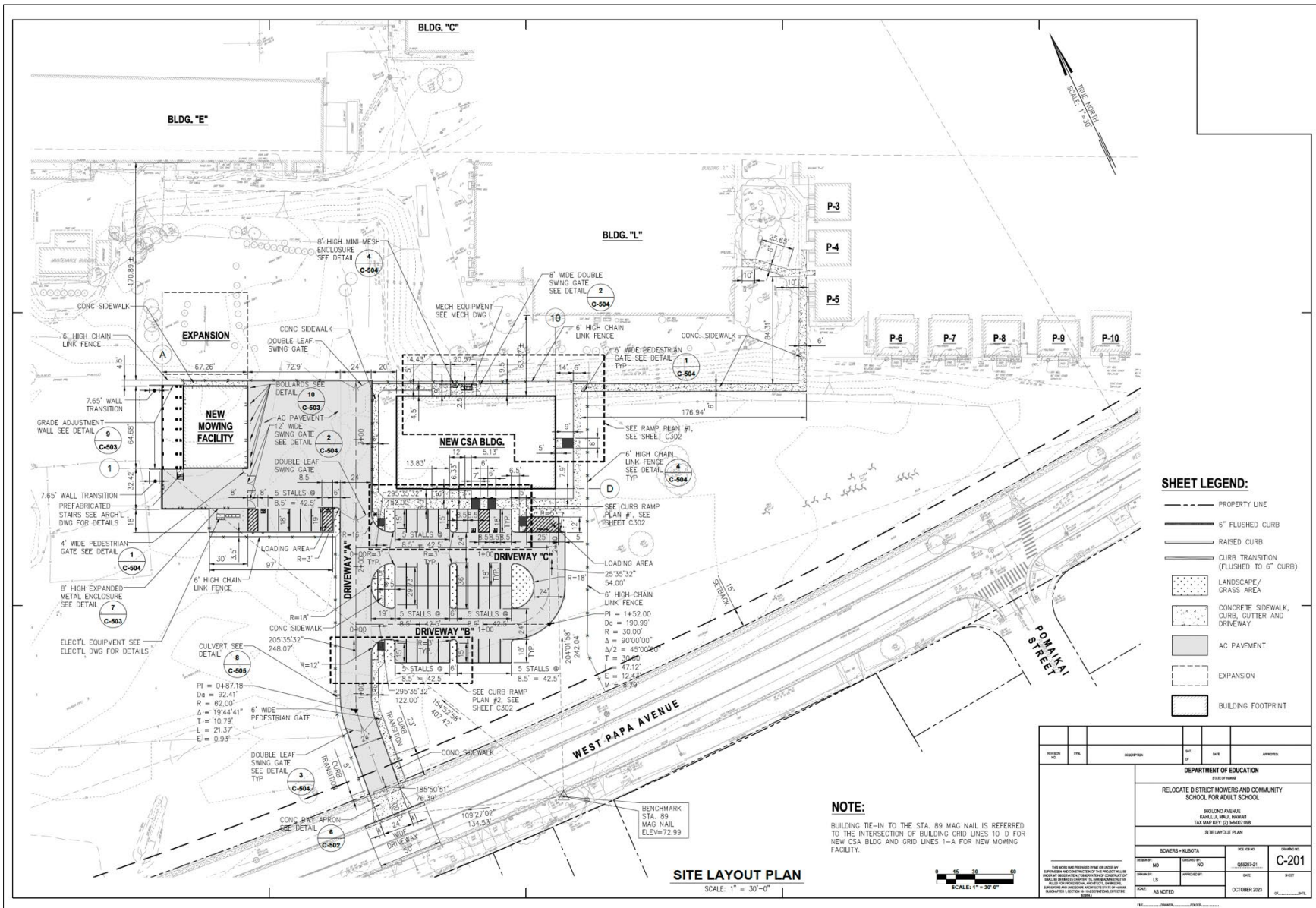


Figure 4. Current design plans for the proposed project illustrating the footprint and estimated ground disturbance associated with the MHS facilities expansion (Bowers and Kubota 2024).



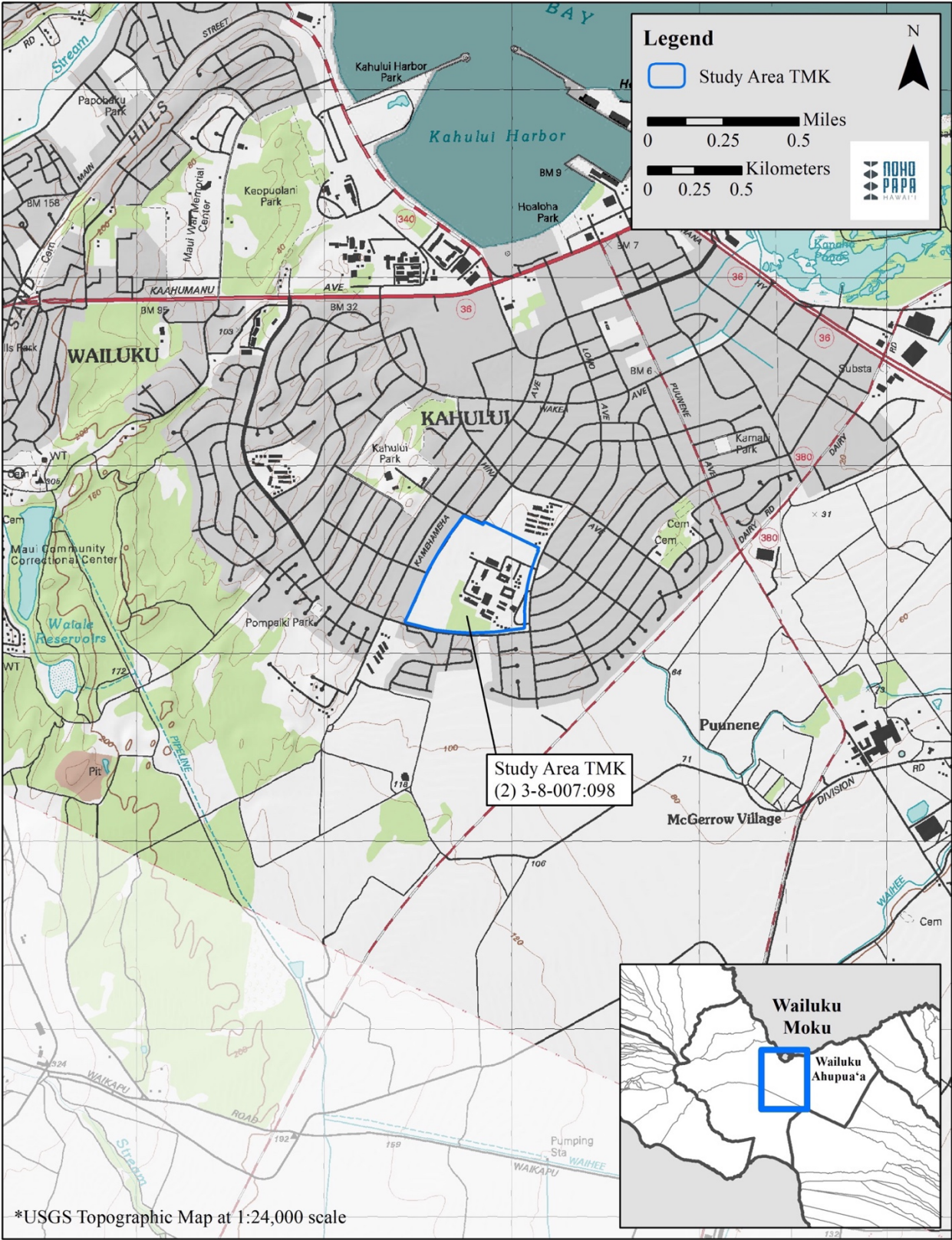


Figure 5. Aerial imagery depicting the project area overlain with the TMK of the project area (TMK [2] 3-8-007:098), and surrounding vicinity.



### **McKinley Community School for Adults Maui Campus:**

Facility (CSA; 9,125 square feet) - 125 feet long x 73 feet wide x 4 feet deep  
McKinley Community School for Adults Maui Campus parking lot (18,450 square feet) – 152.5 feet long x 121 feet wide x 1.17 feet deep  
Drainage utilities - 345 feet long x 2 to 3 feet wide x 4 to 7 feet deep  
Water utilities - 297 feet long x 2 to 3 feet wide x 4 to 4.5 feet deep  
Sewer utilities – 259 feet long x 2 to 3 feet wide x 6 to 7.5 feet deep  
Access routes for the DOE-FDB connecting each facility to West Papa Avenue - 346 feet long x 24 feet wide x 1.17 feet deep  
Fence – 1258 feet long x 1 feet wide x 3.5 feet deep

### **Electrical/Communication Utilities:**

Primary Electrical, Fire Alarm, Communication - 273 feet long x 3 feet wide x 3 feet deep  
Primary Electrical – 197 feet long x 16 feet wide x 3 feet deep  
Secondary Electrical – 400 feet long x 16 feet wide x 3 feet deep  
Communications – 341 feet long x 16 feet wide by x 3 feet deep  
Fire Alarm – 386 feet long x 16 feet wide x 3 feet deep  
Fire Alarm, Communications – 301 feet long x 16 feet wide x 3 feet deep  
Lighting – 906 feet long x 16 feet wide x 3 feet deep



## **Document Purpose**

The purpose of the CIA is to inform HRS §343 environmental compliance review triggered by DOE-FDB facilities improvements at MHS. The State constitution, as well as state laws and courts, require government agencies to “promote and preserve cultural beliefs, practices, and resources of native [sic] Hawaiians and other ethnic groups. Chapter 343 also requires environmental assessment of cultural resources, in determining the significance of a proposed project,” (State of Hawai‘i Environmental Council 1997). As noted by the State of Hawai‘i Environmental Council (1997), “[a] cultural impact assessment analyzes “the impact of a proposed action on cultural practices and features [collectively termed ‘cultural resources’] associated with the project area”.

In order to accomplish the above, this CIA consisted of four primary tasks: (1) Ethnohistorical background research; (2) Community ethnographic interviews, summaries, and recommendations; (3) Cultural impacts assessment; (4) Results reporting.

Through ethno-historical background research and consultation, this CIA provides an assessment of the proposed project’s potential impacts to cultural resources, defined as practices and features, which may include Traditional Cultural Properties (TCPs) of ongoing cultural significance that may be eligible for inclusion on the Hawai‘i Register of Historic Places, in accordance with Hawai‘i Revised Statutes (HRS) Chapter 6E Guidelines for significance criteria (AR §13-284) under Criterion E.

## **Regulatory Context**

The proposed project is a DOE state agency undertaking, an action that triggers an Environmental Assessment and Cultural Impact Assessment under Hawai‘i Revised Statutes (HRS) §343, and historic preservation compliance review under HRS §6E-8 and its implementing legislation Hawai‘i Administrative Rules (HAR) §275.

## Methods

This Cultural Impact Assessment consisted of four primary tasks: (1) ethnohistorical background research; (2) community ethnographic interviews, summaries, and recommendations; (3) cultural impacts assessment; (4) synthesis and recommendations. The study spanned a 12-month period from November 2023 through March 2024. Project personnel included: R. Kalena Lee-Agcaoli, M.A., Rachel Hoerman, Ph.D., and Kelley L. Uyeoka, M.A. While conducting this study, Nohopapa Hawai‘i’s research team incorporated a set of living values and beliefs to help guide our research, analysis, behavior, perspective, and overall frame of reference. The core values directing our hui included:

- » ***Aloha ‘Āina-*** to have a deep and cherished love for the land which created and sustains us
- » ***Ha‘aha‘a-*** to be humble, modest, unassuming, unobtrusive, and maintain humility
- » ***Ho‘omau-*** to recognize, appreciate, and encourage the preservation, perpetuation, and continuity of our wahi pana and kaiaulu
- » ***‘Imi Na‘auao-*** to seek knowledge or education; be ambitious to learn
- » ***Kuleana-*** to view our work as both a privilege and responsibility



These values represent the underlying foundation, spirit, and structure for this study. It was our hope that by providing a frame of reference and guiding values, the teams’ efforts would be better understood in the context of our being indigenous researchers genuinely believing in and practicing aloha ‘āina and aloha lāhui.

## Ethnohistorical Research Methods

Background research performed for this study emphasized original efforts and the identification, gathering, and utilization of Hawaiian and other historical resources in order to provide a place-based, culturally-grounded contextualization of land use, settlement patterns, and wahi kūpuna/historic properties in the project area in Wailuku Ahupua‘a through time.

Resources targeted during background research included: Hawaiian oral traditions and other ‘Ōlelo Hawai‘i ethnohistorical resources (including 19<sup>th</sup> and 20<sup>th</sup> century Hawaiian scholarship), historical accounts, Māhele and other land documents and maps, Hawaiian and English language newspapers, ethnographic and historical studies, historical photos and records, and previous academic and compliance archaeological studies. Online repositories consulted included: the Hawai‘i State Archives Digital Collection, the Bishop Museum Library and Archives, the Hawaiian Missions Houses Library and Archives, the University of Hawai‘i at Mānoa (UHM) Hamilton Library, UHM’s Online Maps, Aerial, Photograph and GIS (MAGIS) library, Papakilo Database, Ulukau, and AVA Konohiki. Reports, historical maps and photographs from the Nohopapa internal database as well as books and other publications from the authors’ personal libraries were also utilized.

Nohopapa Hawai‘i’s methodological approach for evaluating and using primary ‘ike kūpuna (ancestral knowledge) and primary source Hawaiian materials is derived from Kikilo (2010:80), who writes that researchers must preference: “...testimonies in the ethno-historic record that were (a) recorded first in Hawaiian Language, and (b) written by native Hawaiian people or recorded first hand from their testimony.”

In addition to these required attributes, Nohopapa Hawai‘i researchers possess the skills Kikiloi (2010:80) asserts are necessary for accurate, careful, and respectful utilization of ‘ike kūpuna (ancestral knowledge) and primary source Hawaiian materials:

- (a) an emic (insider) understanding of cultural context, meaning, and metaphor;
- (b) a level of fluency in the native language or ‘ōlelo Hawai‘i (Hawaiian Language)
- (c) a familiarity with ‘āina (environment) as a critical point of reference to orient and position oneself to have legitimacy in interpretation. [Kikiloi 2010:80]

Background research using the methods and approaches described above was used to inform contextual synthesis of:


- Natural/cultural resources (environmental zones, soils, geology, plants, wai) associated with the project area,
- Native Hawaiian oral traditions and accounts including ka‘ao, mo‘olelo, inoa ‘āina, mele, oli, ‘ōlelo no‘eau, nūpepa, (histories, narratives, place names, songs, chants, proverbs, newspapers) associated with the project area,
- Cultural resources, practices, and beliefs found within the broad geographical area that hosts the project area, including its relationships to people and places throughout the pae ‘āina,
- Post-European contact historical accounts (early visitor accounts, Plantation Era records, historical maps, English language newspapers) associated with the project area,
- Kingdom of Hawai‘i land use and resource management practices within the project area and vicinity (Māhele information –Boundary Commission Testimonies, Land Commission Awards, Native & Foreign Testimonies and Registers, Government Land Grants, Crown lands),
- Archaeological information pertaining to cultural and historic sites within the project area and vicinity in order to understand existing as well as the potential for additional wahi kūpuna/historic properties
- Wahi kūpuna stewardship best practices and historic preservation compliance recommendations

Additionally, a remote public records search of the SHPD archives, University of Hawai‘i at Mānoa Hamilton Library and Bishop Museum Archives for previous academic and compliance archaeological studies associated with the project area and vicinity in Wailuku Ahupua‘a was conducted in May and June 2023. The Maui Historical Society’s (MHS) website indicated their holdings were closed to research, and June 2023 email inquiries to the MHS from Nohopapa Hawai‘i regarding research access or enlisting the MHS’s research services received no response.

## Community Engagement Methods

Community engagement efforts were conducted from November 2023 to February 2024. The ethnographic process consisted of identifying appropriate and knowledgeable individuals, encouraging their active participation, gathering community mana‘o via phone calls and emails, and summarizing the mana‘o to include in the report.


Scoping for this project involved identifying and contacting interested and knowledgeable individuals recognized as having genealogical, cultural, and/or historical connections to the project area in the ahupua‘a of Wailuku on the island of Maui. Initial scoping methods included emailing and mailing letters (Appendix A: Community Participation Letter; Appendix B: Interview Themes and Questions) to inform individuals of the project, contacting individuals by



telephone, and/or meeting with individuals in person to discuss the project. Participants were selected because of their familiarity with or knowledge of the project area. An interview was completed with one individual for this study (see Table 4 in the Community Ethnography section).

Throughout the study, and particularly before any meetings or interviews, it was carefully explained to all participants that their involvement in the study was voluntary. An informed consent process was initiated and completed, including providing ample project background information. The informed consent form (Appendix C: Informed Consent Form) included the participant's rights including notification that participants could choose to remain anonymous. Project background information included explaining the study focus and the purpose and importance of the study. After proper notification and discussion, the interview participants voluntarily provided verbal consent for Nohopapa Hawai'i to use their mana'o for the project and signed the requisite informed consent forms. All the interviews were scheduled and arranged for the participant's convenience, and none of the interviews was initiated until participants felt comfortable and completely satisfied with the process.

Community engagement for this study occurred from November 2023 to March 2024. One individual completed an interview (see Appendix B for questions used). During ethnographic interviews for this study, Nohopapa Hawai'i staff members noted that community members who participated in interviews acquired their knowledge about the project area and vicinity from:

- 
- 1) 'Ohana knowledge or personal, historical knowledge and information passed on within the 'ohana from one generation to the next.
  - 2) Knowledge obtained from individuals outside their 'ohana such as teachers, cultural practitioners, and kūpuna (esteemed elders).
  - 3) Knowledge obtained through written sources such as books, documents, newspapers, reports, and studies.
  - 4) Knowledge gathered through personal experience, observations, and practices growing up in the area (such as knowledge acquired through cultural work and practices within or near the project area).


## Cultural Impact Assessment Methods

Mana'o generously shared by consultees during the ethnographic interviews described above was reviewed and summarized for information, perspectives, and opinions regarding:

- The cultural resources (defined as practices, beliefs, and features), and their location within the broad geographical area in which the proposed action is located, as well as their direct or indirect significance or connection to the broader site;
- The nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area affected directly or indirectly by the proposed project;
- An explanation of confidential information, if any, that has been withheld from public disclosure in the assessment; and,
- A discussion concerning any conflicting information, if applicable, in regard to identified cultural resources, practices, and beliefs.

An assessment of cultural impacts by the proposed project to cultural resources – defined as practices, beliefs, and features – within the project area was performed via synthesis and discussion of consultation mana'o gathered and summarized. The scope of the analysis was commensurate to the breadth and depth of information gathered during consultation. In this instance, the effort included consideration and discussion of:



- 
- The potential effect of any proposed physical alteration on cultural resources (defined as practices, beliefs, and features);
  - The potential of the proposed action to isolate cultural resources from their setting; and,
  - The potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place.

Additionally, consultees were invited to share concerns and recommendations related to cultural impacts by the proposed project to cultural resources – defined as practices, beliefs, and features – within the project area. This included feedback regarding:

- How the project might impact iwi kupuna (Native Hawaiian ancestral remains), wahi kupuna (Native Hawaiian ancestral places) and other cultural resources within or around the project area;
- Anticipated adverse impacts to cultural resources resulting from the proposed project;
- Solutions that would address any concerns shared;
- Preferred alternatives to the proposed project;
- Any preferred or desired mitigation (defined as actions that avoid, minimize, rectify, or reduce the impacts of a project) measures relative to the impacts posed by the proposed project.



# NATURAL LANDSCAPE AND RESOURCES

## Cultural Landscape

This section describes the cultural landscape of the project area, including its topography (general elevations, distance inland, and general terrain patterns), vegetation, geology and soils, climate (including rainfall and winds), and hydrology.

The project area is located in Wailuku Ahupua‘a, Wailuku Moku, at an elevation of 22 to 25 m (72.2 to 16.4 ft) above mean sea level (Google Earth 2023). It occupies an undeveloped tract of land within the Maui High School grounds, in the northern reaches of the Central Maui Plains and sand dune system. The general area has an average high temperature of 23.63° C (74.53° F), and receives approximately 436 mm (17.2 inches) of rain per year (Giambelluca et al. 2013; Geography Department UHM 2023).

The ahupua‘a of Wailuku, location of the project area, is the largest land division within the moku of Wailuku. It straddles Kahului Harbor, and is bounded to the east by the lands within the moku of Hāmākuapoko and Kula, to the south by Waikapū Ahupua‘a, and to the west by the ahupua‘a of Waiehu, both in Wailuku Moku. Lands within the moku of Ka‘anapali and Lāhainā abut the western boundary of Wailuku Ahupua‘a. The ahupua‘a encompasses the waters of Kahului Harbor, the Central Maui Plains as well as the eastern reaches of the West Maui Mountains and lands on the western slopes of Haleakalā (Handy, Handy, and Pukui 1972: 510, 511; Google Earth 2023). Hawaiian oral tradition describes Wailuku, along with the ahupua‘a of Waikapū, Waiehu, and Waihe‘e as “na wai ‘ehā (The four waters)”, which twentieth century Hawaiian Bishop Museum ethnographer Mary Kawena Pukui (1983: 251, #2300) describes as “[a] poetic term for these places on Maui:, each of which has a flowing water (wai).” Another ‘ōlelo no‘eau (Hawaiian proverb or poetical saying) reads “Wailuku i ka malu he kuawa (Wailuku in the shelter of the valleys)” and describes the land division as “reposit[ing] in the shelter of the clouds and the valley,” Pukui (1983:319, #2912). The project area is located in the Central Maui Plains. A Hawaiian oral tradition gathered and published by nineteenth century foreign researcher Abraham Fornander in his *Collection of Hawaiian Antiquities and Folklore* describes the project area’s locale and its character-defining features: “Wailuku is the source of the flying clouds. It is a broad plain where councils are held,” (Fornander 1917[4]:304).

According to the U.S. Department of Agriculture (USDA) Soil Survey Geographic (SSURGO) database (2001) and soil survey data gathered by Foote et al. (1972), the primary soil in the project area and vicinity is Puuone sand (PZUE), 7 to 30 percent slopes (Figure 6). Foote et al. (1972:117) describe Puuone sand soils as consisting of “somewhat excessively drained soils on low uplands,” that “developed in material derived from coral and seashells.” Foote et al. (1972:117) further describe PZUE as “on sandhills near the ocean,” with a surface layer that is “grayish-brown, calcerous sand about 20 inches thick. This is underlain by grayish-brown, cemented sand. The soil is moderately alkaline in the surface layer”.

Jaucas sand (JaC) is also present in the study area, with deposits northwest and southeast of the proposed project area. Foote et al. (1972:48) describe Jaucas sand soils as consisting of “excessively drained, calcerous soils that occur as narrow strips on coastal plains, adjacent to the ocean.” Foote et al. (1972:48) further describe JaC as “single gran, pale brown to very pale brown, sandy, and more than 60 inches deep. In many places the surface layer is dark brown as a result

of accumulation of organic matter and alluvium. The soil is neutral to moderately alkaline throughout the profile.”

## Rains And Winds

Native Hawaiians respected nature because as *kānaka*, they are related to all that surrounds them - to plants and creatures, rocks and sea, sky and earth, and to natural phenomena, including rain and wind. With an intimate relationship to their environment, Native Hawaiians have a vast vocabulary for weather and a nuanced understanding of the winds and rains of their home. Like place names (see discussion in Cultural Historical Overview section of this report), winds and rains acted as mnemonic devices facilitating the recollection of the places they occurred (Olivera 2014:89,90).

Some rain names and wind names associated with Wailuku, Maui, were revealed during background research for this report. The selection discussed below is a surface overview and starting point for further research, not a comprehensive inventory. More Wailuku wind and rain names undoubtedly exist. The *makani* (winds) and *ua* (rains) featured here were integrated into dynamic, storied, intertwined Hawaiian ocean, land, and skylscapes. They are emblems and vehicles of Hawaiian ancestral knowledge as well as cultural beliefs, practices, and relationship to *‘āina*.

Named rains of Wailuku Ahupua‘a include the Kili‘o‘opu, ‘Ulalena, Nāulu, and Uhiwai. The Kili‘o‘opu is a rain and wind (Akana and Gonzalez 2015: 83, 84). Akana and Gonzalez (2015:262, 267) translate ‘Ulalena to mean “yellowish-red,” and affiliate it with Wailuku. The widespread Nā‘ulu is defined as a “sudden shower” as well as a cloud and wind type (Akana and Gonzalez 2015: 187). Uhiwai is a mist specifically associated with ‘Īao Valley (Pukui and Elbert 1986:364). I‘a-iki is named as the wind of Wailuku in the nineteenth and twentieth century Hawaiian language newspaper editor and government official Moses Kuaea Nakuina’s version of the mo‘olelo *The Wind Gourd of La‘amaomao* (Nakuina [Mookini and Nākao, trans.] 2005:55). Oral history shared by Rebecca Nuuhiwa (n.d. in Sterling 1998:63) names Wailuku’s wind as “the Makani-lawe-malie, the wind that takes it easy.” Relatedly, James Kahale’s mele published in 1948 describes Wailuku’s wind, also called Wailuku, as “easygoing,” (Kahale n.d. in Clark 1989:4).

## Vegetation

Indigenous and invasive plant species are associated with Wailuku Ahupua‘a and the project area and vicinity (

Table 1). Background research performed for this report identified indigenous plants linked to the project area vicinity in Wailuku cited in twentieth century surveys and studies (e.g. Foote et al. 1972; Handy, Handy, and Pukui 1972; Krauss 1993). Hawaiians engineered an expansive taro (*Colocasia esculenta* spp.) cultivation system in Waihe‘e, Waiehu, Wailuku, and Waikapū that was contiguous and at one point the largest in the archipelago (Handy, Handy, and Pukui 1972:488, 496). Breadfruit (*Artocarpus altilis* spp.) was cultivated in the Wailuku lowlands and plains while dried taro fields may also have been planted with bananas (*Musa* spp.; Handy, Handy, and Pukui 1972:153, 162). Foote et al. 1972:48, 117 associate invasive trees like kiawe (*Prosopis pallida*), and koa haole (foreign koa; *Leucaena*), as well as bristly foxtail (*Cenchrus ciliaris*), Bermuda grass fingergrass (*Digitaria eriantha*), Australian saltbush (*Atriplex semibaccata*), and lantana (*Lantana camara*) with soils found in the project area and vicinity.



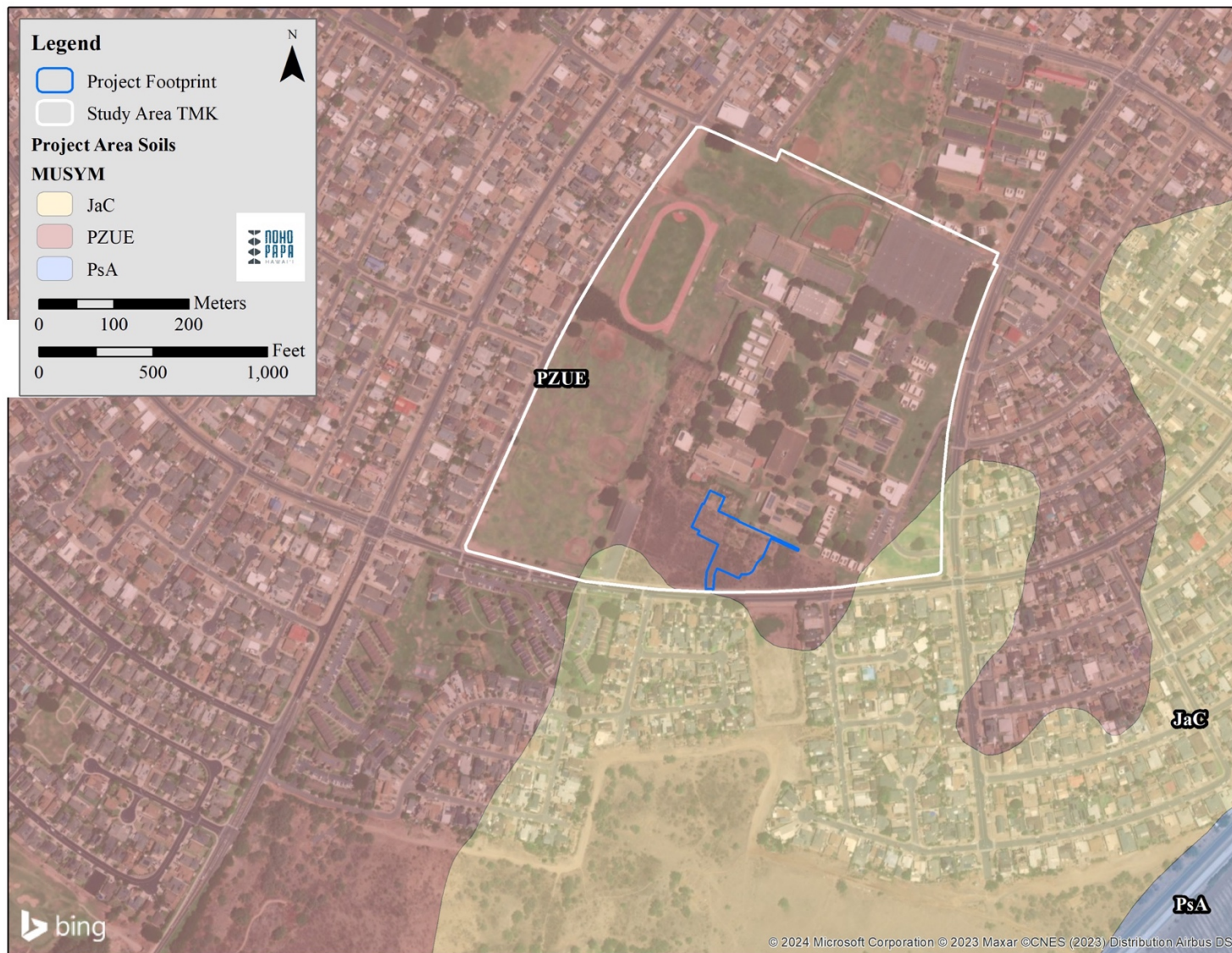


Figure 6. Overlay of Soil Survey of the State of Hawai'i (Sato et al. 1973), indicating soil types within and surrounding the project area (U.S. Department of Agriculture Soils Survey Geographic Database [SSURGO] 2001).



Table 1. Table of Endemic and Indigenous Plant Species Associated With the Project Area

Plant Species	Status	Use	Existing in project area	Existing in surrounding area	Previously existing in project area	Previously existing in surrounding area	Citation
<b>Ground Cover/Ferns/Herbs</b>							
Kalo Taro ( <i>Colocasia esculenta</i> spp.)	Indigenous	Cultural and food staple				X	Handy, Handy, and Pukui 1972:488, 496; Abbott 1992:23; Krauss 1993:178,179
<b>Overstory</b>							
‘Ulu Breadfruit ( <i>Artocarpus altilis</i> spp.)	Indigenous	Food, wood				X	Handy, Handy, and Pukui 1972:153; Krauss 1993:314
Mai‘a Bananas ( <i>Musa</i> spp.)	Indigenous	Food				X	Handy, Handy, and Pukui 1972:162; Krauss 1993: 221, 222



## CULTURAL LANDSCAPE

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An intertwined and contiguous array of significant cultural features and resources constitute the Hawaiian cultural landscape of the project area and vicinity in Wailuku Ahupua‘a, Wailuku Moku, Maui Mokupuni. Hawaiian oral traditions used to relay ‘ike kupuna (ancestral knowledge) and ways of knowing across centuries and generations – from the past through today – are utilized to contextualize the project area in its Hawaiian cultural landscape. These include historical information passed from one generation to the next and transcribed beginning in the nineteenth century through contemporary times. Hawaiian oral traditions relay understandings of things including but not limited to Hawaiian spirituality, culture and cultural practice, history, unique cultural relationships to place and ‘āina, systems of traditional land tenure, sustainability and use, the trajectories of communities, and lives of individuals throughout the pae ‘āina.

### Wahi Kūpuna

Wahi kūpuna are special ancestral spaces and places where Native Hawaiians maintain relationships to the past and foster their identity and well-being in the present (The Kali‘uokapa‘akai Collective 2021:4). As cultural anchors to place, ancestral knowledge and practices, wahi kūpuna are strikingly similar to Traditional Cultural Properties defined by the National Park Service as places associated with the cultural practices or beliefs of a living community that are both rooted in a community’s history and important in maintaining its continued cultural identity (Parker and King 1998:1).

Wahi kūpuna and wahi pana (storied places) comprise component parts and/or entire contiguous Hawaiian cultural land, sea, and skylines (Pukui, Elbert, and Mookini 1974: x- xii; Oliveira 2014: 78, 79; The Kali‘uokapa‘akai Collective 2021). Place names embody and perpetuate Hawaiian cultural history, knowledge, and practice. As explained by Oliveira (2014:78): “To Kānaka and other indigenous peoples who share a close connection to their land and use oral traditions to record their history, place names and landmarks serve as triggers for the memory, mapping the environment and ultimately the tradition and culture of a people.” Wahi pana and wahi kūpuna are special places and spaces. As noted by Maly and Maly (2022:14,15): “Names would not have been given to – or remembered if they were – mere worthless pieces of topography”. Traditional nomenclature indicates the variety of functions that named localities served, such as describing a particular feature of the landscape; indicating a site of cultural and ceremonial significance; recording particular events or practices that occurred in that given area; revealing the source of a natural resource or other materials necessary for a cultural practice; marking trails and trailside resting places; signifying triangulation points for cultural practices; giving notice of residences; showing the use of an area; and recording a notable event that occurred in the area (Maly 2022:14, 15).

Examples specific to Wailuku, Maui, location of the current project and study areas, illustrate the broad genealogical, biographical, and geographical significance and interconnectedness of wahi kūpuna. In the article series “Ka Mo‘olelo Hawai‘i” authored by Nineteenth century Hawaiian scholar Samuel Mānaiakalani Kamakau and originally published in the Hawaiian language newspaper *Ke Au Okoa* from 1869–1871, ruling chief Kapawa is identified as an important historical example of: “Iā Kapaka ka mālama ‘ana mai, a me ka ho‘omana‘o ‘ana o ka po‘e kahiko i kahi i hānau ai kēlā ali‘i kēia ali‘i,” (Kamakau 1869); “During the time of Kapawa the care of the traditions [began], and traditional society recorded the places that each chief was born,” (translated by Kalama‘ehu Takahashi).

The mele below identifies the place of Kapawa’s birth at Kūkaniloko, and the location of his death and burial, described by a series of epithets that carefully identifies a sacred burial place in the moku of Wailuku:

‘O Kapawa ‘o ke ali‘i o Waialua,  
I hānau i Kūkaniloko,  
‘O Wahiwā ke kahua  
‘O Lihu‘e ke ēwe  
‘O Ka‘ala ka piko  
‘O Kapukapuākea ka ‘a‘a,  
‘O Kaiaka i Māeaea,  
Hā‘ule i Nūkea i Wainakia,  
I ‘A‘aka i Hāleu,  
I ka la‘i malino o Hauola,  
Ke ali‘i ‘o Kapawa, ho‘i nō,  
Ho‘i nō i uka ka waihona,  
Ho‘i nō i ka pali kapu o nā ali‘i,  
He kia‘i Kalakahi no Kaka‘e,  
‘O Heleipawa ke keiki a Kapawa,  
He keiki ali‘i no Waialua i O‘ahu.  
[Kamakau 1869]


This mele for Kapawa is important because, as Hawaiian Studies and Law Professor Malia Akutagawa and Natasha Baldauf, the authors of the 2013 *Ho‘i Hou i Ka Iwikuamo‘o: A Legal Primer for the Protection of Iwi Kūpuna in Hawai‘i Nei* assert: “The burial of iwi impart the mana of the deceased to that particular ground, to that specific ahupua‘a (land division), and to the island itself” (Baldauf and Akutagawa 2013:6). The connectivity of wahi kūpuna are further reflected in W. D. Alexander’s description of the unique relationship the moku of Wailuku to the history of land tenure in Hawai‘i:

On Maui the lands of Waikapu and Wailuku appropriated almost the whole of the isthmus so as to cut off half of the lands in the district of Kula from access to the sea. These two ahupuaas, together with Waiehu and Waihee, which were independent, belonging to no Moku, were called Na Poko, and have been formed into a district in modern times. [Alexander 1891 in Thrum 1891:106]

The arrangement of each historical layer is the key towards understanding the project area’s relationship to the holistic history of this heavily urbanized region. The accounts of intensively cultivated inland regions with highly complex agriculture and noted aquaculture systems, shoreline resource cultivation, and numerous religious sites outlined here provide more points of reference across the landscape to further reinforce the cultural themes and interconnectivity of the project area to its surrounding landscape.


Place names of Wailuku Ahupua‘a relay cultural knowledge and relationship to place. Table 2, below, features a selection of wahi kūpuna of Wailuku Ahupua‘a, Wailuku Moku, Maui. Wailuku Ahupua‘a includes the valley of ‘Īao, which drains the waters from the west-side mountain of the same name into Wailuku River, which meets the ocean near Nehe Point just north of Kahului Harbor. Pukui, Elbert, and Mookini (1974:225) translate Wailuku as “waters of destruction,” with the word ‘luku’ meaning “massacre, slaughter, destruction; to massacre, destroy, slaughter, lay waste, devastate, exterminate, ravage. Mea luku wale, vandal, one who destroys needlessly. Hele





luku, go on a raid...” (Ulukau 2023). A possible interpretation is that “luku” refers to the violence and intensity of the Wailuku River during heavy rain events. The name is also appropriate as significant battles took place within Wailuku Ahupua‘a.

Ke Kula o Kama‘oma‘o is a name for the central plains of the isthmus region of Maui. These dune systems are famed sites in the historical accounts of the battles that took place on the plains and in valley interiors of the upland regions. An important cultural function of the dune system is the interment of the remains of the deceased, mainly iwi (bones). Kamakau offers valuable firsthand knowledge of Hawaiian society, values, and cultural practices applicable to the project area and vicinity whose natural sand dunes are known to contain burials. Kamakau writes: “O ia he wa kuapapa nui a maluhia ke aupuni, ‘o ia ka wā i kanu pono ‘ia nā kupapa‘u, (It was a time of tranquility and security of the nation, a time when the deceased were properly buried)” (Kamakau 1870; translated by Kalama‘ehu Takahashi). The particular reverence held for the final resting places in the same regard for those interred is an important aspect of culture that should be respected, adopted, and applied to areas where reconciliation and respectful avoidance of burials are possible. Writing in the mid-nineteenth century, minister George Washington Bates describes the characteristics of Maui’s Central Plains:



It is a sandy alluvial, constantly changing the configuration of its surface beneath the action of heavy winds. This neck of land has a gradual elevation from the sea-shore on the southwest, to nearly two hundred feet on the northeast, in the region of Wai-lu-ku. In extent it is seven miles by twelve... distinctly marked by moving sand-hills, which owe their formation to the action of the northeast trades. Here these winds blow almost with the violence of a sirocco, and clouds of sand are carried across the northern side of the isthmus to a height of several hundred feet. These sand-hills constitute a huge "Golgotha" for thousands of warriors who fell in ancient battles. In places laid bare by the action of the winds, there were human skeletons projecting, as if in the act of struggling for a resurrection from their lurid sepulchres. In many portions of the plain whole cart-loads were exposed in this way. Judging of the numbers of the dead, the contests of the old Hawaiians must have been exceedingly bloody .... [Bates 1854 in Sterling 1998:92]


Table 2. Wahi Kūpuna of Wailuku Ahupua‘a, Wailuku Moku, Maui

Inoa (name)	Possible Translation	Description and Location
‘Āalalōloa	Translated in Clark (1989:52) as “long path of rough lava.”	According to Clark (1989:52), the name for “an extensive range of hills and rocky sea cliffs between Mā‘alaea and Pāpalaua.”
Hekuawa	--	“Tomorrow we will drink the waters of Wailuku and rest in the shade of Hekuawa,” (Kamakau 1992:87).
‘Iao	--	Valley and Peak, West Maui (Pukui, Elbert, and Mookini 1976:55)
Kaihuwa‘a	“The bow of a canoe, bowsprit,” Puku‘i and Elbert	‘Ili ‘Āina, Kahului
Mā‘alaea (Kamaalaea)	Described by Pukui, Elbert, and Mookini (1974:137) as a possible a contraction of “Maka‘alaea,” meaning “ocherous earth beginnings.” Kamakau	Described by Pukui, Elbert, and Mookini (1974:137) as a “bay, village, and boat harbor, Maui isthmus.”
Nā Poko	--	“..the lands of Waikapu and Wailuku appropriated almost the whole of the isthmus so as to cut off half of the lands in the district of Kula from access to the sea. These two ahupuaa, together with Waiehu and Waihee, which were independent, belonging to no Moku, were called. Na Poko, and have been formed into a district in modern times.” (Alexander 1891 in Thrum 1891:106)
Pa‘uniu	--	Secret hidden burial area of Lonoapi‘ilani (Kamakau 1870)
Palalau	Literally translated as “yellow leaf,” (Pukui, Elbert, and Mookini 1974:76).	Described as the Mā‘alaea coastal area in Pukui, Elbert, Mookini (1974:176). Another name for the shoreline at Mā‘alaea per Clark (1989:50).
Papalekailiu	--	Uaua (1871) “When Ka-nene-nui-a-ka-wai-kalu was chief of Maui, there lived a certain noted man, Kapoi and wife in Wailuku. Wife goes to plain of Papalekailiu to catch uhini (locusts).
Pihana	--	(Thrum 1909:45)




Inoa (name)	Possible Translation	Description and Location
<b>Kahalu‘u</b>	--	Sandhills of region described where the Po‘ouahi and Niu‘ula divisions of Kahekili’s forces ambushed the Alapa forces of Kalani‘opu‘u (Kamakau 1992:85).
<b>Kahului</b>	--	Town, elementary school, port, bay, railroad, and surfing area known as Kahului breakwater (Finney 1959:108)
<b>Kalua</b>	--	Sandhill region where the Po‘ouahi and Niu‘ula divisions of Kahekili’s forces slew the Alapa forces of Kalani‘opu‘u (Kamakau 1992:85) . Ahulau ka Pi‘ipi‘i i Kakanilua, the slaughter at the battle of Kakanilua. (Kamakau 1992:86).
<b>Kama‘oma‘o</b>	--	(Kamakau 1992: 85) Plain marched by Alapa warriors of Kalani‘ōpu‘u Ahulau ka Pi‘ipi‘i i Kakanilua, the slaughter at the battle of Kakanilua, (Kamakau 1992: 86).
<b>Pu‘u‘ainako (Pu‘u‘āinakō/ Pu‘u‘ainakō)</b>	Cane trash hill (Kamakau 1992:85)	Kamakau (1992:85) lists Pu‘u‘ainako along the march of the Alapa warriors.
<b>Wailuku</b>	Pukui, Elbert, and Mookini (1974:225) translate Wailuku as “water of destruction.”	Moku, ahupua‘ a, location of an eighteenth century battle (Pukui, Elbert, and Mookini 1974:225).





The major battle events connect larger land divisions, multiple ahupua‘a and moku, but Ke Kula o Kama‘oma‘o is a focal point because of the location of the project area specifically within the broader region of the coastal sand dunes system. Pukui (1983: 189, #1761) wrote that “[t]he plain of Kama‘oma‘o, Maui, was said to be the haunt of ghosts whose activities were often terrifying.” Ke Kula o Kama‘oma‘o is also significant because of its central cultural historical relevance to other localities within the ahupua‘a of Wailuku, the greater moku of Wailuku, and the island of Maui.

The valley of ‘Iao and the ahupua‘a and moku of Wailuku were heavily cultivated and settled in the pre-contact era: “the whole valley of Wailuku, cultivated terrace after terrace, gleaming with running waters and standing pools, is a spectacle of uncommon beauty,” (Cheever 1851:124). On the basis of archaeological, ecological, and ethnographic evidence, Bishop Museum research affiliate E.S. Craighill Handy wrote of Wailuku:



This is the third of "The Four Streams," the great torrent that drains the highest cloud-capped uplands of western Maui through deep Iao Valley. Much of the upper section of what is now the city of Wailuku is built on old terrace sites. Along the broad stream bed of Iao Valley, extending several miles up and inland, the carefully leveled and stone-encased terraces may be seen. In the lower section of the valley these broad terraces now serve as sites for camps 10 and 6 of Wailuku Sugar Plantation... A little farther up, neat private homes and vegetable and flower gardens cover these old taro terraces; while at their upper limit the terraces are submerged in guava thickets. [Handy 1940:108]

The valley interiors of Nā Wai ‘Ehā were not the only areas of cultivation within Wailuku Moku. The main aquaculture feature of the Kahului region were the fishponds Kanahā and Mau‘oni. Kamakau (1992:42) credits Maui’s ruling chief Kihapi‘ilani with its construction and notes he was living in Kahului during the construction of the ponds. Kamakau recorded a visit of Keawenuia‘Umi to Maui to meet with Kihapi‘ilani:

Keawe-nui-a-'Umi sailed from Hilo to Kapu‘ekahi [Kapueokahi] in Hana and from Hana to Kahului of Wailuku. There the chief of Hawaii met Kiha-a-Pi'ilani, ruler of Maui. Kiha-a-Pi'ilani was building the walls of the pond of Mau'oni. A wide expanse of water lay between Kaipu'ula and Kanaha, and the sea swept into Mau'oni. The two ruling chiefs met and greeted each other with affection. [Kamakau 1992:42]

These abundant food systems sustained large populations and required meticulous planning and an immense amount of collective labor. An account of a wahine named Puea-a-Makakaualii identified Kapi‘iohookalani, a chief of O‘ahu and a portion of Moloka‘i as the chief that commissioned its construction and details of the large workforce:

Tradition relates that the laborers stood so closely together that they passed the stones from hand to hand. The line extended from Makawela (the sea fishery at the sea base of the Wailuku road, as you turn in to Kahului) to Kanaha. ...with such a multitude to feed, the nehu and opae were most suitable as being obtainable in quantity. At times the men had only one nehu each for a meal and had to fill up with sea-weed and salt, hence the saying "Kakahi ka nehu a Kapiioho." [Blaisdell 1923 in Sterling 1998:87]

## Hawaiian Oral Traditions

Hawaiian oral traditions are streams of information that have been passed down by word of mouth from one generation to the next and recorded in more contemporary times. Hawaiian oral traditions provide a general sense of Native Hawaiian history, their connection to land, how they lived, and their traditional land tenure. These Hawaiian oral traditions come in the forms of oli (chants), mele (songs), ‘ōlelo no‘eau (proverbs and poetical sayings), mo‘olelo (stories), mo‘okūauhau (genealogies), and nūpepa (Hawaiian language newspapers). These forms of oral traditions can be woven into each other. For instance, a mo‘olelo may present a mele or oli about a mo‘okūauhau. Essentially, these oral traditions are vehicles for intergenerational transmission of knowledge that ensures the survival of cultural beliefs, practices, and traditions. They are a direct link to experience Hawai‘i through a timeless bridge of cultural insights that have guided Hawaiians for generations. The Hawaiian oral traditions gathered below relay information regarding resources of the land, akua (gods), kupua (shapeshifting demigods), ‘aumākua (familial guardians), ali‘i (chiefs), and ka po‘e kānaka (the Hawaiian people) whose stories weave a unique and treasured history of this ‘āina (cultural landscape).

### Mo‘olelo and Ka‘ao

Mo‘olelo (narratives) and ka‘ao (histories), which are more flexible in structure, version, and meaning, are the second type of Hawaiian oral traditions – verbal testimonies or reported statements concerning the past,” and ‘ike kūpuna (Kikiloi 2010:78).

Amongst all of the vivid detail of the battles that ensued on the Central Maui Plains which claimed many warriors and chiefs then laid to rest at Kama‘oma‘o, the procession of ali‘i after their passing on the way to sacred inland burial sites offers insight into other wahi kūpuna within the moku along the procession. The following is an account of the death and procession of the great Maui chief Kekaulike recorded by Kamakau:

“The chiefs then prepared a manele or palanquin to carry the sick King overland and at a place called Halekii the King expired. This happened in 1736. The High Chiefs being in fear of Alapainui coming to do battle with them, they immediately performed the sacred ceremonies... and decided to take the royal remains to Iao. They again embarked landing at Kapoli in Maalaea, thence to Puuhele, Kaluamanu, Waikapu, Wahanemai, Kaumuilio, Aoakamanu, Puuelinapao, Kaumulanahu, Kapohakai, Kalua, Kekio, Kamaauwai, Kahua at Kailipoe, Kalihi at Kaluaoiki. Along the route relays of high chiefs bore the remains of their beloved sovereign to Kihahale, at Ahuwahine they rested, thence to Loiloa where the royal remains were placed in Kapela Kapu o Kakaē, the sacred sepulchre of the sovereigns and the blue blood of Maui’s nobility.” [Henriques 1916 in Sterling 1998:80]

From 1775–1779, conflict between ruling chiefs occurred on the Central Maui Plains as well as other locations between Kalani‘ōpu‘u and Kahekili (Kamakau 1992:85). Kalani‘ōpu‘u and his forces, the ‘Ālapa and Pipi‘i landed in the moku of Honua‘ula at Keone‘ō‘io in and extended to Mākena. All were eager, thirsting for battle with the collective desire to “drink the waters of Wailuku,” [victory] (Kamakau 1992:85). After ravaging the population there, Kahekili prepared his forces the Niu‘ula and Po‘ouahi. Occupying the area of Kīheipūko‘a, to the south east of Waikapū, the forces of Kalani‘ō‘pu‘u marched northwest towards Wailuku crossing the plains of Pu‘u‘ainako and Kama‘oma‘o. They met their demise at the hands of the Po‘ouahi and Niu‘ula divisions of Kahekili’s army at the sandhills of Kahalu‘u and Kalua. There were two survivors that reported back to a prematurely celebrating Kalani‘ōpu‘u who immediately broke out into




hysterical wailing, mourning the loss of his most coveted forces. This was a particularly disheartening defeat as he and his entire alo ali‘i had full confidence in their victory (Kamakau 1992:85–87).

## Oli, Mele, and ‘Ōlelo No‘eau

Kikiloi (2010:78) defines Hawaiian oral traditions as “verbal testimonies or reported statements concerning the past,” and ‘ike kūpuna and divides them into two types. One group of Hawaiian oral traditions identified by Kikiloi (2010:79) include oli (*chants*), mele (*songs*), and ‘ōlelo no‘eau (*proverbs*) which are short, reproduced through strict protocol, and often “part of sacred learning or tradition,” Kikiloi (2010:78).

Nogelmeier (2001:vii, 1) defines mele as “Hawaiian poetic compositions to be performed as chants or dances,” and “both an art and an ancient tradition...”. The ancient, pan-Pacific roots, developmental trajectory, and depth and breadth of the Hawaiian oral tradition is synthesized by Nogelmeier:



Before Europeans arrived in the Islands, poetry was part of the vast collective repository of oral tradition necessary for social continuity in such a complex oral culture. Poetic form was useful for remembering genealogies and for documenting historical events; combined into histories and legends, this kind of poetry has been recorded throughout the many Pacific cultures. Eventual interior changes in Hawaiian society certainly affected the uses of poetry, fostering its status in the protocols of royal court and religious ceremony and at the same time expanding the practice and appreciation of the art throughout the general population. Whether recited as prayer or invocation, intoned in chant without accompaniment, or presented through dancers as a hula, poetic compositions were called *mele*. Expressing the skills of the poet and the reciter, the art came to be widely embraced; poetic presentation, as pleasant pastime and formal purpose, became a social norm. [Nogelmeier: 2001:1]

‘Ōlelo no‘eau, or Hawaiian proverbs and poetical sayings, are valuable in perpetuating Hawaiian cultural knowledge, presenting layers of kaona (*meaning*), and illustrating creative expressions that incorporate observational knowledge with cultural values, history, knowledge, and humor. Today, they serve as a traditional source to learn about the communities, people, places, histories, and environments of Hawai‘i.

Notably, Ka pela kapu o Kaka‘e at ‘Īao Valley, in Wailuku Moku, is identified in the ‘ōlelo no‘eau below as a sacred burial place of the chiefs of old:

Papani ka uka o Kapela; pua‘i hānono wai ‘ole Kukaniloko; pakī hunahuna ‘ole o Holoholokū; ‘a‘ohe mea nana e ‘a‘e‘ paepae kapu o Līloa.

*Close the upland of Kapela; no red water gushes from Kukaniloko; not a particle issues from Holoholokū; there is none to step over the sacred platform of Līloa.*

...the descendants are no longer laid to rest at Ka-pela-kapu-o-Kaka‘e at ‘Īao, the descendants no longer point to Kukaniloko on O‘ahu and Holoholokū on Kaua‘i as the sacred birthplaces; there is no one to tread on the sacred places in Waipi‘o, Hawai‘i, where Līloa dwelt.

[Pukui 1983: 286, #2602]

Although the ‘ōlelo no‘eau relays a degree of loss, the descendants prevail. Preservation of these wahi kūpuna, their histories, in all themes and tones, is what further ingrain the intimate details of our relationship with these spaces.

Another ‘ōlelo no‘eau mentions the sacred nature of ‘Īao Valley are gathered below:

Ka Malu ao o na pali kapu o Kaka‘e.

*The Cloud Shelter of the sacred cliffs of Kaka‘e.*

Kaka‘e, an ancient ruler of Maui, was buried in ‘Īao Valley, and the place was given his name. It was known as Na-pali-Kapu-o-Kaka‘e (Kaka‘e’s Sacred Precipice) or Na-pela-kapu-o-Kaka‘e. Since that time, many high chiefs have shared his burial place.

[Pukui 1983: 159, #1473]

Battles are another prevalent theme in ‘ōlelo no‘eau for Wailuku Moku:

Ahulau ka Pi‘ipi‘i i Kakanilua,

*A slaughter of the Pi‘ipi‘i at Kakanilua.*

In the battle between Kahekili of Maui and Kalani‘ōpu‘u of Hawai‘i, on the sand dunes of Wailuku, Maui there was a great slaughter of Hawai‘i warriors who were called the Pi‘ipi‘i. Any great slaughter might be compared to the slaughter of the Pi‘ipi‘i.

[Pukui 1983:5, #19]

Ke inu aku la paha a‘u ‘Ālapa i ka wai o Wailuku.

*My ‘Ālapa warriors must now be drinking the water of Wailuku. Said when an unexpected success has turned into failure.*

This was a remark made by Kalani‘ōpu‘u to his wife Kalola and son Kiwala‘ō, in the belief that his selected warriors, the ‘Ālapa, were winning in their battle against Kahekili. Instead they were utterly destroyed.

[Pukui 1983: 184, #1711]

Wehe i ka mākāhā i komo ka i‘a.

*Open the sluice gate that the fish may enter.*

This was uttered by Kaleopu‘upu‘u, priest of Kahekili, after the dedication of the heiau of Kaluli, at Pu‘u‘ohala on the north side of Wailuku, Maui. A second invasion from Kalani‘ōpu‘u of Hawai‘i was expected, and the priest declared that they were now ready to trap the invaders, like fish inside the pond. The saying refers to the application of strategy to trap the enemy.

[Pukui 1983:320, #2923]

Select additional ‘ōlelo no‘eau commemorate resources and features of Wailuku Moku:

Na wai ‘ehā.

*The four wai.*

A poetic term for these places on Maui: Wailuku, Waiehu, Waihe‘e, Waikapū, each of which has a flowing water (wai).

[Pukui 1983:251, #2300]

Ke alanui pali o ‘A‘alaloa.


*The cliff trail of ‘A‘alaloa.*

A well-known trail from Wailuku to Lahaina.

[Pukui, 1983:181, #1675]

Pili ka hanu o Wailuku. Wailuku holds its breath. Said of one who is speechless or petrified with either fear or extreme cold. There is a play on luku (destruction). Refers to Wailuku, Maui. (Pukui 1983, 290, 2647)

Ke kula o Kama‘oma‘o ka ‘āina huli hana.



*The plain of Kama‘oma‘o —that is the place where plenty of work is to be found.*

A taunt of one who talks of looking for work but does not do it. The plain of Kama‘oma‘o, Maui, was said to be the haunt of ghosts whose activities were often terrifying.

[Pukui 1983: 189, #1761).

Ka‘ōlohe puka awakea o Kama‘oma‘o.

*The bare one of Kama‘oma‘o that appears at noonday.*

The plain of Kama‘oma‘o, Muia, is said to be the haunt of ghosts (‘ōlohe) who appear at night or at noon. Also a play on ‘ōlohe (nude), applied to one who appears unclothed.

[Pukui 1983: 164, #1514)





# HISTORICAL LANDSCAPE

## Early Historical Period

During the 18<sup>th</sup> century, Wailuku was a known location of Hawaiian settlements. Writes Kamakau:

In the year 1765 a quarrel arose among the descendants of the chief Ke-kau-like Ka-lani-ku'i-hono-i-ka-moku. Ka-hekili was living at Pihana, at Pukukalo, and at Wailuku with the chiefs, his companions and favorites, and his warriors, Ka-niu-‘ula and Ke-po‘o-uahi. The chiefs of Wailuku passed their time in the surf of Kehu and Ka‘akau... [Kamakau 1961:83]

Hawaiian ethnographer Mary Kawena Pukui collaborated with E.S. Craighill Handy and Elizabeth Green Handy on the 1972 *Native Planters in Old Hawaii: Their Life, Lore, and Environment*. They identify Kahului as a possible location for early Hawaiian settlement with its “protected bay and beach areas where fresh water was available and where there was good inshore and offshore fishing,” (Handy, Handy, and Pukui 1972:268). They note the taro cultivation system in Waihe‘e, Waiehu, Wailuku, and Waikapū was contiguous and “the largest continuous area of we-taro cultivation in the islands (Handy, Handy, and Pukui 1972:488, 496). Breadfruit was cultivated in the Wailuku lowlands and plains and dried lo‘i may also have been planted with bananas (Handy, Handy, and Pukui 1972:153, 162). Their work also discusses the shift in land use that occurred in Wailuku during the early historical era:

On Maui there were five centers of population. Kahakuloa was an isolated area on the northwest coast of West Maui, a valley intensively cultivated in wet taro. The second was the southeast and east part of West Maui where four deep valley streams watered four areas of taro land spreading fanwise to seaward: The Four Waters (Na-wai-‘eha) famed in song and story - Waihe‘e, Waiehu, Wailuku, and Waikapu. Here sugar cane has taken over former taro lands. [Handy, Handy, and Pukui 1972:272]

Wailuku appears on the earliest Hawaiian cartographic representations of land divisions including moku and ahupua‘a. “Wailuku” is a land division label on an 1837 map of the archipelago engraved by Simon Peter Kalama, a talented engraver and mapmaker at Lahainaluna Seminary, Maui (Kalama 1837; Forbes 2012:150; Figure 7 and Figure 8). Kalama’s 1838 map engraving of the archipelago depicts the location and bounds of Wailuku Ahupua‘a (Kalama 1838; Forbes 2012:150; Figure 10).

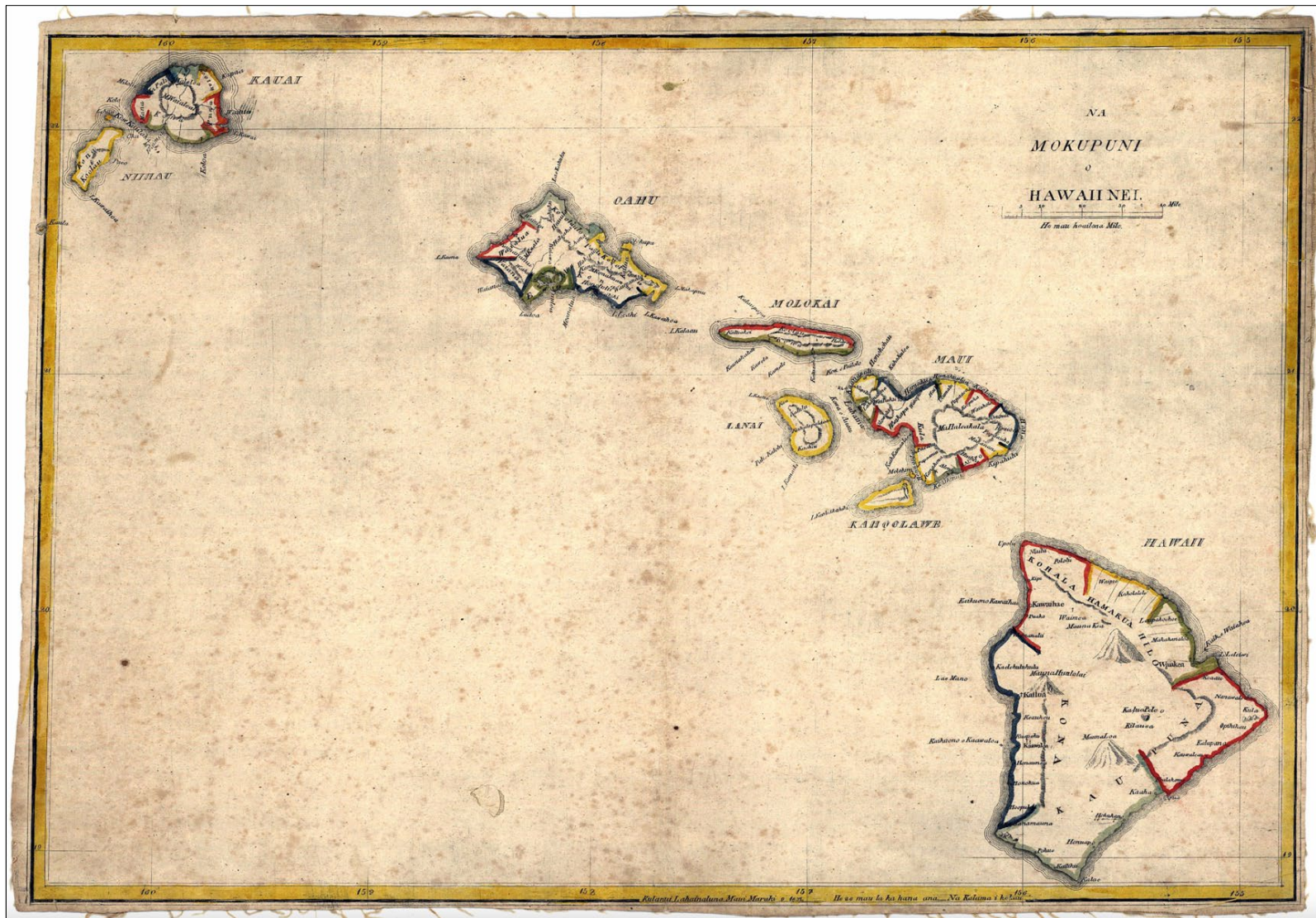


Figure 7. Kalama's 1837 map engraving of the archipelago entitled "Ka Mokupuni o Hawaii Nei" (*The Islands of Hawai'i*) depicting Wailuku, Maui (Kalama 1837; Forbes 2012:150)



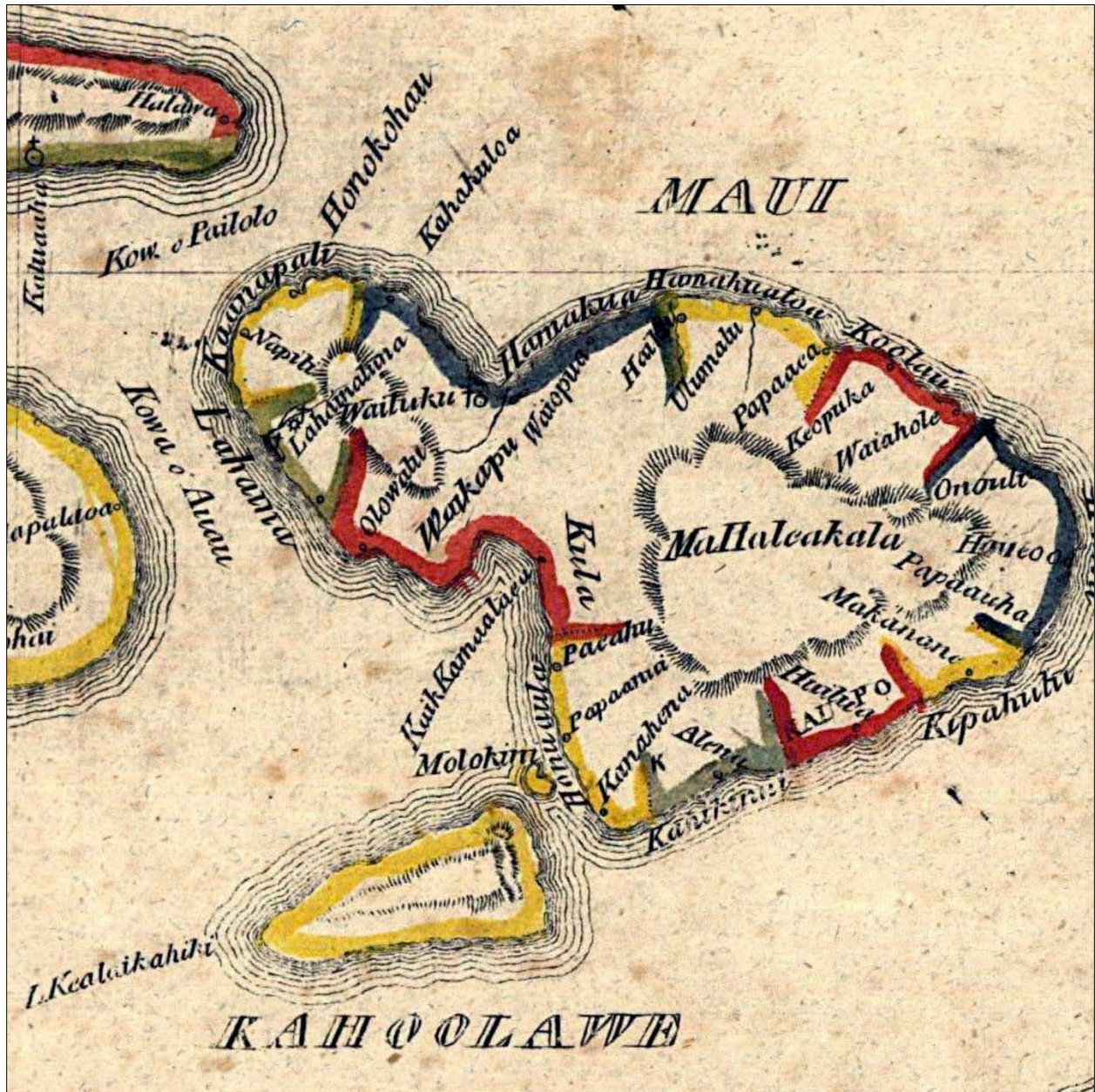


Figure 8. Close-up of the segment of Kalama’s 1837 map engraving of the archipelago entitled “Ka Mokupuni o Hawaii Nei” depicting Wailuku, Maui (Kalama 1837; Forbes 2012:150)



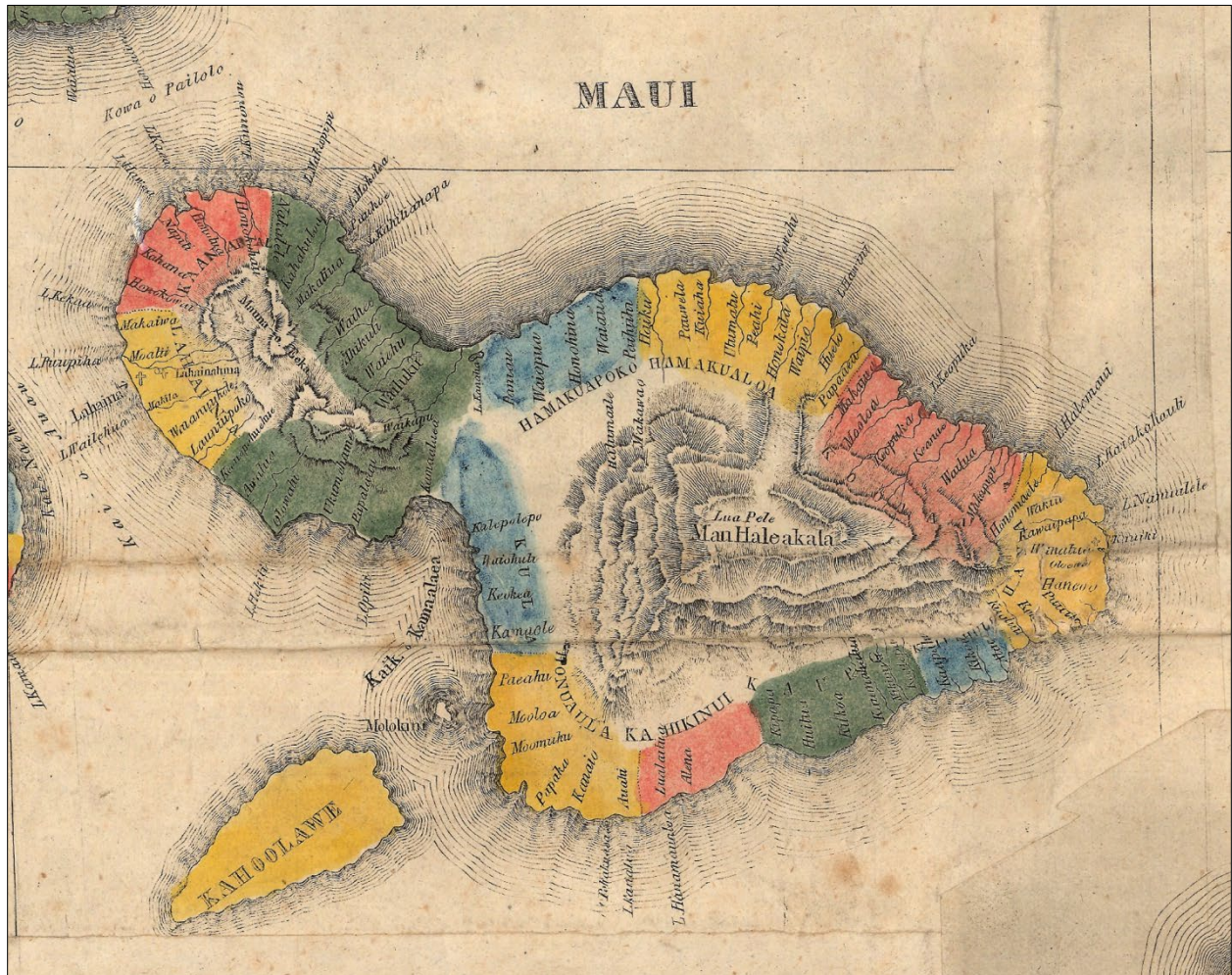


Figure 9. Close-up of a segment of Kalama’s 1838 map engraving of the archipelago depicting the location and bounds of Wailuku Ahupua’a (Kalama 1838; Forbes 2012:150)

## Mid to Late-1800s

The local manifestation of global, extractive sugar industries and economies began in Central Maui and on the lands west, south, and east of the project area beginning in the 1820s. The industry began a long term boom in the 1860s, enhanced by the ratification of the Reciprocity Treaty of 1875 that allowed free trade between the sovereign Hawaiian Kingdom and the United States (Dorrance and Morgan 2000:68; Maclennan 2014:23). Maclennan summarizes the evolution and economic as well as social impacts of the sugar industry in Hawai‘i:

The corporate form of organizing sugar production in Hawai‘i grew out of the early experimentation with sugar cultivation promoted by the Hawaiian king and foreign planters. Corporations are a form of property organization that emerged throughout the world as a regular tool for organizing production in the late nineteenth century – but especially in North America and Europe. Hawai‘i’s sugar corporations – later known as the “Big Five” – followed a somewhat unique path, beginning with missionary settlers who pooled their money, property, and influence into vertically organized institutions that eventually controlled vast resources. Hawai‘i’s brand of capitalism was organic to the social and political arrangements of nineteenth-century life based on a native constitutional monarchy that operated in a global world of trade. The first missionary-created corporations emerged in the 1860s during the first sugar boom and within a quarter-century had brought enough wealth and power to their owners to enable them to challenge the political authority of the Hawaiian monarchy. Corporate property then propelled the missionary-descendants-turned-capitalists into positions of political power, serving the industrial drive toward sugar production for a global market. [Maclennan 2014:33]

Sugar plantations active in the project area vicinity included the Hawaiian Commercial Company which merged with the Maui Agricultural Company to become the Hawaiian Commercial and Sugar Company, managed by Asa Baldwin (Dorrance and Morgan 2000: 59-61). Bal and Adams and the Waikapu Sugar Company were active in the vicinity (Dorrance and Morgan 2000: 60,61). An 1885 Hawai‘i Government Survey map shows the project area in Wailuku Ahupua‘a as part of Grant 3343 in a landscape of sand hills dotted with loko i‘a, and also features the location of the Hawaiian Commercial and Sugar Company landholdings (Figure 10; Dodge and Alexander 1885). An 1893 map of the Sprecklesville sugar plantation, east of the study area, shows the project area in the Central Maui Plains surrounded by roads, railroads, and other plantation infrastructure (Figure 11).

In 1882, the project and study areas were components of an illegal and unauthorized sale of the 24,000 acre Wailuku Ahupua‘a – Crown Lands - to California sugar baron Claus Spreckles by Princess Ruth Ke‘elikolani (Van Dyke 2008:100). The land deal allowed Spreckles to acquire inalienable Crown Lands from an individual who had no authority or right to sell them (Van Dyke 2008:104).



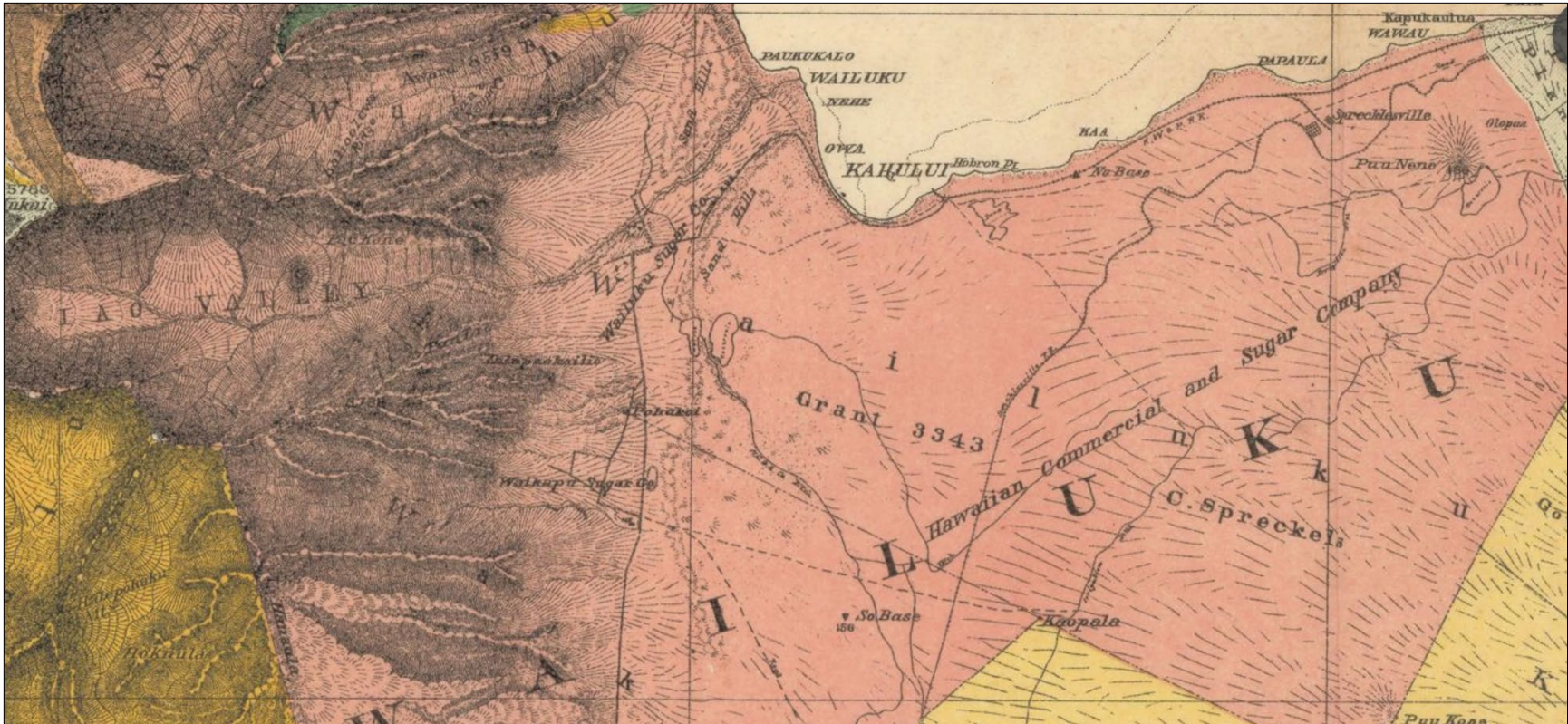


Figure 10. Close-up of an 1885 Hawaii Government Survey map showing the project area in Wailuku as part of Grant 3343 in a landscape of sand hills dotted with fishponds (Dodge and Alexander 1885)





Figure 11.1893 map of the Sprecklesville Sugar Plantation featuring the study area, outlined in blue, on Maui's Central Plains

## 1900s to Present Day

Historical and modern accounts, maps, and photographs provide an understanding of the cultural landscape, settlement, and land use of Wailuku Ahupua‘a and the project area during the 20th century through the present. A 1929 map of Maui shows the Central Maui Plains and location of the project area as undeveloped, with natural topography, and bounded by the settlement of Kahului to the north, and infrastructure like roads and railroads to the west, south, and east (Iao and Wall 1929; Figure 12). Previous archaeological studies associated with the project area and vicinity and the MHS website further detail the twentieth century trajectory of land use in the project area and Central Maui Plain. The project area is described as natural sand dune topography and sediment that served as pasture lands until the late 1960s (Neller 1984:2; Miura et al. 1983:1, 2; Rotunno and Cleghorn 1990:7). Extensive ground disturbance and the modification, reduction, and leveling of the natural sand dune associated with the installation of a papaya and lilikoi fruit plantation by Orchards Hawaii occurred in 1968 (Miura et al. 1983:2). Concurrently, intact or partially intact sand dune systems are recorded south and west of the project area through the 1980s (Neller 1984:2; Miura et al. 1983:2).

According to information on the MHS website (Maui High School 2023), the MHS “opened in 1913 in the community of Hamakuapoko, on the north shore. It was the first academic high school on the island and had an initial enrollment of sixteen students. In 1972, the present Maui High School campus opened in the heart of central Maui.” Historical photographs of the project area and vicinity (Figure 13 and Figure 14) taken in the 1970s feature the MHS campus on the fringes of encroaching Kahului suburbs. The photographs show the current project area in the southern part of the campus as undeveloped land with forested and vegetated segments that were observed roughly intact during the field inspection for this study, roughly four decades later. The photographs also corroborate previous archaeological studies describing sugar cane fields and continued extensive additional ground disturbance from farming and recreational activities like sand mining, dirt biking, the use of informal roads, installation of a drainage pond, and trash dumping observed in lands to the south and west in the 1980s and 1990s (Neller 1984:2; Miura et al. 1983:1, 2; Rotunno and Cleghorn 1990:7).





Figure 12. A 1929 map of Maui showing Central Maui Plains and location of the project area as undeveloped, with natural topography, and bounded by the settlement of Kahului to the north, and infrastructure like roads and railroads to the west, south, and east (Iao and Wall 1929).





Figure 13. A photograph of Kahului in Wailuku Ahupua'a taken in the 1970s after the establishment of the MHS campus in 1972 (yellow arrow), view to the southwest (Bacon 1970s)



Figure 14. A 1975 photograph of Kahului in Wailuku Ahupua'a, featuring the MHS campus established in 1972 (yellow arrow), view to the west (Bacon 1975).



## PREVIOUS ARCHAEOLOGICAL STUDIES

Results of Nohopapa Hawai‘i’s public records search indicates three compliance archaeological studies have occurred in the 2.2 acre project area and no historic properties are officially recorded as associated with the project area. Figure 15 illustrates the locations of previous archaeological studies associated with the project area, study area, and vicinity, listed in (Figure 15). Background research did uncover a previously-issued SHPD determination regarding historic preservation next steps within the project area TMK (SHPD DOC NO: 0903PC83; SHPD 2009; Appendix A). The SHPD determination requires archaeological monitoring of all ground disturbance activities in the northeastern Maui HS campus (north of the current project area); as well as a SHPD-approved Archaeological Monitoring Plan in place prior to ground disturbing activities.

Numerous limitations are important to note regarding the resources yielded and available during background research conducted during this study. William Barrera Jr.’s 1976 *Archaeological Survey at Waiale, Maui* by Chiniago, Inc. was not available. Regarding Sinoto and Pantaleo 1992, the version of the report available from the SHPD was incomplete – all odd numbered pages were missing. Referenced in Cordle and Dega (2007:5), Donna Shefcheck, Michael Dega, and William Fortini’s 2005 *Archaeological Monitoring Report for the Maui High School Softball Field, Kahului, Wailuku Ahupua‘a* for the lands and segment of the MHS campus just north of the project area also was not available.

### Previous Archaeological Research Within the Project Area

Background research performed for this study yielded three previous compliance-related archaeological studies completed for the current study area and project area: an archaeological monitoring report, draft archaeological monitoring plan, and literature review and field inspection completed for environmental compliance review only and therefore not on file at the SHPD (Yucha, Yates, and Hammatt 2020). The studies are summarized in catalog form below.

**Study Title:** *Archaeological Monitoring Report for Maui High School, Kahului, Wailuku Ahupua‘a, Wailuku District, Island of Maui, Hawai‘i [TMK: 3-8-007:098]*

**Study Type:** Archaeological Monitoring Report

**Author(s):** Shayna Cordle, William Fortini Jr., and Michael F. Dega

**Year:** 2007

**Firm or Organization:** Scientific Consultant Services



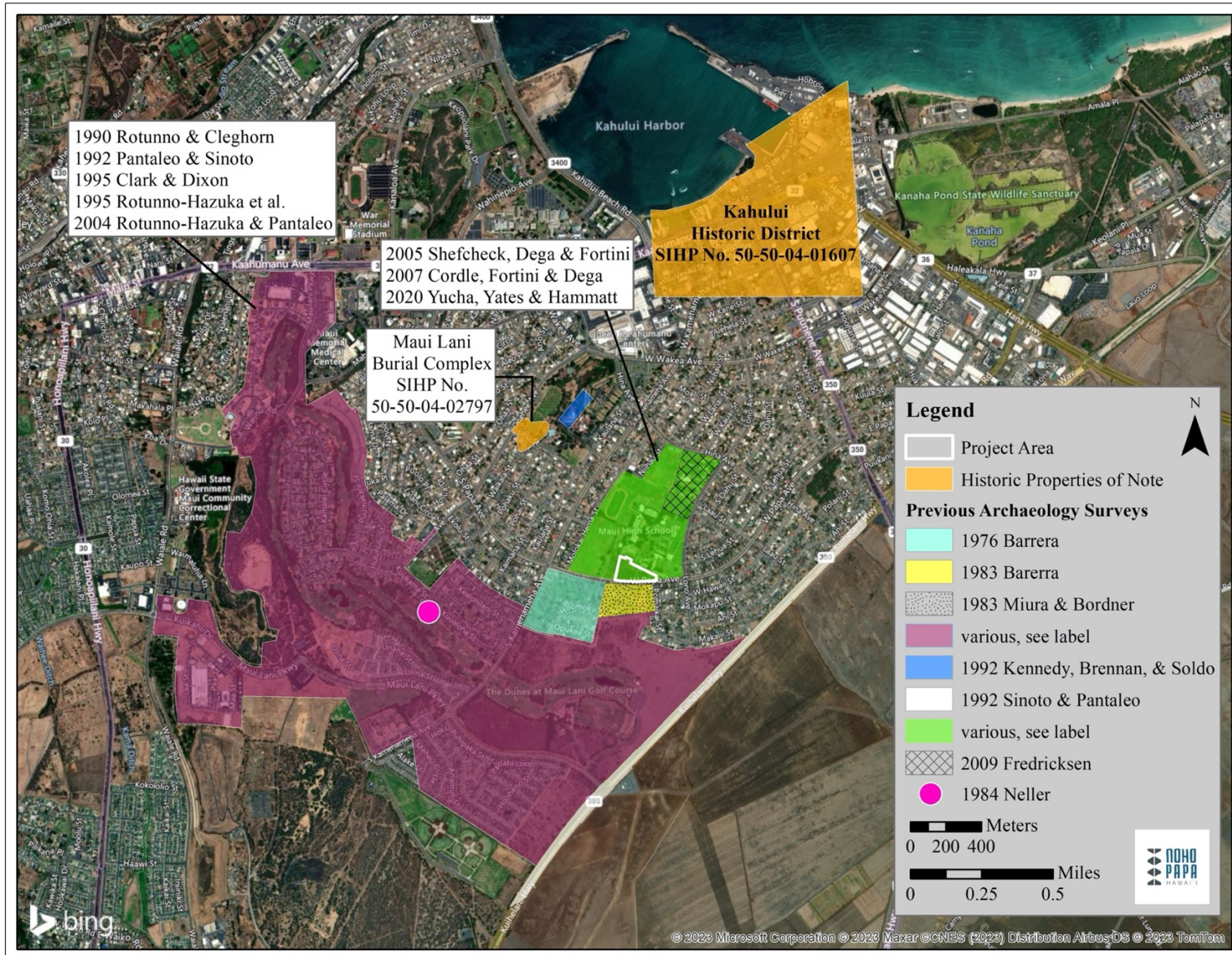


Figure 15. An aerial photograph overlain with the boundaries of previous archaeological studies, labeled by author(s) and year, conducted in the project area and vicinity



Table 3. Previously-identified historic properties and SHPD determinations in the project area and vicinity\*  
 \*defined as within 1/2 mile radius of the project area

Designation	Formal Interpretation	Functional Interpretation	Temporal Interpretation	Status	Firm/Organization	Notes
<b>Previously-identified SHPD determinations in the project area</b>						
SHPD DOC NO: 0903PC83	N/A	N/A	N/A	N/A	SHPD (DLNR 2009)	Requires archaeological monitoring of all ground disturbance activities in the northeastern Maui HS campus; as well as a SHPD-approved Archaeological Monitoring Plan in place prior to ground disturbing activities
<b>Previously-identified historic properties in the project area vicinity</b>						
SIHP #-1607 Kahului Historic District	Historic District	Commerce, housing	19 <sup>th</sup> and 20 <sup>th</sup> centuries	Unknown	Nohopapa Hawai'i Internal GIS Database	
SIHP #- 50-50-04- 02797	Maui Lani Burial Complex	Burials	“pre-Contact or early historical,” (Rotunno- Hazuka et al. 1995:39)	Unknown	Bishop Museum Anthropology Department	“It is recommended that Site 50-50-04-2797 be considered significant under National Register Criteria A and D, and significant under State Criterion E, which assigns a traditional cultural value to the site,” (Rotunno-Hazuka et al. 1995:i).
SIHP #- 4146	Several burials	Burial preserve	Unknown	Unknown, received one burial from SIHP #-5404	Unknown	See discussion in Rotunno-Hazuka and Pantaleo 2004:i Precise location unknown

Designation	Formal Interpretation	Functional Interpretation	Temporal Interpretation	Status	Firm/Organization	Notes
SIHP #-5404	Two burials	Burials	Unknown	One burial relocated to SIHP #-4146, a burial preserve on Maui Lani Golf Course; one burial preserved in place	Archaeological Services Hawai'i, LLC	See discussion in Rotunno-Hazuka and Pantaleo 2004:i
SIHP #-5504	Human remains	Burials in primary and secondary contexts	Unknown	Unknown	Archaeological Services Hawai'i, LLC	See discussion in Rotunno-Hazuka and Pantaleo 2004:i





**Project Area Location:** MHS grounds, TMK (2) 3-8-007:098

**Project Area Acreage:** Unreported

**Study Purpose:** Results of archaeological monitoring program outlined in Chaffee and Dega (2004)

**Methods:** Intermittent monitoring between September 2006 and July 2007.

**Results:** “No cultural deposits or isolated cultural materials were identified during this project. The strata varied from mostly fill layers to natural, sandy sediment sterile of all organics and cultural material (Dega and Risedorf 2004),” (Cordle, Fortini, and Dega 2007:6).

**Mitigation Commitments/Historic Preservation Next Steps:** None.

**Notes:**

No detailed descriptions of subsurface excavations, including their horizontal extents, are provided. No stratigraphic profiles or photographs of the project area or subsurface deposits are included in the 10 page report. It also contains a contradictory description of subsurface deposits. In one section, a range of natural and fill strata are reported in the project area (Cordle, Fortini, and Dega 2007:6). Another states “all ground breaking activities never extended below the fill into natural sands,” (Cordle, Fortini, and Dega 2007:7).

**Study Title:** *An Archaeological Monitoring Plan for Proposed Drainage Improvements for Kahului Elementary School, Wailuku Ahupua‘a, Wailuku District, Maui Island (TMK: [2] 3-8-007:Portion of 041 and 098).*\*

**Study Type and Purpose:** Archaeological Monitoring Plan (AMP)

**Author(s):** Erik Fredericksen

**Year:** 2009

**Firm or Organization:** Xamanek Researches, LLC

**Project Area Location:** Current study area, including current project area (Kahului Elementary School Campus)

**Project Area Acreage:** 1.6 acres

**Methods:** Monitoring plan generated in compliance with the SHPD requirement (SHPD DOC NO: 0903PC83) of monitoring all ground disturbance activities within the project area.

**Results:** The AMP recognizes that significant cultural materials are potentially present on the Maui HS campus.

**Mitigation Commitments/Historic Preservation Next Steps:**

**Notes:** Frederickson writes: “Given the location of the proposed project area, the State Historic Preservation Division (SHPD) Maui office had previously indicated that archaeological monitoring of all ground disturbance activities would be necessary (SHPD DOC NO: 0903PC83 Appendix A). This requirement was stipulated because the project area lies in a portion of Maui that contains Jaucas and Pu‘uone dune sand deposits. Isolated and clustered burials have been previously located in the general vicinity of the project area in this soil type,” (Frederickson 2009: 1).

\*The records search performed for this study did not yield a final version of this AMP

**Study Title:** *Draft Archaeological Literature Review and Field Inspection for the Maui High School STEM Building & Autism Center Project, Wailuku Ahupua‘a, Wailuku District, Maui Island TMK: [2] 3-8-007:098.*

**Study Type and Purpose:** Literature review and field inspection

**Author(s):** Josephine Yucha, Angela Yates, and Hallett H. Hammatt

**Year:** 2020

**Firm or Organization:** Cultural Surveys Hawai‘i

**Project Area Location:** Maui HS Campus

**Project Area Acreage:** 73.64 acres

**Methods:** Literature review and pedestrian field inspection

**Results:** “No potential historic properties were observed on the surface of the project area during the field inspection,” (Yucha et al. 2020:ii).

**Mitigation Commitments/Historic Preservation Next Steps:** “Consultation with the SHPD Archaeology Branch is recommended to determine appropriate historic preservation requirements for this project. CSH recommends archaeological monitoring during project-related ground disturbance based on previous archaeological finds, including human burials, encountered northwest and southwest of the Maui High School within sand deposits that are also present within the current project area,” (Yucha, Yates, and Hammatt 2020:68).

## Previous Archaeological Research Within the Project Area Vicinity

At least eight compliance-related previous archaeological studies have occurred directly south and southwest of the current project area and are cataloged below; however, several previous archaeological reports were unavailable for examination and inclusion in this overview and discussion (see limitations discussion in the “Previous Archaeological Synthesis and Predictive Model,” below).

**Study Title:** *Archaeological Reconnaissance Kahului Housing – Phase I (Hale Laulea Subdivision) TMK 3-8-07-106*

**Study Type and Purpose:** Archaeological reconnaissance survey

**Author(s):** Marvin Miura and Richard Bordner

**Year:** 1983

**Firm or Organization:** Environmental Impact Study Corporation

**Project Area Location:** Directly south of the current project area, Maui HS campus

**Project Area Acreage:** Unreported

**Methods:** Pedestrian survey

**Results:** The authors note “[t]he study area has undergone tremendous land modification in the last twenty years. The initial clearing, grubbing and dune removal for the plantation effectively destroyed the existing land surface for the majority of the study area. This situation was exacerbated [sic] by further clearing and recreational activities,” (Miura and Bordner 1983:4).

**Mitigation Commitments/Historic Preservation Next Steps:** “Due to the very disturbed nature of the study area, no further surface work is recommended. The possibility of sub-surface materials, especially burials, must be taken into account. Due to these concerns, the following recommendations are made: 1) It is recommended that backhoe testing be conducted prior to construction work at the study area,” focused on the “remnant dune area” (Miura and Bordner 1983:4). Notice to state and county authorities prior to ground-breaking activities, outreach to construction workers regarding the potential for subsurface cultural materials on-site, and “[a] contingency set-up to provide for re-interment of cultural remains at a suitable location,” additionally suggested (Miura and Bordner 1983:4).

**Notes:** No background research and limited informal consultation to understand land use performed. A previous caretaker on the property relayed the land was a sand dunescape until cleared by a fruit plantation in the late 1960s, and did not recollect any artifacts or iwi revealed at any time (Miura and Bordner 1983:2).

**Study Title:** *Recovery of Endangered Human Bones from the Wailuku Sand Hills, Maui, Hawaii*

**Study Type:** Letter Report of Test Excavation Results

**Author(s):** Earl Neller

**Year:** 1984

**Firm or Organization:** Historic Preservation Office



**Project Area Location:** Wailuku sand hills, “sand minding area, in the dunes mauka of Onehee Street,” (Neller 1983:1), west/northwest of the current study area

**Project Area Acreage:** Unreported

**Study Type and Purpose:** Emergency archaeological recovery of human remains

**Methods:** Surface survey and excavation of partially exposed burial in a primary context.

**Results:** The burial was excavated, examined, and then “[t]he bones were then placed in a box and temporarily buried in the woods nearby, outside of the sand mining area,” (Neller 1984:3). Additional bones on the ground surface were attributed to at least three and potentially more undetected burials in the area (Neller 1984:4).

**Mitigation Commitments/Historic Preservation Next Steps:** The author recommends: “Archaeologists should begin probing the area to locate the other graves before they are destroyed. Someday soon, houses will be built on the site. Construction and grading should proceed slowly in undisturbed portions of the sand hills. If the ground surface is removed in layers, an archaeologist must be able to spot burial pits before the bones are demolished by bulldozers and backhoes. All skeletal material should be excavated carefully by hand. Measurements and photographs should be taken in place. Controlled excavations should also be conducted to establish stratigraphic relationships. Samples should be collected for land snails analysis and radiocarbon dating. A report should be written describing the results of the fieldwork,” (Neller 1984:4).

**Notes:** No test excavation descriptions, stratigraphic profiles or photographs that can be tied to specific test excavations and locations are contained in the report.

**Study Title:** *Archaeological Reconnaissance Survey of TMK 3-8-07:02 and 110 Wailuku, Maui.*

**Study Type and Purpose:** Archaeological reconnaissance survey in order to “locate and record any archaeological sites within the project area, and to assess the potential for subsurface remains,” (Rotunno and Cleghorn 1990:1).

**Author(s):** Rotunno and Cleghorn

**Year:** 1990

**Firm or Organization:** Anthropology Department, Bishop Museum

**Project Area Location:** Wailuku, Maui, directly south and across the street from the current project area

**Project Area Acreage:** 1,000 acres

**Methods:** The project area was divided into five zones, number four of which is directly below the current project area. A surface survey utilizing north-south trending transects spaced at 50 m apart was then conducted (Rotunno and Cleghorn 1990:4).

**Results:** Two potential historic properties identified. In Zone 1, an approximately 15 m long “possible walkway” consisting of “compacted sand cobbles that are in a parallel alignment,” was observed (Rotunno and Cleghorn 1990:5). A roughly 0.3 m high, 2.9 x 1.4 m rock mound of “piled, compacted stone cobbles” oriented north-south was recorded “at the top of a knoll in Zone 3,” (Rotunno and Cleghorn 1990:5). The authors repeatedly emphasize that “due to dense vegetation cover, some sites may have been missed,” (Rotunno and Cleghorn 1990:7). Neither historic property are located in the vicinity of the current project area.

**Mitigation Commitments/Historic Preservation Next Steps:** Due to the noted presence of burials, and “the possibility of missed sites due to dense vegetation, the past and currently ongoing ground disturbing activities, and imminent development of the Maui Lani parcel,” further archaeological work was recommended. This included: “...detailed mapping, and monitoring if needed, during all phases of grubbing activities and subsurface testing,” and a combination of backhoe trenches and excavated test units (Rotunno and Cleghorn 1990:7). The authors also recommended “[f]or the sand dune areas with high potential for burials, the feasibility of using ground penetrating radar (Surface Interface Radar) equipment should be explored. Nondestructive methods of burial identification is [sic] highly recommended in view of addressing recent Native Hawaiian and community concerns,” (Rotunno and Cleghorn 1990:7).

**Notes:** The authors repeatedly emphasize that “due to dense vegetation cover, some sites may have been missed,” (Rotunno and Cleghorn 1990:7). They also describe Zone 4, directly south of the current project area, as a location that “has experience a lot of dumping as well as burning and earth moving,” noting “[d]irt roads that traverse Zone 4 led to the orchard where most of the trash seems to have originated,” and the entire project area as exhibiting “evidence of extensive previous ground disturbing activities,” (Rotunno and Cleghorn 1990:7). Importantly, the authors further note “[e]xcavations in, or just south of the project area were prompted by the discovery of human bone in a sand stockpile that had originated in the sand hills. The fill was being used on a construction site in Lahaina.”

**Study Title:** *Draft: Archaeological Inventory Survey of the East Maui Waterline Project, Wailuku and Makawao, Maui (TMK: 2-5-03 thru 05:2-7-3, 2-7-07 thru 11, 2-7-13, 2-7-16 thru 20, 3-8-01, 3-8-06 thru 07, 3-8-51, 3-8-59, 3-8-70, 3-8-71).*

**Study Type and Purpose:** Archaeological inventory survey of the footprint for a pipeline

**Author(s):** Aki Sinoto and Jeffrey Pantaleo

**Year:** 1992

**Firm or Organization:** N/A

**Project Area Location:** Central and northern coastal Maui

**Project Area Acreage:** Unknown – report pages missing.

**Methods:** “The survey involved systematic transects along selected segments of the project corridor. Since the majority of the project corridor follows existing paved and cane roads, surface survey concentrated in the gulch areas. Machetes were used to cut through dense vegetation,” (Sinoto and Pantaleo 1992:8).

**Results:** Unknown – report pages missing.

**Mitigation Commitments/Historic Preservation Next Steps:**

**Notes:** The version of the report available from the SHPD during background research conducted for this study was incomplete – all odd numbered pages were missing

**Study Title:** *Inventory Survey with Subsurface Testing Report for a Property Located at TMK: [2] 3-8-07:97 (por.) in the Ahupua‘a of Wailuku, District of Wailuku, on the Island of Maui.*

**Study Type and Purpose:** Inventory survey and subsurface testing results reporting.

**Author(s):** Joseph Kennedy, Peter Brennan, and David Soldo

**Year:** 1992

**Firm or Organization:** Archaeological Consultants of Hawaii, Inc.

**Project Area Location:** Kahului Park, roughly 500 m northeast of the MHS project area

**Project Area Acreage:** 2.41 acres

**Methods:** Nine mechanical test excavations measured roughly 70 cm wide, 2-3m deep, “...excavated arbitrarily into the portion of the property eligible for testing, in order to ensure the greatest coverage of the intact dune deposit,” were installed in the proposed project area (Kennedy et al. 1992: 20). The authors note all test excavations were monitored and that “...random screening of the back fill at arbitrary distances,” occurred. Soil samples were taken and representative profiles generated for a selection of test excavations.

**Results:** “The excavation on the subject property did not encounter human remains in the sand dune. Indeed, no features or deposits of historic significance were encountered on the subject property,” (Kennedy et al. 1992:30).

**Mitigation Commitments/Historic Preservation Next Steps:**

**Notes:** The authors further note: “The owner and developer should be aware that human burials have been encountered in sand dunes in the Kahului area. It is possible that the testing undertaken during the present investigations did not locate human burials which are present in the sand dune. In the event that human remains are encountered during construction activities, the State Historic Preservation Division should be contacted immediately, in accordance with HRS Chapter 6E,” (Kennedy et al. 1992:30).



**Study Title:** *Archaeological Testing of Four Sites on the Maui Lani Property in Wailuku Ahupua'a, Wailuku District, Island of Maui, Hawaii'i.*

**Study Type and Purpose:** Archaeological subsurface testing and data recovery

**Author(s):** Lisa Rotunno-Hazuka, B.A., Lonnie Somer, Ph.D., Stephan D. Clark, B.S., and Boyd Dixon, Ph.D.

**Year:** 1995

**Firm or Organization:** Anthropology Department, Bishop Museum

**Project Area Location:** Maui Lani property (TMKs 3-8-07:2 and 110, Wailuku, Maui, directly south and across the street from the current project area)

**Project Area Acreage:** Unreported

**Methods:** Four archaeological test excavations at intentionally selected, feature-adjacent locations – T-1 (two parallel alignments), T-2 (adjacent to proposed project area footprint), T-3 (two adjacent rock mounds), and T-4 (a single rock mound).

**Results:** “Sites T-1, T-3, and T-4 are considered to have no archaeological significance, and no further work at these sites is recommended,” (Rotunno-Hazuka et al. 1995:i). “The fourth site, designated as Site 50-50-04-2797 (Bishop Museum Site 50-Ma-C9-40), is a human burial site. Test excavations at this site were focused in areas containing surface fragmented human skeletal remains on the western periphery of a sand borrow pit, near the eastern boundary of the Maui Lani project area. Test excavations did not locate intact burial features, but resulted in the recovery of scattered human skeletal remains in Layer I. Based on osteological analysis, these skeletal remains represent a minimum number of three individuals,” (Rotunno-Hazuka et al. 1995:i). The finalized version of Fredericksen’s 2009 AMP was also unavailable.

**Mitigation Commitments/Historic Preservation Next Steps:** “It is recommended that Site 50-50-04-2797 be considered significant under National Register Criteria A and D, and significant under State Criterion E, which assigns a traditional cultural value to the site,” (Rotunno-Hazuka et al. 1995:i).

**Study Title:** *Draft Archaeological Monitoring Report for Maui Lani Development at the Bluffs Subdivision, Kamehameha Avenue and Maui Lani Parkway Extensions (TMK 3-8-07:121 POR, 130, 131). Wailuku Ahupua'a [sic] District, Island of Maui.*

**Study Type and Purpose:** Archaeological monitoring program results reporting

**Author(s):** Lisa Rotunno-Hazuka and Jeffrey Pantaleo

**Year:** 2004

**Firm or Organization:** Archaeological Services Hawaii, LLC

**Project Area Location:** Maui Lani subdivision, roughly 400 m south and southwest of the current project area

**Project Area Acreage:** 1,000 acres

**Methods:** “Archaeological monitoring was initiated on all ground disturbing activities related to construction,” in implementation of an archaeological monitoring plan approved by the SHPD in 1996 (Rotunno-Hazuka and Pantaleo 2004:i).

**Results:** “Monitoring for the Bluffs residential subdivision was performed intermittently from 2000-2003, where two inadvertent burial sites, FS #54 and #62 (SIHP-5404) were identified. FS54 was disinterred and shall be relocated to SIHP #4146 (Loc. 12), a burial preserve within the Golf Course. SIHP #5404 (FS62) has been left *in situ* according to the Burial Treatment and Preservation Plan submitted in March 2003. Monitoring of the roadway corridors was performed in the year 2003, during the months of February thru October. No significant historic properties were identified within the roadway corridors. However, to date, 63 find spots (localized areas with human remains) containing over 100 Native Hawaiian burials; [sic] have been documented at Maui Lani,” (Rotunno-Hazuka and Pantaleo 2004:i). The authors further conclude: “Thirty-five burial features have been identified at the Hawaiian Cement, Ameron and Kuihelani Project Areas within TMK 3-8-07\_101\_121[sic]. Numerous burial features have also been documented along the Lower Main/Waiale corridor which bounds the above mentioned project areas. The identified

of these aforementioned burial sites further supports the inland dunes as a traditional Native Hawaiian burial ground,” (Rotunno-Hazuka and Pantaleo 2004:15).

**Mitigation Commitments/Historic Preservation Next Steps:** Archaeological monitoring of all subsurface deposits recommended (Rotunno-Hazuka and Pantaleo 2004:16).

**Notes:** Natural sedimentary deposits observed throughout project area; cultural deposits observed to aggregate along a stream deposit (Rotunno-Hazuka and Pantaleo 2004:15). Both burials were revealed *in situ* (Rotunno-Hazuka and Pantaleo 2004:15). The authors further note: “Human remains were identified along Kuihelani Highway at the sod farm (between Waikapu Stream/Waiko Road and Maui Lani Parkway) and assigned SIHP 50-50-04-5504. These remains were unearthed by HC&S when they were building a berm along Kuihelani Highway, and consisted of one individual *in situ* and at least two individuals in secondary contexts (Rotunno-Hazuka and Pantaleo 2004:15).


## Background Summary and Predictive Model

Background research and the survey of previous archaeological studies show the project area is situated within a greater, contiguous biocultural landscape and integrated system of resource management established by Native Hawaiians. Ke Kula o Kama‘oma‘o, the central plains of the isthmus region of Maui, is comprised of dune systems that are battlefield locations commemorated in oral traditions. Ke Kula o Kama‘oma‘o also served the widely known cultural function as an internment space for the remains of the deceased.

Previous archaeological studies spanning at least 40 years further evince the Hawaiian cultural understanding of the dune systems in Central Maui as battlefields and a burial ground. All the studies summarized above note burials as an obvious and heightened concern in the project area and vicinity. Within the vicinity, the Maui Lani Burial Complex (SIHP #-50-50-04-02797) is located roughly ¼ mile northwest of the current project area, and the Kahului Historic District (SIHP #-1607) is located roughly ½ mile to the north (Rotunno-Hazuka et al. 1995:i). SIHP #5404, two burials, were revealed on the Maui Lani development and ordered disinterred and relocated to SIHP #4146, a burial preserve in the Maui Lani golf course whose precise location is indeterminate based currently available information (Rotunno-Hazuka and Pantaleo 2004:i). Writing in 2004, but without further detailed references, Rotunno-Hazuka and Pantaleo (2004:i) state: “...to date, 63 find spots (localized areas with human remains) containing over 100 Native Hawaiian burials; [sic] have been documented at Maui Lani,” which is just south of the project area. Several previous archaeological studies underscored the increased likelihood for burials within the dune system, need to abide by community concerns regarding this, and the need for all stages of proposed projects to comply with historic preservation rules and regulations (Kennedy et al. 1992:30; Miura and Marvin 1983:4). Specifically, on the basis of the many burials revealed in the sand dune system, Rotunno-Hazuka and Pantaleo declare “the inland dunes as a traditional Native Hawaiian burial ground,” (Rotunno-Hazuka and Pantaleo 2004:15). Lastly, a 2009 SHPD determination (DLNR 2009:2; Appendix A) requires archaeological monitoring of all ground disturbance activities in the northeastern Maui HS campus as well as a SHPD-approved Archaeological Monitoring Plan in place prior to ground disturbing activities. The SHPD determination states that archaeological monitoring is recommended in situations where the SHPD “believe[s] it is possible that archaeological sites from the pre- and/or post-Contact periods may be present in the subsurface deposits exposed during the proposed work,” (DLNR 2009:2). The letter requires a SHPD-approved Archaeological Monitoring Plan and implementation of an Archaeological Monitoring Program for any ground-disturbing activities.

Background research did not yield previously-recorded historic properties in the project or study areas. Extensive alteration of the vegetation, topography, and hydrography of the project area and vicinity commenced with nineteenth century ranching and continued with industrialized





agricultural activities and the expansion of Kahului suburbs over the course of the last 40 years. Given that the report by Shefcheck, Dega, and Fortini 2005 was not available, and documentary evidence of subsurface excavations in the project area were not provided (Cordle, Fortini, and Dega 2007), not enough information is available to understand sedimentary deposition and the likelihood of subsurface historic properties in the project area.



## COMMUNITY ETHNOGRAPHY

Ethnographic work for this study was conducted from November 2023 to February 2024. The ethnographic process consisted of identifying appropriate and knowledgeable individuals, conducting ethnographic interviews, summarizing the interviews, analyzing the ethnohistoric data, and preparing the report. Twenty-four individuals were contacted to participate in this study. Of the twenty-four individuals who were contacted to participate in this study, one individual committed to an interview. Twenty-three of the remaining individuals who were contacted for this study were unable to participate for various reasons. Though unable to participate in an interview or survey to consult on this project, three individuals contributed to the community ethnography process by graciously offering their recommendations on who should be contacted to participate in this study, all of whom were contacted. Table 4 below lists the name, background information, and the date of the individual who was interviewed for this study.

Table 4. Community Interview Participants (in alphabetical order)

Participant	Background/Affiliation	Notes
Clare Apana	<ul style="list-style-type: none"><li>• Descendant of Wailuku, Maui</li><li>• President of Mālama Kakanilua</li></ul>	Completed interview on February 23, 2024. Mana‘o is included below.

### Mahalo

Nohopapa Hawai‘i would like to underscore our mahalo Clare Apana for sharing her time and insights related to this project. Without her willingness to share personal recollections and stories, this important project would not have been possible. The mana‘o that was shared will help to mālama Wailuku for future generations to better understand, appreciate, and cherish the uniqueness of this place.

### Summary of Community Mana‘o


#### Mo‘okū‘auhau and Mo‘okū‘auhau ‘Āina (Background Information)

##### *Connection to Wailuku, Maui*

Clare Apana is a descendant of Wailuku, Maui. Her life and advocacy efforts have been dedicated to the protection of iwi kūpuna. She is the president of Mālama Kakanilua, a non-profit organization on Maui whose mission is, “to protect and preserve vested rights of iwi kupuna as granted in CC of 1860 Act for the Protection of Places of Sepulture, Kānāwai Ko Hawai‘i Pae ‘Āina. Mālama Kakanilua remains steadfast in upholding the integrity of the above stated Kānāwai as to any disinterment, conveying away or destruction of burial places Mauka to Makai. Mālama Kakanilua recognizes the inherent rights of the iwi kupuna as Kānaka Maoli. Mālama Kakanilua’s advocacy is to restore the Ola (health and well-being) of the Kānaka Maoli.”


During an on-site interview, Apana described her connection to the project area, “I grew up in Wailuku but was here in Kahului a lot. My sister lives one block away from this school, and I did lots of babysitting and staying overnight with them in this area. And, I actually got to see this whole area be developed. It must have been kiawe forest. And so, it’s interesting to think about the further development of this area because there wasn’t even a high school here before.” Apana’s





recollection of the project area dates back prior to 1972, the year when Maui High School campus was moved from Hāmākuapoko to its current location in Kahului. Apana commented, “There was only Baldwin High School and Saint Anthony. And now we’re looking at Maui High, really growing up more.” When asked what was her memory of this place before Maui High School, she responded by remembering the fields of kiawe that filled the area, “We played a lot of tennis on the tennis court. I don’t know if it’s still here or not, but, [laughs] and then we used to come over on the football field and I’d bring my nephews and we’d be playing on the football field over here.”

### *Site-Visit Reflections*




While walking around the perimeter of the project area, Apana observed the boundaries of the site and commented, “I’d be a little wary. It’s an unusual shape. Because they should have squared it off, right? And they didn’t. Which could mean something because they didn’t.” For Apana, the unusual shape of the project boundaries was reminiscent of the development of Maui Lani. She commented, “I mean, it’s kind of shaped like the one at Maui Lani. The one with 69 burials in it.” Noticing the unusual boundary shape mapped for this project and the hill on which the site is situated, Apana stated, “This is an interesting little hill. There’s more here than meets the eye.” Uncertain of whether the sloping contours and of the project area landscape were one of natural occurrence, push-piled during the grading of the Maui High School campus, or dug out and extracted for leveling purposes, the peculiarity of the hill that the proposed project site is located, is an area of concern for Apana. Apana mentioned, “So many of the remains are in the push pile.” Relating the use of digging in other development projects on Maui, Apana reflected on Maui Lani Safeway development and the use of digging there. Looking at the project area, Apana stated, “They [could have] dug it out because they found burials in it. Like how they did up at Safeway.”

In her observations during the site-visit walking within the project area perimeters, Apana commented that the area within the fence was a nice area. Apana shared her first impression of the site, “It’s kind of nice, ah, back here. You got this little place in here.” Noticing how the Maui High School custodial and landscape employees utilized the space to grow a garden of their own, producing crops like papaya, banana, okra, and squash, Apana stated that if an agriculture program is not something already in existence at the school, “They could do a big one. They should grow food for the kids.”

Exiting the project area enclosure, Apana described her personal sensibilities to the space, “Closer to the buildings definitely has a different energy to it. A flow to it. This [the school buildings] has a much more sterile feeling, you know? And if you walk there [inside the project area], it’s probably because there’s more nature too, but there’s more aliveness in the ground there. And, I don’t know whether it’s because there are burials. I would have to come and sit here for a little bit more.”


### *Biocultural Landscapes, Resources, Uses, and Practices*

Apana commented on the great ‘uala (sweet potato) patches of Kekūhaupi‘o that stretched along Wailuku and its probability of being within this site. She shared, “So, it must be somewhere in here. It could have been with this place because Kekūhaupi‘o was one of the ones who survived the battle.” The battle Apana was referring to was the Battle of Kakanilua. In recalling the portion of the mo‘olelo related to Kekūhaupi‘o, she described, “Kamehameha never got off the boat until the battle was already over. And then, when he came out, Kekūhaupi‘o was fighting for his life. And Kamehameha actually rescued him. It’s an amazing story because Kekūhaupi‘o fought so many people at the same time.” In sharing about Kekūhaupi‘o, Apana revealed that Kekūhaupi‘o had grown ‘uala throughout Wailuku. She shared, “Well, as far as Wailuku was known, that was



the crop, was the ‘uala. And of course, they had so many taro patches. Amazingly, Wailuku had so much water, you know? So, coming all the way down was lo‘i.”

When asked if she believed the presence of lo‘i to be in this area, Apana responded, “Mmm... I don’t think so. I kind of doubt that it came to this side. Would’ve been maybe that side [upland]. But it’s hard to say because the forest used to come from Waikapū used to be so much farther down. In the 1800’s they were talking about, ‘Oh man, we’re losing our forest already,’ you know, and the water. And then, because they were starting to do sugar cane, they were diverting water and they were talking about how the forest is just shrinking. And so, the Waikapū forest, low forest, came way farther down than we think about now.”




In a follow-up discussion with Apana after the initial interview was conducted, Apana had shared that she had later spoken to a former student of Maui High School, who had begun farming in the fields of the project area. Apana shared, “I met with [an anonymous individual]. [They] attended Maui High School and actually helped to work in the agricultural program that was exactly the place that this new project is asking to be built upon. [They] said it was a really good thing. [Their] teacher was so dedicated to it, but the program seemed to not continue after the teacher left Maui. [The former student] hopes that it will continue to be an agricultural classroom or one where there is ‘āina for the students, as many students, in times of needing support for their lives.” After recounting what the former student had shared with her, Apana stated, “Please consider the words of someone who actually helped to establish the area as a living garden, a place of being in ‘āina. From a student who actually saw the benefits of this land being used as an agricultural class, [they] hope that it will again return to its former status.”

### *Mo‘olelo*

Apana shared her recollection of the famed Battle of Kakanilua, which was fought between the Hawai‘i chief, Kalani‘ōpu‘u, and Maui chief, Kahekili. She shared this mo‘olelo in reflecting on the potential of what could be done for this project area and the lessons that could be learned. Apana shared, “And the history of this area being the second day of the Battle of Kakanilua and they [Kalani‘ōpu‘u and Kahekili] purposely fought down off the sand dunes, in Waikapū and fought this battle down here, down lower.” She reflected and shared the lesson of this mo‘olelo:


“Well, the thing that you really could learn from it [the Battle of Kakanilua], is that they [Kalani‘ōpu‘u and Kahekili] fought, and they really needed to stop. Before either side was demolished. And both of them were really hurting. And so, when Keōua was carried across the sand by his uncle and the fighting stopped, I think that that really was the lesson, that it was time to make peace. They were both really hurting. But it was the second day that the fighting continued with more of the regular regiments, you know, the maka‘āinana warriors. And, so his uncle allows him to leave and the battle stops. Kahekili allows them to leave and the battle stops, and then they go back and prepare for another battle, to come back. So, what do we learn? I think the sand dunes here really show kānaka a lot about what we haven’t learned to do. And, the whole premise of the Kalani‘ōpu‘u being so sure that he could win this and going into battle and then having his royal guard the ‘Ālapa and Pi‘ipi‘i just demolished on the first day of fighting. And then Kalani‘ōpu‘u saying, ‘I’m gonna fight again!’ But the battle ends with peace. We can make better choices. If we can make better choices today, say, in how we build that little space out. You know, can it be something that does not infringe upon what may be in the ground? A burial area of our kānaka. Can we honor that? Honor them? Can we bring ‘āina to life here on this campus? We have every possibility. I would hope that a school could have some figured thoughts when they make this



plan like this, and that they could actually build in honor of our people who gave up their resting places so that we can have homes, roads, streets, shopping centers, and schools. But how could we honor them? But to make it the very best for our children. So, I think there are many more people who know more about the building of this school and what may have happened with the burial grounds here, but I think that always, for me, the sand dunes represent possibilities of doing our best. And doing better. Making choices that benefit our children and future.”

## Concerns and Recommendations

### *Concerns of Potential Impacts*



Though unable to speak towards the certainty of burials that could be found within the project site, Apana expressed concern for the likelihood of discoveries that could potentially be found here when taking into consideration the close proximity the project site is in relation to other developments where high numbers of burials were discovered. In particular, Apana reflected on Hale Mahaolu Luana Gardens Apartment complex and Maui Waena Intermediate School. Apana shared, “Luana Gardens is right across the street. One of the first places that they found burials in concentration during the time that they were reporting them.” When asked for clarification on what year this incident would have occurred, Apana stated, “Geez, I would have to say the eighties. And you can easily find it. They have a report of it. They found lots of burials there.” With Luana Gardens being just one block away from the project site and knowing its history with the sheer concentration of burials found there, Apana stated concern for the potential discoveries that may be found in the project area.

Apana also spoke and commented that there were many desecrations that occurred at Maui Waena Intermediate School. When asked, what kind of things did they find at Maui Waena, Apana responded, “85 burials. 85 that they claimed when we left. And where the school is, they have, I don’t know how many burials in the park next door.” Apana’s estimate of how far Maui Waena is from the project area was four blocks. In reference to the location of burials found within Maui Waena Intermediate School and Luana Gardens, Apana commented, “So, if you just follow the sand dunes, you would know. There’s a great tremendous amount of burials there.”

Apana also recalled a memory shared by a friend who grew up across the street from Maui High School. She shared, “I remember my friend, Thomas Palafox, speaking about growing up in a home that is right across the street from the school, and he would recount times of spiritual disturbances. Actually, he said the night marchers would come through his house. So, we know that this area is still protected and inhabited by our ancestors.”


Apana’s first comments, prior to having walked the project area, were expressions of concern for the project area’s location and closeness to Maui Waena Intermediate School and Luana Gardens, areas that have historically been reported to have disturbed and desecrated a number of burials. After physically walking the project site, Apana was asked again, “Now, having walked the space, is the locale of the project area something concerning to you?” She responded, “Yes. Because in the sand, you also get cultural layers that are two or three deep. So, you get one layer and then you go down another 8-10 feet and you get another layer. And then you could go one more time. You know, I haven’t seen more than three. But it’s not unusual to have that, you know. So, I suppose, as a sand dune, that could happen. You get cultural layers like that. If some of the archaeologists had done their job and actually written their reports about what they found when they monitored, you’d know that much more clearly.”





## Recommendations

In consideration of what was observed and her knowledge of the project area, Apana recommended, “I really hope that they would consider having buildings that actually do less ground disturbance that can be built above ground with all the infrastructure built right there on top of the ground, rather than having to dig like six or eight feet down into burial grounds. Because we don’t know. It looks like fill, but you don’t know what’s there. And this is the place where they’re always *surprised*, ‘Oh, burials?!’ Ah! We thought that was probably a very good possibility. So, I’d say, why don’t we plan not to disturb our kūpuna and let them lay in as much peace as they can and build something that would honor them, like building something that actually respects the ‘āina and builds sustainably for the ‘āina momona. The ‘āina momona of the children here. Apana stressed the recommendation, “They should actually build buildings that go above ground and have the infrastructure without digging into the ground. It has never been done in a school except for these portables. It’s never been done to actually design it so that you didn’t ground disturb.”



When posed the question, what would your recommendation be if they were to proceed with this project? Apana responded, “To do as little ground disturbance as possible. And if it costs a little bit more, it would probably be worth it. From what you have all around you, you know, it would be very possible that if they cleared out the area here, then there would be burials.”

Apana also commented on the need for development processes to be proactive in anticipating and redirecting the course of development over burial grounds. Apana shared, “I also want to say that I know somebody who worked in many of the A & B [Alexander & Baldwin] and Maui Lani projects in these sand dunes. And he says he never hit an iwi kūpuna because he can feel them, and he reworks his course. And I think it would be important for people who are going to work on this project to be able to speak to somebody like him or to other people, like our people, Tommy and Vicky Palafox, who work with us, and they do kahuna pule for us. And so they, essentially, do prayers for us with our iwi kūpuna here in Maui, in the sand dunes. And it would be very honoring if somehow they could be able to help to guide the understanding and the work crew and even the teachers here.” Apana’s recommendation is for developers and project managers to be proactive and allow for cultural consultants to be contacted for engagement, with the autonomy to recommend remapping of sites if necessary. She commented, “And, if it does happen [discovery of burials], then I would hope that they would be called to take care of it rather than an archaeologist. You can call the archaeologist, but please let our people take care of our own iwi kūpuna.”

## Additional Mana ‘o

Apana’s underlying recommendation for proceeding with this proposed project commented, “Do as little ground disturbance as possible. If you can do something where you don’t have to do the ground disturbance, you know, you could be taking the chance and digging up bones, maybe you could, and it wasn’t something that wasn’t really irreverent, I don’t know that they would mind, especially if it was for the kids.” In sharing her belief of the importance of connecting children to ‘āina and the potential for that to be integrated into education, Apana stated, “To me, I think it’s somewhat appropriate, for the kids, even if maybe there are burials in there, because of that being the last space that they didn’t take. And the way it looks and feels. But it would be a beautiful thing for them to have an education so they could feel ‘āina, you know?”

When asked to share her overall thoughts and recommendations for this project Apana shared the following reflection:



“So, this school is right in the area of these sand dune complexes. I know from being in the yard of my sister, who’s a block away, that’s definitely sand in the ground. And with the sand, is the traditional burial ground. And there have been so many burials found in this area, across the street in the presidential condo home apartments living area, up the street at Maui Waena School. The entire neighborhood that borders the Maui Waena School and all the way across Maui Lani has a residential neighborhood, which just shows us that this is a traditional burial ground. But, what do we learn from it? And I’d say there’s always something to learn from our ‘āina and from the sand dunes. And one was making peace. Kahekili met with his family from Moku o Keawe, who came to wage war with him, and he allowed them to go and leave. He did not decimate them completely. And I think we could all learn a lot from that. Making choices that bring about peace. And in this school, I see the same thing because that little piece of land is more alive than all the rest of the school, I think. You know, the feeling of the ‘āina being alive in that little place where they, the people, I guess the maintenance people, have built a garden, and there are plants growing back there. Just makes me feel like this would be such a great area for the students to learn about ‘āina. Being in the ‘āina, having a piece of live ‘āina to go to or to have that classroom. So anyway, I was just thinking that it would be great if the adult education program came out into these portable classrooms that they have here, and the kids got to have a newer school that was built into the ‘āina. With the ‘āina. And, that would be somewhat of a solution for the sand dunes, which we are still working to affect. To build balance and the future of our community in the best way possible.”



## ASSESSMENT OF CULTURAL IMPACTS

This section reviews and synthesizes background research and consultation for information, perspectives, and opinions regarding:

- The cultural resources (defined as practices, beliefs, and features), and their location within the broad geographical area in which the proposed action is located, as well as their direct or indirect significance or connection to the broader site;
- The nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area affected directly or indirectly by the proposed project;
- An explanation of confidential information, if any, that has been withheld from public disclosure in the assessment; and,
- A discussion concerning any conflicting information, if applicable, in regard to identified cultural resources, practices, and beliefs.

It then provides an assessment of impacts posed by the proposed project to cultural resources – defined as practices, beliefs, and features – within the project area. The scope of the analysis was commensurate to the breadth and depth of information gathered during consultation. In this instance, the effort included consideration and discussion of:

- The potential effect of any proposed physical alteration on cultural resources (defined as practices, beliefs, and features);
- The potential of the proposed action to isolate cultural resources from their setting; and,
- The potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place.


### Background Research and Consultation Synthesis

Background research shows the project area in Wailuku is situated within a greater, contiguous cultural landscape and integrated system of resource management established by Native Hawaiians. Hawaiian oral traditions describe Wailuku and Waikapū as land divisions with cultivated inland regions, highly complex agricultural and noted aquacultural systems, shoreline resource cultivation, and numerous religious sites, and other wahi kupuna and wahi pana. The project area in Wailuku is located in in Ke Kula o Kama‘oma‘o, the plains of Central Maui, which host an expansive sand dune system that traditionally served as a battlefield and burial ground. Wailuku appears on the earliest Hawaiian cartographic representations of kahiko (*old, ancient, traditional*) land divisions like moku and ahupua‘a, underscoring the importance of the place in Hawaiian geographies.

Sugar plantations active in the project area vicinity included the Hawaiian Commercial Company which merged with the Maui Agricultural Company to become the Hawaiian Commercial and Sugar Company, managed by Asa Baldwin. In 1882, the project and study areas were components of an illegal and unauthorized sale of the 24,000 acre Wailuku Ahupua‘a – Crown Lands - to California sugar baron Claus Spreckles by Princess Ruth Ke‘elikolani, a land deal that allowed Spreckles to acquire inalienable Crown Lands from an individual who did not have the authority or right to sell them.


The project area remained undeveloped, with natural topography until the late 1960s. In 1968, the installation of a papaya and lilikoi fruit plantation by Orchards Hawaii occurred in the project area and involved extensive ground disturbance and the modification, reduction, and leveling of





the natural sand dune associated with occurred in 1968 (Miura et al. 1983:2). Archaeological reports record intact or partially intact sand dune systems are recorded south and west of the project area through the 1980s (Neller 1984:2; Miura et al. 1983:2).

In 1971, the MHS campus was established in its current location (Maui High School 2023). Photographs of the project area from the 1970s show it as undeveloped land with forested and vegetated segments that were observed roughly intact during the field inspection for this study, roughly four decades later. The photographs also the presence of capture sugar cane fields and continued extensive additional ground disturbance in lands to the south and west in the 1980s and 1990s.



Previous archaeological studies in the project area and vicinity further evince the Hawaiian cultural understanding of the dune systems in Central Maui as battlefields and a burial ground. Most studies note burials as an obvious and heightened concern in the project area and vicinity. Three compliance archaeological studies have occurred in the 2.2 acre project area and no historic properties are officially recorded as associated with the project area (Cordle, Fortini, and Dega 2007; Frederickson 2009; Yucha, Yates, and Hammatt 2020). Not enough information is available to understand sedimentary deposition and the likelihood of subsurface historic properties in the project area because Shefcheck, Dega, and Fortini 2005 was not available, and documentary evidence of subsurface excavations in the project area were not provided (Cordle, Fortini, and Dega 2007). Eight compliance-related previous archaeological studies have occurred directly south and southwest of the current project area, although some reports could not be located for this study. Within the vicinity, the Maui Lani Burial Complex (SIHP #-50-50-04-02797) is located roughly ¼ mile northwest of the current project area, and the Kahului Historic District (SIHP #-1607) is located roughly ½ mile to the north (Rotunno-Hazuka et al. 1995:i). SIHP #5404, two burials, were revealed on the Maui Lani development and ordered disinterred and relocated to SIHP #4146, a burial preserve in the Maui Lani golf course whose precise location is indeterminate based currently available information (Rotunno-Hazuka and Pantaleo 2004:i). Writing in 2004, but without further detailed references, Rotunno-Hazuka and Pantaleo (2004:i) state: “...to date, 63 find spots (localized areas with human remains) containing over 100 Native Hawaiian burials; [sic] have been documented at Maui Lani,” which is just south of the project area.

Several previous archaeological studies underscored the increased likelihood for burials within the dune system, need to abide by community concerns regarding this, and the need for all stages of proposed projects to comply with historic preservation rules and regulations (Kennedy et al. 1992:30; Miura and Marvin 1983:4). Specifically, on the basis of the many burials revealed in the sand dune system, Rotunno-Hazuka and Pantaleo declare “the inland dunes as a traditional Native Hawaiian burial ground,” (Rotunno-Hazuka and Pantaleo 2004:15). Lastly, a 2009 SHPD determination (DLNR 2009:2; Appendix A) requires archaeological monitoring of all ground disturbance activities in the northeastern Maui HS campus as well as a SHPD-approved Archaeological Monitoring Plan in place prior to ground disturbing activities.

Clare Apana, president of Mālama Kakanilua, is a descendant of Wailuku, Maui. Her life and advocacy efforts have been dedicated to the protection of iwi kūpuna. Out of respect for Apana’s wishes not to have the consultation she generously offered paraphrased, the reader is referred to the consultation synthesis offered in the previous section.

## Impact Assessment

Based on ethnohistorical and historical research and previous archaeological studies as well as consultation efforts conducted for this study, cultural resources, defined as practices and features, associated with the project area include:

- **Iwi kūpuna**, which Hawaiian oral traditions associate with Ke Kula o Kama‘oma‘o, the plains of Central Maui; these oral traditions are secondarily corroborated by archaeological studies and the consultation provided for this report
- **Hawaiian oral traditions**, vessels of ancestral knowledge across centuries and generations, consultation provided for this report
- **Wahi kūpuna**, that relay cultural knowledge and relationship to place
- **‘Ulu (breadfruit), kalo (taro), mai‘a (bananas), and ‘uala (sweet potato), potentially lo‘i**, as recorded in Hawaiian oral traditions, Bishop Museum research initiatives, and consultation provided for this report
- **Kili‘o‘opu, ‘Ulalena, Nāulu, and Uhiwai**, the named rains of Named rains of Wailuku Ahupua‘a, as recorded in Hawaiian oral traditions

Regarding the potential effect of any proposed physical alteration to cultural resources, practices and features within the project area/vicinity, it is appropriate to emphasize the verbatim perspectives offered by Apana during consultation for this study.

Regarding **iwi kūpuna**, Apana stated concern for the potential discoveries that may be found in the project area. with Luana Gardens being just one block away from the project site and knowing its history with the sheer concentration of burials found there. In particular, Apana reflected on Hale Mahaolu Luana Gardens Apartment complex and Maui Waena Intermediate School. Apana shared, “Luana Gardens is right across the street. One of the first places that they found burials in concentration during the time that they were reporting them.” When asked for clarification on what year this incident would have occurred, Apana stated, “Geez, I would have to say the eighties. And you can easily find it. They have a report of it. They found lots of burials there.”

Apana also spoke and commented that there were many desecrations that occurred at Maui Waena Intermediate School. When asked, what kind of things did they find at Maui Waena, Apana responded, “85 burials. 85 that they claimed when we left. And where the school is, they have, I don’t know how many burials in the park next door.” Apana’s estimate of how far Maui Waena is from the project area was four blocks. In reference to the location of burials found within Maui Waena Intermediate School and Luana Gardens, Apana commented, “So, if you just follow the sand dunes, you would know. There’s a great tremendous amount of burials there.”

Apana’s first comments, prior to having walked the project area, were expressions of concern for the project area’s location and closeness to Maui Waena Intermediate School and Luana Gardens, areas that have historically been reported to have disturbed and desecrated a number of burials. After physically walking the project site, Apana was asked again, “Now, having walked the space, is the locale of the project area something concerning to you?” She responded, “Yes. Because in the sand, you also get cultural layers that are two or three deep. So, you get one layer and then you go down another 8-10 feet and you get another layer. And then you could go one more time. You know, I haven’t seen more than three. But it’s not unusual to have that, you know. So, I suppose, as a sand dune, that could happen. You get cultural layers like that. If some of the archaeologists had done their job and actually written their reports about what they found when they monitored, you’d know that much more clearly.”

## Recommendations

This section summarizes concerns and recommendations related to cultural impacts by the proposed project to cultural resources – defined as practices, beliefs, and features – within the project area shared by Apana. Her verbatim consultation perspectives featured below include feedback regarding:

- How the project might impact iwi kūpuna, wahi kūpuna and other cultural resources within or around the project area;
- Anticipated adverse impacts to cultural resources resulting from the proposed project;
- Solutions that would address any concerns shared;
- Preferred alternatives to the proposed project;
- Any preferred or desired mitigation (defined as actions that avoid, minimize, rectify, or reduce the impacts of a project) measures relative to the impacts posed by the proposed project.
- Mitigation measures – actions that avoid, minimize, rectify, or reduce the impacts of a project – distilled from perspectives shared during consultation summarized in the previous section and synthesized in this chapter

In consideration of what was observed and her knowledge of the project area, Apana recommended, “I really hope that they would consider having buildings that actually do less ground disturbance that can be built above ground with all the infrastructure built right there on top of the ground, rather than having to dig like six or eight feet down into burial grounds. Because we don’t know. It looks like fill, but you don’t know what’s there. And this is the place where they’re always *surprised*, ‘Oh, burials?!’ Ah! We thought that was probably a very good possibility. So, I’d say, why don’t we plan not to disturb our kūpuna and let them lay in as much peace as they can and build something that would honor them, like building something that actually respects the ‘āina and builds sustainably for the ‘āina momona. The ‘āina momona of the children here. Apana stressed the recommendation, “They should actually build buildings that go above ground and have the infrastructure without digging into the ground. It has never been done in a school except for these portables. It’s never been done to actually design it so that you didn’t ground disturb.”

When posed the question, what would your recommendation be if they were to proceed with this project? Apana responded, “To do as little ground disturbance as possible. And if it costs a little bit more, it would probably be worth it. From what you have all around you, you know, it would be very possible that if they cleared out the area here, then there would be burials.”


Apana also commented on the need for development processes to be proactive in anticipating and redirecting the course of development over burial grounds. Apana shared, “I also want to say that I know somebody who worked in many of the A & B [Alexander & Baldwin] and Maui Lani projects in these sand dunes. And he says he never hit an iwi kūpuna because he can feel them, and he reworks his course. And I think it would be important for people who are going to work on this project to be able to speak to somebody like him or to other people, like our people, Tommy and Vicky Palafox, who work with us, and they do kahuna pule for us. And so they, essentially, do prayers for us with our iwi kūpuna here in Maui, in the sand dunes. And it would be very honoring if somehow they could be able to help to guide the understanding and the work crew and even the teachers here.” Apana’s recommendation is for developers and project managers to be proactive and allow for cultural consultants to be contacted for engagement, with the autonomy to recommend remapping of sites if necessary. She commented, “And, if it does happen [discovery of burials], then I would hope that they would be called to take care of it rather than an



archaeologist. You can call the archaeologist, but please let our people take care of our own iwi kūpuna.”

Apana’s underlying recommendation for proceeding with this proposed project commented, “Do as little ground disturbance as possible. If you can do something where you don’t have to do the ground disturbance, you know, you could be taking the chance and digging up bones, maybe you could, and it wasn’t something that wasn’t really irreverent, I don’t know that they would mind, especially if it was for the kids.” In sharing her belief of the importance of connecting children to ‘āina and the potential for that to be integrated into education, Apana stated, “To me, I think it’s somewhat appropriate, for the kids, even if maybe there are burials in there, because of that being the last space that they didn’t take. And the way it looks and feels. But it would be a beautiful thing for them to have an education so they could feel ‘āina, you know?”



It is appropriate for this section to close with recommendations from Apana, and the generous consultation she provided for this study. When asked to share her overall thoughts and recommendations for this project Apana shared the following reflection:



“So, this school is right in the area of these sand dune complexes. I know from being in the yard of my sister, who’s a block away, that’s definitely sand in the ground. And with the sand, is the traditional burial ground. And there have been so many burials found in this area, across the street in the presidential condo home apartments living area, up the street at Maui Waena School. The entire neighborhood that borders the Maui Waena School and all the way across Maui Lanī has a residential neighborhood, which just shows us that this is a traditional burial ground. But, what do we learn from it? And I’d say there’s always something to learn from our ‘āina and from the sand dunes. And one was making peace. Kahekili met with his family from Moku o Keawe, who came to wage war with him, and he allowed them to go and leave. He did not decimate them completely. And I think we could all learn a lot from that. Making choices that bring about peace. And in this school, I see the same thing because that little piece of land is more alive than all the rest of the school, I think. You know, the feeling of the ‘āina being alive in that little place where they, the people, I guess the maintenance people, have built a garden, and there are plants growing back there. Just makes me feel like this would be such a great area for the students to learn about ‘āina. Being in the ‘āina, having a piece of live ‘āina to go to or to have that classroom. So anyway, I was just thinking that it would be great if the adult education program came out into these portable classrooms that they have here, and the kids got to have a newer school that was built into the ‘āina. With the ‘āina. And, that would be somewhat of a solution for the sand dunes, which we are still working to affect. To build balance and the future of our community in the best way possible.”

Apana shared her recollection of the famed Battle of Kakanilua, which was fought between the Hawai’i chief, Kalani’ōpu’u, and Maui chief, Kahekili. She shared this mo’olelo in reflecting on the potential of what could be done for this project area and the lessons that could be learned. Apana shared, “And the history of this area being the second day of the Battle of Kakanilua and they [Kalani’ōpu’u and Kahekili] purposely fought down off the sand dunes, in Waikapū and fought this battle down here, down lower.” She reflected and shared the lesson of this mo’olelo:

“Well, the thing that you really could learn from it [the Battle of Kakanilua], is that they [Kalani’ōpu’u and Kahekili] fought, and they really needed to stop. Before either side was demolished. And both of them were really hurting. And so, when Keōua was carried across the sand by his uncle and the fighting stopped, I think



that that really was the lesson, that it was time to make peace. They were both really hurting. But it was the second day that the fighting continued with more of the regular regimens, you know, the maka‘āinana warriors. And, so his uncle allows him to leave and the battle stops. Kahekili allows them to leave and the battle stops, and then they go back and prepare for another battle, to come back. So, what do we learn? I think the sand dunes here really show kānaka a lot about what we haven’t learned to do. And, the whole premise of the Kalani‘ōpu‘u being so sure that he could win this and going into battle and then having his royal guard the ‘Ālapa and Pi‘ipi‘i just demolished on the first day of fighting. And then Kalani‘ōpu‘u saying, ‘I’m gonna fight again!’ But the battle ends with peace. We can make better choices. If we can make better choices today, say, in how we build that little space out. You know, can it be something that does not infringe upon what may be in the ground? A burial area of our kānaka. Can we honor that? Honor them? Can we bring ‘āina to life here on this campus? We have every possibility. I would hope that a school could have some figured thoughts when they make this plan like this, and that they could actually build in honor of our people who gave up their resting places so that we can have homes, roads, streets, shopping centers, and schools. But how could we honor them? But to make it the very best for our children. So, I think there are many more people who know more about the building of this school and what may have happened with the burial grounds here, but I think that always, for me, the sand dunes represent possibilities of doing our best. And doing better. Making choices that benefit our children and future.”


## Considerations

*“Please consider the words of someone who actually helped to establish the area as a living garden, a place of being in ‘āina. From a student who actually saw the benefits of this land being used as an agricultural class, [they] hope that it will again return to its former status.”*

- Clare Apana, consultation provided specifically for this study

Additionally, and from a space of wahi kūpuna stewardship and regulatory compliance expertise, Nohopapa Hawai‘i advises several considerations regarding the proposed project’s potential impacts to cultural resources (practices, features, and beliefs) associated with the project area and/or vicinity:

- **Consultation early and often.** Should the footprint or other characteristics of the proposed project change significantly as it unfolds, **additional and expanded consultation is recommended** to ensure community members have the opportunity to provide input on updated potential impacts of the proposed project to cultural resources per the requirements of the Hawaii Environmental Policy Act and its implementing legislation Hawaii Revised Statutes (HRS) §343 and 1997 Environmental Council Guidelines for Assessing Cultural Impacts. Considering the proximity of iwi kūpuna as well as wahi kūpuna/historic properties to the project area and the large amount and scale of ground disturbance and alteration of the project area that is proposed, **we recommend continued community consultation for the duration of this project** from the design plan and execution phases to its completion. This would include **Community care of any iwi kūpuna revealed** in accordance with the best practices outlined by Apana.
- **Carefully considered project design.** Project design should make every effort to limit ground disturbance. The design team should consider options for building the land up



before developing it, avoiding the disturbance of natural dune sediments and fill that are known to contain iwi kūpuna. As shared by Apana: “[B]uild something that would honor them, like building something that actually respects the ‘āina and builds sustainably for the ‘āina momona. The ‘āina momona of the children here. Apana stressed the recommendation, “They should actually build buildings that go above ground and have the infrastructure without digging into the ground. It has never been done in a school except for these portables. It’s never been done to actually design it so that you didn’t ground disturb.”

These measures, which are optimal under the auspices of a project, additionally benefit the project timeline and budget.

- **Cultural monitoring alongside archaeological monitoring** is appropriate for this location given the sensitive nature of the dune deposits as well as professional best practices.





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# APPENDIX A: COMMUNITY PARTICIPATION LETTER



January 2024

*Welina mai me ke aloha,*

On behalf of Bowers and Kubota Consulting, [Nohopapa Hawai'i](#), LLC, is conducting a Cultural Impact Assessment (CIA), and Hawai'i Revised Statutes (HRS) §6E Consultation supporting environmental and historic preservation compliance review for the Department of Education (DOE) Facilities Maintenance Branch (FMB) and Maui High School (MHS) Facilities Project at MHS, Wailuku Ahupua'a, Wailuku Moku, Maui Moku (TMK: 3-8-007:098) (Figure 1 and Figure 2).

The proposed project includes the addition of a new one-story building and parking lot for DOE's Maui District Mowing Facility and a new one-story building and parking lot for the McKinley Community School for Adults (CSA). The proposed project will also involve constructing two new driveways to connect each facility to West Papa Avenue and provide electrical, communications, water, sewer, and drainage utilities for each building. Extensive ground disturbance in support of construction is anticipated.

This CIA aims to gather and evaluate the proposed project's potential impacts on the Hawaiian cultural practices and resources associated with the project area in Wailuku Ahupua'a. We would like to engage with individuals, 'ohana, and/or organizations with relationships to this area. In particular, we would like to gather information relating to:

- » **Cultural knowledge of mo'olelo, ka'ao, inoa 'āina, mele, oli, 'ōlelo no'eau, and hula related to the project area**
- » **Knowledge of wahi pana, wahi kapu, and wahi kūpuna and cultural practices associated with these wahi**
- » **Knowledge of the 'āina, natural landscapes and resources, and associated cultural uses**
- » **Concerns regarding how this project might impact any Hawaiian biocultural resources or practices within or around the project area**
- » **Suggestions, impact mitigations, and recommendations regarding the management and stewardship of wahi kūpuna in and around the project area**
- » **Referrals of kūpuna and kama'āina who are knowledgeable of the project area and might be willing to participate in this study**

Please let us know if you are interested and available to participate in consultation for this important project. You can participate via a virtual or in-person interview, group interview, online survey ([Link](#)), or by filling out the attached questionnaire.

We look forward to collaborating with you to document your mana'o and recommendations to assess any cultural impacts that might stem from this proposed project at Maui High School, Wailuku Ahupua'a.

*Me ka ha'aha'a,*  
Kalena Lee-Agcaoili  
[kalena@nohopapa.com](mailto:kalena@nohopapa.com)  
Nohopapa Hawai'i, LLC website <https://www.nohopapa.com/>

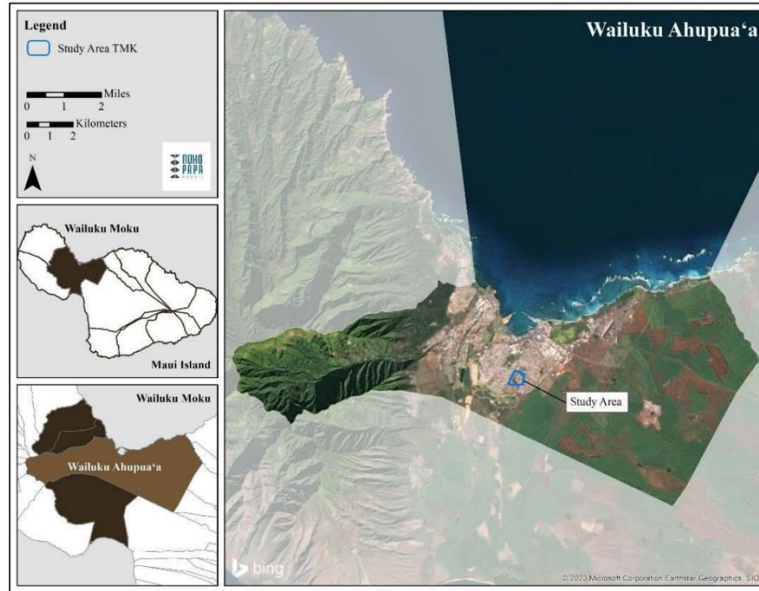


Figure 1. Aerial overview of the study area outlined in blue. Located in Wailuku Ahupua'a, Wailuku Moku, Maui Moku (TMK: 3-8-007:098) (Google Earth)



Figure 2. Aerial photo of the updated project area in Wailuku Ahupua'a, Wailuku Moku, Maui Moku (TMK: 3-8-007:098) (Google Earth)



# APPENDIX B: INTERVIEW THEMES AND QUESTIONS



## Maui High School, Wailuku Ahupua‘a CIA| Questionnaire

Interviewer: \_\_\_\_\_ Date: \_\_\_\_\_ Location: \_\_\_\_\_

*\*Note, answering the following questions is optional*

### Mo‘okū‘auhau

Name:	
Where did you grow up? Where do you live today?	
How are you pili to this place? o Is Wailuku significant to you/your ‘ohana? If so, how?	
Do you/your ‘ohana mālama this place or any locations nearby? If so, how?	
Is your ‘ohana from the Wailuku area and/or surrounding ahupua‘a? o Do you/your ‘ohana have any stories about the area? <i>(Share any connections to this wahi)</i>	

### Biocultural Landscapes, Resources, Uses, and Practices

Are there any culturally important places you know, around, or connected to Wailuku? o Any prominent geographical features, boundary markers, habitation, trails, burial sites, or religious sites? o What’s the cultural significance of these sites/areas? o Do you know of any historical maps or photos that depict changing land use and/or settlement patterns?	
What native and/or introduced plants and animals are associated with Wailuku? o In the surrounding area(s)? o Traditionally and historically? <i>Such as growing, cultivation, mo‘olelo</i> o Cultural significance and/or uses of these resources?	
Do you know of any ocean and freshwater resources, springs, and streams? o Cultural significance and/or uses of these resources?	
Are you aware of any seasonal changes to the natural landscape?	



Do you know of any iwi kūpuna previously revealed in the project area or vicinity?	
--	--

**Mo‘olelo, Inoa ‘Āina, Mele, Oli, ‘Ōlelo No‘eau**

Any mele, ‘ōlelo no‘eau, oli, or other oral or cultural traditions that reflect a sense of place and cultural identity for this place and its people?	
---	--

**Cultural Practices**

Do you know of any “old” ways associated with this place that are no longer practiced?	
Do you gather or use resources from this place? If so, what kind?	
Do you or your ‘ohana engage in activities or cultural practices associated with this place? If so, what kind?	
Do you know of any cultural practices associated with the Maui High School (MHS) Facilities Project in the Wailuku Ahupua‘a, and/or the surrounding area?	
Can these cultural practices be integrated into resource management and stewardship of this place today? If so, how?	
Are there inappropriate practices/protocols/uses for the Maui High School (MHS) Facilities Project in Wailuku Ahupua‘a?	

**Concerns and Recommendations**

There is an enhanced possibility for iwi kūpuna to be revealed on the MHS campus. The current project area was natural sand dunes until the late 1960s, when it was used for a fruit plantation. And, the proposed project involves development and ground disturbance. Given these factors, do you have any iwi kūpuna-related concerns or recommendations to share?	
Any concerns regarding how this project might impact any wahi kūpuna, cultural resources, or cultural practices within or around the project area?	





Specifically, do you foresee any adverse impacts to cultural resources, practices, or features resulting from the proposed project?	
Do you have any preferred alternatives to the proposed project?	
Do you wish to share any preferred or desired mitigation* measures relative to the impacts proposed by the proposed project? *Mitigation = actions that avoid, minimize, rectify, or reduce the impacts of a project	
Do you have any short or long-term concerns regarding the project? Please explain.	
Do you have any recommendations regarding site management or protection and development in the area?	
Any other mana'o you'd like to share? (i.e., recommendations, concerns, questions)	

**Contact Information & Referrals**

You'll have the opportunity to review your written transcript/interview summary and make any additions, deletions, or corrections as you wish. What is the best way to send you the interview to review & approve? (Email or Mail)	
Can you refer us to other individuals or organizations we should talk to?	
Are there any parts of this interview you do not want publicly disclosed?	
Please provide your mailing address so we can send you a makana as a Mahalo for sharing your valued mana'o and 'ike.	



# APPENDIX C: INFORMED CONSENT FORM



## INFORMED CONSENT FORM

Aloha mai, Nohopapa Hawai'i appreciates your generosity and willingness to share your knowledge of the wahi pana of Wailuku and its surrounding areas. This mana'o will be included in the Cultural Impact Assessment (CIA) for the proposed new building and parking lot for the Department of Education (DOE) Facilities Maintenance Branch (FMB) and Maui High School (MHS) Facilities Project at MHS, Wailuku Ahupua'a, Wailuku Moku, Maui Mokuuni.

Nohopapa Hawai'i understands our responsibility to respect the wishes and concerns of the interviewees participating in this study. Here are the procedures we promise to follow:

1. The interview will not be recorded without your knowledge and explicit permission.
2. You will have the opportunity to review the written transcript and summary of your interview. At that time, you may make any additions, deletions, or corrections you wish.
3. You will be given a copy of the interview transcript and/or summary for your records.
4. You will be given a copy of this release form for your records.
5. You will be given a copy of any photographs taken of you during the interview.

For your protection, we need your written confirmation that (check yes or no):

1. You consent to use the complete transcript and/or interview quotes for this study.  
Yes    No
2. If a photograph is taken during the interview, you consent to the photograph being included in this study.    Yes    No

I, \_\_\_\_\_, agree to the procedures outlined above and,  
(Please print your name here)  
by my signature, give my consent and release of this interview and/or photograph to be used as specified.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
Nohopapa Hawai'i, LLC \* [nohopapa.hawaii@gmail.com](mailto:nohopapa.hawaii@gmail.com)



# APPENDIX D: THE ENVIRONMENTAL COUNCIL'S 1997 GUIDELINES FOR ASSESSING CULTURAL IMPACTS

## INTRODUCTION

It is the policy of the State of Hawai'i under Chapter 343, HRS, to alert decision makers, through the environmental assessment process, about significant environmental effects which may result from the implementation of certain actions. An environmental assessment of cultural impacts gathers information about cultural practices and cultural features that may be affected by actions subject to Chapter 343, and promotes responsible decision making.

Articles IX and XII of the State Constitution, other state laws, and the courts of the state require government agencies to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups. Chapter 343 also requires environmental assessment of cultural resources, in determining the significance of a proposed project.



The Environmental Council encourages preparers of environmental assessments and environmental impact statements to analyze the impact of a proposed action on cultural practices and features associated with the project area. The Council provides the following methodology and content protocol as guidance for any assessment of a project that may significantly affect cultural resources.

## BACKGROUND


Prior to the arrival of westerners and the ideas of private land ownership, Hawaiians freely accessed and gathered resources of the land and seas to fulfill their community responsibilities. During the Māhele of 1848, large tracts of land were divided and control was given to private individuals. When King Kamehameha the III was forced to set up this new system of land ownership, he reserved the right of access to privately owned lands for Native Hawaiian ahupua'a tenants. However, with the later emergence of the western concept of land ownership, many Hawaiians were denied access to previously available traditional resources.

In 1978, the Hawaii constitution was amended to protect and preserve traditional and customary rights of Native Hawaiians. Then in 1995 the Hawaii Supreme Court confirmed that Native Hawaiians have rights to access undeveloped and under-developed private lands. Recently, state lawmakers clarified that government agencies and private developers must assess the impacts of their development on the traditional practices of Native Hawaiians as well as the cultural resources of all people of Hawaii. These Hawaii laws, and the National Historic Preservation Act, clearly mandate federal agencies in Hawaii, including the military, to evaluate the impacts of their actions on traditional practices and cultural resources.

If you own or control undeveloped or under-developed lands in Hawaii, here are some hints as to whether traditional practices are occurring or may have occurred on your lands. If there is a trail on your property, that may be an indication of traditional practices or customary usage. Other clues include streams, caves and native plants. Another important point to remember is that, although traditional practices may have been interrupted for many years, these customary practices cannot be denied in the future.

These traditional practices of Native Hawaiians were primarily for subsistence, medicinal, religious, and cultural purposes. Examples of traditional subsistence practices include fishing,






picking ‘opihi and collecting limu or seaweed. The collection of herbs to cure the sick is an example of a traditional medicinal practice. The underlying purpose for conducting these traditional practices is to fulfill one’s community responsibilities, such as feeding people or healing the sick.

As it is the responsibility of Native Hawaiians to conduct these traditional practices, government agencies and private developers also have a responsibility to follow the law and assess the impacts of their actions on traditional and cultural resources.

The State Environmental Council has prepared guidelines for assessing cultural resources and has compiled a directory of cultural consultants who can conduct such studies. The State Historic Preservation Division has drafted guidelines on how to conduct ethnographic inventory surveys. And the Office of Planning has recently completed a case study on traditional gathering rights on Kaua‘i.



The most important element of preparing Cultural Impact Assessments is consulting with community groups, especially with expert and responsible cultural practitioners within the ahupua‘a of the project site. Conducting the appropriate documentary research should then follow the interviews with the experts. Documentary research should include analysis of Māhele and land records and review of transcripts of previous ethnographic interviews. Once all the information has been collected, and verified by the community experts, the assessment can then be used to protect and preserve these valuable traditional practices.

Native Hawaiians performed these traditional and customary practices out of a sense of responsibility: to feed their families, cure the sick, nurture the land, and honor their ancestors. As stewards of this sacred land, we too have a responsibility to preserve, protect and restore these cultural resources for future generations.


## CULTURAL IMPACT ASSESSMENT METHODOLOGY

Cultural impacts differ from other types of impacts assessed in environmental assessments or environmental impact statements. A cultural impact assessment includes information relating to the practices and beliefs of a particular cultural or ethnic group or groups.

Such information may be obtained through scoping, community meetings, ethnographic interviews and oral histories. Information provided by knowledgeable informants, including traditional cultural practitioners, can be applied to the analysis of cultural impacts in conjunction with information concerning cultural practices and features obtained through consultation and from documentary research.

In scoping the cultural portion of an environmental assessment, the geographical extent of the inquiry should, in most instances, be greater than the area over which the proposed action will take place. This is to ensure that cultural practices which may not occur within the boundaries of the project area, but which may nonetheless be affected, are included in the assessment. Thus, for example, a proposed action that may not physically alter gathering practices, but may affect access to gathering areas would be included in the assessment. An ahupua‘a is usually the appropriate geographical unit to begin an assessment of cultural impacts of a proposed action, particularly if it includes all of the types of cultural practices associated with the project area. In some cases, cultural practices are likely to extend beyond the ahupua‘a and the geographical extent of the study area should take into account those cultural practices.


The historical period studied in a cultural impact assessment should commence with the initial presence in the area of the particular group whose cultural practices and features are being



assessed. The types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs.

The types of cultural resources subject to assessment may include traditional cultural properties or other types of historic sites, both man-made and natural, including submerged cultural resources, which support such cultural practices and beliefs.

The Environmental Council recommends that preparers of assessments analyzing cultural impacts adopt the following protocol:

- 
1. Identify and consult with individuals and organizations with expertise concerning the types of cultural resources, practices and beliefs found within the broad geographical area, e.g., district or ahupua‘a;
  2. Identify and consult with individuals and organizations with knowledge of the area potentially affected by the proposed action;
  3. Receive information from or conduct ethnographic interviews and oral histories with persons having knowledge of the potentially affected area;
  4. Conduct ethnographic, historical, anthropological, sociological, and other culturally related documentary research;
  5. Identify and describe the cultural resources, practices and beliefs located within the potentially affected area; and
  6. Assess the impact of the proposed action, alternatives to the proposed action, and mitigation measures, on the cultural resources, practices and beliefs identified.


Interviews and oral histories with knowledgeable individuals may be recorded, if consent is given, and field visits by preparers accompanied by informants are encouraged. Persons interviewed should be afforded an opportunity to review the record of the interview, and consent to publish the record should be obtained whenever possible. For example, the precise location of human burials are likely to be withheld from a cultural impact assessment, but it is important that the document identify the impact a project would have on the burials. At times an informant may provide information only on the condition that it remain in confidence. The wishes of the informant should be respected.

Primary source materials reviewed and analyzed may include, as appropriate: Māhele, land court, census and tax records, including testimonies; vital statistics records; family histories and genealogies; previously published or recorded ethnographic interviews and oral histories; community studies, old maps and photographs; and other archival documents, including correspondence, newspaper or almanac articles, and visitor journals. Secondary source materials such as historical, sociological, and anthropological texts, manuscripts, and similar materials, published and unpublished, should also be consulted. Other materials which should be examined include prior land use proposals, decisions, and rulings which pertain to the study area.

#### CULTURAL IMPACT ASSESSMENT CONTENTS


In addition to the content requirements for environmental assessments and environmental impact statements, which are set out in HAR §§ 11-200-10 and 16 through 18, the portion of the assessment concerning cultural impacts should address, but not necessarily be limited to, the following matters:

1. A discussion of the methods applied and results of consultation with individuals and organizations identified by the preparer as being familiar with cultural practices and



features associated with the project area, including any constraints or limitations which might have affected the quality of the information obtained.

2. A description of methods adopted by the preparer to identify, locate, and select the persons interviewed, including a discussion of the level of effort undertaken.
3. Ethnographic and oral history interview procedures, including the circumstances, under which the interviews were conducted, and any constraints or limitations which might have affected the quality of the information obtained.
4. Biographical information concerning the individuals and organizations consulted, their particular expertise, and their historical and genealogical relationship to the project area, as well as information concerning the persons submitting information or interviewed, their particular knowledge and cultural expertise, if any, and their historical and genealogical relationship to the project area.
5. A discussion concerning historical and cultural source materials consulted, the institutions and repositories searched, and the level of effort undertaken. This discussion should include, if appropriate, the particular perspective of the authors, any opposing views, and any other relevant constraints, limitations or biases.
6. A discussion concerning the cultural resources, practices and beliefs identified, and, for resources and practices, their location within the broad geographical area in which the proposed action is located, as well as their direct or indirect significance or connection to the project site.
7. A discussion concerning the nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area, affected directly or indirectly by the proposed project.
8. An explanation of confidential information that has been withheld from public disclosure in the assessment.
9. A discussion concerning any conflicting information in regard to identified cultural resources, practices and beliefs.
10. An analysis of the potential effect of any proposed physical alteration on cultural resources, practices or beliefs; the potential of the proposed action to isolate cultural resources, practices or beliefs from their setting; and the potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place.
11. A bibliography of references, and attached records of interviews which were allowed to be disclosed.



The inclusion of this information will help make environmental assessments and environmental impact statements complete and meet the requirements of Chapter 343, HRS. If you have any questions, please call 586-4185.



## APPENDIX E: ACT 50: A BILL FOR AN ACT RELATING TO EIS

**Act 50 [State of Hawai'i 2000].** H.B. NO. 2895 H.D.1 was passed by the 20th Legislature and approved by the Governor on April 26, 2000 as Act 50.

A Bill for an Act Relating to Environmental Impact Statements.

SECTION 1. The legislature finds that there is a need to clarify that the preparation of environmental assessments or environmental impact statements should identify and address effects on Hawaii's culture, and traditional and customary rights.

The legislature also finds that native Hawaiian culture plays a vital role in preserving and advancing the unique quality of life and the "aloha spirit" in Hawai'i. Articles IX and XII of the State constitution, other State laws, and the courts of the State impose on government agencies a duty to promote and protect cultural beliefs, practices, and resources of native Hawaiians as well as other ethnic groups.

Moreover, the past failure to require native Hawaiian cultural impact assessments has resulted in the loss and destruction of many important cultural resources and has interfered with the exercise of native Hawaiian culture. The legislature further finds that due consideration of the effects of human activities on native Hawaiian culture and the exercise thereof is necessary to ensure the continued existence, development, and exercise of native Hawaiian culture.

The purpose of this Act is to: (1) Require that environmental impact statements include the disclosure of the effects of a proposed action on the cultural practices of the community and State; and (2) Amend the definition of "significant effect" to include adverse effects on cultural practices.

SECTION 2. Section 343-2, Hawai'i Revised Statutes, is amended by amending the definitions of "environmental impact statement" or "statement" and "significant effect", to read as follows:

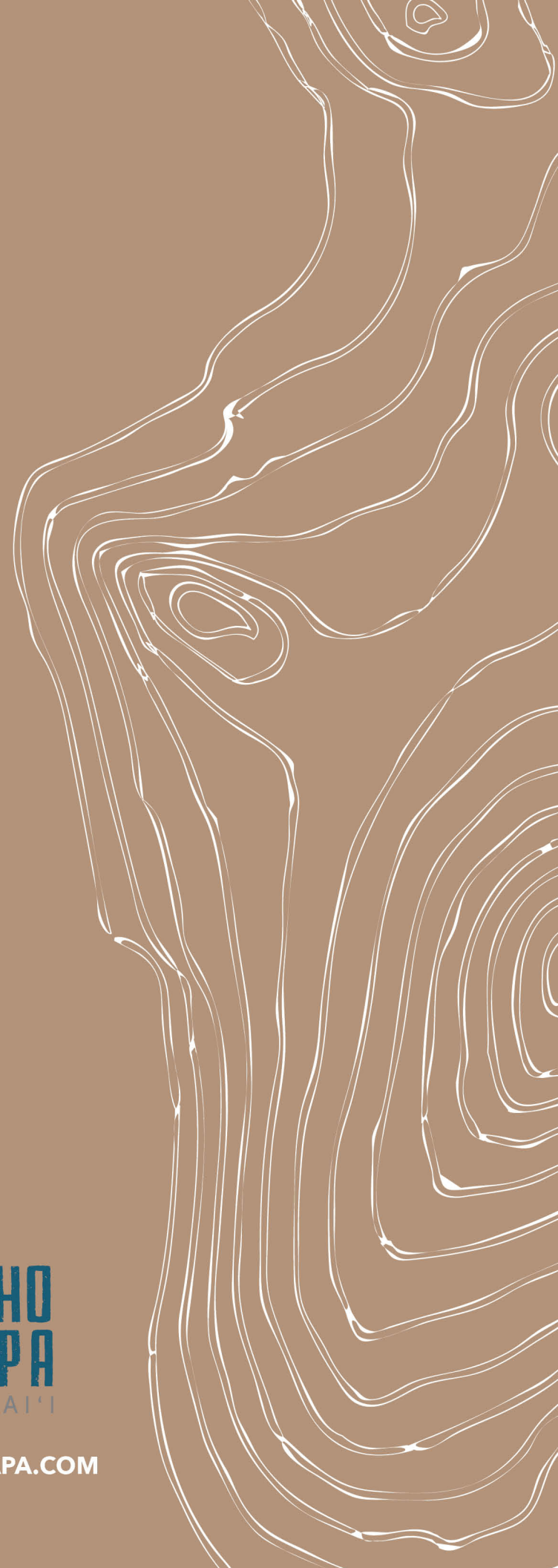
"Environmental impact statement" or "statement" means an informational document prepared in compliance with the rules adopted under section 343-6 and which discloses the environmental effects of a proposed action, effects of a proposed action on the economic [and] welfare, social welfare, and cultural practices of the community and State, effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects.

The initial statement filed for public review shall be referred to as the draft statement and shall be distinguished from the final statement which is the document that has incorporated the public's comments and the responses to those comments. The final statement is the document that shall be evaluated for acceptability by the respective accepting authority.

"Significant effect" means the sum of effects on the quality of the environment, including actions that irrevocably commit a natural resource, curtail the range of beneficial uses of the environment, are contrary to the State's environmental policies or long-term environmental goals as established by law, or adversely affect the economic [or] welfare, social welfare[,], or cultural practices of the community and State."

SECTION 3. Statutory material to be repealed is bracketed. New statutory material is underscored.

SECTION 4. This Act shall take effect upon its approval.  
(Approved April 26, 2000.)



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