Archaeological Assessment of Alternative Routes Proposed for the Lydgate to Kapa‘a Bike And Pedestrian Pathway Project

Within the Ahupua‘a of Wailua, South Olohena, North Olohena, Waipouli, and Kapa‘a,

Island of Kaua‘i

By

Hallett H. Hammatt, PhD
and
David W. Shideler, M.A.

Prepared for
Kimura International

by
Cultural Surveys Hawa‘i, Inc.
April 2004
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Abstract

This archaeological assessment addresses the archaeological resources that may be encountered by the proposed Lydgate Park to Kapa’a Bike/Pedestrian Path Project, extending from Lydgate Park in Wailua Ahupua’a north to the Waikae Canal in Kapa’a. The cultural history and archaeological resources of the coastal portions of the traditional Hawaiian land divisions (ahupua’a) of Wailua, South and North Olohena, Waipouli and Kapa’a were evaluated in reference to proposed trail corridor alignments. The work accomplished included primarily a synthesis of the pertinent literature including in particular adaptation and updating of earlier archaeological studies in support of proposed Kūhiō Highway improvement options (Hammatt et al. 1997, Hammatt and Shideler 2003). Additional fieldwork was carried out focused on the coast. Two additional sites were identified: an area of grinding stones (designated site # 50-30-08-823) and a WWII bunker (designated site 50-30-08-891). In general the alternative trail alignments studied were determined to be relatively free of archaeological constraints.

The greatest concerns are suggested to be the need for avoidance of any potential adverse impact to the Hikinaakalae Heiau complex and associated Wailua petroglyph site (sites 50-30-08-105 and 105A; sites on the National Register and part of the Wailua Complex of Heiau National Historic Landmark) and avoidance of any potential adverse impact to Kukui Heiau (site 50-30-08-108; listed on the National Register of Historic Places). The Alternative 3 path plan shows a possible spur trail on the south side of the Hikinaakalae Heiau complex and associated Wailua petroglyph site on the south side of the mouth of the Wailua River. Although this route would primarily or exclusively be on a former railroad berm, State Parks is unresponsive to this undertaking. The Alternative 3 path plan also envisions the construction of a new bike/pedestrian path bridge crossing the Wailua River on the seaward side of the existing bridges. It appears that such a bridge could be constructed without adversely impacting the Wailua petroglyph site. It is recommended, however, that if this new bridge alternative is pursued, that State Parks and the State Historic Preservation Division be consulted early regarding possible further study to better delimit the extent of this petroglyph field. Kukui Heiau on Alakukui Point in coastal South Olohena extends from the high water line into the adjacent privately held condominium lands. It is not possible to develop a trail along the coast here on public lands without going over this national register Hawaiian temple. It is recommended that consideration of path routes near the Hikinaakalae Heiau complex and Kukui Heiau are probably best deferred unless State Parks changes their position regarding the former or consideration is given to acquiring public access to a strip of privately held property just inland of Kukui Heiau.

After the National Register heiau site issues, the greatest archaeological concern for this project is suggested to be potential impact to human remains. As a generalization, significant archaeological resources (other than those included in the Wailua Complex of Heiau) are more likely to be encountered in the sandy deposits at the coast than further inland. Two concentrations of human burials have been documented along the proposed routes in Waipouli/Kapa’a and in the vicinity of the Coco Palms. The present route of Kūhiō Highway and the coastal routes through Waipouli/Kapa’a Town appear the most likely area for burial disturbance among the proposed road corridor segments. Low burial sensitivity is associated with more inland routes. In addressing burial concerns potentially associated with the bike and pedestrian pathway project consultation with the Kaua’i/Ni’ihau Islands Burial Council, and an archaeological monitoring program with on-site monitoring in the areas indicated above are recommended.
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### Glossary

(All definitions follow Pukui and Elbert’s *Hawaiian Dictionary*, 1986 ed.)

<table>
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<th>Definition</th>
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<tr>
<td><em>ahupuaʻa</em></td>
<td>Land division usually extending from the uplands to the sea.</td>
</tr>
<tr>
<td>‘āpana</td>
<td>Land parcel, often a piece of a Land Commission Award.</td>
</tr>
<tr>
<td>‘ātowai</td>
<td>Ditch, canal, typically for irrigation of fields.</td>
</tr>
<tr>
<td>Haku ‘āina</td>
<td>Landowner, Landlord.</td>
</tr>
<tr>
<td>Hānai</td>
<td>Foster child, adopted child.</td>
</tr>
<tr>
<td>Hau</td>
<td>A lowland tree (<em>Hibiscus tiliaceus</em>).</td>
</tr>
<tr>
<td>Herau</td>
<td>Pre-Christian place of worship, shrine.</td>
</tr>
<tr>
<td>Hōlua</td>
<td>Ancient sled used on grassy slopes, sled course.</td>
</tr>
<tr>
<td>‘ili</td>
<td>Land section, usually a subdivision of an <em>ahupuaʻa</em>.</td>
</tr>
<tr>
<td>Kalo</td>
<td>Taro (<em>Colocasia esculenta</em>).</td>
</tr>
<tr>
<td>Kapu</td>
<td>Taboo, prohibitions.</td>
</tr>
<tr>
<td>Konohiki</td>
<td>Headman of an <em>ahupuaʻa</em> land division under a chief.</td>
</tr>
<tr>
<td>Kukui</td>
<td>Candlenut Tree (<em>Mauritis moluccana</em>).</td>
</tr>
<tr>
<td>Kula</td>
<td>Plain, field, open country, pasture.</td>
</tr>
<tr>
<td>Kuleana</td>
<td>Right, concern, property.</td>
</tr>
<tr>
<td>Kupua</td>
<td>Demigod or culture hero.</td>
</tr>
<tr>
<td>Loʻi</td>
<td>Irrigated terrace, especially for taro, but also for rice.</td>
</tr>
<tr>
<td>Loko puʻuone</td>
<td>Fish pond near the shore, as connected to the sea by a stream or ditch.</td>
</tr>
<tr>
<td>Lua</td>
<td>A type of dangerous hand-to-hand fighting, <em>Lua</em> holds were named.</td>
</tr>
<tr>
<td>Māhele</td>
<td>Land division of 1848, often used to refer to subsequent <em>kuleana</em> act land divisions</td>
</tr>
<tr>
<td>Makaʻainana</td>
<td>Commoner, people in general.</td>
</tr>
<tr>
<td>Makai</td>
<td>Directional, toward the sea.</td>
</tr>
<tr>
<td>Mauka</td>
<td>Directional, toward the uplands.</td>
</tr>
<tr>
<td>Moku</td>
<td>District</td>
</tr>
<tr>
<td>Moʻo</td>
<td>Narrow strip of land, smaller than an ‘ili, also lizard, dragon, water spirit.</td>
</tr>
<tr>
<td>Noni</td>
<td>Indian mulberry (<em>Morinda citrifolia</em>).</td>
</tr>
<tr>
<td>Pāhele</td>
<td>House lot</td>
</tr>
<tr>
<td>‘Uiola</td>
<td>Sweet potato (<em>Ipomoea batatas</em>).</td>
</tr>
<tr>
<td>Wauke</td>
<td>Paper mulberry (<em>Broussonetia papyrifera</em>). The bark was made into tough bark cloth.</td>
</tr>
</tbody>
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I. INTRODUCTION

A. Project Background

This archaeological assessment study addresses the archaeological resources that may be encountered by the proposed Lydgate Park—Kapa‘a Bike/Pedestrian Path Project, extending from Lydgate Park in Wailua Ahupua‘a up to the Waikae'a Canal in Kapa‘a Ahupua‘a. Cultural Surveys Hawai‘i has previously conducted two studies of much of the same area (Hammati et al. 1997 and Hammati and Shideler 2003) in support of proposed Kapa‘a By-pass (Relief Route) projects. The present study builds on these earlier studies adapting and updating the data compiled to address the alignments presently under consideration for the Bike/Pedestrian Path project. The present study adapts the findings of the earlier studies to the presently considered alignments, incorporates the results of other studies that have subsequently become available, and incorporates the results of additional fieldwork focused on the most sensitive portion of the route along the coast. A summary discussion reviews archaeological concerns and suggests appropriate mitigation measures.

B. Description of the Project Area

Our study considers a large block of land in east Kaua‘i extending west from the coast inland approximately one kilometer and extending from Lydgate Park on the south side of the Wailua River mouth through Kapa‘a Town on the north (Figures 1 to 4). Descriptions of these lands are provided in the descriptions of the natural setting for each ahupua‘a (present report sections IIA1 for Wailua, IIB1 for Olohe, IIC1 for Waipouli, and IID1 for Kapa‘a). Three different alternative path routes are under present consideration; each of which involves some complexity. These are described in detail below.

The southern terminus of the proposed trail system would link up with the existing northern end of a previous trail project at the existing Lydgate Bike/Pedestrian Path cul-de-sac near the north end of Lydgate Park in the immediate vicinity of the northwest corner of the Aloha Beach Resort. The stated position of State Parks staff (Ms. Martha Yent, personal communication) that the trail should not come close to the Hikinaakalā Heiau and Pu‘u honua o Hauola complex pretty much dictates that the south end of the proposed trail system would link up with the end of the existing concrete path on the seaward side of Kuhiō Highway just south of the Wailua River mouth. The main path, continuing north, would typically be a 10-12 foot wide concrete path. The path would follow a short section of an old railroad alignment before crossing the Wailua River. The different alternatives under consideration for how the trail system should proceed to the north are summarized under the three alternative headings below. A short summary of how each alternative differs from the preceding alternatives concludes each discussion.

1. Alternative 1

The Coastal Option of Alternative 1

The path would cross the Wailua River on a cantilevered new bike/pedestrian bridge to be constructed off of the seaward side of the existing cane haul road bridge. The path would then proceed north on the seaward side of Kuhiō Highway as a doublewide boardwalk on the makai side of an existing rock wall (and a new northern continuation of this low rock wall) to a point
Figure 1: Portion of USGS Kapa’a Quad map showing general location of project area (all alternative alignments are shown)
Figure 2: Tax Map Key showing general location of project area area (all alternative alignments are shown)
Figure 3: Map of south half of project area showing all alignments under consideration
Figure 4: Map of north half of project area showing all alignments under consideration
just south of the old Sea Shell Restaurant where different options begin to be considered. These are summarized in the following overviews of Alternative 1 routes: 1) coastal option, 2) the inland option, 3) the Wailua House lots extension, and 4) the Kapa‘a Town extension.

As presently conceived, the coastal option of Alternative 1 consists of various configurations on the seaward side of Kūhiō Highway. From a point just south of the old Sea Shell Restaurant the main 10-12 foot wide concrete path would continue up past the mauka side of the former Seashell Restaurant and then proceed north up the makai side of Papaloa Road. An existing pedestrian access between the Hale Awapuhi Condos and the Kapa‘a Sands Condos might be widened as a spur to the trail for beach access. The main coastal route would continue up Papaloa Road turning seaward between the Lēa Nani Condos and the Kau‘a‘i Sands Hotel with the widening of an existing access to Kukui Heiau. A short spur path with look out might be provided to improve the access to Kukui Heiau and possibly provide some interpretation of this National Register of Historic Places site.

An alternate pedestrian path route, 5 feet wide, might also run along the coast from a point just south of the Sea Shell Restaurant joining up with the main seaward path by Kukui Heiau.

The main coastal option of the Alternative 1 trail would then head north along the coast on the seaward side of Kau‘a‘i Sands Hotel, the Aston Islander on the Beach and the Kau‘a‘i Coast Resort at the Beachboy, the Kau‘a‘i Coconut Beach Hotel and the Mokihana of Kau‘a‘i. In front of the latter resort and the adjacent Bullshed Restaurant a boardwalk might be built over an existing seawall. A bridge would need to be built across the Uhelekwawawa Canal to support this proposed alignment. The coastal option of the Alternative 1 path might head west back to Kūhiō Highway on the Southside of the Waipouli Beach Resort (Singleton Development) or might continue along the coast and then head up to the highway on the north side of the Waipouli Beach Resort parcel. Certain improvements would be indicated for the stretch along Kūhiō Highway to be utilized extending north to Niulani Street. These might include widening sidewalks and providing bike/pedestrian warning signs. A crossing of the highway to a mauka path extending west along the south side of the Uhelekwawawa Canal might be indicated. At Niulani Street the path would head back makai turning closer to the coast on Ala Road and then running north up Moamakai Road, to the vicinity of the mouth of Waikae Canal. The county might acquire Niulani Street and convert it to a local road with bike/pedestrian priority. The path could connect with an earlier trail segment crossing the pedestrian bridge across the Waikae Canal at the coast or could continue back to the Highway just south of the Kapa‘a Hongwanji Mission. Some improvements extending south from the Hongwanji Mission along the makai side of Kūhiō Highway to a possible inland segment along Panihi Road may be indicated.

The Inland Option of Alternative 1

The inland option of Alternative 1 under consideration would run inland on the south side of Hale‘iwa Road on up to the Wailua House lots extension option. From Hale‘iwa Road, the inland option of Alternative 1 would turn north, following old cane haul roads running mauka of the Wailua Family Restaurant and the Wailua Shopping Plaza, crossing the Temporary Bypass Road, and continuing north to the large canal that parallels Kūhiō Highway on the mauka side. The trail would continue north on the makai side of this canal to where it runs seaward just north of the Waipouli Town Center. Two pedestrian bridges might be constructed west and north across the canal with the path continuing north inland of the Kau‘a‘i Village Shopping Center. The path might continue north along the east side of the northwest trending drainage canal to the
A different route of the coastal option of Alternative 2 would continue north of the Lae Nani Condos on the east side of Papaloa Road and then continue up the east side of Kūhiō Highway past the Coconut Marketplace and the extensive Plantation Hale complex to the northwest corner of the Waipouli Beach Resort where it would rejoin the coastal route of the coastal option of Alternative 2.

Certain improvements would be indicated for the stretch along Kūhiō Highway to be utilized extending north from Kamoa Road to Niulani Street. These might include widening sidewalks and providing bike/pedestrian warning signs. A crossing of the highway to a mākai path extending west along the south side of the Uhelekawawa Canal might be indicated. At Niulani Street the path would head back mākai turning closer to the coast on Ala Road and then running north up Moanakai Road, to the vicinity of the mouth of Waikae Canal. The county might acquire Niulani Street and convert it to a local road with bike/pedestrian priority. The path could connect with an earlier trail segment crossing the pedestrian bridge across the Waikae Canal at the coast or could continue back to the Highway just south of the Kapa’a Hongwanji Mission. Some improvements extending both a short distance south and north from the Hongwanji Mission along the mākai side of Kūhiō Highway to a possible inland segment along the south side of the Waikae Canal may be indicated.

This coastal option of Alternative 2 differs from the coastal option of Alternative 1 primarily in that Alternative 2 includes a long stretch of path along streets, specifically Papaloa Road north of the Lae Nani condos and then along the mākai side of Kūhiō Highway all the way north to Niulani Street. Other differences are that Alternative 2 does not include a route along the sea north from the Sea Shell restaurant, does not include an approach to Kukui Heiau and Alternative 2 traverses north on the west side of the Mokihana of Kaua‘i and Bull Shed restaurant.

The Inland Option of Alternative 2

The inland option of Alternative 2 is very much the same as the inland option of Alternative 1 with the only substantive difference appearing to be that the inland option of Alternative 2 does not include a spur route down Panihi Road.

The Wailua House lots Extension of Alternative 2

A portion of the proposed path may be extended straight up the north side of the Wailua House lots, using remnants of cane haul roads, all the way up to a Nounou Mountain Trail Easement. No branch of this route would extend to the Wailua House lots Park.

The Kapa’a Town Extension of Alternative 2

The Kapa’a Town extensions of Alternative 2 are the same as for Alternative 1.

3. Alternative 3

The path would cross the Wailua River on a new bike/pedestrian bridge to be constructed on the seaward side of the existing bridges. The path would then proceed north on the seaward side of Kūhiō Highway to Kuamo’o Road. Where different options begin to be considered. These are summarized in the following overviews of the 1) coastal option, 2) the inland option, 3) the Wailua House lots extension, and 4) the Kapa’a Town extension.
West of the Kaua‘i Village Shopping Center the inland option might continue north along the northwest trending drainage canal to the vicinity of the west end of Panihi Road. In the vicinity of the west end of Panihi Road three different inland routes continue to the north. One segment would continue down Panihi Road to Kūhiō Highway and then proceed north along the highway crossing to the makai side at mid block. Another segment would continue from the vicinity of the west end of Panihi Road up the northwest side of the drainage canal to the Waikae Canal and then parallel the east side of the canal to the KIUC base yard. A third segment would continue from the vicinity of the west end of Panihi Road up the northeast side of the wetlands before joining the canal near the KIUC Base yard. The path would then sweep around the north side of the base yard and run along the south side of Waikae Stream back to Kūhiō Highway.

The Wailua House lots Extension of Alternative 3

A portion of the proposed path may be extended up the southern side of Hale‘i‘lio Road into the Wailua House lots all the way up to a Nounou Mountain Trail Easement. Another possible branch of this route would take a large U-turn to the south off of Hale‘i‘lio Road, following Nounou Road and Lanakila Road, before rejoining Hale‘i‘lio Road and continuing on up to the Nounou Mountain Trail Easement.

The Kapa‘a Town Extension of Alternative 3

At the Waikae Bridge, the project joins a previously planned Kapa‘a-Keālia path running close to the coast. There may in the future be a connection from the vicinity of the KIUC Base yard, west up the south side of the Waikae Canal and then north to the Kapa‘a New Park inland of Kapa‘a Town. Another spur route may extend up Kawaihau Road from Kūhiō Highway, possibly differing from Alternatives 1 and 2 by meandering across a stretch of undeveloped land, before connecting to the end of the existing Kawaihau bike/pedestrian path.

Scope of Work

The archaeological assessment scope of work included:

1. Historical research to include study of archival sources, historic maps, Land Commission Awards and previous archaeological reports to construct a history of land use and to determine if archaeological sites have been recorded on or near this property.

2. Field inspection of the project area to identify any surface archaeological features and to investigate and assess the potential for impact to such sites. This assessment will identify any sensitive areas that may require further investigation or mitigation before the project proceeds.

3. Preparation of a report to include the results of the historical research and the fieldwork with an assessment of archaeological potential based on that research, with recommendations for further archaeological work, if appropriate. It will also provide mitigation recommendations if there are archaeologically sensitive areas that need to be taken into consideration. The generated data will assist in selection of a preferred alternative.
C. Methods

This archaeological assessment study builds on two previously conducted studies by Cultural Surveys Hawai‘i that cover the same general area entitled Archaeological Inventory Survey for the Kūhiō Highway Widening and Bypass Options within the Ahupua‘a of Wailua, South Olohe‘na, North Olohe‘na and Waipouli and Kapa‘a, Island of Kaua‘i (Hammatt et al. 1997; reviewed and accepted by the State Historic Preservation Division in 1998) and Archaeological Study in Support of Proposed Kūhiō Highway Improvements Kapa‘a By-Pass) Hanamā‘ulu to Kapa‘a Ahupua‘a Kaua‘i (Hammatt and Shideler 2003; reviewed and accepted by the State Historic Preservation Division in 2004). The data developed in these prior studies has been adapted to the configuration of alternative alignments for the proposed Lydgate Park-Kapa‘a Bike / Pedestrian Path under present consideration.

Additional research was conducted at the State Historic Preservation Division in order to update the work incorporating the results of recent studies.

Additional fieldwork was conducted by David W. Shideler, M.A. and Todd Tulchin B.A. under the overall supervision of Hallett H. Hammatt Ph.D. This fieldwork focused on the coastal proposed alignments that are regarded as the area of greatest concern for archaeological resources.

Preliminary consultations with the State Historic Preservation Division and State Parks were held regarding sites present and archaeological concerns.
II. HISTORIC AND ARCHAEOLOGICAL BACKGROUND

Alternative alignments for the proposed Lydgate Park-Kapa'a Bike / Pedestrian Path under present consideration cover land within five ahupua'a, from south to north: Wailua, South and North Oloheha, Waipouli, and Kapa'a. In terms of historic perspective, emphasis is placed on Wailua, Waipouli, and Kapa'a - the three ahupua'a that have the most comprehensive source material. North and South Oloheha are discussed briefly. Based on the dearth of historic documentation these Oloheha ahupua'a did not play a major role in late pre-history and in the early historic era. Additionally much of the Oloheha lands were in sugar cane for many decades and therefore little in the way of archaeological constraints would be expected within the ma'uka path alternatives through these ahupua'a. For example, there is only one Land Commission Award in Oloheha Ahupua'a inland. The ahupua'a traversed by the alternative alignments for the proposed Lydgate Park-Kapa'a Bike/Pedestrian Path will be discussed separately in turn from south to north. The research on previous archaeology is generally incorporated into the historic background to form a comprehensive pattern of settlement within the ahupua'a.

A. Wailua

1. Natural Setting of Wailua

Wailua Ahupua'a, located on the eastern side of the island of Kaua'i, is exposed to the prevailing northeast trade winds and thus experiences 40 to 50 inches of rainfall annually at the seashore. This rapidly increases to 75 to 100 inches in more inland (western) localities. The Wailua River and its tributaries comprise the major drainage system for the central area of the Līhu'e basin. The Līhu'e basin is bounded by the Haupu Mountains to the south, Wai'ale'ale to the west and the Makaleha Mountains to the north. Sea level changes in recent geologic time on this side of Kaua'i have submerged the eastern edge of the Līhu'e basin, resulting in the deposition of alluvium, beach and dune sand, and lagoon clays and marls along the seaward (eastern) side of the Kalepa-Nonou Ridge through which the Wailua River flows.

The ahupua'a of Wailua is situated in the old moku (or district) of Puna, but today is located in two separate judicial districts. North of the Wailua River it is in the district of Kawaihau and south of the river it is in Līhu'e District. It is the largest ahupua'a in both district systems, stretching from the shoreline to its ma'uka extent at Wai'ale'ale (elev. 5080 ft.), and encompassing most of the small streams and tributaries which flow into the Wailua River - the largest and singularly navigable river in the State (Handy and Handy 1972:245). Wailua Ahupua'a contains 20,255 Acres, 2,800 in Wailua Makai, and 17,455 in Wailua Mauka (Commission of Boundaries Record, Kauai Vol. 1: 37).

2. Origin of the Place Name - Wailua

The most popular and literal meaning of the place name Wailua is "two waters," supposedly referring to the two main forks (north and south) that flow together to form the Wailua River. However, as Lyle Dickey says (1916:15) "this explanation never seems to occur to a native Hawaiian." Other meanings include "water pit" referring to the pools at the bottom of several waterfalls along the river's course (Damon 1931:360) and "ghost or spirit" (Kikuchi 1973:5).
Perhaps even more plausible is the explanation that it comes from the name of the high chief - Wailuanuiaho‘ano. Kamakau (1976:7) states:

Wailuanui-a-Ho‘ano was born in ‘Ewa, O‘ahu, and his descendants went to Kaua‘i and to Maui, and wherever they settled they called the land after the name of their ancestor. Wailua was a song of La‘akona, ancestor of the ‘Ewa family by Ka-ho‘ano-o-Kalani. His name, Wailuanui-a-Ho‘ano, came from adding the name of his mother.

Other early traditional and non-traditional data on the Wailua area are recorded on maps constructed from data collected during 19th century surveys of the Boundary Commission and later, during the early 20th century, Territory of Hawaii and U.S. Geological Survey topographical surveys. E.S. Craighill Handy (1940) and Elizabeth and E.S. Craighill Handy (1972) collected ethnohistorical data focusing on agriculture in some detail. Many traditions and legends are related to geological features in Wailua.

3. Cultural History of Wailua

Archaeological and ethnographic evidence reinforce one another and indicate that Wailua was the religious and political center of Kaua‘i during ancient times. There were more heiau in Wailua than in other ahupua‘a on Kaua‘i (See Bennett 1931). The lower portion of the river valley, makai of Nona‘au ridgeline to the north and Mauna Kapu to the south, was known as Wailuanuiho‘ano (Wailuanuiaho‘ano) or alternately Wailuanuilani. It was an area so sacred that it was kapu to maka‘āinana or commoners. Only the ali‘i, their kahuna and retainers could reside or visit here (Dickey 1916). There have been at least seven major heiau recorded in this relatively small area of the ahupua‘a (Ching 1968:28). The Wailua Complex of Heiau was declared a National Historic Landmark in 1962 (see Figure 8).

A survey of traditional mythological literature shows Wailua prominently associated with some of Hawai‘i’s most famous legendary and historical figures including Maui, Kawaiolono, Pikoikawa, La‘amaikaikamalu, Mō‘ikeha, La‘amaikahiki and Ka‘ililauokekoa (Dickey 1916; Forand 1916-19; Kalākaua 1888; Rice 1923). These associations suggest a particularly ancient and continuous occupation of the area. Martha Yent (1989:1) suggests that because of the traditional connection of several Wailua heiau with Mō‘ikeha as well as the mythical menihune, the religious complex there may have been constructed circa A.D. 1200.

A famous O‘ahu chief, Mō‘ikeha (dates ca. A.D. 1340-1360 by the 20 years per generation count), according to tradition, sailed off to Kahiki and on his return settles in Wailua, Kaua‘i, where the Pu‘u family of chiefs welcome him. "Upon the death of Pu‘u, Mō‘ikeha becomes the Ali‘i nui of Kaua‘i and remained there" (Forand II 1879:53-54).

There is a chant associated with Mō‘ikeha’s favorite son, Kila (by the Kaua‘i chiefess Ho‘oipoikamalani) who also traveled to Kahiki. Kila is sent to seek a new chief and at each place he stops along the way he is asked who he is and what has become of Mō‘ikeha. He answers that Mō‘ikeha is alive and "Dwelling at ease on Kaua‘i where the sun rises and sets; where the surf of Makaiwa curves and bends; by the changing blossoms of the kūkui of Pu‘u; by the broad waters of Wailua, he will live on Kaua‘i and die on Kaua‘i" (Beckwith 1989:355-356).

Also pointing to the great antiquity and importance of the settlement at Wailua is that the area is, in recorded traditions, the site of many "firsts." Dickey records claims that the first kalo
and 'uala on Kaua'i were said to be planted by Mōʻikeha here (Dickey 1916:24). Mōʻikeha’s hūnai son Laʻamaikaheiki, brought the first temple drum to the islands and placed it at the heiau of Holo Holo'Hokū at Wailua (Fornander 1878-85:II,62). Here also were introduced the first hau trees on Kaua'i at Hīhiakalahau along the river below Poliʻahu Heiau, and the first coconut tree in the islands at Molohua, just north of the river mouth (Dickey 1916:16,24,30).

4. Early Period After European Contact

Few Westerners visited Wailua in the years just after Cook’s arrival, hence detailed descriptions of the area are scarce. Most of the voyagers during the late eighteenth and early nineteenth centuries landed at Waimāna, on the southwestern side of the island, a location that would eventually overshadow Wailua in its royal importance because of the opportunities there to associate and trade with these foreigners (Lyddate 1920).

However, in 1793, Wailua was still the “capital” of Kaua‘i and Capt. George Vancouver, who had already visited the island several times under Capt. James Cook and later on his own, knew this fact well and tried to land there in March. Although conditions prevented him from anchoring, Vancouver observed the area from off shore and gave this description:

This part seemed to be very well watered, as three other rapid small streams were observed to flow into the sea within the limits above mentioned. This portion of Attouai, 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 the regent, with the young prince Tamanerrie, were now living... (Vancouver 1798:221-222).

Missionary Hiram Bingham passed through Wailua twice in 1824 and visited the birthplace of King Kaumuali‘i (the pōhaku ho‘ohānau), a hōlau slide and the lower falls on the south fork of the river, but left no clues as to the size of extent of the settlement there (Bingham 1847:220, 231).

In October 1846 members of the U.S. Exploring Expedition came to Wailua and recorded the following:

The country on this route was uninteresting, until they reached Wailua, the residence of Deborah, a chief woman of the islands, readily known as such from her enormous size, and the cast of her countenance. She has a person living with her called Olivia Chapin, who speaks English, and has learned how to extort money. Deborah has about forty men in her district; but they were absent, being employed in the mountains cutting timber to pay the tax to the king. 

Near Deborah’s residence are extensive fishponds belonging to her, which have been made with great labour: they are of different degrees of saltiness. The fish are taken from the sea when young and put into the saltiest pond; as they grow larger, they are removed into one less salt, and are finally fattened in fresh water. While our gentlemen were there, Deborah received young fish in payment of the poll-tax, which were immediately transferred to her ponds.
Wailua, (two waters,) was formerly a place of some importance. It is situated on a small stream of the same name, in a barren, sandy spot.

Deborah furnished them with a double canoe, to carry them up the river to visit the falls. Taking the western branch, they ascended it for two and a half miles.

There are many good taro-patches and sugar plantations on its banks. They landed in what appeared to have been an old crater, in front of a basin, with high perpendicular bank. The low grounds along the river are extremely fertile, producing bread-fruit, sugar-cane, oranges, etc. The latter, however, are suffering from the blight, and some of the trees were covered with a black smut, produced by a species of aphid.

In ascending, an insulated black rock is passed, known as the "Muu," which has been detached from a high rocky bluff, that is remarkable for the dikes visible in it.

They afterwards ascended the bank, two hundred feet high, and crossed about half a mile to the falls, over a plain covered with grass and wild sugar-cane. The stream was very small, running sluggishly, and passed over a precipice of barren rocks, one hundred and sixty feet in height. Although there is neither tree nor shrub along the stream above the fall, the valley beneath is filled with them; the most conspicuous was the pandanus. The whole scene is picturesque. Below, the falls present a very curious appearance, the wind continually breaking and dispersing the water in heavy showers over a great variety of ferns, which are growing in the crevices of the rocks. The volume of water does not exceed ten hogsheads a minute.

In the basin beneath were found many fine specimens of Neritina granulata, and two other species were found further down the stream, about four feet below the surface; these were procured by diving. Mr. Rich obtained specimens of the plants. Mr. Peale found but few birds; ducks were abundant on the river's banks, some of which were killed. Rushes were growing along the banks from eight to ten feet in length, four or five feet under the water; besides these, the banks were covered with hibiscus and ricinus (castor-oil trees), growing wild (Wilkes 1846:IV, 68-69).

Debora Kapaule, the former wife of Kaua'i sovereign Kaumuali'i, took up residence in Wailua shortly after the rebellion of 1824 in which Kaumuali'i's son George led a revolt which was put down by forces loyal to Kamehameha II. Debora, who remained loyal to Kamehameha, was granted lands at Wailua by Ka'ahumanu, kuhina nui or regent of the islands. Her fishpond, Akaimiki, that still exists on the grounds of the Coco Palms Hotel was of the loko pu‘uone type. Another was said to be located just mauka of the hotel's historic coconut grove (Foreign Testimony 1848:IX, 55-56; XIII 72; Kikuchi 1987:9; Lydgate 1920). All alternative alignments avoid these ponds.

It is important to note the recording of only "about forty men" in the district. This is seemingly a major reduction in settlement from Vancouver's 1793 observation of an "extensive village." The apparent decrease in population may be attributed to the decimation of native Hawaiians by western-introduced diseases and possibly also by a movement of people to the Waimea area which, by 1840, had become the center of trade and politics on Kaua'i.
5. The Mahele Period

During the first privatization of land, the Mahele, only fifty-one parcels totaling approximately 75 acres were awarded to twenty-seven individual claimants in Wailua. All of the parcels are within approximately a mile of the shore. Of the parcels on which kalo was cultivated on the north side of the Wailua River, most were watered by 'auwai sourced in 'Ōpaeka'a (or Waiuluaki) Stream as shown in the Lydgate Map of 1920 (Figure 5). On the south side of the river (in or near the present Lydgate Park), three Land Commission Awards LCA's 3403:2, 3555:2, and 3567:2, attest to the existence of house sites, along the shore. The other house sites were on the north side of the river near the shore or just slightly inland.

There are 11 other ahupua'a on Kaua'i with greater numbers of claims at the time of the Mahele (1848-1855). When it was the former religious, economic and social center of Kaua'i more land would have been under cultivation, not only for the lo'i and kula, but other traditional crops, such as wauke and noni, bananas, woods and fishponds. The fact that so few claimed land in Wailua at the time of the Mahele, no doubt reflects Wailua's changed status after trading ships and missionaries arrived. Communities grew up around the new social and economic centers, especially on the south side of the island and drew people away from their former establishments.

The Wailua claims mention 53 'āpama of which 51 are awarded. These comprise 122+ lo'i, 5 mo'o, 24 house lots, 8 kula (and more than a dozen pastures are mentioned by name), as well as one (1) graveyard belonging to Josiah Kaumuali'i, a burying place called Mahupuoni between two house lots on the sand dunes, Deborah Kapule's royal fishponds right behind the dunes, and 3 orange trees. Over a dozen 'auwai or ditches are mentioned as boundaries. Most of the house lots are at or near the shore, although Oliwa Chapin, Josiah Kaumuali'i and other illustrious personages had homes a bit farther inland. The majority of the lo'i and mo'o are inland along the floodplain (See Table 1: Chart of Land Use below).

Almost all of the awardees originally received their land from Deborah Kapule "in the days of Kaikioewa" or "in the days of Ka'ahumanu" indicating a rather short tenancy since around the Kaua'i Rebellion of 1824 or later. Kapule's claim also mentions land in Waihe'e which includes a heiau. In Wailua she claims a house lot and taro patches and two fishponds. Apparently when Deborah Kapule received the Wailua lands from Ka'ahumanu, she served as komohiki for the ahupua'a or in her own words, the haku 'aina or landlord (Native Register 1848:IX,55-56). Apparently, she later relinquished this position to her son Josiah Kaumuali'i (Foreign Testimony: XII, 74-75).

Stauder, Cleeland and Frazier have traced the genealogy of Josiah (Josiah) Kaumuali'i and the title to his property in their article on the Wailua birthstones and heiau (Archaeology on Kaua'i, Vol 5, No. 3, Dec. 1976:pps. 3, 5, 6, 7, 11). Within Kaumuali'i's 17 acres, 1 acre was described in LCA 3561 as a family cemetery known as Holoholo-kū (p.7). This 1-acre lot was bequeathed to Queen Kapū'olani, but because she predeceases, J. Kaumuali'i's wife's second husband, J. Kaee, inherited it. "As late as 1900 the name Holoholo-kū designated a cemetery" (Ibid.). Another of J. Kaee's wives, Jessie Kapaihi, inherits the cemetery from him and mortgages it as a "house lot." The authors of the article hypothesize this redesignation in land use may have helped in the mortgage proceedings. Stauder et al. cite a Mr. Gerald Fowke who noted that late in the 1920s the property becomes state-owned.
Figure 5: Portion of J. M. Lydgate 1920 Map of Part of Wailua Kai, Showing Land Commission Awards Registered Map 269
<table>
<thead>
<tr>
<th>LCA no.</th>
<th>Claimant</th>
<th>'Ili of the 'Ahupua'a</th>
<th>Land use</th>
<th>No. of 'Apana</th>
</tr>
</thead>
<tbody>
<tr>
<td>3111</td>
<td>Kapule, Deborah</td>
<td>Kapeleula Pakoli Kaimoki Kawaiikī Pohoua</td>
<td>house lot 2 lo'i 2 fishponds</td>
<td>1 (4 acres, 2 roods, 9 roods) 1 (3 acres, 3 roods, 15 roods) 1 (5 acres, 29 roods)</td>
</tr>
<tr>
<td>3226</td>
<td>Chapin, Oliva</td>
<td>Kuemanu Pāpohaku</td>
<td>house lot, 4 lo'i and kula</td>
<td>1 (1 acre, 3 roods, 7 roods) 1 (4 acres, 2 roods, 32 roods)</td>
</tr>
<tr>
<td>3238</td>
<td>Hawea / Kawea</td>
<td>Kahakoa Village Kahihei / Heikei</td>
<td>sleeping house, 1 lo'i</td>
<td>1 (36 roods) 1 (2 roods, 17 roods)</td>
</tr>
<tr>
<td>3248</td>
<td>Hanalea / Hanale / Hanare / Henry</td>
<td>-</td>
<td>claims in Nāwiliwili, lives in Wailua</td>
<td></td>
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<tr>
<td>3264</td>
<td>Lanikaula</td>
<td>Hi'o, Kamani</td>
<td>7 lo'i house lot</td>
<td>(1 acre, 2 roods, 22 roods) 1 (2 roods 34 roods)</td>
</tr>
<tr>
<td>3281</td>
<td>Wahine / Wahineai</td>
<td>Kahakoa Lualikamai / Inaiokama</td>
<td>house lot, 2 lo'i</td>
<td>1 (30 roods) 1 (1 acre, 29 roods)</td>
</tr>
<tr>
<td>3282</td>
<td>Wahapuu, Sera</td>
<td>Halepuola Kahakoa Village</td>
<td>2 lo'i house lot</td>
<td>1 (3 acres, 3 roods) 1 (14 roods)</td>
</tr>
<tr>
<td>3302</td>
<td>Maawe / Maawi</td>
<td>Kahakoa Village Puhauula</td>
<td>house lot, 6 lo'i</td>
<td>1 (27 roods) 1 (1 acre, 1 rood, 20 roods)</td>
</tr>
<tr>
<td>3303</td>
<td>Makaiki / Makaiken</td>
<td>Kapalai (Waioo) Kapuaipounohua</td>
<td>5 (1*) lo'i house lot</td>
<td>1 (2 roods, 20 roods) 1 (27 roods)</td>
</tr>
<tr>
<td>3345</td>
<td>Nakai</td>
<td>Kapalai Kahakoa Village</td>
<td>2 lo'i house lot</td>
<td>1 (1 acre, 31 roods) 1 (32 roods)</td>
</tr>
<tr>
<td>3346</td>
<td>(Location index)</td>
<td>See also 3345</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3367</td>
<td>Noi</td>
<td>Hapuupuu Kahakoa</td>
<td>3 lo'i and kula, house lot</td>
<td>1 (2 roods, 9 roods) 1 (35 roods)</td>
</tr>
<tr>
<td>3368</td>
<td>Nakaakai</td>
<td>Maulili Palakawai</td>
<td>3 lo'i house lot (also mentions a claim in Waimea)</td>
<td>1 (2 roods, 22 roods) 1 (2 roods, 4 roods)</td>
</tr>
<tr>
<td>No.</td>
<td>Place</td>
<td>Description</td>
<td>Containing a hetau</td>
<td>Area</td>
</tr>
<tr>
<td>-----</td>
<td>-------</td>
<td>-------------</td>
<td>--------------------</td>
<td>------</td>
</tr>
<tr>
<td>3403</td>
<td>Pahio</td>
<td>Kapuhai Malaihauono</td>
<td>3 lo‘i and kula, house lot</td>
<td>1 (1 acre, 1 rood, 18 rods) 1 (1 rood, 1 rod)</td>
</tr>
<tr>
<td>3405</td>
<td>Poka</td>
<td>Kaiwaiiki / Halilauhau</td>
<td>3 lo‘i and house lot</td>
<td>1 (1 rood, 4 rods)</td>
</tr>
<tr>
<td>3406</td>
<td>Pula</td>
<td>Kapuaiomolohua Village Waioo</td>
<td>house lot, 5 lo‘i and kula</td>
<td>1 (29 rods), 1 (1 acre, 8 rods)</td>
</tr>
<tr>
<td>3551</td>
<td>Kehenui / Kaibenui</td>
<td>Noleha Palahuulu</td>
<td>house lot, 1 lo‘i and 2 mo‘o</td>
<td>1 (1 acre) 1 (3 acres, 1 rood, 4 rods)</td>
</tr>
<tr>
<td>3552</td>
<td>Kaula / Nakaaul - died in epidemic</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3553</td>
<td>Kekalo / Kikolo left the land</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3555</td>
<td>Kiaipali</td>
<td>Malaehakoa / Meleahakoa Naliha</td>
<td>house lot, 10 lo‘i</td>
<td>1 (1 rood, 7 rods) 1 (2 acres, 15 rods)</td>
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<tr>
<td>3556</td>
<td>Kekua</td>
<td>Kapalai</td>
<td>3 lo‘i</td>
<td>1 (1.75 acres, 14 rods)</td>
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<tr>
<td>3557</td>
<td>Kaniwi / Kinui</td>
<td>Kahakoa Lanipaa</td>
<td>house lot, 14 lo‘i</td>
<td>1 (2 roods, 26 rods) 1 (2 acres, 20 rods)</td>
</tr>
<tr>
<td>3559 see 3111</td>
<td>Kapule</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3560</td>
<td>Kauakahi / Kanakahi</td>
<td>Pua / Pua Puniiki Village</td>
<td>3 lo‘i and kula (pasture), house lot</td>
<td>1 (3 acres, 1 rood, 16 rods) 1 (1 rood, 12 rods)</td>
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<tr>
<td>3561</td>
<td>Kaumualii, Josiah</td>
<td>Papaalai</td>
<td>12 lo‘i, kula, 2 houses and grave, 8 or 10 lo‘i and kula</td>
<td>1 (17.75 acres, 28 rods)</td>
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<tr>
<td>3567</td>
<td>Kaiapa</td>
<td>Hapuupuu</td>
<td>7 lo‘i (4 taro and 3 brush) and house lot</td>
<td>2 (1.25 acres, 18 rods)</td>
</tr>
<tr>
<td>3568</td>
<td>Kelani</td>
<td>Kawaiiki on shore Waioo</td>
<td>house lot, 5 lo‘i</td>
<td>1 (29 rods) 1 (1 acre, 3 roods)</td>
</tr>
</tbody>
</table>
## Historic and Archaeological Background Wailua

<table>
<thead>
<tr>
<th>3569 (location index- LCA testimony lists as 3568)</th>
<th>Kupalu</th>
<th>Paki Pahoula</th>
<th>3 lō‘i, house lot</th>
<th>1 (1 acre, 1 rood, 24 rods) 1 (19 rods)</th>
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<tbody>
<tr>
<td>3756</td>
<td>Amara / Amala / Aamaia (died)</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>3759</td>
<td>Alikia</td>
<td>Alalike Kauakahiuna Village</td>
<td>4 lō‘i, house lot</td>
<td>1 1</td>
</tr>
<tr>
<td>3909</td>
<td>Nahinu, I</td>
<td>Kupapaupapa Pelehuna</td>
<td>4 mo‘o a lihi (w/ 3 orange trees)</td>
<td>1 (4 acres, 16 rods) 1 (16 rods)</td>
</tr>
<tr>
<td>4146</td>
<td>Kaliu</td>
<td>Kamaluokukui Kaulupalau</td>
<td>2 lō‘i and kula house lot</td>
<td>1 (2 roods, 26 rods)</td>
</tr>
</tbody>
</table>

No. of lō‘i differs among Native Register, Native Testimony and Foreign Testimony
Kamehameha III awarded the ahupua‘a 33 'äpoa claims - 31 awarded
Claimed: more than 122 lō‘i, 24 house lots, 8 kula, 2 fishponds 5 mo‘o, 1 grave yard, 1 burial ground, 3 orange trees

Also on the topic of cemeteries - the Foreign Testimony supporting the claims of Maawe (#3302) and Nawai (#3346) mention a “burying ground” called Mahunapuoni, which today would be located on the grounds of the Coco Palms Hotel and may possibly be the site studied by William Kikuchi (1973) when excavation for a new wing to the hotel uncovered thirty-four burials. This burying ground may extend under and across Kūhō Highway into the area proposed for construction of a wall continuation and a double-wide boardwalk.

Referring to another burial site, Stanley B. Porteus (1962) mentions 2,000 Polynesians, mostly Gilbert Islanders brought in for plantation work and Porteus says those who died in Hawai‘i “were buried in the sand dunes alongside what is now the golf course, near Kapa‘a (i.e. Wailua Golf Course).

Within decades of western contact the area lost its ancient importance, and likely its population also. The ali‘i who enjoyed and benefited from their contact with westerners, spent more time in Waimea - the preferred anchorage for visiting ships. Also the complex of heiau at Wailua lost their great 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 from the sea. They were displaced within decades by imported farmers and crops.

6. **Post-Mahele Period**

Like most well watered areas in Hawai‘i, rice crops began taking over former lō‘i kalo in the second half of the 1800’s. This sharing of the land by the Chinese rice farmers and native kalo growers continued through the century. Knudsen (1991:152) visited Wailua in 1895 and wrote.
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.

By 1935, Handy (1940:67) found no kalo being cultivated. The terraces had been taken up by rice, sugar cane, sweet potato and pasture. However:

Kapa’a, Waipo‘üli, Olohe‘na, and Wailua are districts which have broad coastal plains bordering the sea, any part of which would be suitable for sweet potato plantings; presumably a great many used to be grown in this section. There are a few flourishing plantations in Wailua at the present time [Handy 1940:153].

7. Previous Archaeological Research and Finds in Wailua Ahupua‘a

The following two tables outline the archaeological research (Table 2) and archaeological sites (Table 3) identified in Wailua Ahupua‘a. Table 2 provides a list of archaeological research conducted within Wailua Ahupua‘a, including columns for source, location, nature of study, and findings. The locations of these archaeological studies are shown in Figure 6. Table 3 is a list of known archaeological sites within the ahupua‘a and includes columns for state site numbers, site type, location and reference. The locations of identified sites within seaward Wailua Ahupua‘a are shown in Figure 7. The configuration of the designated Wailua Complex of Heiau National Historic Landmark is shown in Figure 8. A discussion of the research and a summary discussion of the likelihood of historic properties follows.

8. Summary of Wailua Settlement Pattern and Discussion

Before discussing the most important sites of Wailua, we note that the importance of the area along the southern boundary in the ahupua‘a of Wailua was probably minor in the total scheme of land use in traditional times and no Land Commission claims mention this area. The flatlands between the dunes and Kälepa Ridge contain swampy areas fed by springs along the base of the ridge that may have allowed limited kalo cultivation (Handy 1940:68) on the margins of the marsh. The situation here may have been very similar to that described by Ida and Hammatt (1993) in Kekaha where any permanent habitation was at the base of the ridge near the fresh water source. The makai side of the marsh would probably not have been used for taro because the water would have been warmer and less desirable for taro cultivation. The dunes between the marshland and the sea were probably used only for human interment, except for the seaside, which would have hosted temporary or seasonal fishing camps.

The Wailua River, along both shores, was the most important high-status area on Kaua‘i in pre-Contact times. This area was the royal center where the high chiefs and chiefesses carried on their business when they were not traveling about the island(s), and where they entertained visitors. Today we see a small portion of this royal center when we look at the remnants of five of the heiau (where official decision making was carried out), the Hawola Pu‘uhonua (place of refuge), the birthstones, the royal coconut grove, the bellstone and the royal fishponds. There exist no visible surface remnants of the chiefly homes, the supporting lo‘i and kula lands, the places of recreation, the burial place called Mahunapu‘oni (just makai of Kapule’s fishponds), the fish traps and the canoe landings.
### Table 2: Previous Archaeological Studies in Coastal Wailua Ahupua‘a (see Figure 6)

<table>
<thead>
<tr>
<th>Source</th>
<th>Location</th>
<th>Nature of Study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thrum 1906</td>
<td>Mouth of Wailua River</td>
<td>Listing of heiau</td>
<td>Lists 4 heiau: Malae, Poli‘ahu, Holoholokū and Hikinaakalā</td>
</tr>
<tr>
<td>Bennett 1931</td>
<td>Mouth of Wailua River</td>
<td>Archaeological reconnaissance survey of heiau and place of refuge</td>
<td>Describes 6 sites- Site 103: Dune burials, Site 104: Malae Heiau, Site 105: Hikinaakalā Heiau, Site 106: Holoholokū Heiau and sacred grove, Site 107: Poli‘ahu Heiau and Site 109: an unnamed heiau</td>
</tr>
<tr>
<td>Soehren 1967</td>
<td>Wailua River Valley including North and South Forks</td>
<td>Field Trip Report</td>
<td>Locates and briefly describes 34 sites with B.P.B.M. site numbers A1-1 to A1-34</td>
</tr>
<tr>
<td>Ching 1968</td>
<td>Wailua River Valley including North and South Forks</td>
<td>Surface Survey</td>
<td>Locates and briefly describes Soehren’s (1967) 34 sites and adds sites 35-58 with B.P.B.M. site numbers A1-1 to A1-58</td>
</tr>
<tr>
<td>Handy and Handy 1972</td>
<td>Archipelago-wide, discuss Wailua Ahupua‘a</td>
<td>Native Planters Study</td>
<td>Discuss agricultural pattern at Wailua Ahupua‘a</td>
</tr>
<tr>
<td>Kikuchi 1973</td>
<td>Coco Palm Hotel, north of Wailua River, <em>mauka</em> of Kāhīō Highway</td>
<td>Burial Study</td>
<td>Discusses 34 burial finds, other features and artifacts</td>
</tr>
<tr>
<td>Kikuchi 1974</td>
<td>Mouth of Wailua River</td>
<td>Hīelanamī Study</td>
<td>Hikinaakalā Heiau</td>
</tr>
<tr>
<td>Walton and Spilker 1974</td>
<td>Lydgate State Park Pavilion Project, south of river mouth, <em>makai</em> of Kūhiō Highway</td>
<td>Assessment and subsurface testing (7 post hole digger excavations)</td>
<td>Testing did not locate any archaeological materials</td>
</tr>
<tr>
<td>Kikuchi et al. 1976</td>
<td>Holoholo-kū and Pōhaku Ho‘ohānau</td>
<td>Study of oral documentation and historical records</td>
<td>Compendium of information regarding these sites</td>
</tr>
<tr>
<td>Cox 1977</td>
<td>Wailua Golf Course</td>
<td>Burial Recovery project</td>
<td>13 burials located (Sites -542 to -546 and -819)</td>
</tr>
<tr>
<td>Source</td>
<td>Location</td>
<td>Nature of Study</td>
<td>Findings</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Yent 1980</td>
<td>North side of <em>makai</em> portion of Wailua River</td>
<td>Evaluation of <em>bellestone</em></td>
<td>Bellstones located, described and traditions are given along with preservation recommendations</td>
</tr>
<tr>
<td>Kikuchi 1984</td>
<td>South of Mouth of Wailua River</td>
<td>Mapping of Petroglyphs</td>
<td>Survey of petroglyphs noted 36 figures, more possibly in river and bulldozer damage from clearing mouth of river</td>
</tr>
<tr>
<td>Kikuchi 1987</td>
<td>Malae Heiau, South of mouth of Wailua River</td>
<td>Adze study</td>
<td>Discusses adze fragments from Malae Heiau</td>
</tr>
<tr>
<td>Yent 1987</td>
<td>South of Mouth of Wailua River</td>
<td>Demolition of old comfort station and corings for new comfort station</td>
<td>No subsurface cultural deposits located</td>
</tr>
<tr>
<td>Dunbar 1988</td>
<td>Wailua Complex of Heiau</td>
<td>National Register of Historic Places Inventory Nomination Form</td>
<td>“One of the most important site complexes in the Hawaiian Islands”</td>
</tr>
<tr>
<td>Yent 1989a</td>
<td>South side of the mouth of Wailua River Hikinaakalā Heiau and Hauola area</td>
<td>Mapping and testing of Site 50-30-08-105 in 1986 (6,000 sq ft excavations)</td>
<td>Concluded 2 periods of occupation, one historic, and an earlier period may or may not be associated with heiau building</td>
</tr>
<tr>
<td>Hammatt 1991b</td>
<td>Wailua River Mouth</td>
<td>Subsurface Testing</td>
<td>No cultural deposit observed</td>
</tr>
<tr>
<td>McMahon 1991</td>
<td>Eastern margin of Sleeping Giant Mountain on the north edge of Wailua Ahupua‘a</td>
<td>Archaeological Investigations</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Walker et al.</td>
<td>Work on both sides of Kūhiō Hwy. At the south end of the <em>ahupua‘a</em></td>
<td>Archaeological inventory survey for a master plan</td>
<td>Identified no sites</td>
</tr>
<tr>
<td>Source</td>
<td>Location</td>
<td>Nature of Study</td>
<td>Findings</td>
</tr>
<tr>
<td>-------------------</td>
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</tr>
<tr>
<td>Yent 1991a</td>
<td>Mouth of Wailua River</td>
<td>Archaeological Testing</td>
<td>Although several fill layers and extensive ground alteration was indicated, a possible pre-contact cultural deposit was noted; no site number was assigned</td>
</tr>
<tr>
<td>Yent 1991b</td>
<td>Malae Heiau South of mouth of Wailua River</td>
<td>Park Planning</td>
<td>Discusses Malae Heiau in context of proposed incorporation into Wailua River State Park</td>
</tr>
<tr>
<td>Yent 1991c</td>
<td>South side Wailua River Mouth</td>
<td>Damage Assessment</td>
<td>Summary of petroglyph site 50-30-08-105A</td>
</tr>
<tr>
<td>Folk and Hammatt</td>
<td>Wailua County Golf Course from coast to Kūhiō</td>
<td>Assessment for Fiber Optic</td>
<td>Examination of exposed strata revealed no cultural material, informants described burials in the golf course area.</td>
</tr>
<tr>
<td>1992</td>
<td>Highway</td>
<td>Cable</td>
<td></td>
</tr>
<tr>
<td>Kikuchi and</td>
<td>Island-wide, B005 on north bank of <em>makai</em></td>
<td>Cemeteries of Kaua‘i</td>
<td>Identifies site 50-30-08-B005-Poli‘ahu Japanese Cemetery</td>
</tr>
<tr>
<td>Remoaldo 1992</td>
<td>Wailua River</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spear 1992</td>
<td>North of Wailua River mouth, <em>makai</em> of Kūhiō</td>
<td>Sub-surface Testing</td>
<td>No significant findings; two charcoal lenses noted.</td>
</tr>
<tr>
<td></td>
<td>Highway</td>
<td>(7 backhoe trenches)</td>
<td></td>
</tr>
<tr>
<td>State Parks</td>
<td>Poli‘ahu Heiau</td>
<td>Interpretive Signage Plan</td>
<td>Summarizes data on Poli‘ahu Heiau</td>
</tr>
<tr>
<td>1992</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yenti 1992</td>
<td>Mouth of Wailua River</td>
<td>Hurricane Damage Assessment</td>
<td>Damage report</td>
</tr>
<tr>
<td>Erkelens and Welch</td>
<td>Kaua‘i Community Correctional Center west of</td>
<td>Archaeological assessment</td>
<td>Summarizes literature and notes probability of burials</td>
</tr>
<tr>
<td>1993</td>
<td>Kūhiō Highway and the Wailua County Golf Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kawachi 1993</td>
<td>Mouth of Wailua River mouth (4-1-04:01)</td>
<td>Survey of river</td>
<td>Discovered unreported submerged petroglyph, no site number assigned</td>
</tr>
<tr>
<td>Source</td>
<td>Location</td>
<td>Nature of Study</td>
<td>Findings</td>
</tr>
<tr>
<td>------------------------</td>
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</tr>
<tr>
<td>Beardsley 1994</td>
<td>Kaua‘i Community Correctional Center west of Kūhiō Highway and the Wailua County Golf Course</td>
<td>Sub-surface testing for sewer line</td>
<td>One burial designated Site -9357 regarded as part of Bennett’s site 50-30-08-103 but no other significant findings</td>
</tr>
<tr>
<td>Folk et al. 1994</td>
<td>Wailua County Golf Course from coast to Kūhiō Highway</td>
<td>Archaeological Inventory Survey with sub-surface testing</td>
<td>No significant finds</td>
</tr>
<tr>
<td>Hammatt et al. 1994</td>
<td>Lands mauka of Kūhiō Highway</td>
<td>Archaeological Assessment</td>
<td>Identifies archaeological concerns including: 1) impact on the Wailua Complex of heiau, 2) impact on potential burial sites in the Wailua Golf Course and the Coco Palms Resort area, and 3) impact on existing and former Wailua marshlands in the vicinity of the County Correctional facility and on the north side of Wailua River</td>
</tr>
<tr>
<td>Carpenter and Yent 1995</td>
<td>North Fork of the Wailua River</td>
<td>Archaeological Reconnaissance</td>
<td>Notes high potential for extensive archaeology</td>
</tr>
<tr>
<td>Flores 1995</td>
<td>Malae (Malaeha‘akoa) Heiau; south of Wailua River mouth, mauka of Kūhiō Highway</td>
<td>Historical and Cultural Research</td>
<td>Data on the heiau (Site 50-30-08-104) and Wailua Ahupua‘a in general is presented</td>
</tr>
<tr>
<td>Folk and Hammatt 1995</td>
<td>Wailua County Golf Course from coast to Kūhiō Highway</td>
<td>Monitoring fiber optic cable conduits</td>
<td>Found remains of eight individuals from disturbed, possibly secondary, deposits</td>
</tr>
<tr>
<td>Hammatt et al. 1997</td>
<td>Lands mauka of Kūhiō Highway</td>
<td>Archaeological Inventory Survey for Kūhiō Highway widening</td>
<td>1 new site found north of river, 50-30-08-756; a terrace</td>
</tr>
<tr>
<td>Source</td>
<td>Location</td>
<td>Nature of Study</td>
<td>Findings</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------</td>
<td>------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Yent 1997a</td>
<td>Extreme south, coastal Wailua, <em>makai</em> of Kühiō Highway</td>
<td>Burial Treatment and Monitoring Plan</td>
<td>Plans to attend proposed work at a temporary automobile storage facility close to Dune Burials sites</td>
</tr>
<tr>
<td>Yent 1997b</td>
<td>Malae Heiau, south of Wailua River, <em>mauka</em> of Kühiō Highway</td>
<td>Vegetation Removal and Landscaping Plan</td>
<td>Outlines methodology and guidelines for vegetation removal at Malae Heiau</td>
</tr>
<tr>
<td>Yent 1997c</td>
<td>Malae Heiau</td>
<td>Vegetation Removal Report</td>
<td>Summarizes work</td>
</tr>
<tr>
<td>Shideler et al. 2001</td>
<td>Lydgate Park</td>
<td>Archaeological Assessment</td>
<td>Summarizes work</td>
</tr>
<tr>
<td>Fager and Spear 2000</td>
<td>Wailua Golf Course</td>
<td>Archaeological Monitoring Report</td>
<td>Documents several burials</td>
</tr>
<tr>
<td>Buffum and Dega 2002</td>
<td>Coco Palms</td>
<td>Archaeological Monitoring Report</td>
<td>Cultural layer identified as site 1711</td>
</tr>
<tr>
<td>Dega and Powell 2003</td>
<td>Kühiō Hwy. Bypass options</td>
<td>Archaeological Monitoring Report</td>
<td>Feature of site 1711 described</td>
</tr>
<tr>
<td>Hammatt and Shideler 2003</td>
<td>Kühiō Hwy. Bypass options</td>
<td>Archaeological Assessment</td>
<td>Summarizes work, describes six new sites (667, 668, 676-679)</td>
</tr>
</tbody>
</table>
Figure 6: Previous Archaeological Studies in Coastal Wailua Ahupua'a
<table>
<thead>
<tr>
<th>Site No.</th>
<th>Site Type/Name (if any)</th>
<th>Location</th>
<th>Size/Constraints</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>B005</td>
<td>Poliʻahu Japanese Cemetery (now Site 50-30-08-675)</td>
<td>South side Kuamoʻo Road (Poliʻahu Road)</td>
<td>Discrete Historic Cemetery approx 118 burials, interments as late as 1979</td>
<td>Kikuchi and Remoalado 1992:66-74</td>
</tr>
<tr>
<td>103</td>
<td>Dune Burials</td>
<td>Wailua Golf Course, large area, not well defined; primarily seaward of Kūhiō Hwy, N of Wailua Golf Course club house</td>
<td>Minimum number of individuals encountered to date approx. 100; consultation and monitoring in vicinity indicated</td>
<td>Bennett 1931:125; Erkelens and Welch 1993; Beardsley 1994; Fager and Spear 2000</td>
</tr>
<tr>
<td>104</td>
<td>Malae Heiau</td>
<td>South bank of Wailua River, 200 feet mauka of Kūhiō Highway</td>
<td>Part of Wailua Complex of Heiau National Historic Landmark - defined area 2 acres, heiau and buffer 9.49 acres, in State Park, Yent 2000 specifies view corridor concerns</td>
<td>Thrum 1906:40; Bennett 1931:125; Yent 1991b; Yent 2000</td>
</tr>
<tr>
<td>104A</td>
<td>Adze Workshop/flake scatter</td>
<td>In cane field N and NE of Malae Heiau extending to road to marina</td>
<td>Within 9.49 acre Malae Heiau and buffer parcel in State Park</td>
<td>Kikuchi 1987:1-9; see Yent 2000</td>
</tr>
<tr>
<td>105</td>
<td>Hikinaikalā Heiau and Puʻuhōnaʻa o Haunula</td>
<td>Southern side of the mouth of Wailua River</td>
<td>Part of Wailua Complex of Heiau National Historic Landmark - defined area 2.3 acres in State Park</td>
<td>Thrum 1906:40; Bennett 1931:125-126; Kikuchi 1974; Yent 1989</td>
</tr>
<tr>
<td>106</td>
<td>Kalaeokamanu (Kalaeumanu) Heiau aka Holoholokū Heiau and associated pōhaku hoʻohānau</td>
<td>North bank of the Wailua River at the base of Puʻukī</td>
<td>Part of Wailua Complex of Heiau National Historic Landmark - defined area 37.960 sq ft., in State Park</td>
<td>Bennett 1931:127; Damon 1934</td>
</tr>
<tr>
<td>Site No.</td>
<td>Site Type/Name (if any)</td>
<td>Location</td>
<td>Size/Constraints</td>
<td>Reference</td>
</tr>
<tr>
<td>---------</td>
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</tr>
<tr>
<td>107</td>
<td>Poli`ahu Heiau</td>
<td>Wailua River State Park</td>
<td>Part of Wailua Complex of Heiau National Historic Landmark - defined area 49,140 sq ft., in State Park</td>
<td>Thrum 1906:40; Bennett 1931:127</td>
</tr>
<tr>
<td>217</td>
<td>Kauhihalau agricultural site</td>
<td>S. of makai portion of Wailua River, eastern quarter occupied by Wailua State Marina</td>
<td>Virtually no data, size unclear, further work in area indicated; in State Park</td>
<td>Ching 1968:16</td>
</tr>
<tr>
<td>247</td>
<td>Kamalau agricultural site</td>
<td>N. of Mauna Kapu on flats</td>
<td>Virtually no data, size unclear, further work in area indicated; in State Park</td>
<td>Ching 1968:16</td>
</tr>
<tr>
<td>250</td>
<td>Hauloa agricultural site</td>
<td>N. of makai portion of Wailua River</td>
<td>Virtually no data, size unclear, further work in area indicated; in State Park</td>
<td>Ching 1968:16</td>
</tr>
<tr>
<td>321</td>
<td>`Auwai, earthen ditch</td>
<td>Just North of Confluence of North and South Forks, Wailua River (associated with sites 218 and 250) along base of valley wall in dense hau</td>
<td>Little data, length unclear, further work in area indicated; in State Park</td>
<td>Soehren 1967; Ching 1968:16; Yent 1989a:7; Carpenter and Yent 1997:35</td>
</tr>
<tr>
<td>325</td>
<td>Kamalau and Kulaina storied rocks</td>
<td>N of Mauna Kapu, at mauka end of site 247 one rock in middle of river below Poli`ahu Heiau</td>
<td>Site consists of two storied rocks; description insufficient for identification; in State Park</td>
<td>Ching 1968:16-18</td>
</tr>
<tr>
<td>326</td>
<td>Kamalau and Kulaina storied rocks</td>
<td>N of Mauna Kapu, at mauka end of site 247 one rock in middle of river below Poli`ahu Heiau</td>
<td>Site consists of two storied rocks; description insufficient for identification; in State Park</td>
<td>Ching 1968:16-18</td>
</tr>
<tr>
<td>Site No.</td>
<td>Site Type/Name (if any)</td>
<td>Location</td>
<td>Size/Constraints</td>
<td>Reference</td>
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</tr>
<tr>
<td>329 (Ching Site 42)</td>
<td>Ahuauhi, reported home and burial ground of Kumauna/Lono Kelekomoa family</td>
<td>North of <em>makai</em> portion of Wailua River “near the little hillock, Ahuauhi, where the one (lone) tall coconut tree stands” (Salisbury, 1936)</td>
<td>Virtually no data, size unclear, further work in area indicated; in State Park</td>
<td>Ching 1968:14, Salisbury, 1936</td>
</tr>
<tr>
<td>330 (Ching Site 43)</td>
<td>Kaluaumokila legendary cave through hill from N to S, south end just above water level; sealed with a stone, land entrance opening is small</td>
<td>North of <em>makai</em> portion of Wailua River</td>
<td>Virtually no data, may only be legendary, further work in area indicated; in State Park</td>
<td>Ching 1968:13</td>
</tr>
<tr>
<td>331 (Ching Site 44)</td>
<td>Old Rice Mill</td>
<td>North of mouth of Wailua River, just <em>mauka</em> of Smith’s and Doris’ old boat landing</td>
<td>Still stood in 1953, only foundations are left, testing and marker recommended; in State Park</td>
<td>Ching 1968:12-13</td>
</tr>
<tr>
<td>334 (Ching Site 47)</td>
<td>Pōhaku‘ele‘ele Heiau (and several other sites reported by Dickey [1916:29])</td>
<td>“On the <em>makai</em> tip of a hill near the eastern end of the promontory between the two northern branches of the Wailua River” (Dickey 1916:14)</td>
<td>Virtually no data, some uncertainty about the location, size unclear, further work in area indicated; in State Park</td>
<td>Dickey 1916:29; Ching 1968:14-15</td>
</tr>
<tr>
<td>335 (Ching Site 48)</td>
<td>Bellstone(s)</td>
<td>North of <em>makai</em> portion of Wailua River</td>
<td>Part of Wailua Complex of Heiau National Historic Landmark - defined area N.A.; in State Park</td>
<td>Ching 1968:14</td>
</tr>
<tr>
<td>Site No.</td>
<td>Site Type/Name (if any)</td>
<td>Location</td>
<td>Size/Constraints</td>
<td>Reference</td>
</tr>
<tr>
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<td>-------------------------</td>
<td>----------</td>
<td>-----------------</td>
<td>-----------</td>
</tr>
<tr>
<td>337</td>
<td>Hihiakalahu &quot;the place where the first hau tree grew&quot;</td>
<td>North of Mauna Kapu, south of Poi‘ahu</td>
<td>Seemingly just a legendary hau tree grove, size unclear; in State Park</td>
<td>Ching 1968:16</td>
</tr>
<tr>
<td>340</td>
<td>Agricultural Terraces &quot;indicated as being in rice in 1900 and 1923&quot;</td>
<td>North of confluence of North and South Forks, Wailua River</td>
<td>Virtually no data, size unclear, further work in area indicated; in State Park</td>
<td>Ching 1968:18</td>
</tr>
<tr>
<td>342</td>
<td>Agricultural flat &quot;appears as rice land on Monsarratt’s map of 1900 and Wall’s map of 1923&quot;</td>
<td>North of makai portion of Wailua River</td>
<td>Virtually no data, size unclear, further work in area indicated; in State Park</td>
<td>Ching 1968:13</td>
</tr>
<tr>
<td>343</td>
<td>Kula &quot;indicated as kula land on Wall’s map of 1923&quot;</td>
<td>South side of makai portion of Wailua River</td>
<td>Virtually no data, size unclear, further work in area indicated; in State Park</td>
<td>Ching 1968:16</td>
</tr>
<tr>
<td>542</td>
<td>Burial</td>
<td>North part of Wailua County Golf Course</td>
<td>Burials understood as part of Site -103 consultation and monitoring in vicinity indicated</td>
<td>Cox 1977</td>
</tr>
<tr>
<td>543</td>
<td>Burial</td>
<td>North part of Wailua County Golf Course</td>
<td>Burials understood as part of Site -103 consultation and monitoring in vicinity indicated</td>
<td>Cox 1977</td>
</tr>
</tbody>
</table>
### Historic and Archaeological Background Wailua

<table>
<thead>
<tr>
<th>Site No. 50-30-08-</th>
<th>Site Type/Name (if any)</th>
<th>Location</th>
<th>Size/Constraints</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>544</td>
<td>Burial</td>
<td>North part of Wailua County Golf Course</td>
<td>Burials understood as part of Site -103 consultation and monitoring in vicinity indicated</td>
<td>Cox 1977</td>
</tr>
<tr>
<td>545</td>
<td>Burial</td>
<td>North part of Wailua County Golf Course</td>
<td>Burials understood as part of Site -103 consultation and monitoring in vicinity indicated</td>
<td>Cox 1977</td>
</tr>
<tr>
<td>546</td>
<td>Burial</td>
<td>North part of Wailua County Golf Course</td>
<td>Burials understood as part of Site -103 consultation and monitoring in vicinity indicated</td>
<td>Cox 1977</td>
</tr>
<tr>
<td>634</td>
<td>Extensive wetlands, former lo'i area</td>
<td>North bank of Wailua River</td>
<td>130-acre; further archaeological work indicated</td>
<td>Hammatt et al. 1997:68,70</td>
</tr>
<tr>
<td>667</td>
<td>Linear Terrace</td>
<td>Adjacent to north side of pasture access road mauka of Smith's Tropical Paradise</td>
<td>Approx. 2 m by 5 m long, further archaeological work indicated</td>
<td>Hammatt and Shideler 2003</td>
</tr>
<tr>
<td>668</td>
<td>Cement slabs inscribed with year 1926</td>
<td>North central portion Smith’s Tropical Paradise</td>
<td>An area 4 m by 5 m, further archaeological work indicated</td>
<td>Hammatt and Shideler 2003</td>
</tr>
<tr>
<td>675</td>
<td>Poliahu Japanese Cemetery (formerly known as 50-30-08-B005)</td>
<td>East end of Pu‘u Kī Ridge above Pōhaku Ho‘ohanau and Holoholoku Heiau</td>
<td>Preservation of historic cemetery</td>
<td>Hammatt and Shideler 2003</td>
</tr>
<tr>
<td>676</td>
<td>Alignments and enclosures</td>
<td>Greatly modified as a contemporary sacred site – possibly former Heiau</td>
<td>Modern modifications make it difficult to evaluate; preservation or data recovery recommended</td>
<td>Hammatt and Shideler 2003</td>
</tr>
<tr>
<td>Site No. 50-30-08-</td>
<td>Site Type/Name (if any)</td>
<td>Location</td>
<td>Size/Constraints</td>
<td>Reference</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------</td>
<td>----------</td>
<td>------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>677</td>
<td>Two lava tubes</td>
<td>Just S of Kuamo’o Road in the N side of Pu’u Kī 100 m W of Pōhaku Ho‘oha‘anau</td>
<td>Appears to be no surface deposits, testing of talus slope at entrance indicated</td>
<td>Hammatt and Shideler 2003</td>
</tr>
<tr>
<td>678</td>
<td>Terrace</td>
<td>central Pu’u Kī summit ridge</td>
<td>Data Recovery</td>
<td>Hammatt and Shideler 2003</td>
</tr>
<tr>
<td>679</td>
<td>Overhang rock shelter</td>
<td>N bank of Wailua River, SW portion of Pu’u Kī ridge</td>
<td>Appears to be no surface deposits, testing indicated</td>
<td>Hammatt and Shideler 2003</td>
</tr>
<tr>
<td>756</td>
<td>Terrace</td>
<td>North bank of Wailua River</td>
<td>In State Park, 30 m by 12 m, further archaeological work indicated</td>
<td>Hammatt et al. 1997:68,70</td>
</tr>
<tr>
<td>761</td>
<td>Burial</td>
<td>North bank of Wailua River mouth</td>
<td>Consultation and monitoring in vicinity indicated</td>
<td>Ida and Hammatt 1998</td>
</tr>
<tr>
<td>819</td>
<td>Burial</td>
<td>North part of Wailua County Golf Course</td>
<td>Burials understood as part of Site -103 consultation and monitoring in vicinity indicated</td>
<td>Cox 1977</td>
</tr>
<tr>
<td>1711</td>
<td>Traditional cultural layer</td>
<td>Coco Palms and Kūhiō Hwy</td>
<td>Monitoring in vicinity indicated</td>
<td>Buffum and Dega 2002, Dega and Powell 2003</td>
</tr>
<tr>
<td>1980</td>
<td>Burial</td>
<td>Wailua County Golf Course east of County Correctional Facility, half way to the sea</td>
<td>Minimum number of eight individuals encountered</td>
<td>Folk and Hammatt 1995</td>
</tr>
<tr>
<td>9357</td>
<td>Burial (1)</td>
<td>County Correctional Facility</td>
<td>Burial understood as part of Site -103, consultation and monitoring in vicinity indicated</td>
<td>Beardsley 1994</td>
</tr>
</tbody>
</table>
Figure 7: Archaeological Sites in Coastal Wailua Ahupua‘a
The Wallua Complex of Heiau, on both sides of the River, was the focus of political and religious activity. Among the seven heiau of Wallua, the Malae Heiau (at the river mouth on the south side) and Poliahu Heiau (on the north side of the river inland atop Poliahu Ridge) were two large companion heiau. The mokai section of the ahupua'a near the river mouth was the focus of daily life for the royal families. Some house sites were south of the river on the dunes (mokai of the present highway), but the majority of house sites were on the north side of the river just mauka of the highway between the Coco Palms Resort and the river. A burial area is associated with these house lots on the dune and archaeological work shows there are still present remains of the habitation layer and the burials. A portion of Kapule's fishponds, just behind the sand berm, still exists on the grounds of the Coco Palms Resort. The choicest house area, according to the Maliehe documents, is probably the area in and around the Royal Coconut Grove, where Debora Kapule (3111), Oliva Chapin (3226), Naakaakai (3368) and Kupalu, wife of Kaniwi (3568) had their homes. These homes were close to the river, the Kaluaekanamu (Holoholokū) Heiau, the birthstones (where elaborate birthing ceremonies of royalty would take place), and the coconut grove.

Inland, along the floodplain, are remnants of the many lo'i parcels and other house sites as well. There is archaeological evidence that agricultural use of the land stretched far mauka along the Wallua River and its tributaries, and supported a relatively large population at an earlier time. Archival records mention other resources, including bananas, wood for canoes and housing, and candlenuts for lights as coming from farther inland. Archaeological research shows adze materials for tools also inland.

9. Pattern of Archaeological Sites and Constraints in Wallua

The pattern of archaeological sites in Wallua Ahupua'a is of almost contiguous historic sites (or former historic sites) located within the Wallua River valley, at the mouth of the valley, and in the flat coastal lands on the north side of the river mouth.

These archaeological resources may be a significant issue in this area particularly as they involve potential impacts to archaeology within a State Park and may involve impacts in proximity to sites on the National Register of Historic Places. Very little in the way of adverse impacts would be anticipated in the development of any of the former sugar cane lands back from the coast.

The designation of the Wallua Complex of Heiau National Historic Landmark (1988) consists of five discontinuous properties: Site -104, Malae Heiau; Site -105, Hikinaakalā Heiau (and petroglyphs); Site -106, Holoholokū Heiau and Pōhaku Hoʻohāna; Site -107, Poliʻahu Heiau; and Site -335, the Wallua Bellstone(s). The designation of these properties for the National Register/National Historic Landmark listing is five circles each centered in the middle of each of the sites but only slightly greater than the radius of the sites themselves (Figure 8).

All of the proposed alternatives begin at their southern end at the existing northern terminus of a previous trail project at the existing Lydgate Bike/Pedestrian cul-de-sac near the north end of Lydgate Park in the immediate vicinity of the northwest corner of the Aloha Beach Resort. All of the proposed alternatives involve the construction of a 10-12 foot wide path that heads north on an old railroad berm on the seaward side of Kūhiō Highway the short distance to the Wallua River mouth. The proposed path either crosses the Wallua River on a bridge cantilevered off of the existing mokai bridge (Alternatives 1 and 2) or crosses the river on a new bike/pedestrian
Figure 8: Map of the Configuration of Wailua Complex of Heiau National Historic Landmark
path bridge to be constructed seaward of the existing bridges (Alternative 3). The results of our field assessment and preliminary consultation with State Parks and the State Historic Preservation Division indicate that such an alignment is appropriate. However, we recommend continuing consultation as plans become more definite. The Wailua petroglyph site (Ka Pae Kʻī Mahu o Wailua, Site 50-30-08-105A; Figures 9 & 10) at the mouth of the Wailua River was clearly regarded by Dr. Kikuchi (1984) as “historically part of the temple of Hikina-a-ka-lā and the City of refuge, Hauʻola (both site coded 50-30-08-105)” which is why he designated the petroglyphs as site 105A. Thus the petroglyphs should probably be regarded as a contributing element of the designated Wailua Complex of Heiau National Historic Landmark.

There is some uncertainty regarding the extent of this Wailua petroglyph site as: “The appearance of the boulders is determined by the vagaries of the weather, e.g. the flow pattern at the mouth of the Wailua River, the sand deposited by storms and the tides of the sea” (Kikuchi 1984).

Field inspection and available maps (Figures 9 & 10) indicate that the petroglyph field is well to the southeast of any likely footing for a new bike/pedestrian path bridge, however, if Alternative 3 is pursued (with footings for a new bridge on the south side of the river makai of the existing bridges) we recommend that plans be shared with State Parks and the State Historic Preservation Division to evaluate the possible need for a program of subsurface testing to further evaluate the prospect of impacting any buried portion of this petroglyph site that should be regarded as a contributing element of the designated National Historic Landmark.

Alternative 3 includes a possible spur path extending down the north side of the Aloha Beach Resort effectively connecting the proposed path with the vicinity of Hikinaakalā, the Puʻuhoa o Hauola, a parking area and the coast. Although this route would largely or entirely lie on a former railroad berm, and would provide access to a designated National Historic Landmark site, informal discussion with State Parks has indicated that they are not receptive to such a path in such close proximity to this site complex.

On the north side of the Wailua River mouth, the proposed path would pass the Coco Palms Resort on the makai side of Kūhiō Highway. All 3 alternatives involve construction of a low rock wall as a continuation of an existing rock wall with the provision of a doublewide boardwalk on the makai side of the wall. This presumably would involve some excavation for footings and foundations. Of concern in this area is the report of a burying ground or cemetery mentioned in the 1848 Foreign Testimony and Native Testimony as on the south edge of Land Commission Award 3346:1 to Nawai. This LCA lies just mauka of Kūhiō Highway and this may possibly be the site studied by William Kikuchi (1973) when excavation for a new wing to the hotel uncovered thirty-four burials. This burying ground may extend under and across Kūhiō Highway into the area proposed for construction of a wall continuation and a doublewide boardwalk. Buflum and Dega (2002) and Dega and Powell (2003) furthermore documented a traditional cultural layer in this area between Kūhiō Highway and the Coco Palms resort. Because of the prospect for burials and/or other cultural resources archaeological monitoring is probably appropriate in this area.

All three proposed alignments include a route up Haleʻiwa Road passing the north side of the Coco Palms lands. Elmore and Kennedy (2000) reported on a burial located approximately 100 m south of Haleʻiwa Road within the Coco Palms. This indicates a heightened probability of burials and/or other cultural resources in the stretch of Haleʻiwa Road traversing sandy soils.
Figure 9: Location of Wai'anae petroglyph site (Ka Pae Ki'i Mahu o Wai'anae, Site 50-30-08-105A) at the mouth of the Wai'anae River (from Kikuchi 1984)

Figure 10: Sketch of petroglyph boulder field (Site 50-30-08-105A)
Proposed Alternative 3 includes an additional stretch of path development extending up Kuamo'o Road to the major ditch (just east of Kahoeokamanu, Kahoeokamanu Heiau aka Holoholokii Heiau and the associated Pōhaku Ho'ōhūna'a; site -106) where the path then turns north arcing around the inland side of the Coco Palms coconut grove. Midway up the stretch of Kuamo'o Road the path would pass over the outlet of the Coco Palms water feature that was also the traditional outlet for the Hawaiian fishpond located there. Although recent archaeological study of the Coco Palms site (Hoffman et al. in progress) found very little in the way of cultural resources in the adjacent lands this area still has a somewhat elevated potential for cultural resources, particularly along the seaward portion of Kuamo'o Road.

B. Olohana (North Olohana and South Olohana)

1. Natural Setting of Olohana

Both Olohana Ahupua'a, north and south, are located on the eastern side of the island of Kauai, with Waipouli to the north and Waialua to the south. Like Waipouli and Waialua, these two Ahupua'a are located within the central area of the Lihue basin and are exposed to the prevailing northeast tradewinds with 40 to 50 inches of rainfall annually at the seashore and 75 to 100 inches in the upland mountainous area. The Nounou Forest Reserve (ridge) forms a belt (north/south) across the two Olohana Ahupua'a with plains on both sides. Konohiki Stream is about a mile inland. This stream meanders north and crosses into Waipouli to empty into the ocean. The shoreline of both Olohana is shallow topsoil above lava bedrock and there is shallow reef along the shore. Together the Olohana Ahupua'a contain 2,368 acres, South Olohana contains 1,151 acres, and North Olohana 1,217 acres (Commission of Boundaries Record, Kauai', vol. 1, 1872:109).

2. Origin of the Place Name - Olohana

Pukui, Elbert and Mookini (1976) state that Olohana has no meaning, but may be a cognate with Olosenga, an island in the Manu'a group of Samoa.

3. Mahele Period and Boundary Commission

There is little cultural history known for Olohana, but some cultural information can be derived from the 1875 Boundary Commission report. Before that, in the Mahele Awards, we know that Kiamoku relinquished half of Olohana and retained half, and purchased Grant 3662 of 403 acres. Interior Department Book 15 (p. 109) shows Kiamoku had 60 miles of seacoast. Another Interior Department Document, dated June 28 1850, shows Kiamoku offering to exchange his Olohana land for Moloa'a land. However Kiamoku died in October of 1851 and no further documentation is found regarding this land for Kiamoku (Barrere 1994:365). TMK map 4-3 (1932) shows North Olohana made up mostly of Kiamoku's grant and South Olohana of Grant 5264 to R.P. Spaulding for Lihue Plantation (419 Acres). The one LCA claimed and granted (Table 4) is inland on Konohiki Stream (LCA 3831). Pahuwai, the single claimant in both Olohana, has 2 parcels, one in Olohana ili and one in Kuana ili and he lived and worked his lo'i there. He is awarded one parcel, but all that he claims is included in the award. The Native Testimony adds the information that the entire area was surrounded by a wall. Pahuwai's award is near the Waipouli boundary at the edge of marshland called "Waiialialii" and he was not far from his nearest neighbors, the most inland Waipouli claims.
Table 4: Chart of Land Use from Oloheana Land Commission Award

<table>
<thead>
<tr>
<th>LCA Number</th>
<th>Claimant</th>
<th>'Ilī of the Ahupua'a</th>
<th>Land Use</th>
<th>No of 'Apana Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>3831</td>
<td>Pahuwai</td>
<td>Kulanāa</td>
<td>4 lo'i and house lot</td>
<td>1 (2 roods)</td>
</tr>
</tbody>
</table>

Awarded 1 claim, 1 'āpana, 4 lo'i, 1 house lot

In the Boundary Commission survey (1875) for Oloheana, James Gay describes in general terms the boundaries of Oloheana (the half belonging to Kamehameha III became government land) (Commission of Boundaries, Kauai, I:106-108). Probably around the turn of the century the racetrack (shown in TMK 4-3: 1932) was built along the shoreline, straddling both North and South Oloheana Ahupua'a (1936). TMK 4-4 shows many small grants in South Oloheana; probably government lands which according to R.D. King, principal cadastral engineer for the Territory of Hawaii, were sold during the period from 1846 to 1900 (King 1942:11).

The Waihau Boundary Commission report contains more information about Oloheana than the Oloheana report does -- no witnesses were called for the Oloheana boundaries since the surrounding boundaries (Waihau and Waipouli) were already surveyed. The Waihau report notes that on the Waihau/Oloheana boundary at approximately N 56° 33′ W there is a stone shaped like a dog house and at S 85° 0′ W one goes up a spur 850 links to a narrow place called Kaeo (the fifth point between Waihau and Oloheana) where there is an old burying ground surrounded by hau and kou "where the bodies of those slain in battle were buried" (Commission of Boundaries, Kauai, I:32-37). When one compares the Kapa'a Quad map with R. M. 976 and R.M. 388 (James Gay maps of Oloheana and Waihau, Figures 11 and 12) this point appears to be at the Forest Reserve boundary at the Waihau-South Oloheana line. The kama'aina testimony states that the boundary at the sand beach is where "the fish were drawn in and were divided between Oloheana and Waihau," that the blow hole and the house and God Stone of Kewalo are in "Oloheana" (Commission of Boundaries, Kauai, I:32-37). No other mention of Kewalo's God Stone was found. The house of Kawelo - Ching's site 41 "a little below the cave of Māmaukuamo [in Waihau] - is a stone shaped like a grass house. Kawelo would have been Kawelomahamahia, grandfather of Aikanaka and a king of Kauai . . ." (Ching 1968:25). Kewalo is possibly the same as Kawelo. Formander's accounts of the legend of Kawelo say he lived with his parents in Hanamā'ulu. In any case, the Boundary Commission report does not mention where the house or God Stone were.

4. Previous Archaeological Research and Finds in Oloheana Ahupua'a

The following two tables outline the archaeological research (Table 5) and archaeological sites (Table 6) identified in Oloheana (North Oloheana and South Oloheana) Ahupua'a. A discussion of the research and a summary discussion of the likelihood of historic properties follows. Table 5 provides a list of archaeological research conducted within Oloheana Ahupua'a, including columns for source, location, nature of study, and findings. The locations of these archaeological studies are shown in Figure 13. Table 6 is a list of known archaeological sites within the ahupua'a and includes columns for state site numbers, site type, location and reference. The locations of identified sites within Oloheana Ahupua'a are shown in Figure 14.
Figure 11: Portion of James Gay Map of Oloheina copied by W.A. Wall in 1893, R. M. 976, showing "Stone like dog's house" (citation from Boundary Commission report)
Figure 12: Olohena and Wailua Information on Portion of James Gay Map of Wailua in 1872, R. M. 388, Showing 5 Survey Points from Shore Inland
<table>
<thead>
<tr>
<th>Source</th>
<th>Location</th>
<th>Nature of Study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thrum 1906</td>
<td>Alakukui Point, central coastal South Olohe na</td>
<td>Heiau Study</td>
<td>Kukui Heiau</td>
</tr>
<tr>
<td>Bennett 1931</td>
<td>Alakukui Point, central coastal South Olohe na</td>
<td>Island-wide Survey</td>
<td>Kukui Heiau</td>
</tr>
<tr>
<td>Davis and Bordner 1977</td>
<td>Alakukui Point, central coastal South Olohe na</td>
<td>Archaeological Investigation of Heiau</td>
<td>Kukui Heiau</td>
</tr>
<tr>
<td>Rosendahl and Kai 1990</td>
<td>North coastal North Olohe na</td>
<td>Archaeological Inventory Survey</td>
<td>Cultural layer Site -1800 and burials (3) at coast</td>
</tr>
<tr>
<td>Hammatt 1991</td>
<td>Kūhiō Highway Road Corridor, South and North Olohe na</td>
<td>Archaeological Subsurface Testing</td>
<td>Excavation of 3 trenches (3,4 and 5) produced no significant findings</td>
</tr>
<tr>
<td>Kikuchi 1992</td>
<td>Central South Olohe na <em>makai</em> of Kūhiō Highway (TMK: 4-3-01:10)</td>
<td>Archaeological Survey and Sub-surface Testing</td>
<td>Cultural layer and 3 <em>imu</em>. No site # assigned</td>
</tr>
<tr>
<td>Spear 1992</td>
<td>Along Kūhiō Highway, South and North Olohe na</td>
<td>Archaeological Subsurface Testing</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Hammatt et al. 1994</td>
<td>Lands <em>mauka</em> of Kūhiō Highway</td>
<td>Archaeological Assessment</td>
<td>Notes marshlands and the potential for paleoenvironmental data and evidence of wetland cultivation.</td>
</tr>
<tr>
<td>Hammatt et al. 1997</td>
<td>Just <em>mauka</em> of Kūhiō Highway, central South Olohe na</td>
<td>Archaeological Inventory Survey</td>
<td>A sediment core yielded no significant findings</td>
</tr>
<tr>
<td>Perzinski et al. 2001</td>
<td>On coast, NE edge of South Olohe na</td>
<td>Archaeological Monitoring Report</td>
<td>A cultural layer and burials (2) were given Site # 50-30-08-791.</td>
</tr>
<tr>
<td>Dega and Powell 2003</td>
<td>Kūhiō Hwy.</td>
<td>Archaeological Monitoring Report</td>
<td>No significant finds</td>
</tr>
<tr>
<td>Hammatt and Shideler 2003</td>
<td>Kūhiō Hwy. improvements alternate routes</td>
<td>Archaeological Assessment</td>
<td>Summarizes information</td>
</tr>
</tbody>
</table>
Figure 13: Previous Archaeological Studies North and South Olohehna Ahupua’a
<table>
<thead>
<tr>
<th>Site # 50-30-08-</th>
<th>Site Type/ Name (if any)</th>
<th>Location</th>
<th>Site Constraints</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>108</td>
<td>Kukui Heiau</td>
<td>Alakukui Point, central South Oloheha on coast</td>
<td>68 ft by 230 ft, can assume buffer of 100 feet; further work in area indicated</td>
<td>Thrum 1906; Bennett 1931:127; Davis and Bordner 1977; Kawachi 1993</td>
</tr>
<tr>
<td>791</td>
<td>Cultural layer and burials (2)</td>
<td>Northeast end of coastal South Oloheha</td>
<td>Extends inland approximately 150 ft. from the coast, archaeological monitoring in area indicated</td>
<td>Perzinski et al. 2001</td>
</tr>
<tr>
<td>1800</td>
<td>Cultural layer and burials (2)</td>
<td>Northeast end of coastal North Oloheha</td>
<td>Extends inland approximately 120 ft. from the coast, archaeological monitoring in area indicated</td>
<td>Rosendahl and Kai 1990</td>
</tr>
</tbody>
</table>
Figure 14: Archaeological Sites in Coastal North and South Olohe na Ahupua‘a
5. Pattern of Archaeological Sites and Constraints in Oloheha

Only three archaeological sites have been designated at North and South Oloheha Ahupua‘a but all are located on the coast. Little data is available for more inland areas but the potential for archaeological resources mauka of Kūhiō Highway appears modest.

Of particular concern is Kukui Heiau located right on the coast of central South Oloheha at Alakukui Point. Kukui Heiau (designated site 50-30-08-108) was placed on the Hawai‘i Register of Historic Places on June 15 1986 and was placed on the National Register on May 18, 1987. This site effectively extends from high-water right up and into the Lae Nani Condos parcel. Alternatives 1 and 3 show a primary path extending along the back of Kukui Heiau. Alternative 1 also has a proposed secondary path (5 feet wide) extending north along the coast linking up with this primary path. While these routes would offer access to the heiau and interpretive opportunities it seems clear that this would constitute an adverse impact to a National Register site and would require consideration of mitigation measures. Consideration might be given to the acquisition of an adjacent strip of the Lae Nani Condos parcel so that a path could be constructed without intruding directly upon Kukui Heiau. Without acquisition of a strip of private land it appears impossible to create paths transiting the coast at Alaka Kukui Point without adverse impact to Kukui Heiau. The State Historic Preservation Division and concerned Hawaiian groups are likely to oppose such trail impacts.

Previous archaeological studies have shown the presence of intact cultural deposits and traditional Hawaiian burials along coastal Oloheha (such as sites 791 and 1800). A monitoring program with on-site monitoring of coastal trail development appears warranted. An on-call archaeological monitoring program should suffice if the route were through former sugar cane lands mauka of Kūhiō Highway.

C. Waipo‘ouli

1 Natural Setting of Waipo‘ouli

The ahupua‘a of Waipo‘ouli is located on the east side of the island of Kaua‘i, south of Kapa‘a and to the north of Oloheha, and Wailua. Waipo‘ouli encloses within its boundaries remnants of the two volcanic series - the Waimea Canyon and the Kōloa - that created most of the present landmass of Kaua‘i. Waipo‘ouli contains an area of 2,966 acres (Commission of Boundaries Record, Kauai, vol. 1, 1873:23).

During the Pliocene, the Waimea Canyon Volcanic Series formed Kaua‘i’s large, single shield volcano (MacDonald and Abbott 1970: 382-384). Part of the heavily eroded remnants of this shield volcano are the Makaleha Mountains that are the highest uplands of Waipo‘ouli. In the early Pleistocene the Kōloa Volcanic Series added to Kaua‘i’s land mass, with major vents in the area of present-day Kōloa, within the Lihu‘e Basin, and in other areas of the island (MacDonald and Abbott 1970: 389). In Waipo‘ouli, the Kōloa Volcanic Series both added new land area and covered over the existing Waimea Canyon Volcanic Series land mass. The alluvium, colluvium and terrigenous sediments resulting from the erosion of these two volcanic series are major sources of sediment for the formation of Kaua‘i’s non-mountainous regions - including part of the ahupua‘a of Waipo‘ouli.
Waipouli is located within the physiographic division known as the Lihue Plain (Armstrong 1973: 30). During higher sea levels, terrigenous sediment accumulated further inland as streams released their sediment loads further inland where the shoreline had encroached. Also, reefs grew with the rising sea level, and, as the sea receded once again, marine sediment was created and deposited on shore by the erosion of these reefs. Both of these processes were part of the formation of the Lihue Plain.

The present Kīhīō Highway road corridor in Waipouli is located between 1800 ft. and 2600 ft. from the shoreline on a sandy coastal flat. Except for modern construction materials and inland clay soils brought in to modify the area's land surface, the Kīhīō Highway corridor area is made up of coralline beach sand. A resident of the area informed Cultural Surveys Hawai‘i that the coralline beach sand extends much farther inland (mauka).

A large marshland was inland of the road corridor (at least until 1886), when it was cut through by drainages that reached the ocean. Two branches of these marsh-like drainages formed an island. The northern branch of this drainage was filled in 1960 as part of a program to improve the drainage of the inland marshy lands. Most likely, these lowland areas were the result of the slow in-filling of a lagoon that once existed in this area. The present shoreline forms a berm that appears to be slowly accreting, behind which the marshy lowlands continue to exist - although drainage of the area has been improved for recent development. These lowlands were used for the cultivation of taro and, beginning in the latter part of the nineteenth century, for rice planting.

2. Origin of the Place Name - Waipouli

Waipouli means the "dark water" (Pukui, Elbert and Mookini 1976).

3. Cultural History of Waipouli

Waipouli is mentioned in a version of the legend of Kaiilauokekoa, a chiefess of Kapa‘a and granddaughter or daughter of the above-mentioned Mō‘ikeha. Thomas Thrum (1907:83-84) relates that

[Kaiilauokekoa's] greatest desire was to play konane, a game somewhat resembling checkers, and to ride the curving surf of Maka‘wa (ke‘eke‘e naalu o Maka‘wa), a surf which breaks directly outside of Waipouli, Kapa‘a. She passed the larger part of her time in this matter every day, and because of the continual kissing of her cheeks by the fine spray of the sea of Maka‘wa, the bloom of her youth became attractive 'as a torch on high,' so unsurpassed was her personal charm.

Wailua Ahupua‘a, where its river enters the sea, was traditionally the home of the high chiefs of the island. The ahupua‘a of Waipouli, to the north of Wailua, is only associated with the surfing of these high chiefs whose residence was typically at Wailua.

When Captain George Vancouver (1798:221), sailing off the east coast of Kaua‘i during his third voyage to the Hawaiian Islands in March of 1793, proclaimed it the "most fertile and pleasant district of the island," he was only confirming the qualities that must have, much earlier, captured the imagination and spirit of the ancient Hawaiians living within the ahupua‘a of that coast.
Accounts of excursions by missionaries and naturalist-travelers along the east coast of Kaua‘i during the first half of the nineteenth century make no specific reference to Waipouli. This may reflect a general desuetude within the area, the result of shifts in population that had taken place on Kaua‘i in response to the stresses - including disease and commerce - of post-European contact life. J.W. Coulter (1931:15), in his study based on the missionary censuses, comments that by the mid-nineteenth century "on the east coast of Kauai nearly all the people lived in Ko‘olau Wailua and in the vicinity of Nāwiliwili Bay." A map of Kaua‘i in Coulter’s study, showing population distribution in 1853, indicates that no single area from Oloheha to Kapa‘a contained a population much greater than fifty. This may reflect an ongoing migration of people from more remote, though formerly well-populated, areas to the population centers of the mid-nineteenth century.

If Waipouli presented a nondescript appearance to a nineteenth-century visitor, a more interesting past is hinted at in the documented presence of a chief of Waipouli, Kiamakani, at two important events on Kaua‘i during the first quarter of the 19th century. In 1824 the brig "Pride of Hawaii," owned by Lihiho (Kamehameha II), ran aground in Hanalei Bay. Hiram Bingham (1848:221-222) recorded the efforts of a great crowd of Hawaiians to pull the vessel to shore for salvage.

Kiamakani passed up and down through the different ranks, and from place to place, repeatedly sung out with prolonged notes, and trumpet tongue... 'be quiet - shut up the voice,' To which the people responded... 'say nothing,' as a continuance of the prohibition to which they were ready to assent when they should come to the tug. Between the trumpet notes, the old chief, with the natural tones and inflections, instructed them to grasp the ropes firmly, rise together at the signal, and leaning inland, to look and draw straight forward, without looking backwards toward the vessel. They being thus marshaled and instructed, remained quiet for some minutes, upon their hams.

The salvage efforts ultimately failed and the brig was lost. Bingham’s account vividly suggests the force of personality of the chief and further betokens an authority and stature that may have been founded upon the traditional prestige of his domain, Waipouli.

Kiamakani appears in Samuel Kamakau’s (1961) account of the 1824 rebellion of the chiefs of Kaua‘i upon the death of Kaumualii'. Kalanimoku, representative of Kamehameha II, had called a council of the Kaua‘i chiefs at Wai‘anae during which he announced:

"The lands shall continue as they now stand. Our son, Kahala-l'a, shall be ruler over you." A blind chief of Waipouli in Puna, named K‘ai‘ai-makani, said, "That is not right; the land should be put together and re-divided because we have a new rule," but Ka-lani-moku would not consent to this [Kamakau 1961: 267].

Some Kaua‘i chiefs, including Kiamakani, rebelled against the imposed decrees.

On August 8 [1824] the battles of Wahiawa was fought close to Hanapēpē. The Hawaii men were at Hanapēpē, the Kauai forces at Wahiawa, where a fort had been hastily erected and a single cannon (named Humehume) mounted as a feeble attempt to hold back the enemy...Large numbers of Kaua‘i soldiers had gathered on
the battleground, but they were unarmed save with wooden spears, digging sticks, and javelins...No one was killed on the field, but as they took to flight they were pursued and slain. So Kīʻiʻi-makani, Na-keʻu, and their followers met death [Kamakau 1961: 268].

Kamakau's singling out of Kīʻiʻi-makani for special mention reinforces the impression that the chief and his ahupuaʻa may have shared a traditional prestige. However by the twentieth century, Handy (and Handy 1972:424) described Waipouli thus:

...a rather insignificant ahupuaʻa south of Kapaʻa, watered by Konohiki stream, in the bed of which there were flats where taro was once planted. There is some level, swampy land by the sea that looks as if it had been terraced.

4. Mahele Period

Documentation produced during the second half of the nineteenth century creates a more lively sense of Waipouli itself. At the time of the Great Mahele, William C. Lunalilo (the future king) was awarded the entire ahupuaʻa of Waipouli along with Kāhili, Kalihiwai, Pilāʻa, Manuahi, Kamalōmalōʻa and Kumukumu (See Table 7 below).

Land Commission records reveal ten individual kuleana awards within the wide makai-most extent of Waipouli. An 1872 map (Figure 15) by James Gay delineating the boundaries of Kapaʻa and adjacent lands shows that much of this makai region of Waipouli was a "swamp" that extended into and across the southeast makai portion of Kapaʻa. This swamp, perhaps the site of a former fishpond, appears to be the most pervasive natural feature of the seaward end of Waipouli and would have been the focus of the Hawaiians' attempt to work and harmonize with the land. The ten kuleana claims show house lots and kula from shore to inland.

A 1929 map traced from a M.D. Monsarrat map based upon an 1886 survey, charts the disposition of the ten Land Commission Awards (LCAs) of Waipouli. Eight of the awards included separate ʻāpina (parcels) for taro loʻi and pāhale (house lots). Kula and loʻi associated with these awards were located within and adjacent to the extensive swamp. Peter H. Buck (1964) describes how the marsh areas would have been utilized: "Wet taro planting took place along the banks of streams and in swamps where the mud was heaped up into mounds." However, it is in combination with details gathered from the Foreign Testimony for the Waipouli LCAs that the map - and the area itself - comes to life. Since seven of the ten claims are testified to by one man, Kaalihihaua (who is himself one of the claimants), and two other claimants testify for the remaining three claims, the testimonies in aggregate may possess a uniformity and heightened accuracy. No one in the claims mentions sweet potatoes, although Handy (and Handy 1972:424) suggested they would have been grown along the coastal plain.

The 1929 Monsarrat map (R.M. No. 1660) has been augmented with the loʻi, kula, wauke, house lots, pigpen and fishpond claimed in the LCAs (Figure 16). This mapping of the land use claims within the awards shows most of the house lots near the shore, but several inland LCAs (3639, 7636, 8836 and 8828) also have house lots where they are growing taro. There are 12 claims made for land and 10 are awarded. These 10 claims include 16 ʻāpina, with 38 loʻi, 10 house lots, 8 kula, 1 claim for wauke, and 1 pigpen. The loʻi are all within or around the marsh land just mauka of the shoreline. For LCA 3560 both ʻāpina state that they are bounded by the
<table>
<thead>
<tr>
<th>LCA no.</th>
<th>Claimant</th>
<th>‘Illof Ahupua’a</th>
<th>Land use</th>
<th>No. of ‘Apana</th>
</tr>
</thead>
<tbody>
<tr>
<td>3243</td>
<td>Honolii</td>
<td>Kupanihi Village</td>
<td>mahina’ei (farm), 7 lo‘i</td>
<td>(Award in Kapa‘a)</td>
</tr>
<tr>
<td>3560</td>
<td>Kauakahī</td>
<td>Pua / Pua‘a Puuiki</td>
<td>3 lo‘i, kula (pasture), house lot</td>
<td>(Award in Wailua)</td>
</tr>
<tr>
<td>3622</td>
<td>Kamahōlēlani</td>
<td>Makamakaeole Village</td>
<td>3 lo‘i and kula (pasture), house lot</td>
<td>1 (2 acres, 1 rood, 3 rods)</td>
</tr>
<tr>
<td>3624</td>
<td>Kaumiumi</td>
<td>Pāhaku Makamakaeole Village</td>
<td>3 lo‘i and small kula (pasture), house lot</td>
<td>1 (3 roods, 38 rods)</td>
</tr>
<tr>
<td>3639</td>
<td>Kapalahua and Nalopī</td>
<td>Kekee Kanalimua Village</td>
<td>3 lo‘i and uncult. kula, house lot</td>
<td>1 (3 roods)</td>
</tr>
<tr>
<td>3971 See 3243</td>
<td>Honolii</td>
<td>Living at Waipouli</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7636</td>
<td>Kanaka</td>
<td>Mokuapi Makahokoloko Village</td>
<td>3 (5) lo‘i house lot</td>
<td>2 (3 roods, 27 rods)</td>
</tr>
<tr>
<td>8559B</td>
<td>Kanaina, C. for Lunalilo</td>
<td>Ahupua’a of Waipouli</td>
<td>Revenue</td>
<td>‘Apana 42</td>
</tr>
<tr>
<td>8836</td>
<td>Kaaliihikaua</td>
<td>Kaheloko</td>
<td>2 lo‘i, kula, wauke, pig pen, house lot</td>
<td>1 (1 acre, 8 rods)</td>
</tr>
<tr>
<td>8838</td>
<td>Kahukuma</td>
<td>Pīni</td>
<td>2 lo‘i, kula (pasture) and house lot</td>
<td>1 (1.5 acres, 37 rods)</td>
</tr>
<tr>
<td>8839</td>
<td>Kuaiwa</td>
<td>Hape Mokanahala / Mokunahala Village</td>
<td>4 lo‘i and sm. kula, house lot</td>
<td>1 (3 roods, 13 rods)</td>
</tr>
<tr>
<td>9013</td>
<td>Nawaimakanui</td>
<td>Naohoe Uahalekakawawa</td>
<td>3 lo‘i, house lot</td>
<td>1 (1 acre, 12 rods)</td>
</tr>
<tr>
<td>10146</td>
<td>Mahi</td>
<td>Pau Paikahawai</td>
<td>3 lo‘i and sm. kula, house lot</td>
<td>1 (1 acre, 17 rods)</td>
</tr>
</tbody>
</table>

12 claims for land and 10 claims awarded, 16 ‘Apana awarded, 38 lo‘i, 10 house lots, 8 kula, 1 wauke patch, 1 pigpen
Figure 15: Portion of 1872 Survey Map by James Gay, Showing Makai Marsh Land in Waipouli and Kapa’a (rough estimates of ahupua’a boundaries at shore added)
Figure 16: Portion of 1929 Map by R. Lane Based on 1886 M. D. Monsarrat Survey Showing Makai Portion of Waipouli with Land Commission Awards
Waipouli pigpen and the house lot has a cool spring on its makai side. LCA 3622 ʻapana 2 (shown on the shore) states it is in a village of Makamakaole and states that the muliwai and Waipouli stream is just south. Umiumi (LCA 3624) claims two ʻauwai to the east and south of his ʻapana 1 claim, and at the shore his ʻapana is bounded by the Makamakaole kula (pasture) to the north. LCA 3639 ʻapana 1 states the konohiki's (Kaweloloko's) fishpond is to his east. His second lot (not located) states it is also near the Waipouli pig pen and the cool water spring.

Immediately striking in the testimonies is the number of individual features, each given a name by the Hawaiians, used to define the location and boundaries of the claims. The following list presents this profusion:

- 'ILIJ  Kekeee, Kukaeuli, Mokuapi, Kaheloko, Pōhaku, Pua, Pau, Koape, Naohe
- KULA  Kaheloko, Kulaonohiwa, Makamakaole, of Konohiki, of Waipouli
- VILLAGE  Mokanahala, Uahalekawawa, Makamakaole, Puuiki, Paikahawai, Makabokoloko, Kanelimua
- FISHPOND  Hapakio (or Kopekia) (Figure 16)
- ʻAUWAI  Waipouli, Koape, Pua, Papaike, Naohe, Pohakanawai, Kololuku (or Kololoko)
- RIVER  Waipouli
- BROOK  Waipouli, Ohia. Uhalakahawa, Olohena

Two noteworthy details emerge from this accumulation of names. The first is the identification of two place names - Uahalekawawa is a "village" and Hapakio is a fishpond of the konohiki (LCA 9013), and the profusion of named features within a very small portion of the entire ahupua'a suggests an intense use of the makai area by what must have been a much larger population than that present by the mid-nineteenth century. Ross Cordy (1988) also clearly documents the LCA location and land use of Waipouli in his work entitled *Initial Archival Information on Land Use Patterns: Waipouli Ahupua'a.*

5. Boundary Commission

Additional clues to the nature of Waipouli Ahupua'a come to light in the records of the 1872-73 Commission of Boundaries (1864-1905) proceedings concerning Waipouli. The guardians of William C. Lunalilo had petitioned that the "boundaries of the Ahupua'a of Waipouli situated in the district of Puna Island of Kaua'i may be defined and settled." Four witnesses, all Hawaiians familiar with the ahupua'a, gave evidence from which Duncan McBryde, the Commissioner of Boundaries, made his decision on November 7, 1872. A subsequent survey by James Gay was undertaken in June 1873.

McBryde's decision and Gay's survey notes - both included in the Boundary Commission record - contain an abundance, similar to that of the Foreign Testimony entries for Waipouli LCAs, of place names. Some of these place names are especially worth noting.

Kauwanawa'a is a "canoe harbour" on the shore at the southern boundary of Waipouli. Midway up the southern boundary is an "old pig pen Papua'a." Along the mauka half of the northern boundary are the "site of old houses Panini" and "old houses Kapukaili." The presence of the pig pen and two old house sites suggests there were populated areas, of which these were only three,
Historic and Archaeological Background Waipouli

Figure 17: Map Showing Waipouli Place Names from Nineteenth Century Documents
### Table 3: Previous Archaeological Studies in Coastal Waipouli Ahupua‘a (see Figure 18)

<table>
<thead>
<tr>
<th>Source</th>
<th>Location</th>
<th>Nature of Study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handy and Handy 1972</td>
<td>Archipelago-wide</td>
<td>Native Planters Study</td>
<td>Brief discussion of traditional agriculture in Waipouli Ahupua‘a</td>
</tr>
<tr>
<td>Cordy 1988</td>
<td>Waipouli Ahupua‘a</td>
<td>Archival Study of Land Use Patterns</td>
<td>Primary pattern houses clustered on coast, lo‘i just back</td>
</tr>
<tr>
<td>Rosendahl and Kai 1990</td>
<td>Coconut Plantation Development Site 6, (TMK: 4-4-3-07:27) <em>makai</em> of Kūhiō Highway, S. Waipouli</td>
<td>Archaeological Inventory Survey</td>
<td>Extensive subsurface cultural deposit with 5 burials encountered</td>
</tr>
<tr>
<td>Folk, et al. 1991</td>
<td>(TMK: 4-3-08:1) 12.66-Acre Parcel <em>makai</em> of Kūhiō Highway, central Waipouli</td>
<td>Archaeological Survey and Subsurface Testing</td>
<td>An extensive pre-contact layer and eight identified burials; was assigned Site # 50-30-08-1836</td>
</tr>
<tr>
<td>Folk and Hammatt 1991a</td>
<td>(TMK: 4-3-08:1) 12.66-Acre Parcel <em>makai</em> of Kūhiō Highway, central Waipouli</td>
<td>Addendum to Archaeological Survey and Subsurface Testing</td>
<td>Site # 50-30-08-1836, encountered 3 additional burials</td>
</tr>
<tr>
<td>Hammatt 1991a</td>
<td>Coconut Plantation Development Site 6 (TMK: 4-4-3-07:27) <em>makai</em> of Kūhiō Highway S. Waipouli</td>
<td>Archaeological Testing Results</td>
<td>17 1-m² hand-dug units better defined the site</td>
</tr>
<tr>
<td>Hammatt 1991b</td>
<td>Proposed Kapa‘a Sewer line</td>
<td>Archaeological Subsurface Testing</td>
<td>Identified Site # 50-30-08-1836 as extending as far inland as Kūhiō Highway</td>
</tr>
<tr>
<td>Hammatt 1991c</td>
<td>Coconut Plantation Development Site 6, (TMK: 4-4-3-07:27) <em>makai</em> of Kūhiō Highway, S. Waipouli</td>
<td>Data Recovery, Interim Preservation and Burial Treatment Plan</td>
<td>Plan was followed in the work of Toenjes et al. 1991</td>
</tr>
<tr>
<td>Shun 1991</td>
<td>TMK:4-4-3-07:29 and 30</td>
<td>Archaeological Subsurface Testing</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Source</td>
<td>Location</td>
<td>Nature of Study</td>
<td>Findings</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Toenjes et al. 1991</td>
<td>A 12-Acre Property at Coconut Plantation, Waipouli, Kaua‘i. (TMK 4-3-07:27)</td>
<td>Results of Archaeological Data Recovery</td>
<td>Site 50-30-08-1801, re-identified two known burials (no new burials found) and identified a workshop area and permanent habitation.</td>
</tr>
<tr>
<td>Hammatt and Folk 1992a</td>
<td>(TMK: 4-3-08:1) 12.66-Acre Parcel makai of Kūhiō Highway, central Waipouli</td>
<td>Data Recovery Plan</td>
<td>Site 50-30-08-1836</td>
</tr>
<tr>
<td>Hammatt and Folk 1992b</td>
<td>TMK 4-3-06:01, adjacent to mauka side of Kūhiō Highway, central Waipouli</td>
<td>Archaeological Subsurface Testing</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Spear 1992</td>
<td>Along Kūhiō Highway</td>
<td>Archaeological Subsurface Testing</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Hammatt et al. 1994</td>
<td>Lands mauka of Kūhiō Highway crossing Waipouli Ahupua‘a</td>
<td>Archaeological Assessment</td>
<td>Notes the extensive marshlands stretching across portions of Waipouli just mauka of Kūhiō Highway and the potential for paleoenvironmental data and evidence of wetland cultivation.</td>
</tr>
<tr>
<td>Chaffee and Spear 1995</td>
<td>N. Olohana/Waipouli boundary near Kalama Stream</td>
<td>Reconnaissance Survey</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Creed et al. 1995</td>
<td>Kūhiō Highway between Wana Road and Keaka Road in north Waipouli</td>
<td>Archaeological Monitoring Report</td>
<td>4 burials designated Site 50-30-08-872 within the cultural layer designated Site 50-30-08-1848</td>
</tr>
<tr>
<td>Hammatt et al. 2000</td>
<td>TMK: 4-3-08:1) 12.66-Acre Parcel makai of Kūhiō Highway, central Waipouli</td>
<td>Archaeological Data Recovery Report</td>
<td>Documents extensive finds of midden artifacts and features</td>
</tr>
<tr>
<td>Source</td>
<td>Location</td>
<td>Nature of Study</td>
<td>Findings</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Dega and Powell 2003</td>
<td>Kūhiō Highway</td>
<td>Archaeological Monitoring Report</td>
<td>Identifies site 886 cultural layer, possible <em>'auwai</em>, &amp; human remains</td>
</tr>
<tr>
<td>Hammatt and Shideler 2003</td>
<td>Kīhiō Hwy. improvements alternate routes</td>
<td>Archaeological Assessment</td>
<td>Summarizes information</td>
</tr>
</tbody>
</table>
Figure 18: Previous Archaeological Studies in Coastal Waipouli Ahupua‘a
<table>
<thead>
<tr>
<th>Site # 50-30-08-</th>
<th>Site Type/Name (if any)</th>
<th>Location</th>
<th>Site Constraints</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>872</td>
<td>Burials (4)</td>
<td>Along Kūhiō Highway in north Waipouli, lies within Site 50-30-08-1848</td>
<td>Consultation and monitoring in vicinity indicated</td>
<td>Creed et al. 1995:50</td>
</tr>
<tr>
<td>886</td>
<td>Cultural layer, possible 'auwai &amp; human remains</td>
<td>Kūhiō Hwy near Coconut Market Place</td>
<td>Consultation and monitoring in vicinity indicated</td>
<td>Dega and Powell 2003</td>
</tr>
<tr>
<td>1801</td>
<td>Subsurface cultural deposit and 5 human burials</td>
<td>Adjacent to coast, S central Waipouli, 200 m makai of Kūhiō Highway</td>
<td>Consultation and monitoring in vicinity indicated</td>
<td>Rosendahl and Kai 1990; Hammatt 1991a and c; Toenjes et al. 1991</td>
</tr>
<tr>
<td>1848</td>
<td>Subsurface cultural layer</td>
<td>Along Kūhiō Highway in north Waipouli</td>
<td>Consultation and monitoring in vicinity indicated</td>
<td>Hammatt 1991b; Creed et al. 1995</td>
</tr>
</tbody>
</table>
Figure 19: Archaeological Sites in Coastal Waipouli Ahupua‘a
continuous accretion of beach sand, there had been no major depositional or erosional events. The integrity of the cultural deposits indicated the land surface had remained stable for a long period and had escaped modern disturbances such as sand mining, grading, and coconut tree planting in contrast to neighboring localities (Folk et al. 1991:81-82). They found the prehistoric cultural A-Horizon (Stratum II) formed in the upper limits of the extensive terrace of coralline beach sand. There was some mixing of the modern A-Horizon (Stratum I) with the top 3 to 5 centimeters of the prehistoric A-horizon as seen in the reworking of the prehistoric materials from Stratum II into Stratum I due to historic use of the land surface for pasture and rodeo practice. The natural, culturally sterile, parent beach sand material (Stratum III) is present throughout this shoreline property from beneath the cultural layer, at a maximum of about 6 feet (2 m) above mean sea level, to an undetermined depth below the ground water table. This sequence was consistent throughout the southeastern and south-central portions of the property.

Prehistoric basalt flake tools were observed on the ground surface across the southern half of the project area coming from the Stratum II cultural (habitation) layer (Folk et al. 1991:81-82).

There were fill deposits over the wetlands along the northern and northwestern portion of this property, some of it apparently brought in for the 1960 Waipouli Drainage Canal project. Along the eastern boundary, the present day beach berm has buried the cultural layer beneath recently deposited sand. Folk et al. (1991:81-82) surmised human occupation began upon the beach terrace, possibly as early as A.D. 1500, based on the charcoal sample from Stratum II. This stratum contained a significant number of traditional Hawaiian artifacts and innumerable features associated with human activity in relatively undisturbed stratigraphic contexts. The features varied from wide, shallow pits to deep, narrow pits. The traditional artifacts represented activities including the manufacture of tools for fishing and woodworking, and for use as weapons. The abundance of these tools suggested the site was utilized in the pursuit of occupational endeavors rather than for permanent habitation. A unique cache of sling stones in various stages of completion was found.

Midden, or refuse from food consumption, indicated exploitation of the inshore fringing reef marine environment of this coastal area and the freshwater limpet – Neritina granosa. Other food resources represented in the midden by skeletal remains were birds – shearwaters and petrels exclusively – and juvenile and adult pigs. The pig remains were found in varied contexts including use in the manufacture of tools and ornaments of social status, and possibly for religious offerings in the cases of burial of entire young pigs.

Testing located several human burials, some probably associated with two Land Commission Awards. Some of the burials post-dated the prehistoric layer, some predated it, and some were contemporaneous with it. Burials were re-interred along with grave goods that were thought to be associated with the burials.

Details about the shoreline from the 20th century, were provided by Mr. Ed B. Crabbe, President of Niupia Farms, Ltd. Mr. Crabbe’s grandfather bought the shoreward lands of Waipouli sometime in the first quarter of the century. A coconut grove was planted at the present site of the Coconut Plantation to produce copra and animal feed. Mr. Crabbe’s father moved his family from Maui to Kaua‘i sometime in the 1940s. They occupied the former Golding house (Dr. Golding was a veterinarian) with Mr. Crabbe living in the former office. Mr. Crabbe recalled that there was indeed a surf break off Waipouli called Makaiwa. Another coastal feature of Waipouli was a "double reef" formation that somehow dissipated the force of such inundations as the 1946 tidal wave that swept over the Hawaiian Islands. Mr. Crabbe recalls that
his shoreline property was used only for horse pasturage and rodeo practice. The north side of the property, formerly the bank of the northernmost watercourse exiting from the marshlands, was filled in when the Waipouli Drainage Canal was constructed. A portion of this canal mauka of the Kāhūi Highway runs parallel to the shore; a branch exiting to the sea follows the natural drainage of the former Waipouli (or Konohiki) Stream. The canal was built in 1960 for flood control as a Department of Accounting and General Services project (information provided by Mr. Tom Kam of the Department of Land and Natural Resources). Mr. Crabbe’s location of the Maka‘iwa surf break off Waipouli brings the Waipouli account full circle to its beginning in the legend of Ka‘ilila‘uekou whose “greatest desire was to ride the curving surf at Maka‘iwa.”

Legend told of the surf break, 19th century documentation mentions a location suitable for a “canoe harbour”, and a present-day informant has told of a “double reef” capable of diminishing the force of tidal waves and seasonal high surf. These features would have heightened the appeal of the makai portion of Waipouli for settlement by the Hawaiians. That this area may have been, in fact, well-populated in former times has been suggested by the numerous villages, lo‘i, and watercourse features named in 19th century documents. More speculatively, these documents further suggest that a significant population was dispersed throughout the ahupua‘a.

7. Summary of Waipouli Settlement Pattern and Discussion

Traditionally, Waipouli was known for its fine surf area. The Land Commission Awards show several house lots at the beach, but there are also house lots within the plots claimed for lo‘i and kula along the southern edge and within the marshy area more in the Kapa‘a direction. While most of the claims are for lo‘i and kula, one LCA (8836) also claimed a fishpond and some wauke. This general area is known as Uapakio or the konohiki’s fishpond. Homes and kula were scattered around the pond where lo‘i would have been on the edges of the wetland and the flatlands were used for pasture and grasslands. The settlement in Waipouli, unlike adjoining ahupua‘a, is spread from the shoreline inland and those living inland at the time of the Māhele also had houses with their lo‘i and kula, even in the most mauka claim (8838). The Boundary Commission record adds locations of old home sites far inland as well locations of koa and kukui trees and places to catch wild fowl.

Archaeological work along the beach terrace of Waipouli has uncovered cultural layers both at the Coconut Plantation Resort area and the Uhalekawa‘a area, with dates for use during the 15th century for the former and the 16th century for the latter. Archaeologists believe that the Coconut Plantation area was a recreational area, due to its extensive layer but paucity of artifacts. The Uhalekawa‘a area has a thick cultural layer with the traditional artifacts representing activities such as tool manufacture for fishing and woodworking, and for weapons. The abundance of these tools suggested the area was a work site rather than a permanent habitation one.

The traditional landscape around the marsh was replaced by dry land in the 1960’s when Waipouli Drainage activities drained and filled the former marshlands which allowed for its use for sugar cane.

8. Pattern of Archaeological Sites and Constraints in Waipouli

The strongest expression of archaeological sites (cultural layers and human burials) at Waipouli is immediately on the coast such as designated sites 1801 and 1836. Site 1836 does
extend as far inland as Kūhiō Highway and four burials (Site -872) have been recovered from under Kūhiō Highway. Thus it must be assumed that other subsurface deposits and burials extend mauka of Kūhiō Highway particularly in the east portion of Waipouli. Most of the former sugar cane lands well mauka of the highway would be anticipated to be free of archaeological sites. An on-site archaeological monitoring program and consultation with the Kauai‘i/Ni‘ihau Islands Burial Council would be recommended for any area near or seaward of Kūhiō Highway.

D. Kapa‘a

1. Natural Setting of Kapa‘a

The ahupua‘a of Kapa‘a is located on the eastern side of the island of Kaua‘i, in the old district or moku of Puna. Adjacent to the north is the ahupua‘a of Kealia, and to the south, Waipouli. Like its neighboring ahupua‘a to the south it is exposed to the northeast tradewinds and similarly has 40 to 50 inches of rain a year at the shore and more inland. Kapa‘a contains an area of 7,237 acres (Gay 1872 R.M. 159).

Geologically, Kapa‘a does not fit the mold of the typical high-walled valley setting with a flat bottom that lent itself to the well-developed wetland agricultural techniques of the ancient Hawaiians. Rather, it can be characterized as fairly flat, with irregularly-shaped gullies and small valleys in the uplands, through which small tributary streams run including Kapahi, Makaleha and Moalepe. While some of these streams combine with other tributaries in neighboring Kealia to form Kapa‘a Stream which empties into the ocean at the northern border of the ahupua‘a, others flow directly into the lowlands of Kapa‘a creating a large (approximately 170 acre) swamp area which has, in modern times, been filled in (Handy and Handy 1972;394. 423; Territorial Planning Board 1940:9).

Kapa‘a Town is presently built on either side of Kūhiō Hwy. on a sand berm with ocean on the makai side and marsh on the mauka side. The sand berm was probably slightly wider here than in other localities, but dry land was probably always at a premium.

2. Cultural History of Kapa‘a

In the Pre-Contact Period, while Kapa‘a does not shine in the spotlight of Hawaiian myths and legends to the degree of other areas on the island like nearby Wailua Ahupua‘a, it is tied to several esteemed native traditions. High in the mauka region of Kapa‘a in the Makaleha mountains at a place called Ka‘ea is said to lie the supernatural banana grove of the Kaua‘i kupua, or demigod, Palila, grandson of Hina. It is said that the banana plants grew 35 feet tall, the fruit clusters over 10 feet long, and each banana over 4 inches in diameter (Handy and Handy 1972:424; Beckwith 1970:414).

Mō‘ikeha, the chief is also associated in chant with Kapa‘a. Pukui reports the saying, “Ka lulu o Mō‘ikeha i ka laulā o Kapa‘a - The calm of Mō‘ikeha in the breadth of Kapa‘a,” referring the peace of Kapa‘a, Kaua‘i, the place he chose as his permanent home (Pukui 1983:157).

Kapa‘a also figures prominently in the famous story of Pā‘a‘a, and the wind gourd of La‘amaomao. Pā‘a‘a was the son of Kūanu‘uanu, a high-ranking retainer of the island of Hawai‘i ruling chief Keawenua‘umi (a son and eventual successor to the legendary chief ‘Umi), and La‘amaomao, the most beautiful girl of Kapa‘a and member of a family of high status kahuna. Keawenua‘umi left the island of Hawai‘i, traveled throughout the other islands and
finally settled on Kaua'i, at Kapa'a. It was there that he met and married La'amaomao, although he never revealed his background or high rank to her until the day a messenger arrived, calling Kuanu'uanu back to the court of Keawenuia'umi.

By that time, La'amaomao was with child, but Kuanu'uanu could not take her with him. He instructed her to name the child, if it turned out to be a boy, Paka'a. Paka'a was raised on the beach at Kapa'a by La'amaomao and her brother Ma'ilou, a bird snarer. He grew to be an intelligent young man and it is said he was the first to adapt the use of a sail to small fishing canoes. Although Paka'a was told by his mother from a very young age that his father was Ma'ilou, he suspected otherwise and after constant questioning La'amaomao told her son the truth about Kuanu'uanu.

Intent on seeking out his real father and making himself known to him, Paka'a prepared for the journey to the island of Hawai'i. His mother presented to him a tightly covered gourd containing the bones of her grandmother, also named La'amaomao, the goddess of the winds. With the gourd and chants taught to him by his mother, Paka'a could command the forces of all the winds in Hawai'i. While this story continues on at length about Paka'a and his exploits on the big island and later on Moloka'i, it will not be dwelt upon further here. It is important to note that several versions of this story do include the chants which give the traditional names of all of the winds at all the districts on all the islands, preserving them for this and future generations (Nakuina 1990; Rice 1923:69-89; Beckwith 1970:86-87; Thrum 1923:53-67; Forbther 1918:78-128).

Kapa'a is also mentioned in traditions concerning Kawelo (Kawelooleimakua), Ka'ililauokekoa (Mokuhea's daughter, or granddaughter, dependent on differing versions of the tale), the mo'o Kalama'ina'a and the origins of the hina'i hina'lea or the fish trap used to catch the hina'lea fish, and the story of Lonoikamakahiki (Fornander 1917:318, 704-705; Rice 1923:106-108; Thrum 1923:123-135; Kamakau 1976:80).

"Kunoena kalukalu Kapa'a" or "Kapa'a is like the kalukalu mats" is a line from a chant recited by Lonoikamakahiki. The kalukalu is a sedges grass, apparently used for weaving mats. Kau'a'i was famous for this peculiar grass, and it probably grew around the marshlands of Kapa'a. It is thought to be extinct now, but an old-time resident of the area recalled that it had edible roots, "somewhat like peanuts." Perhaps it was a famine food source (Fornander 1917:518-19; Kapa'a Elementary School 1933.VI).

Handy (1940:68; Handy and Handy 1972:269,282) commented that the ahupua'a contained a wealth of good kula land, and also stated that there was a "highly developed irrigation system" there, although no specifics were given. He noted that terraces were present where the terrain allowed, more than 4 miles up Kapa'a stream, and that wetland cultivation probably also occurred at the edges of the marsh nearer to the coast.

3. Early Post-Contact Period

Very few recorded observations exist for this period in Kapa'a's history. George Vancouver (1798:221-223) examined the east coast of the island from his ship in 1793 and stated that it was the "most fertile and pleasant district of the island..." However, he did not anchor nor go ashore there due to inhospitable ocean conditions.
In 1840, Peale and Rich, with Charles Wilkes' United States Exploring Expedition, traversed the coastline there on horseback heading north from Wailua:

The country on the way is of the same character as that already seen. They passed the small villages of Kuapa, Kealia, Anahola, Mowaa, and Kauhakakehi, 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 1845:69].

James Jarvis (1844:157), who tracked much of the same route as Peale and Rich noted "nothing of particular interest is met with on the road, until arriving at Anahola."

4. The Mahele Period

Documents relating to Land Commission Awards (kuleana) during this period show, surprisingly, that only six individuals were awarded land parcels in the relatively large ahupua'a of Kapa'a (Table 10 and Figure 20). Five of the six received multiple parcels and show characteristic similarities. They are Keo (LCA #3554, 3599), Kiao (#8843), Kama'ana (#8837), Ioane Honolii (#3971), and Hulili (#3638).

All five had lo'i fields on the mauka side of the lowland swamp area, sometimes extending a short distance up into small, shallow gulches and valleys. Each also had a separate house lot located on the makai side of the swamp, adjacent to the beach. The five LCAs within Kapa'a Town are all right next to the present highway. Interestingly, the residential "village" of Kapa'a did not exist as a single entity, but was a series of probably small settlements or compounds that stretched along the shoreline of the ahupua'a and included (north to south) Ulukini, Puhi, Kalolo (Kaulolo), and Kupanahi (Makahaukupanahi). The sixth individual, Ehu (#8247), was the only person to be awarded a single parcel in the upland area of Kapa'a at Molepea valley, approximately five miles from the shore. In 1848, when Ehu made his claim, he was the only one living there. A few years later, according to Honolii's testimony to support Ehu's claim, "There are no houses and no people now living on the land. Ehu found himself alone there, all his neighbors having either died or left the land. Ehu now lives in Wailua." (Foreign Testimony 92-93 Vol. 13, No. 8247, Ehu, Claimant) Ehu may have been the last person to live at and cultivate in the traditional way, the far mauka region of Kapa'a.

A check of the Foreign Testimony for Kuleana Claims to Quiet Land Titles in the Hawaiian Islands (1848-50) reveals the names of four 'anuiai in Kapa'a. Cross-referencing this information with various maps gives a general indication of most of their locations: Makahaikupanahi, along the southern border of the ahupua'a near the shore; Makea, near the current Kapa'a Public Library on the mauka side of Kūhiō Highway; and Kapa'a, probably along the current Kaneale Road.
### Table 10
Chart of Land Use from Kapa‘a LCAs

<table>
<thead>
<tr>
<th>LCA No.</th>
<th>Claimant</th>
<th>‘Ili of the Ahupua‘a</th>
<th>Land Use</th>
<th>No. of ‘Åpana</th>
</tr>
</thead>
<tbody>
<tr>
<td>3243</td>
<td>Honolii, Ioane</td>
<td>Kahana</td>
<td>Kupanii Village, 6 lo‘i</td>
<td>2 (2 acres, 1 rood, 1 rod)</td>
</tr>
<tr>
<td>3243</td>
<td>See 3971</td>
<td></td>
<td>(uncult), house lot</td>
<td></td>
</tr>
<tr>
<td>3554</td>
<td>Keo</td>
<td>Kahanui Pahi Village</td>
<td>15 lo‘i, house lot</td>
<td>2 (7 acres, 1 rood, 17 rods)</td>
</tr>
<tr>
<td>3559</td>
<td>Keo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3559</td>
<td>See 3554</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3638</td>
<td>Hululi</td>
<td>Maelele Kaloko Village</td>
<td>12-15 lo‘i, house lot</td>
<td>2 (5 acres, 1 rood, 19 rods)</td>
</tr>
<tr>
<td>3971</td>
<td>Hololii, Ioane</td>
<td>Kahana</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3971</td>
<td>See 3243</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8247</td>
<td>Ehu</td>
<td>Moalepe/Noalepe</td>
<td>20 lo‘i</td>
<td>1 (3 roods)</td>
</tr>
<tr>
<td>8837</td>
<td>Kamapuu</td>
<td>Ulukiui Ilo Awawaloa Ulukiui</td>
<td>3 lo‘i, 2 lo‘i, house lot</td>
<td>1 (2 acres, 2 roods, 27 rods)</td>
</tr>
<tr>
<td>8843</td>
<td>Kiau</td>
<td>Apopo Kalolo Village</td>
<td>6 (5) lo‘i and kula house lot</td>
<td>2 (2.75 acres, 3 rods)</td>
</tr>
<tr>
<td>10564</td>
<td>Oleloa, Daniel</td>
<td>Hikinui farm</td>
<td>fishpond, 10 lo‘i</td>
<td></td>
</tr>
</tbody>
</table>

7 claimants, 6 awards of 10 ‘Åpana, more than 64 lo‘i (more than 77 claimed), 5 house lots, 1 fishpond claimed but not awarded.

5. The Late 1800’s

The sugar industry came to Kapa‘a in 1877 with the establishment of the Makee Sugar Company and subsequent construction of a mill near the north end of the present town. Cane was cultivated mainly in the upland areas on former kula lands. The first crop was planted by the Hui Kawahuan, composed of associates of then King David Kalākaua, and the king threw much of his political and economic power behind the project to ensure its success (Dole 1929:8-15). A train line went inland from Kapa‘a Town from the coast along the present Lihue Street alignment heading south behind Kapa‘a Town. This railroad line skirts the rice lands behind Kapa‘a Town. Another branch ran between Hauula and Hurdley Roads and the branch from behind Kapa‘a Town joined the Hauula/Hurdley railroad alignment where the proposed corridors join the present Kūhiō Highway and the train line continued north to the Kealii (Kapa‘a) River (Figures 21 and 22). Chinese rice farmers had begun cultivating the lowlands of Kapa‘a with increasing success about this same time. Several Hawaiian kuleana owners leased or sold outright their parcels mauka of the swampland to rice cultivators. Concurrently, the economic activity as a result of rice and sugar sparked the same fate for the house lot kuleana on the makai side of the
Figure 21: Portion of Map by Joseph Iao (Nov. 1914) Kapa'a Section, Island of Kaua'i Showing Railroad and Rice Lands, Hawai'i Territory Survey (HTS Plat 3014)
Figure 22: Portion of Map by James S. Mann (Nov. 1914) Kapa‘a Homesteads, 4th Series, Puna, Kaua‘i, Hawai‘i Territory Survey (HTS Plat 3018); Note Railroad Lines, Rice and Kula Lots, and Church Grants by the Keālia River
marsh for increasing commercial and residential development (Lai 1983:148-161). This land was
drained and used for cane in this century before more recent urbanization of the area.

6. Previous Archaeological Research and Finds in Kapa‘a Ahupua‘a

The following two tables outline the archaeological research (Table 11) and historic
properties (Table 12) identified in Kapa‘a Ahupua‘a. These tables are followed by discussion of
the research and historic properties. Table 11 provides a list of archaeological research conducted
within Kapa‘a Ahupua‘a, including columns for source, location, nature of study, and findings.
The locations of these archaeological studies are shown in Figure 23. Table 12 is a list of known
historic properties within the ahupua‘a and includes columns for state site numbers, site type,
location and reference. The locations of identified sites within Kapa‘a Ahupua‘a are shown in
Figure 24.

Bennett (1931:128), who surveyed the island in 1928-29, listed only one site for the
ahupua‘a:

Site 110. Taro terraces and bowl, back of the Kapa homesteads.
In the foothills of the mountains are many little valleys which contain taro terraces.
Single rows of stone mark the divisions with some 2-foot terraces. Under a large
mango tree was found a bowl.

Bennett (1931:73) also refers to “taro terraces and house sites” at Kapahi, approximately 5 miles
from the shoreline.

Hammatt did not observe any archaeological sites during his 1981 reconnaissance of 52.56
acres of mostly kula land in upland Kapa‘a, nor were any terraces or other sites apparent during a
1986 reconnaissance of the upper reaches of the Makaleha stream valley. In 1991 during
subsurface testing for the proposed Kapa‘a sewer line, Hammatt obtained radiocarbon dates from
a buried habitation deposit along Inia Street, which parallels the beach makai of Kūhiō Highway.
This cultural deposit was radiocarbon dated to A.D. 1435 to 1665.

Archaeological work on the Kapa‘a Sewer line (Creed et al. 1995) encountered 26 burials
associated with habitation locations, which ultimately totaled 30 individuals in the sewer line
corridor, within the sand deposits underlying Kapa‘a Town and Kūhiō Highway to the south. In
spite of urban development, large areas of undisturbed subsurface sediments remain under the
streets and, presumably within the blocks (State site areas, site 50-30-08-1848, south of Kūhiō
Highway and site 50-30-08-1849) and are associated with the habitation areas (Figure 25). The
makai east and west boundaries of the latter site can now be extended in Kapa‘a Town to
include a continuous stretch from ‘Ohi‘a Street eastward to Lehua Street. These sites are
expressed as preserved pre-contact A-horizon/cultural layers with artifactual and midden
materials, charcoal and soil pits. On ‘Inia Street small deep pits probably represent postholes of
pole and thatch dwellings.

Five radiocarbon dates were recovered, three from the cultural layer of Site -1849, one from
a burial pit on Ulu Street, and one from a pit feature on the corner of Lehua and Niu Streets.
These indicate a prehistoric time spread from A.D. 1165 to 1950. Two of these dates are well
within the pre-contact period. One from A.D. 1435 to 1665 and the other A.D. 1165 to 1400
Materials from the historic development of Kapa‘a town were seen in the trash pits from various
localities in the present commercial district. Bottles and other historic materials were recovered
### Table 11 Previous Archaeological Studies in Coastal Kapa’a (see Figure 23)

<table>
<thead>
<tr>
<th>Source</th>
<th>Location</th>
<th>Nature of Study</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bennett 1931</td>
<td>Island-wide</td>
<td>Archaeological</td>
<td>Identifies 2 sites: Site 110-taro terraces and bowl, and Site 111-a large simple dirt Hawaiian ditch</td>
</tr>
<tr>
<td>Handy and Handy 1972</td>
<td>Archipelago-wide</td>
<td>Native Planter study</td>
<td>Discusses &quot;highly developed irrigation system&quot;</td>
</tr>
<tr>
<td>Ching 1976</td>
<td>Just south of the Waikaka Drainage Canal</td>
<td>Archaeological</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Hammatt 1981</td>
<td>Upland Kapa’a</td>
<td>Archaeological</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Hammatt 1986</td>
<td>Upper reaches of the Makaleha stream valley</td>
<td>Archaeological</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Hammatt 1991b</td>
<td>Along Kūhiō Highway</td>
<td>Subsurface Testing</td>
<td>Identifies two sub-surface cultural layer sites</td>
</tr>
<tr>
<td>Kikuchi and Remoaldio 1992</td>
<td>Around Kapa’a Town</td>
<td>Cemeteries of Kaua’i</td>
<td>Identifies six cemeteries</td>
</tr>
<tr>
<td>Spear 1992</td>
<td>South side Waikaena Canal, mauka of Kūhiō Highway</td>
<td>Monitoring Report</td>
<td>Designated subsurface site 50-30-08-547</td>
</tr>
<tr>
<td>Chaffee, Burgett and Spear 1994a</td>
<td>A house lot (TMK: 4-5-09:10) near the corner of Kukui and Ulu Streets in mauka Kapa’a Town</td>
<td>Archaeological Inventory Survey</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Chaffee, Burgett and Spear 1994b</td>
<td>Māmame Street Kapa’a Town.</td>
<td>Archaeological Inventory Survey</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Hammatt, Ida and Chiogiogi 1994</td>
<td>Proposed bypass routes mauka of Kapa’a Town</td>
<td>Archaeological Assessment</td>
<td>No new fieldwork, reviews literature</td>
</tr>
<tr>
<td>Hammatt, Ida and Folk 1994</td>
<td>South side Waikaena Canal, mauka of Kūhiō Highway</td>
<td>Archaeological Inventory Survey</td>
<td>Weak cultural layer; designated site 50-30-08-748</td>
</tr>
<tr>
<td>Source</td>
<td>Location</td>
<td>Nature of Study</td>
<td>Findings</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Kawachi 1994</td>
<td>Inia Street (Jasper) TMK 4-5-08:33</td>
<td>Burial Report</td>
<td>Designates Site 50-30-08-871</td>
</tr>
<tr>
<td>McMahon 1994</td>
<td>The location is uncertain &quot;behind the armory in Kapa’a near the god stones&quot; and &quot;Buzz’s near the Coconut Marketplace&quot;</td>
<td>Documents second hand report of burials in two locations</td>
<td>Bones in 3 places reported from behind the armory, 16 bodies reported from the Buzz’s restaurant. No site numbers assigned</td>
</tr>
<tr>
<td>Creed et al. 1995</td>
<td>Kapa’a Sewer line project, Kūhiō Highway, south and central Kapa’a Town</td>
<td>Archaeological Monitoring Report</td>
<td>Documents cultural layer of site -1848 and (an enlarged) site -1849 and recovery of thirty burials at sites -867, -868, -871, and -1894</td>
</tr>
<tr>
<td>Joulande 1995</td>
<td>1382-A ‘inia Street, makai of Kūhiō Highway, central Kapa’a Town</td>
<td>Burial Report</td>
<td>Site 626</td>
</tr>
<tr>
<td>McMahon 1996</td>
<td>South side Waikae Canal, makau of Kūhiō Highway</td>
<td>Archaeological Inventory Survey</td>
<td>No significant cultural material</td>
</tr>
<tr>
<td>Hammatt et al. 1997</td>
<td></td>
<td>Archaeological Inventory Survey</td>
<td>Four test trenches were excavated inland of Kapa’a Town</td>
</tr>
<tr>
<td>Borthwick and Hammatt 1999</td>
<td>Kapa’a Seventh-Day Adventist Church at 1132 Kūhiō Highway.</td>
<td>Archaeological Monitoring and Burial Treatment Plan</td>
<td>Monitoring was indicated as this parcel lay within the designated Site 50-30-08-1848.</td>
</tr>
<tr>
<td>Bushnell and Hammatt 2000</td>
<td>Seventh-Day Adventist Church, makai of Kūhiō Highway, south of the Waikae Canal</td>
<td>Archaeological Monitoring Report</td>
<td>Minimal findings (one piece of worked bone)</td>
</tr>
<tr>
<td>Callis 2000</td>
<td>Kapa’a Beach Park</td>
<td>Human Burial Removal and Archaeological Monitoring Report</td>
<td>No significant cultural material</td>
</tr>
<tr>
<td>Perzinski and Hammatt 2001</td>
<td>Kūhiō Highway on the margins of the Waikae Canal</td>
<td>Archaeological Monitoring Report</td>
<td>No significant cultural material</td>
</tr>
</tbody>
</table>
Figure 23: Previous Archaeological Studies in Coastal Kapaa' a Ahupua' a
Table 12  Archaeological Sites in Coastal Kapa‘a Ahupua‘a (see Figure 24)

<table>
<thead>
<tr>
<th>Site #</th>
<th>Site Type/ Name (if any)</th>
<th>Location</th>
<th>Site Constraints</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>B001</td>
<td>Historic Cemetery</td>
<td>South of bend of Kapa‘a Stream, a kilometer mauka from Kūhiō Highway</td>
<td>Appears to be a discrete historic cemetery</td>
<td>Kikuchi and Remoaldo 1992</td>
</tr>
<tr>
<td>B002</td>
<td>Historic Cemetery</td>
<td>Just mauka from Kūhiō Highway, south of Kapa‘a Stream</td>
<td>Appears to be a discrete historic cemetery</td>
<td>Kikuchi and Remoaldo 1992</td>
</tr>
<tr>
<td>B003</td>
<td>Kapa‘a Public Cemetery</td>
<td>South of Kanaele Road, approximately one kilometer inland of Kūhiō Highway</td>
<td>Appears to be a discrete historic cemetery</td>
<td>Kanaele Road; Kikuchi and Remoaldo 1992</td>
</tr>
<tr>
<td>B004</td>
<td>Historic Cemetery</td>
<td>North of Apopo Road, approximately one kilometer inland of Kūhiō Highway</td>
<td>Appears to be a discrete historic cemetery</td>
<td>Kikuchi and Remoaldo 1992</td>
</tr>
<tr>
<td>B013</td>
<td>Historic Cemetery</td>
<td>Just mauka from Kūhiō Highway, north of the Waikaea Canal</td>
<td>Appears to be a discrete historic cemetery</td>
<td>Kikuchi and Remoaldo 1992</td>
</tr>
<tr>
<td>B014</td>
<td>All Saints Episcopal Church Cemetery</td>
<td>Just mauka from Kūhiō Highway, south of the Waikaea Canal</td>
<td>Appears to be a discrete historic cemetery</td>
<td>Kikuchi and Remoaldo 1992:62-65</td>
</tr>
<tr>
<td>547</td>
<td>sub-surface features including a firepit and a possible house foundation</td>
<td>South of bend of Waikaea Canal, mauka of Kūhiō Highway</td>
<td>Archaeological monitoring in the vicinity is recommended</td>
<td>Spear 1992:3</td>
</tr>
<tr>
<td>626</td>
<td>Burial</td>
<td>‘Inia Street, mokai of Kūhiō Highway, central Kapa‘a</td>
<td>Consultation and monitoring in vicinity indicated</td>
<td>Jourdane 1995</td>
</tr>
<tr>
<td>748</td>
<td>Minimal findings, a weak cultural layer (buried A-horizon)</td>
<td>South of the bend of the Waikaea Canal, mauka of Kūhiō Highway</td>
<td>Considered no longer significant within project area</td>
<td>Hammatt et al. 1994</td>
</tr>
<tr>
<td>867</td>
<td>1 set of human remains</td>
<td>Kukui Street, just mauka of Kūhiō Highway, Kapa‘a Town</td>
<td>Consultation and monitoring in vicinity indicated</td>
<td>Creed et al. 1995:50</td>
</tr>
</tbody>
</table>
Figure 24: Archaeological Sites in Coastal Kapa’a Ahupua’a from these historic pits and are datable as early as 1840 but most fall within the period 1910-1930. Some may have been
associated with the clearing of debris after the well-known Dec. 22, 1923 Kapa‘a town fire which affected more than 25 buildings along Kukui, Lehua, Hululi and Niu Streets.

The five LCAs within Kapa‘a Town are all right next to the present highway. Perhaps, because of the narrowness of this sandy strip and limited land available for habitation, the human burials and habitation areas (cultural layers) are not separate entities.

The cultural layer, usually identified as Stratum II, was observed intact through large stretches of excavations under streets. Stratum II survives as a buried A-horizon/cultural layer with variable amounts of midden, charcoal and artifactual material. The lower portion of this stratum is generally prehistoric in age with mixing of historic materials in the upper portions of the stratum. It represents continuous occupation on a stable beach sand surface from as early as A.D. 1165. Major erosional or depositional events to interrupt this stability were not apparent in stratigraphic profiles, such as storm surf, tsunami, flood events, etc. In almost all cases, burial pits could be traced to an origin somewhere in Stratum II cultural layer. However, on ‘Inia Street three burials occurred in pits which were sealed by sterile sand underlying Stratum II and were probably slightly older.

7. Summary of Kapa‘a Settlement Pattern and Discussion

The association of the ahupua‘a of Kapa‘a with legendary historical figures such as Mō‘ikeha implies that the area was settled previous to Mō‘ikeha’s time (early 14th century), although the extent of this settlement is not known. Through archaeology and other sources, it is known that at one time agricultural and domestic activities extended into the far mauka areas of Kapa‘a, but were totally abandoned by the mid-19th century.

The LCA pattern in Kapa‘a (as indicated by six awards) shows lo‘i and kula on the rim of the swamplands and extending partly into watered valleys. Marshlands without known LCAs may have had lo‘i along the edges. The six claimants had shoreline house lots makai of the swamp. We assume that permanent settlement existed in association with mauka agricultural lands in the prehistoric period but this is not reflected in the LCAs. The mauka settlements were probably abandoned before the 19th century. Permanent settlement occurred along the coast throughout late prehistory, as indicated by the presence of extensive and thick habitation deposits in the shore and backshore areas of Kapa‘a, especially along Inia Street and Kūhiō Highway (Hammatt 1991). However in the early 20th century the entire area behind Kapa‘a Town was rice and kula lots and there was a rice mill in the area. When flood control measures were instituted in the 1960’s, these marsh lands, used previously for taro and then taken over by the rice farmers, were drained and became cane and pasture land.

8. Pattern of Archaeological Sites and Constraints in Kapa‘a

The pattern of archaeological studies in Kapa‘a Ahupua‘a is somewhat skewed with a dozen projects in urban Kapa‘a Town and very little work back from the coast. Numerous burials and other subsurface sites have been reported from coastal Kapa‘a Town (Kawachi 1994; Creed et al. 1995; Jourdane 1995; Callis 2000) (Figure 25). The more inland studies (Hammatt 1981; Spear 1992; Chaffee et al. 1994a; Hammatt et al. 1994, 1997; McMahon 1996), however, have generally reported minimal or no significant findings. Given the large pre-contact and early
Figure 25: Map of Coastal Kapa'a Showing Locations of Burials Previously Encountered (adapted from Creed et al. 1996:Figure 10)
historic populations of Kapa‘a and previous archaeological finds on-site archaeological monitoring is probably warranted for any significant subsurface impacts on or seaward of Kūhiō Highway
III. RESULTS OF FIELD INSPECTION

Pedestrian inspection of portions of the proposed Lydgate to Kapa'a Bike and Pedestrian Pathway Project was conducted on December 10, 2003 by two CSH archaeologists, David Shideler, M.A. and Todd Tulchin, B.S., under the overall supervision of Hallett H. Hammatt, Ph.D. The pedestrian inspection was made to locate any surface historic properties within the proposed pathway corridor. As previously discussed, the majority of the inland portions of the proposed pathway involve modifications to existing roads and sidewalks. In these developed areas, any surface historic properties would have been destroyed by construction activities. Therefore, the pedestrian inspection was focused on the undeveloped portions of the project corridor, including the coastline and areas in the vicinity of the former Lihue Plantation railroad. Bridge crossings were also inspected for possible historic concerns, though none were noted. The following Table 13 and text provide descriptions of historic properties located during the pedestrian inspection:

Table 13  Sites Identified in Field Inspection

<table>
<thead>
<tr>
<th>State Site #</th>
<th>Temporary #</th>
<th># Features</th>
<th>Form</th>
<th>Function</th>
<th>TMK</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-30-08-823</td>
<td>CSH 3</td>
<td>1</td>
<td>Stone and concrete railroad culvert</td>
<td>drainage to support transportation</td>
<td>4-3-02:6</td>
</tr>
<tr>
<td>50-30-08-890</td>
<td>CSH 1</td>
<td>1</td>
<td>Shallow depressions in boulders (Grinding stones)</td>
<td>Tool manufacture</td>
<td>4-3-02: beach reserve</td>
</tr>
<tr>
<td>50-30-08-891</td>
<td>CSH 2</td>
<td>1</td>
<td>WWII bunker</td>
<td>Coastal defense</td>
<td>4-3-02: 16</td>
</tr>
</tbody>
</table>

1. Grinding Stone Artifacts

A collection of traditional Hawaiian grinding stones (State Site 50-30-08-890) were located along the shoreline within a small bay, northwest of Ku‘uhi Heiau (Figure 26). The stones are resting on the sandy shoreline near the high tide line, in the area fronting the Lanikai, Lae Nani, and Kapaa Sands Condominiums. The grinding stone artifacts consist of several large basalt boulders with both linear and circular worn depressions (Figure 27). These stones would have been used in traditional times to sharpen stone tools and weapons. Along with readily available sand and water, stone implements could be rounded or sharpened as appropriate using these stones.

2. WWII Era Pillbox

A concrete WWII era military structure (State Site 50-30-08-891) was located fronting the shoreline within a vacant lot adjacent to the southwest side of the Kaua‘i Coconut Beach Hotel (Figure 26). The structure rests at the edge of the sandy shoreline with windbreak plantings of
Figure 26: USGS Topographic Map showing the location of identified historic properties in relation to the proposed pathway
Figure 27: Example of grinding stone artifact located along shoreline

Figure 28: WWII Era bunker located near coastline, view to east
ironwood trees, immediately makai of the existing coastal footpath. The structure is a combination of brick and reinforced concrete construction (Figure 28). The structure is rectangular, measuring 3.4 by 3.8 m with a maximum height of 2.3 m. The four walls and floor of the structure exhibited significant cracking and weathering. No roof was present. Two entrances (doors) were located within the mauka and makai facing walls, each measuring approximately 0.8 m wide and 2 m high. Adjacent to the makai wall is a small porch, 1.3 by 1.2 m wide and 0.7 m high, with four metal posts for mounting equipment. The structure is believed to be a former U.S. military pillbox, or machine-gun emplacement. It is one of hundreds of pillboxes located throughout the shorelines of the Hawaiian Islands, constructed to defend against a coastal invasion by the Japanese during WWII.

3. Railroad Culvert
A stone and concrete railroad culvert was located at the intersection of the former railroad grade and the existing Kapa‘a Temporary Bypass Road (Figure 26). The culvert crosses a drainage ditch which runs parallel to the Temporary Bypass Road. The culvert is of concrete construction with a basalt boulder facing, and measures approximately 2 m wide by 3 m long (Figure 29). This railroad culvert is understood to be a portion of the Lihue Plantation Railroad Embankment (previously given State Site # 50-30-08-823). Virtually the entire alignment of this railroad has been obliterated.
Figure 29: Stone faced railroad culvert, view to east
IV. SUMMARY OF ARCHAEOLOGICAL CONCERNS

A. Summary Discussion of all Sites Which May be Affected by the Proposed Undertaking

The following table lists designated archaeological sites that lie in or near (within 100 m) the proposed bike and pedestrian pathway alternatives. While the length of this table may appear to suggest great potential impact, this is exaggerated by the pattern of giving separate site numbers for burials within a larger designated site. Some site numbers designate single burials or groups of burials within a larger site complex.

The following discussion summarizes the greatest potential impacts on archaeological resources and associated issues.

1. The Wailua Complex of Heiau

Of particular concern are potential impacts to the Wailua Complex of Heiau National Historic Landmark (1988) which consists of five discontinuous properties: Site 104, Malae Heiau; Site 105, Hikinaakalā Heiau (and petroglyphs); Site 106, Holoholokū Heiau and Pōhaku Ho’ohana; Site 107, Pō’ahu Heiau; and Site 335, the Wailua Bellstone(s). The designation of these properties for the National Register/National Historic Landmark listing is five circles each centered in the middle of each of the sites but only slightly greater than the radius of the sites themselves (see Figure 8). Alternative 3 includes a possible spur path extending down the north side of the Aloha Beach Resort effectively connecting the proposed path with the vicinity of Hikinaakalā, the Pauwhouma o Hauola, a parking area and the coast. Although this route would largely or entirely lie on a former railroad bench, and would provide access to a designated National Historic Landmark site, informal discussion with State Parks has indicated that they are not receptive to such a path in such close proximity to this site complex. We thus must recommend that this option not be pursued at this time.

Another potential issue involves the Wailua petroglyph site (Ka Pae Ki’i Mahu o Wailua, Site 50-30-08-105A) at the mouth of the Wailua River. This site was clearly regarded by Dr. Kikuchi (1984) as “historically part of the temple of Hikina-a-kalā and the City of refuge, Hau’ola (both sites coded 50-30-08-105)” which is why he designated the petroglyphs as site 105A. Thus the petroglyphs should probably be regarded as a contributing element of the designated Wailua Complex of Heiau National Historic Landmark. There is some uncertainty regarding the extent of this Wailua petroglyph site as: “The appearance of the boulders is determined by the vagaries of the weather, e.g. the flow pattern at the mouth of the Wailua River, the sand deposited by storms and the tides of the sea” (Kikuchi 1984).

Field inspection and available maps indicate that the petroglyph field is well to the southeast of any likely footing for a new bike/pedestrian path bridge, however, if Alternative 3 is pursued (with footings for a new bridge on the south side of the river makai of the existing bridges) we recommend that plans be shared with State Parks and the State Historic Preservation Division to evaluate the possible need for a program of subsurface testing to further evaluate the prospect of impacting any buried portion of this petroglyph site that should be regarded as a contributing element of the designated National Historic Landmark.
<table>
<thead>
<tr>
<th>Site No.</th>
<th>General Location</th>
<th>Function</th>
<th>Recommended Mitigation/Comments</th>
<th>Relation to Path Alternatives</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>Southern side of Mouth of Wailua River, makai of Kūhiō Hwy.</td>
<td>Hikinaakalaka Heiau and Puʻuhōnaʻu o Kuaola</td>
<td>Preservation as part of National Historic Landmark; avoidance of vicinity</td>
<td>Kūhiō Hwy runs just inland (approx. 70 m.) of concern regarding possible spur route in Alternative 3</td>
<td>Bennett 1931:125-126</td>
</tr>
<tr>
<td>105A</td>
<td>Southern side of Mouth of Wailua River, makai of Kūhiō Hwy</td>
<td>Wailua petroglyph site (Ka Pae Kīi Mahu o Wailua</td>
<td>Preservation as part of National Historic Landmark; avoidance of vicinity</td>
<td>Kūhiō Hwy runs just inland (approx. 50 m.) of concern regarding possible new freestanding Wailua River bridge in Alternative 3</td>
<td>Kikuchi 1984</td>
</tr>
<tr>
<td>108</td>
<td>Alakukui Point, central South Olohe on coast</td>
<td>Kukui Heiau</td>
<td>Avoidance of heiau structure, acquiring rights to strip of condo property?</td>
<td>Extends from highwater to Lae Nani Condo property making path on mauka side of heiau in all Alternatives problematic</td>
<td>Thrum 1906; Bennett 1931:127; Davis and Bordner 1977; Kawachi 1993</td>
</tr>
<tr>
<td>547</td>
<td>Near big bend in Waikae Canal</td>
<td>Subsurface features incl. a fire pit &amp; possible house foundation</td>
<td>Monitoring Program indicated for vicinity</td>
<td>Near big bend in Waikae Canal</td>
<td>Hammatt et al. 1994</td>
</tr>
<tr>
<td>634</td>
<td>North bank of Wailua river, inland of Coco Palm parcel</td>
<td>Extensive wetlands, former taro loʻi area</td>
<td>Adjacent but no significant impact anticipated</td>
<td>Adjacent to path around back of Coco Palms parcel</td>
<td>Hammatt et al. 1997</td>
</tr>
<tr>
<td>Year</td>
<td>Area Description</td>
<td>Cultural Feature</td>
<td>Monitoring Program Indication</td>
<td>Site Description</td>
<td>References</td>
</tr>
<tr>
<td>------</td>
<td>------------------</td>
<td>------------------</td>
<td>-------------------------------</td>
<td>------------------</td>
<td>------------</td>
</tr>
<tr>
<td>1800</td>
<td>Coastal North Olohe</td>
<td>Cultural layer and burials (2)</td>
<td>Monitoring Program indicated for vicinity</td>
<td>Coastal north Olohe</td>
<td>Rosendahl and Kai 1990</td>
</tr>
<tr>
<td>1836</td>
<td>East of Waipouli Town Center on Makai side of Kūhiō Hwy.</td>
<td>Waipouli Cultural Layer and burials (17)</td>
<td>Monitoring Program indicated for vicinity</td>
<td>East of Kūhiō Hwy; strongest expression at coast; site extends to Kūhiō Hwy</td>
<td>Folk et al. 1991, Hammatt et al. 2000</td>
</tr>
<tr>
<td>B014</td>
<td>South Kapa‘a Town, mauka edge of Kūhiō Hwy.</td>
<td>All Saints Episcopal Church Cemetery</td>
<td>Monitoring Program indicated for vicinity</td>
<td>Kūhiō Hwy, near All Saints Episcopal Church</td>
<td>Kikuchi and Remoaldo 1992, 63</td>
</tr>
</tbody>
</table>
2. Kukui Heiau

Of particular concern is Kukui Heiau located right on the coast of central South Oloheina at Alakukui Point. Kukui Heiau (designated site 50-30-08-108) was placed on the Hawai'i Register of Historic Places on June 13 1986 and was placed on the National Register May 18, 1987. This site effectively extends from high-water right up and into the Lae Nani Condos parcel. Alternatives 1 and 3 show a primary path extending along the back of Kukui Heiau. Alternative 1 also has a proposed secondary path (5 feet wide) extending north along the coast linking up with this primary path. While these routes would offer access to the heiau and interpretive opportunities it seems clear that if these paths were constructed on what is now public land that this would constitute an adverse impact to a National Register site. Consideration might be given to the acquisition of an adjacent strip of the Lae Nani Condos parcel so that a path could be constructed without intruding directly upon Kukui Heiau. Without acquisition of a strip of private land it appears impossible to create paths transiting the coast at Ala Kukui Point without adverse impact to Kukui Heiau. The State Historic Preservation Division and concerned Hawaiian groups are likely to oppose such trail impacts. We thus recommending abandoning consideration of paths that physically cross Kukui Heiau.

3. Burials

After the Waipouli Complex of Heiaus and Kukui Heiau, the greatest archaeological historic preservation concern for this project is suggested to be potential impact to human remains. Two concentrations of human burials have been documented along the proposed routes: extending back from the coast in Waipouli/Kapa'a (including designated sites 626, 867, 871, 872, 1836, 1848, 1849, and adjacent historic cemeteries), and in the vicinity of the Coco Palms (including site 660).

In the vicinity of Waipouli/Kapa'a Town several burials have been encountered near the coast and in close proximity to Kūhiō Highway. Improvements along the coast or along Kūhiō Highway involving substantial subsurface impacts would be expected to encounter human remains in these areas. This area is also particularly rich in other non-burial cultural resources.

In the vicinity of the Coco Palms, the highest densities of burials are thought to lie just inland of the present Kūhiō Highway alignment with only modestly elevated burial sensitivity along Kūhiō Highway. This area may also be particularly rich in other non-burial cultural resources. No increased burial sensitivity is associated with more inland routes.

In addressing burial concerns potentially associated with the Kapa'a Relief Route project we recommend continuing consultation with the Kaua'i/Ni'ihau Islands Burial Council and an archaeological monitoring program with on-site monitoring in the areas indicated above. If substantial subsurface impacts in these areas are anticipated, it may be advisable to consider reinterment options in advance of construction.

B. Opportunities for Site Interpretation

The proposed bike and pedestrian pathway alignments pass quite close to two sites that may be regarded as of national historic importance: 1) Site –105 (and 105A), Hikinaaikalā Heiau and Pu'uhonua o Hauola (and petroglyphs) on the south side of the Waiau River mouth, and 2) Kukui Heiau in coastal South Oloheina. Regrettably concerns regarding avoiding any adverse
impact to these sites make any close access or interpretation of these sites in association with the bike and pedestrian pathway project problematic.

The vast majority of identified sites along the bike and pedestrian pathway project routes are entirely of a subsurface nature and many involve culturally sensitive burial issues as well. These sites would thus appear to have little interpretive potential. While the grinding stones on the coast are a readily observable remnant of traditional Hawaiian practices they lie in a stretch of coast for which no coastal path may be possible because of the difficulty of getting a trail around Kukui Heiau at Alakukui Point. The WWII era bunker and railroad culvert offer modest interpretive potential.

C. Mitigation of Impacts to Historic Sites

An archaeological monitoring program (plan, combination of on-call and on-site monitoring, monitoring report) is recommended to mitigate potential impacts to burials and other cultural resources that are believed to underly portions of the proposed alternative routes of the Lydgate to Kapaa Bike and Pedestrian Pathway Project. Particularly sensitive areas are understood to include the vicinity of the Coco Palms including adjacent stretches of Kuamo'o Road and Hale'iwa Road. The area in the vicinity of the south side of LCA 3346 to Nawai (south of the central portion of the Coco Palms Resort; see Figure 5) may be of particular concern. Areas of Jaucas sand in Waipouli and Kapaa Ahupuaa are well known for both burials and intact cultural deposits. These historical preservation concerns would be anticipated to be greatest at the coast but may extend mauka of Kuhio Highway in some areas. It is understood that the pathway project will have a very light footprint with much of the path requiring minimal excavation. Many of the burials and cultural deposits previously documented, however, are quite shallow. In those areas in which monitoring is indicated, an approach of monitoring excavations extending greater than 30 cm into undisturbed sediments might be suggested for consideration to the State Historic Preservation Division.

Early consultation with the Kaua'i/Ni'ihau Islands Burial Council is recommended regarding burial treatment.
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