An Archaeological Monitoring Plan for the Proposed Kuhio Highway Emergency Shoreline Mitigation at Wailua Beach Project

TMKs: (4) 3-9-006:012, (4) 4-1-004:001, 020, and 999; (4) 4-1-005:004, 014, 017, and 999

Wailua Ahupua'a
Puna District
Island of Kaua'i

DRAFT VERSION

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1. INTRODUCTION

At the request of WSP, on behalf of the State of Hawai‘i Department of Transportation (HDOT), ASM Affiliates (ASM) has prepared this Archaeological Monitoring Plan (AMP)for the proposed Kuhio Highway Emergency Shoreline Mitigation at Wailua Beach, Wailua Ahupua‘a, Puna District, Island of Kaua‘i (Figures 1, 2, and 3). This archaeological monitoring plan has been prepared in compliance with the Department of Land and Natural Resources-State Historic Preservation Division’s (SHPD) Rules Governing Standards for Archaeological Monitoring Studies and Reports as contained in Hawai‘i Administrative Rules (HAR) 13§13-279. As the bridge improvements are being conducted with aid of monies from the Federal Highway Administration (FHWA), this plan has also been prepared in compliance with commitments made during the National Historic Preservation Act (NHPA) Section 106 process, and any additional work that is performed during the monitoring project will be consistent with the *Secretary of the Interior’s Standards and Guidelines for Archaeological Documentation* (48 FR 44734-370). A description of the proposed Undertaking and the Area of Potential Effects (APE) is presented below. This is followed by an outline of the area’s culture-historical context and *ahupua‘a* settlement pattern, and a summary of prior archaeological studies and previously documented archaeological/historical sites. Lastly, a discussion of anticipated remains is presented along with an outline of the procedures to be followed and implemented during the archaeological monitoring and subsequent reporting effort.

PROPOSED UNDERTAKING

In March of 2021, a large storm impacted the Wailua Beach area on Kaua‘i, resulting in the removal of protective beach dunes, large sections of *naupaka* and ironwood trees, and caused severe undermining of highway infrastructure. As a result, on March 9, 2021, Governor David Ige issued an emergency proclamation to provide relief for disaster damages, losses, and suffering. The emergency proclamation exempted this project from review under Hawai‘i Revised Statutes (HRS) Chapter 6E. This undertaking addresses permanent repairs to prevent further damage. HDOT, in cooperation with the Federal Highway Administration (FHWA), is planning to undertake installation of an un-grouted rock revetment following storm damage to the area and to protect highway infrastructure from extreme storm events, such as storm surges. Ideally, in conjunction with revetments, a protective beach should be preserved due to concerns about “flanking erosion.” In addition to the un-grouted revetment, HDOT proposes to install a new, patented beach nourishment technology called Sandsaver which uses the energy of breaking waves to thrust suspended sand particles up the beach, while simultaneously breaking down wave energy, thereby building sand dunes while reducing erosion. The project is viewed as a prototype in Hawai‘i that can potentially be used in other areas.

Additionally, to study wave action along Wailua Beach, HDOT, in collaboration with the University of Hawai‘i (UH) is proposing the placement of Acoustic Doppler Current Profilers (ADCPs) at various locations along the ocean floor, which will capture full wave spectrum and current velocity of the water column. Finally, HDOT is also proposing the removal of a concrete slab, sandbags, concrete column, trees and debris, and installation of signs, traffic delineators, a concrete slab, boulders, and *naupaka* (*Scaevola*).

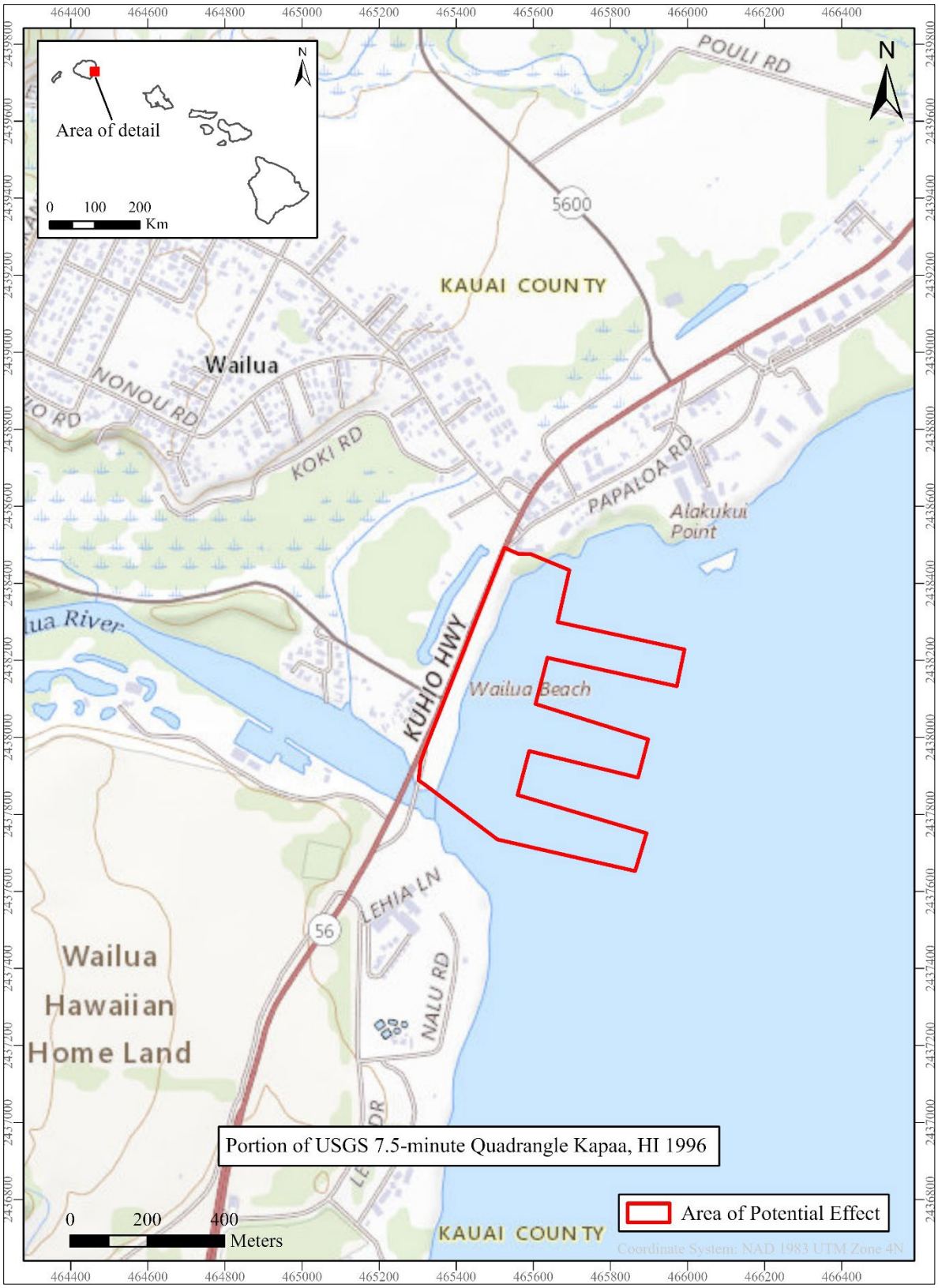

Figure 1. Area of Potential Effects (APE).

Figure 2. Recent satellite imagery with APE outlined in red.

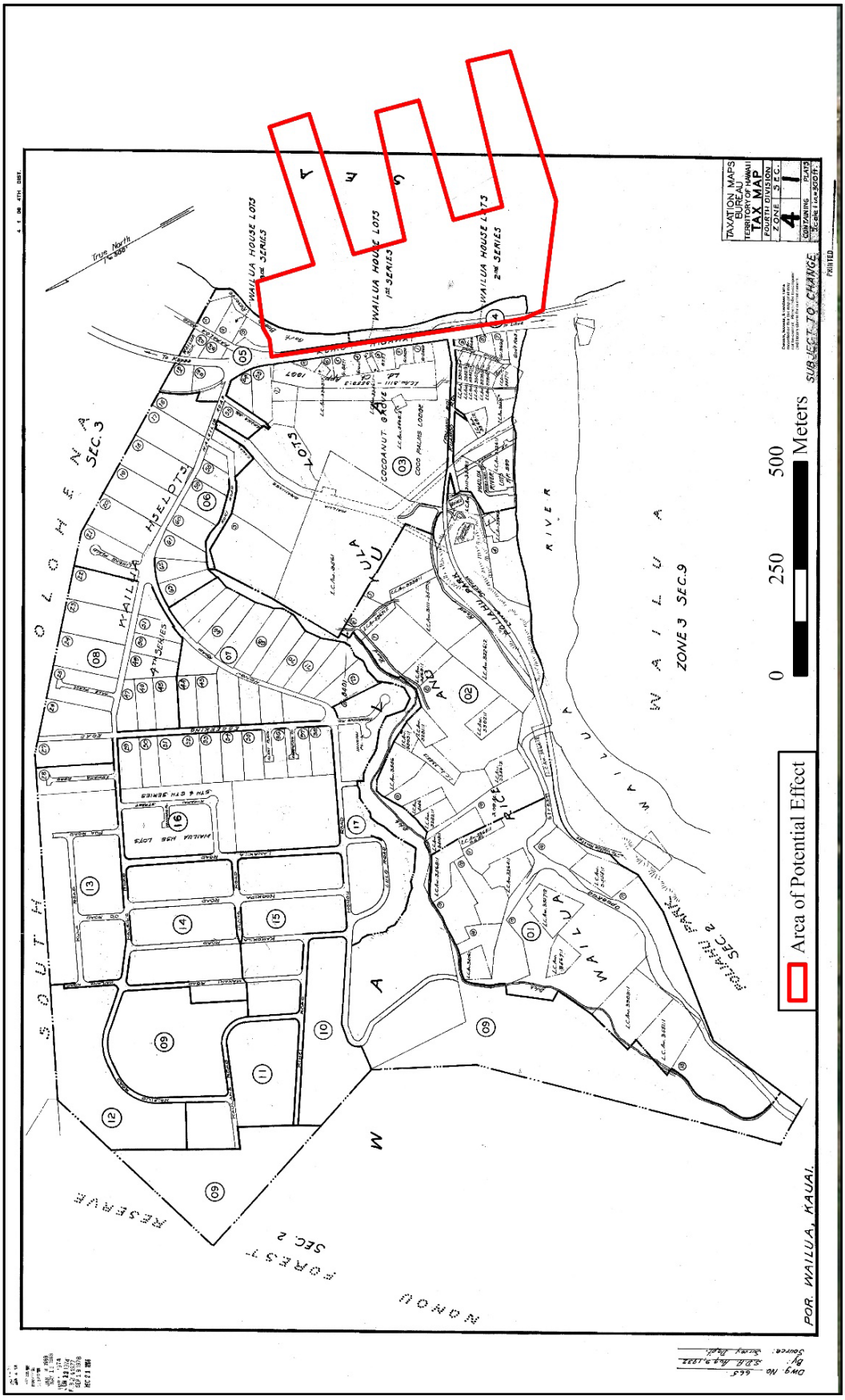

Figure 3. Tax Map Key (TMK): (4) 4-1 with APE outlined in red.

Figure 4. Soils within the APE, which is outlined in red.

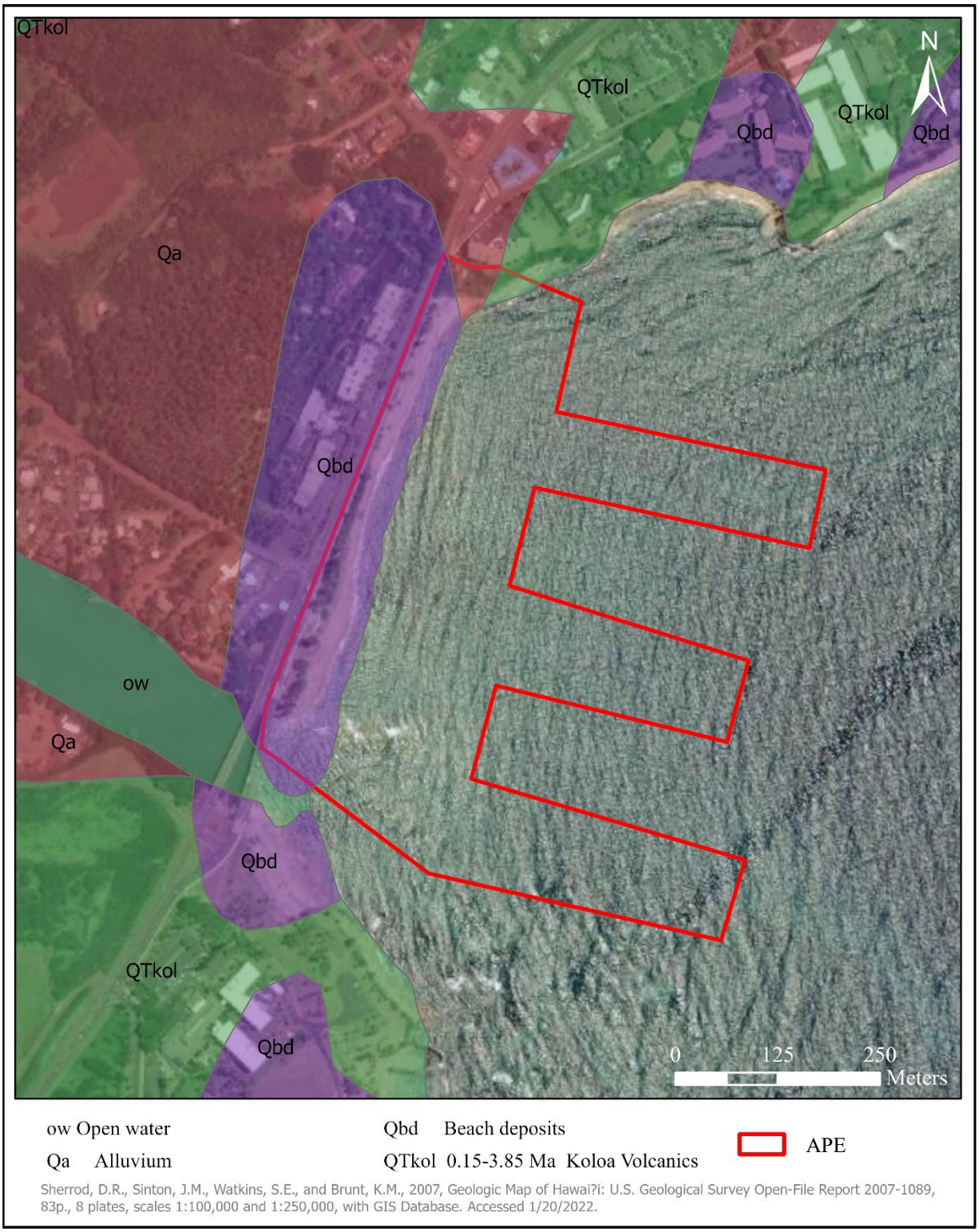

Figure 5. Geology within the APE, which is outlined in red.

AREA OF POTENTIAL EFFECTS (APE)

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) and Title 36 of the Code of Federal Regulations (CFR), Section 800.16(y), the FHWA and the HDOT received concurrence from the State Historic Preservation Officer (SHPO) regarding the APE for the subject project on October 5, 2021 (Appendix A; Project No.: 2021PR01064, Doc. No.: 2110SH01). The Area of Potential Effects (APE) entails a 0.36-mile long stretch of Kuhio Highway with an area of approximately 63 acres and includes the following TMKs: (4) 3-9-006:012, 4-1-004:001, (4) 4-1-004:020, (4) 4-1-004:999, (4) 4-1-005:004, (4) 4-1-005:014, (4) 4-1-005:017, and (4) 4-1- 005:999 along Kuhio Highway beginning in the vicinity of Kuamoo Road and extending toward the vicinity of Papaloa Road. The APE is roughly 2,030 feet wide throughout its length and extends from approximately the middle of Kuhio Highway's right-of-way, toward the ocean. The APE is situated along the coastal plain on the eastern side of Kaua‘i Island between the Waialua River and the town of Waipouli. Elevations in this area range from sea level to approximately 40-feet above sea level. Soils within the APE (Figure 4) are classified as Beaches and Marsh with the far northern portion being Lihue silty clay (Soil Survey Staff 2022). Figure 5 depicts the geology of the APE, where the majority of the APE consists of beach deposits (Qbd). To the north of the APE are small concentrations of alluvium (Qa) and Koloa Volcanics (QTkol). Vegetation within the APE (Figures 6, 7, and 8) is extremely limited and includes Ironwood trees, coconut trees, *naupaka*, false *kamani*, and *hala* (pandanus; *Pandanus odoratissimus*).

Figure 6. Northern end of APE, view looking southwest.

Figure 7. Central portion of the APE, view looking northeast.

Figure 8. Southern end of the APE looking northeast.

2. BACKGROUND

To provide an understanding of the types of archaeological remains or historic properties that are anticipated within the current APE, a brief culture-historical context is provided below along with a presentation of relevant prior studies.

BRIEF CULTURE-HISTORICAL CONTEXT

Pukui et al. (1974:224) defines Wailua as "two waters," most likely referring to the two main forks—north and south—of the Wailua River. The saying "*Ka wai hālau o Wailua*" translates to "the expansive waters of Wailua" as it is the largest river in the Hawaiian Islands (Pukui 1983:178). An alternative suggestion is "water pit" which refers to the various waterfalls and pools dotted along the river's course (Damon 1931:360). Hawaiian author and historian, Samuel Kamakau (1976:7) suggests that Wailua Ahupuaʻa was most likely named after the 14th-Century chief, Wailuanuiahoʻāno:

> Wailuanui-a-Hoʻano was born in ʻEwa, Oʻahu, and his descendants went to Kauaʻi and to Maui, and wherever they settled they called the land after the name of their ancestor. Wailua was a song of Laʻakona, ancestor of the ʻEwa family by Ka-hoʻano-o-Kalani. His name, Wailuanui-a-Hoʻano, came from adding the name of his mother.

And, while the literal translation of "two waters" (Pukui et al. 1974:224) is the most commonly used definition for Wailua, Dickey offers his commentary of this interpretation:

> Though "Two Waters" is the white man's natural translation of "Wailua" and this name and Waialua on Oahu are generally said to refer to the two main branches of the principal rivers of these districts, yet this explanation never seems to occur to a native Hawaiian. (Dickey 1917:15)

The word *wailua* has also been translated by Pukui and Elbert (1986:379) as "spirit, ghost; remains of the dead," suggesting this place to be metaphysically associated with Hawaiian beliefs surrounding the mysteries of transfiguration and the afterlife. This concept is elaborated by Fredrick Wichman (1998:67-68), who explained:

> Spirits of the dead indeed gathered together on the upland plains and on certain moonlit nights marched in great procession accompanied with drums and nose flutes down to the river. These night marchers entered waiting canoes and paddled down the river into the sea and around the coast until they reached Polihale at Mānā. Here they leaped from the cliffs into Pō, the land of the dead, which lay beneath the sea.

Nonetheless, the Wailua area was and continues to be abundant in freshwater and ocean resources. The upper reaches of the *ahupuaʻa* (land division spanning from the mountain to the ocean) consist of Mount Waiʻaleʻale, the highest mountain on Kauaʻi. Pukui et al. (1974:220) translates Waiʻaleʻale as "rippling water or overflowing water," exhibiting the abundance of waters that emanate from this source. As a result of the various natural resources available, Wailua became a desirable area for habitation and was a residence of *aliʻi nui* (high chiefs) and a political center. Historical accounts discuss the many caves in Wailua associated with stories of legendary characters. This includes Anahulu Cave associated with Kamalau who stayed there prior to looting Poliʻahu Heiau; Hauma, where the sister of Kamalau slept before looting the *heiau* (place of worship) with her brother; and Kaluamōkila, a cave associated with a *moʻo* (lizard, water spirit) and the mother of *aliʻi* (chief) Kaumualiʻi (Dickey 1917:30). The underwater cave known as Kauela was where the shark with the same name resided near the mouth of the Wailua River. Wichman (1998:72) shares that the present-day cement bridge was built over Kauela's home, forcing the *manō* (general name for shark) to find a new home. The cave known as Kawelowai is located behind Waiʻehu Falls and was a place where Wailua chiefesses hid during war (Dickey 1917:23). Keoniewa was a cave where the giant Kauahoa Kameʻeui spent the evening when he was en route to visit the *aliʻi* ʻAikanaka who was at Nounou (ibid.). Māmāʻakualono is the traditional name for the "Fern Grotto," which is one of the most famous caves in Wailua located at the junction of the North and South forks of the Wailua River (Dickey 1917:33). Manuʻena is a cave associated with the demi-god Māui and is the location where the secret of making fire was withheld (Dickey 1917:73).

In addition to the various caves located throughout Wailua, at least seven major *heiau* were recorded in a concentrated area in the *ahupuaʻa* and were declared a National Historic Landmark in 1962 (Dunbar 1988). These *heiau* include Pōhakuʻeleʻele, Hikini-a-ka-lā, Holo-holo-kū and Pōhaku Hoʻohānau, Ka-lei-o-Manu, Mālae (also known as Mālaehaʻakoa), Makaʻukiu, Poliʻahu, and Pōhaku kani (also known as the Bellstone).

A mythical site known as Malohua is reported to the north side of Wailua Bay (Dickey 1917:20). The site consists of a footprint on a rock with a second footprint said to be nearby on a rock in the water. An account relates a magician from Hawaiʻi Island who came to Kauaʻi searching for the deity Kamapuaʻa, the mythological half-hog and half-man

associated with agriculture. Here the magician stepped onto the rock, making a footprint during his search but failed to locate the creature only stumbling on a small pig who was Kamapuaʻa in disguise. When the magician returned to Wailua, he was told that he was tricked by the creature and therefore killed all the pigs in the *ahupuaʻa*, vowing to never eat pork again (ibid.).

Early historical accounts from Captain George Vancouver, who arrived in 1793, describe the landscape of eastern Kauaʻi below:

> This portion of Attowai [Kauaʻi], the most fertile and pleasant district of the island, is the principal residence of the king, or, in his absence, of the superior chief, who generally takes up his abode in an extensive village, about a league to the southward of the north-east point of the island. Here Enemo [Inamoʻo] the regent, with the young prince Tamooerrie [Kaumualiʻi], were now living;… (Vancouver 1967:221-222)

Following the death of Kaʻeokūlani in 1794 and the subsequent passing of his mother high chiefess Kamakahelei their son Kaumualiʻi assumed the sovereign reign over Kauaʻi and Niʻihau (Kamakau 1992). While Kaumualiʻi ruled over his island kingdom, Hawaiʻi Island chief, Kamehameha had already embarked on a major quest to consolidate all of the islands under his rule—a destiny that was prophesized in his earlier years when he managed to overturn the famed Pōhaku Naha (Naha Stone) in Hilo (Desha 2000). Although this amazing feat occurred in Hilo, Desha points to Wailua as the stone's place of origin when he noted:

> This stone, called Pōhaku Naha, had been brought from Kauaʻi, from a place close to that great *heiau* which was situated near the estuary of the Wailua River. This royal birthstone has been brought by a certain chief named Makaliʻinuikuakawaiea, and it was the mark of the chiefly *naha* line. (Desha 2000:78)

In 1840, the United States Exploring Expedition lead by Charles Wilkes, traversed the coastline from Wailua to the north by horseback. Below is an excerpt from Wilkes travels:

> The country on the way is of the same character as that already seen. They passed the small villages of Kupau [Kapaʻa], Kealia [Keālia], Anehola [Anahola], Mowaa [Moloaʻa], and Kauharaki, situated at the mouths of the mountain streams, which were closed with similar sand-bars to those already described. These bars afforded places to cross at, though requiring great precaution when on horseback. The streams above the bars were in most cases, deep, wide, and navigable a few miles for canoes. Besides the sugarcane, taro, etc., some good fields of rice were seen. The country may be called open; it is covered with grass forming excellent pasture-grounds, and abounds in plover and turnstones, scattered in small flocks. (Wilkes 1856:69)

By the mid-19th century, the Hawaiian Kingdom was an established center of commerce and trade in the Pacific, recognized internationally by the United States and other nations in the Pacific and Europe (Sai 2011). The increasing population of Westerners in the Hawaiian Islands forced socioeconomic and demographic changes that promoted the establishment of a Euro-American style of land ownership. By 1840 the first Hawaiian constitution had been drafted and the Hawaiian Kingdom shifted from an absolute monarchy into a constitutional government. Convinced that the feudal system of land tenure previously practiced was not compatible with a constitutional government, the *Mōʻī* Kauikeaouli and his high-ranking chiefs decided to separate and define the ownership of all lands in the Kingdom (King n.d.). The change in land tenure was further endorsed by missionaries and Western businessmen in the islands who were generally hesitant to enter business deals on leasehold lands that could be revoked from them at any time. After much consideration, it was decided that three classes of people each had one-third vested rights to the lands of Hawaiʻi: the *Mōʻī* (monarch), the *aliʻi* (chiefs) and *konohiki* (land agents), and the *makaʻāinana* (common people or native tenants).

In 1845 the legislature created the Board of Commissioners to Quiet Land Titles (more commonly known as the Land Commission), first to adopt guiding principles and procedures for dividing the lands and granting land titles, and then to act as a court of record to investigate and ultimately award or reject all claims brought before them. All land claims, whether by chiefs for entire *ahupuaʻa* or by tenants for their house lots and gardens, had to be filed with the Land Commission within two years of the effective date of the Act (February 14, 1848) to be considered. This deadline was extended several times for the *aliʻi* and *konohiki*, but not for commoners (Alexander 1920; Soehren 2003)

The *Mōʻī* and some 245 *aliʻi* (Kuykendall 1938) spent nearly two years trying unsuccessfully to divide all the lands of Hawaiʻi amongst themselves before the whole matter was referred to the Privy Council on December 18, 1847 (King n.d.). Once the *Mōʻī* and his *aliʻi* accepted the principles of the Privy Council, the *Māhele ʻĀina* (Land Division) was completed in just forty days (on March 7, 1848), and the names of all of the *ahupuaʻa* and *ʻili kūpono* (nearly independent *ʻili* land division within an *ahupuaʻa*) of the Hawaiian Islands and the chiefs who claimed them,

were recorded in the *Buke Mahele* (also known as the *Māhele* Book). As this process unfolded the *Mō'ī*, who received roughly one-third of the lands of Hawai'i, realized the importance of setting aside public lands that could be sold to raise money for the government and also purchased by his subjects to live on. Accordingly, the day after the division when the last chief was recorded in the *Buke Māhele* (*Māhele* Book), the *Mō'ī* commuted about two-thirds of the lands awarded to him to the government (King n.d.). Unlike the *Mō'ī*, the *ali'i* and *konohiki* were required to present their claims to the Land Commission to receive their Land Commission Award (LCAw.). The chiefs who participated in the *Māhele* were also required to provide commutations of a portion of their lands to the government to receive a Royal Patent that gave them title to their remaining lands. The lands surrendered to the government by the *Mō'ī* and *ali'i* became known as "Government Land," while the lands that were personally retained by the *Mō'ī* became known as "Crown Land," and the lands received by the *ali'i* became known as "*Konohiki* Land" (Chinen 1958:vii, 1961:13). Most importantly, all lands (Crown, Government, and Konohiki lands) identified and claimed during the *Māhele* were "subject to the rights of the native tenants" therein (Garavoy 2005:524). Finally, all lands awarded during the *Māhele* were identified by name only, with the understanding that the ancient boundaries would prevail until the land could be formally surveyed. This process expedited the work of the Land Commission.

According to the Buke Māhele (1848), the *ali'i wahine* (chiefess), Victoria Kamāmalu relinquished Wailua Ahupua'a to the Crown, thereby establishing Wailua as Crown Lands. To help clarify the exclusive nature of Crown Lands, in 1864 the Supreme Court established that all lands with such designation were inalienable and shall pass to the successor of the Hawaiian Kingdom for his or her lifetime and subject only to the rights of the tenants (Office of the Commissioner of Public Lands 1929; Van Dyke 2008). Lands selected by the Crown held special cultural and spiritual significance (ibid.)—characteristics that are exemplified in the vast cultural landscape and the many legendary accounts associated with Wailua Ahupua'a. Van Dyke (ibid.:111) further explains that "[t]he Commissioner of the Crown Lands managed the land, leased the most productive lands (usually to sugar plantations), and conveyed the revenues to the *Mō'ī*." Wailua was one of only seven *ahupua'a* on Kaua'i that was given the designation of Crown lands.

As the *Mō'ī* and *ali'i* made claims to large tracts of land during the *Māhele*, questions arose regarding the protection of rights for the native tenants. To address this matter, on August 6, 1850, the *Kuleana* Act or Enabling Act was passed, allowing native tenants to claim a fee simple title to any portion of lands which they physically occupied, actively cultivated, or had improved (Garavoy 2005). Additionally, the *Kuleana* Act clarified rights to gather natural resources, as well as access rights to *kuleana* parcels, which were typically landlocked. Lands awarded through the *Kuleana* Act were, and still are, referred to as *kuleana* awards or *kuleana* lands. The Land Commission oversaw the program and administered the *kuleana* as Land Commission Awards (Chinen 1958). Native tenants wishing to make a claim to their lands were required to submit a Native Register to the Land Commission, followed by Native Testimony given by at least two individuals (typically neighbors) to confirm their claim to the land. Upon successful submittal of the required documents, the Land Commission rendered their decision, and if successful, the tenant was issued the Land Commission Award (LCAw.). Unlike the *Māhele* between the chiefs, native tenants claiming land through the *Kuleana* Act were required to pay for a Government surveyor to survey and map the boundaries of the awarded parcels. The *kuleana* awards in the vicinity of the current APE are listed in Table 1 and shown on Figure 9.

Table 1. LCAw. in the vicinity of the APE from north to south.

LCAw.	*Claimant*	*Parcels Awarded*	*'Ili*	*Uses in Vicinity of APE*
3111/3559	Debora Kapule	3	Kawaiiki/Pakoli/Pohoula	Fishponds
3406	Pula	2	Kapuaiomolohua/Waioo	Residential
3303	Makaiki	2	Kapalai/Kapuaiomolohua	Residential
3346	Nawai	2	Kulaakapueo/Makunapanone	Residential
3568	Kelani	2	Kawaiiki/Waioo	Residential
3302	Maawe	2	Kauhakoa/Puhauula	Residential
3282	Sera Wahapuu	2	Halepuolo/Kauhakoa	Residential
3345	Nakai	2	Kahakoa/Kapalai	Residential
3367	Noi	2	Hapuupuu/Kahakoa	Residential
3238	Hawea	2	Kahakoa/Kahihei	Residential
3281	Wahineai	2	Kahakoa/Luaiokama	Residential
3405	Poka	1	Kaiwaiki	Residential
3557	Kaniwi	2	Kahakoa/Lanipaa	Residential

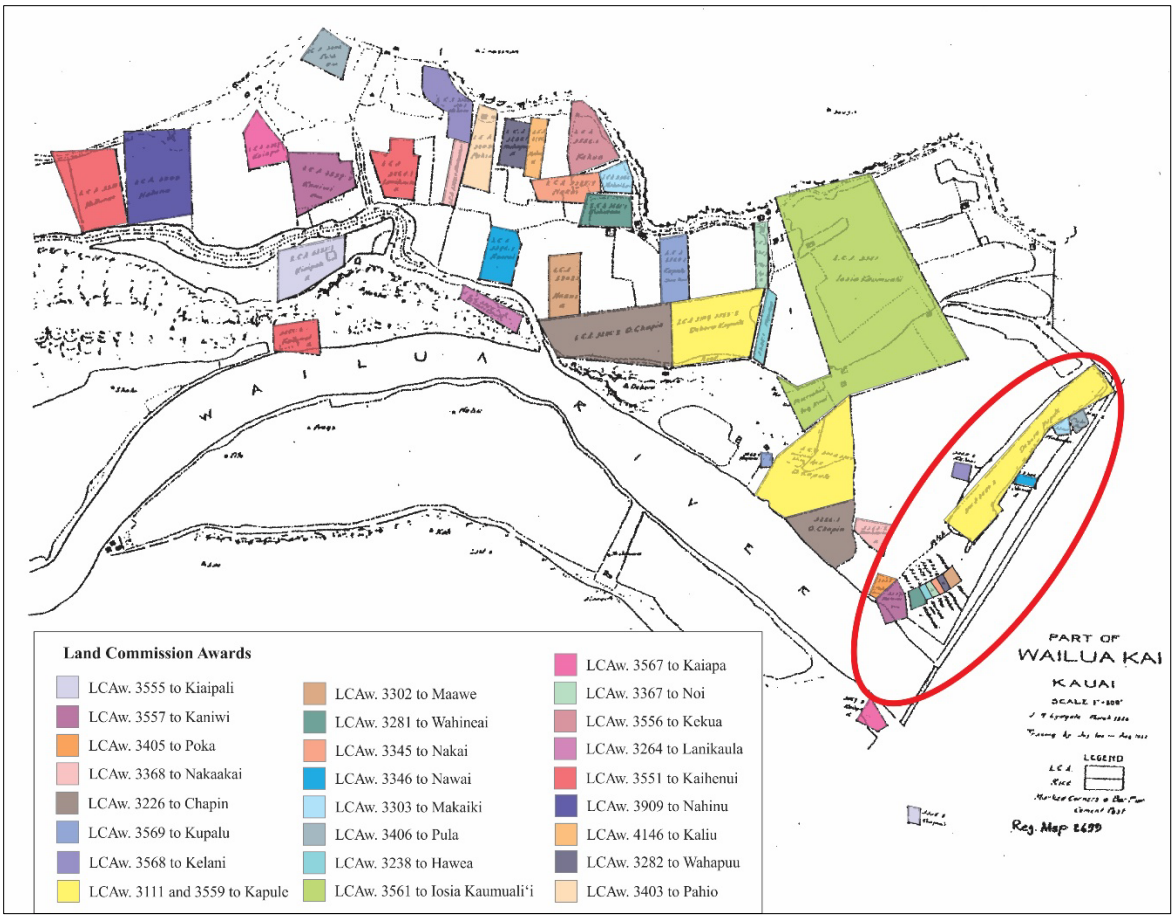

Figure 9. *Kuleana* LCAw. in Wailua Kai with area of focus in the vicinity of the APE encircled in red (base map is Hawai'i Registered Map 2699 prepared by Lydgate in 1920).

As illustrated on Figure 9, the majority of the *kuleana* LCAw. within Wailua were within one mile of the shore along the northern bank of Wailua River. All of these awards are *mauka* of the current APE, and the Land Commission records indicate that the more makai awards were for house lots with the more mauka awards for irrigated taro fields (*lo'i*). In the vicinity of the current APE, all but one of the awards were for house lots (see Figure 9 and Table 1), with the larger award (portion of LCAw. 3111 and 3559) to Debora Kapule (a *wahine ali'i*) consisting of a former fishpond. Bushnell et al. (2004) reported that "Queen Debora Kapule" had claimed Akaimiki fishpond, which was located within the parcel located *mauka* of the old Government road and was of the *loko pu'uone* type, which is characterized by Apple and Kikuchi (1975:8) as "an isolated shore fishpond usually formed by the development of a barrier beach." For a more detailed discussion of the immediate area of these *kuleana* LCAw. the reader is directed to Hammatt and Shideler (2015).

Following the *Māhele 'Āina* of 1848, new commercial enterprises were begun mostly by Westerners including Elard Hoffschlaeger and Florens Stapenhorst, who together formed Hoffschlaeger & Co. Their interest was in creating a ranch to supply whaling ships that arrived in Hawaiian waters during the winter months with provisions. While their primary business was cattle ranching, they also made butter, barreled salted beef, and raised fresh produce.

A group of native Hawaiians also attempted to create new agricultural ventures in Wailua through what appears to be a cooperative type of farming that utilized the overgrown *lo'i*. In 1855, this faction took up a lease in the amount of $300 per year for former *konohiki* lands within Wailua Kai (Flores 1999). The article titled *Na Mea Hou Ma Wailua Kauai* (The New Things at Wailua Kauai) printed in a November 1856 edition of the Hawaiian language newspaper *Ka Hae Hawai'i*. Written by Baniamina Holi, the article described the efforts of this group who referred to themselves as the Hui Mahiku. A portion of the article reads thusly:

> *Aloha oe—Ua lana ko'u manao e hai aku i ke ano o keia mea hou. O ka holo mua ana o ka Hui Mahiku ma Wailua nei, "E ninau paha auanei oukou," He aha la ka Mahiku? (Eia, o ka aina nahelehele i mahi ia me ka ike ole aku o ka maka i ka hua o ka aina, a hua mai ka ai o ka aina i*

hooikaika aku ai, alaila e loaa auanei kona inoa hope) he mahiai, no ka mea, ua ai i ka hua o ka aina i hooikaika ai.

Penei ka mua o ka holo ana o ka mahiai ma Wailua nei. Ua hui kekahi poe umi, ma ke ano hui Mahiku, a oi aku no hoi kekahi poe Hui Mahiai, na lakou e hoomakaukau mua i mau oo, a me ka pahiolo, a me ka pahi. I ka makaukau ana o keia mau hana, hooko koke lakou ma ka mea a lakou i kuko ai, oia ka Mahiai Pualu.

E hana mua i ka loi nahelehele o kekahi i ka la mua, a pau like, ua poe Hui nei, alaila hoomaka hou i ko ka mea mua i hana ia, alaila ua maikai ka aina o keia Poe Hui. Ua loihi ka waiho ana o keia mau poe loi nahele, 7 paha makahiki 3 paha; aka, i keia mau malama elua, ua maikai maoli keia poe loi nui 8...

Penei ke ano o ka mahiai ana i keia poe i kumu hoohalike no ka poe makemake mai, e okioki mua i ka "neki" me ka pahi, alaila, hookaawale ka opala "neki," ma kahi e ae, alaila e olo me ka pahiolo ma ke loa, a hiki ma kekahi aoao o ka loi, alaila, e olo ma ka laula, i kapuai ka manoanoa o luna, alaila, hehi ka wawae malalo o ka eka i oleloia, alaila e kiola maluna i ka eka, ma ke kuaauna o ka loi; alaila, ua maikai ua loi nei, no ka mea ua pau ka eka maluna, o ka pahiolo oia ka mea i holo ai ka hana, a oia ka mea e holo ai ka Hui Hana ana.

Translation: Greetings—My thoughts have surfaced to share the nature of these new things. First, the arrival of Hui Mahiku here at Wailua. You folks may be asking, what is the Mahiku? (Here, it is the clearing of land for farming without seeing the fruit of the land, and when the fruits are finally seen, then we know what to call these lands) a farming because we have reaped the fruit of the land that we have improved.

This is how this farming was done here at Wailua. A group of ten people came together and formed the group Mahiku, and there are more people in the Hui Mahiai and they prepare the *ʻōʻō* [digging sticks], the saws, and the knives. When these tools are prepared, which they do quickly because they have a strong desire to farm cooperatively.

Clearing the overgrown *loʻi* that belongs to a person is done on the first day, until they are all cleared by the group. Work then starts on the first *loʻi* that was cleared by the group. The *loʻi* have been abandoned for a long time, seven years and some three. But over the past two moons, some eight *loʻi* have been prepared and are ready…

Here is the nature of this farming that is being done by these role models for those that want to follow: cut the "neki" [bulrush] with a knife, then separate the waste matter elsewhere, then using a saw, saw the length until the other side of the *loʻi* is reached, then saw the width of the *loʻi* leaving a foot of bulrush standing, then using the feet, stomp it down into the soil, then spread the soil on the tops and embankments of the *loʻi*, then the *loʻi* is prepared. The saw is what makes the work quick and that what keeps the work of this group moving forward.

The lease to these lands was later acquired by Ernest Lindemann who arrived in Wailua from Germany in 1864 to manage Wailua Ranch. Lindemann devoted the Wailua Kai lands for sheep ranching, and later added cattle and horses. Lindemann also attempted to grow cotton on ten acres of land in the *ʻili* of Konolea.

Since most of these early ranching businesses were established to supply food and goods to whaling ships, the demise of the whaling industry during the 1870s had a crippling effect on the ranching industry and other associated enterprises. Nonetheless, this gave way to an increase in rice production and lands within Wailua were leased to Chinese rice planters who also took over much of the taro cultivation. In her book, *He Was A Ram: Wong Aloiau of Hawaii,* Violet Lai (1985) wrote that the rice industry prospered during the 1880s when the Hawaiian Kingdom Government heavily taxed imported rice, a demand that came primarily from Chinese laborers. These Chinese laborers had also gained control over taro production throughout much of Kauaʻi and established Chan Chip, the largest taro business, which was established in Wailua.

In a newspaper article published in the March 30, 1920 edition of *The Garden Isle*, Lydgate reported that roughly 115 acres of Wailua lands were used for taro and rice production, with one-third being planted in the taro and the remaining in rice. Lydgate (1920) also told that Chan Chip operated a *poi* factory near the fork of the Wailua River's northern branch, producing sixty bags of taro weekly. By the 1890s, Lindemann who held the lease for Wailua Kai also took possession of nine *kuleana* parcels which were used either for rice cultivation or pastures (Flores 1995). However, by the 1930s, the increased production cost coupled with large-scale national competitors, the rice industry

slowly declined. During this time, Lindeman attempted to establish a copra business in Wailua when some two thousand coconut trees were reportedly planted in the vicinity of the Coco Palms Hotel (ibid.).

Tax assessment records located at the Hawai‘i State Archives for the years 1857, 1870, and 1890 show a dramatic decline in the number of residents within Wailua—a trend that is grimily mirrored throughout other parts of the islands. Tax records from 1857 show 107 residents within Wailua Ahupua‘a, which included elderly males, females, and school-aged children. The tax records from 1870 and 1890 are separated into Wailua Uka and Wailua Kai. In 1870, 46 males and females are listed for Wailua Kai and another 41 individuals are listed for Wailua Uka, for a combined total of 87 people—a 19% decline from 1857. By 1890, only 14 people were listed for Wailua Kai and another 9 individuals for Wailua Uka for a combined total of 23—a 79% decline from 1857. In associating the drastic population decline within Wailua following western contact, Bushnell et al. in their Cultural Impact Assessment for the Kapa‘a highway relief project remarked:

> Within decades of western contact, Wailua lost its ancient importance, and likely its population also. The *ali‘i* who enjoyed and benefitted from their contact with westerners spent more time in Waimea—the preferred anchorage for visiting ships. Also the complex of *heiau* at Wailua lost its significance after the abolishment of the *kapu system*. By the mid-1800s, only a small population, decimated in part by disease, existed in the Wailua River Valley within a mile of the sea. Indigenous farmers would be displaced within decades by larger scale commercial agriculture and associated immigrant laborers. (Bushnell et al. 2004:44-45)

Ultimately, the reformation of the traditional land tenure system compounded by a shifting political economy backed by Euro-Americans effectively paved the way for the upsurge of large-scale industrial agriculture. The introduction of commercial sugar cultivation to Kaua‘i in 1830 brought about sweeping changes to the landscape and added to the cultural tapestry of the islands. The 1894 *Biennial Report of the Commissioner of Crown Lands* compiled by the Agent of Crown Lands, Curtis Iaukea describes some of the agricultural endeavors within Wailua Uka and Wailua Kai:

> WAILUA—The Wailua lands in the district of Puna, comprise a total area of 20,255 acres in two sections: Wailua-kai and Wailua-uka. Wailua-uka is very fertile containing several hundred acres of good cane land besides an immense forest land, a large portion of which might be available for coffee. Taro is now grown in some parts of the valley, and for a long distance on either side may be seen indications of extensive taro cultivation in years past. This land is well watered and could support a large population. Waiehu Falls situated at the head of the valley and which is also the source of the Wailua river, irrigates about 600 acres of the Lihue and Hanamaulu lands. Wailua-uka has 17,455 acres. Wailua-kai 2800 acres, consists for the most part of pasture land. A large portion of the rice land found here is mostly on kuleanas. There is about 75 acres of cane on the lower part of the land. (Iaukea 1894:39)

A table presented in Iaukea’s 1894 report shows that Lihue Plantation Company held 30-year government lease (lease number 108b) for lands in Wailua Uka with an annual rent of $1,200 (Iaukea 1894:78), while Wailua Kai was in the possession of Lindemann (lease number 171) with a 30-year term and an annual rent of $800 (ibid.:81). A note written in Iaukea’s (ibid.:73) report stated “cane land. Has valu’ble water rights, several hundr’d acres cane land in the upper portion might be made available. At Wailua-kai there are several acres of rice land. Good grazing.”

Although sugarcane was a stable crop in traditional agricultural practices and described by early westerns to be growing along the banks of Wailua River, it never dominated the landscape. Commercial cultivation of cane in Hawai‘i has its origins in Kōloa Kaua‘i, when William Hooper, Peter Allen Brinsmade, and William Ladd secured a 50-year lease from the reigning monarch, Kauikeaouli, for 980 acres of land in Kōloa. However, by 1849, in the midst of the *Māhele ‘Āina*, the Lihue Plantation Company began operations for commercial sugar cultivation in Hanamā‘ulu and later expanded to include the lands of Wailua (Dorrence and Morgan 2000).

The Lihue Plantation Company was organized in 1849 by Henry A. Peirce and other distinguished American businessmen including Charles Reed Bishop and Judge William L. Lee, and was the second commercial sugar plantation established in Nāwiliwili, Kaua‘i (Saito and Campbell 2004). In 1854, Peirce sold his interest in the company to partners, including William Rice and moved back to Boston. In 1869 Peirce moved back to the islands and took a position as United States Minister to Hawai‘i and served until 1878, three years after the passing of the Reciprocity Treaty—a free trade agreement that lifted import taxes for the United States. The passing of this treaty allowed for products produced in the Hawaiian Kingdom to be imported to the United States duty-free. This subsequently led to a mass expansion of Hawai‘i’s sugarcane industry and as a result an increase in production and exportation of raw sugarcane to processing facilities in California.

In 1870, Lihue Plantation purchased 17,000 acres of land in Hanamā‘ulu Ahupua‘a and utilized water runoff to irrigate the fields in both Hanamā‘ulu and the Līhu‘e area. Following this purchase, Hanamaulu Plantation was opened and operated by Albert Spencer Wilcox, the son of a missionary. By 1898, Hanamaulu Plantation had merged with Lihue Plantation and it was soon realized that the cane growing in Hanamā‘ulu needed more water. As early as 1870 water was drawn from the south fork of Wailua River for irrigation purposes. The river was tapped a second time in 1877 to increase water flow and in 1895 another irrigation ditch was built to the north branch of the river which funneled water across the south branch and into Lihue Ditch (Flores 1995). By 1878, Lihue Plantation continued to expand, and leased 30,000 acres of land in Wailua (Saito and Campbell 2004). In 1895, Eric Knudsen visited Wailua and described the sight that lay before him:

> We rode through the Lihue Plantation cane fields, passed through Hanamaulu and came to the Wailua River. What a sight! The great river lay clear and placid—winding away up toward the mountains with rice fields and taro patches filling all the low lands. (Knudsen 1991:152)

By the early 1900s, additional ditch system and reservoirs were built in Wailua for irrigation and hydroelectric power (Saito and Campbell 2004). Flores (1995:II-29) reported that “during the 1920s, the East Kauai Water Company (EKWC) was established with jurisdiction over those waters that arise in and across government lands such as Wailua.” To facilitate the movement of cane, labor, and other goods, from Lihue Plantation and Makee Sugar Company, Ahukini Terminal & Railway Company built a railroad which serviced east Kaua‘i from Puhi to Kealia. Between 1920 and 1921, a railroad system was laid in the Wailua area. This rail line, situated just *mauka* of existing Kuhio Highway, was in operation in the vicinity of the current APE and serviced this area until 1959.

By 1933, the Lihue Plantation Company had purchased Makee Sugar Company and by 1935 had owned all or portions of the Ahukini Railway, Nawiliwili Transportation Company, East Kauai Water Company, Princeville Ranch, Waiahi Electric Company as well as pineapple lands leased to Hawaiian Canneries (Saito and Campbell 2004). The plantation managed to survive through labor shortages caused by World War II and other social and economic changes throughout the remainder of the twentieth century. After 151 years of operation, the Lihue Plantation Company closed its doors in December of 2000, leaving behind scattered remnants of Wailua’s plantation era (Sommer 2002).

Public improvement projects along Kuhio Highway and commercial development within coastal Wailua during the recent times have continued to transform this area. These projects have also led to the completion of several archaeological, historical, and cultural studies that shed light on Wailua’s Pre- and Post-contact history. The details of the relevant studies conducted within the current APE vicinity are presented in the following section of this report.

RELEVANT PRIOR STUDIES

There have been several relevant prior studies conducted in the vicinity of the current APE, four of which have been conducted within the APE. Collectively, these studies provide a general understanding of the cultural resources and historic properties that may be present within the APE. Table 2 lists these studies with findings, while Figure 10 depicts their locations relative to the current APE.

Table 2. Prior studies conducted within and in the vicinity of the current APE

Year	*Author*	*Type of Study*
1931	Bennett	Survey of *heiau*
1973	Kikuchi	Burial study
1995	Hammatt et al.	Archaeological Inventory Survey
2000	Elmore and Kennedy	Inadvertent Discovery of Human Remains
2002	Buffum and Dega	Archaeological Monitoring
2003	Dega and Powell	Archaeological Monitoring
2005	Hoffman et al.	Archaeological Inventory Survey
2006	O’Leary and Hammatt	Archaeological Inventory Survey Addendum
2007	Hammatt and Shideler	Archaeological Assessment with Substantial Subsurface Testing
2011	Yucha and Hammatt	Archaeological Assessment
2013	MKE and Fung	State Historic Bridge Inventory & Evaluation
2014	Kamai and Hammatt	Archaeological Monitoring
2020	Westfall	National Register of Historic Places Nomination

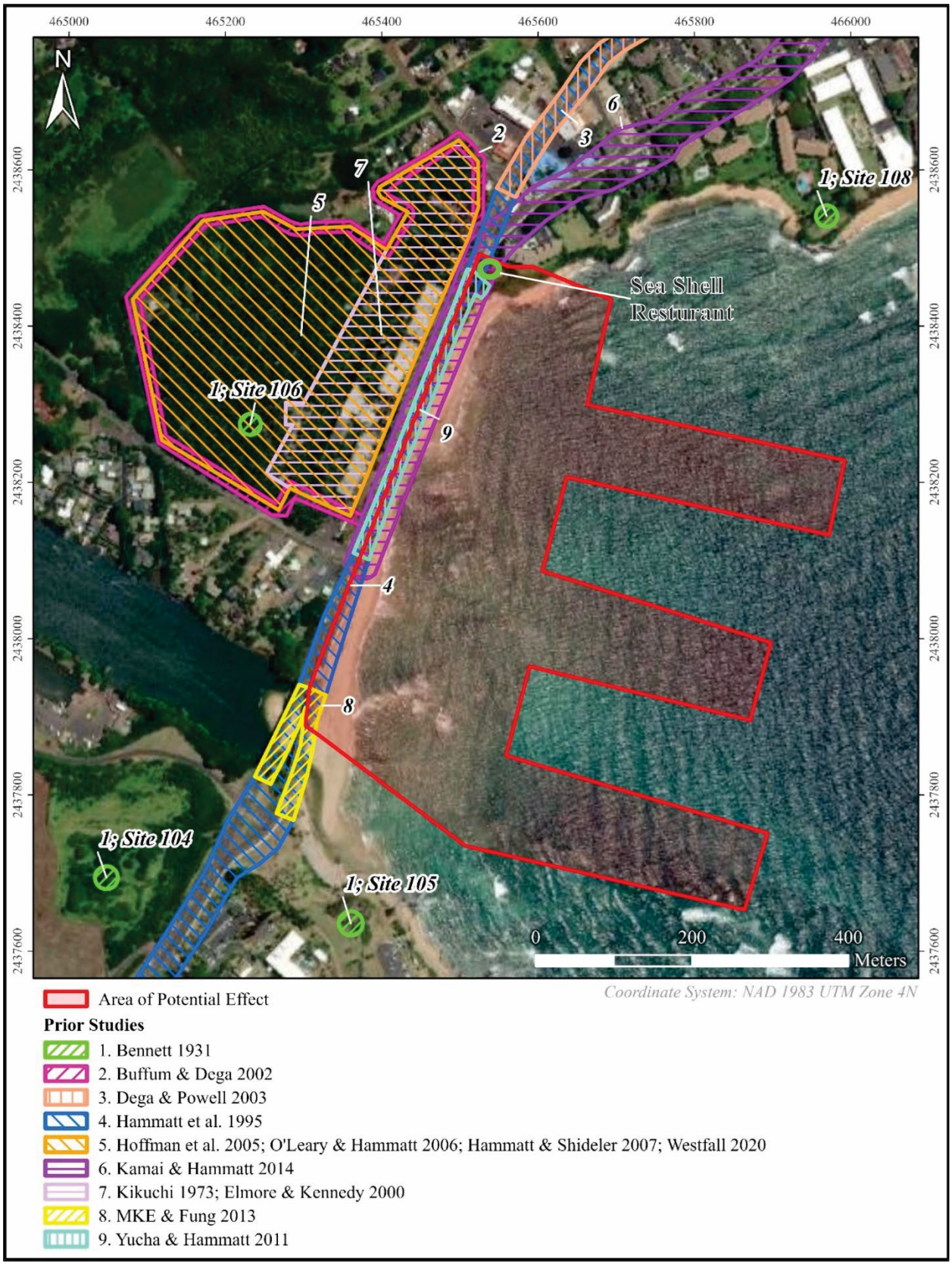

Figure 10. Prior studies conducted within and in the vicinity of the current APE.

Prior Studies Conducted in the Vicinity of the Current APE

Prior archaeological research in the area of Wailua began in the early twentieth century with an archaeological reconnaissance survey of *heiau* and places of refuge by Wendell Clark Bennett for Bishop Museum (Bennett 1931). In his book *Archaeology of Kauai,* Bennett describes four sites within vicinity of the APE, recorded by the Bishop Museum as Sites 104-106 and Site 108. Mālae Heiau (SIHP Site 50-30-08-0104) was located near the south end of Wailua River and only its outer walls remain. SIHP Site 50-30-08-0105 is documented as Hikinaʻakalā Heiau, situated on the shores of the south bank of the Wailua River. The *heiau* has three distinct divisions with stones dividing the front and middle portions and a number of graves mark the middle and outer sections. Subsequently, a place of refuge (Puʻuhonua o Hauola) and associated petroglyphs were added to Site 0105. SIHP Site 50-30-08-0106 is a royal coconut grove and the traditional birthplace of *aliʻi* on the north bank of the Wailua River. Finally, SIHP Site 50-30-08-0108, Kukui Heiau, is located along the shore to the northeast side of the bay. Collectively, Sites 0104 through 0106 comprise the National and State Register of Historic Places nomination of the Wailua Complex of Heiau (SIHP Site 50-30-08-0502). Site 0502 is a group of five discontinuous *heiau*, in addition to Poliahu Heiau, Kalaeokamanu Heiau, and the royal birth site at Holoholokū and the bellstone (Dunbar 1988; Flores 1995).

Construction of the Coco Palms Hotel in Wailua began in the mid-twentieth century (Kikuchi 1973). An unknown number of burials were encountered while building the hotel and were later reburied at the front of the property. As a new wing was being added to the hotel in 1973, more human skeletal remains were encountered in sand deposits. William Kikuchi (1973) carried out a burial study to document the findings and, as a result, 34 sets of human skeletal remains were documented. Along with the burials, the study identified several pieces of logs and a large, modified helmet shell (*Cassis cornuta*). The human skeletal remains were reinterred at the site of the previous reburials and marked with a plaque attached to a boulder. Kikuchi (1973) does not document the precise location of the burials within the study area, so it is unclear where the burials were located (see Figure 10).

In 1995, Cultural Surveys Hawaiʻi (CSH) conducted an archaeological inventory survey (AIS) for three alternative road corridors that would traverse the lands of Hanamāʻulu, Wailua, North and South Olohena, Waipouli, and Kapaʻa (Hammatt et al. 1995). This study documented two archaeological sites, SIHP Site 50-30-08-0756, a possible historic terrace, and SIHP Site 50-30-08-0634, the Wailua wetland, a major *loʻi* complex, which was subsequently converted into rice patches in the Historic Period. Both sites are situated along the north side and upstream of the mouth of the Wailua River.

Excavations of contaminated soil near a diesel tank at the Coco Palms Hotel property conducted by Elmore and Kennedy (2000) discovered another burial which was designated SIHP Site 50-30-08-0660. The burial was discovered with glass beads, which date to the early Historic Period. The individual was determined to be Native Hawaiian due to the presence of a coral abrader within a sand matrix (ibid.). The human skeletal remains were reburied in a boulder platform reinterment site at the north edge of the Coco Palms Hotel property.

In 2002, during a monitoring project at Coco Palms for the installation of a perimeter fence around the property, Scientific Consultant Services (SCS) encountered a buried cultural layer (SIHP Site 50-30-08-1711), which included an adze preform (Buffum and Dega 2002). During a subsequent monitoring project for the installation of a fiber optic cable along the *mauka* side of Kuhio Highway, Dega and Powell (2003) encountered an *imu* (rock filled earth oven) which they associated with the previously identified Site 1711.

In 2004, an AIS was carried out by CSH at the former Coco Palms Hotel Resort, during which eighty-six trenches were excavated and three sites were documented including the previously identified Site 1711 and two newly identified sites, SIHP Site 50-30-08-0680 and -0681 (Hoffman et al. 2005). A modified fishpond known as Weuweu-Kawai-Iki (Site 0680) was identified and subsequently nominated to the National Register of Historic Places. Site 0681 was a historic burial ground. The intermittent buried cultural layer, Site 1711, first recorded by Buffum and Dega (2002), was re-encountered in nine of the trenches in the western central portion and along the southern boundary. Subsequently, an addendum to the AIS documented an additional thirteen trenches in the northwestern portion of Coco Palms for a total of ninety-nine trenches (Oʻ Leary and Hammatt 2006). No additional archaeological features were encountered.

In 2007, CSH carried out subsurface testing for an archaeological survey at TMK: (4) 4-1-003-039, which is situated along portions of the former railroad corridor situated between the Coco Palms Hotel and Kuhio Highway (Hammatt and Shideler 2007). Ten backhoe trenches were excavated, and a sparse cultural layer was discovered in one trench. The cultural layer included charcoal flecks, fire-affected rock, and *Nerita picea* (*pipipi*) shells. The cultural layer was interpreted to be an extension of Site 1711, the intermittent burial cultural layer that was initially recorded by Buffum and Dega (2002).

In 2010, monitoring of a fiber optic line along a short stretch of Kuhio Highway near Kuamoo Road and Wailua River Bridge was carried out by SCS (Dega and Powell 2010). This was a continuation of the fiber optic line first monitored by Dega and Powell (2003). Two fifty-foot linear trenches were excavated, and no archaeological material was encountered.

Prior Studies Conducted within the Current APE

In 2011, CSH conducted an archaeological assessment for the *makai* path of the Lydgate Park-Kapa‘a Bike Path, which includes a portion of the current APE. The project entailed the development of a 10- to 12-foot-wide multi-use recreational path along a 2-mile stretch of coastline from Wailua to Kapa‘a (Yucha and Hammatt 2011). No cultural resources were identified during the assessment. However, previous archaeological research indicated a high probability for Precontact subsurface cultural layers and human burials. CSH recommended an on-site archaeological monitoring program for all construction activities. In October 2014, CSH carried out the archaeological monitoring program and produced a report for a segment of the Kaua‘i Bike/Pedestrian Path from Lydgate Park to Lihi Park, which includes a portion of the current project area (Kamai and Hammatt 2014). During the monitoring for Phase A, Segment 1 (Kuhio Highway north of Wailua River Cane Haul Bridge to the fork at Papaloa Road) no surface or subsurface cultural material and/or features were encountered.

HDOT’s State Historic Bridge Inventory & Evaluation report (MKE and Fung 2013) documented two bridges (Wailua River Bridge and Wailua River Plantation Bridge) and the remnants of a third bridge (Wailua River Concrete Arch Bridge) at the mouth of the Wailua River. A portion of the Wailua River Plantation Bridge is within the current APE. Both the Wailua River Bridge and the remnants of the Wailua River Concrete Arch Bridge are outside of the current APE. The National and State Register eligible Wailua River Bridge was built in 1949 and replaced the 1919 Wailua River Concrete Arch Bridge, remnants of which are still present and were determined eligible by the SHPO’s adoption of HDOT’s State Historic Bridge Inventory & Evaluation report (MKE and Fung 2013). The Wailua River Plantation Bridge, also known as the Wailua Cane Haul Bridge was constructed in 1921 as a railroad bridge, the bridge was completely replaced by a new bridge in 2012 and, therefore, has lost integrity (MKE and Fung 2013) and is not considered a historic property.

In 2020, Mason Architects, Inc. prepared a National Register of Historic Places (NRHP) Registration Form for the former Coco Palms Resort (Westfall 2020). The resort was nominated for the NRHP and listed in the hawaii Register of Historic Places (HRHP) as a district and included 25 buildings, two sites, a dozen structures, and approximately 50 objects. Weuweu-Kawai-Iki Fishpond, which was already listed in both the HRHP and NRHP in 2009, was considered a contributing resource for 2020 nomination. The main resort sits on a 32-acre parcel *mauka* of Kuhio Highway with “a small section of discontinuous land across the highway (*makai*) fronting the beach [which] contains the Seashell Restaurant” (Westfall 2020:4). The Seashell Restaurant is within the current APE (see Figure 10) and considered to be one of the contributing elements to the Coco Palms Resort Historic District. The resort has been non-operational since 1992 when Hurricane Iniki struck the island of Kaua‘i resulting in severe damage to buildings and structures on the property. Although there has been severe deterioration to the existing buildings and structures, Westfall (2020:4) concluded that “Coco Palms retains integrity of location, setting, feeling, and association.”

3. ANTICIPATED FINDINGS

Wailua Ahupua‘a was an area of great importance in Precontact times (Flores 1995). Wailua River was the center of business and governance used by high chiefs and chiefesses of Kaua‘i. The *ahupua‘a* contains numerous significant cultural sites and archaeological deposits, many of which are situated at the coast near the mouth of the River; however, there are no known historic properties associated with traditional Hawaiian use within the current APE. Archaeological excavations conducted in the vicinity of the APE along the *mauka* shoulder of Kuhio Highway (Hammatt and Shideler 2007) and archaeological monitoring (Dega and Powell 2003) revealed a very residual cultural deposit that is likely an extension of the intermittent buried cultural deposit (SIHP Site 1711) recorded by Buffum and Dega (2002) and Hoffman et al. (2005) on the Coco Palms Hotel property (Figure 11). Extensive archaeological work (Elmore and Kennedy 2000; Kikuchi 1973) on that same property also revealed numerous burials (see Figure 11). Given the culture-historical background and the findings of prior archaeological studies combined with the fact that the entirety of the APE lies within an area already developed for the highway and along the immediate shoreline and off-shore areas, although unlikely, anticipated findings are limited to a remnant buried cultural layer perhaps associated with Site 1711 and possible burial features. Additionally, one architectural resource (the Seashell Restaurant) considered a contributing element to the Coco Palms Resort Historic District is situated in the northern corner the current APE. This resource will be protected from impact by the placement of construction fencing prior to work commencing.

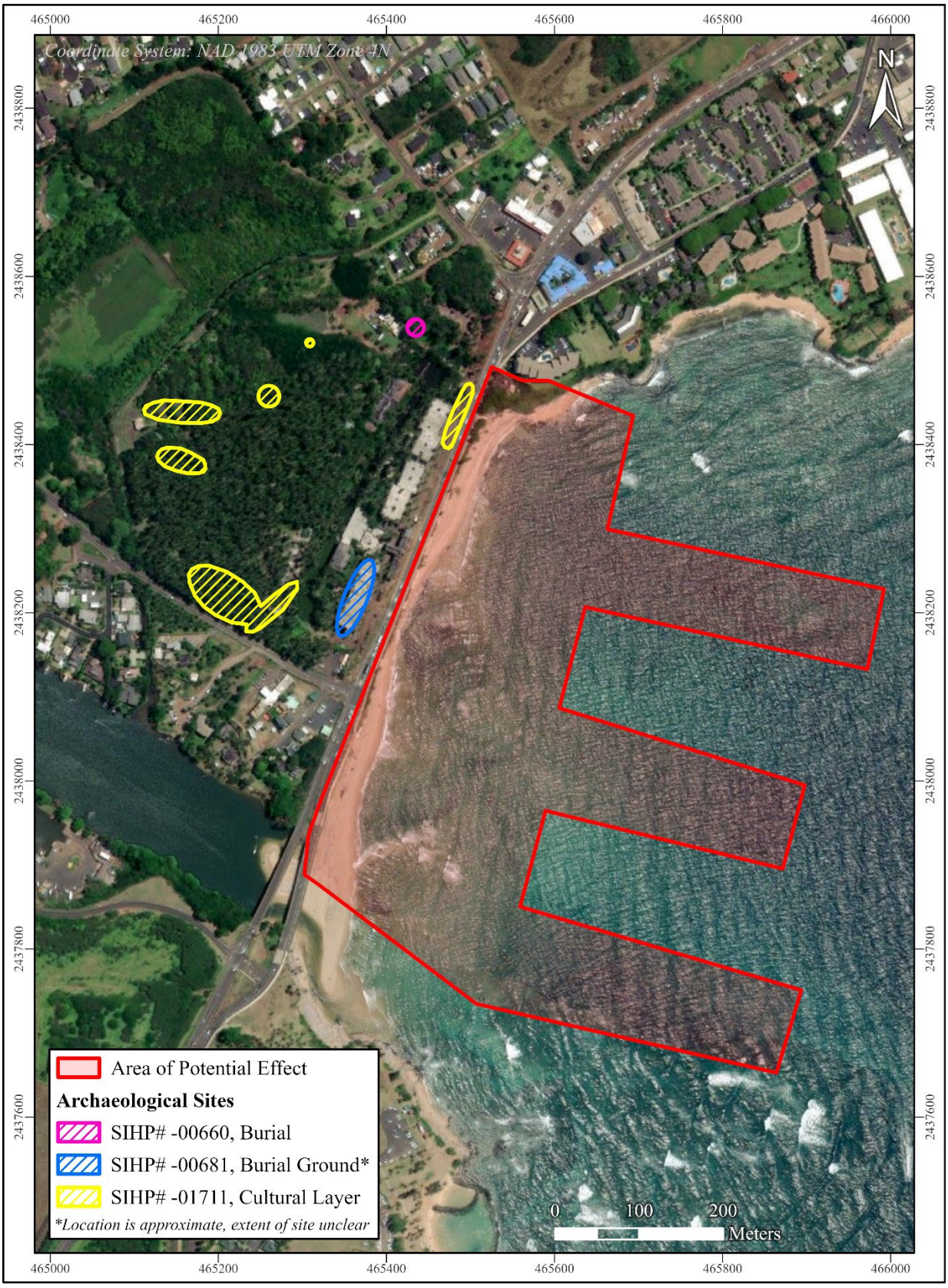

Figure 11. Locations of previously documented archaeological deposits in the vicinity of the current APE.

4. THE MONITORING EFFORT

Prior to the onset of ground-disturbing activities, the primary archaeological monitor will meet with all on-site personnel (i.e., equipment operators, surveyors, etc.) to discuss the procedures for monitoring, the general cultural significance of the APE, and types of potential historic properties that are and could be present within the APE. All on-site personnel are required to receive this briefing from the archaeologist. The archaeological contractor, in coordination with the HDOT, is responsible for maintaining a written log of all persons who have received the training. It will be explained that the monitoring archaeologist has the authority to halt ground-disturbing activities in the event that cultural resources are encountered. If cultural resources identified during monitoring are deemed significant, the monitoring archaeologist will immediately notify the SHPO/SHPD Archaeology Branch and coordinate consultation as appropriate with any groups or organizations. Additionally, the SHPO/SHPD Archaeology Branch will be notified upon the onset and completion of the monitoring activities, along with any change in status of the monitoring, such as a shift from on-site to on-call monitoring. It is the responsibility of the HDOT and the FHWA to ensure the archaeological firm contracted to conduct archaeological monitoring during the project is equipped with the required staffing and submeter accurate Global Positioning System (GPS) equipment prior to the start of work. An archaeological monitor meeting the Secretary of the Interior's (SOI's) qualifications in archaeology will be on site at all times in which there is ground disturbance associated with the project to monitor the ground disturbance and/or to oversee the work carried out by any archaeological monitors that do not meet the SOI's qualification standards.

FIELD METHODS

Prior to work commencing, construction fencing will be installed to protect all aspects of the Seashell Restaurant, placement of which will be verified by photograph and in writing and submitted to the SHPO/SHPD for acceptance. A qualified archaeological monitor(s) will be present on-site to observe **all ground-disturbing activities** within the APE. When on site, monitors will keep a daily log of activities performed and any discoveries made. The APE and development activities will be photographed over the course of the project, and these photographs will be included in the Archaeological Monitoring Report (AMR) prepared at the end of the project. Monitors will inspect all impacted soils and sediments and examine exposed stratigraphic profiles. Stratigraphic profile documentation will include recording the depths in centimeters below surface from top to bottom of each identified layer within the entire profile, and the soil attributes of each stratigraphic layer will be described using USDA soil descriptions and Munsell soil color charts. The locations of the documented stratigraphy will be recorded by GPS and depicted on project area maps. Profile walls, and trench floors when applicable, will be cleaned using a hand trowel prior to documentation, unless entering the excavated area poses a threat to safety. These practices will be followed in an effort to identify previously unrecorded cultural deposits, features, artifacts, and human skeletal material. Additionally, representative stratigraphic, scaled profiles will be prepared, even in the absence of identified cultural deposits or features, documenting the range of stratigraphy identified across the project area, at least one profile drawing of a 2-meter-wide exposure for each distinct profile type will be included in the AMR for reference. If any archaeological resources are encountered, the following procedures will be initiated:

Cultural Deposits

The monitor will notify the SHPO/SHPD Archaeology Branch if non-burial historic properties are identified. All cultural deposits and sequences (including representative natural sequences) identified during the monitoring effort will be mapped, representative scaled profile drawings and plan views will be prepared, photographs will be taken, and the soils will be described in detail (using standard USDA soil descriptions and Munsell colors). The locations of these deposits will be recorded using sub-meter accuracy GPS technology and placed on a map (and/or table) and presented in the AMR. If intact cultural deposits are discovered during monitoring, an assessment will be made by an SOI qualified archaeologist as to integrity and significance using the criteria enumerated in HAR 13§13-275-6(b), as well as by applying the criteria to be listed in the NRHP. If the deposit is deemed significant and is likely to be further impacted by ground-disturbing activities, work in the affected area will be curtailed, and an appropriate mitigation strategy will be developed in consultation with the SHPO/SHPD Archaeology Branch. Work will not resume in the area of the find until the SHPO/SHPD provides written approval to proceed.

Cultural Features

Subsurface cultural features will be fully described, drawn, and photographed. Provenience information will also be recorded and related to an established project datum ensuring accurate horizontal and vertical placement. The limits of the feature will be defined, if possible, without further excavation, and any natural or cultural associations (including surrounding soil) will be noted. Locations of subsurface cultural features will be recorded using sub-meter accuracy

GPS technology. The locations of these features will be recorded on a map (and/or table) and will be presented in the AMR. When appropriate, samples for further analyses will be recovered and processed.

Artifacts

Artifacts observed in the removed soil will be recovered and their general provenience recorded. All traditional Precontact Hawaiian artifacts and diagnostic post-Contact artifacts will be recovered for laboratory analysis. The precise locations of any items found *in situ* will be recorded and the items photographed and recovered for subsequent laboratory analysis, and their locations recorded using sub-meter accuracy GPS technology. The locations of these points will be recorded on a map (and/or table) and will be presented in the AMR. Any observed associations will also be documented, and the surrounding soil will be described using standard USDA soil descriptions and Munsell colors.

Human Skeletal Remains

If human skeletal remains are encountered during the monitoring effort, the on-site monitor will halt all ground-disturbing activity in the immediate area of the discovery, stabilize the remains, and contact the appropriate authorities. SHPO/SHPD staff from the Archaeology Branch and from the History and Culture Branch will be notified immediately, and the monitor will notify the appropriate on-site construction personnel, the Police, and Medical Examiner, as appropriate. If the skeletal material is determined to be Historic or Precontact (as opposed to recent), the monitoring archaeologist will direct the applicant to seek SHPO/SHPD guidance on how to proceed with the discovery, and the human skeletal remains will be handled in compliance with HRS Chapter 43.6, HAR §13-300, and SHPO/SHPD directives. If the remains are determined to be recent, the Kaua‘i Police Department will be contacted.

TREATMENT OF RECOVERED REMAINS

All recovered material will be temporarily stored within a secure location (preferably on-site in a construction trailer or similar location). The recovered items will be recorded in a field catalog, and upon completion of the monitoring fieldwork the disposition of the items will be as follows:

Cultural Material

Artifacts from intact contexts will be analyzed; those recovered from fill will simply be cataloged. Analyzed items will be cleaned, weighed, measured, photographed, and illustrated (if appropriate). Analysis will include formal description and functional interpretation. The identification of artifacts, vertebrate faunal remains, and invertebrate faunal remains will include comparison with reference collections and materials, as needed.

Recovered Samples

All recovered samples (soil, charcoal, etc.) will be initially processed (catalogued, weighed, etc.) by the qualified archaeological firm before being dispersed to the appropriate institutions for detailed analysis.

Human Skeletal Remains

If the SHPO/SHPD determines that the removal of buried human remains is an appropriate course of action, then a treatment/reburial plan will be developed in consultation with SHPO/SHPD and other consulted parties, as appropriate in accordance with Hawai‘i State law as outlined in HAR 13§13-300.

REPORTING

Within 30 days following completion of archaeological monitoring, an end of field report pursuant to HAR 13§13-282 will be prepared by the qualified archaeologist and submitted by the HDOT to the SHPO/SHPD Archaeology Branch. A draft AMR will be likewise prepared and submitted to the SHPO/SHPD for review and acceptance within 60 days of completion of fieldwork. This report will follow the specifications contained in HAR 13§13-279-5. If any human skeletal remains are recovered as part of the monitoring project, they will be summarized in the final AMR following procedures contained in HAR §13-300.

CURATION OF RECOVERED ITEMS

Any material recovered during the project will be temporarily stored for a period of no more than one year following submission of the final monitoring report, during which time arrangements will be made for permanent curation in consultation with the respective landowner and the SHPO/SHPD. It will be the respective landowner’s responsibility to secure permanent curation in an acceptable facility; included in this responsibility are the costs associated with long-term curation.

REFERENCES CITED

Alexander, A.
1920 Land Titles and Surveys in Hawaii. The Hawaiian Planters' Record XXIII:67-78. Electronic document, https://ags.hawaii.gov/wp-content/uploads/2012/09/Land-Titles-and-Survey.pdf, accessed 2017/03/07.

Apple, R., and W. Kikuchi
1975 *Ancient Hawaii Shore Zone Fishponds: An Evaluation of Survivors for Historical Preservation*. Office of the State Director, National Park Service, United States Department of the Interior, Honolulu.

Bennett, W.
1931 *Archaeology of Kauai*. Bernice P. Bishop Museum Bulletin 80. Published by the Museum, Honolulu.

Buffum, A. and M. Dega
2002 Archaeological Monitoring During Temporary Fence Installation at Coco Palms Resort, Wailua Ahupua'a, Puna District, Kauai Island, Hawai'i [TMK: 4-01- 03:4,5,7,39 and 44]. Scientific Consultant Services, Inc., Honolulu.

Buke Māhele
1848 Buke Kakau Paa no ka mahele aina i Hooholoia iwaena o Kamehameha III a me Na Lii a me Na Konohiki ana, Hale Alii, Honolulu.

Bushnell, K., D. Shideler, and H. Hammatt
2004 Cultural Impact Assessment for the Kapa'a Relief Route; Kapa'a, Waipouli, Olohena, Wailua, and Hanamā'ulu, Island of Kaua'i. Prepared for Kimura International. Cultural Surveys Hawai'i.

Chinen, J.
1958 *The Great Mahele: Hawaii's Land Division of 1848*. University of Hawaii Press, Honolulu.

1961 *Original Land Titles in Hawaii*. Privately published.

Ching, F.
1968 Archaeological Surface Survey; Wailua State Park, Kaua'i, State of Hawaii. Division of State Parks, Deparment of Land and Natural Resources, Honolulu. Prepared for Dept. of Land and Natural Resources, Honolulu.

Commissioner of Public Lands (Office of the Commissioner of Public Lands of the Territory of Hawaii)
1929 *Indices of Awards Made by the Board of Commissioners to Quiet Land Titles in the Hawaiian Islands*. Star Bulletin Press, Honolulu.

Damon, E.
1931 *Koamalu. A Story of Pioneers on Kauai and of What They Built in That Island Garden*. Honolulu Star-Bulletin Press, Honolulu.

Dega, M., and J. Powell
2010 Addendum Archaeological Monitoring Report for the Relocation of a Fiber Optics Duct Line Kuhio Highway: Kuamoo road to Wailua River Bridge Wailua Ahupuaʻa, Kawaihau District, Kaua 'i Island, Hawai'i [TMK: 3-9-02, 4-1-04, 4-1-03. Scientific Consultant Services, Inc. Project Number 1007-AMR-2. Prepared for Kuʻiwalu Honolulu.

2003 Archaeological Monitoring During Phase I of the Kauai Rural Fiber Optic Duct Lines Project, Kauaʻi Island, Hawai 'i. Scientific Consultant Services, Inc., Honolulu.

Desha, S.
2000 *Kamehameha and his warrior Kekūhaupiʻo*. Translated by F. N. Frazier. Kamehameha Schools Press, Honolulu.

Dorrence, W. and F. Morgan
2000 *Sugar Islands The 165-Year Story of Sugar in Hawaiʻi*. Mutual Publishing, Honolulu.

Dickey, L.
1917 Stories of Wailua, Kauai. *Annual Report of the Hawaiian Historical Society* 25:14-36.

Dunbar, H.
1988 Wailua Complex of Heiau National Historic Landmark National Register of Historic Places Inventory Nomination Form. Prepared for State of Hawaii-Department of Land and Natural Resources.

Elmore, M., and J. Kennedy
2000 A Report Concerning the Inadvertent Discovery of Human Remains at Coco Palms Hotel TMK: 4-1-003: 007 in Wailua Ahupua`a, Kawaihau District, Island of Kauaʻi. Archaeological Consultants of the Pacific, Inc.,, Haleiwa, HI.

Flores, K.
1995 Historical & Cultural Research of Malaehaʻakoa, District of Puna, Island of Kauaʻi, State of Hawaiʻi. Manaʻoʻiʻo, Waimea, Kauaʻi, Hawaiʻi. Draft. Prepared for State of Hawaii.

Garovoy, J.
2005 "Ua koe ke kuleana o na kanaka" (Reserving the rights of Native Tenants): Integrating Kuleana Rights And Land Trust Priorities in Hawaii. *Harvard Environmental Law* 29:523-571.

Hammatt, H., R. Chiogioji, G. Ida, and V. Creed
1995 An Archaeological Inventory Survey For the Kuhio Highway Widening and Bypass Options within the Ahupuaʻa of Wailua, South Olohena, North Olohena, Waipouli, & Kapaʻa, Island of Kauaʻi. Cultural Surveys Hawaiʻi, Inc. Kailua, Hawaiʻi. Cultural Surveys Hawaiʻi, Inc. Prepared for Pacific Planning and Engineering.

Hammatt, H. and D. Shideler
2007 Archaeological Assessment for the Kuhio Highway Short-Term Improvements– Kuamoʻo Road to the Temporary Kapaʻa Bypass Road, Wailua Ahupuaʻa, Puna District, Kauaʻi, TMK: [4] 4-1-003:039 por. Cultural Surveys Hawaiʻi, Inc., Kailua, HI.

Historic Hawaii Foundation
2014 Weuweu-Kawai-iki Fishpond. Electronic document, accessed April 4, 2022, https://historichawaii.org/2014/02/19/weuweu-kawai-iki-fishpond/.

Hoffman, T., D. Shideler, and H. Hammatt
2005 Archaeological Inventory Survey with Subsurface Testing at the Coco Palms Resort, Wailua Ahupua'a, Puna District, Island of Kaua'i (TMK 4-01-03: 4, 5, 7, 11, 39, 44; 4-01-05: 14, 17). Cultural Surveys Hawai'i, Inc., Kailua, HI.

Iaukea, C.
1894 *Biennial Report of the Commissioner of Crown Lands 1894*. Hawaiian Gazette Company, Honolulu.

Kamai, M. and H. Hammatt
2014 Archaeological Monitoring Report for the Kaua'i Bike/Pedestrian Path: Lydgate Park to Lihi Park Segment, Phase A, Wailua, South Olohena, and Kapa'a Ahupua'a, Kawaihau District, Kaua'i, TMKs: [4] 4-1-004, 4-1-005, 4-3-002, 4-5-013, and 4-6-014. Cultural Surveys Hawai'i, Inc. Job Code: WAILUA 22. Final. Prepared for Kaikor Construction Company, Inc.

Kamakau, S.
1976 *The Works of the People of Old, Na Hana a ka Po'e Kahiko*. B.P. Bishop Museum Special Publication 61. Bishop Museum Press, Honolulu.

1992 *Ruling Chiefs of Hawaii*. Revised ed. Kamehameha Schools Press, Honolulu.

Kawachi, C.
1993 An Archaeological Survey at Wailua River Mouth, Wailua, Kawaihau (Puna), Kaua'i (TMK: 4-1-04:01). Prepared for State Historic Preservation Division, Honolulu, HI. .

Kikuchi, W.
1973 The Coco Palms Burial Site: Wailua. Vol. 2.*Archaeology on Kaua'i*. Anthropology Club of Kaua'i Community College, Lihue, Kauai, HI.

King, R.
n.d. Hawaiian Land Titles. Electronic document, https://ags.hawaii.gov/wp-content/uploads, accessed May 15, 2020.

Knudsen, E.
1991 A Trip Around Kauai and Some Personal Experiences on the Na Pali Coast, 1895. *The Kauai Papers*. Kaua'i Historical Society.

Kuykendall, R.
1938 *The Hawaiian Kingdom 1778–1854. Foundation and Transformation*, vol. 1. 3 vols. University Press of Hawaii, Honolulu.

Lai, V.
1985 *He Was A Ram: Wong Aloiau of Hawaii*. University of Hawaii Press, Honolulu.

Lydgate, J.
1920 An Important Minor Industry. *The Garden Isle*. March 30, 1920.

MKE and Fung (M. K. E. Associates LLC and Fung Associates, Inc.)
2013 Hawaii State Historic Bridge Inventory And Evaluation. MKE Associates, LLC and Fung Associates, Inc. Prepared for State of Hawai‘i, Department of Transportation, Highway Division, Honolulu.

O’Leary, O., and H. Hammatt
2006 Archaeological Inventory Survey Addendum for the Coco Palms Resort Wailua Ahupua‘a, Puna District, Island of Kaua‘i TMK [4] 4-01-003: 004, 005, 007, 011, 017; 4-01-005: 014, 017.

O’Hare, C., D. Shideler, and H. Hammatt
2009 Archaeological Data Recovery Plan for the Coco Palms Resort, State Inventory of Historic Places #50-30-08-680, Weuweu-Kawai-iki Fishpond, Wailua Ahupua‘a, Puna District, Island of Kaua‘i, TMK [4] 4-1-003: 004, 005, 007, 011, 017; 4-1-005: 014, 017. Cultural Surveys of Hawai‘i, Inc. Job Code: WAILUA 11. Final. Prepared for Coco Palms Ventures, LLC.

Pukui, M. (editor)
1983 *‘Ōlelo No‘eau: Hawaiian proverbs & poetical sayings*. Bishop Museum Press, Honolulu.

Pukui, M., S. Elbert, and E. Mo‘okini
1974 *Place Names of Hawaii*. Revised and Expanded ed. University of Hawaii Press, Honolulu.

Sai, D.
2011 *Ua Mau Ke Ea Sovereignty Endures: An Overview of the Political and Legal History of the Hawaiian Islands*. Pū‘ā Foundation, Honolulu.

Saito, D. and S. Campbell
2004 Register of the Lihue Plantation Company, Lihue, Kaua‘i 1850-1968. Hawaiian Sugar Planters’ Association Plantation Archives. University of Hawai‘i at Mānoa Library. Internet source: http://www2.hawaii.edu/~speccoll/p_lihue.html. Accessed October 17, 2018.

Soehren, L.
2003 A Catalog of Kaua‘i Place Names Including Ni‘ihau, Lehua, and Ka‘ula Compiled from the Records of the Boundary Commission and the Board of Commissioners to Quiet Land Title of the Kingdom of Hawaii. 2002. Electronic document, http://ulukau.org/cgi-bin/hpn, accessed September 14, 2016.

Soil Survey Staff (United States Department of Agriculture, Natural Resources Conservation Service)
2022 Web Soil Survey. Electronic document, http://websoilsurvey.nrcs.usda.gov.

Sommer, A.
2002 Last of the Last, Lihue Plantation will close forever a week from today. Honolulu Star Bulletin, December 23, 2002. Interner source: http://archives.starbulletin.com/2002/12/23/business/index.html. Accessed October 17, 2018.

Stauffer, B.
1994 Debora Kapule of Wailua, Kaua‘i. Prepared for Division of State Parks, Department of Land and Natural Resources, Honolulu.

Vancouver, G.
1967 *A Voyage of Discovery to the North Pacific Ocean, and Round the World*, vol. II. Three vols. Bibliotheca Australiana #31. N. Israwl/Da Capo Press, Amsterdam, New Yotk.

Van Dyke, J.
2008 *Who Owns the Crown Lands of Hawai'i?* University of Hawaii Press. Electronic document, https://books.google.com/books?id=IjZPcGb2R08C.

Westfall, A.
2020 Coco Palms Resort. National Register of Historic Places Nomination Form. National Parks Service, United States Department of the Interior. Kapaa, Kauai, HI. January 2020.

Wichman, F.
1998 *Kaua'i: Ancient Place-names and Their Stories*. University of Hawai'i Press.

Wilkes, C.
1856 *Narrative of the United States Exploring Expedition During the Years 1838–1842, Under the Command of C. Wilkes, U.S.N*, vol. IV. G. P. Putnam and Co., New York.

Yucha, T. and H. Hammatt
2011 Archaeological Assessment for the *Makai* Path of the Lydgate Park-Kapa'a Recreational Path, Wailua Ahupua'a, Kawaihau District, Kaua'i Island, Kuhio Highway Right-of-Way, TMK: [4] 4-1-004:999 por. and 4-1-005:999 por. Cultural Surveys Hawai'i Job Code: WAILUA 17. Final. Prepared for County of Kaua'i

APPENDIX A

DAVID Y. IGE
GOVERNOR OF
HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
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AQUATIC RESOURCES
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CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
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KAHOOLAWE ISLAND RESERVE COMMISSION
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STATE OF HAWAII
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STATE HISTORIC PRESERVATION DIVISION
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601 KAMOKILA BLVD., STE 555
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October 5, 2021

IN REPLY REFER TO:
Project No.: 2021PR01064
Submission No.: 2021PR01064.001
Doc. No.: 2110SH01
Archaeology

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State of Hawai'i Department of Transportation
1720 Haleukana Street
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Email: Lawrence.j.Dill@hawaii.gov

Electronic Transmittal Only, No Hard Copy to Follow

Dear Lawrence Dill:

SUBJECT: **National Historic Preservation Act (NHPA) Section 106 Review –
Initiation of Consultation and Request for Concurrence with the Area of Potential Effects
Kuhio Highway Emergency Shoreline Mitigation Vicinity of Wailua Beach
Ref. No. HWY-K 4.210247, Federal Aid Project No. ER-24(004)
Wailua Ahupua'a, Puna District, Island of Kaua'i
TMK: (4) 3-9-006:012, (4) 4-1-004:001, (4) 4-1-004:020, (4) 4-1-004:999, (4) 4-1-005:004, (4) 4-1-005:014, (4) 4-1-005-017, (4) 4-1-005:999**

The State Historic Preservation Division (SHPD) received a letter dated August 25, 2021 from the State of Hawai'i Department of Transportation (HDOT) on behalf of the Federal Highway Administration (FHWA) to initiate the Section 106 historic preservation review process and to request information and the State Historic Preservation Officer's (SHPO's) concurrence with the Area of Potential Effects for the Kuhio Highway Emergency Shoreline Mitigation project in the Vicinity of Wailua Beach on the island of Kaua'i. The SHPD received this submittal on August 30, 2021.

The proposed HDOT project will receive funding from the FHWA and has been determined a federal undertaking as defined in 36 CFR 800.16(y). Therefore, the proposed project is subject to compliance with Section 106 of the NHPA. Pursuant to the Programmatic Delegation of Authority (May 2016), the FHWA has delegated Section 106 consultation to the HDOT.

According to HDOT's letter, the Wailua Beach area on Kaua'i was impacted by a large storm in March 2021. The storm surge removed much of the protective beach sand dunes along with large sections of naupaka vegetation and large iron-wood trees and ultimately caused severe undermining of the highway infrastructure. On March 9, 2021, Governor David Ige issued an emergency proclamation to provide relief for disaster damages, losses, and suffering, as well as to protect the health, safety, and welfare of people. This project addresses the permanent repairs to prevent further damage to vulnerable assets.

HDOT is proposing an un-grouted rock revetment to protect the highway infrastructure from extreme events such as storm surges, wave run-up and hurricane force waves. Un-grouted riprap is described as a soft solution for coastal erosion to reduce wave energy and is preferred over a grouted riprap revetment by state agencies managing the coastal areas; ideally, in conjunction with revetments, a protective beach and sand dunes should be preserved due to concerns about the potential for "flanking erosion."

Therefore, in addition to the un-grouted rock revetment, HDOT, in collaboration with the University of Hawai'i, is proposing a solution to restore the beach to protect the highway infrastructure from daily ocean forces. To do this economically, HDOT proposes to install a new, patented beach nourishment technology called Sandsaver. Sandsaver works by using the energy of breaking waves to thrust suspended sand particles up the beach at the same time, breaking down the energy of the waves, thereby building sand dunes back and reducing erosion to the beach and ultimately protecting the roadway. Along with the installation of the Sandsaver, HDOT will be re-grading the sand on the beach to its previous condition which was lost by previous storm events and wave action. The project is viewed as a prototype in Hawaii that can potentially be used in other areas to restore beaches.

To study the wave action along Wailua Beach, HDOT, in collaboration with UH, is proposing the placement of Acoustic Doppler Current Profilers (ADCPs) at various locations along the ocean floor. ADCPs gather the full wave spectrum and current velocity of the water column and transmit this data thru underwater cables to a solar powered telemetry system on land or will be retrieved manually. The Telemetry system will collect and report the system status and process wave data for transmission. All the information gathered thru the ADCP will assist in identifying the appropriate location and configuration of the sand savers.

Along with the improvements along the coast, HDOT is proposing the removal of a concrete slab, sandbags, concrete column, trees and debris, and installation of signs, traffic delineators, a concrete slab, boulders and naupaka plants.

The proposed project is located in Wailua. The Area of Potential Effects (APE) is defined as an approximately 0.36 mile long stretch along Kuhio Highway and its shoreline, beginning in the vicinity of Kuamoo Road on the Lihue side of the highway and extending toward the vicinity of Papaloa Road on the Hanalei side of the highway. The APE is roughly 2,030 feet wide throughout its length and extends from approximately the middle of Kuhio Highway's right-of-way makai, toward the ocean. All staging, and stockpiling will take place within the APE. The area of the APE is approximately 63 acres. Based on the information received, the SHPO has no objections to the APE as it is defined.

In response to HDOT's request for a contact list of potential consulting parties, the SHPD recommends HDOT refer to the Native Hawaiian Organization Notification List provided by the U.S. Department of the Interior and maintained by the Office of Native Hawaiian Relations. This can be referenced online at: https://www.doi.gov/hawaiian/NHOL. Additionally, we recommend expanding consultation to interested parties such as civic clubs and historic preservation interest groups such as Historic Hawai'i Foundation.

Per HDOT's request for SHPD to provide information identifying historic properties that may be within the APE, the SHPD recommends HDOT consult our library in Kapolei, archival records, and the State and National Register of Historic Places to identify previously documented historic properties that may be located within the APE. If adequate records of previously recorded architectural and/or archaeological historic properties within or closely nearby the APE do not exist, then additional efforts to identify archaeological and/or architectural historic properties may need to be conducted. The SHPD highly recommends consulting with our office prior to conducting any efforts to identify historic properties by means of a field survey or subsurface testing to ensure efforts are agreed to be adequate.

SHPD conducted a modest level of research and found that near TMK: (4) 3-9-006:012 and immediately adjacent to TMK: (4) 4-1-004:001, there is a previously identified burial located makai of the right-of-way. At TMK: (4) 4-4-1-005:014, burials have been encountered during the Coco Palms Resort project. Furthermore, the soil types within the APE are known to contain human remains and archaeological deposits. Overall, the APE is located in an area with high potential for human remains and archaeological resources to be encountered beneath the current ground surface. Archaeological monitoring for the purpose of identification during ground disturbance associated with this project may be warranted.

Please submit all forthcoming information and correspondence related to the subject project to the SHPD to HICRIS Project No. 2021PR01064 using the Project Supplement option.

The SHPD looks forward to continuing the Section 106 process for the proposed project.

The HDOT and FHWA are the offices of record for this undertaking. Please maintain a copy of this letter with your environmental review record for this undertaking.

Please contact Stephanie Hacker, Historic Preservation Archaeologist IV, at Stephanie.Hacker@hawaii.gov or at (808) 692-8046 for matters regarding archaeological resources or this letter.

Aloha,
Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Eric Fujikawa, HDOT (Eric.j.Fujikawa@hawaii.gov)
Meesa Otani, FHWA (Meesa.Otani@hawaii.gov)
Todd Nishioka, WSP (Todd.Nishioka@wsp.com)