FINAL—Cultural Impact Assessment for Wai'anae Elementary School Improvements, Wai'anae Ahupua'a, Wai'anae District, Island of O'ahu, Hawai'i

TMK: (1) 8-5-001:059 and (1) 8-5-009:018



Prepared For:

Group 70 International 925 Bethel Street, 5th Floor Honolulu, Hawaii 96813



October 2015



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MANAGEMENT SUMMARY

Keala Pono Archaeological Consulting prepared a cultural impact assessment for the proposed additions to the Wai'anae Elementary School at TMK: (1) 8-5-001:059 and (1) 8-5-009:018 in Wai'anae Ahupua'a, Wai'anae District, on the island of O'ahu.

The current study took the form of background research and an ethnographic survey consisting of two interviews, all of which are included in this report. The background research synthesizes traditional and historic accounts and land use history for the Wai'anae area. Community consultations were performed to obtain information about the cultural significance of the subject properties and the region as a whole, as well as to address concerns of community members regarding the effects of the proposed construction on places of cultural or traditional importance.

The interviewees were generally supportive of the project. Because of the currently developed state of the Wai'anae Elementary School lands, there were no concerns for surface archaeological resources. It was recommended to have a cultural monitor available if archaeological remains or iwi $k\bar{u}puna$ are found during construction. It was also recommended to save an important poinciana tree that has been on the school grounds for a long time.

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INTRODUCTION

At the request of Group 70 International, Keala Pono Archaeological Consulting conducted a cultural impact assessment (CIA) for improvements to Wai'anae Elementary School in Wai'anae Ahupua'a, Wai'anae District, on the island of O'ahu. Two new buildings are planned for the school grounds. This work was designed to identify any historic properties that may be located on the parcels in anticipation of the proposed construction.

The report begins with a description of the project area and an historical overview of land use and archaeology in the area. The next section presents methods and results of the ethnographic survey. Project results are summarized, and recommendations are made in the final section. Hawaiian words, flora and fauna, and technical terms are defined in a glossary, and an index at the end of the report assists readers in finding specific information. Also included are appendices with documents relevant to the ethnographic survey, including full transcripts of the interviews.

Project Location and Description

The Wai'anae Elementary School project is located in Wai'anae Ahupua'a, Wai'anae District, on the west side of O'ahu. The Elementary School property covers three parcels, two of which include the proposed project. The project area is located *mauka* (to the north) about 850 ft. (260 m) from Farrington Highway, on the west side of Wai'anae Valley, on the leeward coast of O'ahu, north of Poka'i Bay, in Wai'anae Kai Ahupua'a (Figure 1). The two Wai'anae Elementary School properties together are roughly trapezoidal in shape and the project boundaries encompass an area of 3.06 ac. (1.24 ha).

The two parcels are shown in Figure 2. TMK: (1) 8-5-009:018 is a 2.85 ac. (1.15 ha) property owned by the City and County of Honolulu. In some records this is listed as TMK: (1) 8-5-001059. This property is surrounded on three sides (south, east, and north) by TMK (1) 8-5-001-067 and is fronted on the west side by McArthur Street. TMK: (1) 8-5-001:067 is a 10.65 ac. (4.31 ha) parcel owned by the State of Hawai'i. This larger property encloses the first parcel on three sides and is bounded by McArthur Street to the west, Plantation Road to the east, and Imipono Street to the north. This property is immediately adjacent to the north of the Wai'anae Protestant Church property leased to Hawai'i Public Housing Authority and the east boundary is bordered by Pilila'au Park.

The project will provide two new buildings on open field areas on the Wai'anae Elementary School campus. The larger building is approximately 7,000 sq. ft. and the other is 5,000 sq. ft., and both are one story tall. Some trenching will be needed for utilities and the parking area will be repaved and restriped. There will also be a new access point from MacArthur street.

Physical Environment

The project area is relatively flat and has been cleared of all native vegetation. Elevation ranges from approximately 10–20 ft. (3–6 m) above mean sea level (amsl). The project lands rest on alluvium deposited by Kaupuni Stream to the east and would be on the north edge of the Wai'anae Valley coastal plain. Beneath this and on both sides of the stream is an emerged fossil limestone reef rock formed by uplifted coral reefs.

According to Foote et al. (1972:6, 84–85), the soils on the property are classified as part of the Lualualei Series (Lualualei-Fill Land-Ewa association) consisting of well-drained soils on the coastal plains. These soils developed in alluvium and colluvium and are deposited and develop on nearly level or gently slopes Typically Lualualei soils are dark grayish-brown, very sticky and

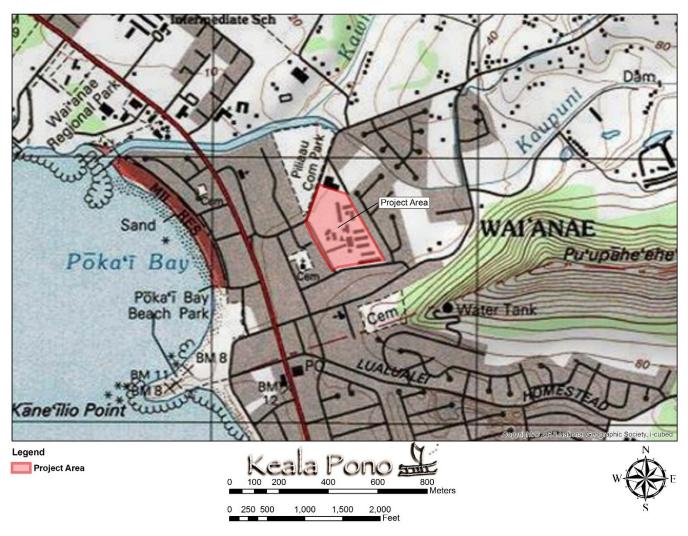


Figure 1. The project area (in red) on a 7.5 minute USGS Waianae Quadrangle map with TMK overlay.

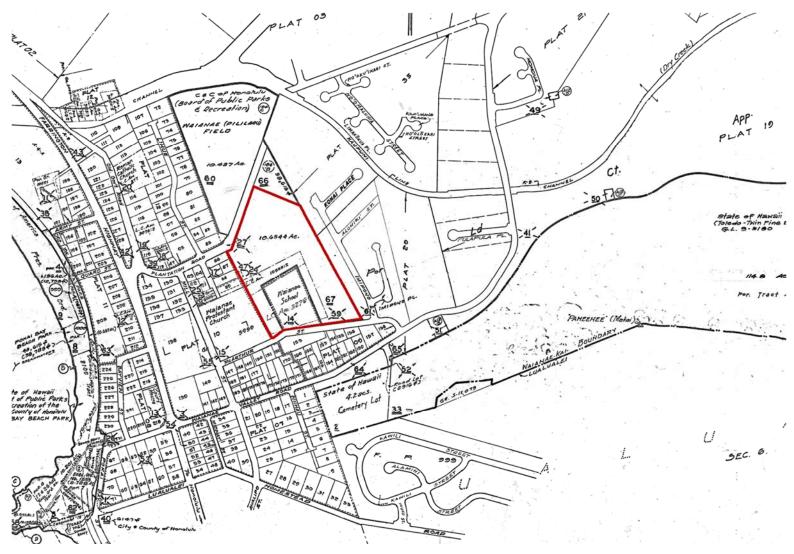


Figure 2. Portion of TMK plat (1) 8-5-001, dated December 1933, showing the project area in red.

plastic, underlain by coral gravel, sand, or clay below a depth of about 40 in. (102 cm). Specifically, soils in the project area consist entirely of PsA, or Pulehu clay loam, 0–3% slopes (Foote et al. 1972) (Figure 3).

The project area lies in a belt of warm, dry northeasterly trade winds which persist throughout much of the year. Due to the Wai'anae Mountain Range to the east and its proximity to Pōka'ī Bay and the coast, the region is also semi-arid (Foote et al. 1972), and rainfall ranges from 10–25 in. (25–64 cm) per annum (Giambeluca et al. 2013).

Wai'anae Valley is drained by Kaupuni Stream and its ten tributaries with a total watershed of 9.2 sq. mi. (23.9 km²). The project area is located within the coastal flood zone of Kaupuni, which is a perennial stream whose tributaries and headwaters extend to the back of the valley and the surrounding Waianae Mountains. Although many streams in leeward Oʻahu do not flow year round, historical accounts suggest that Kaupuni carried flow throughout the year, and fed at least one large fishpond on the inland side of Pōkaʻī Bay.

Native and Polynesian introduced plants have been removed in the project area with the exception of coconut, or *niu* (*Cocos nucifera*). Grasses are the dominant vegetation with the exception of a number of large, introduced monkeypod trees (*Samanea samen*), *kiawe* (*Prosopis pallida*) and *koa haole* (*Leucaena leucocephala*).



Figure 3. Soils in the vicinity of the project area.

LITERATURE REVIEW

This section of the report presents background information as a means to provide a context through which one can examine the cultural and historical significance of the project lands. In the attempt to record and preserve both the tangible (i.e., traditional and historic archaeological sites) and intangible (i.e., moʻolelo, ʻōlelo noʻeau) culture, this research assists in the discussion of anticipated finds. Research was conducted at the Hawaiʻi State Library, the University of Hawaiʻi at Mānoa libraries, the SHPD library, and online on the Waihona 'Aina database and the State of Hawaiʻi Department of Accounting and General Services (DAGS) website. Historical maps, archaeological reports, Māhele data, and historical reference books were among the materials examined.

Wai'anae (or more accurately Wai'anae Kai) is one of nine *ahupua'a* identified for the Wai'anae Moku, situated in western O'ahu. As the largest, most centrally located of the *ahupua'a* and one that takes its name from the *moku*, Wai'anae—both the *ahupua'a* and *moku*—played an important role in the history of leeward O'ahu. The *ahupua'a* is bounded by Mākaha and Lualualei Ahupua'a to the northwest and southeast, respectively. The boundaries of Wai'anae originally extended across the ridge tops of the Wai'anae Mountains and to the east and north it reached the ridgeline of the Ko'olau Mountains. It would have been bordered by Kamananui Ahupua'a in Waialua and Waipi'o and Waikele Ahupua'a in the *moku* of 'Ewa. This upland region was known as Wai'anae Uka. The northern boundary is now the ridgeline of the Wai'anae Mountains.

When speaking of land use terms and concepts regarding O'ahu, it is important to note that some of O'ahu's ancient traditions are unique and have continued to survive. *Kupuna* Glen Kila shares, "In Wai'anae, we do not use the term [ahupua'a], at that time before Kamehameha, we used the term 'ili. 'Ili was an ahupua'a in our vocabulary" (McElroy et al. 2013:102). Furthermore, Kupuna Kila explains that prior to the ahupua'a system coming to the O'ahu kingdom, there was a traditional O'ahu resource management system called "ka'ananiau" (McElroy et al. 2013) which can be loosely translated as "managing the beauty of the environment over time."

Traditional Land Use

Place names often shed light on traditional views of an area and can provide important contextual information. The name of the Wai'anae district and *ahupua'a* is translated as "mullet water" (Pukui et al. 1974:220), referring to the area's richness in mullet, a prized eating fish. The district might have been named for a large fishpond called Puehu, located on the northwest side of Keaupuni Stream (Handy et al. 1991:468). Pōka'ī Bay is named for a chief from Kahiki who planted the coconut grove along the banks of Keaupuni Stream (Thrum in Sterling and Sterling and Summers 1978). Pāhoa includes three sections of land, possibly an '*ili kūpono*; one section is located near the coast on Pōka'ī Bay. A second plot of land identified with Pāhoa includes the section of land adjacent to the Wai'anae Elementary School. The term translates as "shark dagger or stone" (Pukui et al. 1974:301). This may be in reference to the location where Olopana attempted to slay Kamapua'a (see *Mo'olelo* section).

The ridge and the mountain tops that surround Wai'anae were also named. These include the following: Kamaile'unu, Kepauala, Kawiwi, Ka'ala, Kaua'ōpu'u, Kuwale, Pāhe'ehe'e Mauka, and Pāhe'ehe'e Makai. Mt. Ka'ala is the highest mountain peak of O'ahu and sits at the head of Wai'anae. It is mentioned in numerous chants and prayers, in part because it was visible from a distance. It is associated with Kāne, a deity in the pantheon of Hawaiian gods. Place names that define the coastal boundaries of Wai'anae are Kāne'īlio on the south, and Laukīnui (now Lahilahi) to the north. Several of the ridge and mountain places are noted in oral traditions and other Hawaiian sources.

Wai'anae was one of three dry or leeward *moku* on the Island of O'ahu (Handy et al. 1991). Although Handy (1940:156) identifies its staple crop as sweet potato, or 'uala (Ipomoea batatas), he is likely referring to one of the other ahupua'a (possibly Mākaha) within the moku of Wai'anae. In Wai'anae Ahupua'a there were a number of relatively large lo'i and house complexes along the streams that drained the valley beginning inland from the coastline and extending more than 2 km (1.2 mi.) up the valley. This is supported by Handy (1940:84) who describes an "extensive system of terraces along its various streams..." He notes at least 14 different names for these complexes, probably referring to their associated 'ili 'āina. Kalo, or taro (Colacasia esculenta), would have been the primary crop in these lo'i. The 'ili of Kamaile on the west side of Wai'anae was almost 40 ha (98 ac.) in size and much of it would have been devoted to irrigated agriculture. The three contiguous 'ili of Ana, Kaho'olanakio, and Lehanonui (Monsarrat 1870) adjacent to Keaupuni Stream covered nearly 25 ha (61 ac.), again much of it devoted to irrigated agriculture. Based on a map by Monsarrat (1906) that depicts lo i above the confluence of Keaupuni and Kawaopuu, Honua, and Kūmaipō Streams there are more than 111 ha (275 ac.) of irrigated plots. Although these estimates are suggested by Cordy (2012) to include dryland terraces, they are evidence of the substantial conversion of lands in Wai'anae for agricultural purposes. Smaller lo'i were likely located farther inland where streams diverged and the land became more dissected at least to an elevation of 275 m (900 ft.) above sea level (Holt et al. 2002). Handy (1940:75) also includes Wai'anae Uka, the section of the ahupua 'a extending from the Wai anae to the Ko olau Mountains as a location where terraces were present. Clearly, Wai'anae was a major area for the production of kalo and other cultivated plants, the largest in Wai'anae Moku (Green 1980) and similar to the valley ahupua'a on the windward side of O'ahu.

Much of the settlement of Wai'anae would have been concentrated in the *makai* or lower section of the valley. Not only do the numerous irrigated agricultural complexes within this zone suggest such a pattern, but historical maps of Wai'anae show house sites scattered in or adjacent to *lo'i*. Few houses would have been clustered into coastal villages. This is supported by Vancouver's description of the Wai'anae area in March 1793 on his second exploration voyage to Hawai'i. His accounts describe a village near Mauna Lahilahi on the west end of the valley, with only scattered huts and a coconut grove in other parts of the leeward coast (Handy et al. 1991:275, 468).

Kamakau offers a poetic description of Wai'anae that mentions its reputation for poi and fish:

... Wai'anae of the gentle Kaiālulu wind, the sweet waters of 'Eku, the thick poi of Pā'hoa, the stringy poi of Lehano and Kūāiwa, the rich poi of Kamaile, and the *aku* fish "tidbits" of Wai'anae —in Wai'anae, land beloved of the sun. (1991:106)

Lastly, Wai'anae is the location of a *pu'uhonua* or place of refuge and safety. It was reported to be a stronghold used during a time of war and was situated at a place named Kawiwi, nearly 915 m (3,000 ft.) above sea level, along the ridgeline that serves as a boundary between Mākaha and Wai'anae (Thrum 1909:152). A major battle, involving a beleaguered O'ahu chief, took place at this location during the time of Kahekili, a paramount chief from Maui.

Mo'olelo of Wai'anae

There are many accounts from oral traditions that mention the location of Wai'anae without much further detail. Several of these associate named individuals with Wai'anae —both the *ahupua'a* and *moku*. Cordy (2001) provides an overview of the oral traditions and named individuals associated with the *moku* of Wai'anae, with much of the emphasis on Wai'anae Ahupua'a. These accounts range over a considerable time period, beginning with Olopana who may have lived and served as a chief nearly 20 generations (see Cachola-Abad 2000) before the advent of Kamehameha I. Kūali'i, who was a notable O'ahu chief is associated with Wai'anae during his lifetime about five generations

before Kamehameha. Here we describe the accounts linked to four chiefs: 1. The death of the *ali'i* Olopana at the hands of Kamapua'a; 2. The life of the *ali'i* Halemano, 3. The rise to power of the *ali'i* Kawelo, and 4. The life of Kūali'i, one of the most important *ali'i* in O'ahu's history.

Olopana

The first *ali'i* associated with Wai'anae is Olopana, one of the first paramount chiefs of the Ko'olau Moku on the windward side of O'ahu, and whose efforts to sacrifice Kamapua'a in Wai'anae are summarized here (from Fornander 1918–1919:314–326).

Olopana was an early paramount chief of Oʻahu whose history is linked to Kamapuaʻa, a demigod who could appear either has a human or a pig. Kamapuaʻa was known for his appetite, particularly for chickens. Olopana summoned his priest from Kauaʻi to Waiʻanae to assist him in dealing with the trepidations of Kamapuaʻa. The *kahuna*, Malae, warned Olopana that he would not be able to kill Kamapuaʻa outright. Instead he suggested Olopana offer him various plants and animals to make him weak and vulnerable. After presenting this offering to Kamapuaʻa, Olopana's men bound and dragged him to Pāhoa, a section near the coast of Waiʻanae Ahupuaʻa. There Kamapuaʻa was tightly bound, placed on a *heiau* and prepared for sacrifice (including making several cuts into his skin). The *heiau* is thought to have been Kane Heiau. At this same time a second priest, who was also opposed to Olopana heard of these plans and prepared to intervene to save Kamapuaʻa. (Fornander 1918–1919). Subsequently, Olopana was killed by Kamapuaʻa, along with his followers on Oʻahu.

Kawelo

Linked by association with Kākuhihewa (a paramount chief of Oʻahu who ruled at about the same time as 'Umi on Hawai'i Island), when Kawelo was born on Kauaʻi it was foretold that he would be a great soldier and eventually a leader. Early in his life his family moved from Kauaʻi to Oʻahu where he met 'Aikanaka, an *aliʻi* who later would vie to become the chief of Kauaʻi. Kawelo bested one of the soldiers of Kākuhihewa in his youth and went on to become proficient in fighting and warfare. When his family was forced off their lands in Kauaʻi by 'Aikanaka, Kawelo promised his support to those opposing him. Prior to traveling to Kauaʻi, however, he and his followers landed in Waiʻanae where they built a *heiau* (Fornander 1918–1919:28). Here Kawelo prayed for success to his god Kane-i-ka-pualena and to the idol of the god Ka-lani-hehu that had been sent from Kauaʻi. Kawelo traveled with his warriors to Kauaʻi and in a number of battles defeated the soldiers of 'Aikanaka and eventually bested 'Aikanaka, who had gathered his followers for a final stand against this warrior-chief. After defeating 'Aikanaka Kawelo then assumed the role of paramount chief of all of Kauaʻi (Cachola-Abad 2000). Once victorious on Kauaʻi, Kawelo distributed its lands to his ranking warriors.

Halemano

The story of Halemano shares some of same elements as both Olapana and Kūali'i although in this case his history is bound up with his wife, Kamalalawalu, who betrays him, not once but twice. In one of the final accounts of Halemano he has been summoned to a game of *kilu* by a Kohala chief (in whose district he was living at the time). This game involves skill in hitting a target and between turns the chiefs recited chants. On the third and fourth rounds of this game Halemano, who has seen his wife watching his performance, chants the following that includes naming the main bay and the mountains of Wai'anae:

My lover from the Kalihi rain, where the clothes are bundled up, Where in the back is the only sheltered spot; It is being pressed by the Waahila (rain), The rain of my land where women are led away secretly.

Search is made to the top of **Kaala**,

The lower end of **Pokai** is plainly seen.

Love looks in from Honouliuli,

The dew comes creeping, it is like the wind of Lihue,

Like a false gleaming of the sun at Kaena,

For it is being destroyed by the Unulau wind from below,

Causing coldness within, made so by love of thee,

For I love thee, my companion of that parched plain. (Fornander 1916–1917:252, emphasis ours)

Halemano wins this game in the 15th round and his former wife steps up to claim him once more. But she is rejected because Halemano has a new wife. Afterwards he and his new wife return to Oʻahu where he eventually meets his first wife, Kamalalawalu again. Once more their union could not endure and she went to live with a chief in Waiāhole. In the meantime, the chief from Hilo learned of Kamalalawalu's presence and he had previously been promised her hand. He and his warriors traveled to Oʻahu, defeated the Waiāhole chief, and returned to Hawai'i Island with Kamalalawalu.

Kūali'i

Kūali'i is identified as a "usuper" king by Beckwith (1940), one who by dint of his strength and courage vanquished his foes and became one of the most recognized chiefs in Hawaiian history. His history is recounted in Fornander (1916–1917:364–402). Born in Kailua on Oʻahu, Kūaliʻi, was recognized for his strength at an early age, and in his training was encouraged to challenge chiefs who were oppressive. Cachola-Abad (2001) places him in the 20th generation of paramount chiefs on Oʻahu; Kirch (2011) suggests he ruled in the late 17th century. He does so by a variety of means: usurping their roles in rituals performed at *heiau*, winning battles, marrying a high ranked chiefess, and taking on critical allies. He was said to win battles even when outnumbered and first was elevated as a paramount chief of the Kona Moku of Oʻahu, whereupon he became proficient in warfare and conquest. He traveled to Kauaʻi where again with few warriors he defeated a larger force and subdued all or part of the island. He also served as an ally to help win Molokaʻi and Lānaʻi, and aided a chief in Maui. He then went to Hawaiʻi and routed a chief named Haʻalilo, but returned to Oʻahu to repel a revolt of the Waiʻanae chiefs at Kalena.

Kūali'i also composed a *mele* to himself and this was sung at one of his battles by his son. Among the more than 600 verses is this one that mentions several locations in Wai'anae Ahupua'a:

Hawaii of high mountains;

Towering unto heaven is Kauiki;

Down at the base of the islands

Where the sea holds it fast.

105 Kauiki the mountain,

Like the sea-gull flapping its wings when about to fall

Kauai,

Great Kauai inherited from ancestors

Sitting the calm of Waianae

110 Kaena is a point

Kahuku is hala-wreathed

Covered with dew is the back of **Kaala**

There below doth Waialua sit,

That is Waialua

This verse identified Kamaile, both an 'ili of Wai'anae and the location of a major heiau.

400 The koaie of Kauai;

The sea grass has been stripped by Ku—

The waving [grass] of **Kamaile**;

The towering surf of Mahiwa,

Which dammed up the water of Halapo

And these verses recognize Ka'ala and Kawiwi, two prominent landmarks of Wai'anae.

The moss that hangs on wood,

The red crab on the top of Kaala

Not like unto these are thou, Ku

Not like the kukui

The rough-barked kukui

The fragrant poholua tree,

Nor the maile that grows on Maoi,

Nor the kaluhea of Kawiwi

Not like these are thou, Ku.

Not like the kawuu

Is the kalia standing in the open (Fornander 1916–1917:364–402, emphasis ours)

The *mele* valorizes Kūali'i, linking him not only to numerous places in O'ahu and elsewhere in Hawai'i but also Tahiti (or Kahiki). The prominent role that Wai'anae place names play in this *mele* are a sign of the region's visible importance to Kūali'i's political ambitions.

'Ōlelo No 'eau

Wai'anae, both the *moku* and *ahupua'a*, are mentioned in Hawaiian proverbs (Pukui 1983). They provide further insight to traditional beliefs and practices of these lands:

E nui ke aho, e ku'u keiki, a moe i ke kai, no ke kai la ho'i ka 'āina.

Take a deep breath, my son, and lay yourself in the sea, for then the land shall belong to the sea.

Uttered by the priest Kaʻopulupulu at Waiʻanae. Weary with the cruelty and injustice of Kahāhana, chief of Oʻahu, Kaʻopulupulu walked with his son to Waiʻanae, where he told his son to throw himself into the sea. The boy obeyed, and there he died. Kaʻopulupulu was later slain and taken to Waikīkī where he was laid on the sacrificial altar at Helumoa. (Pukui 1983:44)

Ka malu niu o Pōkā'ī.

The coco-palm shade of Pōkā'ī.

Refers to Wai'anae, on O'ahu. At Pōkā'ī was the largest and best-known coconut grove on O'ahu, famed in chants and songs.(Pukui 1983:160)

Kapakahi ka lāma Wai'anae.

Lopsided is the sun at Wai'anae.

Used to refer to anything lopsided, crooked, or not right. First uttered by Hi'iaka in a rebuke to Lohi'au and Wahine'ōma'o for talking when she warned them not to. (Pukui 1983:164)

Malolo kai e! Malolo kai e!

Tide is not high! Tide is not high!

Said of threatening disaster. Robbers once lived at a place in Wai'anae now known as Malolo-kai. Their spies watched for travelers to kill and rob. When there were only a few that could be easily overcome, the spies cried, "Low tide!" Which meant disaster for the travelers. But if there were too many to attack, the cry was "High tide!" (Pukui 1983 232–233)

Ola o Waianae i ka makani Kaiāulu

Wai 'anae is made comfortable by the Kaiāulu breeze.

Chanted by Hi'iaka at Ka'ena, O'ahu, after her return from Kaua'i. (Pukui 1983:273)

The Kaiāulu has been described as a "pleasant, gentle trade wind" (Nakuina 2005:123).

Historic Events and Land Use

The history of Wai'anae is closely tied to the larger history of its *moku* and the Island of O'ahu. Political dynamics among *ali'i* on O'ahu had been mostly confined to the island with occasional incursions from the chiefs of other islands. For the most part, the kingdom of O'ahu had developed into a peaceful and prosperous kingdom. In 1783 this changed with invasion of O'ahu by Kahekili, the paramount chief of Maui. At the time of Kahekili's attack, Kahahana was the ruler of the O'ahu kingdom and would be the last sovereign to rule over an independent O'ahu. When Kahekili invaded, not only did he take the island but Kahekili killed virtually all of O'ahu's royal heirs and descendants of the Nanaulu line of chiefs. By 1795, Kamehameha the Great from Hawai'i Island had taken over Maui's rule of O'ahu by ousting Kalanikūpule, the son of Kahekili and with that unified all of the main Hawaiian Islands, save Kaua'i. On the leeward side of O'ahu, control of Wai'anae was passed to a series of Kamehameha's retainers and family. Kamehameha's ally, Boki was named governor of O'ahu in 1816 and after Kamehameha's death was the unrivaled leader of the Island. Boki was granted Wai'anae Ahupua'a at this time, while the *moku* of Wai'anae was controlled by the Crown.

Māhele Records

The change in the traditional land tenure system in Hawai'i began with the appointment of the Board of Commissioners to Quiet Land Titles by Kamehameha III in 1845. The Great Māhele took place during the first few months of 1848 when Kamehameha III and more than 240 of his chiefs worked out their interests in the lands of the Kingdom. This division of land was recorded in the Māhele Book. The King retained roughly a million acres as his own as Crown Lands, while approximately a million and a half acres were designated as Government Lands. The Konohiki Awards amounted to about a million and a half acres, however title was not awarded until the *konohiki* presented the claim before the Land Commission.

In the fall of 1850 legislation was passed allowing citizens to present claims before the Land Commission for parcels that they were cultivating within the Crown, Government, or Konohiki lands. By 1855 the Land Commission had made visits to all of the islands and had received testimony for about 12,000 land claims. This testimony is recorded in 50 volumes that have since been rendered on microfilm. Ultimately between 9,000 and 11,000 *kuleana* land claims were awarded to *kama'āina* totaling only about 30,000 acres and recorded in ten large volumes

During the 1848 Māhele land division the entire Wai'anae District, aside from Mākaha, was first designated as Crown Land. In the original government act that established fee simple land ownership all of Wai'anae Ahupua'a is identified as part of the Crown Lands (Kingdom of Hawai'i 1846:26). A chief from Wai'anae known as Pāhoa was given half of the 'ili of Kalena in Wai'anae Uka but

this was later rescinded. Pāhoa was also the original awardee for Land Commission Award (LCA) 7713; again this was later rescinded. The lands were later awarded to Victoria Kamāmalu as part of a claim that included property on several islands.

Later there were a large number of (i.e., more than 160) successful LCAs in Wai'anae Ahupua'a (see Commissioner of Public Lands 1929:845–852). These awards are associated with (and assigned to) one of the more than 15 *'ili 'āina* that have been identified in the *ahupua'a*: Ana, Ka'akoa, Ka'api, Kahaniki, Kaho'olanakio, Kamaile, Keaunui, Keekee, Kuaiwa, Kumaipo, Lehanoiki, Lehanonui, Leleakoae, Pāhoa, and Puea.

The Wai'anae Elementary School sits on the property that was claimed by Waimalu as LCA 3276, as well as an 'āpana' section claimed by Olaelae as part of LCA 10585. Waimalu's portion, totaling 3.57 ac. (1.44 ha) had two linked house sites and was surrounded on all four sides by a stone wall. In testimony provided by Waimalu he claimed 13 lo'i, an 'auwai, and a kula' plot. Olaelae's portion, totaling 1.26 ac. (0.51 ha) was bounded on two sides by a stone wall. In testimony provided by Olaelae he claimed three lo'i, an 'auwai, and bananas.

These two properties (Waimalu, Olaelae) have been assigned to the 'ili 'āina of Wailele as well as Pāhoa. They are located mauka (north) of the main road. A second section of Pāhoa extended into Wailele just west of Waimalu's property. Figure 4 shows this property as first mapped by Monsarrat in 1870. The larger enclosure, encompassing the three parcels, is roughly square measuring about 360–400 ft. (110–122 m) on each side. It was enclosed by stone walls that defined its boundaries. Much of the property, and likely the 'ili, was given over to the cultivation of kalo in a number of lo'i irrigated by an 'auwai from Keaupuni Stream.

On Jackson's (1884) map, he shows a large section of *lo'i* just west of Keaupuni Stream and north of the *'ili 'āina* boundary wall separating Wailele and Pāhoa (Figure 5). This property on which the Elementary School sits today was part of a much larger section, again defined by a stone wall. This may demarcate the boundary of the entire *'ili 'āina* of Wailele. It extended northeast more than 2,000 ft. (610 m) with the boundary crossing Keaupuni Stream. It then angles to the southwest, extending 1,300 ft. (396 m). The total area encompassed by the *'ili* was approximately 94 ac. (38 ha). And although the claimant testimony does not identify it as such, there is a house site represented on two of Monsarrat's (1870, 1902) maps. By 1902 this property also supported eight homes, likely for the plantation workers for the Waianae Company (Figure 6).

Post-Māhele History

After the Māhele, large tracts of land in the upper valley were leased or purchased as grants for ranching, initiating a series of landscape changes in the region. The Waianae Sugar Plantation was founded in 1878 by H.A. Widemann; its cultivated lands encompassed much of *makai* Wai'anae both east and west of Keaupuni Stream. Ranching occurred in the uplands as L.L. McCandless acquired several large leases on the east side of the valley. With this the Wai'anae community grew substantially. By 1906 the Waimalu parcel is recorded as property for a school—presumably the precursor to the current Wai'anae Elementary School. By 1884, Wai'anae was listed in the Hawaiian Directory as one of the largest settlements on O'ahu, second only to Honolulu.

During the 1890s the Oahu Railway and Land Co. (OR&L) railroad was constructed to bring crops and animals from the Leeward Coast to Pearl Harbor. This railway would eventually run through all of the Wai'anae District and around Ka'ena Point to Kahuku. Vestiges of the old rail line can still be seen along Farrington Highway. Two sections of this railway extended into Wai'anae Valley to transport sugarcane harvested on Waianae Company lands. The eastern extension of the railway was located about 30 m (100 ft.) south of the Waimalu property.

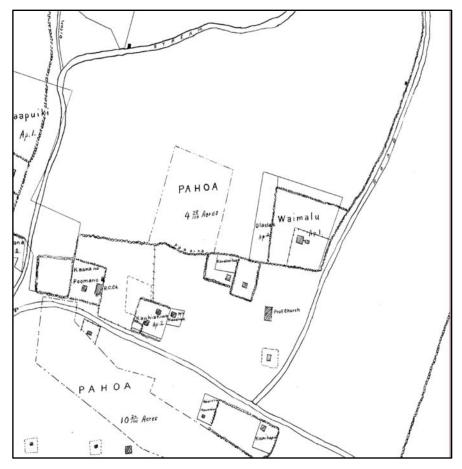


Figure 4. Portion of a map depicting the location of Waimalu's Land Commission Award (Monsarrat 1870) (see Figure 10 for the full map). This property largely defines the boundaries of the Wai'anae Elementary School.

Sugarcane production and military activity dominated the first half of the 20th century on the Leeward Coast. Much of Pōka'ī Bay was acquired by the military through an Executive Order as a staging area for its troops (see Aiu 1928). World War II was devastating for the Waianae Sugar Plantation as high paying defense jobs created a labor shortage. All sugarcane production in the Wai'anae District was eliminated at this time due to labor shortages, water shortages, military procurement of land, and other more productive agricultural regions taking over. The OR&L railway was officially abandoned in 1946.

Previous Archaeology and Historical Materials

A wealth of archaeological and ethno-historical studies have been undertaken in the *ahupua'a* of Wai'anae (Figure 7 and Table 1). The following is a summary of archaeological publications found in the SHPD library that report on work carried out in the vicinity of the Wai'anae Elementary School and the larger area of Wai'anae Ahupua'a. Cordy's *An Ancient History of Wai'anae* (2002) remains the major overview of the prehistory of Wai'anae District. Despite the number of archaeological studies, the prehistory of Wai'anae Ahupua'a remains relatively unknown. This is partly due to the extensive historical (and on-going) modifications from sugarcane cultivation, as well as the

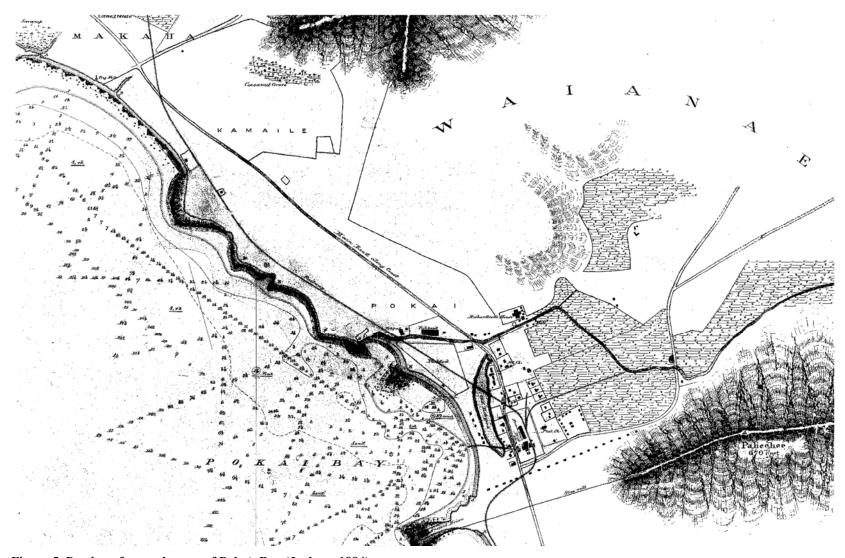


Figure 5. Portion of an early map of Pōka'ī Bay (Jackson 1884).

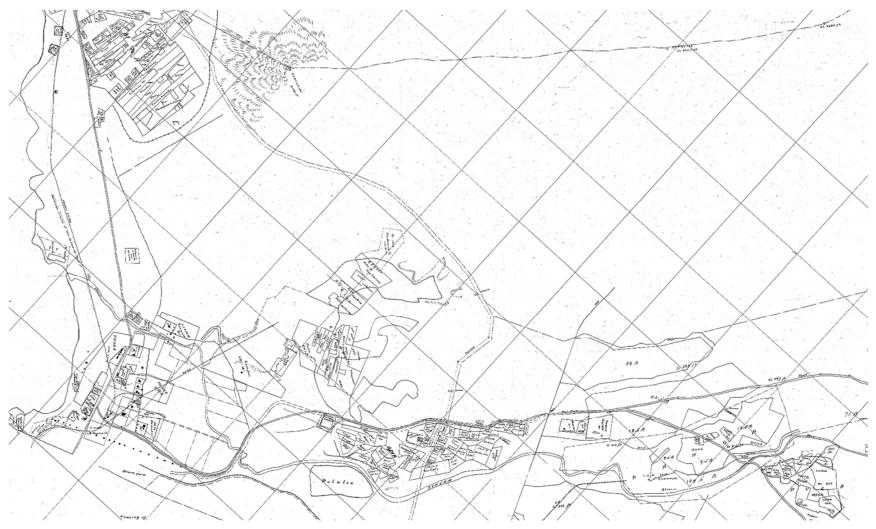


Figure 6. Portion of an early map of Wai'anae (Monsarrat 1902).

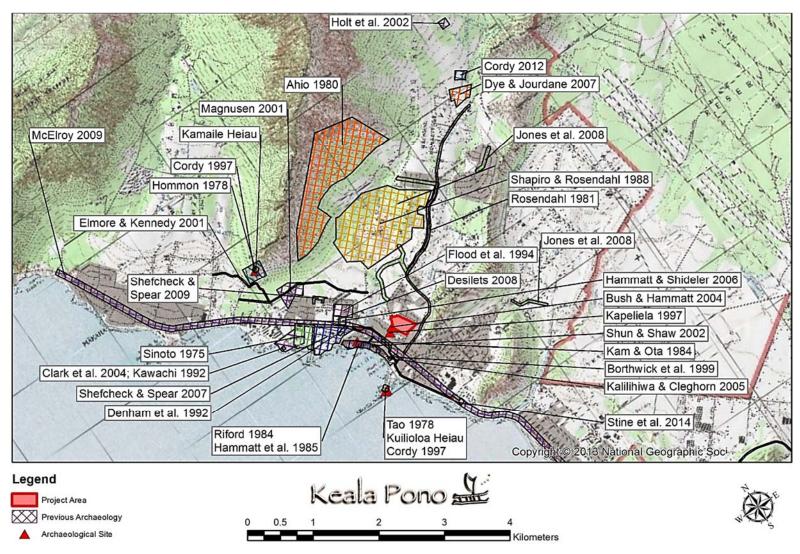


Figure 7. Previous archaeological projects in Wai'anae.

Table 1. Previous Archaeology in Wai'anae Ahupua'a

Author and Year	Location	Work Completed	Findings
McAllister 1933	Nine site locations in Wai'anae	Island-wide Survey	Described ten <i>heiau</i> , one rockshelter, one fishpond, several house sites, refuge site.
Sinoto 1975	Wai'anae Regional Park	Reconnaissance	Identified five dry-laid masonry structures or features, including three enclosures, an L-shaped wall, and an isolated wall.
Hommon 1978	Kamaile Heiau	Survey and Mapping	Mapped the <i>heiau</i> , described habitation cave and terraces below.
Tao 1978	Kuʻiliola Heiau, Pōkaʻī Bay, Waiʻanae	Archival Research	Planned to restore the <i>heiau</i> .
Abe and Kelly 1979	Kuʻiliola Heiau, Pōkaʻī Bay, Waiʻanae	Survey and Mapping	Identified eight construction features for Ku'iliola Heiau.
Sinoto 1979	Western Coastline, Wai'anae Kai	Reconnaissance	Documented irrigated terraces.
Ahlo 1980	Waiʻanae Agricultural Park, Waiʻanae Kai	Reconnaissance	Identified 24 archaeological features used for dryland agriculture or habitation.
Ota 1981	Upper Waiʻanae Valley, Honua Stream	Reconnaissance	Documented irrigated and dryland agricultural terraces.
Rosendahl 1981	Wai'anae Valley Road Improvements	Survey	No artifacts or features located.
Kam and Ota 1984	Waiʻanae Army Recreational Area, Pōkaʻī Bay	Inadvertent Burial, Burial Recovery	Recorded two human burials, historic artifacts, hearths or fire pits.
Riford 1984	Pōka'ī Bay	Monitoring	Human remains.
Hammatt et al. 1985	Pōkaʻī Bay	Test Excavation and Monitoring	Recorded prehistoric and historic cultural features (fire pits, human burials) and layers, human remains, and significant number of traditional artifacts including volcanic glass, adze fragments, worked calcite, faunal remains.
Shapiro and Rosendahl 1988	Lower Wai'anae Valley, north of Keaupuni Stream	Surface Survey, Subsurface Testing and Significance Assessment	Recorded 34 sites with 45 features, most associated with historic dairying. Traditional features included dry laid masonry walls, ditches, coral and basalt lithic scatter, and a terrace. Subsurface trenching identified buried pondfield soils in seven locations where LCAs were claimed.
Bordner 1989	Upper Waiʻanae Valley, Hui Stream	Reconnaissance	Identified dryland agricultural features.
Kawachi 1990	Mauna Lahilahi, Coastal Waiʻanae	Inadvertent Burial, Burial Recovery	Recorded a human burial.
Kawachi 1992	Wai'anae Regional Park	Burial Report	Recorded a human burial.

Table 1 (Cont.)

Author and Year	Location	Work Completed	Findings
Denham et al. 1992	Wai'anae Regional Park	Survey and Subsurface Testing	Recovered one volcanic glass flake, possible basalt abrader, shellfish, and faunal remains; no cultural deposits.
Flood et al. 1994	East of Wai'anae Intermediate School	Survey	Identified 24 features including 14 unmodified sinkholes, four modified sinkholes, a wall, a historic artifact scatter, a trash mound, an alignment, a platform dog burial, and a terrace.
Cordy 1997	Upper Waiʻanae Valley, Punanaʻula and Kūmaipō Streams	Reconnaissance Survey	Relocated Punana'ula Heiau, and documented the occurrence of <i>lo'i</i> complexes associated with the two streams. Identified dryland agricultural fields in their lower reaches. One complex with 20 features mapped, including an animal pen, house site, dryland field walls, <i>lo'i</i> terraces and <i>'auwai</i> .
Kapeliela 1997	Lihue Street and Plantation Road, Wai'anae	Inadvertent Discovery of Human Remains, Burial Recovery	Documented human remains.
Borthwick et al. 1999	Pōka'ī Beach Park, Pōka'ī Bay, Wai'anae	Subsurface Survey	Noted a possible pre-contact cultural layer.
McGuire and Hammatt 2001	'Ili of Kamaile and Wai'anae Ahupua'a	Traditional and Historical Assessment	Identified known references to Kamaile and Wai'anae and interviewed residents on the history of the sugar plantation.
Magnusen 2001	Kamaile Elementary School, Wai'anae	Reconnaissance	No archaeological features or remains encountered.
Shun and Shaw 2002	Pōkaʻī Bay, Waiʻanae	Monitoring	Recorded a disturbed charcoal layer, fire-cracked rock, possible 'ili 'ili paving stones.
Holt et al. 2002	Site 5803, Upper Wai'anae Valley	Surface Survey and Excavation	Documented three, possibly four structural, dry-laid masonry foundations (including a shrine), two features (fire pits), basalt flakes, and adze preform.
Clark et al. 2004	Waiʻanae Regional Park	Survey, Subsurface Testing	Recorded three dry-laid masonry structures, three sinkholes used as gardening areas, including subsurface cultural deposits. Recovered volcanic glass, basalt flakes, faunal materials, historic bottle glass, <i>kukui</i> , pearl shell fishhook, wood charcoal, bird bone, pig bone, large variety of shellfish, and invertebrates.
Bush and Hammatt 2004	Near Wai'anae Elemer School, Hawaiian Elec Company		Identified a portion of one human burial.

Table 1. (Cont.)

Author and Year	Location	Work Completed	Findings
Kalilihiwa and Cleghorn 2005	Pōka'ī Bay, Wai'anae	Monitoring	No findings, only modern materials identified.
Hammatt and Shideler 2006	Leeward Coast Emergency Homeless Shelter, Wai'anae	Survey	Documented one human burial.
Desilets 2007	Dept. of Transportation Wai'anae Baseyard	Assessment and Geophysical Survey	No findings.
Dye and Jourdane 2007	Chen Farm, Waiʻanae Valley Road	Assessment	No findings.
Jones et al. 2008	Wai'anae Valley Road, Board of Water Supply	Monitoring	Recorded former <i>lo 'i</i> soils, red brick.
Shefcheck and Spear 2007	Waiʻanae Regional Park, Pōkaʻī Bay	Archaeological Assessment	Possible subsurface cultural deposits
Nakamura et al. 2008	Wai'anae Water System, McArthur and Kawili Streets, Wai'anae Kai	Monitoring	Recovered 19 th –20 th century historic artifacts (bottle glass, ceramics). Project area linked to pre-contact foot trail.
Shefcheck and Spear 2008	Waiʻanae Regional Park, Pōkaʻī Bay	Archaeological Assessment	Found no cultural materials; noted possible subsurface cultural deposits.
McElroy 2009	Farrington Highway Fiber Optic Line, Lualuaei, Wai'anae, and Mākaha	Monitoring	Collected a 20 th century glass bottle.
Shefcheck and Spear 2009	Wai'anae Kai, Hawaii Coalition of Christian Churches	Monitoring	Identified a grinding stone mortar.
Cordy 2012	Wai'anae Valley Ranch, Ranch headquarters and western, upper portion of Kawiki, Punana'ula, Kumaipu streams, Wai'anae Kai	Reconnaissance	Recorded 116 sites located in the upper valley mostly used for dryland and irrigated agriculture, including irrigation canals. One rockshelter used for habitation, a number of house sites, several possible shrines, small platforms that may be locations for human burials. Historic era dry laid masonry walls also identified.
Stine et al. 2014	Lualualei and Waiʻanae Ahupuaʻa	Monitoring	Identified three sites: Puehu Fishpond, the Old Government Road, and the Waianae Sugar Plantation railway.
Graves et al. 2015	Wai'anae Elementary School	Literature Review	Conducted archival research as part of the current study.

construction of a roadway and then a railway through the area. Relatively few reports provide chronometric dates and those that do, generally do not describe the reliability of these dates (e.g., if the samples were identified as short lived taxa). Few of the archaeological studies have included any synthesis (but see Flood et al. 1994 for an extended summary of archaeological studies done prior to 1990). Project summaries here are presented for four areas within Wai'anae: 1. Coastal Southern Section, including Pōka'ī Bay, to Keaupuni Stream, 2. Coastal Western Section of Wai'anae including the Kamaile 'ili 'āina, 3. Lower or Makai Wai'anae Valley, above Keaupuni-Kawiwi Streams, and 4. Upper or Mauka Wai'anae Valley above Punana'ula Stream. Several historical maps for Wai'anae were also used in this overview. They are listed in Table 2 and can be found on the Department of Accounting and General Services website. These maps depict various aspects of land use, as well, as including "archaeological" features and structures (e.g., fishponds and heiau).

One measure of the cultural and ritual significance of Wai'anae is the large number of heiau identified there. McAllister (1933:112-116) names nine heiau in Wai'anae Valley: Pu'upahe'ehe'e (Site 152), Kūʻīlioloa (Site 153), Keaupuni (or Keopuni) (Site 155), Kamohoaliʻi (Site 156, also known as Haua [Sterling and Summers 1978:71), Malaeha'akoa (Site 157), Kikahi (Site 158), Kalamaluna (Site 159), Kane (Site 160), Kamaile (Site 161), and Punana'ula (Site 161), many more than he identified in either Mākaha or Lualualei. Some of these heiau have been destroyed, some may be partially intact (e.g., Malaeha'akoa) while a few may be fully intact. Cordy (1997; Holt et al. 2002) relocated Punana'ula Heiau in the upper reaches of Punanua'ula Stream. Keaupuni Heiau, located along the west bank of Keaupuni Stream near its mouth in Pōka'ī Bay, was identified by Flood et al. (1994:29) as the structure mapped by Monsarrat (1870, 1902). It has been leveled. They also identify the likely location and structure associated with Kamohoali'i Heiau, located about 300 m (1,000 ft.) inland from Poka'ī Bay, in the 'ili of Leohano-iki. It was mapped by Monsarrat (1870, 1902) by which time it apparently had houses constructed on its foundation. Pu'upahe'ehe'e Heiau, on the eastern ridgeline separating Wai'anae from Lualualei, was destroyed when a cemetery was enlarged. It was identified by Thrum (1916) as a luakini class heiau. Kū'īlioloa Heiau is the only known heiau on O'ahu to be surrounded by water on three sides. McAllister (1933) speculates its use may be related to the sea and fishing. It is located on Kāne'īlio Point at the eastern end of Pōka'ī Bay (1933:11). It has been partly restored and its history and archaeology described by Tao (1979) and Abe and Kelly (1979). Kamaile Heiau is relatively well preserved on the ridgeline and ahupua 'a boundary separating Wai'anae and Mākaha. It was mapped by McAllister (1933) and again by Hommon (1978).

While none of these *heiau* have been adequately documented or studied, they do illustrate how the locations of such structures were organized: there are two *heiau* on the coastal points on both the east and west *ahupua'a* boundaries. Similarly there were two *heiau* constructed on the ridgelines above the coast, again situated on the east and west *ahupua'a* boundaries. Both Kamaile and Pu'upahe'ehe'e Heiau were likely of the *luakini* class, as were possibly Kamohoali'i and Kane Heiau (where Kamapua'a was supposedly held).

Historic Maps

One of the earliest maps for Wai'anae was prepared in 1860 for the Waimalu Lease (Figure 8). It is not a final map—many names are written in long hand. It does show a number of 'ili 'āina that are noted on later maps. There are also several other names that are probably 'ili 'āina names as well. The property of Waimalu, where the Elementary School is located, is shown on this map. There are apparently other place names or named individuals labeled but these could not be deciphered.

Another map of part of Wai'anae Kai, also dated 1860, does not provide much detail (Figure 9). It depicts the locations of the *lele* (separate properties) of the *'ili kūpono* named Pāhoa. The large coastal fishpond on Pōka'ī Bay is represented; it shows a section of it as belonging to the "king."

Table 2. Listing of Historical Maps for Wai'anae

Author and Year	Location	Mapped Objects
Pease 1860	Waiʻanae Ahupuaʻa	Coastline, streams, <i>ahupua</i> 'a boundaries, named landholdings, road, place names, fishpond.
Kahena 1860	Wai'anae Ahupua'a	Place names, named landholdings, stream, coastline.
Jackson 1884	Makai Waiʻanae	Coastline, major topographic features, streams, roads, houses, churches, railway, agricultural complexes, fishponds.
Monsarrat 1870	Makai Waiʻanae	Coastline, <i>ahupua</i> 'a boundaries, streams, land awards (LCA, Grants), named landholdings, roads, houses, churches, agricultural complexes, irrigation ditches, fishponds, stone walls, <i>heiau</i> .
Monsarrat 1902	Waiʻanae Ahupuaʻa	Coastline, major topographic features, streams, reservoirs, land awards (LCA, Grants), named landholdings, leased lands, roads, houses, churches, railway, agricultural complexes, fishpond, <i>heiau</i> .
Monsarrat 1906	<i>Makai</i> and <i>Mauka</i> Wai'anae	Major topographic features, streams, swamps, reservoirs, land awards (LCA, Grants), named landholdings, homestead plots, former taro cultivation lands, leased lands, roads, trails, houses, churches, railway, agricultural complexes or locations, irrigation ditches, tunnels, springs.
Sorenson 1906	<i>Makai</i> Wai [°] anae	Coastline, <i>ahupua</i> 'a boundaries, streams, land awards (LCA, Grants), named landholdings, roads, railway, houses, cemetery, Wai 'anae Elementary School plot.
Aiu 1924	Makai Wai'anae	Three LCA plots, stone walls, and irrigation ditches.
Aiu 1927	Pōkaʻī Bay, <i>Makai</i> Waiʻanae	Coastline, <i>ahupua'a</i> boundaries, streams, land awards (LCA, Grants), named landholdings, roads, railway, houses, cemetery, <i>heiau</i> .

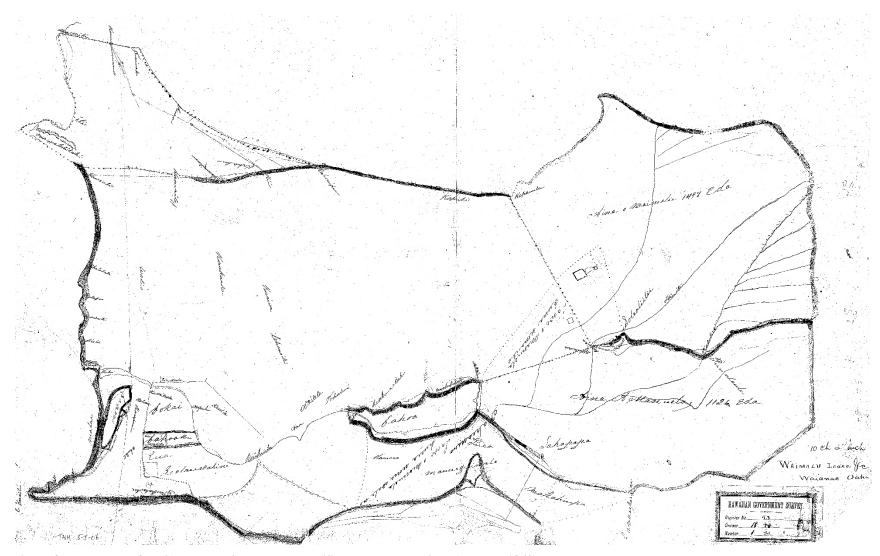


Figure 8. Early map of Wai'anae showing the several 'ili names and locations (Kahena 1860).

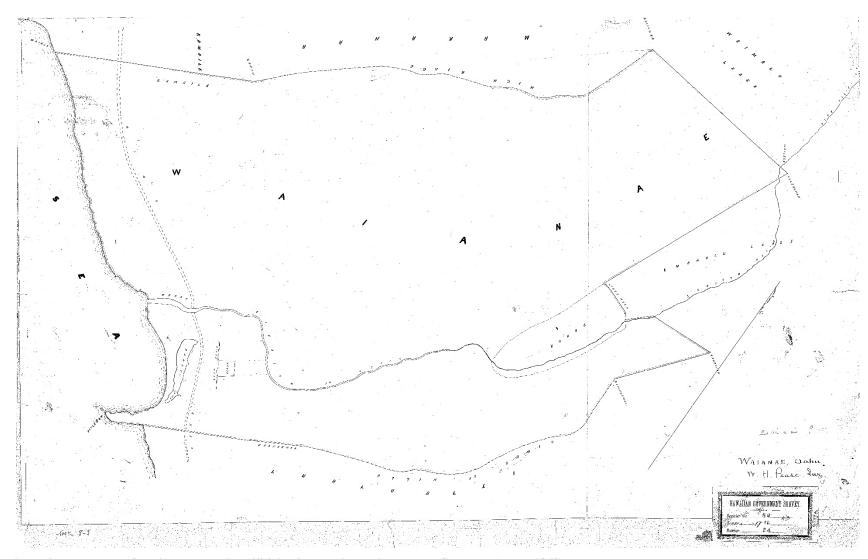


Figure 9. Early map of Wai'anae showing 'ili lele of Pahoa including a large fishpond (Pease 1860).

Monsarrat produced the most complete maps of Wai'anae, three of which were consulted. The first of these appears undated (Figure 10) although Cordy (2012) identifies the date of its completion as 1878. When the map was created, there were no sugarcane fields yet established in the valley. A single house is shown, along with the stone walls surrounding the Waimalu property and the larger area of the LCA (No. 3276) on which it occurred. Several other features are presented that are not represented on later maps, such as the second channel from Keaupuni Stream to the coast, which was identified as a "ditch." Both *ahupua'a* boundaries are included and represented as stone walls, with gates. This map has the most inclusive set of 'ili 'āina names but only shows the walled boundaries of these places, likely representing the extent of lo'i still in use at the time the map was completed.

A map by Jackson (1884) of *makai* Wai'anae also depicts the Pāhoa fishpond, suggesting it was still in use at this time (see Figure 5). It shows the locations of a number of houses along the coast, the new housing for sugarcane workers, and the railway. Just inland from the lower Pāhoa property there are large agricultural areas depicted with fence lines drawn in. These would have been areas under sugarcane cultivation. The Waimalu property is shown with additional houses placed on it that are likely those for sugarcane workers.

The latest Monsarrat map from 1906 includes the upper part of Wai'anae Kai (Figure 11). This map was prepared to identify the new Forest Reserve area within Wai'anae, as well as to show lease and homestead properties. The lease properties were either under sugarcane cultivation or used for ranching. This map depicts a number of areas "formerly in taro." It is unclear if these were originally recorded by Monsarrat but not previously incorporated into his earlier maps.

The map by Aiu (1924) shows a small section of land in what was likely the upper *lele* of Pāhoa (Figure 12). This map shows three LCA plots along with several stone walls that bounded the plots and ditches, some of which match Monsarrat's earlier map from 1902 (see Figure 6). Taro was still under cultivation and watered by a traditional ditch. A later map (Aiu 1928) shows the location and surrounding features of the military reservation in Pōka'ī Bay (Figure 13).

Historic Wai'anae Elementary School

The Wai'anae Elementary School is said to be more than 150 years old (Anonymous 2012), although it is not clear if the school buildings have been in the same location over this period of time. Public education was established by law in 1840 under the Kingdom of Hawaii (Wist 1940), and the Reorganization Act of 1865 established the Bureau of Public Instruction (Hunt 1969:295). The establishment of commercial sugar companies, including the Wai'anae Sugar Company in 1879, often expanded educational opportunities with the creation of local schools. A school fund for both 'Ewa and Wai'anae had been previously established in 1875 (Hawai'i State Archives 2003:C-77). Until the early 20th century, there was just one public secondary school in Hawai'i; the rest were elementary schools only (Forbes 1988:9).

Historic maps by Jackson (1884) and Monsarrat (1902) show several structures on what was to become the school lot property (see Figures 5 and 6). The 1902 map depicts a row of what appear to be plantation houses along the south and east boundary of the school's property, plus a larger structure set in the center of the parcel. Sorenson's (1906) map includes all of the coastline of Wai'anae Kai and labeled as "school lot" a 2.85 acre property that had been awarded to Waimalu (Figure 14). No structures or buildings are depicted on Sorenson's map.

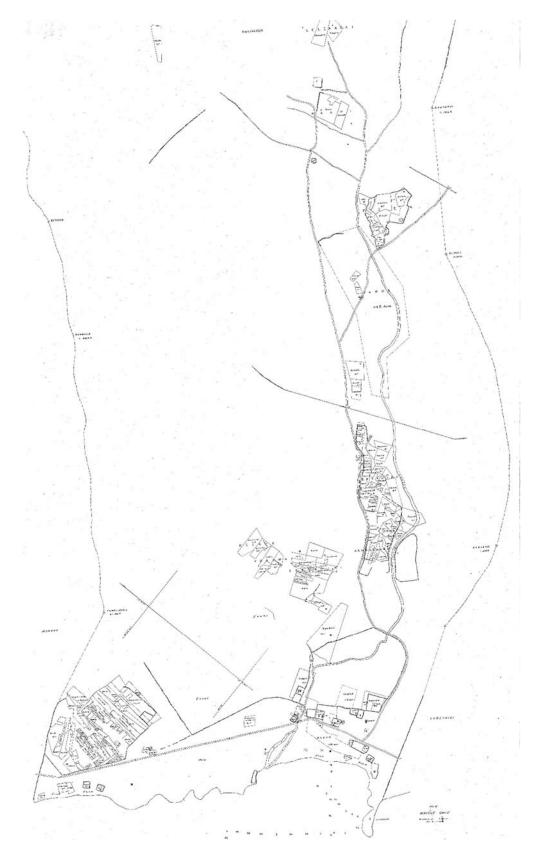


Figure 10. Monsarrat's earliest map of Wai'anae Kai Ahupua'a (1870).

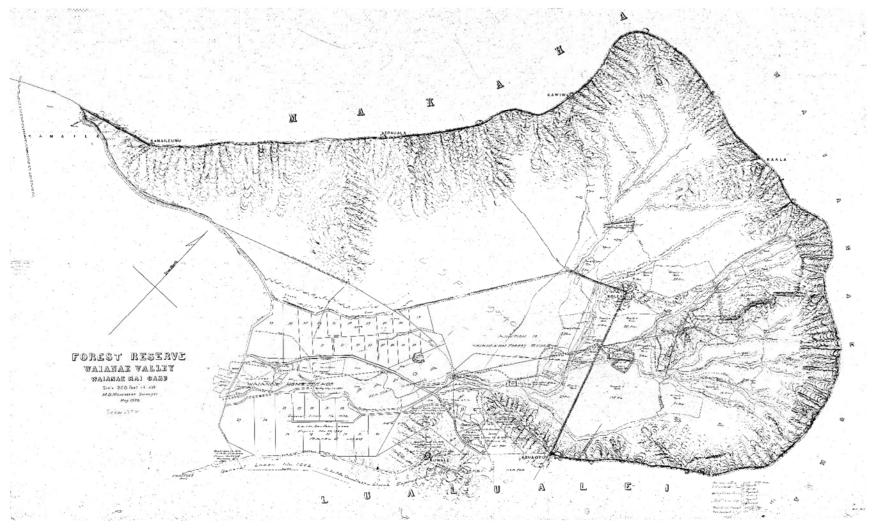


Figure 11. Early map of Wai'anae Valley, showing Forest Reserve area (Monsarrat 1906).

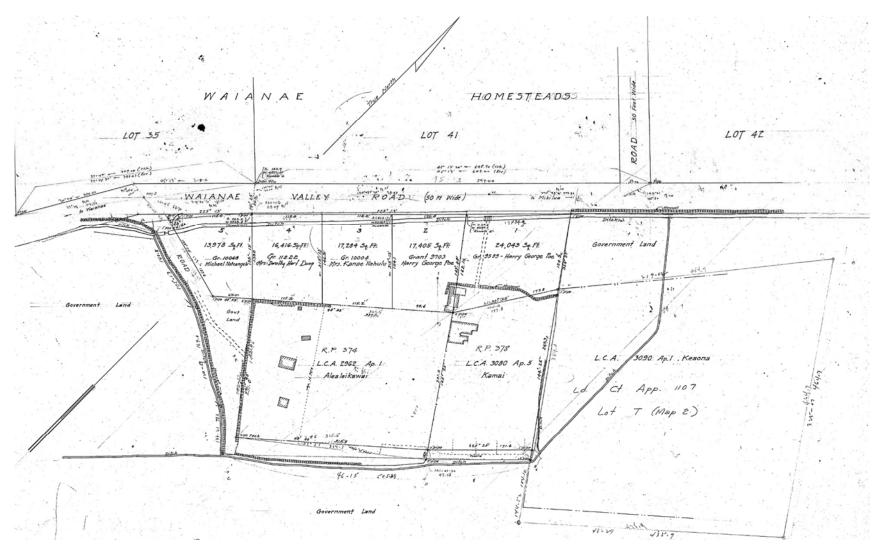


Figure 12. Map of Wai'anae House Lots (Aiu 1924).

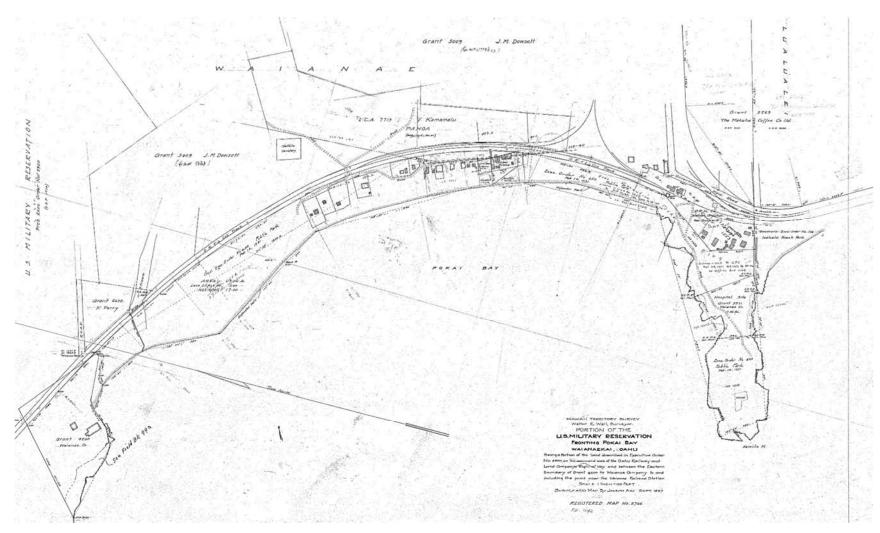


Figure 13. Historic map of Pōka'ī Bay (Aiu 1927).

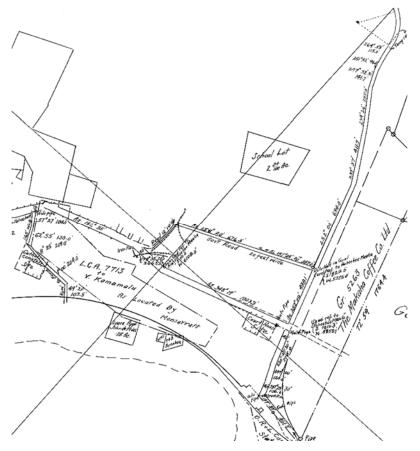


Figure 14. Wai'anae Kai Map showing the school lot property (Sorenson 1906).

The first map that depicts a school house on the Wai'anae Elementary School parcel is a Waianae Quadrangle, topographic map that was prepared in 1928–1929 by the Department Engineer, Territory of Hawaii under the sponsorship of the Coast and Geodetic Survey and Corps of Engineers, U.S. Army, War Department but printed later (Department Engineer 1936) (Figure 15). The school can be discerned by the flag atop one of the buildings shown on the parcel. The series of school buildings on the north edge of the property represented on the 1936 map are still in place today. There are two small houses located on the east edge of the property that may be same as those on Monsarrat's 1902 map.

The map from 1936 was followed up by a 1954 revised quadrangle map (Figure 16) that again depicts the Wai'anae Elementary School buildings on the north perimenter of the campus. They are distinguishable as long structures set perpendicular to the property's border. A number of other buildings, generally small, possibly houses, along the south portion of the property are shown, several of which reappear on later maps. The 1983 Waianae Quadrangle map largely replicates the 1954 version (Geological Survey 1983). The most recent version of the Waianae Quadrangle (Figure 17) printed in 1998 depicts all of the current school buildings that are also shown on the project area map: along the north edge of the property there are now only five of the original six long buildings and a number of smaller buildings located west of the open area on the southwest secton of the parcel. The library and cafeteria buildings are shown on the 1998 map along with a series of portable buildings, six of which are placed in the locations where several of the original plantation houses were located on the 1954 Quadrangle.



Figure 15. Portion of an early Waianae Quadrangle Map (Department Engineer 1936).

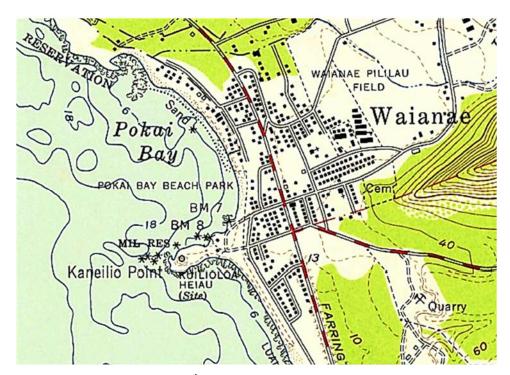


Figure 16. Portion of a mid- 20^{th} century Waianae Quadrangle Map (Geological Survey 1954).

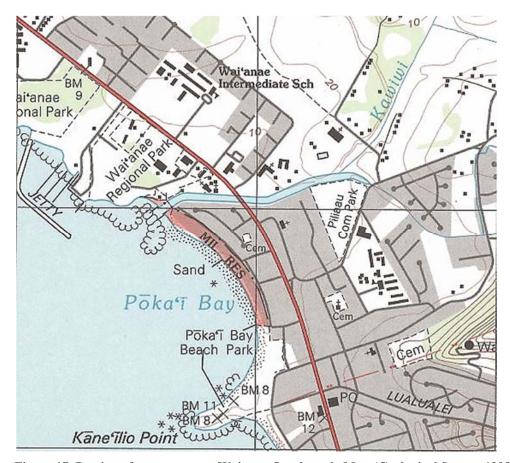


Figure 17. Portion of a more recent Waianae Quadrangle Map (Geological Survey 1998).

Several of the original buildings, from the north side of the property and depicted on the early quadrangle maps, are shown in this photograph of the school that was taken from the Department of Education website (Figure 18). While not as architecturally imposing as other historic schools on Oʻahu, the original buildings at Waiʻanae Elementary School are similar to others built in plantation communities such as Hanalei and Kilauea Elementary Schools on Kauaʻi. Both Hanalei and Kilauea are listed on the National Register of Historic Places and were built between 1916 and 1926.



Figure 18. Photograph of the main classroom buildings at Wai'anae Elementary School.

Coastal Southeast Wai'anae, including Pōka'ī Bay

Lower Keaupuni Stream (below its confluence with Kawiwi Stream), Pōka'ī Bay and Kāne'īlio Point define the major natural features along the southeast coastal section of Wai'anae. This area had the best access to the ocean as well as to fresh water from the stream. It would have been a prized area for habitation. Later both a roadway and railway were established along the inland section of the bay.

McAllister's early archaeological survey identified a number of sites in Wai'anae Ahupua'a near or on the coast (1933). Site 153 is Kū'ilioloa Heiau, located on the *makai* end of Kāne'īlio Point (McAllister 1933:112) (Figure 19). Ten *heiau* were named by McAllister: Pu'upahe'ehe'e, Kū'ilioloa, Keaupuni, Kamohoali'i (or Kahoalii), Malaeha'akoa (or Malaihakoa), Kikiahi, Kalamalama, Kane, Pu'uana'ula, and Kamaile. Pu'upahe'ehe'e and Kamaile likely were located on their respective *ahupua'a* boundaries—Pu'upahe'ehe'e with Lualualei, and Kamaile with Mākaha. Two of the *heiau* were situated in the valley itself: Malaeha'akoa and Pu'uana'ula. Kū'ilioloa Heiau had three main, stepped terraces and platforms and evidence of additional terracing on the *mauka* end. The highest platform is at the tip of the point (McAllister 1933:112). Abe and Kelly (1979) conducted a condition assessment of the *heiau*, identifying as many as eight construction features, one with walls at least 2.5 m (8 ft.) in height. This *heiau* is identified on at least two historical maps (Jackson 1884; Aiu 1927) where it is associated with what appears to be the *ahupua'a* boundary wall separating Wai'anae and Lualualei Ahupua'a (see Monsarrat 1870, 1902). A section of this boundary wall apparently also served as a *hōlua* ramp (Jackson 1884). Pukui et al. note that Kū'ilioloa was dedicated to and named after a giant dog-man (1974:84), likely a variant of the deity, Kū.

Site 154 is Puehu Fishpond, once located near the mouth of Keaupuni Stream (McAllister 1933:113). McAllister posits that the fishpond's original area was 150 m by 90 m (300 ft. by 75 ft.) (1933:113). There are two other fishponds identified by Monsarrat (1878, 1902) and Jackson (1884). One of these fishponds, on the lands of Pāhoa, was on the inland side of Pōka'ī Bay and was at least 1 km (.6 mi.) long. It extended along the length of the bay and its northwestern portion likely was buried when the Marin Road was constructed. On an early map (Pease 1860) a portion of this fishpond is identified as belonging to the "king." All of these fishponds are now destroyed or buried. Monsarrat (1870) also depicts a ditch that provided a second channel for water flowing in Keaupuni Stream to reach the ocean.

Site 155 is Keaupuni Heiau, located on the Mākaha side of Pōkaʻī Bay, but now destroyed (McAllister 1933:114). It is likely displayed on historic maps as an unnamed structure on the north side of Keaupuni Stream (Jackson 1884; Monsarrat 1870). Flood et al. (1994:29) identify Keaupuni with this structure on a map. Site 156, Kamohoaliʻi Heiau, located inland and across Farrington Highway from Puehu Fishpond, has also been destroyed (McAllister 1933:114). Flood et al. (1994:29) associate this *heiau* with a large enclosure in the *'ili* of Leohano-iki. The major structures and features found in this section of Waiʻanae attest to its cultural and religious significance.

At least five house sites are depicted on Pōka'ī Bay (Monsarrat 1878) and by the early 20th century there were houses along both sides of Farrington Highway, formerly the Marin Road, that borders the bay. Stone wall enclosures are shown by Monsarrat around most of the house sites.

Much archaeological work has been done along the coastal fringe fronting Pōka'ī Bay *makai* of Farrington Highway (Riford 1984; Kam and Ota 1984; Hammatt et al. 1985; Borthwick et al. 1999; Shun and Shaw 2002; Kalilihiwa and Cleghorn 2005). Unfortunately, virtually all of the likely prehistoric structures and features associated with this area are no longer visible. Much of the surface area was modified extensively and has seen substantial deposition of modern materials.



Figure 19 Ku'ilioloa Heiau, Wai'anae.

Subsurface excavations have revealed a number of cultural features and deposits. Work in the northwestern portion of the Wai'anae Army Recreational Center (WARC) in the 1980s and 1990s was particularly notable for the large number of human remains uncovered (Riford 1984; Kam and Ota 1984; Hammatt et al. 1985). Testing and monitoring at the WARC also produced intact, buried cultural layers, possible paving stones, and hearths or firepits suggesting former habitation areas. A variety of cultural remains are noted, including volcanic glass, fishing gear and tools, adze fragments, and other stone, shell, and bone artifacts (Hammatt et al. 1985; Shefcheck and Spear 2014). Faunal remains and marine shell are also documented in these contexts. The coastal area was clearly in heavy use by pre-contact Hawaiians for a variety of activities related to food preparation, fishing and management of fish, collection of marine resources, and habitation. Cultural deposition was found exclusively in the calcareous sand deposits that are common to the coastal fringe. These deposits diminish with distance from the coastline. Stine et al. (2014) provide an assessment of historic sites or features that were previously located within the project boundaries for a sewer line; these included a former fishpond, archaeological evidence for the historic roadway, and a spur of the railway line.

Coastal Northwest Wai'anae to Kawiwi Stream

This section of Wai'anae includes the coast west of Pōka'ī Bay and extended to the *ahupua'a* boundary between Mākaha and Wai'anae. This portion of the coastline is fronted by smaller sandy embayments and exposed bedrock to the west and a section of raised limestone, derived from a former coral reef that occupies the center of the coastline. The north and west boundary is represented by Kawiwi Stream, which flows from the east face of the western ridgeline in a southeast direction where it joins Keaupuni Stream. There is limited surface water on the westernmost portion of this area; a small stream that originates to the west of the *ahupua'a* boundary wall emptied out into one of the bays just on the Mākaha side of the boundary. Although it lacked stream water, there were springs that emerged near the base of the Kamaile ridgeline that were sufficiently substantial to support a relatively verdant plant community.

Historic maps (Monsarrat 1870, 1902; Jackson 1884) depict the Mākaha-Wai'anae Ahupua'a boundary wall with a gate about 100 m inland. The current roadway runs through this location today. North of this lies the 'ili of Kamaile. Near the boundary with Mākaha there were several house sites on the Wai'anae beach according to historical maps (Jackson 1884; Monsarrat 1870, 1902). Inland from the beach was a large area in which lo'i were present, along with a number of houses. Historic maps show more than 50 plots that were presented as claims during the Māhele. These plots and their associated lo'i lie below the Kamaile springs. Kamaile Heiau sits on the ridge above the valley floor and there is a cave or rockshelter just below (McAllister 1933; Hommon 1978). A second heiau, named Kane or Kaneikapulena was once situated within the Kamaile 'ili. There is a large walled enclosure depicted on Monsarrat's map (1870) in the northeast corner that might be the location of this heiau. Archaeological fieldwork in this area has further documented Kamaile Heiau and the associated cave below it (Hommon 1978). A habitation complex (Site 5949) below the Kamaile Heiau complex and Kuka'au'au Cave (Site 1181) was mapped. A subsurface platform or paving was also identified at this site. The habitation feature is likely associated with the large Kamaile lo'i and habitation complex.

To the east of Kamaile was the 'ili of Lehanoiki, whose western boundary was represented by the stone wall that extended northward from the coast. Most of this area is raised limestone karst with numerous sinkholes. There is little surface water available except to the north and east where Kawiwi Stream joins Keaupuni Stream. Natural sinkholes occur in the karst and these could have supported gardening activities or smaller residential structures. Kawiwi Stream would have been the major source of water for this area, and maps place two other 'ili, Keekee and Kuaiwi, within or adjacent to the upper section of the stream.

Shapiro and Rosendahl (1988) conducted an extensive survey of the former Waianae Dairy operations. This project area covers a portion of land west of Kawiwi Stream (and hence falling into this section). Several LCA awards shown on Monsarrat's (1902) map are placed across Kawiwi Stream. Trenching in these areas by Shapiro and Rosendahl uncovered buried gleyed soils, typically associated with *lo'i* pondfields. Much of the surface of this project area contained historic debris from the former dairy, including concrete foundations, ditches, flumes, a well, a bridge, and a culvert.

Archaeological fieldwork in this region has further documented Kamaile Heiau and the associated cave below it (Hommon 1978). A number of sinkholes with cultural material (Flood et al. 1994; Sinoto 1975) were identified during reconnaissance surveys. Relatively few features or structures have been found on the raised limestone section.

Archaeological inventory survey was completed for the proposed Leeward Coast Emergency Homeless Shelter on Farrington Highway, east of Wai'anae Intermediate School (Hammatt and Shideler 2006). Extensive backhoe trenching uncovered no artifactual remains, although one human burial was encountered. A total of 33 m² surrounding the find was excavated to bedrock to confirm that the remains were an isolated occurrence and not part of a larger burial complex.

Archaeological and geophysical surveys were conducted at the State of Hawai'i Department of Transportation's Wai'anae Baseyard, just west of the Leeward Coast Emergency Homeless Shelter (Desilets 2007). Excavation of 11 test trenches produced no evidence of cultural remains. Outcrops of coral bedrock protruded from the surface in portions of the parcel, but in other areas the bedrock was not encountered until as deep as 150 cm below surface (cmbs).

A human burial was found at Wai'anae Regional Park, eroding from the shoreline after Hurricane Iniki (Kawachi 1992). The individual was found at 60 cmbs and was identified as possibly an adult female. The burial was covered with sand and left in place.

Archaeological reconnaissance was carried out for the Wai'anae Light-Draft Boat Harbor on the west side of Wai'anae Regional Park (Sinoto 1975). Five sites were recorded, including Site 50-80-07-4822, an animal pen or enclosure; Site 50-80-07-4823, a rectangular enclosure and adjoining L-shaped wall; Site 50-80-07-4824, a stone wall; Site 50-80-07-4825, a partially destroyed enclosure; and Site 50-80-07-4826, an L-shaped wall or shelter. OR&L railroad remnants and other heavily disturbed sites were also noted but not recorded due to their poor condition. The five sites were later re-examined through archaeological inventory survey and subsurface testing (Clark et al. 2004). Two of the sites had been destroyed and four new features and two cultural deposits were identified. The new features, the three remaining previously identified sites, and a burial exposed during Hurricane Iniki were subsumed under a single site number, 50-80-07-3967. The new features were sinkholes interpreted as gardening areas. The cultural deposits were found within the sinkholes and yielded charcoal, marine shell, and animal bone.

Archaeological inventory survey and subsurface testing were completed for a proposed extension to Wai'anae Regional Park (Denham et al. 1992). A total of ten test trenches and six auger bores produced only a volcanic glass flake, a possible basalt abrader, and historic material. No cultural deposits were identified.

In sum, this west section of coastal Wai'anae can be separated into areas near the western *ahupua'a* boundary where a *heiau* and the *ahupua'a* boundary wall were located. Below Kamaile Heiau there is a cave that was occupied, probably in association with the *heiau*. A major irrigated agricultural complex, with some habitation structures is associated with Kamaile 'Ili, just inland from the coast, below the western ridgeline. Portions of the walls and terraces likely still exist in this area. Along the western coastal zone just inland from a bay were several residential structures, and in the raised limestone that comprised the eastern portion of this section, several structural features that may have served as house sites or animal pens, human burials, and gardening areas in sinkholes have been identified. West of Keaupuni Stream at the coast was Keaupuni Heiau, depicted on several historic maps, but now destroyed. There were also two fishponds in this region, one of them named Puehu. The historic railway also passed through along the coast.

Lower or *Makai* Wai'anae Valley, from Keaupuni-Kawiwi Streams to the Confluence of Keaupuni and Punana'ula Streams

This section of the valley extends from the confluence of Kawiwi Stream with Keaupuni Stream *mauka* to the confluence of Keaupuni and Punana'ula. Several '*ili* 'āina occur here: Puea, the upper *lele* section of Pāhoa, Palaloe, Ana, Lehanonui, Lehanoiki, Kaholanakio, Kaho'olanakio Keekee, Kuaiwi, the middle Pāhoa *lele*, and Waikele. Two of these are illustrated on historic maps and contained several large *lo'i* complexes.

Rosendahl (1981) surveyed the Wai'anae Kai Property associated with a former dairy operation. Most of the 34 sites are remnants of the dairy (e.g., flumes, bridge). Ten of twelve trenches were excavated north of Kawiwi Stream, on properties that had been claimed as LCAs. In seven of these trenches, gleyed soils, likely the product of taro cultivation in *lo'i*, were found. There were no remaining surface indications of terraces.

Archaeological inventory survey was conducted on a seven-acre property on the east side of Wai'anae Intermediate School, inland of the Leeward Coast Emergency Homeless Shelter (Flood et al. 1994). A total of 24 features were recorded under Site 50-80-07-2474, including 14 unmodified sinkholes, four modified sinkholes, a wall, a historic artifact scatter, a trash mound, an alignment, a platform dog burial, and a terrace. Ten features were excavated, and traditional cultural deposits were encountered. Basalt flakes, volcanic glass, a fragment of cut bone, and an octopus lure point were collected, along with bone and shell midden, and a multitude of historic material.

Upper or Mauka Wai'anae Valley, Above the Confluence of Keaupuni and Punana'ula Streams

This area includes a series of streams that merge into upper Keaupuni Stream at different points. Punana'ula is the first major stream (other than Kawiwi) to flow into Keaupuni at about 90 m (300 ft.) above sea level. Above this Keaupuni splits into three named streams: Kawaopu'u, Honua, and Kūmaipō. The main branch of Honua Stream splits into Hiu Stream and Kalalua Stream. Above Kanewai, Niolopua, Kukaki, and Kanemimi Streams join Honua Stream. The branching of streams creates a series of ridgetops that extend to the north, northeast, and northwest up to the Wai'anae Mountains and the two ridgelines that serve as the Wai'anae Ahupua'a boundaries. All of these streams were fed by springs or marshes, many of which are shown on a later Monsarrat (1906) map of the Forest Reserve in the upper Wai'anae Valley.

Although several surveys have been completed in this area, few had adequately described the findings until summarized by Cordy (2012). Still much of what we know has been gleaned from historic maps (Monsarrat 1870, 1902, 1906) and two small archaeological projects (Cordy 1997; Holt et al. 2002). Several other, larger projects are recorded from this area (e.g., Sinoto 1979; Bordner 1981; Chiniago 1982) but these were not available for review.

Monsarrat's 1906 map shows sections of the *'ili 'āina* of upper Pāhoa, Ka'api, Leleakoai, Kūmaipō, along with other areas that were likely *'ili* as well (but whose names cannot be verified, e.g., Makahiupa, Lahapapa, Koleali'ili'i (see Kahena 1860). This section of upper Wai'anae was largely devoted to irrigated agriculture as is shown on the 1906 map. Although little documented by archaeologists, this map also depicts 11 areas above the Punana'ula Stream confluence that formerly supported *kalo* cultivation. The total area is 94 ha (237 ac.), making this one of the largest *lo'i* systems known for O'ahu. These complexes extend as much as 305–365 m (1,000–1,200 ft.) above sea level. Several irrigation ditches are also shown on this map, one of which tapped upper Keaupuni (at about 90 m [300 ft.] above sea level) and was at least 2.12 km (6,949 ft.) in length, extending downslope to the south end of upper Pāhoa. Dryland fields also occur on the ridges between the streams and along their lower sections. A number of these fields are preserved and visible on Google Earth (Figure 20).

Cordy (2012) has updated these findings and produced maps of both the pre- and post-contact archaeology for the area. More than 115 sites are now documented for the former Wai'anae Valley Ranch, located in the upper west portion of the valley. Many of these sites, mostly dryland and irrigated agriculture, contain numerous features or complexes and are distributed over large sections of the uplands. At least 40 habitation features or complexes are represented here, and at least eight heiau or other religious features are now known for this area. Historic-era sites include a series of stone walls and a variety of features (wells, tunnels, flumes, roadways) that are associated with sugarcane cultivation and water transport. Cordy's work confirms the extensive preservation of historical and cultural properties that document the role Wai'anae played in the region's prehistory and history.

Cordy (1997) notes the two complexes of *lo'i* terraces associated with upper Punana'ula (Site 5523) and Kūmaipō Streams (5521). There is at least one *heiau*, Punana'ula, in the Upper Valley just south of the stream. It is shown on the 1906 map; this complex (Site 165) was noted but not observed by McAllister (1933) and was located by Cordy. It is situated to the south of Punana'ula Stream near the *lo'i* complex, Site 5523. It is visible from the air (Figure 21). Five house sites have been recorded in this area (Cordy 1997; Holt et al. 2002) one of them near the dryland fields of lower Punana'ula.



Figure 20. Probable dryland fields between Punana'ula and Kūmaipō Streams.



Figure 21. Aerial view of Punana'ula Heiau, Wai'anae.

Settlement Patterns

More than 15 distinct 'ili, named sub-sections of Wai'anae Ahupua'a, have been identified on historic maps (Monsarrat 1870, 1902, 1906). These typically include both agricultural and habitation features. They are also where most of the LCA awards are concentrated for this ahupua'a. These 'ili are distributed across the valley both along the coast, inland and adjacent to the major streams that drain into the valley from the mountains and ridges that surround it on three sides. Agricultural lands are clustered around both streams and springs and extensive areas were converted to lo'i. By 1880 when the first maps were developed, some areas of Wai'anae Ahupua'a had already been abandoned and their 'ili have gone unrecorded. Several 'ili are contiguous with one another, their boundaries distinguished by low stone walls. Nonetheless, there are irrigation ditches that cross 'ili boundaries suggesting water was shared from a single source. In a few cases, these irrigation ditches extend for more than 1 km in length.

One 'ili, named Pāhoa, contained at least three separate plots of land that included a fishpond on Pōka'ī Bay, a small section of irrigated land adjacent to Waikele 'ili, and a third section located farther up the valley on Keaupuni Stream that contained a number of lo'i.

House sites, both on historic maps and those identified by archaeologists, fit the pattern of dispersed habitation. Except the house sites that are located on the coast, the remainder are placed within LCA parcels and/or named 'ili 'āina. Most appear to be adjacent to locations where lo'i or other agricultural sites would have been cultivated.

At least four *heiau* in Wai'anae were located on the *ahupua'a* boundaries with Mākaha and Lualualei, highlighting the potential integration of these separate communities by religious considerations as well as by socio-political relationships. A fifth *heiau* was on the coast, on the west end of Pōka'ī Bay near a series of fishponds and at the mouth of Keaupuni Stream. Several other *heiau* were adjacent to or within the boundaries of named *'ili*, such as Kane Heiau in the *'ili* of Kamaile, suggesting they served as one or more landholding units. *Heiau* also occur inland, such as the one found near Punana'ula Stream.

Summary of Background Information

Several features of Wai'anae Ahupua'a suggest it was an important center in Leeward O'ahu. These include its central location, large size, inland boundary that extended to the Ko'olau Mountains, substantial number of heiau, and association with at least four paramount chiefs of O'ahu mentioned in oral traditions. While portions of the leeward coast likely had a lower density of population at the time of European contact, there were some areas such as Wai'anae that supported more substantial groups. With more than 15 named 'ili 'āina, each of which would have supported several Hawaiian families, the population of Wai'anae Kai could have reached as many as 800-1,000 individuals. The large number of LCA awards, in excess of 160, made to residents of Wai'anae likewise are a testament to its sizeable and influential community. A number of ali'i also made their home in Wai'anae, probably living along the coast and attached to the larger 'ili. Large tracts of land were devoted to the cultivation of irrigated taro and these plots extended from the makai area of the valley into the upper portion where there were many springs and multiple streams with perennial water flow. Elsewhere dryland crops, such as sweet potato, sugarcane, and yams, were grown on the lower ridges that separated the stream drainages. At least three fishponds are known from Wai'anae; one of them was at least 1 km in length. The ocean was a major resource, with prime fishing grounds exploited along the coast. Finally, there were at least 10 named heiau in the ahupua'a, several of them occupying key landmark locations or near important resources.

The historic period brought widespread changes to the region. Large numbers of the population were lost to the catastrophic diseases introduced to the islands by early Europeans and Americans. This set off a series or relocations of communities as well as less productive areas that were largely or completely abandoned in favor of locations closer to population centers or with access to irrigated farming. Nonetheless, Wai'anae continued to support a series of local households and extended families. Later with large expanses converted to cattle ranches and sugarcane fields, its population grew again through emigration of laborers for the plantations and the development of Wai'anae as a commercial center.

Many archaeological projects have taken place in the Ahupua'a of Wai'anae. These, along with historic maps, documented a wide variety and extensive array of structures, features, and artifacts that date to the pre- and post-contact periods. Archaeological remains in the region consist of remnants of stone walls and terraces, as well as irrigation ditches, house sites (and their artifact remains), as well as human burials. Although the surface archaeology for the project area has likely been removed or substantially altered, there are likely sizeable areas where intact subsurface deposits and features will be found. These would include, in addition to features and human burials, soils associated with pondfield cultivation of taro. The section of land on which the Elementary School lies is also significant since this parcel was identified as early as 1906 as the location where a school was to be built.

ETHNOGRAPHIC SURVEY

As we all know, there are some things that cannot be found in the archives, in textbooks, or at the library. It is here, through the stories, knowledge and experiences of our $kama'\bar{a}ina$ and $k\bar{u}puna$, that we are able to better understand the past and plan for our future. With the goal to identify and understand the importance of, and potential impacts to, traditional Hawaiian and/or historic cultural resources and traditional cultural practices of the Wai'anae region, ethnographic interviews were conducted with community members who are knowledgeable about the project area.

Methods

This Cultural Impact Assessment was conducted through a multi-phase process between March and May, 2015. Guiding documents for this work include The Hawai'i Environmental Council's Guidelines for Assessing Cultural Impacts, A Bill for Environmental Impact Statements, and Act 50 (State of Hawai'i). Personnel involved with this study include Windy McElroy, PhD, Principal Investigator of Keala Pono Archaeological Consulting, Michael Graves, PhD, Archival Researcher, and Dietrix Duhaylonsod, BA, Ethnographer.

Consultants were selected because they met one or more of the following criteria: 1) was referred by Keala Pono Archaeological Consulting or Group 70; 2) had/has ties to the project area or vicinity; 3) is a known Hawaiian cultural resource person; 4) is a known Hawaiian traditional practitioner; or 5) was referred by other cultural resource professionals. Two individuals participated in the current study. *Mana 'o* and *'ike* shared during these interviews are included in this report.

Interviews were taped using a digital MP3 recorder. During the interviews, consultants were provided with a map or aerial photograph of the subject property, the Agreement to Participate (Appendix A), and Consent Form (Appendix B), and briefed on the purpose of the Cultural Impact Assessment. Research categories were addressed in the form of open questions which allowed the consultant to answer in the manner that he/she was most comfortable. Follow-up questions were asked based on the consultant's responses or to clarify what was said.

Transcription was completed by listening to recordings and typing what was said. A copy of the edited transcript was sent to each consultant for review, along with the Transcript Release Form. The Transcript Release Form provided space for clarifications, corrections, additions, or deletions to the transcript, as well as an opportunity to address any objections to the release of the document (Appendix C). When the forms were returned, transcripts were corrected to reflect any changes made by the consultant.

The ethnographic analysis process consisted of examining each transcript and organizing information into research themes, or categories. Research topics include archaeological sites, cultural practices and *mo'olelo* historic Wai'anae/change through time, and concerns and recommendations for the project. Edited transcripts are presented in Appendices D and E.

Consultant Background

The following section includes background information obtained from each consultant during the interviews. This includes information on the consultant's 'ohana and where the consultant was born and raised. The interviewees are prominent Wai'anae residents Eric Enos and Glen Kila.

Eric Enos

Eric Enos has lived in Mākaha for approximately 60 years. He attended Waiʻanae Elementary School from kindergarten through sixth grade and then transferred to Kamehameha Schools. After graduating from the University of Hawaiʻi he began working with the community, starting with Nānākuli and continuing down the coast. Uncle Eric helped establish the cultural learning center at Kaʻala Farm as part of a model cities project with the Waiʻanae Rap Center in the early 1970s. The Kaʻala Farm lands in Waiʻanae Valley were made available in 1976 and he has been working with the community and studying the cultural sites there ever since. Of particular importance is working to preserve the cultural landscape.

Glen Kila

Glen Makakauali'i Kila has ancestral ties to the lands of Wai'anae, which extended from Wai'anae Kai to Wai'anae Uka. 'Ohana with the family name of Haulele lived at Pu'u Palailai near Honokai Hale, and also came from Pōka'ī and Wai'anae Valley. Some of his ancestors were also the *ali'i* of the Manuia clan. Uncle Glen acquired significant knowledge of cultural sites, traditional beliefs, and practices from his *kūpuna*. He attended Wai'anae Elementary School from kindergarten to 7th grade and then continued on to Wai'anae High School. Wai'anae Elementary was also the school of his grandfather John, his father Benedict, and Uncle Glen's two sons. Uncle Glen is a respected cultural practitioner today.

Topical Breakouts

A wealth of information was obtained through the oral interviews. This is organized in the following sections by topic. Topical breakouts include archaeological sites, cultural practices and *mo'olelo*, historic Wai'anae/change through time, and concerns and recommendations for the project. Quotes from the interviews are provided below for each topic.

Archaeological Sites

I remember stories about a spring there called Wai'oli, "Happy Waters," that my grandfather would talk about. [Glen Kila]

Because there was a famous spring there, Wai'oli, there were a lot of Hawaiian settlements at that time that surrounded Wai'anae Elementary, Pililā'au Park and Pu'u Kahea. The plantation manager's house up there was the home of O'ahu's king Kahahana. [Glen Kila]

If we look at our family properties that we own today, we are reminded about the ancient streams and springs where our families lived. Their crops, the *kalo*, sweet potato, bananas all grew next to the water sources. Stories also talked about a *heiau*, a *hale mua*, near or on the school grounds. I think if you go deep under the ground there may be remnants of the old Hawaiian village. We called this place again Pāhoa, the same name we called in the valley and near the beach area. [Glen Kila]

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...There's a lot of significant sites, but aside from the $h\bar{o}lua$ [slide], the other site is across where the water was, and that would have been where the *heiau* once sat, which was destroyed, which the Mormon temple sits on now, I mean the Mormon church and the plantation. So that was a major site, and then right at the point over there, where the stream comes in and where the rest camp is, all in that area, those were the important sites. They all have been pretty bus' up already, and the fishpond area. So aside from that, this area in question is far away and isolated so that's the only impact I see. [Eric Enos]

...Being kula lands, the lands up here, up in Wai'anae Valley is where all the lo'i were. And the majority of the cultural sites were closest to the water source. Down below were kula lands, the only cultural site adjacent to it was the $h\bar{o}lua$, which is maybe less than a quarter mile from the site in question, as you face the southeast on that little pu'u coming down. But that has been kind of bus' up already, the $h\bar{o}lua$ slide, and other than that, I can't see any surface impacts, except when they start to do any subsurface. [Eric Enos]

Cultural Practices, Mo'olelo

Well aside from gathering knowledge, the '*ike*, which the school needs to do more of, but then that's a DOE issue, not a building issue. [Eric Enos]

There's no gathering practices of any kind that I've seen or heard of at the site. [Glen Kila]

One incident that was very famous in Wai'anae was the story of the Green Lady. The Green Lady stemmed from the ancient legend of Hi'iaka and Wahine'ōma'oma'o. She supposed to have killed children in Wai'anae. This led to mass hysteria back in the '60s and at one time closed the school because of students fears. [Glen Kila]

Historic Wai'anae, Change through Time

Well the school has already been in existence before I was there. Obviously it's one of the older elementary schools. In fact, it might have even been even higher grades way back when, during the plantation era. [Eric Enos]

...I think all the buildings are pre and post-World War II, and then the modern portables that have come up. The cafeteria was there when I was there. The main office is long gone. The oldest thing is probably that stage over there, but then that's about it. I don't see any historical properties or buildings existing on the campus anymore. [Eric Enos]

Wai'anae Elementary was part of the plantation homes in the area after the Hawaiian settlements because of the Wai'oli spring. I don't recall churches except for the Protestant Church nearby. I do recall it being government and plantation lands which extended to the Japanese and Chinese graveyard just above the school at Pu'u Pahe'ehe'e Hill and Heiau. [Glen Kila]

The school itself was very village-like. We had principal, Mr. Moore, who lived at the school with teachers at the teacher's cottages. Some of the teachers at Wai'anae Elementary also taught at Wai'anae High and Intermediate. We didn't have Mākaha, Mā'ili, Leihōkū Elementary, so the population for the student body at Wai'anae Elementary was very large. There were over a thousand students at the time. [Glen Kila]

He [my grandfather] also shared that Wai'anae Elementary was the center of the community. Even during my time in the 1960s, Wai'anae Elementary had a lot of different events, like the Halloween bazaars, Christmas, May Day programs. This was really the center for the Wai'anae families to celebrate the holidays. [Glen Kila]

There were all wooden buildings at that time. The administration building was a long wooden building that consisted of the health room and the sixth grade class. The area that is now planned for development is where the principal's cottage was. He had a garden, and there were cottages next to it. [Glen Kila]

The buildings were very large, as I recall. The area, where there's the new library, consisted of the old library, a smaller building. The cafeteria itself is the same cafeteria that I grew up 55 years ago, except for the small extension. All of the wooden buildings are gone and the area that is being planned was were cottages where people lived. [Glen Kila]

In the 1960s, the 2nd grade classes consisted of Quonset huts from World War II. There were a lot of trees, large trees, and specifically, the tamarind tree which all the children used to pick up fruits. It is near the area that is planned for the parking lot. Also there was a jacaranda tree next to the stage that was very famous for its beautiful purple flowers that bloomed every year. [Glen Kila]

There was also the stage that was built by the Japanese Hongwanji community in recognition of the three Wai'anae men that died in World War II. They were from the Nakamine and the Teramoto families. The third person, I am not too sure of his name. [Glen Kila]

There were a lot of Hawaiians, Japanese, Filipinos, Portuguese, you know, plantation people attending Wai'anae Elementary. The school was a place where people congregated and lived. [Glen Kila]

The mill ended in the 1940s, right after World War II. But the mill camps were still part of the community. We had areas that lived native Hawaiians such as my family. We owned a portion of the beach area. Then you had the Japanese family with their *furo*, community baths, right next to our family property. You had the Okinawans who were separated from the Japanese, "*naichi*" people. The Japanese and Okinawans had their own Buddhist Hongwanji churches. We also had the Chinese camp which is now near McDonald's, and in fact it's right here next to this restaurant. The Filipino camp was closer to the Japanese camp and the Portuguese camp near Army Beach road. We all knew each other and lived together as one family. [Glen Kila]

The common culture was, the Local culture, that we call the Plantation culture. The school was center for the local cultures. And then of course, during this time, we all intermarried. My grandpa is Filipino, my uncles Japanese, Portuguese, and Chinese. [Glen Kila]

Yes, the Portuguese, many of us are part-Portuguese. The Portuguese camp was near the back of this building. There is a small Catholic graveyard near here. Our Portuguese side of the family is buried here. I don't recall Korean and Puerto Ricans here. [Glen Kila]

Most of the people here attended the Sacred Hearts Catholic Church, Honpa Hongwanji Buddhist church and the Waianae Protestant Church and several pentacostal churches in the community. A lot of the boys and girls belonged to the young Buddhist association because there weren't any YMCAs clubs in Wai'anae during that time. There was only a two lane road in Wai'anae that held Christmas and homecoming parades. [Glen Kila]

Wai'anae Elementary area was the center for a lot of homes in Wai'anae town. Some of the area was the area called Pāhoa after the home of our *konohiki*, Ka'apuiki. My nephew Chris Oliveira is a direct descendant of this *konohiki*. [Glen Kila]

Concerns and Recommendations

I don't believe [the proposed development will affect any place of cultural significance], because as I recall, that area was where the cottages were. The cottages are gone. The Quonset huts are gone. There are modern portables in that area now. The area's an open grass area now. People also park there. There's an old tree that I do remember. It's the royal poinciana tree that still remains there. The tree should stay because it's part of the school cottage history. It was a famous tree for the students because it marked summer time was coming. [Glen Kila]

Basically, I see that that land, because it's been developed, and it has all those buildings already, that I have no concerns. I think all the surface features, if they were there, have long been obliterated, first with agriculture, and then now with the school, historically. I went there in the kindergarten, so you can imagine, and I'm born in 1948, you can do the math, so the school was already pretty old at that time. So my assumption is, you know, that place was developed prior. [Eric Enos]

If you run into anything of concern, then you should always have a cultural monitor nearby, if there's any *iwi*, or if there's any subsurface types [of features], at least it could be recorded. But as far as it stopping the job, I don't think that's practical and necessary. [Eric Enos]

None whatsoever [when asked if the project will affect any places of cultural significance]. This is already building within the compound of buildings so it's all part of the school's *kuleana*. I see no interference. [Eric Enos]

I don't foresee any other cultural concerns, unless there's something major, significant, subsurface. Other than that, as I said, we should have enough people to monitor, but it should not stop its development and the building. [Eric Enos]

Summary of Ethnographic Survey

The consultants noted that the project area was once the location of a spring called Wai'oli, and a village, $h\bar{o}lua$ side, $hale\ mua$, heiau, and agricultural zones were nearby. The place name associated with the area was Pāhoa. However, the land has been heavily modified over the years, and the consultants did not know of any surface remains of these resources within the project boundaries. Likewise, the consultants also did not know of any traditional practices, such as plant gathering, that occur at the school property today.

Historically, Wai'anae Elementary School was very different than it is today. There were fewer schools in the area, so the student body was very large, with more than 1,000 students at one time. The school served as a center for the community, often hosting events, especially on holidays. Also, the principal and teachers lived at the school in cottages on campus, and the principal's cottage was situated where the current construction is proposed. The cafeteria is one of the buildings still standing that was there when the consultants attended school, but this building is outside the current construction footprint.

The interviewees were generally supportive of the project. Because of the currently developed state of the Wai'anae Elementary School lands, there were no concerns for surface archaeological resources. It was recommended to have a cultural monitor available, particularly if subsurface archaeological remains or *iwi kūpuna* are found during construction. It was also recommended to save an important poinciana tree that has been on the school grounds for a long time.

SUMMARY AND RECOMMENDATIONS

Wai'anae Elementary School has a long history as the center of the Wai'anae community. The exact date of construction is not known, however the property was designated as a school on historic maps as early as 1906. Two community members were interviewed to share their *mana'o* about the area and to help identify any potential cultural resources or practices that might be affected by the proposed improvements to the school. The consultants were generally very supportive of the proposed plans for school improvements and did not identify any cultural resources that would be affected. They did note that subsurface cultural remains, such as human burials might be found in the area

Cultural Resources, Practices, and Beliefs Identified

The ethnographic interviews revealed that the project area was once the location of a thriving village centered around a spring called Wai'oli. A $h\bar{o}lua$ side, $hale\ mua$, heiau, and agricultural areas were also in the vicinity. Since the land has been heavily modified over the years, it is not likely that any surface vestiges of this early use of the property remain.

In the historic era, Wai'anae Elementary School served as a center for the community, often hosting events, especially on holidays. The principal and teachers lived at the school in cottages, and the principal's cottage was once located where the current construction is proposed. The cafeteria is one of the buildings still standing that was there when the consultants attended school, but this building is outside the current construction footprint.

Because the project area was identified as supporting a traditional settlement and then the historic school, subsurface archaeological remains of these resources might be found during construction.

The consultants also did not know of any traditional practices, such as plant gathering, that occur at the school property today.

Potential Effects of the Proposed Project

The consultants were not aware of any specific cultural resources or practices which may be affected by the proposed school improvements. In general, they were supportive of the plans.

Confidential Information Withheld

During the course of researching the present report and conducting the ethnographic survey program, no sensitive or confidential information was discovered or revealed, therefore, no confidential information was withheld.

Conflicting Information

No conflicting information was obvious in analyzing the gathered sources. On the contrary, a number of themes were repeated and information was generally confirmed by independent sources.

Recommendations/Mitigations

The interviewees shared several concerns and recommendations for the project:

- there may be vestiges of former use of the property beneath the surface
- a cultural monitor should be available if archaeological remains are found during construction
- a notable poinciana tree should be saved

Background research and oral history interviews did not reveal any surface archaeological resources within the project area, aside from the school itself. It is possible, however, that subsurface remains of the former village or historic use of the school might be found. Keala Pono recommends that a program of archaeological monitoring is developed for the project to ensure that any historic properties are not adversely affected by the proposed improvements. Community concerns and recommendations should be considered during all phases of the project.

GLOSSARY

ahupua'a Traditional Hawaiian land division usually extending from the uplands to the sea.

aku The bonito or skipjack (*Katsuwonus pelamis*), a prized eating fish.

ali'i Chief, chiefess, monarch.

'āpana' Piece, slice, section, part, land segment, lot, district.

'auwai Ditch, often for irrigated agriculture.

furo Japanese style bathtub.

hale mua Men's eating house.

heiau Place of worship and ritual in traditional Hawai'i.

hōlua Traditional Hawaiian sled used on grassy slopes.

'ike To see, know, feel; knowledge, awareness, understanding.

'ili, 'ili'āina Land area; a land section, next in importance to ahupua 'a and usually a subdivision

of an ahupua 'a.

'ili kūpono An 'ili within an ahupua'a that was nearly independent. Tribute was paid to the

ruling chief rather than the chief of the ahupua 'a, and when an ahupua 'a changed

hands, the 'ili kūpono were not transferred to the new ruler.

'ili'ili Waterworn cobbles often used in floor paving.

iwi Bone.

Kahiki A far away land, sometimes refers to Tahiti.

kahuna An expert in any profession, often referring to a priest, sorcerer, or magician.

kalo The Polynesian-introduced *Colocasia esculenta*, or taro, the staple of the traditional

Hawaiian diet.

kama'āina Native-born.

kiawe The algaroba tree, *Prosopis* sp., a legume from tropical America, first planted in

1828 in Hawai'i.

kilu A small container used for storing precious objects or for feeding a favorite child;

a quoit in the kilu game in which a player would attempt to hit an object with the

kilu to win a kiss from a member of the opposite sex.

koa haole The small tree Leucaena glauca, historically-introduced to Hawai'i.

konohiki The overseer of an *ahupua'a* ranked below a chief; land or fishing rights under

control of the *konohiki*; such rights are sometimes called *konohiki* rights.

kukui The candlenut tree, or *Aleurites moluccana*, the nuts of which were eaten as a relish

and used for lamp fuel in traditional times.

kula Plain, field, open country, pasture, land with no water rights.

kuleana Right, title, property, portion, responsibility, jurisdiction, authority, interest, claim,

ownership.

kupuna Grandparent, ancestor; *kūpuna* is the plural form.

lele A detached part or lot of land belonging to one 'ili, but located in another 'ili.

lo'i, lo'i kalo An irrigated terrace or set of terraces for the cultivation of taro.

luakini Large *heiau* of human sacrifice.

Māhele The 1848 division of land.

makai Toward the sea.

mana'o Thoughts, opinions, ideas.

mauka Inland, upland, toward the mountain.

mele Song, chant, or poem.

midden A heap or stratum of refuse normally found on the site of an ancient settlement. In

Hawai'i, the term generally refers to food remains, whether or not they appear as a

heap or stratum.

moku District, island.

monkeypod A large tree, *Samanea saman*, introduced to Hawai'i from tropical America.

mo'olelo A story, myth, history, tradition, legend, or record.

niu The Polynesian-introduced tree *Cocos nucifera*, or coconut.

'ohana Family.

'ōlelo no'eau Proverb, wise saying, traditional saying.

poi A staple of traditional Hawai'i, made of cooked and pounded taro mixed with water

to form a paste.

post-contact After A.D. 1778 and the first written records of the Hawaiian Islands made by

Captain James Cook and his crew.

pre-contact Prior to A.D. 1778 and the first recorded arrival of Westerners in the islands.

pu'u Hill, mound, peak.pu'uhonua Place of refuge.

'uala' The sweet potato, or *Ipomoea batatas*, a Polynesian introduction.

REFERENCES

Abe, S. and M. Kelley

1979 Appendix. Background History of Ka'ilioloa Heiau: Archaeological Research for the Ka'ilioloa Heiau Restoration Project, Pōka'ī Bay, Wai'anae, O'ahu. Ms. on file. Anthropology Department, Bishop Museum, Honolulu.

Ahlo, H.M., Jr.

1980 Proposed Wai 'anae Agricultural Park, Wai 'anae, O 'ahu, Hawai 'i. Prepared for VTN, Honolulu by Hawai 'i Marine Research, Inc. Honolulu.

Aiu, J.

- 1924 Wai'anae House Lots, Wai'anae, O'ahu. Hawai'i Territory Survey, Register Map No. 2807. Scale: 1 inch = 50 feet. On file, Department of Accounting and General Services. State of Hawai'i, Honolulu
- 1927 Portion of the U.S. Military Reservation Fronting Pōka'ī Bay, Wai'anaekai, O'ahu. Hawai'i Territory Survey. Registered Map No. 2766. Scale: 1 inch = 20 feet. On file, Department of Accounting and General Services. State of Hawai'i, Honolulu

Anonymous

2012 Wai'anae Elementary School: School Status and Improvement Report School Year 2011–12. http://wes.nwcomplex.org/ourpages/school_performance/SSIR/2012.pdf.

Beckwith, M.

1940 Hawaiian Mythology. University of Hawai'i Press, Honolulu.

Bordner, R.

1989 Archaeological Reconnaissance—Wai'anae Water Main Replacement. Ms. On file. State Historic Preservation Division, Department of Land and Natural Resources, Honolulu.

Borthwick, D., R. Chiogioji, H.H. Hammatt, and D.W. Shideler

1999 Subsurface Archaeological Survey for the Proposed Pōka ʿī Bay Beach Park Pōka ʿī Bay, Wai ʿanae, Oʻahu, Hawai ʿi. Prepared for Calvin Kim and Associates by Cultural Surveys Hawai ʿi, Inc., Kailua.

Bush, A.R., and H.H. Hammatt

2004 Letter Report for Hawaiian Electric Co. Job Across from Wai'anae Elementary School [TMK 8-5-01]. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

Cachola-Abad, C.K.

2000 The Evolution of Hawaiian Socio-Political Complexity: An Analysis of Hawaiian Oral Traditions. PhD. Dissertation, Department of Anthropology, University of Hawai'i at Mānoa, Honolulu.

Chinago, Inc.

1982 Letter to Mr. Fred Proby, VTN Pacific. On file at the State Historic Preservation Division, Department of Land and Natural Resources, Kapolei, Hawai'i.

Clark, S.D., D. Gosser, and R. Nees

2004 Archaeological Inventory Survey for the Proposed Wai 'anae Regional Park, Wai 'anae Kai Ahupua 'a, O 'ahu, Hawai 'i [TMK: 8-5-02:11]. Prepared for the City and County of

Honolulu Department of Design and Construction by Pacific Consulting Services, Inc., Honolulu

Cordy, R.

1997 Archaeological Survey in Upper Wai 'anae Valley, Wai 'anae Ahupua 'a, Wai 'anae District, O'ahu. Manuscript on file, State Historic Preservation Division, Department of Land and Natural Resources, Kapolei, Hawai 'i.

2002 An Ancient History of Wai 'anae. Mutual Publishing, Honolulu.

2012 Appendix A. Archaeological Survey of the Former Wai anae Valley Ranch Headquarters Area and Appendix B. Information on Historic Sites, Upper Wai anae Valley [TMK: (1) 8-5-06: 04]. Final Environmental Assessment for the Wai anae Valley Ranch Application for a General Lease by Ka ala Farm, Inc. and Ho mau Ke Ola. Prepared for Townscape, Inc., Honolulu by Hawaiian-Pacific Studies, University of Hawai'i-West O'ahu,

Commissioner of Public Lands (Compiler and Publisher)

1929 Indices of Awards made by the Board of Commissioners to Quiet Land Titles in the Hawaiian Islands. Territory of Hawai'i, Honolulu.

Denham, T., J. Kennedy, and L. Reintsema

1992 Archaeological Inventory Survey with Subsurface Testing Report for a Property [TMK: 8-5-02:49] Wai 'anae Ahupua 'a, Wai 'anae District Island of O 'ahu. Prepared for Clifford Murakami, AIA. by Archaeological Consultants of Hawai 'i, Inc., Hale 'iwa, Hawai 'i.

Department Engineer

1936 Waianae Quadrangle Map. Hawaiian Territorial Survey and US Coast and Geodetic Survey and Corps of Engineers. US Army, War Department (originally prepared 1929).

Desilets, M.

2007 Archaeological Assessment and Geophysical Survey of Proposed Dewater Facility Site, Wai'anae Ahupua'a, Wai'anae District, Island of O'ahu, Hawai'i. Prepared for Parsons Brinckerhoff Quade & Douglas, Inc. by Garcia and Associates, Kailua, Hawai'i.

Dye, T.S. and E.H.R. Jourdane

2007 Archaeological Assessment for the Proposed Verizon Wireless (VZW)Wai 'anae Valley Cell Site 2004085584, Chen Farm, 85–1490 Wai 'anae Valley Road, Wai 'anae, O'ahu Island TMK:(1)8–5–004:019 por. T.S. Dye & Colleagues, Honolulu.

Flood, K., P.C. Klieger, S.A. Lebo, B. Dixon, S.D. Clark, and S. Parry

1994 An Archaeological Inventory Survey and Mitigation Plan of a Seven Acre Parcel [TMK: 8-5-28: POR. 42]) in Wai'anae Kai Ahupua'a, Wai'anae District, O'ahu Island, Hawai'i. Prepared for Franklin Wong and Associates Limited by Anthropology Department, Bernice P. Bishop Museum, Honolulu.

Foote, D., E. Hill, S. Nakamura, and F. Stephens

1972 Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. United States Department of Agriculture, Soil Conservation Service. Published in cooperation with the University of Hawaii Agricultural Experiment Station, Washington, D.C.

Forbes, R.P.

1988 *The Education of a Territory: Origins of Hawaiian Statehood*. Unpublished manuscript in possession of author.

Fornander, A.

- 1916–1917 Hawaiian Antiquities and Folk-Lore. Memoirs, Vol 4. Bernice P. Bishop Museum, Honolulu.
- 1918–1919 *Hawaiian Antiquities and Folk-Lore. Memoirs, Vol 5.* Bernice P. Bishop Museum, Honolulu.
- Giambelluca, T.W., Q. Chen, A.G. Frazier, J.P. Price, Y.-L. Chen, P.-S. Chu, J.K. Eischeid, and D.M. Delparte
 - 2013 Online Rainfall Atlas of Hawai'i. Bulletin of the American Meteorological Society 94, 313–316, doi: 10.1175/BAMS-D-11-00228.

Geological Survey

- 1954 Waianae Quadrangle, Island of Oahu, 7.5 Minute Series Topographic Map. Department of the Interior, United State, Washington, DC.
- 1983 Waianae Quadrangle, Island of Oahu, 7.5 Minute Series Topographic Map. Department of the Interior, United State, Washington, DC.
- 1998 Waianae Quadrangle, Island of Oahu, 7.5 Minute Series Topographic Map. Department of the Interior, United State, Washington, DC.

Graves, M.W., W.K. McElroy, and D. Duhaylonsod

2015 Draft Literature Review for Wai 'anae Elementary School Improvements, Wai 'anae Ahupua 'a, Wai 'anae District, Island of O'ahu, Hawai 'i. Prepared for Group 70 International by Keala Pono Archaeological Consulting, Kāne 'ohe, Hawai'i.

TMK: (1) 8-5-001:059 and (1) 8-5-009:018

Green, R.C.

1980 Mākaha Before 1880 A.D.: Mākaha Valley Historical Project-Summary, Report No. 5. Pacific Anthropological Records, 31. B.P. Bishop Museum, Honolulu.

Hammatt, H.H., D. Borthwick, and D. Shideler

1985 Archaeological Excavations at the Wai 'anae Army Recreational Center, Pōka'ī Bay, Wai 'anae, O 'ahu, Hawai 'i. Prepared for U.S. Army Corps of Engineers, Pacific Ocean Division by Cultural Surveys Hawai'i, Kailua, Hawai'i.

Hammatt, H.H., and D.W. Shideler

2006 Archaeological Inventory Survey for the Leeward Coast Emergency Homeless Shelter Project, Wai 'anae Civic Center Location, DAGS Job No. 12-33-7262, Wai 'anae Ahupua'a, Wai 'anae District, O'ahu. Prepared for Department of Accounting and General Services by Cultural Surveys Hawai'i, Kailua, Hawai'i.

Handy, E.S.C.

1940 *The Hawaiian Planter: His Plants, Methods and Areas of Cultivation.* Bulletin 161. Bishop Museum Press, Honolulu.

Handy, E.S., E.G. Handy, and M.K. Pukui

1991 *Native Planters in Old Hawaii: Their Life, Lore, and Environment.* Revised Edition. Bernice P. Bishop Museum Bulletin 23, Bishop Museum Press, Honolulu.

Hawai'i State Archives

2003 Ewa and Wai'anae School Fund Journal, 1875-76. Inventory of Records of the Department of Education. Department of Administrative and General Services, State of Hawai'i. Honolulu.

Holt, A., S. Kapoi, A. Lino, O. Kamohalii, M. Lee, and R. Cordy.

2002 Archaeological Work at a House Site, Site 5803, Wai 'anae Valley, O 'ahu. Report by Wai 'anae High School Hawaiian Studies Program, Wai 'anae, Hawai 'i.

Hommon, R.

1978 Wai 'anae (Kamaile) Complex, O 'ahu: [TMK 80-07-1181] and Ho 'ohana Project. Ms. on file, State Historic Preservation Division, Department of Land and Natural Resources, Honolulu.

Hunt, J.R.

1969 *Hawai'i Department of Education: Historical Development and Outlook.* Reprinted from Education in the States. Council of Chief State Schools Officers. National Education Association, Washington, DC.

Jackson, G.E.G.

1884 Pōkaʻī Bay (Waiʻanae) Oʻahu. Hawaiian Government Survey Map. Kingdom of the Hawaiian Islands. Scale 1:6000. Registered Map 1349. On file, Department of Accounting and General Services. State of Hawaiʻi, Honolulu.

Jones, K., D.L. Cordy, A. Hazlett, and H.H. Hammatt

2008 Archaeological Monitoring Report for the Board of Water Supply Water System Improvements on Wai'anae Valley Road and Connecting Streets, Wai'anae Ahupua'a and Lualualei Ahupua'a, District of Wai'anae, Island of O'ahu, Hawai'i [TMK 8-5-001, 003, 021-023, 029, 033 and TMK 8-6-001, 003, 011-014]. Prepared for Board of Water Supply, Honolulu by Cultural Surveys Hawai'i, Inc. Kailua, Hawai'i.

Kahena

1860 Waimaiu Lease Map. Wai'anae, O'ahu. Hawai'i Government Survey, Register No. 93. Scale: 10 feet = 1 inch. On file, Department of Accounting and General Services. State of Hawai'i, Honolulu

Kalilihiwa, S.H., III, and P.L. Cleghorn

2005 Archaeological Monitoring for the Pōka'ī Bay Beach Park Canoe Halau Project, Wai'anae, Island of O'ahu [TMK 8-5-08-36]. Pacific Legacy, Inc., Kailua, Hawai'i.

Kam, W. and J. Ota

1984 Burial Report: Waianae Army Recreation Center, Waianae, Oahu. State Historic Preservation Division, Department of Land and Natural Resources, Kapolei, Hawai'i.

Kamakau, S.M.

1991 *Nā Moʻolelo a Ka Poʻe Kahiko Tales and Traditions of the People of Old.* Bishop Museum Press, Honolulu.

Kawachi, C.

1990 Mauna Lahilahi Crevice Burials, Mākaha Wai'anae, O'ahu. State Historic Preservation Division, Honolulu.

1992 Burial Exposed by Hurricane Iniki, Wai'anae Regional Park, Wai'anae, Wai'anae, O'ahu [TMK: 8-5-02:11]. Memorandum on file at the State Historic Preservation Division, Kapolei, Hawai'i.

Kapeliela, K.

1997 Inadvertently Discovered Human Remains at Corner of Lihue Street and Plantation Road in Wai 'anae, O'ahu [TMK 8-5-10:24]. Letter Report on file. State Historic Preservation Division, Honolulu.

Kingdom of Hawai'i

1846 An Act to Organize the Executive Departments of the Hawaiian Islands (Part 1, Chapter VII, Article IV) Of the Board of Commissioners to Quiet Land Titles. Honolulu.

Kirch, P.V.

2011 How Chiefs Became Kings: Divine Kingship and the Rise of Archaic States in Ancient Hawai'i. University of California Press, Berkeley and Los Angeles.

Kennedy, J

1986 Archaeological Investigations at Mauna Lahilahi, Wai 'anae, Island of O'ahu. Report by Archaeological Consultants of Hawai'i, Inc., Hale'iwa, Hawai'i.

McAllister, J.G.

1933 Archaeology of O'ahu. Bulletin 104. Bernice P. Bishop Museum, Honolulu.

McElroy, W.

2009 Archaeological Monitoring Report for the Sandwich Isles Communication's Fiber Optic Duct Lines Project, Lualualei, Wai'anae, and Mākaha Ahupua'a, Wai'anae District, Island of O'ahu, Hawai'i. Prepared for Ku'iwalu LLC by Garcia and Associates, Kailua, Hawai'i.

McElroy W., M. Ellison, and D. Duhaylonsod

2013 Cultural Impact Assessment for a Proposed Solar Farm in Kalaeloa, Honouliuli Ahupua'a, 'Ewa District, Island of O'ahu, TMK (1) 9-1-013:001. Prepared for Mana Elua by Keala Pono Archaeological Consulting, Kāne'ohe, Hawai'i.

McGuire, K., and H.H. Hammatt

2001 A Traditional and Cultural Practices Assessment for Portions of the Proposed Wai 'anae Coast Emergency Access Road at Nānākuli, Lualualei, Mā 'ili, Wai 'anae, and Mākaha, Wai 'anae District, Island of O 'ahu. Prepared for Townsend, Inc. by Cultural Surveys Hawai 'i, Kailua, Hawai 'i.

Magnusen, C.

2001 Archaeological Reconnaissance for Kamaile Elementary School Expansion, Wai 'anae, O'ahu. Prepared for Honolulu. Belt Collins-Hawai'i by International Archaeological Research Institute, Inc., Honolulu.

Monsarrat, M.D.

1870 Map of Waiane, O'ahu. 1 inch = 330 feet. Registered Map 575. On file, Department of Accounting and General Services, Honolulu.

1902 Map of Wai'anae, O'ahu. Reprinted. Traced by Newton, Heilbron and Pierce. 1:3600. Originally published 1878. On file, Department of Accounting and General Services, Honolulu.

1906 Map of the Forest Reserve, Wai'anae Valley, Wai'anae Kai, O'ahu. Register Map 2372. On file, Department of Accounting and General Services, Honolulu.

Nakamura, C.S. and P. McCoy

2008 Archaeological Monitoring Report in Support of the Board of Water Supper's Wai 'anae Water System Improvements, Part II on McArthur, Kawili, and Alamihi Streets, Wai 'anae and Lualualei Ahupua 'a, Wai 'anae District, Island of O'ahu, State of Hawai 'i [TMK: (1) 8-5-09: 10, 20, and (1) 8-6-20]. Prepared for the Board of Water Supply by Pacific Consulting Services, Inc., Honolulu.

Nakuina, M.K.

2005 The Wind Gourd of La'amaomao. Revised Edition. Kalamakū Press, Honolulu.

Ota, J.

1981 Archaeological Field Report: Wai 'anae Water Well Site for the Honolulu Board of Water Supply, Wai 'anae, O'ahu. State Parks Division and State Historic Preservation Division, Department of Land and Natural Resources, Honolulu.

Pease, W.H.

1860 Wai'anae, O'ahu. Hawaiian Government Survey. Register Map No. 86. No scale. On file, Department of Accounting and General Services, Honolulu.

Pukui, M.K.

1983 *'Ōlelo No 'eau: Hawaiian Proverbs and Poetical Sayings*. Bishop Museum Press, Honolulu.

Pukui, M.K., and S.H. Elbert

1986 Hawaiian Dictionary. University of Hawai'i Press, Honolulu.

Pukui M.K., S.H. Elbert, and E.T. Mookini.

1974 Place Names of Hawaii. University Press of Hawaii, Honolulu.

Riford, M.

1984 Report of Archaeological Consulting Services During Repair of Sewer Lines and Replacement of Water Main Lines at Wai 'anae Army Recreation Center, O'ahu, Hawai'i. Report by the Anthropology Department, Bishop Museum, Honolulu.

Rosendahl, P.H.

1981 Archaeological Reconnaissance Survey of the Wai 'anae Valley Road Improvements Alignment, Wai 'anae, O'ahu. Ms. on file, State Historic Preservation Division, Department of Land and Natural Resources, Honolulu.

Shapiro, W.A., and P.H. Rosendahl

1988 Archaeological Reconnaissance Survey and Limited Subsurface Testing Wai 'anae Kai Property, Land of Wai 'anae, Wai 'anae District, Island of O 'ahu [TMK 8-5-003: 009,010, 029, 031, 032, 43; 8-5-04: 28; 8-5-19: 35, 36, 37]. Prepared for PBR, Honolulu by Paul H Rosendahl Inc., Hilo, Hawai 'i.

Shefcheck and Spear

- 2008 An Archaeological Assessment of a Portion of the Wai 'anae Regional Park in Preparation for Parking Improvements in Wai 'anae Ahupua 'a, Wai 'anae Kai, Pōka 'ī 'Ili, Wai 'anae District, Island of O 'ahu, Hawai 'i [TMK: (1) 8-5-002:49]. Prepared for Austin, Tsutsumi, and Associates by Scientific Consultant Services, Inc., Honolulu.
- 2009 An Archaeological Monitoring Report for Two Adjacent Parcels Measuring Approximately 2.5 Acres in Wai 'anae Ahupua'a, Wai 'anae Kai, Ili of Lehano Iki, Wai 'anae District, Island of O'ahu, Hawai'i [TMK: 1-8-5-0272 071 and 073]. Prepared for Hawai'i Coalition of Christian Churches by Scientific Consultant Services, Inc., Honolulu.

Shun, K. and C. Shaw

2002 Results of Archaeological Monitoring and Sampling During Installation of Grease Trap Interceptor and Modification of Existing Plumbing Lines, Building 4065, U.S. Army Recreation Center, Oʻahu Island, Hawaiʻi. Memorandum on file at the State Historic Preservation Division, Kapolei, Hawaiʻi.

Sinoto, A.

- 1975 Archaeological Reconnaissance Survey of the Wai'anae Light-Draft Harbor Project Site Wai'anae, O'ahu, Hawai'i. Prepared for the U.S. Army Corps of Engineers by Department of Anthropology, Bishop Museum, Honolulu.
- 1979 Archaeological Reconnaissance Survey of Proposed Water Well, Wai 'anae, O 'ahu, Hawai 'i. Ms. on file. Department of Anthropology, Bishop Museum, Honolulu.

Sorenson, O.L.

1906 Wai'anae, O'ahu: Portion Applied for by the Wai'anae Company. Compiled from work by Monsarrat, Harvey, and Sorenson. Company. Registered Map 2380. On file, Department of Accounting and General Services, Honolulu.

Sterling, E and C. Summers (editors)

1978 Sites of O'ahu. Bishop Museum Press, Honolulu.

Stine, C., H.H. Hammatt, and D.W. Shideler

2014 Archaeological Monitoring Report for the Makaha Interceptor Sewer Rehabilitation/Replacement Project, Wai'anae Ahupua'a and Lualualei Ahupua'a, District of Wai'anae, Island of O'ahu, Hawai'i, TMK: [1] 8-5 and 8-6 various parcels, Job 208035. Prepared for Insituform Technologies, Inc. by Cultural Surveys Hawai'i, Kailua, Hawai'i.

Tao, G.

1979 Archaeological Research for the Kaʻilioloa Heiau Restoration Project, Pōkaʻī, Waiʻanae, Oʻahu. Ms. on file, Anthropology Department, Bishop Museum, Honolulu.

Thrum, T.G.

1909 Almanac and Annual for 1910. Honolulu.

1916 Completing Oahu's Heiau Search. Almanac and Annual for 1915. Honolulu.

Wist, B.O.

1940 A Century of Public Education in Hawaii, October 15, 1840–October 15, 1940. Hawaii Educational Review, Honolulu.

APPENDIX A: AGREEMENT TO PARTICIPATE

Agreement to Participate in the Cultural Impact Assessment for the Wai'anae Elementary School Project Dietrix J. U. Duhaylonsod, Ethnographer, Keala Pono Archaeological Consulting

You are invited to participate in a Cultural Impact Assessment (CIA) of the Wai'anae Elementary School Project in Wai'anae, on the island of O'ahu (herein referred to as "the Project"). The Project is being conducted by Keala Pono Archaeological Consulting (Keala Pono), a cultural resource management firm, on behalf of Group 70 International. The ethnographer will explain the purpose of the Project, the procedures that will be followed, and the potential benefits and risks of participating. A brief description of the Project is written below. Feel free to ask the ethnographer questions if the Project or procedures need further clarification. If you decide to participate in the Project, please sign the attached Consent Form. A copy of this form will be provided for you to keep.

Description of the Project

This CIA is being conducted to collect information about the Project property in Wai'anae and its surrounding areas in the Wai'anae Kai region of O'ahu Island through interviews with individuals who are knowledgeable about this area, and/or about information including (but not limited to) cultural practices and beliefs, *mo'olelo*, *mele*, or *oli* associated with this area. The goal of this Project is to identify and understand the importance of any traditional Hawaiian and/or historic cultural resources, or traditional cultural practices in properties on the current subject properties. This Assessment will also attempt to identify any affects that the proposed development may have on cultural resources present, or once present within the Project area.

Procedures

After agreeing to participate in the Project and signing the Consent Form, the ethnographer will digitally record your interview and it may be transcribed in part or in full. The transcript may be sent to you for editing and final approval. Data from the interview will be used as part of the ethno-historical report for this project and transcripts may be included in part or in full as an appendix to the report. The ethnographer may take notes and photographs and ask you to spell out names or unfamiliar words.

Discomforts and Risks

Possible risks and/or discomforts resulting from participation in this Project may include, but are not limited to the following: being interviewed and recorded; having to speak loudly for the recorder; providing information for reports which may be used in the future as a public reference; your uncompensated dedication of time; possible misunderstanding in the transcribing of information; loss of privacy; and worry that your comments may not be understood in the same way you understand them. It is not possible to identify all potential risks, although reasonable safeguards have been taken to minimize them.

Benefits

This Project will give you the opportunity to express your thoughts and opinions and share your knowledge, which will be considered, shared, and documented for future generations. Your sharing of knowledge may be instrumental in the preservation of cultural resources, practices, and information.

Confidentiality

Your rights of privacy, confidentiality and/or anonymity will be protected upon request. You may request, for example, that your name and/or sex not be mentioned in Project material, such as in written notes, on tape, and in reports; or you may request that some of the information you provide remain off-the-record and not be recorded in any way. To ensure protection of your privacy, confidentiality and/or anonymity, you should immediately inform the ethnographer of your requests. The ethnographer will ask you to specify the method of protection, and note it on the attached Consent Form.

Refusal/Withdrawal

At any time during the interview process, you may choose to not participate any further and ask the ethnographer for the tape and/or notes. If the transcription of your interview is to be included in the report, you will be given an opportunity to review your transcript, and to revise or delete any part of the interview.

APPENDIX B: CONSENT FORM

Consent Form	
Cultural Impact Assessment (her the Project is to conduct oral h subject property and surrounding that Keala Pono Archaeological participation (digital recording,	am a participant in the Wai'anae Elementary School Project ein referred to as "Project"). I understand that the purpose of istory interviews with individuals knowledgeable about the area in the Wai'anae Kai region of O'ahu Island. I understand Consulting and/or Group 70 will retain the product of my transcripts of interviews, etc.) as part of their permanent may be used for scholarly, educational, land management, and
delivered to the of my participati stated above. By	Keala Pono and Group 70 ownership of the physical property institution and the right to use the property that is the product on (e.g., my interview, photographs, and written materials) as a giving permission, I understand that I do not give up any formance rights that I may hold.
provided by me of to be used, published.	Keala Pono and Group 70 my consent for any photographs or taken of me in the course of my participation in the Project shed, and copied by Keala Pono and Group 70 and its assignees or purposes of the Project.
biographical info	a Pono and Group 70 may use my name, photographic image, ormation, statements, and voice reproduction for this Project pproval on my part.
the opportunity to what I meant to transcripts after indicate my release	are to be included in the report, I understand that I will have o review my transcripts to ensure that they accurately depict convey. I also understand that if I do not return the revised two weeks from the date of receipt, my signature below will see of information for the draft report, although I will still have o make revisions during the draft review process.
the purpose of this Project, the data will be analyzed. I unders	m, I am acknowledging that I have been informed about e procedure, how the data will be gathered, and how the tand that my participation is strictly voluntary, and that I on at any time without consequence.
Consultant Signature	Date
Print Name	Phone
Address	

Thank you for participating in this valuable study.

APPENDIX C: TRANSCRIPT RELEASE

OBJECTIONS TO RELEASE OF INTERVIEW MATERIALS: Consultant Signature Date		ELEASE OF INTERVIEW MATERIALS:
	and release my identification, for the purmade public, subject to	atity, biographical information, and other intervial arpose of including such information in a report to o my specific objections, to release as set forth bel
I agree that Keala Pono Archaeological Consulting and/or Group 70 may use and release my identity, biographical information, and other interview information, for the purpose of including such information in a report to made public, subject to my specific objections, to release as set forth below under the heading "OBJECTIONS TO RELEASE OF INTERVIEW MATERIALS."	for those matters delir CORRECTIONS, ADD	DITIONS, DELETIONS."

Transcript Release

Address

APPENDIX D: INTERVIEW WITH ERIC ENOS

TALKING STORY WITH

ERIC ENOS (EE)

Oral History for the Wai'anae Elementary project by Dietrix Duhaylonsod (DD) For Keala Pono 4/22/2015

DD: Aloha, today is Wednesday, April 22, 2015, and we're up in the back of Wai'anae Valley at Ka'ala Farms, and we're gonna be talking about the renovations they're gonna be making at Wai'anae Elementary School. We're talking with Uncle Eric Enos, and we'd like to thank him for taking time out of his busy schedule to talk story with us and share his *mana'o* about the area, so *aloha*.

Uncle, if we could start, if you could just give us some background about yourself; if you could state your name; where/when you were born; where you grew up; where you went to school?

EE: Ok, *aloha*, my name if Eric Enos. I live in Mākaha. I've lived in Mākaha basically for the past, oh maybe 60 years. My parents moved out here when Chinn Ho first opened up the lower portion of Mākaha Valley for sale. I went to Wai'anae Elementary from kindergarten to the sixth grade; 7th grade I went to Kamehameha Schools; graduated and I went to the University of Hawai'i, and I got my degree. And then I started working back in the community right after I graduated from the university, starting with Nānākuli, and worked my way down the coast. And we're now at the cultural learning center at Ka'ala, Ka'ala Farm, which we helped to establish as part of a model cities project with the Wai'anae Rap Center which I was involved with in the early 1970s.

But basically in 1976, this land was made available, and so now I have been involved with this project up in Wai'anae Valley. But I'm very familiar with the community and all those areas, and we've been studying those cultural sites for a long time. And we have been one of the people at the forefront trying to preserve our cultural landscape.

DD: *Mahalo*, Uncle, for sharing that. Is there anything else that you would like to share about your 'ohana background, your family background on this side?

EE: Well, I come from the two sides, one from Kaua'i and one from the Big Island, Hawai'i Island, the Hawaiian side, and the rest is all mix-up [ethnicities].

DD: Ok, mahalo.

So today, we're talking about that parcel of land where Wai'anae Elementary is located. Could you share your association, I know you said you went to that school, any other ways you've acquired special knowledge of that particular area.

EE: Well the school has already been in existence before I was there. Obviously it's one of the older elementary schools. In fact, it might have even been even higher grades way back when, during the plantation era.

Basically, I see that that land, because it's been developed, and it has all those buildings already, that I have no concerns. I think all the surface features, if they were there, have long been obliterated, first with agriculture, and then now with the school, historically. I went there in the kindergarten, so you can imagine, and I'm born in 1948, you can do the math, so the school was already pretty old at that time. So my assumption is, you know, that place was developed prior.

And being kula lands, the lands up here, up in Wai'anae Valley is where all the lo'i were. And the majority of the cultural sites were closest to the water source. Down below were kula lands, the only cultural site adjacent to it was the $h\bar{o}lua$, which is maybe less than a quarter mile from the site in question, as you face the southeast on that little pu'u coming down. But that has been kind of bus' up already, the $h\bar{o}lua$ slide, and other than that, I can't see any surface impacts, except when they start to do any subsurface.

If you run into anything of concern, then you should always have a cultural monitor nearby, if there's any *iwi*, or if there's any subsurface types [of features], at least it could be recorded. But as far as it stopping the job, I don't think that's practical and necessary.

DD: Ok, yeah it makes a lot of sense that the school is so old that a lot of the previous development would've taken away any surface features, and definitely to keep a cultural monitor in case of any subsurface finds and so forth. Ok, so *mahalo* for sharing that.

What about the surrounding area or that particular parcel, do you have any personal stories or any *mo 'olelo*, *mele*, place names that you'd like to share?

EE: Not at this time. I mean, there's a lot of significant sites, but aside from the $h\bar{o}lua$ [slide], the other site is across where the water was, and that would have been where the *heiau* once sat, which was destroyed, which the Mormon temple sits on now, I mean the Mormon church and the plantation. So that was a major site, and then right at the point over there, where the stream comes in and where the rest camp is, all in that area, those were the important sites. They all have been pretty bus' up already, and the fishpond area. So aside from that, this area in question is far away and isolated so that's the only impact I see.

DD: *Mahalo* for that. For clarity, the places that Uncle is sharing are like in the surrounding area but not on the property itself.

Uncle, are there any other cultural sites or historic buildings from the site area that you'd like to share about, on the property itself?

EE: No I think all the buildings are pre and post-World War II, and then the modern portables that have come up. The cafeteria was there when I was there. The main office is long gone. The oldest thing is probably that stage over there, but then that's about it. I don't see any historical properties or buildings existing on the campus anymore.

DD: Ok, *mahalo*. Uncle is talking about the stage that's on that grassy area on the school property.

What about this proposed development, do you foresee that it would affect any place of cultural significance, or if it would affect access to any place of cultural significance?

EE: None whatsoever. This is already building within the compound of buildings so it's all part of the school's *kuleana*. I see no interference.

DD: Ok, and how about traditional gathering practices, any gathering practices at that project area?

EE: Well aside from gathering knowledge, the 'ike, which the school needs to do more of, but then that's a DOE issue, not a building issue.

DD: Ok, *mahalo* for that. Well, we're coming towards the end, and this is already a previously developed piece of property of course. Are you aware of any other cultural concerns the community might have related to this project site?

EE: I don't foresee any other cultural concerns, unless there's something major, significant, subsurface. Other than that, as I said, we should have enough people to monitor, but it should not stop its development and the building.

DD: Ok, *mahalo*. And finally, are there any other *kūpuna*, or *kama 'āina*, or descendants that you think we should speak with?

EE: Uh, aside from the usual suspects, uh no. [laughs]

DD: [laughs]

EE: I'm sure you have the names of people stepping up as cultural experts. They're out there, you know, so some are hidden, and some, you know, people know who they are. And everybody has a little bit of knowledge.

DD: True.

EE: Everything is important.

DD: Yeah.

EE: Everything that you can glean, I think it's just to filter it so that we can cross check the information.

DD: Yup, good advice.

Ok, so that concludes our $k\bar{u}k\bar{a}k\bar{u}k\bar{a}$, and again, *mahalo nui loa* to Uncle Eric Enos for taking time out of his busy schedule to talk story with us. Ok, so *aloha*.

EE: Aloha.

APPENDIX E: INTERVIEW WITH GLEN KILA

TALKING STORY WITH

GLEN KILA (GK)

Oral History for the Wai'anae Elementary project by Dietrix Duhaylonsod (DD) For Keala Pono 3/25/2015

DD: Aloha, today is Wednesday, March 25, 2015, and we are at Coquito's in Wai'anae, sitting with Uncle Glen Kila once again, very grateful that he's taken the time to share with us his *mana'o* today on this area in Wai'anae, specifically the elementary school.

So in the past, Uncle has given us his family background, and we're going to go straight to Wai'anae Elementary to ask Uncle about his association to that property there.

GK: My association for Wai'anae Elementary is that I attended the school back in 1960, and I graduated from Wai'anae Elementary, 7th grade. At that time it was from kindergarten to 7th grade and after I went to Wai'anae High School.

The school itself was very village-like. We had principal, Mr. Moore, who lived at the school with teachers at the teacher's cottages. Some of the teachers at Wai'anae Elementary also taught at Wai'anae High and Intermediate. We didn't have Mākaha, Mā'ili, Leihōkū Elementary, so the population for the student body at Wai'anae Elementary was very large. There were over a thousand students at the time.

DD: Ok, wow Uncle, so that's about over 50 years ago, interesting. Could you share maybe what are the ways that you acquired knowledge of that area around Wai'anae Elementary?

GK: As I stated before, my parents and my ancestors all came from Pōkaʻī and Waiʻanae Valley, so Waiʻanae Elementary was the school of my grandfather John, my father Benedict, myself, and my two sons.

I remember stories about a spring there called Wai'oli, "Happy Waters," that my grandfather would talk about. He also shared that Wai'anae Elementary was the center of the community. Even during my time in the 1960s, Wai'anae Elementary had a lot of different events, like the Halloween bazaars, Christmas, May Day programs. This was really the center for the Wai'anae families to celebrate the holidays.

DD: Thank you, Uncle, yeah that's special going to the school and growing up there.

As far as you remember with your experiences, how has the area changed? Could you share how it was when you were young and how it's different now?

GK: There were all wooden buildings at that time. The administration building was a long wooden building that consisted of the health room and the sixth grade class. The area that is now planned for development is where the principal's cottage was. He had a garden, and there were cottages next to it.

The buildings were very large, as I recall. The area, where there's the new library, consisted of the old library, a smaller building. The cafeteria itself is the same cafeteria that I grew up 55 years ago, except for the small extension. All of the wooden buildings are gone and the area that is being planned was were cottages where people lived.

In the 1960s, the 2nd grade classes consisted of Quonset huts from World War II. There were a lot of trees, large trees, and specifically, the tamarind tree which all the children used to pick up fruits. It is near the area that is planned for the parking lot. Also there was a jacaranda tree next to the stage that was very famous for its beautiful purple flowers that bloomed every year.

There was also the stage that was built by the Japanese Hongwanji community in recognition of the three Wai'anae men that died in World War II. They were from the Nakamine and the Teramoto families. The third person, I am not too sure of his name.

One incident that was very famous in Wai'anae was the story of the Green Lady. The Green Lady stemmed from the ancient legend of Hi'iaka and Wahine'ōma'oma'o. She supposed to have killed children in Wai'anae. This led to mass hysteria back in the '60s and at one time closed the school because of students fears.

There were a lot of Hawaiians, Japanese, Filipinos, Portuguese, you know, plantation people attending Wai'anae Elementary. The school was a place where people congregated and lived.

DD: Wow, thank you for sharing that, Uncle.

So it kind of sounds like you alluding to Wai'anae having a plantation history with a mill and all that back in the day, but just to be certain, by that time in the '60s, the mill was no longer there, but there was the descendants of the plantation community, is that correct?

GK: Yes, correct. The mill ended in the 1940s, right after World War II. But the mill camps were still part of the community. We had areas that lived native Hawaiians such as my family. We owned a portion of the beach area. Then you had the Japanese family with their *furo*, community baths, right next to our family property. You had the Okinawans who were separated from the Japanese, "*naichi*" people. The Japanese and Okinawans had their own Buddhist Hongwanji churches. We also had the Chinese camp which is now near McDonald's, and in fact it's right here next to this restaurant. The Filipino camp was closer to the Japanese camp and the Portuguese camp near Army Beach road. We all knew each other and lived together as one family.

The common culture was, the Local culture, that we call the Plantation culture. The school was center for the local cultures. And then of course, during this time, we all intermarried. My grandpa is Filipino, my uncles Japanese, Portuguese, and Chinese.

DD: Wow, that's a Wai'anae that I'm sure looks different from the layout of the town today. Thank you for describing that, Uncle.

What about, I'm just curious, do you remember a Portuguese camp or a Puerto Rican camp or Korean by any chance, did they have their own area also?

GK: Yes, the Portuguese, many of us are part-Portuguese. The Portuguese camp was near the back of this building. There is a small Catholic graveyard near here. Our Portuguese side of the family is buried here. I don't recall Korean and Puerto Ricans here.

Most of the people here attended the Sacred Hearts Catholic Church, Honpa Hongwanji Buddhist church and the Waianae Protestant Church and several pentacostal churches in the community. A lot of the boys and girls belonged to the young Buddhist association because there weren't any YMCAs clubs in Wai'anae during that time. There was only a two lane road in Wai'anae that held Christmas and homecoming parades.

DD: Uncle, thank you for sharing that, and you mentioned this graveyard behind here, I just wanted to share, my great-great grandfather is buried there.

GK: Oh wow, is that right?

DD: Yeah, and also I just would just like to say that Uncle is describing where the building is going to be. We do have a map, and we went to the property before we sat down here to kind of figure out where the layout is going to be, and that's why he's mentioning that he remembers that's where the garden was and so forth, the cottage and so forth. Yeah, we took a walk down there and tried to envision it.

Ok, Uncle, so is there any other *mana* 'o you'd like to share regarding the area, some *mo* 'olelo, place names, personal stories, or any other *mana* 'o that you'd like to share about the area around the school?

GK: Because there was a famous spring there, Wai'oli, there were a lot of Hawaiian settlements at that time that surrounded Wai'anae Elementary, Pililā'au Park and Pu'u Kahea. The plantation manager's house up there was the home of O'ahu's king Kahahana.

Wai'anae Elementary area was the center for a lot of homes in Wai'anae town. Some of the area was the area called Pāhoa after the home of our *konohiki*, Ka'apuiki. My nephew Chris Oliveira is a direct descendant of this *konohiki*.

If we look at our family properties that we own today, we are reminded about the ancient streams and springs where our families lived. Their crops, the *kalo*, sweet potato, bananas all grew next to the water sources. Stories also talked about a *heiau*, a *hale mua*, near or on the school grounds. I think if you go deep under the ground there may be remnants of the old Hawaiian village. We called this place again Pāhoa, the same name we called in the valley and near the beach area.

DD: Thank you for sharing that, Uncle, so we have the ancient settlement there, the spring, Wai'oli, are there any other cultural or archaeological sites or even historic buildings that we should be aware of, that were there or might still be there or any other structures or even burials that we should take note of?

GK: Wai'anae Elementary was part of the plantation homes in the area after the Hawaiian settlements because of the Wai'oli spring. I don't recall churches except for the Protestant Church nearby. I do recall it being government and plantation lands which extended to the Japanese and Chinese graveyard just above the school at Pu'u Pahe'ehe'e Hill and Heiau.

Other than that, I don't believe the site has remnants of the village. I don't recall even during my time, except for stories, that there were a small *heiaus*, called *unu*'s temples along the Kanepuniu and Eku streams in Wai'anae.

DD: Thank you Uncle for sharing that.

Do you think that this proposed development will affect any place of cultural significance or access to any place?

GK: I don't believe so, because as I recall, that area was where the cottages were. The cottages are gone. The Quonset huts are gone. There are modern portables in that area now. The area's an open grass area now. People also park there. There's an old tree that I do remember. It's the royal

poinciana tree that still remains there. The tree should stay because it's part of the school cottage history. It was a famous tree for the students because it marked summer time was coming.

DD: This tree, the royal poinciana, is that the one where we were looking at, or is it near the parking lot?

GK: Yes that is the tree that has a cemented foundation now, I guess that is to help it from falling over.

DD: Ok, alright, I know which one is that.

That's in the corner outline of the property, so to clarify, Uncle is saying that it would be good to keep that tree. That tree has some history there, and it's within that grassy area where the construction is planned to be done.

Ok, Uncle, are there any traditional gathering practices that we should be aware of in this area that they are developing?

GK: No. There's no gathering practices of any kind that I've seen or heard of at the site.

DD: Yeah, it's on the school grounds, and Uncle, are there any other cultural concerns the community might have in the vicinity of the project?

GK: I might say that where the parking lot is, there may be remnants of graves, only because of the proximity to Hawaiian Protestant church that's on Mill Street. The reason I believe this is because the area is in close proximity to the Protestant Church that has many graves on its property. I would also be cautious of the area because it has always been an open place never developed. I also recall, a burial found by a Portuguese-Hawaiian family at their home next to the school.

DD: Ok. Thank you for sharing that, Uncle, I think that's something that we should really be aware of and look out for.

GK: If they dig down a certain depth like planting a tree, you might find burials.

DD: Right. Ok.

So we're nearing the end here. Uncle, is there anyone else you suggest we should talk to regarding this area?

GK: I'm not sure at this time.

DD: Right, ok. Well thank you, Uncle. It's always a pleasure talking story with you.

GK: Mahalo Kumu for your due diligence in protecting and recording the information about our community.

DD: *Mahalo ia 'oe*. Ok, so we're gonna close. And *Aloha*.

GK: Aloha.

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