
Draft

**Cultural Impact Assessment for the
Island School State Land Use District Boundary
Amendment Project,
Nāwiliwili and Niumalu Ahupua'a,
Līhu'e District, Kaua'i
TMK: [4] 3-8-002:016**

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Prefatory Remarks on Language and Style

A Note about Hawaiian and Other Non-English Words:

Cultural Surveys Hawai‘i (CSH) recognizes that the Hawaiian language is an official language of the State of Hawai‘i. Hawaiian Language is important to daily life, and using it is essential to conveying a sense of place and identity. As such, CSH does not follow the conventional use of italics to identify and highlight Hawaiian words. However, other non-English words in this report are still presented in italics unless citing from a previous document that does not italicize them. CSH parenthetically translates or defines in the text the non-English words at first mention, and the commonly-used non-English words and their translations are also listed in the *Glossary* (Appendix A) for reference. However, translations of Hawaiian and other non-English words for plants and animals mentioned by community participants are referenced separately (see explanation below).

A Note about Plant and Animal Names:

When community participants mention specific plants and animals by Hawaiian, other non-English, or common names, CSH provides their possible scientific names (Genus and species) in the *Common and Scientific Names of Plants and Animals Mentioned by Community Participants* (Appendix B). CSH derives these possible names from authoritative sources, but since the community participants only name the organisms and do not taxonomically identify them, CSH cannot positively ascertain their scientific identifications. CSH does not attempt in this report to verify the possible scientific names of plants and animals in previously published documents; however, citations of previously published works that include both common and scientific names of plants and animals appear as in the original texts.

Abbreviations

AD	Anno Domini referring to the year of Christ’s birth
AIS	Archaeological Inventory Survey
APE	Area of Potential Effect
BC	Boundary Certificate Number
BCT	Boundary Commission Testimony
CIA	Cultural Impact Assessment
CSH	Cultural Surveys Hawai‘i
DOH/OEQC	Department of Health/Office of Environmental Quality Control
FB	Field Book Register
HAR	Hawai‘i Administrative Rules
HRS	Hawai‘i Revised Statutes
HSPA	Hawaiian Sugar Planters’ Association
HSRM	Hawai‘i Survey Registered Maps
KCC	Kaua‘i Community College
LCA	Land Commission Award
NHPA	National Historic Preservation Act
NR	Land Commission, National Register
NT	Land Commission, Native Testimony
OHA	Office of Hawaiian Affairs
RM	Registered Map
RPG	Royal Patent Grant
KNIBC	Kaua‘i/Ni‘ihau Island Burial Council
SIHP	State Inventory of Historic Properties
SHPD	State Historic Preservation Division
TCP	Traditional Cultural Property
TMK	Tax Map Key
UHCC	University of Hawai‘i Community College
USGS	United States Geological Survey

Management Summary

Reference	Cultural Impact Assessment (CIA) for the Island School State Land Use District Boundary Amendment Project, Nāwiliwili and Niumalu Ahupua‘a, Līhu‘e District, Kaua‘i, TMK: [4] 3-8-002:016 (Magat, Fa‘anunu and Hammatt 2014)
Date	April 2014
Project Number	CSH (Cultural Surveys Hawai‘i) Job Code: NĀWILIWILI 18
Agencies	State of Hawai‘i Department of Health/Office of Environmental Quality Control (DOH/OEQC)
Project Location	This study is located in the ahupua‘a (Land division usually extending from the uplands to the sea) of Nāwiliwili in the district of Līhu‘e, on the island of Kaua‘i. The TMK parcel for the proposed site is [4] 3-8-002:016
Land Jurisdiction	Private
Project Description	<p>Island School is an existing Pre-K through Grade 12 private school located on a 38.448-acre (15.559-hectare [ha]) parcel in Puhī, on Kaua‘i Island. The Island School campus is located on TMK parcel [4] 3-8-002:016 and situated adjacent to the northeast boundary of the University of Hawai‘i’s Kaua‘i Community College campus. To meet increased enrollment projections, Island School has prepared a development master plan for its campus that includes new classrooms and other school facilities. Thus, Island School is proposing an amendment to the State Land Use Boundary to redesignate the campus property from its existing land use classification of Agricultural District to Urban District.</p> <p>Existing Island School facilities were approved in the State Agriculture District through Special Permits. Similarly, the neighboring Kaua‘i Community College, also on Agricultural District, is seeking an urban rezoning of its campus property to achieve its educational mission. Thus, re-designation of the Island School campus from Agriculture to Urban District, would be consistent with the goals of the community college, as well as the developed character of the surrounding area. Under Urban District designation, both campuses would then be regulated by the County of Kaua‘i Comprehensive Zoning Ordinance.</p>
Project Acreage	Approximately 38.448 acres
Area of Potential Effect (APE) and Survey Acreage	For the purposes of this CIA, the APE is defined as the 38.448-acre project area. While this investigation focuses on the project APE, the study area also includes the two ahupua‘a of Nāwiliwili and Niumalu.

Document Purpose	The project requires compliance with the State of Hawai‘i environmental review process (Hawai‘i Revised Statutes [HRS] §343), which requires consideration of a proposed project’s effect on cultural practices and resources. Through document research and ongoing cultural consultation efforts, this report provides information pertinent to the assessment of the proposed Project’s impacts to cultural practices and resources (per the <i>Office of Environmental Quality Control’s Guidelines for Assessing Cultural Impacts</i>), which may include Traditional Cultural Properties (TCP) of ongoing cultural significance that may be eligible for inclusion on the State Register of Historic Places. The document is intended to support the project’s environmental review and may also serve to support the project’s historic preservation review under HRS §6E-42 and Hawaii Administrative Rules (HAR) §13–284.
Consultation Effort	Hawaiian organizations, agencies and community members were contacted in order to identify potentially knowledgeable individuals with cultural expertise and/or knowledge of the project area and the vicinity. Outreach included efforts to contact 28 individuals and agencies. The organizations consulted included the State Historic Preservation Division (SHPD), the Office of Hawaiian Affairs (OHA), the Kaua‘i/Ni‘ihau Island Burial Council (KNIBC), Kaumuali‘i Hawaiian Civic Club, and community members of the Līhu‘e District.
Results of Background Research	<p>Background research for the proposed project indicates tht the project area, which lies approximately 2 miles southwest of Līhu‘e Town, is part of a traditional region encompassing the ahupua‘a of Nāwiliwili and Niumalu. Early accounts describe the region as an open, grass-covered land dotted with trees and streams flowing down from lush mountains on the way to the sea, with soils that bore a variety of crops like sugarcane, taro, sweet potatoes, beans, and groves of kukui, (candlenut), hau (beach hibiscus), koa, hala (pandanus), and wiliwili. The abundance of water and water systems, presence of famed fishponds along the coast, along with the concentration of permanent house sites, temporary shelters, and heiau suggests early settlement along coastal areas, with a radiocarbon date of AD 1170 to 1400 near the mouth of Hanamā‘ulu Stream, north of Nāwiliwili.</p> <p>In the mid-nineteenth century, the project area became associated with the establishment of commercial sugarcane agriculture which required foreign indentured labor imported from Japan, China, and the Philippines, becoming part of the Grove Farm Plantation before the farm stopped its sugar business in 1974. Adjacent to the project area lie remnants of the Old Puhi Camp, built around 1920 along the present Kaumuali‘i Highway, which housed plantation workers of Grove Farm and contained a movie hall, three stores, a Chinese laundry, a slaughterhouse, and an area for social events. Most of the Puhi Camp housing was removed in the 1970s prior to the construction of the</p>

	<p>Kaua‘i Community College (KCC) and the last homes of the camp were dismantled in the 1980s.</p> <p>The study area is also linked to many mo‘olelo (stories, oral histories) and wahi pana (storied places) that suggest early settlement of the area by a viable Native Hawaiian population. These include mo‘olelo about Kuhiau Heiau (the largest heiau in Kaua‘i), Ninini and Ahukini Heiau in Kalapakī, the Menehune, wiliwili trees, and the many well-known chiefs, heros, and gods such as the chief Papalinaloa, the three sons of La‘a Maikahiki, the hero Lohiau, the contest of Kemamo the sling-thrower and Kapūnohu, the ravishing of Pele by Kamapua‘a, demi-god Pōhaku-o-Kaua‘i (Hoary Head), as well as a Kaua‘i chief sent by Ka‘umuali‘i to placate Kamehameha I on O‘ahu. Mo‘olelo with associated bodies of water near the project area are also plentiful which include Alekoko, the largest fishpond in Kaua‘i (also known as ‘Alekoko, Alakoko, Pēpē‘awa), Hulēia (Hulā‘ia) Stream, Kilohana, and Nāwiliwili Bay. Many wahi pana of settled areas, such as Puhi, Līhu‘e, and various pu‘u (hills, ridges) are also associated with the project area.</p> <p>Other important findings from background research are presented and emphasized in more detail:</p> <p>The traditional moku or districts of Kaua‘i were replaced in the mid-to-late nineteenth century. Līhu‘e became the modern district that includes the ahupua‘a of the proposed project, previously under the Puna District. “Līhu‘e,” which literally translates as “cold chill,” was not consistently used until the establishment of commercial sugar cane agriculture in the mid-nineteenth century (Creed et al. 1999). Between the 1830s and the Māhele, the names Nāwiliwili and Līhu‘e were used somewhat interchangeably to refer to a settlement along Nāwiliwili Bay.</p> <p>No known heiau currently exists within the study area although Kuhiau Heiau, reported to be the largest and most famed heiau on Kaua‘i, existed along the coast of Nāwiliwili Ahupua‘a (Damon 1931). Listed by Bennett (1931) as Site No. 99, this heiau is reported to have been about 4 acres and associated with Paukini Rock, its sister heiau that marks the boundary between Nāwiliwili and Kalapakī Ahupua‘a. After the Māhele, Victoria Kamāmalu was awarded over 2,000 acres of Nāwiliwili Ahupua‘a, along with much of Niumalu. Land Commission Awards (LCAs) describe many lo‘i (irrigated fields, especially for taro) and kula (plain, field, open country, pasture) lands within the study area particularly as being in the same ‘āpana (piece, slice, portion), a pattern common to the Puna District of Kaua‘i, but uncommon elsewhere in Hawai‘i. Maka‘āinana (commoner) in the Puna District were referring to lands in valley bottoms as kula.</p>
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	<p>Many loko i‘a (fishponds) were prevalent in the study area. LCAs document six in Nāwiliwili and seven in Niumalu. ‘Aleko Fishpond, also known as Menehune Fishpond, or Niumalu Fishpond, is the largest fishpond on Kaua‘i and still exists in the study area. It has been designated State Inventory of Historic Properties (SIHP) # 50-30-11-501.</p> <p>The project area is near the Grove Farm Plantation—so named after an old stand of kukui trees. The plantation was established in 1850 and taken over by Mr. George Wilcox in 1863. He bought the farm in 1870 for \$12,000 and it flourished under his leadership. In the mid-1960s, Grove Farm donated 200 acres of former sugar land to the State of Hawai‘i for KCC. Grove Farm ended its sugar business in 1974 (Wilcox 1998:76).</p> <p>The Old Puhi Camp, which housed plantation workers of Grove Farm, is next to the project area and consisted of about 600 homes for about 1,200 workers and their families. At the forefront of housing reforms, Puhi Camp dwellings became the standard for the plantation industry in the 1920s (Riznik 1999).</p> <p>One historic property was identified during earlier LRFI work (Groza and Hammatt 2013) for the project area, SIHP # 50-30-11-2179, Features A through D (Feature A, a reservoir; Feature B, an earthen ditch; Feature C, an earthen ditch with running water; Feature D, an earthen ditch). This historic agricultural infrastructure is part of a large historic agricultural district once extant throughout much of Nāwiliwili. Portions of this district are still farmed today.</p>
Results of Community Consultation	<p>CSH attempted to contact 28 community members, government agencies, community organizations, and individuals. Community consultations began in October 2013 and continued until January 2014. One of the three respondents, a kama‘āina (Native-born), participated in a formal interview. Consultation indicates the project area is a much-loved place characterized as “an old playground” and “special place” by community contact Mrs. Bernie Sakoda. According to study participant Mr. David Pratt, the project area was part of a sugar cane field operated by the Lihue Plantation Company in the 1970s and 1980s. Mrs. Sakoda recalled that the project area was “part forest, part cane field” and she described using the tassels from the sugar cane as spears for childhood games. Mrs. Sakoda related that she and her friends used the cane field on their way to obtain what they needed in the area, gathering sweet “rat berries” that grew nearby and making slingshots from guava trees.</p> <p>Previous interviews for the KCC project adjacent to the present project area for Island School indicate the study area and environs—in particular the lo‘i, kula or lands in valley bottoms in this particular context, rivers, streams and Nāwiliwili Bay—has a long history of use</p>

	<p>by Kānaka Maoli (Native Hawaiians) and other kama'āina groups for a variety of past and present cultural activities and gathering practices. In previous interviews Mr. Pereira and Mr. Chun discussed fishing, gathering 'opihi (limpets) and limu (seaweed, algae) in Nāwiliwili Bay, and crabbing along Hulē'ia River, which still continue today among residents of the area. They discussed spear and throw-net fishing which for Mr. Pereira consisted in part of catching akule (big-eye scad), manini (convict tang), and squid using his own throw net which he created and offered for sale to others. Several previous interviewees narrated he'enalu (surfing) practices and associated mo'olelo in the past and in the present. At least two participants in previous interviews noted the abundance of freshwater resources and the watershed near the project area and highlighted the ecological relationship of natural and cultural resources within or near the project area.</p> <p>Mo'olelo from earlier interviews discussed the practice of hukilau (fish with the seine); the origin of the name "Puhi" which is connected to the cave of a shark god in Ha'ikū, as well as the presence of spirits in the project area in the form of fireballs. The gathering of plants such as bamboo shoots, papaya, mangoes, passionfruit, guava, and pepeiao (cloud ear fungus) in the vicinity of the project area along with the catching of crayfish, 'o'opu, and frogs in the irrigation ditches and reservoirs were common practices and two previous participants described hunting pheasants and wild boars. Previous interviews also discussed burials and noted the existence of a historic cemetery surrounded by the project area, and another cemetery nearby. Previous and current interviewees stressed how natural resources were shared with one another, and utilized in cultural practices.</p> <p>Other important findings from community consultations are presented in more detail:</p> <p>The project area was planted with sugar cane by the 1900s according to CIA participant Mr. Pratt.</p> <p>Lihue Plantation operated the cane field in the 1970s and the 1980s. Sugar cane operations had ceased by the 1990s, when Island School acquired acreage from the former Lihue Plantation Company.</p> <p>The project area contains or is near plants such as ginger, eucalyptus, guava, sugar cane, and grey berries that were sweet to eat.</p> <p>The project area is on agricultural land and is part of the historical plantation era. Plantations provided a livelihood for many residents of Kaua'i like Mrs. Bernie Sakoda and Mr. Pratt. Previous interviewee Mr. Pereira worked in the sugar and pineapple plantations during the summertime as a young boy, which paid for his schooling, while</p>
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	<p>Kupuna Makanani also made a living processing pineapple.</p> <p>The project area is adjacent to the former Puhi Camp, a former plantation camp for the workers of Grove Farm Plantation and their families. Since Puhi Camp is a significant part of the project area's history, Puhi Camp is described in more detail:</p> <p>Cultural practices like the playing of music, dancing, preparing of ethnic dishes, the practice of games and other activities were shared among the many diverse cultures living in Puhi Camp according to Mrs. Sakoda.</p> <p>Previous interviews indicated Puhi was a self-sufficient plantation camp with its own stores, doctors, and medical facilities. Families shopped for groceries in plantation stores, and bought items using credit, to be paid for on payday. Plantation workers lived at Puhi for cheap rent, received kerosene for cooking, and hot water for bathing. Land was also given to anyone who wished to grow vegetables and crops were shared with each other.</p> <p>While various accounts portray plantation life as harsh and unfulfilling, Mr. Takahashi related in a previous interview that the Wilcox family treated their workers very well and life was enjoyable at Puhi. Workers were given the opportunity to own their own homes. Those raised on the camp fondly reminisced of a simple life and special place—a close-knit community where everybody recognized and took care of each other despite their differences.</p> <p>The culture of Puhi Camp was diverse. According to Kupuna Makanani who was interviewed for the KCC CIA, the homes in Puhi were arranged by race though “everybody lived as one people.” Participants who were raised in the camp expressed their appreciation for their multi-cultural upbringing.</p> <p>As revealed in previous consultation, other cultural activities at Puhi Camp included the “Social Box” which was a dance held by the Filipinos once a month. Mr. Pereira also described an annual Filipino carnival called the “Holy Ghost” that occurred every December. On Tuesdays, fresh bread and <i>malasadas</i> (Portuguese pastry) were baked and children collected firewood to keep the fire alive for baking.</p> <p>The transition to unionization of the workers in 1946 brought many changes to Puhi Camp. Kupuna Makanani explained in a previous interview that before the union, though wages were low, housing and water were free and Grove Farm provided equipment and toys for the children. Several strikes ensued but the strikes were peaceful, unlike the massacre at Hanapēpē in 1924. During the strikes, a soup kitchen run by the union provided food for striking workers and their families. Previous consultation indicated the existence of two graveyards, known to Puhi residents as “Old Puhi Cemetery” (SIHP # 50-30-11-</p>
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	<p>B0006) and “Cement Pond,” located outside of but near the project area. The cemetery is divided into two sections for Japanese and Filipino families despite the multi-cultural makeup of Puhi. Other ethnicities chose to be buried elsewhere and many graves were removed by their families. “Cement Pond” exists approximately 200 m north of the project area and consists of three burials. In previous interviews, participants speculated that these burials are not of Puhi Camp residents but possibly of affluent Japanese. Kupuna Makanani recalled how it was possible to bury family members around one’s residence when she was growing up.</p> <p>Filipino migrants came to Hawai‘i in the early 1900s as contract laborers or “<i>sakadas</i>,” searching for a better place to live, related Mr. Takahashi and Kupuna Makanani in previous interviews. Some graves at Old Puhi Cemetery are of Filipino veterans who have no known family with only crosses in the ground for their burial, according to Mr. Takahashi. He wished that relatives of these veterans could find them, allowing younger generations to continue their ties to their culture and family tree.</p> <p>No participants had knowledge of any heiau within the study area. However, one participant in a previous interview shared a mo‘olelo about fireballs, which reflect the presence of spirits in Native Hawaiian culture, near the project area.</p> <p>Previous consultation described an abundance of water in the project area. From Kilohana, water collects in reservoirs that once fed the plantations. Reservoirs and ditches were utilized by Puhi residents as food sources, and for recreational swimming. Mr. Takahashi asserted a gate still exists that controlled water flow to these water sources and regulated flow to prevent floods. Water subsequently flowed down through streams and rivers into Nāwiliwili Bay. The Hulē‘ia National Wildlife Refuge, which includes the Menehune Fishpond, is part of a watershed downstream of the project area. Development has changed water flow patterns, as well as water quality.</p>
Impacts and Recommendations	<p>The following cultural impacts and recommendations are based on a synthesis of all information gathered during preparation of the CIA. To help mitigate the potential adverse impacts of the proposed project on cultural beliefs, practices, and resources, recommendations should be faithfully considered and the development of the appropriate measures to address each concern should be implemented.</p> <p>While the project site is located adjacent to the Old Puhi Camp and Puhi Cemetery, these areas are beyond the Area of Potential Effect (APE). Therefore, no impacts to these sites are anticipated as a result of the proposed project.</p> <p>Should cultural or burial sites be identified during future ground</p>

	disturbance in the project area, all work should immediately cease and the appropriate agencies be notified pursuant to applicable law.
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Section 1 Introduction

1.1 Project Background

At the request of Wilson Okamoto Corporation, CSH conducted a CIA for the Island School State Land Use District Boundary Amendment project on TMK parcel [4] 3-8-002:016, situated in the ahupua‘a of Nāwiliwili and Niumalu, in Līhu‘e District, on Kaua‘i. The proposed property is located in Puhi, approximately 2 miles southwest of the County seat in Līhu‘e. Figure 1 through Figure 3 show the project area.

Island School is an existing Pre-K through Grade 12 private school located on a 38.448-acre (15.559-hectare [ha]) property. The Island School campus is located adjacent to the northeast boundary of the University of Hawai‘i’s Kaua‘i Community College campus. To meet increased enrollment projections, Island School has prepared a development master plan for its campus that includes new classrooms and other school facilities. Thus, Island School is proposing an amendment to the State Land Use Boundary to redesignate the campus property from its existing land use classification of Agricultural District to Urban District.

Existing Island School facilities were approved in the State Agriculture District through Special Permits. Similarly, the neighboring Kaua‘i Community College, also on Agricultural District, is seeking an urban rezoning of its campus property to achieve its educational mission. Thus, redesignation of the Island School campus from Agriculture to Urban District would be consistent with the goals of the community college, as well as the developed character of the surrounding area. Under Urban District designation, both campuses would then be regulated by the County of Kaua‘i Comprehensive Zoning Ordinance.

1.2 Document Purpose

The project requires compliance with the State of Hawai‘i environmental review process (Hawai‘i Revised Statutes [HRS] §343), which requires consideration of a proposed project’s effect on cultural practices. Through document research and ongoing cultural consultation efforts, this report provides information pertinent to the assessment of the proposed project’s impacts to cultural practices and resources (per the *Office of Environmental Quality Control’s Guidelines for Assessing Cultural Impacts*). The impacts may include Traditional Cultural Properties (TCPs) of ongoing cultural significance that may be eligible for inclusion on the State Register of Historic Places. In accordance with Hawai‘i State Historic Preservation guidelines for significance criteria under Hawai‘i Administrative Rules (HAR) §13–275, Criterion “e,” an historic property determined to be significant shall:

Have an important value to the Native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group’s history and cultural identity.

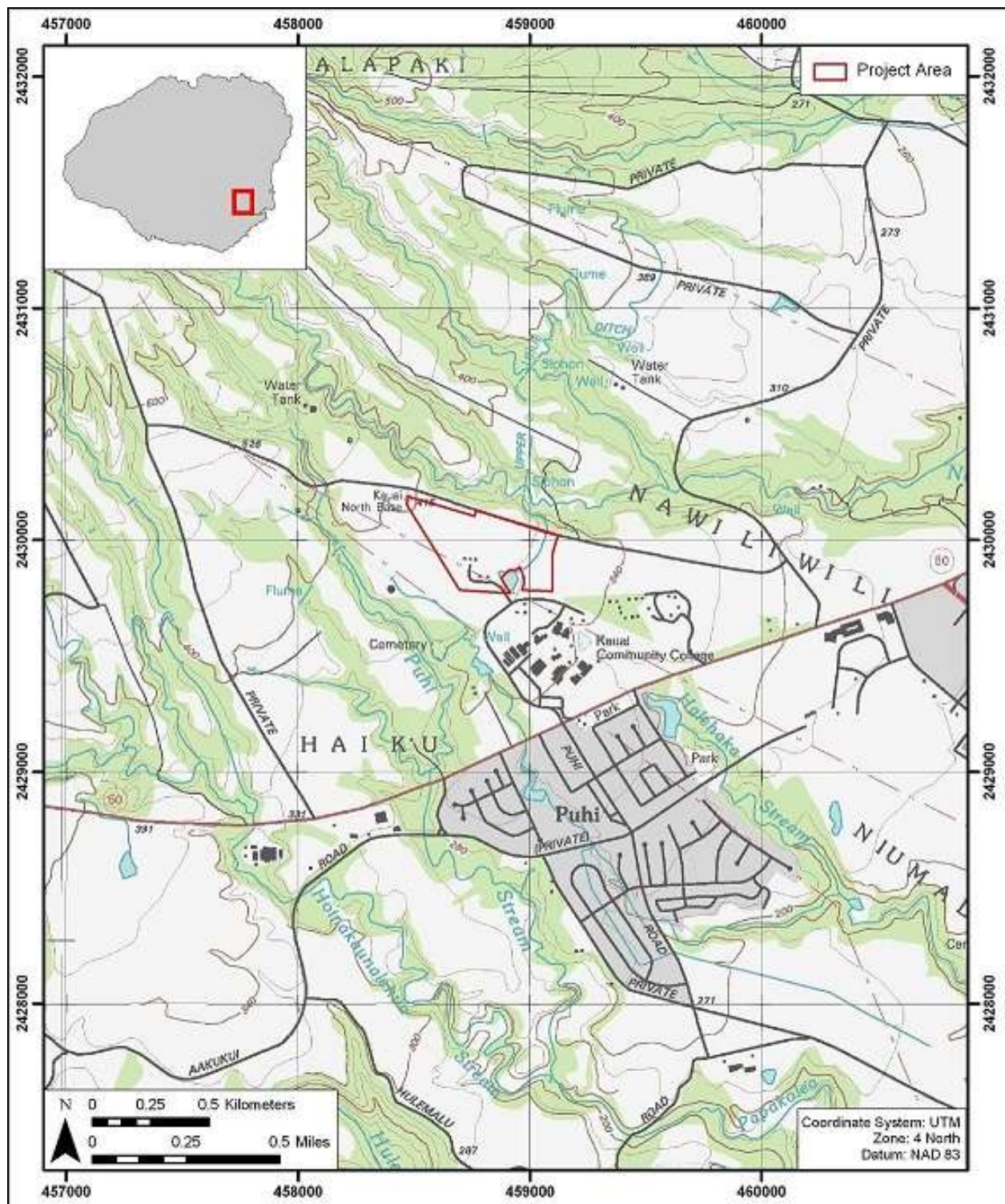


Figure 1. 1996 U.S. Geological Survey (USGS) 7.5-minute topographic map showing the project area



Figure 2. Aerial photograph showing the project area (GeoEye 2001)

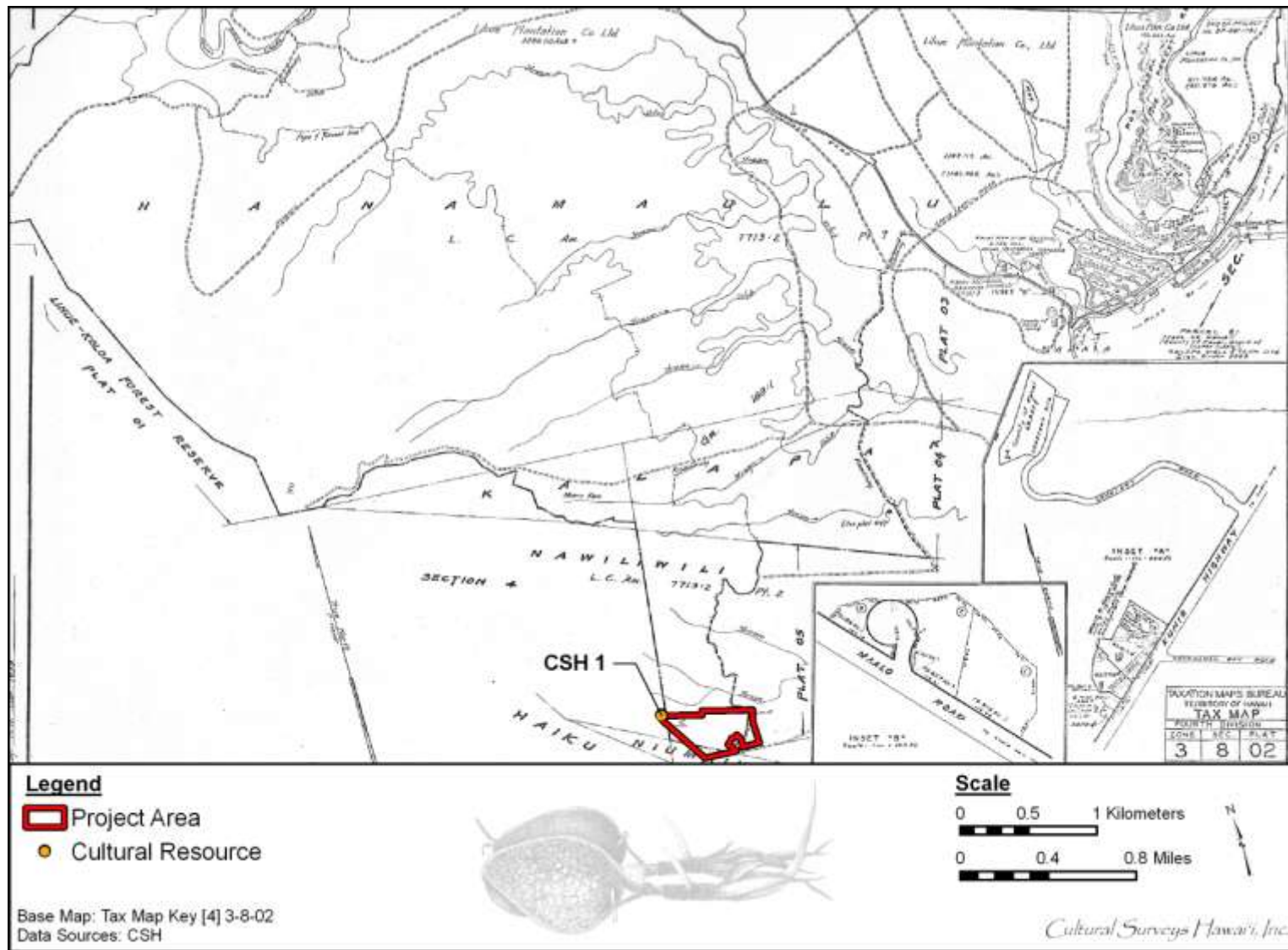


Figure 3. Tax Map Key showing the project area (Hawai'i TMK Service 1984)

The document is intended to support the project's environmental review and may also serve to support the project's historic preservation review under HRS §6E-42 and HAR §13-284.

1.3 Scope of Work

The scope of work for this CIA includes the following:

1. Examination of cultural and historical resources, including Land Commission documents, historic maps, and previous research reports, with the specific purpose of identifying traditional Hawaiian activities including gathering of plant, animal, and other resources or agricultural pursuits as may be indicated in the historic record.
2. Review of previous archaeological work at and near the subject parcel that may be relevant to reconstructions of traditional land use activities; and to the identification and description of cultural resources, practices, and beliefs associated with the parcel.
3. Consultation and interviews with knowledgeable parties regarding cultural and natural resources and practices at or near the parcel; present and past uses of the parcel; and/or other practices, uses, or traditions associated with the parcel and environs.
4. Preparation of a report summarizing the results of these research activities and providing recommendations based on findings.

1.4 Environmental Setting

1.4.1 Natural Environment

The project area is located approximately 2 miles west of Līhu'e, mauka (inland) of Kaumuali'i Highway in Nāwiliwili, Niumalu, and Ha'ikū Ahupua'a, Līhu'e District, on the southeastern quadrant of the island of Kaua'i. The parcel is fairly inland, approximately 3 miles from the southeastern coast. The project area is exposed to the prevailing northeast trade winds, and receives up to 254 cm (100 inches) of rainfall annually (Giambelluca et al. 1986). The project area lies on moderately sloping lands that range from approximately 300 to 400 ft above mean annual sea level.

Project area soils predominately consist of Puhi silty clay loam, 3 to 8% slopes (PnB) with a ribbon of Puhi silty clay loam, 8 to 15% slopes (PnC), running along its southwestern boundary. Rough broken land (rRR) abuts the north boundary and extends into the northeastern portion of the project area (Figure 4).

Puhi silty clay loam consists of well-drained soils on uplands. These soils developed in material derived from igneous rock. Slope ranges primarily from 3-15%. The run-off of the Puhi silty clay loam is slow, creating an only slight erosion hazard. Puhi silty clay loam is used for sugar cane, pasture, pineapple, orchards, wildlife habitat, and woodland.

Rough broken land (rRR) consists of very steep land broken by frequent intermittent drainage channels. Slope is 40-70%, runoff and geologic erosion are both rapid (Foote et al. 1972:62, 75, 118:Sheet 22).

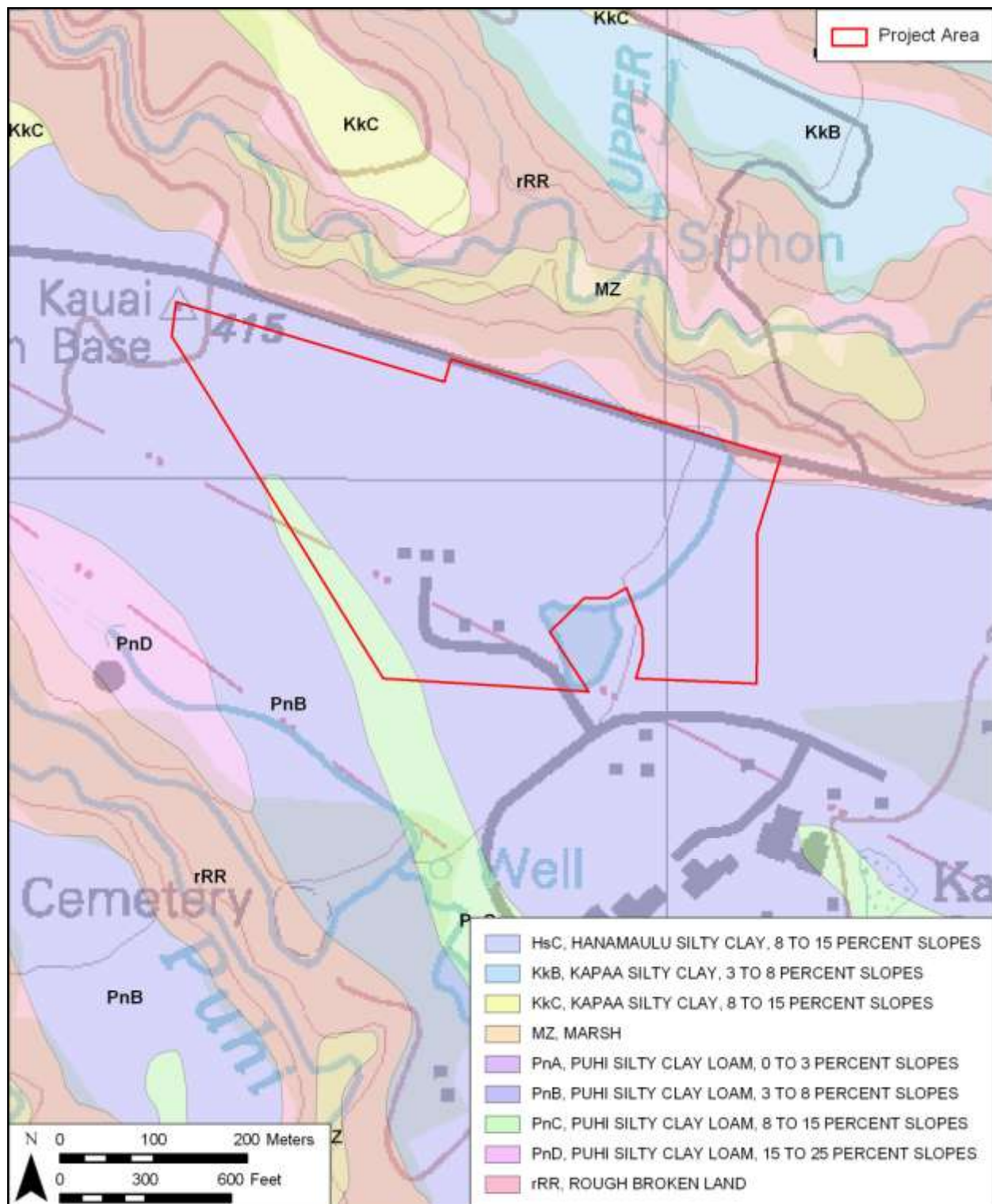


Figure 4. Portion of 1996 Lihue USGS 7.5-Minute Series Topographic Quadrangle, with overlay of the U.S. Department of Agriculture (USDA) Soil Survey of the State of Hawai'i (Foote et al. 1972), indicating sediment types within the project area

In pre-Contact times, vegetation in the project area consisted of lowland mesic (relatively moist) forest, woodland and shrubland (Juvik and Juvik 1998). Most of this native ecosystem was disturbed and severely diminished by early historic activities, including commercial agriculture and ranching. According to Hammatt and Creed (1993), Land Commission documents describe mid-nineteenth century Nāwiliwili Ahupua'a as having native vegetation of hau and wauke (paper mulberry) (See Appendix B for scientific names).

1.4.2 Built Environment

Development within the project area consists of existing school and administrative buildings. The University of Hawai'i's Kaua'i Community College campus is adjacent to the south. The residential community of Puhi lies just south across Kaumuali'i Highway. The lands to the west, north and east are relatively undeveloped (see Figure 1 and Figure 2).

Section 2 Methods

2.1 Archival Research

Historical documents, maps and existing archaeological information pertaining to the project area were researched at the CSH library and other archives including the University of Hawai‘i at Mānoa’s Hamilton Library, the State Historic Preservation Division (SHPD) library, the Hawai‘i State Archives, the State Land Survey Division, and the Bishop Museum Archives. Previous archaeological reports for the area were reviewed, as were historic maps and photographs and primary and secondary historical sources. Information on LCAs was accessed through Waihona ‘Aina Corporation’s Māhele Database (Waihona ‘Aina 2000) as well as a selection of CSH library references.

For cultural studies, research for the Traditional Background section centered on Hawaiian activities including religious and ceremonial knowledge and practices, traditional subsistence land use and settlement patterns, gathering practices and agricultural pursuits, as well as Hawaiian place names and mo‘olelo, mele (songs), oli (chants), ‘ōlelo no‘eau (proverbs) and more. For the Historic Background section, research focuses on land transformation, development and population changes beginning in the early post–Western Contact era to the present day (see Scope of Work above).

2.2 Community Consultation

2.2.1 Sampling and Recruitment

A combination of qualitative methods, including purposive, snowball, and expert (or judgment) sampling, were used to identify and invite potential participants to the study. These methods are used for intensive case studies, such as CIAs, to recruit people who are hard to identify, or are members of elite groups (Bernard 2006:190). Our purpose is not to establish a representative or random sample. It is to “identify specific groups of people who either possess characteristics or live in circumstances relevant to the social phenomenon being studied . . . This approach to sampling allows the researcher deliberately to include a wide range of types of informants and also to select key informants with access to important sources of knowledge” (Mays and Pope 1995:110).

We began with purposive sampling informed by referrals from known specialists and relevant agencies. For example, we contacted the SHPD, Office of Hawaiian Affairs (OHA), Kaua‘i/Ni‘ihau Island Burial Council (KNIBC), and community and cultural organizations in the Līhu‘e District for their brief response/review of the project and to identify potentially knowledgeable individuals with cultural expertise and/or knowledge of the study area and vicinity, cultural and lineal descendants of study area, and other appropriate community representatives and members. Based on their in–depth knowledge and experiences, these key respondents then referred CSH to additional potential participants who were added to the pool of invited participants. This is snowball sampling, a chain referral method that entails asking a few key individuals (including agency and organization representatives) to provide their comments and referrals to other locally recognized experts or stakeholders who would be likely candidates

for the study (Bernard 2006:192). CSH also employs expert or judgment sampling which involves assembling a group of people with recognized experience and expertise in a specific area (Bernard 2006:189–191). CSH maintains a database that draws on over two decades of established relationships with community consultants; these are cultural practitioners and specialists, community representatives and cultural and lineal descendants. The names of new potential contacts were also provided by colleagues at CSH and from the researchers' familiarity with people who live in or around the study area. Researchers often attend public forums (e.g., Neighborhood Board, Burial Council and Civic Club meetings) in (or near) the study area to recruit participants. Please refer to Table 4, Section 6, for a complete list of individuals and organizations contacted for this CIA.

CSH focuses on obtaining in-depth information with a high level of validity from a targeted group of relevant stakeholders and local experts. Our qualitative methods do not aim to survey an entire population or subgroup. A depth of understanding about complex issues cannot be gained through comprehensive surveying. Our qualitative methodologies do not include quantitative (statistical) analyses, yet they are recognized as rigorous and thorough. Bernard (2006:25) describes the qualitative methods as “a kind of measurement, an integral part of the complex whole that comprises scientific research.” Depending on the size and complexity of the project, CSH reports include in-depth contributions from about one-third of all participating respondents. Typically this means three to 12 interviews.

2.2.2 Informed Consent Protocol

An informed consent process was conducted as follows: 1) before beginning the interview the CSH researcher explained to the participant how the consent process works, the project purpose, the intent of the study and how his/her information will be used; 2) the researcher gave him/her a copy of the Authorization and Release Form to read and sign (Appendix C); 3) if the person agreed to participate by way of signing the consent form or providing oral consent, the researcher started the interview; 4) the interviewee received a copy of the Authorization and Release Form for his/her records, while the original was stored at CSH; 5) after the interview was summarized at CSH (and possibly transcribed in full), the study participant was afforded an opportunity to review the interview notes (or transcription) and summary and to make any corrections, deletions or additions to the substance of their testimony/oral history interview; this was accomplished either via phone, post or email or through a follow-up visit with the participant; 6) the participant received the final approved interview and any photographs taken for the study for their records. If the participant was interested in receiving a copy of the full transcript of the interview (if there is one; not all interviews are audio-recorded and transcribed), a copy was provided. Participants were also given information on how to view the report on the OEQC website and offered a hardcopy of the report once the report is a public document.

If an interviewee agreed to participate on the condition that his/her name be withheld, procedures were taken to maintain his/her confidentiality (see Protection of Sensitive Information below).

2.2.3 Interview Techniques

To assist in discussion of natural and cultural resources and cultural practices specific to the study area, CSH initiated semi-structured interviews (as described by Bernard 2006), asking

questions from the following broad categories: gathering practices and mauka and makai resources, burials, trails, historic properties, and wahi pana. The interview protocol was tailored to the specific natural and cultural features of the landscape in the study area, identified through archival research and community consultation. These interviews and oral histories supplement and provide depth to consultations from government agencies and community organizations that may provide brief responses, reviews and/or referrals gathered via phone, email, and occasionally face-to-face commentary.

2.2.3.1 In-depth Interviews and Oral Histories

Interviews were conducted initially at a place of the study participant's choosing (usually at the participant's home or at a public meeting place) and/or—whenever feasible—during site visits to the project area. Generally, CSH's preference is to interview a participant individually or in small groups (two–four); occasionally participants are interviewed in focus groups (six–eight). Following the consent protocol outlined above, interviews may be recorded on tape and in handwritten notes, and the participant photographed. The interview typically lasts one to four hours, and records the—who, what, when and where of the interview. In addition to questions outlined above, the interviewee is asked to provide biographical information (e.g., connection to the study area, genealogy, professional and volunteer affiliations, etc.).

2.2.3.2 Field Interviews

Field interviews are conducted with individuals or in focus groups comprised of kūpuna and kama'āina who have a similar experience or background (e.g., the members of an area club, elders, fishermen, hula dancers) who are physically able and interested in visiting the project area. In some cases, field visits are preceded with an off-site interview to gather basic biographical, affiliation and other information about the participant. Initially, CSH researchers usually visit the project area to become familiar with the land and recognized (or potential) cultural places and historic properties in preparation for field interviews. All field activities are performed in a manner to minimize impact to the natural and cultural environment in the project area. Where appropriate, Hawaiian protocol may be used before going on to the study area and may include the ho'okupu (offering) of pule (prayer), and oli. All participants on field visits are asked to respect the integrity of natural and cultural features of the landscape and to not remove any cultural artifacts or other resources from the area.

2.2.4 Study Limitations

Cultural impact assessments are limited by the time frame and costs of the study as well as community participation. Often, researchers have little control over the time frame or budget available for a project but may have more discretion over study design and the methodologies employed to illicit public participation. Various factors may affect participation, such as the availability of contact information for community members during the recruitment process, the interest of the community in the project, and the commitment of participants through several phases of the interview process. For example, once an interview is scheduled and conducted, CSH engages the interviewee at least one more time (in person or by emails or phone calls) to gain their approval of the interview transcript or summary and to incorporate any changes they make. The voluntary nature of community participation in this process, combined with restraints

on time and costs, often limits the number of interviews and the depth of information gathered during the interviews.

2.3 Compensation and Contributions to Community

Many individuals and communities have generously worked with CSH over the years to identify and document the rich natural and cultural resources of these islands for cultural impact, ethno-historical and, more recently, TCP studies. CSH makes every effort to provide some form of compensation to individuals and communities who contribute to cultural studies. This is done in a variety of ways. Individual interview participants are compensated for their time in the form of a small honorarium and/or other makana (gift); community organization representatives (who may not be allowed to receive a gift) are asked if they would like a donation to a Hawaiian charter school or nonprofit of their choice to be made anonymously or in the name of the individual or organization participating in the study; contributors are provided their transcripts, interview summaries, photographs and—when possible—a copy of the CIA report; CSH is working to identify a public repository for all cultural studies that will allow easy access to current and past reports; CSH staff do volunteer work for community initiatives that serve to preserve and protect historic and cultural resources (for example in Lānaʻi and Kahoʻolawe). Generally our goal is to provide educational opportunities to students through internships, share our knowledge of historic preservation and cultural resources and the State and Federal laws that guide the historic preservation process, and through involvement in an ongoing working group of public and private stakeholders, collaborate to improve and strengthen the §343 environmental review process.

Section 3 Traditional Background

3.1 Overview

This section focuses on the traditional background of the study area which includes the ahupua‘a of Nāwiliwili and Niumalu, within Līhu‘e District. Traditionally, the island of Kaua‘i was divided into five moku: Halele‘a, Kona, Ko‘olau, Nāpali, and Puna. The traditional moku were replaced in the mid- to latter part of the nineteenth century by the modern political district names of Hanalei, Kawaihau, Līhu‘e, Kōloa, and Waimea. Under the old district classification, the ahupua‘a of the study area were in the moku of Puna which became replaced by Līhu‘e under the new classification.

3.2 Wahi Pana

A Hawaiian wahi pana, also referred to as a place name, “physically and poetically describes an area while revealing its historical or legendary significance” (Landgraf 1994:v). Wahi pana can refer to natural geographic locations, such as streams, peaks, rock formations, ridges, and offshore islands and reefs, or they can refer to Hawaiian divisions, such as ahupua‘a and ‘ili (land section usually a subdivision of an ahupua‘a), and man-made structures, such as fishponds. In this way, the wahi pana of Niumalu and Nāwiliwili, tangibly link the kama‘āina of these ahupua‘a to their past.

The source for place names in this section is the online database of Lloyd Soehren’s *Hawaiian Place Names* (2010) and Fredrick B. Wichman’s *Kaua‘i, Ancient Place-Names and Their Stories* (1998). Soehren compiled all names from mid-nineteenth century land documents, such as Land Commission Awards and Boundary Commission Testimony (BCT) reports. The BCT lists boundary points for many of the ahupua‘a. The names of ‘ili ‘āina (land units within an ahupua‘a) and ‘ili kū (land units awarded separately from a specific ahupua‘a) are compiled from the testimony in Māhele Land Commission Awards (LCAs), from both awards successfully claimed and from those rejected. Place names found by authors on U.S. Geological Service (USGS) maps and Hawai‘i Survey Registered Maps (HSRM) were also added to the database. The Soehren database includes place name meanings from the definitive book on Hawaiian place names, *Place Names of Hawai‘i* (Pukui et al. 1974). For cases in which Pukui et al. (1974) did not provide a meaning, Soehren suggested meanings for simple names from the *Hawaiian Dictionary* (Pukui and Elbert 1986).

Many sources suggest **Nāwiliwili** takes its name from the wiliwili tree (nā is the plural article, as in “the wiliwili trees” or “place of the wiliwili trees”). According to Pukui and Elbert (1986), the wiliwili (*Erythrina sandwicensis*) is a native leguminous tree whose flowers and pods are used for lei, and whose light wood was once used for surfboards, outriggers, and net floats. Handy (1940:67) suggests a kaona (hidden meaning) for the name Nāwiliwili based on a reduplication of the word wili, which means “twisted,” as in the meandering Nāwiliwili Stream.

According to Hammatt and Creed (1993:22), Land Commission documents indicate the shoreline location of several house lots in Nāwiliwili Ahupua‘a was known as **Papalinaloha**. Kikuchi (1973) states this was the name of “an early chief,” but Hammatt and Creed (1993)

suggest it may also have been an ‘ili or the konohiki (headman of of an ahupua‘a land division under the chief). Papalinaloa was also the name of an ‘auwai (ditch, canal) on the south side of Nāwiliwili Stream, associated with LCA 3566 (Hammatt and Creed 1993).

Pukui et al. (1974) list but do not translate **Kalapakī**, defined simply as a “beach” in Līhu‘e district. Pukui and Elbert (1986) define the word kalapakī (with a small “k”) as “double-yolked egg, Kaua‘i.” Aside from its beach and landing, Kalapakī is probably best known in a traditional sense for its heiau of **Ahukini** and **Ninini** (and possibly another at Kūki‘i). Ahukini has been translated as “altar [for] many [blessings]” (brackets inserted by Pukui et al. 1974), and this was also the name of a heiau in Kāne‘ohe, O‘ahu. Ninini has been translated as “pour,” as in ninini wai (to pour water), while Kalapakī was also the name of a village located along the coast. According to Hammatt and Creed (1993:22), Land Commission documents demonstrate the “village of Kalapaki” was synonymous with the “‘ili of Kuuhai.”

Niumalu literally translates as “shade [of] coconut trees,” but the word malu can also refer to “protection” or “shelter.” Niumalu’s famous fishpond (also called erroneously Niamalu in some older publications) is traditionally known as either **Alekoko** (or ‘Alekoko) or Alakoko depending on the source. According to Kikuchi (1973), **Pēpē‘awa** is yet another name for this loko. Pukui et al. (1974) do not include either of these names for the loko at Niumalu, but there are well known mo‘olelo references to a pair of brother and sister shark guardian spirits named **Alekoko** and Kahalalehue (see below).

Niumalu is known for a series of pu‘u along the high ridge forming the south side of Nāwiliwili Bay and stretching back to Hā‘upu. **Kalanipu‘u** (779 ft elevation), located right above the entrance to the harbor, translates literally as “the royal hill.” Traditionally, it is known as a pu‘u kāhea (“calling hill”) from which the locations and movements of fish were monitored. Further mauka (up the ridge) is Kepaweo (1167 ft elevation) and **Hōkūnui** (1608 ft elevation). Pukui et al. (1974) translated the latter literally as “large star,” but nui can also mean “supreme” or “greatest.”

Pukui et al.’s (1974) entry for **Hulē‘ia** refers the reader to **Hulā‘ia**, described as an old name for Hulē‘ia Stream, which drains into Nāwiliwili Bay. The authors provide this additional intriguing information regarding the literal translation of Hūla‘ia: “pushed through (Kama-pua‘a ravished Pele here)” (Pukui et al. 1974:53). A survey map of the boundaries of Niumalu Ahupua‘a from the mid-nineteenth century (Ching et al. 1973:102) depicts a stream between Nāwiliwili and Hulē‘ia Streams identified as “Waikonui Stream.” Pukui and Elbert (1986) define waikō as “water with a very strong current.” This stream is today named Pu‘ali on current USGS maps. The broad delta of the **Hulē‘ia** river is 1.5 miles long and in the ahupua‘a of **Ha‘ikū** which is the ahupua‘a south of Niumalu.

Līhu‘e, literally translated as “cold chill,” became the modern political name for the traditional moku of Puna. Historical documents suggest the name Līhu‘e was first applied to this area by Kaikioewa (Governor of Kaua‘i) in the 1830s, perhaps after Kaikioewa’s upcountry residence on the island. On the other hand, Nathaniel Emerson’s translation of the famous oli cycle of Hi‘iaka and Pele mentions Līhu‘e with the other main place names of this area. It is also well known that Līhu‘e was a traditional settlement area near the current Schofield Barracks on O‘ahu.

Kilohana, source of Nāwiliwili and Hulē‘ia Streams, is associated with mo‘olelo of a boy named Lahi and his uncle; there are multiple possible meanings of the name Kilohana (Pukui et al. 1974 list three, “lookout point,” “outer tapa,” or “best, superior.”)

Puhi is a village and stream in the Līhu‘e District that literally translates as “blow.” Ka-holi-a-Kāne (the sprouting [made] by Kāne) was a shark god who lived in a cave in Puhi.

3.3 Mo‘olelo

The presence of many mo‘olelo in the study area suggest the place was once well-populated. The following section presents mo‘olelo from the region.

3.3.1 Nāwiliwili

The menhune were known to live in the Nāwiliwili area:

It was one of the favorite playgrounds of the tribe of Menehune, the little brown work-people who played as hard as they worked. And again it is William Hyde Rice, who, more than any other teller of stories, has kept for us old tales of this happy playground. [Damon 1931:395-396]

3.3.2 Ahukini and Ninini

According to Wichman (1998), Ahukini Heiau, located near the study area, was named for Ahukini-a-la‘a (who lived about AD 1250), one of three sons of La‘a-mai-kahiki. An ancestor of the Kaua‘i chiefly lines, with a close relationship to O‘ahu, Ahukini was also ali‘i nui (supreme chief) of the Puna District of Kaua‘i (Wichman 2003).

In the 1920s, the Hawaiian legend chronicler Rice (1974), a life-long resident of Kaua‘i, published this mo‘olelo about Ahukini in the story of “The Goddess Pele”:

Two brothers of Pele, who had come from foreign lands, saw Lohiau’s body lying as a stone where the lava flow had overtaken him. Pity welled up in their heart and they brought Lohiau to life again. One of these brothers made his own body into a canoe and carried the unfortunate Lohiau to Kauai, where he was put ashore at Ahukini. [Rice 1974:14]

3.3.3 Kemamo and Kapūnohu

Niumalu translates as “shaded coconut trees” and derives from the mo‘olelo involving Kemamo and Kapūnohu (Wichman 1998:57). Kemamo, known for his ability to shoot a rock from his sling 5 miles and never missing a shot, is said to have resided on the Kona/Puna Districts boundary. During Kapūnohu’s travels through the islands he was warned of Kemamo’s challenges to travelers. Upon their meeting, Kapūnohu agreed to a contest with Kemamo, each betting his most prized possession. Kapūnohu bet his spear and Kemamo his sling. Kalalea peak, visible from their location, was the target. Kemamo slung a rock that failed to reach Kalalea and fell near Anahola. Kapūnohu’s spear shaded the coconut trees, which led to the naming of Niumalu, “dipped into the Wailua River, hence the name Waiehu, and finally pierces the mountain at Kalalea leaving a large hole that was visible until just a few years ago” (Wichman 1998:57).

3.3.4 Niumalu and Hulē'ia

Ching et al. (1973) recount, without attribution, the following mo'olelo about the origins of 'Alekoko Fishpond in Niumalu Ahupua'a:

Living in the valley between the Kipu River [Hulē'ia] and Niumalu resided Alekoko, the brother, and Ka-lala-lehua, the sister, young chiefs of handsome countenance, who agreed together to construct a fishpond each for themselves. The work on these fishponds was done by the menehunes, it was done in one night (during the night of akua, on which there was a full moon). Stones for the walls were gathered from as far away as the sea beach of Makalii.

(The pond of the brother was built on one side of the river, while the pond of the sister was built in the opposite bend in the river below Kalaeakapapa Point. The menehune women built the sister's pond, and the menehune men built the brother's pond.) As dawn approached the menehunes fled to the mountains. (The sister's pond was never completed.)

The sister, seeing her fishpond was incomplete, was grieved and wept at its unfinished state, while the brother rejoiced at the completion of his. The stones gathered for the sister's pond still remain in the stream to this day. [Ching et al. 1973:28]

Ching et al. (1973) describe mo'olelo associated with Hulē'ia, suggesting its close pili (association) with O'ahu:

The earliest mention of the [Niumalu] area is legendary dating to 1785. After Kahekili defeated Oahu a number of chiefesses of highest rank were killed. Kekelaokalani made her escape to Kaua'i bringing with her some Oahu soil, part of which she deposited at Hulaia [Huleia]. [Ching et al. 1973:19]

3.3.5 Menehune Fishpond

'Alekoko Fishpond was named after Chief 'Alekoko. Today, it is known as Menehune Fishpond and its walls are believed to have been built in one night by menehune (legendary race of small people who worked at night, building fishponds). Chief 'Alekoko and his sister, Chiefess Ka-lālā-lehua, requested the construction of the fishpond across the Hulē'ia River. The menehune agreed to construct the 825-m dirt stone-faced dam only if Chief 'Alekoko and his sister promised to stay in their home and not watch the menehune at work. The two agreed. The menehune formed two lines stretching from the Wahiawa Plains to the Hulē'ia River and passed stone blocks through the night. Before morning, Chief 'Alekoko could no longer just listen to the menehune at work and the shifting of the stone. He made a small hole in the house's grass thatch and peeked through. The menehune dropped their stones, washed their hands, and left the fishpond incomplete as a reminder that promises are not to be broken. The chief's name and that of the fishpond, 'Ale-koko, translates as "rippling blood" and is said to refer to the hands of the menehune, bleeding from passing the rough stone they did not have time to polish (Wichman 1998:57-58). The pond was later completed by Chinese (Rice 1923:37).

3.3.6 Kuhiau and Paukini

Several historic documents discuss the close connection between Kuhiau Heiau, reportedly the largest heiau in Kaua'i, and the pōhaku (rock) known as Paukini, which marks the ahupua'a boundary between Nāwiliwili and Kalapakī. Damon (1931:393) writes:

[Kuhiau Heiau] . . . was in its day the largest and most far-famed temple on the island. Below it, in the bay, is still the rock called Paukini, which was said to be its companion or sister heiau, and was probably also the home of the kahuna [priest], or priest, of Kuhiau. In ancient times this rock was connected with the shore near the site of the former boat landing.

3.3.7 Kalanipu'u

This pu'u kāhea directly above Nāwiliwili Bay is associated with mo'olelo about Pele's older sister Nā-maka-o-Kaha'i, who planted 'awa (kava) and mai'a (bananas) upon it (Pukui et al. 1974).

3.3.8 Kilohana

Damon (1931) described Kilohana as a famous nesting place of 'uwa'u (dark-rumped petrel), a chiefly delicacy. The top of Mauna Kahili, the peak to the west of Kilohana, was a sacred burial place of Hawaiian chiefs. Kilohana is also associated with the menehune.

One of their favorite play places was the little hill of Po-po-pii, Rounded-for climbing-up. This they had themselves built on the top of Kilohana and never were they more delighted than when they could climb it over and over again for the sheer fun of rolling down its sides, frolicking and laughing as they rolled. It was such a sport that their gleeful shouts carried clear across the Kauai channel to the southeast and startled birds at Kahuku on the island of Oahu.

Once, a Menehune called Ka-uki-uki, The-man-of-wrath, boasted that he could climb to the top of this hill at Kilohana and snare the legs of the moon. Ridiculed by his fellow tribesmen, he valiantly attempted to make good his boast, and was turned into a stone when he failed of achievement. For many years this stone was recognized by Hawaiians as a kupua, or demigod, and offerings of lehua-blossoms and fragrant maile [a native twining shrub] leaves were laid upon it in passing, that rain and fog might not hinder the errand which carried the people into the mountains. [Damon 1931:395-396]

Beckwith (1970) in *Hawaiian Mythology* recounts Rice's (1923) telling of the "Wainiha Story," a mo'olelo about bird hunters who lure a giant to his death; and koa (warriors) who come to avenge the giant's murder only to be thrown to their deaths by the young bird hunter Lahi.

Lahi and his uncle Kane-alohi live in the Wainiha valley and go up to Kilohana to catch uwa'u birds for food, a kind of bird that seeks its nest in the cliffs by day, blinded by the light. Their first enemy is a 'giant' whom they lure into a hole and kill. Their next is the chief with 'four hundred' soldiers who objects to the depredations among the birds. They sit on a rock eating birds and watching the rippling of the water below for men approaching . . . The boy hides at the pass and

throws all four hundred men over the cliff. The chief comes last and, recognizing Lahi as his own son, invites him to the village. He prepares a trap, but this boy discovers and, burning down the house with his treacherous father and followers within, takes over the rule of the land. [Beckwith 1970:331]

3.3.9 The Winds of Kaua‘i

One of the oldest and most famous mo‘olelo in Hawaiian oral tradition describes the travels and exploits of Pele, the Hawaiian volcano goddess, and one of her sisters, Hi‘iakaikapoliopole (more commonly known simply as Hi‘iaka). Pele, in her lengthy oli of literally hundreds of named winds of Kaua‘i, lists those of Nāwiliwili, Kalapakī, Ahukini, Līhu‘e, Kapaia, and Hanamā‘ulu (Nogelmeier 2006):

He Hu‘eone ka makani o Nāwiliwili	The wind of Nāwiliwili is a Hu‘eone
He Wāmua ka makani o Kalapakī	The wind of Kalapakī is a Wāmua
He ‘Ehukai ka makani o Ahukini	The wind of Ahukini is an ‘Ehukai
He Pahola ke kiu ho o kii makani lele kula o Līhu‘e	A Pāhola wind is the scout that fetches the winds sweeping the Līhu‘e plains
He Kuli‘āhiu ka makani o Kapaia	The wind of Kapaia is a Kuli‘āhiu
He Ho‘oluako‘inehe ka makani o Hanamā‘ulu	The wind of Hanamā‘ulu is a Ho‘oluako‘inehe

3.4 Mele (Songs)

3.4.1 Mele Associating Nāwiliwili with the Mokihana (*Pelea anisata*) Flower

Bowers (1984) compiled the lyrics (in Hawaiian and English) to over two dozen mele about Kaua‘i, several of which mention Nāwiliwili, Līhu‘e, and Niumalu. These mele are attributed to a variety of composers (sometimes no specific person is listed); most of these songs were probably written in the twentieth century, based on their style (e.g., the second song below uses the term “uapo,” also spelled in some sources as “uwapo,” defined by Pukui and Elbert 1986 as a historically-introduced [i.e., “pidgin”] term for “wharf”). Regardless of their age—whether they are decades or centuries old—these songs are cherished by many people, and speak to a great love for the beauty of Nāwiliwili, in particular.

The following song (Bowers 1984:3), attributed to “Haunani Kahalewai’s Trio with the Waikiki Serenaders” (Kamehameha Schools Archives n.d.), associates Nāwiliwili with the nearby Hā‘upu and the mokihana flower.

Kaulana mai nei a‘o Nāwiliwili	Renowned is Nāwiliwili
He nani nō ninini	Attractive even to Ninini
He nani maoli nō	A beauty unsurpassed.
Kuahiwi nani ‘oe a‘o hā‘upu	Splendid ridge of Hā‘upu
Ka pua mokihana ‘ea	The mokihana flower
Ka pua nani o Kaua‘i	The beautiful flower of Kaua‘i.

Ho‘ohihi ka mana‘o iā Kaua‘i
Eō mai k oleo aloha
Ke kani a‘o pi‘ilani

Ha‘ina ‘ia mai ana ka puana
Kaulana mai nei Nāwiliwili
He nani maoli nō

[Bowers 1984:3]

The mind is entranced with Kaua‘i
Let your beloved voice respond
The sound of Pi‘ilani.

The refrain has been told
Renowned is Nāwiliwili
A beauty unsurpassed.

Another mele entitled “Kaulana ka inoa a‘o Kaua‘i” (Bowers 1984:2), attributed to a recording (*Music of Old Hawaii*) by the famous Sons of Hawai‘i, again mentions the mokihana:

Kaulana ka inoa a‘o Kaua‘i
Ku‘u lei mokihana pōina ‘ole.

Ku kilakila ‘oe Wai‘ale‘ale
Me ka nani kaulana ‘o Nāwiliwili.

Laua‘e o makana ka‘u aloha
Me ka uapo nani a‘o Niumalu

E pi‘ina I ke ‘ike a‘o Kipu
Me ka wai ‘anapanapa e kaulana nei.

I aloha ia noa‘o Waimea
Me ke one kani la a‘o Nohili

Pu‘ili kou aloha ma ku‘u poli
Honehōne kou leo me he ipo ala.

Hea aku no au, e o mai ‘oe
Lei ana Kaua‘i ka mokihana

[Bowers 1984:2]

Famous is the name of Kaua‘i
My unforgettable mokihana lei.

Wai‘ale‘ale you stand majestic
With the famous beauty of Nāwiliwili.

I love the fragrant fern of Makana
With the fine wharf of Niumalu.

Ascending to see Kipu
With the famous glittering waterfall.

Beloved is Waimea
With the barking sands of Nohili.

Your love is held fast in my heart
Sweet your voice like a sweetheart.

I call, you answer
Kaua‘i, decked in mokihana.

The mokihana is a native (endemic) tree, found only on Kaua‘i, considered traditionally to be a variety of ‘alani (a general term for citrus tree). The lei made of mokihana is a traditional symbol of the island of Kaua‘i. According to Abbott (1992), mokihana were used to make the most treasured and rare seed lei in the Hawaiian Islands.

3.4.2 Līhu‘e

The song “Līhu‘e” speaks of the rustling leaves of Niumalu:

Aloha ‘ia no au Līhu‘e

I ka ne‘e mai a ka ua Paupili

Ua pili no au me ku‘u aloha

Me ke kau nehe mai au Niumalu.

[Clark 1990:2]

Beloved is Līhu‘e

When the Paupili rain comes.

I cling to my beloved

Under the soft rustling [leaves] of Niumalu

3.5 Heiau

Historic maps show that only one heiau, Kuhiau Heiau, existed along the shoreline of the study area (Figure 5 and Figure 6) in Nāwiliwili Ahupua‘a. This heiau is thought to be associated with its sister heiau, Paukini Rock, which marks the boundary between Nāwiliwili and Kalapakī. Three other heiau nearby (as shown in Figure 5 and Figure 6) were located in Kalapakī Ahupua‘a, directly north of Nāwiliwili. These include remnants of an unknown heiau at Kūki‘i Point, and two heiau along rocky points at Ninini and Ahukini. Physical evidence of these heiau have been obliterated by historic activities and more recent development. Nevertheless, the sacred nature of the landscape in and around these heiau are still appreciated.

3.5.1 Kuhiau Heiau and Paukini Rock

Kuhiau Heiau, also known as Site 99 (SIHP # 50-30-11-099), was recorded in Bennett’s (1931) archaeological survey in the late 1920s. Figure 5 shows Kuhiau Heiau was located near the courthouse and near the ocean. Two decades prior to Bennett’s study, Thrum had described this heiau as already “long since destroyed” (Bennett 1931:124). According to Thrum,

[a] large paved heiau, whose enclosure covered an area of about four acres . . . The rock Paukini, now separated from but formerly connected with the shore, was where the kahuna lived. This is said to have been the largest and most famous on Kauai in its day. [Bennett 1931:124]

Damon (1931) describes Kuhiau Heiau’s close connection with Paukini, the pōhaku that marks the boundary between Nāwiliwili and Kalapakī. He writes,

[Kuhiau Heiau] . . . was in its day the largest and most far-famed temple on the island. Below it, in the bay, is still the rock called Paukini, which was said to be its companion or sister heiau, and was probably also the home of the kahuna, or priest, of Kuhiau. In ancient times this rock was connected with the shore near the site of the former boat landing. [Damon 1931:393]

3.5.2 Heiau at Kūki‘i Point, Ninini and Ahukini

An 1881 map of Nāwiliwili Harbor (Figure 5) depicts “remnants of an ancient heiau” near Kūki‘i Point. Ninini Heiau (Site 100; SIHP # 50-30-11-100) and Ahukini Heiau (Site 101; SIHP # 50-30-11-101) were both described by Bennett as totally destroyed. According to Thrum (Bennett 1931:125), Ahukini was “[a] heiau of medium size; foundations only now remain.”

3.6 Freshwater Resources and Fishponds

3.6.1 Streams

Nāwiliwili and Hulē‘ia Streams originate on the slopes of Kilohana Crater, and (Hulē‘ia only) upon more distant Wai‘ale‘ale. The meandering streams of Nāwiliwili and Hulē‘ia have formed extensive natural (alluvial) terraces along their lengths. These abundant terraces consist of small level areas formed along major meanders that could be planted with relatively little preparation of the landscape. Higher terraces were irrigated by diverting some of the stream flow, carefully

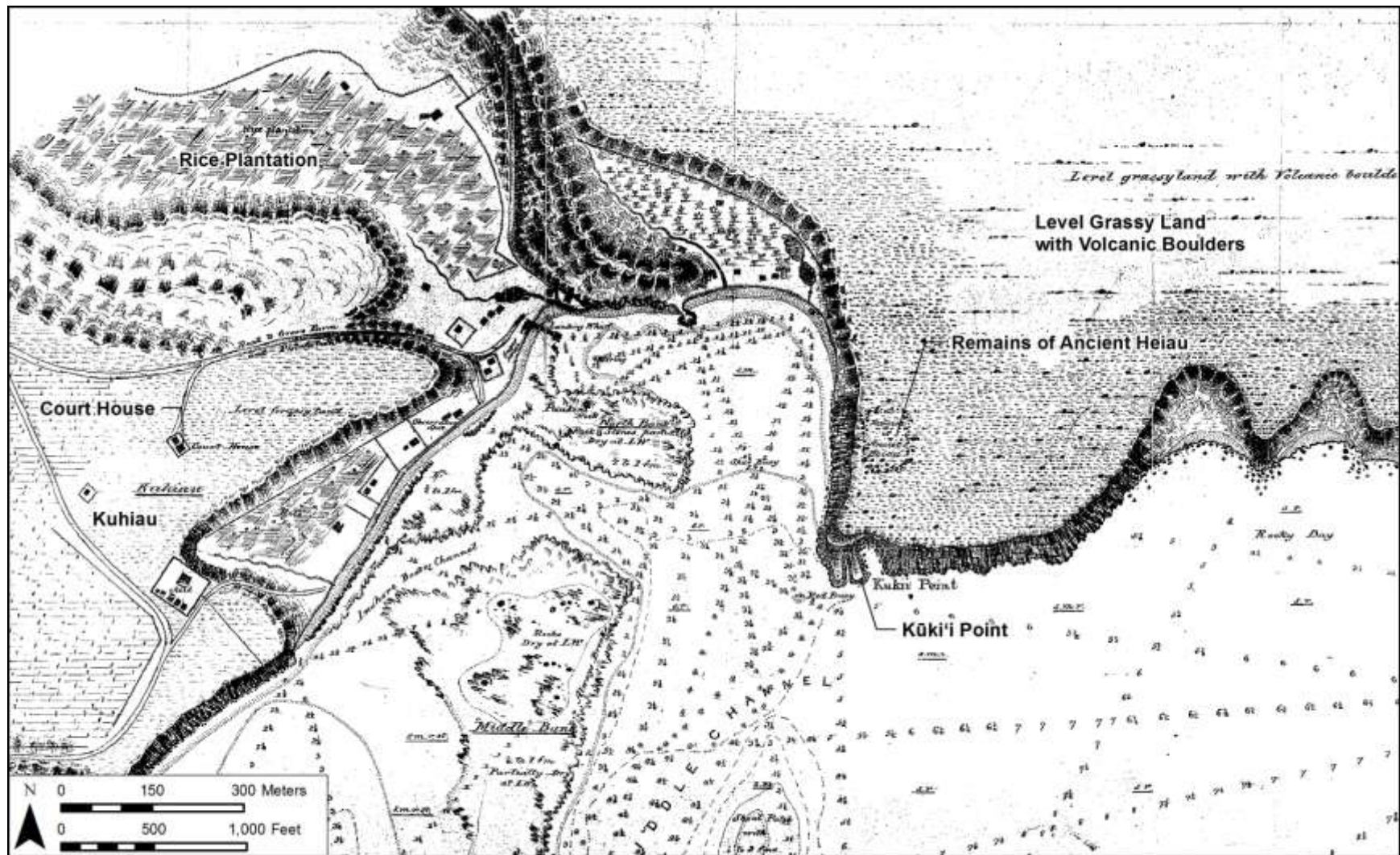


Figure 5. An 1881 map of Nāwiliwili Harbor by Lt. George G. Jackson, showing remnant of ancient heiau near Kūki'i Point; note the area called "Kuhiau" near the courthouse (left), previous location of Kuhiau Heiau



Figure 6. Map showing heiau along the coastal areas within and near the study area (adapted from Damon 1931)

managed by community leaders or konohiki. It is likely there were once other smaller drainages between the Nāwiliwili and Hulē'ia Streams and that native Hawaiian planters used and modified these as 'auwai. Most of these smaller drainages have been changed beyond recognition by historic and modern land use and development. However, it appears some of these smaller streams were still flowing into the early twentieth century. For example, two smaller streams, Koena'awa nui and Koena'awa iki, are identified in Land Commission documents as draining into Kalapakī Bay (Figure 7).

3.6.2 Fishponds

3.6.2.1 Menehune Fishpond/ Niumalu Fishpond/'Aleko Fishpond

Menehune Fishpond, also known as Alakoko in Land Commission documents and alternatively, Alekoko or 'Aleko in other sources (Kikuchi 1987), was first described and mapped scientifically by Bennett in the late 1920s. According to Handy and Handy (1972:426), Bennett incorrectly named this site Niamalu (Niumalu) Fishpond probably due to the proximity of nearby Niumalu Ahupua'a. It is located along the Hulē'ia Stream near its mouth to Nāwiliwili Bay. Kikuchi (1973, 1987) considered it a loko wai (freshwater pond or lake) class fishpond because of its inland location along a meander of the Hulē'ia Stream; other sources (perhaps inaccurately) consider it a loko kuapā (fishpond made by building a wall on a reef). The overall area of the pond has apparently varied through time from as small as 32 acres to as large as 39 acres. Figure 8 shows the fishpond in 1912 and by 1934, it was still in use (Figure 9). Menehune Fishpond was placed on the National Register of Historic Places in 1973 as SIHP # 50-30-11-501.

Bennett (1931) describes the dimensions and construction features of Niamalu [*sic*] Fishpond:

The Niamalu [*sic*] fish pond consists principally of a stone-faced, dirt wall that runs for over 900 yards and cuts off a large bend in the river for use as a fish pond. It is today [in the early 1930s] used both for fish and ducks. Cement walls and iron gates have obscured any old method of controlling the water or the fish. [Bennett 1931:124]

This fishpond is associated with the mo'olelo of the brother and sister shark guardian spirits named 'Aleko and Kahalalehue, who were said to have given the task of construction to the menehune (Kaiwi 1921). According to Rice (1974), it is said the menehune failed to completely finish their task, thus leaving a small opening later finished by people who did an inferior job of it; this inferior stone-work being still visible in historic times. See Section 3.3.5 for a more detailed description of the mo'olelo associated with the fishpond.

3.7 Settlement and Subsistence

The ahupua'a of Nāwiliwili and Niumalu were permanently inhabited and intensively used in the pre-Contact and early historic periods, based on archaeological, historical, and oral history documentation. The archaeological record of early Hawaiian occupation in this area indicates a date range of ca. AD 1100 to 1650 for pre-Contact Hawaiian habitations (Walker et al. 1991). A radiocarbon date of AD 1170-1400 was obtained from excavated sediments near the mouth of

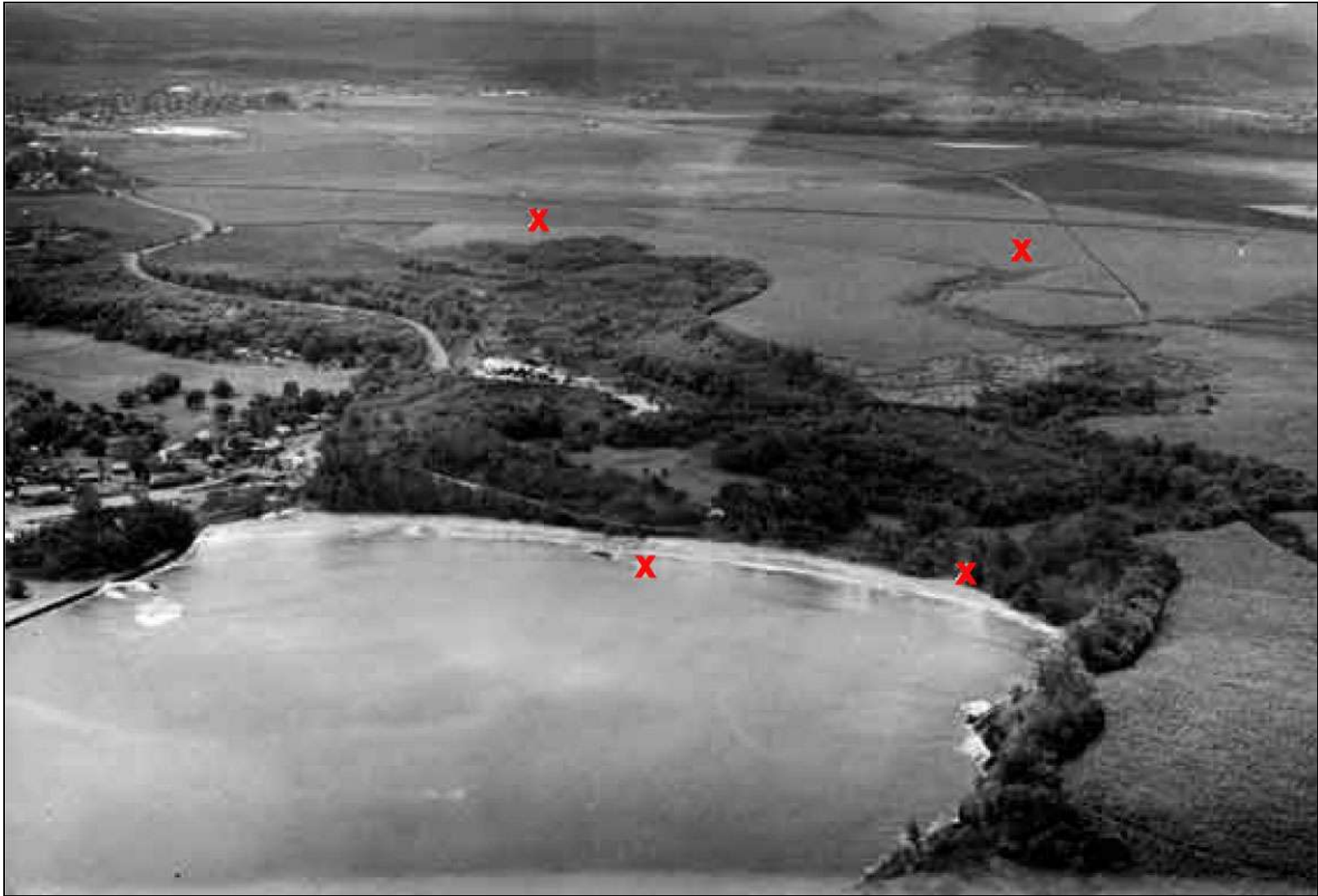


Figure 7. Kalapakī Bay, showing two streams with red Xs marking their mauka locations and outlets to Kalapakī Bay; Koenaʻawa-nui Stream is on the left (Kauai Historical Society n.d.)



Figure 8. Menehune Fishpond, 1912 (Baker 1912)



Figure 9. Menehune Fishpond still in use in 1934 (Kauai Historical Society 1934)

Hanamā'ulu Stream, north of Nāwiliwili. Mo'olelo associated with the study area are also plentiful suggesting early settlement of the area by a viable Native Hawaiian population. The abundance of water, the presence of distinguished fishponds along the coast, and water systems are testaments to early settlement.

The coastal areas held the concentration of permanent house sites and temporary shelters, heiau, including ko'a (shrine) and kū'ula (both types of relatively small shrines dedicated to fishing gods), numerous trails, and fishponds. There were numerous house sites and intensive cultivation areas within the valley bottoms of Nāwiliwili and Hulē'ia Streams. According to Hammatt and Creed (1993:22), Land Commission documents indicate the shoreline location of several house lots in Nāwiliwili Ahupua'a, known as Papalinahoa. Kikuchi (1973) states this was the name of "an early chief," but Hammatt and Creed (1993) suggest it may also have been the name of an 'ili or of the konohiki. Papalinahoa was also the name of an 'auwai on the south side of Nāwiliwili Stream, associated with LCA 3566 (Hammatt and Creed 1993). Before the historic era, there was a village at Kalapakī (probably between Kalapakī Beach and Ahukini), and another, likely larger, at Nāwiliwili to the southwest. Another village was located near the mouth of the Hanamā'ulu Stream.

Land Commission documents indicate a land use pattern that may be unique to this part of the island, or to Kaua'i, in general, in which lo'i and kula lands are described in the same 'āpana, with house lots in a separate portion. In most places, kula lands are defined as drier landscapes and they do not typically occur next to, and among, wetter lo'i lands. The dryland areas (kula) of these ahupua'a contained native forests and were cultivated with crops of wauke, 'uala (sweet potatoes), and ipu (bottle gourd). According to Hammatt and Creed (1993:23), "there are several [LCA] references to other lo'i next to the beach which indicate wetland cultivation extending right to the shoreline." This is a type of land use that seems to be fairly unique to Kaua'i.

Handy (1940) describes the study area in 1935 as a land with many lo'i and good fishing. He describes Nāwiliwili Valley in his chapter on the main kalo (taro) growing locations in Puna, Kaua'i:

For 3 miles inland from the sea the Nāwiliwili River twists (*wiliwili*) through a flat valley bottom which was formerly all in terraces. Inland, just above the bay, three Hawaiian taro planters cultivate wet taro in a few small terraces. Most of the land is [now] in pasture. There are one small cotton plantation and several small garden plots. For about a half mile below and a half mile above the mill the valley is mostly filled with plantation camp and other structures, with many small clumps of bananas, some garden plots, and a few old breadfruit trees. The old terrace area extended half a mile up into the small valley that opens out northwest just above the mill. Approximately the last mile of flat valley bottom, before the river bed becomes a narrow gulch, used to be in terraces but is now pasture and ranch land. [Handy 1940:67]

Handy describes Niumalu Ahupua'a as having some of the best fishing grounds on the island of Kaua'i.

Niumalu is a tiny ahupua'a, a mere wedge between Nāwiliwili and Haiku, but it was, and is, one of the most important fishing localities on Kauai, and contained a

fairly large area of terraces along the lower mile of Puali Stream. There were a few terraces at the lower end of Halehaka Stream where it joins the Puali about 1.5 miles inland. [Handy 1940:67]

Nimalu fields and fishponds are shown in Figure 10. Handy and Handy (1972) additionally note,

. . . southward of the Huleia River and harbor [Niumalu] . . . had fairly large *lo'i* areas at the seaward ends of its two streams, Puali and Halehaka. Niumalu was noted in the past, as it is today, for being one of the most important fishing localities on Kauai. [Handy and Handy 1972:427]

Ching et al. (1973: Appendix 6) list kapu (prohibited) resources for the ahupua'a of the study area (Table 1) which were gleaned from Land Commission documents from these areas. These were akule for Nāwiliwili and Niumalu Ahupua'a. Kapu wood was koa for Nāwiliwili and 'ōhi'a for Niumalu.

Table 1. Kapu Resources Mentioned in Land Commission Documents from the Ahupua'a of Nāwiliwili, Niumalu, and Ha'ikū (source: Ching et al. 1973)

Ahupua'a	Kapu fish	Kapu wood
Nāwiliwili	Akule	Koa
Niumalu	Akule	'Ōhi'a



Figure 10. Niumalu Flats filled with pond fields and fishponds (Kaua'i Historical Society, n.d.)

Section 4 Historical Background

4.1 Overview

This section briefly summarizes the historical background of the study area from the time of the arrival of Captain Cook in Hawai‘i in 1778, or the early post-Contact period, to modern times.

4.2 Early Post-Contact Period

The first written accounts of Kaua‘i are from travelers, missionaries, and surveying expeditions. Missionary accounts of the first half of the nineteenth century provide the majority of the early written records for this region of Kaua‘i. Hiram Bingham’s 1820s map of the island identifies the place names Hulaia [Hulē‘ia], Niumaru [Niumalu], Haitu [Ha‘ikū], and Tipu [Kīpū] (Figure 11).

Damon (1931) wrote about observations Bingham made in 1824 and included in his memoir, *A Residence of Twenty-One Years in the Sandwich Islands*, published in 1847. According to Damon, Bingham described the lands near Kilohana, a summit and crater in the Līhu‘e District near the project area, as “finer country than the western part of the island.” Damon writes,

In 1824, when walking around the island from Waimea to counsel the people after the wreck of *The Cleopatra’s Barge*, Rev. Hiram Bingham crossed from Hanapēpē, as has been seen, over the old upland trail back of Kilohana, and wrote of it as ‘a country of good land, mostly open, unoccupied and covered with grass, sprinkled with trees, and watered with lively streams that descend from the forest-covered mountains and wind their way along ravines to the sea, —a much finer country than the western part of the island.’ [Damon 1931:401]

In the 1830s, another missionary, Rev. Peter Gulick, was living on Kaua‘i at Waimea and Kōloa. He made the following observation about the kind of provisions one could find in Hanamā‘ulu, a place immediately north of the study area, at the time.

The governor [Kaikioewa] reached Hanamaulu in his canoe just as we entered on horse back . . . This is the governor’s custom, when he travels. A man is sent before to give notice that provision may be made, at the different stopping places, for him and his train: which frequently amounts to two hundred [people] . . . I with a few natives had a comfortable house at Hanamaulu. The inhabitants brought us fish fresh from the ocean, fowls, taro, potatoes, and a pig, all except the fish roasted or baked in the ground . . . A youth who went with me for the purpose prepared my food. My bed, which was made with mats, was covered with ten tapas; these were the bed clothes which according to custom were presented to the guest for whom they were spread. [Damon 1931:360]

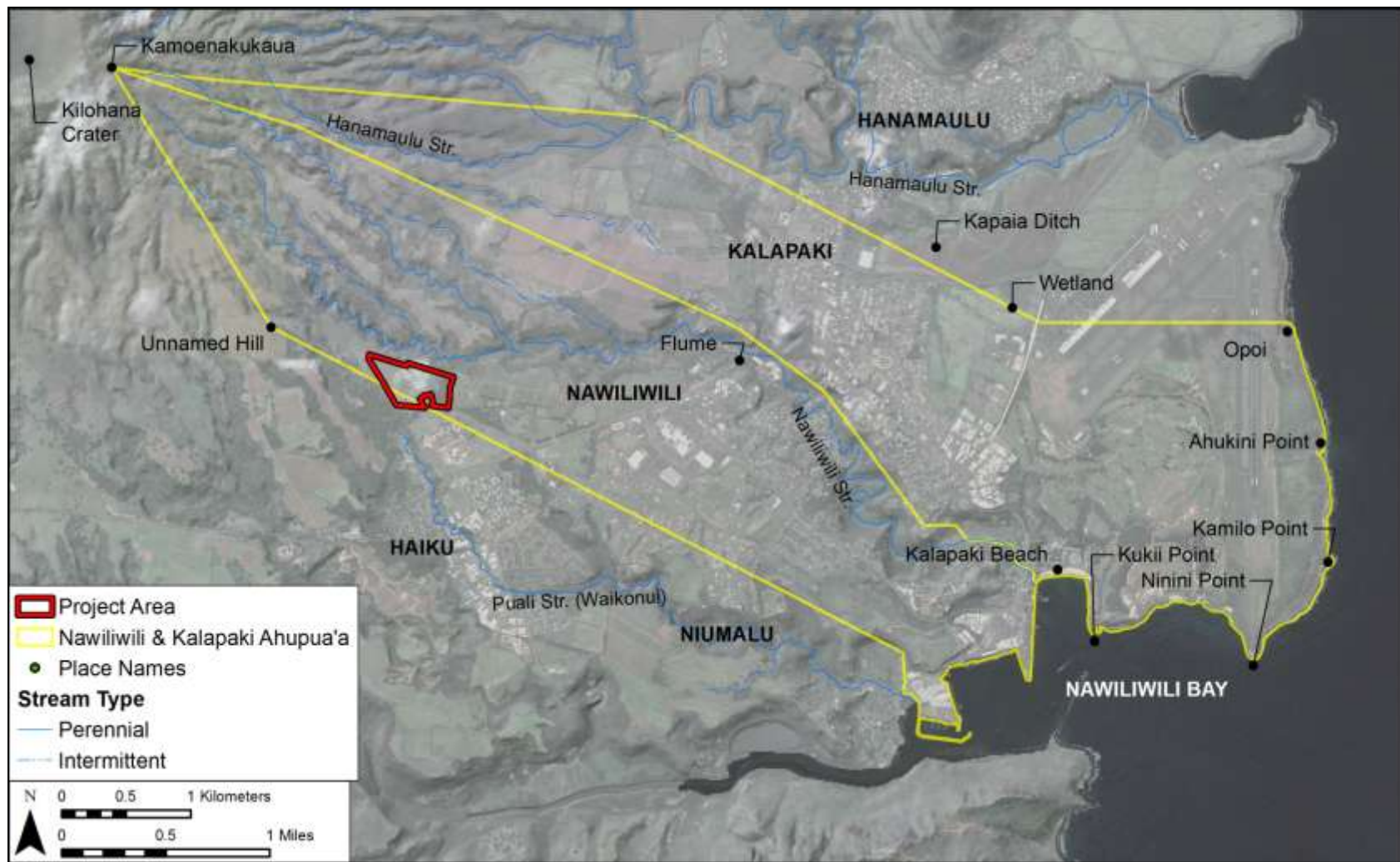


Figure 11. A 2013 google earth aerial photograph of Kaua'i showing some place names of Nāwiliwili and Kalapaki

Also at this time in the 1830s, Governor Kaikioewa founded a village at Nāwiliwili that eventually developed into Līhu'e. According to Hammatt and Creed (1993), the name Līhu'e was not consistently used until the establishment of commercial sugar cane agriculture in the mid-nineteenth century; and from the 1830s to the Māhele, the names Nāwiliwili and Līhu'e were used interchangeably to some extent to refer to a settlement along Nāwiliwili Bay. Some sources attribute the decision to call this area Līhu'e to Kaikioewa, who apparently named it after his nearby upcountry home. Waimea and Kōloa were preferred anchorages compared with Nāwiliwili, which opens directly east to the trade winds. Gales were known to blow ships onto the rocks. During the whaling era, Kōloa, which was home to the earliest major commercial operations in the Hawaiian Islands, was the preferred anchorage because of the ready supply of nearby food stuffs for resupplying the ships.

By 1830, the sandalwood trade had waned and the whaling industry was just beginning. At the same time, commercial agriculture was being established on Kaua'i. When the first crop of sugar cane was harvested at Kōloa, the king himself commanded that portions of his private land be planted in cane. In 1839, Governor Kaikioewa began farming the slopes of Nāwiliwili Bay where there was more rain than at Kōloa (Dorrance and Morgan 2000). He also built a house and church in Nāwiliwili Ahupua'a.

Donohugh (2001) describes Governor Kaikioewa's attempt to establish the first commercial sugar mill and plantation in Līhu'e in 1839:

During the early decades of Kōloa Plantation, other sugar plantations had started up on the island. One was to result in the ascendancy of Līhu'e to the principal town and seat of government on Kaua'i, replacing Wailua. When Kaikio'ewa was appointed governor, he located his home in what is now the Līhu'e District. He planned to grow sugar cane but died in 1839 before his plans could be realized. Kaikio'ewa was responsible for the name [Līhu'e], which means 'cold chill,' the name of his previous home at a higher and chillier altitude on O'ahu. [Donohugh 2001:94]

As mentioned by Donohugh (2001:4), Kaikioewa died in 1839 soon after the start of the sugar plantation, which lasted only one year and closed down in 1840 (Dorrance and Morgan 2000).

Around this time, perhaps as late as 1842, the first missionaries settled in the Līhu'e area led by Dr. and Mrs. Thomas Lafon, and assisted by Rev. and Mrs. Peter Gulick from Kōloa. Schools were opened, and some missionaries attempted to grow cotton as the first intensive cash crop, but were unsuccessful (Damon 1931).

An account of the United States Exploring Expedition, which passed through Līhu'e in 1840, talks about the area, but also mentions the forced removal of kama'āina from the coastal areas:

At noon they reached Lihui, a settlement lately undertaken by the Rev. Mr. Lafon, for the purpose of inducing the natives to remove from the sea-coast, thus abandoning their poor lands to cultivate the rich plains above. Mr. Lafon has the charge of the mission district lying between those of Koloa and Waioli. This district [Līhu'e] was a short time ago formed out of the other two.

The principal village is Nāwiliwili, ten miles east of Koloa. This district contains about forty square miles, being twenty miles long by two broad. The soil is rich: it

produces sugar-cane, taro, sweet-potatoes, beans, etc. The only market is that of Koloa. The cane suffers somewhat from the high winds on the plains.

The temperature of Lihui has much the same range as that of Koloa, and the climate is pleasant: the trade-winds sweep over it uninterruptedly, and sufficient rain falls to keep the vegetation green throughout the year. No cattle are to be seen, although the pasturage is good. [Wilkes 1845:67-68]

With the death of Kaikioewa, governorship of Kaua‘i was transferred for a brief period to his widow Keaweamahe. The brief tenure of Chiefess Kekauonohi and her husband Kealiihonui (son of King Kaumuali‘i) followed after which the governorship passed to Paulo Kanoa in 1848. Kanoa had two houses overlooking Nāwiliwili Bay, one on the bluff south of Nāwiliwili Stream (the present site of Kaua‘i High School) and another at Papalinahoa, north of the bay (Damon 1931).

William DeWitt Alexander, son of Waioli missionary William P. Alexander, traveling from Kōloa to the north shore of Kaua‘i in 1849 recorded some descriptive notes of Hanamā‘ulu, north of the project area:

A few miles further on we crossed the picturesque valley of Hanamaulu. This valley is prettily bordered by groves of Kukui, koa, & hala trees, and is well cultivated with taro. A fine stream flows through the midst of it, which makes a remarkable bend at this place like a horse shoe. We then traveled along the seashore at the foot of a range of hills through groves of hau, & among hills of sand. It was now after dark, but the moon shone brightly, and there was no difficulty in finding our way. About eight o'clock we arrived at the banks of the Wailua river. [Kauai Historical Society 1991:121]

One of the last vestiges of the pre-cash crop landscape is depicted in the diary entry for the Rice family's arrival on Kaua‘i in 1854. During the second half of the nineteenth century, western settlers and entrepreneurs set their sights on southeast Kaua‘i. Damon describes the Līhu‘e landscape at the time of the family's arrival at Nāwiliwili Bay:

From the deck of their river craft in 1854 Mrs. Rice and the children could plainly see above the rocky shore and ruins of Kuhiau, the old heiau, or temple, and nearby on the bluff the flaming blossoms of a great wili-wili tree among koa trees which ten grew almost down to the water's edge. [Damon 1931:17-18]

4.3 The Māhele (1848)

Prior to 1848, all land belonged to the akua (gods), held in trust for them by the paramount chief and managed by subordinate chiefs. In the mid-1800s, Kamehameha III decreed a division of lands called the Māhele, which divided land for private land ownership in Hawaiian society (Chinen 1958). In 1848, lands were divided into three portions, crown lands, government lands, and lands set aside for the chiefs. Individual plots, called kuleana (Native Hawaiian land rights) awards, were granted within these divided lands to native inhabitants who lived on and farmed these plots and came forward to claim them. The chiefs and konohiki were required to pay a commutation fee for their lands, usually about one-third the value of any unimproved lands.

Awardees usually “returned” a portion of the lands awarded to pay the commutation fee for the lands they “retained.” The returned lands usually became government lands (Chinen 1958:13).

The Kuleana Act was legislated in 1950 allowing maka‘āinana (folk; commoners) to own land parcels which they were currently and actively cultivating and/or using for residence. In theory, this “set aside” hundreds of thousands of acres as potential kuleana parcels which led to about 10,000 claimants obtaining approximately 30,000 acres. The konohiki, 252 chiefs, divided up about a million acres. Many Hawaiians were disenfranchised by these acts (Cordy et al. 1991).

4.3.1 Nāwiliwili Ahupua‘a

Victoria Kamāmalu was awarded over 2,000 acres of Nāwiliwili Ahupua‘a (LCA 7713), along with much of Niumalu, Ha‘ikū, and Kīpū, as well as Kalapakī and Hanamā‘ulu. In addition to Kamāmalu’s large award at Nāwiliwili, there were many smaller kuleana awards. Within the ahupua‘a of Nāwiliwili, there were 33 LCAs of which 20 were awarded (Waihona ‘Aina 2000). A study by Hammatt and Creed (1993) describes LCAs in Nāwiliwili Valley:

Within the valley floor and adjacent to the alluvial plain [in Nāwiliwili] . . . are 14 land Commission Awards for which there are testimonies available in the Land Commission records . . . The awards vary in size between one to two acres and are generally around one acre. The majority of land recorded is for lo‘i (wetland agriculture) but kula (dryland plots) are present as are a few house lots.

In all there are 54 lo‘i recorded. Each award is generally two to three lo‘i plots. The largest award comprised eight lo‘i; a single award consisted of one lo‘i. All awards contained lo‘i and nine of the fifteen total awards had kula lots. Without exception, the nine awards containing kula mention only one kula per award. This is of interest because it shows that the alluvial plain was not entirely dedicated to wetland planting and that a small kula lot was essential for subsistence agriculture. [Hammatt and Creed 1993:20]

Some awards at Nāwiliwili mention house lots along the shoreline. Figure 12 and Figure 13 depict Nāwiliwili Valley with its many lo‘i near the ocean.

According to Kikuchi (1973), Nāwiliwili was home to at least five other fishponds in addition to Alekoko (Menehune) Loko. The names of two of these were unknown, but the others are Kalalalehua, Lokoponu, and Papalinaloa. LCA documents identify the konohiki for Nāwiliwili at the time of the Māhele as Daniela Oleloa.

4.3.2 Niumalu Ahupua‘a

As described earlier, Victoria Kamāmalu was awarded much land in Niumalu Ahupua‘a. According to Ching et al. (1973), there are 21 LCAs for Niumalu which contained 80 lo‘i. Many lo‘i and kula lands are described as being in the same ‘āpana, a pattern common to Puna District of Kaua‘i, but not common elsewhere in Hawai‘i. Perhaps maka‘āinana were creating kula lands by piling up soil adjacent to wet lands. Throughout most of the Hawaiian Islands, kula lands refer specifically to dry sloping lands between the mountains and the sea. However, maka‘āinana were referring to lands in valley bottoms as kula in the Puna District of Kaua‘i. Some claimants describe their lands as being trampled by cattle.



Figure 12. Taro terraces in Nāwiliwili Valley (Kauai Historical Society, n.d.)



Figure 13. Taro cultivated in the vicinity of Pu‘ali Stream in 1905 (Kaua‘i Historical Society, 1905)

Niumalu had seven other ponds in the vicinity of the well-known Alekoko (Menehune) Loko. Survey notes (Ching et al. 1973:105) for Niumalu Ahupua‘a state that “[t]he fishing privilege [sic] of Huleia River belongs to the Ahupua‘a of Niumalu from its mouth to the Road crossing it to Kīpū Kai.”

4.4 Mid-Nineteenth to Twentieth Century

4.4.1 Population

A map by Coulter (1931) shows the population of Kaua‘i ca. 1853 concentrated in the coastal areas. Within the Puna District, the map indicates an estimated population of approximately 1,700 people in the vicinity of Nāwiliwili Bay (Figure 14).

4.4.2 Changing District Names

The traditional moku or districts of Kaua‘i were replaced in the middle to latter part of the nineteenth century by modern political district names (Figure 15). Given its economic importance to the island, Līhu‘e became the modern district name and includes the ahupua‘a of the proposed project, previously under the Puna District. Rice writes,

The name, Lihue, applied in a larger sense, included the districts of what are now Kawaihau and Lihue, reaching from Anahola to the Gap, being made so by law in about the year 1861, according to early court records, but some years later divided into the present two districts. The large district was also known as the Puna district, and is found on early maps as such. It was August thirteenth, 1880, that the district was divided into two, by act of Legislature with King Kalākaua’s signature . . . Lihue, in a local sense, and from which the name of the district was derived meant only that little portion of land upon which the present village, as consisting of bank, post office and store, now stands. [Rice 1914:46]

4.4.3 Commercial Sugar Cane Agriculture

As Western dominance grew in Hawai‘i, sugar came to dominate economic, political, and social life in the islands. In 1835, commercial cultivation of sugar began at Kōloa on Kaua‘i which created needs for a larger supply of indentured, contract laborers (Riznik 1999). Plantations were established throughout Hawai‘i, but by the beginning of the mid-nineteenth century, reduced Native Hawaiian populations could no longer meet plantations’ needs for a constant supply of cheap labor. Thus, foreign labor was imported by plantations particularly from Japan, China, and the Philippines (Riznik, 1999).

4.4.3.1 Lihue Plantation

Following the Māhele and the availability of large tracts of land for sale, Lihue Plantation “was established on the site Kaikio‘ewa had chosen, and the cluster of homes and stores around it was the start of the town of Līhu‘e.” (Donohugh 2001:94). Situated adjacent to the project area, Lihue Plantation began as a partnership between Henry Augustus Pierce, Judge William Little Lee, and Charles R. Bishop in 1849 (Damon 1931). The first 3,000 acres were purchased

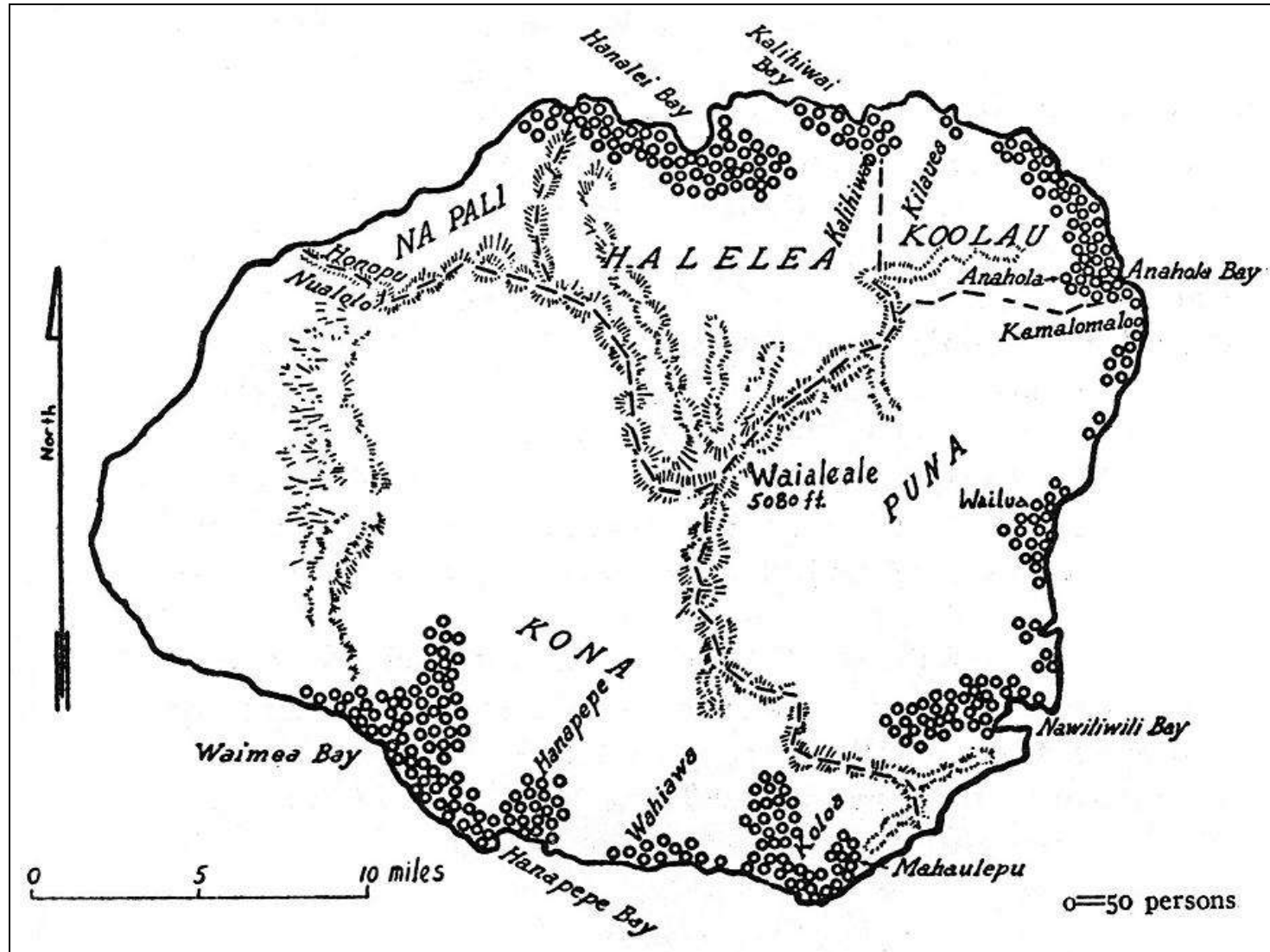


Figure 14. Map showing population estimate for Kaua'i in 1853 (adapted from Coulter 1931:16)



Figure 15. USGS map showing the political districts of the County of Kaua'i

in Nāwiliwili and an additional 300 acres were purchased in Ahukini in 1866. The Lihue Plantation became the most modern plantation at that time in all of Hawai'i. It featured a steam-powered mill built in 1853, the first use of steam power on a Hawaiian sugar plantation. The 10-mile-long Hanamā'ulu Ditch was also built in 1856 by plantation manager William H. Rice, the first large-scale irrigation project for any of the sugar plantations (Moffatt and Fitzpatrick 1995:103).

Hawaiians made up the labor force of Lihue Plantation, and many built their homes on the land surrounding the mill (Figure 16). Planting began in 1850 and the first crop was ground in 1853 (Joesting 1984:173). From 1854 to 1862, under the management of William Harrison Rice, the plantation invested heavily in irrigation ditch infrastructure known initially as "Rice's Folly" (Krauss and Alexander 1984:67). George Norton Wilcox, son of the ABCFM teacher Abner Wilcox, was raised on Kaua'i and observed Rice's successful utilization of irrigation. Wilcox attended Yale University and studied engineering and surveying, earning a certificate in 1862. Upon returning to Kaua'i in 1863 he soon began work as a surveyor for Judge Herman Widemann, owner of the Grove Farm Plantation at the time.

Commercial sugar cane agriculture continued in Līhu'e until 2000, when Lihue Plantation and the Kekaha Sugar Company finally shut down and terminated approximately 400 workers. The nearby Kipu Plantation, founded in 1907, operated until 1942 (Dorrance and Morgan 2000).

Lihue Plantation remained a vibrant and successful commercial operation throughout most of the twentieth century, in part because of a continuing investment in technological innovation. For



Figure 16. Lihue Plantation Sugar Mill, 1941 (U.S. National Archives and Records Administration)

example, in 1912 Lihue Plantation installed two 240-kilowatt generators above the cane fields on the slopes of Kilohana Crater, becoming one of the first hydroelectric power producers (along with Kekaha, Kaua'i) in the Hawaiian Islands (Dorrance and Morgan 2000).

First-hand recollections about life in the early twentieth century plantation days of Līhu'e are documented and archived at the Grove Farm Museum. The following example, which appeared in the *Honolulu Advertiser* on 24 April 2000, describes the struggles of 78-year-old Tadeo Suemori to keep his house at the so-called Rice Camp (TenBruggencate 2000:B-1). Mr. Suemori was born and lived his whole life at this house, which was previously one of a total of 18 plantation cottages on a 14-acre parcel owned by Wm. Hyde Rice, Ltd. When the landowner began moving people out in 1989 to sell the property to the museum, Mr. Suemori refused to vacate, "They never evicted me. I said, 'I ain't moving out' (TenBruggencate 2000:B-1). He was eventually allowed to rent the place for the remainder of his life, but had wished to restore and rehabilitate the old Rice Camp. The reporter recorded Mr. Suemori's concerns:

He is concerned about the environment, and particularly about pollution in Nawiliwili Stream, which runs below his house. It was clean when he and his childhood friends skinny dipped there while the U.S. stock market was crashing in 1929. It was the place where they caught prawns and 'o'opu and frogs . . . Today the stream runs brown and smells bad. Only a few frogs and mosquito fish live

there. That angers Suemori. He wants someone to clean it up. [TenBruggencate 2000:B-2]

4.4.3.2 Grove Farm Plantation (1864-1974)

Grove Farm Plantation, which was named after an old stand of kukui trees, was established by Warren Goodale after acquiring the land in 1850. He sold the property the same year to James F. B. Marshall for \$3,000 who sold it to Judge Widemann for \$8,000 in 1856. At the end of 1863 Judge Widemann asked George Wilcox to undertake the supervision of the cutting of a water lead or irrigation ditch for the Grove Farm Plantation using Hawaiian labor. The following year, Wilcox leased Grove Farm Plantation from Widemann and rapidly expanded development of the irrigation infrastructure.

Western commerce between Kōloa and Līhu'e took off during the second half of the nineteenth century. A visitor to Kaua'i in 1865, William T. Brigham, described the route between Līhu'e and Kōloa.

From Līhu'e the road led over the plain with the mountains on the left. A ditch crossed and recrossed the road as it wound along the hills from the mountains to the canefields below. Owls (pueo) were very abundant. The Pass over the mountains was very good and not at all steep, and all the way which was some twelve miles, the road was very good, in fact a carriage road. Two hours riding brought me to Dr. Smith's [in Kōloa] at eight. [Lydgate 1991:143]

The "ditch" Brigham described probably included "1st Ditch" excavated in 1864 and "2nd Ditch" which was completed in 1865. Prior to the completion of 1st Ditch, Krauss and Alexander write that Wilcox

drove an ox cart to the beach and around the bay to a Hawaiian settlement called Niumalu where the natives grew sugar cane, as a supplementary food crop, on the earthen dams that separated their taro patches, George carefully chose stands of healthy cane, making sure that they were original plantings and not rations. [Krauss and Alexander 1984:133]

In 1870, Wilcox bought Grove Farm from Widemann for \$12,000, three-quarters of which was borrowed. Four years later he had 200 acres under cultivation. The cane was milled at the Lihue Mill and exported from Nāwiliwili. In 1874, Wilcox renewed a 25-year lease with Princess Ruth Ke'elikōlani for 25 years, for a 10,000-acre tract of Ha'ikū Ahupua'a (Krauss and Alexander 1984:179). On 1 April 1881 George Wilcox bought 10,500 acres of Ha'ikū Ahupua'a from Princess Ruth, increasing the acreage of Grove Farm nearly ten-fold (Krauss and Alexander 1984:206). The sale was part of a package deal whereby Mr. Rice also received Kīpū and Kīpū Kai for a total price of \$27,500—money Princess Ruth used to build her palace that rivaled Kalākaua's palace, on Emma Street in Honolulu.

An 1878 Government Survey map (Figure 17) also shows little development within the project area vicinity and sugar plantations which have not expanded to their later extent; Grove Farm fields are to the southeast, and Lihue Plantation is to the east. Kaumuali'i Highway appears to be an unimproved or dirt road.

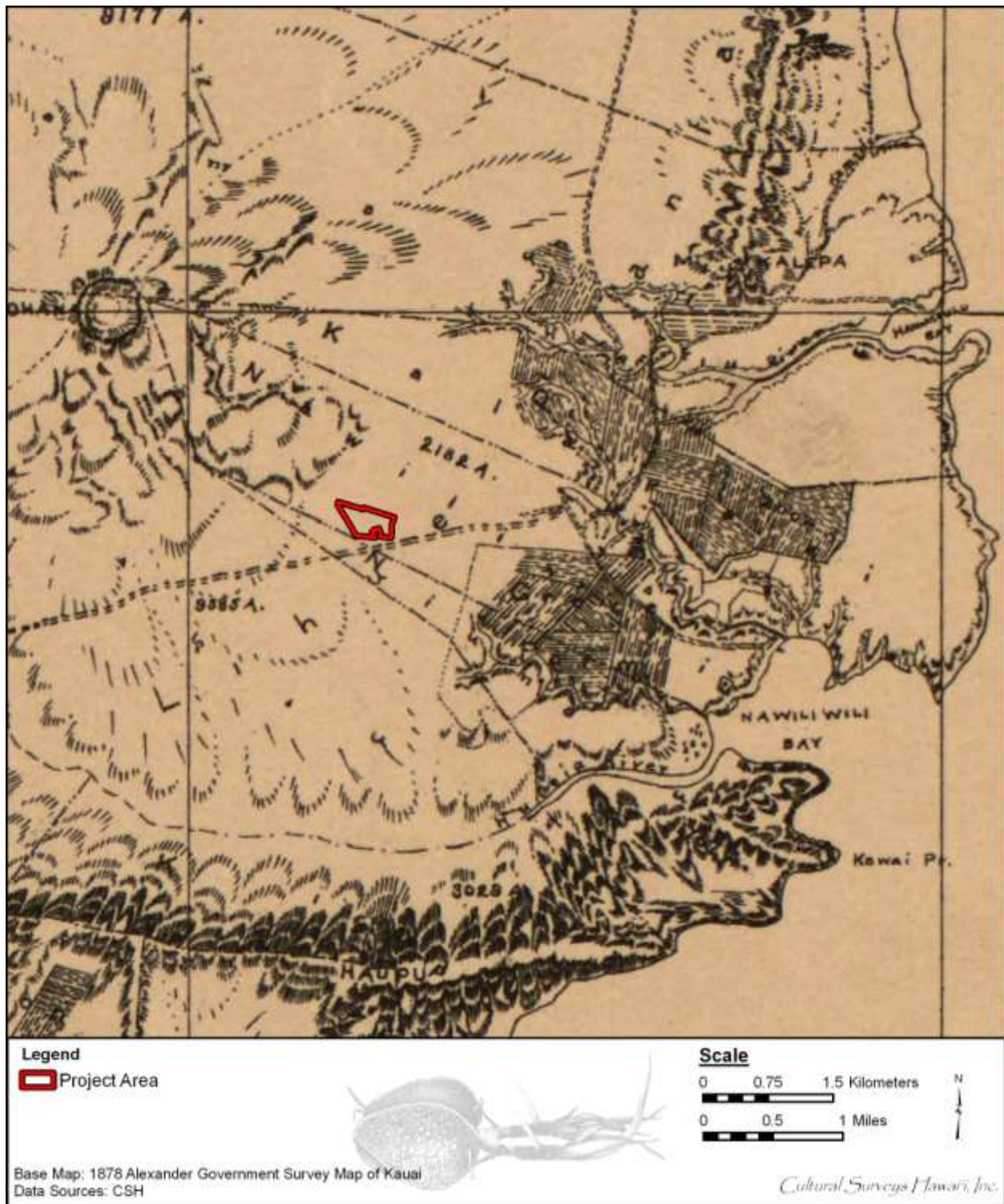


Figure 17. Portion of 1878 Government Survey map by W.D. Alexander, showing location of the project area and Grove Farm (shaded)

4.4.3.3 Puhi Camp

Grove Farm (Figure 18) operated under George Wilcox until 1933 when he died. During that time, the plantation flourished and many innovations like new cultivation and planting methods developed. Grove Farm was also at the forefront of housing improvements during a time when plantation housing throughout the Hawaiian Islands was inadequate (Riznik 1999). Unsanitary and crowded housing for workers compounded the spread of infectious diseases which spurred interest in housing reform on individual plantations. From 1917 to 1920, Grove Farm built 120 houses in a single new camp for workers which became known as Puhi Camp. The new housing at Puhi attracted the attention of the Hawaiian Sugar Planters' Association (HSPA) and the dwellings became the standard for the plantation industry in the 1920s (Figure 19 and Figure 20).

In 1917, Robert S. Thurston, the Experiment Station's associate agriculturalist, described the buildings at Grove Farm.

The buildings being erected are of three types: (1) Two or three rooms in a row, all under an inverted V roof, without a kitchen. (2) Two rooms under the same kind of roof, but with a kitchen adjoining in the rear. (3) A three room bungalow [sic] with adjoining kitchen in the rear. The first type is for bachelors; the second for a couple and one or two children; and the third for larger families. The kitchen floors are of concrete. The stove is built of concrete and cast iron and has a concrete smoke stack, thereby reducing to a minimum the chance of fire. Just outside the kitchen is a concrete floor about 4' x 5' on which a wash tub may be set. This floor drains into a concrete gutter which runs past and drains all the houses.

The buildings are of wood and are set out in 3 double rows, each row front on a street. Cross walks will be put in, making a double row of 8 buildings, or 16 buildings per block. Each building is set on a lot 50' x 75'. Running water is piped to each kitchen and an open concrete ditch is furnished for drainage from the kitchens. If the laborers wish to cultivate their gardens the plantation will furnish a team and plow with which to plow up the land. (Riznik 1999:134)

In the 1920s, Grove Farm began a new building program at Puhi, along the route of the present Kaumuali'i Highway and just south of the project area. The continuing lack of development in the area prior to this is evident on the 1910 USGS map (Figure 21).

About 1920 George Wilcox began construction of a completely modern camp at Puhi in the heart of the expanding plantation. Instead of building houses haphazardly as new families moved in, a complete village was laid out with streets, a playground, room for gardens, and lawns. The houses had proper kitchens equipped with running water and enough bedrooms for each family depending upon the number of children. [Krauss and Alexander 1984:310]

Puhi Camp also extended into the current project area, adjacent to Kaumuali'i Highway. The plantation camp consisted of some 600 homes occupied by up to 1,200 workers and their families. Puhi Camp also contained a movie hall, three stores, a Chinese laundry, a slaughterhouse, and an area for social events (Chang 2007).

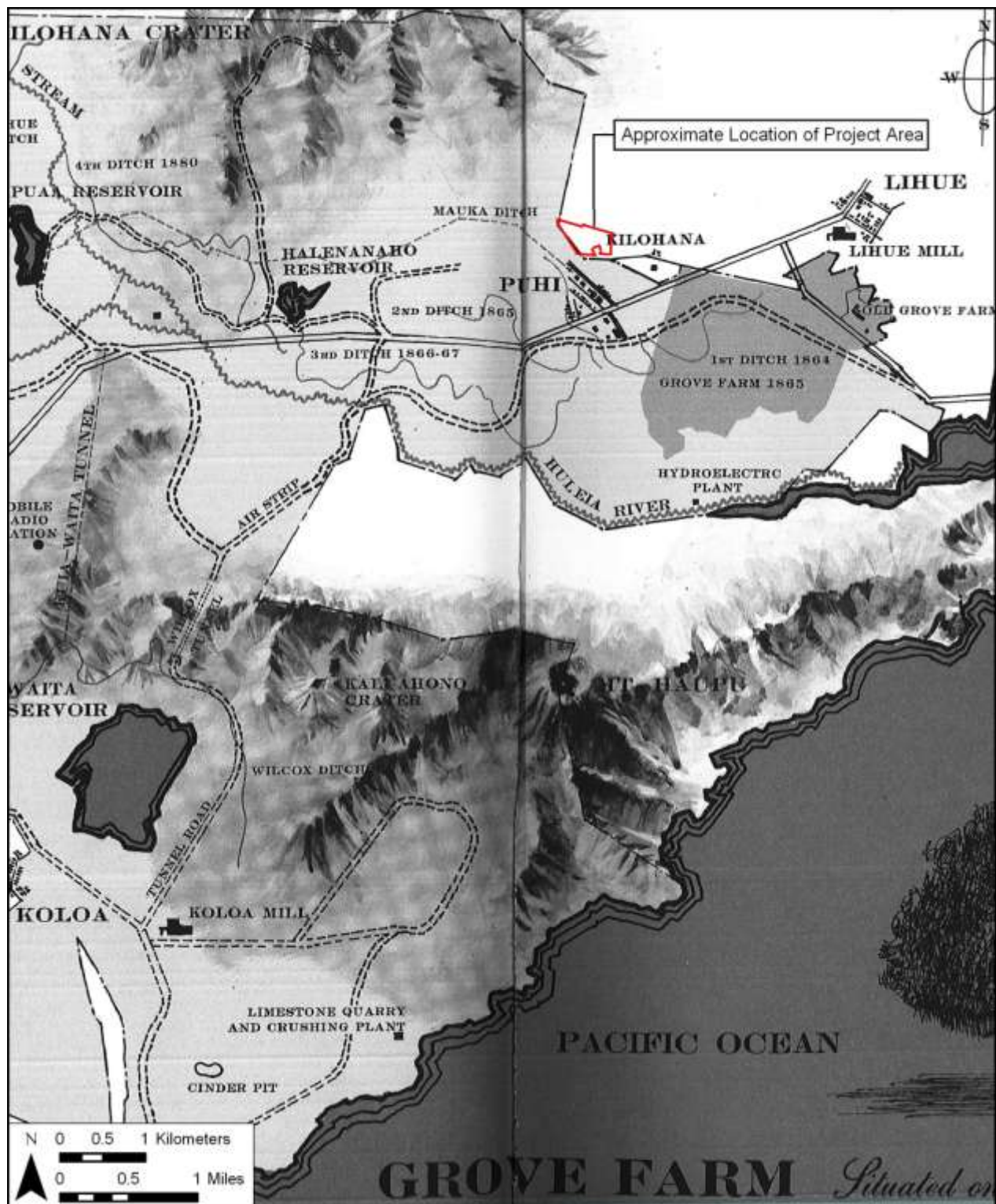


Figure 18. Grove Farm showing its approximate location to the Project area, Līhu'e, Kōloa, and larger southwestern Kaua'i (adapted from Krauss and Alexander 1984)



Figure 19. Plantation housing at Puhi Camp (adapted from Riznik 1999)

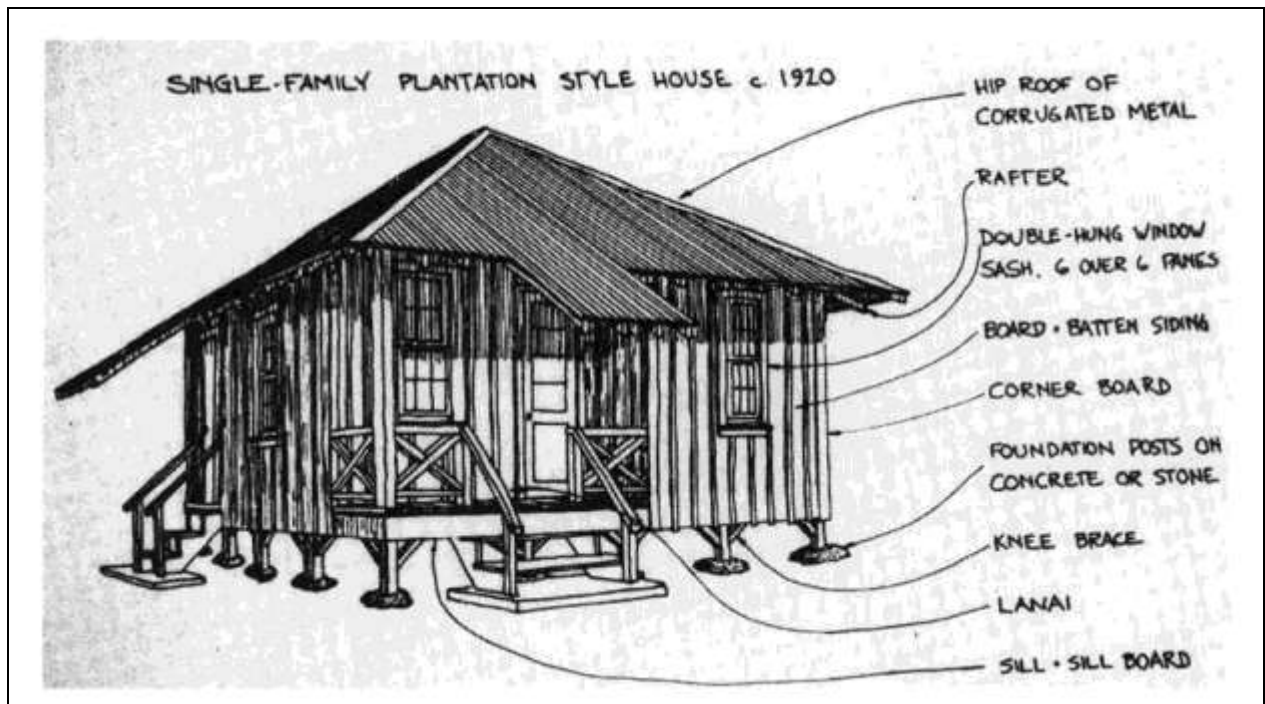


Figure 20. Single family plantation style house at Puhi Camp, 1920 (adapted from Riznik 1999)

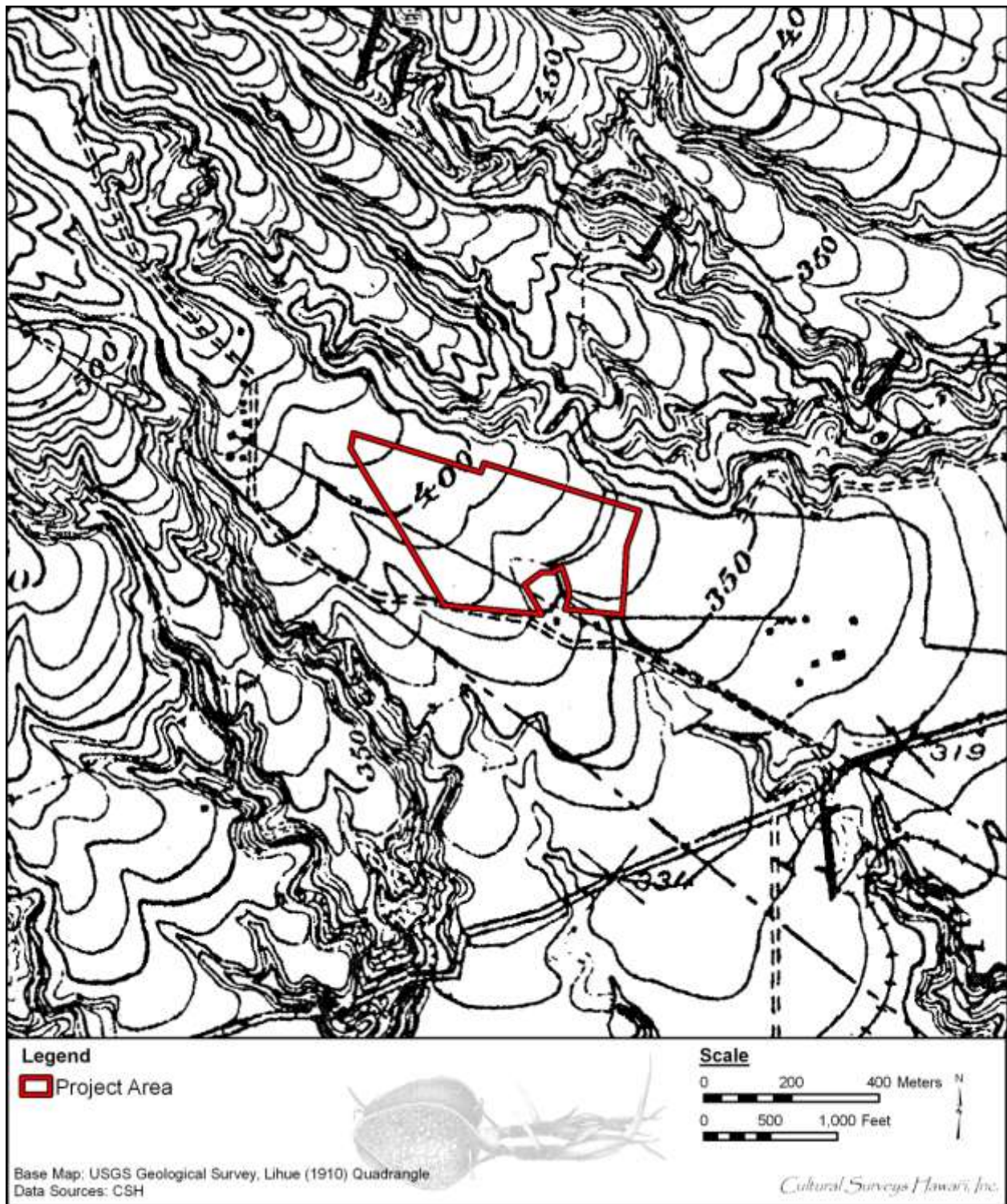


Figure 21. Portion of 1910 Lihue USGS quadrangle, showing the project area

At the beginning of the twentieth century, Grove Farm developed agreements to secure sufficient water and also to sell any surplus. A right-of-way with Koloa Plantation was secured in 1906 that provided water from Kuia Stream. Grove Farm’s “Upper Ditch” was constructed between 1914 and 1917 and by the 1920s “Grove Farm had 16 miles of ditches delivering 26 mgd” (Wilcox 1998:74).

During the 1930s, federal funds became available to assist the Territory of Hawai‘i’s highway construction program. Between 1933 and 1937, the reconstruction of the Belt Road, or what is now the present Kaumuali‘i Highway, was completed incrementally. Ho‘omana Overpass (Ho‘omana Road Bridge) was constructed in 1928, Waihohonu Bridge was built in 1934, the Lihue Mill Bridge was constructed in 1936, and the Weoweopilau Bridge was built in 1937.

At the same time that the Belt Road construction program was underway, during the mid-1930s, Grove Farm was further expanding into Puhi with its new headquarters and the construction of a new office building, shop, and stables. Figure 22 shows the 1941 location of Grove Farm in relation to Lihue Plantation. At that time, Grove Farm was still dependent on Lihue Plantation’s mill for processing its sugar.

In 1948, Grove Farm purchased Koloa Plantation. This doubled the size of Grove Farm, gave Grove Farm its own sugar mill for the first time, and eliminated duplication in manpower, equipment and administrative costs. In 1948-1949, a cane haul truck tunnel (the Wilcox Tunnel) was excavated under the Hoary Head Range connecting the sugar cane fields of Ha‘ikū to the Koloa Mill (Krauss and Alexander 1984:366-368). Figure 18 shows Grove Farm, identifying the plantation’s original areas and subsequent acquisitions. The graphic also shows “Mauka Ditch” extending north to south through the center of the Project area.

In 1954, an airstrip was developed at Ha‘ikū for aerial spraying of fertilizer and herbicides. In the early 1960s, the nearly 1-mile-long Kuia-Waita Tunnel was completed bringing Ha‘ikū water to the drier Kōloa side. Development within the project area and its vicinity can be seen on the 1963 USGS map (Figure 23). The symbols for buildings adjacent to Kaumuali‘i Highway on Figure 23 are the homes within Puhi Camp.

Wilcox (1998:76) reports that despite almost 100 years of irrigation ditch construction, “Grove Farm’s ditch system was a modest one not known for any outstanding technical or physical achievements. This may reflect the limited watershed available to Grove Farm, the small size of the plantation’s acreage, or G.N.’s [Wilcox] personal sense of scale.”

4.5 Modern Land Use

In the mid-1960s, Sam Wilcox of Grove Farm donated 200 acres of former sugar land to the state for KCC. A 1965 aerial photograph (from Foote et al. 1972) (Figure 24) shows the extent of sugar cane cultivation within the project area and vicinity prior to the construction of KCC (Kamins and Potter 1998:275). Grove Farm ended its sugar business in 1974, setting aside lands for development and also for the continuation of sugar cultivation by leasing its Lihue lands to Lihue Plantation, and its Koloa lands to McBryde Sugar (Wilcox 1998:76). A 1977-1978 aerial (Figure 25) shows the new college campus and development within its vicinity although the northern- and western-most portions of the approximately 200-acre campus still appear to be undeveloped.

Most of the Puhi Camp housing was removed in the 1970s prior to the construction of KCC. In the 1980s, the last homes in Puhi Camp were dismantled (Chang 2007). Currently, newer buildings for the Pūnana Leo o Kaua'i Pre-School and Kawaikini New Century Public Charter School, and a few agricultural plots occupy some of the former Puhi Camp lands.

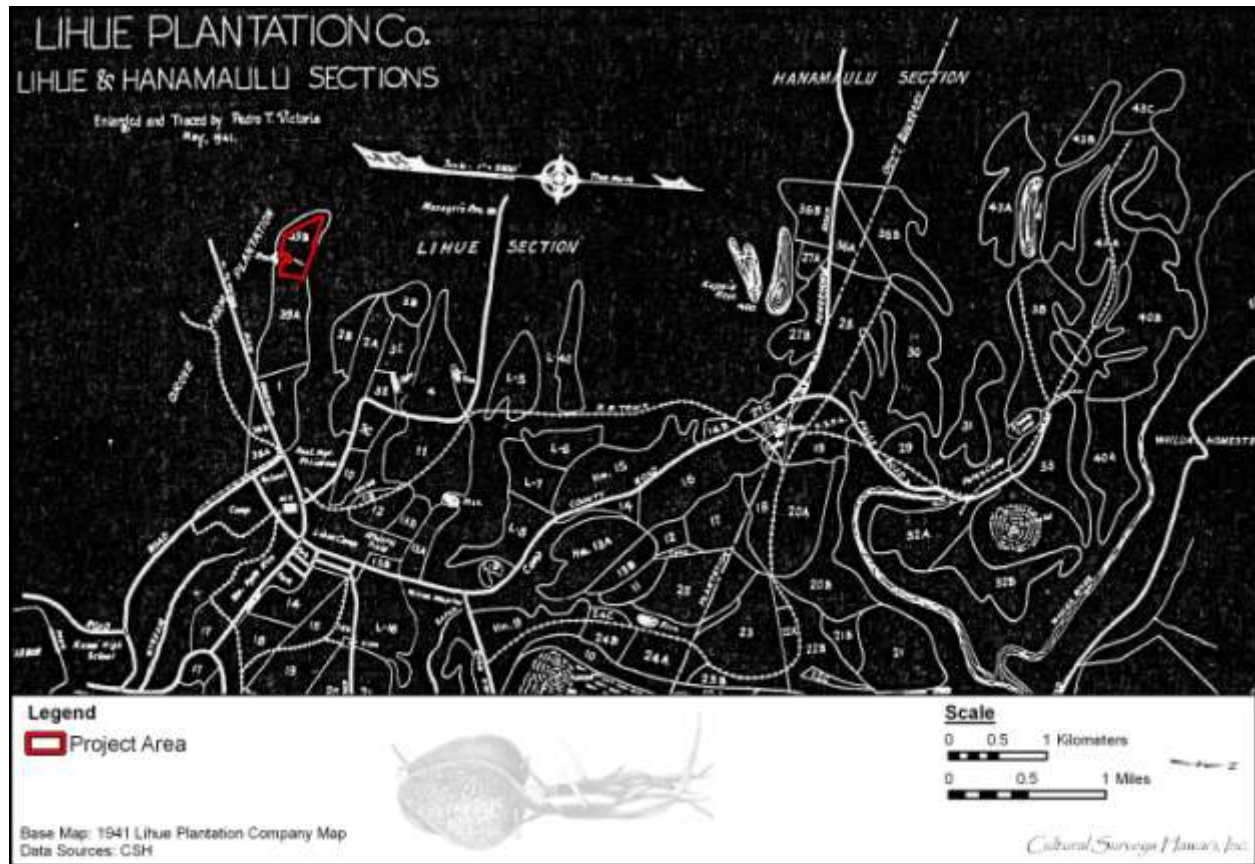


Figure 22. Portion of 1941 Lihue Plantation map showing the location of the project area adjacent to the plantation and within Grove Farm

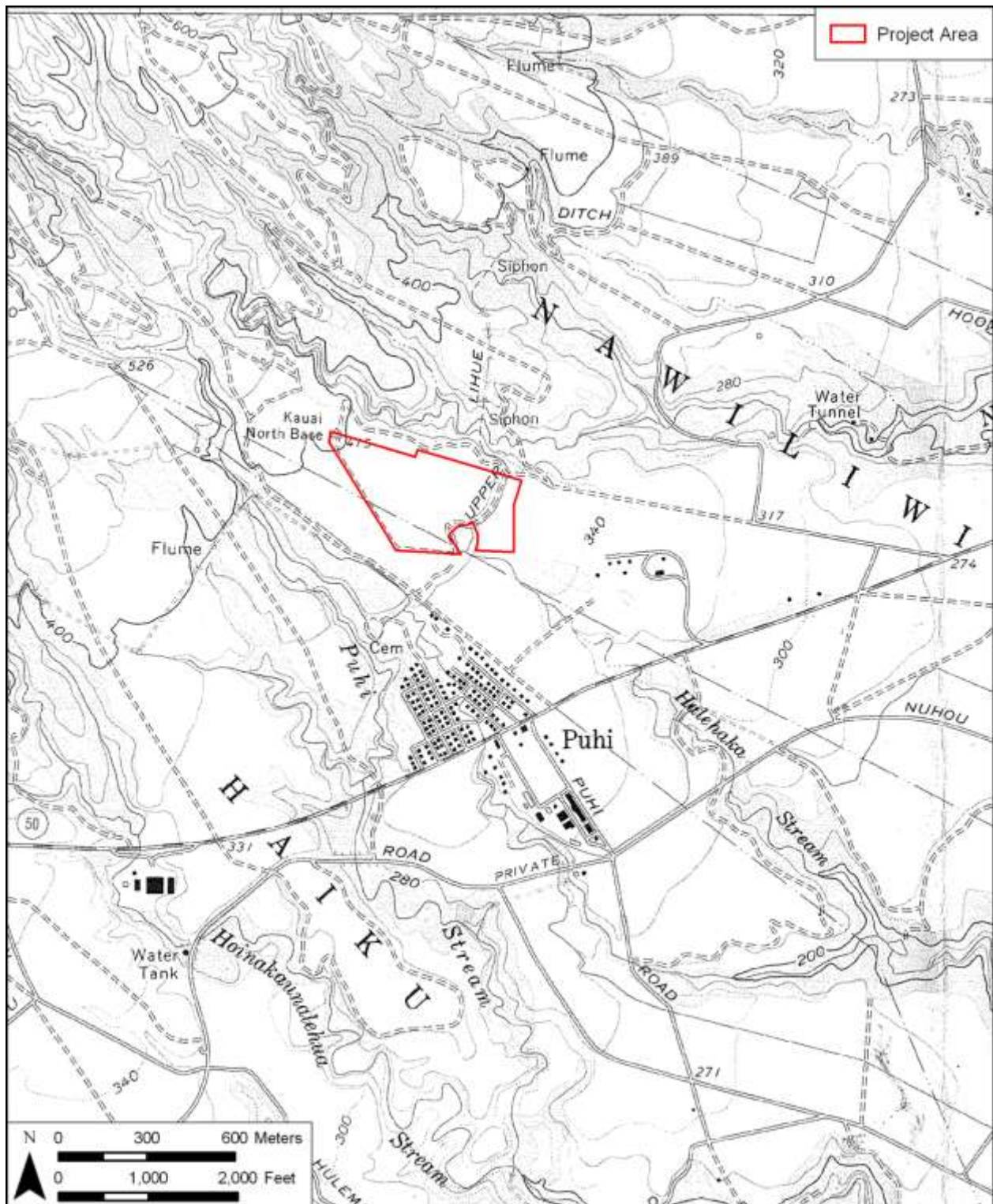


Figure 23. Portion of 1963 Lihue USGS 7.5-Minute Series Topographic Quadrangle showing the project area

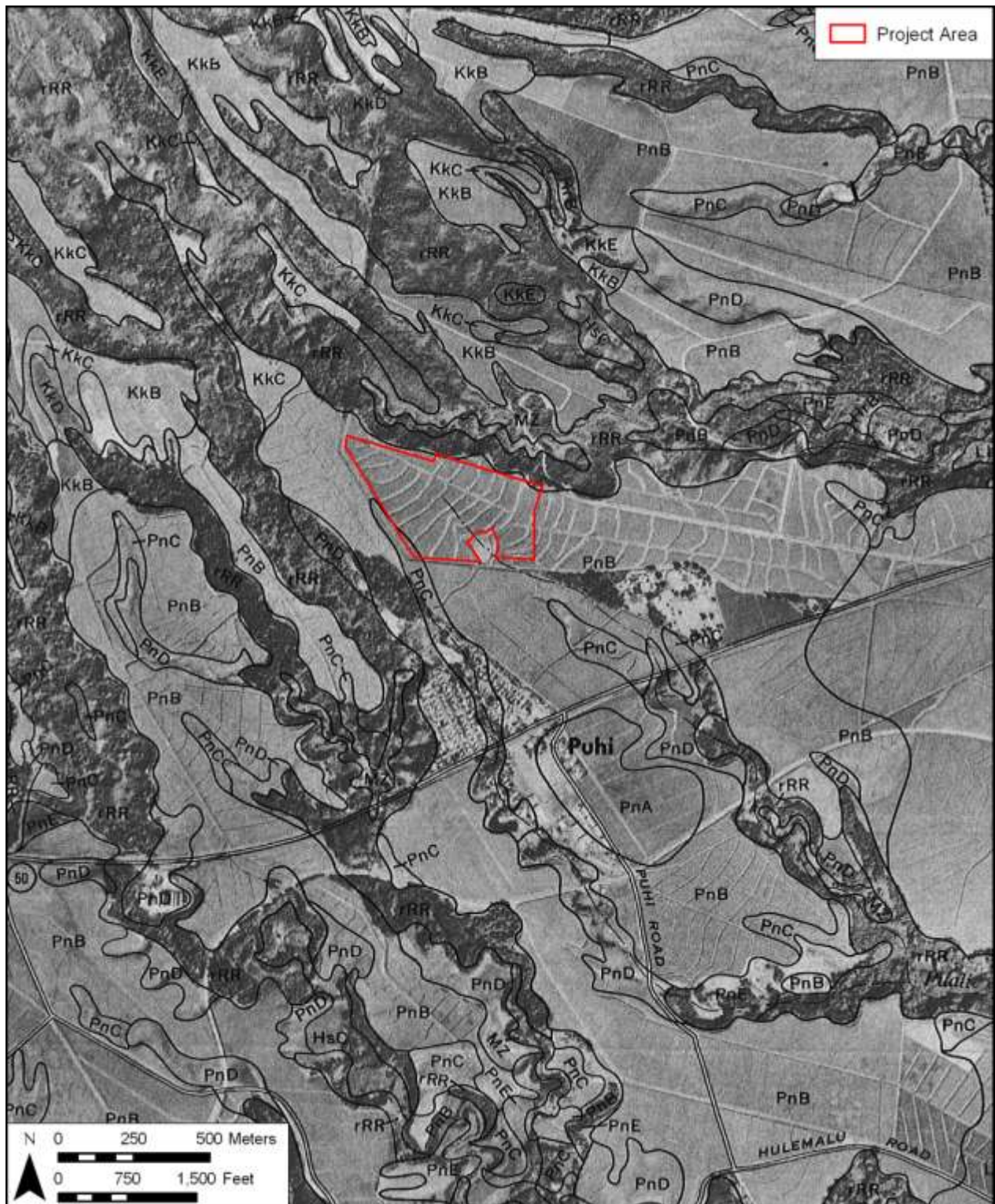


Figure 24. A 1965 aerial photograph showing the extent of sugar cane within the project area and its vicinity (adapted from Foote et al. 1972)



Figure 25. 1977-1978 USGS aerial photograph of Līhu'e and vicinity showing the project area

Section 5 Archaeology

5.1 Previous Archaeological Research

5.1.1 Previous Archaeological Studies in the Study Area

The first comprehensive archaeological survey of Kaua'i was conducted by Bennett (1931) of the Bishop Museum. Bennett's survey report identifies no archaeological sites within or in the immediate vicinity of the project area. The report identifies Bennett Site 98 as the "Niamalu" or "Menehune" Fishpond located approximately 3 km southwest of the project area. According to Bennett,

The Niamalu [sic] fish pond consists principally of a stone-faced, dirt wall that runs for over 900 yards and cuts off a large bend in the river for use as a fish pond. It is today [in the early 1930s] used both for fish and ducks. Cement walls and iron gates have obscured any old method of controlling the water or the fish. [Bennett 1931:124]

The focus of more recent archaeological studies in the vicinity of the project area has been along the mouth of the Hulē'ia River, Nāwiliwili Bay, and the associated river banks leading down to Nāwiliwili Bay. The agricultural fields within and surrounding the project area have been slowly converted to other uses, particularly in the 1990s, and some archaeological work has been undertaken within these areas. Archaeological studies near the project area are summarized in Table 2 and Figure 26.

Neller and Palama (1973) carried out an archaeological reconnaissance of the lower portion of the Hulē'ia River and its vicinity, recording a number of historic properties. The archaeological richness of the area from the "Menehune Fishpond" downstream and near the crest of the trail to Kīpū Kai is clear. They did, however, also document four historic properties upstream of the Menehune Fishpond, the nearest of which (SIHP # -3010) consists of contiguous rock wall enclosures and several other features. This historic property is described as

a compound, probably belonging to a chief or other important person. Nearby there are stone-faced river terraces, irrigation ditch (auwai), and a stone bridge crossing the auwai. The area is worth restoring to its prehistoric condition. It is an impressive site. [Neller and Palama 1973:3]

SIHP # -3009, also identified by Neller and Palama, is approximately 1.6 km from the current project area, and consists of an "agricultural area along both sides of the river, including rock-walled terraces and irrigation ditches ('auwai). Also includes cement covered grave of G. Kalili, died Dec. 17, 1898" (Neller and Palama 1973:11).

Ching et al. (1973) conducted detailed research on Alekoko (Menehune) Fishpond and its vicinity. Nine archaeological features and feature complexes were identified and documented, including three fishpond features (loko kuapā and two loko wai), two 'auwai, and four lo'i complexes.

Walker and Rosendahl (1988) conducted an archaeological surface and subsurface inventory survey of 450-acre Grove Farm from Puhi Town, south of Kaumuali'i Highway nearly to

Table 2. Previous Archaeological Studies within and near the Project Area

Study	Location	Type	Results
Bennett 1931	Island-wide survey	Recordation of major pre-Contact sites	Identified one site in the area (Site 98)
Palama 1973	Kaua'i Community College area	Reconnaissance survey	Noted portions of 'auwai, possible lo'i, a cemetery and a historic military complex
Neller and Palama 1973	Lower portion of the Hulē'ia River	Reconnaissance survey	Identified 31 sites including one historic human burial
Ching et al. 1973	Kanoa Estate, Niumalu	Reconnaissance survey	Nine features associated with the 'Alekoko (Menehune) Fishpond identified and documented
Walker and Rosendahl 1988	Grove Farm Līhu'e/Puhi project	Surface and subsurface survey	Identified two historic properties, Japanese cemetery SIHP # -503; and historic residence SIHP # -9390
Kido 1986	Alekoko Fishpond and Hulē'ia Estuary	Preliminary survey	Mangrove encroachment on pond wall, breaks in wall and rubbish used to fortify wall; recommends more comprehensive survey
Rosendahl 1989	Eight additional areas of the Grove Farm Līhu'e/Puhi project	Archaeological inventory survey	No cultural material observed
McMahon 1990	Līhu'e	Archaeological fieldcheck	Three previously identified historic residential sites (SIHP #s -9390, -9401, -9402)
Walker et al. 1991	Līhu'e District	Archaeological inventory survey	Identified ten historic properties; three pre-Contact, seven historic including a concrete bridge, concrete wharf, cultural deposits, terraces, roads, walls, retaining walls, a possible agricultural area, and an historic cemetery
Henry et al. 1993	590-acre Grove Farm Līhu'e/Puhi project site	Inventory survey with subsurface testing	Two historic properties identified including a cemetery and residence (revised report same as Walker and Rosendahl 1988)
O'Hare et al. 1993	100-acre Puakea Golf and Country Club, Līhu'e	Inventory survey with subsurface testing	No cultural material observed

Study	Location	Type	Results
Hammatt and Chiogioji 1998	11.5 km portion of Kaumuali'i Hwy corridor	Archaeological assessment	Four historic properties identified, Grove Farm office building in Puhi, Lihue Mill Bridge, Ho'omana Overpass Bridge, and Lihu'e Public Cemetery
Hammatt and Shideler 2004	One-Stop Center at KCC	Archaeological and cultural impact evaluation study	No cultural material observed and no cultural impacts anticipated
Groza and Hammatt 2010	KCC	Archaeological literature review and field inspection	Ten historic surface features identified; 'auwai and cemetery (SIHP # -B006) previously recorded by Palama (1973) and other features related to Grove Farm dated to plantation era
Groza and Hammatt 2013	Island School	Archaeological literature review and field inspection	SIHP # -2179 observed, reservoir and three associated irrigation ditches related to Lihue Plantation

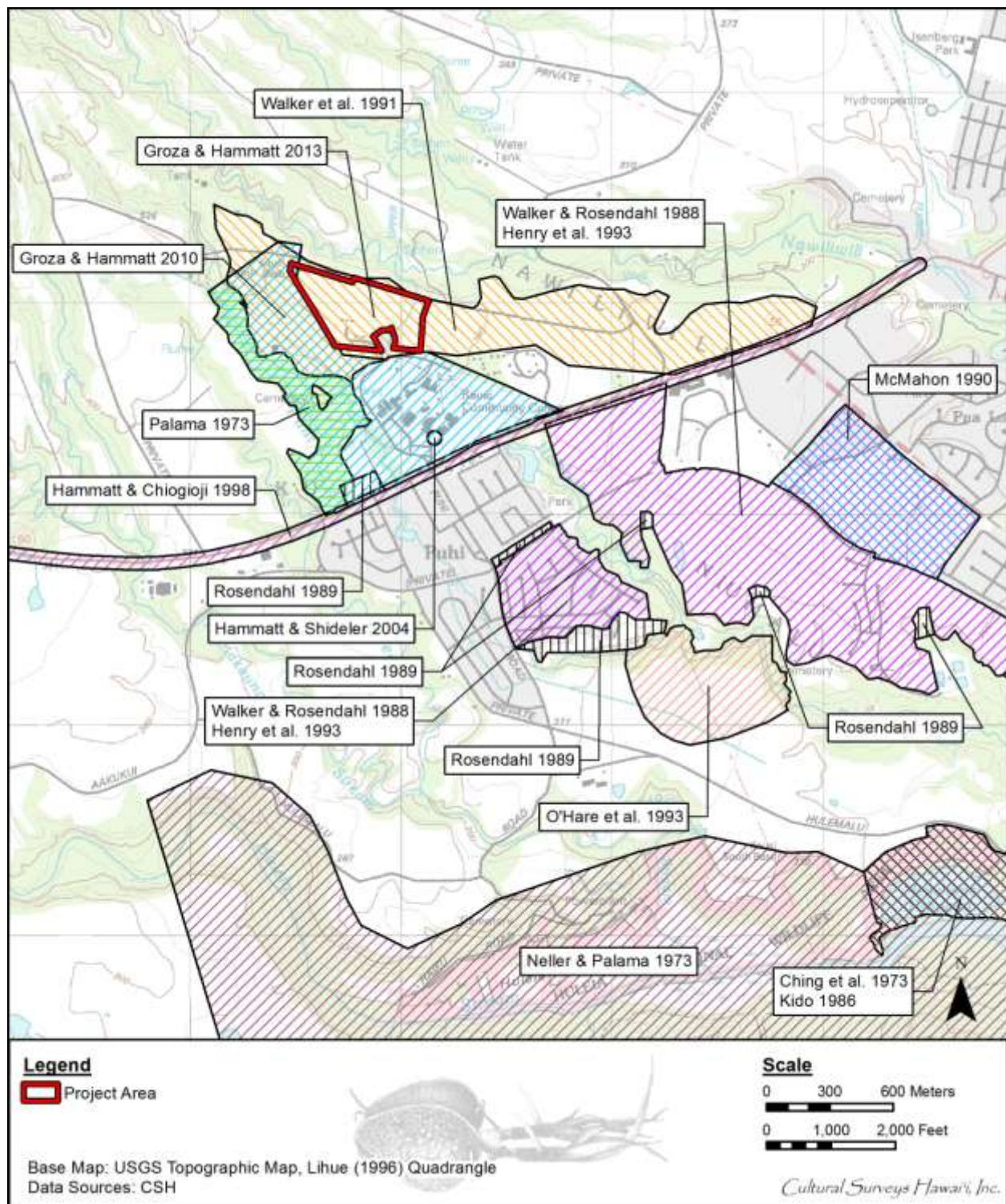


Figure 26. Portion of 1996 Lihue USGS 7.5-Minute Series Topographic Quadrangle showing previous archaeological studies in vicinity of the project area

Nāwiliwili Bay. A total of two historic properties were identified, a historic Japanese cemetery (SIHP # -503), and an historic residence (SIHP # -9390). The following year, Paul Rosendahl (1989) produced an addendum report covering eight additional separate small adjacent areas. No historic properties or cultural material were identified. Henry et al. (1993) covers the same project area and is the final archaeological inventory survey for this area.

O'Hare et al. (1993) carried out an archaeological inventory survey on a 100-acre Puakea Golf and Country Club project area located approximately 1 km south east of Puhi Town. No historic properties or cultural materials were identified.

5.1.2 Previous Archaeological Studies adjacent to the Project Area

5.1.2.1 KCC Archaeological Reconnaissance (Palama 1973)

In 1973, the Archaeological Research Center Hawaii conducted an archaeological reconnaissance of approximately 57 acres of the gully portion of KCC (Palama 1973), an area north and west of the currently developed portion of KCC. During the archaeological reconnaissance an "old 'auwai," an old military complex, a Japanese cemetery, old plantation camp remains, an extant plantation camp, and possible lo'i were found (Figure 27). Palama (1973:2) asked plantation camp residents whether they ever found evidence of taro cultivation or if they farmed within the gully in the western-most portion of the current project area. Apparently only very limited farming had ever been conducted in the gully, and the plantation workers were not aware of any taro cultivation. Palama (1973:2) "recommended that no further work is warranted" for the historic features he identified and no state site numbers were assigned.

5.1.2.2 Rosendahl (1989)/ Henry et al. (1993) Archaeological Inventory Survey

One of the eight additional separate small adjacent areas surveyed by Paul Rosendahl (1989) in the addendum report described above, is within the southwestern portion of the project area and adjacent to Kaumuali'i Highway. Designated as Area 1, it is described as consisting of "residential homesteads and yards" (Henry et al. 1993:18).

5.1.2.3 Līhu'e/Puhi/Hanamaulu Master Plan (Walker et al. 1991)

Approximately 220 acres within and adjacent to the project area were included in the 1,550-acre Lihue/Puhi/Hanamaulu Master Plan (Walker et al. 1991). Designated as Section No. 1, this area is described as

bounded on the north and east by the Nawiliwili Stream gulch, on the south by Kauai Community College and Kaumualii Highway, and on the west by the Puhi Stream gulch. This entire parcel has been modified and is presently in sugar cane (*Saccharum officinarum* L. hybrid) cultivation. [Walker et al. 1991:2]

The report states,

areas in sugar cane were only sampled . . . [and] were not generally surveyed . . . because areas altered by sugar cane cultivation are unlikely to contain archaeological features, and because sugar cane cultivation within the present

project area does not occur in low swale or alluvial flat areas that may contain buried cultural deposits. [Walker et al. 1991:7]

While Section No. 1 is listed as an area subjected to “inventory-level survey” in the report, this statement is further explained with “only very limited surface survey was done in sugar cane fields . . . [and] no subsurface testing was performed in sugar cane fields” (Walker et al. 1991:18). No additional descriptions of the project area and its vicinity are included in the report. Additionally, none of the ten historic properties (SIHP #s -1838 through -1847) identified during the Walker et al. (1991) study—including a concrete bridge, concrete wharf, cultural deposits, terraces, roads, walls, retaining walls, a possible agricultural area, and a historic cemetery—was identified in or within close proximity to the project area.

5.1.2.4 Kaumuali'i Highway Archaeological Assessment (Hammatt and Chiogioji 1998)

CSH (Hammatt and Chiogioji 1998) conducted an archaeological assessment of an approximately 11.5-km-long portion of the Kaumuali'i Highway corridor, a portion of which is adjacent to the southern boundary of KCC. During the reconnaissance survey, no historic properties were found in the vicinity of the school campus. No surface traditional Hawaiian archaeological sites were observed during the entire survey although four historic properties (two bridges, a cemetery and an office building) were noted. No state site numbers were assigned.

5.1.2.5 2004 KCC One-Stop Center AIS and CIA (Hammatt and Shideler 2004)

In 2004, CSH conducted an archaeological and cultural impact evaluation study for the One-Stop Center at KCC (Hammatt and Shideler 2004). The project involved construction of a two-story building of approximately 35-40,000 net sq ft (about 55-60,000 gross sq ft) located in the southwest side of the existing KCC campus. A field inspection of the vicinity of the proposed project was conducted and observed to be a graded, established lawn with no observed indicators of any archaeological concern. As the area for that project was under sugar cane cultivation for many decades and its location observed to be graded with an established lawn, the study concluded that cultural impacts associated with the proposed project were unlikely.

A summary of the proposed project and its findings was mailed to Dr. Pua Aiu (then) of the Office of Hawaiian Affairs and to Mr. Dennis Chun of the Hawaiian Studies program at KCC on 23 December 2003. Follow-up telephone consultation was held with Mr. Chun on 19 February 2004 and with Dr. Aiu on 24 February 2004. A brief telephone conversation on the subject was also held with Ms. LaFrance Kapaka-Arboleda of the Kaua'i Office of Hawaiian Affairs and the Kaua'i/Ni'ihau Islands Burial Council on 20 February 2004. None of these parties expressed any concerns of adverse impacts to cultural practices by the proposed project. Subsequently, the SHPD concluded, “No further archaeological work [was] needed for the project.”

5.1.2.6 AIS for KCC (2010)

CSH archaeologists completed a field inspection of the KCC campus between 18 and 25 August 2010. A total of ten historic surface features, including two previously identified historic features (CSH 9, CSH 10), were found during the field inspection. CSH 9, an “old ‘auwai” that conforms to a portion of Grove Farm’s “Mauka Ditch,” (Figure 27) was previously found during an archaeological reconnaissance (Palama 1973) of the western portion of the project area.

Palama (1973) also recorded the location of a cemetery identified during the current field inspection as CSH 10. The Puhi Camp Cemetery, SIHP # -11-B006/CSH 10, is outside of the KCC property.

The nine features found within the KCC property appear to be related to Grove Farm and date to the plantation era. The historic surface features consist of five irrigation ditches (CSH 1, CSH 2, CSH 4, CSH 6, CSH 9), one of which (CSH 1) is abandoned; three reservoirs (CSH 3, CSH 5, CSH 7) of which CSH 3 is abandoned; and an abandoned wooden flume (CSH 8).

Palama's (1973) archaeological reconnaissance had identified old plantation camp remains associated with Puhi Camp, and an area containing possible lo'i. These features were not present during the field inspection. An old military complex identified by Palama (1973) is outside of the KCC property and no evidence of the complex was found during the field inspection.

As discussed in Section 4.5, all Puhi Camp plantation housing was removed by the 1980s. Currently, newer buildings for the Pūnana Leo o Kaua'i Pre-School and Kawaikini New Century Public Charter School and a few agricultural plots occupy some of the former Puhi Camp lands.

Descriptions and photograph documentation of each of the historic features identified during the field inspection are shown in Table 3 and Figure 28.

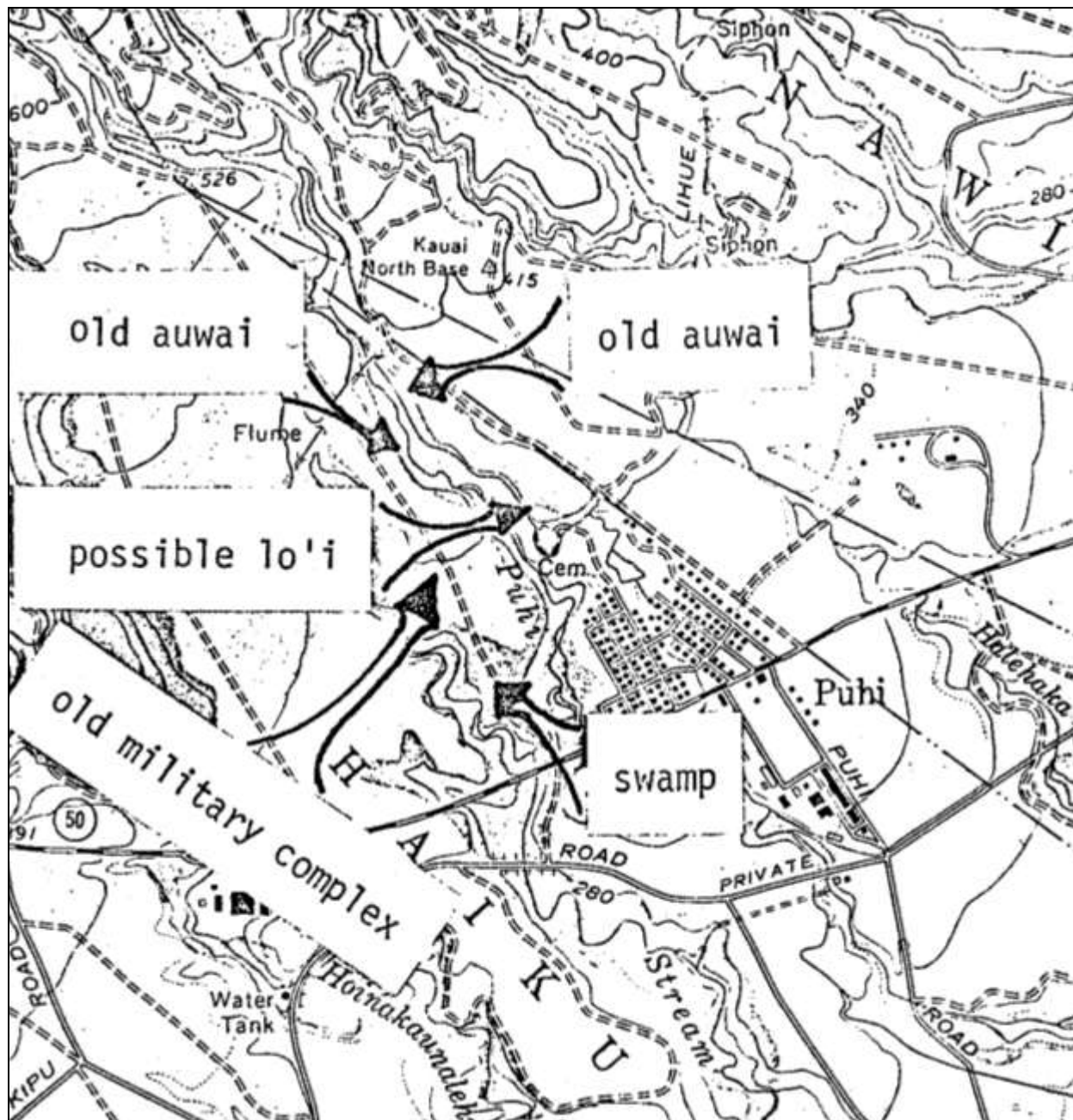


Figure 27. Locations of historic resources found within portions of the project area during a 1973 archaeological reconnaissance (adapted from Palama 1973:4)

Table 3. Historic Features Identified Adjacent to the Project Area

Feature	Feature Type	Function	Age	Notes
CSH 1	Irrigation ditch	Water control	Plantation era	Abandoned
CSH 2	Irrigation ditch	Water control	Plantation era	Currently in use for run-off
CSH 3	Reservoir	Water control	Plantation era	Abandoned
CSH 4	Irrigation ditch	Water control	Plantation era	Currently in use
CSH 5	Reservoir	Water control	Plantation era	Currently in use
CSH 6	Irrigation ditch	Water control	Plantation era	Currently in use
CSH 7	Reservoir	Water control	Plantation era	Currently in use
CSH 8	Flume	Water control	Plantation era	Abandoned
CSH 9	Irrigation ditch	Water control	Plantation era	Currently in use
CSH 10/ SIHP # -B006	Cemetery	Burial	1920-1977	Designated as SIHP # 50-30-11-B006 (Kikuchi and Remoaldo 1992:134)

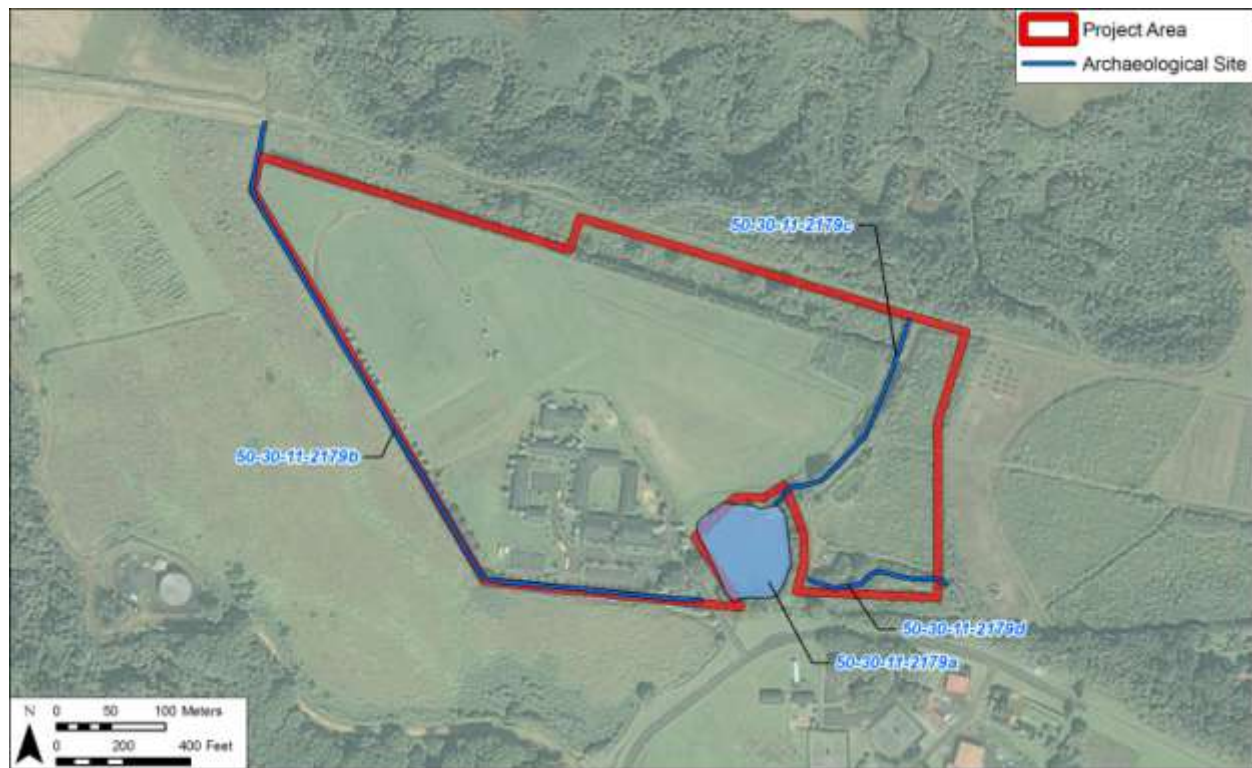


Figure 28. Locations of historic resources found within the project area (base map Google Earth 2012)

5.2 Archaeological Study for the Island School State Land Use District Boundary Amendment Project (Hunkin et al. 2013)

In 2013, CSH archaeologists completed an AIS of the project area. One historic property was identified during earlier LRFI work (Groza and Hammatt 2013) for the project area, SIHP # -2179. SIHP # -2179 contains Features A through D (Feature A, a reservoir; Feature B, an earthen ditch; Feature C, an earthen ditch with running water; Feature D, an earthen ditch).

Although the south side of the project area curves around the reservoir, the reservoir is not part of Island School and is located on another parcel. For more details on the findings and recommendation, please see Hunkin et al. 2013.

Section 6 Community Consultation

Throughout the course of this assessment, an effort was made to contact and consult with Hawaiian cultural organizations, government agencies, and individuals who might have knowledge of and/or concerns about traditional cultural practices specifically related to the study area. This effort was made by letter, email, telephone, and in-person contact. The initial outreach effort began in October 2013 and community consultation was completed in January 2014.

In the majority of cases, a letter (Appendix D), map, and an aerial photograph of the project area were mailed. In most cases, one to multiple attempts were made to contact individuals, organizations, and agencies apposite to the CIA for the project. The results of the community consultation process are presented in Table 4. Written statements from organizations, agencies, and community members are presented in Sections 6.1 below and summaries of interviews with individuals are presented in Section 7.

The previous interviews for the Kaua'i Community College CIA (Fa'anunu et al. 2012) are also included in this report, due to its proximity to the current project area. CSH sought all the interviewees' approval to reuse their previous interviews during the course of this consultation for the Island School CIA, and the efforts and results are reflected in Table 4 below. The previous interviews for the KCC CIA are in Section 7.

Table 4. Results of Community Consultation

Community Group/Member	Affiliation	Comments
Agena, Robert "Bobby"	Kama'āina; former resident of Puhi Camp	CSH mailed letter and figures on 3 October 2013. CSH called and left message on 7 November 2013.
Ayau, Halealoha	Hui Mālama I Nā Kupuna O Hawai'i Nei	CSH emailed letter and figures on 8 October 2013.
Cataluna, Donald	OHA Trustee, Kaua'i/Ni'ihau Ho'okipa Network	CSH mailed letter and figures on 3 October 2013. OHA replied with a letter dated 23 October 2013, referring CSH to Grove Farm and Bernie Sakoda (see Section 6.1 below).
Chun, Dennis	Chair, Department of Hawaiian Studies	CSH mailed personal letter and figures on 22 October 2013. CSH emailed Mr. Chun on 13 December 2013 and Mr. Chun emailed CSH on 14 December 2013, approving the use of previous interview for KCC CIA.
Crabbe, Dr. Kamana'opono	Head, Office of Hawaiian Affairs	CSH mailed letter and figures on 3 October 2013. OHA replied with a letter dated 23 October 2013, referring CSH to Grove Farm and Bernie Sakoda (see Section 6.1 below).

Community Group/Member	Affiliation	Comments
Dacay, Manny	Kama'āina	CSH mailed letter and figures on 3 October 2013. CSH called 7 November 2013 and was unable to leave message.
Ellamar, Frederic	Kupuna	CSH mailed personal letter and figures on 4 October 2013. CSH mailed a copy of KCC CIA on 8 October 2013, as requested by Mr. Ellamar. CSH called on 7 November 2013 and was unable to leave message.
Grove Farm Company		CSH mailed letter and figures on 3 October 2013.
Hussey-Albao, Liberta	President, Queen Deborah Kapule Hawaiian Civic Club	CSH mailed letter and figures on 3 October 2013.
Kajiwaru, Dr. Robert	Head Librarian, Kaua'i Community College	CSH mailed letter and figures on 3 October 2013.
Kaumuali'i Hawaiian Civic Club	Civic Club	CSH emailed letter and figures on 8 October 2013.
Kawado, Audrey	Kama'āina	CSH mailed personal letter and figures on 4 October 2013. CSH called and left message on 7 November 2013. CSH called and left message on 12 December 2013. CSH got approval to use previous interview for KCC CIA on 19 December 2013.
Kealoha, Keone	Executive Director, Mālama Kaua'i	CSH mailed letter and figures on 3 October 2013. Letter was returned with no forwarding address on 21 October 2013. CSH received new contact information and emailed Mr. Kealoha on 22 October 2013.
Lovell-Obatake, Cheryl	Kupuna	CSH mailed letter and figures on 3 October 2013.
Madayag, Moises	Curator, Grove Farm Museum	CSH emailed letter and figures on 8 October 2013.
Makanani, Mabel	Kupuna	CSH mailed personal letter and figures on 4 October 2013. CSH emailed letter and figures on 8 October 2013. CSH called on 7 November 2013 and talked with Mrs. Makanani. She approved the use of her previous interview for KCC CIA.

Community Group/Member	Affiliation	Comments
McClure, Amber	Kama'āina	CSH mailed personal letter and figures on 4 October 2013. CSH called and left message on 7 November 2013. CSH emailed Ms. McClure on 26 November 2013. Ms. McClure emailed CSH on 1 December 2013 asking how she could help and giving her approval for previous statement for KCC CIA to be used. CSH emailed on 2 December 2013. Ms. McClure emailed CSH on 19 December 2013 and conveyed the approval for her mother, Daphne McClure and for her aunt, Audrey Kawado, for their previous interviews for KCC CIA to be used.
McClure, Daphne	Kama'āina	CSH mailed personal letter and figures on 4 October 2013. CSH called Mrs. McClure on 7 November 2013 and talked with Mrs. McClure who requested a detailed map comparing project areas of KCC CIA to the new Island school CIA. CSH emailed detailed map on 7 November 2013. CSH called on 12 December 2013 and left message. CSH received approval to use previous interview for KCC CIA on 19 December 2013.
Pereira, Mr. Charlie	Kupuna	CSH mailed personal letter and figures on 22 October 2013. Letter came back on 29 October 2013. CSH called Waipā on 20 November 2013 in attempt to contact Mr. Pereira. CSH talked with Mr. Pereira on 21 November 2013. CSH mailed letter and figures on 22 November 2013 to new address. Mr. Pereira called CSH on 19 January 2014 and gave approval to use previous interview for KCC CIA.
Pratt, David	Island School Board Member; former irrigation specialist; acquainted with residents associated with Puhi Camp	CSH mailed letter and figures on 3 October 2013. Mr. Pratt replied via email on 28 October 2013 (see Section 6.1 for Mr. Pratt's statement)
Requilman, Mary	Director, Kaua'i Historical Society	CSH mailed letter and figures on 3 October 2013.

Community Group/Member	Affiliation	Comments
Rodrigues, Hinano B.A., J.D.	Cultural Historian/Acting History and Culture Branch Chief DLNR, State Historic Preservation Division–Maui	CSH mailed letter and figures on 3 October 2013.
Rossi, Pualiiliimaikalan i	Instructor, Hawaiian Studies	CSH mailed letter and figures on 3 October 2013.
Sakoda, Bernie	Kama'āina	CSH mailed personal letter and figures on 4 October 2013. CSH emailed Mrs. Sakoda on 20 November 2013. CSH interviewed Mrs. Sakoda on 21 November 2013. CSH emailed on 2 January 2014 and 7 January 2014. Mrs. Sakoda emailed CSH on 7 January 2014 with her revisions and gave approval of her interview. She also approved the use of her previous interview for the KCC CIA.
Santos, Kaliko	Office of Hawaiian Affairs, Kaua'i	CSH emailed letter and figures on 8 October 2013. OHA replied with a letter dated 23 October 2013, referring CSH to Grove Farm and Bernie Sakoda (see Section 6.1 below).
Takahashi, Dennis	Kama'āina	CSH mailed personal letter and figures on 4 October 2013. CSH mailed a copy of KCC CIA on 8 October 2013, as requested by Mr. Takahashi. Mr. Takahashi called CSH on 17 October 2013. CSH called Mr. Takahashi on 21 October 2013 and Mr. Takahashi approved the use of a previous interview give for the KCC CIA in 2011, stating the new project area covers much of the same area as the project area of the KCC CIA. He also made a correction to the previous contact table for the KCC CIA, noting that Mr. Henry Sasaki is not deceased and that he will contact him for comments on the Island School project.
White, Robert	Niumalu resident	CSH emailed personal letter and figures on 22 October 2013. CSH emailed letter on 25 October 2013. Mr. White replied via email on 26 October 2013, noting he does not have direct information for the project area and that CSH can use his previous interview for the KCC CIA for this current project.

Community Group/Member	Affiliation	Comments
Yap, Keith	Kaua'i/Ni'ihau Island Burial Council, Vice Chairman	CSH mailed letter and figures on 3 October 2013.

6.1 Other Statements and Brief Responses from Project Participants

6.1.2 OHA Response

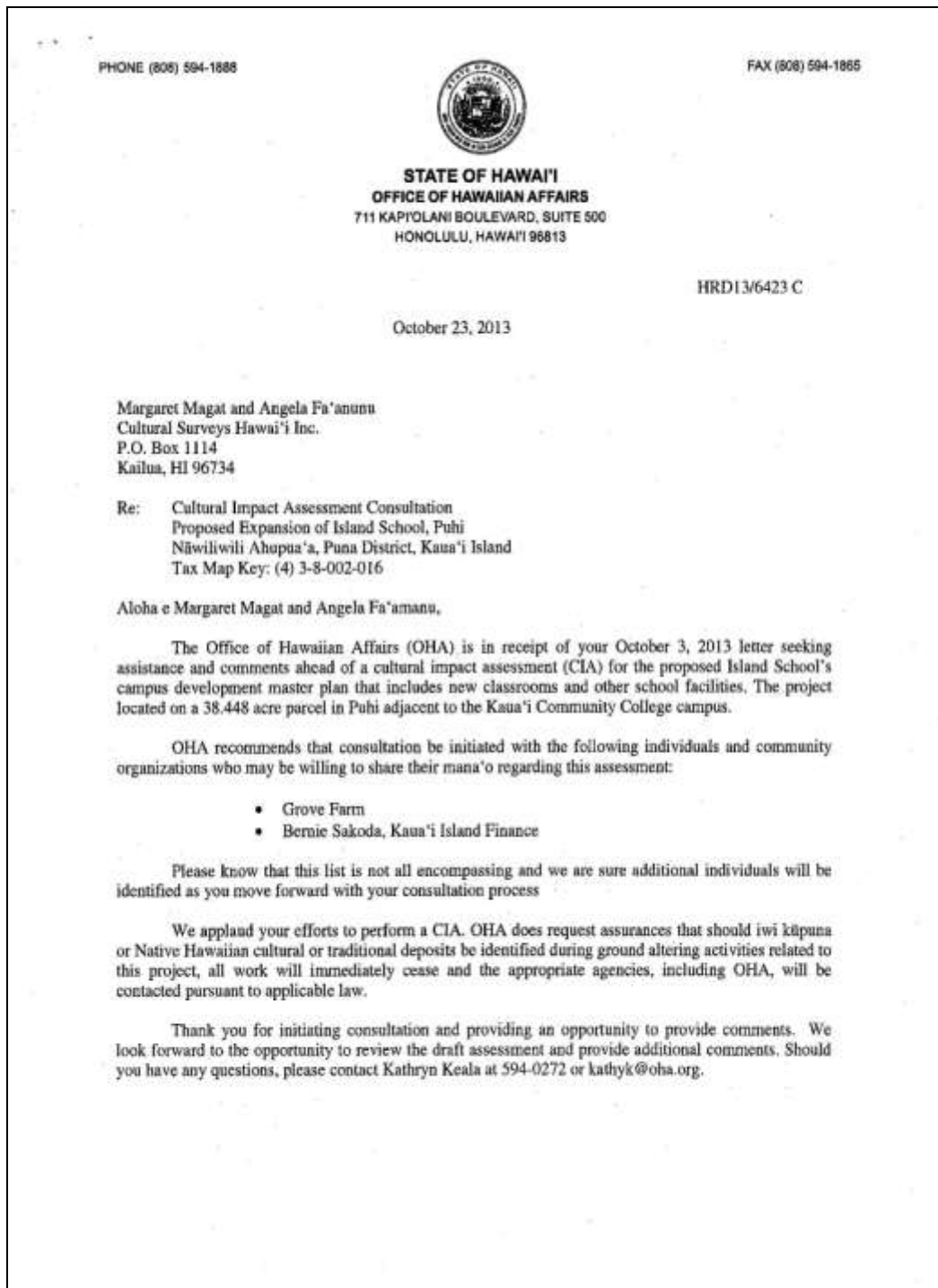


Figure 29. Page 1 of OHA response

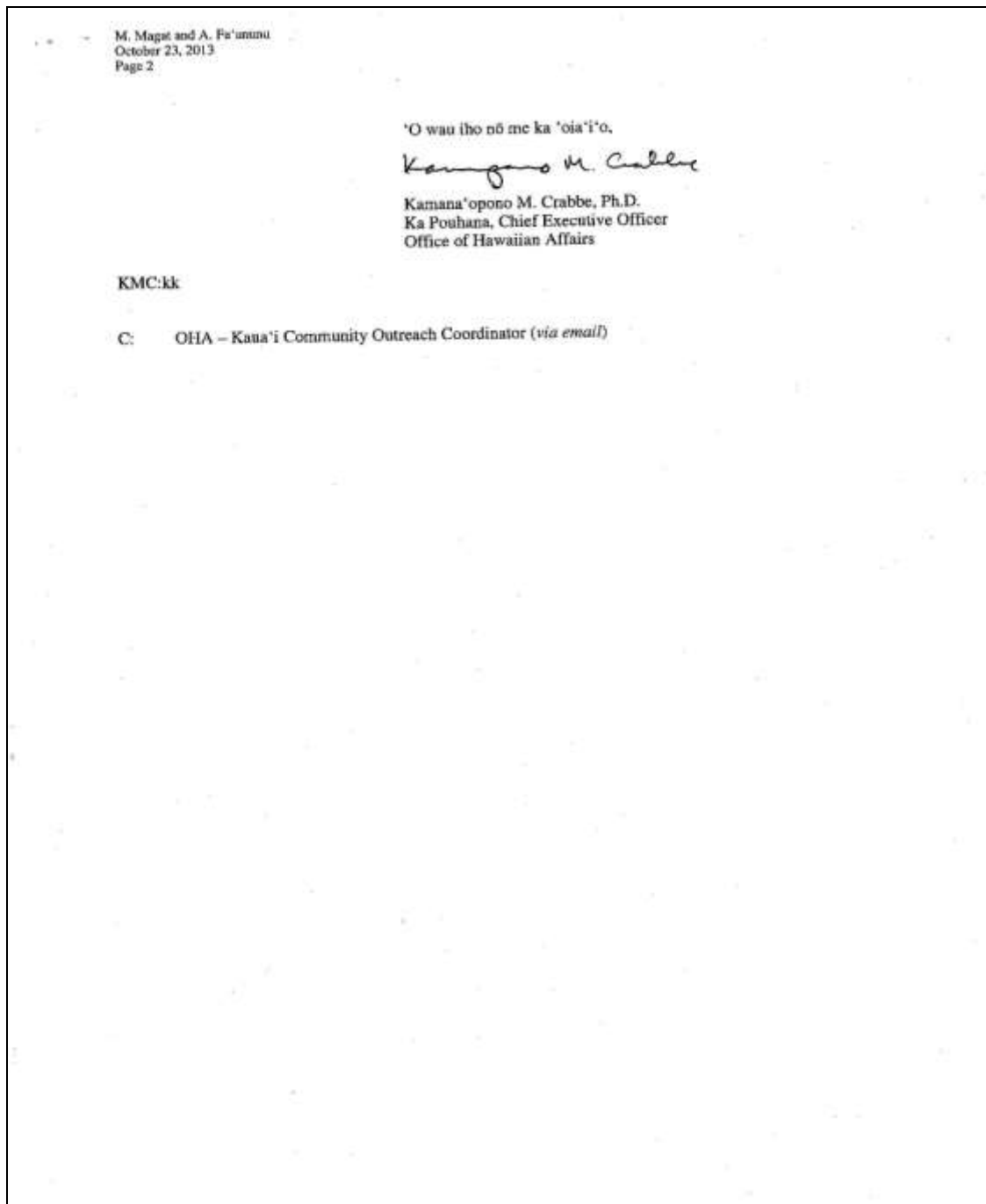


Figure 30. Page 2 of OHA response

6.1.3 David W. Pratt

David W. Pratt
P. O. Box 662096
Lihue, Hawaii 96766

October 28, 2013

Margaret Magat and Angela Fa'anunu
Cultural Surveys Hawai'i Inc.
P. O. Box 1114
Kailua, Hawai'i 96734

Re: Cultural Impact Assessment for
Island School

Margaret and Angela,

The following is my qualifications and effort to provide information on the historic, archaeological, and cultural history of the 38,448-acre Island School project site (the Project) next to the Kauai Community College.

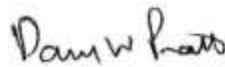
1. My knowledge of the Project dates back to 1972 when I began my employment with Grove Farm Company, Ltd. (GFC). The company (GFC) was in the process of donating approximately 200 acres to the University of Hawaii for the Kauai Community College which is adjacent to the Project. I was President of Grove Farm Company, Ltd. from 1975 to 1996. I recall the Project site was a portion of a cane field operated by The Lihue Plantation Company in the 1970s and 1980s.
2. I did some research on the commencement of cane cultivation on the Project site and determined that most, if not all, of the Project site was planted to cane by the year 1900. See Appendix B to the May 2013 Draft Archaeological Inventory Survey for the Island School Project prepared by Cultural Surveys Hawai'i, Inc.

Figure 31. Page 1 of David Pratt response

Margaret Magat and Angela Fa'anunu
October 28, 2013
Page 2

3. I have been a Board member of Island School since 1987. I was President of the Board from 1997 to 2009. I have been Vice President of the Board since 2009. The Lihue Plantation Company committed 10 acres of the Project site for use by Island School by way of a license agreement dated July 13, 1990. Cane cultivation on most, if not all, of the Project ceased by this time. Island School acquired 20 additional acres in 1999 and 8.448 acres in 2005 from the former Lihue Plantation Company cane field.
4. I was a member of the Kauai & Niihau Island Burial Council for 8-years between 1989 and 1999. I do not recall any discussion of burial or cultural significance of the Project area while on the Council. An Archaeological Inventory Survey for the Island School Project by Cultural Surveys Hawai'i Inc. did not find any Hawaiian burial or cultural deposits.
5. I was employed at various Amfac sugar plantations between 1960 and 1972. During a portion of that employment I served as an irrigation specialist. The Archaeological Inventory Survey identifies several irrigation facilities within the Project as significant and worth monitoring. While these facilities may be historic, they are not unique in my opinion.

If you have any questions, please call me at (808) 651-5029.



David W. Pratt

Cc: Earl Matsukawa
Wilson Okamoto Corp.

Figure 32. Page 2 of David Pratt response

Section 7 Interviews

Kama‘āina and kūpuna with knowledge of the proposed project and study area were contacted to participate in semi-structured interviews for this CIA. From October 2013 to January 2014, CSH contacted 28 individuals and organizations of which three responded and one participated in a formal interview. Participants in the KCC CIA were invited to participate with new interviews as well as specifically requested to approve use of their previous interviews, as the Island School project area is adjacent to the KCC. All the KCC CIA participants gave their approval to use previous interviews. Mrs. Bernie Sakoda also provided an interview for this project (see Section 7.6).

7.1 Acknowledgements

The authors and researchers of this report extend our deep appreciation to everyone who took time to speak and share their mana‘o with CSH whether in interviews or brief consultations. We request that if these interviews are used in future documents, the words of contributors are reproduced accurately and not in any way altered, and that if large excerpts from interviews are used, report preparers obtain the express written consent of the interviewee/s.

7.2 Previous KCC CIA Site Interview with Ms. Audrey Kawado, Kupuna Mabel Makanani, Mrs. Hirokane McClure, Ms. Amber McClure, and Mr. Dennis Takahashi

CSH interviewed five community contacts for a previous CIA for the Kaua‘i Community College on 5 December 2011. The site interview took place on and near the current project area with the following study participants: Ms. Audrey Hirokane Kawado, Kupuna Mabel Makaniolo Makanani, Mrs. Daphne Hirokane McClure, her daughter Ms. Amber McClure, and Mr. Dennis Takahashi. During the site interview, the group toured the former Puhi Plantation Camp, now part of the Kaua‘i Community College, in Līhu‘e, Kaua‘i. The entire group, with the exception of CSH staff and Ms. Amber McClure, was raised in Puhi Camp. As mentioned above, Puhi Camp was built for Grove Farm plantation workers in the early 1920s. In 1974, an area consisting of about 200 acres of the camp became part of what is now KCC.

At 84 years old, Kupuna Mabel Makanani was the oldest member of the group. With the possible exception of one other family, Kupuna Makanani’s family was the only Native Hawaiian family in Puhi Camp. At the start of the site visit, she provided CSH with a written statement summing up her life in Puhi Camp. The following is entirely Kupuna Makanani’s words, with the exception of two words in brackets included by CSH for clarity:

This is what I remember as a child growing up in Puhi. It was a typical plantation-style camp. We all grew up together as one people, although we lived in homes by race. I think my dad was the only pure Hawaiian in the camp, with the exception of Mr. Malaia, I’m not sure if he was pure, but he spoke the language, I often heard them together. We lived in rows by race and shared cultural practices in music, dance and games, even movie nights, where we had a Hall for movies and monthly events—Filipino movies, Japanese, English, etc. The only people that

lived away from us were the Chinese—they lived in a valley close by, called 'Pake Valley.'

We lived simple lives. Grove Farm gave us [land], who ever wanted a piece of land to grow vegetables and we shared what we grew with each other. We bought from our crops.

Someone in the camps also raised (bee) hives. Going swimming up in the hills, called 'Cement Pond,' we passed the bee hives and if the owner was there, he'd give us some honey dripping from the wax and it was a treat for us.

We learned a lot growing up in a camp especially the different kinds of instruments different races used and their cultural customs and dances; for me, born and raised in Puhi was great, [I] learned the background of my mother and was amazed at all the instruments my dad could play. My mom taught me everything she knew from her mom. I was raised as a Catholic and followed all.

Stating that her heart is here in Puhi Camp, Kupuna Makanani explained what made it special:

I was born and raised here. It was a different lifestyle. It was one people. A generation of one people. No matter who you were, you recognized each other. It is not like today.

The first stop of the project site tour was at the Old Puhi Camp Cemetery, which is divided into two sections, a Japanese cemetery and a Filipino cemetery. Although there were other ethnicities such as Portuguese who worked in Puhi camp, most of them chose to be buried elsewhere. As she looked over the old graves, Kupuna Makanani voiced her concern about the protection of the remaining Puhi Camp places, especially the cemetery.

Beside her was Mr. Takahashi who also expressed his worry that no one will be left to take care of the cemetery (Figure 33). Although many of the graves had been removed by families already, there are still some that remain (Figure 34). He recalled that when he was a young boy, a group of Japanese workers kept a community fund to be used to maintain the graves. Once a year, before the Obon festival, the designated group would come and clean up the graves using hoes and rakes. Mr. Takahashi would assist in caring for the graves, something which he continues to do even now.

While at the Puhi Camp Cemetery, Mr. Takahashi pointed to a proposed project area aerial map and asked if the proposed rezoning would affect the cemetery and cause a disturbance of burials. To him, it seemed from the aerial map that the project would be developed very close if not in the actual area where the cemetery is. Both Kupuna Makanani and Mr. Takahashi stressed the need for Puhi Cemetery to be taken care of as the current volunteer caretaker, Mr. James Kazuo Amimoto, is getting older. In addition, both sides of the cemetery need to be maintained, including the Filipino side which contained more weeds than the Japanese section.

Besides some of the graves in the Japanese cemetery are vases for flowers (Figure 34). Mr. Takahashi admitted that one of his goals is to get all the headstones cleaned and then translated by a Buddhist priest. He has always been interested in learning about Kaua'i history and genealogy. Since he was young, he has made it a point of reading old newspapers and spending



Figure 33. Mr. Takahashi shows Old Puhi Camp Cemetery (CSH 2011)



Figure 34. Headstones in the Japanese side of Puhi cemetery (CSH 2011)

time with elders. "You know after the older generation pass on, the younger ones, they [are] not gonna know nothing, yeah," Mr. Takahashi stated.

Kupuna Makanani's father drove Grove Farm's train. According to her, men had the freedom to move all over the place. Her father was George Makaniolo, and he drove Train Number 1. When the plantation days were over, his train was sold to China. Somewhere possibly in Grove Museum, there is a nice picture of her father posing with the Number 1 train.

Mr. Takahashi's father was Takeshi Takahashi, who was a machinist for Grove Farm, and his mother was Katsuko Takahashi, who worked for Kaua'i Inn and Kaua'i Surf Hotel. His parents had three boys, and Mr. Takahashi was the middle child. He was born in 1945 in Līhu'e, and his family moved to the camp in the early 1950s. Although his parents did not attend college as they were too busy working for their families starting from a young age, they instilled the importance of a college education in their children and as a result, all of the Takahashi boys went on to college, with Mr. Takahashi obtaining a degree in business management. He later worked for Times Supermarket in Honolulu, and retired in 2007.

Although Mr. Takahashi noted he understands the school has to grow, he considers the preservation of the Puhi Camp cemetery to be of utmost importance. After pointing out to CSH how erosion is causing some of the headstones to be close to toppling over, Mr. Takahashi also remarked how big trees near the graves should be removed in case a large storm causes the tree or its branches to fall and destroy the headstones.

When asked about the KCC project, Mr. Takahashi commented,

The development is okay, but they should preserve you know the past, yeah. Because this is supposed to be the final resting place of the people, ah. You know, who worked on our plantation . . . so they shouldn't be disturbed.

The significance of the continuing relevance of the Puhi Camp cemetery to the living community was underscored during the site visit, when shortly after Mr. Takahashi expressed his recommendation for preservation, Mrs. McClure discovered the grave of a relative, Alice, located in the cemetery (Figure 35). Up until that point, she had no idea her cousin was buried in the cemetery, and using the headstone as a guide, she shared with the group her family ties and memories of her cousin Alice, who passed away at 30 years old and who was married to Tomas. Kupuna Makanani also shared her memory of Alice as a young girl and how much she enjoyed playing with paper dolls.

Like Mr. Takahashi, Kupuna Makanani would like the place to be preserved, relating an additional recommendation that in her opinion, families who still have ties to the cemetery and project area should be consulted before anyone else, and that project proponents should take care of the preservation financially.

I would go along with whatever the people who live here, the people who have families here, their concerns would be number one . . . If ever in time that they would still continue to develop, then I think the community should make an amendment where whoever is building, would provide a separate place for them and take care of all the finances to remove and to preserve and to set up.



Figure 35. Mrs. Daphne Hirokane McClure discovers her cousin Alice's grave in Puhi Cemetery (CSH 2011)

Kupuna Makanani recollected that when she was growing up, she it was possible to bury family members around one's residence. It does not surprise her that now burials are found whenever there is construction being done or a building being renovated. The only people who would know and who should be consulted are those who lived in the area, and if graves are unknown, it illustrates the need to continue to care for the place and for the new generation to have the information to do it. This makes it even more crucial to have meetings and exchange of cultural information, much like the site visit tour for the KCC CIA. Stated Kupuna Makanani,

That the people would . . . get together like how we're meeting, cultural . . . It's the ones that [are] left behind that plant the importance of their ancestors to upkeep.

Mr. Takahashi pointed out how some of the graves in the Filipino side of the cemetery are those of Filipino veterans who have no known family, and only crosses in the ground mark their burial. It would be ideal if somehow relatives of these veterans would be able to find them and be reunited. He decried the forgetting of one's roots and expressed his hopes that the younger generation would continue their ties to their culture and family tree.

Indicating a grave with "Unknown" in the marker, Mr. Takahashi stated the following:

Maybe . . . whoever this is, has relatives in the Philippines. Maybe they've been over here but they have no family here and he died. But, we don't know who this person is.

Both Kupuna Makanani and Mr. Takahashi related the history of Filipino migrants to Hawai'i, how Filipinos came to Hawai'i starting in the early 1900s as contract laborers, "*sakadas*," searching for a better place to live. They remarked on how Filipinos maintain their ties to the Philippines by supporting their families through remittances. The group found one Filipino veteran's grave dated to World War I. In addition, children are also buried in the graveyard. One grave in the Filipino side of the Puhi Cemetery held a two-month-old baby (Figure 36).

Given this example and others, Kupuna Makanani emphasized that whatever can be preserved should be protected because soon people will lose access to the knowledge. She cited the example of Mrs. McClure finding the grave of her cousin.

Like Kupuna Makanani, Mr. Takahashi remembered the old days with fondness, describing when everybody was like one big family. For him, it was the close-knit feeling of community and family, where people knew each other and looked after one another.

All the different nationalities . . . you know all the da kids, eh? We were so close. You know we go to each others' homes . . . people just open up their home, [share] da food. You normally have like weddings, birthday parties, all kinds [of] parties you know. We intermingle with all different nationalities. Everybody was on an equal basis, eh. Which is, you know, rare today, eh.



Figure 36. Grave of a two-month old baby in Puhi Cemetery (CSH 2011)

Despite the fact that various accounts of plantation life portrayed it as a harsh, unfulfilling life, Mr. Takahashi related that the Wilcox family treated their workers very well and life was enjoyable in Puhi Camp. According to Mr. Takahashi, everyone who was a Grove Farm worker agreed they were looked after by the Wilcox family, and people were provided the opportunity to own their own home.

Families shopped for groceries in plantation stores and bought items using credit, to be paid for when payday came. As a young child, Mr. Takahashi was given the specific job of tending to the vegetable garden. For extra money, he cleaned the yards of neighbors. The Takahashi family moved out of Puhi Camp in 1969 when Grove Farm built a subdivision across the road from what is now KCC, selling the lots to workers.

7.2.1 Strikes and Unions

Both Mr. Takahashi and Kupuna Makanani described the strikes and the effects of unionization on Puhi Camp. During one strike in the 1960s, plantation workers had a soup kitchen provided by the union that was able to provide them food. Mr. Takahashi related how at dinner time, each family would be given their allotted share of rice and main dish. Workers would bring their pot so it could be filled with rice as well as the viands for the day. If the family had several children, the soup kitchen provided enough for each member. The soup kitchen lasted as long as the strike. Mr. Takahashi recalled one particularly long strike that lasted six months.

The strikes of Grove Farm plantation workers were mostly peaceful affairs that did not turn bloody as the one in Hanapēpē in 1924 did, when 16 Filipino workers were killed along with four local policemen. Mr. Takahashi put it this way, “Yeah, they would picket, but in the meantime you know everybody had to report and then take care of the garden because no more food!”

Although most Puhi Camp residents had their own gardens they used to supplement their meals, the main source of food during strikes was the soup kitchen, which Mr. Takahashi noted as a “real humble experience.” But those were the times too, when the community came together, and when all the workers from different nationalities would “chip in” and work “side by side.” Life during strikes was undeniably difficult, according to Kupuna Makanani:

It was hard, but you know, because we lived simple lives you know we survived.

It was like, ‘Oh my goodness, what’s gonna happen now . . . we have no food!’

But we were . . . we were standing in line for food.

The transition from non-union to union came in 1946 and was not without controversy. With unionization came changes, some as major as housing which was no longer provided free to workers. Kupuna Makanani noted, “We had free water, free house, we had everything free! Our equipment to play was free, the plantation would provide bats and balls and everything that the kids needed.”

Once the union came in, stipulations were made. Kupuna Makanani listed some of the advantages before unionization:

You don’t have to pay house rent . . . you don’t have to pay water, you could use as much water as you can, you know . . . there it was. The pay was very small but

you learned to live without . . . You don't go over it, you live without . . . And everybody trusted each other. Not like today . . . you gotta lock doors and lock windows and put alarms and you see these people doing that in the house and it's sad because who do you trust? There's no trust.

7.2.2 Everyday Life in Puhi Camp

The group also reminisced about life each day in the camp. Some of Mr. Takahashi's favorite memories of growing up at Puhi Camp included making swords from straight tree branches and swimming in one of the three reservoir ponds, which were clean. Pointing out the type of vines he once used, Mr. Takahashi shared how he would cling to the vines to swing about and imagine he was Tarzan (Figure 37).

He recalled searching for special V-shaped branches from guava or strawberry guava trees and breaking it off in order to make homemade slingshots using the inner tube from wheels of old cars. With the slingshot, he and his friends would practice by shooting pebbles at bottles before attempting to hunt for birds. Laughing at the memory, he admitted he failed catching birds with his slingshot.

It was a great childhood for Mr. Takahashi. For him, a typical day involved attending Līhu'e School in the morning, and after school, he did chores such as chopping firewood to heat up



Figure 37. Mr. Takahashi shows the type of vines he used as a child (CSH 2011)

water. He collected firewood from eucalyptus trees surrounding the camp which had been planted by the Wilcox family years before. The Wilcox family allowed their employees to utilize the trees for their firewood.

After chores and school, he would visit friends, and they would then go around to visit other houses. One of his former neighbors was a Filipino family who had one of the first televisions in the camp. Mr. Takahashi chuckled at the memory of how he and all the other children in the camp would go to the house with the television and watch shows during the 1950s.

Mr. Takahashi also explored the irrigation tunnels with friends such as Mrs. Kawado and Mrs. McClure, who are sisters. Mrs. McClure was born in 1948 and her memories of Puhi Camp in the 1950s remain clear. She vividly described the days when houses stood side by side where current roads now run and when the road to the Puhi cemetery was once covered with camp buildings. Mrs. McClure lived in the camp until she went away to college in 1966, and by the time she came back, the camp was already gone. However, her daughter Amber helped capture some of the memories on film when she recorded the oral histories of former Puhi Camp residents for her ethnographic film *From Where We Come*, in fulfillment of a master's degree for the University of London.

Kupuna Makanani was the youngest of three siblings and had two older brothers. When she was growing up, she was raised differently from them in the sense that it was in a more protective manner. However, she did enjoy activities such as swimming in the irrigation ditches with her school friends. She remembered,

All of the kids swam. I remember Shigeno Amimoto . . . behind where they lived, there was an irrigation ditch . . . we would put on our swimsuit and swim in the ditch because it wasn't polluted, you know . . . and we would go down the stream together.

She recalled there were softball teams for boys and girls, with different ethnic groups having their own games. For example, Filipinos had "*sipa*," which consists of the player continuously trying to hit a designated "mark" on the side of their feet without losing the "mark." Kupuna Makanani shared how the games were "so good" and enjoyable.

Like many others in Puhi Camp, Kupuna Makanani attended Līhu'e Grammar School and walked with her brothers to go to school, until the time came when she was forbidden to walk to school. World War II began when she was in high school, and she decided to sneak out and sign up to work in the Kapa'a Pineapple Cannery. Eventually her family, first her brothers, found out she was working as the truck from Kōloa came very early to pick up all the workers. By then, however, she had already committed to working.

I said, 'No,' but all my friends in high school they fine working . . . I never wanted to sit and do nothing, I wanted to do something. And so they couldn't do anything—I signed up already.

Kupuna Makanani continued to work while she attended school. She worked only on weekends and during vacations.

Every summer I would go work. What we had [was] office work at the coffee building, we had different things that you could go. But, because my family didn't

want me to go work, I stayed in class. And unless on Fridays, this was every Friday they could go. The boys would put up barbwire, you know all the kinds at beaches and whatever you had to work and the girls could go work in the office or where ever work was needed. Yeah . . . so it was like . . . but it was good because I got to work.

Like the majority in Puhi Camp, her family maintained a vegetable garden. In addition to all kinds of vegetables, Kupuna Makanani shared memories of her mother's flower garden.

My mom loved flowers so we had all kinds of flowers. She had everything from lilies to orchids to ferns, maiden-hair . . . I remember conifers. We used to come and tell her, 'Please we want you to take out your maiden-hair,' she had gorgeous maiden-hair . . . all different varieties, begonias . . . Our yard was full of flowers, tuberose, roses, [for] my dad every weekend, my mom would make a hat for him . . . [for] riding or where ever we would go.

Her mother would also make all of her father's leis, using the flowers growing in her garden. Kupuna Makanani recalled fondly how much her father loved roses, and how carnations bloomed along the walkway from the gate to their house in Puhi Camp. There were always two patches of carnations along the path.

One of the few Puhi Camp places that is left is the cement house, which has been converted to become the Pūnana Leo o Kaua'i School. Kupuna Makanani took the group to the site of her former house that once stood in the upper part of Puhi Camp. Although the house is no longer standing, a huge mango tree that once served as a landmark still remains (Figure 38).

She described a valley that went down past her childhood home which was the family's original vegetable garden. Across the street from their house was a vegetable garden for everybody.

Although Kupuna Makanani's father knew many legends, he did not readily talk about them to the family as he was "very protective" of them. She was raised as a Catholic while her father was born into a Mormon family. She identified with her Portuguese background.

So we were brought up Catholics, you know to worship God and do all the right things and so my dad was born a Mormon so it's two different lines of worship. Although you are worshipping God, but the rules was different. But, my dad never did stop my mom from raising us as Catholics but he stopped going to Mormon church [temple]. I think he was ordained as an elder. I remember something about him going into the Mormon temple so you have his family, my dad's family were Mormon, very strong Mormon. My mom's family was coming from Portugal so the [maternal] line is Catholic. And my great-grandparents served the priests and took care of the priests and their house and their clothes. And so that tradition came to Hawai'i with my grandmother, so my mom has that tradition. Now I'm born, I do the same thing.

Her Catholic faith is a source of strength and to serve God is the reason she maintains her involvement in numerous activities helping others.



Figure 38. Kupuna Makanani tells of her childhood home, marked by mango tree in background (CSH 2011)

It's that culture steering me to serve the one God. And so I'm still doing it and . . . I go back in time and it's telling me that my generation for my ancestors were serving God from the beginning. It's from Portugal coming here. My grandmother lives in Kōloa and goes to that church. It's still that church and that ministry . . . I'm born and raised in that same line of service and that's what I do today. I serve the Lord whatever. And it's always in hospitality. You know, it's serving. Making food for the ones who need, taking care of those that don't have nothing, you know you give, that's my life . . . that's my life.

Sharing her mana'o about the project area is part of her desire to serve:

I feel for the people because I grew up here in a wonderful time. You know, we didn't steal from each other . . . if your neighbor needed something, they could come to your house and go through your cabinets and take whatever they need and then the next day they would bring back. Somebody is sick in the camp . . . so you raise chickens, ducks, pig or whatever you make something and you would bring to their house . . . You never had to call, 'Oh so and so is sick, can you provide a meal?' Not before, before it came natural. You serve your friends, your neighbors and you don't think of their color, creed or whatever. You know they're neighbors, they're friends, you're growing up with them, you learn from them.

Kupuna Makanani lived in Puhi Camp until her early years of marriage, and moved only when her own house was constructed in Wailua Houselots, the first house in that area. Even after she and her husband moved and they had a child, her parents remained in Puhi Camp and took care of their granddaughter during the day. She learned to shoot with a .22 rifle with her husband, and practiced by shooting cans with her rifle before hunting for pheasants with her husband when he came home from work. Once they caught a pheasant, they would return home and roast it. She credited her childhood spent growing up with many ethnicities for her ability to enjoy eating different kinds of foods and being appreciative of other cultures.

So now, I can eat any other food, I can go to any party and I can say, 'I can eat that,' not, 'I don't like that, it doesn't look good' or you know, 'I don't want that.' We were brought up different, our generation is really different . . . to appreciate one another and love them.

These days, Kupuna Makanani's daily diet consists of mostly vegetables and fish. She likes to eat everything, but does not care too much for meat. Her advice is not to overdo eating. She usually bakes her food and sometimes fries it. In particular, she loves baked salmon and fried fish. As for sashimi, she does not eat it probably because when her children were growing up, she gave them sashimi and she did not acquire a taste for it. But she enjoys eating poke which her children did not favor when they were little.

7.2.3 Foodways in Puhi Camp

Throughout the project area tour, the group freely recalled many memories which involved the tastes of their childhood and how the food incorporated the marine and plant resources around them. Kupuna Makanani shared that whenever her family needed some vegetables, they went to their garden, or foraged for bamboo shoots by the back of the three reservoirs which were connected and had bamboo on one side. This is where many people in Puhi Camp came to get their bamboo shoots. They also took care of their own chickens as well as ducks.

Mr. Takahashi described foraging during spring for young bamboo shoots, called "*takenoko*" by the Japanese, and hunting for a type of fungus called "*pepeiao*" (edible jelly fungus) which was gathered around the camp boundaries. For seafood, he and his friends fished for crayfish by lowering lines with small meat bait, and they also caught fish like bass in the reservoir.

The *pepeiao* was prepared by Mr. Takahashi's mother to be fried or cooked with chop suey, chicken, or pork. Chickens were usually bought from the store as the wild chickens tended to roam in the valley away from Puhi Camp, but there were lots of wild boars that could be hunted, which Mr. Takahashi's uncle regularly did.

For treats, he and other children usually enjoyed homemade goodies like pickled green mangoes and guava jelly and jam. The children were sent off to pick ripe guavas on the roadside to be used for making preserves and for juice. Mr. Takahashi reminisced how his mother would squeeze the guavas for their juice and freeze the juice in ice trays. Passion fruit juice was also a favorite; the fruit grew in vines all around the project area (Figure 39). Mr. Takahashi shared his memories:



Figure 39. A passion fruit flower grows in the project area (CSH 2011)

That passion fruit, you know, that vine that's growing wild, in the summer time, the thing [fruit] drops, and then we would take 'em home and squeeze 'em, eh, and make passion guava and mix the two together, eh.

As for pickling mango seed, his grandparents, aunts, and uncles made this by taking green mangoes, peeling their skin, cutting them and drying them for about two days before boiling them in sugar and adding Chinese spices like five-spice. Mr. Takahashi described the fibrous seed as the "best part, because all the flavor would soak into that." He lamented that nowadays, hardly anyone makes pickled mango seed from scratch anymore.

There was a small mom-and-pop store in Puhi Camp run by the Funada family, and in addition to canned goods and everyday items, dried abalone was available in glass jars. For about 50 or 60 cents, each child got a nice chewy slice cut from the big piece that could be chewed for what seemed like hours. "Real delicious, eh. Today so expensive you can't even buy it now," Mr. Takahashi noted. The Funada store was located in the Puhi Camp area. There were three stores in Puhi Camp, including a Chinese meat market.

Gathering and hunting for tasty edible food sometimes took on a competitive edge. The search for bamboo shoots or *takenoko* heated up as people came up with ways to try and hide the tender shoots that sprout up after storms. Kupuna Makanani stated,

We used to go when it stormed, yeah, when it stormed, the bamboo would grow and so we'd always get our grab bags and a clean knife or a sharp knife and we'd go right across the street. Yeah, we used to wear long sleeves, shirt and then dig

and then you cheat because some people know that . . . maybe [a] couple of weeks more rain . . . it's gonna come up so they cover it. Yeah.

The *takenoko* had to be harvested before it got too hard and too bitter, as both characteristics became more pronounced, the older the bamboo shoot. It therefore needed the right time to grow before being picked. To help ensure that, people would cover the place with dirt and hide the shoot until harvest time. The group reminisced how much fun it was to walk around hunting for shoots underneath small piles of freshly dug earth (Figure 40).

The preparation of the *takenoko* involved boiling and changing the water. Kupuna Makanani recalled that her mother boiled and changed the water which was red, and Mr. Takahashi shared that once the water was clear or white, then the *takenoko* was ready to be eaten. Slices were enjoyed in chop suey and other stir-fried dishes and also in *nishime*, a Japanese stew made with root vegetables.

The group then walked to an irrigation ditch, where Mr. Takahashi pointed out the minnows and other small fish swimming in the low-level water. He described how he and other children frequently waded in the water through a tunnel. Mr. Takahashi noted how he used to catch frogs in the ditch and bring them home so they could be fried, "like chicken." Toads were another matter, though, and when they appeared at night with their big eyes gleaming, the toads scared Mrs. Kawado.

Going through the tunnel was an exciting, scary adventure for the young Mr. Takahashi and his childhood friends Mrs. Kawado and Mrs. McClure (Figure 41). He stated,

Small kid time we used to play. You could walk all the way to outside, yeah. Even when the water is like this, not too bad. You know, you can walk through, eh. This is the tunnel that go under the road . . . We used to catch frogs over here, too.

He shared that he would make spooky sounds to scare the girls while they were going into the tunnel and they would respond with screams, prompting Mrs. Kawado to remember how she did not like going through the tunnel.

Besides frogs, Mr. Takahashi also caught crayfish in the irrigation ditches and reservoirs. According to Mr. Takahashi, crayfish looked and tasted a lot like regular shrimp and were delicious when pan fried with shoyu and sugar. He detailed how he caught them, employing pieces of meat like pork dangled in the water using a fishing line.

What we do is catch it . . . and then we'd lure it and then the thing would just grab onto the meat and then roll and pick it up and then we would have a bucket . . . Little meat fire 'em up through a string or a fishing line, yeah. No hook or anything, but the thing would come out and then with the hook, that pincher they'll go for the meat, eh and get stuck on there. And you gotta be real careful you know and they fall off . . . Just shake 'em and they fall off 'cause there's no hook, yeah.

'O'opu also flourished in the irrigation ditches and reservoir and were enjoyed by Mr. Takahashi and other Puhi Camp residents. However, he believes that 'o'opu are no longer



Figure 40. A picture of *takenoko* growing in the project area (CSH 2011)



Figure 41. Mr. Takahashi and Mrs. McClure indicate the irrigation ditch that leads to a tunnel they explored as children (CSH 2011)

present. 'O'opu was pan fried, sometimes flavored with shoyu and sugar. "Lot of bones, but the thing was delicious," he recalled.

Mr. Takahashi pointed out a gate that still exists to control water flow to the irrigation ditch. He noted that Grove Farm still likely owns the water rights. For Mr. Takahashi, the gate remains an integral part of history as it provided water to the ditches and reservoirs and regulated the flow to prevent floods.

At one point during the site tour, the group came upon a papaya tree full of flowers. Kupuna Makanani illustrated how she would use the flowers to make leis (Figure 42). Both Kupuna Makanani and Mr. Takahashi enjoyed green papaya soup with chicken, or chicken tinola, a Filipino dish. Another fond memory the group shared was the regular baking of fresh bread, usually done on Tuesdays along with *malasadas*. Even the yeast was made by hand, with a little piece taken out, used, and replaced each baking.

During baking days at Puhi Camp, the children's the job was to gather wood and keep the fire going. The children were given a special kind of bread baked in a long pan, like a muffin pan, made just for them, according to Kupuna Makanani:

And when we were full, we would go out and play. And then the other kids would come, and they would take care [of the fire]. And they would give the kids some bread and butter. And you know because you can smell the bread coming out.

The group took note of plants that grow in and around the project area, including orchids (Figure 43), koa trees, as well as fruit trees like mango, papaya, and others.

7.2.4 Puhi Camp Memories

When the group hiked toward a second cemetery, referred to by Mr. Takahashi as being near the "Cement Camp," located in the perimeter just outside the project area, Mrs. Kawado reminisced with CSH about her experiences in Puhi Camp. Mrs. Kawado was born in 1945 and grew up in Puhi Camp. Her maiden name was Hirokane. She was the eldest child in a family of four children, two girls and two boys. The children were each born a year apart and the first letter of each of their names corresponded to the order of their birth. Since she was the oldest, her name was Audrey, followed by Boyd, her brother, then Chad another brother, and Daphne, the youngest (now Mrs. McClure).

Mrs. Kawado continued to share her cherished memories of Puhi Camp:

The fact that, even though all of us were from families that didn't have a lot of money, it didn't feel like we were missing out on anything because we had good friends, people take care of you . . . they didn't treat you like you were lacking anything . . . we didn't have beautiful houses; some of us had out houses, we didn't have toilets that flushed. But still . . . it was such a special place for me.

Each day as a young child, Mrs. Kawado walked to Līhu'e School with her friends. During her seventh grade they built a new school, the Elsie H. Wilcox elementary school. Her mom prepared hot cocoa for breakfast for her and her siblings. For lunch, she ate peanut butter sandwiches. At the time, the peanut butter in the jar was very hard to spread, so her



Figure 42. Kupuna Makanani points out papaya flowers she used in lei (CSH 2011)



Figure 43. A non-native orchid growing near the project area identified by CSH as mostly likely *Spathoglottis plicata* (Philippine ground orchid) (CSH 2011)

mother dipped the spoon in a cup of warm water before using it to spoon the peanut butter spread for sandwiches.

After school, she swam in the reservoirs and fished there too. For after school treats, one of her favorites was called "V apple," a tart local fruit eaten with a mixture of shoyu, vinegar, sugar, and pepper. Another treat was slices of dried abalone, bought and eaten like beef jerky, confirming what Mr. Takahashi remembered.

It was Mrs. Kawado's responsibility after school to get the daily newspaper and bread at the store. She recalled the Afong store, which was also a meat market, and another store called Puhi store. The post office was also in the store. Her friends were Filipino, Portuguese, Puerto Rican, and Japanese, and she became familiar with their favorite foods, including the tastes and terms for each one. Mrs. Kawado also played the folk games from her friends' cultures. One of her favorites was a Filipino children's game called "*panio*" or "*alapanio*" where they ran around the cane fields and hid from people designated to find them.

She admitted it was a hard life with no running water for toilets and baths taken in a "*furo*" (Japanese bath tub) where water had to be heated up by hand. Before using the *furo*, they all had to scrub and wash up to be clean, since the *furo* water would be used by everyone. After everyone had their baths, the water would be recycled to water the plants. Her father planted lots of vegetables including lima beans which grew on a wire fence. It was a happy childhood where she played with her siblings and helped out with the chores.

When she was 14, the day of her brother's 13th birthday, their father died from a sudden stroke, an event that in a way marked the end of a happy childhood. Mr. Hirokane supplemented their table with the wild fruits and vegetables that grew around them, in addition to planting their own.

He used to do that, he used to get wild liliko'i, *takenoko*, so we kinda lived off the land in that way . . . and he never came home one day. So I guess my mom called the police. She was reporting him missing and he had a stroke, he had fallen . . . some place where they have *takenoko*.

After her father's death, her mother continued to work as a maid for the Wilcox family. The Wilcox family owned the Kilohana Plantation and a 16,000-sq-ft mansion in the Tudor style close to Puhi Camp. The mansion was built in 1935 by Gaylord Wilcox and his wife, Ethel. Gaylord Wilcox was the descendant of Abner Wilcox who was among the first missionaries in Hawai'i (Kilohana Plantation n.d.). Mr. Gaylord Wilcox was the manager of Grove Farm Plantation at the time the mansion was built.

Each morning, Mrs. Hirokane walked to her work as she did not know how to drive. She raised all four of her children single-handedly, and two of them went to college. Years later, Mrs. Kawado remained in awe of what her mother had done for her and her siblings.

Yeah! And you know, we never went on welfare or food stamps. Well we didn't have food stamps in those days, but social security I think saved us. Yeah, my dad had been working many years so he had. He just didn't earn a lot of money because he worked for the plantation, but it was enough for her, she was the one who practically raised me all the way . . . to go to college. But I said, 'You know, I want to go to college, but you know what are the chances?' . . . And then she

made all arrangements, she looked into college, she looked into getting a loan for me and all that! She was amazing! I think she wanted that for her kids, to be self-sufficient.

Mrs. Kawado first went to Maui to Maunaolu Junior college surrounded by cane fields and which reminded her of the days in Puhi camp. Then she went on to the University of Hawai'i and majored in Sociology. Shortly after she graduated in 1968, she was offered a position with the State of Hawai'i in the Department of Social Services. The year she graduated, Mrs. Kawado married Mr. Alan Kiyoji Kawado, and they had three sons. Her husband passed away recently, before they could celebrate their 43rd anniversary. She recalled with a laugh how he was known to everyone as "Mr. Aloha Airlines." He was fiercely loyal to the airline. If friends ever flew another airline, they knew better than to tell him.

The last site the group visited was located off a dirt trail some 200 m north of the project area. Mr. Takahashi referred to the second graveyard as the "Cement Pond" cemetery. In the 1950s, when he was about 10 or 12 years old, Mr. Takahashi was bicycling with a friend when they came across the cemetery. According to him, the general area where the second cemetery is located is called "Cement Pond" by Puhi Camp residents because there had been a big tank there where all the drinking water came from, and when a new tank was built, all the children swam there.

The Cement Pond cemetery contains at least three graves with headstones (Figure 44). As for the graves, a royal palm tree marks their location on the side of the trail. The tree has been there as a marker ever since Mr. Takahashi was a child.

It has been at least two years since Mr. Takahashi has been able to clean the graves. He showed the group the heavy moss covering the headstones and pointed out the leaves and debris. He posited that the graves do not look like they belonged to people from Puhi Camp, but rather, someone or some people who may have been well-to-do. The headstones are engraved in Japanese and one of them dates from 1918.

Across the road from the Cement Pond cemetery is a field where according to Mr. Takahashi, a fireball once appeared. He narrated the mo'olelo he had heard:

They were plowing the field one day and the tractor operator seen there's a fireball coming out of ground . . . and then the guy just took off [laughs]. And they said there's a kahuna eh, spirit of a kahuna, that's what the Hawaiians claim. So that's an old area too because when I was young, I see lot of broken fragments you know like ceramics, yeah. Dishes or something here so had to have a big camp over here before.

Mr. Takahashi's story of the fireball led Kupuna Makanani to share her own, similar experience, which did not take place in the project area, but by Stable Camp, in Kapahi, where she had been visiting friends. That day, she decided to take a path that led her past an area by a water tank where she saw white smoke:

The smoke was coming out, was coming out, and it seemed the whole place would be burned down. But no . . . meantime I was passing, and I never seen that. Only [that] one time I saw it. And so coming back the next day, there's two ways to go up there, so coming back, I thought to check, because I saw the smoke.



Figure 44. One of three graves in the Cement Pond cemetery (CSH 2011)

There was nothing burned, nothing. It was in the field by a big water tank. The smoke was white, white, white, like a cloud.

The similarity of the environment around Cement Pond and the area around Stable Camp made Kupuna Makanani recall more details about what she had seen:

There was also a water tank . . . I seen the forest and I seen smoke so I said, 'Oooh . . . that's spooky, they gonna make fires and there's the trees,' and so I went to my friend's house and then, I didn't tell them anything and the next time I went up, I told them, 'Ooooh, you know, funny there' smoke, but when I came back the next day, there was nothing burning.' But I say, 'I seen it.' And then he told me, 'Oh we forgot to tell you that that road is "*obake*" [Japanese term for "spirit"].' Yeah. And I said, 'What?' So I never wanted to go that time and I usually go in usually when I get to work.

For Kupuna Makanani, both the smoke she witnessed and the fireball were one and the same; they are "spirits" according to the Hawaiian belief system. Mr. Takahashi agreed with her.

Mr. Takahashi pointed out no one knows how old the area is. He noted that Kaua'i is the oldest of islands:

And the first to be probably inhabited so what was here before the missionaries came, nobody know . . . A lot of the heiau were all run down when the missionaries came, so might have been a heiau up here and nobody knows, you know.

He related that a while back, he had seen some shards of glass and opium bottles as well as pottery bits when he was working in the field. This led to his theory that Chinese people as well as Hawaiians were former inhabitants of the area where the fireball was seen.

After the site visit to Cement Pond cemetery, the group discussed their thoughts about the project. Mr. Takahashi noted would be good for KCC to eventually be a four-year program, in order to attract more students. He saw the need for new buildings, and a new parking lot so the school can grow. He and others like Mrs. Kawado also wanted to preserve the remnants of Puhi Camp for the education of future generations.

Kupuna Makanani was of the same mindset as Mr. Takahashi. She thought the expansion of the community college was good, providing there were some limitations. "Your children and your grandchildren will benefit, but if they have nothing, they are going to move," she stated. She wanted to know what project proponents have in mind in order to provide her recommendations.

Kupuna Makanani knew, however, what she didn't want. She did not want the burials to be moved but she could see that the reservoir and graveyard are in the middle of the project area. Kupuna Makanani appreciated that a CIA was being done.

Later during the day, a smaller group consisting of Kupuna Makanani, Mr. Takahashi, Amber McClure, and CSH visited the offices of Bernie Sakoda, who has been instrumental in organizing past Puhi Camp reunions. Born in 1946, Mrs. Sakoda was raised in Puhi Camp and two generations of her family worked for Grove Farm (see Section 7.6 for Mrs. Sakoda's interview for the Island School project).

Mrs. Sakoda recalled her weekly chore of collecting firewood, as well as certain ingredients needed for the homemade pig stew. Ingredients for the stew included honohono grass, papayas, and avocados.

My family thought I was crazy but I thought it was the greatest job, it was hard work but I didn't mind chopping and cooking it. We would cook it once a week and the 50 gallon slop would last the whole week. Everyday, we could re-heat some of it and put it in a can on the wagon and take it to the piggery.

If the pig was slaughtered, all the parts of the pig were used and nothing was left to waste. Mrs. Sakoda recalled with some pride how her family raised rabbits, ducks, turkeys, and had "a most beautiful garden" in the backyard. "We lived off the land pretty much, we can be very self-sufficient. It was wonderful times, and the community was really a solid community," she related. Even if her parents were having hard times, she did not realize it because her father provided meat from the family "mini-farm" as well as produce from the garden.

Kupuna Makanani added that no one wanted to be on welfare.

You shamed if you were on welfare . . . You worked and everything went on the table. Nobody said this is mine; there was one pot for everybody. If you had a dollar or 50 cents, you were satisfied. You don't ask questions why, you were satisfied.

All of the group members present, including Mr. Takahashi, Kupuna Makanani, and Mrs. Sakoda, emphasized the importance of respect that was instilled in them. Mrs. Sakoda shared

that just a stare from her parents was enough to make her stop her misbehavior. But the lack of respect she sees in children brought up today may be due to the different circumstances in the home:

You can't blame the kids, I think both parents are struggling in this age now, and both parents work. In our days, we had someone at home all the time, watching over us. The discipline was so different in the past . . . We were brought up in the Asian custom of 'you listen to adults and you respect the adults.' If we answered back, we were sent out of the room. It's so amazing how respectful we were to our parents and when we knew we were doing wrong.

The rod was not spared either, the group agreed. Mrs. Sakoda noted that as older children, they received a spanking and they knew when it was coming. Overall, her childhood was a wonderful experience where she learned the value of not just respect but also the meaning of sharing with one another. Puhi Camp residents came from all over. For example, she cited how Japanese residents came from different prefectures in Japan as well as from Okinawa.

Everybody's culture was different. We shared. We had 'Up' and 'Down' camp, and a lot of people in between. In our camp, we had a good mixture of Filipino, Portuguese, Puerto Rican, Chinese . . . We grew up in the community where everyone shared food . . . and it's not only the food, but all of their history. For us, it was playing with '*taiko*' [Japanese percussion instrument] drums and concerts with Okinawans, for the Portuguese, who did all the cooking in the outdoor oven, we baked bread. We ate '*kimchi*' [Korean fermented spicy cabbage].

7.2.5 More Foodways

Food was an important part of the cultural education for Mrs. Sakoda, and she related how *miso* was made by fermenting beans in a huge barrel. She also shared the recipe for an Okinawan dish plantation families enjoyed. It involved boiling down pork fat until it got crispy. Then *miso*, sugar, and ginger were added so that it was like a paste. The crispy pork pieces were mixed into the paste and the whole thing was served over hot rice.

Food was such an indelible part of life in Puhi Camp that during the camp reunion in 2003, the amount of food prepared was enormous. Dishes Mrs. Sakoda credited as being part of the Puhi Camp repertoire included Chicken Hekka, Hulihuli chicken, and Chicken Papaya with *malunggay* (*moringa*) leaves. The group then traded stories of foodways, specifically the different ways to prepare dishes from all the ethnic groups, including the taste of *pansit* (a Filipino noodle dish), *pinakbet* (Filipino vegetable stew with vegetables) and *bagoong* (fermented shrimp paste) or shrimp with pork as flavoring. There was also mochi rice, adobo, *cascaron* (also known as *bitsu-bitsu* balls, a Filipino dessert usually served on a stick made with mochi flour, coconut, and sugar).

Even today, Mrs. Sakoda prepares many of the dishes she ate at Puhi Camp. She related,

I have a *malunggay* tree in my backyard because we love it so. Wild bitter melon and green beans and squash—we love *pinakbet*. We love *adobo* [Filipino dish involving meat cooked with vinegar, soy sauce, and bay leaves, most likely from Mexico].

7.2.6 The Social Box or Box Dance

An important part of Puhi Camp was the hall provided by Grove Farm, a gathering place near Puhi store, where people celebrated holidays, weddings, and other events. According to the group, Filipinos held an occasion called “the Social Box.” At pay day once a month, all the women prepared whatever delicacy or dish they wanted to make, such as *musubi* (rice with seaweed usually filled with something such as spam), which they placed into a box the size of a shoebox. They then took the box lunches to a dance in the hall. Ostensibly, the dance was held for single Filipino men, but everybody participated because it was a fun evening. According to Mrs. Sakoda,

It was a night to go out and socialize, and we didn't have TV at that time. The women would auction off their boxed lunch, that's why it was called a 'Box Dance.' They would auction off their boxed lunch to the highest bidder. The highest bidder gets to dance with them and to eat the lunch . . . It's like matchmaking.

The women could also have someone prepare lunches for them if they were too busy working in the pineapple field or cannery. Mrs. Kawado and Mrs. McClure's mom, Mrs. Hirokane, was well-known for her cooking and her boxed lunches were in demand among busy, working women. When asked what the primary goal of the dance was, Mrs. Sakoda described it as a way for men and women to socialize. The boxed lunches were also a way to make some extra money on the side. Kupuna Makanani noted there was no alcohol served but the dance was still fun with music and an emcee. Social events like these are credited by Mrs. Sakoda for teaching her about other cultural practices:

There was Filipino music, Japanese music from the Japanese and so on . . . That's why we all know how to do the bamboo dance, we all know how to do the hula, we all could play the 'ukulele. That's what the communities all were [doing] on weekends. If you wanted to take 'ukulele, you could go there, if you wanted to sew, you could go there.

Both Mrs. Sakoda and Mr. Takahashi traded memories of Chinese men who sold *manapua* (steamed meat buns), and delicious hot saimin. Eggs and milk were delivered to residents. Other vendors included tofu sellers, including one particular lady from Līhu'e. Mrs. Sakoda described the following:

She had a stick across her back, and the cans, cracker cans would be balanced. The cans had tofu. One would bring one's bowl to buy the tofu. If you wanted bean curd . . . there was also *nishime*.

The holidays were a special time for the children in Puhi Camp, marked by food. Mrs. Sakoda described how at Christmas each child received a gift from Grove Farm:

Every Christmas, we would have a handful of mixed nuts, fruit, an apple, and an orange and some candy. It was so precious for us to get that each Christmas, that little brown bag with just that. If we only could re-create that, it was so valuable to have that apple and orange . . . we were fortunate. The unions were very good to our camps.

7.2.7 Recommendations

The group then discussed the certain style of plantation homes in Puhi Camp. Old Japanese homes, for example, usually had a “china hutch” for food with screens on the doors to keep flies from coming in. The legs of the china hutch sat in containers of water to keep ants from climbing up. Although no more Puhi Camp houses remain standing, Mrs. Sakoda drew attention to the Grove Farm Museum where there are replicas of plantation homes. Preserving the past became an issue for Puhi Camp residents when the 2003 reunion committee pondered what was valuable to remember. Mrs. Sakoda stated,

It never crossed our minds until we did the [Puhi] camp reunion, and then we realized it was really too late because all the homes were destroyed. When they asked to relocate the remains in the cemetery, that's the first we knew that there were going to be development there . . . Those days, we were never aware or made aware of all the history that was going to be lost.

The significance of the camp bulletin board and the role it played in the everyday life of the workers was one of the main things the Puhi Camp reunion committee wanted to preserve. The board contained communication vital to the daily life of the camp, everything from union meetings, holiday events and seasonal announcements. Because there were no computers in those days, the bulletin board was one centralized area that effectively communicated all upcoming events affecting the camp's residents.

According to Mrs. Sakoda, the reunion committee had asked Grove Farm to make a replica of the bulletin board as a memorial to Puhi Camp. It could then be located somewhere on campus where students and visitors could read about its history. Mrs. Sakoda stated,

When we were doing this [2003] reunion, we thought it would be a good idea because we remember our laborers had that bulletin board . . . We want to use that as a re-created one or restore it to use again. It was a bulletin board with an attached roof, with all the announcements pertinent to the camp life . . . We know KCC has a carpentry department, and it would nice for them to re-create that bulletin board, and restore our oven. But keep it on campus, so it would remind people [of Puhi Camp], and it has to look the same as when we were growing up.

As for the Puhi Cemetery, Mrs. Sakoda shared that her little brother could still be buried somewhere in the cemetery. Her first preference is that the graves will remain where they are. The group talked about who will clean the graves in the future. In the end, Mrs. Sakoda, Mr. Takahashi, and Kupuna Makanani agreed that if it is possible, a columbarium containing all the graves should be built on site. Then it would be able to maintain itself. The columbarium has to be in the area so people will know it was Puhi Cemetery.

Mrs. Sakoda shared the following question that she would like answered by project proponents:

What is the intent, their intentions regarding Puhi cemetery? The group is wondering why they have not gotten notification about the project proponents' intentions regarding the cemetery. They would like to be part of the discussion when a decision has been made.

7.3 Previous KCC CIA Interview with Mr. Charlie Pereira

CSH interviewed Mr. Charlie Pereira at the Waipā Foundation site in Hanalei, Kaua'i, on 8 December 2011 for the KCC CIA. Mr. Pereira is from Niumalu Ahupua'a where he spent the majority of his childhood years. He stated that it was during those years that he learned to fish. Mr. Pereira is a renowned fisherman and a master fishing net weaver who was weaving his most recent fishing net during parts of the interview with CSH (Figure 45). As a young boy, Mr. Pereira worked in the sugar and pineapple plantations then at 21 years of age, he was drafted into the U.S. Army. During his time in the military, Mr. Pereira spent 11 years at Scholfield Barracks then worked in Korea, Germany, and Texas. When he retired from the military, Mr. Pereira returned to Kaua'i and worked at Coco Palms for 24 years. He lamented that he missed the fishing. He has two daughters, five grandchildren, and five great-grandchildren. He currently lives in Namaholo with his two daughters. On Thursdays, Mr. Pereira volunteers at the Waipā Foundation in Hanalei, making poi.

Regarding his connection to the KCC project area, Mr. Pereira explained that his uncle, Joe Texeria, lived at Puhi Camp, which was formally located in the project area. Mr. Pereira told of spending a lot of time with his uncle and visiting him at the camp often. During a flooding event, water reached their home in Niumalu so his family spent the night at Puhi with his uncle.

Mr. Pereira recalled that the location of the KCC was formally agricultural land with pineapple, cattle, and later, sugar cane. He explained that it was a hard life living in the plantation camp. He shared his memories of Puhi:



Figure 45. Mr. Pereira weaving a fishing net (CSH 2011)

Where the college is at KCC, that used to be all agriculture and pineapple. They also had cattle grazing there. They only raised cattle and pineapple and then sugar. They got their water from reservoirs. They had ponds. They got them in Puhi. I remember the plantation having the bathrooms outside. They had water running for the bathroom and the plantation gave them kerosene for their cooking and for hot water for baths. Their life was pretty hard. The Filipinos got together once a year around December I think. We'd go too, but it was a Filipino celebration. When I was growing up, they called the celebration the 'Holy Ghost.' The Catholic Church had a carnival and now they call it 'Carnival' but at that time, it was 'Holy Ghost.' They made sweet bread, you know, *malasadas*. As the years went by they made some pretty good stuff.

Mr. Pereira worked for the sugar and pineapple plantation for many years especially during the summer time as a young boy. He explained,

It was sugar and pineapple. I was twelve years old when I worked for the plantation. I worked there in the summer time. That's how we made our money for school. We had to buy our clothes. I worked in the plantation for a dollar and a quarter a day. I had a German boss. The only thing I didn't do in the sugar cane was irrigate, you know, water the cane, but I was in the fertilizing and the harvesting of the field. There was very little machinery when we first started but as the years went by, they had more improved machinery for cutting the cane.

When asked about fishing practices in Niumalu, Mr. Pereira shared the following recollections. He also told of his passion for fishing and making nets and shared with CSH a picture of himself casting his first fishing net at the age of 12 (Figure 46):

There was a lot of fishing in Niumalu. There was a guy, Mr. Coney, who caught the akule with the net. We'd go out to catch the akule in the bay. We'd bring it in and take out the fish and we'd sell it and eat some of it too. We were always playing in the bay. I'd be on the break water picking up 'opihi and spear. I did a little spear fishing with the boys but my interest was the net, once I got into the net. We'd catch mostly small fish—manini [convict tang], squid [he'e], and other good fish [See Appendix B for scientific names].

Fishing is my thing. I make the nets. I sell them to whoever wants to buy them. I learnt from my dad and he learnt from the Hawaiian people. My dad was Portuguese. Grandpa and Uncle were fishermen. Commercial fishermen, and now it's my nephew. He uses the nets with the floaters and the weights and surrounds the akule schools of fish. The nets I make are smaller. Throw net they call it.

They dredged the harbor [Nāwiliwili] to make it deeper. It was too shallow for the big boats. I have a picture of me there with my fishing net. Where I'm standing in the picture, today, there's gas tanks there. This one here, this is the picture [as he shows CSH his picture]. I had a bigger one with my net in my folder, but I don't have it in my wallet. This picture was taken when I was twelve years old with my first net. My mom took this picture.



Figure 46. Mr. Pereira with his first fishing net at age 12 (courtesy of Mr. Pereira)

In addition to net fishing, ‘opihi-picking, and spear-fishing, Mr. Pereira also fished for crab using crab nets.

I used to go crab fishing with the crab net and catch crabs. It’s a round net with the wire ring. We used to catch crabs over there at Niumalu Bay. We used to catch a white crab [possibly kūhonu] and the Samoan crab with the blue pinchers. They call it Samoan crab [See Appendix B for scientific names].

Mr. Pereira also used to paddle from Niumalu on his surfboard to surf in Nāwiliwili Bay. He said, “from Niumalu, I’d go on the surf board. I went all the way around the harbor to where that Marriott Hotel is, just to catch a couple of waves. I went all the way back too on the surfboard and the surfboards were made out of plywood.”

Mr. Pereira reminisced about growing up in Niumalu and portrayed a picture of rural life during that time:

We didn’t have our electricity until probably after the war—1945 or 1946. We didn’t have electricity before that so my mom used kerosene for cooking. Mom was good at making bread. Home-made bread. I used to sell it to the Hawaiians for ten cents and I couldn’t collect ten cents. You could buy a loaf of bread for ten cents and an ice-cream for a nickel. I remember those days. We didn’t have electricity. Same thing with my wife in Anahola. They didn’t get electricity until about 1957 or 1958. Then I lived in Moloaa. Our house is there. My wife got the property through her dad and we didn’t get electricity until 1982 over there. Everything was kerosene. My wife was raised with kerosene lamps the same way

I was raised. You know, you had to push it out! If you went too high . . . what happened? They called it 'da chip nail.' The glass would get all black.

Mr. Pereira volunteers at Waipā Foundation for the organization's "Poi Day" every Thursday. He shared with CSH how he became involved with the organization and described the poi-making activities at Waipā.

My wife started coming here before. After the hurricane we had in '92, she came here to make poi and then took it out to the old people. I was in Europe when she did it by herself. My daughters used to help her sometimes. After that, I started coming here and I kinda look forward to it. It's an outing for me to come out here. She was the one coming out here then she passed away. So then my grandson started coming here. He works for the county and he's off Wednesdays and Thursdays so we come here. When I come here, I come in, bring taro, then we get caught up cleaning the taro and start grinding it.

When asked if there are any resources or practices within the KCC project area that people should be aware of, should there be any development, Mr. Pereira responded, "I wouldn't know." However, Mr. Pereira is supportive of the KCC project as he supports education. He stated, "The more you have [education], the better it is for you." Mr. Pereira's grandson attended Pūnana Leo, the Hawaiian Language Immersion program at the Kaua'i Community College, for five years.

7.4 Previous KCC CIA Interview with Mr. Dennis Chun

CSH met with Mr. Dennis Chun on 6 December 2011 at the KCC where he has been a faculty member in the Department of Hawaiian Studies for 22 years. He, along with several other faculty, was instrumental in establishing the college's Department of Hawaiian Studies. Prior to KCC, Mr. Chun worked in alternative education for Kamehameha Schools. Mr. Chun is an experienced sailor and seaman with almost 40 years of experience in traditional Polynesian navigation. He has been associated with Hōkūle'a, the traditional Hawaiian sailing canoe, since 1974, on which he sailed his first deep-sea voyage to Tahiti in 1985.

Mr. Chun is connected to the KCC project area, not only through his experience and familiarity with the KCC campus, but also as a resident of Nāwiliwili Ahupua'a, where he was raised and currently resides. Although his family is originally from O'ahu, Mr. Chun moved to Kaua'i when he was a young boy. He shared with CSH his memories of growing up in Nāwiliwili, portraying the cultural and environmental landscape of the place at the time.

I've been there [Nāwiliwili] since small-kid time. I grew up in that area, in Kupolo, the name of that subdivision just above Nāwiliwili. If you're driving toward Nāwiliwili from Rice Street and the road starts going down the hill, there's a subdivision on the right hand-side. That's it. It overlooks Nāwiliwili Valley between Kaua'i High School, Wailers and the entrance to the Marriott. My grandparents were from O'ahu but we moved here when I was young, eight to ten or something like that, and we were raised here since then.

Mr. Chun described the valley of Nāwiliwili as being a small town when he was growing up where taro was once cultivated, later replaced by pastures for cattle.

It [Nāwiliwili] was a small town at the time. I remember that valley, it's not on these maps [pointing to maps]. The mill is over here and the valley comes around here and goes toward Kalapaki. Down in that valley where we used to live, there were taro patches. Now it's all pastures and grassland but before, they used to be taro patches. Someone is still planting taro there. There's still some taro patches down here. In Niumalu, there's taro way in the back. I remember when we wanted lū'au [young taro tops, especially as baked in coconut cream and chicken or octopus] leaves or taro, we'd go down there. There's only one family I knew who had taro but they got old and didn't continue it. I think the landowner down there was Kanoa Estates. They sold some parcels but they leased out the land for cattle. The Andrades, from Kalaheo, used to have cattle down there. This was around the sixties to mid-seventies. After that, the place just went to grass.

He recalled the sugar cane industry as a child and a railway that brought sugar from the plantations to a mill in Nāwiliwili. Mr. Chun remembered that by the seventies, trucks replaced the rail system.

Sugar was there when I was a child. In fact, they still had the railway run to the mill and down alongside this valley. They used to bring sugar to the mill. That ended around the seventies. I remember that lasted only for ten years or so and then it stopped. Everything went to trucks after that. Trucks transported sugar from the fields to the mill.

According to Mr. Chun, the land on which the KCC campus is located was also cultivated in sugar cane. He recalled that Puhi Camp, a plantation camp, was also located within the project area. He was doubtful that any archeological, historical, or cultural sites remain within the project area due to the prior cultivation of sugar cane on the property. He stated,

This campus used to sit on sugar cane land. I remember as a kid that this side over here [pointing to map], was a plantation camp. The Puhi Camp. It was here and also here. This was all sugar. As far as archaeological, historic, or cultural sites, I don't know if there'd be anything left because this was all sugar cane land.

Mr. Chun shared his memories of Puhi Camp and explained that the camp was predominantly Filipino. He described life in the plantation camp:

Puhi Camp was all single-family homes. Old style. It was run by Lihue Plantation or it may have been Grove Farm. They provided housing for their plantation workers. I think the workers paid for their housing but it was cheap. That was part of the plantation mentality at the time. Workers were brought in, paid the minimum wage, and housing was provided. At that time, most of the camp was Filipino because that was the latest immigration group that was brought in to work the plantations. They were the majority of this plantation camp. They [Puhi Camp] had their own plantation doctor, medical facilities, and plantation store. So the money stayed within the company. It was like that for awhile. You know where the Macy's is located at the Shopping Center? Back then, Liberty House was there. It started off as a plantation store for American Factor's Corporation which was one of the Big Five Corporations. They had their own plantation stores

to supply their own plantation workers so that the money would come back into the corporation. Originally, it was called Heckfield and Sons which is a German family but then during the war, World War I, they didn't want to have any affiliation with something German so they changed the name to Liberty House. Something American.

Mr. Chun explained how water flowed down from Kilohana mountain and fed the plantations. He described an abundance of water that collected in reservoirs. However, he suggested that developments such as roads have changed how water once flowed. He explained,

One of these sites here was a reservoir. The water for that reservoir came from a spring up here . . . down from Kilohana. There's another reservoir here, and another here and here. So the water fed these reservoirs then the water went out to the sugar cane fields in this area. Now, the water comes down still. This one is dry, right outside of our building [Hawaiian Studies Building]. When it rains, the water runs off and overflows. When there's heavy rain, the water drains and kind of fills up the road that comes out in front of here. This one [reservoir] still runs and goes to this stream that comes down here some place [pointing to map]. They're putting in culverts and all sorts of thing in the road construction in front of the campus so I have no idea where the water all goes. Before, the water used to just go across the road and go down here [pointing to map]. This was all Puhi Camp, plantation camp over here.

Mr. Chun explained that freshwater flows down into Nāwiliwili Bay through rivers and streams such as the Hule'ia River. He had observed changes in the water quality of Nāwiliwili Bay over time and attributed muddy water in the bay not only to heavy rains flooding the Hule'ia River but to activity upstream at the sugar mill, as well as the development of the Marriott Hotel. He explained,

When there's heavy rains in the Hule'ia River, the whole bay gets muddy. That river flushes. Another stream comes up from the mill up this way and brings water down to Kalapakī side. When I think back, Nāwiliwili Bay wasn't always muddy from rain because it didn't depend on the rain, at least on the Kalapakī side. It depended on what the mill was doing. It didn't depend on the weather. If it rained hard, yeah, then it would get muddy from the Hule'ia River but on this side [Kalapakī], it was more dependent on the mill. I think what happened is that the sugar mill up here used that stream to wash their cane so the stream would get silty and rubbish from the mill would come down into the bay. The water quality used to be junk.

Today, there's another runoff stream that comes up here [pointing to map]. It used to come down on the backside of the Marriott. When the Marriott Hotel was built, they diverted the stream and made underground culverts for the water. Remember those really heavy rains when it rained everyday for a long time? Four years ago? When the dam broke, these culverts they had underground to divert the stream collapsed, and made major damage to the hotel parking area and entrance. It was major. Because of that, whenever it rains, silt comes down through this and here too and joins and makes this real muddy.

Mr. Chun believes fresh water has shaped the ecology of Nāwiliwili Bay in that corals do not grow where there is fresh water. He believes the sandy bottoms of the bay and the location of the coral reef further out in the bay is due to the decreased salinity of the water from fresh water.

There's a rock here in the middle of the beach where water comes along here and out. That's why it's all sandy in the middle of the bay because coral is not going to grow where there's fresh water. That's why the reef is further out. In between this area, it's all sandy on the bottom because fresh water comes in here and here [pointing to map].

Mr. Chun described Nāwiliwili Bay during his childhood and shared surfing stories from the bay. He also told of mo'olelo associated with sharks and shark gods in the bay.

The jetty wasn't like the harbor where it is today. We didn't have the breakwater outside. When they dredged this harbor, they made this jetty. Here's inside lighthouse and outside lighthouse there. There's a rock over here I heard a story about. I don't know the name but they say that one of the shark gods came to this place. When we were kids, we used to surf over here and I'd think, 'I don't know if I wanna go surf over there. Sharks come around.' See these lighthouse here? There's a break over here. They say that on this side, there's another cave where the sharks give birth. So everytime we'd surf over here, we'd always look around. One time, we're out here surfing as kids, maybe fourteen, fifteen and we looked around behind us and we saw this fin swimming behind us coming around this way. It's all cliff here but there's a little indentation that's kind of low over here so we paddled to it. We climbed up this little indentation and we looked behind us and there's this ten-foot shark behind us. That's why I hardly go surfing there nowadays. They say, and it still holds today with the kids, some of them say, sharks give birth over here. A number of years ago, we're surfing in this area along the rock where the reef is when these guys shout, 'shark coming in,' so we're all paddling and jump on the wall along here. The shark came. It was a hammerhead shark. The water was only chest-deep but it gave birth so there was a lot of thrashing and blood in the water. They kind of swam around here and went out. That doesn't happen often but that's one of the stories.

Mr. Chun recited previous survey research that his colleague, Mr. Pila Kikuchi, had conducted in the area which indicated the place name "Puhi" was the name of a cave where a shark god lived. He believed the cave was located in Ha'ikū, near the Menehune Fishpond. He explained,

The place name, 'Puhi,' means 'to blow.' A shark god lived in a cave in the area. The name of the cave was Puhi, therefore, the name of the area. But where? See this? This area is in the ahupua'a of Ha'ikū. So it would have to be down in this area, near the fishpond [Menehune].

Regarding fishing practices in the bay, Mr. Chun recalled seeing a hukilau event at the bay as a child. He shared the story:

The first time I saw a hukilau was over there. It was in front of the Old Kaua'i Surf. It was old style Hawai'i kind of a hotel, part of the Big Five hotel chain. It was pretty low key, like Coco Palms, and open. They'd just started building it

when I saw the hukilau. They had it here [pointing to map] and I thought it was so cool. They were just pulling in ropes with leaves tied to it and all these fish were coming in. It was pretty cool. I saw that once and I never saw that again. It was one family. I don't even know whose family it was. Maybe it was Auntie Sarah's family. Kailikea was the family. She passed away already but they were one of the old time Hawaiian families that lived in this area. In fact, they still have one house along here and I think the son still lives there. There was also uncle Gable 'Ii. The Lovells were another one. Those are the families I remember.

Mr. Chun talked more about fishing practices in the bay and stated that not too much fishing occurs in the bay today. Instead, people go to Wailua to fish. However, he maintained that people still gather limu and 'opihi inside the bay and go crabbing along the Hulē'ia River. He stated,

There's not too much fishing in the bay. There is some but not that much. For us, we'd kind of go this side, to Wailua for fishing. We'd also walk down to Ninini Point, by the outside lighthouse. We'd use the roads and go down, park our cars, and go down along the coastline. Before, I don't know if there still is, but there used to be a dirt road that goes there. You could also go by the airport and go along the coastline to the outside lighthouse. As far as limu and 'opihi, we could get them right inside the bay. It was not a problem. People would go crabbing right along here, the Hule'ia. We used to do that. People still do that. 'Opihi, you can still get all along there in the bay, along the seawall. But, it's so easy, people pick them small because it's convenient. If people just want a handful for eating tonight, they'd go there.

Mr. Chun also mentioned Menehune Fishpond as the largest fishpond in Kaua'i and the main one in the vicinity of the project area.

Menehune Fishpond is probably the largest. There's one in Hanalei that I know of, right behind the Wilcox family house, Hanalei Bay. But, Menehune Fishpond is the main one in this area.

When asked about his knowledge of burials and other features of cultural significance within the project area, Mr. Chun indicated he knew of a cemetery located near the campus. He identified the cemetery on the map. He reiterated that the sugar cane plantations would have displaced features of cultural significance within the project area and also pointed out that the population centers would have been concentrated along the coast or along the Hulē'ia River. Therefore, the likelihood of finding heiau and other cultural features would be higher along the coast than within the project area. He knew of no heiau in the ahupua'a of the project area.

There's a cemetery up here. It's on the map. It's a separate parcel. That's the only burials that I know of, at least, in recorded times but I don't know as far as pre-history. I haven't heard of anything here. I think because this was all sugar cane fields, everything got reburied, hidden, displaced, or destroyed by the time we came about. If there's anything remaining, it's probably destroyed. I'm sure there were stories. If we go back far enough, we'll find written accounts of things but to find that now is difficult. I know what people would look for in digging around this area. They'd be looking for artifacts like old bottles and things like that. I see

that happening more than for Hawaiian artifacts. In those days, I don't think the population centers would have been up here. If anything, it would down along this area along the coast or along Hulē'ia. I don't know of any heiau around here. Heiau I know that would've been around the coastline. Not any that I know of in any of these ahupua'a.

7.5 Previous KCC CIA Interview with Mr. Robert White

CSH met with Mr. Robert (Bob) White on 7 December 2011 at his residence in Niumalu. Mr. White and his family moved to Kaua'i in 1970 and spent most of the summers surfing and camping at the beach in Kalapakī since he was ten years old. He has lived in Wailua and 'Ōma'o, but moved to his current residence approximately 15 years ago. His home is located directly adjacent to the Hulē'ia River and minutes away from the Menehune Fishpond. Mr. White, therefore, lives within the study area and near the KCC project area. He and his wife have two children who grew up in Niumalu and attended Kaua'i High School. They have a strong sense of place and love the island and its people. Mr. White expressed the following sentiments about Kaua'i, "We have a really strong sense of feeling for this island. So, we're very open to this project because we love Kaua'i. We love the area, and we love the people." He shared with CSH his mana'o regarding the KCC project.

Mr. White acknowledged the importance of the KCC project to the well-being of the island of Kaua'i and supports the plans to develop the school. He stated, "I think it makes perfect sense to develop the school. It's in a great location." Being familiar with the area, Mr. White pointed out that should the college expand, mitigation plans to ease potential traffic problems should be addressed. He explained that motor vehicles turning into the Chevron station near the main intersection on Puhi Street, directly in front of the campus, currently cause traffic congestion and he foresees the problem exacerbated if the campus expands. He shared his views on the traffic problem:

Numerous times, I have seen dangerous driving behavior and unnecessary traffic congestion at the intersection of Puhi Road and Kaunani Highway. The issue is that cars are turning left on Puhi Road into the Chevron station but there are cars generally stopped at the traffic light along Puhi Road. This creates an unnecessary traffic jam as the traffic along Puhi Road blocks the cars attempting to turn left into the station. In terms of easing traffic, it might make sense for Kaua'i's Public Works to mark the road 'Do not block' so people can make their left turns into the Chevron station without holding up traffic. It would also make ingress and egress into the Chevron station safer for motorists.

Mr. White recommended the following:

As they expand the school, it would make sense to have that intersection flow better. Even though the State is improving the highway there, there is still going to be a traffic issue at this corner unless the County can install the necessary signage or asphalt marking.

Mr. White also pointed out that should the college expand, he was concerned about the potential effects of any herbicide usage for weed control on the surrounding areas. Mr. White

acknowledged that the study area is a watershed which includes the Hulē'ia National Wildlife Refuge near and downstream from the project area. He stated,

One thing that is a valuable point to mention is the County or the State's use of herbicide or weed control. I just wonder how many of those chemicals end up in our watershed and how much that is affecting our aquatic reserves and resources. I would say, they should be sensitive about the fact that this is a watershed and that it is feeding down to the National Wildlife Refuge. This is actually a wildlife refuge, just around the corner. This whole area, where the Menehune Fishpond is, is in a wildlife refuge now. So, all the more reason to consider careful usage of spray or pesticides.

He was concerned about potential contamination of the watershed, particularly that of the Hulē'ia National Wildlife Refuge near the project area, from any use of herbicides and methods of weed control. He recommended careful usage of these substances by the State of Hawai'i and/or the County of Kaua'i.

7.6 Mrs. Bernie Sakoda

CSH interviewed Mrs. Bernie Sakoda on 21 November 2013, regarding the Island School Land Use District Boundary Amendment. Mrs. Sakoda also graciously provided her approval for CSH to use her previous interview for the KCC CIA (see Section 7.2). Mrs. Sakoda was born just a short distance from the project area and was raised in Puhi Camp and two generations of her family worked for Grove Farm. Her father, Robert Seiyei Tokuda, was a truck driver for Grove Farm and her brothers worked in the pineapple fields during summer vacations.

Mrs. Sakoda noted that she and Mr. Robert Agena, another former Puhi Camp resident, discussed the Island School proposed project and also reviewed the previous interviews made during the site interview at Puhi Camp for the KCC CIA. They reminisced about the old days at Puhi Camp, which was adjacent to the current project area of Island School. Regarding the Island School project, Mrs. Sakoda shared, "We believe what Island school is planning will be a nice addition to their campus. Our community is very fortunate to have their project at the chosen site."

Pointing out that the proposed project area is away from the Puhi Camp cemetery which was and is the main area of concern for her, Mrs. Sakoda expressed her satisfaction that the planned project would not impact the cemetery.

When asked if she could recall any cultural practices and resources in and around the Island School project area, Mrs. Sakoda related that all cultural practices like music, dancing, ethnic dishes, games, and other activities were shared among the many diverse cultures living in the camp.

As a child, Mrs. Sakoda lived just down the highway from the project area and she hiked all around with her friends and spent many days exploring.

It was a special place growing up for all of us. As children, being able to go into the forest area, and into the field at the time where there was sugar cane and pineapple. We also made homemade toys from the resources around the area. We

would use the tassels from the sugar cane to use as spears. We would make slingshots from guava trees, and we picked 'rat berries' (berries that had a grey furry skin) that were sweet and delicious.

The grey berries could be picked off bushes. They grew all over the project area during her years in Puhi Camp, between 1946 when she was born to 1964, when she left for college. These days, the berries can be found just past the Humane Society, but she is not sure if it is still there inside the project area.

Describing how the project area looked during her childhood, Mrs. Sakoda stated, "The way it looked like was different, part forest, part cane field . . . We used the cane field to get to the bushes and everything we needed in the area."

Besides the ginger plants and berries, Mrs. Sakoda also mentioned the eucalyptus trees in the project area. She did not recall when the area changed for Island School. To this day, she still has fond memories of the project area, characterizing it as "an old playground."

Section 8 Cultural Landscape

Discussions of specific aspects of traditional Hawaiian culture as they may relate to the project area are presented below. This section integrates information from Sections 3–7 in order to examine cultural resources and practices identified within or in proximity to the project area in the broader context of the encompassing landscape of Nāwiliwili, Niumalu, and Ha'ikū. Excerpts from consultations are incorporated throughout this section where applicable.

8.1 Hawaiian Habitation and Agriculture

As discussed in Section 3.7, the ahupua'a of Nāwiliwili and Niumalu were permanently inhabited and intensively used in pre-Contact and early historic times as far back as possibly AD 1100 (Walker et al. 1991). Historically, settlement of the study area was predominantly along the coastal areas as evidenced by the concentration of permanent house sites, temporary shelters, heiau, fishponds, and intensive cultivation in these areas. In 1853, Coulter recorded the population around Nāwiliwili Bay to be approximately 1,700 and indicated on his map that settlement was predominantly along the coast, most likely reflecting a high dependence on marine resources for subsistence. An 1886 photograph of Nāwiliwili, shown in Figure 47, suggests that some 40 years later, the study area was still highly engaged in taro cultivation. However, observations by Handy (1940) of Nāwiliwili in 1935 suggest major changes to the landscape of the study area occurred between 1886 and 1935 during which time lo'i cultivation significantly decreased and was replaced by pastureland and sugar cane plantation-related activities.

This drastic change in the landscape was likely attributed to the prevalence of the sugar cane industry, particularly in the early twentieth century. Mr. Chun, who grew up in Nāwiliwili in the 1960s, described the valley of Nāwiliwili during his childhood as a small town where taro was once cultivated, later replaced by pastures for cattle. He related that even during the 1960s, taro was still being cultivated in the area, though probably to a lesser extent than in 1935. Today, taro patches are almost non-existent in the study area with only a few families still cultivating taro.

Consultations with residents of the study area and of the former Puhi Camp indicate the landscape of the project area was formerly under sugar cane cultivation, though Mr. Pereira also made references to the farming of pineapple and of cattle.

8.2 Wahi Pana and Mo'olelo

Wahi pana and mo'olelo provide a unique insight into the cultural and natural landscape of the past. Wahi pana and mo'olelo associated with the study area are plentiful suggesting early settlement of the area by a viable Native Hawaiian population. In the case of the project area, the wahi pana of "Puhi," the name of the area in which the project area is located, is associated with a shark god. Mr. Chun explained:

The place name, 'Puhi,' means 'to blow.' A shark god lived in a cave in the area. The name of the cave was Puhi, therefore, the name of the area. But where? See this? [Pointing to map] This area is in the ahupua'a of Ha'ikū. So it would have to be down in this area, near the fishpond [Menehune].



Figure 47. Taro growing along the Nāwiliwili Stream to half a mile up above the mill (Bishop Museum 1886)

Thus, Puhi was the cave of a shark god, which is thought to be possibly located within the ahupua‘a of Ha‘ikū, near the Menehune Fishpond. Though Puhi is located several miles inland from the coast, the association with sharks reflects a culture deeply connected with the ocean and emphasizes the mauka–makai orientation of the land that is central to Native Hawaiian culture. Mr. Chun also shared other mo‘olelo associated with sharks and shark gods residing in and around Nāwiliwili Bay.

8.3 Burials

Archaeological studies discussed in Section 5 and consultations presented in Section 6 and 7 indicate two graveyards, the Puhi Camp Cemetery and Cement Pond, though outside the project area, are located near the Island School project area. Thus, known burials in the vicinity of the project area are historically relatively recent. Kupuna Makanani recalled in a previous interview that it was possible to bury family members around one’s residence when she was growing up; therefore, she expressed that discovering inadvertent burials is possible. Acknowledging the agricultural history of the project area, Mr. Chun explained in a previous interview that “the sugar cane plantations would have displaced features of cultural significance within the project area.”

8.4 Heiau

Literature research indicates no known heiau currently exists within the study area though Kuhiau Heiau, reported to be the largest and most famed heiau on Kaua‘i, once existed along the coast of Nāwiliwili Ahupua‘a (Damon 1931). This heiau is described as covering about four acres and associated with Paukini Rock, its sister heiau that marks the boundary between Nāwiliwili and Kalapakī Ahupua‘a. Previous consultation revealed that no participant had any knowledge of heiau in the study area, probably because these structures have been physically obliterated.

However, in previous interviews, residents of the study area shared some knowledge of mo‘olelo associated with heiau that existed in the project area. Mr. Chun described a rock near the lighthouses along Kalapakī linked to stories of a shark god. The rock he described may be Paukini rock, the sister heiau of Kuhiau Heiau described above.

8.5 Marine and Freshwater Resources

Early accounts describe the study area as a rich land with abundant fresh water and marine resources. Niumalu Ahupua‘a in the mid-twentieth century was described as having some of the best fishing grounds on the island of Kaua‘i. Inhabitants of the study area fished the reefs, farmed fishponds, and utilized the many freshwater streams and rivers flowing seaward from Kilohana not only for lo‘i cultivation, but for fishing. During the sugar cane plantation era, which began in the 1830s in Kaua‘i, freshwater was utilized to support the largest industry driving the economy of the project area at the time. Nearby the project area, Grove Farm Plantation diverted freshwater streams to build reservoirs and ditches supporting the life and daily activities of the plantation. The literature and previous consultations with residents of the study area suggest that since the mid-

nineteenth century, demands of population increase and its associated development have negatively affected the health and quality of these water systems.

8.5.1 Streams

Section 3.61 discusses streams within the study area in more detail and affirms that modern development has modified the flow of these water systems. Previous consultations with residents of the study area revealed the types of changes they have observed over their lifetimes. Mr. Chun explained that fresh water flows down into Nāwiliwili Bay through rivers and streams such as the Hule'ia River. He has observed changes in the water quality of Nāwiliwili Bay over time and attributes muddy water in the bay not only to heavy rains flooding the Hule'ia River but to activity upstream at the sugar mill, as well as the development of the Marriott Hotel.

Mr. Chun's observations highlight the mauka-makai connection of the land in that the impacts of land-based activities are not only localized but may have more far-reaching impacts on distant locations and ecosystems. Streams and rivers act as media connecting points along the land with the ocean. Mr. White acknowledged the study area is a watershed which includes the Hulē'ia National Wildlife Refuge located near to and downstream from the project area. He is concerned about potential contamination of the watershed, particularly of the Hulē'ia National Wildlife Refuge, with herbicides and methods of weed control used by local businesses.

8.5.2 Fishing

As discussed earlier, the study area was known for being one of the best fishing places in Kaua'i. Handy (1940:67) relates that, "Niumalu is a tiny ahupua'a, a mere wedge between Nāwiliwili and Haiku, but it was, and is, one of the most important fishing localities on Kauai." Thus, by the mid-twentieth century, fishing within the study area was widely practiced and there was an abundance of fish. However, previous consultation indicated marine resources have declined over time and though people continue to gather limu, pick 'opihi in the bay, and crab, many prefer to fish in Wailua, north of the study area. Mr. White no longer eats fish from Niumalu Bay due to pollution.

Mr. Chun, Mr. White, and Mr. Pereira, long-time residents of Niumalu and Nāwiliwili who have spent many years fishing in the area, shared their knowledge and experience of fishing. They indicated that fishing mainly occurred along the coastal areas of the study area, particularly at Nāwiliwili Bay. They recalled fishing for akule with large nets, picking 'opihi on the break water along the bay, spearfishing, netting, and crabbing for a white crab (possibly kūhonu) and Samoan crabs along the Hulē'ia River and in Niumalu Bay. Mr. Pereira also recalled catching he'e and fish like manini. Mr. Chun remembered a hukilau event at Nāwiliwili Bay during his childhood but has never seen another in his lifetime.

Mr. Chun believes freshwater has shaped the ecology of Nāwiliwili Bay in that corals do not grow where there is freshwater. He believes the sandy bottoms of the bay and the location of the coral reef further out in the bay is due to the decreased salinity of the water from freshwater.

Closer to the project area, Puhi Camp residents fished for 'o'opu and crayfish, and caught frogs in nearby ditches and reservoirs to supplement their diet (See Appendix B for scientific

names). It is not clear whether these reservoirs are still utilized by residents of the study area for fishing.

8.5.3 Loko I‘a

According to LCA records, fishponds were abundant in the study area with six in Nāwiliwili, and seven in Niumalu. Menehune Fishpond, the largest of all fishponds in Kaua‘i, still exists, as shown in Figure 48. Menehune Fishpond has experienced many changes as documented in Section 3.6.2.1. Comparisons of recent imagery of the fishpond in Figure 48 to those from a century ago (Figure 8 and Figure 9), show that mangroves have encroached upon the fishpond, decreasing its size. Today, the fishpond is a historic property (SIHP # 50-30-11-501) that is a major tourist attraction in Kaua‘i.

8.5.4 He‘enalu

Previous consultations for this project indicate surfing was and continues to be a Native Hawaiian cultural practice within the coastal areas of the study area. Mr. Chun, Mr. White, and Mr. Pereira all shared surfing stories from the bay. Mr. Pereira recalled using surfboards made of plywood. Today, surfing is a significant recreational activity, not only for residents of the study area but also for visitors.



Figure 48. Menehune (‘Alekoko) Fishpond today (Boynton n.d.)

Section 9 Summary and Recommendations

CSH undertook this CIA at the request of Wilson Okamoto Corporation. The cultural survey broadly included the entire study area, and more specifically the approximately 38.448-acre project area.

9.1 Results of Background Research

Background research for the proposed project indicates the project area, which lies approximately 2 miles southwest of Līhu‘e Town, is part of a traditional region encompassing the ahupua‘a of Nāwiliwili and Niumalu. Early accounts describe the region as an open, grass-covered land dotted with trees and streams that flowed down from lush mountains on the way to the sea, with soils that bore a variety of crops like sugar cane, taro, sweet potatoes, beans, and groves of kukui, (candlenut), hau (beach hibiscus), koa, hala (pandanus), and wiliwili. The abundance of water and water systems, presence of famed fishponds along the coast, along with the concentration of permanent house sites, temporary shelters, and heiau suggests early settlement along coastal areas, with a radiocarbon date of AD 1170 to 1400 near the mouth of Hanamā‘ulu Stream, north of Nāwiliwili.

In the mid-nineteenth century, the project area became associated with the establishment of the commercial sugar cane agriculture which required foreign indentured labor imported from Japan, China, and the Philippines. The project area became part of the Grove Farm Plantation before the farm stopped its sugar business in 1974. Adjacent to the project area lie remnants of the Old Puhi Camp, built around 1920 along the present Kaumuali‘i Highway. It housed plantation workers of Grove Farm and contained a movie hall, three stores, a Chinese laundry, a slaughterhouse, and an area for social events. Most of the Puhi Camp housing was removed in the 1970s prior to construction of the Kaua‘i Community College (KCC) and the last homes of the camp were dismantled in the 1980s.

The study area is also linked to many mo‘olelo (stories, oral histories) and wahi pana (storied places) that suggest early settlement of the area by a viable Native Hawaiian population. These include mo‘olelo about Kuhiau Heiau, the largest heiau in Kaua‘i, Ninini and Ahukini Heiau in Kalapakī, the Menhune, wiliwili trees, and the many well-known chiefs, heros, and gods such as the chief Papalinaloa, the three sons of La‘a Maikahiki, the hero Lohiau, the contest of Kemamo the sling-thrower and Kapūnohu, the ravishing of Pele by Kamapua‘a, demi-god Pōhaku-o-Kaua‘i (Hoary Head), as well as a Kaua‘i chief sent by Ka‘umuali‘i to placate Kamehameha I on O‘ahu. Mo‘olelo with associated bodies of water near the project area are also plentiful which include Alekoko, the largest fishpond in Kaua‘i (also known as ‘Alekoko, Alakoko, Pēpē‘awa), Hulēia (Hulā‘ia) Stream, Kilohana, and Nāwiliwili Bay. Many wahi pana of settled areas, such as Puhi, Līhu‘e, and various pu‘u (hills, ridges) are also associated with the project area.

Other important findings from background research are presented and described in more detail:

1. The traditional moku or districts of Kaua‘i were replaced in the mid-to-late nineteenth century. Līhu‘e became the modern district that includes the ahupua‘a of the proposed

project, previously under the Puna District. “Līhu‘e,” which literally translates as “cold chill,” was not consistently used until the establishment of commercial sugar cane agriculture in the mid-nineteenth century (Creed et al. 1999). Between the 1830s and the Māhele, the names Nāwiliwili and Līhu‘e were used somewhat interchangeably to refer to a settlement along Nāwiliwili Bay.

2. No known heiau currently exists within the study area although Kuhiau Heiau, reported to be the largest and most famed heiau on Kaua‘i, existed along the coast of Nāwiliwili Ahupua‘a (Damon 1931). Listed by Bennett (1931) as Site 99, this heiau is reported to have been about 4 acres and was associated with Paukini Rock, its sister heiau that marks the boundary between Nāwiliwili and Kalapakī Ahupua‘a.
3. After the Māhele, Victoria Kamāmalu was awarded over 2,000 acres of Nāwiliwili Ahupua‘a, along with much of Niumalu. Land Commission Awards (LCAs) describe many lo‘i (irrigated field, especially for taro) and kula (plain, field, open country, pasture) lands within the study area particularly as being in the same ‘āpana (piece, slice, portion), a pattern common to the Puna District of Kaua‘i, but uncommon elsewhere in Hawai‘i. Maka‘āinana (commoner) in the Puna District referred to lands in valley bottoms as kula.
4. Many loko i‘a (fishponds) were prevalent in the study area. LCAs document six in Nāwiliwili and seven in Niumalu. ‘Aleko Fishpond, also known as Menehune Fishpond, or Niumalu Fishpond, is the largest fishpond on Kaua‘i and still exists in the study area. It has been designated SIHP # 50-30-11-501.
5. The project area is near the Grove Farm Plantation—so named after an old stand of kukui trees. The plantation was established in 1850 and taken over by Mr. George Wilcox in 1863. He bought the farm in 1870 for \$12,000 and it flourished under his leadership. In the mid-1960s, Grove Farm donated 200 acres of former sugar land to the State of Hawai‘i for KCC. Grove Farm ended its sugar business in 1974 (Wilcox 1998:76).
6. The Old Puhi Camp, which housed plantation workers of Grove Farm, is next to the project area and consisted of about 600 homes for about 1,200 workers and their families. At the forefront of housing reforms, Puhi Camp dwellings became the standard for the plantation industry in the 1920s (Riznik 1999).
7. One historic property was identified during earlier LRFI work (Groza and Hammatt 2013) for the project area, SIHP # -2179, Features A through D (Feature A, a reservoir; Feature B, an earthen ditch; Feature C, an earthen ditch with running water; Feature D, an earthen ditch). This historic agricultural infrastructure is part of a large historic agricultural district once extant throughout much of Nāwiliwili. Portions of this district are still farmed today.

9.2 Results of Community Consultation

CSH attempted to contact 28 community members, government agencies, community organizations, and individuals. Community consultations began in October 2013 and continued until January 2014. Of the three respondents, one kama‘āina (Native-born) participated in a formal interview. Consultation indicates the following:

The project area is a much-loved place characterized as “an old playground” and “special place” by community contact Mrs. Bernie Sakoda. According to study participant Mr. David Pratt, the project area was part of a sugar cane field operated by the Lihue Plantation Company in the 1970s and 1980s. Mrs. Sakoda recalled that the project area was “part forest, part cane field” and she described using the tassels from the sugar cane as spears for childhood games. Mrs. Sakoda related that she and her friends used the cane field on their way to obtain what they needed in the area, gathering sweet “rat berries” that grew nearby and making slingshots from guava trees.

Previous interviews for the KCC project adjacent to the present project area for Island School indicate the study area and environs, in particular the lo‘i, kula or lands in valley bottoms in this particular context, rivers, streams and Nāwiliwili Bay, have a long history of use by Kānaka Maoli (Native Hawaiians) and other kama‘āina groups for a variety of past and present cultural activities and gathering practices. Mr. Pereira, and Mr. Chun discussed in previous interviews fishing, gathering ‘opihi (limpets) and limu (seaweed, algae) in Nāwiliwili Bay, and crabbing along Hulē‘ia River which still continue today among residents of the area. They discussed spear and throw-net fishing which for Mr. Pereira consisted in part of catching akule (big-eye scad), manini (convict tang), and squid using his own throw net which he created and makes for sale to others. Several previous interviewees shared he‘enalu (surfing) practices and associated mo‘olelo in the past and in the present. At least two participants in previous interviews noted the abundance of freshwater resources and the watershed near the project area and highlighted the ecological relationship of natural and cultural resources within or near the project area.

Mo‘olelo from earlier interviews discussed the practice of hukilau (fish with the seine), the origin of the name “Puhi” which is connected to the cave of a shark god in Ha‘ikū, as well as the presence of spirits in the project area in the form of fireballs. The gathering of plants such as bamboo shoots, papaya, mangoes, passionfruit, guava, and pepeiao (cloud ear fungus) in the vicinity of the project area along with catching crayfish, ‘o‘opu, and frogs in the irrigation ditches and reservoirs were common practices; two previous participants talked about hunting pheasants and wild boars. Previous interviews also discussed burials and noted the existence of a historic cemetery surrounded by the project area, and another cemetery nearby. Previous and current interviewees stressed how natural resources were shared with one another, and utilized in cultural practices.

Other important findings from community consultations are presented in more detail:

1. The project area was planted with sugar cane by the 1900s according to CIA participant Mr. Pratt.
2. Lihue Plantation operated the cane field in the 1970s and the 1980s. Sugar cane operations had ceased by the 1990s, when Island School acquired acreage from the former Lihue Plantation Company.
3. The project area contains or is near plants such as ginger, eucalyptus, guava, sugar cane, and grey berries that were sweet to eat.
4. The project area is on agricultural land and is part of the historical plantation era. Plantations provided a livelihood for many residents of Kaua‘i like Mrs. Bernie Sakoda and Mr. Pratt. Previous interviewee Mr. Pereira worked in the sugar and

- pineapple plantations during the summertime as a young boy, which paid for his schooling, while Kupuna Makanani also made a living processing pineapple.
5. The project area is adjacent to the former Puhi Camp, a former plantation camp for the workers of Grove Farm Plantation and their families. Since Puhi Camp is a significant part of the project area's history, Puhi Camp is described in more detail:
 - a. Cultural practices like the playing of music, dancing, preparing of ethnic dishes, the practice of games and other activities were shared among the many diverse cultures living in Puhi Camp according to Mrs. Sakoda.
 - b. Previous interviews indicate Puhi was a self-sufficient plantation camp with its own stores, doctors, and medical facilities. Families shopped for groceries in plantation stores, and bought items using credit, to be paid for on payday. Plantation workers lived at Puhi for cheap rent, received kerosene for cooking, and hot water for bathing. Land was also given to anyone who wished to grow vegetables and crops were shared among families.
 - c. While various accounts portray plantation life as harsh and unfulfilling, Mr. Takahashi related in a previous interview that the Wilcox family treated their workers very well and life was enjoyable at Puhi. Workers were provided the opportunity to own their own homes. Those raised in the camp fondly reminisce of a simple life and special place—a close-knit community where everybody recognized and took care of each other despite their differences.
 - d. The culture of Puhi Camp was diverse. According to Kupuna Makanani who was interviewed for the KCC CIA, the homes in Puhi were arranged by race though “everybody lived as one people.” Participants who were raised in the camp expressed their appreciation for their multi-cultural upbringing.
 - e. Other cultural activities at Puhi Camp included the “Social Box” which was a dance held by the Filipinos once a month. Mr. Pereira also described an annual Filipino carnival called the “Holy Ghost” that occurred every December. On Tuesdays, fresh bread and *malasadas* (Portuguese pastry) were baked and children collected firewood to keep the fire alive for baking.
 - f. The transition to unionization of workers in 1946 brought many changes to Puhi Camp. Kupuna Makanani explained in a previous interview that before the union, though wages were low, housing and water were free and Grove Farm provided equipment and toys for the children. Several strikes ensued but the strikes were peaceful, unlike the massacre at Hanapēpē in 1924. During the strikes, a soup kitchen run by the union provided food for workers on strike and their families.
 6. Previous consultation indicated the existence of two graveyards, known to Puhi residents as “Old Puhi Cemetery” (SIHP # -B0006) and “Cement Pond,” located outside but near the project area. The cemetery is divided into two sections for Japanese and Filipino families despite the multi-cultural makeup of Puhi. Other ethnicities chose to be buried elsewhere and many graves were removed by their families. Cement Pond exists approximately 200 m north of the project area and consists of three burials. In previous interviews, participants speculated that these

- burials are not of Puhi Camp residents but possibly of affluent Japanese. Kupuna Makanani recalled how it was possible to bury family members around one’s residence when she was growing up.
7. As related by Mr. Takahashi and Kupuna Makanani in previous interviews, Filipino migrants came to Hawai‘i in the early 1900s as contract laborers or “*sakadas*,” searching for a better place to live. Some graves at Old Puhi Cemetery are of Filipino veterans with no known family; only crosses in the ground mark their burial, according to Mr. Takahashi. He wished that relatives of these veterans could find them, allowing younger generations to continue their ties to their culture and family tree.
 8. No participants had knowledge of any heiau within the study area. However, one participant in a previous interview shared a mo‘olelo about fireballs, which reflect the presence of spirits in Native Hawaiian culture, near the project area.
 9. Previous consultation described an abundance of water in the project area. From Kilohana, water collects in reservoirs that once fed the plantations. Reservoirs and ditches were utilized by Puhi residents as food sources, and for recreational swimming. Mr. Takahashi maintained a gate still exists that controlled water flow to these water sources and regulated flow to prevent floods. Water subsequently flowed down through streams and rivers into Nāwiliwili Bay. The Hulē‘ia National Wildlife Refuge, which includes the Menehune Fishpond, is part of a watershed downstream of the project area. Development has changed water flow patterns, as well as water quality.

9.3 Impacts and Recommendations

The following cultural impacts and recommendations are based on a synthesis of all information gathered during preparation of the CIA. To help mitigate the potential adverse impacts of the proposed project on cultural beliefs, practices, and resources, recommendations should be faithfully considered and the development of the appropriate measures to address each concern should be implemented.

1. While the project site is located adjacent to the Old Puhi Camp and Puhi Cemetery, these areas are beyond the Area of Potential Effect (APE). Therefore, no impacts to these sites are anticipated as a result of the proposed project.
2. Should cultural or burial sites be identified during future ground disturbance in the project area, all work should immediately cease and the appropriate agencies be notified pursuant to applicable law.

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Appendix A Glossary

To highlight the various and complex meanings of Hawaiian words, the complete translations from Pukui and Elbert (1986) are used unless otherwise noted. In some cases, alternate translations may resonate stronger with Hawaiians today; these are placed prior to the Pukui and Elbert (1986) translations and marked with “(common).”

Diacritical markings used in the Hawaiian words are the ‘okina and the kahakō. The ‘okina, or glottal stop, is only found between two vowels or at the beginning of a word that starts with a vowel. A break in speech is created between the sounds of the two vowels. The pronunciation of the ‘okina is similar to the sound between the “ohs” in “oh-oh.” The ‘okina is written as a backwards apostrophe. The kahakō is only found above a vowel. It stresses or elongates a vowel sound from one beat to two beats. The kahakō is written as a line above a vowel.

Hawaiian Word	English Translation
<i>adobo</i> (Filipino)	Filipino dish involving meat cooked with vinegar, soy sauce, and bay leaves
ahupua‘a	Land division usually extending from the uplands to the sea, so called because the boundary was marked by a heap (ahu) of stones surmounted by an image of a pig (pua‘a), or because a pig or other tribute was laid on the altar as tax to the chief
akua	God, goddess, spirit, ghost, devil, image, idol, corpse; divine, supernatural, godly
ali‘i	Chief, chieftess, officer, ruler, monarch, peer, headman, noble, aristocrat, king, queen, commander
‘āpana	Piece, slice, portion, fragment, section, land parcel
‘auwai	Ditch, canal
<i>bagoong</i> (Filipino)	Fermented shrimp paste
<i>bitsu-bitsu</i> balls	Filipino dessert; also known as <i>cascaron</i>
<i>furo</i> (Japanese)	Japanese bathtub
he‘enalu	To ride a surfboard, surfing, surf rider
heiau	Pre-Christian place of worship, shrine; some heiau were elaborately constructed stone platforms, others simple earth terraces; many are preserved today
ho‘okupu	Offering, gift
hukilau	To fish with a seine
hula	To dance the hula, a Native Hawaiian dance
‘ili	Land section, next in importance to an ahupua‘a and usually a subdivision of an ahupua‘a
‘ili ‘āina	Land area; an ‘ili land division chief pays tribute to the chief of the ahupua‘a of which it is a part, rather than directly to the king

Hawaiian Word	English Translation
‘ili kū	Short for ‘ili kūpono; a nearly independent ‘ili land division within an ahupua‘a, paying tribute to the ruling chief and not to the chief of the ahupua‘a
kāhea	To call, cry out, invoke, greet, name
kahuna	Priest, sorcerer, magician, wizard, minister, expert in any profession; kāhuna—plural of kahuna
kama‘āina	Native-born, one born in a place, host; native plant; acquainted, familiar, <i>lit.</i> , land child
kānaka maoli	Full-blooded Native Hawaiian person
kaona	Hidden meaning, as in Hawaiian poetry
kapu	Taboo, prohibition; special privilege or exemption from ordinary taboo
<i>kimchi</i> (Korean)	Korean fermented spicy cabbage
ki‘owai	Pool of water, water hole, fountain
ko‘a	Fishing grounds, usually identified by lining up with marks on shore; shrine, often consisting of circular piles of coral or stone, built along the shore or by ponds or streams, used in ceremonies as to make fish multiply
koa	Brave, bold, to act as a soldier
kōkua	Help, aid, assistance, relief, assistant, associate, deputy, helper; co-operation, old term for lawyer before loio was used; to help, assist, support, accommodate, second a motion
konohiki	Headman of an ahupua‘a land division under the chief
kuapā	Dashing, slashing, as waves on a shore; wall of a fishpond; fishpond made by building a wall on a reef
kula	Plain, field, open country, pasture; an act of 1884 distinguished dry or kula land from wet or taro land
kuleana	Native Hawaiian land rights (common); right, privilege, concern, responsibility, title, business, property, estate, portion, jurisdiction, authority, liability, interest, claim, ownership, tenure, affair, province
kū‘ula	Heiau near the sea for worship of fish gods
kupua	Demigod or culture hero, especially a supernatural being possessing several forms; one possessing mana; to possess kupua (magic) powers
kupuna	Elders (common); grandparent, ancestor, relative or close friend of the grandparent’s generation, grandaunt, granduncle; kūpuna—plural of kupuna
limu	A general name for all kinds of plants living under water, both fresh and salt

Hawaiian Word	English Translation
lei	Garland, wreath, necklace of flowers, shells, ivory, feathers, or paper, given as a symbol of affection; any ornament worn around the head or about the neck
lo‘i	Irrigated terrace, especially for taro, but also for rice; paddy
loko i‘a	Fishpond (common)
loko wai	Freshwater pond or lake
loko kuapā	Fishpond made by building a wall on a reef
lū‘au	Young taro tops, especially as baked in coconut cream and chicken or octopus
Māhele	Land division of 1848
maka‘āinana	Commoner, populace, people in general
makai	Seaward
makana	Gift
<i>malasada(s)</i> (Portuguese)	Portuguese pastry
malu	Shade, shelter, protection
mana‘o	Thought, idea, belief, opinion, theory
<i>manapua</i>	Steamed meat buns
mauka	Inland
mele	Song, anthem or chant of any kind; poem, poetry; to sing, chant
menehune	Ledendary race of small people who worked at night, building fishponds, roads, temples
<i>miso</i> (Japanese)	Japanese soup
moku	District, island, islet, section
mo‘olelo	Story, tale, myth, history, tradition, literature, legend, journal, log, yarn, fable, essay, chronicle, record, article; minutes, as of a meeting; (from mo‘o ‘ōlelo, succession of talk; all stories were oral, not written)
<i>musubi</i> (Japanese)	Rice with seaweed that usually has a filling such as spam
<i>nishime</i> (Japanese)	Japanese vegetable stew
nui	Big, large, great, important
<i>obake</i> (Japanese)	Spirit
‘ohana	Family, to gather for family prayers
‘ōhi‘a	Two kinds of trees; see ‘ōhi‘a ai and ‘ōhi‘a lehua
‘ōlelo no‘eau	Proverb, wise saying, traditional saying

Hawaiian Word	English Translation
oli	Chant that was not danced to, especially with prolonged phrases chanted in one breath, often with a trill at the end of each phrase; to chant thus
‘ono	Delicious, tasty, savory
<i>pansit</i> (Filipino)	A Filipino noodle dish
pili	To cling, stick, adhere, touch, join, adjoin, associate with
<i>pinkabet</i> (Filipino)	Filipino stew with vegetables
pōhaku	Rock, stone, mineral
poi	Poi, the Hawaiian staff of life, made from cooked taro corms, or rarely breadfruit, pounded and thinned with water
pu‘u	Any kind of a protuberance from a pimple to a hill, hill, peak
pule	Prayer, blessing
<i>sakada(s)</i>	Term used to describe Filipino men imported by the HSPA to Hawai‘i as unskilled laborers
<i>sipa</i> (Filipino)	To kick, Filipino traditional sport
<i>taiko</i> (Japanese)	Japanese percussion instrument
<i>takenoko</i> (Japanese)	Young bamboo shoots
‘ukulele	Leaping flea, probably from the Hawaiian nickname of Edward Purvis, who was small and quick and who popularized the instrument brought to Hawai‘i by the Portuguese in 1879
wahi pana	Storied place (common); legendary place
wai	Water, liquid or liquor of any kind other than sea water

Appendix B Common and Scientific Names for Plants and Animals Mentioned by Community Participants

Common Names		Possible Scientific Names		Source
Hawaiian	Other	Genus	Species	
akule	big-eyed scad	<i>Selar</i>	<i>crumenophthalmus</i>	Hoover 2003
‘alani	any kind of orange, both fruit and tree	<i>Citrus</i>	<i>sinensis</i>	Pukui and Elbert 1986
‘awa	kava	<i>Piper</i>	<i>methysticum</i>	Pukui and Elbert 1986
hala	pandanus	<i>Pandanus</i>	spp.	Wagner et al. 1999
hala kahiki	pineapple	<i>Ananas</i>	<i>comosus</i>	Pukui and Elbert 1986
hau	beach hibiscus	<i>Hibiscus</i>	<i>tiliaceus</i>	Wagner et al. 1999
he‘e	octopus, squid, <i>tako</i>	Multiple families and species		Hoover 1993
kalo	taro	<i>Colocasia</i>	<i>esculenta</i>	Wagner et al. 1999
koa		<i>Acacia</i>	<i>koa</i>	Pukui and Elbert 1986
kuawa	guava	<i>Psidium</i>	<i>guajava</i>	Pukui and Elbert 1986
kukui	candlenut	<i>Aleurites</i>	<i>moluccana</i>	Wagner et al. 1999
kūhonu	spotted-back crab	<i>Portunus</i>	<i>sanguinolentus</i>	Hoover 1993
liliko‘i	passion fruit	<i>Passiflora</i>	<i>edulis</i>	Wagner et al. 1999
mai‘a	banana	<i>Musa</i>	<i>xparadisiaca</i>	Wagner et al. 1999
maile	a native twining shrub	<i>Alyxia</i>	<i>olivaeformis</i>	Pukui and Elbert 1986
<i>malunggay</i>	drumstick tree	<i>Morringa</i>	spp.	
manini	convict tang	<i>Acanthurus</i>	<i>triostegus</i>	Hoover 2003
mokihana	citrus tree native to Kaua‘i	<i>Pelea</i>	<i>anisata</i>	Pukui and Elbert 1986

Common Names		Possible Scientific Names		Source
Hawaiian	Other	Genus	Species	
‘ōhi‘a		<i>Metrosideros</i>	<i>polymorpha</i>	Wagner et al. 1999
‘o‘opu	general name for fishes included in the families Eleotridae, Gobiidae, and Blennidae			Pukui and Elbert 1986
‘opihi	limpet	<i>Cellana</i>	spp.	Pukui and Elbert 1986
pepeiao	cloud ear fungus	<i>Auricularia</i>	<i>auricula</i>	Pukui and Elbert 1986
poloka	frog	<i>Canna</i>	<i>indica</i>	Wagner et al. 1999
pueo	Hawaiian short-eared owl	<i>Asio flammeus</i>	<i>sandwichensis</i>	Pukui and Elbert 1986
‘uala	sweet potato	<i>Ipomoea</i>	<i>batatas</i>	Wagner et al. 1999
‘uwa‘u	dark-rumped petrel	<i>Pterodroma phaeopygia</i>	<i>sandwicensis</i>	Pukui and Elbert 1986
wauke	paper mulberry	<i>Broussonetia</i>	<i>papyrifera</i>	Pukui and Elbert 1986
wiliwili	leguminous tree	<i>Erythrina</i>	<i>sandwicensis</i>	Wagner et al. 1999
	beans	<i>Phaseolus</i>	spp.	Wagner et al. 1999
	mango	<i>Mangifera</i>	<i>indica</i>	Wagner et al. 1999
	Philippine ground orchid	<i>Spathoglottis</i>	<i>plicata</i>	
	sugar cane	<i>Saccharum</i>	spp.	Wagner et al. 1999

*spp. = multiple species

Appendix C Authorization and Release Form

Cultural Surveys Hawai'i, Inc.
Archaeological and Cultural Impact Studies
Hallett H. Hammatt, Ph.D., President



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AUTHORIZATION AND RELEASE FORM

Cultural Surveys Hawai'i (CSH) appreciates the generosity of the *kāpuna* and *kama'āina* who are sharing their knowledge of cultural and historic properties, and experiences of past and present cultural practices for the proposed Island School State Land Use District Boundary Amendment Project, Nāwiliwili Ahupua'a, Līhu'e District, Kaua'i Island. The general area of the proposed Project limits are within Tax Map Key: (4) 3-8-02:16 situated adjacent to the northeast boundary of the University of Hawai'i's Kaua'i Community College campus.

We understand our responsibility in respecting the wishes and concerns of the interviewees participating in our study. Here are the procedures we promise to follow:

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

For your protection, we need your written confirmation that:

1. You consent to the use of the complete transcript and/or interview quotes for reports on cultural sites and practices, historic documentation, and/or academic purposes.
2. You agree that the interview shall be made available to the public.
3. If a photograph is taken during the interview, you consent to the photograph being included in any report/s or publication/s generated by this cultural study.

I, _____, agree to the procedures outlined above and, by my
(Please print your name here)
signature, give my consent and release for this interview to be used as specified.

(Signature)

(Date)

Appendix D Community Consultation Letter

Cultural Surveys Hawai'i, Inc.
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October 2, 2013

Aloha e,

At the request of Wilson Okamoto Corporation, Cultural Surveys Hawai'i, Inc. (CSH) is preparing a cultural impact assessment (CIA) for the Island School State Land Use District Boundary Amendment Project, Nāwiliwili Ahupua'a, Līhu'e District, Kaua'i Island. Please see accompanying USGS, Aerial and Master Plan maps.

The Island School is an existing Pre-K through Grade 12 private school located on a 38.448-acre (15.559 hectare [ha]) parcel in Puhi, on Kaua'i Island. The Island School campus is located on Tax Map Key: (4) 3-8-002:016 situated adjacent to the northeast boundary of the University of Hawai'i's Kaua'i Community College campus. To meet increased enrollment projections, Island School has prepared a development master plan for its campus that includes new classrooms and other school facilities. Toward implementing its master plan, Island School is requesting the boundary amendment, which will re-designate the property from State Agriculture to Urban District.

The existing Island School facilities were approved in the State Agriculture District through Special Permits. Re-designation to the Urban District would be consistent with the urban character of the campus, as well as that of the neighboring Kaua'i Community College, which is also seeking an Urban re-designation of their campus. Once re-designated Urban, both campuses would then be regulated under the County of Kaua'i Comprehensive Zoning Ordinance.

We are seeking your *kōkua* (help) and guidance regarding the following aspects of our study:

- General history and present and past land use of the Project area.
- Knowledge of cultural sites which may be impacted by future decommissioning of the Project area, for example, historic, archaeological, and burial sites.
- Knowledge of traditional gathering practices in the Project area, both past and ongoing.
- Cultural associations of the Project area, such as legends and traditional uses.
- Referrals of *kāpuna* or elders and *kama'āina* (native-born) who might be willing to share their cultural knowledge of the Project area and the surrounding *ahupua'a* (land division from upland to the sea) lands.
- Any other cultural concerns the community might have related to Hawaiian cultural practices within or in the vicinity of the Project area.

We invite you to contact us, Margaret Magat, at (808)-990-6340 (e-mail: mmagat@culturalsurveys.com) or Angela Fa'anunu, at (808)-227-8855 (e-mail: afaanunu@culturalsurveys.com), if you have any information you would like to share.