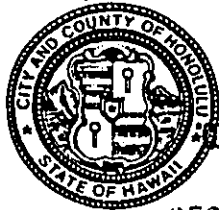


DEPARTMENT OF DESIGN AND CONSTRUCTION  
**CITY AND COUNTY OF HONOLULU**  
650 SOUTH KING STREET, 11<sup>TH</sup> FLOOR  
HONOLULU, HAWAII 96813  
PHONE: (808) 523-4564 • FAX: (808) 523-4567  
WEB SITE ADDRESS: www.co.honolulu.hi.us

JEREMY HARRIS  
MAYOR



RECEIVED

MAY 12 P3:51

TIMOTHY E. STEINBERGER, P.E.  
DIRECTOR

GEORGE T. TAMASHIRO, P.E.  
ASSISTANT DIRECTOR

OFFICE OF ENVIRONMENTAL  
QUALITY CONTROL

May 8, 2003

Ms. Genevieve Salmonson, Director  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

Subject: Finding of No Significant Impact (FONSI) for Kaaawa Beach Park  
Reconstruction of Comfort Station; T.M.K.: 5-1-002: 025  
Kaaawa, Koolauloa, Oahu, Hawaii

The City and County of Honolulu, Department of Design and Construction has reviewed comments received during the 30-day public comment period which began on November 8, 2002. The agency has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the May 23, 2003 OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form and four (4) copies of the final EA.

Please call Mr. Wesley Obata at (808) 523-4783 if you have any questions.

Very truly yours,

  
\_\_\_\_\_  
TIMOTHY E. STEINBERGER, P.E.  
Director, Department of Design and Construction

TES: \_\_\_  
Attach:  
cc: DDC-FD

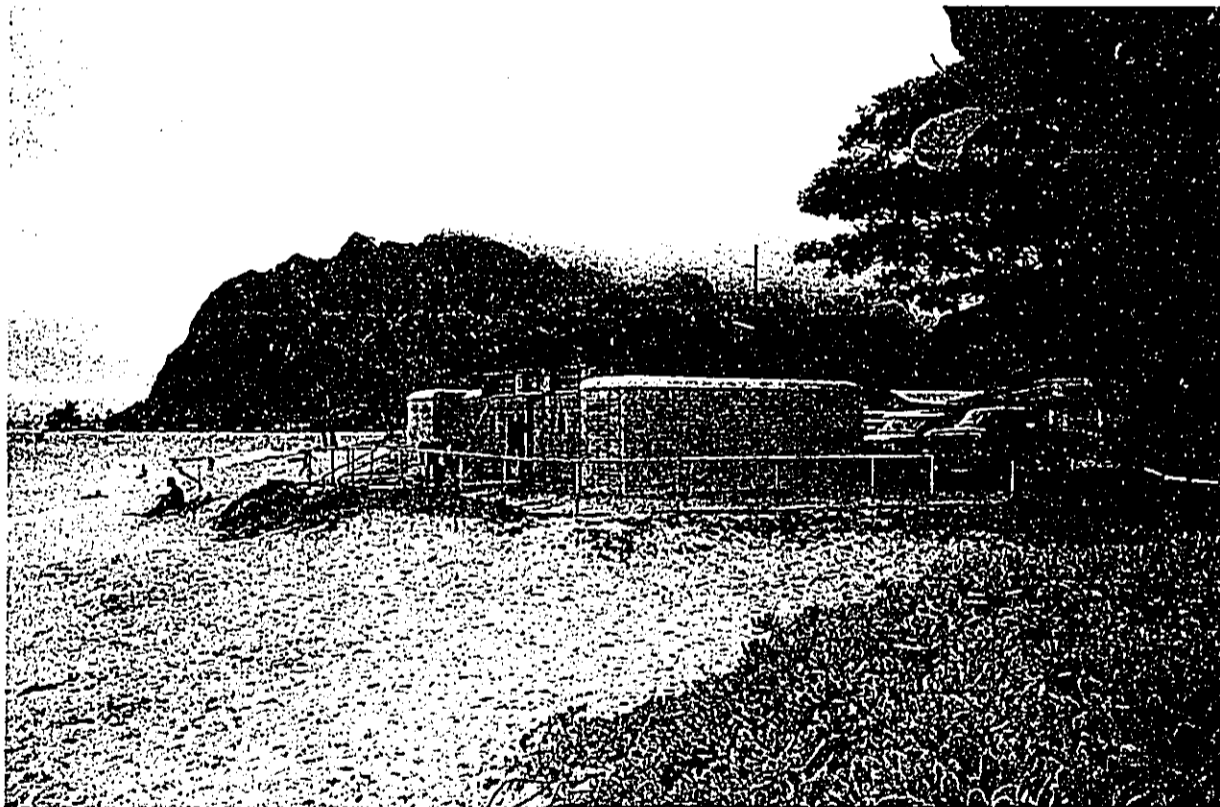
MAY 23 2003

2003-05-23-DA-PEA

FILE COPY

KAAAWA BEACH PARK  
Reconstruction of Comfort Station

FINAL ENVIRONMENTAL ASSESSMENT



CITY AND COUNTY OF HONOLULU

Department of Design and Construction

MAY 2003

# **KAAAWA BEACH PARK**

## **Reconstruction of Comfort Station**

**FINAL ENVIRONMENTAL ASSESSMENT**

Prepared for:

**Department of Design and Construction  
City and County of Honolulu**

Prepared by:

**AKTA Ltd./ARTHUR KIMBAL THOMPSON ARCHITECT, AIA**

**May 2003**

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	Letter from Koolauloa Neighborhood Board No. 28, dated August 10, 2002	
	Koolauloa Vision Team Meeting Notes, dated August 8, 2002.	
	Reconnaissance survey of biota for a comfort station replacement at Kaaawa Beach Park, windward Oahu prepared by AECOS Consultants, dated July 15, 2002.	
	Archeological Inventory Survey for the Proposed Ka`a`awa Beach Park Comfort Station and Parking Area Improvements, Ka`a`awa, Ko`olauloa District, Island of O`ahu, Prepared by Pacific Legacy, Inc., dated April 2003	
	Cultural Impact Statement "Preliminary Report" prepared by Social Research Pacific, Inc. dated April 1, 2003.	

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## 1. INTRODUCTION

### 1.1 PROJECT SUMMARY

Project Name	Kaaawa Beach Park, Reconstruction of Comfort Station (Bathhouse Prototype) and Miscellaneous Site Improvements
Proposing Agency	Department of Design and Construction City and County of Honolulu 850 S. King Street, 9 <sup>th</sup> Floor Honolulu, HI 96813 (808) 523-4783
Landowner	City and County of Honolulu
Address	51-329 Kamehameha Highway Kaaawa, Hawaii 96730
Tax Map Key	5-1-002:025
Project Area	65,340 Sq. ft.
Existing Use	Public Beach Park with Comfort Station
Proposed Project	Replace existing Comfort Station with new Comfort Station (Small Bathhouse Prototype, C-2)
State Land Use	Conservation District
Zoning Designation	P-1 Restricted Preservation
Flood Zone	Firm Zone VE – 10 ft.
Special Management Area (SMA)	The subject property is located within the SMA
Shoreline Setback	The proposed improvements are located within the 40' Shoreline Setback
Action Requested	Compliance with Chapter 343, Hawaii Revised Statutes
Approving Agency	Department of Design and Construction
Basis for Environmental Assessment	Special Management Area Shoreline Setback Variance
Anticipated Determination	Finding of No Significant Impact (FONSI)



## **1.2 PROPOSING AGENCY AND ACTION**

The Department of Design and Construction (DDC), City & County of Honolulu proposes to replace the existing comfort station at Kaaawa Beach Park with a new comfort station (DDC Small Bathhouse Prototype C-2), replace existing wastewater treatment system and provide Americans with Disabilities Act (ADA) accessible parking and other miscellaneous site improvements. This environmental assessment covers all improvements that are sited within the boundaries of the existing beach park.

The proposed improvements for Kaaawa Beach Park were developed through the community vision process sponsored by the City and County of Honolulu. The vision process enables community residents to prioritize capital improvements projects and to allocate funds in a way that would address important neighborhood needs.

## **1.3 PURPOSE OF THE ENVIRONMENTAL ASSESSMENT**

The proposed project involves the use of public funds, is located in a Conservation District, a Special Management Area, and is located within the 40 foot setback line from the certified shoreline and is therefore subject to the environmental review process under Chapter 343, Hawaii Revised Statutes (HRS), Act 241, Session Laws of Hawaii (SLH) 1992, and Chapter 200 of Title 11, Department of Health Administrative rules, "Environmental Impact Statement Rules." This Environmental Assessment (EA) has been prepared in accordance with Chapter 343HRS to address potential impacts that may be caused by construction or subsequent operation of the improvements in the beach park plan.

#### 1.4 PERMITS REQUIRED

The following permits and approvals are required for the Kaaawa Beach Park Reconstruction of Comfort Station project:

ADA Accessibility	State of Hawaii, Disability and Communication Access Board
Approval of Design	City and County of Honolulu, Department of Design and Construction
Building Permit	City and County of Honolulu Department of Planning and Permitting
Special Management Area Use Permit (SMP)	City and County of Honolulu, Department of Planning and Permitting
Shoreline Setback Variance	City and County of Honolulu, Department of Planning and Permitting
Approval of Wastewater System	State of Hawaii, Department of Health
Conservation District Use Permit (CDUP)	State of Hawaii, Department of Land and Natural Resources

## **2. PROPOSED ACTION**

### **2.1 PROJECT DESCRIPTION AND LOCATION**

The proposed bathhouse is planned for the north end of Kaaawa Beach Park at the site of the existing comfort station. Bathhouse is a comfort station with changing area for both men and women. The beach park is located at 51-329 Kamehameha Highway in Kaaawa, Oahu, Hawaii. The park area is 65,340 square feet and is identified as Tax Map Key (TMK) 5-1-002:025. (See Figure 1)

Kaaawa town is located on the eastern shore of Oahu, about thirteen miles from Kaneohe town and twenty-two miles from downtown Honolulu. The beach park is approximately eight miles from Kahaluu and eight miles from Hauula - neighboring communities that may also use the beach park.

Figure 2 shows the beach park location and its immediate geographic context. The project is located on the makai side and along Kamehameha Highway. Motorists arrive at the beach park directly off Kamehameha Highway. Kaaawa Elementary School is located across the park on the other side of the highway.

### **2.2 HISTORICAL BACKGROUND**

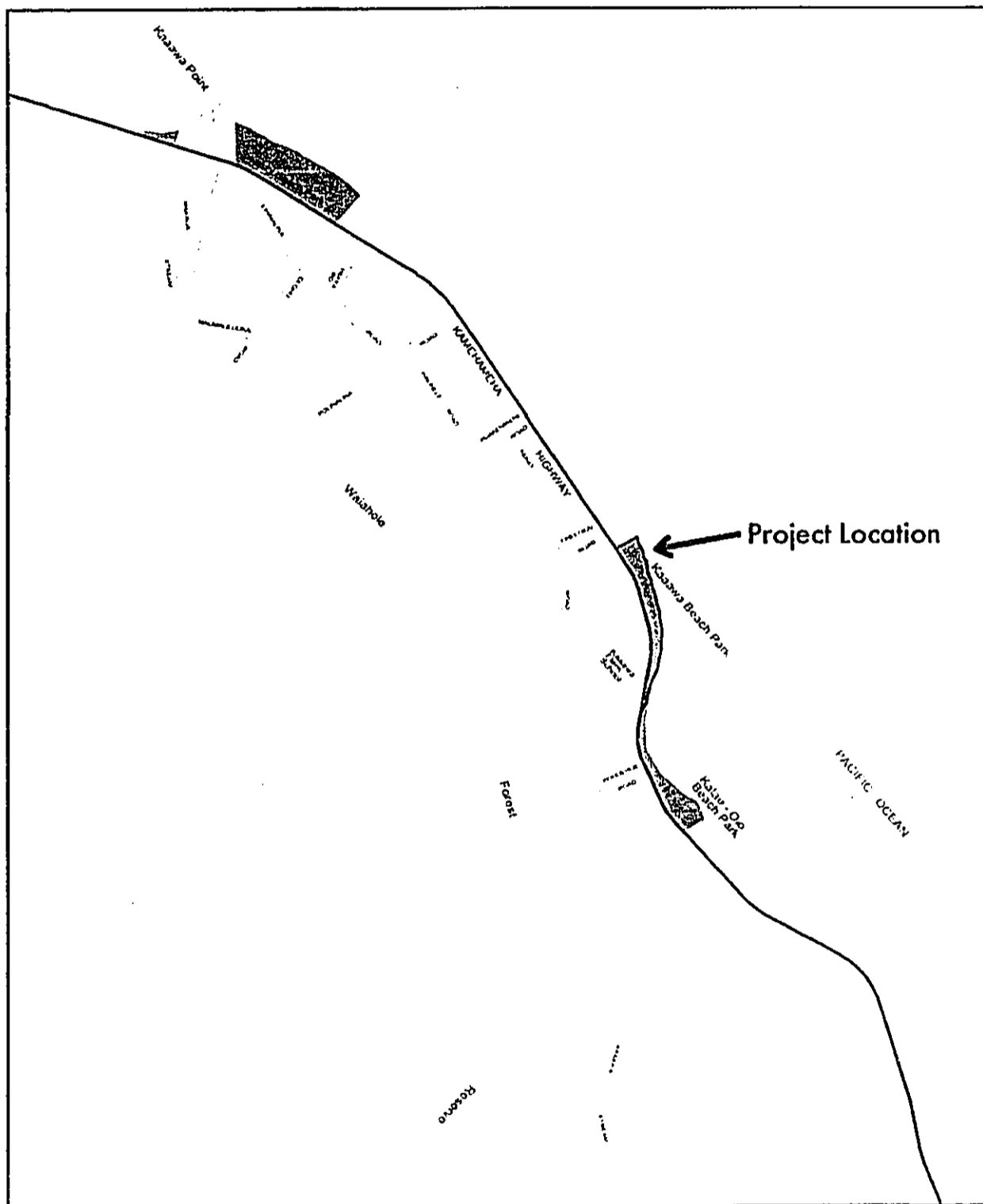
The existing comfort station was built in 1951 and consists of an approximately 726 sq. ft. concrete masonry and wood structure. The historical background of the beach park is not completely documented herein although from conversations with long time residents, the shoreline and beach area has moved toward the structure and highway over the past 50 years. The comfort station has always been highly utilized as a first stop from town for those traveling from windward Oahu and Honolulu to the north shore.

Kualoa Regional Park is much newer and the comfort station there is not as readily visible from the road. While both Kualoa Regional Park and Swazy Beach Park, also in Kaaawa, have greater area and parking access, the visibility and proximity to the road make the Kaaawa Beach Park comfort station more popular as a rest room stop for both automobiles and tour buses.

Historically, the small beach park has always been popular as a weekend respite for residents of Kaaawa and neighboring communities. Additional weekend parking is afforded by the shoulders of the highway.



KAAAWA BEACH PARK, RECONSTRUCTION OF COMFORT STATION  
Final Environmental Assessment



Scale: 1" = 1000'

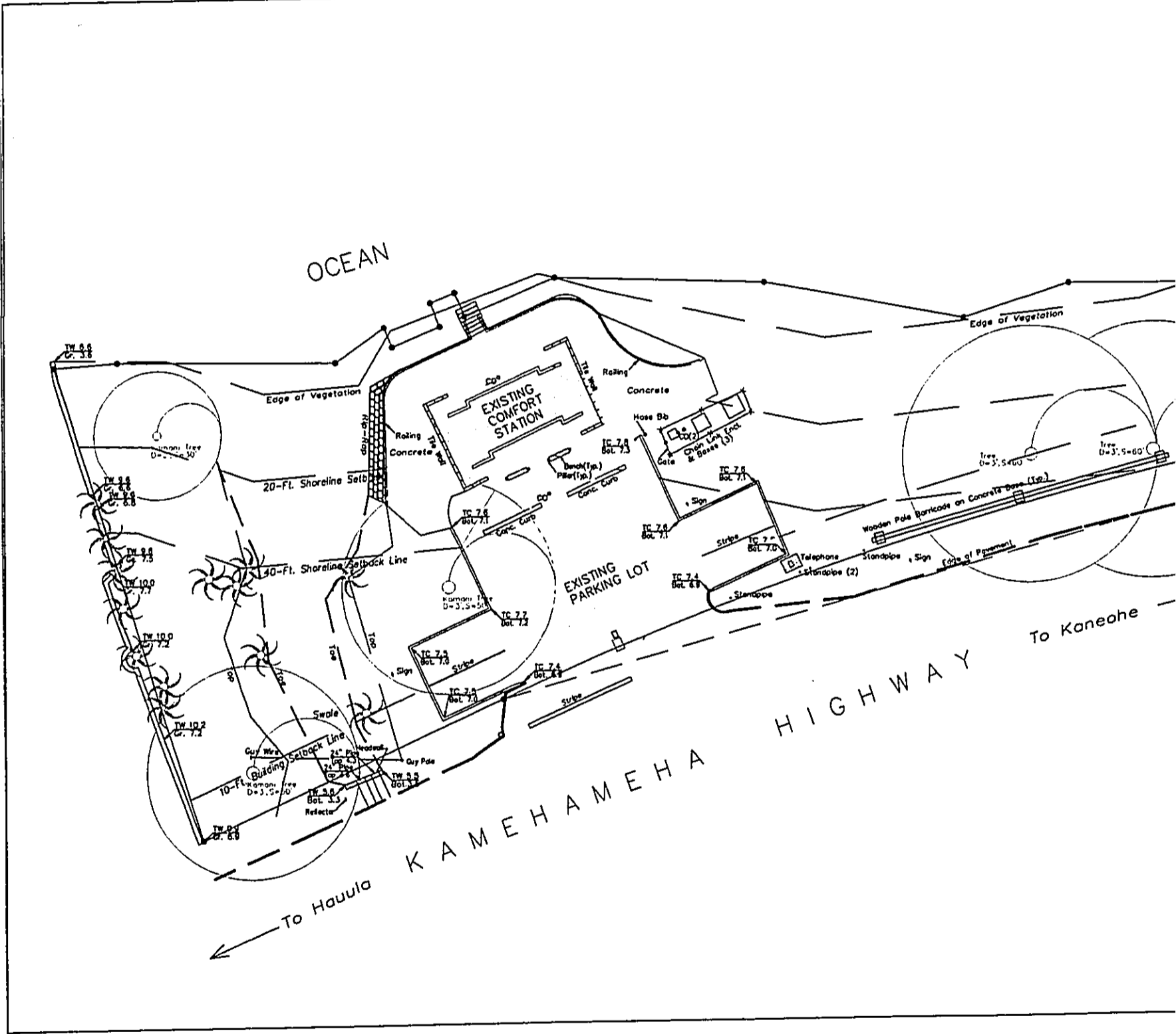
FIGURE 2  
LOCATION MAP

### **2.3 PROJECT PURPOSE AND NEED**

Kaaawa Beach Park is an important component of social life in the Koolauloa community. The beach park is heavily used during the weekends throughout the year and by visitors during the weekdays. The beach park is a regular stop for travelers from Honolulu and Windward Oahu and tour buses en route from Honolulu to activities further north. To ensure continued usage, existing facilities must be replaced or renovated and maintained. (See Figure 3)

The limited number of beach parks along Kamehameha Highway on this side of the island has created a high demand on the existing parks. The existing comfort station is in disrepair, as well as the existing sewer system and parking lot area. The facilities also require conformance with the Americans with Disabilities Act (ADA) standards.

**KAAWA BEACH PARK, RECONSTRUCTION OF COMFORT STATION**  
**Final Environmental Assessment**



Scale: 1" = 30'

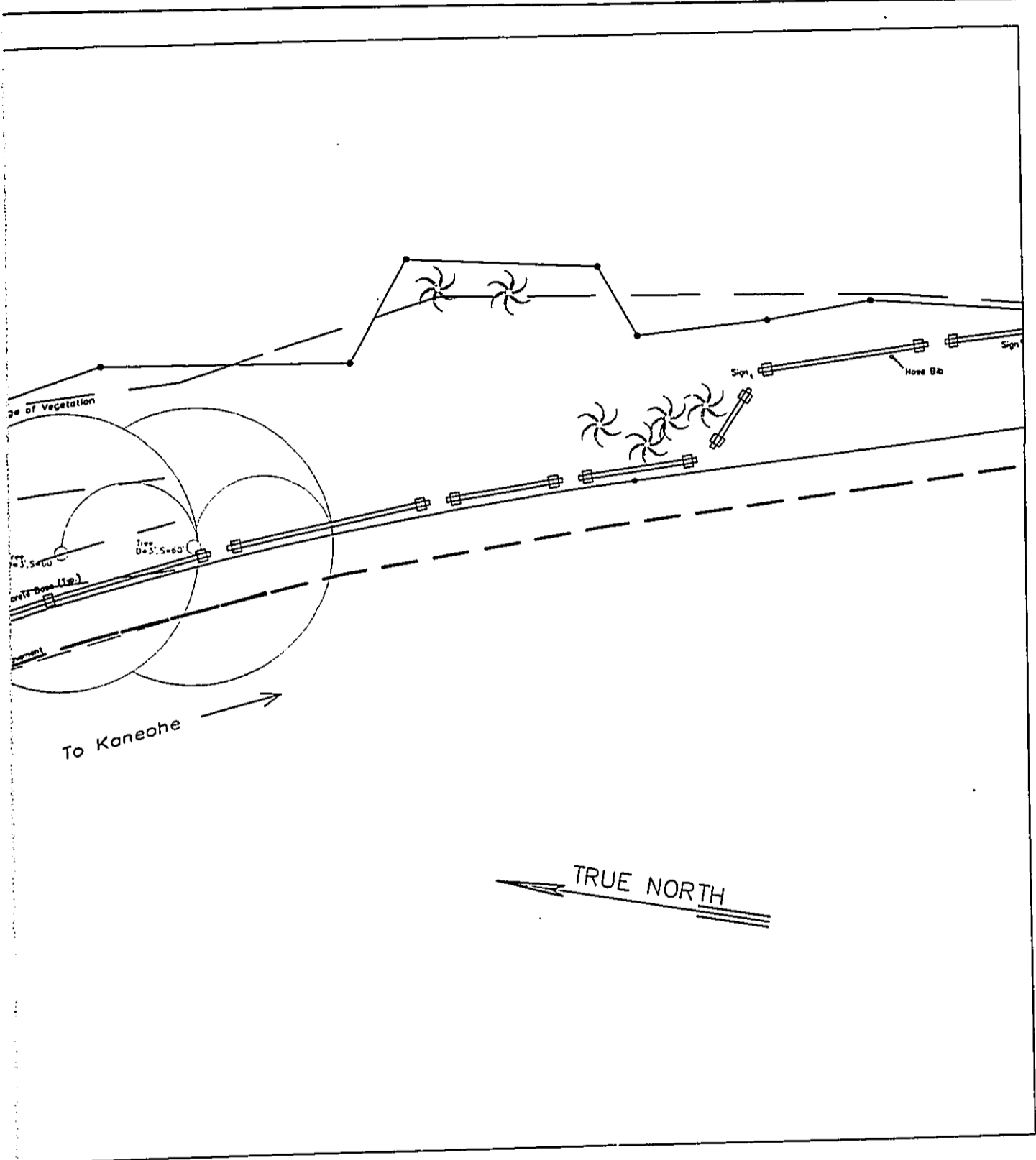
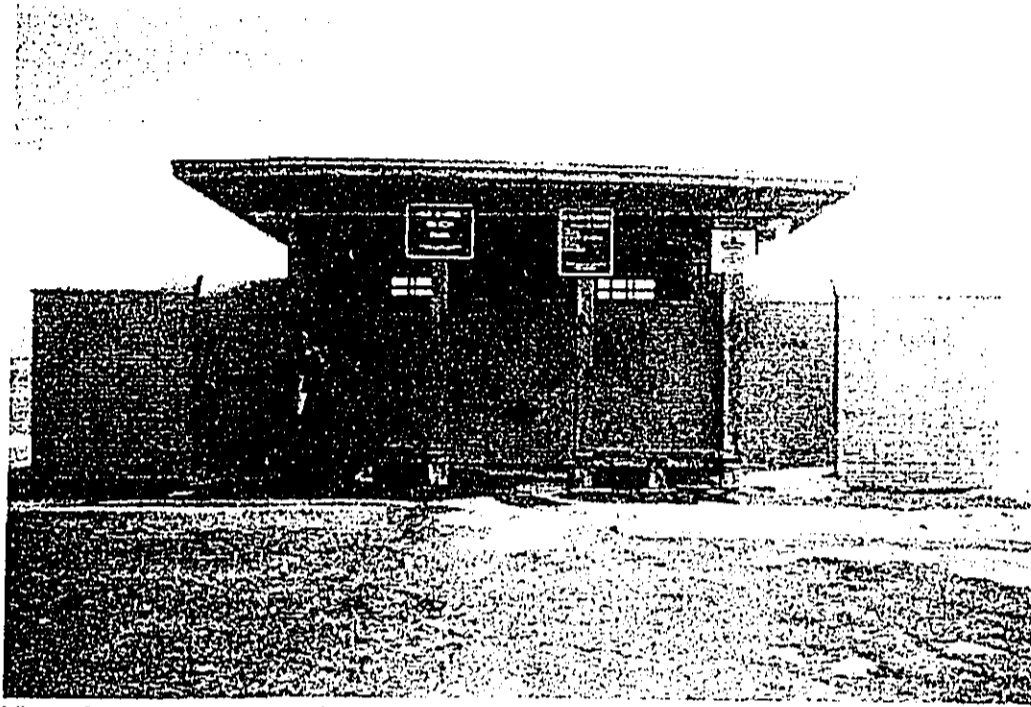
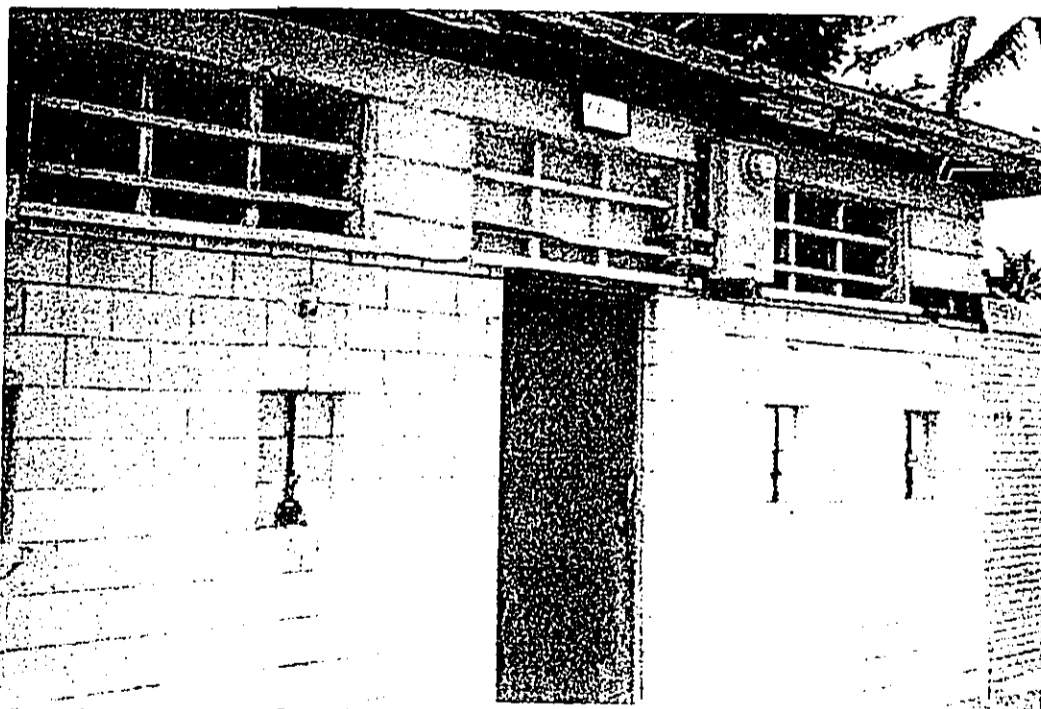


FIGURE 3  
EXISTING COMFORT STATION





View of comfort station and parking lot from Kamehameha Highway.



View of comfort station from the ocean.

Kaaawa Beach Park is one of eight beach parks located in the Koolauloa area. The 2-acre park is relatively small compared to Kokololio Beach Park (15.5 acres) and Swanzy Beach Park (4.8 acres).<sup>1</sup>

## 2.4 TECHNICAL DESCRIPTION

### Bathroom Description

The new bathroom will provide a permanent restroom facility for beach visitors and motorists, a changing and showering facility for beach park users and provide equipment storage area for City and County of Honolulu Department of Parks and Recreation staff. The structure is envisioned to provide a clean modern replacement for the current dilapidated and accessibility restricted structure.

The facility envisioned is the new small bathroom Prototype C-2 developed by the City and County of Honolulu Department of Design and Construction. This structure is a 837 sq. ft. concrete masonry structure with a wood framed 6 in 12 sloped standing seam metal roof. The design includes women's and men's restroom/changing rooms, park keeper's storage room and an additional storage room, projecting roof eaves affording weather protection to access and ventilation penetrations and shower. (See Figures 4 and 5)

This replacement facility will be located within the required 40-foot shoreline setback as there is not enough space between the required front yard setback line and the 40-foot shoreline setback along the entire parcel to fit the prototype restroom design. The structure will fit within the 20 ft shoreline setback allowed with issuance of a shoreline setback variance.

The building will be sited where the existing comfort station and parking is located. The immediate site will require excavation for removal of existing and new comfort station structural footings, new underground wastewater treatment system and utilities, driveway/parking area and surrounding planter areas and back-filled with select borrow as required. Any over-excavation beyond the footprint can be back-filled with the native sand or other suitable backfill material.

Components: (See Figure 6 and 7)

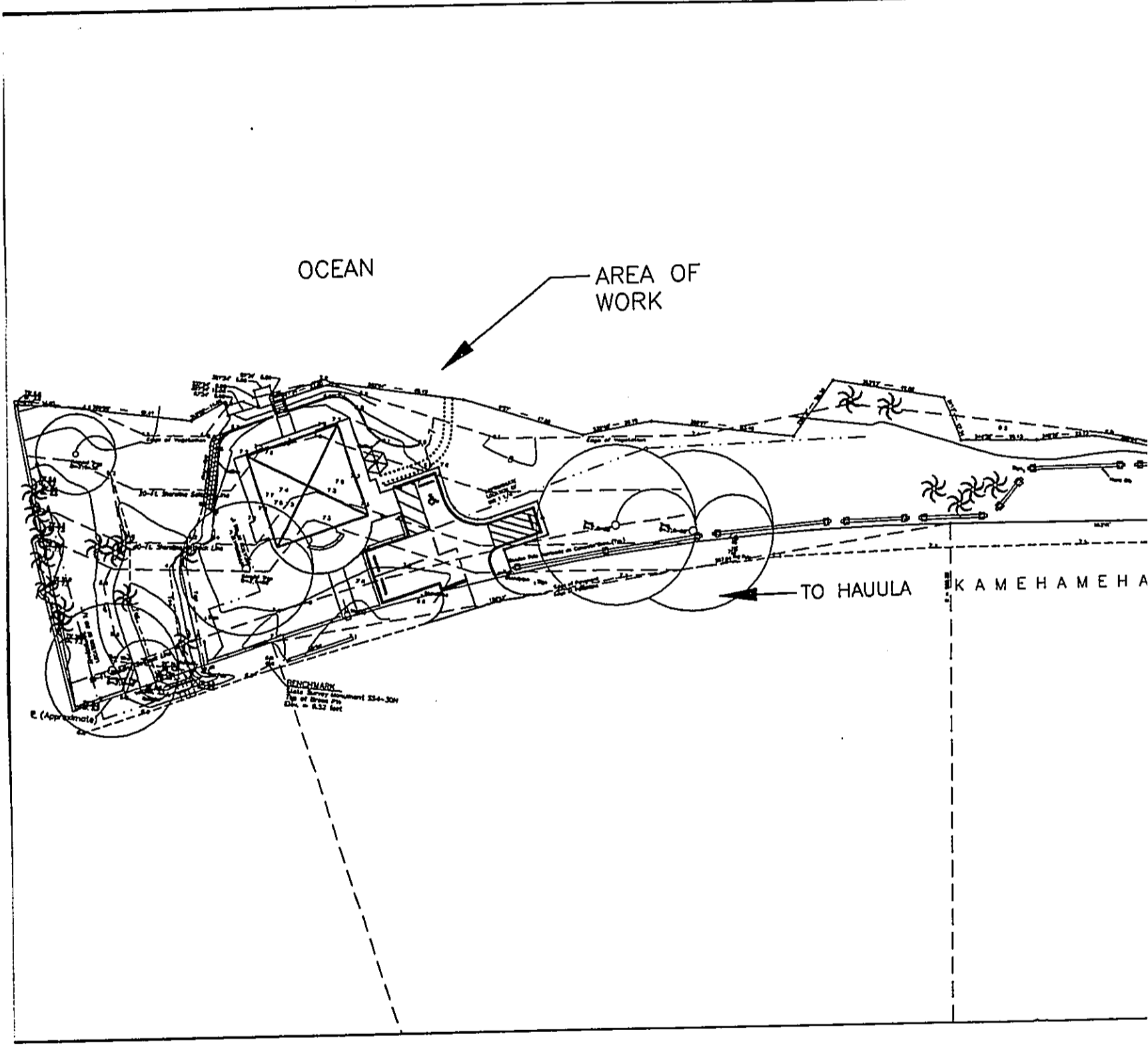
The proposed facility will measure approximately 28 ft. wide x by 32 ft. deep x 18 ft. high. Components of the bathroom will include:

- Men's and Women's Restroom and Dressing facilities.
- Provision for secured storage for Department of Parks and Recreation maintenance equipment.

---

<sup>1</sup> City and County of Honolulu, Department of Planning and Permitting. *Koolau Loa Sustainable Communities Plan*

KAAAWA BEACH PARK, RECONSTRUCTION OF COMFORT STATION  
Final Environmental Assessment



Scale: 1" = 50'

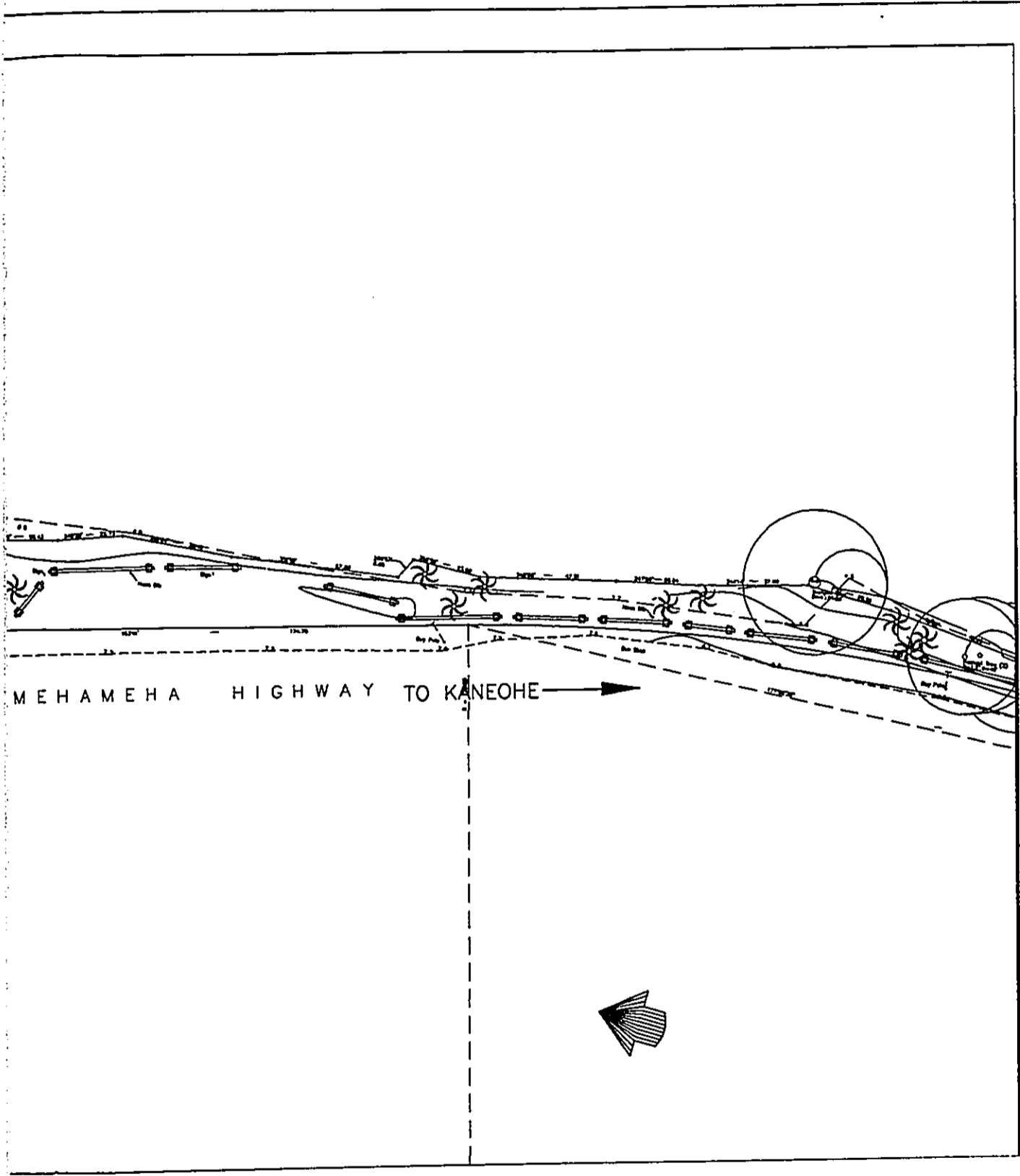
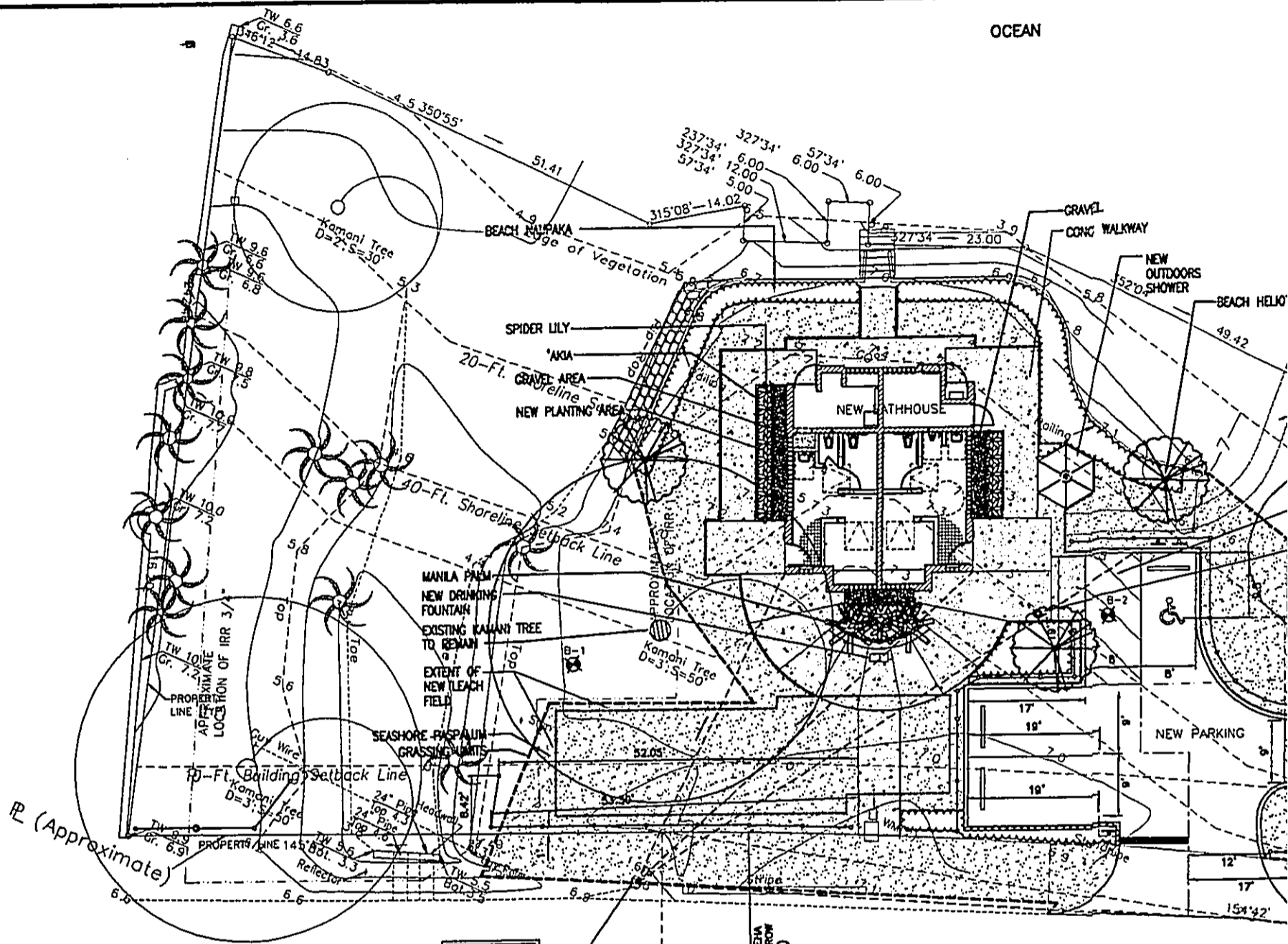


FIGURE 4  
BEACH PARK SITE PLAN

OCEAN



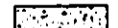

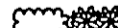



BENCH MARK  
STATE SURVEY  
MONUMENT  
SS4-30H  
TOP OF  
BRASS PIN  
ELEV=6.52'

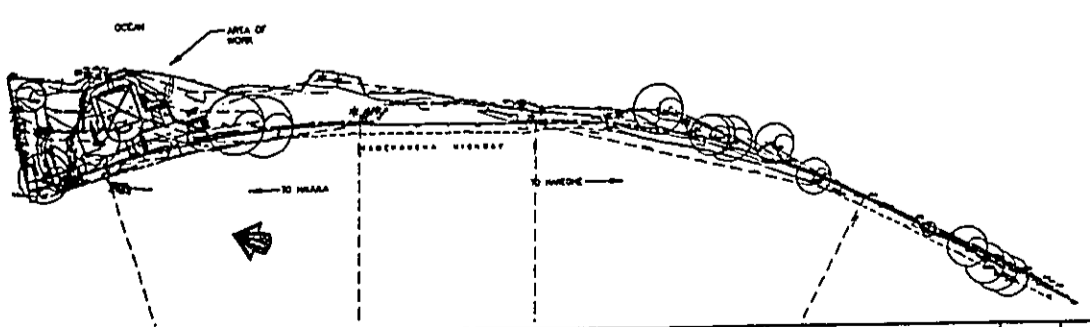
KAMEHAMEHA HIGHWAY

TO KANEHOE

TO HAULUA

LEGEND

-  NEW CONCRETE WALKWAY
-  NEW POST AND CHAIN BARRIER
-  NEW LANDSCAPING
-  TELEPHONE
-  FUTURE ACCESSIBLE ROUTE TO BEACH (BY OTHERS)
-  APPROXIMATE LOCATION OF TEST BORING



SITE PLAN SCALE 1/4" = 1'-0" 13

LEGEND SCALE NONE 9

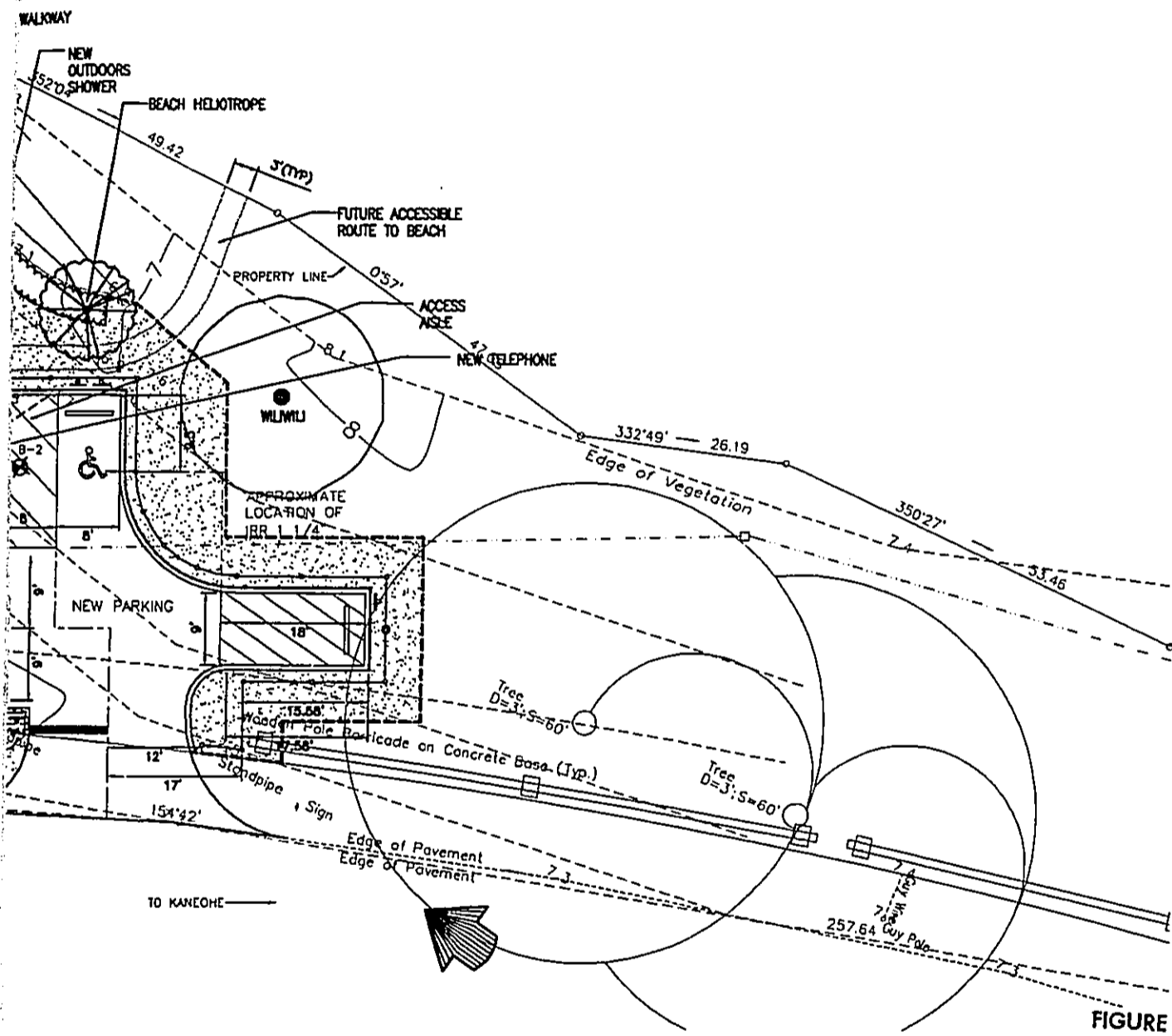
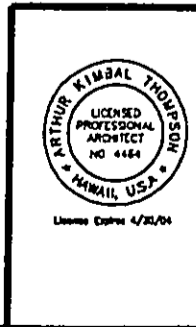


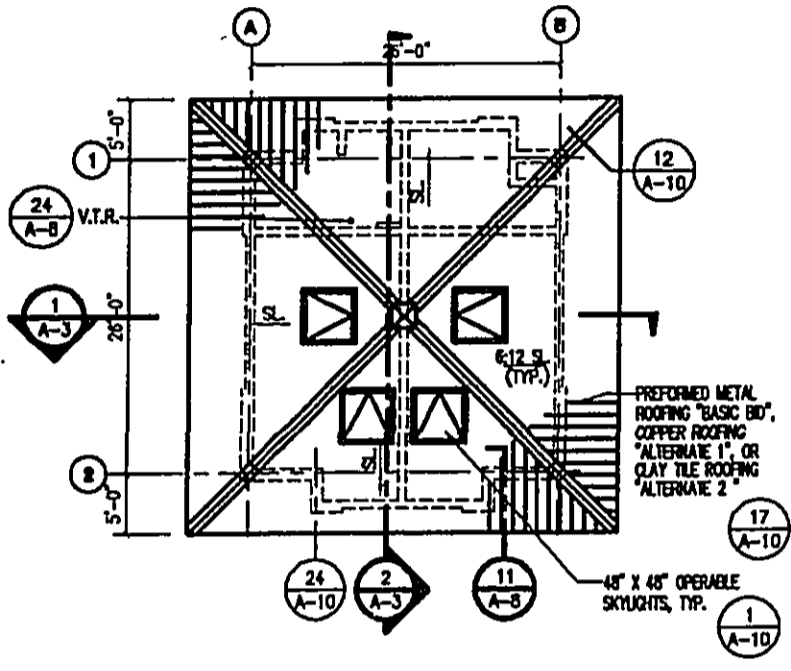
FIGURE 5

SITE LAYOUT PLAN SCALE 1"=40' 2

NO.	DATE	DESCRIPTION	MADE BY	APPROVED
DEPARTMENT OF DESIGN AND CONSTRUCTION CITY & COUNTY OF HONOLULU <b>MASTER PLAN</b> <b>FOR</b> <b>KAAWA BEACH PARK</b>				
APPROVED:				
DIRECTOR, DEPARTMENT OF DESIGN AND CONSTRUCTION			DATE	
CONCURRED:				
DIRECTOR, DEPARTMENT OF PLANNING AND RECREATION			DATE	

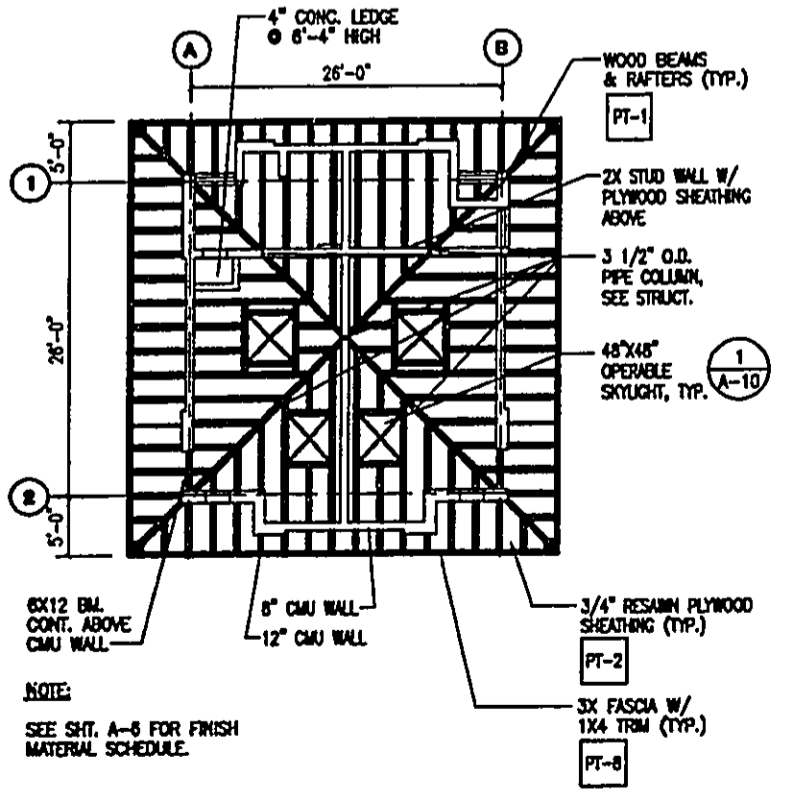


BY (BY OTHERS)  
 RING  
 ID SCALE NONE 9



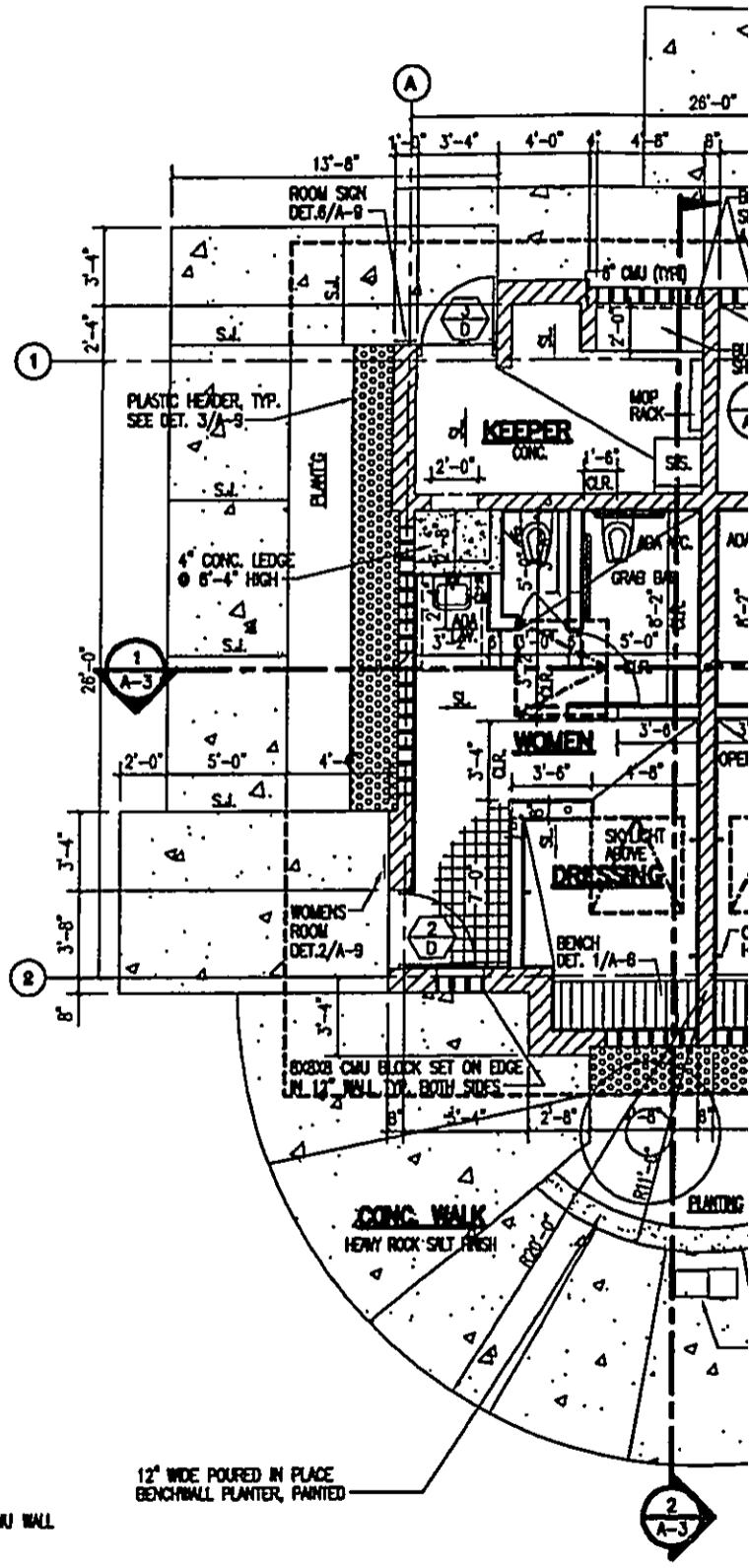
NOTE:  
SEE SHEET A-11 FOR  
"ALTERNATE 2"  
TILE ROOF CONDITIONS

ROOF PLAN SCALE: 1/8" = 1'-0" 23

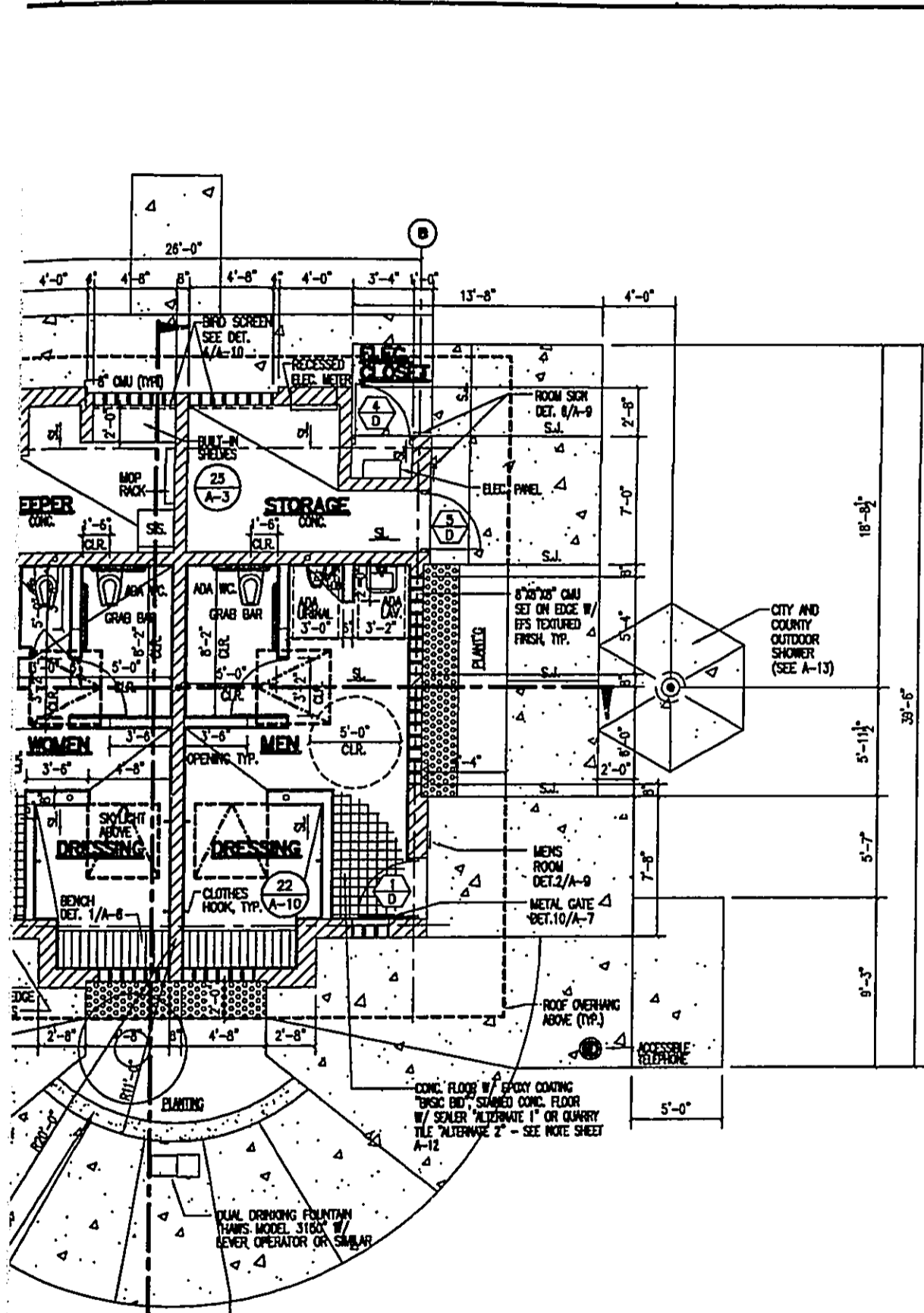


NOTE:  
SEE SHIT. A-8 FOR FINISH  
MATERIAL SCHEDULE.

REFLECTED CEILING PLAN SCALE: 1/8" = 1'-0" 21



- WALL LEGEND
- 6" OR 12" CMU WALL
  - CONC. WALK
  - 12" CONC. WALL
  - 6" OR 8" CMU WALL AT 6'-4" H.
  - 3/4" MAX. CRUSHED GRAVEL, 4" DEEP
- 12" WIDE POURED IN PLACE BENCH/WALL PLANTER, PAINTED



**NOTE:**  
 - SEE EXTERIOR ELEVATIONS FOR DRAIN OPENINGS AT FLOOR LINE.  
 - SEE SHEET A-11 FOR FLOOR FINISH ALTERNATE DETAILS 17/A-11 & 21/A-11

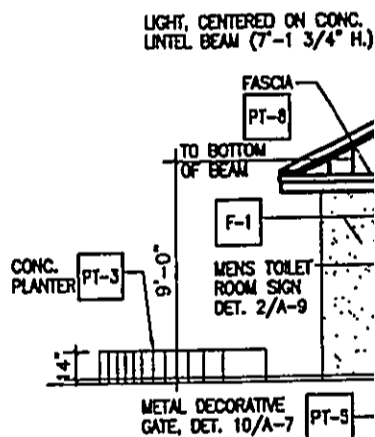
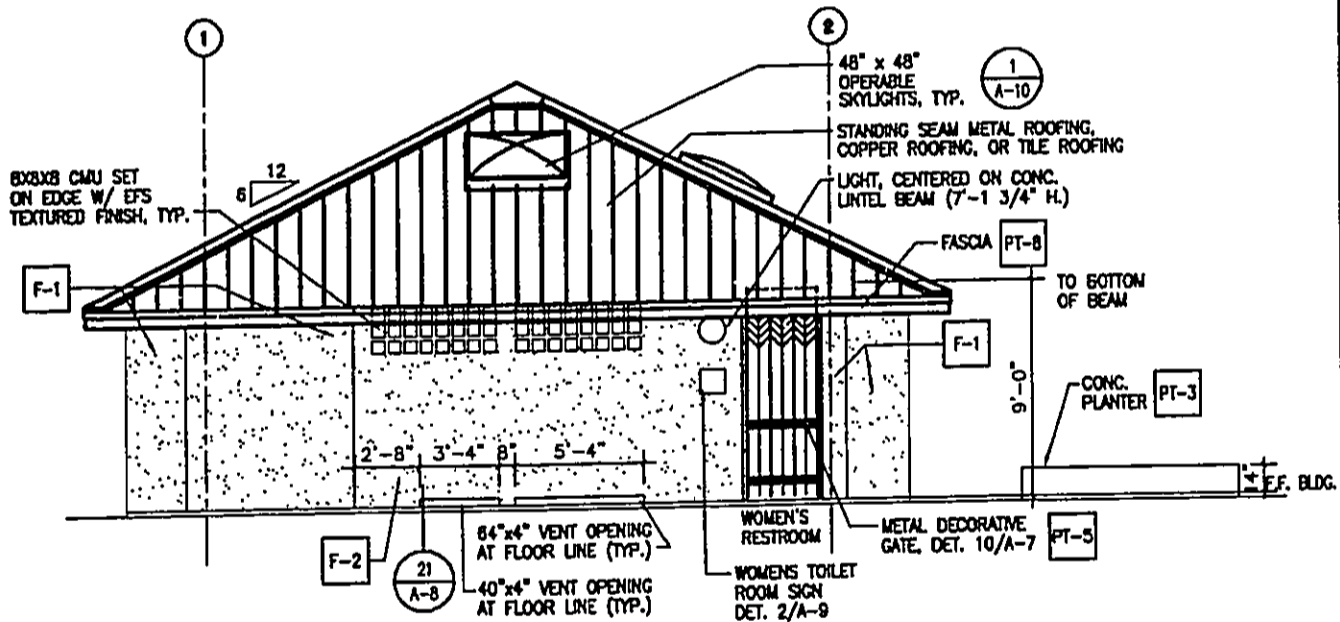
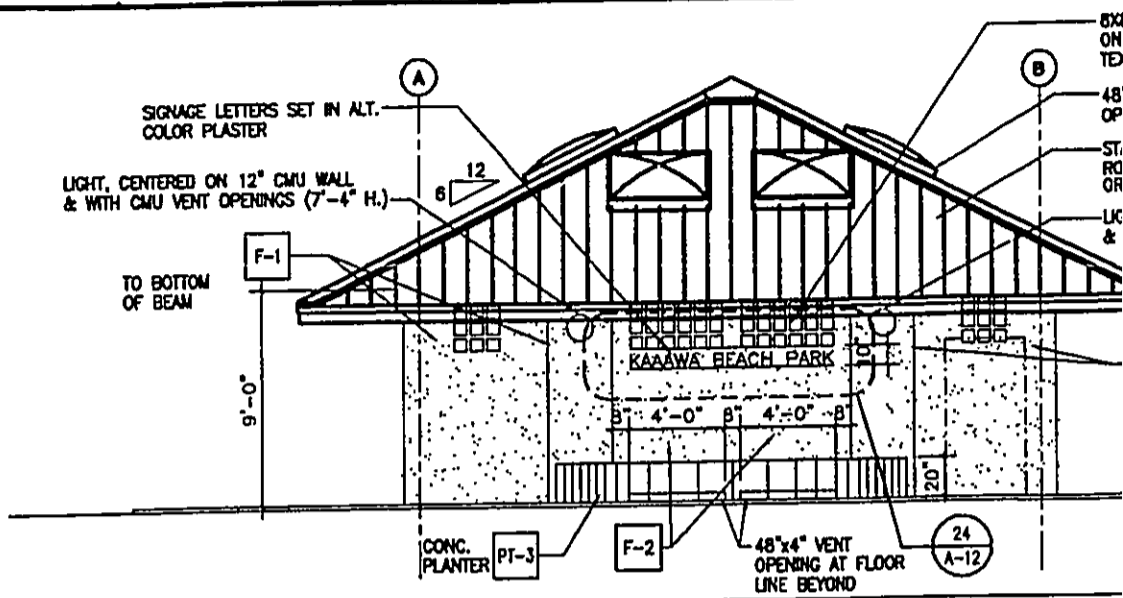


**FIGURE 6**  
 INTERIOR ELEVATIONS

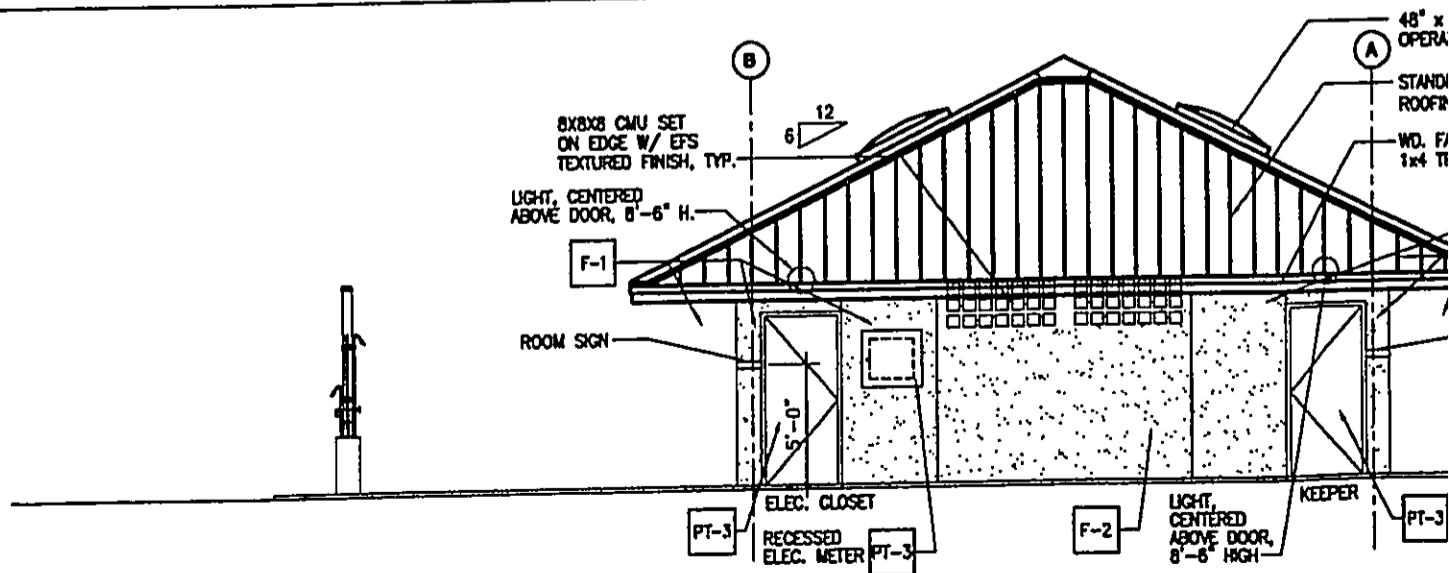
DEPARTMENT OF DESIGN AND CONSTRUCTION CITY & COUNTY OF HONOLULU <b>RECONSTRUCTION OF COMFORT STATION                  (BATHHOUSE) AND MISCELLANEOUS SITE                  IMPROVEMENTS AT KAAWA BEACH PARK</b> FLOOR PLAN, ROOF PLAN, REFLECTED CEILING PLAN	
DESIGNED BY: AKT CHECKED BY: AKT DATE: NOV. 14, 2002 APPROVED:	CONG. PROJECT NUMBER:
LICENSED PROFESSIONAL ARCHITECT NO. 4484 ARTHUR THOMPSON & VSO License Expires 1/31/04	REVISIONS:
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.	MADE BY: APPROVED:
JOB NO. <b>02-P-35</b>	DRAWING NO. <b>A-1</b>
SHEET NO. <b>7</b> OF <b>43</b>	FILE NO. <b>02/78</b>
<b>FLOOR PLAN</b>	SCALE: <b>1/4" = 1'-0"</b>



RAKED JOINT AT SPLIT  
FACE CMU DESIGN  
NO SCALE



LEFT ELEVATION SCALE: 1/4" = 1'-0" 14





- Provision for telephone. Existing public telephone will be utilized.
- Provision for exterior shower to replace existing
- Provision for accessible drinking fountain

Design Features:

The City and County of Honolulu, Department of Design and Construction Small Bathhouse Prototype C-2 (dated 5-10-02), as previously described and illustrated herein will be used. This prototype design concept was developed by the City and County of Honolulu, Department of Design and Construction as an effort to standardize comfort station and bathhouse design for the Department of Parks and Recreation facilities.

**Parking**

Existing on-site asphalt concrete parking lot may be accessed directly between the highway and fronting the existing comfort station. While not necessarily in conformity to current City and County of Honolulu Land Use Ordinance parking space size standards, the current parking lot could accommodate four compact, two standard and one ADA accessible parking spaces. Due to current setback standards to accommodate the prototype bathhouse design and required wastewater treatment system space requirements, the current parking lot will be relocated to the Kaneohe side of the park and reduced in size to accommodate two standard and one ADA van accessible parking spaces.

**Wastewater System**

The current wastewater treatment system is a gravity fed storage tank requiring a pump truck monthly. This system has deteriorated and is in need of replacement. The replacement system will consist of an underground septic tank with an underground leach field. The City and County of Honolulu Department of Parks and Recreation favors the septic tank system for maintenance and cost considerations. The wastewater system will be designed and constructed according to the standards of the State Department of Health's *Administrative Rules, Title 11 - Chapter 62 Wastewater Systems*. This system requires more unpaved ground area and is a primary determinant of the proposed reduced parking area. (See Figure 5, Page 12)

**Landscaping**

The existing beach park includes grassed areas with coconut palm trees that will remain. A current concrete paved area on the ocean end of the current comfort station will be demolished and planted with grass and other landscape materials as will be the current parking lot area. The proposed project would also improve the aesthetics and recreational environment at the bathhouse site at the north end of Kaaawa Beach Park. Naupaka will be planted between the

parking and bathhouse as well as around the bathhouse perimeter. Other salt tolerant plants such as seashore paspalum grass might be considered. A new irrigation system with standard pop-up spray heads will be installed. The system will be automatically controlled with automatic timer and solenoid operated valves. This system is low-flow and will add minimal additional impact to the water system.

### **Accessibility**

All facilities will be designed to meet the requirements of the American with Disabilities Act and the requirements of the Americans with Disabilities Act and the requirements of § 103-50.

## **2.5 PROJECT COST, FUNDING AND SCHEDULE**

As mentioned earlier, the proposed project is a product of the City's Vision Program and CIP funding. A total of \$ 1,160,000.00 for planning, design, and construction of site improvements was included in the City fiscal year 2002 and 2003 budgets.

Advertisement of bids and award of contract is scheduled for 2002. Construction is expected to begin in late 2003 and be completed within six to nine months. The proposed bathhouse will be constructed by a private contractor and overall management of the facility will be provided by the City & County of Honolulu Department of Parks and Recreation (DPR).

The proposed comfort station and other site improvements at Kaaawa Beach Park are considered public uses. Kaaawa Beach Park is publicly owned, operated and maintained by the City & County of Honolulu Department of Parks and Recreation

### 3. AFFECTED ENVIRONMENT

#### 3.1 PHYSICAL ENVIRONMENT

##### 3.1.1 TOPOGRAPHY

The project site is fairly level and located at elevation ranging between 4.0 feet and 7.8 feet above mean sea level (MSL).<sup>2</sup> The parcel is grassed in areas along Kamehameha Highway, and the majority of the site drains towards the ocean.



View looking north.

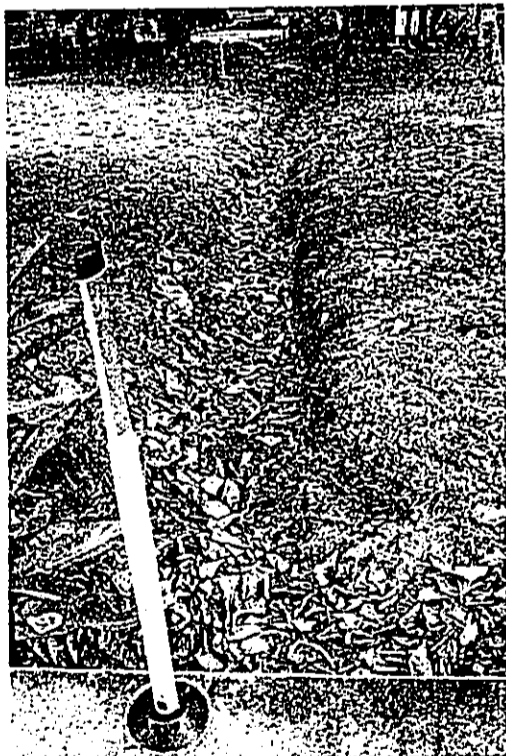
The existing comfort station is located at an elevation of 7.6 feet above MSL. The existing parking lot is located at about 7.0 feet above MSL. The elevation of Kamehameha Highway is approximately 6.7 feet above MSL. The ground generally slopes away from existing building.

There is a sandy drainage swale that directs mauka stormwater runoff into the ocean along the northern boundary of the site. (See Figure 3, page 8) On the mauka side of Kamehameha Highway this swale is small and dried out bordering two residential properties.

<sup>2</sup> Walter P. Thompson, Inc. August 8, 2001 Site Survey



Mauka – makai drainage swale along northern edge of park.



Drainage swale on mauka side of highway.

### 3.1.2 SOIL CHARACTERISTICS

According to Weidig Geoanalysts the following soil and geologic conditions occur at the beach park. "Most of the shoreline along the park is indicated to be underlain by beach sand composed mainly of coral and seashells. The beach sands are extremely erodable and shift constantly under tidal and wind action. On the northerly side of the proposed construction site, a revetment composed of stacked cobbles and boulders extends along the right bank of a ditch that discharges to the sea. The revetment was constructed as an armoring structure to protect the sand bank that supports the existing restroom facility against erosion caused by stream discharges and tidal surges. Cobbles and boulders appear to extend from the toe of the ditch bank at least as far as the existing northerly building lines, and probably beneath them.

The remainder of the proposed construction site is underlain by a soil horizon composed of coralline sands assigned to the Jaucas series. These soils have a low expansion potential as well as a low corrosion potential with respect to uncoated steel and concrete. On relatively flat ground, such as typical of the subject site, the erosion hazard due to water is considered slight, but susceptibility to wind erosion is considered severe where vegetation has been removed (Foote *et al.*, 1972)."<sup>3</sup>

Kaaawa Beach Park consists entirely of Jaucus Sand (JaC). (see Figure 8).

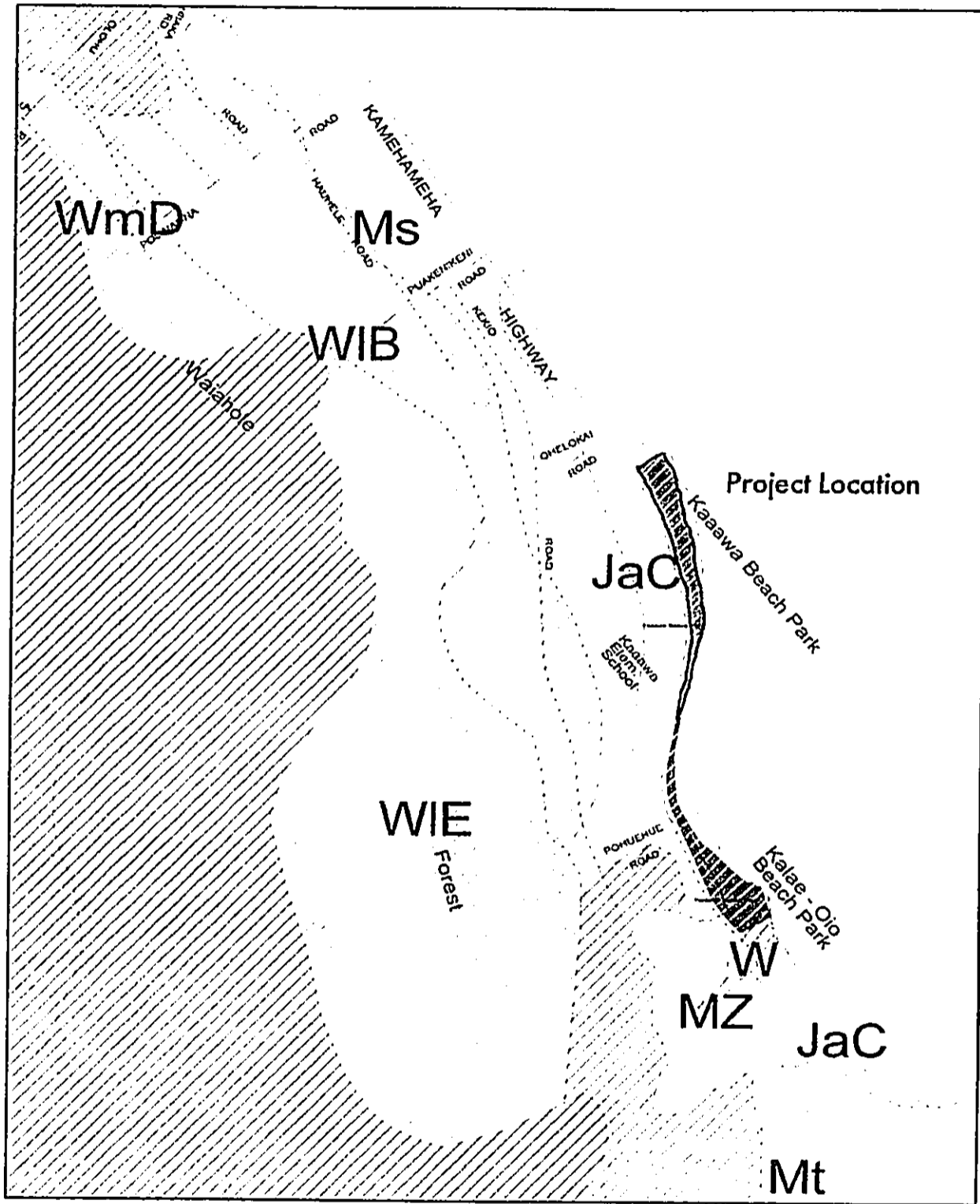
Jaucas sand (JaC), 0-15 percent slopes (in most places slope does not exceed seven percent). Permeability is rapid, and runoff is very slow to slow. Water erosion hazard is minor, however, wind erosion hazard is severe were vegetation is removed.<sup>4</sup>

### 3.1.3 COASTAL EROSION

Coastal erosion is a dynamic process affected by many factors including waves, currents, tides, storms, reef growth, stream erosion, wind, human activities, sea level changes, and coastal structures. These factors serve to shift the position of a natural beach over daily, seasonal, multi-year, and geological time scales. Since 1949 when the first aerial photographs were taken fronting the Kaaawa Beach Park, the beach has experienced shoreline erosion, but during the past decade the beach position appears to have stabilized with periods of erosion and accretion balancing each other. The beach fronting the Kaaawa shoreline is very narrow and the sand is composed of calcareous and terrigenous material (Sea Engineering, 1988). The beach is protected from open ocean waves by a shallow back reef lagoon with a coral reef front approximately 1000 feet from shore. This reef line approaches shore adjacent to a sand channel in line with the Kaaawa Stream about 1200 feet south of the project site. During the period 1949 to 1972, the beach water line receded approximately 75 feet with the vegetation line receding 34 feet in front of the bathhouse (Hwang, 1981). Some of this loss was regained from 1972 to 1975 possibly attributed to construction of other shoreline protection devices along the shoreline and a

<sup>3</sup> Weidig Geoanalysts, Soil and Geologic Conditions, Kaaawa Beach Park Restroom Building. July 31, 2002.

<sup>4</sup> U.S. Department of Agriculture, Soil Conservation Service, 1972. Soil Survey of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii.



Scale: 1" = 600'

FIGURE 8  
SOILS MAP



USACE supported sand replenishment project in 1974. Detailed quarterly transects conducted at this site from 1994 to 1999 (Gibbs, et al, 2001) show a fairly stable upper beach with overlapping erosion and accretion cycles shifting the position of the beach waterline (0' elevation) seawards or landwards by about 10 meters as compared to the initial 1994 transect.<sup>5</sup>

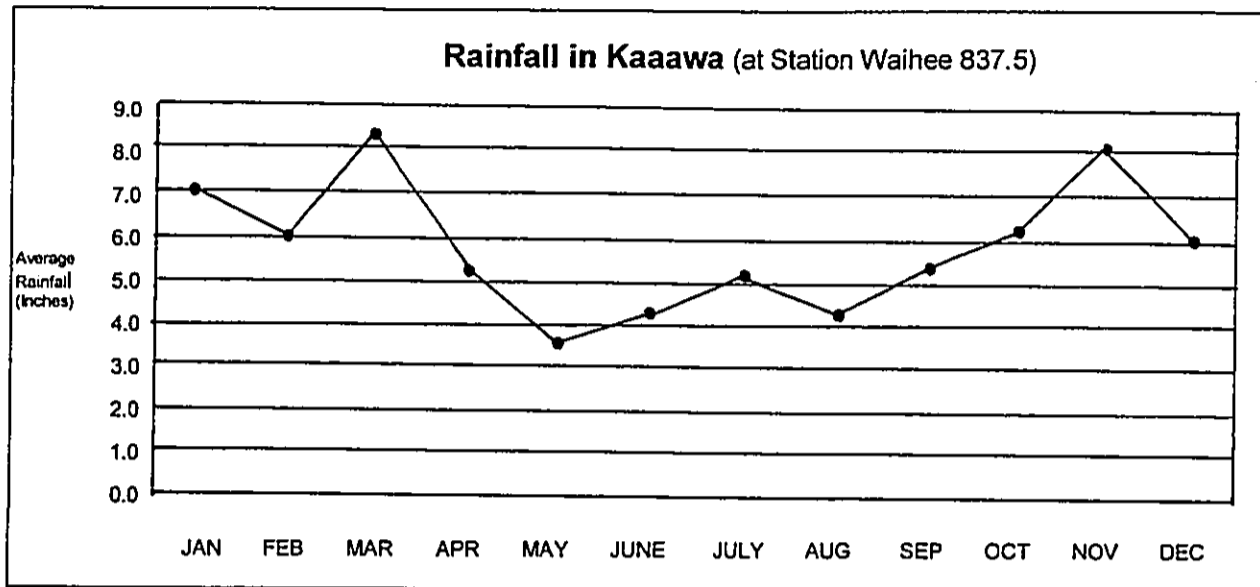
#### 3.1.4 CLIMATE

The Kaaawa climate includes mild and equable temperatures the year round (subtropical), moderate humidity and little variation in temperature between day and night. Prevailing winds are northeasterly trade winds that blow directly on-shore off the ocean. Tradewinds occur 70 percent of the time, with a frequency range of from approximately 45 percent in January to about 90 percent in July. In the summer, between about May and October, when the sun is more directly overhead, the weather is warmer and drier and the trade winds most persistent. In winter, between about October and April, the sun is in the south, the weather is cooler and the trade winds more often interrupted by other winds and by intervals of widespread clouds and rain. Monthly average temperatures range from 70 degrees Fahrenheit in January to 78 degrees Fahrenheit in August. Average annual rainfall in Kaaawa varies with elevation less rainfall at sea level and more at the Koolau Mountain Range. The wet season extends from the beginning of November through April. (See Figure 9)<sup>6</sup>

<sup>5</sup> Soil Erosion assessment prepared by Oceanit. Report dated July 9, 2002.

<sup>6</sup> U.S. National Weather Service, Forecast Office, Honolulu, Hawaii.

FIGURE 9



Source: Hawaii State Climate Office, Department of Meteorology, University of Hawaii

### 3.1.5 AIR QUALITY

Air quality in the area is mostly affected by air pollutants from vehicular sources. The project is located along Kamehameha Highway, a major roadway which links Kaaawa and communities between Kaaawa and (the North Shore) and to Kaneohe, Kailua and Honolulu and presently carries a high level of vehicular traffic, particularly during the morning and evening commute period. The impact of the project is not considered significant because of the rural character of the area and the tradewinds help keeping pollution levels low. Kaaawa is not situated in an air quality maintenance or non-attainment area per the State Department of Health (DOH).

### 3.1.6 WATER QUALITY

The ocean outside Kaaawa Beach Park is designated as class AA by the State Department of Health, Clean Water Branch. Marine waters are classified as AA or A. According to Hawaii Administrative Rules, Chapter 11-54 "it is the objective of class AA waters that these waters remains in their natural pristine state as nearly as possible with an absolute minimum of pollution or alteration of water quality from any human-caused source or actions. To the extent practicable, the wilderness character of these areas shall be protected." There is both point and non-point discharge in this area. However, the waters appear clean. Point source discharge means end-of-pipe discharges from factories or sewage treatment plants. Non-point source pollution (NPS) or polluted runoff comes from many land uses such as agriculture, industrial and residential zones, forests, and marinas.

### 3.1.7 NATURAL HAZARDS

#### Flood Hazard

According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map the entire parcel is located in a Zone VE, elevation 10, with a base flood elevation for a 100-year storm of 10 feet.<sup>7</sup> (See Figure 10) According to Oahu Civil Defense Agency, the subject property is also located in a Tsunami inundation zone.

The proposed action will not exacerbate any hazard conditions. Planning and design for the project will comply with flood district and other structural standards to mitigate any potential damages.

#### Hurricane Hazard

The potential impact of destructive winds and torrential rainfall of tropical storms and hurricanes on the proposed bathhouse will be mitigated by compliance with the Uniform Building Code adopted by the City and County of Honolulu.

#### Seismic Activity

The Uniform Building Code (UBC) provides minimum design criteria to address the possibility of damages due to seismic disturbances. The UBC rates seismic zones on a scale from Zone 1 through Zone 4, 1 being the lowest level of earthquake-induced ground movement. Oahu is a designated Seismic Zone 2A.

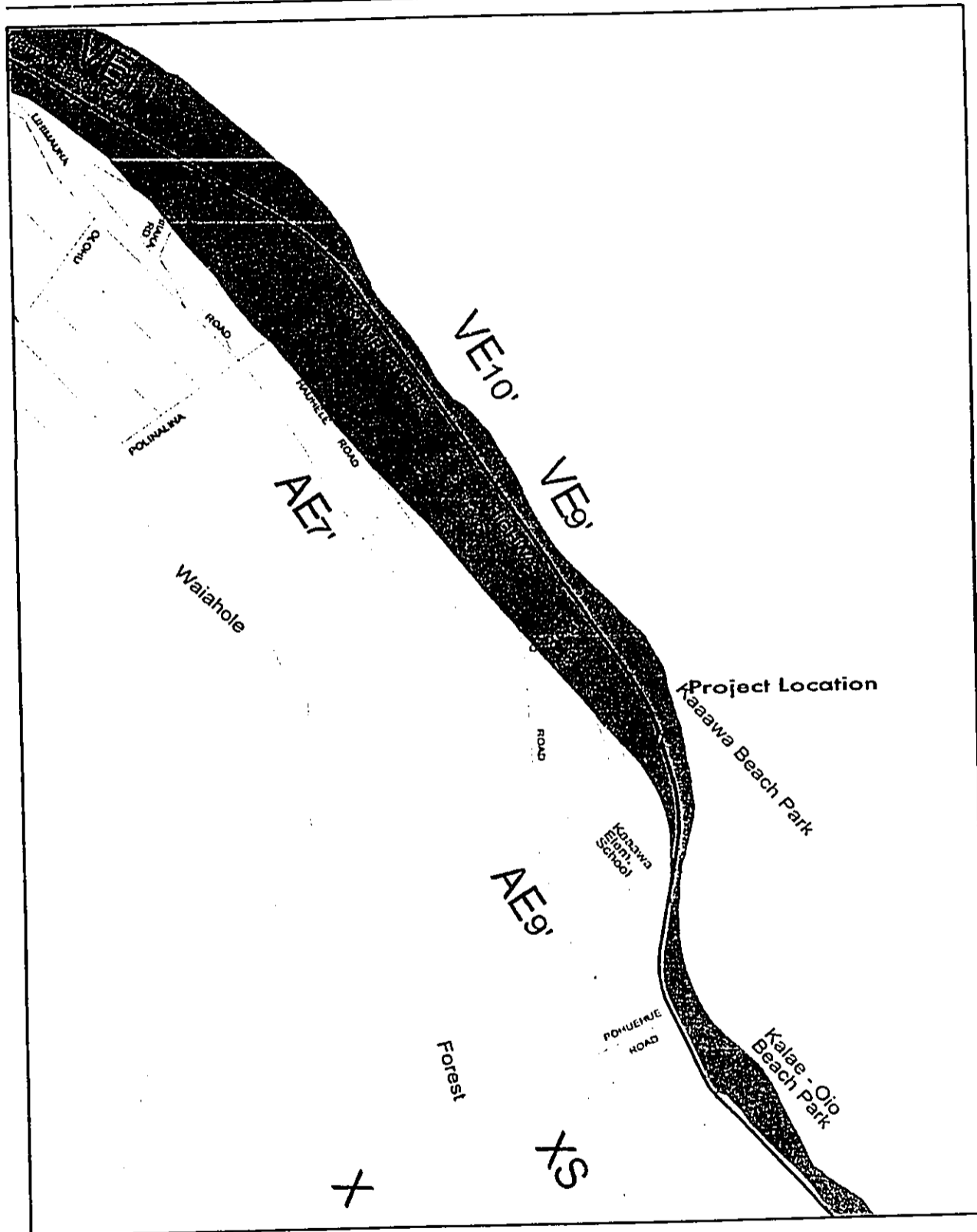
### 3.1.8 NOISE

Existing noise levels at the project site are consistent with similar coastal locations in the surrounding area. Traffic noise from Kamehameha Highway is the predominant source of background noise in the vicinity of the project site.

Construction activities related to the proposed comfort station will affect noise levels. Construction equipment, such as tractor with an excavator and/or, front-loader and small crane or truck mounted hoist and material-carrying trucks and trailers, would be the dominant source of noise during the construction period. Construction noise may impact residents in private homes mauka of Kamehameha Highway and directly north of the project site, but will be confined to daylight working hours only and should be short-term. Construction will comply with the State Department of Health's *Administrative Rules, Chapter 11-46*.

<sup>7</sup> Flood Insurance Rate Map (FIRM) Prepared by the Federal Emergency Management Agency, Map Number 150001165E, Effective date November 20, 2000.

KAAAWA BEACH PARK, RECONSTRUCTION OF COMFORT STATION  
Final Environmental Assessment



Scale: 1" = 600'

FIGURE 10  
FLOOD MAP

## 3.2 BIOLOGICAL ENVIRONMENT

### 3.2.1 FLORA

According to a reconnaissance survey conducted by AECOS Consultants on July 15, 2002, "almost all of the project parcel is maintained as an open lawn area by mowing of grass and removal of weedy shrubs. Only the parking lots, some areas around the existing comfort station, and a small "dune" area in the north corner along the beach are not maintained as lawn. In the latter area, a mixture of trees, shrubs, and herbs are growing in what appears to be an effective vegetation screen separating the park from an adjacent private parcel. This feature is adjacent to a drainage swale running across the park from the highway and which has a bare sand floor.

The lawn grasses at the park are dominated by three salt tolerant species: a dwarf Bermuda grass (*Cynodon dactylon* hybrid), buffalo or St. Augustine grass (*Stenotaphrum secundatum*), and seashore rushgrass or 'aki'aki (*Sporobolus virginicus*). Only the latter is native and in its natural habitat. However, this grass of the upper beach and dunes does not tolerate mowing or foot traffic as well as the planted Bermuda and St. Augustine grasses. Consequently, the seashore rushgrass hangs on in areas that are less frequently mowed or subject to minimal traffic by being close to structures.

Two species of trees predominate at the beach park: the coconut palm (*Cocos nucifera*) and false kamani or seashore almond (*Terminalia catappa*) and both are significant components of the landscaping of the site. One other plant, beach naupaka (*Scaevola sericea*) is both native and important to the site's landscaping. However, beach naupaka is easily damaged by excessive foot traffic, so the plants present hang on in "protected" areas of the park, such as the vegetation screen at the north end (Figure 2b). Puhuehue (*Ipomoea pes-caprae*) is a common, native beach vine that also cannot tolerate the heavy foot traffic in the center of the beach park, but survives on the same dune at the far north end.

Because of the small area and close proximity to the ocean where sandy soil and salty conditions tend to limit the number of species able to colonize, a relatively small number of species (26) were found. The majority of species are non-native, weedy or ruderal species growing along the maintained edges of the highway and coming up in cracks in the pavement or areas less subject to regular mowing. Most are rare at this location (that is, only one or two plants were seen). Of the 26 species of plants identified, 6 are considered native to the Hawaiian Islands (including species brought to Hawai'i during early Polynesian migrations from elsewhere in the Pacific). The ratio of native to non-native species is 23% native. This value is actually high compared with most low elevation O'ahu locations (AECOS Consultants, 2002) where the original vegetation has been completely removed or greatly disturbed. Typically the value is between 6 and 12% native plant species. The high percentage of native species is due to the proximity of the project to the ocean shore, where aggressive alien plants tend not to do as well as native

strand plants. Note, however, that all of the natives are either Polynesian introductions or indigenous (found elsewhere in the Pacific) species.”<sup>8</sup>

Find a more complete description of flowering plants in the survey in the appendix.

### 3.2.2 FAUNA

According to AECOS Consultants “Ka`a`awa Beach Park appears to harbor a small population of *ohiki* or ghost crabs (*Ocypode ceratophthalmus*) on the beach. No crabs were seen, but burrows at the top of the beach were assumed to belong to this species. The nearshore environment directly off the project site is characterized by a broad reef flat. The bottom is mostly sand near the shore and may harbor small infaunal (living in burrows under the sediment surface) invertebrates. In ancient times, the beach and sandy backshore of this coast attracted Pacific green sea turtle (*Chelonia mydas*) that nested here (Clark, 1977). However, human activities, lights, and landscaping of the upper beach and backshore make it very unlikely turtles would utilize the beach park today.”

### 3.2.3 MARINE WILDLIFE

According to the National Fisheries Service (NMFS), the following species might be found in the Kaaawa Beach Park area; “Threatened green sea turtles (*Chelonian mynas*), and endangered hawksbill turtles (*Eretmochelys imbricata*) occurs in waters around Oahu. Green sea turtles may also be found on the beaches off Kaaawa Beach Park. Endangered Hawaiian monk seals (*monachus schauinslandi*) are also found in the nearshore waters and beaches of Oahu and could potentially be found in the project area.”<sup>9</sup>

## 3.3 SOCIO ECONOMIC ENVIRONMENT

Kaaawa is primarily known for its low-density single-family houses. Commercial uses in the vicinity of the project site include a gas station, fast food restaurants and "mom and pop" stores along Kamehameha Highway. Recreational facilities in the vicinity of the project site include the Swanzy Beach Park.

On a short term basis the proposed project will support construction and construction related employment. On a long-term basis, the bathhouse will not have an impact on employment opportunities, nor will it have an impact upon local population levels.

<sup>8</sup> Reconnaissance survey of biota for a comfort station replacement at Kaaawa Beach Park, windward Oahu, prepared by AECOS Consultants. Report dated July 15, 2002.

<sup>9</sup> Letter form national Marine Fisheries Service, dated July 19, 2002.

**3.3.1 POPULATION**

On the weekdays the primary users of the park are tourists when tour buses stop to use restroom facilities, during the weekends however, the park users are primarily the local population. The 2000 census counted 1,427 residents in Kaaawa and 14,546 residents in the Koolauloa region. As seen in table 4, Koolauloa experienced 1.9 percent growth between 1990 and 2000. In contrast, the population of Kaaawa declined 1.4 percent over the same period.

**Table 1: Population in Kaaawa, the Koolauloa District, and Oahu, 1990-2000**

Area	1990	2000	Net Change 1990-2000	Percent Change 1990-2000
Kaaawa	1,447	1,427	-20	-1.4%
Koolau Loa District	14,263	14,546	283	1.9%
Kahaluu District	14,475	14,732	257	1.8%
Oahu	836,231	876,156	39,925	4.8%

Source: U.S. Census Bureau

**Table 2: Population by Age Group in Kaaawa, the Koolauloa District, and Oahu, 2000**

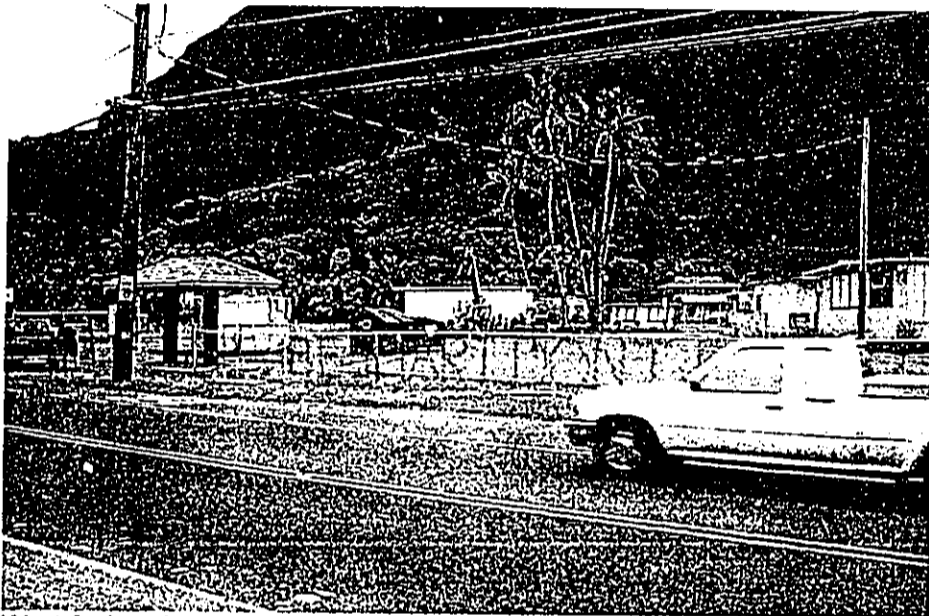
Area	Under 5 Years	5 – 17 years	18 – 64 Years	65 Years and Over
Kaaawa	107	268	890	162
Koolau Loa District	1,198	3,535	8,622	1,191
Kahalu'u District	1,012	3,008	9,476	1,236
Oahu	56,849	151,909	549,661	117,737

Source: U.S. Census Bureau

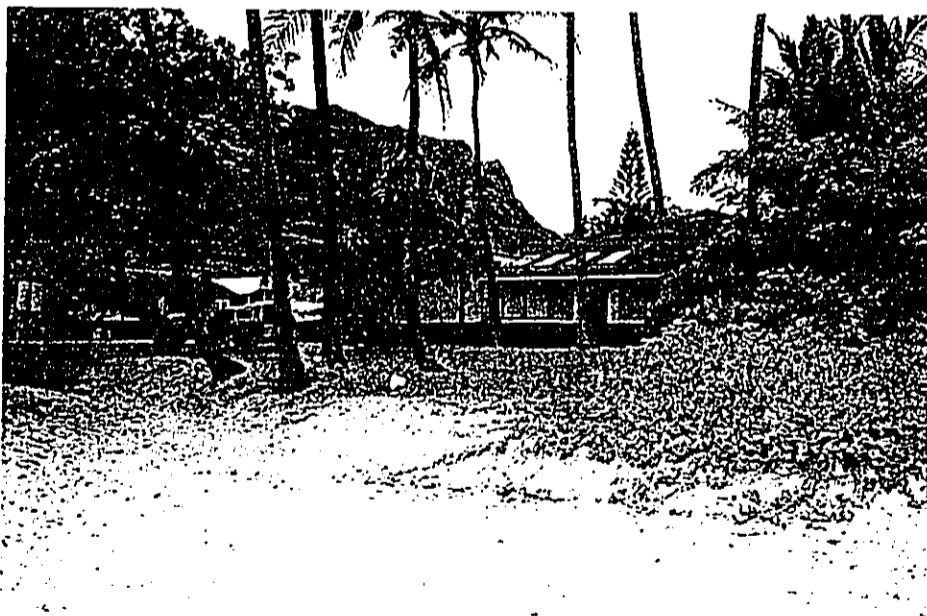
The population growth statistics for both Koolauloa and neighboring Kahaluu support continues demand for bathhouse facilities.

### 3.3.2 SURROUNDING LAND USES

Bordering the beach park across Kamehameha Highway are Kaaawa Elementary School and residential neighborhoods. Private residences are located at the northern edge of the park and along the coastline.

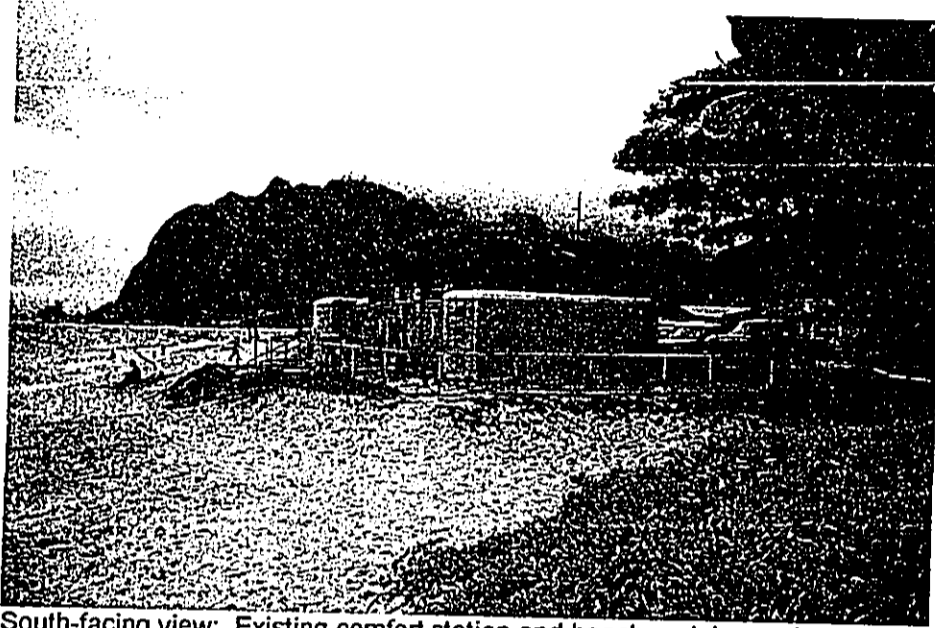


West-facing view: Kaaawa Elementary School parking facility across Kamehameha highway.



North-facing view: Private residence along northern boundary.



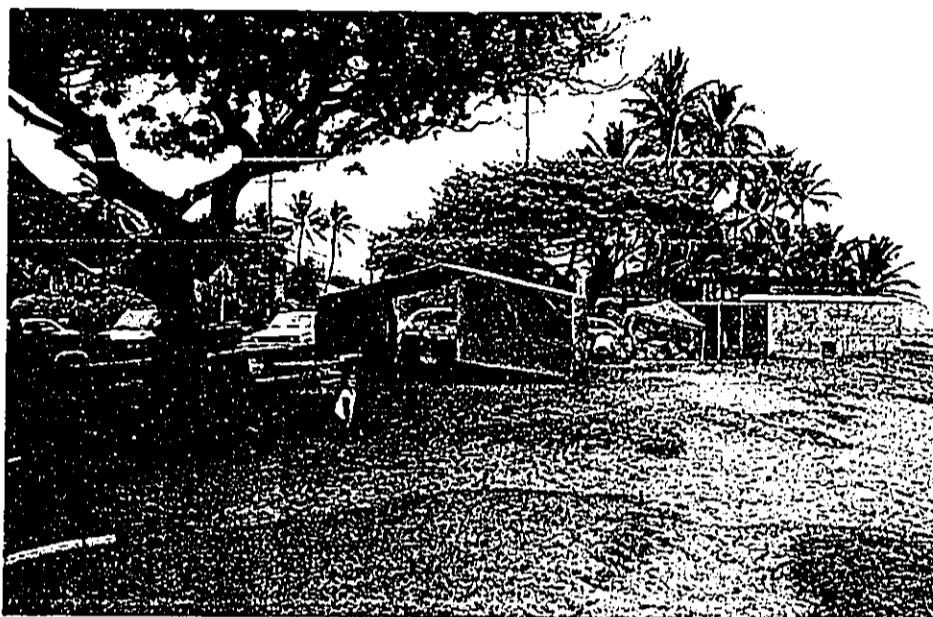


South-facing view: Existing comfort station and beach park beyond from the northeast corner of the site.

### 3.3.3 VISUAL AND SCENIC RESOURCES

Along this strip of Kamehameha Highway the coastal views compete with lush views of the Koolau Mountain Range. Vehicles and pedestrians traveling along glimpse the ocean between mature vegetation. The new bathhouse will be located in the same spot as the existing comfort station.

The proposed bathhouse would have little or no additional impact on nearby residences (in comparison to existing comfort station). Ocean views for private homes across Kamehameha Highway are currently partially obstructed by Kamani trees, coconut palms and other vegetation in this part of the park.



North-facing view from within the park: Mature Kamani trees partially block views of ocean from across Kamehameha Highway.

#### 3.3.4 RECREATIONAL RESOURCES

Residents along this coastline typically depend on the natural environment for recreation, notably the beaches and ocean in this area. Some recreational resources provided by Kaaawa Beach Park are fishing, kayaking, swimming and picnicking. There are no anticipated changes in these activities if the proposed improvements are implemented. Moreover, as a smaller, rural community, the area lacks many of the commercial amenities found in urban areas, such as theaters, shopping malls, bowling alleys and, fitness centers.

#### 3.3.5 ARCHEOLOGICAL, HISTORIC AND CULTURAL RESOURCES

The Department of Land and Natural Resources, Historic Preservation Division recommended that an archeological inventory survey was conducted in order to determine if historic sites are present. The subsurface survey conducted by Pacific Legacy between March 10 and 13, 2003 consisted of six trenches and “resulted in no significant archeological findings. Nothing of archeological significance was found within the project area other than minor recent historic debris.” However, “although no cultural deposits were identified during the archeological survey...the area under the existing comfort station could not be tested since the structure is still standing.” Therefore Pacific Legacy recommends that archeological monitoring will be conducted during any ground disturbing activities in the park.<sup>10</sup>

<sup>10</sup> Pacific Legacy Postfield Summary Report for Archeological Testing at Kaaawa Beach Park, dated March 18, 2003.

A report of the archeological inventory survey findings will be submitted to the State Historic Preservation Division and a monitoring plan will be submitted for approval prior to commencement of any construction activities.

#### CULTURAL RESOURCES

A cultural impact study was conducted by Social Research Pacific, Inc., found the following; "current activities consist primarily of swimming, kayaking, snorkeling, fishing, resting, picknicking and small group events... Traditional activities at the beach park consist primarily of fishing." "Large group social events such as *luau* are perhaps less common due to the relatively small park area, and because many residents hold such events within their home compounds." The study concludes that "the proposed reconstruction of the comfort station at Kaaawa Beach park will have limited if any, long-term impact on traditional uses of the project area. The project in general has overwhelming support from residents who feel there is a need for an improved structure. Currently uses of the beach park will not be impacted except for the short duration of the construction phase. No one in the community felt that construction efforts would be of any inconvenience."<sup>11</sup>

### 3.4 TRAFFIC AND CIRCULATION

#### EXISTING ROADWAY SYSTEM

Primary and only access to and from Kaaawa Beach Park is from Kamehameha Highway, the only major roadway in this part of the island. The highway links Kaaawa to Kaneohe, Kailua, Honolulu and the North Shore. The highway consists of one lane in each direction and is heavily used during the morning and evening commute hours. The speed limit in the vicinity of the beach park is 35 miles per hour.

There are no major intersections near the project site. On a short-term basis, traffic flow on Kamehameha Highway may be impacted as construction vehicles enter and exit the project site. This impact however, is not considered significant due to the short time period this will occur. On a long-term basis there are no anticipated traffic impacts associated with the proposed action.

#### TRAFFIC CONDITIONS

The State Highway Division collects traffic count data at various locations on an annual basis. Based on these counts, traffic estimates are calculated on segments of highway. Table 3 shows peak hour and daily volumes for 1998 through 2002 (for the first six months) at Kamehameha Highway 1.6 miles north of Johnston Road.

Traffic data for other streets in that area that could be affected by the proposed project are not available.

<sup>11</sup> Social Research Pacific, Inc. "Preliminary" Cultural Impact Assessment, dated April 1, 2003.

**Table 3: Kamehameha Highway Traffic Counts**

Kamehameha Highway, 1.6 miles North of Johnson Road (Old Sugar Mill)

Year	24-Hour Period		AM Peak Hour		PM Peak Hour	
	North Bound	South Bound	North Bound	South Bound	North Bound	South Bound
1998	5,181	5,272	350	290	461	346
1999	5,217	5,192	304	315	495	323
2001	5,459	5,451	369	283	483	369
2002	5,495	5,626	329	280	511	338

Source: State Highways Division, *Traffic Survey Data, Island of Oahu, Station C-29-B*

Access to the beach park parking lot is from Kamehameha Highway. Left turns from the beach park are made when there are gaps in the oncoming traffic, there are no traffic signs in the vicinity.

**3.4.1 EXISTING PARKING**

The existing beach park parking lot could accommodate four compact, two standard and one ADA accessible parking spaces. Due to the beach park's popularity during the weekends, park users are forced to park along the shoulder at Kamehameha Highway. The parking lot at Kaaawa Elementary School provided an auxiliary parking until recently when a gate was erected at the entrance of the school parking lot.



North-facing view: Cars parked along Kamehameha Highway

### 3.5 PUBLIC UTILITIES AND SERVICES

#### 3.5.1 WATER SUPPLY

The project is presently served by two existing 2-inch meters (Meter No. 01700779) (Board of Water Supply, Premise-ID 1065501).

#### 3.5.2 EXISTING WASTEWATER SYSTEM

The current wastewater treatment system is a gravity fed storage tank requiring a pump truck monthly. This system has deteriorated and is in need of replacement.

### 3.5.3 STORM WATER

Storm water is presently absorbed on the subject property since it is relatively flat with minimal paved surfaces. The velocity and volume of on-site flows is not expected to increase and there will be no additional adverse effects resulting from the proposed comfort station. There will probably be less storm water runoff due to the reduction of impervious area.

### 3.5.4 EXISTING ELECTRICAL SERVICE

Hawaiian Electric provides electrical service at the site. Connections are available to the subject property. There are existing light poles along Kamehameha Highway and the existing comfort station has interior and exterior lighting.

### 3.5.5 SOLID WASTE DISPOSAL

Solid waste shall be contained and removed from the site in the morning every day and in the evening during weekends as required. This service is provided by the City and County of Honolulu, Department of Parks and Recreation

### 3.5.6 PUBLIC HEALTH AND SAFETY DEVICES

Kaaawa Beach Park is located in District 4 of the Honolulu Police Department. District 4 is the largest patrol area of HPD, extending from Makapuu Point to Kawela Bay on the Windward side of Oahu. Kahuku Substation is located at 56-470 Kamehameha Highway, 15 miles from Kaaawa serves this area.

The park is part of Beat 473 with three officers assigned to a total of five beats. Additional officers from other beats might be dispatched dependent on the incident.

According to HPD's Annual Report, the following offenses were committed in Beat 453 during the year:

No. of Reports	Offenses
4	Assault
9	Burglary
62	Larceny
1	Theft

According to personnel of the Kahuku Substation none of these offenses are directly related to Kaaawa Beach Park. There have been no major police issues at the park; however, security is a

possible problem as groups of people hang out in the parking lot at night. The existing exterior lights have been broken repeatedly, possibly to intentionally darken this area.<sup>11</sup>

Fire protection is provided by Kaaawa Firestation located at 51-518 Kamehameha Highway. Engine 21, an ocean rescue boat and five firefighters for each shift service the local population.

Kahuku Hospital and Castle Hospital are the closest medical facilities with an emergency room.

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<sup>11</sup> Phone conversation with Sgt. Nihipali, Kahuku Substation, July 8, 2002.

## **4. POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

### **4.1 PHYSICAL SETTING**

#### **4.1.1 TOPOGRAPHY**

The existing terrain is relatively flat along Kamehameha Highway and gradually tapers off toward the ocean except for a drainage swale outlet between the existing comfort station and the northern property line. The proposed action will require excavation to demolish and remove the existing comfort station and wastewater system, as well as, excavation for the new wastewater treatment system. The bathhouse will generally be located at the site of the existing comfort station and parking lot. Some excavation will be required for footings and utilities other than that the grading is minor.

Disturbed areas immediately surrounding the bathhouse will be topdressed and re-grassed or planted with naupaka and grass. No mitigate measures are necessary.

#### **4.1.2 SOILS**

Erodable beach sand and sandy soils (see section 3.1.2) are predominant in the beach, however, no soil disturbance will occur in natural areas. The new bathhouse will be located in the existing comfort station location, therefore, no problems are foreseen with above soil types.

#### **4.1.3 COASTAL EROSION**

The existing revetment that protects the sandbank that the existing comfort station is located on will stay in its current location to minimize erosion. No new erosion protection features are planned for this beach park. All of the work will occur beyond the vegetation line. No mitigate measures are necessary.

#### **4.1.4 AIR QUALITY**

Day-to-day beach park operations are not expected to generate any long-term negative impact on air-quality. Short-term adverse impact on air-quality might be due to emissions from construction machinery and vehicles as well as dust from associated with construction and landscaping activities. The following measures will be taken to mitigate these impacts:

- a) Construction debris and excavated materials that is not used for construction will be disposed of at appropriate facilities. Stockpiles will be covered.
- b) If necessary, the contractor will water site periodically.



- c) Contractor will use properly maintained vehicles to minimize pollution.

Construction activities will employ fugitive dust emission control measures in compliance with provisions of Hawaii Administrative Rules (HAR), Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33 on Fugitive Dust and of the State Department of Health Rules and Regulations (Chapter 43, Section 10).

Once the construction is completed, it is anticipated that the bathhouse will not have an adverse impact upon air quality in the area; thus no long-term mitigative measures are needed.

#### 4.1.5 WATER QUALITY

As the master plan and bathhouse construction is implemented, storm water runoff is expected to decrease. When construction is completed, impermeable surfaces (rooftops, walkways and parking) are expected decrease. Any additional run-off created by the new hardscape can be handled by existing means, i.e. on-site percolation.

Temporary ground cover, plastic barriers and cut-off ditches are examples of soil erosion control measures used during construction.

The proposed bathhouse will not change the ocean-related activities that currently take place at Kaaawa Beach Park, except for providing much-needed restroom and dressing room upgrades. During the construction period, the impact to coastal waters will not be affected, as the comfort station project will adhere to Best Management Practices (BMPs).

The following BMPs are to be implemented and will be noted on the construction drawings.

1. Construct a stabilized construction entrance/exit at the locations indicated or as accepted by the officer-in-charge to prevent sand from being tracked onto area roadways, and from entering into storm drainage system and surface/coastal waters.
2. An existing paved area in the park may be used for the washing operation provided that runoff from the site will not create nuisance to park users or have the potential to runoff on to area roadways, or into storm drains, coastal waters or channels leading thereto.
3. Stabilized access/egress points in grassed areas may be covered with a reinforced erosion control mat that will serve to retain dirt and soil materials. Mat materials shall cover a minimum area of 50' L x 20' wide and be maintained as a tire wash area surface throughout the duration of work at the site. All mat material and anchoring devices shall be removed upon completion of the work and the area shall be regressed following use as an access/egress location.

4. If gravel is used to stabilize the access/egress area, it shall be, 1" to 3" size aggregate placed in minimum area of 50'L x 20' wide x 8" D. All gravel is to be removed from the area following construction and disposed off-site. The area shall be re-grassed following use as an access/egress location. Other means of stabilizing the access/egress area may be accepted by the officer-in-charge (O.I.C.). (The Officer-in-Charge, Architect or Engineer authorized to represent the Director of Parks and Recreation.)
5. Install silt fence at locations shown on plan. Silt fence may be adjusted to fit contractor's operations after the contractor acquires acceptance of the officer-in-charge.

The new leach field will be located outside of the 50-foot shoreline setback as required by the State Department of Health. This is common practice in shoreline areas throughout Hawaii and the leach field should have no effect on coastal water quality. A specific study (e.g., modeling study) of the effect of the leach field on coastal water quality is not required and would not be justified.

The effect of water runoff from the outdoor shower facility on coastal water quality is minor. The quantity of "graywater" from the shower is relatively small and would be filtered by the beach sand before reaching the coastal groundwater and eventually migrating to coastal waters, where the dilution would be extremely large.

Long-term permanent sand and soil erosion control measures such as grass and naupaka will be used.

There will be no effect on coastal waters fronting Kaaawa Beach Park; thus no long-term mitigative measures are necessary.

#### 4.1.6 NATURAL HAZARDS

##### Flood Hazard

The proposed action will not exacerbate any flood hazard conditions. This is for the extension of an existing facility; it is a replacement bathhouse with non-habitable spaces used by park users during the day only. Planning and design for the project will comply with flood district and other structural standards to mitigate any potential damages. The existing comfort station is located at an elevation of 7.6 feet above mean sea level (MSL), 2'-6" below the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map designation of Zone VE, elevation 10 feet for the entire parcel. Per the Land Use Ordinance (Section 21-9.10-5), public comfort stations and bathhouses are exempt and a Coastal High Hazard Certification Variance is not required.

Compliance with flood requirements could only be met by elevating the bathhouse on columns such that the lowest horizontal structural member would be 10 feet or more above mean sea level. This would require long ramps (also elevated on columns) to provide ADA accessibility. Such a design would have a very significant impact on structure costs and other aspects of the site design. As a matter of explanation, the ramps would need to be on columns so that they would not obstruct the flow of flood waters and potentially increase water surface elevations and flow velocities at adjacent locations.

The proposed action will not exacerbate any hazard conditions. Planning and design for the project will comply with flood district and other structural standards to mitigate any potential damages.

#### **Hurricane Hazard**

The potential impact of destructive winds and torrential rainfall of tropical storms and hurricanes on the proposed bathhouse will be mitigated by compliance with Section 3.1.7 of the Uniform Building Code adopted by the City and County of Honolulu.

#### **Seismic Activity**

According to the 1997 Uniform Building Code Oahu is a designated Seismic Zone 2A, a low level of earthquake movement (Zone 1 being the lowest). The proposed bathhouse will be designed to comply with the Uniform Building Code, Chapter 16, Division IV-Earthquake Design. No mitigative measures are necessary.

#### **4.1.7 NOISE**

Construction will comply with the State Department of Health's *Administrative Rules, Chapter 11-46*. Once the construction is completed, it is anticipated that the comfort station will have no adverse impact upon existing noise characteristics; thus, no-long-term mitigative measures are necessary.

### **4.2 BIOLOGICAL ENVIRONMENT**

The site of the proposed structure deals with a relatively small area already used for an existing comfort station and paved area within an existing beach park use. As the local community has utilized the area historically, there will be minimal additional impact that would involve a substantial degradation of environmental quality.

#### **4.2.1 FLORA**

No endangered plants are located within the park. The construction of the bathhouse will not require the removal of any trees; the area around the bathhouse will be re-planted with grass and naupaka. There are no botanical reasons to impose restrictions on the proposed new bathhouse.

#### **4.2.2 FAUNA**

No endangered animal species are located within the park. Construction is not expected to have an adverse impact on birds and other small mammals. Outdoor lighting at the park will not have a negative impact on seabirds and other wildlife. Floodlights will not be utilized. Lighting fixtures will be selected to avoid the problem of light attraction. No mitigative measures are necessary.

#### **4.2.3 MARINE WILDLIFE**

No significant lighting will be added to the side of the bathhouse facing the ocean. Strong light can sometimes attract green sea turtles to shore.

The nature and location of the proposed project ensures that wildlife will not be affected.

### **4.3 SOCIO-ECONOMIC ENVIRONMENT**

#### **4.3.1 POPULATION**

As local beachgoers have utilized the area historically, there will be minimal additional impact that would curtail the range of beneficial uses of the environment. The project continues a present shoreline recreational use and access by the general public. In looking to a current planning cycle of 50 years, the intent of this facility is to foster good shoreline management.

The proposed project does not involve substantial secondary impacts, such as population changes or effects on public facilities other than provide an upgraded bathhouse for the local community. There will be minimal additional impact and no mitigative measures are needed.

#### **4.3.2 SURROUNDING LAND USES**

Residents in the neighborhood could possibly be adversely affected by a more frequent and intensive use of the park. Noise and outdoor lighting are other possible problems. This can be mitigated by the design of fixtures and hour of operation and access to the facility.

#### **4.3.3 VISUAL AND SCENIC RESOURCES**

The proposed project will minimally increase the impact of scenic views of the ocean compared to the existing condition. The Kamehameha highway elevation of the existing comfort station is 37' wide and the roof is 12' at its peak. The proposed bathhouse is 27' wide. The roof starts at 8' with the hip roof peak at 17'. Ocean views remain around and to each side of the proposed structure. The visual character of the existing beach park will remain unchanged except for the additional height of the new bathhouse hip roof. The proposed new bathhouse will increase the attractiveness of the beach park. The existing comfort station and parking is in extremely poor condition (as seen in photos on page 9).

#### **4.3.4 RECREATIONAL RESOURCES**

The new bathhouse will not add recreational resources to Kaaawa Beach Park; however, the project will enhance the environment by upgrading the existing facilities and providing the public with a much-needed bathhouse.

#### **4.3.5 ARCHEOLOGICAL, HISTORIC AND CULTURAL RESOURCES**

The Department of Land and Natural Resources, Historic Preservation Division recommended that an archeological inventory survey was conducted in order to determine if historic sites are present. The survey failed to uncover any pre-contact Hawaiian cultural deposits within the areas tested. However, the area under the existing comfort station could not be tested since the structure is still standing and to ensure that no cultural deposits will be disturbed archeological monitoring will be conducted during any ground disturbing activities in the park. A monitoring plan will be submitted to the State Historic Preservation Division for approval prior to commencement of any construction activities.

#### **CULTURAL RESOURCES**

Traditional activities identified during field investigations of the beach park consisted primarily of fishing. The use of the beach park will not be altered with the planned improvements. No mitigative measures are necessary.

#### **4.4 TRAFFIC AND CIRCULATION IMPACTS**

There is no anticipated major increase in traffic due to the beach park project. During construction trucks and other heavy vehicles will temporarily increase traffic. If electrical wires have to be pulled underground from electrical poles mauka of Kamehameha highway, there will be a minor impact on traffic, one lane will be closed for part of one day and the second lane closed for part of the second day. The most congested conditions will continue to occur during the weekends and holidays. The reduction in the proposed number of parking spaces might improve traffic, as fewer cars will pull in and out of the parking onto Kamehameha Highway. There will possibly be an increase in tour bus utilization of the bathhouse with the upgraded facilities, however tour buses mainly attend the park during the slower weekdays. No overall negative effect on traffic is anticipated.

#### **4.4.1 PARKING IMPACTS**

Because of current setback standards to accommodate the prototype bathhouse design and required wastewater treatment system space requirements, the current parking lot will be reduced in size to accommodate two standard and one ADA parking spaces. Two more cars may park along the highway fronting the comfort station. Due to the beach park's popularity during the weekends, park users are already forced to park along Kamehameha Highway. It is estimated that an additional 25 cars can be accommodated by parallel parking along the highway fronting the beach park.

## **4.5 PUBLIC UTILITIES AND SERVICES**

### **4.5.1 PUBLIC UTILITIES**

#### **Water System**

The existing water system is presently adequate to accommodate the fixtures and amount of users of the existing comfort station. New water lines for the drinking fountain and new shower will tap off the existing system. The water demand is dependent on the amount of users and the amount of users is not anticipated to increase drastically and therefore the impact on the existing water system will be insignificant. No improvements to the existing water meter is anticipated.

#### **Wastewater**

Indirect or cumulative effects of building the bathhouse will also not be significant since the proposed project will not change how the existing comfort station is presently used. It is anticipated that the majority of those that will use the new bathhouse already use the existing facilities at the beach park. The current wastewater treatment system is a gravity fed storage tank requiring service of a pump truck monthly. The replacement system will consist of a septic tank with leach field. The City and County of Honolulu Department of Parks and Recreation favors the septic tank system for maintenance and cost considerations. The new system would be designed and constructed in accordance with State Department of Health standards.

#### **Storm Water Drainage**

No adverse drainage impacts to the beach park are expected. Drainage from the parking lot would sheet flow into the adjacent grassy or planted areas where the runoff would percolate naturally into the ground.

#### **Electrical Service**

Hawaiian Electric provides electrical service at the site. There are existing light poles along the mauka side of Kamehameha Highway and the existing comfort station has interior and exterior lighting. The new bathhouse will have indoor lighting for functional use and outdoor security lighting on the building. The parking area lighting will consist of two pole lights approximately 18'-8" tall. The additional electrical fixtures represents a double demand in electrical consumption and this can be accommodated without any modifications to the areas power distribution system. Additional electrical supply will be pulled from electrical poles on the mauka side of Kamehameha Highway.

### **4.5.2 PUBLIC SERVICES**

The demand for police, fire or emergency medical personnel is not likely to increase with the new facilities. Park improvements are likely to enhance security and safety features in the beach park. Added lighting will create a safer illuminated bathhouse and parking facility and help deter criminal activities after dark.

## **5. CONFORMANCE WITH LAND USE POLICIES, PLANS AND REGULATIONS**

### **5.1 STATE GOVERNMENT**

Guidelines for land development within the State of Hawaii are provided in several State policies, plans, regulations and controls.

#### **5.1.1 HAWAII STATE PLANNING ACT**

The Hawaii State Planning Act of 1996 (Chapter 226, HRS) serves as the umbrella document in the State of Hawaii planning system. It is a written guide for the future long-range development of the state, describing a desired future for the residents of Hawaii and providing an overall theme, goals, objectives, and policies that are intended to shape the general direction of public and private development.

Among the policies included in the Hawaii State Planning Act are several related to shoreline and marine resources, scenic and natural beauty, and leisure and recreation. The Kaaawa Beach Park is consistent with the State's efforts to promote and preserve shoreline and marine resources, preserve scenic and natural resources and promote leisure activities. The beach park plan provides a blueprint for improvements to the park, thereby ensuring that existing facilities are replaced, repaired and modernized (including alterations that comply with the Americans with Disabilities Act), and new facilities are sited appropriately. The beach park plan is intended to maintain and further the use of Kaaawa Beach Park, and in doing so supports the following State objectives and policies:

SEC. 226-11 Objectives and policies for the physical environment – land-based, shoreline, and marine resources.

SEC. 226-12 Objectives and policies for physical environment – scenic, natural beauty, and historic resources.

SEC. 226-23 Objectives and policies for socio-cultural advancement – leisure.

#### **5.1.2 CLASSIFICATION OF LAND USE**

The State Land Use Commission, pursuant to Chapter 205 and 205A, HRS and Chapter 15-15, Hawaii Administrative Rules, classify all lands in the State into one of four land use districts: urban, rural, agricultural, and conservation. The Kaaawa Beach Park falls within the "Conservation" classification.

## **5.2 CITY AND COUNTY OF HONOLULU**

### **5.2.1 OAHU GENERAL PLAN**

The City and County of Honolulu General Plan specifies long-range objectives and policies to guide future growth on the island. The General Plan contains social, environmental, economic, and design objectives and associated policies intended to enhance the welfare and prosperity of Oahu residents.

One element of the Oahu general plan relates to culture and recreation. As the beach park plan is implemented, the popular and well-used park will become even more responsive to the needs of local residents. The proposed action is consistent with various objectives and policies in the Oahu general Plan, one objective and policy is shown below:

Culture and Recreation, Objective D: To provide a wide range of recreational facilities and services that are readily available to all residents of Oahu.

Policy 12: Provide for safe and secure use of public parks, beaches, and recreation facilities.

### **5.2.2 KOOLAU LOA SUSTAINABLE COMMUNITIES PLAN**

The Honolulu City Charter mandates the preparation of community-oriented plans for the eight regions on Oahu. The project site is located in the Koolau Loa region, a rural area that stretches from Kaoio Point to east of Kawela Bay. (See Figure 11) Charter amendment in 1992 redefined the plans as "conceptual schemes" with a purpose to describe the "desired urban character and the significant natural, scenic and cultural" environment of each region and to provide "coordination of major development activities." The City began a program to review and revise the plans, based on this new amendment. The revised Koolau Loa Sustainable Communities Plan (SCP) went into effect in August 2000.

According to Koolauloa Sustainable Communities Plan, "Koolauloa is projected to experience very little growth". "The country will remain country, with managed growth occurring in Laie and Kahuku." The vision extended to 2020 and "seeks to preserve the region's rural character and its natural, cultural and scenic resources." "Koolau Loa will remain country, characterized by small towns and villages with distinctive identities that exist in harmony with the natural settings, defined by the mountain ridges and scenic open spaces."

Section 2.4 - Enhance Existing Recreational Areas of the plan discusses the importance of preserving existing beach parks along this coastline and that they should be "recognized as important open space and recreation assets" of this region. Furthermore the plan states that "existing parks and recreation areas should be maintained and enhanced", and "existing beach access should be maintained".



**KO'OLAU LOA  
SUSTAINABLE COMMUNITIES PLAN**

**Land Use Map**



Department of Planning and Permitting  
City & County of Honolulu  
October 1999

- |  |                                   |  |                              |  |                                 |
|--|-----------------------------------|--|------------------------------|--|---------------------------------|
|  | Rural Residential                 |  | Industrial                   |  | Wastewater Treatment Plant      |
|  | Country Town                      |  | Military                     |  | Elementary School(State)        |
|  | Rural Regional Commercial Center  |  | Institutional                |  | Intermediate/High School(State) |
|  | Rural Community Commercial Center |  | Agricultural                 |  | Ahupua'a Boundary               |
|  | Resort                            |  | Preservation                 |  | Rural Community Boundary        |
|  | Visitor Facilities                |  | Major Parks and Golf Courses |  | Preservation Boundary           |
|  | Technology Park                   |  |                              |  | Highway                         |

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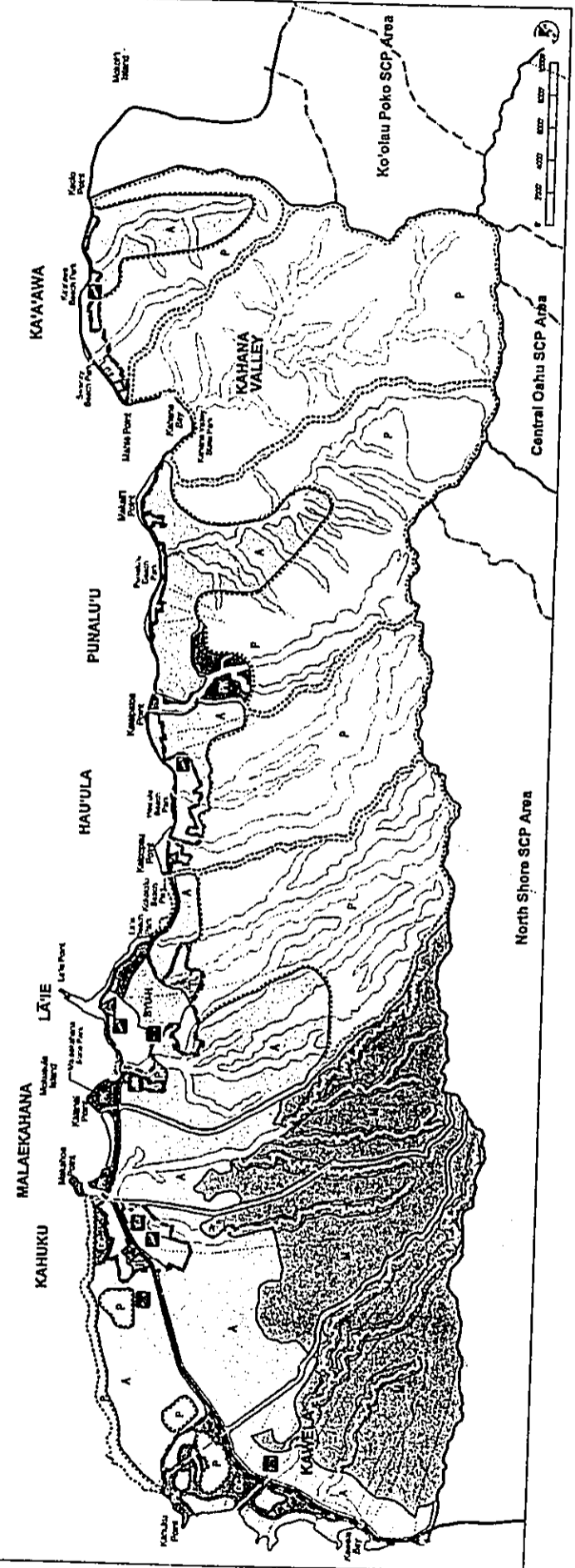


FIGURE 11

### 5.2.3 COUNTY ZONING

The project site is located in zoning district P-1 Restricted Preservation (see Figure 12). Because the beach park is a "public use," it is allowed in any zoning district. The Land Use Ordinance defines (LUO No. 99-12 May 10, 1999) "public uses and structures" as "uses conducted by or structures owned or managed by the federal government, the State of Hawaii, or the city to fulfill a government function, activity, or service for public benefit and in accordance with public policy" (pp 10-24 and 10-25). The underlying zoning will not affect proposed beach park improvements.

### 5.2.4 SPECIAL MANAGEMENT AREA

Coastal Zone Management objectives and policies (Section 205A-2, HRS) and the Special Management Area (SMA) guidelines (Section 25-3.2 ROH) have been developed to preserve, protect, and where possible, to restore the natural resources of the coastal zone of Hawaii. As shown in Figure 13, Kaaawa Beach Park is located within the Special Management Area and a Special Management Area Use Permit-Major (construction cost exceeding \$125,000.00) is required.

The proposed project is also located in a coastal high hazard district (VE 10) as established on the flood insurance rate maps. According to Section 21-9.10-5 of the LUO, "Public and private outdoor recreation facilities, lawn, garden, and play areas;" are permitted to be built in this district. The structure will be designed and constructed to comply with the Land Use Ordinance (LUO) Section 21-9.10-4 - Development standards within flood hazards.

### 5.2.5 SHORELINE SETBACK VARIANCE

Shoreline Setbacks objective and policies (Section 205A, HRS) and Shoreline Setback rules and regulations (Chapter 23 ROH) have been developed "to protect and preserve the natural shoreline, especially sandy beaches; to protect and preserve public pedestrian access laterally along the shoreline and to the sea; and to protect and preserve open space along the shoreline. It is also a secondary policy of the city to reduce hazards to property from coastal floods."

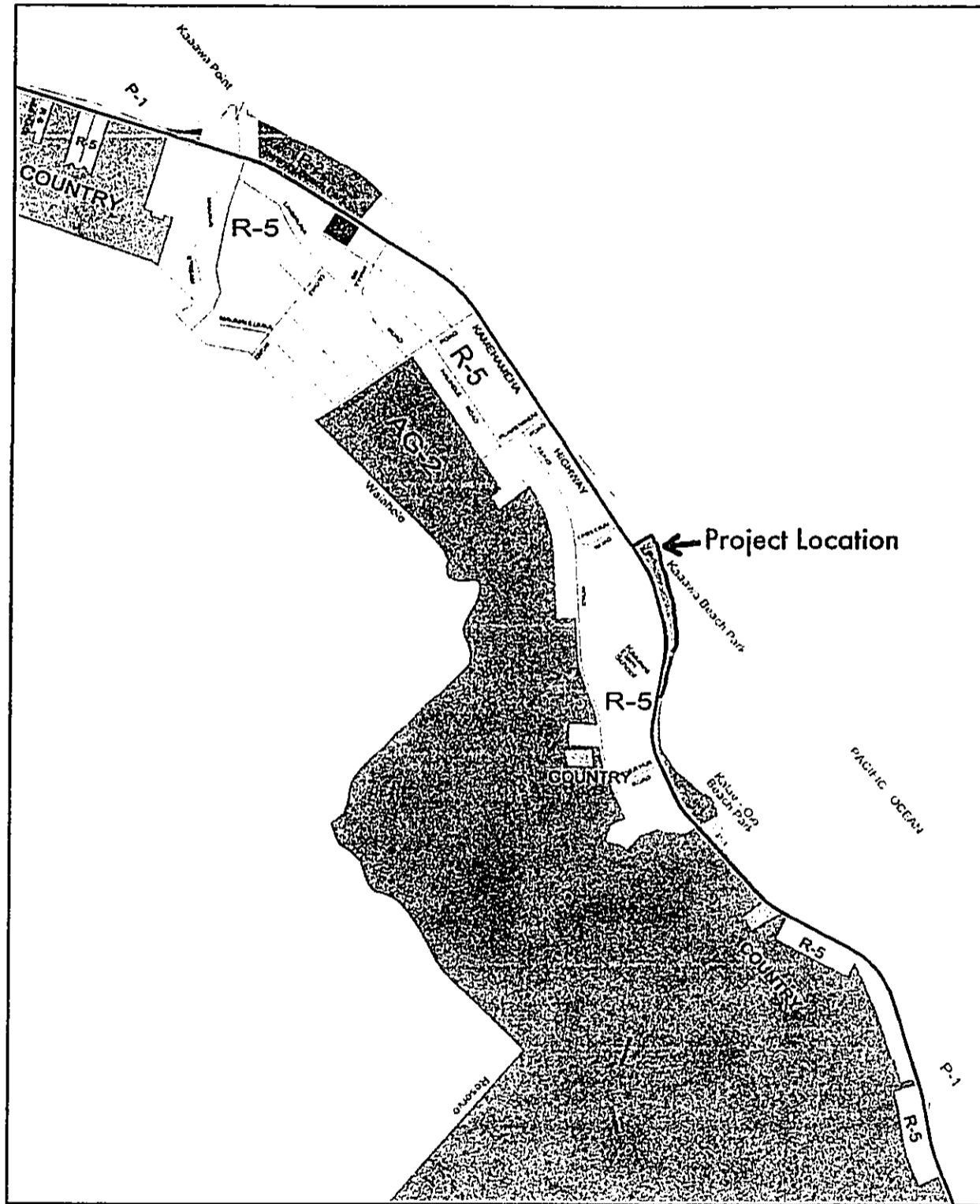
A ROH variance is sought based upon (Sec. 23-1.8):

(2) Public Interest Standard. A variance may be granted for an activity or structure which is undertaken by a public agency or by a public utility regulated under HRS Chapter 269 or private facility or improvement which is undertaken by a private entity and is clearly in the public interest; provided that the proposal is the practicable alternative which best conforms to the purpose of this chapter and the shoreline setback rules. Public interest principally of benefit to the general public, as determined by the director.

(3) Hardship Standard.

(A) A structure or activity may be granted a variance upon ground of hardship if:

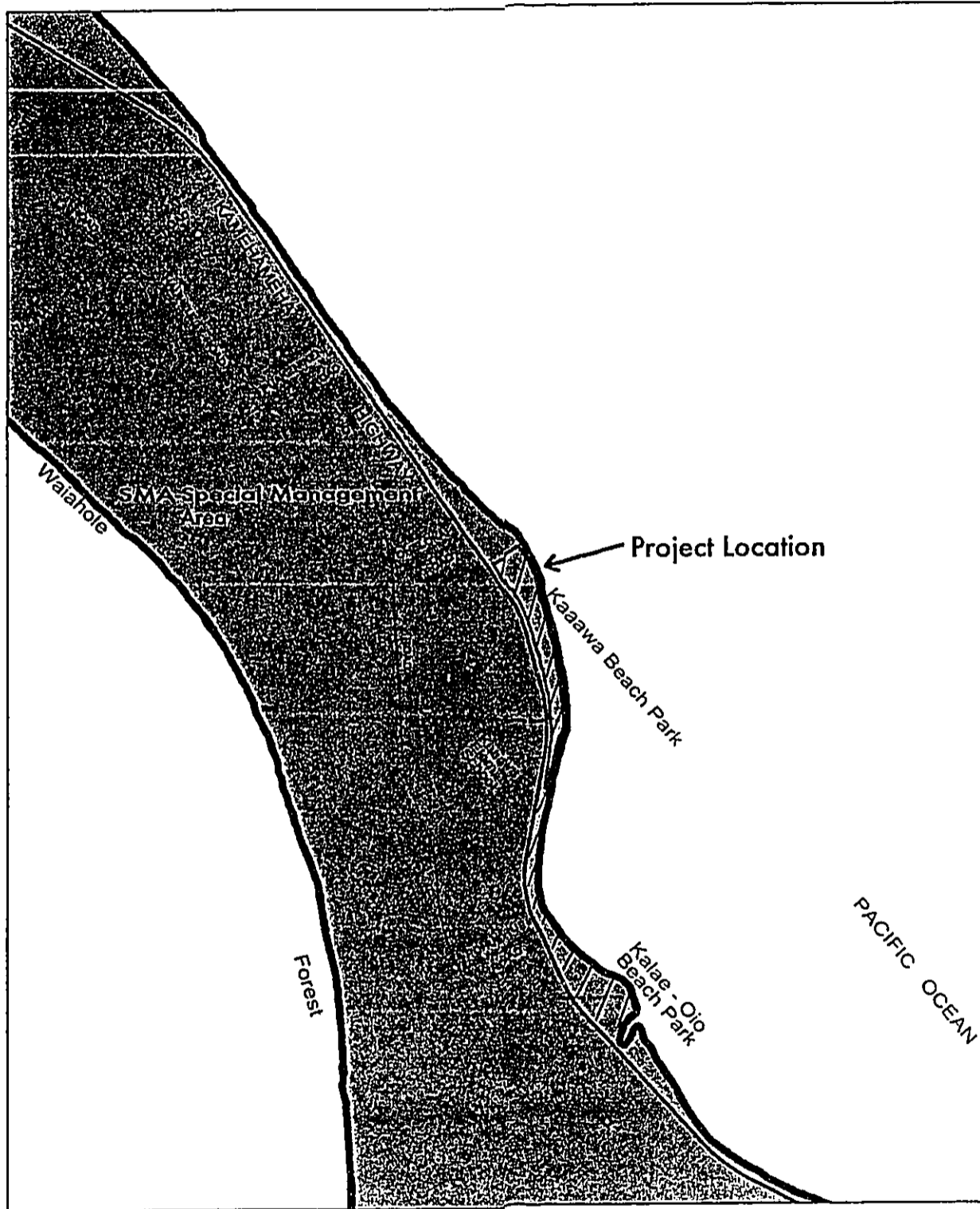
(11) The proposal is the practicable alternative which best conforms to the purpose of this chapter and the shoreline setback rules.



Scale: 1" = 1000'

FIGURE 12  
COUNTY ZONING MAP

KAAAWA BEACH PARK, RECONSTRUCTION OF COMFORT STATION  
Final Environmental Assessment



Scale: 1" = 600'

FIGURE 13  
SMA MAP

## 6. POSSIBLE ALTERNATIVES

### 6.1 NO ACTION

If no action is taken, i.e. the bathhouse and site plan is not implemented; existing facilities will become a public hazard and will eventually be forced to close permanently. The current state of disrepair to the comfort station is such that if normal maintenance activities would continue the public's investment in those facilities will degrade since the larger corrective measures would not be addressed and the facilities would deteriorate through inadequate repair or replacement. Necessary new facilities that would maintain or further expand recreational opportunities will not be available. Residents of Kaaawa and the surrounding community would be affected most directly since they would not be able to enjoy the beach park and the improvements envisioned in the bathhouse and site plans. The "no action" alternative on the other hand, would yield cost savings and enable the City to reallocate funds to other projects. Both of these alternatives are likely to shift benefits to residents in other areas of the island.

### 6.2 DELAYED ACTION

If funding for the Kaaawa Beach Park plan is deferred or delayed or if the project is delayed for any other reason, park users will continue to rely on existing facilities until upgrades are initiated. Delaying improvements of the beach park will not significantly alter the environmental consequences of the project. However, project costs might increase because of inflation and changes in economic and labor supply conditions.

### 6.3 ALTERNATIVE DESIGN

The Kaaawa Beach Park plan is derived from two alternative designs, the merits of which were deliberated by members of the design team and technical consultants and include:

#### *Design Alternative 1*

This alternative included placement of a modified prototype plan bathhouse sited at the location of the existing comfort station and retaining the current parking area location. This plan would impose severe restrictions on design of a wastewater treatment system and may not be feasible. This plan would have resulted in the least amount of change to the existing beach park facilities siting.

#### *Design Alternative 2*

This alternative locates the prototype bathhouse just beyond a 20-foot shoreline setback and relocates a smaller parking area to the Kaneohe side of the structure.

The Koolauloa Vision Team and Neighborhood Board reviewed and accepted the proposed action and design of design alternative 2. (Find letter of support and meeting notes in the appendix)

## **7. ANTICIPATED DETERMINATION**

Given the findings of this environmental assessment, the proposed Kaaawa Beach Park Bathhouse project is not expected to result in significant environmental, economic, social or cultural impacts. Therefore, a finding of no significant impact is anticipated pursuant to the provisions of Subchapter 6 of Chapter 200, Title 11, Hawaii Administrative rules of the Department of Health.

## **8. FINDINGS AND REASONS SUPPORTING THE ANTICIPATED DETERMINATION**

**SIGNIFICANCE CRITERIA:** According to the Department of Health Rules (1-200-12), an applicant or agency must determine whether an action may have significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. In making the determination, the Rules establish "Significance Criteria" to be used as a basis for identifying whether significant environmental impact will occur. According to the Rules, an action shall be determined to have significant impact on the environment if it meets any one of the following criteria:

**1. Involves and irrevocable commitment to loss or destruction of any natural or cultural resources;**

The proposed project will minimally increase the impact of scenic views of the ocean as the new bathhouse will be located at the site of the existing comfort station and is approximately the same size. The shed roof of the existing structure reaches twelve feet at the highway elevation and the structure is 36' wide (including +/- eight feet cmu walls). The proposed bathhouse is 27' wide with 8' high and 11' wide walls extending on either side of the structure, the roof starts at 8' with the hip roof peak at 17'. Existing ocean views remains around and to each side of the proposed structure. The visual character of the existing beach park will remain unchanged except for the replacement with the bathhouse structure, minor additional landscaping (naupaka) directly around the bathhouse and a modified parking layout.

The structure will have no impact on existing drainage systems and site runoff. No significant archaeological or historic sites are known to exist on the site. The construction of the bathhouse will be conducted only after subsurface testing has been done and no historic sites are found. Should archeological remnants be unearthed, the State Historic Preservation Office will be notified to assess impacts and implement mitigative measures deemed necessary.

**2. Curtails the range of beneficial uses of the environment;**

The proposed improvements do not curtail the range of beneficial uses of the environment. The area is dedicated to recreational use, and this use will be enhanced with improved facilities. There will be no significant loss of open space with the new facility. The beach park will retain an overall feeling of openness.



**3. Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS; and any revisions thereof and amendments thereto, court decision, or executive orders;**

The proposed development is consistent with the Environmental Policies established in Chapter 344, HRS and the National Environmental Policy Act.

Per the State Environmental Policy (Chapter 344, HRS) "Parks, Recreation, and Open Space" section the following guidelines apply to the proposed action:

- a) Establish, preserve, and maintain scenic, historical, cultural, park and recreation areas, including the shorelines, for public recreational, educational, and scientific uses;
- c) Promote open space in view of its natural beauty not only as a natural resource, but as an ennobling, living environment for its people.

**4. Substantially affects the economic or social welfare of the community or state;**

As this area has been used as a beach park historically, there will be minimal additional impact that would curtail the range of beneficial uses of the environment. The project continues a present shoreline recreational use and access by the general public. In looking to a current planning cycle of 50 years, the intent of this facility is to foster good shoreline management to and for the Kaaawa public.

**5. Substantially affects public health**

The project should not affect public health.

**6. Involves substantial secondary impacts, such as population changes or effects on public facilities**

The proposed project does not involve substantial secondary impacts, such as population changes or effects on public facilities other than provide a secured restroom location for the local community as well as visitors.

**7. Involves a substantial degradation of environmental quality;**

The site of the proposed structure is not environmentally pristine and does not have any biological sources of significance. As beach park goers have utilized the area historically, there

will be minimal additional impact that would involve a substantial degradation of environmental quality.

**8. Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions.**

As local beach goers have utilized the area historically, there will be minimal additional impact that would curtail the range of beneficial uses of the environment. The project continues a present shoreline recreational use and access by the general public. In looking to a current planning cycle of 50 years, the intent of this facility is to foster good shoreline management.

**9. Substantially affects a rare, threatened or endangered species or its habitat;**

No endangered plant or animal species are located within the park.

**10. Detrimentially affects air or water quality or ambient noise levels;**

Ambient noise levels could increase during construction of the bathhouse, while air and water quality impacts are not expected to be detrimental to human health.

**11. Affects or is likely to suffer damage by being located in an environmentally sensitive area, such as flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, freshwater, or coastal waters.**

According to the Federal Emergency Management Agency (FEMA), the project is located in a flood zone. Flood insurance rate maps designate the parcel as Zone VE, elevation 10' with a base flood elevation for a 100-year storm of 10 feet. According to Oahu Civil Defense Agency, the subject property is also located in a tsunami inundation zone.

The proposed action will not exacerbate any hazard conditions. Planning and design for the project will comply with flood district and other structural standards to mitigate any potential damages.

The potential impact of destructive winds and torrential rainfall of tropical storms and hurricanes on the proposed bathhouse will be mitigated by compliance with the Uniform Building Code adopted by the City and County of Honolulu.

**12. Substantially affects scenic vistas and view planes identified in county or state plans or studies;**

The proposed project will minimally impact scenic views of the ocean since the existing comfort station is replaced with a bathhouse prototype similar in size. Existing ocean views remains around and to each side of the proposed structure. No additional view obstructing landscaping will be installed according to the *Koolau Loa Sustainable Communities Plan* guidelines that states, "Avoid obstructions, such as walls and heavy landscaping which block views, except where necessary for safety reasons".

**13. Requires substantial energy consumption.**

The proposed structure requires no substantial energy consumption and is naturally ventilated. Energy in the form of gasoline and diesel fuel will be used during construction.

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## **10. AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED DURING DESIGN AND IN PREPARING THE FINAL ENVIRONMENTAL ASSESSMENT**

### **10.1 AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED IN PREPARING THE FINAL ENVIRONMENTAL ASSESSMENT**

The following are agencies informally (verbally) or formally (by letter, included in appendix) consulted in preparing for the Kaaawa Beach Park Bathhouse Final Environmental Assessment:

#### **A. Federal**

- National Marine Fisheries Service  
David Nichols

#### **B. State of Hawaii**

- Department of Agriculture  
Earl Yamamoto
- Department of Education
- Department of Health, Clean Water Branch
- Department of Land and Natural Resources
- Department of Transportation, Highway Planning Branch

#### **C. City and County of Honolulu**

- Board of Water Supply  
Grant Odo
- City Council
- Fire Department
- Department of Parks and Recreation  
William Ho
- Department of Planning and Permitting  
Eileen Mark

- Police Department, Kahuku Substation  
Sgt. Nihipali
- Koolauloa Neighborhood Board No. 28
- Koolauloa Vision team

D. Others

- Oceanit  
Robert E. Bourke
- Weidig Geoanalysts  
Paul Weidig
- Pacific Legacy Incorporated  
Dr. Paul L. Cleghorn, PhD.
- Social Research Pacific, Inc.  
Usha K. Prasad, PhD.

**10.2 AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED IN PREPARING THE FINAL ENVIRONMENTAL ASSESSMENT**

The availability of the Draft EA was published in the November 8, 2002 Environmental Notice with a public comment deadline of December 9, 2002. The agencies and organizations listed below were contacted during the 30-day comment period. Their major written comments are summarized. A copy of the DEA was also placed at the Kahuku Public Library and Kaneohe Public Library for public review.

Agency/ Organization	Letter Date	Major Comments
<b>Federal Agencies</b>		
Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service	12/06/02	Project not likely to affect listed species under NOAA fisheries jurisdiction. Follow BMPs listed.
<b>State Agencies</b>		
Department of Health	12/19/02	CAB-develop dust control management plan. Site runoff & discharge concerns.
Department of Natural Resources Engineering Division	01/09/03	Bathroom siting concern due to coastal erosion and storms.
Land Division	12/03/02	Coastal and erosion concern.
State Historic Preservation Division	12/03/02	Archaeological inventory survey to be conducted to determine effect on historic sites.
Department of Transportation	11/22/02	Plans for construction work within and impacting State highway right-of-way must to be submitted.
Office of Environmental Quality Control	12/09/02	
Office of Hawaiian Affairs	--	
<b>City and County of Honolulu</b>		
Board of Water Supply	11/18/02	Existing water system is adequate.
Department of Parks and Recreation	11/22/02	Supports the reconstruction of the comfort station and parking on the same site as they are presently located. Does not support a bathroom or increase in parking stalls.
Department of Planning and Permitting	12/02/02	Feasibility of moving building away from the shoreline, putting leach field under the parking lot, and comply with flood requirements. Effect of water runoff from outdoor shower on coastal water quality.
<b>Private and Community Organizations</b>		
Koolau Vision team	--	

### **10.3 COMMENTS AND RESPONSES TO THE DEA**

The following section includes the comment letters received during the Draft EA 30-day comment period and the corresponding response letters.





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE

Southwest Region / Pacific Islands Area Office  
1601 Kapiolani Boulevard, Suite 1110  
Honolulu, Hawaii 96814-0047

December 6, 2002

Camilla Blomqvist  
AKTA Ltd.  
46-160 Nahiku Street  
Kaneohe, HI 96744

RE: Kaaawa Beach Park - Reconstruction of Comfort Station Environmental Assessment

Dear Ms. Blomqvist:

Thank you for the opportunity to comment on the Kaaawa Beach Park Environmental Assessment (EA). The Department of Design and Construction, City and County of Honolulu propose to reconstruct the existing comfort station and other miscellaneous site improvements.

As previously indicated, the green turtle, hawksbill turtle and Hawaiian monk seal may be present in the area of the proposed project. However, provided the following best management practices (BMPs) are incorporated into the plans, NOAA Fisheries concurs with your determination that the project is not likely to adversely affect listed species under the jurisdiction of NOAA Fisheries. Should the project plans change or additional information become available, this determination may be reconsidered. The BMPs are as follows:

1. If any listed species enters the area during project activities, all activities should cease until the animal(s) voluntarily depart the area.
2. All on-site project personnel should be apprized of the status of the listed species and the protections afforded to the species under federal laws. A brochure explaining the laws and guidelines for listed species in Hawaii may be downloaded from: [http://www.nmfs.noaa.gov/prot\\_rts/MMWatch/hawaii.htm](http://www.nmfs.noaa.gov/prot_rts/MMWatch/hawaii.htm)

Should you have further questions regarding our comments for the proposed project and/or the section 7 process, please contact Margaret Akamine Dupree or David Nichols at (808) 973-2937 or fax (808) 973-2941

Sincerely,

*Margaret M. Akamine*

Margaret M. Akamine  
Protected Species Program



AKTA Ltd./ARTHUR KIMBAL THOMPSON ARCHITECT, AIA

March 31, 2003

Ms. Margaret M. Akamine  
United States Department of Commerce  
National Oceanic and Atmospheric Administration  
Southwest Region / Pacific Island Area Office  
1601 Kapiolani Blvd., Suite 1110  
Honolulu, HI 96814-0047

Dear Ms. Akamine:

Subject: Draft Environmental Assessment (DEA) for Kaaawa Beach Park Reconstruction of Comfort Station, Tax Map Key: S-1-002-025, Koolauloa District, Oahu, Hawaii

We have reviewed your letter dated December 6, 2002 regarding the Draft Environmental Assessment (DEA) for Kaaawa Beach Park, Reconstruction of Comfort Station and have the following responses:

The following best management practices (BMPs) will be incorporated into the construction plans and/or specifications for the project.

- "1. If any listed species enters the area during project activities, all activities shall cease until the animal(s) voluntarily depart the area.
2. All on-site project personnel shall be apprized of the status of the listed species and the protections afforded to the species under federal laws. A brochure explaining the laws and guidelines for listed species in Hawaii may be downloaded from: [http://www.nmfs.noaa.gov/prot\\_rts/MMWatch/Hawaii.htm](http://www.nmfs.noaa.gov/prot_rts/MMWatch/Hawaii.htm)."

Thank you for participating in the environmental review process.

AKTA Ltd./Arthur Kimbal Thompson Architect

*Camilla Blomqvist*

Camilla Blomqvist

cc: Wesley Obata,  
Department of Design and Construction  
City and County of Honolulu

46-160 NAHIKU STREET, KANEOHE, HAWAII 96744  
(808) 236-1373 FACSIMILE: (808) 234-6484  
E-MAIL: [akimball@aol.com](mailto:akimball@aol.com)



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P.O. Box 3078  
HONOLULU, HAWAII 96801-3078

December 19, 2002

LORETTA J. RUOY, A.C.S.W., M.P.H.  
ACTING DIRECTOR OF HEALTH

In reply, please refer to the  
File #:  
02-292/epo

Mr. Arthur Kimball Thompson  
December 19, 2002  
Page 2

Implementation of adequate dust control measures during all phases of development and construction activities is warranted.

Construction activities must comply with provisions of Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust.

The contractor should provide adequate measures to control dust from the road areas and during the various phases of construction. These measures include, but are not limited to:

- a. Planning the different phases of construction, focusing on minimizing the amount of dust generating materials and activities, centralizing on-site vehicular traffic routes, and locating potentially dusty equipment in areas of the least impact;
- b. Providing an adequate water source at the site prior to start up of construction activities;
- c. Landscaping and rapid covering of bare areas, including slopes, starting from the initial grading phase;
- d. Controlling of dust from shoulders and access roads;
- e. Providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
- f. Controlling of dust from debris being hauled away from project site.

If you have any questions regarding these issues on fugitive dust, please contact the Clean Air Branch at (808) 586-4200.

Noise, Radiation and Indoor Air Quality (NRIAQ) Branch

All project activities shall comply with the Administrative Rules of the Department of Health, Chapter 11-46, on "Community Noise Control."

If you have any questions, please contact the NRIAQ at (808) 586-4701.

Environmental Planning Office (EPO)

Page 22 of the DEIS states, "There is no point or non-point discharge in this area and the waters appear clean." However, according to page 17 of the DEIS "...the majority of the site drains towards the ocean" and "There is a sandy drainage swale that directs mauka stormwater runoff into the ocean along the northern boundary of the site." Also, page 37 of the DEIS discusses the prevention of sand and wash water from entering into storm drains, which are considered point sources from a regulatory perspective due to their coverage under National Pollutant Discharge Elimination System (NPDES) permits. Thus we suggest that the statement on page 22 be revised to indicate that there is both point and non-point source discharge in this area.

Mr. Arthur Kimbal Thompson  
ADTA Ltd./ Arthur Kimbal Thompson Architect  
46-160 Nahiku Street  
Kaneohe, Hawaii 96744

Dear Mr. Thompson:

Subject: Draft Environmental Assessment (DEA)  
Kaaawa Beach Park Reconstruction of Comfort Station  
Koolauloa District, Oahu  
Tax Map Key: 5-1-002-025

Thank you for the opportunity to review and comment on the subject proposal. The DEA was routed to the various branches of the Environmental Health Administration. We have the following comments:

Wastewater Branch (VWB)

The existing cesspools must be replaced with a *treatment* individual wastewater system (IWS) such as a septic tank system.

All wastewater plans must conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems." We reserve the right to review the detailed wastewater plans for conformance to applicable rules.

If you have any questions, please contact the Wastewater Branch at (808) 586-4294.

Clean Air Branch (CAB)

Control of Fugitive Dust

There is a significant potential for fugitive dust emissions during the removal of debris and during the grading, trenching, and construction activities that would impact nearby residents and thoroughfares. It is recommended that a dust control management plan be developed which identifies and addresses all activities that have a potential to generate fugitive dust.


Mr. Arthur Kimball Thompson  
December 19, 2002  
Page 3

**AKTA Ltd./ARTHUR KIMBALL THOMPSON ARCHITECT, AIA**

March 31, 2003

If you have any questions, please call David Penn at (808) 586-4337.

Sincerely,

  
JUNE HARRIGAN-LUM, MANAGER  
Environmental Planning Office

Ms. June Harrigan-Lum, Manager  
State Department of Health  
Environmental Planning Office  
P.O. Box 3378  
Honolulu, Hawaii 96801

Dear Ms. Harrigan-Lum:

c: WWB  
CAB  
NRJAQ  
EPO

Subject: Draft Environmental Assessment (DEA) for Kaaawa Beach Park Reconstruction of Comfort Station,  
Tax Map Key: 5-1-002.023, Koolauloa District, Oahu, Hawaii

We have reviewed your letter dated December 19, 2002 regarding the Draft Environmental Assessment  
(DEA) for Kaaawa Beach Park, Reconstruction of Comfort Station and have the following responses:

Wastewater Branch (WWB)

The existing wastewater system will be replaced with a treatment individual wastewater system, which includes an  
underground septic tank and leach field.

The construction plans for the individual wastewater system will conform to applicable provisions of the  
Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems". Construction plans will be  
submitted to your office for review.

Clean Air Branch (CAB)

The construction plans and specifications will include the requirements to comply with applicable provisions of the  
Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control", Section 11-60.1-33, Fugitive Dust.

Noise, Radiation and Indoor Air Quality (NRJAQ) Branch

The construction plans and specifications will include the requirements to comply with applicable provision of the  
Hawaii Administrative Rules, Chapter 11-46, on "Community Noise Control".

Environmental Planning Office (EPO)

The statement on page 22 will be revised in the Final Environmental Assessment to indicate there is both point and  
non-point source discharges in the area.

Thank you for participating in the environmental review process.

AKTA Ltd./Arthur Kimball Thompson Architect



Camilla Blomqvist

c: Wesley Oheua,  
Department of Design and Construction  
City and County of Honolulu

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(808) 236-1373 FACSIMILE: (808) 234-4484  
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STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
P.O. Box 621  
HONOLULU, HAWAII 96809

ERIC T. HIRAKO  
ACTING DIRECTOR  
BOARD OF LAND AND NATURAL RESOURCES

DEAN S. HALENG  
ACTING DEPUTY DIRECTOR FOR  
THE COMMISSION ON WATER  
RESOURCE MANAGEMENT

JOANNE ANDRUSIAK  
BOARD SECRETARY  
COMMISSION ON WATER RESOURCE  
MANAGEMENT AND RESOURCES  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
P.O. Box 621  
HONOLULU, HAWAII 96809  
STATE HAWAII

January 9, 2003

LD-NAV  
KAAAWABEACHPARKCACOH.RCHZ  
L-4001

AKTA Ltd.  
Arthur Kimbal Thompson Architect, AIA  
46-160 Nahiku Street  
Kaneohe, Hawaii 96744

Dear Mr. Thompson:

Subject: City and County of Honolulu Draft Environmental Assessment for  
Kaaawa Beach Park Reconstruction of Comfort Station, Kaaawa,  
Island of Oahu, Hawaii THK: 11/ 5-1-2: 25

This is a follow-up to our letter to you dated December 5, 2002  
(Ref.: KAAAWABEACHPARKKDER.RCH), pertaining to the subject matter.

Attached herewith is a copy of the Engineering Division comment.

The Department has no other comment to offer on the subject  
matter.

Should you have any questions, please feel free to contact  
Nicholas A. Vaccaro of the Land Division Support Services Branch at  
(808) 597-0384.

Very truly yours,

DIERDRE S. KAMIYA  
Administrator

C: Oahu District Land Office

DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

L-4001

COMMENTS

We have reviewed the *Draft Environmental Assessment* for the subject project and concur that the project site is located in Special Flood Hazard Area (SFHA) VE with base flood elevations of 10 feet mean sea level, according to the Flood Insurance Rate Map (FIRM) panel 0165E (November 20, 2000).

The National Flood Insurance Program (NFIP) has strict regulations for development within this type of SFHA and therefore will be subject to the NFIP regulations as set forth in Title 44, Chapter 1, § 60.3 of the Code of Federal Regulations (44CFR60.3). Specific regulations applicable, but not limited, to the proposed project are as follows:

- §60.3(a)(3)
- §60.3(a)(6)
- §60.3(e)(4)
- §60.3(e)(5)
- §60.3(e)(6)

Contrary to the City's Land Use Ordinance, construction of an at-grade comfort station in a VE zone is not exempt from NFIP regulations. However, a variance could be granted to allow this type of construction provided certain design criteria are met. For example:

1. Certification from a registered professional engineer that all walls of the comfort station shall be "break-away". FEMA's Technical Bulletin 9-99 provides guidance in designing and constructing break-away walls below the BFE.
2. Building utilities (i.e. electrical panel boxes, BPIs) shall be located at a minimum elevation of 10 ft. msl. Please coordinate with the National Electrical Code (NEC) for maximum height requirements of electrical components.
3. Use felt bond breakers at the interface between the concrete slab and all supporting columns.

As for a proposed at-grade wastewater treatment facility, this structure would also be subject to the same Federal regulations as the comfort station. However, due to the nature of this facility, it would be impossible to satisfy the V zone development requirements. Therefore, the structure would be considered an "obstruction", unless it can be proven that the proposed facility would not have any adverse impact to adjacent properties and/or structures. FEMA has a "free of obstruction" requirement for development within V zones. This requirement is explained in detail in FEMA's Technical Bulletin 5-93. The bulletin states that construction elements placed outside of the building footprint and not attached to the structure may alter the physical characteristics of the flooding, thus causing potential damage to neighboring structures.

FEMAS'S technical Bulletins can be viewed on-line at <http://www.fema.gov/fimg/techbul.shtml>

If there are questions regarding the NFIP, please contact the State Coordinator, Mr. Sterling Yong, of the Department of Land and Natural Resources at 587-0248. If there are questions regarding flood ordinances, please contact applicable County representative.

Should you have any questions, please call Mr. Andrew M. Monden of the Planning Branch at 587-0229.

Signed:   
ERIC T. HIRANO, CHIEF ENGINEER

Date: 12/24/02

## AKTA Ltd./ARTHUR KIMBAL THOMPSON ARCHITECT, AIA

March 31, 2003

Ms. Dieder S. Mamiya, Administrator  
State of Hawaii  
Department of Land and Natural Resources  
Land Division, Engineering Division  
P.O. Box 621  
Honolulu, Hawaii 96809

Dear Ms. Mamiya:

Subject: Draft Environmental Assessment (DEA) for Kaawawa Beach Park Reconstruction of Comfort Station, Tax Map Key: 5-1-002:025, Koolauloa District, Oahu, Hawaii

We have reviewed your letter dated January 9, 2003 regarding the Draft Environmental Assessment (DEA) for Kaawawa Beach Park, Reconstruction of Comfort Station and have the following responses.

1. The Department of Design and Construction will be applying for a flood hazard variance to reconstruct the comfort station (bathhouse) within the Special Flood Hazard Area (SFHA), Zone VE with a base flood elevation of 10-foot mean sea level.
2. The Department of Design and Construction and the design consultant(s) will be working with the staff of the Department of Land and Natural Resources, Engineering Division to comply with certain National Flood Insurance Program (NFIP) design criteria as appropriate.
3. The proposed wastewater system will include an underground septic tank and underground leach field. We will clarify this in the Final Environmental Assessment.

Thank for participating in the environmental review process.

AKTA Ltd./Arthur Kimbal Thompson Architect



Camilla Blomqvist

cc: Wesley Okata,  
Department of Design and Construction  
City and County of Honolulu

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OLBERT E. COLMAGUIBAN  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

LAND DIVISION  
P.O. Box 621  
HONOLULU, HAWAII 96809

DEC 3 2002

LINDA UENGLER  
GOVERNOR

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
COMMISSION ON WATER RESOURCES  
CONSERVATION AND RESTORATION  
FORESTRY AND WILDLIFE  
LAND AND NATURAL RESOURCES  
STATE PARKS  
WATER RESOURCES MANAGEMENT

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

LAND DIVISION  
P.O. BOX 621  
HONOLULU, HAWAII 96809

December 5, 2002

ID-NW  
L-3161/3289/3361/3489/3435

RKTR Ltd,  
Arthur Kimbal Thompson Architect, AIA  
46-160 Nahiku Street  
Kaneohe, Hawaii 96744

Dear Mr. Thompson:

Subject: City and County of Honolulu Draft Environmental Assessment for  
Kaaawa Beach Park Reconstruction of Comfort Station, Kaaawa, Oahu,  
Hawaii TRK: 14/ 5-1-2: 25

Thank you for the opportunity to review and comment on the subject  
matter.

A copy of the Draft Environmental Assessment covering the subject matter  
was made available to the following Department of Land and Natural Resources'  
Divisions for their review and comment:

- Division of Aquatic Resources
- Division of Forestry and Wildlife
- Division of State Parks
- Commission on Water Resource Management
- Division of Boating and Ocean Recreation
- Engineering Division
- Land Division Planning and Technical Services
- Oahu District Land Office

Enclosed is a copy of the Land Division Planning and Technical  
Services' comment.

Based on the attached responses, the Department has no other comment to  
offer. If the Land Division receives additional comments, they will be  
forwarded to your office at that time.

Should you have any questions, please feel free to contact Nicholas A.  
Vaccaro of the Land Division Support Services Branch at 587-0384.

Very truly yours,

DIERDRE S. MAMIYA  
Administrator

C: Oahu District Land Office

MEMORANDUM

TO: Charlene E. Unoki, Acting Assistant Administrator  
Land Division

FROM: Matthew Myers  
Planning Branch

SUBJECT: Comments on the City & County of Honolulu's Draft Environmental Assessment  
for Kaaawa Beach Park Reconstruction of Comfort Station, Kaaawa, Oahu, Tax  
Map Key (1) 5-1-2:25

We are in receipt of a memorandum from Charlene E. Unoki dated November 7, 2002  
requesting comments on the City and County of Honolulu's Draft Environmental Assessment for  
the proposed reconstruction of a comfort station located at Kaaawa Beach Park.

The Department is concerned with new bathhouse's proposed location. The existing  
bathhouse is located in a coastal zone that appears to be highly active and subject to considerable  
erosion as a consequence of wave action. Chapter 2, Proposed Action of the Draft  
Environmental Assessment (Exhibit 1) indicates,

The historical background of the beach park is not completely documented herein  
although from conversations with long time residents, the shoreline and beach area has  
moved towards the structure and highway over the past 50 years.


Due to the shoreline recession observed at the site it would be practical to redesign the site plan  
for the proposed beach park and bathhouse, and locate the bathhouse closer to the highway. This  
would prevent severe storm action and continued coastal erosion from damaging the new  
structure. The old bathhouse continues to be at risk from a major storm and coastal erosion due  
to the structure's close proximity to the ocean.

0382. Please feel free to contact Matthew Myers, of the Land Division, Planning Branch at 587-

AKTA Ltd./ARTHUR KIMBAL THOMPSON ARCHITECT, AIA

March 31, 2003

Thank you.

Aloha,  
  
Matthew Myers

Ms. Diadre S. Mamiya, Administrator  
State of Hawaii  
Department of Land and Natural Resources  
Land Division  
P.O. Box 621  
Honolulu, Hawaii 96809

Dear Ms. Mamiya:

Subject: Draft Environmental Assessment (DEA) for Kaaawa Beach Park Reconstruction of Comfort Station,  
Tax Map Key: 5-1-002:025, Koolauloa District, Oahu, Hawaii

Thank you for reviewing the Draft Environmental Assessment for Kaaawa Beach Park Reconstruction of  
Comfort Station and for your comments of December 5, 2002.

The Draft Environmental Assessment acknowledges that the proposed bathhouse is located in a coastal  
zone with a history of coastal erosion (Draft EA page 19 paragraph 3.1.3). However, the existing site is severely  
limited and due to the following site constraints the proposed location is the only feasible option.

**Wastewater System:** The proposed wastewater system is an underground septic tank with leach field. The  
leach field has to meet certain setback requirements in accordance with the State Department of Health (§ 11-62-32,  
Table II). There is a 50-foot shoreline setback, a 5-foot building setback, property line setback, and large trees  
setback requirements. These setbacks limit the area where the leach field can be located.

**Parking:** The proposed parking lot is reduced to provide space for the new wastewater system.  
Construction of a parking lot over a leach field should be avoided, because it compromises the performance of both  
the leach field, which consists of wet porous soil, and the parking lot, which requires a well-compacted subbase to  
provide long-term, uniform structural support.

Thank for participating in the environmental review process.

AKTA Ltd./Arthur Kimbal Thompson Architect



Camilla Blomqvist

cc: Wesley Obama,  
Department of Design and Construction  
City and County of Honolulu

46-160 NAHIKU STREET, KANEHOHE, HAWAII 96744  
(808) 236-1373 FACSIMILE: (808) 234-6484  
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LOCAL GOVERNMENT



STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION  
KALANIKOHE BUILDING, ROOM 555  
601 KANOAHA BOULEVARD  
HONOLULU, HAWAII 96813

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
COMMISSION ON WATER RESOURCES  
MANAGEMENT  
CONSERVATION AND RESOURCES  
ENFORCEMENT  
CONSERVATION  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND  
STATE PARKS

December 3, 2002

Camilla Blomqvist  
AKTA Ltd.  
46-160 Nahiku Street  
Kane'ohe Hawaii 'i 96734

LOG NO: 31188 ✓  
DOC NO: 0211EJ14

Dear Ms. Blomqvist:

**SUBJECT:** Chapter 6E-8 Historic Preservation Review - Draft Environmental Assessment for the City and County of Honolulu, Department of Design and Construction Proposed New Bath House at Kaaawa Beach Park  
Kaaawa, Ko'olaupoko, O'ahu  
TMK: (1) 5-1-002:025

Thank you for the opportunity to comment on the DEA for the new bath house at Kaaawa Beach Park. We received the DEA from your office on November 6, 2002.

We commented during the pre-EA consultation phase of this project. Our earlier comments recommending that an archaeological inventory survey be conducted in order to determine if historic sites are present and if so, to gather sufficient information to evaluate their significance, are summarized within the DEA and included in full in the Appendix.

We have not yet received the report of the archaeological inventory survey for review and acceptance. Until the archaeological inventory survey is conducted and the report is submitted for review, we can not determine the effect, if any, this project would have on significant historic sites.

If you have any questions, please feel free to call Sara Collins at 692-8026 or Elaine Jourdan at 692-8027.

Aloha,

Don Hibbard, Administrator  
State Historic Preservation Division

EJ/hk

c: Van Horn Diamond, OIBC  
Kai Markell, SHPD Burial Sites Program  
Wesley Obata, Department of Design and Construction, City and County of Honolulu

AKTA Ltd./ARTHUR KIMBAL THOMPSON ARCHITECT, AIA

March 31, 2003

Ms. Holly McEldowney, Acting Administrator  
State of Hawaii  
Department of Land and Natural Resources  
Historic Preservation Division  
Kakuhineva Building  
601 Kanoaia Boulevard, Room 555  
Kapolei, Hawaii 96707

Dear Ms. McEldowney:

**Subject:** Draft Environmental Assessment (DEA) for Kaaawa Beach Park Reconstruction of Comfort Station, Tax Map Key: 5-1-002:025, Koolauloa District, Oahu, Hawaii

Thank you for reviewing the Draft Environmental Assessment for Kaaawa Beach Park Reconstruction of Comfort Station and for your comments of December 3, 2002.

Your office will receive the archaeological inventory survey for your review and acceptance once survey has been conducted. We acknowledge that until the survey report is submitted and accepted you cannot determine the effect, if any, this project would have on significant historic sites.

We appreciate your input to the environmental review process.

AKTA Ltd./Arthur Kimbal Thompson Architect

Camilla Blomqvist

cc: Wesley Obata,  
Department of Design and Construction  
City and County of Honolulu

46-160 NAHIKU STREET, KANEHOE, HAWAII 96744  
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CAVETT  
WILLIAMS



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

November 22, 2002

Arthur Kimbal Thompson Architect, AIA  
AKTA Ltd.  
46-160 Nahiku Street  
Kaneohe, Hawaii 96744

Dear Mr. Thompson:

Subject: Kaaawa Beach Park Reconstruction of Comfort Station  
Draft Environmental Assessment (EA)  
TMK: 5-1-002: 025

Thank you for your transmittal requesting our review of the subject proposal.

Plans for construction work within and impacting the State highway right-of-way must be submitted for our review and approval.

We appreciate the opportunity to provide comments.

Very truly yours,

BRIAN K. MINAAI  
Director of Transportation

DEPUTY DIRECTOR  
CLARENCE OKAMOTO  
JACQUEE H. BRUGARD

BY REPLY REFER TO:  
STP 8.0553

AKTA Ltd./ARTHUR KIMBAL THOMPSON ARCHITECT, AIA

March 31, 2003

Mr. Rodney Haraga, Director  
State of Hawaii  
Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813

Dear Mr. Haraga:

Subject: Draft Environmental Assessment (DEA) for Kaaawa Beach Park Reconstruction of Comfort Station, Tax Map Key: 5-1-002:025, Koolauloa District, Oahu, Hawaii

Thank you for reviewing the Draft Environmental Assessment for Kaaawa Beach Park Reconstruction of Comfort Station and for your comments of November 22, 2002.

We note that plans for construction work within and impacting the State highway right-of-way will be submitted for your review and approval.

We appreciate your input to the environmental review process.

Thank You.

AKTA Ltd./Arthur Kimbal Thompson Architect

Camilla Blomqvist

cc: Wesley Obata  
Department of Design and Construction  
City and County of Honolulu

46-160 NAHIKU STREET, KANEOHE, HAWAII 96744  
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STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

225 SOUTH KING STREET  
HONOLULU, HAWAII 96813  
Telephone: (808) 534-1100  
Facsimile: (808) 534-1106  
E-mail: [oeqc@doh.hawaii.gov](mailto:oeqc@doh.hawaii.gov)

GENEVIEVE SALMONSON  
DIRECTOR

December 9, 2002

Mr. Wesley Obata  
Department of Design and Construction, City & County of Honolulu  
567 South King Street, 9<sup>th</sup> Floor  
Honolulu, Hawaii 96813

Mr. Arthur Kimball Thompson,  
AKTA Ltd / Arthur Kimball Thompson Architect, AIA  
46-160 Nahiku Street  
Kaneohe, Hawaii 96744

Dear Messrs. Obata and Thompson:

The Office of Environmental Quality Control has reviewed the October 2002, draft environmental assessment under Chapter 343, Hawaii's Revised Statutes for Ka'a'awa Beach Park Improvements in the judicial district of Ko'olaupoko and offers the following comments for your consideration and response.

1. **CULTURAL IMPACT CLARIFICATIONS.** Page 31 of the document notes that "[i]n on-going cultural or religious practices were identified during field investigations at the park." The Office believes that fishing, gathering activities are common cultural activities which occur at the park, which in and of itself is a cultural resource used by the community. Please consult with the Ko'olaupoko Neighborhood Board, knowledgeable community persons, the Office of Hawaiian Affairs as to the numbers and types of cultural activities occurring at the park and including your findings as well as your assessment as to whether the proposed action will impact cultural activities or resources at the site.
2. **DETERIORATED WASTEWATER SYSTEM.** Please describe if any, water quality measurements or reports which may indicate leakage of waste into nearby waters.
3. **SUSTAINABLE BUILDING GUIDELINES: USE OF NATIVE PLANTS, AND GLASSPALT.** We respectfully refer you to our website at <http://www.state.hi.us/health/oeqc/index.html> for guidance documents on sustainable building and the use of native plants in landscaping. Also, please plan to use glasspalt aggregate for proposed paving at the project site.

Thank you for the opportunity to comment. If there are any questions, please call Leslie Segundo of my staff at (808) 586-4185

Sincerely,

*Genevieve Salmonson*  
GENEVIEVE SALMONSON  
Director

AKTA Ltd./ARTHUR KIMBALL THOMPSON ARCHITECT, AIA

March 31, 2003

Ms. Genevieve Salmonson, Director  
State of Hawaii  
Office of Environmental Quality Control  
233 South Beretania Street, Suite 702  
Honolulu, HI 96813

Dear Ms. Salmonson:

Subject: Draft Environmental Assessment (EA) for Kaaawa Beach Park Reconstruction of Comfort Station,  
Tax Map Key: 5-1-002-025, Koolauloa District, Oahu, Hawaii

We have reviewed your letter dated December 9, 2002 regarding the Draft Environmental Assessment (DEA) for Kaaawa Beach Park, Reconstruction of Comfort Station and have the following responses.

1. **Cultural Impact Clarifications.** A cultural impact study will be conducted to assess whether the proposed reconstruction of the comfort station (bathhouse), parking lot and miscellaneous site improvements will have any impact on cultural activities or resources at the project site. The cultural impact study will include consultation with the Ko'olaupoko Neighborhood Board, knowledgeable community persons and the Office of Hawaiian Affairs.
  2. **Deteriorated Wastewater System.** We have no knowledge of water quality measurements or reports that may indicate leakage of waste water into nearby waters at Kaaawa Beach Park.
  3. **Sustainable Building Guidelines, Use of Native Plants, and Glassphalt.** The Department of Design and Construction will review and consider the sustainable building guidelines for the project.  
Native Hawaiian plants are being proposed for use in the landscaping. They include: Akia - Wikstroemia wa-ursi and Beach Naupaka (Naupaka Kahalaui) - Scaevola Sericea.
- The use of glassphalt for the proposed paving within parks is not a City and County of Honolulu standard.

Thank for participating in the environmental review process.

AKTA Ltd./Arthur Kimball Thompson Architect

Camilla Blomqvist

cc: Wesley Obata  
Department of Design and Construction  
City and County of Honolulu

46-160 NAHIKU STREET, KANEOHE, HAWAII 96744  
(808) 236-1373 FACSIMILE: (808) 234-6484  
E-MAIL: [akimball@aol.com](mailto:akimball@aol.com)

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843



November 18, 2002

JEREMY HARRIS, Mayor  
EDDIE FLORES, Jr., Chairman  
CHARLES A. STEED, Vice Chairman  
JAN NELLY, Alder  
HERBERT S.K. KAOPUA, Sr.  
DAROLYN H. LENDOO

CLIFFORD S. JAMILE  
Manager and Chief Engineer  
DOUGLAS FAY K. KITOSIANO  
Deputy Manager and Chief Engineer

Ms. Camilla Blomqvist  
AKTA, Ltd.  
46-160 Nahiku Street  
Kaneohe, Hawaii 96744

Dear Ms. Blomqvist:

Subject: Your Letter of November 4, 2002 on the Draft Environmental Assessment  
for Kaaawa Beach Park Reconstruction of Comfort Station, TMK: 5-1-2-25

Thank you for the opportunity to review the subject document for the proposed Kaaawa  
Beach Park Comfort Station.

The existing water system is presently adequate to accommodate the proposed comfort station.

The availability of water will be confirmed when the building permit is approved. When  
water is made available, the applicant will be required to pay our Water System Facilities  
Charges for resource development, transmission and daily storage.

The proposed project is subject to Board of Water Supply Cross-Connection Control and  
Backflow Prevention requirements prior to the issuance of the Building Permit.

If you have any questions, please contact Joseph Kaakua at 527-6123.

Very truly yours,

for CLIFFORD S. JAMILE  
Manager and Chief Engineer

**AKTA Ltd./ARTHUR KIMBAL THOMPSON ARCHITECT, AIA**

March 31, 2003

Mr. Clifford S. Jamile, Manager and Chief Engineer  
Board of Water Supply  
City and County of Honolulu  
630 South Beretania Street  
Honolulu, Hawaii 96843

Dear Mr. Jamile:

Subject: Draft Environmental Assessment (DEA) for Kaaawa Beach Park Reconstruction of Comfort  
Station, Tax Map Key: 5-1-002:025, Koolauloa District, Oahu, Hawaii

We have reviewed your letter dated November 18, 2002 regarding the Draft Environmental  
Assessment (DEA) for Kaaawa Beach Park, Reconstruction of Comfort Station and have the following  
responses.

We acknowledge that the existing water system is presently adequate to accommodate the proposed  
comfort station (bathroom) and the availability of water will be confirmed when the building permit  
application is submitted to the Board of Water Supply for review and approval.

The Department of Design and Construction will comply with the applicable Water System Facility  
Charges for resource development, transmission and daily storage.

The project will comply with the requirements of the Board of Water Supply Cross-Connection  
Control and Backflow Prevention prior to issuance of the building permit.

Thank you for participating in the environmental review process.

AKTA Ltd./Arthur Kimbal Thompson Architect

Camilla Blomqvist

cc: Wesley Obata,  
Department of Design and Construction  
City and County of Honolulu

46-160 NAHIKU STREET, KANEOHE, HAWAII 96744  
(808) 236-1373 FACSIMILE: (808) 234-6484  
E-MAIL: kimbal@akta-ld.com WEB: akta-ld.com

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU

1000 ULOLOA STREET, SUITE 309, KANEHOHE, HAWAII 96744  
TELEPHONE: (808) 531-5841 FAX: (808) 531-5101 INTERNET: WWW.HONOLULU.HI



JEREMY HARRIS  
MAYOR

WILLIAM D. BALFOUR, JR.  
DIRECTOR  
CONRAD T. SUPPA, DAZ  
SENIOR DESIGNER

November 22, 2002

Mr. Kimbal Thompson  
AKTA Ltd./Arthur Kimbal Thompson Architect, AIA  
46-160 Nahiku Street  
Kaneohe, Hawaii 96744

Dear Mr. Thompson:

Subject: Draft Environmental Assessment (EA) for Kaaawa  
Beach Park Reconstruction of Comfort Station  
Tax Map Key: 5-1-002:025, Koolauloa District,  
Oahu, Hawaii

Thank you for the opportunity to review and comment on the Draft  
Environmental Assessment relating to the Reconstruction of Comfort Station at  
Kaaawa Beach Park.

The Department of Parks and Recreation supports the reconstruction of  
the comfort station and parking on the same sites as they are presently  
located.

We do not support the inclusion of a bathroom or an increase in parking  
stalls.

Should you have any questions, please contact Mr. John Reid, Planner, at  
692-5454.

Sincerely,

WILLIAM D. BALFOUR, JR.  
Director

KDB:mk (J. Reid, MS)  
(1/13/02)

cc: Mr. Don Griffin, Department of Design and Construction  
Mr. Wesley Obata, Department of Design and Construction

AKTA Ltd./ARTHUR KIMBAL THOMPSON ARCHITECT, AIA

March 31, 2003

Mr. William D. Balfour, Jr., Director  
City and County of Honolulu  
Department of Parks and Recreation  
Kappolei Hale  
1000 Uluohia Street, Suite 309  
Kapelei, Hawaii 96707

Dear Mr. Balfour:

Subject: Draft Environmental Assessment (DEA) for Kaaawa Beach Park Reconstruction of Comfort Station,  
Tax Map Key: 5-1-002:025, Koolauloa District, Oahu, Hawaii

We have reviewed your letter dated November 22, 2002 regarding the Draft Environmental  
Assessment (DEA) for Kaaawa Beach Park, Reconstruction of Comfort Station and have the following  
responses.

The existing comfort station has a changing area for both men and women. The proposed comfort  
station (bathroom) will also include a changing area for both men and women and will generally be located on  
the same site and be of the same size as the existing comfort station.

The proposed parking lot will not increase the number of parking stalls. There will be a decrease in the  
number of parking stalls to provide space for the new wastewater system.

The proposed parking lot may not be reconstructed at the present location because of the 50-foot  
shoreline setback for the new leach field as required by the Hawaii Administrative Rules (HAR), Title 11,  
Department of Health, Chapter 62 - Wastewater Systems (HAR § 11-62). The environmental engineering  
consultant does not recommend constructing a parking lot over the leach field, because it compromises the  
performance of the leach field, which consists of moist porous soil, and the parking lot, which requires a well-  
compacted subbase to provide long-term, uniform structural support.

Thank you for participating in the environmental review process.

AKTA Ltd./Arthur Kimbal Thompson Architect

Camilla Blomqvist

cc: Wesley Obata,  
Department of Design and Construction  
City and County of Honolulu

46-160 NAHIKU STREET, KANEHOHE, HAWAII 96744  
(808) 236-1373 FACSIMILE: (808) 234-6484  
E-MAIL: kimbal@akta-ltd.com WEB: akta-ltd.com



ERIC G. CRISPIN, AIA  
Acting Director  
LORETTA K. CHEE  
Senior Planner

2002/ELOG-3247  
2002/ED-9(as)

December 2, 2002

Mr. Kimbal Thompson  
AKTA Ltd./Arthur Kimbal Thompson Architect  
46-160 Nahiku Street  
Kaneohe, Hawaii 96744

Dear Mr. Kimball:

Draft Environmental Assessment for Kaaawa Beach Park  
Renovation of Comfort Station  
5-1-2: 25  
51-329 Kamehameha Highway  
Tax Map Key 5-1-2: 25

This is in response to your letter dated November 4, 2002, requesting our review and comments on the above project.

The following are our comments:

1. We confirm that a Special Management Area Use Permit - Major and a Shoreline Setback Variance are required for the project. A current certified shoreline survey (within one year of the application date) will be required at the time the variance application is submitted.
2. The EA should clarify whether the leach field is underground or aboveground.
3. The EA should address the effect of the leach field on coastal water quality.
4. The EA should discuss the feasibility of moving the building further away from the shoreline and/or putting the leaching field (if it is underground) underneath the parking area, to reduce the encroachment into the shoreline setback.
5. The EA should address the effect of water run off from the outdoor shower facility on coastal water quality.

Mr. Kimbal Thompson  
Page 2  
December 2, 2002

6. Provide the square footage of the proposed facility (not just the dimensions).
7. Seismic Activity: According to the Uniform Building Code, Oahu is located in Seismic Zone 2A, not 1.
8. Any excavation may require a grading permit, in accordance with Section 14-13, Revised Ordinances of Honolulu.
9. The applicant should address the feasibility of compliance with flood requirements for this project. Although an exemption exists for this type of facility, every effort should be made at the planning and design stage to protect the city's (sizable) investment on this project from potential losses due to flooding.
10. Revise Finding Item #11 (page 54) to indicate that the project is in Zone VE, elevation 10 feet, as stated on the rest of the DEA.

Should you have any questions, you may contact Adrian Siu-Li of our staff at 527-5072.

Sincerely yours,

ERIC G. CRISPIN, AIA  
Acting Director of Planning and Permitting

EGC:cs  
Pass Doc No. 190967

AKTA Ltd./ARTHUR KIMBAL THOMPSON ARCHITECT, AIA

Mr. Eric G. Crispin  
DEA for Kaawawa Beach Park  
March 31, 2003  
Page 2

March 31, 2003

Mr. Eric G. Crispin, AIA, Director  
City and County of Honolulu  
Department of Planning and Permitting  
650 South King Street, 7<sup>th</sup> Floor  
Honolulu, Hawaii 96813

Dear Mr. Crispin:

Subject: Draft Environmental Assessment (DEA) for Kaawawa Beach Park Reconstruction of Comfort Station,  
Tax Map Key: 3-1-002.025, Koolauloa District, Oahu, Hawaii

We have reviewed your letter dated December 2, 2002 regarding the Draft Environmental Assessment  
(DEA) for Kaawawa Beach Park, Reconstruction of Comfort Station and have the following responses:

1. We acknowledge that a current certified shoreline survey (within one year of the application date) will be required at the time the variance application is submitted.
2. The proposed leach field is underground. We will clarify this in the Final Environmental Assessment.
3. The proposed individual wastewater system, including an underground septic tank and leach field, will be designed and constructed in accordance with the Hawaii Administrative Rules (HAR), Title 11, Department of Health, Chapter 62 - Wastewater Systems. The effluent from the individual wastewater system will meet the minimum water quality established by these standards.
4. Site constraints and the requirements of the Department of Health for individual wastewater systems (HAR §11-62) will not permit moving the proposed comfort station further away from the shoreline.  
HAR §11-62-32 requires the septic tank and leach field to be located a minimum horizontal distance of 50-feet from the shoreline. Majority of the proposed parking lot will be within the 50-foot shorelines setback. There is inadequate space under the proposed parking lot to install the septic tank and leach field.  
Also, construction of a parking lot over a leach field should be avoided because it would compromise the performance of both the leach field, which consists of moist porous soil, and the parking lot, which requires a well-compacted subbase to provide long-term, uniform structural support.
5. The quantity of "graywater" from the shower is anticipated to be relatively small and would be filtered by the beach sand before reaching the coastal groundwater and eventually migrating to coastal waters, where the dilution would be extremely large.
6. The proposed comfort station will have a footprint of approximately 837 square feet. This information will be included in the Final Environmental Assessment.
7. We acknowledge that Oahu is located in Seismic Zone 2A according to the Uniform Building Code. The seismic zone information will be revised in the Final Environmental Assessment.

8. Construction plans will be submitted to the Department of Planning and Permitting for review and approval. The Department of Design and Construction will apply for and obtain a grading permit if required.
9. The existing ground in the vicinity of the proposed comfort station is approximately 7-feet above mean sea level (msl). To comply with the requirements of the special flood hazard district, the finish floor and lowest horizontal structural member must be located at or above the base flood elevation of 10-feet above msl. This would require a long and extensive ramp to provide accessibility and meet the requirements of the Americans with Disabilities Act. The ramp must be supported on columns so they do not obstruct the flow. Such a design would have a very significant impact on construction cost and other aspects of site design.
10. Item #11 on page 54 will be revised to indicate that the project is in Zone VE, elevation 10-feet.

Thank you for participating in the environmental review process.

AKTA Ltd./Arthur Kimbal Thompson Architect



Camilla Blomqvist

cc: Wesley Obata,  
Department of Design and Construction  
City and County of Honolulu

46-160 NAHIKU STREET, KANEHOHE, HAWAII 96744  
(808) 236-1373 FACSIMILE: (808) 234-6484  
E-MAIL: kimbal@akta-ld.com WEB: akta-ld.com

## APPENDIX

### APPENDIX A: Historic Preservation review correspondence

Letter from AKTA Ltd. to Mr. Don Hibbard, Department of Land and Natural Resources, Historic Preservation Division, dated June 28, 2002

Letter from Department of Land and Natural Resources, Historic Preservation Division to AKTA Lt., dated July 17, 2002

### APPENDIX B: National Marine Fisheries Service correspondence

Letter from AKTA Ltd. to Mr. David Nichols, National Marine Fisheries Service, dated July 16, 2002

Letter from National Marine Fisheries Service to AKTA Ltd., dated July 19, 2002

Other:

### APPENDIX C:

Letter from Koolauloa Neighborhood Board No. 28, dated August 10, 2002.

### APPENDIX D:

Koolauloa Vision Team Meeting Notes, dated August 8, 2002.

### APPENDIX E:

Reconnaissance survey of biota for a comfort station replacement at Kaaawa Beach Park, windward Oahu prepared by AECOS Consultants, dated July 15, 2002.

### APPENDIX F:

Archeological Inventory Survey for the Proposed Ka'a'awa Beach Park Comfort Station and Parking Area Improvements, Ka'a'awa, Ko'olauloa District, Island of O'ahu, Prepared by Pacific Legacy, Inc., dated April 2003.

### APPENDIX G:

Cultural Impact Assessment Final Report Ka'a'awa Beach Park Bathhouse prepared by Social Research Pacific, Inc. dated April 19, 2003.

AKTA Ltd./ARTHUR KIMBAL THOMPSON ARCHITECT, AIA

June 28, 2002

Mr. Don Hibbard, Administrator  
State Historic Preservation Division  
Department of Land and Natural Resources  
Kakuhiwea Building  
601 Kamakila Boulevard, Room 555  
Kapelele, Hawaii 96707

Dear Mr. Hibbard:

Subject: Bath House for Kaawa Beach Park, Koolauloa, Oahu, Hawaii  
51-229 Kamehameha Highway  
TMK: 5-1-002:025

We have been consulted by the City & County of Honolulu, Department of Design and Construction to prepare an environmental assessment for a new Bath House at Kaawa Beach Park. The 1.50 acre beach park is located between Kamehameha Highway and the ocean and borders TMK: 5-1-002:005 to the North. This project is a result of the Ko Olauloa vision team and is intended to upgrade and enhance the existing facilities at the Beach Park.

We would appreciate your assistance in identifying previously discovered historic remains on or in the vicinity of this site. An internet search of SHPD's library yielded two prior archeological assessments in this area:

O-00448, 1988, Subsurface Archeological reconnaissance Survey: Proposed Kaawa Post office Site, Land of Ka'awa, Ko Olauloa District, Island of O'ahu., Rosendahl, Paul, 1-5-1-011:041

O-00466, 1988, Inspection of Kaawa Burial Site 50-80-06-3759, Ka'awa, Ko Olauloa District, Island of O'ahu., Smith, Marc, 1-5-1-013:011

Attached find a TMK Map, Existing Site Plan and Proposed Site Plan for your use.

Please don't hesitate to call if you need further information.

Thank You.

AKTA Ltd./Arthur Kimbal Thompson Architect



Camilla Blomqvist

46-160 NAHIKU STREET, KANEHOE, HAWAII 96744  
(808) 236-1373 FACSIMILE: (808) 234-6484  
E-MAIL: akimball@aol.com



STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION  
1000 KALANIANA'OLA BLVD., 3RD FLOOR  
HONOLULU, HAWAII 96813

5  
GILBERT S. DONALDSON, CHAIRPERSON  
COMMISSION ON WATER RESOURCES MANAGEMENT  
DEPT. OF LAND AND NATURAL RESOURCES  
1000 KALANIANA'OLA BLVD., 3RD FLOOR  
HONOLULU, HAWAII 96813

ADJUTANT COMMISSIONER  
LAND AND OCEAN RECREATION  
COMMISSION ON WATER RESOURCES  
MANAGEMENT  
DEPT. OF LAND AND NATURAL RESOURCES  
1000 KALANIANA'OLA BLVD., 3RD FLOOR  
HONOLULU, HAWAII 96813

July 17, 2002

Camilla Blomqvist  
AKTA Ltd.  
46-160 Nahiku Street  
Kaneohe Hawaii 96734

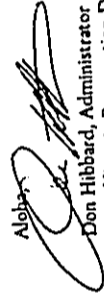
Dear Ms. Blomqvist:

SUBJECT: Chapter 6E-8 Historic Preservation Review - Pre EA Consultation on the City and County of Honolulu, Department of Design and Construction Proposed New Bath House at Kaawa Beach Park  
Kaawa, Ko Olauloa, O'ahu  
TMK: (1) 5-1-002:025  
LOG NO: 30341 ✓  
DOC NO: 0207EJ26

Thank you for the opportunity to comment on the proposed Master Plan new bath house at Kaawa Beach Park. Our review is based on historic reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was made of the project areas. We received notification of this undertaking from your office on July 1, 2002.

A review of our records shows that there are no known historic sites at this location. However, no archaeological inventory has been conducted for the park. Subsurface cultural deposits including human burials have been uncovered in the sandy shoreline both to the north and south of this area and it is possible that ground disturbing activities related to the park development, such as the construction of the new bath facilities and installation of utilities may have an effect on these kinds of deposits. Therefore, we recommend that an archaeological inventory survey with subsurface testing be conducted in order to determine if historic sites are present and if so, to gather sufficient information to evaluate their significance. An acceptable report of the finds should be submitted to the State Historic Preservation Division. If significant historic sites are found during the survey, mitigation plan may need to be developed and executed.

Should you have any questions, please feel free to call Sara Collins at 692-8026 or Elaine Jourdane at 692-8027.



Don Hibbard, Administrator  
State Historic Preservation Division

Ej:jk

c. Van Horn Diamond, OJBC  
Kai Markell, SHPD Burial Sites Program

RECEIVED

JUL 24 2002

AKTA Ltd./



AKTA Ltd./ARTHUR KIMBAL THOMPSON ARCHITECT, AIA

July 16, 2002  
David Nichols  
National Marine Fisheries Service  
2570 Dole Street  
Honolulu, HI 96822

Via Facsimile @ 973-2941

Dear Mr. Nichols,

Subject: Bath House for Kaaawa Beach Park, Koolau Loa, Oahu, Hawaii  
51-329 Kamehameha Highway  
TMK: 5-1-002-025

We have been consulted by the City & County of Honolulu, Department of Design and Construction to prepare an environmental assessment for a new Bath House at Kaaawa Beach Park. The 1.50 acre beach park is located between Kamehameha Highway and the ocean and borders TMK: 5-1-002-005 to the North. This project is a result of the Ko'olaloa vision team and is intended to upgrade and enhance the existing facilities at the Beach Park.

We are requesting a species and habitats list for Kaaawa Beach Park and we are sending attached documents for your information: TMK Map  
Existing Site Plan  
Proposed Site Plan.

Please let me know if you need additional information.

Thank You.

AKTA Ltd./Arthur Kimbal Thompson Architect

Camilla Blomqvist for A. Kimbal Thompson

46-160 NAHIKU STREET, KANEHOHE, HAWAII 96744  
(808) 236-1373 FACSIMILE: (808) 234-6484  
E-MAIL: akimbalt@aol.com



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE

Pacific Islands Area Office  
National Marine Fisheries Service  
1601 Kapiolani Blvd., Suite 1110  
Honolulu, HI 96814-4700

AKTA Ltd.  
46-160 Nahiku St.  
Kaneohe, HI 96744  
FAX: (808) 234-6484

July 19, 2002

ATTN: Camilla Blomqvist,

This responds to your request received via facsimile on July 17, 2002, for a list of threatened and endangered species under the jurisdiction of NOAA Fisheries (NMFS) that may be found in the Kaaawa Beach Park area. We provide the following information under our statutory authorities under the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et seq.*, and the Marine Mammal Protection Act of 1972, as amended 16 U.S.C. 1361 *et seq.* (MMPA).

Threatened green turtles (*Chelonia mydas*), and endangered hawksbill turtles (*Eretmochelys imbricata*) occur in the waters around Oahu. Green turtles may also be found on the beaches of Kaaawa Beach Park. Endangered Hawaiian monk seals (*Monachus schauinslandi*) are also found in the nearshore waters and beaches of Oahu and could potentially be found in the project area.

Should you have further questions regarding protected species in Hawaiian waters under the jurisdiction of NMFS and/or the section 7 process, please contact David Nichols or Margaret Dupree at (808) 973-2937 or fax (808) 973-2941.

Sincerely,  
  
For Margaret Akamine Dupree  
Protected Species Program





**KOOLAULOA NEIGHBORHOOD BOARD NO. 28**  
*(Kahuku, Laie, Hauula, Punaluu, Kaaawa-Kahana)*

c/o NEIGHBORHOOD COMMISSION • CITY HALL, ROOM 400 • HONOLULU, HAWAII 96813

August 10, 2002

A. Kimbal Thompson  
AKTA Ltd./Arthur Kimbal Thompson Architect, AIA  
46-160 Nahiku Street  
Kaneohe, HI 96744

RECEIVED

AUG 21 2002

AKTA Ltd./

Dear Mr. Thompson:

**SUBJECT: Support for Reconstruction of Ka'a'awa Beach Comfort Station**

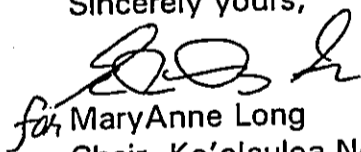
Thank you for presenting information on the plans to reconstruct the Ka'a'awa Beach Park comfort station at the August meeting of the Ko'olauloa Neighborhood Board. Based on the information you presented, our board voted unanimously to support the project.

Despite its small size, the comfort station is a heavily-used facility at Ka'a'awa Beach Park is a favorite gathering spot for families in the area.

Comments made during the presentation referenced the septic system which you explained was addressed in the plan and the fact that there will be considerable reduction in the number of parking stalls from what is presently available.

The community is pleased to see this project moving forward. We look forward to its speedy completion.

Sincerely yours,



for MaryAnne Long  
Chair, Ko'olauloa Neighborhood Board No. 28



Oahu's Neighborhood Board System-Established 1973

## KOOLAULOA VISION TEAM

### Meeting Notes August 8, 2002

#### CALL TO ORDER

John Sabas, Facilitator and Deputy Director for the City's Department of Community Services, called the Vision Team meeting for the Koolauloa Region to order at 5:00 p.m.

#### INTRODUCTIONS

In attendance were: Sandi Takemoto, Sunny Greer, Ralph Makaiau, Les Steward, Camilla Blomquist, Kimbal Thompson, Don Hurlbut, Craig Huish, Creighton Mattoon, Richard Paginawan, Debra Hiiweh, Russell Atakaki, Ed Kono, Warren Soh, Shannon Wood.

John introduced Russell Arakaki, Kimbal Thompson and Camilla Blomquist who were invited to provide information on the Kaaawa Beach Park master plan.

#### OLD BUSINESS

The consultants explained that they wanted bids for the Kaaawa Beach Park to go out by early November, with construction starting by June 2003 and completed within 180 days.

Sunny Greer, aide to Council member Steve Holmes, said Councilman Holmes supports this project and would like to see it started and completed while there is still funding. She encouraged the group to support the project as is and not make the mistakes of other park projects, such as Kualoa, where concerns about the proposed underground wastewater system stalled the project with the result being a lost of funding.

Koolauloa vision team members Mattoon, Hiiweh and Paginawan questioned the proposed parking scheme, wastewater treatment system and location of the comfort station to the ocean and the neighboring property owners.

At the conclusion of the discussion, the Koolauloa vision team acted to support the project, but advised the consultants to consider other wastewater systems in lieu of the underground system being proposed. Concerns were raised relating to the rich limu grounds in the area and the possible unearthing of human remains on the beach.

#### Other

John opened discussion about the Vision Team Projects for FY1103 which were recently

adopted by the Council and approved by the Mayor effective

July 1, 2002.

Ralph Makaiau shared his concern about the Vision process where certain Kahuku projects were eliminated because of politics. Sunny Greer explained that Councilman Holmes formally submitted his recommendations affecting the recommendations for the Kahuku swimming pool and some flooding projects. He recommended that the projects not be funded for various reasons, including the fact that the State should take the lead in funding the swimming pool project since it is with the DOE.

After much discussion, John concluded by commenting that there are valuable lessons to be learned and that the community needs to actively participate in the process. He cited Don Hurlbut's attendance at the Council's budget hearings that lasted to 3:00 am, as one example of what the community can and must do to realize its goals.

#### NEW BUSINESS

Ralph Makaiau recommended that the candidates for Council District 2 be invited to the next Vision meeting to share their views about the area and the vision process. John will contact the candidates.

#### ANNOUNCEMENTS

Shannon Wood announced that on September 10, from 6:30 pm to 7:30 pm, there would be a live debate on channel 54 for the council district #2 candidates.

The next vision meeting is scheduled for Thursday, September 12, 2002 at 5:30 p.m. at the Hauula Community Center.

The meeting was adjourned at 6:35 p.m.

Notes prepared by Sandi Takemoto.

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## Reconnaissance survey of biota for a comfort station replacement at Ka`a`awa Beach Park, windward O`ahu<sup>1</sup>

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July 15, 2002

AECOS Consultants No. AC033

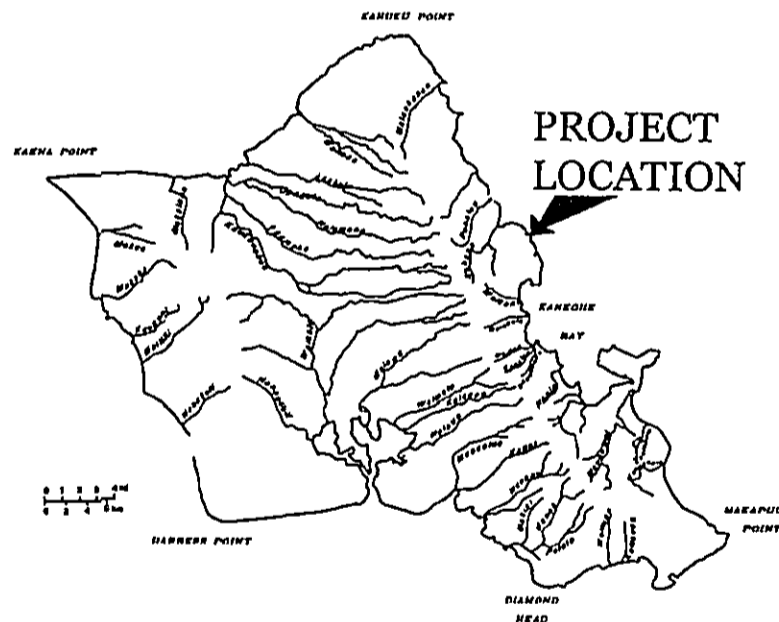
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### Introduction

On July 12, 2002, a biologist conducted a reconnaissance survey of Ka`a`awa Beach Park in Ka`a`awa on the windward coast of O`ahu (Figure 1). The purpose of the survey was to ascertain biological resources found in and adjacent to the beach park, where an existing comfort station building (restroom and showers) is to be replaced with a more modern structure. This report presents findings of the field survey and consideration of pertinent literature.

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Figure 1. Project location on the Island of O`ahu

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<sup>1</sup> This report was prepared for use by AKTA Ltd./Arthur Kimbal Thompson Architect in an Environmental Assessment for the Ka`a`awa Beach Park improvements project. The EA will become part of the public record.

## General Site Description

Ka`a`awa Beach Park, located at 51-329 Kamehameha Highway, occupies a relatively narrow strip of land between the ocean and the highway in Ka`a`awa. The property (TMK: 5-1-002:025; 0.15 ha or 16,300 sq. ft) is widest at the north end where a small drainage swale, a paved parking lot accommodating about 8 vehicles, and a comfort station, are situated. Elsewhere, nearly all of the parcel consists of either beach or mowed lawn, with scattered trees completing the landscaping. An unpaved parking area is located along the highway towards the south end of the park.

Beach erosion has been a problem here in the past: in the 1960s the sand shoreline was cut back some 12 to 18 m (40 to 60 ft; ACOE, 1971). Large boulders were placed at various points to protect the comfort station and selected trees in December 1968 (Clark, 1977). These boulders are presently evident along the shore at the extreme north end of the park and (although now mostly buried by accreted sand) in front of the comfort station. Sand was imported in 1975 to replenish losses (ACOE, 1974; AECOS, 1979). The beach is popular with families, in part because the bottom off the beach park is shallow and protected from wave action by a broad coral reef.

A fringing reef extends 275 m (900 ft) off the shoreline between Kaiaka Channel (trending north-south off Kalaeo`io Beach just east from Ka`a`awa Beach Park) and Kahana Bay. The average depth over the reef is (< 1 m) 2.5 ft. The reef flat is mostly sand and coral-rock rubble, with scattered blocks of old reef limestone. Consolidated reef limestone predominates along the outer margin of the reef. The reef front drops steeply to a depth of 5 m (18 ft) off Ka`a`awa. Seaweeds are the most conspicuous biota on the nearshore bottom, with living corals generally absent or covering only a small percentage of the bottom most of the way out across the shallow flat. Fishes are also generally sparse in the inshore areas, although this coastline remains popular for fishing, especially to the south (known as Kaiaka Bay) closer to Kaiaka Channel and Kalae`o`io Beach (AECOS, 1979).

## Vegetation

Given the small, open area comprising Ka`a`awa Beach Park, a complete listing of plant species present and their relative abundances was generated during the field survey in July 2002 (see Table 1). Almost all of the project parcel is maintained as an open lawn area by mowing of grass and removal of weedy shrubs (Figure 2a). Only the parking lots, some areas around the existing comfort station, and a small "dune" area in the north corner along the beach are not maintained as lawn. In the latter area, a mixture of trees, shrubs, and herbs are growing in what appears to be



Figure 2a (upper): View of Ka`a`awa Beach Park from the north end looking south along the beach. Figure 2b (lower): Dune adjacent to a swale at north end supports native *naupaka kahakai* and *pohuehue*. The project site begins on the left side of this photograph.

an effective vegetation screen separating the park from an adjacent private parcel. This feature is adjacent to a drainage swale running across the park from the highway and which has a bare sand floor.

The lawn grasses at the park are dominated by three salt tolerant species: a dwarf Bermuda grass (*Cynodon dactylon* hybrid), buffalo or St. Augustine grass (*Stenotaphrum secundatum*), and seashore rushgrass or `aki`aki (*Sporobolus virginicus*). Only the latter is native and in its natural habitat. However, this grass of the upper beach and dunes does not tolerate mowing or foot traffic as well as the planted Bermuda and St. Augustine grasses. Consequently, the seashore rushgrass hangs on in areas that are less frequently mowed or subject to minimal traffic by being close to structures.

Table 1. Checklist of plants found at Kaaawa Beach Park (TMK: 5-1-002:025)  
Kamehameha Highway, Ka`a`awa, windward O`ahu.

Species	Common name	Status	Abundance
<b>FLOWERING PLANTS</b>			
<b>DICOTYLEDONES</b>			
<b>AMARANTHACEAE</b>			
<i>Alternanthera pungens</i> Kunth	khaki weed	nat.	R
<b>ASTERACEAE (COMPOSITAE)</b>			
<i>Eclipta alba</i> (L.) Haask.	false daisy	nat.	C
<i>Wedelia trilobata</i> (L.) Hitchc.	Wedelia	nat.	C
<b>CASUARINACEAE</b>			
<i>Casuarina equisetifolia</i> L.	ironwood tree (sapling)	nat.	R
<b>COMBRETACEAE</b>			
<i>Terminalia catappa</i> L.	false kamani	nat.	C
<b>CONVOLVULACEAE</b>			
<i>Ipomoea pes-caprae</i> (L.) R. Br.	pohuehue	ind.	O
<b>CUCURBITACEAE</b>			
<i>Coccinia grandis</i> (L.) Voigt	scarlet-fruited gourd	nat.	R
<b>EUPHORBIACEAE</b>			
<i>Chamaesyce prostrata</i> (Alton) Small	prostrate spurge	nat.	R
<b>FABACEAE</b>			
<i>Desmodium triflorum</i> (L.) DC		nat.	R
<i>Indigofera spicata</i> Forssk.	prostrate indigo	nat.	R
<i>Leucaena leucocephala</i> (Lam.) deWit	koa-haole	nat.	U
<i>Mimosa pudica</i> L.	sensitive plant	nat.	R
<b>GOODENIACEAE</b>			
<i>Scaevola sericea</i> Vahl.	naupaka kahakai	ind.	A

Table 1 (continued)

Species	Common name	Status	Abundance
<b>MALVACEAE</b>			
<i>Hibiscus tiliaceus</i> L.	<i>hau</i>	pol.	R
<i>Thespesia populnea</i> (L.) Sol. ex Correa	<i>milo</i> (seedling)	pol.	R
<b>MORACEAE</b>			
<i>Ficus microcarpa</i> L. f.	Chinese banyan (sapling)	nat.	R
<b>PORTULACACEAE</b>			
<i>Portulaca oleracea</i> L.	pig weed	ind.	R
<b>MONOCOTYLEDONES</b>			
<b>ARECACEAE</b>			
<i>Cocos nucifera</i>	<i>niu</i> , coconut palm	pol.	C
<b>CYPERACEAE</b>			
<i>Cyperus rotundus</i> L.	nut grass	nat.	R
<b>LILIACEAE</b>			
<i>Crinum asiaticum</i> L.	spider lily	nat.	R
<b>POACEAE (GRAMINEAE)</b>			
<i>Cynodon dactylon</i> (L.) Pers.	hybrid Bermuda grass	nat.	AA
<i>Dactyloctenium aegyptium</i> (L.) Willd.	beach wiregrass	nat.	R
<i>Digitaria insularis</i> (L.) Mez ex Ekman	sourgrass	nat.	U
<i>Eleusine indica</i> (L.) Gartn.	beach wiregrass	nat.	A
<i>Sporobolus diander</i> (Retz.) P. Beauv.	Indian dropseed	nat.	R
<i>Sporobolus virginicus</i> (L.) Kunth	seashore rushgrass	ind.	A
<i>Stenotaphrum secundatum</i> (Walt.) Ktze.	buffalo grass	nat.	AA
indet.		nat.	R

## Table 1 Legend:

## Status = distributional status

end. = endemic; native to Hawaii and found naturally nowhere else.

ind. = indigenous; native to Hawaii, but not unique to the Hawaiian Islands.

nat. = naturalized, exotic, plant introduced to the Hawaiian Islands since the arrival of Cook Expedition in 1778, and well-established outside of cultivation.

pol. = Polynesian introduction before 1778.

## Abundance = occurrence ratings for plants

R - Rare - only one or two plants seen.

U - Uncommon - several individual plants observed.

O - Occasional - found between five and ten times; not especially abundant anywhere.

C - Common - considered an important part of the vegetation and observed numerous times.

A - Abundant - found in large numbers; may be locally dominant.

AA - Abundant - abundant and dominant; defining vegetation type.

Two species of trees predominate at the beach park: the coconut palm (*Cocos nucifera*) and false *kamani* or seashore almond (*Terminalia catappa*) and both are significant components of the landscaping of the site. One other plant, beach *naupaka* (*Scaevola sericea*) is both native and important to the site's landscaping.



However, beach *naupaka* is easily damaged by excessive foot traffic, so the plants present hang on in "protected" areas of the park, such as the vegetation screen at the north end (Figure 2b). *Puhuehue* (*Ipomoea pes-caprae*) is a common, native beach vine that also cannot tolerate the heavy foot traffic in the center of the beach park, but survives on the same dune at the far north end.

Because of the small area and close proximity to the ocean where sandy soil and salty conditions tend to limit the number of species able to colonize, a relatively small number of species (26) were found. The majority of species are non-native, weedy or ruderal species growing along the maintained edges of the highway and coming up in cracks in the pavement or areas less subject to regular mowing. Most are rare at this location (that is, only one or two plants were seen). Of the 26 species of plants identified, 6 are considered native to the Hawaiian Islands (including species brought to Hawai'i during early Polynesian migrations from elsewhere in the Pacific). The ratio of native to non-native species is 23% native. This value is actually high compared with most low elevation O'ahu locations (AECOS Consultants, 2002) where the original vegetation has been completely removed or greatly disturbed. Typically the value is between 6 and 12% native plant species. The high percentage of native species is due to the proximity of the project to the ocean shore, where aggressive alien plants tend not to do as well as native strand plants. Note, however, that all of the natives are either Polynesian introductions or indigenous (found elsewhere in the Pacific) species.

## Other Environments

Ka`a`awa Beach Park appears to harbor a small population of *ohiki* or ghost crabs (*Ocypode ceratophthalmus*) on the beach. No crabs were seen, but burrows at the top of the beach were assumed to belong to this species. The nearshore environment directly off the project site is characterized by a broad reef flat. The bottom is mostly sand near the shore and may harbor small infaunal (living in burrows under the sediment surface) invertebrates. In ancient times, the beach and sandy backshore of this coast attracted Pacific green sea turtle (*Chelonia mydas*) that nested here (Clark, 1977). However, human activities, lights, and landscaping of the upper beach and backshore make it very unlikely turtles would utilize the beach park today.

## Discussion

The number of plant species in the project area is small and dominated by lawn grasses and landscaping with coastal strand species, many being indigenous (native plants that occur generally throughout the Pacific islands) or early Polynesian introductions. These are species generally common near the shore around O'ahu. None of these species is listed as threatened or endangered, or otherwise would be

considered rare or special by the State or Federal governments (DLNR, 1986; USFWS, 1996, 1999).

The design for a new comfort station fits into the footprint of the existing comfort station and its parking lot. A new parking area would be constructed adjacent in an area that is presently lawn. Minimal removal of vegetation will be required. In particular, none of the false *kamani* or coconut trees that comprise significant visual elements of the beach park, will be removed. Additional coconut trees will be planted.

The sandy nature of the substratum at the project site suggests water quality problems would be minimal from pushing beach sand around the construction area. If construction is scheduled for dry months (summer period) and the construction activities kept out of the adjacent drainage swale, water quality impacts to the nearshore environment can be largely avoided. It also appears that no new shore protection features are proposed for the portion of the beach fronting the new comfort station and all work contemplated is inland of the vegetation line.

Excellent public access exists along the Ka`a`awa shore from the beach park southward. The primary recreational activities here are relaxation on the beach, swimming, and fishing. The project site is at a popular beach park. Obviously, during construction some access and conveniences will be curtailed. However beach access will remain all along the coast south from the construction area.

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ARCHAEOLOGICAL INVENTORY SURVEY  
FOR THE PROPOSED KA`A`AWA  
BEACH PARK COMFORT STATION  
AND PARKING AREA IMPROVEMENTS,  
KA`A`AWA, KO`OLAULOA DISTRICT,  
ISLAND OF O`AHU



*Prepared by:*

Pacific Legacy, Inc.  
April 2003

ARCHAEOLOGICAL INVENTORY SURVEY  
FOR THE PROPOSED KA`A`AWA  
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AND PARKING AREA IMPROVEMENTS,  
KA`A`AWA, KO`OLAULOA DISTRICT,  
ISLAND OF O`AHU

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April 2003

## ABSTRACT

Pacific Legacy, Inc., under contract to Arthur Kimbal Thompson Architect, AIA (AKTA Ltd.) conducted an archaeological inventory survey between March 10 and March 13, 2003 for the proposed City and County of Honolulu comfort station and parking area improvements at Ka`a`awa Beach Park, Ko`olauloa, O`ahu, Hawaii (TMK 5-1-002:025). The purpose of the archaeological inventory survey was to inventory the cultural resources that may be present at the Ka`a`awa Beach Park. Since the Beach Park is a developed parcel, the archaeological inventory survey consisted of subsurface testing.

Nothing of archaeological significance was found within the project area other than minor recent historic debris. However, given the numerous human burials located within the vicinity and the presence of white beach sand directly under the surface of the tested areas, the potential for encountering human remains during future projects remains high.

The comfort station appears to be more than fifty years old, so was photographically documented (Appendix) and evaluated for its significance. It does not appear to be significant based on NRHP criteria. The photographic documentation has adequately recorded this structure. We recommend that this structure can be demolished without any further study or documentation.

Although no cultural deposits were identified during the archaeological survey, it is recommended that archaeological monitoring be conducted during any ground disturbing activities in the park. Due to the presence of human burials and other cultural deposits known to exist in the general vicinity, there is the high possibility that human remains may be present within the project area and may be disturbed during construction activities. It is, therefore, recommended that an archaeological monitor be present during any future ground disturbing activities.

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\*Frontispiece: View of Ka`a`awa Coastline with Ka`a`awa Beach Park on Point (View to NE).

## 1.0 INTRODUCTION

Pacific Legacy, Inc., under contract to Arthur Kimbal Thompson Architect, AIA (AKTA Ltd.) conducted an archaeological inventory survey for the proposed City and County of Honolulu comfort station and parking area improvements at Ka`a`awa Beach Park, Ko`olauloa, O`ahu, Hawaii (TMK 5-1-002:025).

The survey was conducted between March 10 and March 13, 2003 by Pacific Legacy staff members James McIntosh, B.A., and Jeffrey Putzi, B.A., and Paul L. Cleghorn, Ph.D. who also served as Principal Investigator (PI).

The purpose of the archaeological inventory survey was to inventory the cultural resources that may be present at the Ka`a`awa Beach Park. Since the Beach Park is a developed parcel, the archaeological inventory survey consisted of subsurface testing. If any cultural resources are encountered, they will be recorded and handled in accordance with Chapter 6E of the State of Hawaii Revised Statutes. Archaeological activities addressed the following.

- archival background research;
- subsurface testing of the bathhouse, the parking lot, and the proposed leach field;
- data analysis; and
- preparation of an acceptable report.

### 1.1 PROJECT AREA

Ka`a`awa Beach park is located in the *ahupua`a* of Ka`a`awa in the Ko`olauloa District. The beach park is located in an area approximately 3000 feet (914 m) south of Ka`a`awa Point and 1000 feet (305 m) north of Kuloa Point. The park consists of a small parking lot, comfort station (restrooms, showers, and changing area), picnic tables, and open grassy beach areas totaling approximately one acre (0.4 ha) (Figures 1 and 2).

### 1.2 PHYSICAL SETTING

Located on the windward side of the Ko`olau Range on the island of O`ahu, the *ahupua`a* of Ka`a`awa is a damp region, receiving approximately 50 to 60 inches (1270-1524 mm) of rain per year, with the wettest months being January through March (Juvik and Juvik 1998: 56). Mean annual temperatures range from a minimum of 55° - 62° F (12° - 17° C) to a maximum of 78° - 88° F (25° - 31° C) (Armstrong 1983: 64).

Vegetation in the area consists mainly of various grasses with scattered false *kamani* (*Terminalia catappa*) and coconut (*Cocos nucifera*) trees (Neal 1965: 627).

The soils within the project area and its vicinity include: Jaucas sand, Waialua stony silty clay, and Mokuleia loam. Each of these soil types is described below.



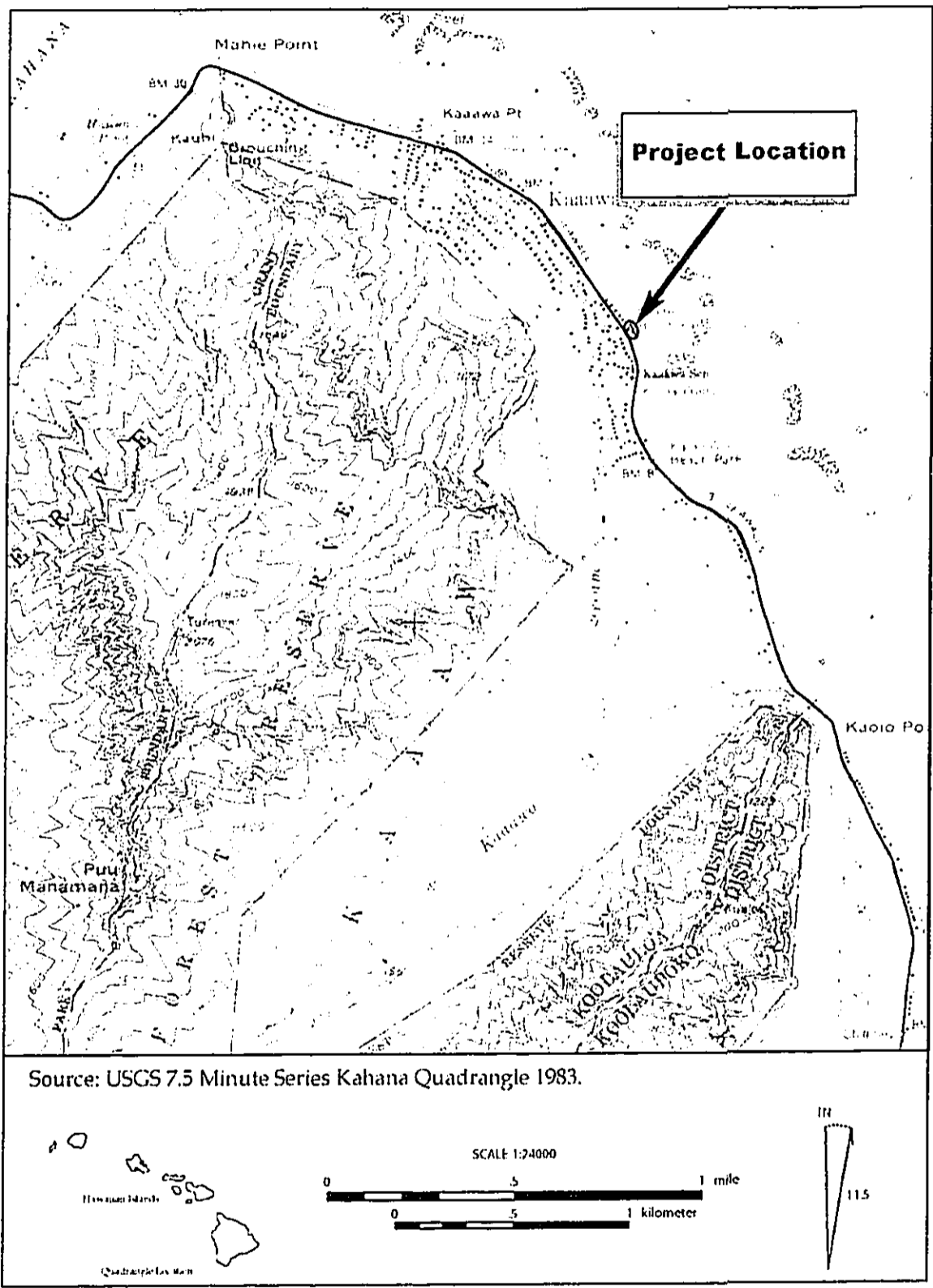


Figure 1. Location of Project Area (USGS Topographic Map).

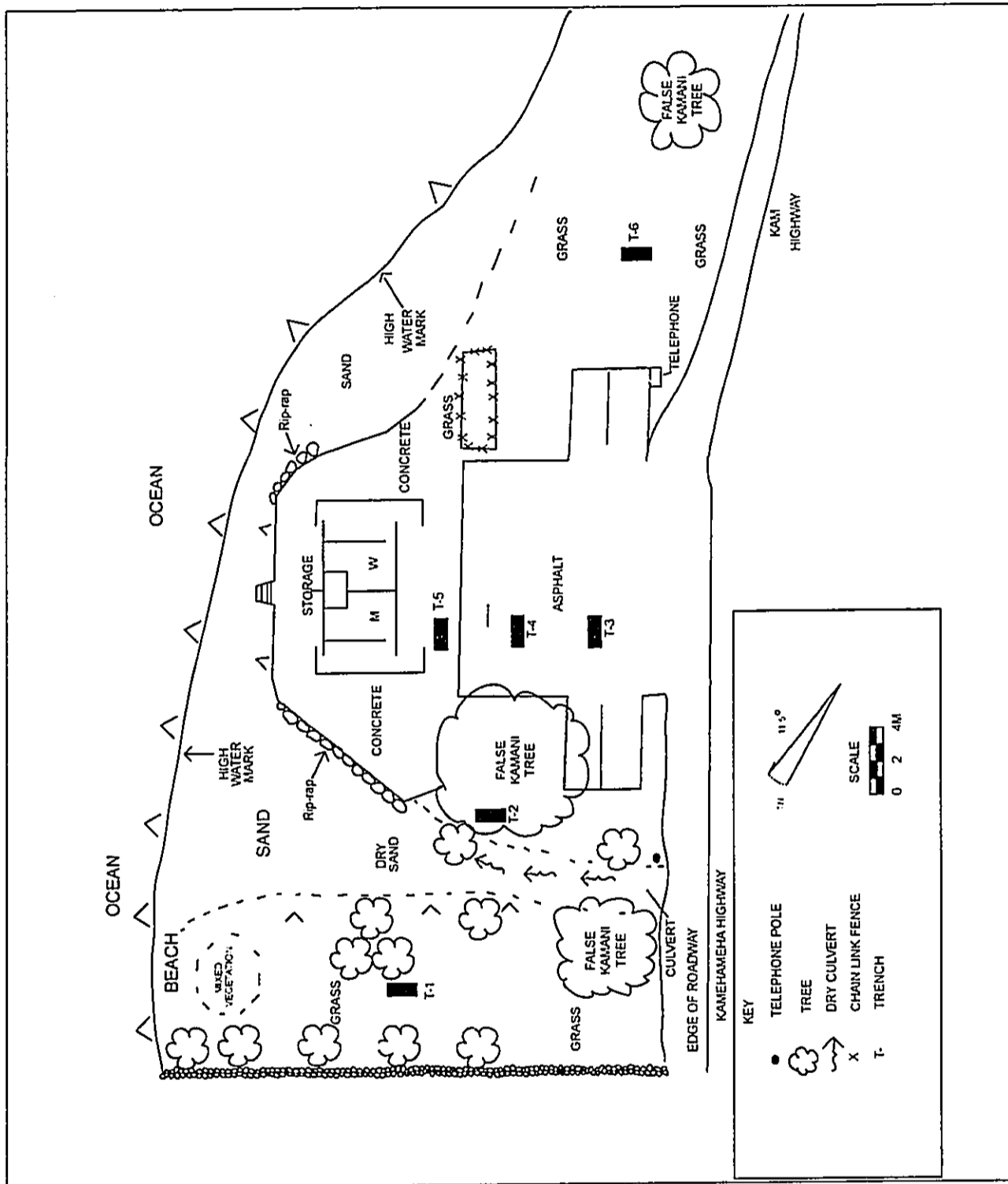


Figure 2. Project Plan View Map.

**Jaucas sand, 0 to 15 percent slopes-** The slope range of this soil is 0 to 15 percent, but in most places the slope does not exceed 7 percent. In a representative profile the soil is a single grain, pale brown to very pale brown, sand and more than 60 inches deep. In many places the surface area is dark brown as a result of accumulation of organic matter and alluvium. Permeability is rapid, and runoff is very slow to slow. The hazard of water erosion is slight, but wind erosion is a severe hazard where vegetation has been removed. In places roots penetrate to a depth of 5 feet or more. Workability is slightly difficult because the soil is loose and lacks stability for use of equipment (Foote et al. 1972: 48).

**Waialua stony silty clay, 3 to 8 percent slopes-** The surface layer of this soil type is dark reddish-brown silty clay about 12 inches thick. The subsoil, about 26 inches thick, is dark reddish-brown and reddish-brown silty clay that has subangular blocky structure. The substratum is dark reddish-brown, mottled silty clay. The soil is neutral in the surface layer and slightly acid in the subsoil. There are sufficient stones present to hinder tillage but not enough to make intertilled crops impractical. Runoff is slow, and the erosion hazard is slight. Workability is slightly difficult (Foote et al. 1972: 128).

**Mokuleia loam-** This soil occurs as small areas on the coastal plains. It is nearly level. The surface layer of this soil type is very dark grayish-brown loam about 8 inches thick. The next layer is dark-brown and light-gray, single grain sand and loamy sand. Permeability is moderate in the surface layer and rapid in the subsoil. Runoff is very slow and the erosion hazard is no more than slight. In places roots penetrate to a depth of 5 feet or more (Foote et al. 1972: 95-96).

## 2.0 HISTORICAL BACKGROUND

### 2.1 PRE-CONTACT TO EARLY 1800'S

The Ko'olaupia District is thought to have been rather densely populated prior to European contact in 1778 (Hammatt et al. 2001). The area was extremely conducive to agriculture and had the ability to support a fairly large permanent population. Permanent habitations were situated along the shoreline. The region also had an availability of fresh water and the presence of nearby reefs and bays made for ideal fishing grounds (Hammatt et al. 2001).

The area underwent drastic changes after contact with the Europeans. The many diseases that devastated Native Hawaiian populations throughout the islands (cholera, leprosy, measles, mumps, and smallpox) also had a profound affect on Ka'a'awa. Other factors which also affected the population of the area included the out-migration to urban centers, and the in-migration of foreign agricultural laborers (Hammatt et al. 2001).

### 2.2 LAND COMMISSION AWARDS (LCA)

Numerous Land Commission Awards (LCAs) were awarded in the Ka'a'awa region during the *Mahele* of 1850 (Figure 3). These consisted of 39 claims, 23 of which were awarded, with 16 claims situated immediately adjacent to Kamehameha Highway. These claims consisted mainly of house lots, fishing rights, and *lo'i* (irrigated terraces).

An archaeological monitoring plan for the Kamehameha Highway resurfacing project, which took place within the vicinity, (Hammatt et al. 2001) provides descriptions of these LCAs and provides the basis for the following descriptions of fifteen LCAs located within the immediate vicinity of the current project area.

Situated at the northernmost point of the project region is LCA 3954. This LCA, located at Ka'a'awa Point north of Swanzy Beach Park, was awarded to claimant Nawa. It consisted of six *lo'i*, *kula* (plain, field/pasture), a wooded upland area, and a house.

Four additional LCAs are clustered together in a small portion of Ka'a'awa approximately 1000 feet (305 m) north of Ka'a'awa Beach Park and adjacent to Kamehameha Highway. The first of these (LCA 10361) consisted of seven *lo'i*, a wooded upland area, *kula*, and a house. Directly across from LCA 10361 is LCA 4403 which consisted of a 1.03 acre parcel awarded to claimant Kaihumua and included three *lo'i*, *kula*, shore fishery, and a house. This LCA also contained a portion of Ka'a'awa Stream and remnants of a stone wall. Directly below is LCA 4421, which was a 1.0 acre parcel awarded to claimant Kaio and consisted of three *lo'i*, *kula*, and a wooded upland area. Located below LCA 4421 is LCA 3952 which consisted of a .8 acre parcel that contained three *lo'i*, *kula*, a wooded upland area, a stream, a stone wall, and a house.

LCA 10200, located approximately 500 feet (152 m) south of Ka'a'awa Beach Park, was a 1.08 acre parcel awarded to claimant Makaokalani and consisted of four *lo'i*, 10 hillocks, *kula*, and a house.

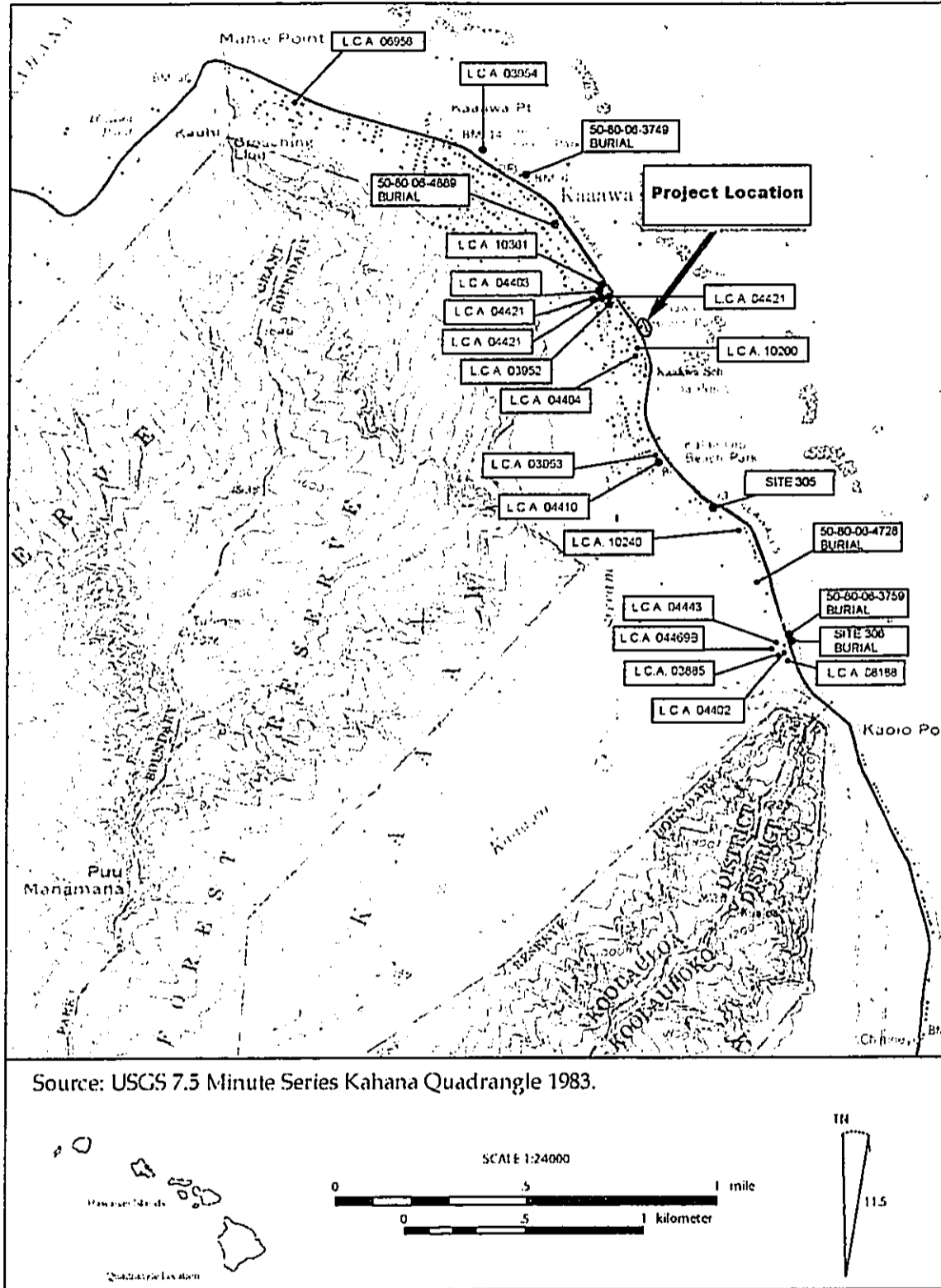


Figure 3. Location of L.C.A.s and previously recorded archaeological sites in the vicinity of the project area.

Archaeological Testing  
Ka'a'awa Beach Park  
Ko'olauloa, O'ahu  
April 2003



LCA 4404 was located approximately 250 feet (76 m) south of LCA 10200 and consisted of a 1.64 acre parcel awarded to claimant Kihei. This parcel contained *lo`i, kula*, wooded upland areas, and a house.

LCAs 3953 and 4410 were located on the western side of Kamehameha Highway at Kalae Oio Beach Park. LCA 3953 was awarded to claimant Niho and consisted of four *lo`i, kula* for raising potatoes and bananas, a wooded upland area, a fishery, and a house. LCA 4410 was awarded to claimant Kapu Kenuikapaole. This area consisted of ten *lo`i, kula* for raising potatoes, a wooded upland area, a fishery, and a house.

Approximately 2000 feet (609 m) south of Kalae Oio Beach Park is LCA 10240. This LCA was awarded to claimant Makaokalai and then to his heirs, Kuheleloa and Powahine. It consisted of three *lo`i, kula* for raising potatoes, a wooded upland area, and a house site.

The remaining five LCAs are located just south of Site 50-80-06-3759 on the west side of Kamehameha Highway. LCA 4443 was awarded to claimant Kuheleloa and consisted of 16 *lo`i*, wooded upland areas, and a house. LCA 4469B was awarded to claimant Hulue and consisted of three *lo`i, kula* (potatoes), a stone wall, and a house site. LCA 3885 was awarded to Pohue and consisted of six *lo`i, kula* (potatoes), a wooded upland area, and a house near the sea. LCA 4402 was awarded to Kauiki and consisted of five *lo`i*, one of which had been abandoned to wild hogs, *kula* with sweet potatoes, a wooded upland area, and a house site. LCA 08188 was awarded to claimant Heana and consisted of four *lo`i, kula* with potatoes, melons, and tobacco, a wooded upland area, and a house lot.

### 3.0 PREVIOUS ARCHAEOLOGY

Several studies have been conducted within the vicinity of the current project area. One of the earliest studies was done in the early 1930's by J.G. McAllister (1933) in which several sites were recorded within the region. These sites (Figure 3), along with several others will be discussed below.

As part of his island wide survey, McAllister (1933) lists four sites in the vicinity of the current project. These include a *heiau*, a fishing shrine, a burial, and a legendary cave. More recent studies conducted within the area have located several additional sites. According to their findings, there is evidence of extensive prehistoric and historic use within the area. This use includes habitation, agricultural, shrines, *heiau*, and burials (Hammatt et al. 2001).

The *heiau* recorded by McAllister (1933) (Site 50-80-06-304) was located on the mountain side of a private residence in Makaua (the Henry Auld premises). The lower terrace was 135 feet long, but its width could not be determined due to obliteration and residential disturbance. Remains indicated a two-terrace *heiau* "of massive construction and large size." At the time of recording the walls stood 3 feet high, but it was speculated from rocks scattered throughout the area, that they had been several feet higher. McAllister also noted an unusual amount of coral present on the site (Sterling and Summers 1978: 175).

A fishing shrine, located at Kalai o Kuonopua`a Point in Ka`a`awa, was also recorded by McAllister. This shrine (Site 50-80-06-305) was reported to be:

The only site in this valley remembered by Padegen, the only old Hawaiian in this section. Though he has lived on the beach at Ka`a`awa for the past 30 years, Padegen has never heard of any *heiau* in the vicinity. He remembers the fishing shrine which has been destroyed by the concrete road, because the old-timers told him to place fish there and warned him never to walk directly behind it (Sterling and Summers 1978: 175).

McAllister (1933) also noted a burial (Site 50-80-06-306) that had been located near Lae o ka Oio. This burial had apparently been exposed after a heavy storm in 1930. It was surmised that the bones had been removed by children (Sterling and Summers 1978: 175).

One legendary site recorded by McAllister is that of Pohukaina (Site 50-80-06-307), a legendary cave said to possess a number of entrances. This cave, located in the Kanehoalani cliff between Kualoa and Ka`a`awa, is said to be, "A royal cave with many valuables hidden within with the ancient kings" (Sterling and Summers 1978: 175).

#### 3.1 BURIALS

A series of human burials have been located throughout the Ka`a`awa region, several within the vicinity of the project area (Figure 3). Human burials within the vicinity are located along the coast as far north as Mahie Point (50-80-06-3954) south to Swanzy Beach Park (50-80-06-3749), and further south to McAllister's Site 306 just north of Kaoio Point, indicating that there is a

high probability of encountering burials within the current project area. These previously recorded burial sites are briefly described below.

Site 3954, located north of the project area and slightly inland from Ka`a`awa Point, is Ka`a`awa Burial Cave. This cave is located on the Waiahole Forest Reserve in Ka`a`awa and consists of a small, natural lava cave that was first recorded in 1985 during archaeological investigations of the area (Kam 1985).

During a 1987 study within Ka`a`awa *Ahupua`a* (Kam 1987), human remains, possibly of one individual, were encountered and recovered from 51-416 Kamehameha Highway between Polinalina, Puakenikeni, and Kekio Roads. This burial was designated as Site 50-80-06-3749 and is located between LCAs 3954 and 10361. A quote within the report states:

The "old bones", seemingly remains of one individual, were recovered from mauka of Kamehameha Highway between Polinalina Road, Puakenikeni Road and Kekio Road (TMK 5-1-10:17) (Kam 1987 cited in Hammatt et al. 2001: 16).

Human remains were also encountered during excavations at a private residence located at 57-471 Kamehameha Highway, approximately 1200 feet (366 m) north of Site 3749 between LCAs 03954 and 10361. These remains consisted of two *in situ* burials located within building footing excavations and two individuals recovered from the backdirt pile. These burials have been designated as Site 50-80-06-4889. Jourdane (1994) indicates that the probability that additional human remains will be encountered within the area remains high.

During archaeological investigations within the central Ka`a`awa Valley (Jourdane 1993), one single burial (Site 50-80-06-4728) was encountered during fencepost excavations at 51-170 Kamehameha Highway.

Burial Site 3759 is a compilation of several burials located through several different archaeological studies. Located approximately ¾ mile (1.2 km) north of the current project area, this portion of Ka`a`awa was first designated as a site in 1988 (Smith 1988). In a report filed with SHPD, an eroding burial sighted by the medical examiner was reported. Upon further investigation of the area by SHPD staff, a cultural layer was described, but no bones could be found. It appeared that the entire burial had been removed by the surf (Hammatt et al 2001: 16).

Also a part of Site 3759 are human remains that were located at Kananelu Beach in Ka`a`awa. This burial consisted of a single secondary burial that was eroding out of an associated pre-Contact cultural deposit. According to a report by June Cleghorn (1991), Mr. John Morgan, owner of Kualoa Ranch, indicated that, "Kualoa Ranch was aware of several burials that had eroded out of this area over the years" (Cleghorn 1991 cited in Hammatt et al. 2001: 16).

An additional eroding burial was reported within Site 3759 in 1996 (Dye 1996). These remains were located in an area of sand on the *makai* side of Kamehameha Highway. A



cultural layer was also located and was thought to possibly extend *mauka* under the highway (Hammatt et al. 2001: 16).

It is important to note that each of the studies discussed above recognizes the high probability that additional human remains will be encountered in the future. While traditional cultural resources are prevalent within the area, not every project has encountered these resources. During an archaeological subsurface testing project at Swanzy Beach Park, a area directly north of the current project area, no archaeological materials, human burials, or evidence of burial pits were observed (Winieski and Hammatt 1996).

#### 4.0 METHODS

The archaeological inventory survey consisted of a series of six backhoe excavated trenches measuring 2 meters long, between 0.7 and 1.3 meters wide and excavated to the water table (less than 2 meters deep) (Figures 4, 5 and 6). The placement of trenches was limited by existing utilities lines (water, sewer, and electrical) that lead to and from the existing comfort station. A total of six backhoe trenches were excavated during the course of investigations: Paul Cleghorn operated the backhoe with James McIntosh and Jeff Putzi inspecting each excavated bucket. Three of the trenches were excavated in the paved parking lot area, which necessitated first cutting the asphalt with a walk-behind power saw prior to backhoe excavation. At least one wall in each trench was photographed and recorded prior to backfilling.

All cultural material identified was recorded and photographed in the field and reburied within the trench. Each trench was backfilled after recording; no trenches were left open overnight.

Water lines were encountered in Trenches 1 and 5 (Figure 7). These waterlines were encountered at approximately 80 cm below surface. They were excavated by backhoe as much as possible and were then hand excavated by shovel to the base of excavation.

All excavated soil material was inspected as it was removed from the trenches. Soils were visually screened as they were slowly emptied from the backhoe bucket. Any soils thought to contain possible cultural resources were screened through a 1/8 inch screen.

All trenches were excavated to the water table which appeared at approximately 165 cm below surface. At that point the trench walls became extremely unstable and collapsed very quickly. These portions were, therefore, quickly recorded and photographed.

Trench profile measurements were obtained using pocket metric tapes. A shovel (1.4 m in length) was placed in an upright position against trench walls as a photographic scale (Figures 7, 11, and 13).

Each trench was backfilled. During backfilling, the soils were wetted and compacted with the backhoe bucket. Each trench in the asphalt area was then patched with concrete (Figures 8 and 9).

Soils were described using standard USDA nomenclature and Munsell color designations.



Figure 4. Excavation of Trench 3, view to the northwest.

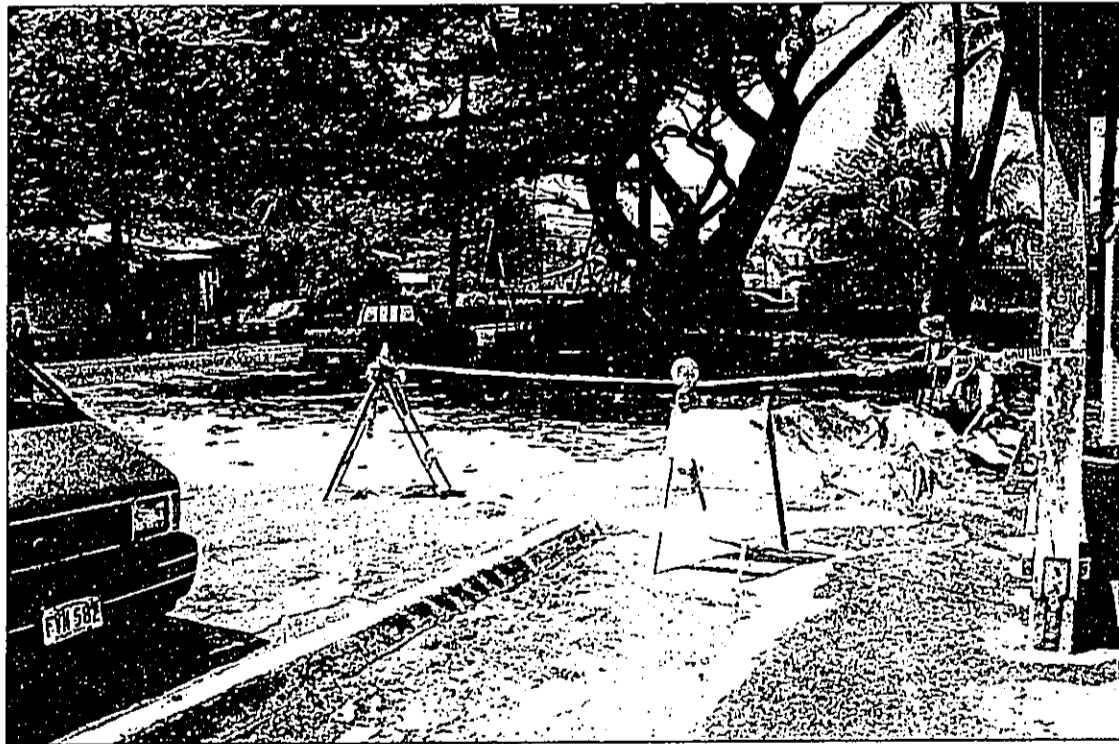


Figure 5. Excavation of trenches (Trench 5 in foreground), view to the northwest.

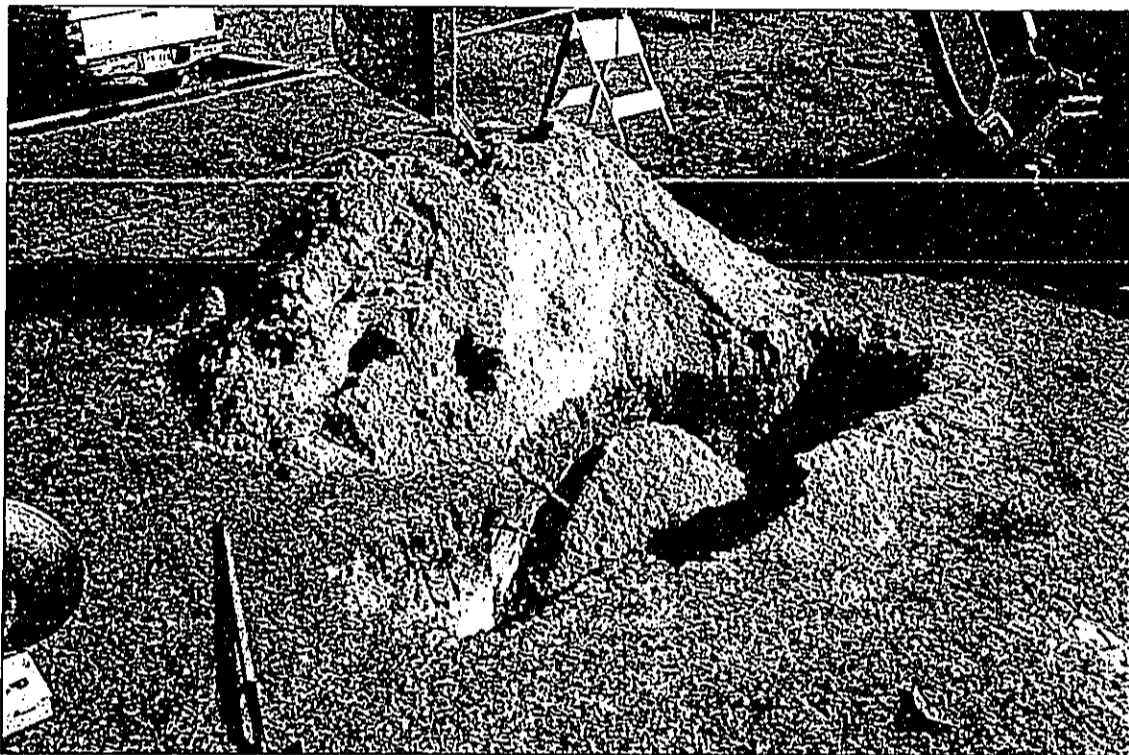


Figure 6. Trench 6 excavation showing sloughing of trench walls.



Figure 7. Trench 5 excavation showing utility line.

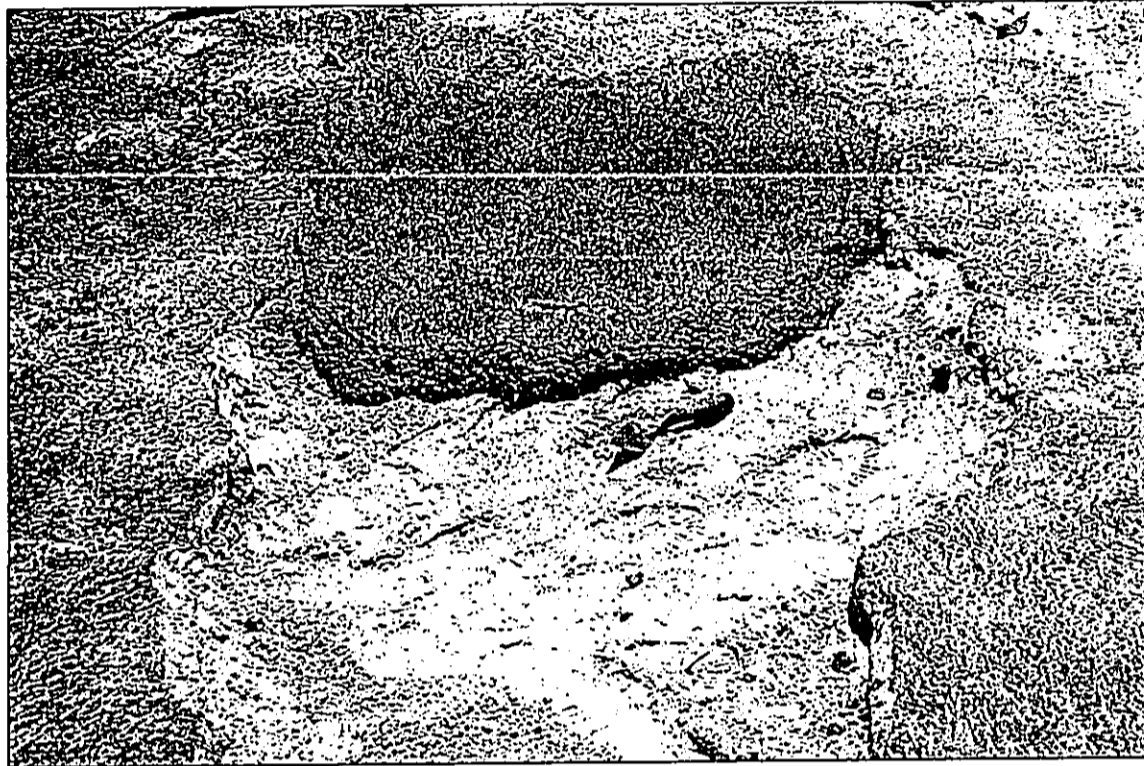


Figure 8. Concrete patch on top of backfilled Trench 4.



Figure 9. Backfilled Trenches 3 and 4, view to the west.

## 5.0 RESULTS

A total of six trenches were excavated within the project area to determine if any cultural resources, including human burials, were present and to provide a representative sample of the stratigraphy (Figure 2).

The archaeological excavations failed to uncover any pre-Contact Hawaiian cultural deposits within the areas tested. Thin organically stained soils were found in one of the trenches (T-4), a recent piece of metal was found in association with this organic stain indicating its historic age. Recent historic debris (glass, metal and ceramic) were identified within several trenches, though these consisted of isolated artifacts and were not associated with any cultural deposits.

### 5.1 TRENCH DESCRIPTIONS

#### Trench 1

Trench 1 was located on the Kahuku, or northern, end of the park along the rock wall and approximately 16 m northeast of Kamehameha Highway. The stratigraphy of this trench is described below. A representative profile is presented in Figures 10 and 11.

Stratigraphic Layer	Depth Below Ground Surface (centimeters)	Description
Layer I	0-8	Humic layer with pale yellow (2.5 Y 7/4) sand; non-sticky, non-plastic clear smooth boundary.
Layer II	8-30	Olive (5 Y 4/3) sand; non-sticky, non-plastic; abrupt smooth boundary.
Layer III	30-140	Light yellowish-brown (2.5 Y 6/4) sand; non-sticky, non-plastic; waterline at 80 cm below surface; two non-human bone fragments observed; concrete pieces (one piece measured 18 x18 x 8 cm); several small boulders.

#### Trench 2

Trench 2 was located next to a false *Kamani* tree along the south side of the dry drainage. Asphalt was encountered at 20 cm and at 40 cm below surface. A plastic tent stake was also found at 40 cm below surface. This trench was excavated to a depth of 1.25 m below surface. No traditional cultural resources were encountered. The first 50 cm is a disturbed "A" horizon mixed with asphalt and very recent historic. The stratigraphy of this trench is described below.

Stratigraphic Layer	Depth Below Ground Surface (centimeters)	Description
Layer I	0-50	Light brownish gray (10 YR 6/2) sand with asphalt; loose; sticky, non-plastic; abrupt smooth boundary; "A" horizon with disturbance (roots and asphalt).
Layer II	50 - 125	Very pale brown (10 YR 7/3) sand; loose; non-sticky, non-plastic; sterile sand with roots throughout.

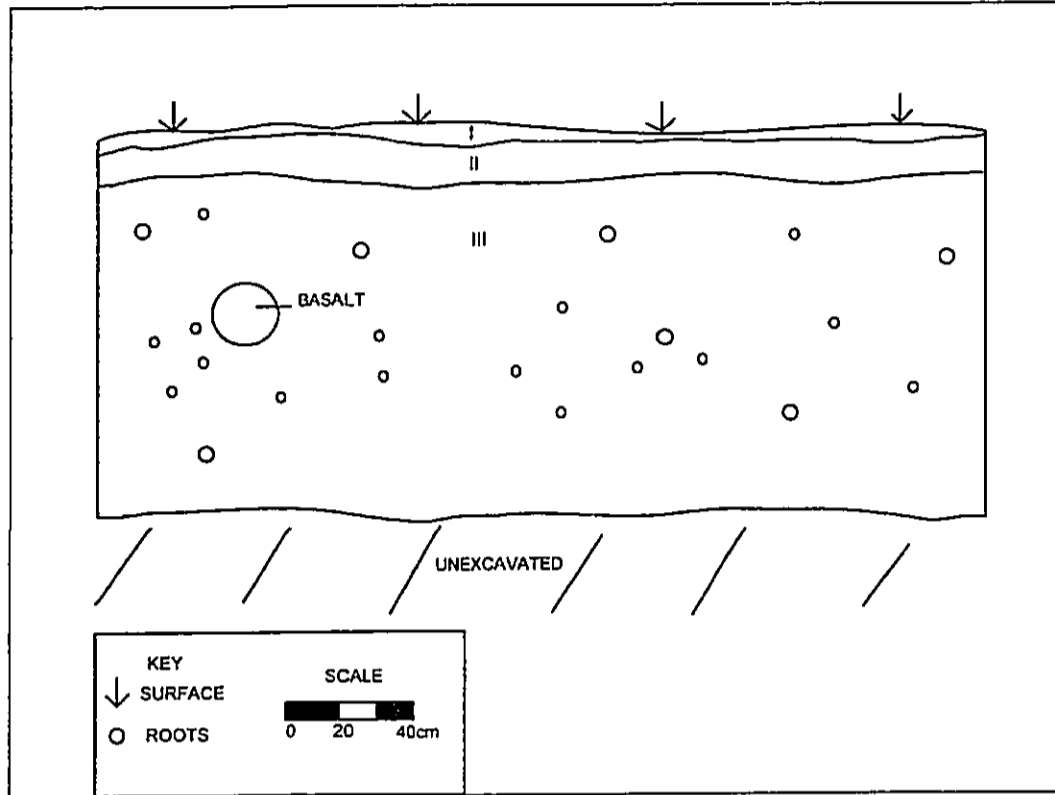


Figure 10. Stratigraphic Profile of Trench 1.

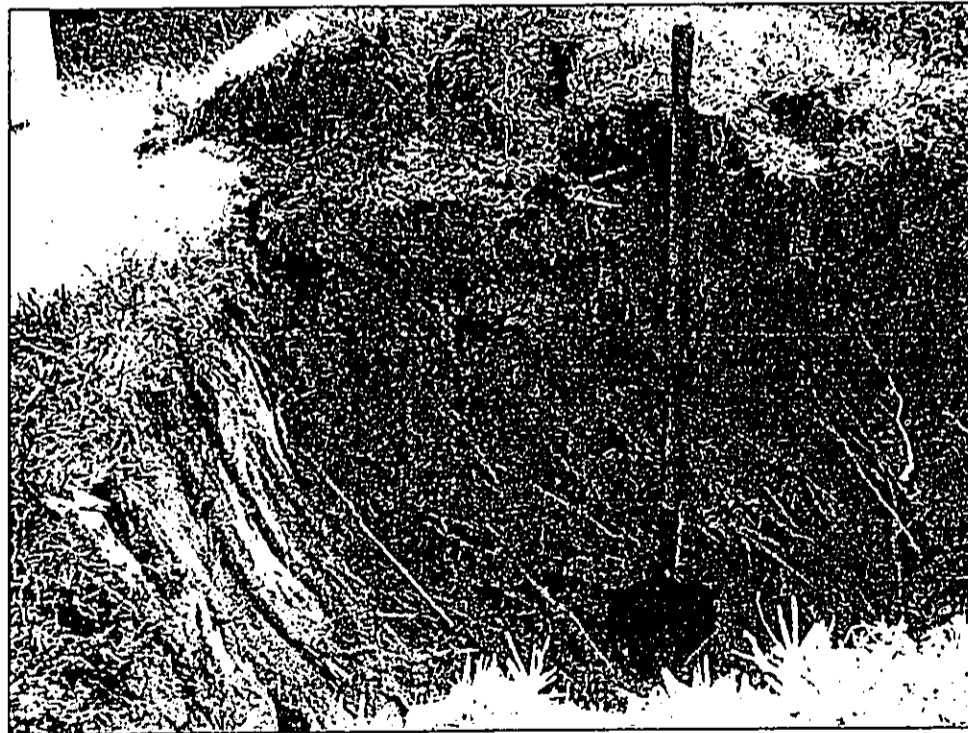


Figure 11. Trench 1 showing abundant tree roots.

### Trench 3

Trench 3 was located approximately 5 meters *makai* of the edge of Kamehameha Highway on the existing parking lot. This trench contained very sterile soil with almost no root activity.

Stratigraphic Layer	Depth Below Ground Surface (centimeters)	Description
Layer I	0-5	Asphalt
Layer II	5-14	Dark brown (10 YR 3/3) clay loam fill; blocky, moist; friable; sticky, non-plastic; abrupt smooth boundary; some basalt pieces and branch coral present in this layer.
Layer III	14-110	Pale yellow (2.5 Y 7/4) sand; compact; non-sticky, non-plastic; sterile.

### Trench 4

Trench 4 was located 5 m north of Trench 3. It consisted of very unstable sand very similar to Trench 3. During backfilling of this trench, the south wall collapsed and revealed what may be a cultural layer (organic stain) just below the clay loam in Layer II. This section was screened through a 1/8 inch screen. Two small non-human bone fragments and one small piece of metal were observed. A representative profile is presented in Figures 12 and 13.

Stratigraphic Layer	Depth Below Ground Surface (centimeters)	Description
Layer I	0-5	Asphalt
Layer II	5-15	Dark yellowish brown (10 YR 3/6) clay loam; blocky; slightly sticky, slightly plastic; clear smooth boundary; fill material.
Organic Stain	15-39	Organically stained very pale brown (10 YR 7/3) sand; non-sticky, non-plastic; clear smooth boundary; abundant tree roots; 2 non-human bone fragments; piece of recent metal.
Layer III	15-121	Very pale brown (10 YR 7/4) sand; compact; sterile sand; non-sticky, non-plastic; common roots. A scatter of basalt pebbles was located at 90 cm below surface in the north wall of the trench. There was no visible stain associated with the pebbles. No cultural resources present.



### Trench 5

Trench 5 was located in front of the comfort station approximately 4 m *makai* of Trench 4. The stratigraphy of this trench is described below.

Stratigraphic Layer	Depth Below Ground Surface (centimeters)	Description
Layer I	0-5	Asphalt
Layer II	5-20	Orange/Red (5 YR 5/8) sandy loam; non-sticky, non-plastic; abrupt smooth boundary; fill.
Layer III	20-30	Dark tan (10 YR 6/4) sand; non-sticky, non-plastic; abrupt smooth boundary; roots throughout.
Layer IV	30-165	Very pale brown (10 YR 7/3) sand; non-sticky, non-plastic.

### Trench 6

Trench 6 was located on the Kualoa (south) side of the park near the sewage system area, approximately 23 m southeast of Trench 3. The stratigraphy of Trench 6 is described below.

Stratigraphic Layer	Depth Below Ground Surface (centimeters)	Description
Layer I	0-5	Humic layer consisting of grass and roots; gray (2.5 Y 5/1) sand.
Layer II	5-35	Dark gray/brown (2.5 Y 4/2) sand; non-sticky, non-plastic; abrupt smooth boundary; a piece of rebar was observed at 30 cm below surface.
Layer III	35-140	Pale yellow (2.5 Y 7/4) sand; non-sticky, non-plastic; a piece of green bottle glass was observed in the backdirt which came from approximately 40 cm below surface; a small basalt cobble (20 x 20 cm) was observed at 100 cm below surface. A piece of a gold-tone ceramic pot was observed at 130 cm below surface.

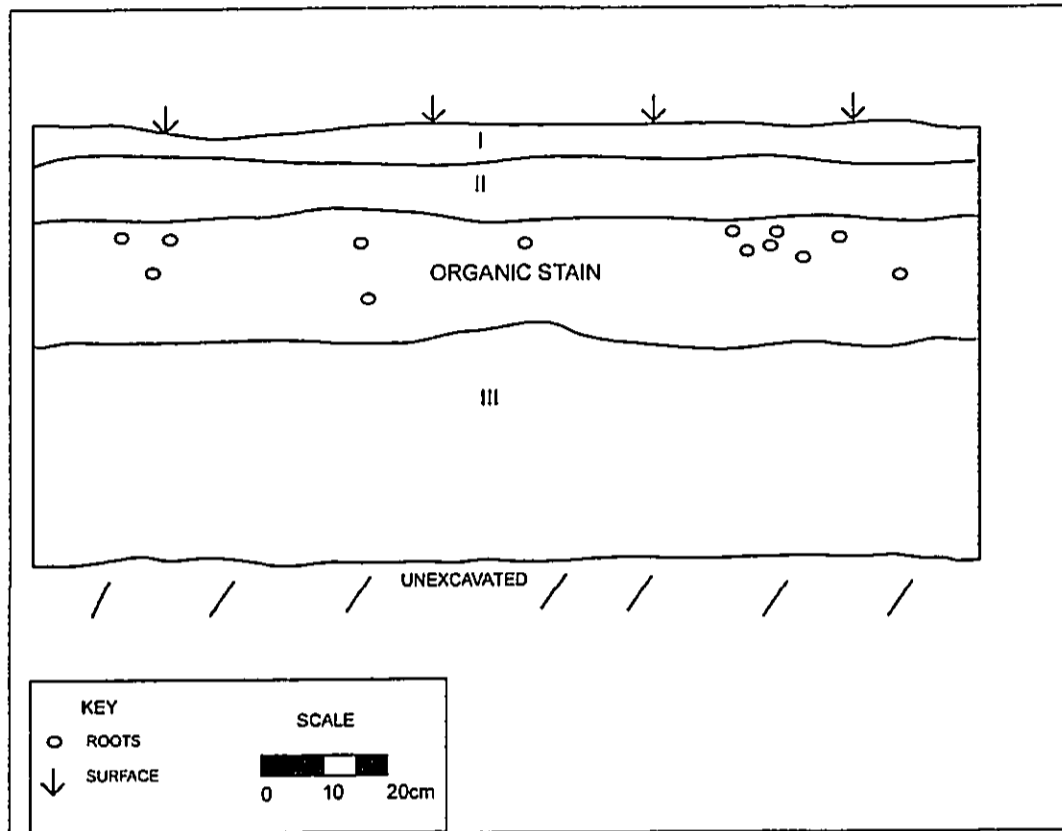


Figure 12. Stratigraphic profile of Trench 4.

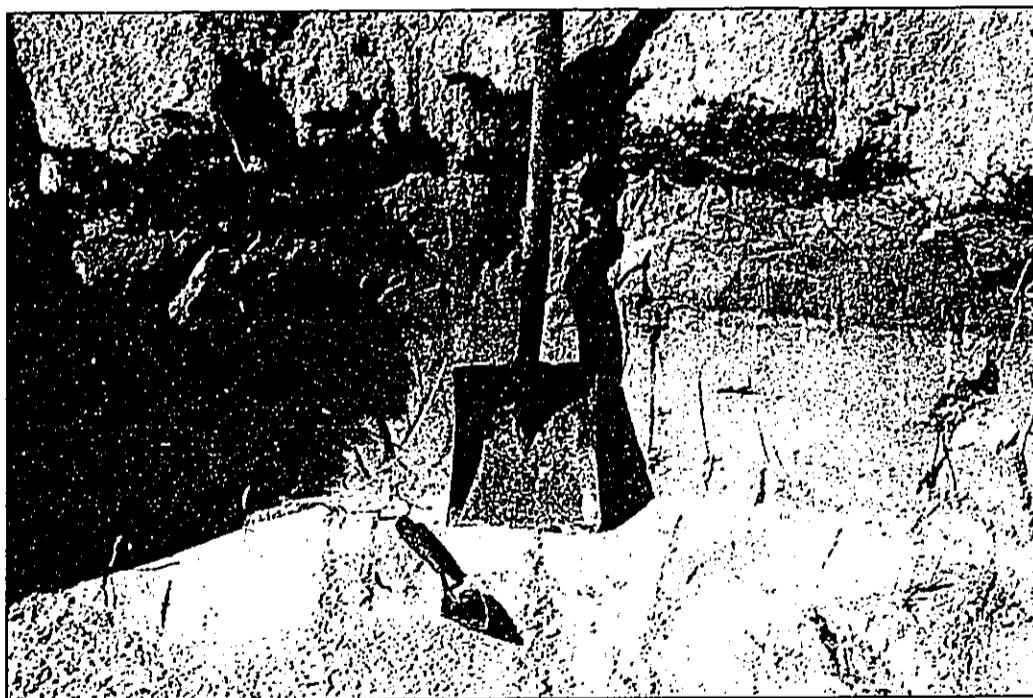


Figure 13. Trench 4 showing organic stain.

## 5.2 ARTIFACTS

A total of seven historic artifacts were recorded during the course of the inventory survey. Each artifact was of recent historic origin. Artifacts were recorded and sketched, where appropriate. Cultural materials were identified and photographed in the field and reburied within the trench of origin. No artifacts were collected.

Several large concrete pieces and a cement block were located in Trench 1. While backfilling this trench, a piece of a ceramic whiteware was observed in the back dirt. This fragment measured 18 x 12 x 2.3 cm. Also located in the back dirt were two pieces of metal with gley sediment attached, indicating that the metal pieces were found in the saturated sediments near the water table.

A yellow plastic tent stake was located during the excavation of Trench 2. The stake was located in Layer I at approximately 40 cm below surface.

Trench 4 contained a small piece of recent metal. This metal was present in the organic stain below Layer II and was found during the screening of a sample of the organic stained deposit.

Trench 6 artifacts included a section of metal rebar/tent stake located at 30 cm below surface. It measured 1.5 cm thick, 45 cm long (when in its bent state), and 60 cm long when extended to its full length (Figure 14).

Bottle glass was also observed in Trench 6 at 40 cm below surface. This glass was green in color and measured 5.5 cm x 4.0 cm x .6 cm. Embossments on the base consisted of "AB / M 13", indicating that it was probably an Anheiser Busch beer bottle base (Figure 14).

Located in Trench 6 at approximately 130 cm below surface was a gold-tone ceramic rim sherd, possibly from a ceramic crock. This sherd measured 7.5 cm x 5.5 cm x 1.0 cm (Figure 14).

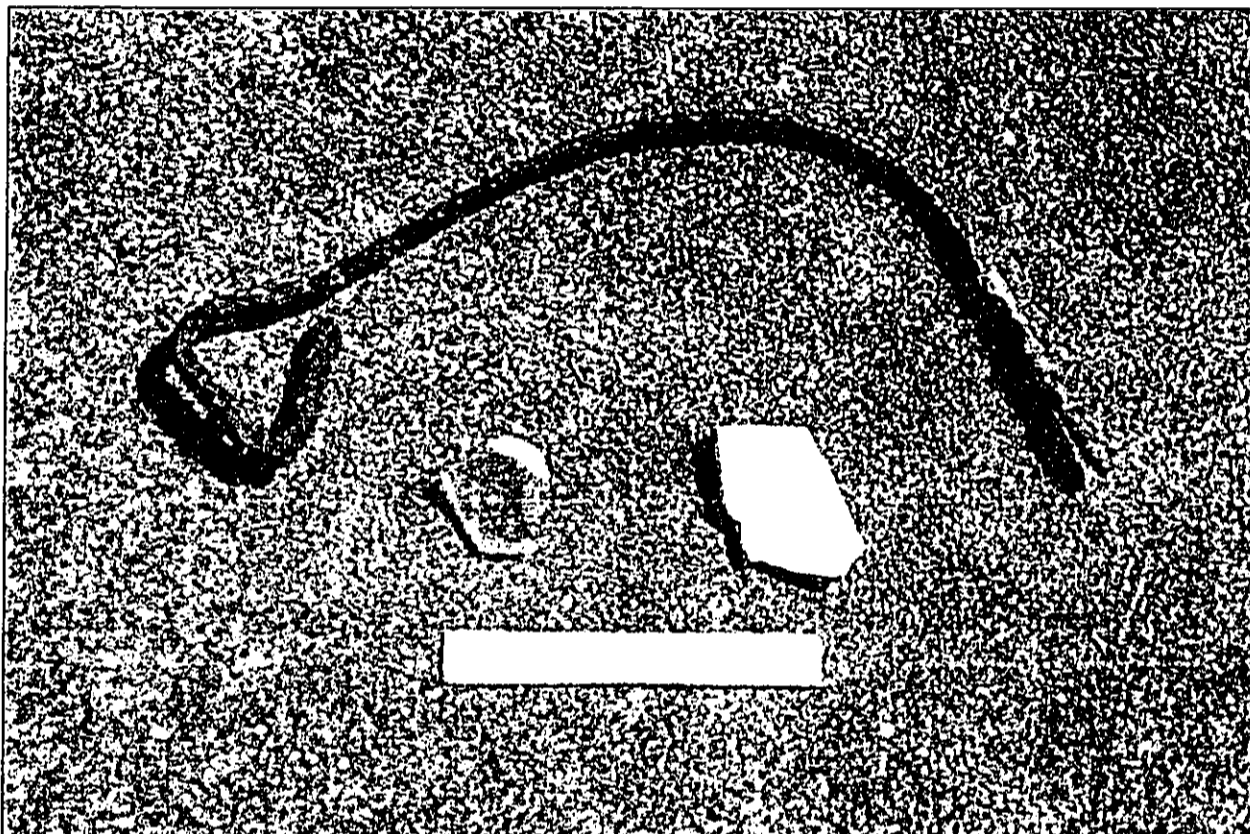


Figure 14. Trench 6 artifacts (metal rebar, ceramic fragment, and glass bottle fragment). Ruler measures 15 cm.

## 6.0 HISTORIC SIGNIFICANCE ASSESSMENT

The National Historic Preservation Act of 1966, as amended, authorizes the Secretary of Interior to expand and maintain a National Register of Historic Places (NRHP) that contains a listing of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. A property may be listed in the NRHP if it meets criteria for evaluation defined at 36 CFR §60.4:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

- (a) That are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) That are associated with the lives of persons significant in our past; or
- (c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or possess high artistic values, or that represent a significant and distinctive entity whose components may lack individual distinction;
- (d) That have yielded, or may be likely to yield information important in prehistory or history.

The comfort station consists of both male and female restroom facilities, showers, and a changing area. Construction maps obtained for this project indicate that the comfort station structure dates to 1952. The age of the structure necessitates its archaeological/historical significance evaluation based on the above criteria. The comfort station does not meet any of the above NRHP criteria. Furthermore, it is falling into disrepair and lacks integrity. Evidence of this decay is provided in the photographs presented in the Appendix of the station taken during the inventory survey. These photographs show that the roof has been patched several times (evident from the plywood covering), interior and exterior metal features are rusting, the wood portions of the structure are in advanced decay showing signs of wood rot and termites, window slats are broken and falling down, bricks are chipped, paint is cracked and peeling, and the concrete around the structure is cracking. The comfort station should not be considered a significant cultural resource.

## 7.0 SUMMARY AND RECOMMENDATIONS

Pacific Legacy completed archaeological investigations for the proposed comfort station and parking area improvements at Ka`a`awa Beach Park during the second week of March, 2003. The current project resulted in no significant archaeological findings.

Nothing of archaeological significance was found within the project area other than minor recent historic debris. However, given the numerous human burials located within the vicinity and the presence of white beach sand directly under the surface of the tested areas, the potential for encountering human remains during future projects remains high.

The comfort station appears to be more than fifty years old, so was photographically documented (Appendix) and evaluated for its significance. It does not appear to be significant based on NRHP criteria. The photographic documentation has adequately recorded this structure. We recommend that this structure can be demolished without any further study or documentation.

Although no cultural deposits were identified during the archaeological survey, it is recommended that archaeological monitoring be conducted during any ground disturbing activities in the park. Due to the presence of human burials and other cultural deposits known to exist in the general vicinity, there is the high possibility that human remains may be present within the project area and may be disturbed during construction activities. It is, therefore, recommended that an archaeological monitor be present during any future ground disturbing activities.

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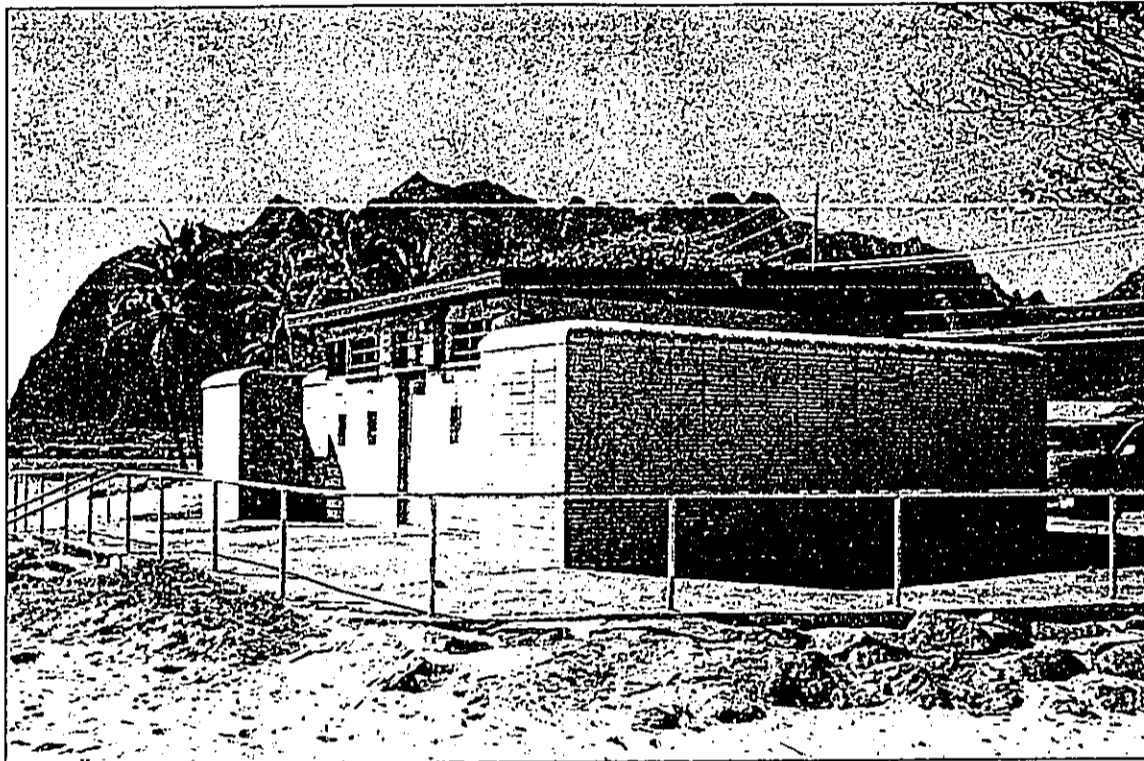
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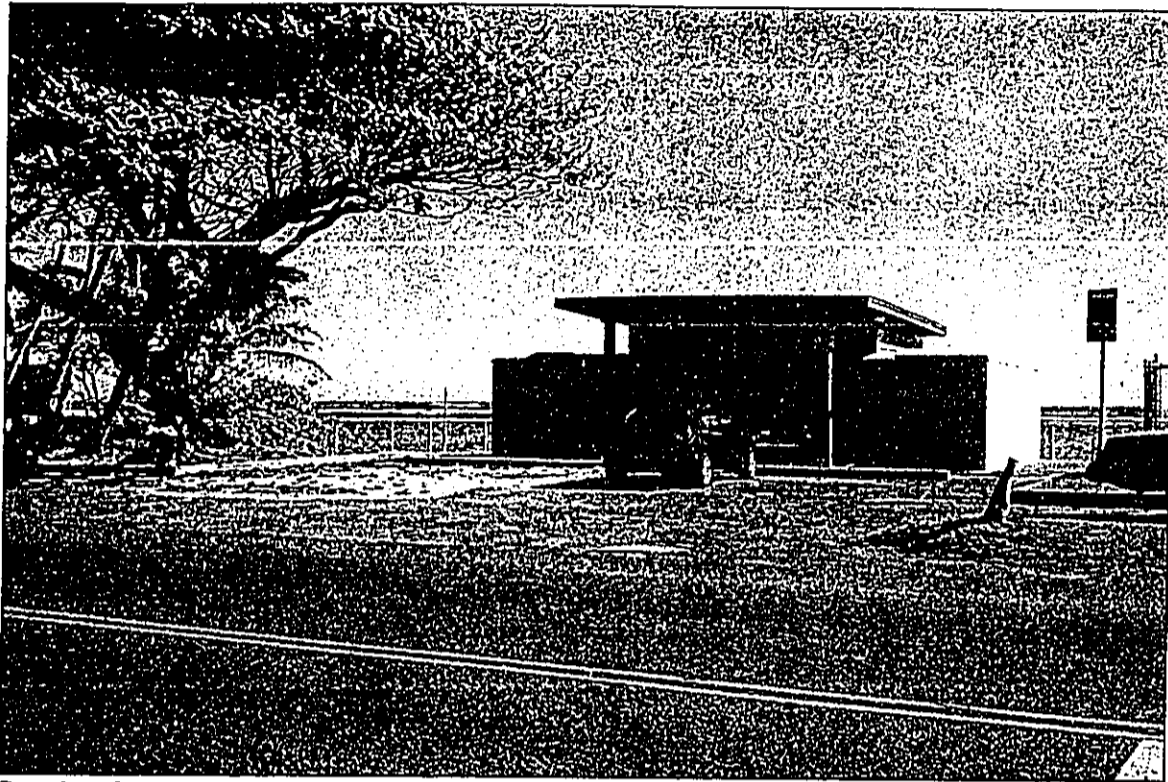
APPENDIX  
PHOTOGRAPHIC DOCUMENTATION  
OF THE KA`A`AWA BEACH PARK  
COMFORT STATION



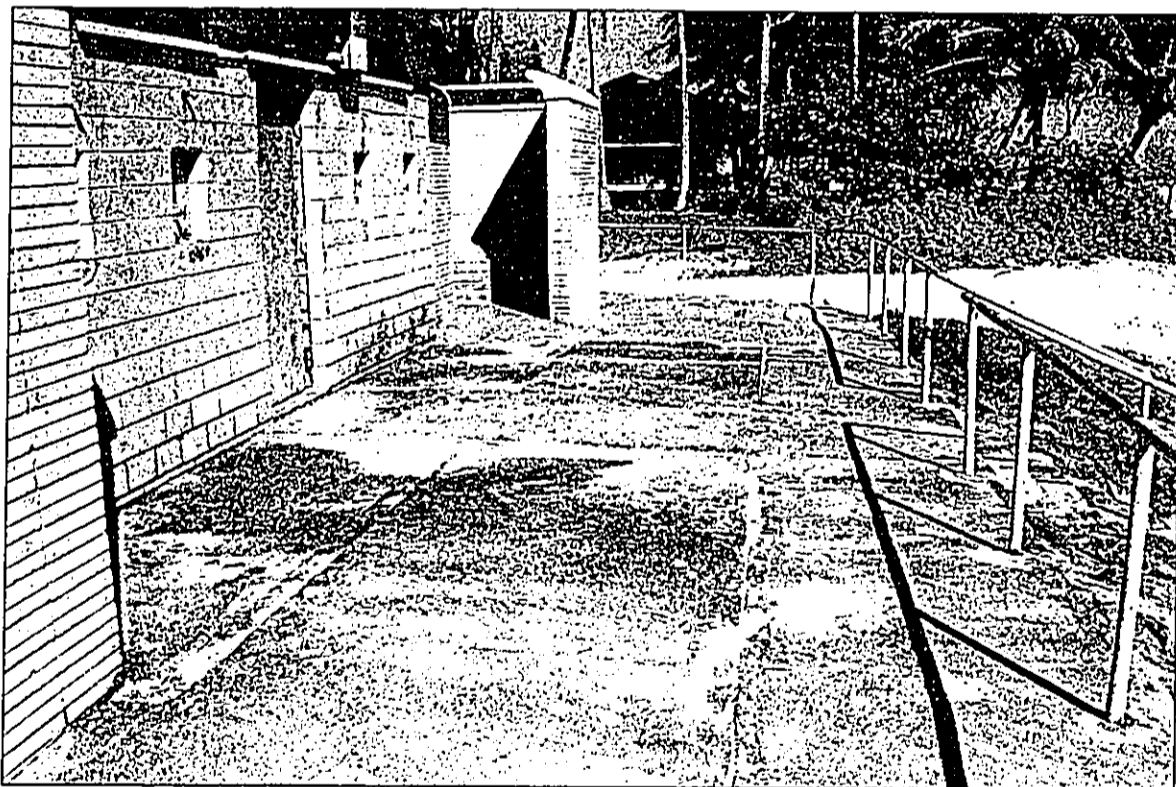
Comfort Station, view to the south.



Comfort Station, view to the southwest.



Comfort Station, view to the north.



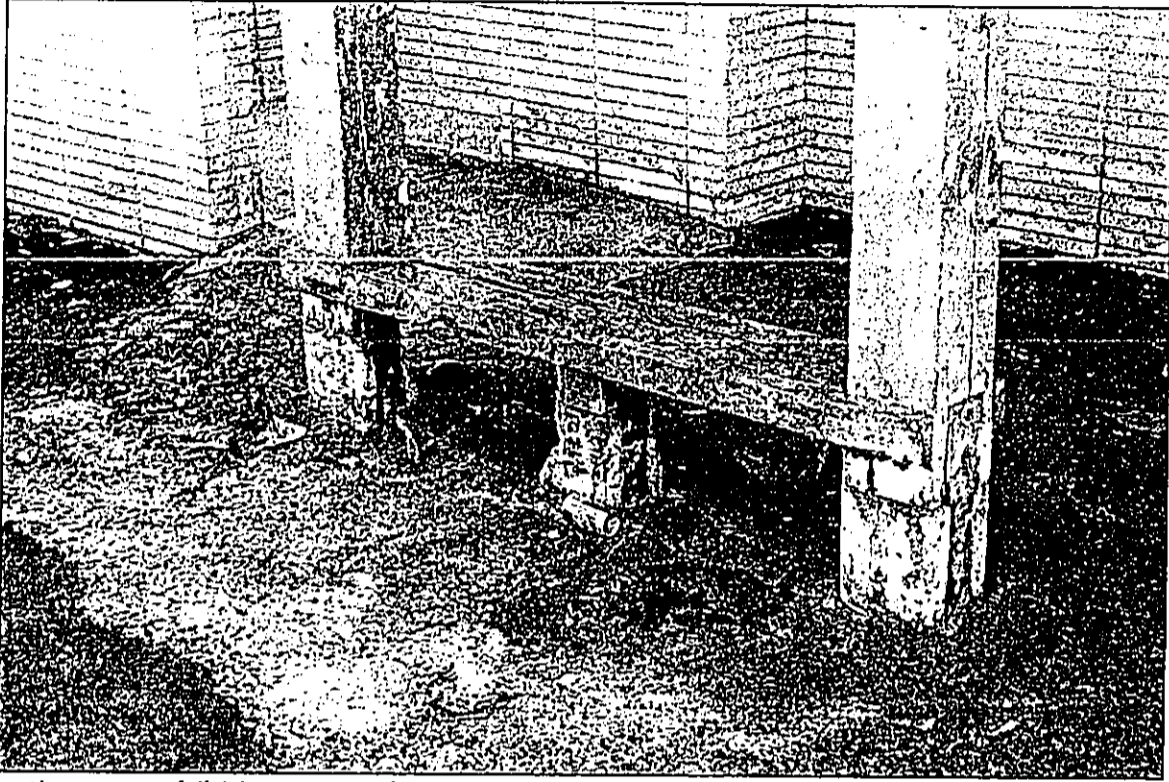
Comfort Station, view to the northwest.



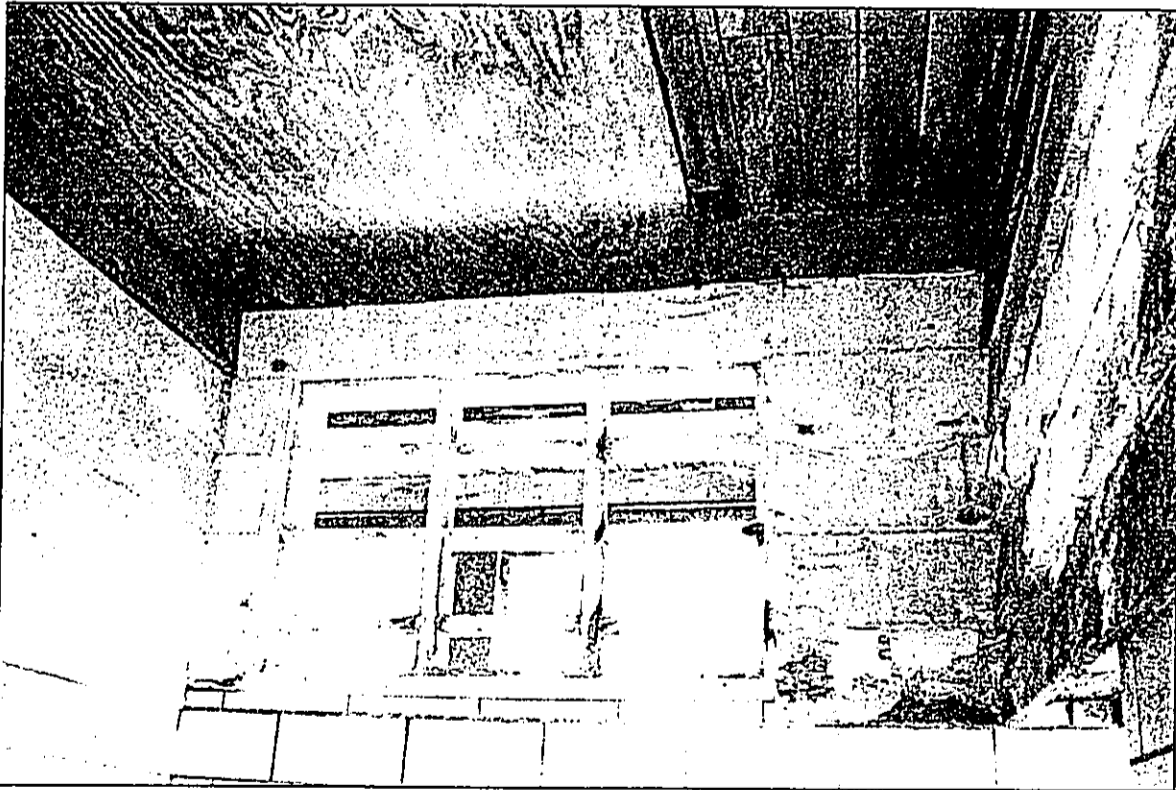
Decay of the roof and window slats.



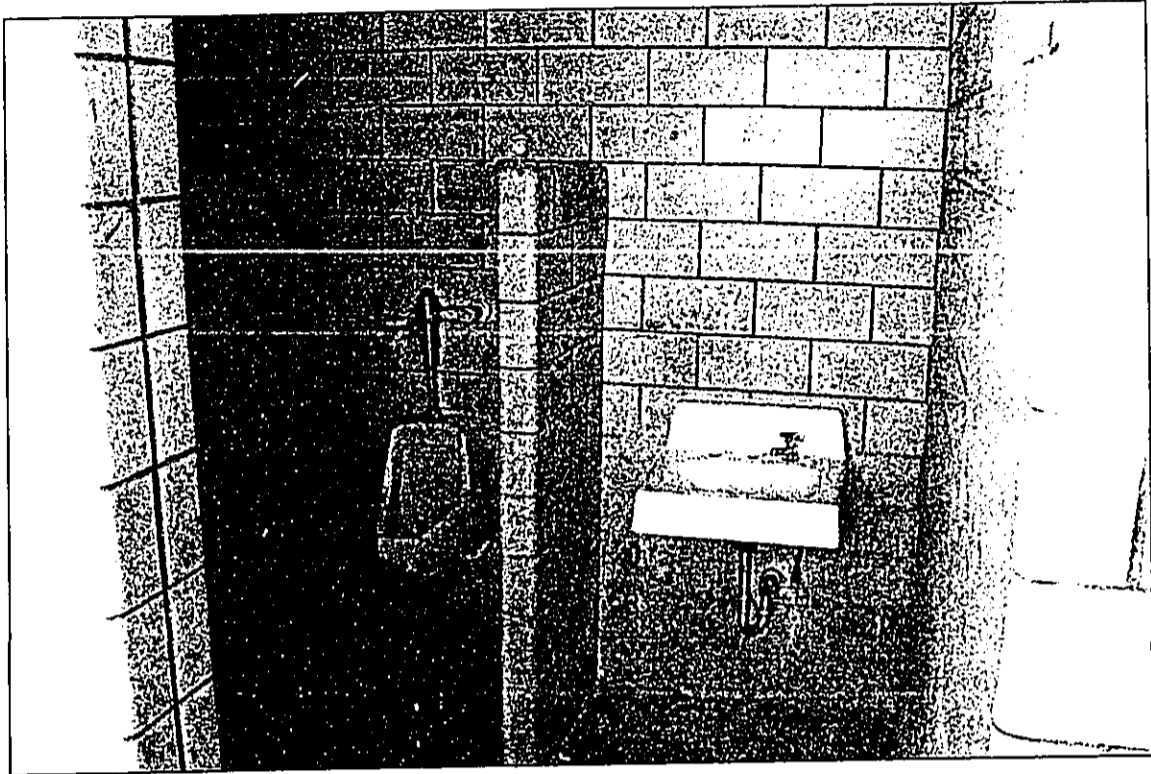
Patchwork of decaying roof and broken window slats.



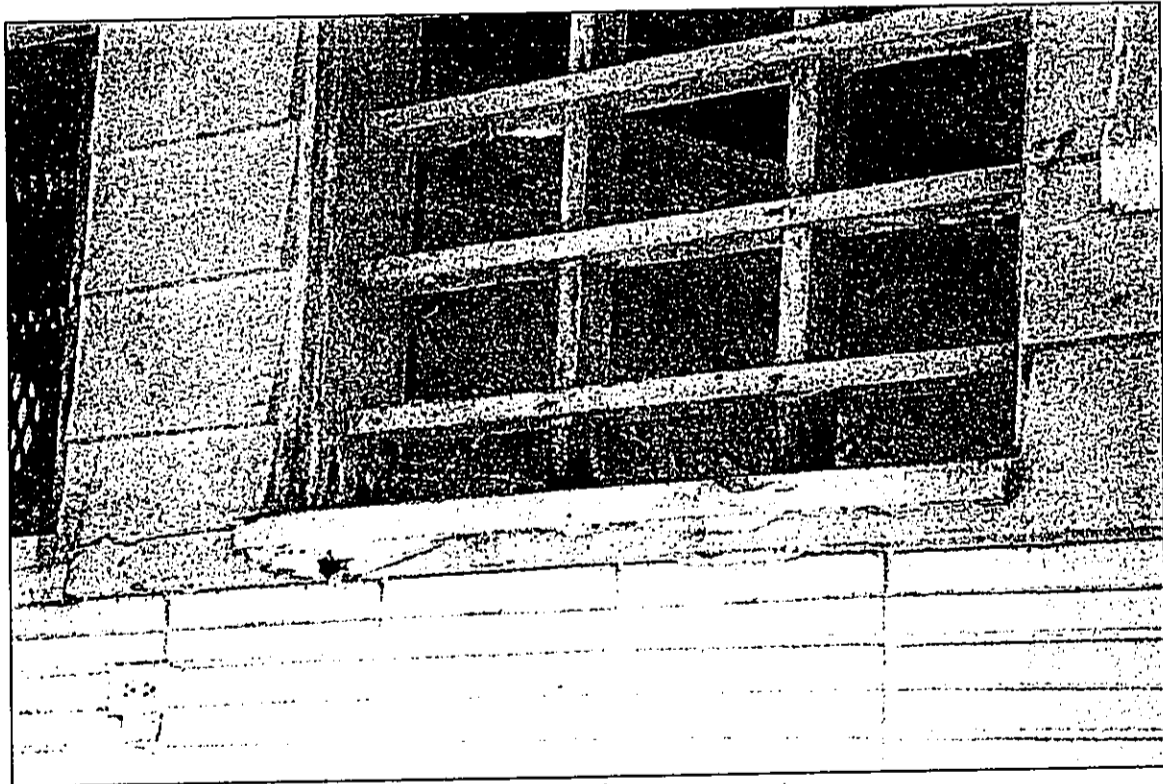
Seating area exhibiting severe decay.



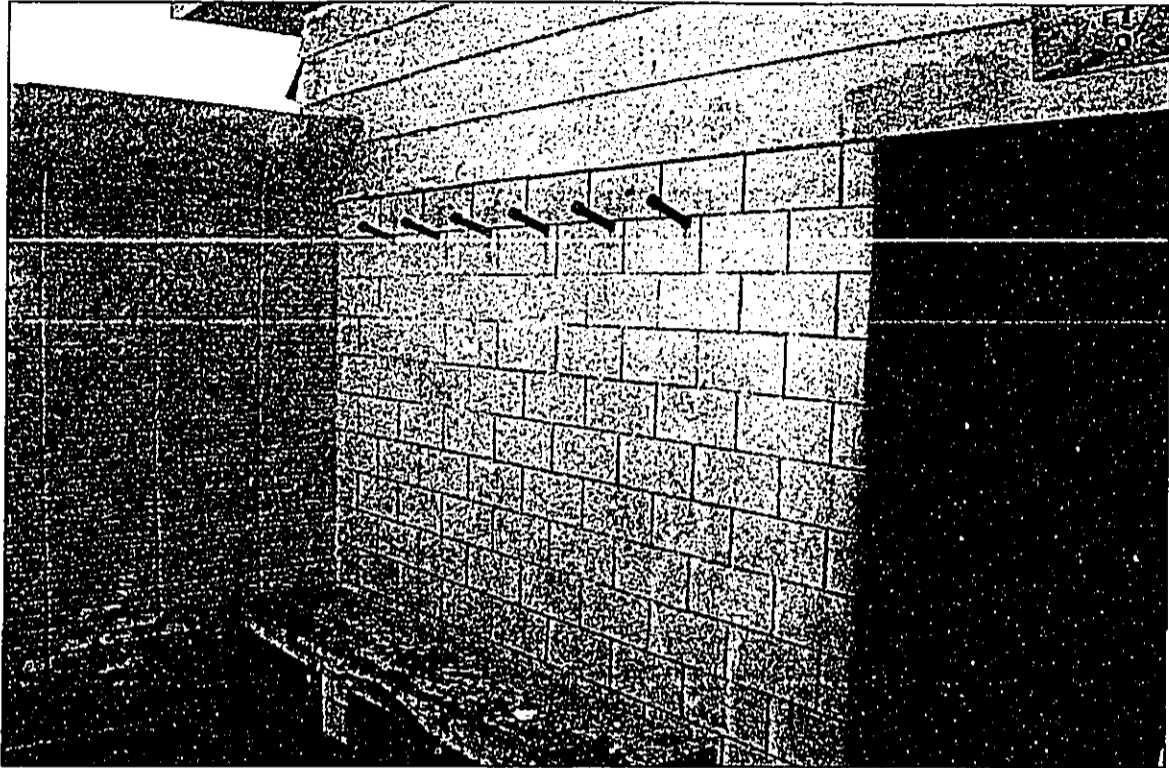
Interior of the men's restroom showing severe decay and non-conforming patchwork.



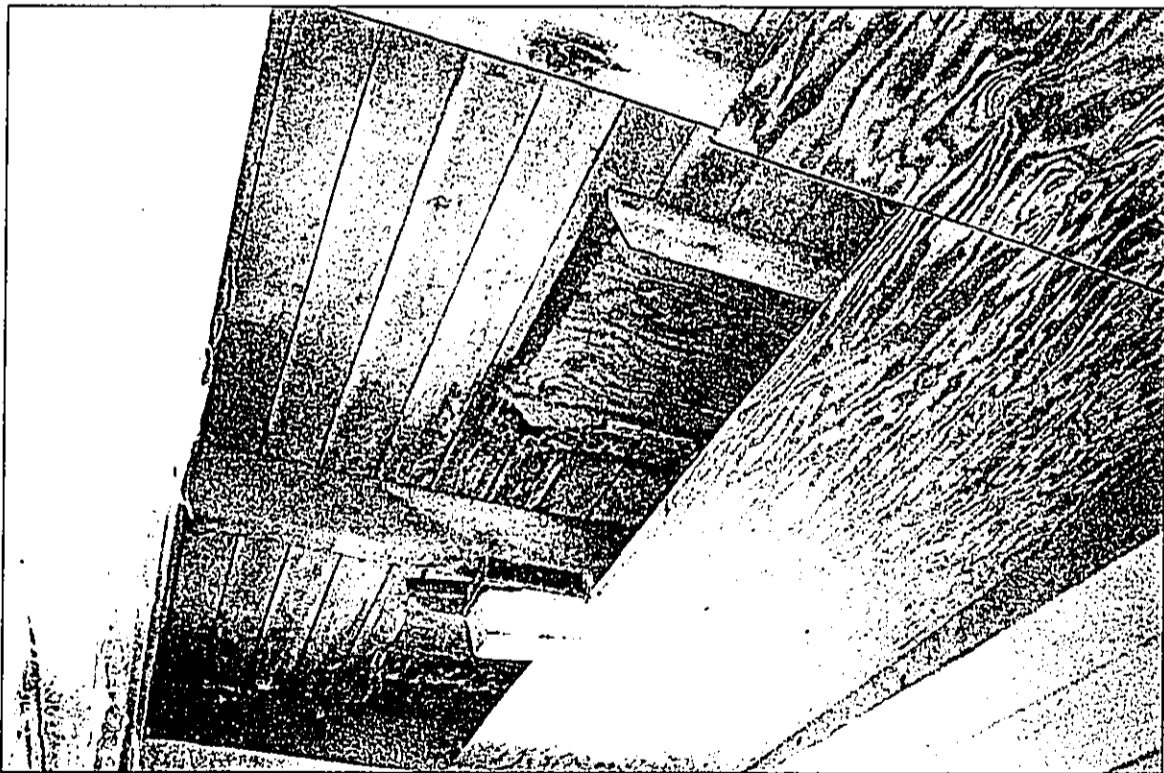
Interior of the men's restroom.



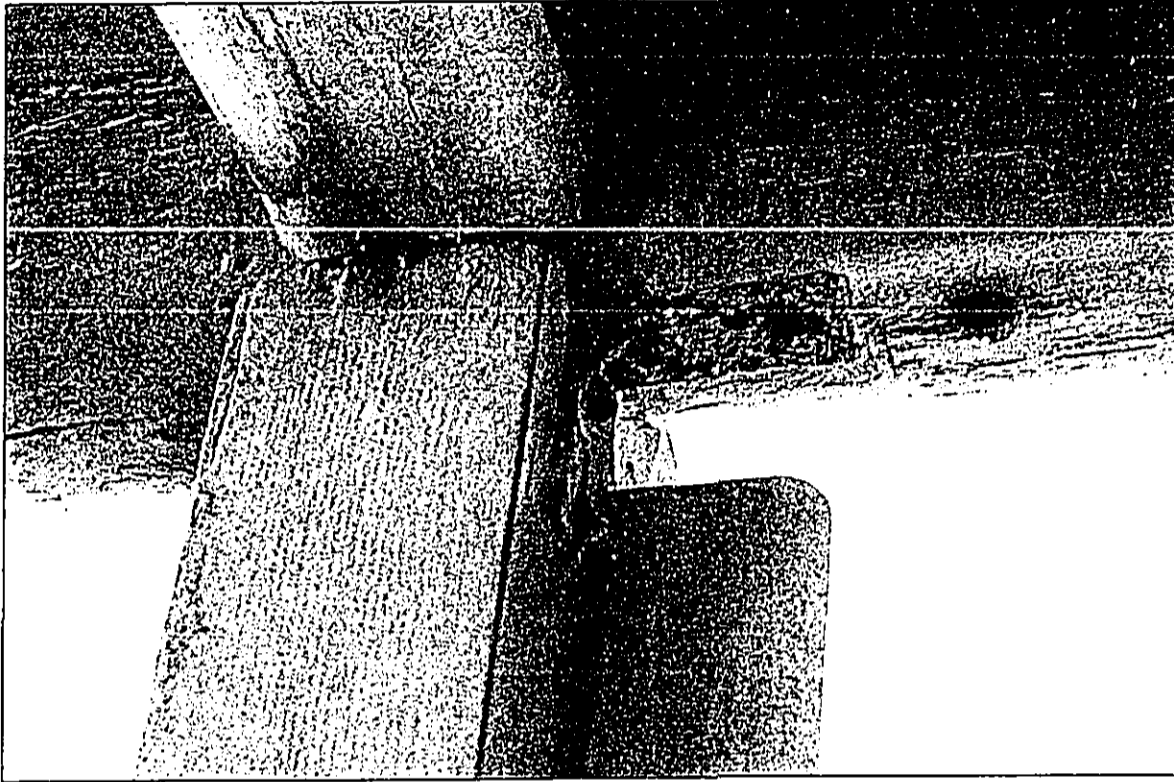
Exterior wall showing severe decay, *mauka* side.



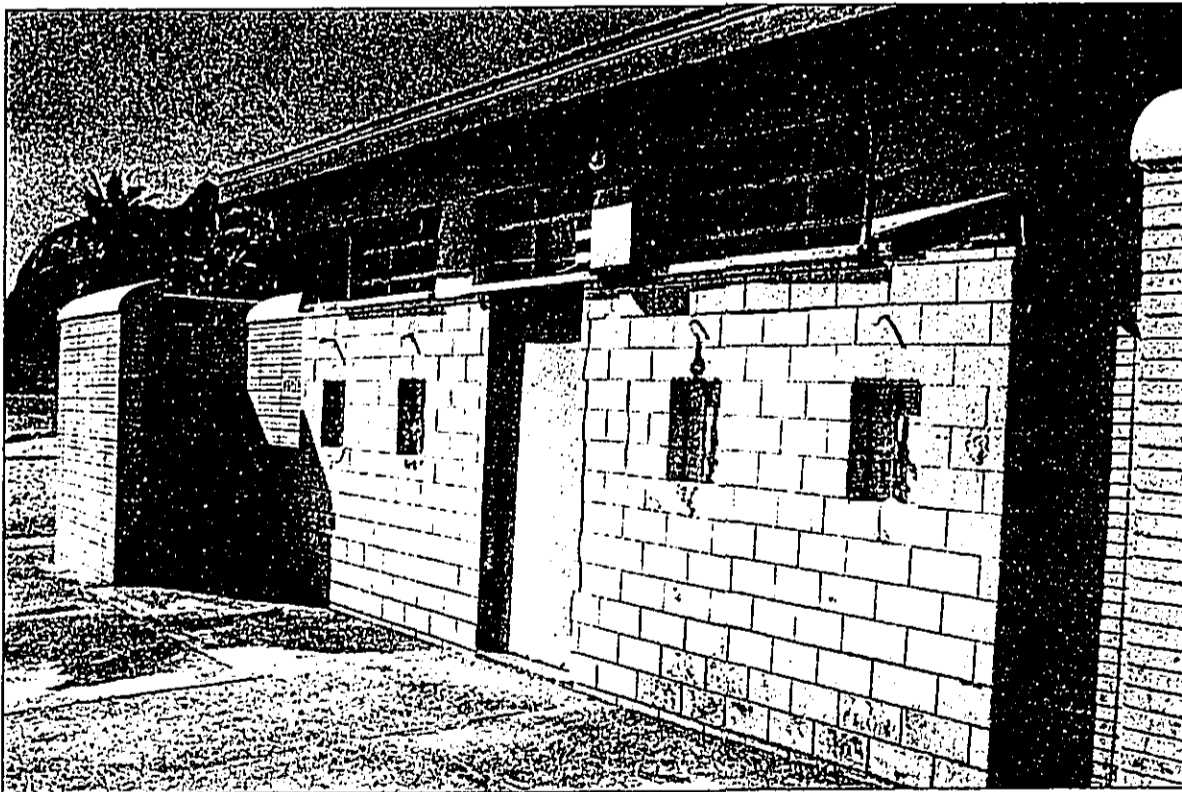
Interior of the men's restroom dressing area.



Roof decay and patchwork, *mauka* side.



Rust and decay surrounding post support.



Exterior of the Comfon Station, view to the southwest.



**Final Report**

**CULTURAL IMPACT ASSESSMENT  
KA'A'AWA BEACH PARK BATHHOUSE**

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April 19, 2003

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## Introduction

The following is a report of the results of a Cultural Impact Assessment study for "Draft Environmental Assessment (DEA) for Ka'a'awa Beach Park Reconstruction of Comfort Station, Tax Map Key: 5-1-002:025, Ko'olau Loa District, O'ahu, Hawai'i". The study was done by Social Research Pacific, Inc., for Arthur Kimbal Thompson Architect, AIA (AKTA), and was completed between the months of March and April 2003.

This study entailed interviews with persons and residents of the area who would potentially be affected by the proposed reconstruction of the existing comfort station. Along with the interviews, site visits were done to assess the proximity of residential, historic, roadways, and other physical features within the project area. The study aimed to satisfy the Hawaii State Historic Preservation Office's (SHPO) request for conducting Cultural Impact Assessments (CIA). It also meets the protocol established in the "Guidelines for Assessing Cultural Impacts", adopted by the Environmental Council of the State of Hawai'i, on November 19, 1997. As part of the requirement, attempts were made to contact *kūpuna* (Hawaiian elders) who are knowledgeable about the area. Prior to the initial site visit, recommendations were sought from the State Office of Hawaiian Affairs (OHA).

Due to the relatively small land area involved in the reconstruction efforts, its history with regards to traditional and current uses of the land, and the generally favorable nature of the project's intent, it is felt that the potential or no impacts found during this brief study is adequate for the Environmental Impact Assessment. A short introduction discussing the purpose of the study, applicable state guidelines, project area and study approach are presented next. The results of the study are presented followed by a summary assessing the potential impacts of the proposed project. Included in this summary is a review of the six areas identified for assessing cultural impacts.

### Purpose of the study

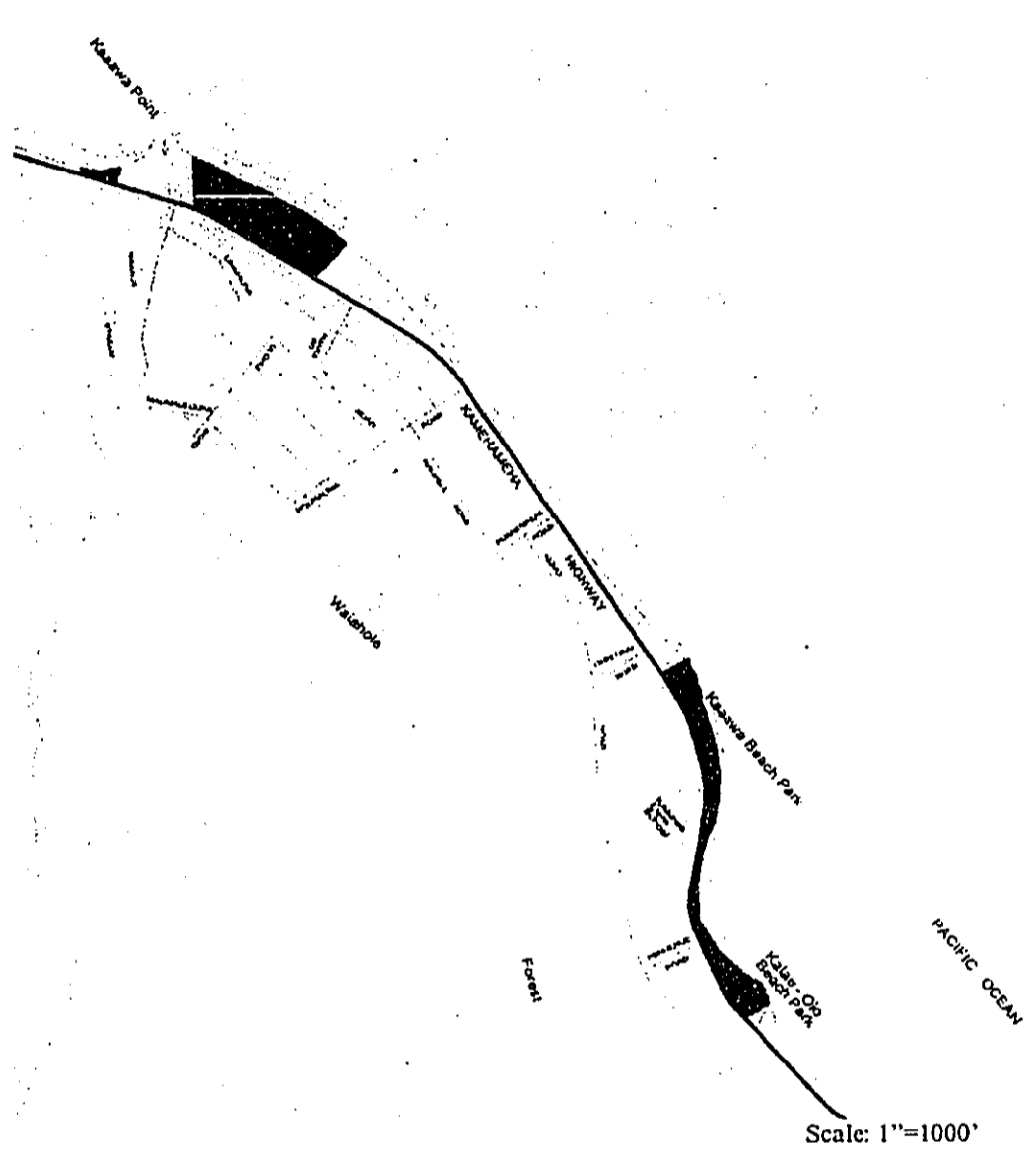
The purpose of this study was to assess the potential cultural impacts resulting from reconstruction of the existing comfort station at Ka'a'awa Beach Park. The primary objective of the project was to gather information through interviews with individuals knowledgeable about the area. The project entailed identifying individuals who could provide such information (interviewees), arranging and conducting oral interviews, site visits and preparation of this report.

### Applicable State Guidelines

Under Articles IX and XII of the State Constitution of Hawai'i (Chapter 343, HRS), requires government agencies to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups. As such, preparers of environmental impact assessments and statements need to study the impacts of a proposed action on cultural practices and features associated with a project area. The "Guidelines for Assessing Cultural Impacts", adopted by the Environmental Council of the State of Hawai'i, on November 19, 1997, identifies the protocol for conducting cultural assessments. The impacts addressed by this study look at the potential cultural effects of the proposed reconstruction of the comfort station.

### The Project Area

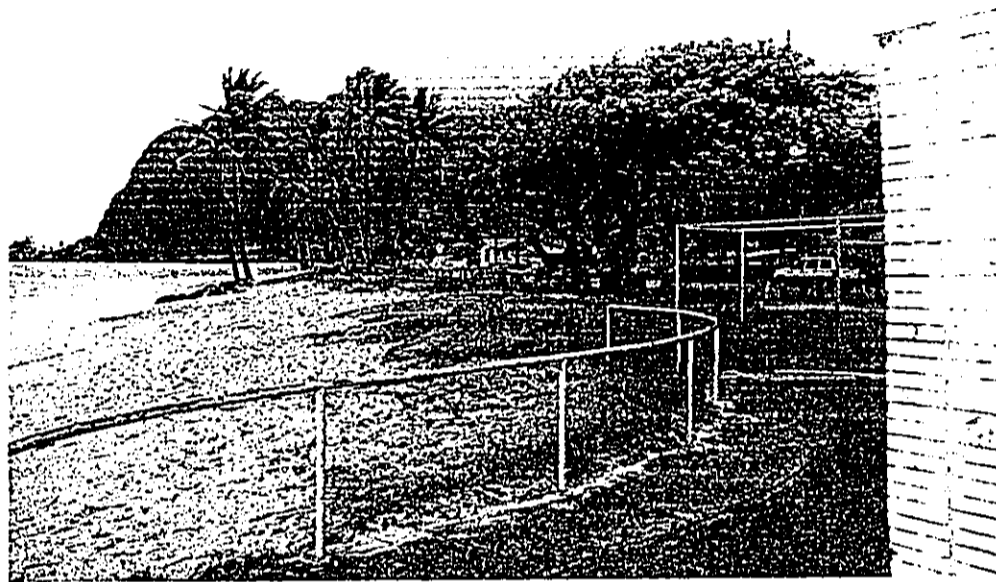
The project area is located on the eastern shores of Oahu. Located directly across from Ka'a'awa Elementary School, it is one of three beach parks in the town of Ka'a'awa. Largely due to easy access and its visibility and close proximity to Kamehameha Highway, it is also the most commonly used comfort station. Figure 1 shows the location of Ka'a'awa Beach Park along Oahu's northshore; Figure 2 shows the general park area, looking east from the existing comfort station.



**Figure 1. Ka'a'awa Beach Park and Vicinities** (source: Draft Environmental Assessment, 2002).

### Results of the Study

A total of ten interviews, six formal and four informal, were completed for this study. Appendix A provides a list of individuals and organizations that were contacted and/or interviewed. Informal interviews took place in and around the Ka'a'awa Beach Park with fishermen and park users. Selection of people to interview was done initially by contacting OHA for its recommendations, followed by contacting members of the Ko'olau Loa Neighborhood Board.



**Figure 2. Photograph of Ka'a'awa Beach Park from existing Relief Station**

In the following section, known traditional and current land use(s) of the project area are discussed. It should be noted that there may be additional current uses of the project area; the activities mentioned below are based primarily on observations from one weekend of site visits, and the responses of area residents.

Current and Traditional Uses of the Proposed Project Area

Ka'a'awa Beach Park is used by both visitors and residents alike, however, the comfort station is probably more widely used by visitors, including those who are driving past, than residents. Current activities consist primarily of swimming, kayaking, snorkeling, fishing, resting, picnicking and small group social events. Unless residents are directly involved in social activities centered at the park, they are more likely to make use of their home facilities. The close proximity of their homes to the beach/ocean, as well as the popular use of family compounds for social events, keeps most residents from spending

prolonged periods at the beach park. A few still families maintain “ranch homes” in Ka`a`awa, which are used primarily on weekends for family gatherings.

As with local Ka`a`awa residents, those who live in nearby Punalu`u and Hau`ula also do not use the facilities at the beach park. Mel, who lives in Hau`ula, says she and her family don’t use Ka`a`awa Beach Park because they have their own park at Hau`ula...”not too many people from Hau`ula side go down to Ka`a`awa, its mainly folks from Kaneohe and Honolulu side that use the park cuz it’s the first beach park when you come out to the windward side”. An old timer from Punalu`u who recently visited Gwen Kim’s house, commented how nice the beach was at Ka`a`awa. It was his first time swimming there.

Traditional activities at the beach park consist primarily of fishing; the beach park has always been a popular fishing spot with local fishermen. At present, fishermen are allowed to camp over for a few nights on the easternmost end, towards Kalae`o`io Park. Both pole fishing and spear fishing (primarily for *tako* or octopus) was observed on two separate occasions. Gwen Kim, who has lived directly across from the park for twenty nine years, likes having the fishermen around because she “feels its [fishing] very much a part of the cultural and social make-up of the place”. Traditional recreational activities such as swimming, kayaking and snorkeling also still take place. There may be some surfing but generally this portion of the windward coastline does not provide ideal surf conditions. Large group social events such as *luau* are perhaps less common due to the relatively small park area, and because many residents hold such events within their home compounds. Two residents commented that the area is not big enough to “hold” their families for larger gatherings.

#### Culturally Significant Features in the Ka`a`awa Beach Park Area and Ka`a`awa Valley

As with the most of this *moku* (traditional land district), the area all along Ka`a`awa Beach Park holds great cultural significance in Hawaiian tradition. Because of its value and use as a traditional fishing grounds, it is likely that one or more *ko`u* (Hawaiian fishing shrine), were located somewhere nearby. This portion of Oahu’s coastline has

also revealed ancient burials – a practice quite common amongst Hawaiians who settled near the shoreline. Amy Kamaka`ala, Park Keeper for Ka`a`awa Beach Park for thirty four years, recalls about ten years after [approximately 1974] she started to work there, “had one guy come out, said that there were layers. Sand/dirt layers...right where drainage was”. Although no *iwi* (human skeletal remains) was seen, “the guy did say these layers were from use of the area by Hawaiians before”. While there are no known features within the immediate vicinity of the park area, several well-known features and legends have been associated with the valley of Ka`a`awa.

The cultivation of taro within Ka`a`awa Valley is known from both remnants of terraces as well as from the type of soils found (Handy and Handy 1972). The legend of *Kauhi*, known as Kane’s very large dog or a man kneeling on all fours, is recounted in several versions in Sterling and Summers (1978:172-173). McAllister identified a large *heiau* with an canoe shaped depression, and a *ko`a* at Kalai o Kuonopuaa Point (McAllister 1933). He also recorded the finding of a burial following a heavy storm in 1930. Perhaps the most famous traditional Hawaiian cultural feature known from the area is Pohukaina Cave [also written as Pohokaina and Pahukaina]. This cave, situated on Kanehoalani Hill between Kualoa and Ka`a`awa, is said to contain burials of chiefs (Sterling and Summers 1978:175-176). Although its exact location is in question, the legends associated with burying of chiefs in cave sites such as Pohukaina, are found throughout Hawaiian folklore.

#### **Summary: Assessing the Potential Cultural Impacts from the Proposed Project**

Based on information gathered from interviews with members of the Ka`a`awa community, the potential impacts of the proposed project would generally be highly positive. All area residents and organizations interviewed are in complete support of an improved comfort station. They are equally content with the footprint for the new structure remaining the same as the existing facility. The concerns raised largely reflect the construction phase of the project; these are summarized below in order of importance/preference:



1. The existence of *ivi* beneath the existing concrete floor/parking area.
2. Proximity of future facilities to the existing and changing shoreline.
3. Maintain the 'small community feel' about the comfort station.
4. Locating maintenance doors for the new facility on the side or front (current doors face the ocean).
5. Locate new showers away from the rear of the building.
6. Increase septic tank size.
7. Do not increase the area to be concreted; use only existing foundation.

In addition to the above, the following concerns were raised about issues that do not reflect the proposed project but rather use of the general park area. These are: 1) discontinuation of camping at the park because the area is too narrow (too close to the highway) to safely accommodate such events; 2) patrolling of the park area after nightfall; and 3) discouraging drug users from using the comfort station throughout the day and night.

As for the structure itself, the existing comfort station poses many problems including those that hamper proper maintenance and upkeep of the facility. Amy Kamaka'ala has taken care of the facility from 1964 until her retirement two years ago. In that time, she has dealt with recurring problems with the existing septic system, unsafe tiled walls, caving in of the tool room door by sand, sand packing into men's and women's restrooms, and general deterioration of the structure. She recommends the structure be torn down.

#### Possible Negative Impacts from the Proposed Project

The only possible negative impacts from the proposed project are:

1. Finding of *ivi*. This would be a short-term impact resulting from the discovery of human skeletal remains and/or other culturally significant remains.

2. If the new concrete foundation stretches further east and towards the shoreline, the cumulative wave action over time will create a major change in the existing beach formation. This would be a long-term negative impact.

#### Application of the Environmental Council Guidelines for Cultural Impact Assessments

Efforts were taken to meet the Environmental Council's guidelines for conducting cultural impact assessments. An evaluation of the council's six-point protocol is offered below.

1. Efforts were made to contact individuals and organizations that have expertise concerning the types of cultural resources, practices and beliefs found within the vicinity of Ka'a'awa Beach Park and its surrounds.
2. Efforts were made to locate individuals who would be directly affected by changes to the proposed project area.
3. Oral interviews were conducted with at least ten individuals with historical knowledge about the area. In addition, several discussions were held with individuals who may have had some knowledge about the area.
4. A brief documentary search, particularly on the location of cultural and historical uses of the area, was completed.
5. Cultural resources in the project area are briefly referenced in this report, and are not seen as a major component of the current study's purpose.
6. The summary above is considered an appropriate conclusion since the goal of the study was not to conduct a comprehensive Cultural Impact Assessment but to

identify potential impacts resulting from reconstruction efforts to an existing facility; no new land areas will be effected.

### Conclusion

The study found that the proposed reconstruction of the comfort station at Ka'a'awa Beach Park will have limited, if any, long-term impact on traditional uses of the project area. The project in general has overwhelming support from residents who feel there is a need for an improved structure. Currently uses of the beach park will also not be impacted except for the short duration of the construction phase. No one in the community felt that construction efforts would be of any inconvenience.

The potential negative impact(s) can be resolved by (a) close archaeological monitoring and following proper protocol for handling sensitive human remains, and (b) a well designed, viable, structural plan for the newly proposed facility. Most residents are aware that *iwi* may be found during excavation; their request is that proper recovery procedures be followed. The second concern relates to the possible increase in the area to be covered in concrete for the new comfort station. While this is not a direct cultural impact, long-term physical changes to the beach area [as a result of extending the concrete foundation] may compromise uses of the beach park by residents.

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**Appendix A**

<u>Name of Individual</u>	<u>Affiliation</u>
Pua Aiu	Office of Hawaiian Affairs
Steve Rodrigues	City and County of Honolulu
Mary Ann Long,	Ko'olau Loa Neighborhood Board Chairperson
Gwen Kim	Queen Lili'uokalani Children's Center and long-term resident of Ka'a'awa
DeeDee Letts	Chair of Ka'a'awa Community Association
Amy Kamaka'ala	Retired Park Keeper of Ka'a'awa Beach Park

Ka`a`awa Beach Park CIA

People talked with on March 28, 2003:

**Pua Aiu** (594-1931), Office of Hawaiian Affairs

Pua is not from the area but recommended Gwen Nihiu-Kim (aka Nihipali), the Oahu Island Burial Council, and Ahi Logan of Punalu`u, who is working on cultural monitoring of the water projects in the area. I asked if I should send her a formal letter, and she said yes. Although its with the understanding that no written reply would be provided in lieu of this telephone conversation.

**Steve Rodrigues** (.....), Minutes reporter for the Ko`olauloa Neighborhood Board. The next meeting is to take place on April 10, 2003, at 7 pm at the Hauula Civic Center (next to the Fire Station). These meetings are held once a month. He doesn't recall this project being presented in last few sessions (months); he would have been the recorder if this item had been on the agenda.

**MaryAnn Long** (293-7554), Ko`olauloa Neighborhood Board Chairperson

MaryAnn could not recall having seen the a presentation being made of the Ka`a`awa project but she said it may have been presented at their "Vision Team/Project" meetings. (these meetings precede the neighborhood ones). She suggested I contact Deedee Letts, the chair or acting chair of the newly formed Ka`a`awa Community Association. Usually, the protocol for neighborhood board issues is first raised at the local/individual community associations. Deedee's phone (538-5990, email: [ddlctts@lava.net](mailto:ddlctts@lava.net)).

**Gwen Kim** (293-8577), Queen Liliuokalani Children's Center, Kaneohe. Gwen has lived in Ka`a`awa for 29 years; her house is at the easternmost end of Ka`a`awa Beach Park, near Kalaio`io Stream. Gwen says "improvement is needed" of the current facilities. She likes having the fishermen around, feels its very much part of the cultural and social make up of the place. She notes that the parking stalls fronting the existing relief station are used primarily by visitors, Kaneohe residents, etc. "Everybody [Punalu`u etc.] else has their own bathroom". She was just talking to an old timer who lives in Punalu`u, who stated that ... "nice the beach over here but first time I went swimming here" [he was visiting Gwen's house]. The primary acitivities taking place at the park are swimming and fishing. Sometimes, though rarely, the crowd gets thick enough where they park in front of her house. But she says this is rare and she doesn't mind on weekends because she figures everyone's entitled to enjoy their weekends some. She'd much rather have them partying at the beach across the way then hiding out somewhere and doing drugs and such.

Her concerns are:

1. shoreline (current structure too close to the shore)
2. security (although she's aware this concern is out of the range of the current project, this is one of her concerns about the park in general).

3. *iwi* – the major concern but as she says “*iwi* is always a concern along our beach [this means the entire length of the beaches in the moku, including Punalu`u, Kahana, etc.]. She added that she doesn’t see there would be much of a sensitivity to finding *iwi* as long as “treat *iwi* with proper respect, people would more than accept that”.
4. don’t put bathrooms on Kalaio’io side of the park...without it “holds down the use” (this is across from her house and the area where fishermen usually stay).

**Mel** (293-8577), QLCC, receptionist, resident of Hauula. She and her family don’t use Ka`a`awa Beach Park much because they have their own park at Hauula. She says not too many people from Hauula side go down to Ka`a`awa ...its mainly folks from Kaneohe and Honolulu side that use the park cuz it’s the first beach park when you come out to the windward side.

**Deedee Letts** (538-5990), Chair of Ka`a`awa Community Association. Deedee will be meeting with me at 4pm on March 29, 2003, to take me on a tour of the area and the park. Meanwhile, she did mention that this is one of the ‘vision’ projects (hence why it hasn’t appeared on the Neighborhood Board meetings). Deedee recommended that I meet with “Auntie Nona” who has been a resident here forever. (Auntie Nona’s in Volcano fro 2 weeks but Deedee will set up a meeting for me when she returns). According to Deedee,

- 1) there’s “a lot of sensitivity to the fact that *iwi* (human bones) may be found under the existing structure once construction gets underway. She has expressed this very succinctly at the meeting. “Even if they stay within the existing footprint, they may find *iwi* in the subsurface”. This has already happened in Hauula, where *iwi* were dug up and the bones were dumped. People in Hauula are very angry with this.
- 2) Otherwise, she says that the beach here is very narrow, and camping along there is dangerous; they’re working on trying to get the City to discontinue camping at Ka`a`awa Beach Park. She thinks the footprint shouldn’t be changed and it would be nice to see the current plans.
- 3) Comfort station needs to stay small to reflect its community’s needs. It shouldn’t be expanded to accommodate tourists, etc. (this isn’t a question on others not being able to use the comfort station but simply that it should reflect its local neighborhood...the people who will be most affected by its existence).

**Amy Kamaka`ala** (237-8532), Park Keeper for Ka`a`awa Beach Park until 2 years ago. Amy had been Park Keeper for 34 years; she just retired. Since her retirement only one Park Keeper, Harry Kim, is doing 5-6 parks a day (due to shortage of funds). She used to take care of several parks on the weekends – Kalaioio, Swanz) and Ka`a`awa. Amy was born in Kahuku, grew up in Kahana, than married and moved to Punalu`u. but she always wanted to live in Ka`a`awa.

The existing bathroom is 56 years old. Its is bad shape. Amy’s been cut by the tile that lines the walls in the bathroom. She said they’ve attempted steam cleaning but with little success. “Should tear it down”; “Should increase septic tank size...current one doesn’t

hold enough, waste would come out the door at times". "that thing gotta go...I'm happy...that thing so junk".

She says the water comes over the wall. "It doesn't make sense that the tool room is in the back...the door gets caved in by sand. Sometimes she has to dig out the sand to be able to get into through the door. Entrance should not be in the back where it faces the ocean. Also, with high water, "all sand pack into men's and women's restroom". We'd get cesspool backup. The bathrooms are used constantly, sometimes busloads come in. a lot of drug addicts hang around...they park their cars and hang around checking out tourists. Of some of the fishermen, Amy says "they act like fishermen but they're not"...they're there to steal. She kept an eye out on these folk.

When asking about iwi, Amy has never seen any but about 10 years after she started work there (she started in 1964), there was the first erosion. At that time "had one guy come out said that there were layers. Sand/dirt layers...right where drainage was." Although no iwi was seen, the guy did say these layers were from use of the area by Hawaiians before.

**Deborah Hiwah (237-7088)**, past President of Ka'a'awa Community Association. Would be more familiar with past efforts to improve the current facilities. Highly recommended by Amy.