

DRAFT ENVIRONMENTAL ASSESSMENT

**HOTEL RENOVATIONS, KING KAMEHAMEHA'S
KONA BEACH HOTEL**

TMKs (3rd): 7-5-006:020, 021, 024 & 032; 7-5-005:062, 066 & 075

Kailua-Kona, North Kona District, County of Hawai'i, State of Hawai'i

December 2008

Prepared for:

**County of Hawai'i
Planning Department
101 Aupuni Street, Suite 3
Hilo, Hawai'i 96720**

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APPROVING AGENCY:

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CLASS OF ACTION:

Use of Historic District

This document is prepared pursuant to:

The Hawai'i Environmental Policy Act,
Chapter 343, Hawai'i Revised Statutes (HRS), and
Title 11, Chapter 200, Hawai'i Department of Health Administrative Rules (HAR).

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SUMMARY OF THE PROPOSED ACTION, ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

IWF KKH, LLC proposes to renovate King Kamehameha's Kona Beach Hotel and its grounds. The most noticeable change would be demolition of the poolside retail portion of the central arcade structure located between the two hotel towers. This area would be the location for a new pool area and a partial open air gallery. The location of the former Liberty House Store will become a lecture hall, museum, and gallery for exhibiting and interpreting the cultural artifacts currently displayed throughout the hotel. The existing pool and bar area, which is now makai of the hotel, would be removed and replaced by a pool deck pulled closer to the hotel central core, along with walkways and enhanced landscaping, resulting in more open area near the shoreline. The existing conference and banquet facilities will be completely refurbished and a small pre-function vestibule area will be added. Additional parking will be made available through more efficient site planning. The interior and exterior renovation would slightly modify the overall appearance of the hotel to be more reflective of the surroundings. The project is necessary because this landmark hotel, built in 1975, is aging, and in need of major renovations.

Because the renovations and landscaping will disturb more than one acre of ground, the contractor will obtain an NPDES permit and develop and implement a Storm Water Pollution Prevention Plan (SWPPP) to contain sediment and storm water runoff during construction. Furthermore, construction equipment shall be kept in good working condition to minimize the risk of fluid leaks that could enter runoff and groundwater. Significant leaks or spills, if they occur, shall be properly cleaned up and disposed of at an approved site. A dust management plan will be prepared and implemented to mitigate the potential for the release of dust and other particulate pollutants during the project phase. Impacts to threatened and endangered flora and fauna will not occur, as none are present. In order to reduce traffic impacts, construction vehicles will be mobilized to and from the project site only during off-peak hours. No short or long term traffic impacts are expected. Apart from minor construction-phase visual impacts, the project will create a more visually appealing structure and grounds. While it should be recognized that the reconstructed features of Ahu'ena House and Hale nana mahina 'ai may no longer hold archaeological significance, they hold great cultural significance for modern practitioners. Ahu'ena House and Hale nana mahina 'ai, along with the cultural activities that take place there, are considered sacred by Hawaiian cultural practitioners. All of the area proposed for active work as part of the actual renovations of the Hotel has previously been disturbed as part of various activities in the past, and this area is all in active use as part of the Hotel and its grounds today. In order to avoid impacts to the existing features of Kamakahonu, all these features need to be protected against impacts during the proposed renovation activities by measures such as temporary fencing, contractor education, and monitoring, which should be developed in coordination with Ahu'ena Heiau Inc. and other concerned parties. To mitigate potential effects to possible buried archaeological resources or human remains within the already disturbed areas of Kamakahonu and adjacent areas in which the renovation will occur, archaeological monitoring is recommended during subsurface demolition or development activities. Such monitoring will provide for an immediate response if any such resources are discovered. It is furthermore recommended that the Hotel, in cooperation with historical and cultural groups, undertake to educate visitors and kama'aina alike about the significance of Kamakahonu. Finally, to the greatest degree reasonable, the Hotel ownership should ensure access to Ahu'ena by cultural practitioners during the proposed renovation.

PART 1: PROJECT DESCRIPTION, LOCATION AND ENVIRONMENTAL ASSESSMENT PROCESS

1.1 Project Location, Description and Ownership

IWF KKH, LLC (“the Hotel owner”) proposes to renovate King Kamehameha’s Kona Beach Hotel and its grounds. The most noticeable change would be demolition of the poolside retail portion of the central arcade structure located between the two hotel towers. This area would be the location for a new pool area and a partial open air gallery. The location of the former Liberty House Store will become a lecture hall, museum, and gallery for exhibiting and interpreting the cultural artifacts currently displayed throughout the hotel. The existing pool and bar area, which is now makai of the hotel, would be removed and replaced by a pool deck pulled closer to the hotel central core, walkways, and enhanced landscaping, resulting in more open area near the shoreline. The existing conference and banquet facilities will be completely refurbished and a small pre-function vestibule area will be added. Additional parking will be made available through more efficient site planning. The interior and exterior renovation would slightly modify the overall appearance of the hotel to be more reflective of the surroundings. The project is necessary because this landmark hotel, built in 1975, is aging, and in need of major renovations.

Renovations would reduce the overall ground floor area from 99,297 square feet (sf) to 93,617 sf, a figure which accounts for 7,434 sf of demolition, and 1,754 sf of additions, yielding a net reduction of 5,680 sf. (see Appendix 1 for selected sheets of the architectural site plans). Additions include a new pre-function vestibule and a service corridor along the banquet rooms. The number of guest rooms will decrease by four to 456. The restaurant will be completely refurbished and upgraded as will all the ground floor public spaces. The overall project reduces the current retail use by 18,041 sf. It converts over 11,000 sf into a cultural center/artifacts museum; administrative offices; and an open air gallery. The County Code requires 443 spaces for the areas discussed above; by utilizing the area of the existing tennis courts and green house along with more efficient parking layout, a total of 622 stalls will be made available, bringing a surplus of 179 parking spaces to the hotel.

Although no historic properties or their features would be affected by the project, preparation of an EA is required because a portion of the hotel is located on a 1.616-acre parcel (TMK 7-5-006:032) that is listed on the National and State Register of Historic Places. This parcel is notable as the location, along with that of the adjacent parcel (TMK 7-5-006:024), of Kamakahonu, Kamehameha I’s residence. No work would be done in the vicinity of the historic sites associated with Ahu’ena Heiau and Kamakahonu, famed for their association with Kamehameha I, nor would work be done in the lawn area around the shoreline. Very limited actions are planned in the makai area of the grounds. Several trees would be planted near the southwest corner of the west tower and walkways would be constructed on the hotel side of the S-shaped concrete walk that fronts the shoreline area (see Site Plan in Appendix 1).

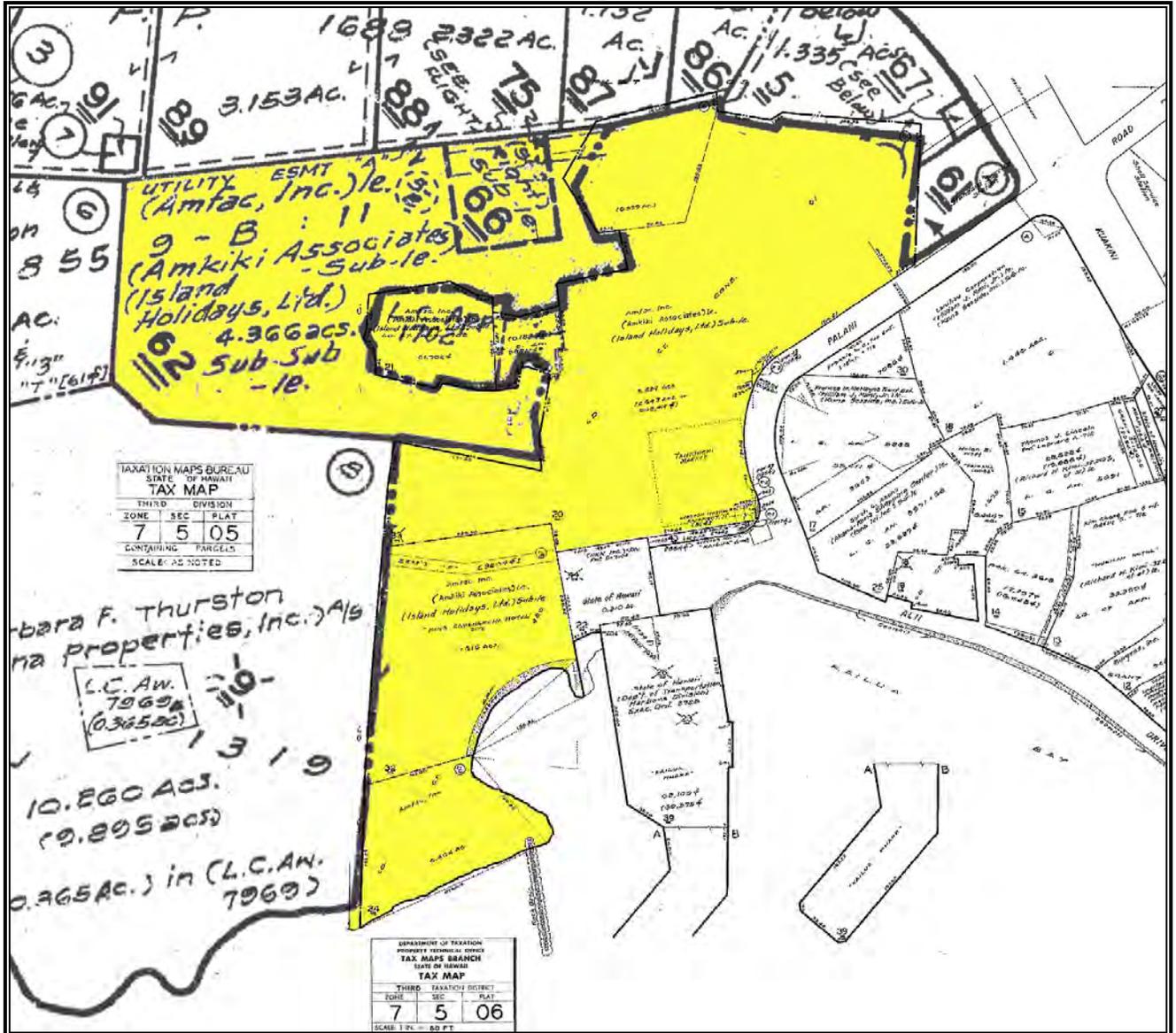
The development of this project will take approximately 18 months to complete. The renovations and improvements will cost in excess of \$25 million including demolition; furniture; fixtures and equipment; landscaping; swimming pool; tenant improvements and guest room renovation.

**Figure 1
Project Location**



IWF KKH, LLC leases the Hotel and its grounds from the owners, who are HKK Management, Inc., for TMKs 7-5-006:020, 021, 024 and 032, and Lanihau Properties, LLC, for TMKs 7-5-005:062, 066 and 075.

Figure 2
TMK Map



Project site parcels are shaded.

1.2 Environmental Assessment Process

This Environmental Assessment (EA) process is being conducted in accordance with Chapter 343 of the Hawai‘i Revised Statutes (HRS). This law, along with its implementing regulations, Title 11, Chapter 200, of the Hawai‘i Administrative Rules (HAR), is the basis for the environmental impact process in the State of Hawai‘i. According to Chapter 343, an EA is prepared to determine impacts associated with an action, to develop mitigation measures for adverse impacts, and to determine whether any of the impacts are significant according to thirteen specific criteria. Part 4 of this document states the anticipated finding that no significant impacts are expected to occur; Part 5 lists each criterion and presents the conclusions for each made by the applicant. If, after considering comments to the Draft EA, the Planning Department concludes that no significant impacts would be expected to occur, then this agency will issue a Finding of No Significant Impact (FONSI), and the action will be permitted to occur. If the Planning Department concludes that significant impacts are expected to occur as a result of the proposed action, then an Environmental Impact Statement (EIS) will be prepared.

Figure 3. Project Site Photos
3a: Airphoto



Figure 3. Project Site Photos
Top (3b): Beach and Hotel; Bottom (3c): Makai Recreational Area



Figure 3. Project Site Photos

Top (3d): Hotel from Palani Road; Bottom (3e): Current View from Back of Hotel Makai



1.3 Public Involvement and Agency Coordination

The following agencies and organizations were consulted in development of the environmental assessment:

State:

Department of Land and Natural Resources, Historic Preservation Division
Department of Land and Natural Resources, Division of Forestry and Wildlife
Department of Land and Natural Resources, Office of Conservation and Coastal Lands
Department of Land and Natural Resources, Boating Division
Board of Land and Natural Resources
Office of Hawaiian Affairs

County:

Planning Department
Public Works Department
Police Department
County Council
Civil Defense

Private:

Sierra Club
Kona Hawaiian Civic Club
Kona Outdoor Circle
Kuakini Hawaiian Civic Club of Kona
Kona Kohala Chamber of Commerce
Ahu'ena Heiau, Inc.
Kulana Huli Honua

Copies of communications received during early consultation are contained in Appendix 3a. Copies of the Draft EA have also been sent to Moku O Hawai'i Canoe Racing Association and the Kai Opua Canoe Club.

PART 2: ALTERNATIVES

2.1 No Action

Under the No Action Alternative, the renovations and landscaping changes would not be undertaken. This alternative is considered highly undesirable by IWF KKH, LLC as it would not correct the currently degraded condition of the hotel and would likely jeopardize the Hotel's financial viability. This avoidable situation would harm not only the Hotel's owners, but also Hotel employees and the general community.

2.2 Alternative Locations or Strategies

Because the Hotel property is unique there is no reasonable alternative location to perform a similar project. A possible alternative, which has been considered by IWF KKH, LLC, is to demolish the existing structure and construct an entirely new hotel. Because the Hotel structure is still in good condition, renovation is a far more fiscally responsible choice for the Hotel owners to pursue rather than this much more costly alternative, which would also involve more energy, materials, and solid waste generation.

PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Basic Geographic Setting

The Hotel and its grounds are referred to throughout this EA collectively as the *project site*. The term *project area* is used to describe the urban center of Kailua-Kona and in some cases, the North Kona District.

The project site is located makai of Palani Road (see Figures 1-3), a two-lane, County roadway that serves as one of several arterial connectors between SR 19 (Queen Ka'ahumanu Highway), SR 190 (Mamalahoa Highway), SR 11 (Kuakini Highway) and Ali'i Drive, the main makai thoroughfare between Kailua-Kona and Keauhou. The vegetation of the project area has been completely modified by landscaping. Adjacent land is generally developed for urban uses around Kailua-Kona, with the exception of several residences to the southwest. The average maximum daily temperature is approximately 80 degrees F., with an average minimum of 68 degrees, and annual rainfall averages approximately 40 inches (U.H. Hilo-Geography 1998:57).

3.1 Physical Environment

3.1.1 Geology, Soils and Geologic Hazards

Environmental Setting

Geologically, the project site is located on the lower flank of Hualalai volcano. The surface consists of lava flows of the Hualalai volcanics series of age greater than 10,000 years old, with a portion of the site surfaced by younger flows 1,500 to 3,000 years old (Wolfe and Morris 1996). The project site's soils are classified by the U.S. Natural Resources Conservation Service (formerly Soil Conservation Service) as raw pahoehoe (rLW) lava flow, having no developed soils (U.S. Soil Conservation Service 1973).

The site is located on the north end of Kailua Bay in the ahupua'a of Lanihau. A portion of the project site abuts the shoreline along the small cove named Kamakahonu. The project site elevation varies from sea level to approximately 15 feet above mean sea level.

The entire Big Island is subject to geologic hazards, especially lava flows and earthquakes. Volcanic hazard as assessed by the U.S. Geological Survey in this area of North Kona is 4 on a scale of ascending risk 9 to 1 (Heliker 1990:23). The high hazard risk is based on the fact that Hualalai has erupted in the historical period (e.g., 1801), with nearby lava flows at Keahole from an 1801 eruption. Volcanic hazard zone 4 areas have had about 5% of land area covered by lava or ash flows since the year 1800, and are at lower risk than zone 3 areas because of their greater distances from recently active vents and/or because the local topography makes it less likely that flows will cover these areas. All of Hualalai, including the lower flanks, is considered volcanic hazard zone 4 because Hualalai is steeply sloping, with a relatively short distance from vents to the coast as compared to Mauna Loa and Kilauea volcanoes.

In terms of seismic risk, the entire Island of Hawai‘i is rated Zone 4 Seismic Hazard (Uniform Building Code, 1997 Edition, Figure 16-2). Zone 4 areas are at risk from major earthquake damage, especially to structures that are poorly designed or built. The project site does not appear to be subject to subsidence, landslides or other forms of mass wasting.

Impacts and Mitigation Measures

In general, geologic conditions do not appear at this time to impose any overriding constraints on the project, and no mitigation measures are expected to be required. However, it is recognized the much of the surface of Hawai‘i Island is subject to eventual lava inundation, and that infrastructure in places such as Kailua face this risk. However, there are no alternative locations or strategies. As much of the project area has a similar hazard, geologic hazards impose no particular constraints on the proposed action, and the renovations are not imprudent to construct.

Because the No Action Alternative would not preclude use of the Hotel, it would provide no less risk to life and property from geologic hazards.

3.1.2 Drainage and Flooding

Existing Environment

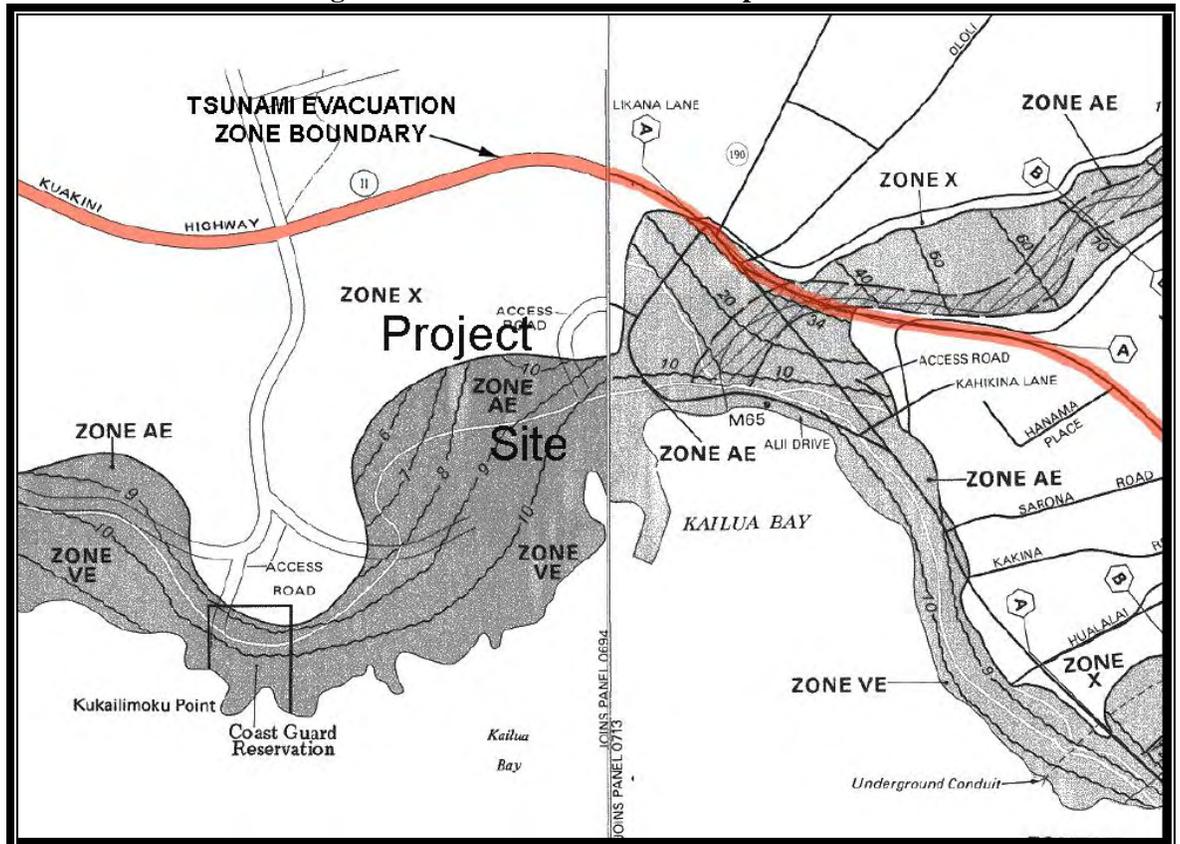
The project site sits adjacent to the northern edge of Kailua Bay. There are no freshwater resources in the project area. No stream poses a flooding hazard to the project site; however, some of the site can be threatened by coastal flooding as well as tsunami inundation. The Flood Insurance Rate Maps (FIRM) 1551660694C and 1551660713D (Figure 4) show that about half of the site is located in Flood Zone VE and Flood Zone AE. Flood Zone VE is defined as the special flood hazard area that corresponds to the 100-year coastal flood plains that have additional hazards associated with storms waves. Flood Zone AE is defined as the zone that corresponds to the 100-year floodplain as determined in a Flood Insurance Study by detailed methods. These areas are more commonly known as coastal high hazard areas or tsunami inundation zones.

Impacts and Mitigation Measure

Because the site is located within the coastal flood and tsunami inundation zones the Hotel currently maintains, and will continue to maintain, evacuation plans for coastal flooding and potential tsunami inundation, as well as the required flood insurance.

Any increase in the amount of storm water runoff due construction of impermeable surface will be contained on-site, as required by County Code. All renovations will comply with applicable sections of Chapter 27, Floodplain Management, Hawai‘i County Code, for the VE and AE flood zone, as well as Chapter 10 of the County Code related to Erosion and Sedimentation Control. Both the unpaved (temporary) and paved parking areas will include engineered drainage, in conformance with applicable regulations, that will promote infiltration of storm water runoff and will therefore serve to both protect and improve area surface water quality in the long-term, and also will prevent storm water runoff leaving the site.

Figure 4. Flood Insurance Rate Map



3.1.3 Water Features and Water Quality

Existing Environment

The only water features in the area are the coastal waters of Kailua Bay. The marine habitat in this area consists of sandy beaches, well used by humans, beyond which is a typical West Hawai'i reef platform. Many reef corals and other benthic fauna find this an ideal habitat. At about 50 feet in depth, there is a third zone with different coral species. Other important organisms in all zones are sea urchins, sea cucumbers, sponges, red calcareous algae, and various mollusks and crustaceans. The reef fish populations are typical of those throughout West Hawai'i, and include many food fish taken by subsistence and/or recreational fishermen. Surgeon fishes, parrotfish, damselfish, and wrasses are all very common.

Several species of marine animals that occur in Hawaiian waters have been declared threatened or endangered under federal law. The threatened green sea turtle (*Chelonia mydas*) is commonly found along the Kona Coast, while the endangered hawksbill turtle (*Eretmochelys imbricata*) is known infrequently from Kona. Populations of the endangered humpback whale (*Megaptera novaeangliae*) winter in Hawaiian waters from December to April. Individuals of the endangered Hawaiian monk seal (*Monachus schlauslandi*), which are much more common in the Northwestern Hawaiian Islands, are occasionally seen in the area.

Preservation of water quality is an important goal, even in this urban area, as clean coastal waters support valuable ecological communities, native Hawaiian fishing and gathering practices, subsistence and commercial fishing, and tourism and economic activity. Fortunately, coastal water quality in urban Kona, which lacks the heavy industry, history of intensive agriculture, or other factors that lead to contamination, is generally good (U.S. EPA 2000). However, the Natural Resources Defense Council (<http://www.nrdc.org/water/oceans/ttw/ttw2008.pdf>) has reported exceedances of bacteria in water quality at certain beaches, which local water quality scientists attribute mainly to wastewater (Hawai'i Tribune Herald: August 6, 2008, page 1).

Natural factors promoting good water quality are the volcanic geology also favors fast circulation of recharging groundwater, which also prevents substantial mineral accumulation, but can also lead to fast delivery of nutrients. The high energy of the shoreline zone leads to rapid mixing of the small amount of pollutants that do arrive.

Factors that potentially impair coastal water quality in urban Kona are wastewater, chemical contaminants from urban uses, and polluted runoff. The typical pathway of pollutants is via groundwater, as there are no surface streams and runoff directly into the ocean is generally not substantial except during rare episodes of intense rainfall when drainage channels have large flows.

Much of Kona's wastewater, especially that associated with new urban development in the Kailua-to-Keauhou corridor, is treated in municipal facilities at the County's Kealakehe Wastewater Treatment Plant (WWTP), and the He'eia WWTP in Keauhou, owned and operated by Kamehameha Investment Corporation. Although central wastewater treatment plants are important to maintaining water quality, there are questions about whether the County's practice of pouring partially treated effluent into an unlined hole about three-quarters of a mile from the shoreline in Honokohau may be inducing water quality impacts. Furthermore, despite the significant amount of treated wastewater, many older and scattered parts of Kona continue to rely on cesspools and septic systems.

In terms of effects on groundwater, U.S. EPA and Department of Water Supply Annual Water Quality Reports for wells and water systems indicate no health-based or monitoring violations in at least the past 10 years. (<http://oaspub.epa.gov/enviro/>). Although some chemical contamination has been found (Hawai'i State DOH 2003), levels have been below EPA acceptable limits.

Another source of water pollution is runoff from developed properties, which can carry chemicals, sediments and nutrients. Although not a chronic problem, periodic acute episodes have occurred in some construction sites. Proper implementation and enforcement of construction BMPs are important to safeguard water quality. After construction, reducing contamination relies on confining runoff, particularly "first-flush" runoff, which contains most of the contaminants, to drainage structures which capture and retain many of the pollutants, especially sediments.

Impacts and Mitigation Measures

In general, water quality impacts from the renovation activities and continuing operation of the Hotel should continue to be modest and within the capacity of the natural ecosystem to absorb. Wastewater will continue to be treated at the Kealakehe WWTP, which may be required to

upgrade or modify its treatment to respond to water quality concerns. Operationally, no substantial amounts of pollutants are generated that could affect water quality, and Hotel personnel are trained and procedures are in place to minimize pollution and respond to spills of cleaning fluids, solvents, paint and spills, should they occur.

Construction-phase impacts have the potential to produce uncontrolled excess sediment from soil erosion during and after excavation and construction that may impact natural watercourses, water quality and flooding. Contaminants associated with heavy equipment and other sources during construction have the potential to impact surface water and groundwater if not mitigated effectively. In order to minimize the potential for sedimentation and erosion of shoreline areas, the contractor shall perform all earthwork and grading in conformance with Chapter 10, Erosion and Sediment Control, Hawai'i County Code. Because the project will disturb more than one acre of soil, a National Pollutant Discharge Elimination System (NPDES) permit must be obtained by the contractor before the project commences. This permit requires the completion of a Storm Water Pollution Prevention Plan (SWPPP). In order to properly manage storm water runoff, the SWPPP will describe the emplacement of a number of best management practices (BMPs) for the project. These BMPs may include, but will not be limited to, the following:

- Minimization of soil loss and erosion by revegetation and stabilization of slopes and disturbed areas of soil, possibly using hydromulch, geotextiles, or binding substances, as soon as possible after working;
- Minimization of sediment loss by emplacement of structural controls possibly including silt fences, gravel bags, sediment ponds, check dams, and other barriers in order to retard and prevent the loss of sediment from the site;
- Minimizing disturbance of soil during periods of heavy rain;
- Phasing of the project in order to disturb a minimum necessary area of soil at a particular time;
- Application of protective covers to soil and material stockpiles;
- Construction and use of a stabilized construction vehicle entrance, with designated vehicle wash area that discharges to a sediment pond;
- Washing of vehicles in the designated wash area before they egress the project site;
- Use of drip pans beneath vehicles not in use in order to trap vehicle fluids;
- Routine maintenance of BMPs by adequately trained personnel; and
- Cleanup and disposal at an approved site of significant leaks or spills, if they occur.

3.1.4 Flora, Fauna and Ecosystems

Existing Environment

The only native plants found in the Hotel grounds are those utilized in landscaping, as no natural communities exist in the area proposed for renovation. No plants listed, or proposed for listing, as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS)were found, or would be expected to be found, within or near the project site (USFWS 2008). Introduced plants utilized in landscaping include crotons, coconuts, kukui, bougainvillea, banana, ti, Madagascar

periwinkle, plumeria, and many others. A large banyan tree graces the area between the hotel and the pier. Several common native coastal species are also represented in the landscaping, including naupaka, milo, and hala.

No listed (or proposed) threatened or endangered or otherwise rare bird or mammal species were observed within or are likely to inhabit the project site. It is unlikely that any endangered forest birds or seabirds, which range widely around the island of Hawai‘i, would find the urban setting suitable habitat for either nesting or foraging.

Because the project site is so highly developed it would not be expected to provide habitat to native birds or the only native mammal, the Hawaiian Hoary Bat. Fauna on the site are the typical non-native species found in Hawai‘i, including cats, mongoose, rats, mice, myna birds, cardinals, etc.

In terms of conservation value, no botanical or zoological resources requiring special protection are present.

Impacts and Mitigation Measures

Because of the lack of native ecosystems, or threatened or endangered plant species, no adverse impacts would occur as a result of landscaping and improvements.

3.1.5 Air Quality, Noise, and Scenic Resources

Environmental Setting

Air pollution in West Hawai‘i is mainly derived from volcanic emissions of sulfur dioxide, which convert into particular sulfate and produce a volcanic haze (vog) that frequently blankets North and South Kona. Vehicle traffic may also contribute to air pollution in the project area, although it is generally dispersed by wind.

Noise on the project site varies from moderate to high, and is derived from a variety of sources including motor vehicles on Palani Drive, cruise ship and associated vessels, tour buses and airplanes, and hotel activities, with occasional noise from road maintenance, industrial and commercial activities.

The Hawai‘i County General Plan, which provides guidance for preservation of areas of natural and scenic beauty during development, discusses scenic areas in North Kona as follows:

“The Kona districts have long attracted people because of their natural beauty. Although man-made structures are in some places dominant, the vast expanse of the Kona landscape is still the area’s most striking feature.

North Kona, in the area called Kekaha, is characterized by a sense of openness created by expansive areas of lava flows. Vegetation on the lava is comprised of low pockets of grasses and scrub trees. From the coastline, the land climbs slowly to the distant saddle plateau between Mauna Kea and Mauna Loa. This long natural grade also contributes to the sense of openness and space.

The rest of North Kona is dominated by Hualalai. Its steep slopes provide a green backdrop when viewed from the coast, or spectacular views of the coastline, ocean and horizon from higher elevations.

Part of Kona's natural beauty is also due to the wide range of climatic conditions in a relatively short distance. Such variations extending from the coastal areas to the higher elevations are evidenced by changes in vegetation, producing a wide scope of different physical environments."

No specific scenic views are listed in the General Plan in or near the project site, but views of and along the shoreline have high scenic quality, as they involve curving lines of turquoise water and pocket beaches, backed by scenic coconut and banyan trees as well as resort buildings, some of which reflect the character of small-town Kailua-Kona. The General Plan calls for preserving natural beauty by carefully considering the effects of proposed construction during all land use reviews in order to protect scenic vistas and viewplanes from becoming obstructed.

Lands uses surrounding the project site are resort, commercial, boating, shoreline recreation, undeveloped land, and historic sites, as shown in Figure 3a. Existing visual corridors are affected by these adjacent land uses. Currently, views of and along the shoreline from Ali'i Drive, the Kailua Pier, and Kamakahonu Beach are not obscured or affected greatly by the Hotel (see Figures 3b-c). Views from Ahu'ena Heiau in all directions have a foreground (and in some cases a middle ground) that is unaffected by development, but almost all background views involve developed uses including the Hotel, the pier, or a shoreline lined by commercial uses. Views from areas immediately surrounding the hotel are naturally blocked by the bulk of the structure (see Figure 3d-e).

Impacts and Mitigation Measures

Short term direct and indirect impacts to air quality could potentially occur due to project construction, principally through: 1) fugitive dust from vehicle movement, landscaping and demolition activities; 2) exhaust emissions from onsite construction equipment and 3) emissions from other renovation activities such as painting and sand blasting. The State of Hawai'i Air Pollution Control Regulations (Chapter 11-60, HAR) prohibit visible emissions of fugitive dust from construction activities beyond the property line. Thus, an effective dust control plan for the project construction phase is essential.

In order to minimize impacts from dust, the contractor will prepare a dust control plan compliant with provisions of HAR Chapter 11-60.1, "Air Pollution Control," and Section 11-60.1-33, "Fugitive Dust". Adequate fugitive dust control can usually be accomplished by the establishment of a frequent watering program to keep bare dirt surfaces in construction areas from becoming significant sources of dust. In dust prone or dust sensitive areas, other control measures such as limiting the area that can be disturbed at any given time, applying chemical soil stabilizers, mulching and/or using wind screens may be necessary. Control regulations further stipulate that open bodied trucks be covered at all times when in motion if they are transporting materials that could be blown away. Demolition activities, being varied in character, may require a variety of control measures including containment and wetting. Haul trucks tracking dirt onto paved streets from unpaved areas are often a significant source of dust in construction areas.

Some means to alleviate this problem, such as road cleaning or tire washing, may be appropriate. Establishment of landscaping as early in the construction schedule as possible can also lower the potential for fugitive dust emissions.

Onsite mobile and stationary construction equipment also would emit air pollutants from engine exhausts. The largest of this equipment is usually diesel powered. Nitrogen oxide emissions from diesel engines can be relatively high compared to gasoline powered equipment, but the standard for nitrogen dioxide is set on an annual basis and is not likely to be violated by short-term construction equipment emissions. Carbon monoxide emissions from diesel engines, on the other hand, are low and should be relatively insignificant compared to vehicular emissions on nearby roadways.

In order to avoid air quality impacts from slow moving construction vehicles traveling to and from the site on major roadways, heavy construction equipment should be moved on-site during periods of low traffic volume.

Development would entail limited excavation, grading, compressors, vehicle and equipment engine operation, and construction of new infrastructure. These activities would generate noise exceeding 95 decibels at times, impacting nearby sensitive noise receptors. In cases where construction noise is expected to exceed the Department of Health's (DOH) "maximum permissible" property line noise levels, contractors would obtain a permit as per Title 11, Chapter 46 HAR (Community Noise Control) prior to construction. DOH would review the proposed activity, location, equipment, project purpose, and timetable in order to decide upon conditions and mitigation measures, such as restriction of equipment type, maintenance requirements, restricted hours, and portable noise barriers.

Some minor, temporary and unavoidable adverse visual impacts would occur during the construction phase. The project would result in a Hotel and grounds that would be more visually appealing than at present.

The proposed renovation of the King Kamehameha Hotel would not involve adverse impacts to existing scenic views. No vertical expansion of the six-story towers is involved. Considerable mass will be subtracted by removing the commercial lobby between the two towers. The only addition to the horizontal bulk of the hotel will be slight expansions to the existing lobby area and meeting space, which is tucked in an alcove of the existing hotel on the mauka side and would not affect any view planes. The modernization and improvement to the outer surfaces of the hotel, including paint, trim and glass, would provide a more attractive building that contributes to the architectural quality of this resort setting.

Landscaping currently adds beauty and character to the grounds of the building and helps the hotel visually harmonize with its shoreline setting. This landscaping will be expanded and improved. The most significant beneficial impact will be the opening up of the commercial lobby area that connects the two towers. Relocating the pool more mauka and limiting the number, density and height of structures between the two towers will provide a new, deep viewplane in an area that currently is limited to the pool deck area. Viewplanes from the beach towards the hotel, which currently involve a clutter of structures and material types, will also improve.

3.1.6 Hazardous Substances, Toxic Waste and Hazardous Conditions

Existing Conditions, Impacts and Mitigation

In general, due to the character of the project site, it is not expected that any hazardous substances, toxic waste, and hazardous conditions exist apart from identified and legitimate uses including chemicals used to treat swimming pool water and cleaning compounds. However, hazardous materials including asbestos, lead-based paint, and PCBs, may be present in building materials. Therefore, prior to demolition activities, all work areas will be surveyed for building materials that contain these hazardous components and, if such materials are identified they will be removed according to applicable laws. Regulated asbestos containing materials (RACM) will be removed by an EPA certified contractor in compliance with NESHAP. If any other hazardous materials are identified they will similarly be removed by qualified contractors prior to the commencement of demolition and construction activities. Further, if suspected asbestos or lead-based paint containing materials are observed during demolition activities, work in the area of the materials will be halted, the materials tested by adequately qualified personnel, and if found to contain hazardous materials, removed appropriately.

3.2 Socioeconomic and Cultural

3.2.1 Socioeconomic Characteristics

The project would affect and benefit the Kailua-Kona community and North Kona district most directly. Table 1 provides information on the socioeconomic characteristics of Kailua-Kona along with those of Hawai‘i County as a whole for comparison, from the United States 2000 census.

Table 1
Selected Socioeconomic Characteristics

CHARACTERISTIC	ISLAND OF HAWAI‘I	KAILUA
Total Population	148,677	9,870
Percent Caucasian	31.5	38.7
Percent Asian	26.7	18.3
Percent Hawaiian	9.7	13.2
Percent Two or More Races	28.4	27.1
Median Age (Years)	38.6	35.5
Percent Under 18 Years	26.1	27.3
Percent Over 65 Years	13.5	9.9
Percent Occupied Households with Children	32.2	35
Average Household Size	2.75	2.78
Percent Housing Vacant	15.5	18.2

Source: U.S. Bureau of the Census. May 2001. Profiles of General Demographic Characteristics, 2000 Census of Population and Housing, Hawai‘i. (U.S. Census Bureau Web Page).

The beach area makai of the Hotel is an important recreational site for both Hotel guests and the general public (see Figure 3). Operationally, the renovation will move Hotel structures further

from this area and will not in any way adversely affect the use of the beach. Construction is not expected to affect public access to this area. The Queen Lili‘uokalani Long-Distance Canoe Races take place at the beach along the hotel every Labor Day. The renovation is not expected to affect these, or any other canoe races.

3.2.2 Cultural and Historic Resources

Methods

A cultural impact assessment (CIA) which also dealt with the issue of potential archaeological resources was prepared by Rechtman Consulting. This extensive report, which includes a number of first-hand accounts and reproductions of maps and photos, is briefly summarized below, with scholarly references generally omitted. Readers interested in greater details are referred to Appendix 2, which contains the report in full.

The CIA is consistent with federal and State of Hawai‘i guidelines for such studies. Among the pertinent guidelines are the Advisory Council on Historic Preservation’s “Guidelines for Consideration of Traditional Cultural Values in Historic Preservation Review” (ACHP 1985); National Register Bulletin 38 “Guidelines for Evaluating and Documenting Traditional Cultural Properties”; the Hawai‘i State Historic Preservation Statute (Chapter 6E), which affords protection to historic sites, including traditional cultural properties of on-going cultural significance; the criteria, standards, and guidelines currently utilized by the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) for the evaluation and documentation of cultural sites; and the November 1997 guidelines for cultural impact assessment studies, adopted by the Office of Environmental Quality Control. The archival-historical sources investigated were located in the collections of the Hawai‘i State Archives, State Historic Preservation Division, the Bishop Museum Archives; the University of Hawai‘i-Hilo Mo‘okini Library, and in the collections held by Ahu‘ena Inc. Historical information was also derived from additional published and unpublished sources cited in the bibliography of Appendix 2.

The CIA also involved extensive consultation with a number of individuals and groups with knowledge of the cultural resources in the area, including Ahu‘ena Inc.; the Kona Hawaiian Civic Club; Ke Akua Hawai‘i Ko Aloha; Kanaka Council; Royal Order of Kamehameha; Clement Kanuha Jr.; Hanale Fergerstrum; Kalani Nakoia; Keiki Kawaiaea; Pualani Kanahale; Kate Winter; Larry Kimura; Geraldine Bell; Elaine Jackson-Rotondo; and Mikahala Roy. It should be noted that not all individuals or groups had comments, and some declined to participate in the consultation. Many of these individuals and groups actively use the area, and some had recommendations regarding the project, which are discussed in Appendix 2.

Background

All of the area proposed for active work as part of the actual renovations of the Hotel has previously been disturbed as part of various activities in the past, and this area is all in active use as part of the Hotel and its grounds today. However, a portion of the Hotel and surrounding grounds occupy a portion of what is historically known as Kamakahonu (SIHP Site 10-27-7002), an important cultural site best known as the last residence of Kamehameha I and the place where he died in 1819. Kamakahonu was the location of multiple heiau known collectively as Ahu‘ena, originally said to have been built by either Liloa or his son Umi-a-Liloa during the sixteenth

century, was reconstructed and rededicated by Kamehameha I in the early nineteenth century. In the centuries prior to 1778, several large and densely populated royal and high chiefly centers were located along the shoreline between Kailua and Hōnaunau. One such center was located along the north end of Kailua Bay at Kamakahonu, which literally means turtle eye. Chiefly residence at Kamakahonu was possibly established as early as the sixteenth century by Umi-a-Liloa. It was during the early nineteenth century that Keawe a Mahi presided over Kamakahonu, and upon the death of Keawe a Mahi, Kamakahonu became the residence of Kamehameha I and his royal entourage. Kamehameha first moved into the former residence of Keawe a Mahi. He then built another house high on stones on the seaward side of that residence, facing directly upland toward the planting fields of Kuahewa. Like an observation post, this house afforded a view of the farm lands and was also a good vantage from which to see canoes coming from the south.

Kamakahonu became the backdrop for some of the most significant events in the early nineteenth-century history of the Hawaiian Kingdom. It is here that in 1819, just six months after Kamehameha's death, the heir to Kamehameha I, Liholiho, chose to ignore certain kapu associated with male/female and chief/commoner interaction, particularly with respect to dietary restrictions, and indefinitely extended the period of 'ai noa (free eating) that follows the death of a chief. In dining with women, Liholiho's actions symbolically and officially marked the end of the native belief system. It is where Protestant missionaries came ashore in 1820 and in 1825 set up a church and parsonage in an area not too distant from Kamakahonu, parts of which had become converted to a fort. Hawaiian royalty continued to maintain a presence here until the passing of Queen Kapi'olani in 1899.

Kamakahonu was listed on the National Register of Historic Places as a National Historic Landmark in 1962. The Ahu'ena heiau complex was archaeologically investigated and rebuilt by the Bernice P. Bishop Museum in the middle 1970s.

In the mid-19th century, the Hawaiian kingdom performed a Māhele (division) that defined the land interests of the King, the high-ranking chiefs, and the konohiki. As a result of the Māhele, all land in the Kingdom of Hawai'i came to be placed in crown land, government land, or konohiki land. As a result of the Māhele, Laniihau 2nd was retained as government land. These lands were subject to kuleana claims made by native tenants. Three such claims were made in the vicinity of Kamakahonu. Leleiohoku claimed a kauhale within Kamakahonu consisting of five houses, which included the two-story stone and wooden houses and a canoe storage building. The government denied this claim but allowed Leleiohoku to retain ownership of the contents of the houses. Another claim was made for a house lot at Ahu'ena by Mahi. Citing lack of sufficient corroboration, the Land Commission denied the award. The Commission did, however, grant another award at Ahu'ena to Kalaikuiwa (LCAw. 7969) for a house lot situated in the center of what is now TMK 3-7-5-05:12, to the west of the current project area. When Ruth Ke'elikolani became governor of Hawai'i she moved the office of governor to Hilo, and the residences and fort at Kamakahonu fell into further disrepair.

As government land, Laniihau 2nd became part of the post-Māhele land granting program that the Kingdom established to help provide native tenants further opportunity to obtain fee-simple land. In 1875 the government sold as a grant a portion of Kamakahonu to William Pitt Leleiohoku II (Royal Patent No. 3148:2) what seems to correspond to the current TMKs 3-7-5-06:24 and 32. Leleiohoku II was the hānai son of Ruth Ke'elikolani. Leleiohoku II died in 1877 and his estate

was inherited by his sisters Lili‘uokalani and Likelike and his brother King Kalākaua. The sisters sold their interest in Kamakahonu to their brother in 1885. Kalākaua converted the two-story stone warehouse/residence into a boathouse for whale boats. Upon Kalākaua’s death in 1891, his Kamakahonu land along with the rest of his estate went to Queen Kapi‘olani.

Following the death of Kapi‘olani in 1899, the Kamakahonu property remained in her estate until 1911, at which time H. Hackfeld & Company bought the holdings at Kamakahonu. Hackfeld opened a store using a building that once belonged to King Kalakaua and converted an old stone barracks into the store’s warehouse. H. Hackfeld & Company reorganized in 1918, and all of the company’s holdings in Kailua were conveyed to American Factors, Limited, which became Amfac, Inc., the parent company of the property when the first hotel was opened in 1960. This hotel was arranged in an arc just back from the beach, primarily occupying a portion of TMK 3-7-5-06:32. The present King Kamehameha’s Kona Beach Hotel was completed in 1975, and its buildings primarily occupy land mauka of Kamakahonu. However, sometime between 1977 and 1980 the lū‘au was moved to its present location nearer the Ahu‘ena Heiau, which was reconstructed by Bishop Museum with funding from Amfac. Appendix 2 contains maps and photographs that depict the layout and appearance of Kamakahonu during various eras.

Archaeological Resources

During preparation of the EA, the DLNR-SHPD was contacted to determine whether historic sites would be affected by the renovation. In a letter of April 23, 2008 (see Appendix 3a), DLNR-SHPD requested that the EA include information on the findings of previous archaeological studies in the immediate hotel area; historic cartographic data for this location; geological and soil characteristics of the hotel site that would aid in predicting the presence/absence of subsurface cultural deposits; and a consideration of the likelihood that significant subsurface deposits could be present beneath the existing hotel structures, infrastructure and/or landscaped lawn areas. This information would help SHPD determine if mitigation measures are needed, and whether subsurface testing would be appropriate as part of the planning process.

Research performed for the CIA determined that beginning in the 1950s, the entire area of the current hotel has been repeatedly subject to major ground-altering activities. However unlikely, it is possible that intact subsurface archaeological remains, be they features or deposits, could be encountered during the proposed renovation. Potential impacts and mitigation to such resources are discussed below.

Cultural Practices and Resources

The OEQC guidelines identify several possible types of cultural practices and beliefs that are subject to assessment. These include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs. The guidelines also identify the types of potential cultural resources, associated with cultural practices and beliefs that are subject to assessment. Essentially these are nature features of the landscape and historic sites, including traditional cultural properties. The origin of the concept of traditional cultural property is found in National Register Bulletin 38 published by the U.S. Department of Interior, National Park Service. “Traditional” as it is used, implies a time depth of at least 50 years, and a generalized mode of transmission of information from one generation to the next, either orally or by act.

“Cultural” refers to the beliefs, practices, lifeways, and social institutions of a given community. The use of the term “Property” defines this category of resource as an identifiable place. Traditional cultural properties are not intangible and they must have some kind of boundary. They are subject to the same kind of evaluation as any other historic resource, with one very important exception. By definition, the significance of traditional cultural properties should be determined by the community that values them.

As the OEQC guidelines do not contain criteria for assessing the significance for traditional cultural properties, the CIA adopted the appropriate criteria for evaluating the significance of historic properties, of which traditional cultural properties are a subset. To be significant the potential historic property or traditional cultural property must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

- A Be associated with events that have made an important contribution to the broad patterns of our history;
- B Be associated with the lives of persons important in our past;
- C Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;
- D Have yielded, or is likely to yield, information important for research on prehistory or history;
- E Have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group’s history and cultural identity.

While it is the practice of the DLNR-SHPD to consider most historic properties significant under Criterion D at a minimum, it is clear that traditional cultural properties by definition would also be significant under Criterion E. A further analytical framework for addressing the preservation and protection of customary and traditional native practices specific to Hawaiian communities resulted from the *Ka Pa‘akai O Ka‘āina v Land Use Commission* court case. The court decision established a three-part process relative to evaluating such potential impacts: first, to identify whether any valued cultural, historical, or natural resources are present, and identify the extent to which any traditional and customary native Hawaiian rights are exercised; second, to identify the extent to which those resources and rights will be affected or impaired; and third, specify any mitigative actions to be taken to reasonably protect native Hawaiian rights if they are found to exist.

There are significant cultural practices and resources identified for the area immediately surrounding the Hotel. As discussed above, a portion of the Hotel and its grounds include a portion of the National Historic Landmark Site of Kamakahonu (SIHP Site 10-27-7002). Kamakahonu is clearly significant under four of the five evaluation criteria, Criterion A, B, D, E, and as a location in and of itself should always be considered a significant place (a wahi pana). It is known from historical sources, archaeological investigation, and oral information that the remaining features of Kamakahonu of archaeological and cultural significance include the reconstructed features (Ahu‘ena House, Hale nana mahina ‘ai, and the mortuary platform), what remains of the perimeter walls, and a reburial feature currently located within a naupaka hedge to the north of the mortuary platform.

While it should be recognized that the reconstructed features of Ahu'ena House and Hale nana mahina 'ai may no longer hold archaeological significance, they hold great cultural significance for modern practitioners. Ahu'ena House and Hale nana mahina 'ai, along with the cultural activities that take place there, are considered sacred by Hawaiian cultural practitioners.

Impacts and Mitigation Measures

As discussed above, all of the area proposed for active work as part of the actual renovations of the Hotel has previously been disturbed as part of various activities in the past, and this area is all in active use as part of the Hotel and its grounds today. In order to avoid impacts to the existing features of Kamakahonu named above, all these features need to be protected against impacts during the proposed renovation activities. Protective measures, which may include temporary fencing, contractor education, and monitoring, should be developed in coordination with Ahu'ena Heiau Inc. and other concerned parties.

To mitigate potential effects to possible buried archaeological resources or human remains within the already disturbed areas of Kamakahonu and adjacent areas in which the renovation will occur, archaeological monitoring is recommended during subsurface demolition or development activities. Such monitoring will provide for an immediate response if any such resources are discovered. In the unlikely event that additional burials, cultural deposits or archaeological resources are encountered during future development activities, work in the immediate area of the discovery will be halted and SHPD will be contacted as outlined in Hawai'i Administrative Rules 13§13-280-3.

Although not directly related to the proposed renovation, it is nonetheless recommended that the current hotel ownership work with DLNR-SHPD to re-inter the human skeletal remains (perhaps in proximity to the existing reburial feature) that were unearthed in 1995, and that are presently in DLNR-SHPD's possession.

It is furthermore recommended that the Hotel, in cooperation with historical and cultural groups, undertake to educate visitors and kama'āina alike about the significance of Kamakahonu. In particular, it is recommended that the Hotel fund exhibits informed by the historical and cultural sources cited in Appendix 2 recounting the significant historical events and features of Kamakahonu as part of the exhibit hall, museum, and auditorium display gallery that is proposed for the hotel's new open air central arcade. This is not intended to be viewed as a mitigative measure that counter balances the cumulative devastation that has befallen Kamakahonu (nor is it the kuleana of the current hotel ownership to do so); this is simply suggested as an educational tool to help preserve a historically accurate memory of what once was.

To the greatest degree reasonable, the Hotel ownership should ensure access to Ahu'ena by cultural practitioners during the proposed renovation.

3.3 Infrastructure

3.3.1 Utilities

Existing Facilities and Services

Electrical power to the Hotel is supplied by Hawai'i Electric Light Company (HELCO), a privately owned utility company regulated by the State Public Utilities Commission, via their island wide distribution network.

Water is supplied by the Hawai'i County Department of Water Supply. Telephone service is provided by Hawaiian Telcom. Wastewater treatment is currently provided by Hawai'i County via a sewer line along Ali'i Drive.

Impacts and Mitigation Measures

The proposed action would not have any substantial impact on existing electrical facilities or HELCO's ability to provide electricity. No other utilities will be affected in any way. The project would not require a long-term net increase in demand for any services because it does not increase the Hotel's capacity. In summary, the utility infrastructure for the facility is adequate and no adverse impacts are expected.

3.3.2 Traffic and Parking

Existing Roadway and Traffic Conditions

King Kamehameha's Kona Beach Hotel is accessed by two entrances; one entrance is a porte-cochere located along Palani Drive near its intersection with Ali'i Drive, the second is the parking lot entrance located along Palani Drive. Traffic along both Palani Road and Ali'i Drive can be heavy, with frequent stops and slow-moving traffic. Because the area is a popular tourist destination, pedestrian traffic can also be heavy.

Impacts and Mitigation Measures

During the construction period equipment would be stored on site, and traffic associated with project construction would be limited to worker traffic, as well as gravel trucks hauling waste and materials to and from the site. Mobilization and de-mobilization of construction equipment, however, can create traffic congestion. In order to minimize traffic impacts, heavy equipment will be transferred to and from the site only during off-peak hours.

No changes to the basic hotel access would occur, and there are no adverse impacts in terms of traffic.

In a letter of February 25, 2008 (see Appendix 3a), the County of Hawai'i Police Department recommended that the hotel accommodate emergency response and that vehicular and pedestrian designs facilitate rapid emergency evacuations. The renovations include features that would

facilitate emergency evacuation, notably elevator modernization, the expansion of open space on the first floor, and enhancement of the existing entry feature.

3.4 Secondary and Cumulative Impacts

The project will not involve any secondary impacts, such as population changes or effects on public facilities. Although the project would provide some short-term construction jobs, these would almost certainly be filled by local residents and would not induce in-migration.

Cumulative impacts result when implementation of several projects that individually have limited impacts combine to produce more severe impacts or conflicts in mitigation measures. The adverse effects of the project – very minor and temporary disturbance to air quality, noise, visual and traffic congestion quality during construction – are very limited in severity, nature and geographic scale, as the project is simply a renovation. The only potential impact might occur during construction activities as vehicles and equipment are being moved on- and offsite. There are a number of road and highway improvement projects being undertaken by the State and County of Hawaii – notably, the widening of Queen Kaahumanu Highway – that also involve large numbers of equipment and vehicles. There is some potential for traffic slowdowns from road projects and the renovation projects to interact. It is recommended that renovation contractors be made aware of the progress and schedules of the highway construction projects and the need to coordinate work schedules to avoid conflicts. Most conflicts can be avoided by scheduling for off-peak hours. There do not appear to be any other potential sources of cumulative impacts.

3.5 Required Permits and Approvals

The following permits and approvals would be required:

- Hawai'i County Building Division Approval and Building, Plumbing and Electrical Permits
- Hawai'i County Planning Department Approval
- Hawai'i County Public Works Department Grading & Driveway Permits
- National Pollutant Discharge Elimination System Permit (NPDES)
- Special Management Area (Major) Use Permit

3.6 Consistency With Government Plans and Policies

3.6.1 Hawai'i State Plan

Adopted in 1978 and last revised in 1991 (Hawai'i Revised Statutes, Chapter 226, as amended), the Plan establishes a set of themes, goals, objectives and policies that are meant to guide the State's long-run growth and development activities. The three themes that express the basic purpose of the Hawai'i State Plan are individual and family self-sufficiency, social and economic mobility and community or social well-being. The project would promote these goals by providing seriously needed renovations to a landmark hotel that provides jobs, recreation, and a venue for social and government functions.

3.6.2 Hawai‘i State Land Use Law

All land in the State of Hawai‘i is classified into one of four land use categories – Urban, Rural, Agricultural, or Conservation – by the State Land Use Commission, pursuant to Chapter 205, HRS. The property is in the State Land Use Urban District. The Land Use Commission Administrative Rules (Chapter 15-15 HAR) allows determination of allowed uses for the Urban Land Use district by County Zoning (discussed in section 3.6.3, below).

3.6.3 Hawai‘i County Zoning, LUPAG and Special Management Area

Hawai‘i County Zoning. The project site is in the Hawai‘i County Resort-Hotel District (V-0.75). The project is a permitted use within this designation. The Planning Department stated that the owner will need to consolidate any parcels where new structures will be constructed across property lines in order to meet setback requirements.

The Hawai‘i County General Plan Land Use Pattern Allocation Guide (LUPAG). The LUPAG map component of the General Plan is a graphic representation of the Plan’s goals, policies, and standards as well as of the physical relationship between land uses. It also establishes the basic urban and non-urban form for areas within the planned public and cultural facilities, public utilities and safety features, and transportation corridors. The project site is classified as Resort in the LUPAG. The project is consistent with the Resort Node and High Density Urban designations, which are intended for resorts, hotels, condominiums, and support services.

Hawai‘i County Special Management Area. The property is situated within the County’s Special Management Area (SMA). A special management area permit will be required, which includes a detailed assessment of the project’s impacts in relation to the provisions and guidelines contained in Chapter 205A, Hawai‘i Revised Statutes (HRS), entitled *Coastal Zone Management*. The following is a summary assessment of the ten objectives of Chapter 205A, Coastal Zone Management Act and the impacts the proposed actions will have.

1. **Recreational and Visual Resources:**

The proposed hotel renovations will not affect access to or the utilization of any recreational resources in the area. The relocation of the swimming pool and deck to a more mauka location will actually provide a greater buffer between public utilization of the coastal resources and the private uses associated with the hotel.

2. **Historic Resources:**

Adverse effects to historic resources have been avoided through proper evaluation of historic sites, as discussed above in Section 3.2. Archaeological monitoring will occur during construction with potential to disturb the ground surface.

3. **Scenic and Open Space Resources:**

The proposed renovation of the King Kamehameha Hotel would not involve adverse impacts to existing scenic views or open space resources. The proposed renovations will reduce the buildings’ foot print by over 8,000 sf. No vertical expansion of the six-story towers is involved. Considerable mass will be subtracted by removing the commercial lobby between the two towers. The only addition to the horizontal bulk of the hotel will

be slight expansions to the existing lobby area, which is tucked in an alcove of the existing hotel on the mauka side and would not affect any view planes. The modernization and improvement to the outer surfaces of the hotel, including paint, trim and glass, would provide a more attractive building that contributes to the architectural quality of this resort setting.

Landscaping currently adds beauty and character to the grounds of the building and helps the hotel visually harmonize with its shoreline setting. This landscaping will be expanded and improved. The most significant beneficial impact will be the opening up of the commercial lobby area that connects the two towers. Relocating the pool more mauka and limiting the number, density and height of structures between the two towers will provide a new, deep viewplane in an area that currently is limited to the pool deck area. Viewplanes from the beach towards the hotel, which currently involve a clutter of structures and material types, will also improve.

4. Coastal Ecosystems:

No change in use of the property is proposed. The number of hotel rooms and the number of projected guests will not increase, and there will be a reduction in the area of commercial spaces by nearly 5,680 sf. No additional impacts to coastal water quality or other determinants of coastal ecosystems will occur. Construction impacts will be mitigated by Best Management Practices that will be developed and implemented as part of the NPDES permit process.

5. Economic Uses:

The proposed renovations consist of private improvements with private funding, in excess of \$25 million, that will have a substantial positive economic impact on Kailua Village and the visitor industry in West Hawai‘i and will not induce and adverse economic impacts. The positive effects of renovating this important element of Kailua Village will be felt by all of the businesses in the Village including shops, restaurants and other tourist related activities.

6. Coastal Hazards:

The project site sits adjacent to the northern edge of Kailua Bay. There are no freshwater resources in the project area. No stream poses a flooding hazard to the project site; however, some of the site can be threatened by coastal flooding as well as tsunami inundation. The Flood Insurance Rate Maps show that about half of the site is located in Flood Zone VE and Flood Zone AE. Flood Zone VE is defined as the special flood hazard area that corresponds to the 100-year coastal flood plains that have additional hazards associated with storms waves. Flood Zone AE is defined as the zone that corresponds to the 100-year floodplain as determined in a Flood Insurance Study by detailed methods. These areas are more commonly known as coastal high hazard areas or tsunami inundation zones.

Because the site is located within the coastal flood and tsunami inundation zones the Hotel currently maintains, and will continue to maintain, evacuation plans for coastal flooding and potential tsunami inundation, as well as the required flood insurance.

7. Managing Development:

The applicant will notify the surrounding property owners within 300 feet of the perimeter of the property as required by the Zoning Code and Planning Commission Rule No. 9 (Special Management Area) public hearing notification requirements. This public hearing process improves the development review process, communication, and public participation in the management of coastal resources and hazards.

8. Public Participation:

The public will be informed of the proposed action through the Chapter 343 EA Assessment process and the SMA Permit, as required by law, explained above. The County of Hawai'i Planning Commission must hold a public hearing on the Applicant's Special Management Area Use Permit Application. At the public hearing, the public is free to participate in this open hearing forum and to provide their comments to the Planning Commission. The Planning Commission public hearing, and if required, the Contested Case Process, provide the vehicle for stimulating public awareness, education and participation in the coastal management decision making.

9. Beach Protection:

The proposed hotel renovations will not affect any beaches or adversely affect public use and recreation of the shoreline in this area. The relocation of the current swimming pool to a more mauka location will increase the buffer between the public's use of the shoreline area and the private uses of the hotel property.

10. Marine Resources:

The hotel renovation project will not lead to impacts to marine resources including fisheries, water quality, traditional practices, or any other resource. The proposed renovations and relocation of the swimming pool to a more mauka area will generate no impact on the State's marine resources.

3.6.4 Hawai'i County General Plan

The General Plan for the County of Hawai'i is a policy document expressing the broad goals and policies for the long-range development of the Island of Hawai'i. The General Plan itself is organized into thirteen elements, with policies, objectives, standards, and policies for each. There are also discussions of the specific applicability of each element to the nine judicial districts comprising the County of Hawai'i. Most relevant to the project are the following Goals, Standards, Policies and Courses of Action of the following chapters:

NATURAL RESOURCES AND SHORELINE – GOALS

- (a) Protect and conserve the natural resources from undue exploitation, encroachment and damage.
- (b) Provide opportunities for recreational, economic, and educational needs without despoiling or endangering natural resources.
- (c) Protect and promote the prudent use of Hawaii's unique, fragile, and significant environmental and natural resources.

- (e) Protect and effectively manage Hawaii's open space, watersheds, shoreline, and natural areas.
- (f) Ensure that alterations to existing land forms, vegetation, and construction of structures cause minimum adverse effect to water resources, and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation, or failure in the event of an earthquake.

NATURAL RESOURCES AND SHORELINE – POLICIES

- (c) Maintain the shoreline for recreational, cultural, educational, and/or scientific uses in a manner that is protective of resources and is of maximum benefit to the general public.
- (i) Encourage an overall conservation ethic in the use of Hawaii's resources by protecting, preserving, and conserving the critical and significant natural resources of the County of Hawai'i.
- (r) Ensure public access is provided to the shoreline, public trails and hunting areas, including free public parking where appropriate.

Discussion: The project would protect and preserve a portion of shoreline, while maintaining public access. The project would mitigate risks to water quality, would move structures further from the shoreline, and hence is a prudent action.

ECONOMIC - GOALS

- (a) Provide residents with opportunities to improve their quality of life through economic development that enhances the County's natural and social environments.
- (b) Economic development and improvement shall be in balance with the physical, social, and cultural environments of the island of Hawaii.
- (c) Strive for diversity and stability in the economic system.
- (d) Provide an economic environment that allows new, expanded, or improved economic opportunities that are compatible with the County's cultural, natural and social environment.
- (e) Strive for an economic climate that provides its residents an opportunity for choice of occupation.
- (f) Strive for diversification of the economy by strengthening existing industries and attracting new endeavors.
- (g) Strive for full employment.
- (h) Promote and develop the island of Hawaii into a unique scientific and cultural model, where economic gains are in balance with social and physical amenities. Development should be reviewed on the basis of total impact on the residents of the County, not only in terms of immediate short run economic benefits.

ECONOMIC – POLICIES

- (c) Encourage the development of a visitor industry that is in harmony with the social, physical, and economic goals of the residents of the County.
- (f) Support all levels of educational, employment and training opportunities and institutions.
- (h) The land, water, air, sea, and people shall be considered as essential resources for present and future generations and should be protected and enhanced through the use of economic incentives.
- (o) Promote a distinctive identity for the island of Hawaii to enable government, business and travel industries to promote the County of Hawaii as an entity unique within the State of Hawaii.
- (p) Identify the needs of the business community and take actions that are necessary to improve the business climate.

ECONOMIC – NORTH KONA – COURSES OF ACTION

(a) Resort development in the area shall be in balance with the social and physical goals as well as economic desires of the residents of the district. Necessary pollution controls shall be available prior to development. Other necessary support facilities such as transportation and nursery facilities shall also be provided.

(f) Recognize the natural beauty of the area as a major economic and social asset. This resource should be protected through appropriate review processes when development is proposed.

(g) Improve Kailua Village to maintain its viability as a popular visitor destination.

Discussion: The project serves to enhance the economic vitality of a Kailua-Kona landmark. The project would renovate the hotel, enhancing the attractiveness as a destination to residents and visitors. The renovations would support the efforts of the Kailua Village Business Improvement District by investing in excess of \$25 million dollars in this important and visible property. Attracting visitors to the hotel will have a positive effect on all other Village businesses by bringing guests who will support the restaurants, shops and other tourist activities in the Village.

FLOODING AND OTHER NATURAL HAZARDS – GOALS

(a) Protect human life.

(b) Prevent damage to man-made improvements.

(c) Control pollution.

(d) Prevent damage from inundation.

(e) Reduce surface water and sediment runoff.

(f) Maximize soil and water conservation.

FLOODING AND OTHER NATURAL HAZARDS – POLICIES

(a) Enact restrictive land use and building structure regulations in areas vulnerable to severe damage due to the impact of wave action. Only uses that cannot be located elsewhere due to public necessity and character, such as maritime activities and the necessary public facilities and utilities, shall be allowed in these areas.

(d) Any development within the Federal Emergency Management Agency designated flood plain must be in compliance with Chapter 27.

(g) Development-generated runoff shall be disposed of in a manner acceptable to the Department of Public Works and in compliance with all State and Federal laws.

(j) The County and the private sector shall be responsible for maintaining and improving existing drainage systems and constructing new drainage facilities.

(q) Consider natural hazards in all land use planning and permitting.

FLOODING AND OTHER NATURAL HAZARDS – STANDARDS

(a) "Storm Drainage Standards," County of Hawaii, October, 1970, and as revised.

(b) Applicable standards and regulations of Chapter 27, "Flood Control," of the Hawaii County Code.

(c) Applicable standards and regulations of the Federal Emergency Management Agency (FEMA).

(d) Applicable standards and regulations of Chapter 10, "Erosion and Sedimentation Control," of the Hawaii County Code.

(e) Applicable standards and regulations of the Natural Resources Conservation Service and the Soil and Water Conservation Districts.

Discussion: No stream poses a flooding hazard to the project site; however, some of the site can be threatened by coastal flooding as well as tsunami inundation. The Flood Insurance Rate Maps (FIRM) 1551660694C and 1551660713D (Figure 4) show that about half of the site is located in Flood Zone VE and Flood Zone AE. Flood Zone VE is defined as the special flood hazard area that corresponds to the 100-year coastal flood plains that have additional hazards associated with storms waves. Flood Zone AE is defined as the zone that corresponds to the 100-year floodplain as determined in a Flood Insurance Study by detailed methods. These areas are more commonly known as coastal high hazard areas or tsunami inundation zones. Because the site is located within the coastal flood and tsunami inundation zones the Hotel currently maintains, and will continue to maintain, evacuation plans for coastal flooding and potential tsunami inundation, as well as the required flood insurance. All improvements will be subject to review by the Hawai'i County Department of Public Works to ensure that all relevant standards of Chapter 27 and Chapter 10 will be addressed, and improvements will be inspected for acceptance.

HISTORIC SITES – GOALS

- (a) Protect, restore, and enhance the sites, buildings, and objects of significant historical and cultural importance to Hawaii.
- (b) Appropriate access to significant historic sites, buildings, and objects of public interest should be made available.

HISTORIC SITES – POLICIES

- (a) Agencies and organizations, either public or private, pursuing knowledge about historic sites should keep the public apprised of projects.
- (c) Require both public and private developers of land to provide historical and archaeological surveys and cultural assessments, where appropriate, prior to the clearing or development of land when there are indications that the land under consideration has historical significance.
- (f) Encourage the restoration of significant sites on private lands.
- (i) Signs explaining historic sites, buildings and objects shall be in keeping with the character of the area or the cultural aspects of the feature.

Discussion: Adverse effects to historic resources have been avoided through proper evaluation of historic sites, as discussed above in Section 3.2. Archaeological monitoring will occur during construction with potential to disturb the ground surface.

LAND USE – RESORT – GOALS

- (a) Maintain an orderly development of the visitor industry.
- (b) Provide for resort development that maximizes conveniences to its users and optimizes the benefits derived by the residents of the County.
- (c) Ensure that resort developments maintain the cultural and historic, social, economic, and physical environments of Hawaii and its people.

LAND USE – RESORT – POLICIES

- (b) Promote and encourage the rehabilitation and the optimum utilization of resort areas that are presently serviced by basic facilities and utilities.
- (c) Lands currently designated Resort should be utilized before new resorts are allowed in undeveloped coastal areas.

- (g) Evaluate resort areas and the areas surrounding existing resorts to insure that viable quality resorts are developed and that the surrounding area contributes to the quality, ambience and character of the existing resorts.
- (h) Encourage the visitor industry to provide resort facilities that offer an educational experience of Hawaii as well as recreational activities.
- (i) Coastal resort developments shall provide public access to and parking for beach and shoreline areas.
- (k) Require developers to provide the basic infrastructure necessary for development.

Discussion: The project encourages the rehabilitation of an important resort that contributes in many ways to economic and cultural vitality. The Hotel has contributed in significant ways to the cultural and educational improvement of the community, and it provides access to Kamakahonu Bay, which is utilized by visitors and the general public for ocean recreation. The hotel hosts cultural events and has a display of cultural artifacts with signage to help educate visitors and residents about the Hawaiian culture, a program which will be expanded and improved as part of the renovation. No impact on infrastructure is associated with the project.

3.6.5 Kona Community Development Plan

The *County of Hawai'i General Plan*, Section 15.1 (February 2005, as amended) calls for the preparation of Community Development Plans "to translate the broad General Plan statements to specific actions as they apply to specific geographical areas." The *General Plan* requires Community Development Plans be adopted by the County Council as an "ordinance", giving the plans force of law. This is in contrast to plans of the past that were adopted by resolution, and therefore, served only as guidelines or reference documents for decision-makers. Community Development Plans are to be long-term plans with a planning horizon to year 2020, consistent with the *General Plan*.

The Kona Community Development Plan (Kona CDP) was recently adopted by the County Council on September 25, 2008 under Ordinance 08-131. The Kona CDP translates the broad goals and policies of the *County of Hawai'i General Plan* into specific actions and priorities for specific geographic areas in the districts of North Kona, reaching nearly to Waikoloa Village, and South Kona, including the community of Miloli'i. The Kona CDP will deal with all the elements included in the General Plan such as the economy, energy, environmental quality, flooding and other natural hazards, historic sites, natural beauty, natural resources and shoreline, housing, public facilities, recreation, transportation, and land use.

The purposes of the Kona CDP are to:

- Articulate Kona's residents' vision for the planning area.
- Guide regional development in accordance with that vision, accommodating future growth while preserving valued assets.
- Provide a feasible infrastructure financing plan to improve existing deficiencies and proactively support the needs of future growth.
- Direct growth in appropriate areas.
- Create a plan of action where government and the people work in partnership to improve the quality of life in Kona to live, work, and visit.

- Provide a framework to monitor the progress and effectiveness of the plan and to make changes and update, if necessary.

The goals, objectives, policies, and actions of the Kona CDP are presented as eight elements, including:

1. Transportation
2. Land Use
3. Environmental Resources
4. Cultural Resources
5. Housing
6. Public Facilities, Infrastructure and Services
7. Energy
8. Economic Development

These elements generally correspond with the thirteen elements of the *County of Hawai‘i General Plan (GP)* except that five elements of the GP have been combined in two of the Kona CDP elements. Specifically, the Kona CDP element for Public Facilities, Infrastructure and Services combines the GP elements for Public Facilities, Public Utilities and Recreation; and the Kona CDP element for Environmental Resources combines the GP elements for Environmental Quality, Flooding, and Other Natural Hazards, Natural Beauty and Natural Resources and Shoreline. The GP element for Historic Sites is referred to in the Kona CDP as Cultural Resources and the GP element for Economic is referred to as Economic Development.

Most relevant to the King Kamehameha Hotel Renovation Project are the following Guiding Principles and Policies of the Kona CDP.

KONA CDP GUIDING PRINCIPLES AND POLICIES

1. Protect Kona’s natural resources and culture.

1a. Natural resources. The watershed, including coastline, flood plains, important agricultural land, open space, and areas mauka of Mamalahoa Highway shall be protected. Guided by a principle of respect for the land, environment and natural resources shall be preserved and protected to ensure clear air and water, thriving native species, conservation of shorelines and open space, improvements in watershed management and flood control, and reductions in solid waste.

Discussion:

- The Project would protect and preserve a portion of the shoreline, while maintaining public access.
- The Hotel would mitigate risks to air quality by preparing and implementing a dust control plan to ensure clean air.
- The Hotel would mitigate risks to water quality by implementing a Storm Water Pollution Prevention Plan, keep construction equipment in working condition to minimize the risk of fluid leaks, and designating a disposal site to dispose leaks and spills during construction in order to contain sediment and storm water runoff and protect the shoreline water quality.

- The only native plants found in the Hotel grounds are those utilized in landscaping which will be preserved, as no natural communities exist in the area proposed for renovation.
- The Project is located within the Flood AE and VE zones and all renovation work will be done in compliance with Chapter 27, *Floodplain Management*, of the Hawai‘i County Code.

1b. *Culture*. Multi-ethnic culture is preserved, protected, and restored in a manner that perpetuates all aspects of the aloha spirit.

Discussion:

- Extensive consultation has occurred with a number of individuals and community groups with knowledge of the cultural resources in the area.
- The Hotel is committed to providing continued access to Kamakahonu Bay utilized by visitors and the general public for ocean recreation.
- No work is anticipated in the vicinity of the historic sites associated with Ahu‘ena and Kamakahonu, famed for their association with Kamehameha I. Kamakahonu has been identified as a National Historic Landmark Site (SIHP Site 10-27-7002) and thus subject to protection under HRS Chapter 6E (*Policy ENV-1.5*).
- The Hotel continues to host cultural events and display cultural artifacts with signage to help educate visitors and residents about the Hawaiian culture, a program which will be expanded and improved as part of the renovation. (*Policy CR-3.2*)
- The Hotel shall coordinate with Ahu‘ena Heiau, Inc., to protect the existing features of Kamakahonu, and in cooperation with historical and cultural groups, shall undertake to educate visitors and local residents about the significance of Kamakahonu. (*Policy CR-3.2*)
- The renovations will convert over 11,000 square feet into a cultural center/artifacts museum and lecture hall exhibiting the cultural artifacts currently displayed throughout the Hotel. (*Policy CR-3.2*)

2. Provide connectivity and transportation choices.

Future growth should connect communities with movement alternatives such as sidewalks, trails, and bike lanes. We need an efficient public transportation system for moving people. It should have comfortable and frequent service to key destinations, along prominent commuter routes, and at transfer points that offer connections to alternative modes of transportation.

Discussion:

- Situated off of Palani Road near the Ali‘i Drive intersection and makai of Kuakini Highway, the Hotel has direct or easy access to pedestrian sidewalks, pedestrian/bike pathways to nearby shopping malls, grocery stores, restaurants, shoreline, and mixed-use areas promoting pedestrian activity thus reducing the number of car trips for hotel guests.
- The Hotel is located within the Kailua Village Redevelopment regional center, a designated Transit Oriented Development floating zone. (*Policy LU-2.2, LU-2.3[7]*)
- Located within the Kailua Village Redevelopment area, the project will involve only renovation work at this time and thus is not subject to roadway improvements under the Official Concurrency Map. (*Policy TRAN-6.1*)

- The Hotel is in proximity to a secondary transit route which shall connect Kailua Village with Keauhou and also serve the areas of Queen Ka‘ahumanu and Kuakini Highways. As a secondary transit route, transit will share the vehicular travel lane, and its headways will be equal or less than the trunk route. *(Policy TRAN-1.4)*
- The Hotel is in proximity to the Kailua Village transit hub where buses would operate from Captain Cook to the Kailua Village hub creating an intra-Kona transportation service. *(Policy TRAN-1.6)*

4. Provide recreation opportunities.

Future growth should provide a diversity of recreational opportunities that are well-maintained, attractive, and easily accessible to the entire community.

Discussion:

- Future renovations to the existing pool and bar area, which is currently makai of the hotel, would involve a pool deck pulled closer to the hotel central core, walkways, and enhanced landscaping, creating more open area near the shoreline, thus creating more space for beach related activities.
- The Hotel, in cooperation with historical and cultural groups, will undertake to educate visitors and local residents about the significance of Kamakahonu.
- The Hotel is committed to providing continued access to Kamakahonu Bay utilized by visitors and the general public for ocean recreation.

8. Promote effective governance

An effective and accountable regional government structure that improves the quality of life for Kona residents should manage the impacts of growth and meet the needs of the Kona community by encouraging cooperation among public, private, and civic partners, ensuring equitable distribution of resources, and instituting policies and regulations in a predictable and consistent manner.

Discussion:

- The Hotel is committed to working with the Kona community, a regional government structure, the Kailua Village Design Commission, as well as the County.
- A portion of the Hotel and its grounds include a portion of the National Historic Landmark Site of Kamakahonu which is of archaeological and cultural significance and include the reconstructed features (Ahu‘ena House, Hale nana mahina ‘ai, and the mortuary platform). The Hotel will cooperate with historical and cultural groups to educate visitors and local residents about Kamakahonu’s significance. *(Policy CR-3.2)*
- Extensive consultation with a number of individuals and groups with knowledge of the cultural resources in the area.

It is also important to note that Section 4.8.1 (4) of the Kona CDP specifically mentions the Hotel and its planned \$25 million investment in redevelopment, which Section 4.8.2 (g) and Policy ECON 1.7 state has a high value as an economic stimulus. In summary, the proposed renovation

of the King Kamehameha Hotel is consistent with the vision, guiding principles, and policies of the Kona CDP and the Design Guidelines of the Transit Oriented District.

PART 4: DETERMINATION

Based on information to this point, the County of Hawai'i Planning Department is expected to determine that the project will not significantly alter the environment, as impacts will be minimal, and that an Environmental Impact Statement is not warranted, and is thus expected to issue a Finding of No Significant Impact (FONSI). Comments on the Draft EA will be reviewed in order to ascertain whether this anticipated determination is appropriate.

PART 5: FINDINGS AND REASONS

Chapter 11-200-12, Hawai'i Administrative Rules, outlines those factors agencies must consider when determining whether an Action has significant effects:

1. *The project will not involve an irrevocable commitment or loss or destruction of any natural or cultural resources.* No valuable natural or cultural resources would be committed or lost. The action will not adversely affect the important historic and cultural resources of Kamakahonu.
2. *The project will not curtail the range of beneficial uses of the environment.* No restriction of beneficial uses would occur as a result of the project.
3. *The project will not conflict with the State's long-term environmental policies.* The State's long-term environmental policies are set forth in Chapter 344, HRS. The broad goals of this policy are to conserve natural resources and enhance the quality of life. The project is minor and fulfills aspects of these policies calling for an improved social environment. It is thus consistent with all elements of the State's long-term environmental policies.
4. *The project will not substantially affect the economic or social welfare of the community or State.* The project would not have any adverse effect on the economic or social welfare of the County or State, and would improve the social and economic welfare of the North Kona area through improved hotel facilities and jobs.
5. *The project does not substantially affect public health in any detrimental way.* The project is not of the type or character that would be detrimental to the public health.
6. *The project will not involve substantial secondary impacts, such as population changes or effects on public facilities.* No secondary effects are expected to result from the proposed action, which would simply improve the existing King Kamehameha's Kona Beach Hotel.
7. *The project will not involve a substantial degradation of environmental quality.* The project is environmentally benign, and would improve the quality and condition of a portion of shoreline. The potential for water quality impacts during construction would be mitigated.
8. *The project will not substantially affect any rare, threatened or endangered species of flora or fauna or habitat.* The project site supports overwhelmingly alien vegetation, as it is completely landscaped and maintained. Impacts to rare, threatened or endangered species of flora or fauna would not occur.
9. *The project is not one which is individually limited but cumulatively may have considerable effect upon the environment or involves a commitment for larger actions.* The project is not related to other activities in the region in such a way as to produce adverse cumulative effects or involve a commitment for larger actions.

10. *The project will not detrimentally affect air or water quality or ambient noise levels. No adverse effects on these resources would occur.* Mitigation of construction-phase impacts will preserve water quality. Ambient noise impacts due to construction will be temporary and restricted to daytime hours.

11. *The project does not affect nor would it likely to be damaged as a result of being located in environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal area.* Although the project is located in an area with in and area of volcanic and seismic risk, the entire Island of Hawai'i shares this risk, and the project is not imprudent to construct. The Hotel is also located partially within the coastal flood zone and tsunami inundation zone. No adverse floodplain impact will occur. The Hotel currently maintains, and will maintain continue to maintain, evacuation plans for coastal flooding and potential tsunami inundation, as well as the required flood insurance.

12. *The project will not substantially affect scenic vistas and viewplanes identified in county or state plans or studies.* No scenic vistas and viewplanes will be adversely affected by the project. The proposed action would improve the visual appearance of the surroundings by making the Hotel for reflective of the surroundings.

13. *The project will not require substantial energy consumption.* The construction and maintenance of the Hotel would require no significant net increase in electricity. New, energy efficient lighting systems are part of the renovation, and all new storefront glass and glazing systems will be equipped with dual pane insulated glass. No adverse effects would be expected.

For the reasons above, the proposed action will not have any significant effect in the context of Chapter 343, Hawai'i Revised Statutes and section 11-200-12 of the State Administrative Rules.

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ENVIRONMENTAL ASSESSMENT

**HOTEL RENOVATIONS, KING
KAMEHAMEHA'S KONA BEACH HOTEL**

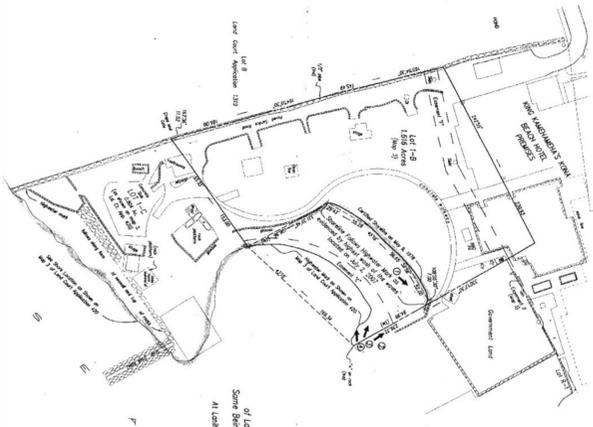
TMKs (3rd): 7-5-006:020, 021, 024 & 032; 7-5-005:062, 066 & 075

Kailua-Kona, North Kona District, County of Hawai'i, State of Hawai'i

APPENDIX 1

Architectural Site Plans

SHORELINE SURVEY



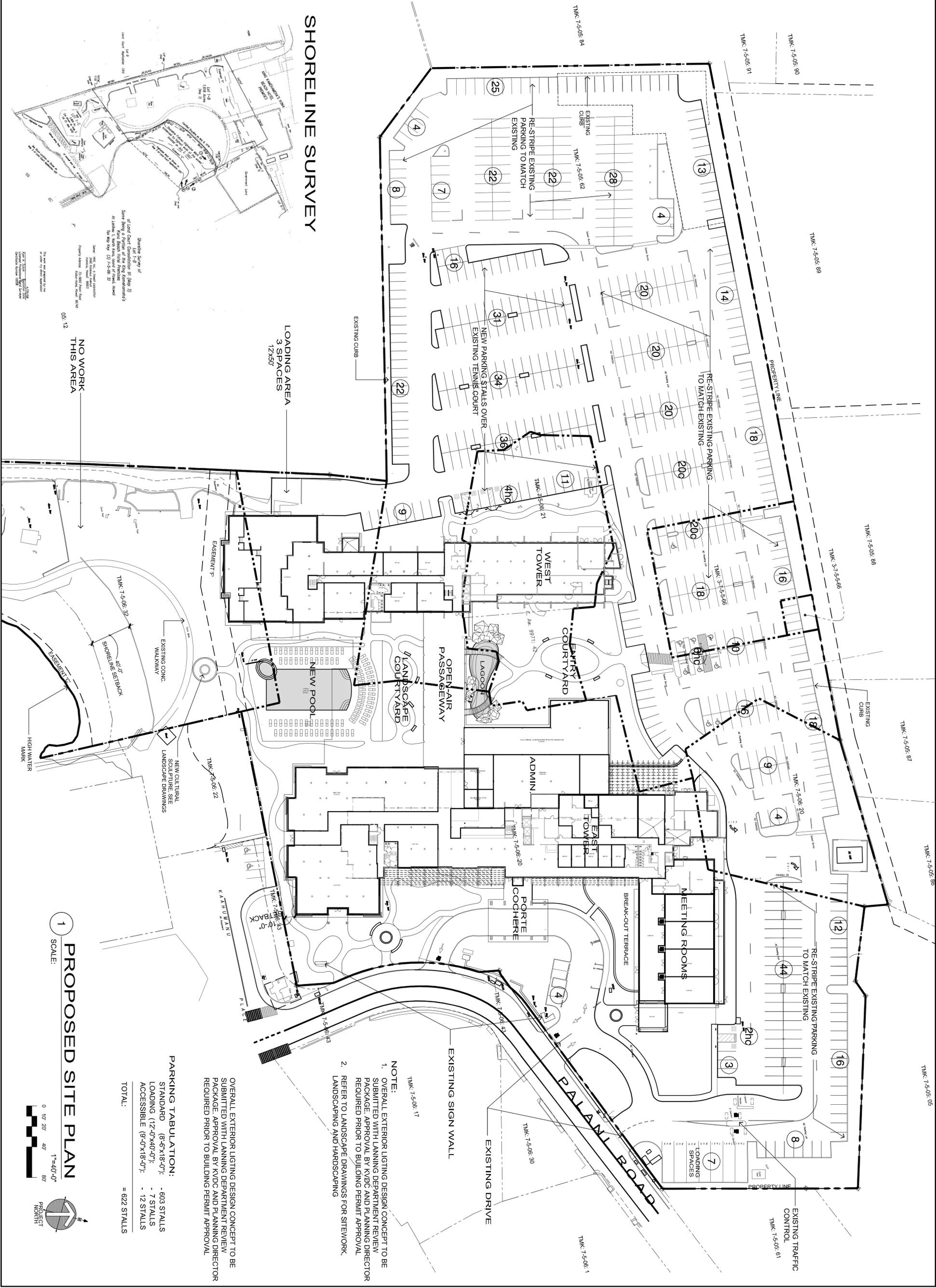
Standard Survey of
 Lot 1-8 of (Map 3)
 Some Being a Portion of the King Kamehameha's
 Kona Beach Hotel Premises, Waikoloa
 Subdivided into Lots 1-8
 For Map Key (7)-2-06-22

Survey: T.M.K. 7-5-06-22
 Project: 75-5660 Kona Beach Hotel
 Address: Waikoloa, Hawaii 96740
 Property Owner: 75-5660 Kona Beach Hotel

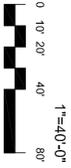
Drawn and prepared by:
 MICHAEL KOLLIN
 LICENSED PROFESSIONAL ARCHITECT
 No. AR-9805
 HAWAII, U.S.A.

NO WORK
 THIS AREA

LOADING AREA
 3 SPACES
 12x80'



1 SCALE: 1"=40'-0"



PARKING TABULATION:

STANDARD (8'-6"X18'-0"):	- 603 STALLS
LOADING (12'-0"X40'-0"):	- 7 STALLS
ACCESSIBLE (9'-0"X18'-0"):	- 12 STALLS
TOTAL:	= 622 STALLS

OVERALL EXTERIOR LIGHTING DESIGN CONCEPT TO BE SUBMITTED WITH LANNING DEPARTMENT REVIEW PACKAGE. APPROVAL BY KADC AND PLANNING DIRECTOR REQUIRED PRIOR TO BUILDING PERMIT APPROVAL.

NOTE:

1. OVERALL EXTERIOR LIGHTING DESIGN CONCEPT TO BE SUBMITTED WITH LANNING DEPARTMENT REVIEW PACKAGE. APPROVAL BY KADC AND PLANNING DIRECTOR REQUIRED PRIOR TO BUILDING PERMIT APPROVAL.
2. REFER TO LANDSCAPE DRAWINGS FOR SITEWORK, LANDSCAPING AND HARDSCAPING

PROJECT: HOTEL RENOVATIONS FOR
KING KAMEHAMEHA'S KONA BEACH HOTEL
 75-5660 PALANI ROAD, KAILUA-KONA, HAWAII 96740
 TMK # 7-5-006-020

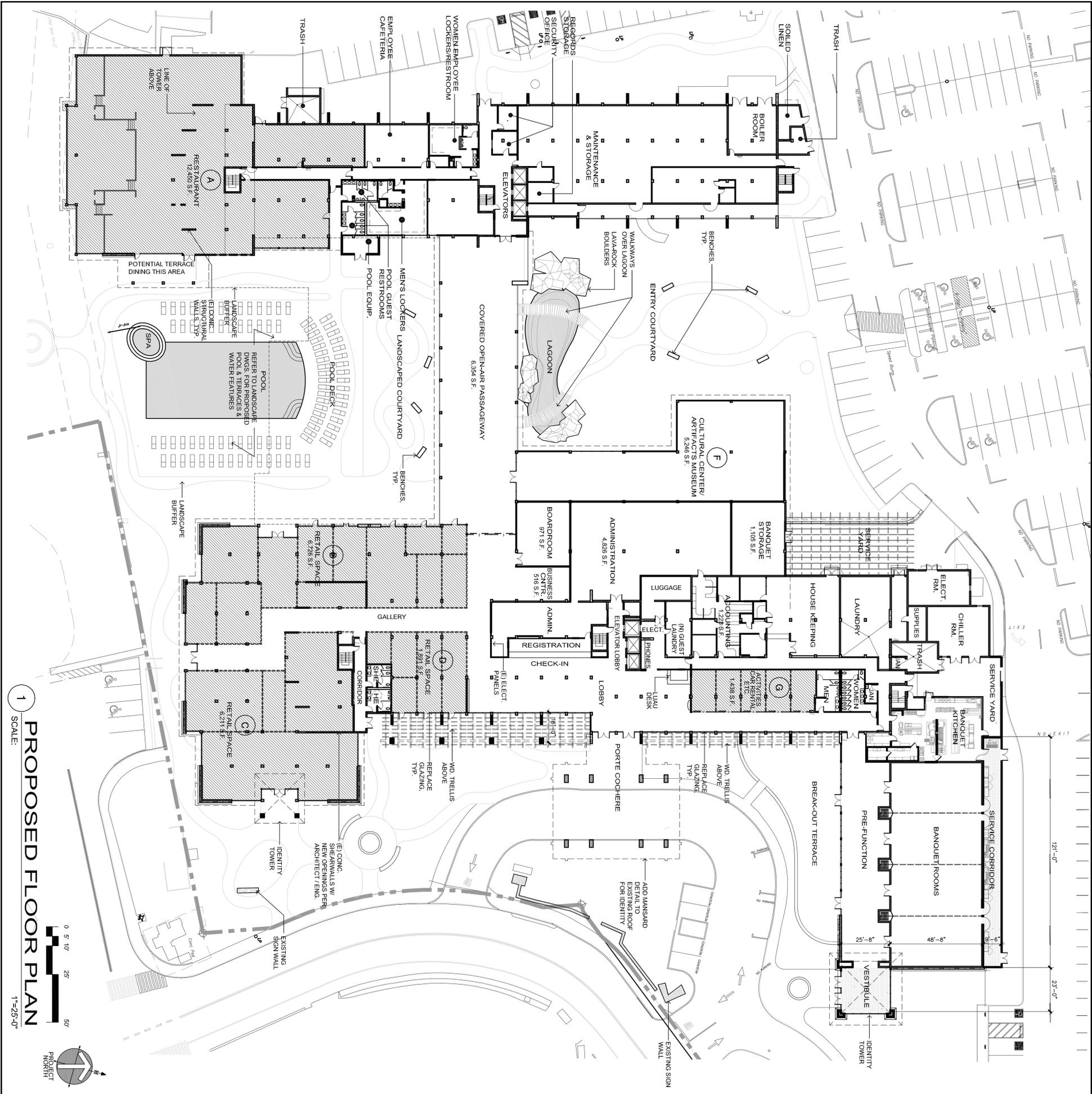
BID DATE:
 JOB NUMBER:
 PLOT DATE:
 DRAWN BY:
 CHECKED BY:
 SHEET TITLE: SITE PLAN
 SHEET NO: A-4

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 www.kollinaltomare.com

THIS WORK WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

signature _____ date _____

NO.	REVISIONS



1 PROPOSED FLOOR PLAN
 SCALE: 1"=25'-0"



BUILDING DATA

	EXISTING	PROPOSED	TOTAL PROPOSED ENCLOSED FLOOR AREA
1st (GROUND) FLOOR	98,297 ± S.F.	7,434 ± S.F.	91,683 S.F.
2nd THRU 6th FLOORS	193,376 S.F. PER FLOOR / PER WING GROSS FLOOR AREA = 193,780 S.F. BALCONIES = 25,880 S.F.	193,780 S.F.	193,780 S.F.
TOTAL AREAS	293,097 S.F. EXIST. GROSS	7,434 S.F. EXIST. DEMOED	285,623 S.F. EXIST. GROSS (LESS DEMOED)
			1,784 S.F. PROPOSED ADDITIONS (ENCLOSED)
			287,277 S.F. PROPOSED FLOOR AREA

PARKING DATA

	EXISTING	PROPOSED
GUESTROOMS	(460 ROOMS EXISTING)	(460 ROOMS PROPOSED)
RETAIL	34,307 S.F.	16,266 S.F.
RESTAURANT W/ KITCHEN	7,586 S.F.	12,450 S.F.
BAR & GRILLE	1,408 S.F. (COFFEE SHOP)	—
BANQUET KITCHEN	1,281 S.F.	2,850 S.F.
MEETING RMS. / PRE-FUNCTION	8,750 S.F.	8,774 S.F.
ADMINISTRATION OFFICE	1,880 S.F.	6,049 S.F.
REQUIRED	443	438
PROVIDED	448 EXISTING	622 PROPOSED

STANDARD SPACES TO BE 8'-6" X 18'-0"
 COMPACT SPACES ARE ALLOWED @ 7'-6" X 18'-0" WITH A MAXIMUM OF 33% COMPACT TO STANDARD STALLS
 PROVIDE 51 LOADING SPACES (36 @ 12'-0" X 30'-0" WITH 45° BACK-UP) 2 @ 10'-0" X 22'-0" WITH 45° BACK-UP)

RETAIL/LEASE SPACES AVAILABLE

NO.	ROOM NAME	FLOOR AREA
A	RESTAURANT EXISTING FACILITY 9,734 S.F. +/- (PUBLIC SPACE) 2,716 S.F. +/- (KITCHEN/BACK-OF-HOUSE)	12,450 S.F.
B	RETAIL SPACE	6,726 S.F.
C	RETAIL SPACE	6,211 S.F.
D	RETAIL SPACE	1,891 S.F.
E	CULTURAL CENTER / ARTIFACTS MUSEUM	5,246 S.F.
F	ACTIVITIES, CAR RENTAL, ETC.	1,438 S.F.
G		
I		

LEGEND:



REVISIONS

NO.	DESCRIPTION	DATE

THIS WORK WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

signature _____ date _____



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HOTEL RENOVATIONS FOR
KING KAMEHAMEHA'S KONA BEACH HOTEL
 75-5660 PALANI ROAD, KAILUA-KONA, HAWAII 96740
 TMK # 7-5-006:020

PROJECT: **KONA BEACH HOTEL**
 BID DATE: 08-26-08
 JOB NUMBER: 705-07
 PLOT DATE: 08-26-08
 DRAWN BY: BV
 SHEET TITLE: FLOOR PLAN
 SHEET NO: **A-7**

ENVIRONMENTAL ASSESSMENT

HOTEL RENOVATIONS, KING KAMEHAMEHA'S KONA BEACH HOTEL

TMKs (3rd): 7-5-006:020, 021, 024 & 032; 7-5-005:062, 066 & 075

Kailua-Kona, North Kona District, County of Hawai'i, State of Hawai'i

APPENDIX 2

Cultural Impact Assessment

Cultural Impact Assessment for Renovations to the King Kamehameha Kona Beach Hotel

(TMKs: 3-7-5-06:020, 021, 024, 032;
and 3-7-5-05:062, 066, 075)

Lanihau 2nd Ahupua‘a
North Kona District
Island of Hawai‘i



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PREPARED FOR:

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ARCHAEOLOGICAL, CULTURAL, AND HISTORICAL STUDIES

Cultural Impact Assessment for Renovations to the King Kamehameha Kona Beach Hotel

(TMKs: 3-7-5-06:020, 021, 024, 032; and 3-7-5-05:062, 066, 075)

Lanikai 2nd Ahupua‘a
North Kona District
Island of Hawai‘i



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INTRODUCTION

At the request of Greg Mooers, on behalf of IWF KKH, LLC (the current owners of the King Kamehameha Kona Beach Hotel) Rechtman Consulting, LLC has prepared this Cultural Impact Assessment associated with the proposed renovation of the hotel, which is located in Lanihau 2nd Ahupua‘a, North Kona District, Island of Hawai‘i (Figure 1). The current hotel was completed in 1975 and replaced an earlier hotel that was originally opened for business in 1960. A portion of the King Kamehameha Kona Beach Hotel and surrounding grounds occupy what is historically known as Kamakahonu (SIHP Site 10-27-7002), an extremely important cultural site best known as the last residence of Kamehameha I and the place where he died in 1819. Kamakahonu was also the backdrop for some of the most significant events in the early nineteenth-century history of the Hawaiian Kingdom. It is where in 1819 (just six months after Kamehameha’s death) Liholiho (the heir to Kamehameha I) chose to ignore certain *kapu* associated with male/female and chief/commoner interaction, particularly with respect to dietary restrictions, and indefinitely extended the period of *‘ai noa* (free eating) that follows the death of a chief. In dining with women, Liholiho’s actions symbolically and officially marked the end of the native belief system. It is where Protestant missionaries came ashore in 1820 and by 1825 set up a church and parsonage in an area not too distant from Kamakahonu. It is where Hawaiian royalty maintained a presence until the passing of Queen Kapi‘olani in 1899. It is the location of multiple *heiau* known collectively as Ahu‘ena, originally said to have been built by either Līloa or his son ‘Umi-a-Līloa during the sixteenth century, reconstructed and rededicated by Kamehameha I in the early nineteenth century, and archaeologically investigated and rebuilt by the Bernice P. Bishop Museum in the middle 1970s. Kamakahonu was listed on the National Register of Historic Places as a National Historic Landmark in 1962. Possessing National Historic Landmark status does not automatically compel compliance with Federal regulations (e.g., Section 106) when assessing potential impacts to a listed resource (only if Federal funds, lands, or permits are involved); however, use of a historic site does necessitate compliance with Hawai‘i state law (HRS Chapter 343).

The Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) in their response (DOC NO: 0804TD10) to a request for concurrence with a determination of “no effect” on historic properties, requested “that the EA include information on previous archaeological studies . . . historic cartographic data . . . geological and soil characteristics . . . and a consideration of the likelihood that significant subsurface deposits could be present beneath the existing hotel structures, infrastructure and/or landscaped lawn areas.” The current study addresses these issues, and is intended to accompany an Environmental Assessment (EA) compliant with Chapter 343 HRS, as well as fulfilling the requirements of the County of Hawai‘i Planning Department and the Department of Land and Natural Resources with respect to permit approvals for land-altering and development activities. This study has been prepared pursuant to Act 50, approved by the Governor on April 26, 2000; and in accordance with the Office of Environmental Quality Control (OEQC) *Guidelines for Assessing Cultural Impact*, adopted by the Environmental Council, State of Hawai‘i, on November 19, 1997.

This study was performed in a manner consistent with Federal and state guidelines, among which are the Advisory Council on Historic Preservation’s “Guidelines for Consideration of Traditional Cultural Values in Historic Preservation Review” (ACHP 1985); National Register Bulletin 38, “Guidelines for Evaluating and Documenting Traditional Cultural Properties” (Parker and King 1990); the Hawai‘i State Historic Preservation Statute (Chapter 6E), which affords protection to historic sites, including traditional cultural properties of on-going cultural significance; the criteria, standards, and guidelines currently utilized by the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) for the evaluation and documentation of cultural sites (cf. 13§13-275-8; 276-5); and the November 1997 guidelines for cultural impact assessment studies, adopted by the Office of Environmental Quality Control (OEQC). The archival-historical sources investigated were located in the collections of the Hawai‘i State Archives, State Historic Preservation Division, the Bishop Museum Archives; the University of Hawai‘i-Hilo Mo‘okini Library, and in the collections held by Ahu‘ena Inc. Historical information was also derived from the following sources: Kamakau (1992); ‘I‘i (1963); Malo (1951); Kekahuna (1955); Ellis (1827, 1963, 1969); Fornander (1996); Kelly (1983); Barrère (1975), Kelly and Barrère (1980); Bingham (1969); and Reineke (n.d.).

Below is a description of the project area and the proposed development activities, a detailed cultural and historical background, and a presentation of prior studies, which combined provide the setting and context to facilitate an understanding of the potential significance of Kamakahonu and its component historic and cultural features. The consultation process is described and summarized, followed by a discussion of potential cultural impacts and suggested appropriate actions and strategies to mitigate any potential impacts.



Figure 1. Project area location.

PROJECT AREA DESCRIPTION AND PROPOSED DEVELOPMENT ACTIVITIES

The King Kamehameha Kona Beach Hotel sits on approximately 13.2 acres in Lanihau 2nd Ahupua‘a (Figure 2). IWF KKH, LLC leases the hotel grounds from the owners, who are HKK Management, Inc., for TMKs 7-5-006:020, 021, 024 and 032, and Lanihau Properties, LLC, for TMKs 7-5-005:062, 066 and 075. As listed in the National Register of Historic Places, the historic site of Kamakahonu occupies what are today Parcels 24 and 32, accounting for 2.42 acres of the overall hotel property. As will be discussed below, Kamakahonu at the time of Kamehameha occupied an area nearly twice that size. Presently, Parcel 24 contains the 1970s Ahu‘ena reconstruction area and the hotel *lū‘au* stage; while the primary beach area, *imu* pit, and a portion of the existing restaurant and pool area lie within Parcel 32. Beyond this is the built environment of the hotel and parking lot. Figure 3 is an aerial view of the hotel and surrounding environment taken November 2000.

The proposed renovations (Figure 4) would increase the open space area between the reconstructed features of Ahu‘ena and the hotel buildings, and include demolition of retail portion of the central arcade structure located between the two hotel towers. This open area would be the location for a new pool area and a partial open air gallery. The location of the former Liberty House Store will become a museum, gallery, and lecture hall exhibiting the cultural artifacts currently displayed throughout the hotel. The existing pool and bar area, which is now *makai* of the hotel, would be removed and replaced by a pool deck pulled closer to the hotel central core, walkways, and enhanced landscaping, resulting in more open area near the shoreline and the removal of the pool and bar area from within Kamakahonu proper. The existing conference and banquet facilities will be completely refurbished and a small pre-function vestibule area will be added. Additional parking will be made available through more efficient site planning. The interior and exterior renovation would slightly modify the overall appearance of the hotel to be more reflective of the surroundings. The proposed renovations would reduce the overall ground floor area from 99,297 to 93,617 square feet, a figure which accounts for 7,434 square feet of demolition, and 1,754 square feet of additions. The number of guest rooms will remain the same at 460. The restaurant would be completely refurbished and upgraded as would all the ground floor public spaces. The overall project reduces the current retail use by 18,041 square feet. It converts over 11,000 square feet into a cultural center/artifacts museum; administrative offices; and an open air gallery. County Code requires 443 parking spaces for the areas discussed above; by removing the existing tennis courts and green house along with more efficient parking layout, a total of 622 stalls will be made available, bringing a surplus of 179 parking spaces to the hotel.

CULTURE-HISTORICAL BACKGROUND

Origins and Dispersal

In Hawaiian society, natural and cultural resources are one and the same. Native traditions describe the formation (the literal birth) of the Hawaiian Islands and the presence of life on and around them in the context of genealogical accounts. All forms in the natural environment, from the skies and mountain peaks, to the watered valleys and lava plains, and to the shoreline and ocean depths were believed to be embodiments of Hawaiian deities. One Hawaiian genealogical account, records that Wākea (the expanse of the sky—father) and Papa-hānau-moku (Papa—Earth-mother who gave birth to the islands)—also called Haumea-nui-hānau-wā-wā (Great Haumea—Woman-earth born time and time again)—and various gods and creative forces of nature, gave birth to the islands. Hawai‘i, the largest of the islands, was the first-born of these island children. As the Hawaiian genealogical account continues, we find that these same god-beings, or creative forces of nature who gave birth to the islands, were also the parents of the first man (Hāloa), and from this ancestor, all Hawaiian people are descended (cf. Beckwith 1970; Malo 1951:3; Pukui and Korn 1973). It was in this context of kinship, that the ancient Hawaiians addressed their environment and it is the basis of the Hawaiian system of land use.

Archaeologists and historians describe the inhabiting of these islands in the context of settlement that resulted from voyages taken across the open ocean. For many years, researchers have proposed that early Polynesian settlement voyages between Kahiki (the ancestral homelands of the Hawaiian gods and people) and Hawai‘i were underway by A.D. 300, with long distance voyages occurring fairly regularly through at least the thirteenth century. It has been generally reported that the sources of the early Hawaiian population—the Hawaiian Kahiki—were the Marquesas and Society Islands (Cordy 2000; Emory in Tatar 1982:16-18).

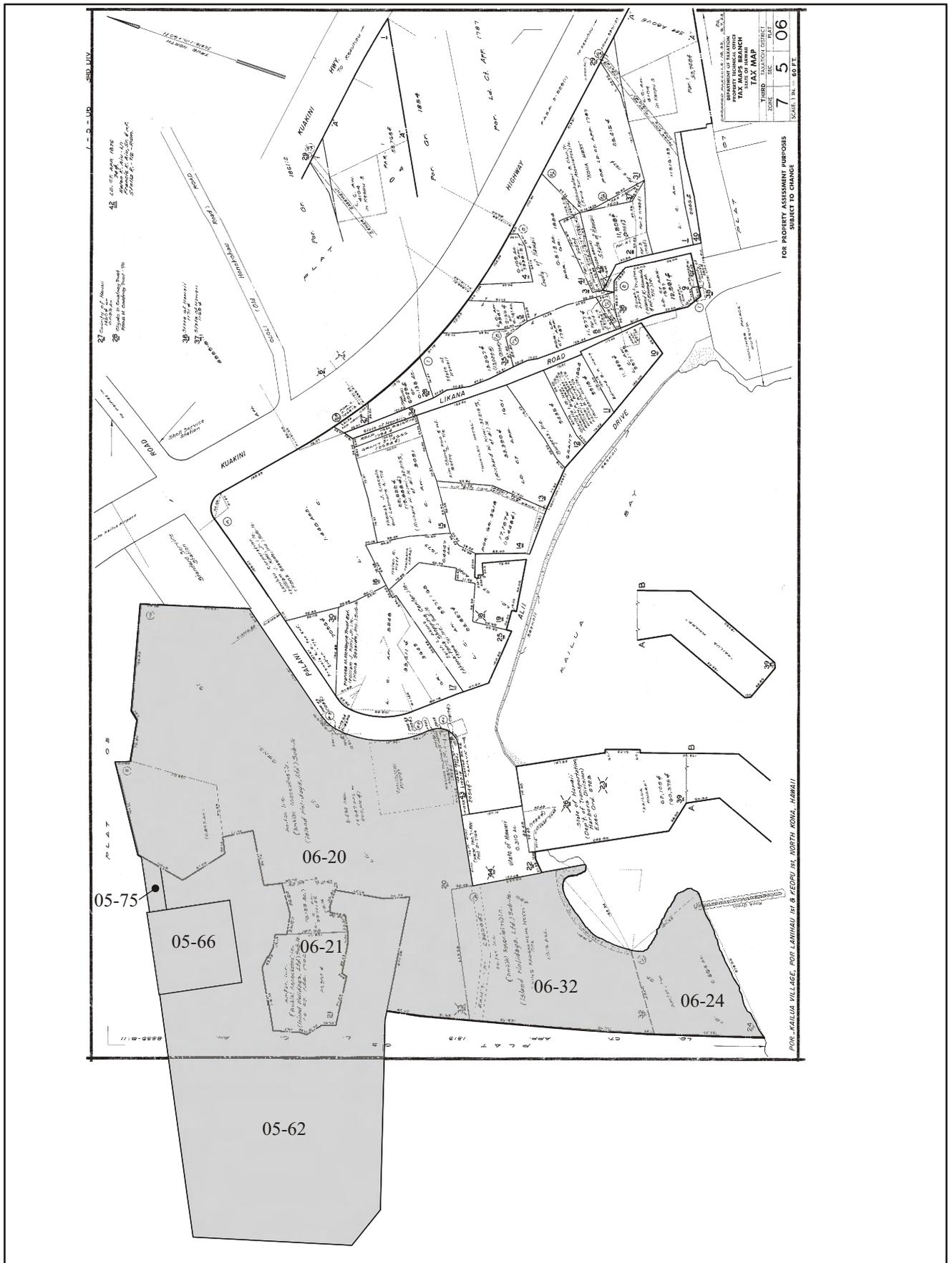


Figure 2. Tax Map Key showing study parcels (3-7-5-05 parcels: 062, 066 and 075; 3-7-5-06 parcels: 020, 021, 024, and 032).



Figure 3. 2000 aerial photograph of the project area.

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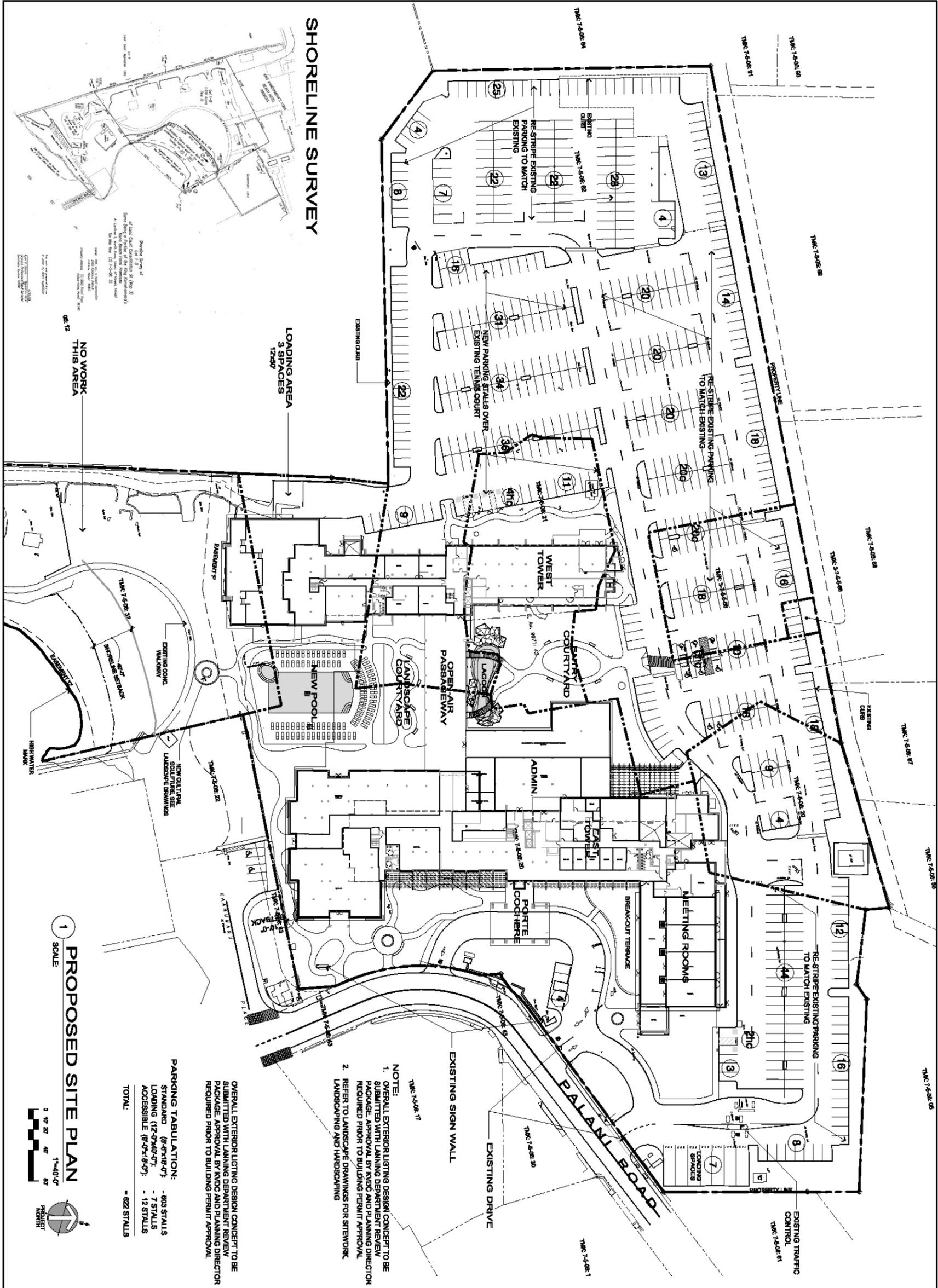


Figure 4. Proposed King Kamehameha Kona Beach Hotel renovation plan.

For generations following initial settlement, communities were clustered along the watered, windward (*ko'olau*) shores of the Hawaiian Islands. Along the *ko'olau* shores, streams flowed and rainfall was abundant, and agricultural production became established. The *ko'olau* region also offered sheltered bays from which deep sea fisheries could be easily accessed, and near shore fisheries, enriched by nutrients carried in the fresh water, could be maintained in fishponds and coastal waters. It was around these bays that clusters of houses where families lived could be found (McEldowney 1979:15). In these early times, Hawai'i's inhabitants were primarily engaged in subsistence level agriculture and fishing (Handy et al. 1972:287).

Over a period of several centuries, areas with the richest natural resources became populated and perhaps crowded, and by about A.D. 900 to 1100, the population began expanding to the *kona* (leeward side) and more remote regions of the island (Cordy 2000:130). In Kona, communities were initially established along sheltered bays with access to fresh water and rich marine resources. The primary “chiefly” centers were established at several locations—the Kailua (Kai-a-ke-akua) vicinity, Kahalu'u-Keauhou, Ka'awaloa-Kealakekua, and Hōnaunau. The communities shared extended familial relations, and there was an occupational focus on the collection of marine resources. By the fourteenth century, inland elevations to around the 3,000-foot level were being turned into a complex and rich system of dryland agricultural fields (today referred to as the Kona Field System). By the fifteenth century, residency in the uplands was becoming permanent, and there was an increasing separation of the chiefly class from the common people. In the sixteenth century the population stabilized and the *ahupua'a* land management system was established as a socioeconomic unit (see Ellis 1963; Handy et al. 1972; Kamakau 1961; Kelly 1983; and Tomonari-Tuggle 1985).

In Kona, where there were no regularly flowing streams to the coast, access to potable water (*wai*), was of great importance and played a role in determining the areas of settlement. The waters of Kona were found in springs and caves (found from shore to the mountain lands), or procured from rain catchments and dewfall. Traditional and historic narratives abound with descriptions and names of water sources, and also record that the forests were more extensive and extended much further seaward than they do today. These forests not only attracted rains from the clouds and provided shelter for cultivated crops, but also in dry times drew the *kēhau* and *kēwai* (mists and dew) from the upper mountain slopes to the low lands (Rechtman et al. 2001).

In the 1920s-1930s, Handy et al. (1972) conducted extensive research and field interviews with elder native Hawaiians. In lands of North and South Kona, they recorded native traditions describing agricultural practices and rituals associated with rain and water collection. Primary in these rituals and practices was the lore of Lono—a god of agriculture, fertility, and the rituals for inducing rainfall. Handy et al., observed:

The sweet potato and gourd were suitable for cultivation in the drier areas of the islands. The cult of Lono was important in those areas, particularly in Kona on Hawai'i . . . there were temples dedicated to Lono. The sweet potato was particularly the food of the common people. The festival in honor of Lono, preceding and during the rainy season, was essentially a festival for the whole people, in contrast to the war rite in honor of Ku which was a ritual identified with Ku as god of battle. (Handy et al. 1972:14)

Handy et al. (1972) noted that the worship of Lono was centered in Kona. Indeed, it was while Lono was dwelling at Keauhou, that he is said to have introduced taro, sweet potatoes, yams, sugarcane, bananas, and 'awa to Hawaiian farmers (Handy et al. 1972:523). The rituals of Lono—“The father of waters”—and the annual *Makahiki* festival (honoring Lono) preceding and during the rainy season, were of great importance to the native residents of this region (Handy et al. 1972:14). The significance of rituals and ceremonial observances in cultivation and indeed in all aspects of life was of great importance to the well being of the ancient Hawaiians, and cannot be overemphasized, or overlooked when viewing traditional sites of the cultural landscape.

Over the generations, the ancient Hawaiians developed a sophisticated system of land and resources management. By the time 'Umi-a-Līloa rose to rule the island of Hawai'i in ca. 1525, the island (*moku-puni*) was divided into six districts or *moku-o-loko* (Fornander 1996–Vol. II:100-102). On Hawai'i, the district of

Kona is one of six major *moku-o-loko* within the island. The district of Kona itself, extends from the shore across the entire volcanic mountain of Hualālai, and continues to the summit of Mauna Loa, where Kona is joined by the districts of Ka‘ū, Hilo, and Hāmākua. One traditional reference to the northern and southern-most coastal boundaries of Kona tells us of the district’s extent:

Mai Ke-ahu-a-Lono i ke ‘ā o Kani-kū, a hō‘ea i ka ‘ūlei kolo o Manukā i Kaulanamauna e pili aku i Ka‘ū!—From Keahualono [the Kona-Kohala boundary] on the rocky flats of Kanikū, to Kaulanamauna next to the crawling (tangled growth of) ‘ūlei bushes at Manukā, where Kona clings to Ka‘ū! (*Ka‘ao Ho‘oniua Pu‘uwai no Ka-Miki in Ka Hōkū o Hawai‘i*, September 13, 1917; Translated by K. Maly)

The traditional district of Kona is divided today into two districts, North Kona and South Kona. And like other large districts on Hawai‘i, was further subdivided into *‘okana* or *kalana* (regions of land smaller than the *moku-o-loko*, yet comprising a number of smaller units of land). In the region now known as Kona *‘akau* (North Kona), there are several ancient regions (*kalana*) as well. The southern portion of North Kona was known as “Kona *kai ‘ōpua*” (interpretively translated as: Kona of the distant horizon clouds above the ocean), and included the area extending from Lanihau (the present-day vicinity of Kailua Town) to Pu‘uohau (now known as Red Hill). The northern-most portion of North Kona was called “Kekaha” (descriptive of an arid coastal place). Native residents of the region affectionately referred to their home as *Kekaha-wai-‘ole o nā Kona* (Waterless Kekaha of the Kona District), or simply as the *‘āina kaha*. Of all the land divisions, perhaps the most significant management unit was the *ahupua‘a*. *Ahupua‘a* are subdivisions of land that were usually marked by an altar with an image or representation of a pig placed upon it (thus the name *ahu-pua‘a* or pig altar). In their configuration, the *ahupua‘a* may be compared to wedge-shaped pieces of land that radiate out from the center of the island, extending to the ocean fisheries fronting the land unit. Their boundaries are generally defined by topography and geological features such as *pu‘u* (hills), ridges, gullies, valleys, craters, or areas of a particular vegetation growth (Lyons 1875).

The *ahupua‘a* were also divided into smaller individual parcels of land (such as the *‘ili*, *kō‘ele*, *māla*, and *kīhāpai*, etc.), generally oriented in a *mauka-makai* direction, and often marked by stone alignments (*kuaiwi*). In these smaller land parcels the native tenants tended fields and cultivated crops necessary to sustain their families, and the chiefly communities with which they were associated. As long as sufficient tribute was offered and *kapu* (restrictions) were observed, the common people, who lived in a given *ahupua‘a* had access to most of the resources from mountain slopes to the ocean. These access rights were almost uniformly tied to residency on a particular land, and earned as a result of taking responsibility for stewardship of the natural environment, and supplying the needs of the *ali‘i* (see Kamakau 1992:372-377 and Malo 1951:63-67).

Entire *ahupua‘a*, or portions of the land were generally under the jurisdiction of appointed *konohiki* or lesser chief-landlords, who answered to an *ali‘i-‘ai-ahupua‘a* (chief who controlled the *ahupua‘a* resources). The *ali‘i-‘ai-ahupua‘a* in turn answered to an *ali‘i ‘ai moku* (chief who claimed the abundance of the entire district). Thus, *ahupua‘a* resources supported had not only the *maka‘āinana* and *‘ohana* who lived on the land, but also contributed to the support of the royal community of regional and/or island kingdoms. This form of district subdividing was integral to Hawaiian life and was the product of strictly adhered to resources management planning. In this system, the land provided fruits and vegetables and some meat in the diet, and the ocean provided a wealth of protein resources. Also, in communities with long-term royal residents (like Kamakahonu), divisions of labor (with specialists in various occupations on land and in procurement of marine resources) came to be strictly adhered to. It is in the general cultural setting outlined above, that we find the *ahupua‘a* of Lanihau, a native land division among some seventy *ahupua‘a* that make up the traditional district of Kona. Lanihau is divided into two *ahupua‘a*, Lanihau 1 and Lanihau 2 and bordered by the *ahupua‘a* of Moeauoa on the south and Keahuolū to the north. Extending from the shore at Kailua (Kai-a-ke-akua) Bay, Lanihau is cut off by Honua‘ula *Ahupua‘a* at about 2,400 feet elevation. Lanihau literally translates as “cool heaven” (Pukui et al. 1976:128).

Kamakahonu

As previously mentioned, several large and densely populated royal and high chiefly centers were located along the shoreline between Kailua and Hōnaunau (Cordy 1995, Tomonari-Tuggle 1993). One such center was located along the north end of Kailua Bay at Kamakahonu. According to Pukui et al. (1976), Kamakahonu literally means the turtle eye. Chiefly residence at Kamakahonu was possibly established as early as the sixteenth century by ‘Umi-a-Līloa. It was during the early nineteenth century that Keawe a Mahi, a *kahu* of Keawe a Heulu presided over Kamakahonu, and upon the death of Keawe a Mahi, Kamakahonu became the residence of Kamehameha I and his royal entourage (‘I‘i 1963).

In “*Na Hunahuna no ka Moolelo Hawaii*” (Fragments of Hawaiian History), native historian and member of the Kamehameha household, John Papa ‘I‘i wrote about Kamehameha’s move from Kalake‘e to Kamakahonu upon the death of Keawe a Mahi. Kamehameha first moved into the former residence of Keawe a Mahi. He then built another house on the seaward side of that residence, which ‘I‘i calls a *hale nana mahina ‘ai*. This house was built high on stones and faced directly upland toward the planting fields of Kuahewa. Like an observation post this house afforded a view of the farm lands and was also a good vantage point to see canoes coming from South Kona and from the Kailua vicinity. Based on ‘I‘i’s descriptions, Paul Rockwood prepared a sketch (Figure 5) showing a possible spatial distribution of the features within Kamakahonu.

During Kamehameha’s tenure at Kamakahonu several structures were erected using both traditional materials and techniques and more “modern” materials and techniques. ‘I‘i (1963:119) describes that the “King erected three houses thatched with dried ti leaves,” a sleeping house (*hale moe*) and separate men’s (*hale mua*) and women’s (*hale ‘āina*) eating houses. The *hale ‘āina* belonged to Ka‘ahumanu, and as ‘I‘i described:

This house had two openings in the gable end toward the west, and close to the second opening was the door of the sleeping house. A third opening was in the end toward the upland.

There were three openings in the sleeping house. The one in the middle of the west end, one which served as a window on the upland side of the southwest corner, and one mauka of the window. This window lay beyond the men’s house (*mua*) on the south. The door mauka of the window was the one entered when coming from the men’s house.

The door of the men’s house closest to the sleeping house was the one used to go back and forth between these two houses. There was also a door in the end wall on the west side of this house, and two small openings in the south seaward corner, one in the upper side and one on the lower side of the corner. These faced the many capes of Kona and took in the two extremities of this tranquil land and the ships at anchor. However, should the ships be more to the ocean side, only the masts were visible. A fifth opening was a little on the seaward side of the northeast corner, where the upland side of the men’s house extended a little beyond the sleeping house, and it was only through this entrance that the men went in and out. It was near the door that was used to enter from the sleeping house. Near the door facing westward in the *mua*, was the king’s eating place. On the upper side were large and small wooden containers that served as bowls and platters, together with a large poi container always filled with poi from the king’s lands.

. . . The men’s eating house, the sleeping house, and the women’s eating house were at the end of a 7- to 8-foot stone wall that ran irregularly from there to the shore at the back of the *hale nana mahina ‘ai*. Outside of the wall was the trail for those who lived oceanward of Kamakahonu. Immediately back of the wall was the pond of Alanaio, where stood some houses. (‘I‘i 1963:119)

Describing further construction ‘I‘i notes that:

Two eating houses were built for Kaheiheimalie and her daughter, Kekauluohi, opposite the three houses thatched with ti leaves. They stood back of the *kou* trees growing there at Kamakahonu, both facing northwest. Kaheiheimalie’s eating house had two doors, but Kekauluohi’s had but one door. In front of her house was a bathing pool, at the upper bank of which were some small houses and that of the king. (ibid.:120)

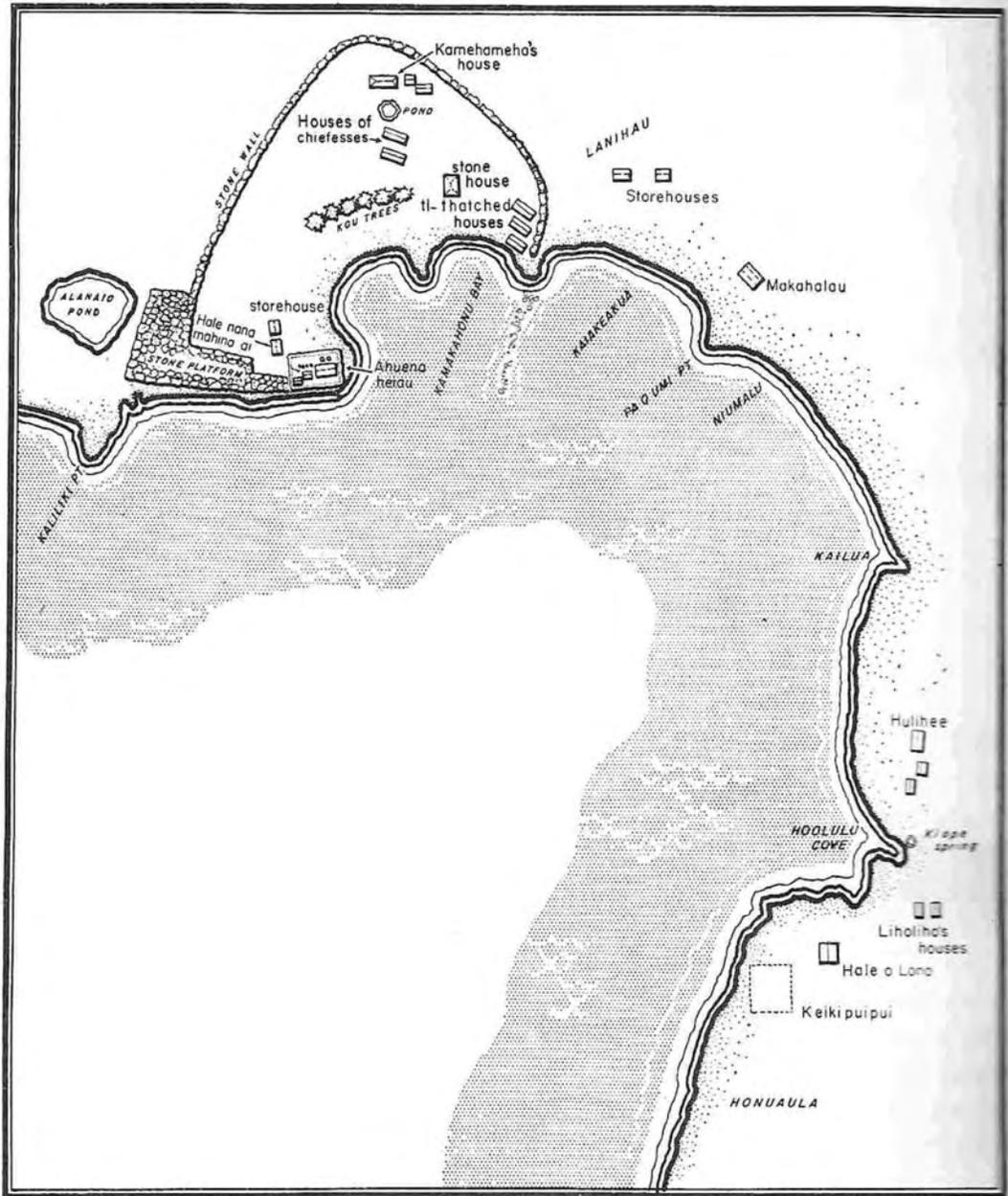


Figure 5. Map prepared by Paul Rockwood based on 'I'i's (1959) description of Kamakahonu.

‘Ii continues his description:

A stone house was built between the three houses thatched with ti and those of these chiefesses. Its builder was either a Frenchman or a Portuguese named Aikona. He was skilled in such work, . . . (ibid.:120)

When Aikona began building the end and side walls of the house at Kamakahonu he built a third wall between them and arranged stones in the center of this middle wall to form a door. The walls rose together until the house, from one end to the other, was finished. When Aikona later removed the stones set up in the doorway of the center wall, the doorway looked like the fine arched bridge of Pualoalo at Peleula in Honolulu. As he removed the stones, Aikona explained that had they been piled inexpertly, the whole house might have collapsed. This house was well completed. In the stone house were stored the king’s valuables and those of Aikona’s. These valuables were kegs of rum and gunpowder and guns, of which the guns and powder were placed on the inside near the inner wall. . . . (ibid.:120)

Later, another storehouse was built in Kamakahonu, on the north side of the *hale nana mahina ‘ai*. It had stone walls and was constructed like a *maka halau*. The upper of its two stories was for storing tapa, *pa‘u*, malos, fish nets, lines, and *olona* fiber; and all other goods went into the lower story. The thatching was of sugar-cane leaves, the customary thatching on the house along that shore. Dried banana trunk sheaths were used for the inside walls and were cleverly joined from top to bottom. Banana trunk sheaths were also used in the *hale nana mahina ‘ai*. (ibid.:121)

‘Ii ends his description with what was perhaps the last building that was constructed during Kamehameha’s tenure at Kamakahonu:

After these houses were built, another heiau house, called Ahuena, was restored (*ho‘ala hou*). This house stood on the east side of the *hale nana mahina ‘ai*, separated from it by about a chain’s distance. The foundation of Ahuena was a little more than a chain from the sand beach to the westward and from the rocky shore to the eastward. Right in front of it was a well-made pavement of stone which extended its entire length and as far out as the place where the waves broke. . . . (ibid.:123)

A series of early written Western accounts spanning a time frame from about 1815 to 1823 (see also Barrère 1975) describe the social and economic milieu of Kamakahonu. While these accounts contain descriptions of some of the interiors of the residential structures within the royal compound, the most detailed descriptions were focused on Ahu‘ena House and document the transition of Kamakahonu from royal compound to fort (Arago 1823, 1840; Choris 1822; Corney 1896; Ellis 1827; Freycinet 1826, 1839; Holman 1931; Kotzebue 1821; Wiswell and Kelly 1978). Figure 6 is lithograph of a drawing prepared by Choris, a member of the Kotzebue expedition that anchored in Kailua Bay in 1816 and 1817. Ahu‘ena House had only been standing a few of years at that point and as ‘Ii (1963) described was actively used by Kamehameha. Kotzebue describes the “king’s camp” at Kamakahonu as he saw it in 1816:

. . . the view of the king’s camp was concealed only by a narrow tongue of land, consisting of naked rocks, but when we had sailed round we were surprised at the sight of the most beautiful landscape. We found ourselves in a small sandy bay of the smoothest water, protected against the waves of the sea; on the bank was a pleasant wood of palm-trees, under whose shade were built several straw houses; to the right, between the green leaves of the banana-trees, peeped two snow-white houses, built of stone after the European fashion . . . to the left, close to the water, on an artificial elevation, stood the morai of the king, surrounded by large wooden statues of his gods, representing caricatures of the human figure. (Kotzebue 1821:299-300)

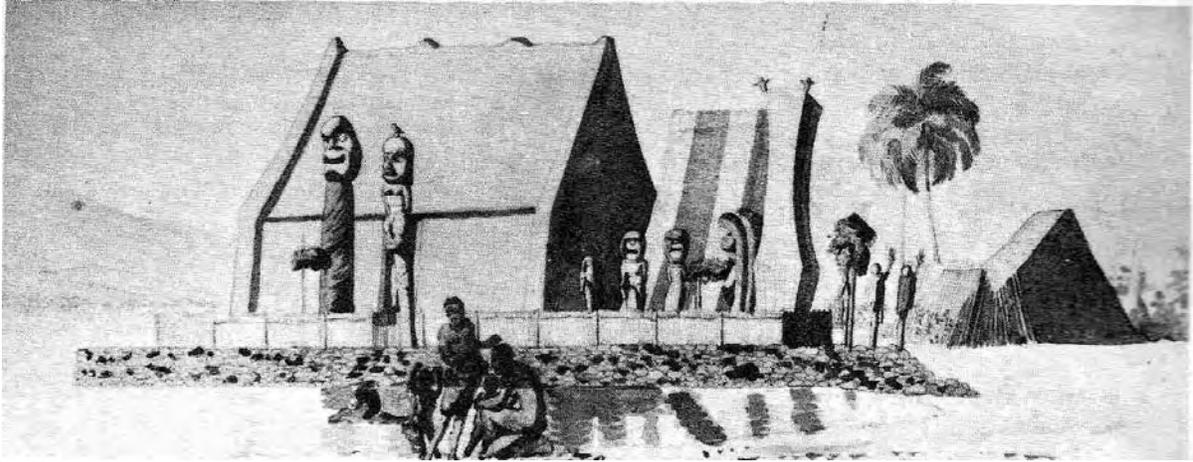


Figure 6. Lithograph of drawing of Ahu'ena sketched by Choris in 1816.

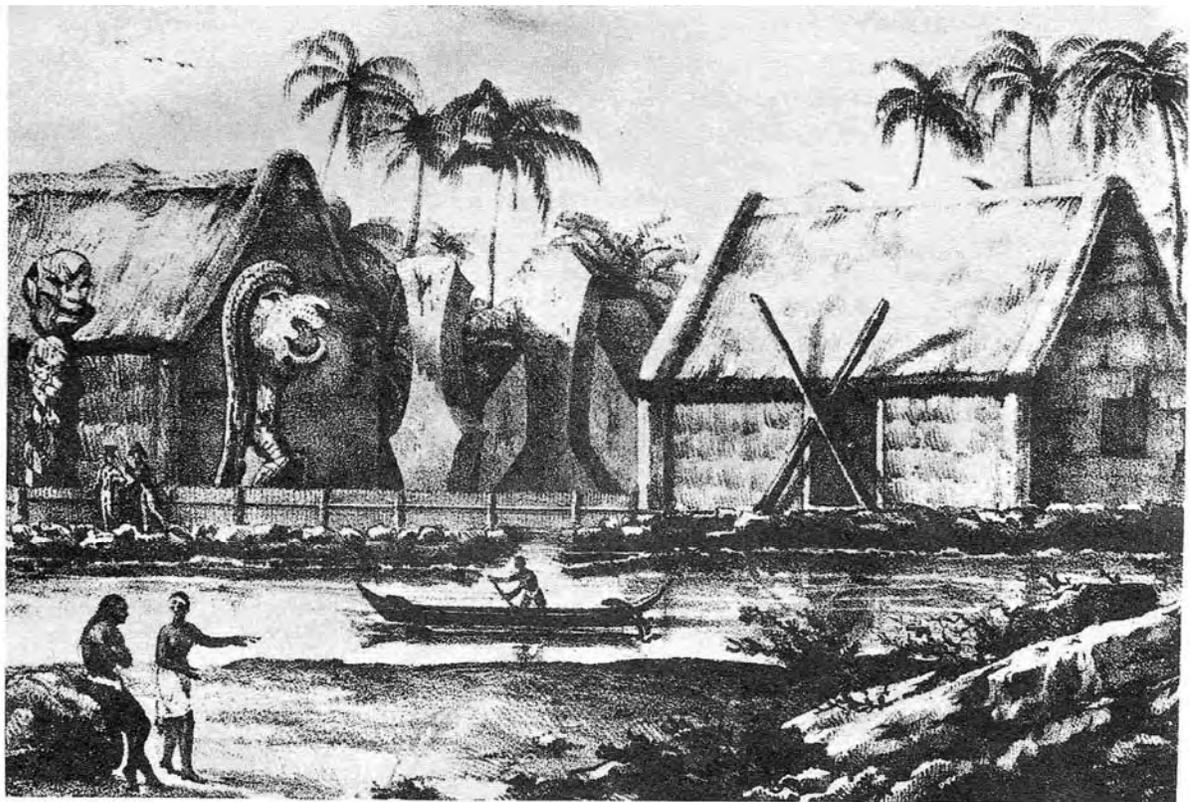


Figure 7. Lithograph of drawing of Ahu'ena sketched by Arago in 1819.

When the Freycinet expedition arrived in Kailua in 1819, three months after Kamehameha had died, Ahu'ena House had been abandoned as a place of worship with a *kapu* placed on it, and “almost all of the images there had been thrown over, and the sacred house of the sovereign was open and filled with furniture of European or Chinese origin, which had been used by the deceased king” (Freycinet 1839 Vol. 2:598; translated in Wiswell and Kelly 1978:74). Jacques Arago, an artist in Freycinet's company, prepared a drawing (Figure 7) of Ahu'ena House and an adjacent structure (perhaps a *hale poki* built to temporarily house Kamehameha's remains). He also provided the following narrative:

Governor Kookini [Kuakini] has two houses at Kairooah [Kailua]; the first one, where I was received, is his guest house; the other one is his castle, defended by two howitzers on which one may read the inscription: “French Republic.” Not far away, and alongside of the great morai, is a kind of fortification made of earth and stone, where there were mounted some twenty odd guns of small caliber, protected by casements, or sheds covered with coconut leaves. Here there will be found five or six warriors without any uniform, carrying their guns on their shoulder, and walking rapidly from one end to the other of the fortification.

On the other hand, the sentinels walk very slowly along that rampart which faces the sea; and upon a hand bell being shaken by another sentry, the first one faces about to continue his beat. The tour of duty lasts one quarter hour . . . One must pass alongside of this strange earthwork . . . before one may reach the tomb of Tamahamah, towards which Berard and I were heading . . . (Arago 1840 Vol.2:60-61; translated in Houston 1940:28)

Eight months later in April of 1820 the wife of the Reverend Thomas Holman recorded the following in her diary:

April 7 . . . we went to see the ruins of the Moriah [marae] . . . It was sure enough in ruins, and such a scene of devastation, I never before beheld. There appeared to me to have been stone (solid lava) enough among the ruins of the temple, to build a city – 4 of the wooden gods are left for curiosity . . . In a large ohale (or house) near by lies buried the bones of the Great Tamahamaah—with a cross on each side, signifying Tarboo, (or no admittance). Upon this sacred ground was no common person allowed to step his foot. (Holman 1931:23)

Two years later, in April of 1822 two English missionaries report that:

. . . Accompanied by him [John Young] we visited a neighbouring marae, which, like other obsolete abominations of the kind, is now a ruin. A house has been built on that part where the corpse of the late king was laid, previous to the flesh being taken from the bones, the latter distributed among his principal chiefs, and the former committed to the flames, according to ancient usage. At this funeral pyre, five hundred dogs were sacrificed with the royal remains. (Tyerman and Bennett 1822 Vol 2:378)

In August of 1823 when the Reverend William Ellis visited the area he observed that Ahu'ena had been converted into a fort (see also Jones 1938):

Adjacent to the governor's house stand the ruins of Ahuena, an ancient heiau, where the war god was often kept, and human sacrifices offered. Since the abolition of idolatry, the governor has converted it into a fort, has widened the stone wall next the sea, and placed upon it a number of cannon. The idols are all destroyed, excepting three, which are planted on the wall, one at each end, and the other in the centre, where they stand like sentinels amidst the guns, as if designed by their frightful appearance to terrify and enemy. (Ellis 1827:436)

Kamehameha's Death and the Demise of Traditional Religion

On May 8, 1819, approximately six years after moving the kingdom capital from Honolulu to Kamakahonu, Kamehameha passed in the night. Kamakau provides the following description of that event:

. . . His {Kamehameha I} death occurred at night at Kamaka-honu, Kailua, Hawaii. He had been noted in his youth for his strength in the three forms of wrestling and in other sports. His strength lay in his shoulders, which were broad and muscular, and in his back. His powerful jaws showed energy and determination of character; in anger his eyes became bloodshot. But his outward appearance belied his true nature, for at heart he was a father to the orphan, a savior to the old and weak, a helper to the destitute, a farmer, fisherman, and cloth maker for the needy. When he died his body was still strong, his eyes were not dimmed, his head unbowed, nor did he lean upon a cane; it was only by his gray hair that one could tell his age.

He was a long time ill, and Ka-lani-moku and Ke'e-au-moku and the other chiefs who were away cutting sandalwood on Oahu were summoned back to Hawaii leaving Boki Kama'ule'ule as governor of Oahu and a few chiefs with him. At the beginning of his illness he was treated by such men as Ku-a'ua'u, Ka-lani-moku, Kua-ka-mauna, and others who had attended the chief before and were experts in the medicinal art. They agreed that his illness would not yield to treatment, and Kua-ka-mauna told him, "The doctors have done all they can; you must place yourself in the hands of the god who alone has power over life and death." This was done in the following manner. At the direction of the leading kahuna an 'ohi'a house was erected for Ku-ka'ili-moku, and a man demanded of the chief as a human sacrifice to the god. The people, hearing this request, all ran away and hid in the bush until the tabu should be lifted; only a few remained with the chiefs in attendance on the ruling chief. Kamehameha, however, refused to have a human sacrifice given, saying, "Men are sacred to the chief," meaning to his son Liholiho. The gods Ku-ka'ili-moku, Ku-ka-lani-ho'one'e-nu'u, and Ku-ke-olo'ewa were like rosaries worn about the neck in time of war or danger. During such a tabu ceremony, if the kahuna was allowed to continue his prayer to the end without interruption it was a sign that his request for life was granted. Ku-ka'ili-moku was in the old days a representative who acted as messenger of the god to whom the petition was offered. A sign to be noticed during the tabu was the movement of the feathers on the head of Ku-ka'ili-moku, which would stand out like hair charged with electricity and wave like a flag as a sign of consent to the request prayed for; or the god might fly from its stand to the head or shoulder or some part of the person it fancied, and this was a sign that the request had been favorably received. If none of the signs occurred the audience broke up with heavy hearts for this meant that the prayer was not granted. On this occasion Ku-ka'ili-moku gave no sign.

At the close of the kauila service the weakness of the chief increased and at the next service he sent Liholiho in his place. The chiefs and the sons and daughters of Kamehameha had heard of a kahuna who had cured many people through his mana obtained from the gods, Pua and Kapo. Pua was another name for Kalai-pahoa, and the mudhen (*'alae*) was a form of Kapo. It was said that if these gods were brought into a house the sick would be healed. Once before the chief had been cured by this kahuna, who had not come himself but sent the gods to the chief's house. They therefore built two houses, one for the male (Pua) and the other for the female (Kapo) god. Kamehameha grew no better but steadily worse, and after three days they took him from these houses to his own sleeping house. At the close of the day he was carried to the eating house, where he took a mouthful of food and a swallow of water, but when he was asked to speak made no reply. About ten o'clock he was again carried to the eating house and again took a mouthful of food and a swallow of water. Ka-iki-o-'ewa then asked him for a last word, saying, "We are all here, your younger brothers, your chiefs, your foreigner (Young). Give us a word." "For what purpose?" asked the chief. "As a saying for us" (*I hua na makou*). "Endless is the good that I have given you to enjoy" (*E oni wale no 'oukou i ku'u pono 'a'ole e pau*). Then John Young put his arms about his neck and kissed him; Ulu-maheihei bent down and whispered that he be given charge of his bones. Kamehameha was

then taken to the sleeping house. At midnight he was again moved to the eating house, but he began to gasp for breath when his head alone was inside the eating house while his body was still in the sleeping house. He was taken back to the sleeping house, and at two o'clock that morning his soul departed and he ceased to live. (Kamakau 1992: 210-211)

In his book *Kamehameha and his Warrior Kekuhaupi'o*, Desha writes of those who were in the presence of Kamehameha when he passed, questioning how he died—was the cause of Kamehameha's death spiritual or old age? A way of discovering the answer to this follows:

Some *kahuna* who performed black magic thought that Kamehameha had died because of sorcery rather than from old age. They burned some parts of his body in order to bring death to the person who had done the sorcery.

A strange thing done at that time was that the *kahuna* had set up flags at the edge of their fireplace, and an *ali'i* who was drunk came and persisted in knocking over the flags.

This was Ke'eaumoku, the brother of Ka'ahumanu. All the flags were torn down by this drunken *ali'i*, and because of these actions, the death of Kamehameha was attributed to Ka'ahumanu. She and her family were defamed (*hō'ino*) by the people.

This misperception was only because of Ka'ahumanu's drunken brother. Perhaps this was one of the first signs of the loss of power of the *kāhuna* class which was completely lost afterwards. Perhaps this blame on Ka'ahumanu and her family for Kamehameha's death was the reason that Ka'ahumanu so firmly overthrew the power of the *kahuna* shortly thereafter. (Desha 2000:500)

According to old tradition, the death of Kamehameha at Kamakahouunu, defiled the place along with those who came into contact with the corpse. A cleansing ceremony purified those who came into contact with the body with the following prayer (Kamakau 1992:213):

<i>E ma ka 'ai ku, e ma ka 'ai alo,</i>	Here is the food offered, here is the food offered in your favor,
<i>E ma ka 'aia, e ma ka hele huna</i>	Here is the food for the sin offering, let him be hidden
<i>E ma ka hele pa'ani</i>	Let him go and play.
<i>E ma ka uwe makena</i>	Here let there be mourning
<i>O kukakau a ka ho'olina</i>	For the dead and for his heir
<i>Papae'e A kaluako'i</i>	Let him be accepted where he is laid to rest
<i>I hemu 'oia i heu</i>	Let him go in peace,
<i>I hemu 'oia i hemu</i>	Let him go in silence

As Kamakau recounts:

At the close of the purification the *kahuna* Hewahewa said, "Where shall the ruling chief stay?" The chiefs responded in unison, "Where indeed? Are not you the one to choose the place?" "Since Kona is unclean, there are but two places for him to stay, Ka-'u and Kohala." So the chiefs chose Kohala because the people there were more loyal to the chief. At dawn of day the body was carried to the house of the dead (*hale lua*), and then for the first time the

people were aware that their chief was dead, and they bewailed him with bitter weeping and gestures of despair and recalled with deep emotion his farming, fishing, and cloth making and all his fatherly acts toward them. A man named Ke-amo-hulihia was so wrought up with emotion when he saw the body borne along that he sprang upon the bier and attempted to anger the chiefs into making him into a death companion (*moepu'u*) for Ka-mehameha, but since they had heard Kamehameha's command putting a tabu upon men for the chief Liholiho, they drove Ke-amo-hulihia away, and each time that he returned they refused. Kalandi-moku also wished to be his death companion, but Ho'okio prevented him. Formerly it was customary for chiefs to show their affection in this way without caring for their own lives; it was their way of repaying their chief's kindness. In the meantime when a land was defiled by the corpse of its ruling chief, it was considered in old days the proper thing for his heir to depart to another district for some days until the bones had been cleaned (*ho'oma'ema'e ia*), covered with basketwork (*ka'ai ia*), and placed within the tower (*'anu'u*) of the heiau, as the corpses of chiefs were prepared in old days for burial. In the early morning therefore Liholiho sailed and touched at Kawaihae. When the people of Kona and of neighboring places heard of the death of the chief the voice of weeping and wailing arose and the sound of lamentation and general mourning, recalling their regret and reciting their love for their chief. It would be impossible to describe all their ways of expressing love and sorrow, even to wishing to die with him. No nation on earth could have shown more grief and affection, and these manifestations of regret lasted many days. (Kamakau 1992:213)

With the passing of Kamehameha, his heir Liholiho was given the name of Kamehameha II. Ka'ahumanu, the favorite wife of Kamehameha, announced the last commands of Kamehameha I:

O heavenly one! I speak to you the commands of your grandfather. Here are the chiefs; here are the people of your ancestors; here are your guns; here are your lands. But we two shall share the rule over the land. Liholiho consented and became ruling chief over the government (Kamakau 1992: 220):

Following the death of a prominent chief, it was customary to remove all of the regular *kapu* that maintained social order and the separation of men and women and elite and commoner. Thus, following Kamehameha's death a period of *'ai noa* (free eating) was observed along with the relaxation of other traditional *kapu*. It was for the new ruler and *kahuna* to re-establish *kapu* and restore social order, but at this point in history traditional customs saw a change:

The death of Kamehameha was the first step in the ending of the tabus; the second was the modifying of the mourning ceremonies; the third, the ending of the tabu of the chief; the fourth, the ending of carrying the tabu chiefs in the arms and feeding them; the fifth, the ruling chief's decision to introduce free eating (*'ainoa*) after the death of Kamehameha; the sixth, the cooperation of his aunts, Ka-ahu-manu and Ka-heihei-malie; the seventh, the joint action of the chiefs in eating together at the suggestion of the ruling chief, so that free eating became an established fact and the credit of establishing the custom went to the ruling chief. This custom was not so much of an innovation as might be supposed. In old days the period of mourning at the death of a ruling chief who had been greatly beloved was a time of license. The women were allowed to enter the heiau, to eat bananas, coconuts, and pork, and to climb over the sacred places. You will find record of this in the history of Ka-ula-hea-nui-o-kamoku, in that of Ku-ali'i, and in most of the histories of ancient rulers. Free eating followed the death of the ruling chief; after the period of mourning was over the new ruler placed the land under a new tabu following old lines. (Kamakau 1992: 222)

Immediately upon the death of Kamehameha I, Liholiho was sent away to Kawaihae to keep him safe from the impurities of Kamakahonu brought about from the death of Kamehameha. After purification ceremonies Liholiho returned to Kamakahonu:

Then Liholiho on this first night of his arrival ate some of the tabu dog meat free only to the chiefesses; he entered the *lauhala* house free only to them; whatever he desired he reached

out for; everything was supplied, even those things generally to be found only in a tabu house. The people saw the men drinking rum with the women *kahu* and smoking tobacco, and thought it was to mark the ending of the tabu of a chief. The chiefs saw with satisfaction the ending of the chief's tabu and the freeing of the eating tabu. The *kahu* said to the chief, "Make eating free over the whole kingdom from Hawaii to Oahu and let it be extended to Kauai!" and Liholiho consented. Then pork to be eaten free was taken to the country districts and given to commoners, both men and women, and free eating was introduced all over the group. Messengers were sent to Maui, Molokai, Oahu and all the way to Kauai, Ka-umu-ali'i consented to the free eating and it was accepted on Kauai. (Kamakau 1992: 225)

When Liholiho, Kamehameha II, ate the *kapu* dog meat, entered the *lauhala* house and did whatever he desired it was still during a time when he had not reinstated the eating *kapu* but others appear to have thought otherwise. With an indefinite period of free-eating and the lack of the reinstatement of other *kapu* extending from Hawai'i to Kaula'i, and the arrival of the Christian missionaries shortly thereafter, the traditional religion had been officially replaced by Christianity within a year following the death of Kamehameha I.

Kamakahonu after Kamehameha I

Eighteen months after the death of Kamehameha I, in November of 1820 Liholiho (Kamehameha II) relocated what was now his royal entourage to O'ahu, and in doing so, vested in John Adams Kuakini the governorship of Hawai'i Island. As Kamakau recounts:

When Liholiho sailed to Oahu Kua-kini had already taken his luggage to the canoe when the king came and stood by his canoe and said, "Are you one of those sailing to Oahu?" When Kua-kini assented the king said, "Here is the land of Hawaii; there is food in the upland and fish in the sea; take it and eat; and we will go to Oahu." That is when Kua-kini became district ruler of Hawaii . . . (Kamakau 1992:390)

Kuakini apparently accepted Liholiho's instruction with zeal, and by 1824 had a new wood frame house (brought from America) placed within Kamakahonu in the general vicinity of the ti thatched houses that were built by Kamehameha I. As Barrère describes:

Late in 1823 the missionary Asa Thurston and his wife returned to Kailua, where they were joined by Rev. and Mrs. Artemas Bishop early in 1824. Lucy Thurston, wife of the missionary, wrote that at this time Governor Kuakini was living in a " . . . very pretty framed house with green window shades" [1882:24]. She said that the house had been brought from America and was placed in a " . . . capacious yard surrounded by a wall ten feet in height and about the same in breadth. It had quite a distinguished appearance at the head of the village" [*Ibid.*]. Her account is similar to that given by her husband Asa in a letter written on February 5, 1824, in which the enlarging of the Kamakahonu wall is dated as late 1823 or early 1824: ". . . he [Kuakini] has lately purchased a frame house, brought from America. This house adds much to the appearance of his establishment, which has been enclosing with a wall 10 or 12 feet high, and about the same in thickness" [Thurston, A. 1825]. (Barrère 1975:36)

Liholiho died in London in July of 1824, and his body was brought back to the Hawaiian Kingdom on board the British warship *Blonde*. On its return voyage to England in June of 1825, the *Blonde* called in at Kailua and reported:

We made the land of Hawaii on the 9th. The first place we distinguished was Kairua, which is the seat of government, Kuakini, or John Adams, the governor, residing there. The place contains about 3000 inhabitants, and has a fort mounting twenty guns . . . (Graham 1826:161)

It was during his term as governor that Kuakini, completed the transformation of Kamakahonu into a fort. Sometime in the early 1830s Kuakini apparently renovated the old two-story stone storehouse (located near the *hale nana mahina 'ai*) and took this as his residence. Evidence for this is cited by Barrère (1975) and based on information provided by Soreno Bishop (Bishop 1916) who lived in Kailua between 1827 and 1836. Then, in

1837 Kuakini moved into the Hulihe'e Palace, that being his final residence in Kailua as he died in December of 1844. His two-story wooden frame house had been converted into a "Government House" within the fort. As Samuel Damon who visited Kamakahonu in July of 1844 (five months prior to Kuakini's death) recorded:

We next inspected the Fort, and found some of the 32 pounders not exactly ready for service! Within the Fort's enclosures are the remains of an ancient heiau. The "grinning and staring" idols have all been removed. We found only a few chips of the last that was "cut down," and "shipped off," a few years since. An old house was pointed out to us, where tradition says, were for a short time deposited the bones of Kamehameha I. The Government house, standing within the Fort, is a two-story wooden building; we found it stored with chests, nets, etc. belonging to the Governor. (Damon 1845)

Kuakini had designated William Pitt Leleiohoku I as his heir and successor. However, the Governorship was a responsibility unsuited for Leleiohoku; he was removed by the Kingdom's Privy Council and replaced by the deputy Governor George Luther Kapeau on an interim basis in November of 1846 with a permanent appointment following in 1850. During Kapeau's interim tenure, sometime between 1846 and 1849, it appears as though the fort at Kamakahonu was made functional again. In a November 21, 1846 journal entry made by Chester Lyman describing a visit to Kamakahonu, Lyman describes the fort thusly:

It is a space on the North side of the harbor enclosed by a stone wall 10 to 15 feet high—7 cannon (iron) on carriages stand on the beach: they are 9 feet long and about 5 in. caliber. A number of other guns are mounted on the western wall. The fort is not guarded nor now in use. . . a large wooden house, two stories, with a flag staff stand just within the entrance on the East side. (Barrère 1975:340-41)

By contrast, in 1849 S. Hill, an English traveler visiting Kailua stayed at Kamakahonu:

Immediately upon our arrival, we called to pay our respects to the governor, Kapeau, a native chief, who received us with good-humored frankness, and ordered a room in the government-house to be prepared for our reception and residence; in order, as he said, that we might be as nears to him as possible during our stay in the place.

We were not long installed, before the hospitable chief came to pay us a visit, and, as it happened to be a bright moonlight night, he invited us to go at once in his company to inspect the fort, which was in front of his residence [likely the two-story stone storehouse near the *hale nana mahina 'ai*], and which in passable English he called the right arm of his strength. We found it [to] consist of a single battery commanding the bay, with twelve pieces of cannon of not very large caliber. (Hill 1856:207)

Kuakini's two-story wooden frame house, later referred to as the government house, and within which Governor Kapeau permitted the Hill party to stay, appears to have still been standing in the 1890s as documented in a photograph (Figure 8) contained in Barrère (1975:46).

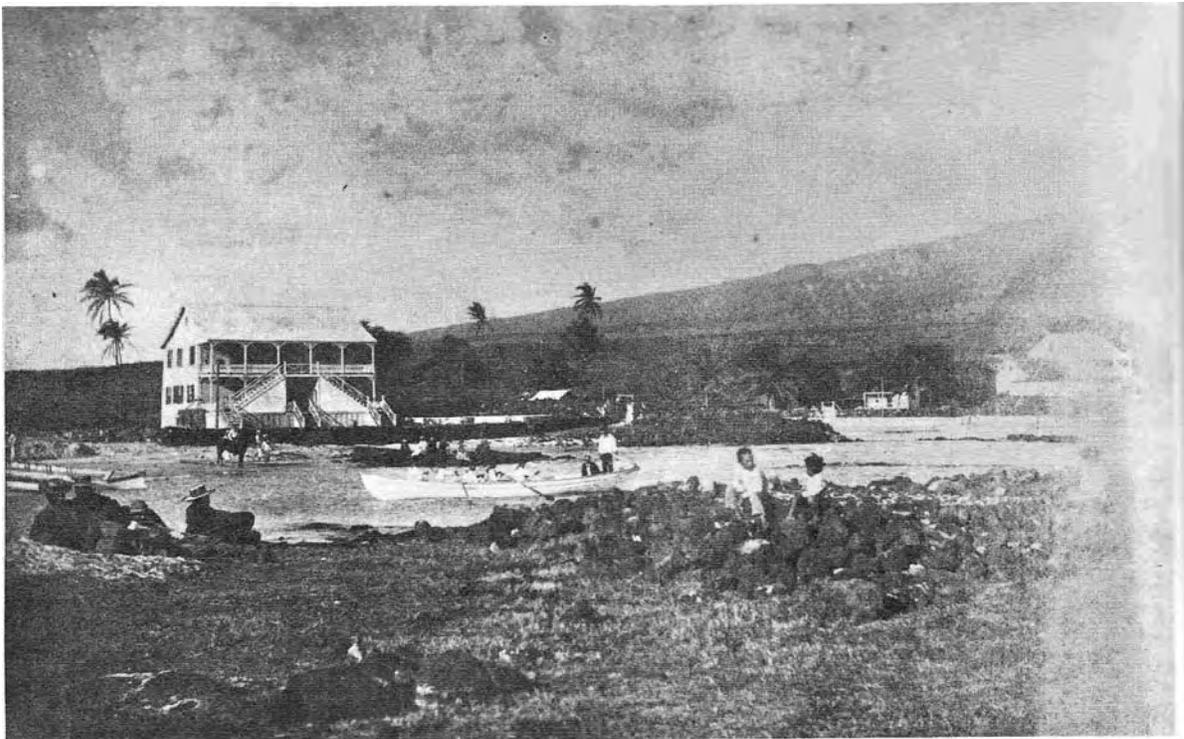


Figure 8. Kamakahonu Bay as it was in ca. 1890.

It was at the time of Kapeau's tenure as governor that the *Māhele* took place. In 1848, the Hawaiian system of land tenure was radically altered by the *Māhele 'Āina*. This change in land tenure was promoted by the missionaries and the growing Western population and business interests in the island kingdom. Generally these individuals were hesitant to enter business deals on leasehold land. The *Māhele* (division) defined the land interests of Kamehameha III (the King), the high-ranking chiefs, and the *konohiki*. As a result of the *Māhele*, all land in the Kingdom of Hawai'i came to be placed in one of three categories: (1) Crown Lands (for the occupant of the throne); (2) Government Lands; and (3) *Konohiki* Lands (Chinen 1958:vii and Chinen 1961:13).

As a result of the *Māhele*, Lanihau 2nd was retained as government land, and as such was subject to *kuleana* claims made by native tenants. Three such claims were made in the vicinity of Kamakahonu. Leleiohoku claimed a *kauhale* within Kamakahonu consisting of five houses, which included the two-story stone and wooden houses, a canoe storage building. The government disputed this claim, which they denied, but allowed Leleiohoku to retain ownership of the contents of the houses.

Another claim was made for a house lot at Ahu'ena (Claim No. 10068). Mahi testified, "Greetings to the Land Commissioners: I hereby petition you for my house lot claim at Ahuena in Lanihau, an ahupuaa, in Kona. It is 120 feet on the northwest, 36 feet on the west, 126 feet on the southeast, and 63 feet on the northeast." (Native Register Vol. 8:473). Citing lack of sufficient corroboration, the Land Commission denied the award. The Commission did however grant an award (LCAw. 7969) to Kalaikuiwa for a house lot that was also claimed at Ahu'ena, situated in the center of what is now Tax Map Parcel 3-7-5-05:012 (see Figure 2) to the west of the current project area. Kalaikuiwa's claim reads:

Greetings to the Land Commissioners of the Hawaiian Islands: I hereby state to you that I, Kalaikuiwa, have a house lot claim. In the front it is 21 fathoms, on the south, 16 fathoms, in the back, 18 fathoms, on the north, 15 fathoms. Those are the dimensions of my house lot at Ahuena in Kailua. A portion of it is walled, however it is not finished; but the rocks are there, which were brought for the wall that is not completed. I hired people to bring these rocks, with coconuts. That is the only makana.

To you, the honorable commissioners. (Native Register Vol. 8:520)

Kapeau was succeeded as governor of Hawai'i by Ruth Ke'elikōlani, the widow of William Pitt Leleiohoku. She proceeded to move the office of governor to Hilo and the residences and fort at Kamakahonu fell into further disrepair. As Jones claims, "In 1861 there were neither soldiers nor policemen stationed at Kailua." (1938:47).

As government land, Lanihau 2nd became part of the post-*Māhele* land granting program that the Kingdom established to help provide native tenants further opportunity to obtain fee-simple land of which they may not have been a recipient of during the earlier division. In 1875 the government sold as a grant a portion of Kamakahonu to William Pitt Leleiohoku II (Royal Patent No. 3148:2) what seems to correspond to what today are referred to as Tax Map Parcels 3-7-5-06:24 and 32. Leleiohoku II was the *hānai* son of Ruth Ke'elikōlani, his parents being Kapa'akea and Keohokalole. Leleiohoku II died two years later in 1877 and his estate was inherited by his sisters Lili'uokalani and Likelike and his brother King Kalākaua. The sisters sold their interest in Kamakahonu to their brother in 1885. Kalākaua converted the two-story stone warehouse/residence into a boathouse for whale boats; its appearance at that time was probably similar to as it appears in Figure 9. Upon Kalākaua's death in 1891, his Kamakahonu land along with the rest of his estate went to Queen Kapi'olani.

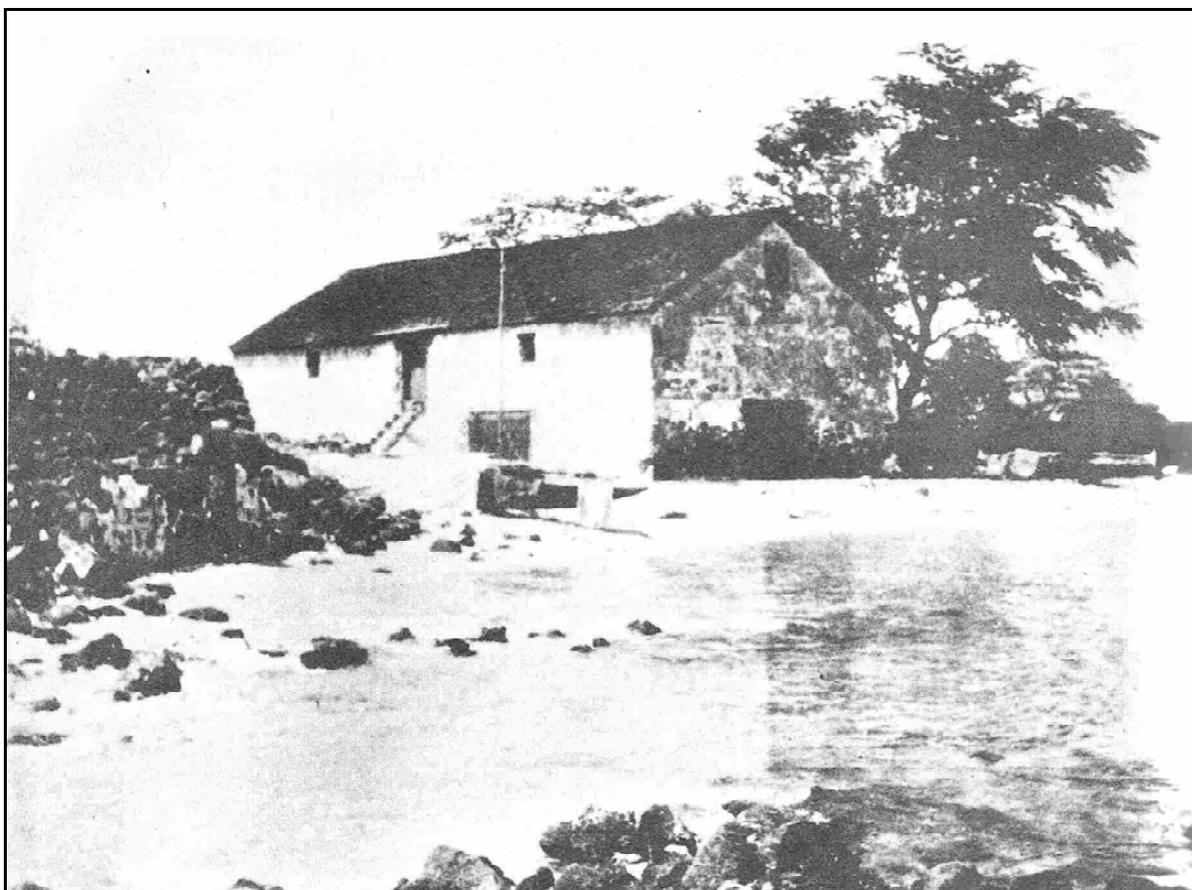
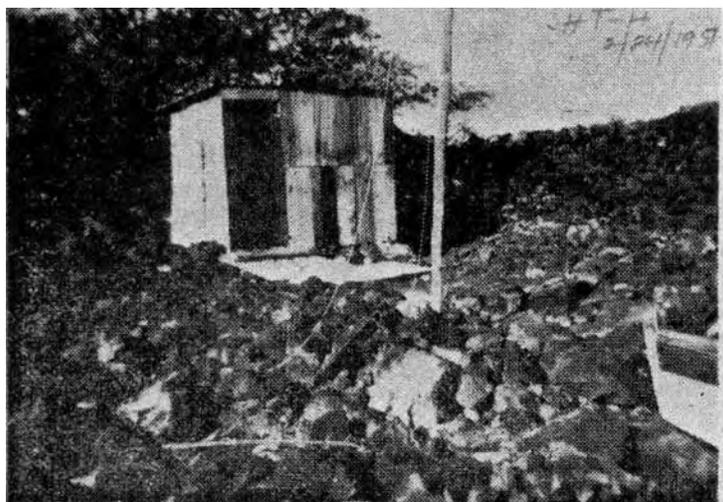


Figure 9. Two-story stone storehouse, possibly *Hale 'Ili Mai'a*, as seen in ca. 1910 (Barrère 1975:48).

Following the death of Kapi'olani in 1899, the Kamakahonu property remained in her estate until 1911, at which time H. Hackfield & Company bought the holdings at Kamakahonu from her estate. William Simonds, the company's historian, recorded that at that time "Another store was opened . . . in a building that once belonged to King Kalakaua. An old stone barracks served as the store's warehouse" (Simonds 1949:64). H. Hackfield & Company reorganized in 1918, and all of the company's holdings in Kailua were conveyed to American Factors, Limited, which became Amfac, Inc., the parent company that owned the property when the first hotel was opened for business in 1960. Figure 10 shows the condition of the Kamakahonu shoreline as it was in 1951 prior to the hotel development. This hotel was arranged in an arc and was situated just back from

the beach primarily occupying a portion of Tax Map Parcel 3-7-5-06:032 (Figure 11). The present King Kamehameha Kona Beach Hotel was completed in 1975, the built environment of which primarily occupies land *mauka* of Kamakahonu (Figure 12). As can be seen from upon close examination of Figure 11, in 1977 the *lū'au* grounds were located closer to the hotel restaurant. It wasn't until sometime between 1977 and 1980 that the *lū'au* was moved to its present location (Figure 13).



CONTRAST—In sharp contrast is another Kona spot of historic interest. This is the specially constructed place where Kamehameha the great came to live for the 40 days of cure that he hoped would give him a few more years of life. Old, tired and ailing, he wished to be near the priest of the heiaus Ahuena-i-Kamakahonu-i-Koi-i-Kekua. It is believed he died on this site. The small house is used to store fish nets.



HISTORIC SPOT—Pointing to the need for designation and possible preservation of historic spots is this view of the area where Kamehameha the Great is believed to have spent his last days. Discarded tin roofing, logs, glass, tin cans and old tires clutter up the spot. The uprights that marked the entrance to Kamehameha's place have long since fallen down and have been removed from the site.—Photos by Rebecca Banks, Kailua.

Figure 10. Kamakahonu as documented in the Hilo Tribune Herald February 24, 1951.



Figure 11. 1968 aerial photograph of the project area.



Figure 12. 1977 aerial photograph of the project area.



Figure 13. 1980 aerial photograph of the project area.

PRIOR STUDIES

As early as the first decade of 1900s, the Bishop Museum was conducting field studies of ancient Hawaiian sites, primarily *heiau* that had been historically documented or were known locally (Thrum 1907). In the vicinity of the current study area, Thrum described ‘Ahu‘ena as “an ancient heiau, of or prior to the time of Liloa . . . , and the first to be repaired by Kamehameha I” (1907:43). Following up on Thrum’s work, In 1906 John F.G. Stokes conducted 5 months of fieldwork documenting *heiau* sites on the Island of Hawai‘i (Stokes and Dye 1991). Stokes visited ‘Ahu‘ena and described it as follows:

Heiau of ‘Ahu‘ena, on the Land of Lanihau, District of North Kona. Situated on the rocky point of Kawahaokaki‘i, on the west side of Kailua Bay, 650 feet southwest of Pa-o-‘Umi. Changed between 1819 and 1823. The name ‘Ahu‘ena is from Ellis and is not known locally. The site at present is marked by a long mound of waterworn stones extending into the sea. The longer axis is approximately east and west. No features of the original foundation were distinguishable. (Stokes and Dye 1991:43-44)

The Bishop Museum continued to study the ancient sites of Hawai‘i through the services John Reinecke, who in 1930 conducted an archaeological reconnaissance survey of the coast extending from “Ahuena Fort in Kailua to Kalahui-puaa, South Kohala” (Reinecke n.d.). Making no mention or reference to Kamakahonu, Reinecke describes what he calls “Ahuena Heiau and Fort” as Site 1:

This structure, being large and at once apparent to all the old voyagers, has been often described by them. In its present form, it presents none of the features of the original heiau and probably very few of those of the fort . . . Within the fort, on the path, are two papamu, one 10 x 10 or 10 x 11, the other apparently 6 x 7 –perhaps incomplete—and two rudo [sic] petroglyphs. (Reinecke n.d.:1)

Reinecke’s sketch map (Figure 14) that accompanied his descriptions seems to indicate that Ahu‘ena extended across an area from the edge of Kailua Bay westward beyond a large pond. The bulk of the constructed environment of Ahu‘ena appears to be on the western side of the stone wall that marks the western boundary of the hotel property. The area of the present-day reconstructed *heiau* is identified as “loose rock of old platform” on Reinecke’s sketch map (see Figure 14). Reinecke also shows a three-sided ruin he labels “wall of modern building,” which seems to be all that remained in 1930 of the two-story stone storehouse called “Hale ‘Ili Mai ‘a” (pictured in Figure 8) that was reportedly demolished in 1917 (Barrère 1975:44).

These early studies are the foundation for the more recent archaeological surveys, and coupled with the Rockwood map in ‘I‘i (1963:118) also may have unintentionally added to the confusion that surrounds the location and identification of Ahu‘ena Heiau. From a focused reading of ‘I‘i (1963) it seems that Ahu‘ena Heiau and Ahu‘ena House are two different structures. Ahu‘ena Heiau being the older of the two “stood beside Kamakahonu” (1963:117); and Ahu‘ena House, referred to as a “heiau house,” “stood on the east side of the *hale nana mahina ‘ai*, separated from it by about a chain’s distance.” (1963:122). ‘I‘i further described this latter feature:

Ahuena house, which was a heiau, was enclosed with a fence of lama wood and within the fence, toward the front on the west and facing inland, there was an *anu‘u* tower. A row of images stood along its front, as befitted a Hale o Lono. Images stood at the northwest corner of the house, with a stone pavement in front of them that extended as far as the western gate and as far as the fence east of the house. On the west side of the outer entrance was a large image named Koleamoku, on whose helmet perched the figure of a plover.

In the center of the house was a fireplace for cooking bananas. Opposite the door at the back wall of the house, in line with the fireplace and the entrance, was a Kane image. This image was of the nature of an *ololupe* god, a god who led spirits; and that part of the house was his place. All the bananas cooked there were laid before his *kuahu* altar, where those who took part in the ceremony prayed. (‘I‘i 1963:123)

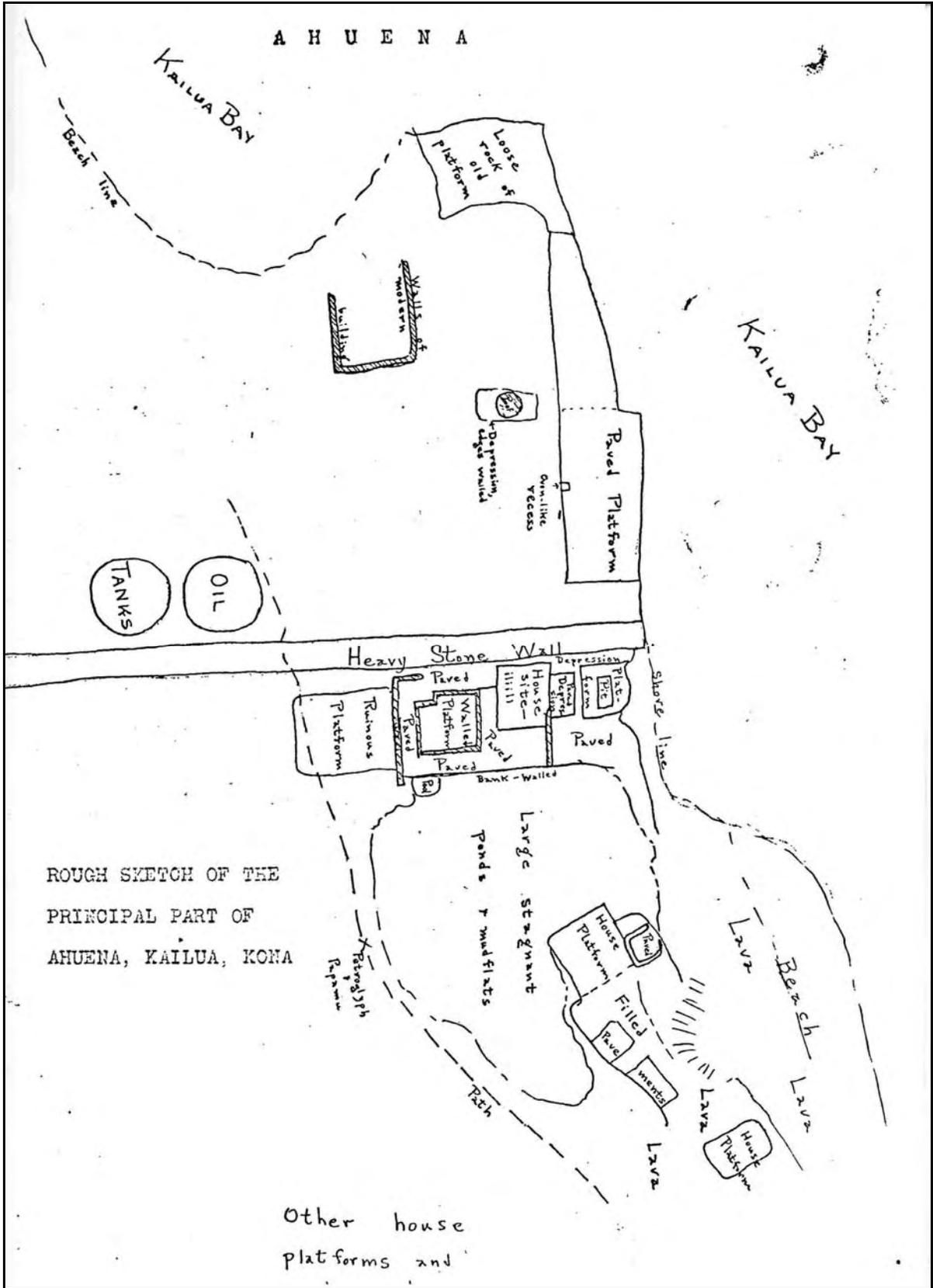


Figure 14. Reinecke's (n.d.:21) 1930 sketch of "Ahu'ena."

Thus, the current restored Ahu'ena Heiau is more properly a restoration of Ahu'ena House, a personal/residential *heiau* built by Kamehameha sometime around 1813. It is within this house that a “secret council met . . . to discuss matters pertaining to the government and to loyalty and rebellion. . . . The council said that the *ololupe* god would perhaps be charged to bring hither the spirits of the rebellious to be destroyed (‘I‘i 1963:123). ‘I‘i’s descriptions perhaps then suggest a duality to Ahu'ena House, externally it appeared and functioned as a “Hale o Lono,” while internally and secretly, offerings were made at an altar dedicated to an *ololupe* form of Kāne.

In 1954 Henry Kekahuna and Theodore Kelsey (with cultural assistance from Kekahuna’s uncle Naluahine Ka’opua) penned a newspaper serial (printed in thirty-seven installmentments between February and April in the Hilo Tribune Herald) about the history and historic sites of Kailua-Kona entitled *Kamehameha In Kailua*. Kekahuna also prepared a series of maps showing historical features of the downtown Kailua-Kona area.

The historical features of Kamakahonu and events that took place there are described in installment six of the newspaper series dated March 6 1954. Kekahuna and Kelsey relate that:

Ka-mehameha’s permanent residence, near ‘Ahu-‘ena Heiau, consisted of three thatched houses known collectively as ku-nui-a-kea—Great Ku Sires by (or Descended from) Wa-kea. These houses stood a short distance back from the picturesque cove of Ka-maka-honu, with its beautiful small crescent beach of white sand, almost adjoining the longer insweep of the former excellent main beach of Kai-lua, pride of the village.

About the middle of Ka-maka-honu’s little beach, just above its upper edge, the King’s two-story stone building, Ka Hale ‘Ili-Mai‘a—Literally, The House of Banana Peels—stood grandly forth. It would have been Ka-mehameha’s palace had he not disdained residence in a foreign building, its lower part was used for the storage of canoes, boats, and fishermen’s supplies; the upper floor was used for general storage.

Two of Kekahuna’s maps are of particular interest for the current study as they depict former elements of Kamakahonu and Ahu'ena Heiau. The map that shows Kamakahonu was printed in 1953 and then again with some minor modifications in 1955 (Figure 15). On this map within Kamakahonu, Kekahuna depicts and describes nine numbered and three lettered features:

1. King Kamehameha I’s permanent residence in Ka-maka-honu, comprising three houses known collectively as Ku-nui-a-kea.
2. Hale-‘ili-mai‘a, a two-story building built by a Frenchman. It was used by the king as a council chamber and storehouse.
3. King Ka-mehameha I’s battery of eighteen 32-puonder guns, which after his demise were placed on the wall of the enclosure of Ka-maka-honu by Gov. Kua-kini.
4. Foundation of Hale Pua-‘ilima, the house in which King Ka-mehameha I was placed during his last illness, and where he breathed his last on May 8, 1819.
5. In this pool King Ka-mehameha I raised tiny red shrimps (‘opae ‘ohuna ‘ula) as bait for ‘opelu, aku, and other fishes
- 6-6. Sites of the two houses of Chief Ke-awe-a-Mahu, following whose decease Kamehameha came into possession of the land Ka-maka-honu through Chief Ka-‘awa, the kahu of Chief Na-ihe.
7. This was the largest building in Ka-maka-honu, and was used as an ammunition storehouse, In it was held the historic feast upon the occasion of the breaking of the ancient tabu that forbade men and women to eat together. This event occurred about Nov. 1819, shortly before the arrival of the first missionaries.

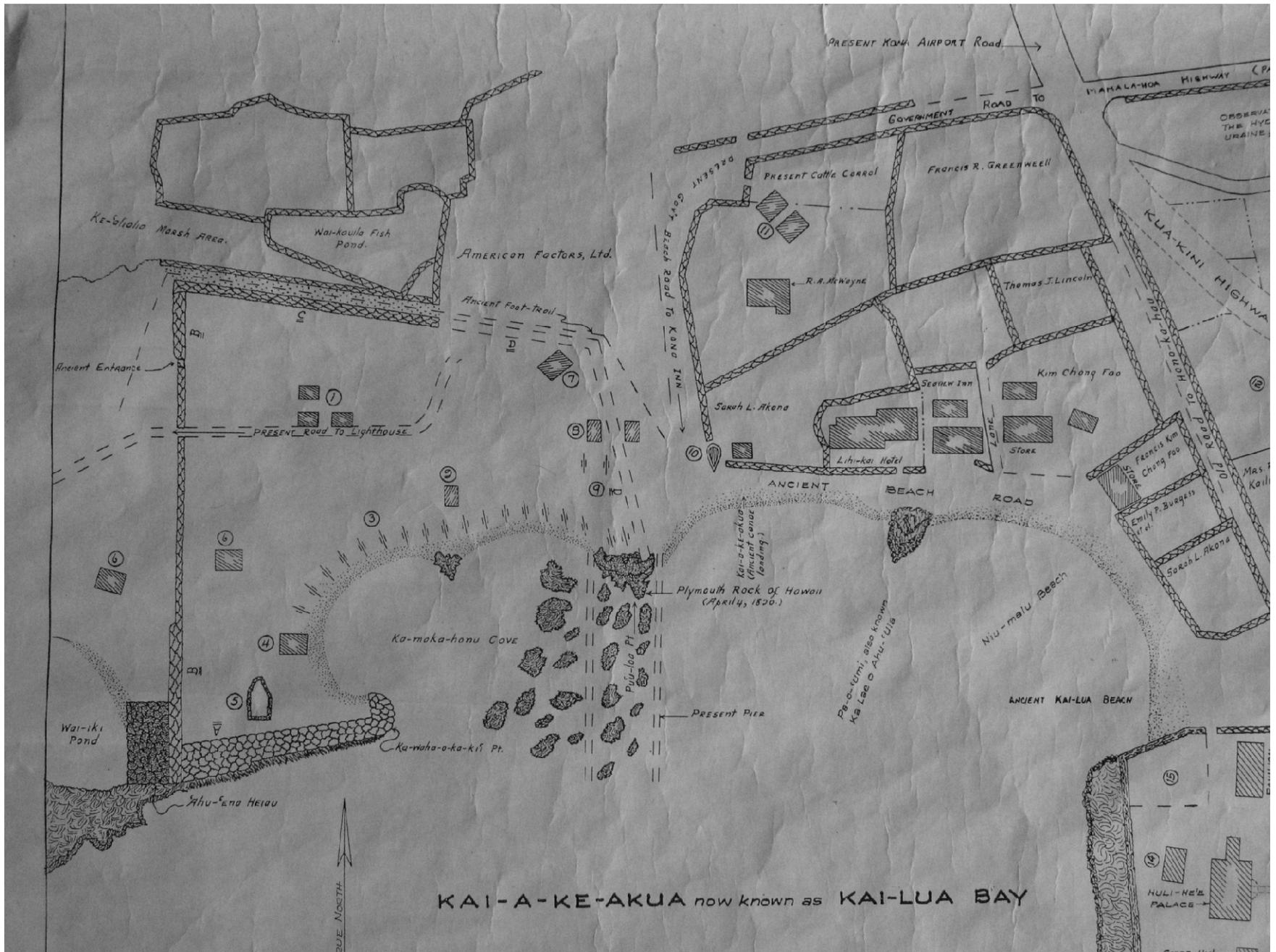


Figure 15. Portion of 1955 Kekahuna map of downtown Kailua.

8. Chief Kua-kini's residence, with two mortars placed in front of it. It was built after King Ka-mehameha I had passed away, as during his lifetime only he, his several wives, and the young Chiefess Ke-kā-ulu-ohi, resided in the royal enclosure.

Chief Kua-kini was never a member of the King's council. It was only after the succession of King Ka-mehameha II, or Liholiho, that Kua-kini's sister, the Regent Ka-ahu-manu, appointed her brother as Governor of the Island of Hawaii. He was also known as Gov. Adams.

9. Site of the residence of Chiefess Ke-kā-ulu-ohi, now occupied by the Kai-lua Gymnasium. In front of the house, between it and the east wall, was a spring.

A. This southern stonewall of the enclosure of Ka-maka-honu was constructed as a protective sea-wall. It is 285 feet long, and tapers from a width of 37 feet at its junction with the south end of the west wall, just outside of which, at this point, lies 'Ahu-ena Heiau, to a width of 10 feet at the entrance of Ka-maka-honu Cove, where its eastern termination forms the curving end of the little point of Ka-waha-o-ka-ki'i, and then extends inward for 40 feet. On this wall Gov. Kua-kini placed some of the guns removed from the line along Ka-maka-honu Cove.

B. The southern end of western wall, which end is 200 ft. long, by 8 ft. wide, by 4 ft. high. On the outside of its lower portion it is adjoined by 'Ahu-ena Heiau. On this portion of wall Gov Kua-kini placed most of the remaining guns at Ka-maka-honu Cove. Thus arose the mistaken impression that he placed guns in 'Ahu-ena Heiau.

From this south end of the west wall a section 337 ½ ft. long, by 4 ft. wide extends to meet the termination north section which is 113 ½ ft. long, by 8 ft wide, by 8 ft. high. At the point of junction with the northern section was an original entranceway.

C. The northern wall, 212 ft. long, by 8 ft. high. Between it and Wai-kaula Fish Pond, as well as all along beside its continued former course, ran an ancient trail paved with medium-sized rocks.

D. Adjoining the northern wall, and extending in the same direction, ran its continuing section about 110 ft. long, by 8 ft. wide, by 8 ft. high, removed to make room for modern improvements, as was also the adjoining eastern wall, 240 ft. long by 8 ft. wide, by 8 ft. high.

The second map (Figure 16), sketched in 1954 was reportedly based on fieldwork conducted in 1950. This map places Ahu'ena on the western side of the wall that forms the western boundary to Kamakahonu.

A critical examination of the historical data presented both in the newspaper serial and on the maps indicates that while the information is in a general sense correct, the accuracy of the details is inconsistent with and in some cases contradictory to other historical sources, particularly that of 'I'i (1959) whose descriptions are firsthand, and should be given primacy with respect to interpreting the historical record. Additionally, while a useful resource, Kekahuna's maps suffer from a lack of scale and orientation, as well as potential historical accuracy as indicated above.

There have been numerous (well over fifty), more modern archaeological studies conducted within the Laniihau *ahupua'a* (see also Spriggs and Tanaka 1988). These studies can be segregated into three primary geographically area of focus, near the old airport and current Kona Bay Estates (Estiolo-Griffin and Lovelace 1980; Jensen and Rosendahl 1983; Neighbor Island Consultants 1973; Neller 1980; Newman 1970; M. Rosendahl 1984; P. Rosendahl 1979a, 1980a; Soehren 1976; Stasack and Stasack 2004; Yent 1982), in the vicinity of the current Laniihau Shopping Center (Barrera 1990; Hammatt et al. 1993; Rechtman 2005; Rechtman and Dougherty 2000; M Rosendahl 1988; P. Rosendahl 1979b; Schilt 1981; Soehren 1979), and in the vicinity of the current project area (Pietruszewsky 1989; Rechtman Consulting, LLC in prep.; P. Rosendahl 1980b; Vernon 1975-1977). It is this latter category of studies upon which we will focus.

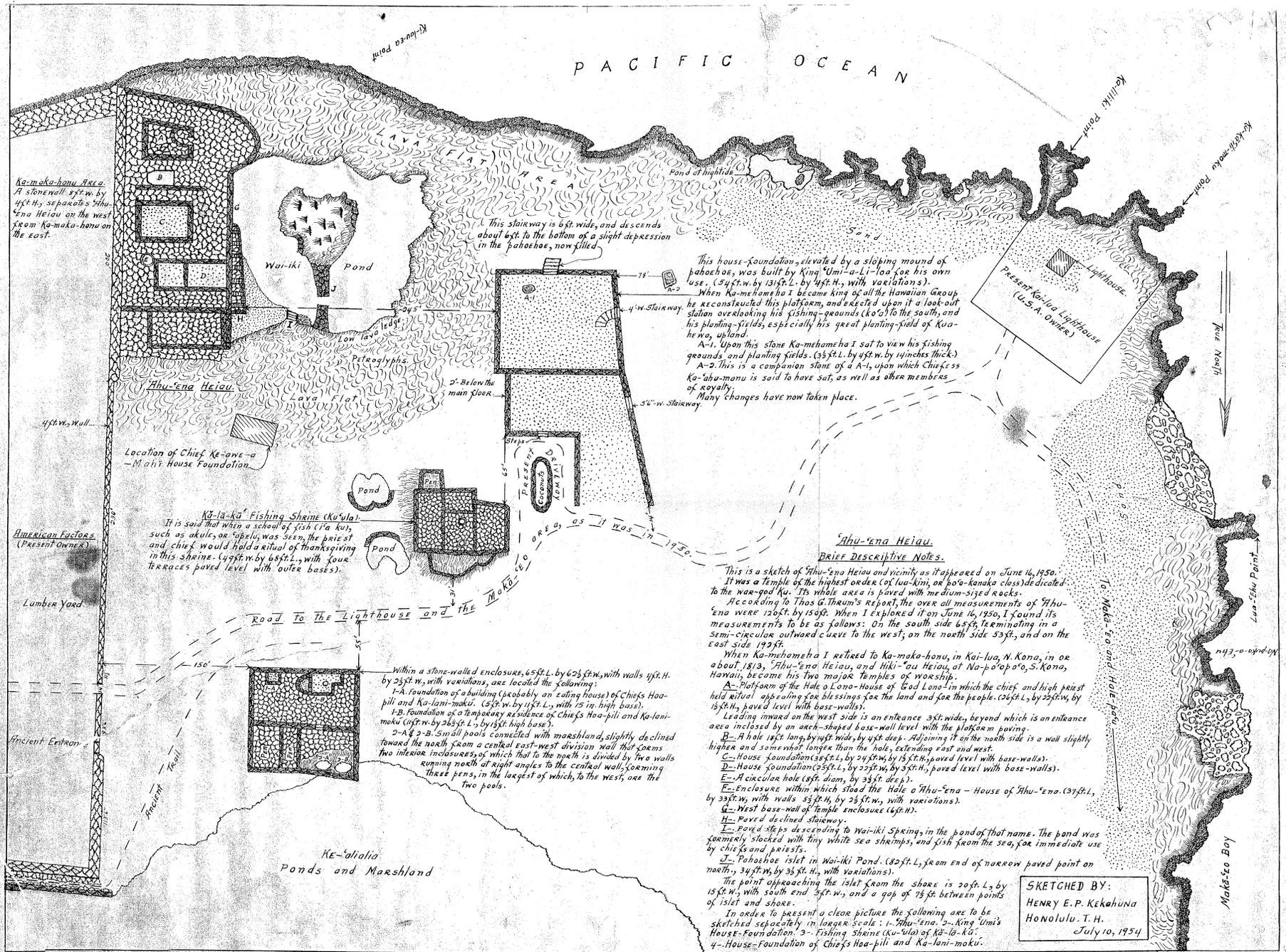


Figure 16. 1954 Kekahuna map of Ahu'ena and vicinity.

Rosendahl (1980) conducted an archaeological reconnaissance survey of the former Thurston property immediately adjacent, and to the west of Kamakahonu; the same area that was mapped by Reinecke (see Figure 14), and that is depicted in Kekahuna's 1954 map (see Figure 16). Describing the area as barren *pāhoehoe* flats with slight inclines, low domes, shallow sinkholes and several small brackish-water ponds, Rosendahl found that "none of the surface structural remains recorded by Reinecke in 1930, and still present in 1940, were any longer surviving." (1980:6). He also noted extensive "bulldozer tread and blade scraping marks cut into the lava surface over much of the survey area." (1980:2). Rosendahl identified a total of twenty features, which included several petroglyphs and *papamū*, two stone walls, a raised platform, a modified pond (retaining wall), a multi-feature residential complex, a modified lava blister, and surface scatters of artifacts and bone. Rechtman Consulting LLC is currently conducting an archaeological inventory survey of this same project area. Fieldwork has been completed and the report is under preparation. Preliminary findings support those of the earlier reconnaissance, and subsurface testing conducted at four locations documented shallow bedrock (within seventy centimeters of the surface at the deepest) immediately below a buried, highly mixed (historic and modern cultural material) and thin (about 10 centimeter thick) cultural layer, which in turn was overlain with clean sand. One would expect that the undisturbed areas (if any exist) within Kamakahonu would have a similar subsurface profile.

A search of the records on file at DLNR-SHPD indicates that human skeletal remains have been inadvertently found over the years within the sandy beach area of Kamakahonu. The remains recovered from one such discovery made in August of 1989 were subject to analysis by Michael Pietruszewsky (1989). Based on his analysis two individuals were represented by the skeletal material, a juvenile (11-15 years of age) and an infant (roughly 2 years of age). Following analysis the remains were returned to the hotel for reburial. These remains appear to have been re-interred and monumented with a stone feature that is now within a *naupaka* hedge to the north of the reconstructed Ahu'ena mortuary platform. DLNR-SHPD records indicate that a second inadvertent discovery was made in January of 1995. The records are silent with respect to the nature of the remains other than that they were human. DLNR-SHPD retrieved the skeletal material and notified the hotel ownership of their preference for reburial on the property and perpetual preservation. These remains are still in the possession of DLNR-SHPD.

In 1975, Amfac Inc. presented the Bishop Museum with a plan for the reconstruction of the Ahu'ena area within the grounds of the King Kamehameha Kona Beach Hotel. Between 1975 and 1977, the Bishop Museum conducted archaeological excavations at Ahu'ena as part of a project that resulted in the reconstruction of several of the extreme coastal features of Kamakahonu including Ahu'ena Heiau (House), *Hale Nana Mahina 'Ai*, and what is described as a mortuary platform. The following individuals participated in this work: Yosihiko H. Sinoto, Museum Coordinator; Kenneth P. Emory, Museum consultant; David K. Roy, Jr. Field Director; Tom Dye Field Archaeologist; Catherine Vernon, Assistant Archaeologist and Field Recorder; and Kenneth Akana, Keawe Alapai, Albert Carter, William Hanchett, Obed Hooper, Lambert Kahananui, Joseph Keka, Calvin Kelekolio, Francis Mokuohai, Carlton Roy, Jim Simmons, and Francis Waiau who served as masons, woodworkers and all around laborers. This reconstruction effort took almost a year and a half to complete. Notching and lashing techniques came from Russell Apple's (1971) book *The Use, Construction, and Adaptation of the Hawaiian Thatched House*. Both Tom Dye and Yosihiko Sinoto were contacted as part of the present study. Tom remembers very little about the project and referred us to Dr. Sinoto, who likewise remembers very little about the project and in turn referred us to a series of field reports prepared by Catherine Vernon. In describing the Museum's work at Kamakahonu, Hammatt, et al. lament that, "[d]espite the fact that [some] of Hawaii's best known archaeologists were involved in the Ahu'ena research, no final archaeological report was produced on this research and virtually no archaeological data is presented in Vernon's 23 reports" (1993: 26). In the acknowledgments to her reports, Vernon thanks Amfac Inc. "for providing the funding that allowed reconstruction of 'Ahu'ena Heiau as a symbolic and visible monument to the heritage of the Hawaiian people." Vernon's reports are presented in their entirety as Appendix A.

SUMMARY OF CONSULTATION

A significant part of this cultural impact assessment was consultation with individuals and organizations that have a connection with the project area, be it cultural, spiritual, religious, genealogical, or occupational. Table 1 is a listing and summary of the individuals and organization contacted. While most of these participated in the consultation process, a few chose not to do so. All of the interviews were informal, that is they were not recorded and transcribed. Interviewees were shown a copy of the proposed renovation plan (see Figure 3), and written notes were taken during the interviews. All interviewees that chose to participate in this process were provided a copy of the current report.

Table 1. List of organizations and individuals consulted.

<i>Organization/Individual</i>	<i>Participated</i>	<i>Comments</i>
Ahu'ena Heiau Inc.	Y	<ul style="list-style-type: none"> • Protection of Ahu'ena during renovation. • Document archaeological finds during renovation. • Access to Ahu'ena not be restricted.
Kona Hawaiian Civic Club	Y	<ul style="list-style-type: none"> • Questions of ownership of Ahu'ena. • Access to Ahu'ena for cultural practices should not be limited.
Ke Akua Hawai'i Ko Aloha	Y	<ul style="list-style-type: none"> • Preserve the access rights of cultural practitioners. • Remove <i>lū'au</i> from sacred area.
Kanaka Council	Y	<ul style="list-style-type: none"> • Relocate <i>lū'au</i>. • Protection of traditional and customary practices.
Royal Order of Kamehameha - Kona (Wayne I'okepa)	N	No comment, deferred to Ahu'ena Heiau Inc.
Clement Kanuha, Jr.	Y	<ul style="list-style-type: none"> • Area already heavily disturbed. • Preserve access for legitimate cultural practices.
Hanale Fergerstrum	Y	<ul style="list-style-type: none"> • Relocate <i>lū'au</i>, too noisy to practice religion. • View Kamakahonu as a religious site.
Kalani Nakoia	Y	<ul style="list-style-type: none"> • Protection of Ahu'ena during renovation.
Keiki Kawaiaē'a	Y	<ul style="list-style-type: none"> • Relocate <i>lū'au</i>. • Protect environment by installing 'ōpala and recycle receptacles. • Possible alleviation of traffic. • Renovation will improve appearance of area.
Pualani Kanahele	N	No comment
Kate Winter	Y	<ul style="list-style-type: none"> • Location of <i>lū'au</i> is too close to <i>heiau</i>. • Good to relocate pool away from beach.
Larry Kimura	Y	<ul style="list-style-type: none"> • Maintain cultural relevance. • Improve interpretive aspects of Kamakahonu.
Pila Wilson	N	No comment
Geraldine Bell	N	No comment
Elaine Jackson-Rotondo	N	No response
Mikahala Roy	N	Refused to participate

The Executive Board of Ahu'ena Heiau Inc. was contacted to discuss any potential impact the remodeling of the King Kamehameha Kona Beach Hotel would have to Kamakahonu. The format of this interview was an unstructured meeting at the King Kamehameha Kona Beach Hotel and a walk around the Ahu'ena Heiau area. Ahu'ena Heiau Inc. had three concerns: first, that access to Ahu'ena Heiau not be restricted, thus allowing those who would like to practice their cultural beliefs the ability to do so; second, that the renovations would not pose any threat to the *heiau*; and third, that any subsurface archaeological remains encountered during renovations be documented.

The proposed renovation plan was presented to members of the Kona Hawaiian Civic Club at one of their regularly scheduled meetings held at the Department of Hawaiian Home Lands La‘i‘ōpua Community Center. The Club had requested that we attend their meeting and present the plan so that they could receive firsthand information about what the renovation was to entail; they had been hearing rumors that Ahu‘ena was to be destroyed. The presentation was well received, and collectively concerns of the Club members revolved around land ownership issues and access related to Ahu‘ena. They were insistent that access to the *heiau* for cultural practices should not be limited in any way.

On June 11, 2008 (Kamehameha Day) Rechtman Consulting, LLC was invited to accompany Ke Akua Hawai‘i Ko Aloha for their annual *E Ala E* (sunrise) procession and ceremony at Ahu‘ena. They began preparations at a beach area in Kalaoa known as Ho‘ona, then assembled at the Kailua Pier. The group of about thirty proceeded along the beach area in front of the King Kamehameha Kona Beach Hotel, through the *lū‘au* grounds to the small beach adjacent to the reconstructed *hale nana mahina ‘ai* and Ahu‘ena. There they presented offerings at the *heiau*, which were received by Mikihala Roy presiding as *kahu*. The hotel was not given advance notice of this activity nor did they require any such notice. The collective *mana‘o* from this group of practitioners was that they would like to continue to enjoy free access to the *heiau* and to have the commercial *lū‘au* moved further away from what they consider a sacred area.

Rechtman Consulting, LLC met with the Kanaka Council at the Queen Lili‘uokalani Children’s Center in Hilo. The proposed renovation plan was presented to the council and their *mana‘o* was sought. They understood that the renovations would not directly impact Ahu‘ena and questioned why we were doing this assessment project if that site was not going to be impacted. It was explained that a portion of the existing hotel sits on the historic site of Kamakahonu, and that is why we were conducting the present study. The remainder of the consultation meeting did not deal in any constructive way with the issue at hand. In the end, the one relevant recommendation offered by the members was that they would like to see the *lū‘au* grounds moved away from Ahu‘ena so that *lū‘au* activities do not interfere with cultural practices that take place at that site.

Clement Kanuha, Jr. (Junior) is a *kama‘āina* of Lanihau and has lived in Kona his entire life. Junior was consulted by telephone. In his youth Junior frequented the Kamakahonu area and what is now the hotel and Ahu‘ena. He related that when he started paddling with the Kai‘ōpua Canoe Club, the canoes were kept in the vicinity of the Ahu‘ena reconstruction (prior to its reconstruction it was a pile of rocks) and the current *lū‘au* area. When the *lū‘au* moved to its current location in about 1978 or 1979, the canoes were moved to where they are now at the location of the former Kailua Gymnasium. Junior expressed the sentiment, with regret, that as a result the placement of the first hotel in the late 1950s early 1960s, and the current hotel in the middle 1970s, what may have remained of Kamakahonu has already been destroyed.

Hanale Fergerson, Temple of Lono Priest, was interviewed and had the following comments: the proximity of the *lū‘au* is too close for him to comfortably practice his religion; during the renovations more consideration should be given to Kamakahonu as a religious site. He suggests that the *lū‘au* be moved to the cooking pit area, and that the former ‘ōpae pond that lies under the current *lū‘au* area be restored. It is Hanale’s belief that by addressing his concerns over the location of the *lū‘au*, that would function to lessen the potential for conflicts with Hawaiian practitioners.

Keiki Kawai‘ae‘a, Director, Kahuawaiola Indigenous Teaching Program, University of Hawai‘i at Hilo, feels the hotel’s use of Ahu‘ena as a backdrop may impact on the privacy of native practitioners. It is her belief that any active sacred site needs to be given the same, or as close to as possible, privacy as those going to a Christian church. Another concern she had was that the renovation plan does not depict the location of the *lū‘au* grounds, and she felt the plan downplays the use of Kamakahonu as a *lū‘au* grounds and thus the renovation plan gives a false impression there will be no *lū‘au*. An important concern for Keiki is the protection of the environment, with renovations the possibility there would be more people coming to the hotel and beach; she strongly feels the hotel should ensure there are sufficient receptacles for ‘ōpala and recyclables. With respect to view planes, Keiki suggested that there should be trees planted to provide privacy for those using Ahu‘ena in their religious practices. Overall, Keiki expressed that the proposed renovation will improve the look of the area, which is important in that the hotel surrounds Ahu‘ena, a sacred site. Moving the pool further back and creating an open air arcade is a good idea to her. The parking lot having more trees will make it look nicer, and as a *kama‘āina* she hopes that the relocation of the main entrance will alleviate traffic in the area.

Kate Winter, Ph.D. who works for the Kona Historical Society, offered comments as a private person who is not speaking on behalf of the Kona Historical Society. She is married into a Kona family and is familiar with the history of Kamakahonu through her years of work with University of Hawai‘i, the Kona Historical Society, and Hulihe‘e Palace. It is her opinion that moving the pool area further away from the beach is good, and that the opening of the central area of the hotel will give a *kama‘āina* feel. She is concerned that the parking spaces near the pier will be removed. She questioned if the *lū‘au* will be moved from its current location as she has often heard folks complain that it is too close to the *heiau*. She also expressed her hope that the hotel will continue to showcase the arts and crafts that are currently being displayed.

Larry Kimura, a Hawaiian Studies professor at the University of Hawai‘i at Hilo, feels that the hotel ownership should recognize the cultural significance of the area and consider Kamakahonu as an asset.

An interview with Kalani Nakoa (a *kahu* of Ahu‘ena) was conducted, although he declined to allow any information from the interview to be released. However, he did want to publicly express one concern, that being his concern for the safety of Ahu‘ena Heiau during the renovation activities

The following people were also contacted but declined to participate in this process (citing too busy, possessing no *mana‘o* on this subject, not their *kuleana*, or simply not responding to our consultation request) Pila Wilson, Hawaiian Studies Professor at the University of Hawai‘i at Hilo, Pualani Kanahēle; Geraldine Bell, Superintendent, Pu‘uhonua o Hōnaunau NHP and Kaloko-Honokōhau NHP; Wayne I‘okepa, *Ali‘ ai moku*—Royal Order of Kamehameha–Kona, and Elaine Jackson-Retondo, National Historic Landmark Program.

An attempt was made to interview Mikahala Roy of Kulana Huli Honua but Ms. Roy vehemently declined to participate in the consultation process.

IDENTIFICATION AND MITIGATION OF POTENTIAL CULTURAL IMPACTS

The OEQC guidelines identify several possible types of cultural practices and beliefs that are subject to assessment. These include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs. The guidelines also identify the types of potential cultural resources, associated with cultural practices and beliefs that are subject to assessment. Essentially these are nature features of the landscape and historic sites, including traditional cultural properties. In the Hawai‘i Revised Statutes–Chapter 6E a definition of traditional cultural property is provided.

“Traditional cultural property” means any historic property associated with the traditional practices and beliefs of an ethnic community or members of that community for more than fifty years. These traditions shall be founded in an ethnic community’s history and contribute to maintaining the ethnic community’s cultural identity. Traditional associations are those demonstrating a continuity of practice or belief until present or those documented in historical source materials, or both.

The origin of the concept of traditional cultural property is found in National Register Bulletin 38 published by the U.S. Department of Interior-National Park Service. “Traditional” as it is used, implies a time depth of at least 50 years, and a generalized mode of transmission of information from one generation to the next, either orally or by act. “Cultural” refers to the beliefs, practices, lifeways, and social institutions of a given community. The use of the term “Property” defines this category of resource as an identifiable place. Traditional cultural properties are not intangible, they must have some kind of boundary; and are subject to the same kind of evaluation as any other historic resource, with one very important exception. By definition, the significance of traditional cultural properties should be determined by the community that values them.

It is however with the definition of “Property” wherein there lies an inherent contradiction, and corresponding difficulty in the process of identification and evaluation of potential Hawaiian traditional cultural properties, because it is precisely the concept of boundaries that runs counter to the traditional Hawaiian belief system. The sacredness of a particular landscape feature is often times cosmologically tied to the rest of the landscape as well as to other features on it. To limit a property to a specifically defined area may actually partition it from what makes it significant in the first place. However offensive the concept of boundaries may be, it is nonetheless the regulatory benchmark for defining and assessing traditional cultural properties. As the OEQC guidelines do not contain criteria for assessing the significance for traditional cultural properties, this

study will adopt the state criteria for evaluating the significance of historic properties, of which traditional cultural properties are a subset. To be significant the potential historic property or traditional cultural property must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

- A Be associated with events that have made an important contribution to the broad patterns of our history;
- B Be associated with the lives of persons important in our past;
- C Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;
- D Have yielded, or is likely to yield, information important for research on prehistory or history;
- E Have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group’s history and cultural identity.

While it is the practice of the DLNR-SHPD to consider most historic properties significant under Criterion D at a minimum, it is clear that traditional cultural properties by definition would also be significant under Criterion E. A further analytical framework for addressing the preservation and protection of customary and traditional native practices specific to Hawaiian communities resulted from the *Ka Pa’akai O Ka’āina* v Land Use Commission court case. The court decision established a three-part process relative to evaluating such potential impacts: first, to identify whether any valued cultural, historical, or natural resources are present; and identify the extent to which any traditional and customary native Hawaiian rights are exercised; second, to identify the extent to which those resources and rights will be affected or impaired; and third, specify any mitigative actions to be taken to reasonably protect native Hawaiian rights if they are found to exist.

It is well documented that a portion of the King Kamehameha Kona Beach Hotel sits on the National Historic Landmark Site of Kamakahonu (SIHP Site 10-27-7002). Kamakahonu is clearly significant under four of the five evaluation criteria, Criterion A, B, D, E, and as a location in and of itself should always be considered a significant place (a *wahi pana*) We know from historical sources, archaeological investigation, and oral information that the remaining features of Kamakahonu of archaeological and cultural significance include the reconstructed features (Ahu’ena House, *Hale nana mahina ʻai*, and the mortuary platform), what remains of the perimeter walls, and a reburial feature currently located within a *naupaka* hedge to the north of the mortuary platform. All of these features should be protected against impacts during the proposed renovation activities. Although not directly related to the proposed renovation, it is nonetheless recommended that the current hotel ownership work with DLNR-SHPD to re-inter the human skeletal remains (perhaps in proximity to the existing reburial feature) that were unearthed in 1995, and that are presently in DLNR-SHPD’s possession.

In an effort to educate visitors and *kama’āina* alike about the significance of Kamakahonu, a description of the site’s former features, as presented in ‘I’i (1959), with an accompanying map showing a layout of Kamakahonu (a revised version of the Paul Rockwood map shown in Figure 5), and a recounting of the significant historical events that occurred at Kamakahonu should be developed and become part of the new museum/gallery space that is proposed for a portion of the former retail space. This is not intended to be viewed as a mitigative measure that counter balances the cumulative devastation that has befallen Kamakahonu (nor is it the *kuleana* of the current hotel ownership to do so), but simply is suggested as an educational tool to help preserve a historically accurate memory of what once was.

Beginning in the 1950s, we know that the entire area of the current hotel has been repeatedly subject to major ground-altering activities; we also know that human skeletal remains have been found in the beach area. Therefore, however unlikely, it is possible that intact subsurface archaeological remains, be they features or deposits, could be encountered during the proposed renovation. To mitigate potential effects to possible buried resources within Kamakahonu and its immediate surrounding area, archaeological monitoring is recommended during subsurface demolition or development activities. Such monitoring will provide for an immediate response if any such resources are discovered, and assuage any concerns that DLNR-SHPD might have with respect potential effects on as of yet unknown subsurface cultural deposits within and adjacent to Kamakahonu.

While it should be recognized that the reconstructed features of Ahu'ena House and *Hale nana mahina 'ai* no longer hold archaeological significance, they hold great cultural significance for modern practitioners. Ahu'ena House and *Hale nana mahina 'ai*, along with the cultural activities that take place there, are considered sacred by Hawaiian cultural practitioners. The hotel ownership should make a concerted effort to continue to allow access to Ahu'ena by cultural practitioners during and subsequent to the proposed renovation.

Another topic which consistently came up during the consultation process was that of the *lū'au* grounds and its proximity to the reconstructed Ahu'ena House, *Hale nana mahina 'ai*, and mortuary platform. While this area is not a part of the proposed renovation, and will not be impacted during the proposed renovation, some discussion of this topic is warranted, if for no other reason than provide both historical and cultural perspectives relative to the establishment, use, and maintenance of this area. As discussed earlier, Ahu'ena House, *Hale nana mahina 'ai*, and mortuary platform were reconstructed in 1975 with considerable involvement from the community and government agencies; the previous hotel owner, AMFAC, also built the *lū'au* grounds at the same time. As the reconstructed features began to show signs of age and were in need of maintenance and repair the hotel, uncertain how to proceed, helped to form a non-profit organization that was specifically established to handle the planning, fundraising and care of the site. This non-profit organization, Ahuena Inc., was formed with the hotel, the State Historic Preservation Division, OHA, the Kona Hawaiian Civic Club, Hulihee Palace and other Hawaiian organizations represented on its board.

In 1990, when AMFAC was considering selling the property, they explored several options for the continued care of the reconstructed features. The National Park Service, the State Historic Preservation Division and other agencies were consulted but all refused or were unable to commit to the site's management. It was at that point in time that restrictive covenants (Appendix B) were legally established that set out the rights and responsibilities for the perpetual management of the Parcel 24 portion of Kamakahonu, which contains the reconstructed features and the *lū'au* grounds. Two management zones were established: Zone 1 containing the reconstructed features, and Zone 2 containing the adjacent *lū'au* grounds (Figure 17). These covenants specify, among other things, that within Zone 1, the hotel ownership is to "maintain and repair the Buildings and Premises in a good and sound state of repair so as to preserve the architectural, historical or archaeological integrity of the Premises in order to protect and enhance those qualities that made the property eligible for listing on the National Register of Historic Places." The covenants further state that, "the Premises [shall] be accessible to the public without charge on a minimum of three hundred (300) days per year from 10:00 a.m. to 4:00 p.m., and at other times by appointment . . ." The perpetual covenants also established the right "to continue the current commercial luau use on zone 2." The Grantor of these covenants is the State Historic Preservation Division, and they have the sole responsibility for enforcement.

In the thirty plus years since the reconstruction effort was completed, Ahu'ena House, *Hale nana mahina 'ai*, and mortuary platform have morphed into a cultural symbol associated with a renaissance in Hawaiian cultural and religious practice. These features are now used on a regular basis by modern practitioners, who may hold views about the site that differ from their immediate forbearers. Some of those views are clearly in conflict with the presiding covenants, especially with respect to the continued use of the *lū'au* ground in close proximity to "their place of worship." The current ownership, through the conduct of the present study (and from other sources), has been made aware of the views of modern practitioners, and this ownership remains committed to honoring the existing perpetual covenants that have been legally established for the preservation and use of this portion of Kamakahonu.

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APPENDIX A—Bishop Museum Ahu‘ena Progress Reports

PROGRESS REPORT NO. 1

NOVEMBER 11-25, 1975

ARCHAEOLOGICAL EXCAVATIONS AND RECONSTRUCTION OF AHUENA HEIAU PLATFORM
AND HALE NANA MAHINA'AI AT KAMAKAHONU, SOUTH KOHALA, ISLAND OF HAWAII

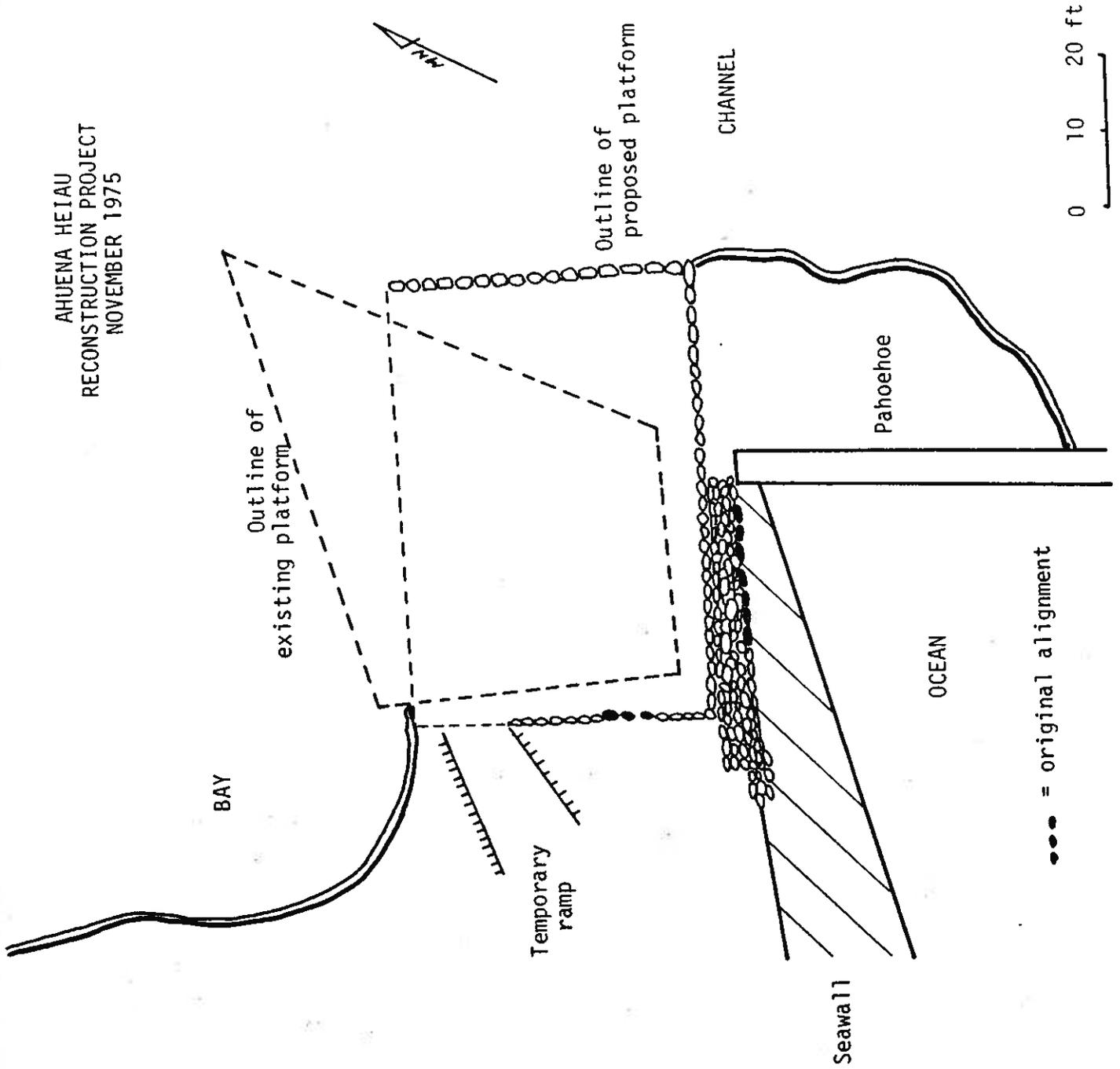
by

Catherine Vernon
Assistant Archaeologist and Field RecorderDepartment of Anthropology
Bernice P. Bishop Museum

On November 11, 1975, Dr. Yoshihiko Sinoto, Museum Coordinator, gave instructions to Mr. David Roy, Field Director, and Ms. Catherine Vernon for work procedure and for establishing the alignments of the South and West walls to form an outline for the reconstructed platform. Actual fieldwork began on November 13. By November 25, the following items of work had been completed:

- (1) site surface was cleared of gas pipes
- (2) ramp was built for crane and backhoe access to heiau platform
- (3) corner markers were set for reconstructing platform, full 40 by 60 ft
- (4) fallen foundation stones from East wall foundation were dredged from channel
- (5) large foundation stones were laid for East wall and area of South wall exposed by sea
- (6) fill was removed from between seawall and South wall
- (7) possible aligned stones and foundation, exposed at the base of the present South wall, were recorded
- (8) Southwest corner of the platform and part of the West wall, extending from the corner to the ramp, were laid, using what appeared to be the original wall foundation; this wall was built up to one course from proposed platform height, 5.5 ft
- (9) after removal of rubble, South wall foundation was built and wall was raised to within one course of completed height
- (10) removal of Northeast corner of present platform was begun
- (11) possible original wall alignment in seawall on South side of platform was repaired, extending to 1.75 meters beyond the Southeast corner of the reconstructed platform
- (12) removal of rubble on North wall of present platform was begun.

AHUENA HEIAU
RECONSTRUCTION PROJECT
NOVEMBER 1975



PROGRESS REPORT NO. 2

November 26 - December 12, 1975

ARCHAEOLOGICAL EXCAVATIONS AND RECONSTRUCTION OF AHUENA HEIAU PLATFORM
AND HALE NANA MAHINA'AI AT KAMAKAĀHONU, SOUTH KOHALA, ISLAND OF HAWAII

by

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On November 24, 1975, we were informed by the Planning Department, County of Hawaii, that a work-stop order was in effect on our project because the work involves areas in nearshore waters. A compromise was reached by Herb Kane which allows our crew to continue work as long as there is no entry into the water. Work has been hindered, therefore, and much slower than during the previous two weeks. The following items have been completed:

1. A test trench, 8.55 meters long, 1.75 meters wide, and 1.35 meters deep, was excavated along the proposed North wall alignment. Profiles of the South and West faces of the trench were completed.
2. The trench depth was increased by 1.25 meters to reach the pahoehoe base (2.60 meters below surface).
3. All rubble and loose material was cleared from the platform surface.
4. All rubble and loose material was cleared from the North wall.
5. The possible original North wall alignment was exposed (bearing, 210°; see map). The decision to use this alignment changes the shape of the platform from the originally proposed 40-by-60-ft dimensions, necessitating an extension of the West wall to a total length of 44.2 ft (13.5 meters).

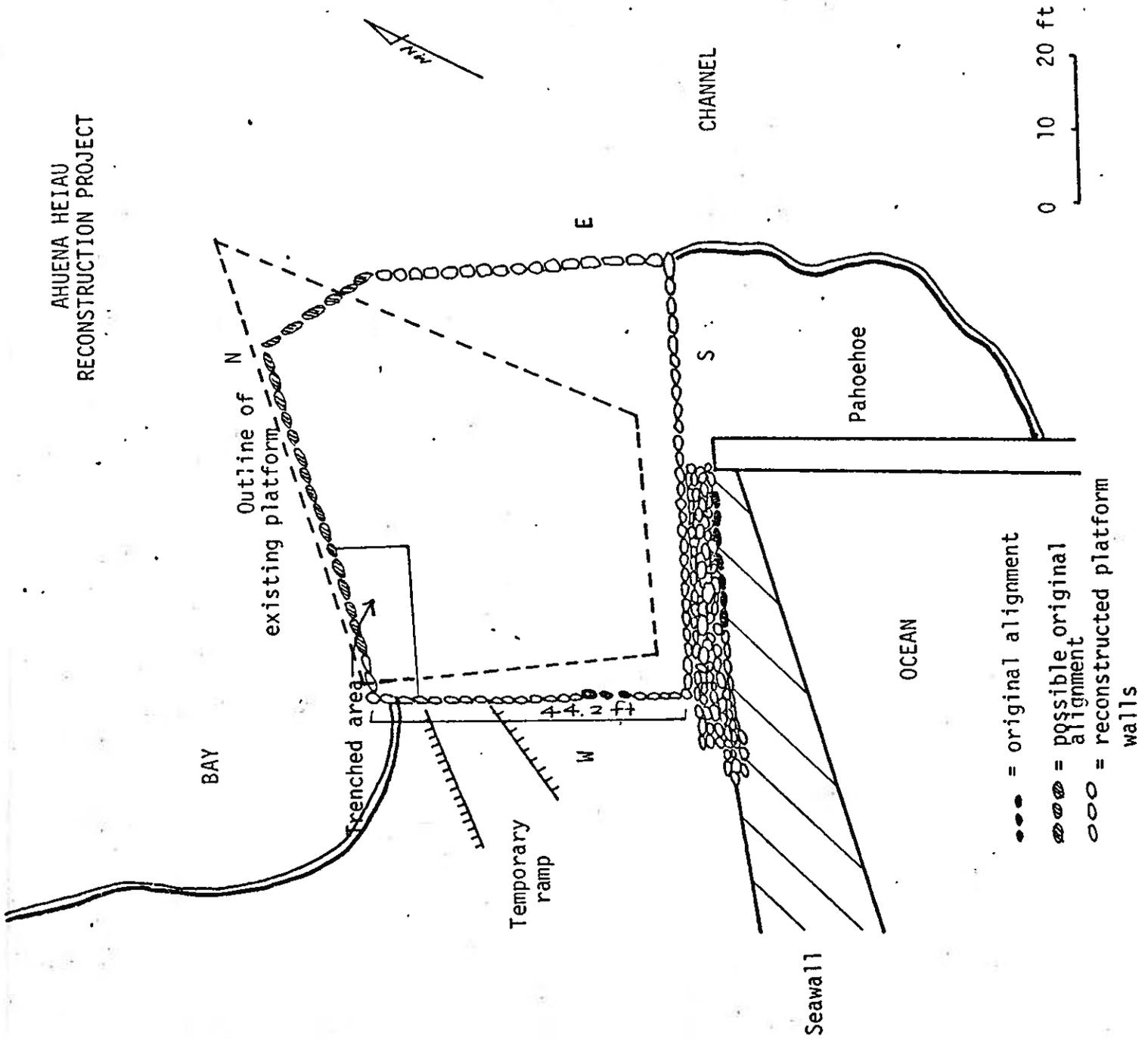
6. Rubble and loose material were removed from the Northeast corner of the present platform down to low-tide level, and a possible original wall alignment was found. If this alignment were extended to 40 ft in length, it would reach out into the channel; therefore the decision was made to retain only the intact portion of the alignment up to the intersection with the reconstructed East wall.

7. A 3.9-meter portion of the western end of the North wall was removed to investigate the foundation alignment and to set a sound footing for reconstruction.

8. The North and West walls were extended to intersect (2.4 and 1.3 meters, respectively).

9. The Northwest corner and the North wall were set and constructed to 1.58 meters high. The wall is double-faced and 1 meter wide.

AHUENA HEIAU
RECONSTRUCTION PROJECT



- = original alignment
- ⊗⊗⊗ = possible original alignment
- = reconstructed platform walls

PROGRESS REPORT NO. 3

December 15, 1975 - January 5, 1976

ARCHAEOLOGICAL EXCAVATIONS AND RECONSTRUCTION OF AHUENA HEIAU PLATFORM
AND HALE NANA MAHINA'AI AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine Vernon

Assistant Archaeologist and Field Recorder

Department of Anthropology

Bernice P. Bishop Museum

During this period, all four walls of the heiau platform were constructed to finished height, and archaeological excavation was begun.

The nine-person crew laid the foundation for the Northeast corner, completed the North wall to a height of 6 ft 3 in. at the Northwest corner base, and completed the East wall. The completed wall lengths and bearings are as follows:

North wall: 60.4 ft long, bearing 210° from Northwest corner
East wall: 60 ft long, bearing 315° from Southeast corner
West wall: 44.3 ft long, bearing 310° from Northwest corner
South wall: 58.9 ft long, bearing 50° from Southwest corner.

The walls were constructed according to the following general procedures:

- (a) existing foundations were stabilized, and new foundations were laid where necessary;
- (b) faced walls were raised, double-faced where possible;
- (c) spaces between faced walls and original platform were filled with stone and gravel.

Specifically, the following work was completed:

1. The East wall required a new foundation. Its bearing, different from that of the existing wall, allowed space for a double-faced core-

filled wall at least 40 in. wide at the base and 1 ft wide at the top.

2. The West portion of the North wall was laid on existing alignment. The foundation required stabilization.

3. Reconstruction of the West wall required removal of the backhoe ramp and joining of the Northwest and Southwest segments of the wall, a 17.5 ft-long segment.

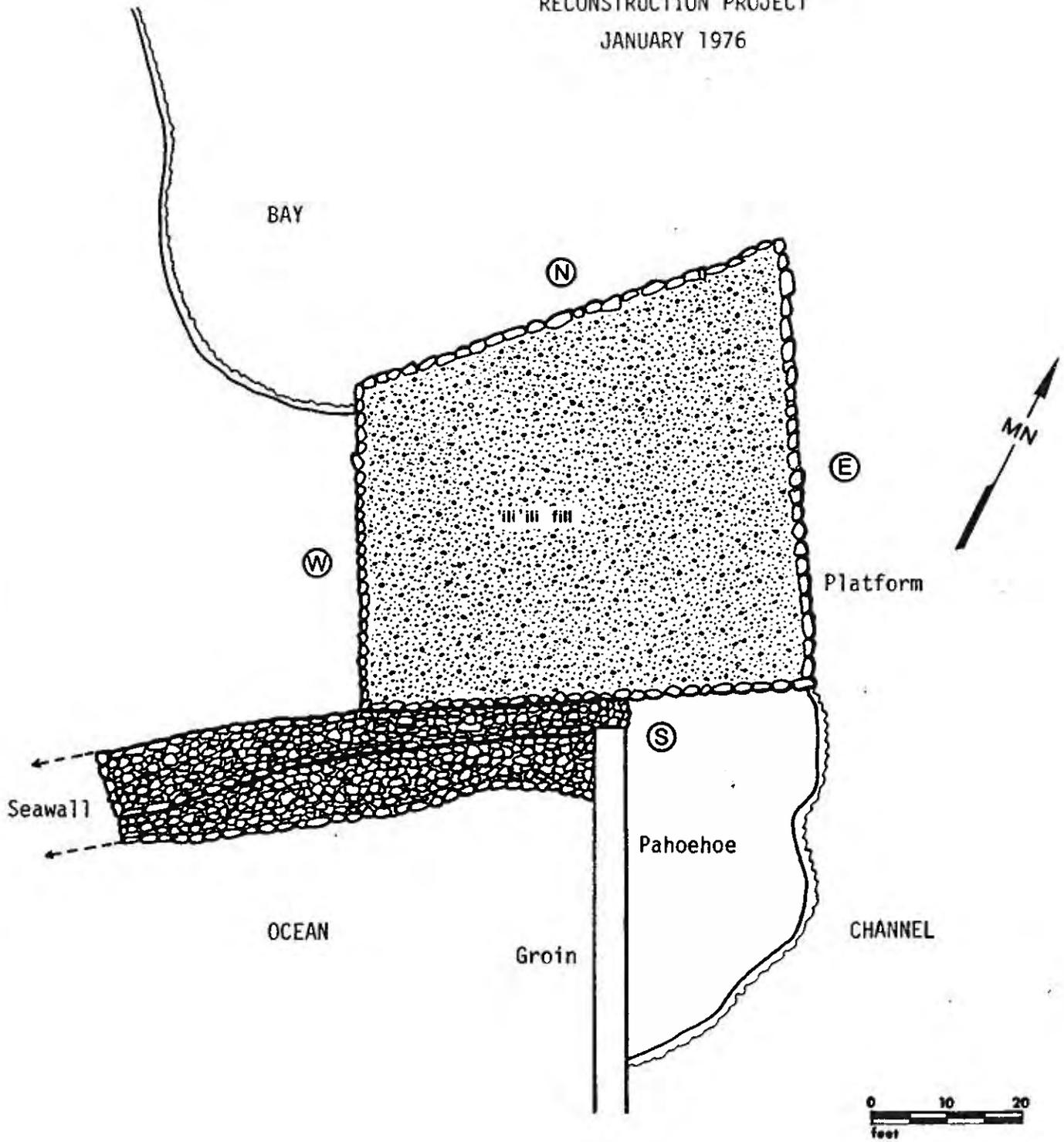
4. All rubble in the vicinity of the North and East walls of the heiau platform has been stacked by backhoe and by hand near the base.

5. Trench B is completely backfilled and the surface levelled.

6. The seawall stones from the groin to behind Hale Nana Mahina'ai were rearranged for protection of the heiau. This wall abuts the groin and extends for 66 ft; it is approximately 6 ft wide.

Dr. Yoshihiko Sinoto and archaeologist Tom Dye from Bishop Museum arrived on January 5, 1976 to direct excavation on the heiau platform and to locate Hale Nana Mahina'ai.

AHUENA HEIAU
RECONSTRUCTION PROJECT
JANUARY 1976



PROGRESS REPORT NO. 4

January 5 - January 16, 1976

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF AHUENA
HEIAU, HALE NANA MAHINA'AI, AND THE MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

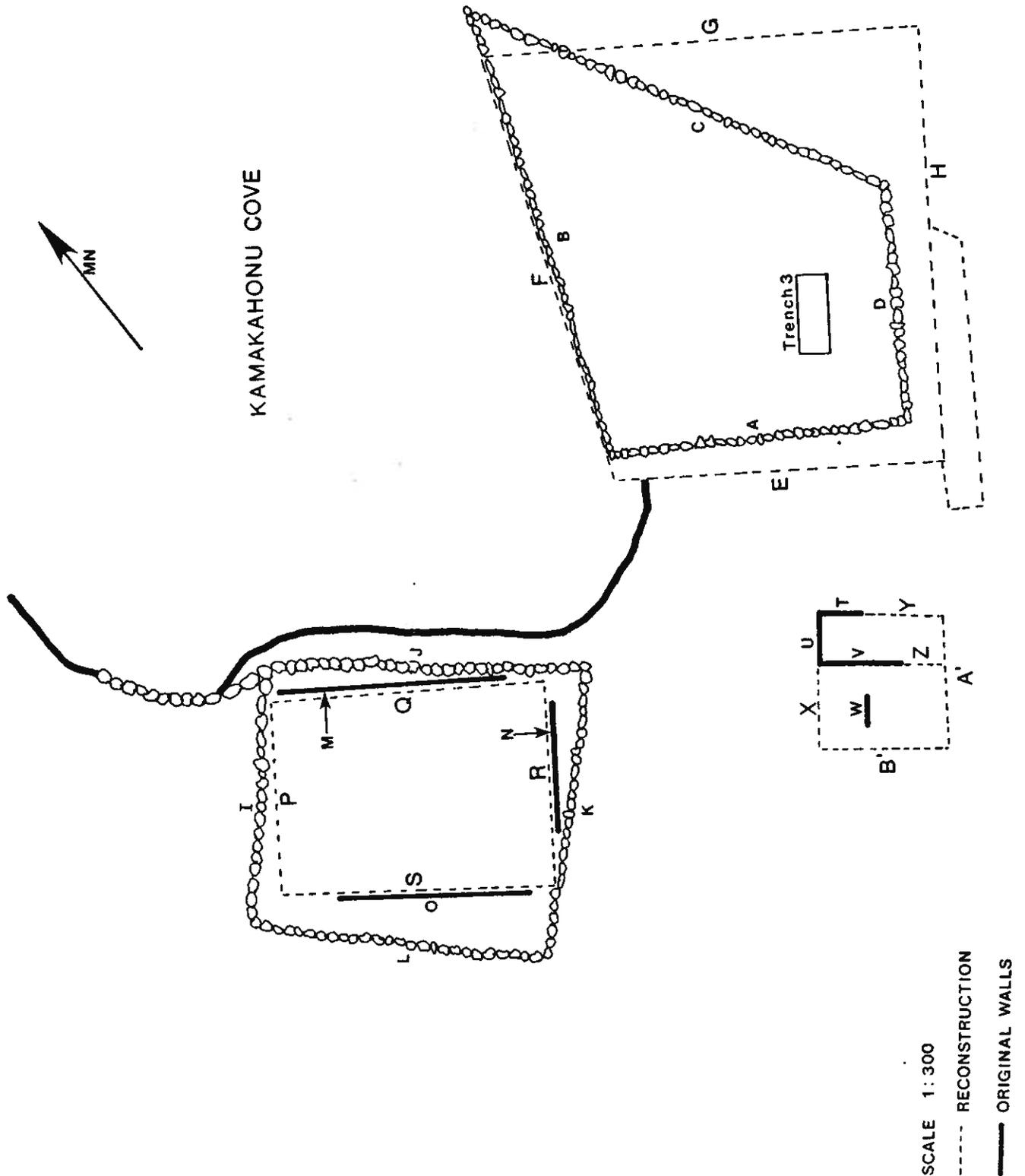
by

Catherine Vernon
Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop Museum

Dr. Yosihiko Sinoto, Museum Coordinator, and Mr. Tom Dye, Archaeologist, arrived to direct the excavation of test trenches on all features. The following work was undertaken:

1. Ahuena Heiau Platform: Trench 3, laid out parallel to Wall H, measured 1.5 meters wide, 4 meters long, and 1.45 meters deep. The trench was excavated in three natural layers. A well laid layer of waterworn stone was noted at the bottom. Artifactual remains were historic--glass fragments, metal fragments, and plastic. Trench 3 was recorded and backfilled.
2. Hale Nana Mahina'ai: The small tidal wave on November 29, 1975, revealed a stone pavement, approximately 9 meters West of the heiau platform. The site of the pavement is approximately the site of Hale Nana Mahina'ai shown in Choris' original sketch (Barrère 1975: fig. 3). The crew removed overburden by shovel from an 8 by 8 meter area. Layer I was excavated completely using trowel and brush. Four stone alignments (T, U, V, W) were found.
3. Mortuary Platform: Seven exploratory trenches were dug in the magazine platform. Portions of walls I and K were removed in the process of excavation. Three wall segments (N, M and O) from the original mortuary house platform were uncovered.
4. A subadult skeleton was found in a cyst located in the platform near Wall I. The State Health Department was notified. The remains were recorded and reinterred in the original cyst, and blessed by Elder Joseph Kahananui.

February 1976



SCALE 1:300

--- RECONSTRUCTION

— ORIGINAL WALLS

PROGRESS REPORT NO. 5

January 19 - January 30, 1976

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF AHUENA
HEIAU, HALE NANA MAHINA'AI, AND THE MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine Vernon
Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop Museum

Excavations during the previous two weeks determined the alignment and location of the Hale Nana Mahina'ai and the mortuary house platform. In this period, wall foundations were stabilized and the platform was reconstructed.

Reconstruction of Mortuary Platform:

1. All trees removed from the platform by backhoe.
2. Existing base stones of alignments M, N and O were reset.
3. Walls Q, R and S were built on the basestones of alignments N, N and O, and were extended to form right angle corners.
4. The Northeast wall (P) was built to form the platform.
5. The area between wall L and wall S was filled with sand to the level of the platform.
6. The measurements of the reconstructed platform are as follows:

Heights of the corners from the ground:

Corner SR: 66 cm
Corner QR: 112 cm
Corner PQ: 94 cm
Corner PS: 85 cm

Wall lengths:

Wall R: 9.5 meters (31.2 ft)
Wall Q: 11.4 meters (37.4 ft)
Wall S: 11.4 meters
Wall P: 9.5 meters

7. A large pahoehoe slab, found in the center of the platform, was reset in original position.
8. The area surrounding the platform was cleared of rubble, except on the sea side.
9. The crew built a wall from the mortuary platform to the hotel sea wall.

Reconstruction of Hale Nana Mahina'ai:

Excavation uncovered four stone alignments, T, U, V and W, and a fairly level area of stones. The following work was undertaken:

1. The crew laid base stones for alignments of X, Y, A' and B'. Stone alignments X and Y are based on the corner of alignments T and U. The overall dimensions of the platform are 12 by 20 ft.
2. Single faced walls were laid on the alignments X, Y, A' and B', and also on alignment Z.
3. The platform was filled to finished height by hand and by backhoe. The finished heights at the corners are:

XY: 37 cm

XB': 72 cm

B'A': 92 cm

A'Y: 32 cm

Average height of wall Z face: 43 cm.

Wall lengths:

X: 5.75 meters (18 ft 9 in.)

Y: 6.1 meters (20 ft 1 in.)

A': 5.75 meters

B': 6.1 meters

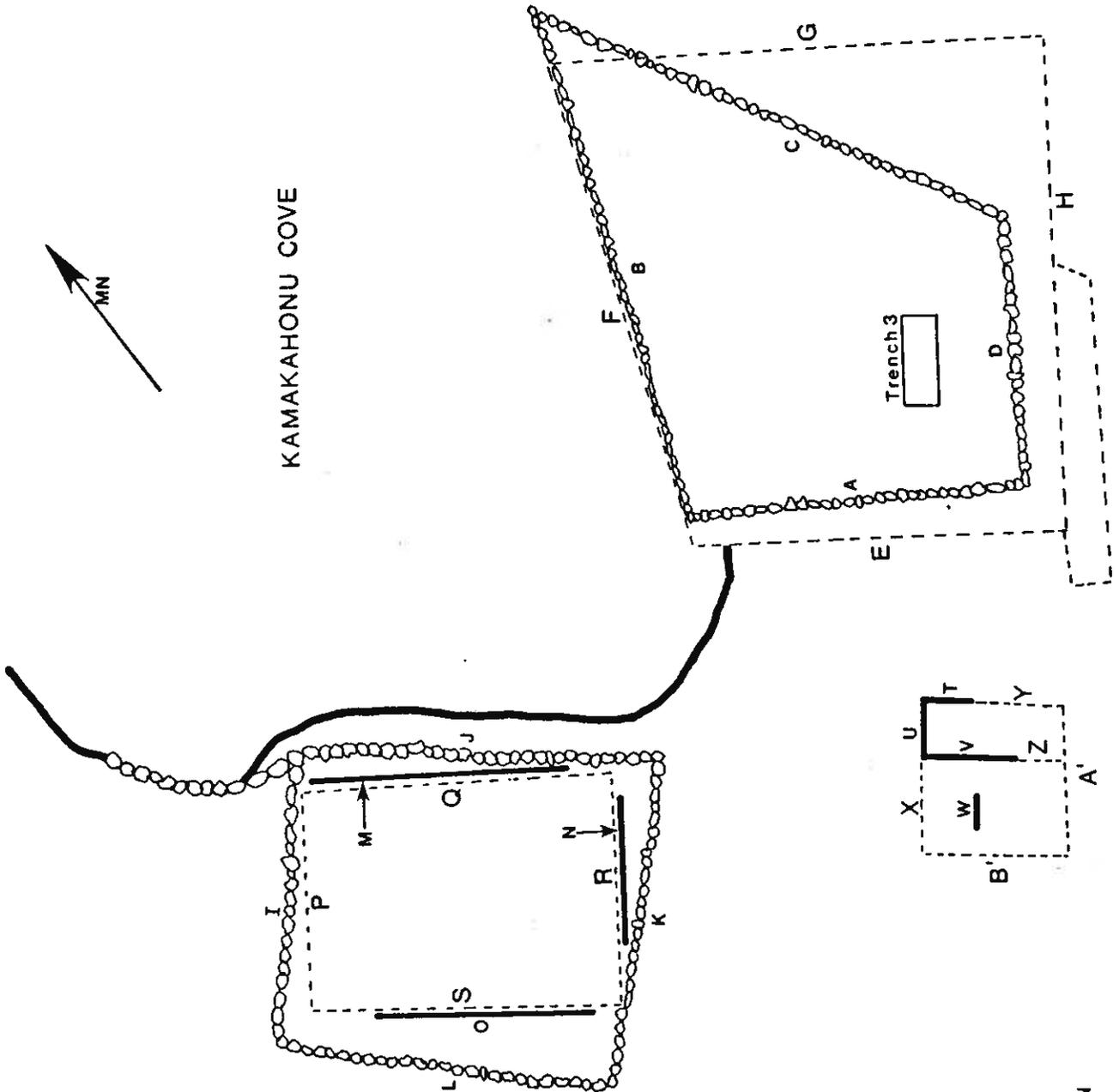
4. The crew cleared the surrounding area of rubble.

Collection of Building Materials for Reconstruction of the Superstructure:

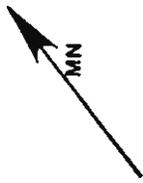
Mr. Sherwood Greenwell of Kealakekua Ranch kindly donated ohia from his ranch land to the Ahuena Reconstruction Project. The major cutting area is on the slopes of Mauna Loa above Kealakekua, at approximately the 4,000 ft elevation. Work consisted of selection, cutting, barking, and loading of trees, and hauling by truck to Ahuena Site.

Collection and drying of ti leaves for thatching began. Mr. Lauren Thurston offered the use of his brackish water ponds adjoining Kamakahonu for keeping of ohia logs until the construction begins, and for soaking of the ti leaves. Mr. Julian Akao tied 15 to 30 leaves in each bundle, soaked them in brackish water, and dried them for thatching. This work will continue until approximately 250,000 ti leaves have been processed.

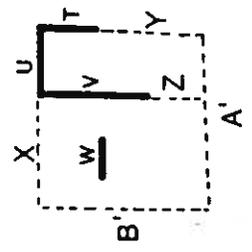
February 1976



KAMAKAHONU COVE



Trench 3



SCALE 1:300

- RECONSTRUCTION
- ORIGINAL WALLS

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PROGRESS REPORT NO. 6

February 1 to March 17, 1976

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF AHUENA
HEIAU, HALE NANA MAHINA'AI, AND THE MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine Vernon
Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop Museum

The first two weeks of February were utilized for the collection and preliminary preparation of *ohia* timbers from Kealakekua Ranch for the reconstruction of the components of the *heiau* platform and additional structures.

For the *hale mana*, *hale pahu*, and the *anu'u* tower of the *heiau* platform, and for the gabled *hale* and small guard's *hale* of the Hale Nana Mahina'ai, over 350 pieces of timber were collected. These ranged in diameter from 2 to 12 inches, and up to 24 ft in length. The timber was debarked to avoid dry rot.

In addition, 35 timbers, ranging from 3 to 9 inches in diameter and up to 12 ft in length, were cut for the hotel's *hale pahu*, and 56 timbers up to 8 inches in diameter and 20 ft in length were cut for the *luau* stage.

HALE PAHU

Construction of the hotel's *hale pahu* was begun on February 17. This drum house will be used for the hotel's torch-lighting ceremony, and was our restoration crew's learning vehicle. Twelve working days were used to complete this structure; each crew member participated in each phase of the construction. The reference for traditional notching and lashing of components is Russell A. Apple's *The Use, Construction, and Adaptation of the Hawaiian Thatched House* (National Park Service, U.S. Department of Interior, Washington, D.C., 1971). Unless otherwise stated, all notches and lashings were done according to this source.

The *hale pahu* was constructed on a 10-by-12-ft stone platform, built by Shield-Pacific. The 1-ft-high raised wall on the N, E, and S sides was refurbished by our stone masons. Overall measurements of the completed structure are 6 ft 8 inches by 10 ft and 12 ft high, with a thatched roof and open sides.

Procedures:

1. Eight postholes were dug in the platform to a depth of 2 ft.
2. Six 8-ft and two 9-ft posts, 8 inches in diameter, were notched for wall posts.
3. Post ends were preserved with creosote and linseed oil and covered with tar paper.
4. Posts were set into platform with cement.
5. Two wall plates, 5 inches by 11 ft, were lashed to posts using Sanyo-produced Kurilon 5/32-inch-diameter line. Wall plates were fitted to posts by hand, using chisel and mallet.
6. Cross pieces, 3 inches by 7 ft, were joined to wall posts on gabled ends, and lashed.
7. Eight rafters, 3 inches by 7 ft, were notched and lashed to wall plates.
8. Two ridgepoles, 3 inches by 11 ft, were throttle-lashed to rafters.
9. Two diagonal support beams, 3 inches by 12 ft, were notched and lashed to interior of rafters.
10. Ten stationary purlins, 3 inches by 7 ft, were lashed to rafters.
11. Waiawa (strawberry guava) wood, 1.5 to 2 inches in diameter, was collected and debarked. Twenty horizontal purlins, 11 ft long, and 10 vertical purlins, 6 ft long, were cut for use as thatching purlins, lashed to stationary purlins and rafters with #21 twisted nylon.

For the roof of this structure, fire-retardant prefabricated imported thatch will be used to be consistent with other hotel structures.

LUAU STAGE

This structure, on the hotel grounds outside the restoration area, is a three-walled structure with an extended covered area that will serve as a dressing room. It was constructed on a raised platform (built by Shield-Pacific), using six wall posts (8 inches by 9 ft) and two center posts (8 inches by 16 ft), two wall plates, eight rafters, ridgepoles, and 36 stationary purlins. Notching

and lashing methods were similar to those detailed above; ridgepoles were notched and lashed to center poles using a slight modification of Apple's method. A low wall was constructed to enclose the dressing room area, and support posts were attached to the rafter framework. A stairway and doorway were constructed on the S exposure of the stage for performers. The completed structure measures 10 by 12 ft and is 14 ft high.

HALE MANA

This structure, on the *heiau* platform, is centered on wall E (see map, Progress Report No. 5). Because of the massiveness and close positioning of the 18 posts used for this structure, a c. 3-ft-wide by 4-ft-deep trench was dug, and individual postholes were prepared within the trench. Stones were used in the bottom and sides of the postholes for bracing. Six wall posts, 12 inches by 12 ft, and twelve wall posts, 8 inches by 12 ft, were notched and moved onto the platform surface with a truck and crane. Post ends were preserved with creosote and linseed oil, covered with tar paper, and sealed with plastic asphalt. Timber rails and rollers were used to position the posts in the trench; posts were set with stone in postholes. Two ridgepoles were joined for a length of 29 ft, fitted, and lashed. The finished structure will measure 15 by 28 ft and over 8 ft high.

HALE NANA MAHINA'AI

Gabled *hale*

This structure will be a roofed and walled *hale* on top of the stepped platform. During this period, postholes were prepared and ten notched wall posts were set and braced with stones. Two wall plates were lashed to wall posts.

Guard's house

A 3-ft-by-4-ft "A-frame" guard's house, 5 ft high, was constructed on the northwest half of the lower step of the platform. Three rafters, 3 inches by 6 ft, were lashed to two throttle-lashed ridgepoles, 3 inches by 4 ft.

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PROGRESS REPORT NO. 7

March 18 to April 2, 1976

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF AHUENA
HEIAU, HALE NANA MAHINA'AI, AND THE MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine Vernon

Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop MuseumHEIAU PLATFORM

Hale mana. The crew constructed a temporary scaffold, 12 ft high, in the interior of the 15-by-28-ft area, surrounded on two sides by the wall posts and wall plates. The scaffold was used for lifting heavy members into place and also will be used for thatching.

Center posts were raised into position, extending 17 ft from the platform surface to the gullet. The ridgepole was fitted between the center posts and arched by means of a support post. Block and tackle were used to raise these members.

Eighteen rafters were notched, fitted, and lashed into position on the wall plate. When the second ridgepole is placed in position the actual height will increase by at least 1 ft.

Hale pahu. This A-frame structure, 10 by 8.5 ft and 13 ft high, with its longitudinal axis running *mauka-makai*, was completed 2 ft west of the *hale mana*, 11.5 ft east of Wall E. The north wall is aligned with the center of the *hale mana*.

Six rafters, two ridgepoles, two diagonal support beams, four gable supports, and 38 stationary purlins were notched and lashed into position.

HALE NANA MAHINA'AI

Gabled hale. Using the same techniques of lashing and notching described in Progress Report No. 6, the center posts, ridgepoles, diagonal roof supports, and 32 stationary purlins were placed in position. Door posts were notched and placed in the entrance. The completed framework measures 10 by 18 ft by 13 ft high, with a 5-ft-high entrance.

Inside the structure the crew built a temporary scaffold, which will be removed when thatching is completed.

Guard's house. All stationary purlins and ridgepoles are lashed into position on this structure, which measures 7 by 5 ft by 6.5 ft high. Two wraps were used due to the small diameter (1 to 2 in.) of the purlins.

In the *makai* area, the rest of the lower step of the Hale Nana Mahina'ai platform has been reset with smooth paving stones.

PROGRESS REPORT NO. 8

April 5 to 19, 1976

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF AHUENA
HEIAU, HALE NANA NAHINA'AI, AND THE MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAIIby
Catherine VernonAssistant Archaeologist and Field Recorder
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During this two-week period, work continued on the structures, using the techniques described in the previous reports. Much effort was expended by the crew to complete the frameworks of the *heiau* platform structures by April 9, the day that the King Kamehameha Hotel hosted the general meeting of Island Holiday stockholders.

The crew also erected three signposts in the reconstruction area. The signs were designed by David Roy and Herb Kane, and describe the *heiau* platform, the Hale Nana Mahina'ai, and the mortuary platform. The reconstruction area is already being visited by many people.

HEIAU PLATFORM

Hale mana. The second ridgepole was lashed to the first, using 14 throttle lashes. All rafters, lashed with "figure 8" lashes, were trimmed. Postholes were prepared, and four 12-ft endposts, 7 to 8 in. in diameter, were notched, preserved, erected, and lashed into position. Each endpost is 3.5 ft from the center post of each end wall.

Four diagonal bracing members, 7.5 ft long and 3 in. in diameter, were cut and lashed into position. Stationary purlins, 2 in. in diameter, were lashed into position on the walls at 16-in. intervals. Six beams or rafter supports, 7 ft in length, were notched and lashed into place, extending from rafter to rafter at a height of 14 ft.

All wall posts, center posts, ridgepoles, diagonal beams, and stationary purlins have been lashed into position. The platform surface was cleaned.

Anu'u tower. Postholes were prepared for the 16-ft-high tower, located 7 ft from Wall E and 8 ft from Wall B. The four vertical posts, 5 in. in diameter, were erected. Three horizontal, notched-and-lashed frameworks, or "floors," were completed. The center framework, 6 ft above the platform surface, measures 4 by 5 ft; the others measure 3 by 5 ft. All vertical and horizontal components are fixed in place.

THATCHING

From April 12 to 14, half of the crew collected material for thatching purlins--*waiawi*, 1 to 2 in. in diameter and 10 to 12 ft long. This material was donated by Mr. and Mrs. Manuel Freitas of Kona. Barking began on Monday, April 19.

PROGRESS REPORT NO. 9

April 19 to May 3, 1976

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF AHUENA
HEIAU, HALE NANA MAHINA'AI, AND THE MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine Vernon
Assistant Archaeologist and Field Recorder
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Bernice P. Bishop Museum

AHUENA HEIAU--THATCHING OF STRUCTURES

Materials Collection and Preparation

The crew spent one day in Mountain View, collecting longer, straighter *waiawi* for thatching purlins for the *hale mana*. Four days were used to bark approximately 1,000 lengths for use as thatching purlins for the *heiau* platform structures.

Hale Mana

Sixteen vertical thatching purlins were lashed on the front and back walls and roof of the *hale mana*, using #21 twisted nylon and techniques described by Apple.* During this period the crew lashed 200 horizontal purlins into position at two-finger intervals. This distance results in three thatching purlins between each two stationary purlins.

The center support post for the ridgepole has been removed.

Hale Pahu

For this structure we were able to use the shorter purlins that had already been cut and barked. Using the same techniques described above, the crew lashed and trimmed all vertical and horizontal purlins. One hundred twenty-five pieces of *waiawi* were needed to complete the thatching framework on the *hale pahu*.

* Russell A. Apple. *The Use, Construction, and Adaptation of the Hawaiian Thatched House*. National Park Service, U.S. Department of Interior, Washington, D.C. - 1971.

PROGRESS REPORT NO. 10

May 4 to May 29, 1976

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF AHUENA
HEIAU, HALE NANA MAHINA'AI, AND THE MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine Vernon
Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop MuseumHeiau Platform

A smooth, stone-paved area forming a courtyard on the *heiau* platform was completed. It extends to the proposed fenceline.

The remainder of the platform, including the interiors of the structures, has been levelled with roughly laid stone.

Thirty-one postholes, approximately 2 ft deep, were dug for fenceposts. Fenceposts are 6 to 8 inches in diameter and were erected at 5-ft intervals to enclose the *heiau* structures. Posts will be cut to a finished height of 3 ft.

Thatching

All thatching purlins, both vertical and horizontal, have been attached to all structures.

A total of 1,043 purlins was used: 433 for the *hale mana*, 107 for the *anu'u* tower, 125 for the *hale pahu*, 218 for the Hale Nana Mahina'ai, and 160 for the *luau* stage.

Materials Collection

The entire crew returned to Mr. Greenwell's Kealakekua Ranch to cut 'ōhi'a timbers for the *heiau* fence. In two days, 170 pieces of 'ōhi'a

ranging from 3 to 4 inches in diameter and from 10 to 14 ft in length, were cut, loaded, and delivered to the Ahuena site. Ten 12-ft long posts, 8 inches in diameter, were also cut.

Barking of the 'ōhi'a began on May 29.

PROGRESS REPORT NO. 11

June 3 - June 28, 1976

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF AHUENA
HEIAU, HALE NANA MAHINA'AI, AND THE MORTUARY PLATFORM
AT KAMAKAIONU, NORTH KONA, ISLAND OF HAWAII

by
Catherine Vernon
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Heiau Platform

A total of 620 'ōhi'a fence posts and 28 cross pieces, 10 ft long, was cut. Posts and cross pieces were tied into position, except for a 15-ft section on the west line, left for access. A shallow trench was dug along the fence line for placement of posts. Kuralon line, dyed using fresh 'ōhi'a bark boiled in salt and fresh water, was used for the lashing. The dyed line is the same color as sun-dried 'ōhi'a.

The firepit in the interior of the Hale Mana was completed. It is centrally located and constructed of waterworn stones. It is approximately 2 ft by 2 ft, and 1 ft deep.

Crushed aa was spread in the interior of the Hale Mana and on the platform outside of the fence. Surface leveling on the heiau has been completed.

Hale Nana Mahina'ai

To insure an arched ridgepole on the gabled house, a jointed 'ōhi'a pole was lashed to the top ridgepole, adding 3 in. to the height of the roof at its center. A spreader is in position between the two poles. The interior of the gabled house was leveled with crushed aa.

Mortuary Platform

A pathway was reconstructed running from Wall Q to a large pūhoehoe slab, parallel to Walls P and N. It is 16 ft 6 in. long, 3 ft 4 in. wide, and 8 in. deep. A large stone was laid on the sand at the base of the pathway on Wall Q, forming a step.

Crushed aa was spread on the platform surface to complete its leveling.

Gordon MacKenzie donated a large breadfruit (*ulu*) tree, which is presently being cut and planed to make door frames for the Hale Mana and the gabled Hale Nana Mahina'ai.

Luau Stage

Thatching has been lashed to the roof of the stage and the crew has begun work on the bonneting. Bonneting for rain-proofing is made from banana sheath, 6 to 8 in. in width and 2 ft 6 in. long, avoiding splits. The methods used for attachment are the same as those used on Hale-o-Keawe, as described by Russell Apple.

Progress Report No. 12

June 29 - July 19, 1976

ARCHAEOLOGICAL EXCAVATIONS AND RECONSTRUCTION OF
AHUENA HEIAU PLATFORM, HALE NANA MAHINA'AI, AND
THE MORTUARY PLATFORM AT KAMAKAHONU,
SOUTH KONA, ISLAND OF HAWAII

by

Catherine Vernon

Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop Museum

HEIAU PLATFORM

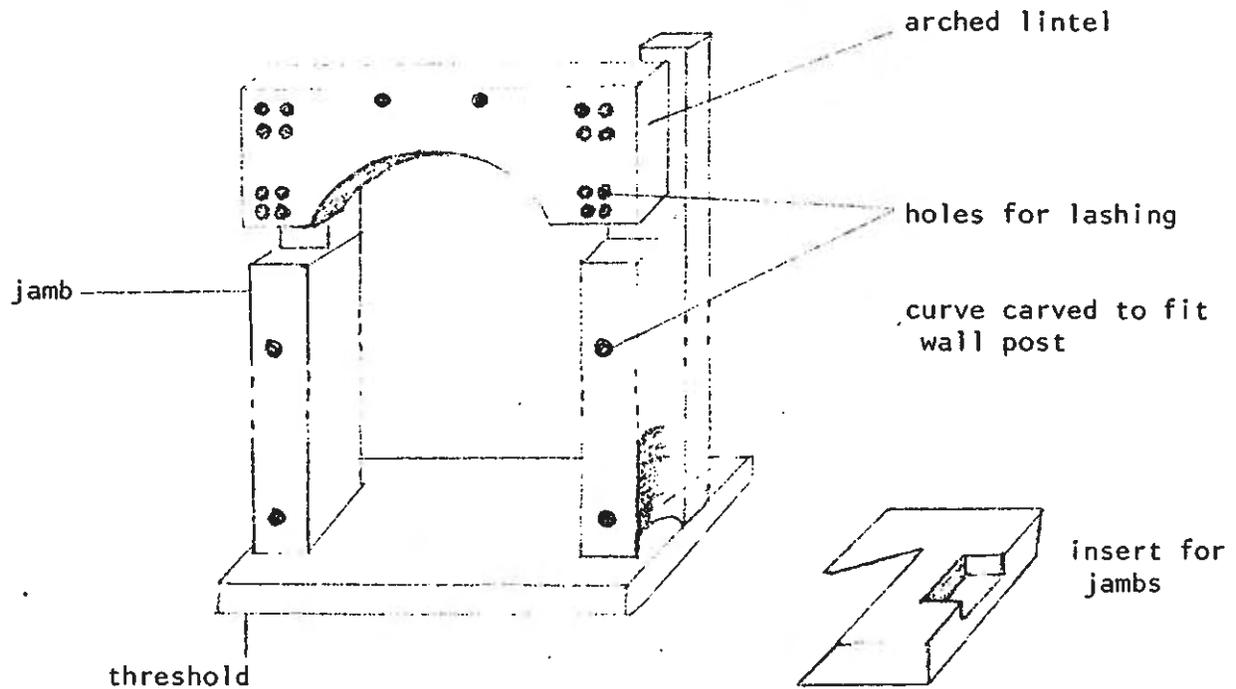
During the last three weeks the door frames for the *hale mana* and *hale pahu* were fashioned and installed. The unseasoned breadfruit ('ulu) tree wood was cut and rough-planed into planks of varying thickness with power tools. These planks were used as frame components. The pieces were fitted by adz and chisel, lashed into position using holes drilled for that purpose, and preserved against insect damage. Each door frame consists of four pieces: the threshold, two jambs, and an arched lintel. The arched lintel for the *hale pahu* had to be laminated, and all pieces requiring repair due to unseen rot were patched.

Hale mana: Overall height of frame is 6 ft. The entry is 2 ft 2½ in. wide and 5 ft high at the center of the arch.

Hale pahu: Overall height of frame is 3 ft 11 in. The entry is 2 ft 2½ in. wide by 3 ft 6¾ in. high.

HALE NANA MAHINA'AI

The same techniques were used on the gabled house door frame as are described above. The overall height of the door frame is 5 ft 1 in., and it is lashed to the wall plate on top of the lintel. The entry is 2 ft ½ in. wide by 4 ft 5¾ in. high at the center of the arch.



HOTEL STRUCTURES

Bonneting was completed on the *luau* stage and on the *hale pahu*. Banana sheath, scraped clean with an *opihī*-shell scraper, was attached, using the technique described for Hale-o-Keawe in *The Hawaiian Thatched House* (Apple 1971).

PROJECT 154

Progress Report No. 13

August 3 - September 3, 1976

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF THE
AHUENA HEIAU PLATFORM, HALE NANA MAHINA'AI,
AND THE MORTUARY PLATFORM AT KAMAKAHONU, SOUTH
KONA, ISLAND OF HAWAII

by

Catherine S. Vernon

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All structures have been protected from insect damage by the application of Penta V.

Thatching is underway on the Hale Nana Mahina'ai gabled house. The structures on this platform require sugarcane thatch. Dry sugarcane leaves are collected in Honokaa, and tied in bundles of approximately 50 leaves each. One 3/4-ton truckload is collected at a time. Each square foot of the structure requires approximately 40 leaves.

The leaves are soaked in brackish water in order to preserve them and make them pliable. As an experiment, bundles were soaked in a 55-gallon drum; presently, however, they are soaked in Mr. L. Thurston's brackish-water pond, adjacent to the hotel grounds.

Thatching begins on the lowest horizontal purlins. Each purlin is covered consecutively to hold the lower thatch in place. Leaves are applied wet. Each leaf must be opened by hand along its midrib in order to secure it to its neighbor. A scaffold was erected on the exterior of the gabled house so workers could reach the roof.

Leaves are folded over each horizontal purlin with the broad halves on the interior forming a smooth, decorative pattern. Vertical purlins are camouflaged by wrapping each leaf horizontally, folding its broad end along the midrib to avoid tearing it where it wraps around a purlin,

and crossing and securing its ends under leaves laid vertically on the horizontal purlins.

Thatching of the south, north, and west walls of the gabled house has been completed, and the west half of the roof is covered. The last load of sugarcane has been collected and the platform structure will soon be finished.

PROJECT 154

Progress Report No. 14
September 4 - 20, 1976

Paul Rosendahl
Bishop Museum

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF
THE AHUENA HEIAU PLATFORM, HALE NANA MAHINA'AI,
AND THE MORTUARY PLATFORM AT KAMAKAIONU, NORTH
KONA, ISLAND OF HAWAII

by

Catherine S. Vernon

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The reconstruction crew has completed thatching of the two structures on the Hale Nana Mahina'ai Platform. The gabled house and the guards' shelter both require bonneting with banana sheath and more sugarcane thatch for waterproofing. Exterior scaffolds, and lines for securing the top layers of thatch, remain in position.

On September 4, the crew began thatching of the remaining walls of the *luau* stage with *lauhala* leaves. After the already-prepared bundles were used, it was necessary to collect, dethorn, and soak additional material.

When the stage is completed, bonneting will begin on the Hale Nana Mahina'ai structures.

PROJECT 154

Paul Rosendahl
Bishop Museum

Progress Report No. 15
September 30 - October 19, 1976

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF THE
AIIUENA HEIAU PLATFORM, HALE NANA MAHINA'AI,
AND THE MORTUARY PLATFORM AT KAMAKAHONU, NORTH
KONA, ISLAND OF HAWAII

by
Catherine S. Vernon

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LUAU STAGE

Lauhala has been collected, processed, and applied to the *luau* stage. The three walls and the interior of the stage roof have been covered.

Processing of the *lauhala* consists of dethorning, soaking, cleaning, and pressing. The roller used for pressing is a hand-crank wringer similar to that on an old-fashioned washing machine.

The *lauhala* is woven between the purlins while still wet. When it dries, the thatch is permanently set. The exposed edges and vertical purlins were covered by split and woven (or braided) *lauhala*.

When comparing the two thatched structures, Hale Nana Mahina'ai and the *luau* stage, one can see that the sugarcane thatch forms a cooler interior with more air circulation. The *lauhala* forms a smooth, silky interior, but a warmer one.

Progress Report No. 16
October 20 - November 4, 1976

Paul Rosendahl
Bishop Museum

ARCHAEOLOGICAL EXCAVATIONS AND RECONSTRUCTION OF AHUENA
HEIAU PLATFORM, HALE NANA MAHINA'AI, AND MORTUARY PLATFORM
AT KAMAKAHIONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine Vernon

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LUAU STAGE

Thatching was completed on the *luau* stage. The Pressing Room door was made in the same manner as a *ti*-leaf raincoat.

HALE NANA MAHINA'AI

Banana stalk was collected, scraped, cut into approximate 3-ft. lengths, and applied to the top layer of sugarcane leaves. For effective waterproofing, the sheathing was lapped four or five layers deep.

To form the bonneting thatch, two more purlins were added parallel to and slightly lower than the ridgepole. These purlins were covered with sugarcane leaves, locking the banana sheathing into place.

Small bundles of wet sugarcane leaves were inserted on alternate sides of the ridgepole between the newly-thatched purlins, and sewn onto the bonneting purlins with no. 23 nylon line. Disguising the alternation of the bundles requires careful craftsmanship, due to the fragility of the sugarcane leaves and closeness of the bundles. Because the bonneting is sewn on, there is no need for exterior purlins.

HALE PAHU--Ahuena Platform

The skeleton of the Hale Pahu was prepared for thatching. (Purlins which had fallen out of position were straightened.) Penta V was applied liberally to protect the *'ohi'a* and *waiawi* from insects.

The crew began processing lauhala for this structure, using the same steps described in previous reports.

Progress Report No. 17

November 5-19, 1976

ARCHAEOLOGICAL EXCAVATIONS AND RECONSTRUCTION OF AHUENA
HEIAU PLATFORM, HALE NANA MAHINA'AI, AND MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine S. Vernon

Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop MuseumHALE NANA MAHINA'AI

The exterior scaffolding was removed and the sugarcane thatch was repaired under its members.

HALE PAHU

Lauhala-leaf processing continues for the thatch on the *hale pahu*. The rolls of prepared *lauhala* must be stored carefully, kept moist, and used before the leaves become too dry, or the soaking process has to be repeated. The initial soaking requires twenty-four hours, for best results. The leaves will curl as they dry if the fibers are soaked too long or not long enough.

Thatching began on the *hale pahu* on November 8. The light-colored areas covering the front, back, and three vertical, 2-ft-wide strips on each side, were completed on November 19, leaving two vertical strips of dark-colored *lauhala*, 2 ft wide, on each side of the structure.

Leaves at least 3 ft long are needed, as each leaf is doubled over five purlins. To form the figure-8 pattern used on the *hale pahu*, the leaf is passed behind the bottom purlin, in front of the second and third, inside the fourth, around the top, inside the fourth and outside the third and second. The end is tucked under the first purlin. The leaves are applied wet, and are overlapped to hold one another in place vertically and horizontally. Tucking the ends of all leaves under the purlins results in a smooth surface, enhancing the material's shiny appearance.

All vertical purlins, except those in the designated "dark areas," have been covered with split and woven *lauhala*. Mr. David Roy began experiments to extract a red dye from *kukui* bark. The dark areas on the *hale pahu* will be covered with dyed *lauhala* leaves to simulate red *lauhala*, which is no longer available in quantity in this area.

Progress Report No. 18
November 20 - December 3, 1976

ARCHAEOLOGICAL EXCAVATIONS AND RECONSTRUCTION OF AHUENA
HEIAU PLATFORM, HALE NANA MAHINA'AI, AND MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine S. Vernon

Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop Museum

HALE PAHU--AHUENA PLATFORM

The *kukui* dye procedure has been completed and all areas requiring the dark-colored *lauhala* have been covered.

Dyeing Process

Kukui-tree bark was collected from the lower two feet of tree trunk. Care was taken to avoid girdling the trees used. The bark was shredded; 40 gallons of carrot-colored fiber were produced and used in the extraction process. Each of ten 5-gallon tins was filled half-full with the *kukui* fiber, one handful of Hawaiian salt, and $\frac{1}{2}$ pint of vinegar. The tins were then filled to the brim with water. The mixture was boiled from $1\frac{1}{2}$ to 2 hours, until the desired color of dye was obtained. The dye solution was then strained through burlap. Total yield was 75 gallons of dye.

Prepared *lauhala* rolls were soaked overnight in the dye, in a 55-gallon drum. Then they were boiled over a low fire in galvanized tubs until an even coloring was obtained. This dyed *lauhala* contrasts nicely with the natural-colored fibers. Areas completed before the Thanksgiving holiday have begun to fade evenly, and the desired effect has been achieved.

In order to complete the *hale pahu*, more *lauhala* was collected, processed, dyed, and applied. Mr. Roy has fortunately located two red *lauhala* trees, which yield a leaf of a color which will be useful for future maintenance of the structure.

Progress Report No. 19
December 3 - January 3, 1977

ARCHAEOLOGICAL EXCAVATIONS AND RECONSTRUCTION OF AHUENA
HEIAU PLATFORM, HALE NANA MAHINA'AI, AND MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine S. Vernon

Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop Museum

HALE MANA

Approximately 3,450 bundles of *ti* leaves have been applied to the *Hale Mana*. These thatch bundles cover the east and south walls and one-half of the west wall. The preparation includes gathering the dry *ti* leaves, pre-sorting according to quality, gathering into large bundles of approximately 50 leaves, soaking bundles in a mixture of fresh and salt water for at least 24 hours, and finally, making each thatch bundle.

Each thatch bundle consists of sixteen leaves--ten leaves to form the thatch itself, two leaves of good quality to tie the bundle to the purlin, three leaves for stability and interior decoration, and one to tie the bundle. The leaves must be wet and pliable and the bundles must be applied before they become too dry. Each workday consists of making bundles and then applying them in the afternoon, using the same techniques described by Russel Apple for use on the *Hale o Keawe*. We are using a spacing of two inches or "two fingers" to maintain the interior design and to avoid using an unnecessary number of leaves.

The leaves have a rich, deep color and form a thick and beautifully textured thatch. The interior design is quite striking and decorative juxtaposed with the smooth silver 'ōhi'a posts. It should be a most beautiful building when completed.

HALE NANA MAHINA'AI

The door securing the entrance to the large gabled structure has been placed in position. Hopefully this door will prevent vandalism and improper use of the sugarcane-thatch structure. It is made of oiled heartwood of the 'ōhi'a. It has two handles for removal, and the smooth texture of the deep-red wood is nicely set off by the surrounding thatch. For entrance, the door must be removed; it is not on hinges for reasons of security.

RECONSTRUCTION AREA

Other projects completed during December include the placement of the last three sections of the fence enclosing the structures on the *heiau* platform, and the construction of a *halau*. This building shades the area for *ti*-leaf bundling and will also serve as a shelter for the image carvers. It is made of lashed 'ōhi'a posts with coconut leaves for roofing and side walls. It is located on the west side of the Mortuary Platform and will be removed when it is no longer needed.

Progress Report No. 20
January 4 - February 4, 1977

ARCHAEOLOGICAL EXCAVATIONS AND RECONSTRUCTION OF AHUENA
HEIAU PLATFORM, HALE NANA MAHINA'AI, AND MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine S. Vernon
Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop Museum

HALE MANA

The major effort for the past month at Kamakahonu has been towards the completion of the *hale mana* thatch. All four walls have been finished to the roof, including the gabled ends. Two small, square openings, 12 by 18 inches, have been left near the peak of the gabled ends for ventilation and air circulation. Except for the top two purlins, the south side of the roof is complete, to the height of the fern cover on the ridge, which will be applied as part of the bonneting.

The crew lays on an average of 500 bundles or 8,000 leaves per day. Due to difficulties encountered with suppliers, the crew collects its own ti leaves. One or two days per week has been devoted to collection, depending upon available supplies. We are using the same techniques as previously described for making and applying bundles of ti leaves.

Progress Report No. 21
February 5 - February 18, 1977

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF AHUENA
HEIAU PLATFORM, HALE NANA MAHINA'AI, AND MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine S. Vernon
Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop Museum

HALE MANA

The crew completed thatching the north side of the roof. A total of 72,496 ti leaves were collected and made into bundles, as previously described. The thatch on both sides of the roof extends up to the fifth purlin below the ridgepole, leaving a space of approximately 25 inches. When the bonneting is applied to this space the structure will be complete.

The bonneting procedure insures a weatherproof structure. Banana stalks will be collected and the sheath will be scraped and applied 6 to 8 layers deep over the ridge as previously described for the Hale Nana Mahina'ai. The sheathing will be covered and held in place by fern ('*ama'u*) trim as depicted by Choris in 1816.

HEIAU PLATFORM

The *amu'u* remains unfinished until the tapa cloth is applied. Various small adjustments remain, such as tightening any loose lashings. The temporary *halau* in the reconstruction area is slated for removal when no longer required. When the structures have been completed the images must be carved to conform to Choris' original sketch.

Progress Report No. 22
February 20 - March 4, 1977

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF AHUENA
HEIAU PLATFORM, HALE NANA MAHINA'AI, AND MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine S. Vernon

Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop Museum

HALE MANA

The bonneting procedure has begun on the *hale mana*. All lashings of timbers on the ridge section have been checked. The ridgepoles holding the rafters in place have been tightened by relashing and adding throttle lashes. There are now 17 throttle positions on the ridgepoles.

Sixty banana trunks have been collected, each yielding approximately seven sheaths. Each sheath was scraped using an *'opih*i shell, as previously described for the Hale Nana Mahina'ai, the edges trimmed, and the sheath cut into 6-ft lengths. The cleaned sheaths were laid over the ridge, six to eight layers thick to insure its weatherability. The sheaths were held in place temporarily by line, ti leaves, and soaked burlap bags for proper drying until the *'ama'u* fern covering can be applied. The bonneting, one-third complete on the ridge, has already proven quite waterproof.

The traditional decorative fern trim for the *hale mana* will cover the entire ridge, including the top 3 ft on each side, the gable edges, and the wall corners of the building. *'Ohi'a* purlins, 2 inches in diameter, were collected and debarked. These purlins--five on each side of the ridge, one on top of the ridge, and two along the edges of the gable and wall corners--are spaced using the "four finger" measure and will be the foundation for the fern trim. The ridge purlins are attached to the outside edge of the ridge and extend toward the center, where the banana sheathing was perforated in order to attach the center vertical support purlin.

The reconstruction area is already often visited by hotel guests. In order to keep the area tidy all materials not needed for ongoing work are promptly removed. The small soaking pond on the northwest corner of the *heiau* platform has been removed, leaving a stacked-stone footing for the platform.

Progress Report No. 23
March 5 - March 17, 1977

ARCHAEOLOGICAL EXCAVATION AND RECONSTRUCTION OF AHUENA
HEIAU PLATFORM, HALE NANA MAHINA'AI, AND MORTUARY PLATFORM
AT KAMAKAHONU, NORTH KONA, ISLAND OF HAWAII

by

Catherine S. Vernon

Assistant Archaeologist and Field Recorder
Department of Anthropology
Bernice P. Bishop Museum

The reconstruction area at Kamakahonu has been completed. The fern trim on the *hale mana* is completely attached and the structure has been sprayed with fire retardant. The interior and exterior scaffolding have been removed and the platform has been cleaned.

Preparing the '*anu'u*' for tapa application was quite painstaking. All places that might cause tearing in the wind were adjusted, and surfaces were improved for better contact between glue and tapa. The tapa was coated with a silicone sealant and cut to the tower dimensions. The four resulting pieces were laid onto the tower with contact cement, and the entire covering was painted with a solution of white glue to improve its weatherability. The finished surface has a sculptured appearance.

APPENDIX B—Declaration of Restrictive Covenants

R-542

STATE OF HAWAII
BUREAU OF CONVEYANCES
RECORDED

DEC 02, 1993 09:15 AM

Doc No(s) 93-199813

/s/ S. FURUKAWA
REGISTRAR OF CONVEYANCES

CONVEYANCE TAX: \$0.00

LAND COURT SYSTEM

After Recordation Return by Mail

P/U

DLNR - Historic Pres. 587-0047

R/S

TITLE OF DOCUMENT:

ASSIGNMENT OF DECLARATION OF RESTRICTIVE COVENANTS

PARTIES TO DOCUMENT:

Assignor: ISLAND HOLIDAYS, LTD.

Assignee: DEPARTMENT OF LAND AND NATURAL RESOURCES, STATE OF HAWAII

PROPERTY DESCRIPTION:

Lot 1-C, shown on Map 3, Ld. Ct.
App. No. 420, situate at
Lanikai 1 and 2, No. Kona
Island and County of Hawaii

LIBER/PAGE:

DOCUMENT NO.:
TRANSFER CERTIFICATE OF
TITLE NO(S): 364,608

ASSIGNMENT OF DECLARATION OF RESTRICTIVE COVENANTS

KNOW ALL MEN BY THESE PRESENTS:

That ISLAND HOLIDAYS, LTD., a Hawaii corporation, whose principal place of business and post office address is 700 Bishop Street, 20th Floor, Honolulu, Hawaii 96813 ("Assignor"), the Grantee under that certain Declaration of Restrictive Covenants ("Restrictive Covenants") dated January 10, 1991, made by HKK,

Inc., a Hawaii corporation, as Covenantor, filed in the Office of the Assistant Registrar of the Land Court of the State of Hawaii as Land Court Document No. 1794200 and noted on Transfer Certificate of Title No. 364,608, for and in consideration of the covenants contained herein made by the STATE OF HAWAII, by and through its Board of Land and Natural Resources and State Historic Preservation Division, whose principal place of business is 33 South King Street, 6th Floor, Honolulu, Hawaii 96813 ("Assignee"), does hereby assign, transfer and convey unto Assignee, all of Assignor's rights, duties and obligations as Grantee, in, to and under the Restrictive Covenants covering the parcel of real property described in Exhibit "A" attached hereto and made a part hereof.

AND Assignee, in consideration of the foregoing assignment hereby covenants and agrees to and with Assignor and HKK, Inc., as Covenantor under the Restrictive Covenants, to faithfully observe and perform all of the duties, obligations, provisions, covenants and conditions of Assignor as Grantee under said Restrictive Covenants, including all preservation and conservation purposes noted therein.

HKK, Inc., the Covenantor named in the Restrictive Covenants, hereby consents to the foregoing assignment on the condition that nothing herein shall be construed as being a waiver of any of the terms covenants and conditions of said Restrictive Covenants.

IN WITNESS WHEREOF, the Assignor, the Assignee and said HKK, Inc. have executed these presents this _____ day of _____, 1991.

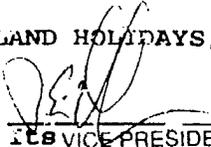
Approved as to Form:

By



ISLAND HOLIDAYS, LTD.

By



ITS VICE PRESIDENT

By

ITS

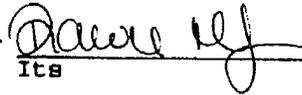
Assignor

STATE OF HAWAII

Approved as to Legality and Form:

Office of the Attorney General

By



ITS

Approved:

State Historic Preservation
Division

By



ITS

Board of Land and Natural
Resources

By

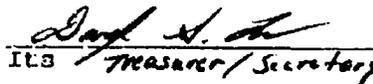


ITS

Assignee

HKK, INC.

By



ITS Treasurer/Secretary

STATE OF HAWAII)
CITY AND COUNTY OF HONOLULU) SS.

On this 3rd day of August, 1993, before me appeared P. ERIC HOHMANN and _____, to me personally known, who, being by me duly sworn, did say that they are the VICE PRESIDENT and _____, respectively, of ISLAND HOLIDAYS, LTD., a Hawaii corporation, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Directors; and said officers acknowledged that they executed said instrument as the free act and deed of said corporation.

Sandra U. Ashby
Notary Public, State of Hawaii
My commission expires: 2/14/94.

STATE OF HAWAII)
CITY AND COUNTY OF HONOLULU) SS.

On this ____ day of _____, 19__, before me appeared _____ and _____, to me personally known, who, being by me duly sworn, did say that they are the _____ and _____, respectively, of DEPARTMENT OF LAND AND NATURAL RESOURCES, STATE OF HAWAII, by STATE HISTORIC PRESERVATION DIVISION, and that said instrument was signed on behalf of said DEPARTMENT OF LAND AND NATURAL RESOURCES, STATE OF HAWAII, by STATE HISTORIC PRESERVATION DIVISION, and said _____ and _____ acknowledged that they executed said instrument as the free act and deed of said corporation.

Notary Public, State of Hawaii
My commission expires: _____.

STATE OF HAWAII)
) SS.
CITY AND COUNTY OF HONOLULU)

On this 18th day of May, 1943, before me ap-
peared Darryl H. Lee to me personally known, who, being
by me duly sworn, did say that he is the Treasurer Secretary of HKK,
INC., a Hawaiian corporation, and that said instrument was signed
and sealed on behalf of said corporation by authority of its Board of
Directors; and said officer acknowledged that he executed said
instrument as the free act and deed of said corporation.

Lydia V. Dayrit
Lydia V. Dayrit

Notary Public, State of Hawaii

My commission expires: 1943 30 1943

L.S

We hereby certify that this is a true copy of the original
filed as Land Court Document No. 1794200
and / or recorded in the Bureau of Conveyances as
Document No. _____ on
January 10, 1991 at 8:01 o'clock am.

TITLE GUARANTY OF HAWAII, INCORPORATED

By [Signature]

LAND COURT SYSTEM	REGULAR SYSTEM
After Recordation Return by Mail (X)	Pickup () To:
BANK OF HAWAII	TGOH 84337
INCOME PROPERTY LOAN DEPT.	TGES 911010045
P.O. BOX 2900	GLEN Y AJIMINE
HONOLULU, HAWAII 96846	
TITLE OF DOCUMENT:	

DECLARATION OF RESTRICTIVE COVENANTS

PARTIES TO DOCUMENT:

Covenantor: HKK, Inc.
Grantee: Island Holidays, Ltd.

PROPERTY DESCRIPTION:	LIBER/PAGE:
Lot 1-C, shown on Map 3, Ld. Ct. App. No. 420, situate at Lanihau 1 and 2, No. Kona, Island and County of Hawaii	DOCUMENT NO.: TRANSFER CERTIFICATE OF TITLE NO(S):

DECLARATION OF RESTRICTIVE COVENANTS

KNOW ALL MEN BY THESE PRESENTS:

THIS DECLARATION OF RESTRICTIVE COVENANTS,
("Restrictive Covenants") made this 10th day of January,
1991, by HKK, INC., a Hawaii corporation, whose principal place

of business and mailing address is 2490 Kalakaua Avenue, Honolulu, Hawaii 96815, hereinafter called the "Covenantor,"

WHEREAS, the Covenantor is owner in fee simple of certain real property in the Island, County and State of Hawaii, which property is hereinafter sometimes referred to as the Kamakahonu National Historic Landmark, (hereinafter "the Premises"), said Premises including at least three (3) structure(s) commonly known as the reconstructed 'Ahu'ena Heia, hale nana mahina'ai, and the foundations of the hale poki (hereinafter "the Buildings"), and is more particularly described in Exhibit A attached hereto and incorporated herein by reference;

WHEREAS, the Kamakahonu National Historic Landmark was listed in the National Register of Historic Places on September 12, 1985 and is a certified historic structure;

WHEREAS, the Covenantor and ISLAND HOLIDAYS, LTD., a Hawaii corporation, hereinafter called the "Grantee", recognize the historical, cultural, and aesthetic value and significance of the Premises, and have the common purpose of conserving and preserving the aforesaid value and significance of the Premises;

WHEREAS, the placing of restrictive covenants on the real property referred to herein will assist in preserving and maintaining the Premises and its architectural, historical, and cultural features;

WHEREAS, the said restrictive covenants will assist in preserving and maintaining the aforesaid value and significance of the Premises;

NOW, THEREFORE, in consideration of \$10.00 and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Covenantor does hereby covenant and agree to and with the Grantee, that Covenantor's interest in the Premises is hereby subjected to all those certain covenants and restrictions set forth herein and such covenants and restrictions shall be in favor of and enforceable by the Grantee, and shall be binding upon the Covenantor and its successors in interest and assigns in perpetuity, all as more fully set forth herein.

1. Description of Premises.

(a) In order to make more certain the full extent of Covenantor's obligations and the restrictions on the Premises (including the Buildings), and in order to document the nature of the Buildings as of the date hereof, attached hereto as Exhibit B

and incorporated herein by this reference are a set of photographs depicting the Buildings and the surrounding property. It is stipulated by and between Covenantor and Grantee that the nature of the Buildings as shown in Exhibit B is deemed to be the nature of the Buildings as of the date hereof and as of the date this instrument is first recorded in the Office of the Assistant Registrar of the Land Court of the State of Hawaii, hereinafter called the "Land Court."

(b) The Premises will be managed under these Restrictive Covenants in two management zones: Zone 1 which shall consist of those areas cross-hatched on Exhibit A-1 attached hereto and incorporated herein by reference, and Zone 2 which shall consist of the remaining portions of the Premises not cross-hatched on Exhibit A-1. The following Paragraphs hereunder shall apply only to Zone 1: Paragraphs 2(a), 2(b)(i), 2(b)(ii), 2(b)(iii), 2(b)(v), 2(d), 2(e), and 3. All other provisions hereunder shall apply to both Zone 1 and Zone 2. It is understood and hereby agreed that Covenantor will retain all use rights in Zones 1 and 2 not specifically restricted herein, including without limitation, the right to continue the current commercial luau use on Zone 2.

2. Covenantor's Covenants. In furtherance of the purposes of these restrictive covenants, Covenantor undertakes, of itself, to do (and to refrain from doing as the case may be) upon the Premises each of the following covenants, which contribute to the public purpose of significantly protecting and preserving the Premises:

(a) Covenantor shall not demolish, remove, or raze the Buildings except as provided in Paragraphs 6 and 7.

(b) Without the prior express written permission of the Grantee, signed by a duly authorized representative thereof, Covenantor shall not undertake any of the following actions:

(i) increase or decrease the height of the Buildings;

(ii) adversely affect the structural soundness of the Buildings;

(iii) make any changes in the Buildings including the alteration, partial removal, construction, remodeling, or other physical or structural change with respect to the appearance or construction of the Buildings, with the

exception of ordinary maintenance pursuant to Paragraph 2(c) below;

(iv) erect anything on the Premises or on the Buildings which would prohibit them from being visible from street level, except for a temporary structure during any period of approved alteration or restoration;

(v) permit any significant reconstruction, repair, painting, or refinishing of the Buildings that alters their state from the existing condition. This subsection (v) shall not include ordinary maintenance pursuant to Paragraph 2(c) below;

(vi) erect, construct, or move anything on the Premises that would encroach on the open land area surrounding the Buildings and interfere with a view of the Buildings or be incompatible with the historic or architectural character of the Buildings.

(c) Covenantor agrees at all times (i) to maintain and repair the Buildings and the Premises in a good and sound state of repair so as to preserve the architectural, historical or archaeological integrity of the Premises in order to protect and enhance those qualities that made the Property eligible for listing on the National Register of Historic Places, (ii) to maintain the structural soundness and safety of the Buildings, and (iii) to undertake a maintenance program to prevent deterioration of the Buildings. The maintenance program shall be developed jointly by Covenantor and Grantee, after consultation with appropriate agencies, organizations and individuals familiar with the maintenance of historic sites and of structures similar to the Buildings, including without limitation the National Park Service. Subject to the casualty provisions of Paragraphs 5, 6, and 7, this obligation to maintain shall include replacement, rebuilding, repair, and reconstruction whenever necessary to have the external nature of the Buildings at all times appear to be and actually be the same as the external nature shown in Exhibit B. Covenantor shall provide a firefighting system as required or recommended by the County of Hawaii Fire Department.

(d) No buildings or structures, not presently on the Premises shall be erected or placed on the Premises hereafter, except for temporary structures required for the maintenance or rehabilitation of the property.

(e) No signs, awnings, or advertisements shall be displayed or placed on the Premises or Buildings; provided,

however, that Covenantor may, with prior written approval from and in the reasonable discretion of Grantee, erect such signs or awnings as are compatible with the preservation and conservation purposes of these Restrictive Covenants and appropriate to identify the Premises and Buildings and any activities on the Premises or in the Buildings. Such approval from Grantee shall not be unreasonably withheld.

(f) No topographical changes, including but not limited to excavation, shall occur on the Premises; provided, however, that Covenantor may, with prior written approval from and in the sole discretion of Grantee, make such topographical changes as are consistent with and reasonably necessary to promote the preservation and conservation purposes of these Restrictive Covenants.

(g) There shall be no removal, destruction, or cutting down of trees, shrubs, or other vegetation on the Premises; provided, however, that Covenantor may with prior written approval from and in the reasonable discretion of Grantee, undertake such landscaping of the Premises as is compatible with the preservation and conservation purposes of these Restrictive Covenants and which may involve removal or alteration of present landscaping, including trees, shrubs, or other vegetation. In all events, Covenantor shall maintain trees, shrubs, and lawn in good manner and appearance in conformity with good forestry practices.

(h) No dumping of ashes, trash, rubbish, or any other unsightly or offensive materials shall be permitted on the Premises.

(i) The Premises shall be used only for purposes consistent with the preservation and conservation purposes of these Restrictive Covenants and the intent of the National Historic Preservation Act of 1966, in strict accordance with all applicable governmental rules and regulations, including without limitation those relating to historic preservation.

(j) No utility transmission lines, except those reasonably necessary for the existing Buildings, may be created on the Premises, subject to utility easements already recorded.

3. Public View and Access. Covenantor agrees not to obstruct the customary and regular opportunity of the public to view the exterior architectural features of the Buildings, from publicly accessible areas adjacent to Covenantor's premises, provided, however, the foregoing shall not limit or restrict

Covenantor's right to prevent unauthorized access to its premises other than Premises.

Covenantor shall make the Premises accessible to the public without charge on a minimum of three hundred (300) days per year from 10:00 a.m. to 4:00 p.m., and at other times by appointment, to permit persons affiliated with educational organizations, professional architectural associations, and historical societies to study the Premises. Any such public admission may be subject to restrictions mutually agreed upon as reasonably designed for the protection and maintenance of the Premises and Covenantor's premises. The Grantee may make photographs, drawings, or other representations documenting the significant historical, cultural, or architectural character and features of the Premises and distribute them to magazines, newsletters, or other publicly available publications, or use by them in any of their efforts or activities for the preservation and conservation of Hawaii's heritage.

4. Standards for Review. In exercising any authority created by these covenants to inspect the Premises or the Buildings, to review any construction, alteration, repair, or maintenance; or to review casualty damage or to reconstruct or approve reconstruction of the Buildings following casualty damage, Grantee shall apply the Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, issued and as may be amended from time to time by the Secretary of the United States Department of the Interior (hereinafter the "Standards") and/or state or local standards reasonably considered appropriate by Grantee for review of work affecting historically or architecturally significant structures or for construction of new structures within historically, architecturally, or culturally significant areas. Covenantor agrees to abide by the Standards in performing all ordinary repair and maintenance work and the maintenance program described in Paragraph 2(c). In the event the Standards are abandoned or materially altered or otherwise become, in the reasonable judgment of the Grantee, inappropriate for the purposes set forth above, the Grantee may apply reasonable alternative standards and notify Covenantor of the substituted standards.

5. Casualty Damage or Destruction. In the event that the Premises or any part thereof shall be damaged or destroyed by casualty, the Covenantor shall notify the Grantee in writing within ten (10) days of the damage or destruction, such notification including what, if any, emergency work has already been completed. For purposes of this instrument, the term "casualty" is defined as such sudden damage or loss as would qualify for a loss deduction pursuant to Section 165(c)(3) of the

Internal Revenue Code of 1986 (construed without regard to the legal status, trade, or business of the Covenantor or any applicable dollar limitation). No repairs or reconstruction of any type, other than temporary emergency work to prevent further damage to the Premises and to protect public safety, shall be undertaken by Covenantor without the Grantee's prior written approval of the work. Within four (4) weeks of the date of damage or destruction, the Covenantor shall submit to the Grantee a written report prepared by a qualified restoration architect and an engineer, if required, acceptable to the Covenantor and the Grantee which shall include the following:

(a) an assessment of the nature and extent of the damage;

(b) a determination of the feasibility of the restoration of the Buildings and/or reconstruction of damaged or destroyed portions of the Premises; and

(c) a report of such restoration/reconstruction work necessary to return the Premises to the condition existing at the date hereof. If in the opinion of the Grantee, after reviewing such report, the purpose and intent of these Restrictive Covenants will be served by such restoration/reconstruction, the Covenantor shall within eighteen (18) months after the date of such change or destruction complete the restoration/construction of the Premises in accordance with plans and specifications consented to by the Grantee up to at least the total of the casualty insurance proceeds. Grantee has the right to raise funds toward the costs of restoration of partially destroyed Premises above and beyond the total of the casualty insurance proceeds as may be necessary to restore the appearance of the Buildings.

6. Grantee's Remedies Following Casualty Damage. The foregoing notwithstanding, in the event of damage resulting from casualty, as defined at Paragraph 5, which is of such magnitude and extent as to render repairs or reconstruction of the Buildings impossible using all applicable insurance proceeds, as determined by Grantee by reference to bona fide cost estimates, then Grantee may elect to reconstruct the Building using insurance proceeds, donations, or other funds received by Covenantor or Grantee on account of such casualty, but otherwise at its own expense.

7. Review After Casualty Loss. If in the opinion of the Grantee, restoration/reconstruction would not serve the purpose and intent of these Restrictive Covenants, then the Covenantor shall continue to comply with the provisions of these

Restrictive Covenants and obtain the prior written consent of the Grantee in the event the Covenantor wishes to alter, demolish, remove, or raze the Buildings, and/or construct new improvements on the Premises.

8. Grantee's Covenants. The Grantee hereby warrants and covenants that:

(a) In the event that the Grantee shall at any time in the future become the fee simple owner of the Premises, Grantee for itself, its successors, and assigns, covenants and agrees, in the event of a subsequent conveyance of the same to another, to create new restrictive covenants containing the same restrictions and provisions as are contained herein, and either to retain such rights in itself or to convey such rights to a similar unit of federal, state, or local government or local, state, or national organization whose purposes, inter alia, are to promote preservation or conservation of historical, cultural, or architectural resources.

(b) Grantee may not, without the prior written consent of Covenantor, which consent shall not be unreasonably withheld, convey, assign, or transfer Grantee's rights hereunder. Any such permitted assignment must be to a state or national organization whose primary purposes, inter alia, are to promote preservation or conservation of historical, cultural, or architectural resources, and must require that the preservation and conservation purposes for which these Restrictive Covenants were created will continue to be carried out.

(c) Grantee, in exercising its rights hereunder, will act reasonably, unless specifically provided otherwise herein.

9. Inspection. Covenantor hereby agrees that representatives of Grantee shall be permitted at all reasonable times to inspect the Premises, including the Buildings. Covenantor agrees that representatives of Grantee shall be permitted to enter and inspect the interior of the Buildings to ensure maintenance of structural soundness and safety; inspection of the interior may involve reasonable testing of interior structural condition. Inspection of the interior will be made at a time mutually agreed upon by Covenantor and Grantee, and Covenantor covenants not to withhold unreasonably its consent in determining a date and time for such inspection.

10. Grantee's Remedies. Grantee has the following legal remedies to correct any violation of any covenant,

stipulation, or restriction herein, in addition to any remedies now or hereafter provided by law:

(a) Grantee may, following reasonable written notice to Covenantor, institute suit(s) to enjoin such violation by ex parte, temporary, preliminary, and/or permanent injunction, including prohibitory and/or mandatory injunctive relief, and to require the restoration of the Premises to the condition and appearance required under this instrument.

(b) Representatives of the Grantee may, following reasonable notice to Covenantor, enter upon the Premises, correct any such violation, and hold Covenantor, its successors, and assigns, responsible for the cost thereof.

(c) Grantee shall exercise reasonable care in selecting independent contractors if it chooses to retain such contractors to correct any such violations, including requiring any such contractor to be properly licensed and to have adequate liability insurance and workman's compensation coverage.

(d) Grantee shall also have available all legal and equitable remedies to enforce Covenantor's obligations hereunder.

(e) In the event Covenantor is found to have violated any of its obligations, Covenantor shall reimburse Grantee for any costs or expenses incurred in connection therewith, including all reasonable court costs, and attorney's, architectural, engineering, and expert witness fees.

(f) Exercise by Grantee of one remedy hereunder shall not have the effect of waiving or limiting any other remedy, and the failure to exercise any remedy shall not have the effect of waiving or limiting the use of any other remedy or the use of such remedy at any other time.

11. Notice from Government Authorities. Covenantor shall deliver to Grantee copies of any notice, demand, letter, or bill received by Covenantor from any government authority within five (5) days of receipt by Covenantor. Upon request by Grantee, Covenantor shall promptly furnish Grantee with evidence of Covenantor's compliance with such notice, demand, letter, or bill, where compliance is required by law.

12. Runs with the Land. The obligations imposed by these Restrictive Covenants shall be effective in perpetuity and shall be deemed to run as a binding servitude with the Premises. These Restrictive Covenants shall extend to and be binding upon

Covenantor and Grantee, their respective successors in interest, or permitted assigns and all persons hereafter claiming under or through Covenantor and Grantee, and the words "Covenantor" and "Grantee" when used herein shall include all such persons. Anything contained herein to the contrary notwithstanding, a person shall have no obligation pursuant to this instrument where such person shall cease to have any interest in the Premises by reason of a bona fide transfer. Restrictions, stipulations, and covenants contained in this instrument shall be inserted by Covenantor, verbatim or by express reference, in any subsequent deed or other legal instrument by which Covenantor divests itself of either the fee simple title to or any lesser estate in the Premises or any part thereof.

13. Recording. Covenantor shall do and perform at its own cost all acts necessary to the prompt recording of this instrument or a short form of same in the Land Court.

14. Subordination of Mortgages. Covenantor and Grantee agree that all mortgages and rights in the Premises of all Mortgagees are and shall be subject and subordinate at all times to the rights of the Grantee to enforce the purposes of these Restrictive Covenants.

15. Plaques. Covenantor agrees that Grantee may provide and maintain a plaque on the Premises, which plaque shall not exceed 24 by 36 inches in size, giving notice of the significance of the Buildings or the Premises and the existence of these Restrictive Covenants.

16. Indemnification. The Covenantor hereby agrees to pay, protect, indemnify, hold harmless, and defend at its own cost and expense, the Grantee, its agents, directors, officers, and employees, or independent contractors from and against any and all claims, liabilities, expenses, costs, damages, losses, and expenditures (including reasonable attorneys' fees and disbursements hereafter incurred) arising out of or in any way relating to Covenantor's breach of these Restrictive Covenants or Grantee's enforcement of these Restrictive Covenants, performed in good faith, of these Restrictive Covenants, including, but not limited to, the granting or denial of consents hereunder, the reporting on or advising as to any condition on the Premises, and the execution of work on the Premises. In the event that the Grantor is required to indemnify the Grantee pursuant to the terms hereunder, the amount of such indemnity, until discharged, shall constitute a lien on the Premises.

17. Taxes. Covenantor shall pay immediately, when first due and owing, all general taxes, special taxes, special

assessments, water charges, sewer service charges, and other charges which may become a lien on the Premises. Grantee is hereby authorized, but in no event required or expected, to make or advance, upon two (2) business days prior written notice to Covenantor, in the place of Covenantor, any payment relating to taxes, assessments, water rates, sewer rentals, and other governmental or municipality charge, fine, imposition, or lien asserted against the Premises and may do so according to any bill, statement, or estimate procured from the appropriate public office without inquiry into the accuracy of such bill, statement, or assessment or into the validity of such tax, assessment, sale, or forfeiture.

18. Written Notice. Any notice which either Covenantor or Grantee may desire or be required to give to the other party shall be in writing and shall be mailed postage prepaid by registered or certified mail with return receipt requested, or hand delivered; if to Covenantor, then at HKK, Inc., 2490 Kalakaua Avenue, Honolulu, Hawaii 96815, and if to Grantee, then at Island Holidays, Ltd., 700 Bishop Street, Honolulu, Hawaii 96813, Attn: Law Department. Each party may change its address set forth herein by a notice to such effect to the other party. Any notice, consent, approval, agreement, or amendment permitted or required of Grantee hereunder may be given by the Grantee or by any duly authorized representative of the Grantee.

19. Evidence of Compliance. Upon request by Grantee, Covenantor shall promptly furnish Grantee with reasonable evidence of Covenantor's compliance with any obligation of Covenantor contained herein.

20. Extinguishment. Covenantor and Grantee hereby recognize that an unexpected change in the conditions surrounding the Premises may make impossible the continued protection of the Premises under these Restrictive Covenants for the preservation and conservation purposes set forth herein and necessitate extinguishment or transfer of these Restrictive Covenant. Such a change in conditions includes, but is not limited to, partial or total destruction of the Buildings resulting from a casualty of such magnitude that Grantee approves demolition as explained in Paragraphs 5 and 7, a condemnation or loss of title of all or a portion of the Premises or the Buildings, or an abandonment by the Grantee of its rights hereunder. Such an extinguishment or transfer must comply with the following requirements:

(a) The extinguishment or transfer must be the result of a final judicial proceeding;

(b) Grantee agrees to apply all of the portion of the net proceeds it receives from an extinguishment to the preservation and conservation of other buildings, structures, or sites having historical, architectural, cultural, or aesthetic value and significance to the people of the State of Hawaii.

(c) Net proceeds shall include, without limitation, insurance proceeds, condemnation proceeds or awards, proceeds from a sale in lieu of condemnation, and proceeds from the sale or exchange by Covenantor of any portion of the Premises after the extinguishment.

(d) A transfer of these covenants under this paragraph shall be only due to an abandonment by the Grantee of its rights hereunder. Such transfer shall be only to a qualified entity pursuant to a permitted assignment as described in Paragraph 8 hereinabove.

21. Interpretation and Enforcement. The following provisions shall govern the effectiveness, interpretation, and duration of these Restrictive Covenants.

(a) Any rule of strict construction designed to limit the breadth of restriction on alienation or use of property shall not apply in the construction or interpretation of this instrument, and this instrument shall be interpreted broadly to effect its preservation and conservation purposes and the transfer of rights and the restrictions on use herein contained as provided in any laws regarding historic preservation.

(b) This instrument shall extend to and be binding upon Covenantor and all persons hereafter claiming under or through Covenantor, and the word "Covenantor" when used herein shall include all such person, whether or not such persons have signed this instrument or then have an interest in the Premises. Anything contained herein to the contrary notwithstanding, a person shall have no obligation pursuant to this instrument where such person shall cease to have any interest (present, partial, contingent, collateral, or future) in the Premises by reason of a bona fide transfer. Any right, title, or interest herein granted to Grantee also shall be deemed granted to each successor and permitted assign of Grantee and each such following successor and permitted assign thereof, and the word "Grantee" shall include all such successors and permitted assigns.

(c) Except as expressly provided herein, nothing contained in this instrument grants, nor shall be interpreted to grant, to the public any unrestricted right to enter on the

Premises or into the Buildings or on Covenantor's other premises other than the Premises.

(d) To the extent that Covenantor owns or is entitled to development rights which may exist now or at some time hereafter by reason of the fact that under any applicable zoning or similar ordinance the Premises may be developed to use more intensive (in terms of height, bulk, or other objective criteria regulated by such ordinances) than the Premises are devoted as of the date hereof, such development rights shall not be exercisable on, above, or below the Premises during the term of these Restrictive Covenants nor shall they be transferred to any adjacent parcel and exercised in a manner that would interfere with the preservation and conservation purposes of these Restrictive Covenants.

(e) For purposes of furthering the preservation of the Premises and Buildings and of furthering the other purposes of this instrument, and to meet changing conditions, Covenantor and Grantee are free to amend jointly the terms of this instrument in writing without notice to any other party; provided, however, that no such amendment shall limit the perpetual duration or interfere with the preservation and conservation purposes of these Restrictive Covenants. Such amendment shall become effective upon recording in the Land Court.

(f) The terms and conditions of these Restrictive Covenants shall be referenced in any transfer of the Premises by the Covenantor, or its successors, and assigns.

(g) It is the intent of the parties to agree and to bind themselves, their successors, and their assigns in perpetuity to each term of this instrument whether this instrument be enforceable by reason of any statute, common law, or private agreement either in existence now or at any time subsequent hereto. This instrument may be re-recorded at any time by any person if the effect of such re-recording is to make more certain the enforcement of this instrument or any part thereof. The invalidity or unenforceability of any provision of this instrument shall not affect the validity or enforceability of any other provision of this instrument or any ancillary or supplementary agreement relating to the subject matter hereof.

(h) Nothing contained herein shall be interpreted to authorize or permit Covenantor to violate any ordinance or regulation relating to building materials, construction methods, or use. In the event of any conflict between any such ordinance or regulation and the terms hereof, Covenantor promptly shall

STATE OF HAWAII)
) SS.
CITY AND COUNTY OF HONOLULU)

appeared Mark Hayashi On this 8th day of January, 1991, before me being by me duly sworn, did say that he is the President of HKK, INC., a Hawaii corporation, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Directors; and said officer acknowledged that he executed said instrument as the free act and deed of said corporation.

Charlene D. Mizukawa
Notary Public, State of Hawaii
My commission expires: 9/3/94.

CS
STATE OF HAWAII)
) SS.
CITY AND COUNTY OF HONOLULU)

appeared P. Eric Hohmann On this 8th day of January, 1991, before me to me personally known, who, being by me duly sworn, did say that he is the Vice President of ISLAND HOLIDAYS, LTD., a Hawaii corporation, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Directors; and said officer acknowledged that he executed said instrument as the free act and deed of said corporation.

Charlene D. Mizukawa
Notary Public, State of Hawaii
My commission expires: 9/3/94.

CS

EXHIBIT A

All of that certain parcel of land situate at Lanihua 1 and 2, District of North Kona, Island and County of Hawaii, State of Hawaii, described as follows:

LOT 1-C, area 0.804 acre, as shown on Map 3, filed in the Office of the Assistant Registrar of the Land Court of the State of Hawaii with Land Court Application No. 420 of American Factors, Limited;

Being the remainder of the land(s) described in Transfer Certificate of Title No. 364,608.

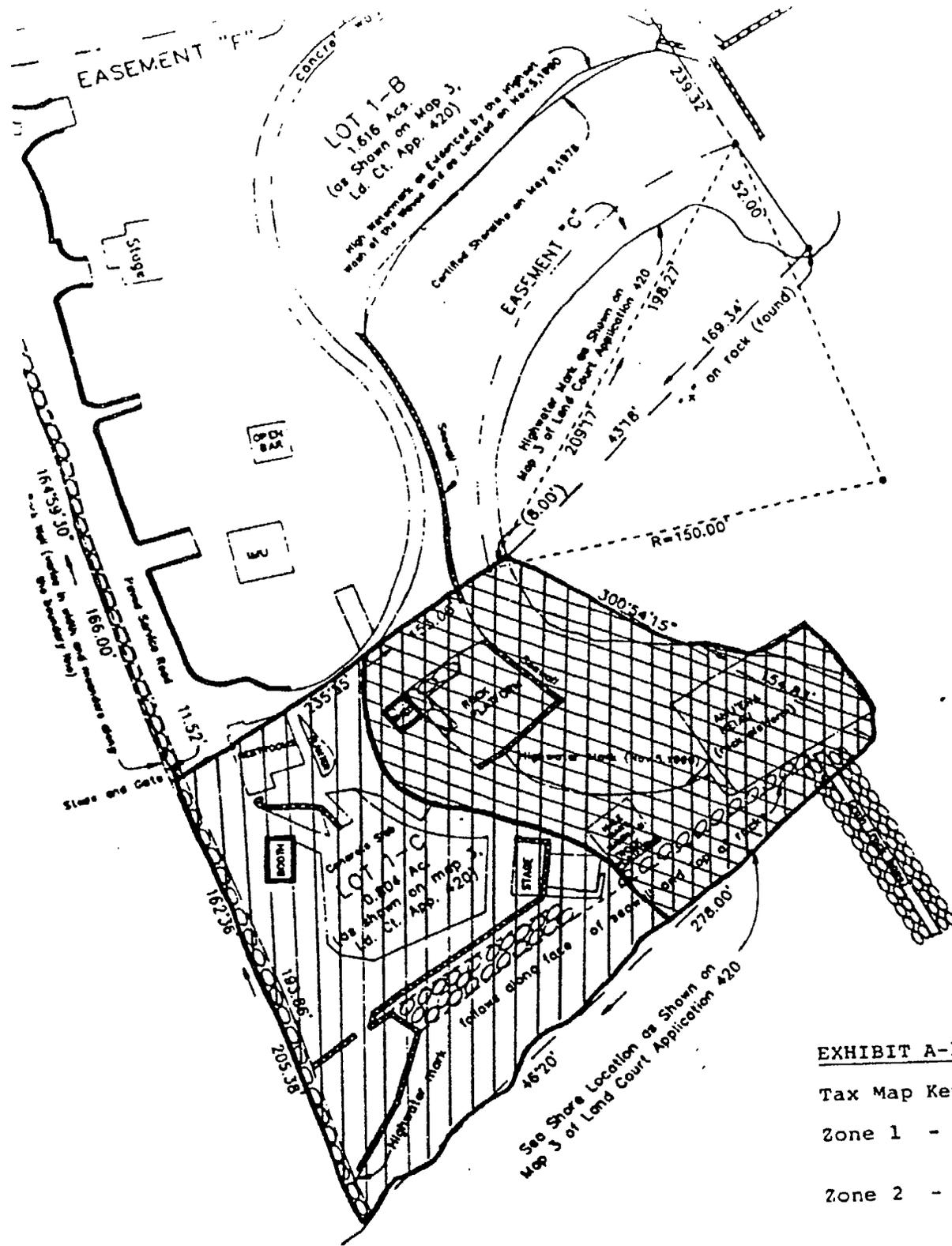


EXHIBIT A-1

Tax Map Key 7-5-6-2

Zone 1 - 

Zone 2 - 

RECORDER'S MEMO: Legibility of Writing, Typing or Printing UNSATISFACTORY in this Document when received.

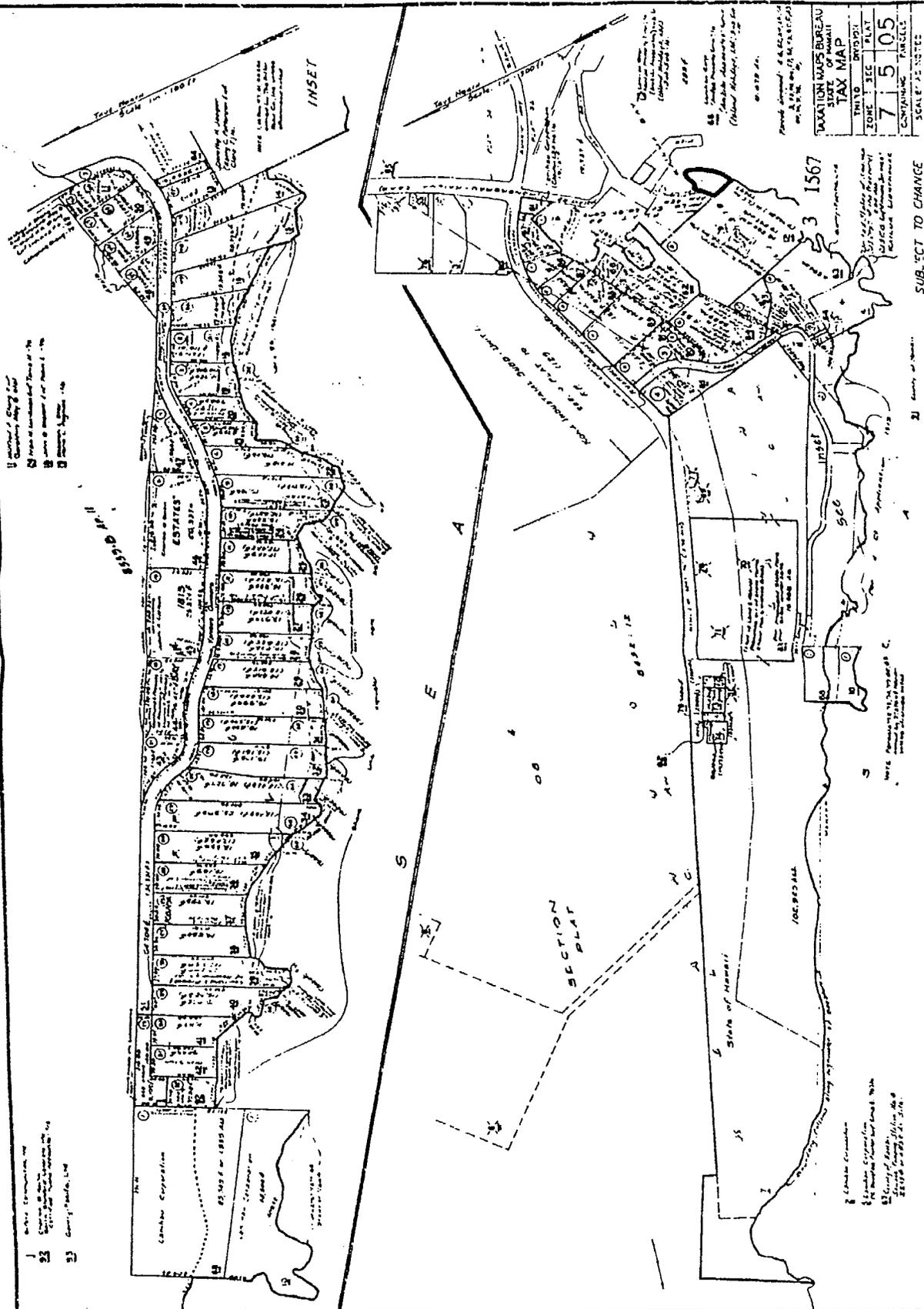
Haka, Maewa Haka, Kamoharuru, Kahua Kona, Hawaii, National Historic Landmark
The Maewaun people sculpted many gods and there were many kinds of heiau, or places of worship. This was Kamoharuru's personal temple at his family residence. The charred heiau
and wooden god images were reconstructed by the King Kamoharuru in 1975, based on archeological research, historical drawings and other evidence uncovered by Bishop Museum.



EXHIBIT B

Aug 2/8

RECORDER'S MEMO: Legibility of Writing, Typing or Printing UNSATISFACTORY
in this Document when received.



- 1. Containing all lots of land
- 2. Area of land owned by State of Hawaii
- 3. Area of land owned by County of Hawaii
- 4. Area of land owned by other persons

- 1. Lombard Corporation
- 2. Estate of ...
- 3. County of Hawaii
- 4. State of Hawaii

TOWN OF HAWAII
 COUNTY OF HAWAII
 DEPARTMENT OF PUBLIC WORKS
 TAX MAP
 7 15 05
 CONTAINING PARCELS
 SCALE 1" = 200'

SUBJECT TO CHANGE

KAILUA AIRPORT NORTH KONA, HAWAII

Drawn by: [Name]
 Checked by: [Name]
 Date: [Date]

ENVIRONMENTAL ASSESSMENT

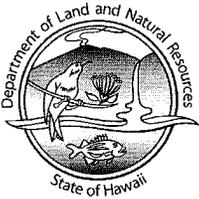
HOTEL RENOVATIONS, KING KAMEHAMEHA'S KONA BEACH HOTEL

TMKs (3rd): 7-5-006:020, 021, 024 & 032; 7-5-005:062, 066 & 075

Kailua-Kona, North Kona District, County of Hawai'i, State of Hawai'i

APPENDIX 3a

Comments in Response to Early Consultation



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

March 4, 2008

Geometrician Associates, LLC
Box 396
Hilo, Hawaii 96721

Attention: Mr. Ron Terry

Gentlemen:

Subject: Pre-consultation for environmental assessment for King Kamehameha
Kona Beach Hotel renovations, Kailua-Kona, Hawaii, Tax Map Keys: (3)
7-5-6:20, 21, 24, 32; 7-5-5:62, 66, 75

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Engineering Division, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

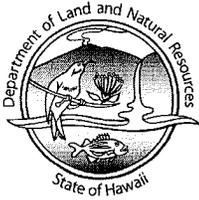
Sincerely,


for Morris M. Atta
Administrator

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

March 12, 2008

Geometrician Associates, LLC
Box 396
Hilo, Hawaii 96721

Attention: Mr. Ron Terry

Gentlemen:

Subject: Pre-consultation for environmental assessment for King Kamehameha Kona Beach Hotel renovations, Kailua-Kona, Hawaii, Tax Map Key: (3) 7-5-6:20, 21, 24, 32; 7-5-5:62, 66, 75

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR), Land Division distributed or made available a copy of your report pertaining to the subject matter to the Division of Aquatic Resources for their review and comment.

The Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Morris M. Atta".

ba
Morris M. Atta
Administrator



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

February 19, 2008

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
x Div. of Boating & Ocean Recreation
x Engineering Division
 Div. of Forestry & Wildlife
x Div. of State Parks
 Commission on Water Resource Management
 Office of Conservation & Coastal Lands
x Land Division – Hawaii District

RECEIVED
LAND DIVISION
2008 FEB 29 A 11:52
DEPARTMENT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

FROM: *for* Morris M. Atta *Thielen*
SUBJECT: Pre-consultation for environmental assessment for King Kamehameha Kona Beach Hotel renovations
LOCATION: Kona, Hawaii, TMK: (3) 7-5-6:20, 21, 24, 32; 7-5-5:62, 66, 75
APPLICANT: Geometrician Associates, LLC on behalf of IWF KKH Pacific Hotel Investors LLC

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by March 1, 2008.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *Cait Thielen*
Date: 2/29/08

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/MorrisAtta
REF: PreConEAKingKamKonaBeachHotel
Hawaii.372

COMMENTS

- () We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone ____.
- (X) **Please take note that based on the map that you provided the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone X. The National Flood Insurance Program does not have any regulations for developments within Zone X.**
- () Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ____.
- () Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- () Mr. Robert Sumitomo at (808) 768-8097 or Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of Planning and Permitting.
 - () Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kiran Emler at (808) 327-3530 (Kona) of the County of Hawaii, Department of Public Works.
 - () Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
 - () Mr. Mario Antonio at (808) 241-6620 of the County of Kauai, Department of Public Works.
- () The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.
 - () The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

- () Additional Comments: _____

- () Other: _____

Should you have any questions, please call Ms. Suzie Agraan of the Planning Branch at 587-0258.

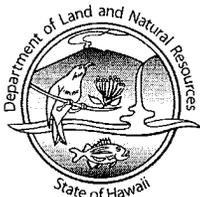
Signed: 
ERIC T. HIRANO, CHIEF ENGINEER

Date: 2/29/08

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

March 5, 2008

Geometrician Associates, LLC
Box 396
Hilo, Hawaii 96721

Attention: Mr. Ron Terry

Gentlemen:

Subject: Pre-consultation for environmental assessment for King Kamehameha
Kona Beach Hotel renovations, Kailua-Kona, Hawaii, Tax Map Keys: (3)
7-5-6:20, 21, 24, 32; 7-5-5:62, 66, 75

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Division of State Parks, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,


Morris M. Atta
Administrator

LINDA LINGLE
GOVERNOR OF HAWAII



Laura H. Thielen
Chairperson
Board of Land and Natural Resources
Commission on Water Resource Management



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

RECEIVED
MAR 19 2008

February 19, 2008

MEMORANDUM

TO: DLNR Agencies:
From: x Div. of Aquatic Resources
x Div. of Boating & Ocean Recreation
x Engineering Division
Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
Office of Conservation & Coastal Lands
x Land Division - Hawaii District

RECEIVED
LAND DIVISION
2008 MAR -5 P 3:29
FRANK J. ANDERSON
STATE OF HAWAII

TO FROM: *JA* Morris M. Atta *Thielen*
SUBJECT: Pre-consultation for environmental assessment for King Kamehameha Kona Beach Hotel renovations
LOCATION: Kona, Hawaii, TMK: (3) 7-5-6:20, 21, 24, 32; 7-5-5:62, 66, 75
APPLICANT: Geometrician Associates, LLC on behalf of IWF KKH Pacific Hotel Investors LLC

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by March 1, 2008.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- () We have no objections.
- () We have no comments.
- () Comments are attached.

Signed: *[Signature]*
Date: 3/4/08

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

February 19, 2008

AQUATIC RESOURCES: 1416

DIRECTOR	
COMM. FISH.	
AQ RES/ENV	
AQ REC	
PLANNER	
STAFF SVCS	
RCU/HUH	
STATISTICS	
AFRC/FED AID	
EDUCATION	
SECRETARY	
OFFICE SVCS	
TECH ASS I	
Return to:	
No. Copies	
Copies to:	
Due Date:	

MEMORANDUM

TO: **DLNR Agencies:**
 Div. of Aquatic Resources
 Div. of Boating & Ocean Recreation
 Engineering Division
 Div. of Forestry & Wildlife
 Div. of State Parks
 Commission on Water Resource Management
 Office of Conservation & Coastal Lands
 Land Division – Hawaii District



FROM: *JA* Morris M. Atta *Maalene*
 SUBJECT: Pre-consultation for environmental assessment for King Kamehameha Kona Beach Hotel renovations
 LOCATION: Kona, Hawaii, TMK: (3) 7-5-6:20, 21, 24, 32; 7-5-5:62, 66, 75
 APPLICANT: Geometrician Associates, LLC on behalf of IWF KKH Pacific Hotel Investors LLC

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by March 1, 2008.

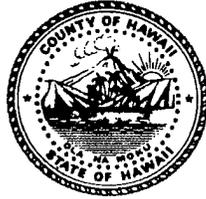
If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached. *PLEASE SEND EA.*

Signed: *[Signature]*
 Date: 10 MARCH 2008

Harry Kim
Mayor



Lawrence K. Mahuna
Police Chief

Harry S. Kubojiri
Deputy Police Chief

County of Hawaii

POLICE DEPARTMENT

349 Kapiolani Street • Hilo, Hawaii 96720-3998
(808) 935-3311 • Fax (808) 961-2389

February 25, 2008

Mr. Ron Terry
Principal
Geometrician Associates
P.O. Box 396
Hilo, Hawaii 96721

Dear Mr. Terry:

SUBJECT: Environmental Assessment for Hotel Renovations, Kona Kamehameha's
Kona Beach Hotel, North Kona, Island of Hawaii
TMK: (3rd) 7-5-006:020, 021, 024 & 032
7-5-005:062, 066 & 075

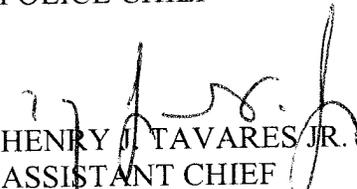
Staff has reviewed the above referenced document and submits the following comments:

- Recommend infrastructure accommodate emergency response.
- Include vehicular and pedestrian designs for rapid evacuation during a natural disaster or emergency.

Should you have any questions, please contact Acting Captain Chad Basque, Commander of Kona Patrol, at 326-4646 extension 249.

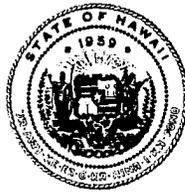
Mahalo,

LAWRENCE K. MAHUNA
POLICE CHIEF


HENRY J. TAVARES JR.
ASSISTANT CHIEF
AREA II OPERATIONS

CB:dmv

LINDA LINGLE
GOVERNOR OF HAWAII



Laura H. Thielen
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

Russell Y. Tsujii
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR FOR
THE COMMISSION ON
WATER RESOURCE MANAGEMENT

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

DIVISION OF FORESTRY AND WILDLIFE

1151 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

March 3, 2008

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE
COMMISSION
LAND MANAGEMENT
STATE PARKS

Mr. Ron Terry
Geometrician Associates, LLC
P.O. Box 396
Hilo, Hawaii 96721

Dear Mr. Terry:

Subject: Preconsultation Environmental Assessment Review for 1) Mamalahoa Highway (SR11) Drainage Improvements at Kawa Flats, Kau, Hawaii; 2) Hotel Renovations, King Kamehameha's Kona Beach Hotel, Kailua, Kona, Hawaii; and 3) Convenience Center Improvements, Volcano, Glenwood, and Pahoa, Hawaii.

DLNR, Division of Forestry and Wildlife provide the following comments to your request. Our preliminary review of the three Environmental Assessments shows no impacts to our management programs or endangered plant species. However, we would like to receive copies of the three subject EA documents through the Environmental review process. For the Convenience Centers of Volcano, Glenwood, and Pahoa involving Conservation lands, a copy of our response will be sent to DLNR, OCCL. Thank you for allowing us to review your intention to prepare Environmental Assessments for these proposed projects.

Sincerely yours,

Paul J. Conry
Administrator

C: DLNR, OCCL

Harry Kim
Mayor



Darryl J. Oliveira
Fire Chief

Glen P.I. Honda
Deputy Fire Chief

County of Hawai'i
HAWAII FIRE DEPARTMENT
25 Aupuni Street • Suite 103 • Hilo, Hawai'i 96720
(808) 981-8394 • Fax (808) 981-2037

March 5, 2008

Mr. Ron Terry
Geometrician Associates, LLC.
PO Box 396
Hilo, Hawaii 96721

**SUBJECT: ENVIRONMENTAL ASSESSMENT FOR HOTEL RENOVATIONS
KING KAMEHAMEHA'S KONA BEACH HOTEL
TMKs: 7-5-006:020, 021, 024, & 32 and 7-5-005:062, 066, & 075**

We have no comments to offer at this time in reference to the above-mentioned Environmental Assessment.

A handwritten signature in black ink, appearing to read "Darryl Oliveira".

DARRYL OLIVEIRA
Fire Chief

PBW:lpc



PHONE (808) 594-1888

FAX (808) 594-1865



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

HRD08/3509

March 12, 2008

Ron Terry
Geometrician Associates LLC
P.O. Box 396
Hilo, HI 96721

RE: Pre-consultation on Draft Environmental Assessment for the renovations to the King Kamehameha's Kona Beach Hotel, TMKs: (3) 7-5-006:020, 021, 024 and 032; and 7-5-005:062, 066 and 075.

Dear Ron Terry,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-referenced pre-consultation letter. IWK KKH Pacific Hotel Investors LLC is planning to renovate the King Kamehameha's Kona Beach Hotel by adding a new pool, open-air pavilion, conference and banquet facilities, terraces, walkways and additional parking. OHA offers the following initial comments.

We request the applicant complete a Cultural Impact Assessment for the project. We also request the applicant's assurances that should iwi kūpuna or Native Hawaiian cultural or traditional deposits be found during the construction of the project, work will cease, and the appropriate agencies will be contacted pursuant to applicable law.

Thank you for the opportunity to comment, and we look forward to reviewing the Draft Environmental Assessment when it becomes available. If you have further questions, please contact Sterling Wong (808) 594-0248 or e-mail him at sterlingw@oha.org.

Sincerely,

A handwritten signature in black ink, appearing to read "Clyde W. Nāmu'o".

Clyde W. Nāmu'o
Administrator

Harry Kim
Mayor



Christopher J. Yuen
Director

Brad Kurokawa, ASLA
LEED® AP
Deputy Director

County of Hawaii
PLANNING DEPARTMENT

101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720-4224
(808) 961-8288 • FAX (808) 961-8742

March 12, 2008

Mr. Ron Terry
Geometrician Associates, LLC
P O Box 396
Hilo, Hawaii 96721

Dear Mr. Terry:

Subject: Pre-consultation for Draft Environmental Assessment (EA)
Project: King Kamehameha's Kona Beach Hotel Renovations
Tax Map Key: (3) 7-5-06:20, 21, 24, 32 and 7-5-05:62, 66, 75; North Kona, Hawaii

This is in response to your letter dated February 12, 2008 in which you requested our comments on any special environmental conditions or impacts related to the proposed hotel renovations.

The subject parcels are located in the State Land Use (SLU) Urban district and are zoned Resort-Hotel District (V-0.75) by the County of Hawai'i. In addition Kailua Village Special District is an overlay district for these parcels. The property is also located entirely within the Special Management Area (SMA). Therefore, the applicant/owner will need to submit a Special Management Area (Major) Use Permit Application to the Planning Commission for the proposed renovations to the hotel and grounds.

The EA should include a discussion of the proposed development on recreational resources and public access and specifically address how public shoreline access will be maintained during hotel renovation construction.

Please provide this office with a copy of the draft EA upon its publication. Should you have questions, please contact Maija Cottle of my staff at 961-8288 extension 253.

Sincerely,


CHRISTOPHER J. YUEN
Planning Director

MJC:cs

P:\wpwin60\Maija\EA-EIS\Pre-Consult Comments\King Kam Renovation 7-5-6-20 Pre-cmnts.doc

xc: Planning Department- Kona Office



Pahuaiikoakaawaloa

**Kūlana Huli Honua
Foundation of the Search for Wisdom**

Mikahala Roy, Executive Director

Ron Terry, Principal
Geometrician Associates, LLC
P O Box 396
Hilo, Hawaii 96721

March 4, 2008

Dear Mr. Terry:

Subject: Environmental Assessment (EA) for Hotel Renovations King
Kamehameha's Kona Beach Hotel, TMKs (3rd) 7-5-006:020, 021, 024 & 032,
7-5-005:062, 066, & 075.

As a Hawai'i non-profit organization recognized as a 501-C3 organization by the federal government in 2001 to guide the life and care of Ahu'ena Heiau and her surrounding area, Kamakahonu, Kūlana Huli Honua here responds to your letter of February 12, 2008 regarding the above mentioned matter. We look forward to full participation in these processes to highest extent imaginable.

We here request all information you have amassed to this point pertinent to this EA. As a party in litigation with IWF-KKH at present and with the state of Hawaii, we do invite you to inquire, should you have any questions, with our lawyer, Mr. Robert D.S. Kim, Esq. at (808) 329-6611 or with myself for my organization at (808) 327-0123.

We request 10 copies of the EA at completion.

'O Wau Iho,

L. Mikahala Roy, President
Kūlana Huli Honua
75-6082 Alii Drive Suite 9
Kailua-Kona, Hawaii 96740
(808) 327-0123 (O); 327-9791 (F)