FINAL—Archaeological Assessment for the New Hope Network Development in Kunia, Hōʻaeʻae Ahupuaʻa, ʻEwa District, Island of Oʻahu

TMK: (1) 9-4-004:009

Prepared For:
Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813

July 2016
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Prepared By:
Windy Keala McElroy, PhD
and
Dietrix Duhaylonsod, BA

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MANAGEMENT SUMMARY

An archaeological inventory survey was conducted for the New Hope Network development at TMK: (1) 9-4-004:009 in Hō‘ae‘ae Ahupua‘a, ʻEwa District, on the island of O‘ahu. New Hope Network is proposing to develop a community center integrated with activities associated with agricultural use on the 203-acre project site. The archaeological work included pedestrian survey that covered 100% of the project area, as well as test excavations consisting of eight trenches.

No surface archaeological remains were found during pedestrian survey of the parcel. The entire property has been disturbed by previous and current agricultural use. Likewise, subsurface testing did not yield any evidence of subsurface archaeological features or deposits. Given the negative findings, archaeological monitoring is not recommended at TMK: (1) 9-4-004:009.
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INTRODUCTION

At the request of Group 70 International, Keala Pono Archaeological Consulting conducted an archaeological inventory survey for the New Hope Network development at TMK: (1) 9-4-004:009 in Hōʻaeʻae Ahupuaʻa, ‘Ewa District, on the island of O‘ahu. The archaeological inventory survey (AIS) was designed to identify, document, assess, and make mitigation recommendations for any historic properties that may be located on the property in anticipation of the proposed construction.

This report is drafted to meet the requirements and standards of state historic preservation law, as set out in Hawai‘i Revised Statutes (HRS) Chapter 6E-42 and Hawai‘i Administrative Rules (HAR) §13-276 Rules Governing Standards for Archaeological Inventory Surveys and Reports. Due to negative findings, the AIS results are presented as an archaeological assessment per HAR §13–275.

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 used in the fieldwork, followed by the results of the archaeological inventory survey. Project results are summarized and recommendations are made in the final section. Hawaiian words and technical terms are defined in a glossary at the end of the document.

Project Location and Environment

The project area is located in the northernmost section of the ahupua’a of Hōʻaeʻae, in the moku of ‘Ewa on the island of O‘ahu. The shape of the project area forms somewhat of an imperfect triangle, and its western border lies along Kunia Road which is also the boundary between Hōʻaeʻae and Honouliuli Ahupuaʻa (Figure 1). The second leg of this imperfect triangle follows the Waiahole Ditch along a southwest to northeast path. This is the southern border of the project area, with the ditch running just outside the project boundaries. The third leg of this triangular shape, which forms the northern border of the project area, leaves the Waiahole Ditch and follows the top of ‘Ēkahanui Gulch along a southeast to northwest path until it arrives back at Kunia Road again. To the north of this border of the project area is the Hawai‘i Country Club.

TMK: (1) 9-4-004:009 is an 82.222-ha (203.175-ac.) parcel owned by Nihonkai Lease Co., Ltd. (Figure 2). Topography is mostly flat, and the entire ground surface has been disturbed by agricultural activity. The project is 192–241 m (630–790 ft.) above sea level and roughly 6 km (3.73 mi.) from the nearest coastline at Pearl Harbor’s West Loch. This area receives approximately 80 cm (31 in.) of rain annually. Most of this rain falls during the wet season months of December and January (Giambelluca et al. 2012:138). The current vegetation in the project area consists mainly of agricultural crops and California grass.

The project area is located on a small portion of the gently-sloping Schofield Plateau of O‘ahu within the broad saddle between the Koʻolau and Wai‘anae Mountain Ranges. This plateau was formed when lava from the Koʻolau volcano accumulated against the eroded slope of the Wai‘anae volcano (MacDonald et al. 1983:420). Rocks of Koʻolau Volcanic Series are typically tholeiitic and olivine basalts with small quantities of oceanite (MacDonald et al. 1983;431). The Central O‘ahu ground-water system, above which Hōʻaeʻae sits, is the “largest and most productive flow system on Oahu…” The Schofield ground-water area separates the northern and southern parts of [this] central Oahu flow system” (USGS 1998:115).

The project area’s soils consist of mostly of Kunia silty clay 0–3% slopes (KyA), with pockets of Kunia silty clay 3–8% slopes (KyB), Kunia silty clay 8–15% slopes (KyC), and Wahiawa silty clay 0–3% slopes (WaA) (Foote et al. 1972) (Figure 3). The Kunia and Wahiawa series are well-

1
drained upland soils associated with sugarcane and pineapple cultivation (Foote et al. 1972:77, 124).

The Project

New Hope Network is proposing to develop a community center integrated with activities associated with agricultural use on the 203-acre site. It is envisioned as a community based campus with multi-purpose facilities that support the agricultural farming operation on 155 acres of land to promote farming practices in Kunia. A long term agreement with agricultural partners will provide prime agricultural land to farmers, making these vacant fallow farm lands productive once again. A 14.7-acre portion on the north end of the project parcel will be used to provide activities for the neighboring community. This area will house a multi-purpose community center building, school (K-12), outdoor amphitheater, auditorium, food service center for education, farm to table café, community kitchen, recreational fields (baseball and soccer), and other support areas such as parking and a constructed wetlands wastewater treatment facility. A new vehicle entrance will be constructed from Kunia Road that will serve as the main entrance to the project site.
Figure 1. Project area (shown in red) on a 1998 USGS Schofield Barracks quadrangle map. Ahupua'a boundaries are shown in orange.
Figure 2. The project area (in red) on TMK plat (1) 9-4-004.
Figure 3. Soils in the project area (data from Foote et al. 1972).
BACKGROUND

A brief historical review of Hōʻaeʻae Ahupuaʻa is provided below, to offer a better holistic understanding of the use and occupation of the project area. 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 Office of Hawaiian Affairs website and the Waihona Aina, Huapala, and Ulukau databases. Archaeological reports and historical reference books were among the materials examined.

‘Ewa and Hōʻaeʻae in the Pre-Contact Era

The cultural history of Hōʻaeʻae begins with the formation of Hawaiʻi and the birth of life on the islands:

Native traditions describe the formation (literally the birth) of the Hawaiian Islands and the presence of life on and around them, in the context of genealogical accounts… As this Hawaiian genealogical account continues, we find that these same god-beings, or creative forces of nature who gave birth to the islands, were also the parents of the first man (Hāloa), and from this ancestor, all Hawaiian people are descended. It was in this context of kinship, that the ancient Hawaiians addressed their environment (Maly and Maly 2003a).

Particularly, Oʻahu Island was established as follows:

Oʻahu is also a new name, given in memory of an ancestor of the people of Oʻahu. Lolo-i-mehani, Lalo-waia, and Lalo-oh-o-aniani were the ancient names of Oʻahu. Oʻahu was the child of Papa and Lua… and because Oʻahu was a good chief and the people lived harmoniously after the time of Wākea mā, Oʻahu’s descendants gave the name of their good chief to the island --- Oʻahu-a-Lua (Kamakau 1991:129).

Much of the oral accounts which narrate the events from the first peopling of Hawaiʻi to the recent period of written documentation has been lost in time. However, there are several renowned Hawaiian historians who diligently tried to record as much of Hawaiian prehistory as possible. Among these historians is the famous scholar, Samuel Mānaiakalani Kamakau, who shared the cosmological story of Oʻahu Island above.

Besides the chronicles of the early Hawaiian historians, there are other means by which Hawaiʻiʻi’s history has been preserved. One often overlooked source of history is the information embedded in the Hawaiian landscape. Hawaiian place names “usually have understandable meanings, and the stories illustrating many of the place names are well known and appreciated… The place names provide a living and largely intelligible history” (Pukui et al. 1974:xii).

The current project area and the places around it are listed in “Place Names Of Hawaii” (Pukui et al. 1974:27, 28, 47, 51, 220, 223), along with the meanings of their names, as follows:

ʻÈkahana… Gulch, Honouliuli, Oʻahu. Lit., large bird’s-nest fern.

ʻEwa… Lit., crooked… Kāne and Kanaloa threw a stone to determine district boundaries. The stone was lost but was found later at Pili-o-Kahe.
Hō‘ae‘ae. Land section and point, ‘Ewa, O‘ahu. Lit., to make soft or fine. A stone called Pōhaku-pili (clinging rock) is on the edge of the cliff on the boundary of Hō‘ae‘ae and Waikele; it belonged to the gods Kāne and Kanaloa.


Wai‘anae… mountain range… O‘ahu. A lizard goddess named Pūhāwai (water hollow) once lived inland at a place called Pūhā; she stole a woman’s husband; the wind god, Makanikeoe, restored him to her… Lit., mullet water.

Waikele. Land section… O‘ahu. Lit., muddy water.

**Subsistence and Traditional Land Use**

No accounts exist today which suggest that Hō‘ae‘ae Ahupua‘a in particular was a land of significant political importance. No heiau have been recorded there to suggest any religious or ceremonial center either. However, this ahupua‘a provided resources which comfortably supported a population in the pre-contact era (before the arrival of westerners in 1778). Hō‘ae‘ae had an interior that was well-supplied with coveted flora and its accompanying fauna. The productive agricultural lands closer to its shore were well-watered with springs and nearby streams. And Hō‘ae‘ae’s submerged lands reached into the natural harbor of Pu‘uloa and provided an ample bounty from the sea.

Handy et al.’s *Native Planters In Old Hawaii* (1991) described the district of ‘Ewa as a whole, of which Hō‘ae‘ae was included. In this book, the entire ‘Ewa District is noted to be of special importance to the royalty of O‘ahu.

The lowlands, bisected by ample streams, were ideal terrain for the cultivation of irrigated taro… The length or depth of the valleys and the gradual slope of the ridges made the inhabited lowlands much more distant from the wao, or upland jungle, than was the case on the windward coast. Yet the wao here was more extensive, giving greater opportunity to forage for wild foods in famine time.

The people needed this resource because ‘Ewa, particularly its western part, got very little rain in the summer months when the trade winds dropped their moisture in the interior. Stream water for irrigation, however, was always abundant.

Ecologically it was like other parts of Oahu, except that the great bays of Pearl Harbor provided a greater variety and abundance of edible shellfish, and were famous as the summer home of mullet. In the interior was the same avifauna, including the birds whose feathers were prized for feather capes, helmets, and lei making. In fact this, with its spacious wao inland, was the region where these birds were most numerous. There were more extensive areas also where wauke and mamaki, which supplied bast for the making of tapa, grew in abundance. In fact, ‘Ewa was famous for its mamaki. There was, too, much olona grown in the interior, and wild bananas and yams flourished.

The area also was famous for its rare and delicious taro, the *kai* variety. The *kai* was native to ‘Ewa and was often referred to as *kai o ‘Ewa*… in the flat, wet lowlands of ‘Ewa this famous taro was grown in mounds (*pu‘epu‘e*) as in marshy localities… This fragrant taro was likened to a woman with whom a man falls in love. And it was said that anyone who married a native of ‘Ewa would come and settle there and would never leave, because of the *kai koi* [type of taro] of ‘Ewa… The area between the West Loch of Pearl Harbor and Loko Eo (the fishpond at the north end of Waipi‘o peninsula) was terraced throughout, continuing for more than a mile up into Waikele Stream. The lower terraces
were watered from the great spring at Waipahu… No area better exemplifies the industry and skills of the Hawaiian chiefs and their people than do the terraced plantation areas and numerous fishponds of ‘Ewa.

The Pearl Harbor ponds were stocked with various kinds of fish, but especially mullet, because these inland waters were the summer home of the mullet of Oahu… Another attraction was the great variety of shellfish found in Pearl Harbor. The most important was the Hawaiian pearl oyster or _pīpi_, which was eaten raw. The shells were valued because they furnished shanks for bonito hooks. The oyster, according to Hawaiian tradition, was brought from Kahiki by a lizard said to have been named Kane-kua'ana. (Handy et al. 1991:469-472).

**Moʻolelo**

As mentioned earlier, Hawaiian place names were connected to traditional stories by which the history of the places was preserved. These stories were referred to as moʻolelo,

…a term embracing many kinds of recounted knowledge, including history, legend, and myth. It included stories of every kind, whether factual or fabulous, lyrical or prosaic. Moʻolelo were repositories of cultural insight and a foundation for understanding history and origins, often presented as allegories to interpret or illuminate contemporary life… Certainly many such [oral] accounts were lost in the sweep of time, especially with the decline of the Hawaiian population and native language. (Nogelmeier 2006:429, 430).

Still, a good amount of traditional stories managed to be recorded as Hawaiian society transitioned from an oral culture to a written one, and among those chronicled were several versions of stories connected to the ‘Ewa region.

One story in particular explains the original marking of the boundaries of the ‘Ewa District. This is linked to the gods Kāne and Kanaloa who, while surveying the islands, arrived at Red Hill and looked across at the expansive western plains. To mark the boundaries of the area, they threw a stone, and the boundary would be marked wherever the stone landed. They wanted to include as much of the great western lands as possible, and so, throwing the stone as far as possible, it landed in the Wai’anae Mountain Range in the area known as Waimānalo. But Kāne and Kanaloa could not find where their stone had landed. Because of this, the area was named “‘Ewa”, meaning “strayed”, due to the straying of the stone. Eventually, the stone was found at the small hills of Pili o Kahe, and this place marked the boundary between the ‘Ewa and Wai’anae Districts (Sterling and Summers 1978:1).

Although there are many stories associated with Hōʻaeʻae’s neighboring ahupua’a of Honouliuli and Waikele, only one moʻolelo was found that mentions Hōʻaeʻae itself. This is the account of the hero, Namakaokapaoʻo. According to the story, Namakaokapaoʻo’s parents met at Hōʻaeʻae. His mother, Pokai, was from Oʻahu, but his father, Ku-ulu-o-kahaʻi, was from the faraway lands of Kahiki. When Namakaokapaoʻo’s father returned to Kahiki, the boy got into a conflict with his stepfather, and later, with the chief of Oʻahu. In the conflicts, both the stepfather and the chief of Oʻahu were killed, and Namakaokapaoʻo instated his mother as the ruler of Oʻahu (Beckwith 1970:480, 481).

**Oli and Mele**

The noteworthiness of specific locales in Hawaiian culture is further bolstered by their appearances in traditional chants. An _oli_ refers to a chant that is done without any accompaniment of dance, while a _mele_ refers to a chant that may or may not be accompanied by a dance. These expressions
of folklore have not lost their merit in today’s society. They continue to be referred to in contemporary discussions of Hawaiian history, identity, and values.

In the account recorded by Abraham Fornander, *Moolelo o Kualii*, Hō‘ae‘ae is mentioned in a list of ‘Ewa place names as part of the great chant of Chief Kuali‘i presented by Kapaahulani at the Keahumooa battlefield. The chant declares that Hō‘ae‘ae is known for the fine salt of Kahuaike. Below is excerpt of this chant (Fornander 1916):

```
O Kaweloiki puu oioi, Puu o Kapolei-e—
Uliuli ka poi e piha nei—o Honouliuli;
Aeae ka paakai o Kahuaiki—Hoaeae;
Pikele ka ia e Waikele—o Waikele;
Ka hale pio i Kauamoa—o Waipio;
E kuu kaua i ka loko awa—o Waiawa;
Mai hoomanana ia oe—o Manana.
He kini kahawai,
He lau kamano—o Waimano;
Ko ia kaua e ke au—o Waiau;
Kukui malumalu kaua—Waimalu;
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Kaweloiki, the sharp-pointed hill. Hill of Kapolei.
Blue is the poi which appeases [the hunger] of Honouliuli;
Fine the salt of Kahuaike—Hoaeae;
Slippery is the fish of Waikele—Waikele;
The arched house at Kauamoa—Waipio;
Let us cast the net in the awa-pond—of Waiawa;
Do not stretch yourself at—Manana.
Many are the ravines,
Numerous the sharks, at Waimano;
We are drawn by the current of Waiau;
In the kukui grove we are sheltered—in Waimalu;
```

In another chant, *He Waa No Naihe*, the harbor of Hō‘ae‘ae is listed along with references to Pu‘uloa, Honouliuli, and Mānana, pointing to the significance of these places in the ‘Ewa District. This comes from the collection of chants belonging to King Kalākaua (found in the Ulukau database’s “Na mele aimoku, na mele kupuna, a na mele ponoi o ka Moi Kalakaua I: Dynastic chants, ancestral chants and personal chants of King Kalākaua I”). An excerpt of this chant which mentions “He lau ke awa o Hoaeae” is below. Whereas the language of the chant is poetic and veiled, it is presented without translation so that different interpretations may be considered.
Na Waa O Naihe

Hei ae la nahae,
Nahaenae ka mana o Honouliuli,
Ko aina ao Kinikini,
E helu oe a Molowa,
He lau ke awa o Hoaeae,
He aina apa i ka malihini,
Kuhi mai la ka uka o Manana,
He waa e amo ana iluna,
E holo ana no i ke kai,
I ke kapili makana i ka makani,
I ea i ka maunu paakea,
I wiria no awe ula ka wai,
He waiwai ka ke aloha o ka manao,
Ua ipu makau eia noho nei—a.

ʻŌlelo Noʻeau

Like oli and mele, traditional proverbs and wise sayings, also known as ʻōlelo noʻeau, have been another means by which the history of Hawaiian locales have been recorded. In 1983, Mary Kawena Pukui published a volume of close to 3,000 ʻōlelo noʻeau that she collected throughout the islands. The introductory chapter of that book reminds us that if we could understand these proverbs and wise sayings well, then we would understand Hawaiʻi well (Pukui 1983).

While there are no ʻōlelo noʻeau recorded which are attributed specifically to Hōʻaeʻae Ahupuaʻa, there are many that pertain to the larger district of ʻEwa of which Hōʻaeʻae is a part. The following Hawaiian proverbs and poetical sayings provide further insight to the region of ʻEwa.

ʻĀina koi ʻula i ka lepo.
Land reddened by the rising dust.
Said of ʻEwa, Oʻahu. (Pukui 1983:11)

O ʻEwa, ʻāina kai ʻula i ka lepo.
ʻEwa, land of the sea reddened by earth.
ʻEwa was once noted for being dusty, and its sea was reddened by mud in time of rain. (Pukui 1983:257)

Anu o ʻEwa i ka iʻa hāmau leo e. E hāmau!
ʻEwa is made cold by the fish that silences the voice. Hush!
A warning to keep still. First uttered by Hiʻiaka to her friend Wahineʻomaʻo to warn her not to speak to Lohiʻau while they were in a canoe near ʻEwa. (Pukui 1983:16)

E ʻEwa e—e kuʻi na lima!
O ʻEwa—join hands!
This cry was a call of the men of Kona, Oʻahu, when they went with their chief to destroy his brother, the ʻEwa chief. (Pukui 1983:33)

ʻEwa kai lumalumaʻi.
ʻEwa of the drowning sea.
An epithet applied to ʻEwa, where kauwā were drowned prior to offering their bodies in sacrifice. (Pukui 1983:47)
‘Ewa nui a La‘akona.
*Great ‘Ewa of La‘akona.*
La‘akona was a chief of ‘Ewa, which was prosperous in his day. (Pukui 1983:47)

He kai puhi nehu, puhi lala ke kai o ‘Ewa.
*A sea that blows up nehu fish, blows up a quantity of them, is the sea of ‘Ewa.* (Pukui 1983:74)

He lō‘ihi o ‘Ewa; he pali o Nu‘uanu; he kula o Kulaokahu‘a; he hiki mai koe.
*‘Ewa is a long way off; Nu‘uanu is a cliff; Kulaokahu‘a is a dry plain; but all will be here before long.*
Said of an unkept promise of food, fish, etc. O‘ahu was once peopled by evil beings who invited canoe travelers ashore with promises of food and other things. When the travelers asked when these things were coming, this was the reply. When the visitors were fast asleep at night, the evil ones would creep in and kill them. (Pukui 1983:85)

I Waialua ka po‘ina a ke kai, o ka leo ka ‘Ewa e ho‘olohe nei.
*The dashing of the waves is at Waialua but the sound is being heard at ‘Ewa.*
Sounds of fighting in one locality are quickly heard in another. (Pukui 1983:137)

Ka i‘a hāmāu leo o ‘Ewa.
*The fish of ‘Ewa that silences the voice.*
The pearl oyster, which has to be gathered in silence. (Pukui 1983:145)

Ka i‘a kuhi lima o ‘Ewa.
*The gesturing fish of ‘Ewa.*
The pipi, or pearl oyster. Fishermen did not speak when fishing for them but gestured to each other like deaf-mutes. (Pukui 1983:148)

Ke kai he‘e nehu o ‘Ewa.
*The sea where the nehu come in schools to ‘Ewa.*
*Nehu* (anchovy) come by the millions into Pearl Harbor. They are used as bait for fishing, or eaten dried or fresh. (Pukui 1983:185)

Ke one kuilima laula o ‘Ewa.
*The sand on which there was a linking of arms on the breadth of ‘Ewa.*
‘Ewa, O‘ahu. The chiefs of Waikīkī and Waikele were brothers. The former wanted to destroy the latter and laid his plot. He went fishing and caught a large *niuhi*, whose skin he stretched over a framework. Then he sent a messenger to ask his brother if he would keep a fish for him. Having gained his consent, the chief left Waikīkī, hidden with his best warriors in the “fish.” Other warriors joined them along the way until there was a large army. They surrounded the residence of the chief of Waikele and linked arms to form a wall, while the Waikīkī warriors poured out of the “fish” and destroyed those of Waikele. (Pukui 1983:191)

Ku a‘e ‘Ewa; Noho iho ‘Ewa.
*Stand-up ‘Ewa; Sit-down ‘Ewa.*
The names of two stones, now destroyed, that once marked the boundary between the chiefs’ land (*Kua‘e ‘Ewa*) and that of the commoners (*Noho iho ‘Ewa*) in ‘Ewa, O‘ahu. (Pukui 1983:200)
Ua 'ai i ke kāī-koi o 'Ewa.
*He has eaten the kāī-koi taro of 'Ewa.*

Kāī is O'ahu’s best eating taro; one who has eaten it will always like it. Said of a youth or a maiden of 'Ewa, who, like the kāī taro, is not easily forgotten. (Pukui 1983:305)

Ka i’a hali a ka makani.
*The fish fetched by the wind.*

The 'anaeholo, a fish that travels from Honuliuli, where it breeds, to Kaipāpā’u on the windward side of O’ahu. It then turns about and returns to its original home. It is driven closer to shore when the wind is strong. (Pukui 1983:145)

**Hōʻaeʻae In The Historic Era**

When the first Westerners arrived in the Hawaiian archipelago in 1778, the islands were not yet united under one sovereign. At that time, Hōʻaeʻae and the entire island of Oʻahu was under the rule of Chief Kahahana. Not long after that, in 1783, Chief Kahahana’s reign was ended with the invasion and victory of Chief Kahekili of Maui. This would also be the end of Oʻahu’s independence as a separate island kingdom. While Kahekili ruled over Oʻahu, the Oʻahu chiefs tried to organize a revolt, but their plan was exposed, and they were not successful. In retribution, Kahekili slaughtered the men, women, and children of ‘Ewa District and of the neighboring Kona District. Fornander recorded this story (1916–1918) and pointed out that the stream of Hōʻaeʻae was one of several streams which were covered with the dead bodies from Kahekili’s massacre:

In the beginning of 1783 – some say it was in the month of January – Kahekili, dividing his forces in three columns, marched from Waikiki by Puowaina, Pauoa, and Kapena, and gave battle to Kahahana near the small stream of Kaheiki. Kahahana's army was thoroughly routed, and he and his wife Kekuapoi-ula fled to the mountains. It is related that in this battle Kauwahine, the wife of Kahekili, fought valiantly at his side.

Oahu and Molokai now became the conquest of Kahekili, and savagely he used his victory.

For upwards of two years or more Kahahana and his wife and his friend Alapai wandered over the mountains of Oahu, secretly aided, fed, and clothed by the country people, who commiserated the misfortunes of their late king. Finally, weary of such a life, and hearing that Kekuananohoa, the uterine brother of his wife Kekuapoi-ula, was residing at Wailele in Ewa, he sent her to negotiate with her brother for their safety. Dissembling his real intentions, Kekuananohoa received his sister kindly and spoke her fairly, but having found out the hiding-place of Kahahana, he sent messengers to Kahekili at Waikiki informing him of the fact. Kahekili immediately returned preemptory orders to slay Kahahana and Alapai, and he sent a double canoe down to Ewa to bring their corpses up to Waikiki. This order was faithfully executed by Kekuananohoa; and it is said that the mournful chant which still exists in the Hawaiian anthology of a bygone age under the name of “Kahahana” was composed and chanted by his widow as the canoe was disappearing with her husband's corpse down the Ewa lagoon on its way to Waikiki.

The cruel treachery practised on Kahahana and his sad fate, joined to the overbearing behaviour and rapacity of the invaders, created a revulsion of feeling in the Oahu chiefs, which culminated in a wide-spread conspiracy against Kahekili and the Maui chiefs who were distributed over the several districts of Oahu. Kahekili himself and a number of chiefs were at that time living at Kailua; Manonokauakakekula, Kaiana, Namakeha, Nahiolea, Kalaniulumoku, and others, were quartered at Kaneohe and Heeia; Kalanikupule, Koalaukane, and Kekuamanohoa were at Ewa, and Hueu was at Waialua.
The Oahu leaders of the conspiracy were Elani, the father of Kahahana, Pupuka and Makaioulu, above referred to, Konamanu, Kalakioonui, and a number of others. The plan was to kill the Maui chiefs on one and the same night in the different districts. Elani and his band were to kill the chiefs residing at Ewa; Makaioulu and Pupuka were to kill Kahekili and the chiefs at Kailua; Konamanu and Kalakioonui were to dispatch Hueu at Waialua. By some means the conspiracy became known to Kalanikupule, who hastened to inform his father, Kahekili, and the Maui chiefs at Kaneohe in time to defeat the object of the conspirators; but, through some cause now unknown, the messenger sent to advise Hueu, generally known as Kiko-Hueu, failed to arrive in time, and Hueu and all his retainers then living at Kaowakawaka, in Kawaiola, of the Waialua district, were killed. The conspiracy was known as the “Waipio Kimopo” (the Waipio assassination), having originated in Waipio, Ewa.

Fearfully did Kahekili avenge the death of Hueu on the revolted Oahu chiefs. Gathering his forces together, he overran the districts of Kona and Ewa, and a war of extermination ensued. Men, women, and children were killed without discrimination and without mercy. The streams of Makaho and Niuhalelewai in Kona, and that of Hoaeae in Ewa, are said to have been literally choked with the corpses of the slain. The native Oahu aristocracy were almost entirely exterminated. It is related that one of the Maui chiefs, named Kalaikoa, caused the bones of the slain to be scraped and cleaned, and that the quantity collected was so great that he built a house for himself, the walls of which were laid up entirely of the skeletons of the slain. The skulls of Elani, Konamanu, and Kalakioonui adorned the portals of this horrible house. The house was called “Kauwalua,” and was situated at Lapakea in Moanalua, as one passes by the old upper road to Ewa. The site is still pointed out, but the bones have received burial.

When Chief Kahekili died in 1794, control of Oʻahu went to his son Kalanikūpule. The following year, Chief Kamehameha of Hawaiʻi Island invaded Oʻahu to engage Kalanikūpule in battle. Kamehameha advanced toward Nuʻuanu and met Kalanikūpule’s forces in the back of the valley at the Nu‘uanu Pali. There Kamehameha overwhelmed Kalanikūpule’s warriors, effectively gaining control of all the islands from Hawaiʻi to Oʻahu (Kanahele 1995).

Early Historical Accounts of Land Use in the ‘Ewa Region

The earliest written records of the district of ‘Ewa come during Kahekili’s rule over Oʻahu. In 1793, Captain George Vancouver described the flat terrain of the ‘Ewa Plain. From his vantage point anchored off of the entrance to West Loch (offshore of Hō‘ae‘ae), the ‘Ewa District did not appear to be densely populated:

The part of the island opposite to us was low, or rather only moderately elevated, forming a level country between the mountains that compose the east [Koolau] and west [Waianae] ends of the island. This tract of land was of some extent, but did not seem to be populous, nor to possess any great degree of natural fertility; although we were told that, at a little distance from the sea, the soil is rich, and all the necessaries of life are abundantly produced. …Mr. Whitbey observed [sic], that the soil in the neighborhood of the harbor appeared of a loose sandy nature; the country low for some distance, and, from the number of houses within the harbour, it should seem to be very populous; but the very few inhabitants who made their appearance were an indication of the contrary (Vancouver 1801, vol. 3:361, 363).

As the number of foreigners visiting Hawaiʻi’s shores increased, more descriptions of the ‘Ewa region were written. Accounts from the early 1800s illustrate a land cultivated with taro, yams, sweet potatoes, coconut trees, bananas, and sugarcane. Some accounts describe plots of land and walled fishponds specifically belonging to particular individuals or groups of individuals:
We passed by foot-paths winding through an extensive and fertile plain, the whole of which is the highest state of cultivation. Every stream was carefully embanked, to supply water for the taro beds. Where there was no water, the land was under crops of yams and sweet potatoes. The roads and numerous houses are shaded by cocoa-nut trees, and the sides of the mountains covered with wood to a great height. We halted two or three times, and were treated by the natives with the utmost hospitality.” (Campbell 1819:145)

The adjoining low country is overflowed both naturally and by artificial means, and is well stocked with tarrow-plantations, bananas, etc. The land belongs to many different proprietors; and on every estate there is a fishpond surrounded by a stone wall, where the fish are strictly preserved for the use of their rightful owners, or tabooed, as the natives express it. One of particular dimensions belongs to the King. (Mathison 1825 in McAllister 1933:109)

The neighborhood of the Pearl River is very extensive, rising backwards with a gentle slope towards the woods, but is without cultivation, except round the outskirts to about half a mile from the water. The country is divided into separate farms or allotments belonging to the chiefs, and enclosed with walls from four to six feet high, made of a mixture of mud and stone. (Macrae 1922 in McAllister 1933:31)

We found ourselves in a rectangular bay, or rather a lake with several arms, consisting of several deep bights. Two of the most important of these stretched to the northeast, while the one to the northwest cut the farthest….The soil in this region seemed at first sight to be exceptionally fertile, and the land consisted of meadows and taro and sugar [cane] fields…. We rowed to the end of the harbor of Opooroa, or the so-called Pearl River, and landed with the boats near a small Indian village with the name of Mannonco….In the meantime, we strolled through the surrounding land, which everywhere was very fertile, with cultivated fields of tarro, maize, and also sugar cane (Boelen 1988:64–65).

Māhele Land Tenure

In the mid-1800s, as the Hawaiian Kingdom became increasingly exposed to outside influences, the Hawaiian monarchy faced a crossroads of change. Dr. David Keanu Sai describes the predicament that King Kamehameha III faced:

Kamehameha III’s government stood upon the crumbling foundations of a feudal autocracy that could no longer handle the weight of geo-political and economic forces sweeping across the islands. Uniformity of law across the realm and the centralization of authority had become a necessity. Foreigners were the source of many of these difficulties. (Sai 2008:62)

In Palapala‘aina: Surveying the Mahele, Moffat and Fitzpatrick (1995) state that “Several legislative acts during the period 1845–1855 codified a sweeping transformation from the centuries-old Hawaiian traditions of royal land tenure to the western practice of private land ownership.” Most prominent of these enactments was the Māhele of 1848 which was immediately followed by the Kuleana Act of 1850.

The Mahele was an instrument that began to settle the undefined rights of three groups with vested rights in the dominion of the Kingdom --- the government, the chiefs, and the hoa‘āina. These needed to be settled because it had been codified in law through the Declaration of Rights and laws of 1839 and the Constitution of 1840, that the lands of the Kingdom were owned by these three groups… Following the Mahele, the only group with an undefined interest in all the lands of the Kingdom were the native tenants, and this would be later addressed in the Kuleana Act of 1850. (Beamer 2008:194,195)
Although the Māhele had specifically set aside lands for the King, the government, and the chiefs, this did not necessarily alienate the makaʻāinana from their land. On the contrary, access to the land was fostered through the reciprocal relationships which continued to exist between the commoners and the chiefs. Perhaps the chiefs were expected to better care for the commoners’ rights than the commoners themselves who arguably might have been more ignorant of foreign land tenure systems. Indeed, the ahupua’a rights of the makaʻāinana were not extinguished with the advent of the Māhele, and Beamer points out that there are “numerous examples of hoaʻāina living on Government and Crown Lands Post-Mahele which indicate the government recognized their rights to do so” (Beamer 2008:274).

Hoaʻāina who chose not to acquire allodial lands through the Kuleana Act continued to live on Government and Crown Lands as they had been doing as a class previously for generations. Since all titles were awarded, “subject to the rights of native tenants.” The hoaʻāina possessed habitation and use rights over their lands. (Beamer 2008:274)

For those commoners who did seek their individual land titles, the process that they needed to follow consisted of filing a claim with the Land Commission; having their land claim surveyed; testifying in person on behalf of their claim; and submitting their final Land Commission Award to get a binding royal patent. However, in actuality, the vast majority of the native population never received any Land Commission Awards recognizing their land holdings due to several reasons such as their unfamiliarity with the process, their distrust of the process, and/or their desire to cling to their traditional way of land tenure regardless of how they felt about the new system. In 1850, the king passed another law, this one allowing foreigners to buy land. This further hindered the process of natives securing lands for their families.

The list of Land Commission Awards (found on the Waihona ‘Aina online database) shows 23 kuleana parcels being awarded for the ahupua’a of Hōʻaeʻae, most of which are located near the coast (Figure 4). One claim appears to be for all of Hōʻaeʻae Ahupua’a, and a portion to the south of the project area was granted. The claimant was N. Namauu, who also made claims for lands on Maui, Hawaiʻi Island, and other parcels on Oʻahu:

**No. 10474*0, Namauu, Honolulu, February 4, 1848**

**N.R. 558-559v4**

Greetings to the Land Commissioners: I, Namauu, hereby state all my claims to you.

1. One loʻi, Kekuniluna, at Keoneula, and ‘ili in Honolulu, makai of Kunawai.
2. One cultivated lot at Kainehe, land of J. Piikoi, in Lahaina.
3. Two enclosed lands at Pahoea, Lahaina.
4. One cattle enclosure at Kahawai in Kapoulu, in Aki, Lahaina.
5. One houselot, Waiohuli, adjoining Kalepolepo at Kula, East Maui.
6. One sweet potato lot at Koanauhi, East Maui.
7. Two Taro moʻo in Wailuku in the ‘ili of Pohakupukupu.
8. These re my claims within the ‘ili of Pohakupukupu, Honokohau.
9. I also have a small canoe landing, between A. Keliahonui’s and Kaumealani’s, next to my house lot.
10. Hoaeae Ahupua’a in Ewa, Oahu.
11. Paho Ahupua’a of Lahaina, Maui, Puunoa Ahupua’a of Kahakuloa, Maui, Kaupakulua Ahupua’a of Hamakua, Hawaii, Kulaikahono
Figure 4. Portion of a map showing kuleana awards in Hōʻaeʻae (Monsarrat 1905). The project area is off the map.
Ahupuaʻa in Hilo, Halelua Ahupuaʻa in Kau, Awakee Ahupuaʻa, Kona, Moeauoa Ahupuaʻa, Kona, Ulumalu Ahupuaʻa, Hamakualoa, Maui.

Within these lands which I am listing, the people have rights, under me.

NAMAUU
Note in margin says: (Forgot) Halelua Ahupuaʻa in Kohala, Hawaii.

N.T.188v10
No. 10474, N. Namauu
COPY
N. Namauu’s land in the Mahele Book.
Moeanoa ahupuaa, Kona Hawaii.
Awakee ahupuaa, Kona, Hawaii.
Halelua ahupuaa, Kohala Hawaii.
Kuleikahono ahupuaa Hilo, Hawaii.
Halelua ahupuaa, Kau, Hawaii.
Weha ahupuaa, Hamakua, Hawaii.
Kaupokolua, ahupuaa Hamakualoa, Maui.
Ulumalu ahupuaa, Hamakualoa, Maui.
Pahoa ahupuaa, Lahaina, Maui.
Puumoa ahupuaa Lahaina, Maui.
Hoaeae ahupuaa, Ewa, Oahu.
Puohai ahupuaa, Hilo, Hawaii.
True Copy.
A.G. Thruston, Secretary K.K., Department of Interior, 25 December 1852.

[ Award 10474; (Oahu) R.P. 4490, Hoaeae Ewa (ahupuaa; Ap. 9); R.P. 4490, (Maui)
Puuau Lahaina; 1 ap.; R.P. 4490, Pahoa Lahaina; 1 ap.; R.P. 4490; Kaupakulua
Hamakualoa; 1 ap.; (ahupuaa; Ap. 6; Namauu for Kekuanaoa); R.P. 4471; Ulumalu
Hamakualoa; 1 ap.; (ahupuaa; 1376 Acs; (Hawaii) R.P. 4490 Kulaikahono Hilo; R.P.
4471, Halelua Kohala; R.P. 4490, Halelua Kau; Awakee Kona; Moeauoa N. Kona; See
Award 311 for Foreign Testimony 231v3 document]

Foreign Testimony for this claim was also consulted, but there was no information pertaining to Hōʻaeʻae.

Other interesting Māhele testimony was found regarding the offshore boundaries of Hōʻaeʻae (Maly and Maly 2003b). This confirms the rights and connection that the people had to their sea. The seaward boundaries of Hōʻaeʻae extended out to the chin-deep waters, while the deeper waters beyond that were considered to belong to Honouliuli Ahupuaʻa:

Fishery of Hoaeae.
The testimony of the kamaainas is that the fishing extends to the depth of a man's chin, opposite this land. Mr. Robinson & Mr. Coney agree to this and that outside of that the fishing belongs to Honouliuli…
The red line indicating the fishery of Hoaeae, conforms to Mr. Bishop's survey, and is agreed to by Mr. Robinson as representing their rights of fishing…

Kukahiko, sworn: I was born at Honouliuli, an ahupuaa on Oahu; born in 1810. Know boundaries, am kamaaina of the land and sea. I know Papapuhi. I belong there. It is a cape, the division of Hoaeae & Honouliuli. (Wit. points it out). The fishery opposite Hoaeae where a man can stand belongs to Hoaeae, and outside in deep water is Honouliuli, and so on, the shore water belongs to the land & the deep water of Honouliuli, till you come to Kalaeokane, a village of Kupali'i, which is a point of division between Honouliuli & Waikiki, in assessing the ancient tax, putting houses on the line so as to evade both. Thence the line ran on the edge of the shore, giving no water to Auiole. The line of Honouliuli cutting across the land to Panau. There the people would cross from side to side to escape tax of either land. There the whole Kai of Homakaia belonged to Waipio…

The Fishing Right of Honouliuli covers the whole of “West Loch,” with the reservation to Hoaeae, Waikiki (Except the Ili of Auiole) and Waipio of the fishing opposite each to where the water is “chin deep” to a man, say five and one half feet deep, also cutting off the bight or inlet where the boundary of Waipio and Waikiki cuts across from [ ] to Kaulu constituting the “Fishery of Hoomakaia.” The channel at the entrance of the Loch, as far up as Pookala point is divided equally between Honouliuli & Halawa…(Maly and Maly 2003b:374, 375, 377)

Sugarcane and Pineapple Cultivation

Pineapple was first brought to Hawaiʻi in 1813 by Don Francisco de Paula Marin, a Spanish adviser to Kamehameha I. By the 1890s pineapple became an important crop in the islands, and a key area for pineapple cultivation was Central O‘ahu. In 1898, a group of homesteaders began settling the Wahiawa Colony Tract (Nedbalek 1984:18). The parcel was roughly bounded by the north and south forks of Kaukonahua Stream around what is now Wahiawa Town. By 1902, a network of flumes, ditches, and tunnels were completed to provide water to the homesteads and cultivated fields (Nedbalek 1984:28). James B. Dole began growing pineapple in the Wahiawa Tract in 1900 for his canning operation and, within a decade, thousands of acres of pineapple fields were developed in Central O‘ahu.

By the 1920s mechanized pineapple farming and military occupation of the central plateau at Schofield Barracks and Wheeler Army Air Field contributed to economic expansion centered in Wahiawa and gradually promoted development and an even greater expansion of pineapple farming throughout the central plateau. The pineapple fields of Central O‘ahu eventually expanded toward Pearl Harbor, some of which ended near the northern fringes of Hō’ae‘ae Ahupua‘a.

While the makai lands of Hō‘ae‘ae were in the floodplains of the Pearl Harbor waters, most of the rest of the ahupua‘a became under the control of the Oahu Sugar Company for its production of sugarcane and the housing of its workers (Yamamoto et al. 2005:24). The Oahu Sugar Company also utilized the lands of several other ‘Ewa ahupua‘a in addition to Hō‘ae‘ae, approximately 12,000 acres in total, leasing the land from the Robinson estate, the Bishop estate, the estate of John Papa I‘i, and also subleasing land from Frank Dillingham. It became one of the most successful sugarcane operations in Hawai‘i, not closing until the 1990s (Yamamoto et al. 2005:24; Dorrance and Morgan 2000:49, 50).
The Oahu Railway and Land Company

The Oahu Railway and Land Company (OR&L) began in the late 1800s as a means to connect the northern and western O‘ahu sugar mills with the port of Honolulu (Treiber 2003:5). This means that the railroad tracks would have run through the ahupua‘a of Hōʻaeʻae. In addition to serving Aiea, Waipahu, ‘Ewa, Wai‘anae, and Kahuku sugar mills, the OR&L often carried passengers traveling from Central O‘ahu to Honolulu (Treiber 2003:5).

In 1906, OR&L extended their railway from Waipahu to Wahiawā, so that pineapples could be transported from the fields to the new Dole cannery constructed at Iwilei in Honolulu. During World War II (1941–1945), freight traffic boomed and the transportation of military cargo such as ammunition, bombs, petroleum products, and other supplies were supported by OR&L (Treiber 2003:9). By 1947, most of the OR&L tracks were abandoned and rail transportation transferred to the trucking industry and the road system that had been significantly improved during World War II (Treiber 2003:11).

The Waiahole Ditch

In the early part of the 20th century, Waiāhole water was diverted to feed the thirsty sugarcane plantations on the opposite side of the Ko‘olau:

A few years later, just before annexation, another large plantation was established on the Honouliuli lands, on that part which lay above the 200-foot level, and upon some adjoining lands. B. F. Dillingham promoted the organization of the Oahu Sugar Company (Waipahu) which was incorporated in 1897. Its first crop, harvested in 1899, produced 7,891 tons of sugar. At the outset, this was, like Ewa, an all-artesian plantation. The high elevation of its land necessitated an expensive pumping system, and ultimately (about 1915) the artesian supply was supplemented by stream water brought from the windward side of the Koolau mountains through the Waiahole tunnel to the higher fields of the plantation. (Kuykendall 1967:69)

The ditch and main tunnel were constructed between 1913 and 1916, then between 1925 and 1935, six additional tunnels were built, with four of them deemed successful. Its construction was a major undertaking:

The Waiahole Ditch was ambitious by any standard. The initial cost was $2.3 million—and the replacement cost has been estimated to be over $56 million. It started at 790 foot elevation in Kahana Valley, traversed the back of Waikane and Waiahole Valleys, pierced the Ko‘olau Range, and ended at the foot of the Wai‘anae Range at an elevation of 600 feet. The original length of the system from Kahana Valley to the terminal reservoir in Honouliuli was 21.9 miles, later extended westward another 5 miles. There were thirty-seven diversions on windward streams. The Waiahole Ditch consisted almost entirely of tunnels. Besides the main tunnel, thirty-eight other tunnels were constructed: twenty-five (later twenty-seven) connecting tunnels on the windward side and thirteen on the leeward side. The shortest was 280 feet, the longest was 3329 feet. Each one took anywhere from 30 days to a year to bore. The ditches were mostly cement-lined; the reservoirs, dirt-packed. (Wilcox 1997:98–99)

In all, the Waiahole ditch system extends 26.5 miles from Kahana Valley to Kunia. The stream diversion caused major controversy as water rights were called into question. There have been ongoing court cases from the 1990s to the present. The 1970s saw another significant dispute involving militant protests by Waiahole residents in response to proposed development of the valley and eviction of the farmers. This was finally resolved in 1977 when the State purchased 600 acres of land to remain in agricultural use (Rayson 2004). The Waiahole Ditch remains in use
today, a portion of which skirts the east side of the subject parcel, just outside the project boundaries.

**Historic Maps**

Historic maps and photos help to paint a picture of Hōʻaeʻae in years past and illustrate the changes that have taken place in the region. The earliest map found for this area is from 1858 (Figure 5). Very little detail is provided, although several Hōʻaeʻae place names are depicted. These include Kaiopaahalina, Apoka, Honouliuli, and Vlalena (sic). Two pāhale are illustrated in the Vlalena area, labeled as Pahale o Kapili and Pahale o Thompson. The name Thompson is shown in several places.
Figure 5. Early map of Hōʻaeʻae (Pease 1858). Scale 4 chains = 1 inch. It could not be determined where the project area lies on this map.
The next series of maps are USGS quadrangles. The earliest of these, from 1953, shows that the reservoir outside the southwest corner of the property has already been established and the Waiahole Ditch runs just outside the east property boundary (Figure 6). A “light duty” road bisects the parcel, and an “unimproved dirt” road connects the former road to the ditch on the south side of the project area. A few structures are illustrated outside the project area to the east, and they are labeled as “Res.” Farther south along Kupehau Road are more structures labeled as “Camp.” A 1960 quadrangle map is basically the same in the region of the subject property, except that the International Country Club is now shown where the Hawaii Country Club is today (Figure 7). In a 1967 quadrangle map, the Hawaii Country Club is now labeled as such (Figure 8). Interestingly, a landing strip is illustrated on the north side of the project area. The structures labeled as “Res” and “Camp” are no longer shown.

A 1977 orthophoto was also found that shows the project area (Figure 9). Fields and roads can be seen within the subject parcel, and more uniform fields on the opposite side of Kunia Road appear to be pineapple plantations.

Contemporary History

After transitioning from the 19th to the 20th century, Hō‘ae‘ae has seen its fair share of modernization. The ahupua‘a witnessed the major expansion of Waipahu Town cutting across the traditional boundaries of Hō‘ae‘ae, Waiekele, and Waipi‘o, and then Hō‘ae‘ae saw the inland development of its own residential community of Village Park. Today, Hō‘ae‘ae also has parks, schools, and a variety of stores, restaurants, and other businesses. With its newer residential communities of Royal Kunia, Hō‘ae‘ae continues to grow in the 21st century to house the rising population of O‘ahu.

Mele

Like the traditional chants from ancient times that give us a window into pre-contact Hawai‘i, the modern songs of today also provide a glimpse of the recent time and place that they were composed. While a song has yet to be composed about Hō‘ae‘ae, another song in particular, Pūpū A‘o ‘Ewa, has come to represent all of the lands of ‘Ewa and the people who call this region their home. It is a very famous song which has been recorded by numerous artists, and it refers to the people of ‘Ewa as the famous shells of the land, a land proud and well-known throughout the ages even to today (Lyrics and translation to this song along with its accompanied description is from the www.huapala.org database compiled by Kanoa-Martin):

Pūpū A O ‘Ewa (Shells of ‘Ewa) - Traditional

Pūpū (a‘o ‘Ewa) i ka nu‘a (nā kānaka)
E naue mai (a e ‘ike)
I ka mea hou (o ka ‘āina)
Ahe ‘āina (ua kaulana)
Mai nā kūpuna mai
Alahula Pu‘uloa he ala hele no
Kaʻahupāhau, (Kaʻahupāhau)
Alahula Pu‘uloa he ala hele no
Kaʻahupāhau, Kaʻahupāhau
Figure 6. Schofield Barracks Quadrangle Map (USGS 1953). The project area is outlined in red.
Figure 7. Schofield Barracks Quadrangle Map (USGS 1960). The project area is outlined in red.
Figure 8. Schofield Barracks Quadrangle Map (USGS 1967). The project area is outlined in red.
Figure 9. Schofield Barracks Orthophoto (USGS 1977). The project area is outlined in red.
Nani Kaʻala hemolele i ka mālie
Kuahiwi kaulana aʻo ‘Ewa
E kiʻi ana i ka makani o ka ʻāina
Hea ka Moaʻe eia au e ke aloha

Kilakila ʻo Polea noho i ka ʻolu
Ia home hoʻohihi a ka malihini
E walea ana i ka ʻolu o ke kiawe
I ka pa kolonahe a ke Kiu

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Shells of ʻEwa throngs of people
Coming to learn
The news of the land
A land famous
From the ancient times
All of Puʻuloa, the path trod upon by Kaʻahupahau
All of Puʻuloa, the path trod upon by Kaʻahupahau

Beautiful Kaʻala, sublime in the calm
Famous mountain of ʻEwa
That fetches the wind of the land
The tradewind calls, “here I am, beloved”

Majestic Polea in the coolness
Home delightful to visitors
Relaxing in the coolness of the kiawe
And the soft blowing of the Kiu wind

Source: Na Mele ‘O Hawaiʻi Nei by Elbert & Mahoe, Olowalu Massacre by Aubrey Janion - The news of the land was the discovery of pearl oysters at Puʻuloa, the Hawaiian name for Pearl Harbor, that was protected by Kaʻahupāhau, the shark goddess. Kaʻala is the highest mountain on Oʻahu and Polea is located in ʻEwa. Nuʻa and naue in the chorus is often interchanged with nuku (mouth) and lawe (bring). Moaʻe is the name of a tradewind. In 1909, the Navy issued a $1.7 million contract for construction of the first Pearl Harbor dry dock. Kapuna Kanakeawe, a Hawaiian fisherman, told the contractor to build it in another location as the spot they selected was the home of Kaʻahupāhau. Work stopped after 3 months as things kept going wrong. Cement would not pour and the contractor could not pump water out of the dry dock. February 17, 1913, 2 years behind schedule, opening ceremonies were held. Then it exploded. One man was killed, $4,000,000 lost and 4 years of work demolished. Another contract was issued in November, 1914. As work progressed, the early warning given by Kanakeawe was remembered. Mrs. Puahi, a kahuna, was called, and instructed the foreman, David Richards, in the necessary rituals to appease Kaʻahupāhau and safeguard the project. After sacrifices were made, prayers chanted and rituals performed, the project was declared safe. When the bottom was pumped out, the skeleton of a 14-foot shark was discovered. Pearl Harbor was also the site of ancient Hawaiian fishponds.
Previous Archaeology

Very few archaeological studies have been conducted within the ahupua'a of Hō‘ae‘ae. After sifting through previous archaeological reports concerning the ‘Ewa District at the SHPD library, only four previous archaeological studies were referenced. One additional project was found in the vicinity of the study area in the adjacent ahupua’a of Waikele. These five projects are shown in Table 1 and Figure 10.

The earliest study is a reconnaissance survey done for a 203.171 acre parcel, reported only as TMK: (1) 9-4-004, located in Hō‘ae‘ae (Kennedy 1987). This is thought to be the subject parcel. No above ground archaeological features were identified, and no further archaeological work was recommended.

The following year, another archaeological survey was conducted in Hō‘ae‘ae, this one for the proposed Royal Kunia Phase II project (Kennedy 1988). Due to sugarcane production, a pedestrian walk-through was limited and the survey was done from automobiles along the cane haul roads. No above ground archaeological features were identified, and no further archaeological work was recommended.

No further archaeological work is documented in Hō‘ae‘ae Ahupua‘a until 2013, when an archaeological inventory survey was conducted in both Hō‘ae‘ae and Waikele Ahupua‘a for a photovoltaic project (Walden et al 2013). No traditional or historical features or artifacts were identified during this assessment. That same year, another report was generated for an archaeological inventory survey conducted for a photovoltaic project within Hō‘ae‘ae Ahupua‘a only (Titchenal et al. 2013). As with the other assessment, no archaeological features or artifacts were identified during this study.

Finally, an archaeological inventory survey was conducted for the Ho‘ohana Solar Farm project in Kunia (Wong and Spear 2015). Although this work took place in the neighboring ahupua‘a of Waikele, it is not far from the current project area in Hō‘ae‘ae. The inventory survey yielded a new site, SIHP (State Inventory of Historic Places) 50-80-08-7671, a historic road complex consisting of three features. In addition, two traditional basalt flakes, a traditional basalt adze preform, and historic cultural material were identified during the study. No further archaeological work was recommended.

Table 1. Previous Archaeological Studies in the Vicinity of the Project Area

<table>
<thead>
<tr>
<th>Author and Year</th>
<th>TMK</th>
<th>Type of Study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kennedy 1987</td>
<td>(1) 9-4-004</td>
<td>Reconnaissance</td>
<td>None.</td>
</tr>
<tr>
<td>Kennedy 1988</td>
<td>(1) 9-4-002:001 (por.) and :091 (por.)</td>
<td>Reconnaissance</td>
<td>None.</td>
</tr>
<tr>
<td>Titchenal et al. 2013</td>
<td>(1) 9-4-004:004</td>
<td>Archaeological Inventory Survey</td>
<td>None.</td>
</tr>
<tr>
<td>Walden et al. 2013</td>
<td>(1) 9-4-002:050 and :064</td>
<td>Archaeological Inventory Survey</td>
<td>None.</td>
</tr>
<tr>
<td>Wong and Spear 2015</td>
<td>(1) 9-4-002:052</td>
<td>Archaeological Inventory Survey</td>
<td>One site was recorded: SIHP 7671, a historic road complex. Traditional and historic artifacts were recovered.</td>
</tr>
</tbody>
</table>
Figure 10. Location of previous archaeological studies near the project area.
**Settlement Patterns**

Based on a review of previous archaeological studies and examination of both pre- and post-
Contact Hawaiian history, settlement patterns for the larger ‘Ewa District can be surmised. Synthesized with Cordy’s (1993) sociopolitical model of O‘ahu, Beardsley (2001:III-8, III-9) summarizes the following settlement pattern:

**Pre-AD 1000** – During this period political organization of the islands consisted of small chiefdoms. Temporary habitations were located in resource rich areas. Permanent settlements were clustered around prime agricultural land; these prime agricultural lands were probably located in well-watered valleys.

**AD 1000 to 1300s** – The political organization of the island coalesced into three independent districts: Greater ‘Ewa, Ko‘olau and Kona. Temporary settlements were established for the first time in inland garden areas, associated with dryland agriculture; permanent habitation expanded into new areas. For ‘Ewa, the Honouliuli floodplain [and portions of Hō‘ae‘ae] would have been the focus of permanent habitation. Settlement in the project area focused on exploitation of marine resources, but was also associated with permanent inland settlement.

**AD 1400 to 1500s** – Full development of class stratification occurred during this period, together with the unification of the entire island under one chief. Permanent habitations expanded in all areas; temporary habitations in inland garden areas were replaced by permanent habitations. For the project area, permanent habitations, possibly associated with rectangular enclosures, developed.

**AD 1600 to 1778** – District chiefs fought for control over the resources of the islands. For ‘Ewa… other population concentrations occurred around Pearl Harbor and at the base of the Wai‘anae Range.

**Post-Contact** – Scattered Hawaiian occupations continued across the ‘Ewa Plain… until the mid-19th century. In the later historical period, populations were low and consisted of scattered families with habitation sites along the coast for marine exploitation and inland houselots with possible walled agricultural areas.

The above summary allows for the initial settlement of Hō‘ae‘ae dating to pre AD 1000 especially in Hō‘ae‘ae’s well-watered lands along Pearl Harbor. Cordy mentions that “dates back to the A.D. 500s–800s came from the fertile lowlands of Honouliuli stream entering Pearl Harbor” (2000:107). These fertile lowlands of the stream that empties into Pearl Harbor are adjacent to Hō‘ae‘ae’s shoreline. Kennedy and Denham further describe these settlements along Pearl Harbor and add information pertaining to the interior lands between the sea and the southeastern base of the Wai‘anae Mountains.

There were permanent settlements in the taro and potato growing areas near West Loch. Fishponds were also used extensively in this area alongside irrigated pondfield cropping of the floodplain… The lower portions of the gulches of the Wai‘anae Range… were probably utilized for growing banana and sugar cane. (Kennedy and Denham 1992:17)

The findings of these studies in the lands near the project area are important because to date, very little archaeological research has been done solely in the project area or anywhere in the uplands of Hō‘ae‘ae. According to Beardsley’s chronology of settlement, Hō‘ae‘ae and its greater district of ‘Ewa had seen firm and permanent habitation by the 1400s. The population of ‘Ewa fluctuated in the following centuries leading to the arrival of foreigners, but for greater or less, it persisted as
O‘ahu went from an independent kingdom to its defeat to the Maui chiefs and the subsequent defeat to the Hawai‘i Island chiefs in the late 1700s.

The timing of O‘ahu’s loss of sovereignty, which coincided with the arrival of foreigners, marked the beginning of its push into the modern era. Within the next century, the land tenure system would be changed to allow private and foreign ownership of Hawaiian lands. Thus, Hō‘ae‘ae saw the emergence of privately claimed kuleana parcels and the transformation of larger tracts for wide scale agricultural enterprises. Following that, the contemporary development of O‘ahu would further continuously alter the landscape of Hō‘ae‘ae giving it its present face of suburban residential usage.

**Anticipated Finds and Research Questions**

No archaeological resources are known to occur within the current project boundaries, although archaeological sites are present nearby and in neighboring ahupua‘a. This consists of the Waiahole Ditch, which lies just outside the project boundaries to the east, as well as a historic road complex in the neighboring ahupua‘a of Waikele.

The lack of surface finds within the project area is likely due to the extensive historic land use changes and land alterations that have taken place around O‘ahu over the last century. Given the extensive modification of Hō‘ae‘ae during the era of pineapple and sugarcane cultivation, a relevant research question may be to determine if any vestiges of this post-contact land use remain. Research questions may also seek to determine if remnants of other post-contact activities such as ranching or military use also exist, as these activities took place in the nearby areas of Honolulu and Waikele Ahupua‘a. Particularly, a historic map shows an old runway on the project parcel (see Figure 8), and remains of it may be found during the survey.

Research questions will broadly address the identification of possible archaeological resources and may become more narrowly focused based on the kinds of resources that are found. Initial research questions are as follows:

1. Is there any evidence of pre-Contact use of the project area and what is the nature of that archaeological evidence?

2. Are there vestiges of historic use of the project area, such as post-contact agricultural, ranching, or military-associated remnants? Particularly, are there any archaeological resources related to the Waiahole Ditch, which lies just outside the project boundaries or the old runway within the project parcel?

3. If cultural resources are found, how do they relate to the settlement pattern of the wider ‘Ewa Plain region?

4. If archaeological or cultural resources are found, how do they support the past and contemporary oral traditions of the history of ‘Ewa?

Once these basic questions are answered, additional research questions may be developed in consultation with SHPD, tailored to the specific kinds of resources that were identified.
METHODS

Archaeological inventory survey was conducted between January 21 and 24, 2013 and again on November 11 and November 16, 2015. Most of the surface survey was completed during the 2013 work, and subsequently the project was put on hold until 2015. During the 2015 work, the surface survey was completed and subsurface testing was carried out. Windy McElroy, PhD served as Principal Investigator, while field technicians included Lokelani Brandt, BA, Kathryn Burns, BA, Trisha Drennan, MS, Halaulani Davan, Jeffrey Lapinad, and Amanda Sims, BA. Between two and five archaeologists were present per fieldwork day.

For the pedestrian survey, the ground surface was visually inspected for surface archaeological remains, with transects walked through the entire parcel. Archaeologists were spaced approximately 5–10 m apart, depending on vegetation. Of the 82.222-ha (203.175-ac.) survey area, 100% was covered on foot. Daily logs were kept for this work. Vegetation was light to moderate in 2013, consisting of rows of farmed plants or open plots bordered by California grass (Figure 11). The vegetation was thicker during the 2015 survey, with tall California grass affecting visibility (Figure 12). Archaeologists were spaced closer together where vegetation was thicker.

Subsurface testing was accomplished with a backhoe (Figure 13). A total of eight trenches were excavated in various areas of the parcel. Trench locations were approved by SHPD beforehand, with the caveat that trenches could be moved depending on which fields were being farmed and which were fallow. Wall profiles were drawn and photographed, and sediments were described using Munsell soil color charts, a sediment texture flowchart (Thien 1979), and the U.S. Department of Agriculture soil manual. Vertical provenience was measured from the surface. Trench locations were documented on both ends with a Garmin GPSmap 62st unit that is accurate to 3 m. All trenches were backfilled after excavation.

Digital photographs were taken of the survey conditions and the trench excavations and stratigraphy. The scale in all field photographs is marked in 10 cm increments. The north arrow on all maps points to magnetic north. Throughout this report rock sizes follow the conventions outlined in Field Book for Describing and Sampling Soils: Gravel <7 cm; Cobble 7–25 cm; Stone 25–60 cm; Boulder >60 cm (Schoeneberger et al. 2002:2–35). No material was collected and no laboratory analyses were conducted.

Community Consultation

Community consultation was carried out between December 2012 and February 2013, and again between September and November 2015, in conjunction with a Cultural Impact Assessment that is being prepared for the project. This was conducted by Keala Pono archaeologist/ethnographer Dietrix Duhaylonsod, BA. Duhaylonsod contacted The Hawai’i Plantation Village, Bernice P. Bishop Museum, as well as various Hawaiian civic clubs and other interested individuals in person and through phone calls and email. A total of four interviews were completed and site visits were made (Duhaylonsod and McElroy 2015). No cultural resources were identified on the property during consultation. The parcel was thought to have been planted in sugarcane or pineapple in the past.
Figure 11. Open farmland encountered during the 2013 survey. Orientation is to the northeast.

Figure 12. Tall grass that covered parts of the project area during the 2015 survey. Orientation is to the east.
Figure 13. Trenching with the backhoe. Orientation is to the northeast.
RESULTS

Pedestrian survey and subsurface testing were conducted in the 82.222-ha (203.175-ac.) project area. No historic properties were found. Excavation of eight test trenches did not yield any evidence of subsurface archaeological deposits, features, or cultural material.

Surface Survey

The surface survey included 100% of the 82.222-ha (203.175-ac.) project area. No surface archaeological remains were found. This is likely due to the extensive farming that has occurred on the parcel for many years, likely beginning with either sugarcane or pineapple cultivation in the early 1900s. The parcel continues to be farmed today, with plots either planted in vegetables and flowers or lying fallow.

Subsurface Testing

A total of eight trenches (TR) were excavated throughout the project area to determine the presence or absence of subsurface archaeological deposits (Figure 14 and Table 2). No archaeological deposits, features, or cultural material were found. Stratigraphy consisted of natural deposits, aside from one area where a layer of lime fertilizer covered the ground. Most trenches exhibited the remains of plastic farming material, likely indicative of past pineapple cultivation (see Table 2).

TR 1 was excavated near the center of the property, on the north side of the dirt road that bisects the parcel (see Figure 14). The trench measured 6.5 m long and 43 cm wide and was excavated to 155 cm below surface (cmbs). Stratigraphy consisted of a single natural deposit of 5YR 3/3 (dark reddish brown) clay loam (Figure 15). No archaeological deposits or material were identified.

TR 2 was also placed near the center of the property, on the south side of the dirt road (see Figure 14). The trench measured 6.1 m long and 43 cm wide and was excavated to 170 cmbs. Stratigraphy consisted of a thin upper layer of lime fertilizer and a lower natural layer (Figure 16). The upper layer was 10YR 8/2 (very pale brown) silty clay; the lower layer was 5YR 3/3 (dark reddish brown) clay loam. No archaeological deposits or material were identified.

TR 3 was located on the east end of the project area (see Figure 14). The trench measured 6.4 m long and 43 cm wide and was excavated to 135 cmbs. Stratigraphy consisted of a single natural deposit of 5YR 3/3 (dark reddish brown) clay loam (Figure 17). No archaeological deposits or material were identified.

TR 4 was located on the southeast side of the project area (see Figure 14). The trench measured 6.9 m long and 43 cm wide and was excavated to 145 cmbs. Stratigraphy consisted of a single natural deposit of 5YR 3/3 (dark reddish brown) clay loam (Figure 18). No archaeological deposits or material were identified.

TR 5 was located on the south end of the project area (see Figure 14). The trench measured 7.1 m long and 43 cm wide and was excavated to 145 cmbs. Stratigraphy consisted of a single natural deposit of 5YR 3/3 (dark reddish brown) clay loam (Figure 19). No archaeological deposits or material were identified.

TR 6 was located toward the northeast side of the project area (see Figure 14). The trench measured 7.3 m long and 43 cm wide and was excavated to 141 cmbs. Stratigraphy consisted of a
Figure 14. Location of trenches (TR) within the project area (outlined in red).
Table 2. Stratigraphic Descriptions

<table>
<thead>
<tr>
<th>Trench</th>
<th>Layer</th>
<th>Depth (cmbs)</th>
<th>Color</th>
<th>Description</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR 1</td>
<td>I</td>
<td>0–55+</td>
<td>5YR 3/3</td>
<td>Clay loam; 5% roots, 2% rocks; pineapple plastic in upper 65 cm; base of excavation.</td>
<td>Natural</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>3–170+</td>
<td>5YR 3/3</td>
<td>Clay loam; 5% roots, 2% rocks; pineapple plastic in upper 8 cm; base of excavation.</td>
<td>Natural</td>
</tr>
<tr>
<td>TR 2</td>
<td>I</td>
<td>0–3</td>
<td>10YR 8/2</td>
<td>Silty clay; 1% roots, 10% rocks; modern debris, pineapple plastic; smooth, very abrupt boundary.</td>
<td>Remnants of lime fertilizer</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>3–170+</td>
<td>5YR 3/3</td>
<td>Clay loam; 5% roots, 2% rocks; pineapple plastic in upper 8 cm; base of excavation.</td>
<td>Natural</td>
</tr>
<tr>
<td>TR 3</td>
<td>I</td>
<td>0–135+</td>
<td>5YR 3/3</td>
<td>Clay loam; 10% roots, 1% rocks; base of excavation.</td>
<td>Natural</td>
</tr>
<tr>
<td>TR 4</td>
<td>I</td>
<td>0–145+</td>
<td>5YR 3/3</td>
<td>Clay loam; 10% roots, 1% rocks; pineapple plastic in upper 20 cm; base of excavation.</td>
<td>Natural</td>
</tr>
<tr>
<td>TR 5</td>
<td>I</td>
<td>0–145+</td>
<td>5YR 3/3</td>
<td>Clay loam; 10% roots, 10% rocks; pineapple plastic in upper 100 cm; base of excavation.</td>
<td>Natural</td>
</tr>
<tr>
<td>TR 6</td>
<td>I</td>
<td>0–141+</td>
<td>5YR 3/3</td>
<td>Clay loam; 5% roots, 1% rocks; pineapple plastic in upper 20 cm; base of excavation.</td>
<td>Natural</td>
</tr>
<tr>
<td>TR 7</td>
<td>I</td>
<td>0–30</td>
<td>5YR 3/4</td>
<td>Clay loam; 3% roots, 1% rocks; pineapple plastic in upper 20 cm; smooth, diffuse boundary.</td>
<td>Natural</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>30–160+</td>
<td>5YR 3/2</td>
<td>Clay loam; 1% roots, 1% rocks; base of excavation.</td>
<td>Natural</td>
</tr>
<tr>
<td>TR 8</td>
<td>I</td>
<td>0–85</td>
<td>5YR 3/4</td>
<td>Clay loam; 5% roots, 1% rocks; pineapple plastic in upper 10 cm; smooth, diffuse boundary.</td>
<td>Natural</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>85–138+</td>
<td>5YR 3/2</td>
<td>Clay loam; 1% roots, 2% rocks; base of excavation.</td>
<td>Natural</td>
</tr>
</tbody>
</table>

single natural deposit of 5YR 3/3 (dark reddish brown) clay loam (Figure 20). No archaeological deposits or material were identified.

TR 7 was placed on the north end of the project area (see Figure 14). The trench measured 6.4 m long and 43 cm wide and was excavated to 135 cmbs. Stratigraphy consisted of two natural deposits of 5YR 3/4 and 5YR 3/2 (dark reddish brown) clay loam (Figure 21). No archaeological deposits or material were identified.

TR 8 was located toward the north end of the project area, approximately 100 m south of TR 7 (see Figure 14). The trench measured 7.8 m long and 43 cm wide and was excavated to 138 cmbs. Stratigraphy consisted of two natural deposits of 5YR 3/4 and 5YR 3/2 (dark reddish brown) clay loam (Figure 22). No archaeological deposits or material were identified.

Summary of Findings

Pedestrian survey of 82.222-ha (203.175-ac.) in Hōʻaeʻae Ahupuaʻa yielded no evidence of surface archaeological remains. The parcel had been disturbed by farming activity for many years. Subsurface testing, consisting of the excavation of eight trenches, did not identify any subsurface cultural deposits or features. Stratigraphy generally consisted of natural deposits.
Figure 15. TR 1 southwest face profile drawing (left) and photo (right).

Figure 16. TR 2 south face profile drawing (left) and photo (right).
Figure 17. TR 3 north face profile drawing (left) and photo (right).

Figure 18. TR 4 south face profile drawing (left) and photo (right).
Figure 19. TR 5 north face profile drawing (left) and photo (right).

Figure 20. TR 6 southwest face profile drawing (left) and photo (right).
Figure 21. TR 7 southeast face profile drawing (left) and photo (right).

Figure 22. TR 8 northeast face profile drawing (left) and photo (right).
SUMMARY AND CONCLUSION

An archaeological inventory survey was conducted for the New Hope Network development at TMK: (1) 9-4-004:009 in Hōʻaeʻae Ahupuaʻa, ʻEwa District, on the island of Oʻahu. New Hope Network is proposing to develop a community center integrated with activities associated with agricultural use on the 203-acre project site. The archaeological work included pedestrian survey that covered 100% of the project area, as well as test excavations consisting of eight trenches. Due to negative findings, the AIS results are presented as an archaeological assessment per HAR §13–275.

No surface archaeological remains were found during pedestrian survey of the parcel. The entire property has been disturbed by previous and current agricultural use of the area. Likewise, subsurface testing did not yield any evidence of subsurface archaeological features, deposits, or material. Stratigraphy consisted of natural deposits, aside from one area where a thin layer of lime fertilizer covered the ground. Most trenches exhibited the remains of plastic farming material, likely indicative of past pineapple cultivation.

Given the negative findings, archaeological monitoring is not recommended for any ground disturbance at TMK: (1) 9-4-004:009. The proposed project will have no effect on historic properties because none occur within the project area.
ahupua‘a  Traditional Hawaiian land division usually extending from the uplands to the sea.
boulder  Rock 60 cm and greater.
California grass The invasive *Brachiaria mutica* that forms dense stands up to 2 m tall.
cobble  Rock fragment ranging from 7 cm to less than 25 cm.
gravel  Rock fragment less than 7 cm.
heiau  Place of worship and ritual in traditional Hawai‘i.
hoa‘āina  Native tenants that worked the land.
‘ili  Traditional land division, usually a subdivision of an ahupua‘a.
Kahiki  A far away land, sometimes refers to Tahiti.
kama‘āina  Native-born.
Kanaloa  A major god, typically associated with Kāne.
Kāne  The leading of the traditional Hawaiian deities.
kauwā  Outcast or slave caste within the traditional Hawaiian social hierarchy.
kiawe  The algaroba tree, *Prosopis sp.*, a legume from tropical America, first planted in 1828 in Hawai‘i.
kukui  The candlenut tree, *Aleurites moluccana*, the nuts of which were eaten as a relish and used for lamp fuel in traditional times.
kuleana  Right, title, property, portion, responsibility, jurisdiction, authority, interest, claim, ownership.
lo‘i, lo‘i kalo  An irrigated terrace or set of terraces for the cultivation of taro.
Māhele  The 1848 division of land.
maka‘āinana  Common people, or populace; translates to “people that attend the land.”
makai  Toward the sea.
māmaki  *Pipturus spp.*, a small native tree. Fiber from its bark was used to make a kind of coarse tapa. Sometimes spelled mamake in old texts.
mele  Song, chant, or poem.
moku  District, island.
mo‘o  Narrow strip of land, smaller than an ‘ili.
mo‘olelo  A story, myth, history, tradition, legend, or record.
nehu  The anchovy, *Stolephorus purpureus*, used for eating and as a chum for bonito.
‘ōlelo no‘eau  Proverb, wise saying, traditional saying.
oli  Chant.
olonā  The native plant *Touchardia latifolia*, traditionally used for making cordage.
<table>
<thead>
<tr>
<th><strong>stone</strong></th>
<th>Rock fragment ranging from 25 cm to less than 60 cm.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>wao</strong></td>
<td>A general term for inland areas, usually forested and uninhabited.</td>
</tr>
<tr>
<td><strong>wauke</strong></td>
<td>The paper mulberry, or <em>Broussonetia papyrifera</em>, which was made into tapa cloth in traditional Hawai‘i.</td>
</tr>
</tbody>
</table>
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