

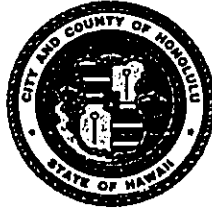
*Aweoweo Beach Park*

DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET  
HONOLULU, HAWAII 96813

RECEIVED

JEREMY HARRIS  
XXXXXXXXXX  
MAYOR



'95 DEC 22 P1:28

DONA L. HANAIKE  
XXXXXXXXXX  
DIRECTOR

OFFICE OF ENVIRONMENTAL  
QUALITY CONTROL

ALVIN K.C. AU  
DEPUTY DIRECTOR

December 21, 1995

Mr. Gary Gill, Director  
Office of Environmental Quality Control  
220 South King Street, Suite 400  
Honolulu, Hawaii 96813

Dear Mr. Gill:

Subject: Final Environmental Assessment (EA), Negative Declaration  
for Aweoweo Beach Park, Waiialua, Oahu, Hawaii  
TMK: 6-08-11: 37 & 38; 6-08-12: 53 & 54

The Department of Parks and Recreation (DPR) has reviewed the comments received during the 30 day public comment period which began on April 23, 1994. The DPR has determined that this project will not have significant environmental effect and has issued a negative declaration. Please publish this notice in the December 23, 1995, OEQC Bulletin.

We have enclosed a completed OEQC Bulletin Publication form and four copies of the Draft EA. Please contact Mr. David Kumasaka at 523-4884 if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dona L. Hanaike".

FOR DONA L. HANAIKE  
Director

DLH:go

Enclosures

*We Add Quality to Life*

186

1996-01-08-0A-Aweoweo Beach Park

JAN 8 1996

<sup>FEA</sup>  
FINAL ENVIRONMENTAL ASSESSMENT **FILE COPY**

FOR

AWEOWEO BEACH PARK

68-197 AU STREET

WAIALUA, OAHU 96791

TAX MAP KEY 6-8-11:37 & 38; 6-8-12:53 & 54

This document is prepared pursuant to Chapter 343, H.R.S.

PROPOSING AGENCY:

Department of Parks and Recreation  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

RESPONSIBLE OFFICIAL:

  
Dona L. Hanaïke, Director

DEC 21 1995  
Date

November 1995

Prepared By:  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

**FINAL ENVIRONMENTAL ASSESSMENT**

FOR

**AWEOWEO BEACH PARK**

68-197 AU STREET

WAIALUA, OAHU 96791

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Appendix B	Existing Topographic Map
Appendix C	Preliminary Construction Plans (Subject to Change) Exhibit 1: Comfort Station Plan & Elevation Views Exhibit 2: Site and Utility Plan Exhibit 3: Grading Plan
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## **I. STATEMENT OF OBJECTIVE**

The goal of this environmental assessment is to evaluate concerns if any, and to arrive at mitigation measures to address such concerns to minimize impacts upon the construction of the new Aweoweo Beach Park project.

Figure 1 on the next page shows the new beach park project to be on four adjoining vacant lots in Mokuleia, Oahu.

It appears the new beach park will be a desirable project and will contribute towards the need for a park facility in the community. The following are excerpts of comments previously expressed by various City Council and/or City Administration members when the Aweoweo Beach Park project was first considered. See also Appendix G for the reference letters from which these excerpts were obtained.

1. "there is a pressing and immediate need to acquire as much of the remaining beach front land because of sky-rocketing costs"
2. "the rapid growth of the district in which the parcels are located has precipitated a need for more parks and recreational services"
3. "the strong community support for priority acquisition of these four parcels for beach access and as a community playground in a high density subdivision which has no playground"
4. "there is a continuing need for additional new recreational facilities in Mokuleia to service community needs"
5. "to preserve a popular fishing and swimming area and to develop the Aweoweo Beach park there"

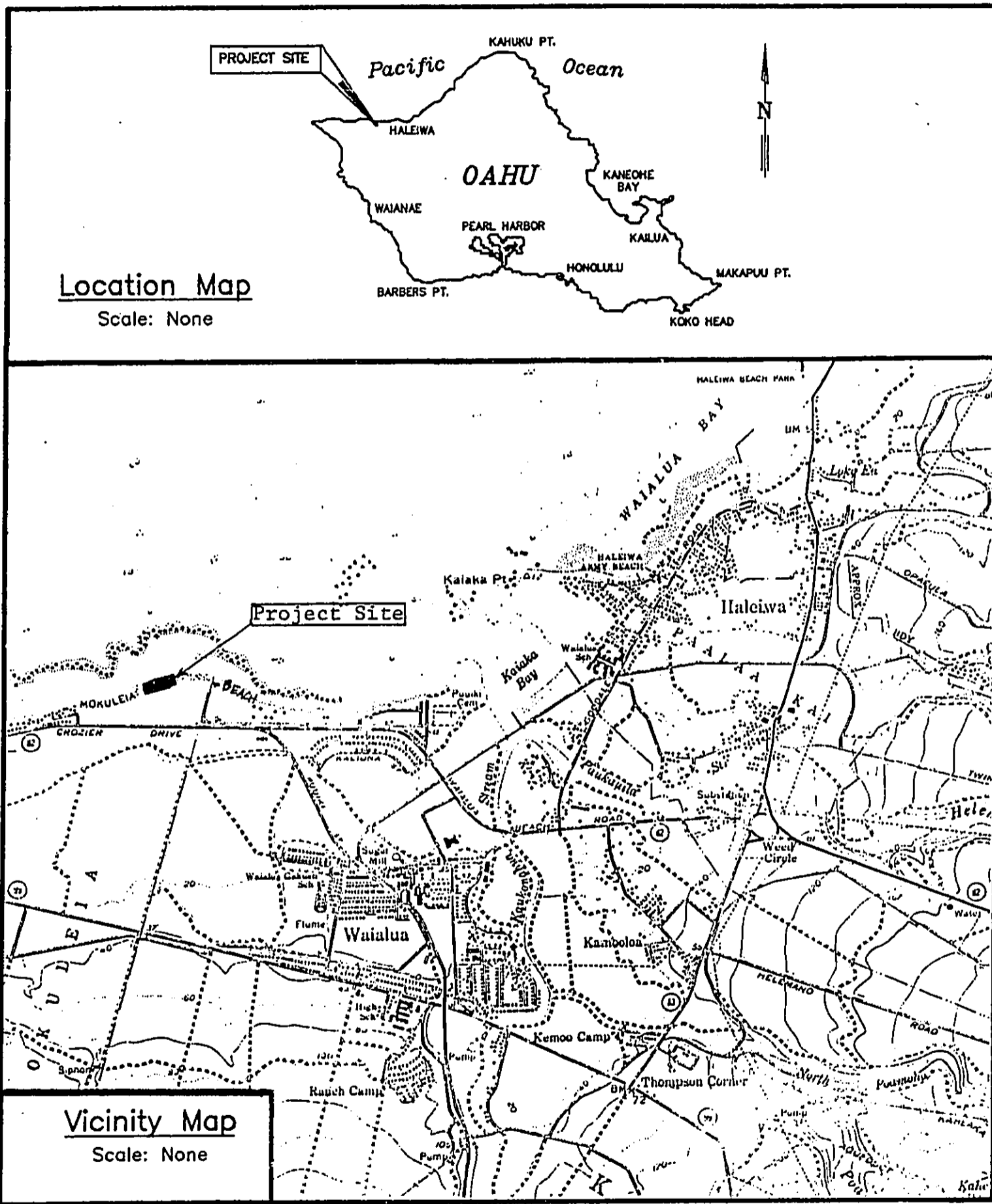


Figure 1

## II. AGENCIES & PERSONS CONSULTED

### CITY AND COUNTY OF HONOLULU

Board of Water Supply  
City Council  
Department of Land Utilization  
Department of Parks and Recreation  
Department of Public Works  
Department of Transportation Services  
Department of Wastewater Management  
Fire Department  
Planning Department  
Police Department

### STATE OF HAWAII

Bureau of Conveyances  
Coastal Zone Management Program, Office of State Planning  
Commission On Persons With Disabilities  
Department of Agriculture  
Department of Health  
Department of Transportation  
Division of Water & Land Development, Dept of Land & Natural Resources  
Environmental Center, University of Hawaii at Manoa  
Environmental Management Division, Dept of Health  
Office of Environmental Quality Control  
Office of Hawaiian Affairs  
State Historic Preservation Division, Dept of Land & Natural Resources

### FEDERAL

Corps of Engineers, Dept of Army  
Federal Emergency Management Agency  
Fish and Wildlife Services, Dept of Interior  
Soil Conservation Service, Dept of Agriculture

### OTHERS

BioSystems Analysis, Inc.  
Hawaiian Electric Company, Inc.  
Melvin Lau & Associates, Inc.  
Northshore Neighborhood Board (#27)  
ParEn, Inc. dba Park Engineering  
Soils International  
The Nature Conservancy of Hawaii



### III. DESCRIPTION OF PROPOSED ACTION

#### A. General Information

**APPLICANT:** Department of Parks and Recreation  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

**RECORDED FEE OWNER:**  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

**AGENT:** Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

**TAX MAP KEYS:** 6-8-11: 37 & 38  
6-8-12: 53 & 54

#### LOT AREAS:

<u>Lot No.</u>	<u>Area (sf)</u>	<u>TMK #</u>
119	19,510	6-8-12: 53
53	14,600	6-8-12: 54
54	14,140	6-8-11: 37
55	14,070	6-8-11: 38

Total Area = 62,320 square feet  
= 1.430 acres

Figure 1 on page I-2 shows the project site to be immediately next to the existing Mokuleia Beach at Kamananui, Waialua, Oahu. The four individual lots will ultimately be consolidated into one single large parcel for the new beach park.

The new park construction will be for a new comfort station, 11 picnic tables, a drinking water fountain, 4 charcoal disposal areas, 14 refuse disposal cans, a shower tree for rinsing and showering, new landscape plantings, a new septic tank and leach field for sewage handling and disposal, a new driveway and parking area for maintenance use, and new concrete walks. Handicapped persons will be able to access the new

comfort station facility and a picnic table area between the comfort station and Au Street by way of a new concrete walkway to be built to meet the requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

The southern side of the new park borders along Au Street. A neighbor's existing 4.0' to 4.5' high CMU wall bounds the west side while the existing beach is along the entire north side. Another neighbor's existing chain link fence is located along the east perimeter of the park.

New landscape plantings call for sea grape hedges to be planted along both the east and west sides of the park to act as buffers between the new park and the two neighboring lots. A new 18" high vehicular barrier wall will be constructed along the length of the Au Street frontage of the new park. The new driveway and parking area will have a removable chain to control and limit use of the parking area to only custodial vehicles. The Aweoweo Beach Park Master Plan is included behind as Appendix A. It shows the placement of the various new improvements on the consolidated lots for the proposed beach park.

Other plans and maps impacting on the development of the beach park are,

1. Beach Park Plan: (See Figure 2 on page III-5)

The plan shows the new Aweoweo Beach Park to be an area the community in Mokuleia can use for their enjoyment. The nearest existing public beach parks that are available to the people would be either Kaiaka Beach Park which is about 3.5 miles towards Haleiwa town or, Mokuleia Beach Park situated in the opposite direction towards Kaena Point, about 4 miles away. There is a private park in the adjacent subdivision about a quarter mile towards Haleiwa. It is the Puuiki Park owned by Castle and Cooke (Waialua Sugar Co.) and used only for their employees and guests. There are future plans for two other public beach parks for this area. They are the Mokuleia Beach Park Expansion and the Makaleha Beach Park. Both will be located between the new Aweoweo Beach Park and the existing Mokuleia Beach Park. Funding for these two new parks is not yet in place nor is the development schedule established.

2. State Land Use Map: (See Figure 3, pg III-6)

The State Land Use Map designates the four parcels for the new Aweoweo Beach Park as Urban.

3. Development Plan Land Use Map North Shore: (See Figure 4, pg III-7)

The City's Development Plan Land Use Map for the North Shore area designates the four parcels for park use. This has been confirmed by the City's Planning Department. They also indicated the proposed project is consistent with the North Shore Development Plan Public Facilities Map. The symbol on the facilities map shows a publicly funded park, site determined, within six years, for the proposed Aweoweo Beach Park. See also Ordinance No. 89-119 attached in back as Appendix H.

4. Zoning Map No. 17 Mokuleia to Haleiwa: (See Figure 5, pg III-8)

Zoning Map No. 17 shows the four parcels in the P2 preservation zone. According to the Zoning District people at the City's Department of Land Utilization, this project falls under the principal category of Public Uses and Structures on Table 3-A of the LUO (page 5-5). Therefore, this project does not need a conditional use permit. Had this project been a private park, Ordinance 92-110 would have required a Type 1 Conditional Use Permit because the parcels are in the General Preservation zone.

5. Flood Insurance Rate Map: (See Figure 6, pg III-9)

All four parcels are in an area designated as ZONE VE (EL 14) meaning the parcels are in a special flood hazard area that can be inundated by the 100-year flood and, more specifically, by coastal floods with velocity hazards (wave action). The base flood elevation has been determined to be around 14 feet. This flood information was confirmed in a review by the Department of the Army Corps of Engineers. Since all of the work will be contained on land, and not involve work in waters of the US; no Department of the Army permit will be needed.

6. Critical Wastewater Disposal Areas Map: (See Figure 7, pg III-10)

Department of Health records show the project to be in the critical wastewater disposal area as determined by the Oahu Wastewater Advisory Committee. It is located below the Underground Injection Control (UIC) line in the Pass Zone. No new cesspools will be

allowed. Since the area has no sewers, the Department of Health concurs with the planned use of an onsite wastewater system such as a septic tank and a soil absorption system for handling the sewage needs of the project. The design and plans for the septic tank and the soil absorption system will be reviewed and approved by the Department of Health prior to installation.

**7. Agriculture Lands of Importance to Hawaii: (See Fig 8, pg III-11)**

None of the four parcels are considered to be important for agriculture land. These lots have neither the size, location, nor the soil quality needed to produce sustained high yields of crops economically.

**8. Special Management Area Map: (See Figure 9, pg III-12)**

All four parcels are in the Special Management Area and will, therefore, need a special management area (SMA) use permit. This has been confirmed with the City's Department of Land Utilization and the City's Planning Department. The SMA permit application will commence upon final disposition of this environmental assessment.

**9. Shoreline Setback Variance:**

New trash cans, trees, and picnic tables will be located in the 40-foot setback area as measured from the vegetation line. As a result, a shoreline setback variance is needed. The shoreline setback variance will be requested and pursued at the time the application for the SMA permit is made.

**10. Street Widening:**

The City's Department of Land Utilization indicates there are no plans to widen Au Street in either the near or distant future. Its present right of way width is 44 feet.

**11. Special Districts:**

There are seven special districts on Oahu. The nearest is the Haleiwa Special District. None of the four parcels are in any of the special district boundaries.

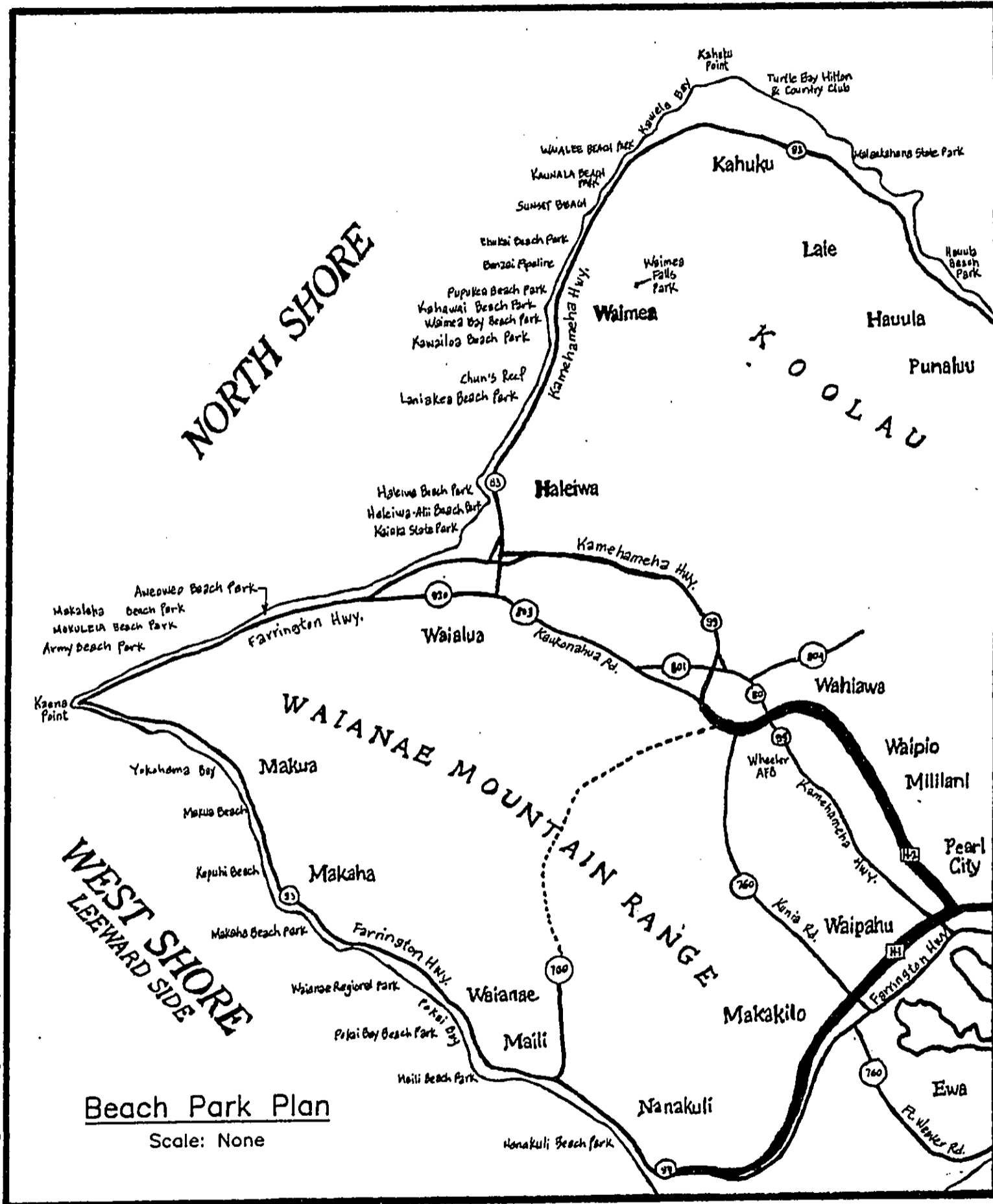
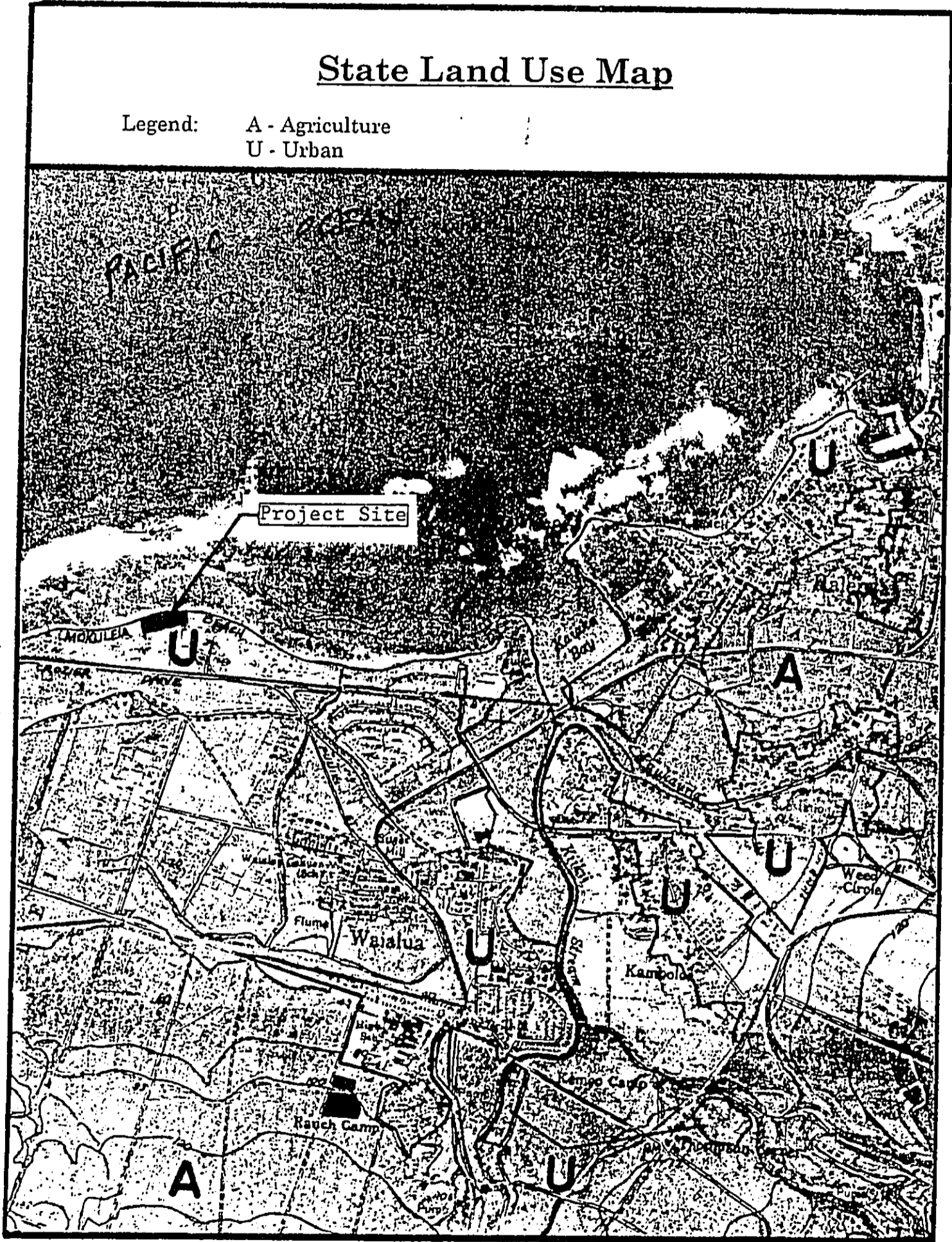


Figure 2



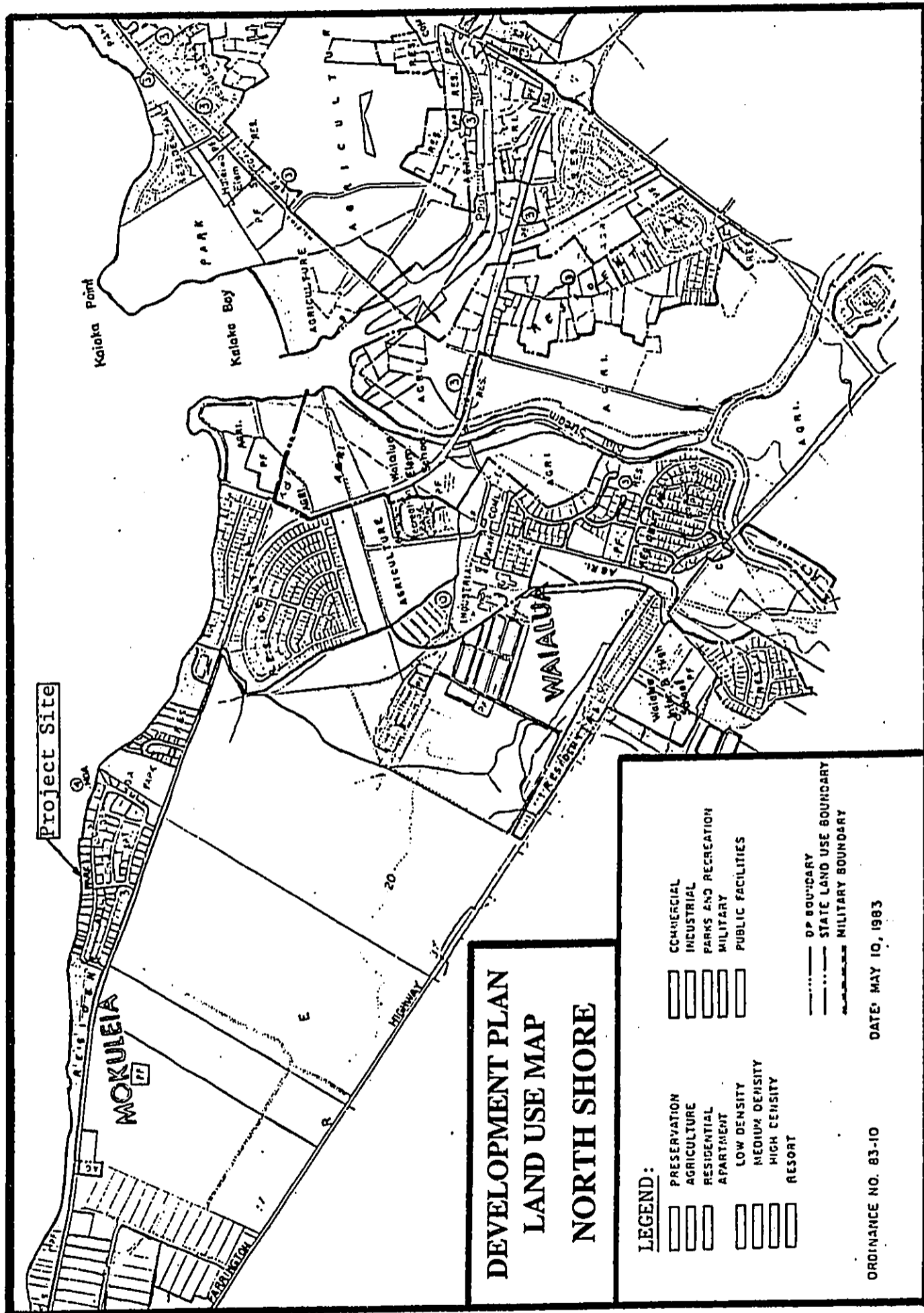
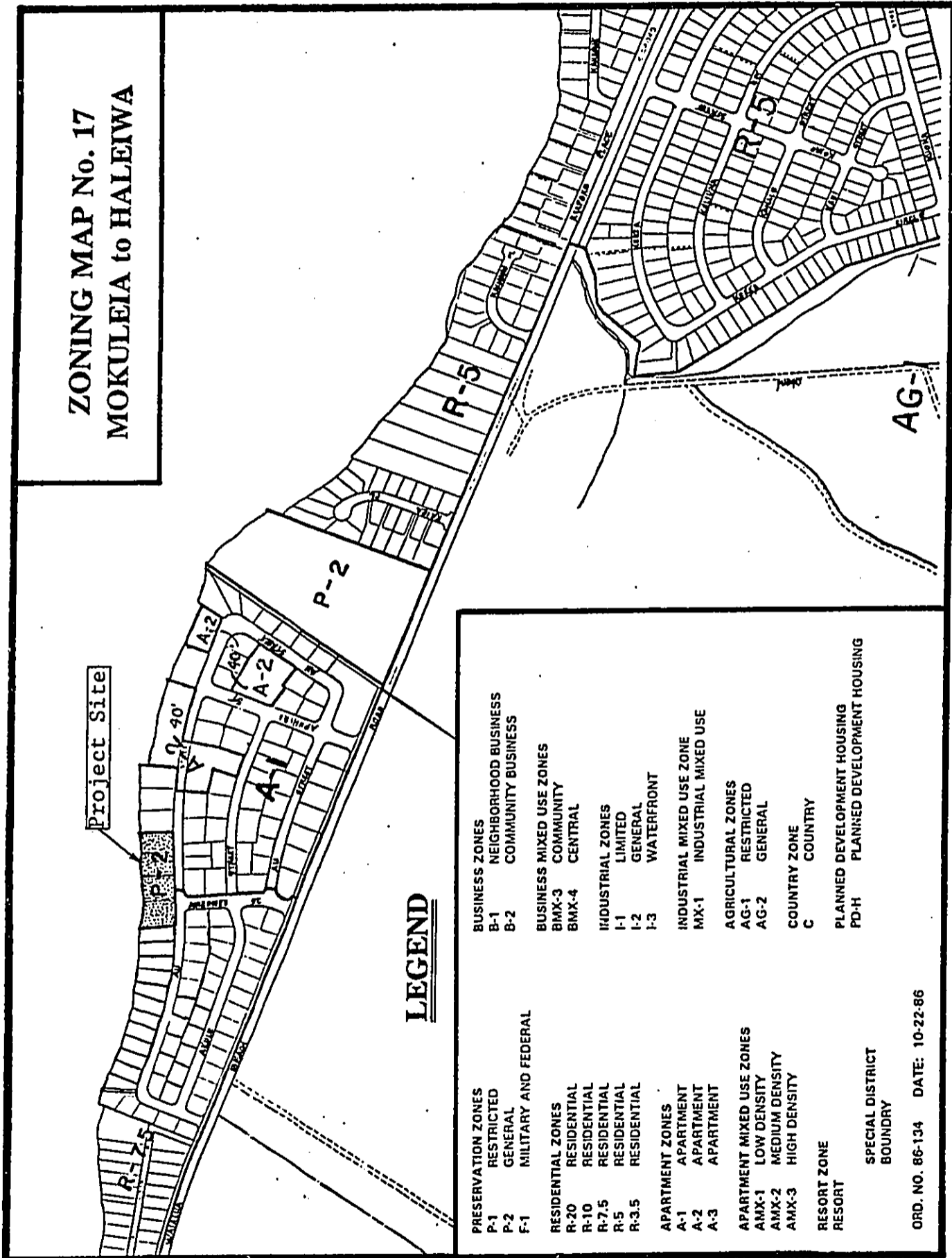


Figure 4

ZONING MAP No. 17  
MOKULEIA to HALEIWA



**LEGEND**

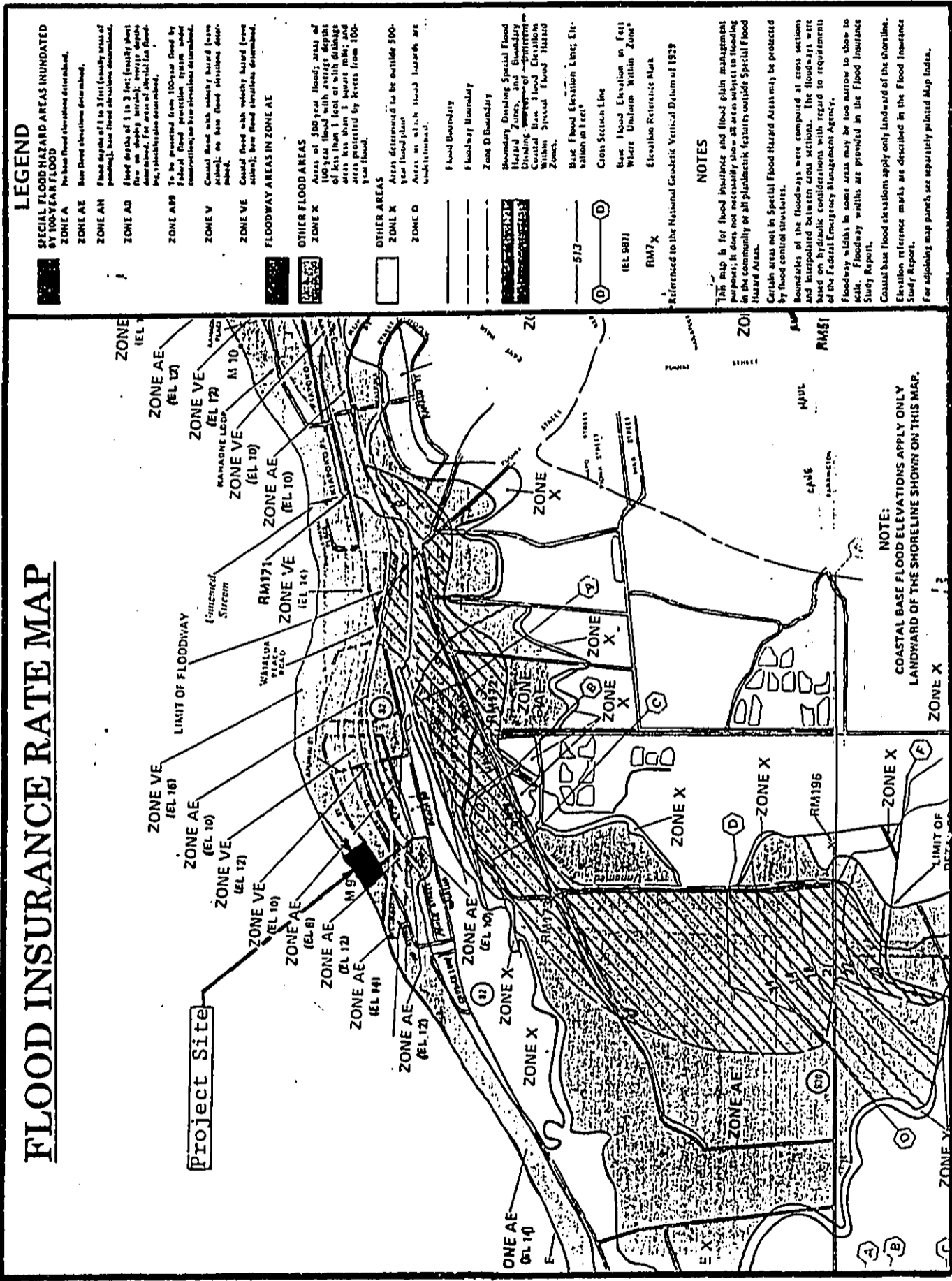
<b>PRESERVATION ZONES</b>	<b>BUSINESS ZONES</b>
P-1 RESTRICTED	B-1 NEIGHBORHOOD BUSINESS
P-2 GENERAL	B-2 COMMUNITY BUSINESS
F-1 MILITARY AND FEDERAL	<b>BUSINESS MIXED USE ZONES</b>
<b>RESIDENTIAL ZONES</b>	BMX-3 COMMUNITY
R-20 RESIDENTIAL	BMX-4 CENTRAL
R-10 RESIDENTIAL	<b>INDUSTRIAL ZONES</b>
R-7.5 RESIDENTIAL	I-1 LIMITED
R-5 RESIDENTIAL	I-2 GENERAL
R-3.5 RESIDENTIAL	I-3 WATERFRONT
<b>APARTMENT ZONES</b>	<b>INDUSTRIAL MIXED USE ZONE</b>
A-1 APARTMENT	MX-1 INDUSTRIAL MIXED USE
A-2 APARTMENT	<b>AGRICULTURAL ZONES</b>
A-3 APARTMENT	AG-1 RESTRICTED
<b>APARTMENT MIXED USE ZONES</b>	AG-2 GENERAL
AMX-1 LOW DENSITY	<b>COUNTRY ZONE</b>
AMX-2 MEDIUM DENSITY	C COUNTRY
AMX-3 HIGH DENSITY	<b>PLANNED DEVELOPMENT HOUSING</b>
<b>RESORT ZONE</b>	PD-H PLANNED DEVELOPMENT HOUSING
RESORT	
<b>SPECIAL DISTRICT</b>	
BOUNDARY	

ORD. NO. 86-134 DATE: 10-22-86

Figure 5



# FLOOD INSURANCE RATE MAP



## LEGEND

### SPECIAL FLOOD HAZARD AREAS INUNDATE BY 100-YEAR FLOOD

- ZONE A**  
No base flood elevations determined.
- ZONE AE**  
Base flood elevations determined.
- ZONE AH**  
Flood depths of 1 to 3 feet (usually areas of ponds); base flood elevations determined.
- ZONE AD**  
Flood depths of 1 to 3 feet (usually areas of flow on steep terrain); average depths determined; for areas of special flood hazard, stability is determined.
- ZONE AP**  
To be protected from 100-year flood by Federal flood protection system under construction; base flood elevations determined.
- ZONE AV**  
Coastal flood with velocity hazard (wave action); base flood elevations determined.
- ZONE VE**  
Coastal flood with velocity hazard (wave action); base flood elevations determined.

### FLOODWAY AREAS IN ZONE AE

- OTHER FLOOD AREAS**
- ZONE X**  
Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with damage potential less than 100-year flood; areas protected by levees from 100-year flood.

- OTHER AREAS**
- ZONE X**  
Areas determined to be outside 500-year flood plain
- ZONE D**  
Areas in which flood hazards are undetermined

- Flood Boundary**
- Floodway Boundary**
- Zone D Boundary**
- Boundary Delineating Special Flood Hazard Zones, and Boundary Delineating Areas of Undetermined Flood Hazard**
- Base Flood Elevation Limit Elevation in Feet**
- Cross Section Line**
- Base Flood Elevation in Feet Where Undrawn Within Zone**
- Elevation Reference Mark**

Referenced to the National Geodetic Vertical Datum of 1929

## NOTES

The map is for flood insurance and flood plain management purposes; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside Special Flood Hazard Areas.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Floodway widths are provided in the Flood Insurance Study Report.

Coastal base flood elevations apply only landward of the shoreline. Elevation reference marks are described in the Flood Insurance Study Report.

For adjoining map panels see separately printed Map Index.

NOTE:  
COASTAL BASE FLOOD ELEVATIONS APPLY ONLY LANDWARD OF THE SHORELINE SHOWN ON THIS MAP.

Figure 6

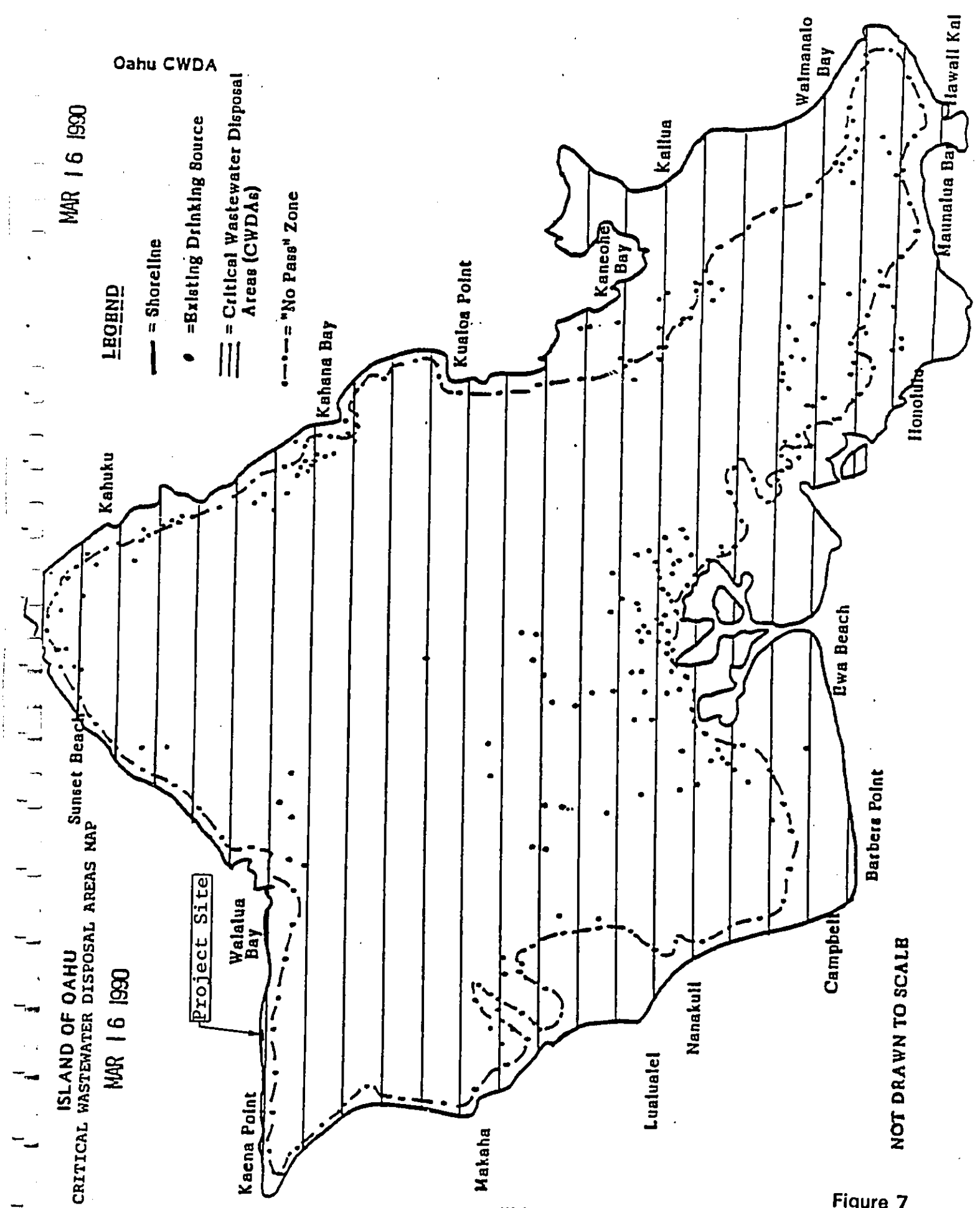


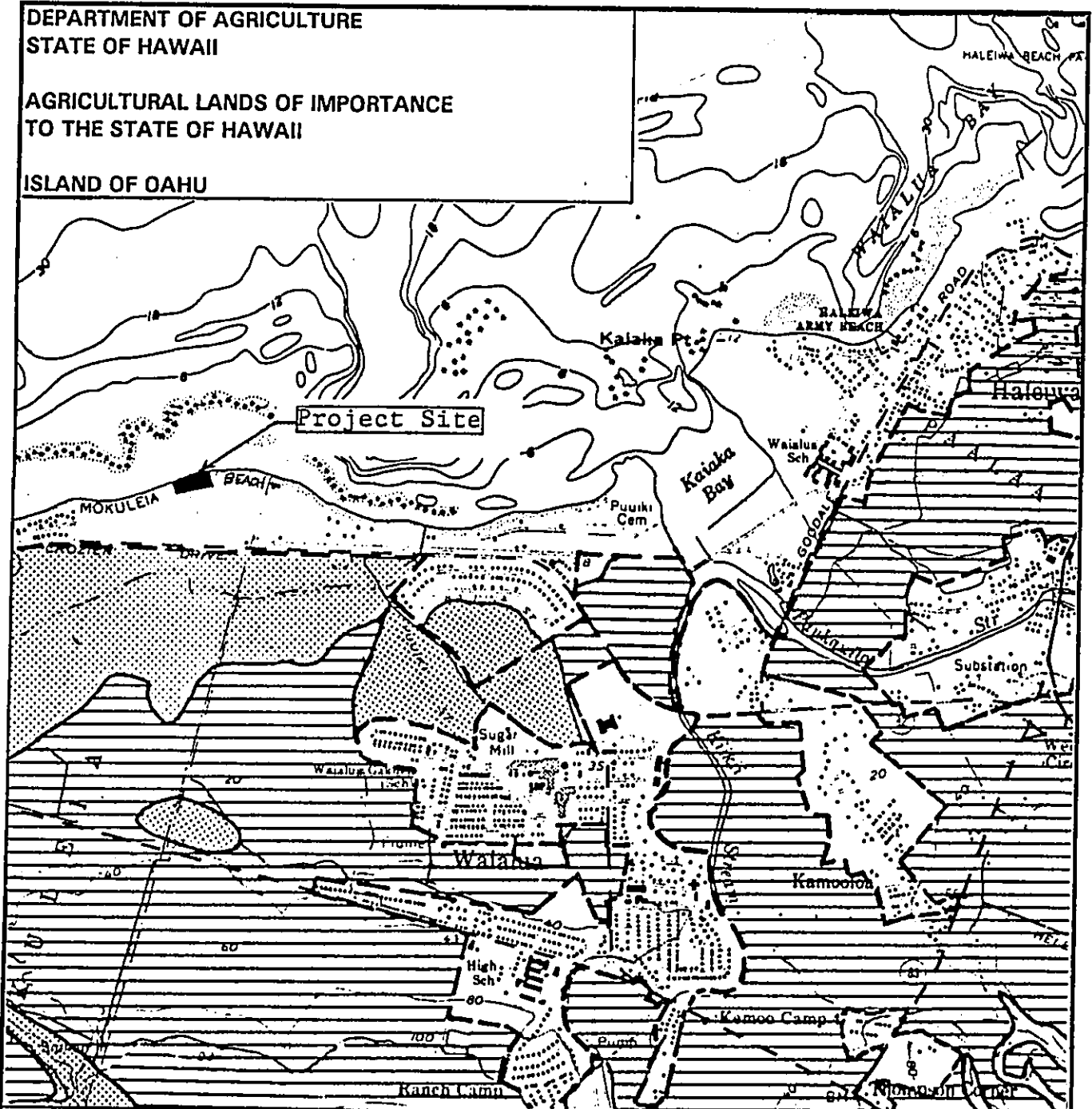
Figure 7

NOT DRAWN TO SCALE

DEPARTMENT OF AGRICULTURE  
STATE OF HAWAII

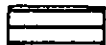
AGRICULTURAL LANDS OF IMPORTANCE  
TO THE STATE OF HAWAII

ISLAND OF OAHU




LEGEND

PRIME AGRICULTURAL LAND:

 - Land which has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed according to modern farming methods.

UNIQUE AGRICULTURAL LAND:

 - Land that has the special combination of soil quality, location, growing season, moisture supply, and is used to produce sustained high quality and or high yields of a specific crop when treated and managed according to modern farming methods.

OTHER IMPORTANT AGRICULTURAL LAND:

 - Land other than Prime or Unique Agricultural Land that is also of state-wide or local importance for agricultural use.

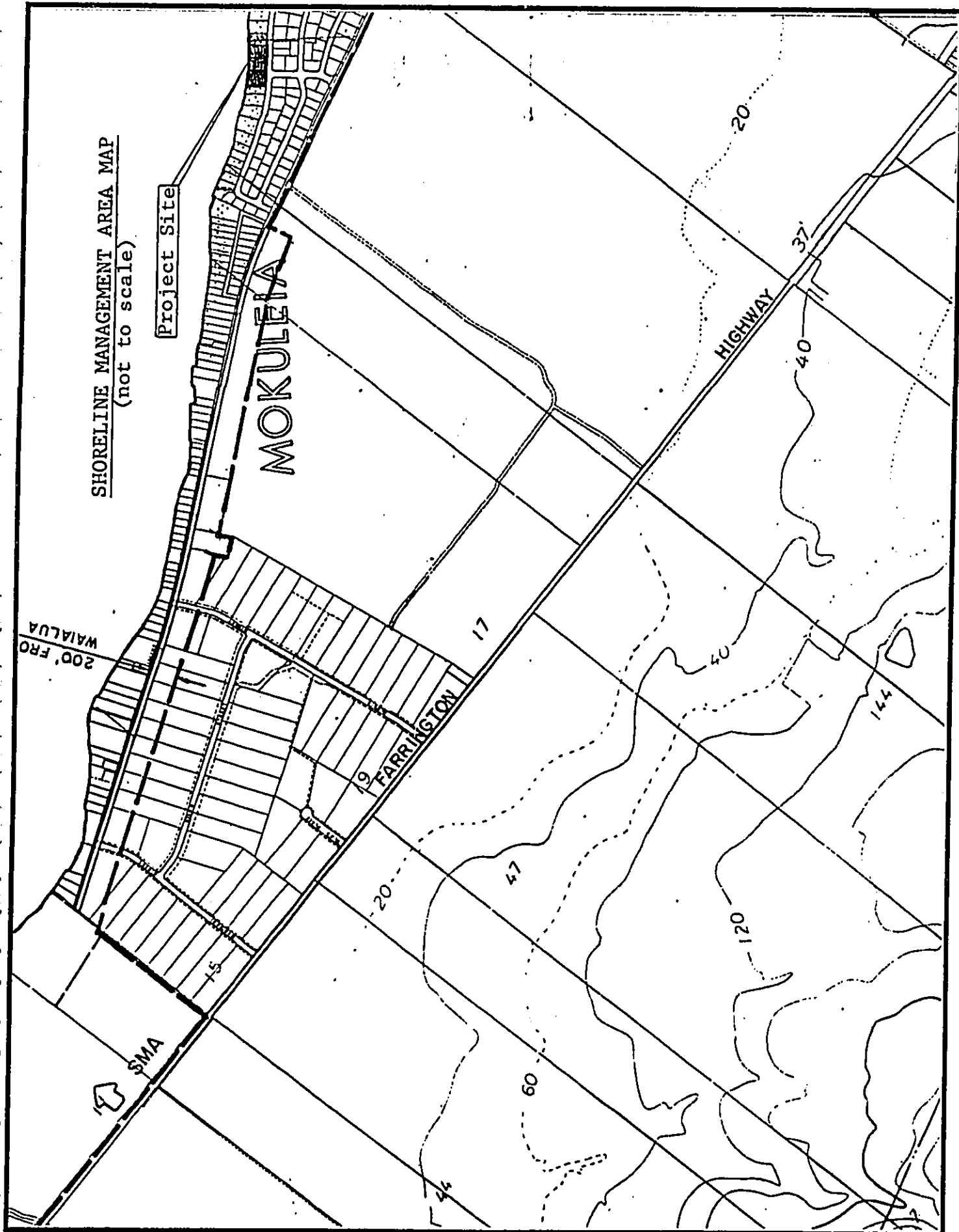
EXISTING URBAN DEVELOPMENT:

 - Land which has been developed for urban type use.

U.S. GOVERNMENT;

 - Land which is currently under the jurisdiction of the U.S. Government.

Figure 8



## B. Existing Conditions

The project site consists of four adjoining land parcels situated on the makai side of Au Street across from the Aweoweo Street and Au Street intersection. All four parcels are presently vacant and has long been used as an unofficial beach park. The site is also a popular fishing and swimming area.

During a past visit, people were seen camping in a tent at the southwest corner of the site. Charcoal remains from a bon fire were seen on the beach at another location. Four trash cans were seen at various locations along the makai side of the site for people to use and, well worn paths caused by both people and vehicles traveling throughout the site were seen.

The topographic map (Appendix B) shows the ground to be relatively flat with banks on both the makai and mauka sides. The elevations range from approximately 7.5 feet to 12.7 feet. There are existing bushes along the makai and east sides and about 6 ironwood trees at the southwest side of the site. The street fronting the site is fully improved with concrete sidewalks, a planter strip, concrete curbs and gutters. Most of the water meter boxes in the sidewalk area are empty. Only one has a water meter. There is a 12 foot wide drainage easement traveling through the site from Au Street to the ocean. The easement contains an existing 36 inch reinforced concrete drain pipe that connects the drainage system in the roadway to the ocean. Ground water was encountered during the soils investigation at an approximate depth of 8.2' below existing grade.

According to discussions with the archaeologist, "No prehistoric sites or features were observed on the surface nor were any prehistoric cultural artifacts observed." However, they did find a cultural deposit that "is most likely associated with fishing or some other form of marine exploitation. The cultural deposit is small in size which suggests that it may have functioned as a temporary habitation site." It is referred to as Site 50-80-04-4657 (See Appendix F) and "measures 8.4m by 8.5m and extends from 41 to 64 centimeters below surface (cmbs). It consists of a cultural layer that contains marine shell midden and a basalt flake." "There is a 75 percent probability that the cultural deposit ... dates to the period between AD 1440-1700 at two standard deviations. There is a high probability, then, that this deposit is of prehistoric origin."

### **C. Technical Characteristics**

The project consists of constructing the proposed Aweoweo Beach Park. The construction work will include, but not be limited to (See Appendix A):

1. a new comfort station
2. a new driveway and parking area for the custodial vehicles
2. a new 18" high vehicular barrier wall
3. site grading
4. new picnic tables, benches, refuse disposal cans, charcoal disposal areas, water fountain, and shower tree
5. new grassing and landscape plantings
6. new septic tank(s) and absorption field(s) for sewage handling and effluent disposal
7. new sprinkler and irrigation system
8. new concrete walkways

The new improvements described above, and as shown on the masterplan in Appendix A, will be conforming to the Americans with Disabilities Act Accessibility Guidelines (ADAAG) so that the park can be used by disabled persons. This includes, but is not limited to, accessible routes on the site to access bathrooms, picnic tables, drinking fountains, and parking. Preliminary construction plans as shown in Appendix C will be submitted to the Commission on Persons with Disabilities for their technical assistance and review to ascertain the project will conform to ADAAG. The Commission will issue a Final Document Review letter once the project conforms to ADAAG.

The proposed project will also be designed to meet City standards. This includes the construction work for the new driveway as well as other improvements within the City right-of-way. See Exhibit 2 in Appendix C. Construction plans will be submitted to various city agencies, state agencies and utility companies for their reviews, comments, and approvals.

The 18" high vehicular barrier wall will serve as a deterrent against people driving directly onto the new park. Grading for the project will be kept to a minimum but yet enough to make the site usable for park activities such as picnics, frisbee throwing, and ball playing as well as provide an access to the beach enabling the public to enjoy the beach for sunbathing, swimming, diving, fishing, spearing, and surfing activities. The grading work for the project will be performed in such a manner so that the volumes of cut and fill are more or less balanced. A tentative grading plan for the new park is provided as Exhibit 3 in

Appendix C. The new landscape plantings will serve to enhance the site as well as create buffered areas for use by various groups and individuals. It shall also serve to screen the neighboring lots from the park's users and activities.

Site drainage will be by natural infiltration rather than concentrating the flows for collection. According to the soils report (Appendix D), the underlying soils beneath the site is Jaucas sand. The Jaucas series consist of excessively drained, calcareous soils. Permeability is rapid and runoff is very slow to slow.

The City's Department of Wastewater Management has confirmed "there are no municipal wastewater facilities in the vicinity of the proposed project site. The State Department of Health has jurisdiction over the disposal of wastewater from this facility." Sewage will be handled by means of a wastewater system comprised of septic tank(s), and soil absorption field(s). This method was discussed with the Department of Health and they concurred with its use. The wastewater system will be located as far inland as possible. The use of low-flow fixtures and urinals that do not constantly drain water will be a requirement. Seepage pits will not be allowed because of the low ground elevation, shallow water table, and proximity to the shoreline. The wastewater plans will be conforming to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems" and will be submitted to the State Department of Health Wastewater Branch for their approval prior to construction. The contractor will be held responsible for complying with all applicable Department of Health Administrative Rules during the construction of the IWS system.

Domestic water for the new park will be off of an existing 8-inch waterline in Au Street fronting the site. There is an existing water meter and lateral that could serve the site but the sizes may or may not be compatible with the needs of the new park. If the sizes are found to be too small, the existing meter would be removed and the lateral cut and plugged at the main. A new larger sized lateral and meter would then be installed at another location that is better suited for the comfort station location. Plans for the new lateral service and meter will be submitted to the Board of Water Supply for their review and approval prior to the construction work. The Board of Water Supply says the off-site water system in the vicinity of the project is presently adequate to accommodate the proposed beach park. Their records indicate there are no Board of Water Supply meters presently serving the project site. The "as-built" construction plans for the Mokuleia Beach Subdivision indicate each of the four parcels do have

one existing water lateral. The Board of Water Supply also says the availability of domestic water will be confirmed when the Building Permit Application is submitted to them for their review and approval. If water is made available to the project, the City's Department of Parks & Recreation will be required to pay the Board of Water Supply's water system facilities charges for source-transmission and daily storage.

There already is an existing fire hydrant in the sidewalk area immediately fronting the new park site for fire protection. The Fire Department foresees no adverse impacts on Fire Department facilities or services. As for the Police Department, they note that short-term air quality, noise, and traffic impacts associated with construction will be mitigated and they are not opposed to the project.

Electrical services for the new comfort station will be off of the overhead services in the roadway fronting the site. The overhead services fronting the new comfort station are located across the street. These utility services cross the street at approximately mid frontage and is in the sidewalk area immediately fronting the site for the west half of the site.

According to the City's Department of Land Utilization, off-street parking is not needed for this project because the project does not have any recreational facilities such as tennis courts. The comfort station is not considered a recreational facility but a bathroom. Therefore, vehicular parking for the new park users will be along Au and Aweoweo Streets or on any of the other neighboring streets in the area. The North Shore Neighborhood Board No. 27 at its July 26, 1994 meeting has also unanimously recommended that off-street parking be not required because of the small size of the park. See Appendix G.

The construction work for this new beach park project will be expected to be in accordance with approved construction plans and specifications.

**D. Economic and Social Characteristics**

The new park project is estimated to be about \$500,000.00 dollars.

The construction period should be between 9 to 10 months notwithstanding inclement weather and/or other unexpected conditions beyond the project's control.



The project's construction work is not expected to result in physical disturbances to adjoining properties. Except for the work in the Au Street Right of Way, all other work for the proposed beach park will be entirely within the project site.

Once completed, the new beach park will enhance the community and serve as another beach park where people can enjoy Hawaii's good weather, beaches, other outdoor activities, and the coastal environment.

#### E. Environmental Characteristics

Construction work for the new park should not cause any major disturbances to the natural features in the area. Most of the work will be in the four adjoining vacant parcels along the makai side of Au Street or in Au Street itself.

Except for the new landscape plantings, much the work for the new beach park is not expected to permanently affect any coastal views from any vantage point. Conversely, once the construction work has been completed, and the landscape plantings become established, the new beach park will enhance the environment with more trees and landscape plantings. As for the comfort station, the highest point of the roof will be approximately 13.5 feet above grade. The comfort station will be designed to meet City and State standards and should not have a significant negative view impact. The Aweoweo and Au Streets intersection is almost directly in front of it. Hence the comfort station should not be in the direct line of sight from any of the residential houses looking makai.

## **IV. PROJECT IMPACTS**

### **A. Short Term or Construction Related Impacts**

#### **1. Noise**

Noise from construction equipment and the contractor's personnel will occur during the construction of the new beach park. The contractor will be expected to keep noise levels well within that permitted by Title 11 of the Department of Health Administrative Rules, Chapters 42 and 43 during construction. If the noise generated exceeds the permitted levels, and the Contractor cannot reasonably reduce such noise levels, the Contractor will be expected to obtain the necessary noise permits prior to commencing with the work. Compliance with noise levels and obtaining permits for this work is vital because the new beach park project is surrounded by houses and apartment buildings.

Construction work will be allowed only during the daytime hours, and no work shall be performed at any time on Saturdays, Sundays, and Holidays without prior notice to, and receipt of approvals from, the Chief Engineer, City and County of Honolulu.

#### **2. Water and Air**

Nearby water bodies and air space will be affected by the new park's construction. However, the contractor is expected to keep the project site and surrounding areas free from dust nuisance. Also, the plans will indicate for the contractor to exercise care to prevent foreign and toxic materials from entering into the ocean and that filter material, if needed will be used. The work will also be expected to conform to the following Chapters of Title 11 of the State Department of Health Administrative Rules,

<u>Chapter</u>	<u>Title</u>
54	Water Quality Standards
55	Water Pollution Control
59	Ambient Air Quality Standards
60	Air Pollution Control

### 3. Odors

Odors are not expected during the construction work since the work doesn't involve cleaning out or exposing any existing cesspools or individual wastewater system tanks.

### 4. Traffic

Aside from the new driveway construction, and the possible installation of a new water lateral in Au Street, the beach park project does not anticipate any other roadway improvements. Traffic flow will increase temporarily during the construction period because of construction equipment and activity to and from, and on and off the site. Since the beach park site does not front any major boulevard or highway, and is in a residential area, the traffic will impact primarily the nearby residential areas during daytime hours and therefore, the impact should be minimal. The State Department of Transportation also finds no significant impact on their highway facilities nearby.

### 5. Historical

The archaeological investigation found a cultural deposit midway in the northeastern half of the site. The new comfort station and most of the improvements will be located on the southwestern half of the site. There will be primarily landscape plantings on the northeastern half of the new park site. The archaeological report finds the project, being a development of a beach park where, "the majority of the work involves surface grubbing, the likelihood of disturbing the cultural deposit is minimal."

### B. Long Term Impacts

There may be some periodic noise impacts on the surrounding residential community from the new beach park. Such impacts however, can be minimized by siting the improvements and locating the activity areas to take advantage of the new landscape plantings where the plantings, hedges, and shrubs can act as buffers to dampen such noise from the neighboring properties. The park's open area, picnic tables, trees, hedges, and other features can be further placed to develop a park where the noise can be kept away from the sides of the park where there are existing houses.

The park's layout and design must also consider litter. Fourteen trash containers are planned throughout the park area in an attempt to prevent the park from becoming a littered park. The trash containers

need to be user friendly and should keep winds from blowing the collected waste back out of it. Four trash containers will be placed along the beach, two at each picnic area (4 picnic areas total) and two by the comfort station. The Department of Health, recommends strongly that sufficient park staff be budgeted so that these trash containers can be emptied on a timely basis, particularly during the weekends and holidays.

The park is anticipated to have a minimal amount of insect infestation on the landscaping since the project's location is in close proximity to the ocean. The salt in the air reduces the chance of having large amounts of infestation on the park's landscaping. Therefore, the amount of pesticide spraying on the park's landscaping is anticipated to be minimal for the project. Any pesticide and/or herbicide spray that is carried in the air off the project site is expected to be minimal and should dissipate in the air before it reaches the ocean. Also, since the wind normally blows from the ocean onto the land, the amount of pesticide and/or herbicide spray leaving the site toward the ocean is further reduced. The landscaping maintenance of the park will be in accordance with the Department of Parks and Recreation maintenance program.

Another long term impact is the development of a usable beach park from four separate vacant parcels for the public to use and enjoy. The new park will serve as another playground and beach access for the people and opens another of Hawaii's beautiful beaches to the public.

## **V. ALTERNATIVES CONSIDERED**

### **A. No Action**

No Action is not considered because of,

1. "a pressing and immediate need to acquire as much of the remaining beach front land because of sky-rocketing costs."
2. "the rapid growth of the district in which the parcels are located has precipitated a need for more parks and recreational services."
3. "the strong community support for priority acquisition of these four parcels for beach access and as a community playground in a high density subdivision which has no playground"
4. "a continuing need for additional new recreational facilities in Mokuleia to service community needs."
5. an attempt "to preserve a popular fishing and swimming area and to develop the Aweoweo Beach park there."

### **B. Development of Aweoweo Beach Park**

Development of the Aweoweo Beach Park was considered and justified based on the same reasons for not considering "No Action" (See also Appendix G).

## **VI. PROPOSED MITIGATION MEASURES**

### **A. Description**

Section VI describes the mitigating measures for short term impacts generally associated with the project's construction work. Except for noise and litter which were discussed earlier, no negative long term impacts are expected from this beach park project. Hence, no mitigating measures for long term impacts are mentioned in this document.

1. Noise - The construction work will increase the noise level in the immediate area temporarily and, ultimately affect occupants living in nearby houses and apartments. Noise sources will be from various pieces of equipment needed for the work activities. Such equipment would be the heavy vehicles for grading the site, installing the landscape plantings, constructing the infrastructure for the project, and building the new comfort station.

To mitigate the adverse noise impacts from the work activities, the contractor will be responsible for properly maintaining and muffling all of the equipment to keep noise levels at a minimum during the construction period. If noise levels must exceed the allowable levels as stated under Title 11 of the Administrative Rules, Department of Health, Chapter 43, Community Noise Control for Oahu, the contractor will be expected to obtain the necessary noise permits prior to starting the work. The contractor's heavy vehicles must also comply fully with Title 11 of the Administrative Rules, Department of Health, Chapter 42, Vehicular Noise Control for Oahu.

2. Air Quality - The contractor's work will generate some dust that may impact temporarily the ambient air quality in the immediate area. In keeping with Title 11 of the State Department of Health's Chapters 59 and 60, and applicable City and County of Honolulu Ordinances, the contractor will be required to take the necessary measures to keep airborne pollutants to a minimum. Such measures would include the emissions from the various construction equipment. The adverse impact from equipment emissions can be controlled and kept to a minimum through proper maintenance programs.

If needed, the Contractor will be expected to also erect temporary dust screens along and/or around the site perimeters to further keep dust problems to surrounding homes and apartments to a minimum.

3. Water Quality - The contractor will be expected to control his lot grading operations to keep erosion and soil deposits from entering and impacting on the water quality of the nearby ocean. All grading work will be performed to meet Title 11 of the Department of Health Administrative Rules, Chapters 54 and 55, and the current Grading Ordinance for the City and County of Honolulu.
4. Erosion Control - Erosion control measures during the construction period shall be according to the approved construction documents. The construction documents will be prepared during the project's design phase and will be submitted to the various City agencies for approval.

The following items would be reflected in the construction documents for the project,

- a. The site is located in an area designated as Jaucas Sand, 0 to 15 percent slopes. The Jaucas Sand series comprise of excessively drained, calcareous soils that occur as narrow strips on coastal plains adjacent to the ocean. They developed in wind and water deposited sand from coral and seashells. They are nearly level to strongly sloping. 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.
  - b. The contractor will be expected to keep the construction area clean and contain all activities to the work area.
  - c. A temporary erosion control measure would be to plant the temporary ground cover immediately after the clearing, grubbing and grading work for all exposed areas that are not being used for storage or parking. The Contractor need not install a temporary irrigation system provided he maintains and cares for the growth of the temporary plantings.
  - d. A permanent erosion control measure would be to plant the permanent ground cover at all areas not covered by pavements and walks as soon as grading for those areas are completed.
5. Traffic - Trucks, heavy equipment, and other construction related vehicles will be using the existing roads to access, import, place and haul away material from the site. Local traffic along the construction route may occasionally encounter some inconveniences. The contractor will be required to keep such inconveniences to a minimum.

He will also be expected to be responsible for and provide the necessary traffic controls and precautions to maintain traffic safety on the roads bordering, near to, as well as at the project site.

6. Historical - The contractor will be required to provide the necessary measures to preserve the small cultural layer that was found during the archaeological investigation throughout all phases of his work.

The State Historic Preservation Division has stated that the buried cultural deposit shall not be disturbed during beach park construction. To help achieve this goal, the Contractor shall,

- a. follow the construction plans that were reviewed and approved by the State Historic Preservation Division.
- b. identify and mark the location of the cultural deposit prior to construction.
- c. brief construction workers on the presence of the deposit and the need to ensure its preservation so that routine construction activities do not inadvertently disturb the deposit.

Also, the project will be conforming to the recommendations contained in the Archaeological Report (See Appendix F).

7. Flora and Fauna - A review of the area by the Nature Conservancy of Hawaii reveals the site has no rare or endangered species of flora and/or fauna. However, the Hawaiian Stilt has been recorded in the general vicinity as shown on the Heritage Haleiwa Quadrangle Map as reference #158 which happens to be off of, and some distance from, the proposed Aweoweo Park site (See Appendix E).

The plant types encountered on the site were basically ironwood trees, naupaka, and some small shrubbery commonly found along the coastal areas of the island. Since the project is the development of a new beach park, new landscape plantings will be added to further enhance the site with more trees, hedges, grass, and shrubbery.

8. Economic - A short term economic impact would be providing jobs to local construction personnel. Local suppliers of material, and retail businesses will also be impacted and they would benefit through a multiplier effect from the increased construction activity in the area.



9. **Public Health and Safety** - The contractor will be expected to provide the necessary measures to assure public health and safety during the entire construction period.

The construction area is to be properly secured during all non-working hours with signs, barricades, fences, and other devices.

10. **Drainage Runoff/Pollutant Discharges/Best Management Practices** - There exists a potential impact of storm water discharge as associated with the construction activities on the water quality of the ocean. The contractor will be required to provide the necessary measures to prevent runoff during construction from entering directly to the ocean. Such measures would be a part of the erosion control and best management practices notes. The measures would control sediment-laden runoff from leaving the site. The measures would be prepared during the design stage of the work and submitted to City agencies for approval. The contractor will be expected to follow the approved measures during construction. Such measures could include sediment traps or silt fences for off-site point(s) of discharge, stabilized construction entrance for ingress and egress, and perimeter runoff control.

## VII. DETERMINATION

This assessment shows there should not be any significant negative effect on the surrounding environment by the work for this project and that the preparation of an Environmental Impact Statement should not be needed.

Any impacts experienced would be on a short term basis and should not be significant. Such impacts can be mitigated through the implementation of various measures and procedures to keep the impacts to a minimum. Many of the measures and/or procedures would either be developed during the design phase of the work or are already discussed in various chapters of established rules and regulations or ordinances.

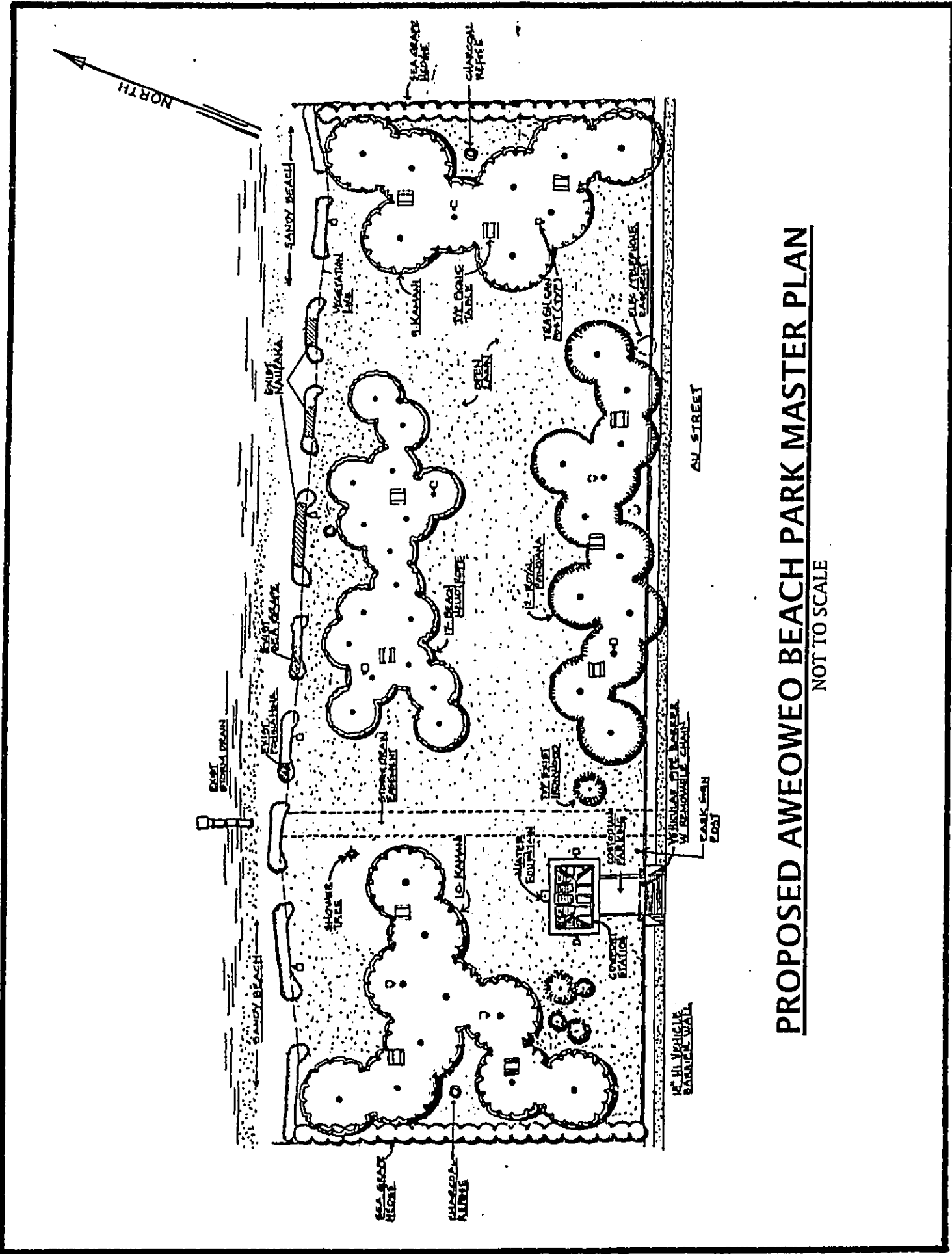
Hence, a negative declaration for the new beach park is issued.

## **VIII. FINDINGS & REASONS SUPPORTING THE DETERMINATION**

1. No rare or endangered species of flora and fauna was found in the project area.
2. Except for temporary construction impacts, the proposed project will not have any significant long term adverse effects on the environment.
3. "the rapid growth of the district in which the parcels are located has precipitated a need for more parks and recreational services."
4. "the strong community support for priority acquisition of these four parcels for beach access and as a community playground in a high density subdivision which has no playground"
5. The project site "has been long been used as an unofficial beach park and is a popular fishing and swimming area".
6. "a continuing need for additional new recreational facilities in Mokuleia to service community needs."
7. An attempt "to preserve a popular fishing and swimming area and to develop the Aweoweo Beach park there."
8. "the proposed park site is currently designated as Park on the North Shore Development Plan Land Use Map."
9. "the proposed park site is currently zoned P-2 General Preservation District" and "the Land Use Ordinance (LUO) permits public park use in the P-2 General Preservation District."
10. The proposed site is currently vacant and will provide a beach access.
11. The proposed site is not considered important for agriculture land.
12. The major benefit to be derived from the work for this project is the creation of a beautiful beach park. This will have a positive long term impact on the surrounding environment as it will maintain the open space and the new landscape plantings will enhance the environment. The new beach park will have more flora than what it is presently there. Moreover, the project will provide another park and beach access for the community and the people of Hawaii to use.

*APPENDIX A*

*PROPOSED AWEOWEO BEACH PARK*  
*MASTER PLAN*

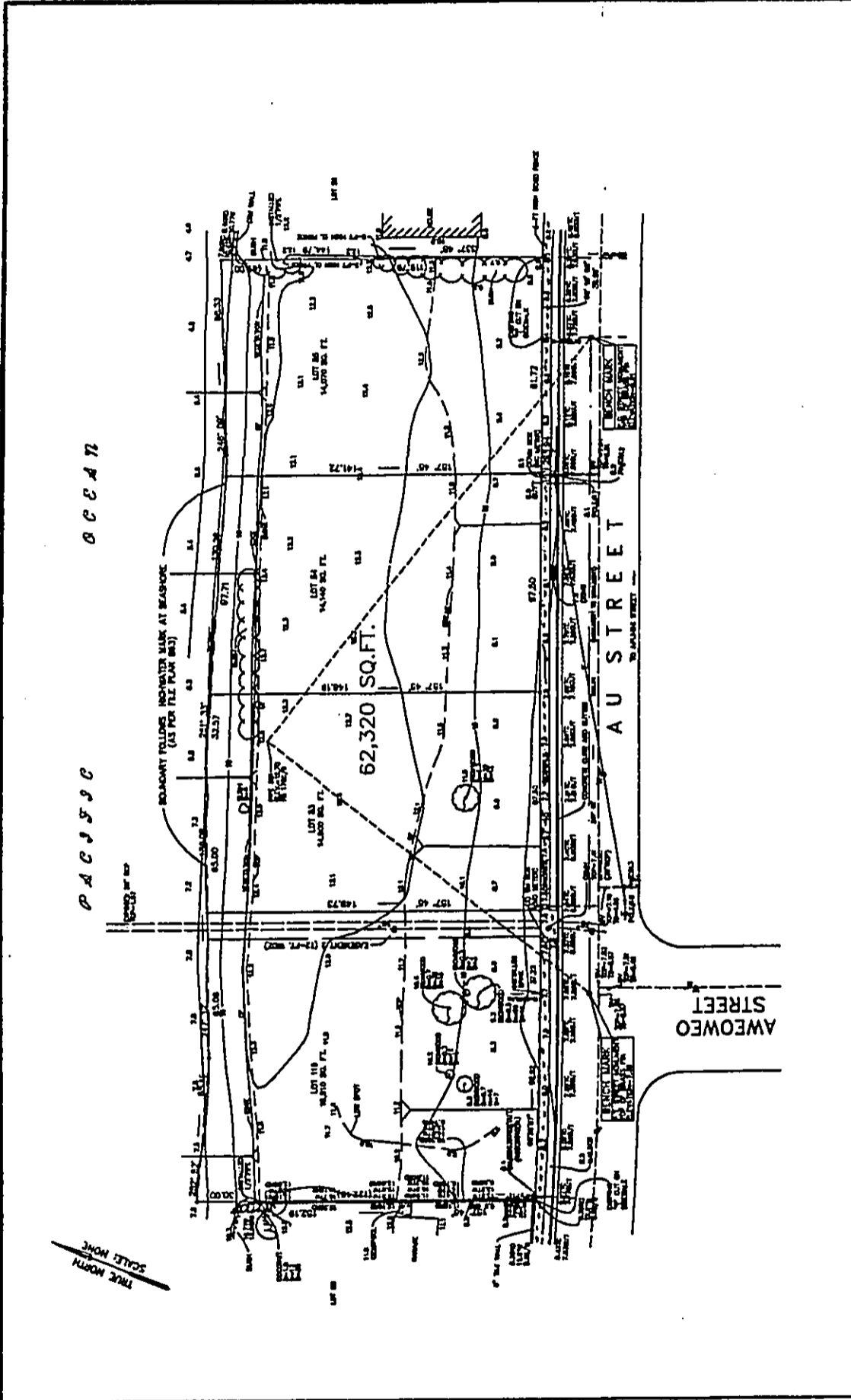


**PROPOSED AWEOWEO BEACH PARK MASTER PLAN**

NOT TO SCALE

*APPENDIX B*

*EXISTING TOPOGRAPHIC*  
*MAP*



# EXISTING SITE

Scale: None

NOTE:  
 THIS PLAN IS A PRELIMINARY PLAN AND IS NOT A GUARANTEE OF ACCURACY.  
 THE ACCURACY OF THE INFORMATION CONTAINED HEREIN IS NOT GUARANTEED.  
 THE CITY ENGINEER HAS REVIEWED THIS PLAN AND HAS FOUND IT TO BE IN ACCORDANCE WITH THE CITY ORDINANCES AND THE STATE STATUTES.  
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PROJECT NO.	
DATE	
DESIGNED BY	
CHECKED BY	
APPROVED BY	
TITLE	EXISTING SITE
SCALE	None
DATE	
PROJECT NO.	
DATE	
DESIGNED BY	
CHECKED BY	
APPROVED BY	
TITLE	EXISTING SITE
SCALE	None
DATE	

DEPARTMENT OF PARKS & RECREATION  
 CITY & COUNTY OF HONOLULU  
 FACILITIES DEVELOPMENT DIVISION  
 SITE IMPROVEMENTS & COMFORT STATION  
 AT  
 AWEOWED BEACH PARK  
 PLAN

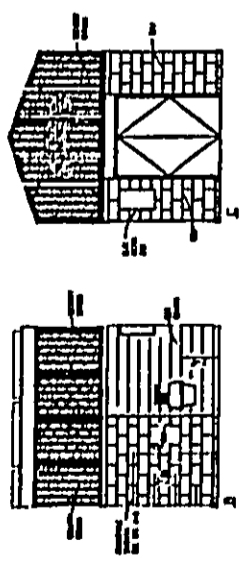
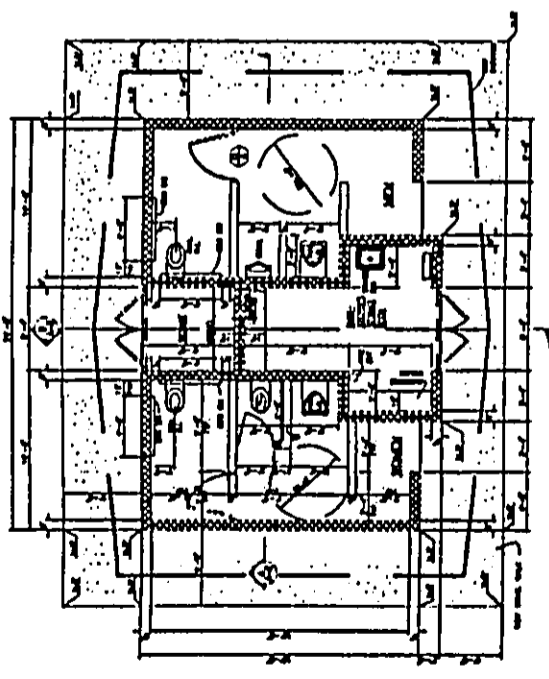
*APPENDIX C*

*PRELIMINARY CONSTRUCTION*

*PLANS*

*(SUBJECT TO CHANGE)*





SEE SEE 10 FOR SPONGE SANDSTONE 12 AND 14.  
PARKKEEPER'S STORAGE ROOM

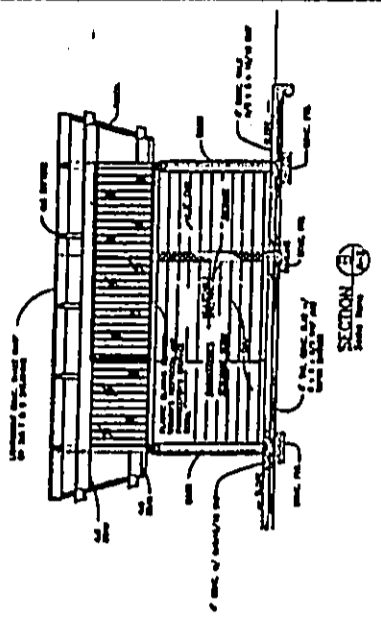
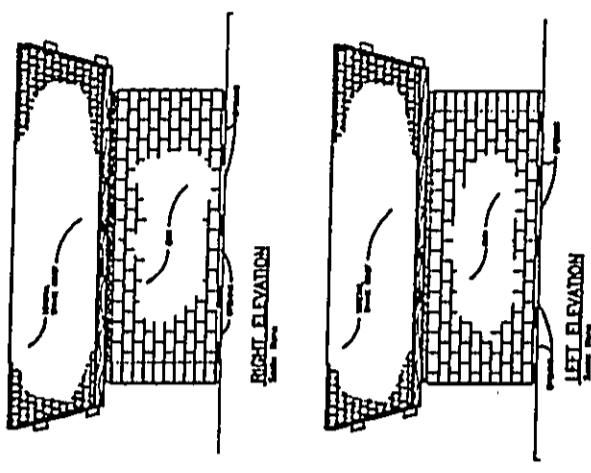
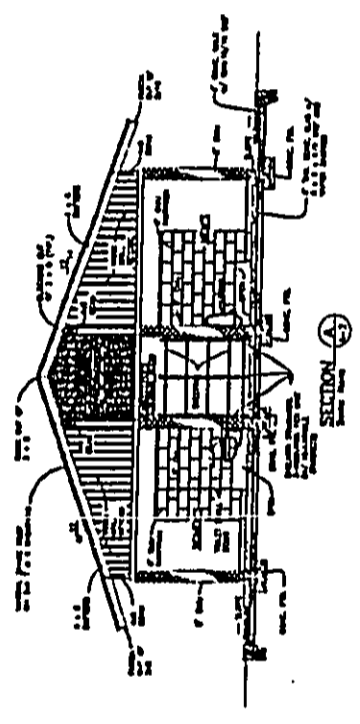
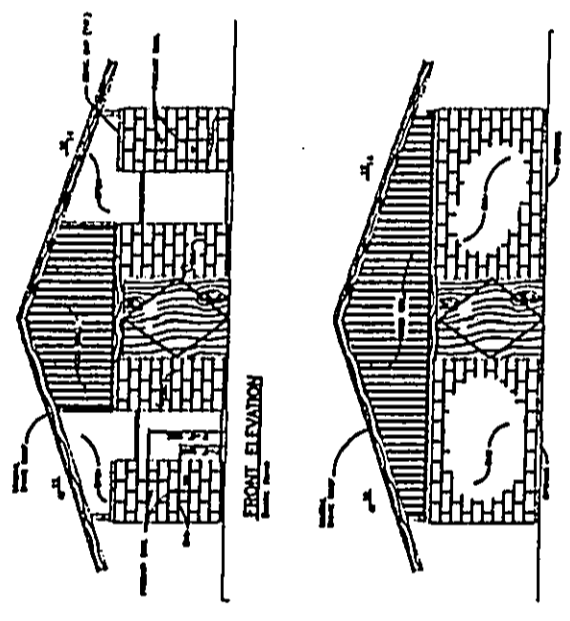
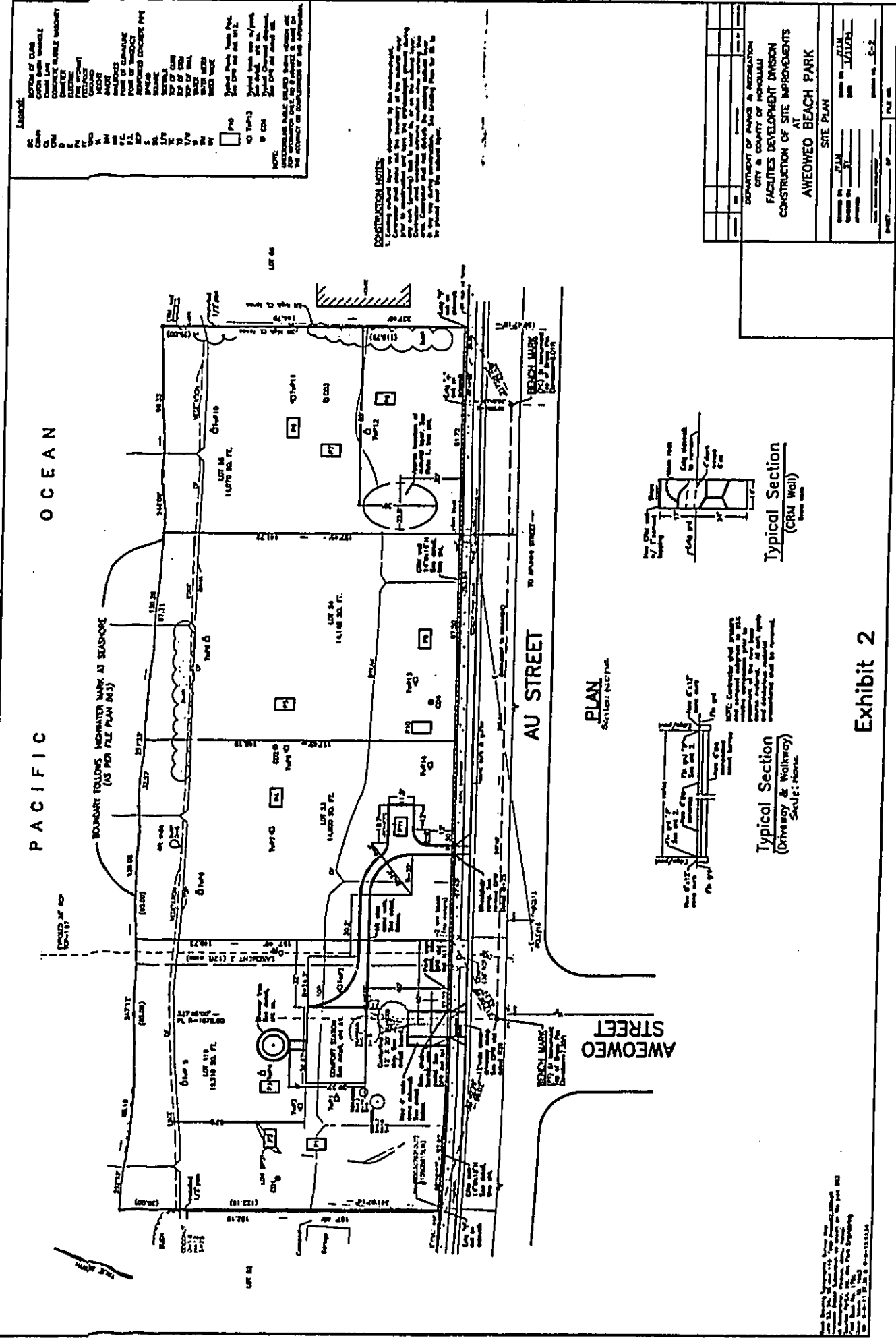


Exhibit 1  
Aweoweo Beach Park  
Proposed Comfort Station  
Plan & Elevation Views

- LEGEND:**
- 1. CENTER LINE
  - 2. CONSTRUCTION LIMITS
  - 3. CONCRETE FINISH
  - 4. CONCRETE
  - 5. ASPHALT
  - 6. GRAVEL
  - 7. SAND
  - 8. GRAVELED
  - 9. GRANITE
  - 10. PAVING
  - 11. ASPHALT CONCRETE
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**CONSTRUCTION NOTES:**

1. All construction shall be in accordance with the specifications.
2. All materials shall be tested and approved by the Engineer.
3. All work shall be done in accordance with the approved plans.
4. All work shall be done in accordance with the approved specifications.
5. All work shall be done in accordance with the approved standards.
6. All work shall be done in accordance with the approved methods.
7. All work shall be done in accordance with the approved procedures.
8. All work shall be done in accordance with the approved practices.
9. All work shall be done in accordance with the approved techniques.
10. All work shall be done in accordance with the approved processes.



**SITE PLAN**

DEPARTMENT OF PARKS & RECREATION  
CITY & COUNTY OF HONOLULU  
FACILITIES DEVELOPMENT DIVISION  
CONSTRUCTION OF SITE IMPROVEMENTS  
AT  
**AWEWEO BEACH PARK**

PLANNED BY: JLM  
DESIGNED BY: JLM  
DATE: 1/27/68  
SCALE: AS SHOWN

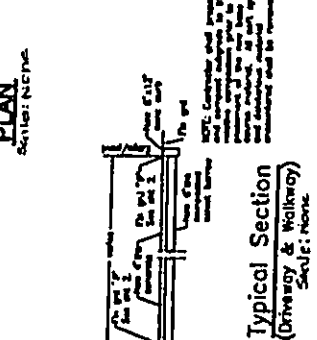


Exhibit 2



*APPENDIX D*

*SOILS REPORT*

REPORT  
SOILS INVESTIGATION

PROPOSED AWEOWEO BEACH PARK COMFORT STATION  
AU STREET  
MOKULEIA, OAHU, HAWAII  
TMK: 6-8-11: 37 & 38, 6-8-12: 53 & 54

for

STANLEY YIM AND ASSOCIATES, INC.

Project No. H-2138-F  
March 15, 1993



99-1255 WAIUA PLACE  
AIEA, HAWAII 96701  
PHONE: (808) 488-0433  
FAX: (808) 488-9535

360 PAPA PLACE, #102  
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99-1255 WAIUA PLACE, AIEA, HAWAII 96701

(808) 488-0433 FAX (808) 488-9535

March 15, 1993  
Project No. H-2138-F

Stanley Yim and Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

RECEIVED  
MAR 15 1993

STANLEY YIM & ASSOC., INC.  
Time 4:30 pm

Gentlemen:

The attached report presents the results of a soils investigation at the site of the proposed comfort station to be located at the Aweoweo Beach Park in Mokuleia, Oahu, Hawaii; TMK: 6-8-11: 37, 38 and 6-8-12: 53, 54.

A summary of the findings is as follows:

- 1) The subsurface condition at the site was explored by drilling one (1) test boring to a depth of 25 feet below existing grade. In addition to the test boring, three (3) percolation test borings were drilled and tested to depths of 3.5 to 4.5 feet below existing grade.  
  
At Boring 1, fill consisting of light brown, slightly moist, moderately dense SAND with debris (roots and glass) was found to a depth of 1.0 feet followed by tan/white, slightly moist to saturated, moderately dense to loose SAND to a depth of 10 feet. Probing was done below 10.0 feet and disclosed loose to moderately dense soil consistency to the final depth of the boring at 25 feet.
- 2) Groundwater was encountered at a depth of 8.2 feet below existing grade.
- 3) Three (3) field percolation tests were performed at the site in order to determine the percolation rates of the underlying soils for design of leach fields. The percolation rates varied from 0.037 to 0.047 minutes per inch. Based on the percolation test values, it is concluded that leach fields may be used for disposal of septic sewage effluent. Special considerations will be required in the design and construction of the leach field due to the rapid percolation rates.
- 4) Spread footings bearing on the on-site natural SAND or on properly compacted fill may be used to support the proposed structure.

Stanley Yim and Associates, Inc.  
March 15, 1993  
Page Two

Details of the findings and recommendations are presented in the attached report.

This investigation was made in accordance with generally accepted engineering procedures and included such field and laboratory tests considered necessary for the project. In the opinion of the undersigned, the accompanying report has been substantiated by mathematical data in conformity with generally accepted engineering principles and presents fairly the design information requested by your organization. No other warranty is either expressed or given.

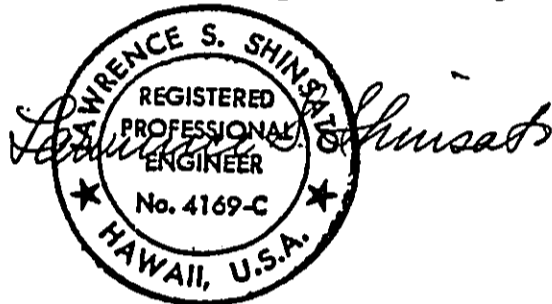
Respectfully submitted,

SOILS INTERNATIONAL

*Lawrence S. Shinsato*

Lawrence S. Shinsato, P.E.  
Vice-President

LSS:ls:kk



This work was prepared by me  
or under my supervision.

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### INTRODUCTION

This investigation was made for the purpose of obtaining information on the subsurface conditions from which to base recommendations for foundation design for the proposed comfort station to be located at the Aweoweo Beach Park in Mokuleia, Oahu, Hawaii. The location of the site, relative to the existing streets and landmarks, is shown on the Vicinity Map, Plate 1.

### SCOPE OF WORK

The services included drilling 1 test boring to a depth of 25 feet below existing grade, obtaining samples of the underlying soils, performing 3 field percolation tests, performing laboratory tests on selected soil samples, and performing an engineering analysis from the data gathered. In general, the following information is provided for use by the Architect and/or Engineer:

1. General subsurface conditions, as disclosed by the boring.
2. Physical characteristics of the soils encountered.
3. Recommendations for foundation design, including bearing values, embedment depth and estimated settlement.
4. Recommendations for placement of fill and backfill.
5. Percolation rates of the underlying soils.

### PLANNED DEVELOPMENT

From the information provided the project will consist of constructing a one story, slab-on-grade comfort station.

SITE CONDITIONS

Surface

The park property, designated by Tax Map Key Number 6-8-11: 37, 38 and 6-8-12: 53, 54, is located on the ocean side of Au Street at Aweoweo Street. The proposed comfort station is to be located at the southwest side of the parcel. According to the plan provided, there is a drainage easement immediately east of the proposed site.

At the time of the investigation, the proposed building area was covered with sparse grass and weeds. The ground surface slopes gently upwards from the street. Beyond the building area, the ground surface is relatively flat; towards the ocean, the ground slopes downwards to the beach.

Subsurface

At Boring 1, fill consisting of light brown, slightly moist, moderately dense SAND with debris (roots and glass) was found to a depth of 1.0 feet followed by tan/white, slightly moist to saturated, moderately dense to loose SAND to a depth of 10 feet. Below 10.0 feet, probing was done by driving AW-rods with a 2-inch diameter probe tip into the underlying materials using a 140-pound hammer falling from a height of 30-inches. This was done to determine the consistency of the underlying formation. The probing disclosed loose to moderately dense soil consistency to the final depth of the boring at 25 feet.

Groundwater was encountered at a depth of 8.2 feet below existing grade.

The locations of the borings are shown on the Plot Plan, Plate 2. Detailed logs of the borings are presented in the Appendix to this report.

From the USDA Soil Conservation Service, "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii", the site is located in an area designated as Jaucas sand, 0 to 15 percent slopes (JaC), (USDA, 1972, pg. 48, Plate 38).

The Jaucas series consists of excessively drained, calcareous soils that occur as narrow strips on coastal plains, adjacent to the ocean. They developed in wind and water deposited sand from coral and seashells. They are nearly level to strongly sloping. 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.

#### Geology

The site is located in the northwesterly side of the island of Oahu. The island is a volcanic doublet formed by lavas of the Koolau Volcano ponding against the Waianae Volcano. The age of the island,

based on K-Ar testing, is believed to be between 2.2 and 2.4 million years.

Each of the volcanoes were built over three sets of fissures intersecting at a summit crater. Eruptions of highly fluid basaltic lava flowed from the fissures and built shield-shaped cones. After cessation of the main volcanic activity, streams cut deep amphitheater-headed canyons into the volcanoes. Submergence and re-emergence of the island during changes in sea level resulted in alluviation of the valleys.

During the late history of shifting sea level, secondary volcanic eruptions took place. These eruptions (believed to have occurred between 5,000 and 1 million years ago), resulted in such familiar craters as Diamond Head, Punchbowl, Koko Head and Salt Lake.

#### CONCLUSIONS AND RECOMMENDATIONS

##### General

Based on the findings and observations of this investigation, it is concluded that the proposed structure may be supported on spread footings provided the recommendations contained herein are included in the design and construction of the project.

##### Special Considerations

Special considerations will be required in the design and

construction of the project due to existing conditions. These includes the following:

- 1) The underlying SAND was found to be moderately dense to loose. It is recommended that the bottom of all footing excavations be compacted prior to constructing the footings.
  
- 2) The underlying SANDS are susceptible to caving. Excavations shall be made in accordance with applicable OSHA standards.

Foundations

An allowable bearing value of 1,500 pounds per square foot may be used for spread or continuous footings bearing on the underlying SAND or on properly compacted fill. The minimum footing embedment depth shall be 12 inches below lowest adjacent grade. If the area is in a flood-zone or tsunami area, additional embedment depth may be required for scouring.

For footings located adjacent to new or existing utility trenches, the bottom of the footing shall be deepened below a 1 horizontal to 1 vertical plane projected upwards from the edge of the utility trench.

For footings located on or adjacent to slopes, the footing shall be deepened such that there is a minimum horizontal distance of 5 feet

or twice the footing width, whichever is greater, from the edge of the footing to the slope face.

The bearing value is for dead plus live loads and may be increased by one-third for momentary loads due to wind or seismic forces. If any footing is eccentrically loaded, the maximum edge pressure shall not exceed the bearing pressure for permanent or for momentary loads.

The bottom of all footing excavations shall be compacted to the degree of compaction specified in the Site Preparation and Grading section to this report. Any loose and disturbed soil at the bottom of footing excavations shall be removed to firm soil or the disturbed soil shall be compacted prior to laying of steel or pouring of concrete.

#### Settlement

Under the fully applied recommended bearing pressure, it is estimated that the total settlement of footings up to 2 feet continuous or 3 feet square bearing on the compacted on-site SAND or on properly compacted fill will be less than 1/2 inch.

Differential settlement between footings will vary according to the size and bearing pressure of the footing.

Lateral Resistance

For resistance of lateral loads, such as wind or seismic forces, an allowable passive resistance equivalent to that exerted by a fluid weighing 300 pounds per cubic foot may be used for footings, or other structural elements, provided the vertical surface is in direct contact with undisturbed soil or properly compacted fill.

Frictional resistance between footings and the underlying soils may be assumed as 0.4 times the dead load. Lateral resistance and friction may be combined.

Retaining Walls

Foundations for retaining walls shall be designed as per the foundation section of this report.

Free-standing retaining walls with level, properly draining backfill, may be designed to resist an equivalent fluid pressure of 30 pounds per cubic foot for on-site SAND or imported granular backfill. For walls with sloping backfill (steeper than 3H:1V), the active earth pressure shall be increased to 45 pcf.

For restrained walls, i.e. walls that are tied at the top, the above active earth pressures shall be increased by 50 percent.

Drainage for the retaining wall backfill shall be accomplished by

providing 4-inch diameter weepholes spaced 6-feet on-center (horizontally as well as vertically) or by using a minimum 4-inch diameter perforated PVC footing drain pipe. A 2-foot thick layer of crushed gravel, which is wrapped with geotextile filter fabric, shall be placed above the pipe; the crushed gravel shall be continuous from weep hole to weep hole, or in the case of a footing drain pipe, laid throughout the full length of the pipe. Geotextile fabric shall be SUPAC 4NP, or similar.

The backfill for the retaining wall shall be properly compacted in accordance with the Site Preparation and Grading section to this report.

The above active pressures do not include surcharge loads such as footings located within a 45 degree plane projected upwards from the heel of the footing, and/or from hydrostatic pressures. If such conditions occur, the active pressure shall be increased accordingly.

#### Slab-on-Grade

It is recommended that slab-on-grade with moisture sensitive floor covering be protected with a moisture barrier.

The subgrade area for the slab shall be proof-rolled to detect any loose or soft spots. Preparation of these areas shall be in



accordance with the Site Preparation and Grading section to this report.

Site grading should be designed to minimize ponding of water adjacent to slab and footing area.

#### Slopes

Cut and fill slopes into the soil materials shall not exceed 2 horizontal to 1 vertical.

Exposed slopes shall be covered as soon as practical after construction to minimize erosion.

Fill slopes shall be constructed by either overfilling and cutting back to compacted soil, or the fill slope shall be track-rolled at vertical height intervals of 5 feet as the fill is being placed.

#### Site Preparation and Grading

It is recommended that the site be prepared in the following manner:

1. In all areas to receive fill and in structural areas, all vegetation, weeds, brush, roots, stumps, rubbish, debris, soft soil and other deleterious material shall be removed and disposed of off-site.
2. The exposed surface shall be proof-rolled to detect any soft or

loose areas. If encountered, the loose/soft areas shall be removed to firm material and the resulting depression shall be filled with properly compacted fill.

3. Fill and backfill material shall consist of soil which is free of organics and debris. The material shall be less than 3 inches in greatest dimension. Material such as select borrow, base course and on-site SAND (cleaned of any debris and vegetation) may be used as fill and backfill.
4. Fill and backfill material shall be placed in lifts not exceeding 8 inches in loose thickness. Prior to placing of the fill, the material shall be aerated or moistened to near optimum moisture content (ASTM D-1557 test procedure).  
  
Where fill is placed on existing ground that is steeper than 5 horizontal to 1 vertical, the existing ground surface shall be benched into firm soil as the fill is placed.
5. Each layer of fill and backfill, and the bottom of all footing excavations, shall be thoroughly compacted to at least 95 percent of the maximum dry density as determined by the ASTM D-1557 test procedure.
6. During construction, drainage shall be provided to minimize

ponding of water adjacent to or on foundation and pavement areas. Poned areas shall be drained immediately or water pumped out without damaging adjacent structures and property. If water accumulation softens the subgrade materials, the affected soils shall be removed and replaced with properly compacted fill.

It is particularly important to see that all fill and backfill soils are properly compacted in order to maintain the recommended design parameters provided in this report.

#### Field Percolation Tests

Three (3) percolation tests were performed at the locations shown on the Plot Plan, Plate 2. The percolation borings were drilled using a 4-inch diameter hand auger to depths of 3.5 to 4.5 feet below existing grade.

The percolation tests were performed using test procedures developed by the Robert A. Taft Sanitary Engineering Center. In general, this consisted of drilling the hole, filling the bottom with 2 inches of coarse sand and then saturating the hole with water (over-night for clayey soils). The test is conducted by filling the hole with clear water and then measuring the drop in water level with time. The results of the measurements are used to determine the percolation rate.

The data and results of the percolation tests are presented on the "Site Evaluation/Percolation Test" sheets in the Appendix to this report. A summary of the percolation rates are as follows:

<u>Boring No.</u>	<u>Test Depth</u>	<u>Percolation Rate</u>
P-1	3.5'	0.037 minutes/inch
P-2	4.0'	0.025 minutes/inch
P-3	4.5'	0.045 minutes/inch

The Department of Health Recommended Standards (Chapter 10) indicates that leach fields (absorption trenches) should not be used in soils with a percolation rate slower than 60 minutes per inch.

Based on the results of the percolation tests, it is concluded that leach fields may be used for disposal of septic sewage effluent. However, the percolation rates are rapid; this may required special filter material in the trenches to reduce the rate.

#### INSPECTION

During the progress of construction, so as to achieve the desired results, it is highly recommended that a representative from this office be present to observe the following operation:

1. Site preparation.
2. Placement of fill and backfill.
3. Footing excavations.

#### REMARKS

The conclusions and recommendations contained herein are based on

the findings and observations made at the boring location. If conditions are encountered during construction which appear to differ from those disclosed by the explorations, this office shall be notified so as to consider the need for modifications.

This report has been prepared for the exclusive use of Stanley Yim and Associates, Inc. and their respective design consultants. It shall not be used by or transferred to any other party or to another project without the consent and/or thorough review by this facility. Should the project be delayed beyond the period of one year from the date of this report, the report shall be reviewed relative to possible changed conditions.

Samples obtained in this investigation will deteriorate with time and will be unsuitable for further laboratory tests within one (1) month from the date of this report. Unless otherwise advised, the samples will be discarded at that time.

The following are included and complete this report:

Vicinity Map ----- Plate 1

Plot Plan ----- Plate 2

Appendix

Field Investigation

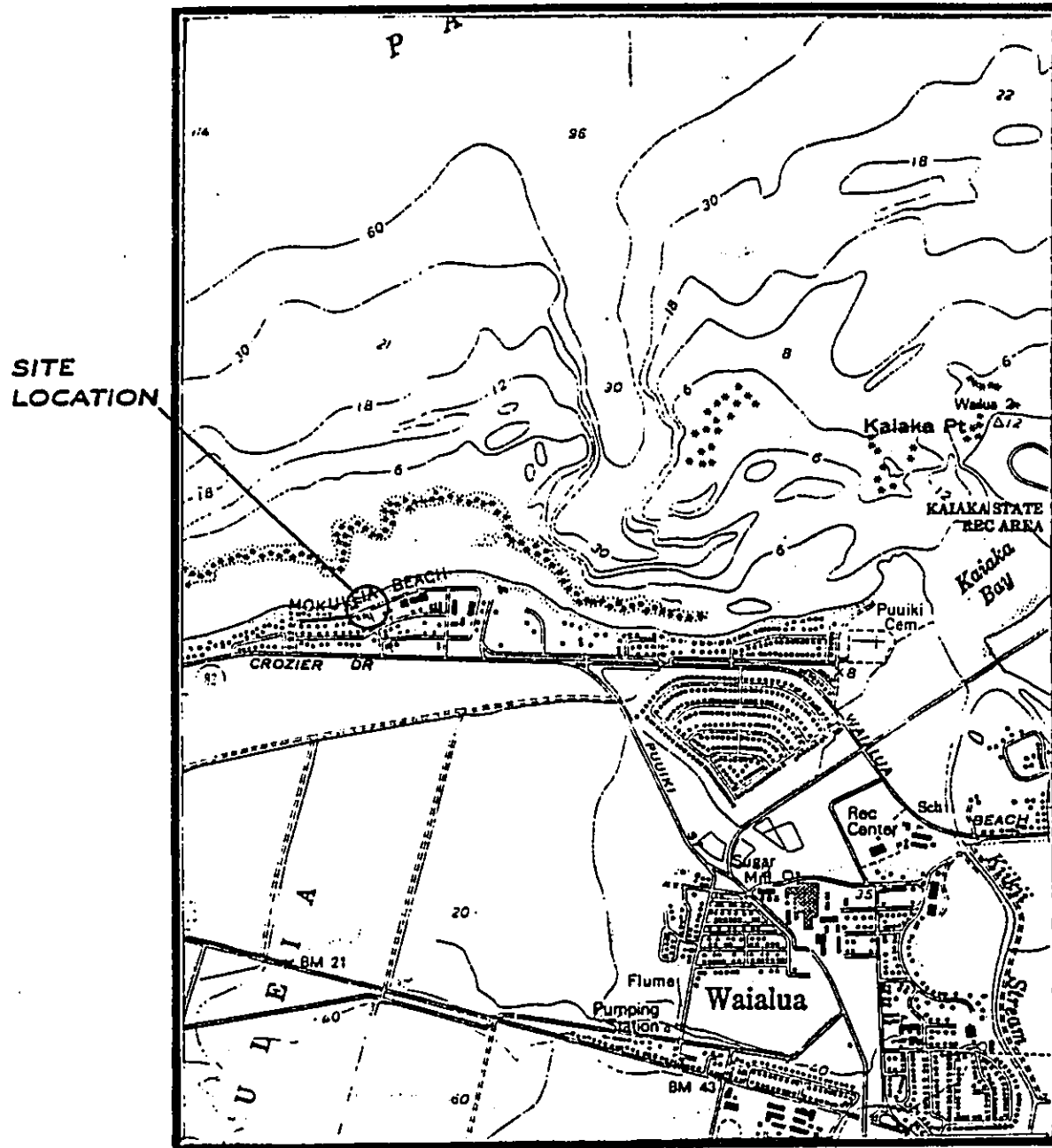
Laboratory Testing

Logs of Borings

Results of Laboratory Tests

Site Evaluation/Percolation Data Sheets

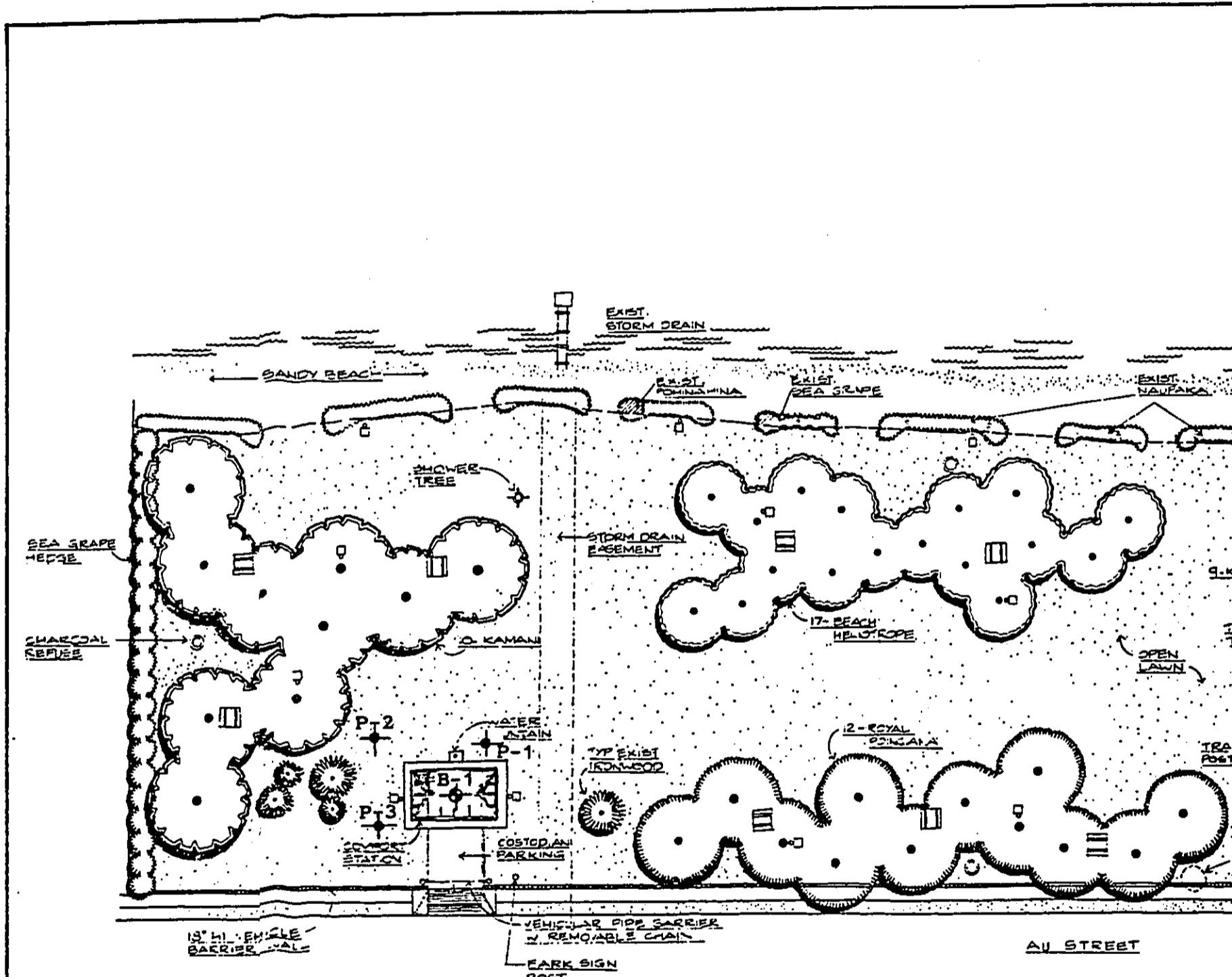
# VICINITY MAP



**REFERENCE:**

USGS TOPOGRAPHIC MAP  
 HALEIWA QUADRANGLE  
 DATED: 1983



<b>AWEOWEO BEACH PARK</b>	
 <p><b>SOR INTERNATIONAL</b>                  A CORPORATION                  Consulting Foundation Engineers                  and Geologists</p>	PROJECT NO. H-2138-F
	DATE 3-4-93
	SCALE 1" = 2000'
	PLATE 1



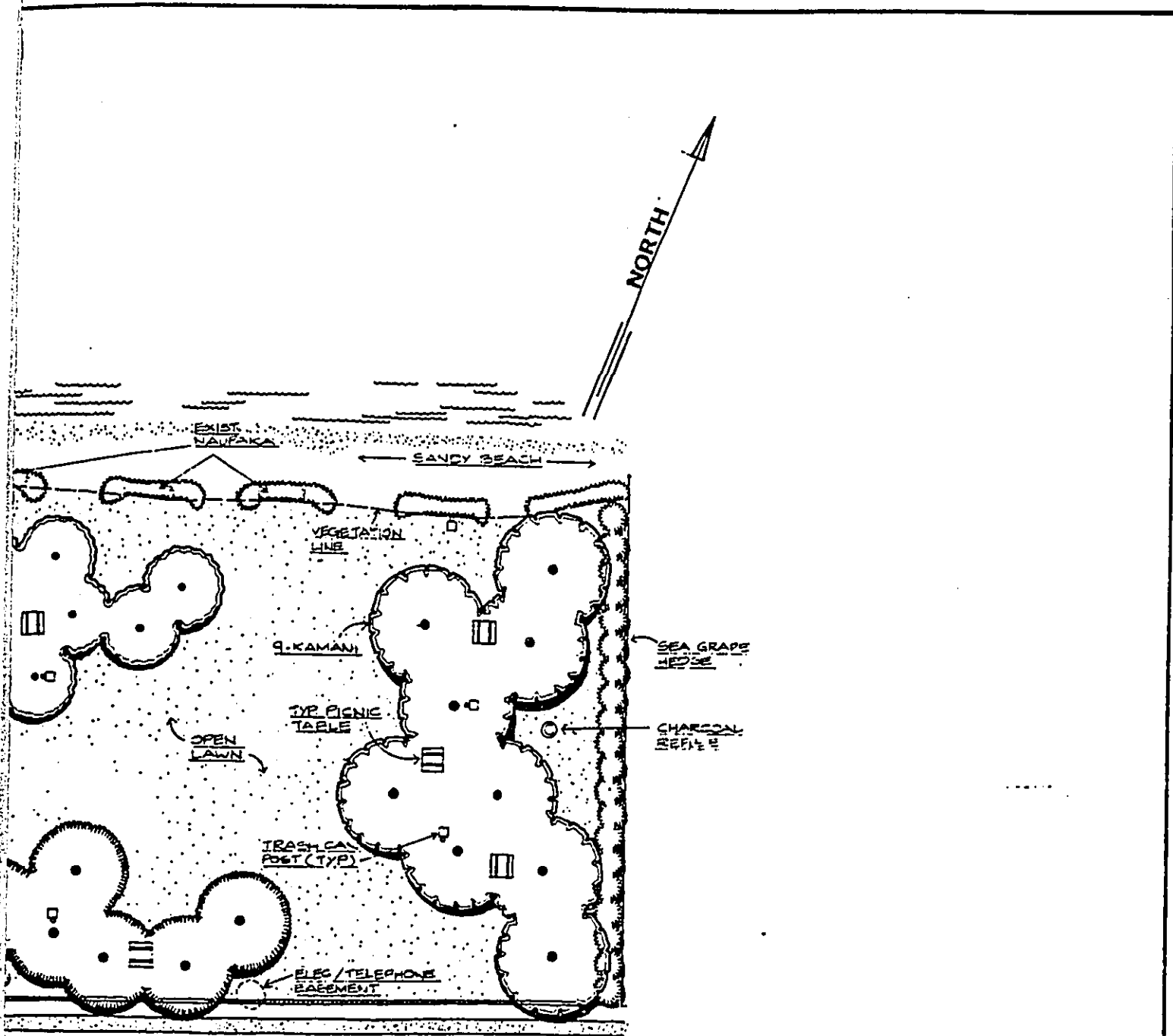
# PLOT PLAN

SCALE: 1=40.0'

## LEGEND

- 
 Test Boring Location
- 
 Percolation Test Location





**PLAN**

40.0'

<b>AWEOWEO BEACH PARK</b>	
<b>SOILS INTERNATIONAL</b>	<b>PLATE</b> 2

APPENDIX

FIELD INVESTIGATION AND LABORATORY TESTING

## FIELD INVESTIGATION

### General

The field investigation consisted of performing explorations at the locations shown on the Plot Plan. The method used for the exploratory work is shown on the respective exploration log. A description of the various method or methods used is presented below.

### Test Borings Using Truck-Mounted Drilling Equipment

Truck-mounted borings are drilled using a gas-powered drilling rig. The hole is advanced using continuous flight augers, wash boring and/or NX coring.

Auger drilling is used in soils where caving does not occur. The augers are 4-1/2 inch diameter continuous helical flight augers with the lead auger having a head equipped with changeable cutting teeth. Soil cuttings are brought to the surface by the continuous flights. After the bore hole is advanced to the required depth and cleaned of cuttings by additional rotation of the augers, the augers are retracted for soil sampling or in-situ testing.

In soils where caving of the bore hole occurs, the hole is advanced by wash boring or hollow-stem augering. Wash boring consists of advancing steel casing by rotary action and water pressure to flush the soil from the casing. The lead section of the casing is equipped with a carbide or diamond casing bit. After the casing has been advanced to the required depth, soil samples are obtained through the inside of the casing. Hollow-stem drilling consists of advancing the hole with 7-5/8 inch outside diameter and 4-1/4 inch inside

diameter augers. The leading drill bit is connected to drilling rods through the central portion of the auger. At the required sampling depth, the interior drill rods and lead bit are removed, and the soil sample is taken by driving a sampler through the "hollow" section of the augers.

Coring is used for hard formations such as rock, coral or boulders. The core barrel, consisting of a 5-foot long double tube, hardened steel barrel with either a carbide or diamond bit, is attached to drilling rods and set on the hard formation. The core barrel is advanced through the formation by rotation of the core barrel. Water is used to flush out the cuttings. Upon completion of the core run, the sample is removed from the core barrel and inspected. The total core recovery length and the sum of all intact pieces over 4-inch in length are measured. The length of core recovery divided by the length of the core run is the recovery ratio. The combined length of the 4-inch or longer pieces divided by the length of core run is the Rock Quality Designation (RQD). The values provide an indication of the quality of the formation.

#### Test Borings Using Portable Drilling Equipment

In areas inaccessible to truck-mounted equipment, portable drilling equipment is used to drill the test boring. The boring is advanced by either 1) continuous drive sampling or by 2) using a small gas-powered drill rig with continuous flight augers, wash boring or NX coring.

Soil samples are obtained with a tripod and cathead assembly using soil sampling methods described below.

Test Pits Using Excavators/Hopto

Test pits are excavated using a hopto or backhoe. Material excavated from the pit and the sides and bottom of the pit are visually inspected and a continuous log of the hole is kept.

Explorations Using Hand Tools

In inaccessible areas requiring only shallow explorations, borings and test pits are made using hand equipment. Borings are drilled using hand augers. Test pits are excavated using hand tools. Cuttings from the boring and/or pit are inspected and visually classified.

Soil Sampling

Relatively undisturbed samples of the underlying soils are obtained from borings by driving a sampling tube into the subsurface material using a 140-pound safety hammer falling from a height of 30 inches. Ring samples are obtained using a 3-inch outside diameter, 2.5 inch inside diameter steel sampling tube with an interior lining of one-inch long, thin brass rings. The tube is driven approximately 18 inches into the soil and a section of the central portion is placed in a close fitting waterproof container in order to retain field conditions until completion of the laboratory tests. Standard Penetration Test (SPT) values and disturbed soil samples are obtained with a 2-inch (outside diameter) split-barrel sampler instead of the 3-inch sampler. The number of blows required to drive the sampler into the ground is recorded at 6-inch intervals. The blow count for the last 12-inches is shown on the boring logs.

From test pit excavations, undisturbed samples are retained from cohesive type soil formations and disturbed bulk samples are retained from friable and cohesionless soil formations.

The soil samples are visually classified in the field using the Unified Soil Classification System. Samples are packed in moisture proof containers and transported to the laboratory for testing.

#### LABORATORY TESTING

##### General

Laboratory tests are performed on various soil samples to determine their engineering properties. Description of the various tests are listed below.

##### Unit Weight and Moisture Content

The in-place moisture content and unit weight of the samples are used to correlate similar soils at various depths. The sample is weighed, the volume determined, and a portion of the sample is placed in the oven. After oven-drying, the sample is again weighed to determine the moisture loss. The data is used to determine the wet-density, dry-density and in-place moisture content.

##### Direct Shear

Direct shear tests are performed to determine the strength characteristics of the representative soil samples. The test consists of placing the sample into a shear box, applying a normal load and then shearing the sample at a constant

rate of strain. The shearing resistance is recorded at various rates of strain. By varying the normal load, the angle of internal friction and cohesion can be determined.

#### Consolidation Test

Consolidation tests are performed to obtain data from which time rates of consolidation and amounts of settlement may be estimated. The test is performed by placing a specimen in a consolidation apparatus. Loads are applied in increments to the circular face of a one (1) inch high sample. Deformation or changes in thickness of the specimen are recorded at selected time intervals. Water is introduced to or allowed to drain from the sample through porous disks placed against the top and bottom faces of the specimen. The data is then used to plot a stress-volume strain curve which is used in estimating settlement.

#### Expansion Test - Ring Swell

Expansion tests are performed on clayey soils to determine the expansion potential of the sample. The test is performed using either a remolded or relatively undisturbed field sample. The sample is placed in an expansion apparatus with a one (1) psi surcharge. The sample is saturated and the change in vertical height is recorded. The initial moisture content is varied (field moisture or air-dried) to determine the variation in expansion potential with moisture changes. The data is used to determine the expansion potential of the soil.

Classification Tests

The soil samples are classified using the Unified Soil Classification System. Classification tests include sieve and hydrometer analysis to determine grain size distribution, and Atterberg Limits to determine the liquid limit, plastic limit and plasticity index.

California Bearing Ratio Test

California Bearing Ratio (CBR) tests are performed on materials to determine the bearing strength of the soil for determination of pavement sections. The sample is compacted into a 6-inch diameter mold in 5 equal layers. Each layer is compacted with a 10-pound hammer falling from a height of 18-inches, with each layer receiving 56 blows. The mold is then placed in a water bath for 4-days and the vertical swell is measured under a surcharge weight of 10 pounds. After the soaking period, the sample is placed in a CBR apparatus that has a 3-square inch penetrometer. The penetrometer is pressed vertically into the soil at constant strain and the loads required to press the penetrometer are recorded. A plot of the load-strain relationship is made to determine the CBR value.

Maximum Dry Density/Optimum Moisture Content

The maximum dry density and optimum moisture content of the material is determined in accordance with the ASTM D1557-78 test procedure. The sample is compacted into a mold in 5 equal layers using a 10 pound hammer falling from a height of 18 inches. The diameter of the mold is either 4-inches or 6-inches depending on the proportion of gravel in the sample. The sample is compacted



at various moisture contents to develop a compaction curve for the soil. The curve is usually bell-shaped with a peak indicating the maximum dry density and optimum moisture content.

Penetrometer Test

Penetrometer tests are performed on clayey soils to determine the consistency of the material and an approximate value of the unconfined compressive strength.

Torvane

Torvane tests are used to determine the approximate undrained shear strength of clayey soils. The torvane apparatus consists of a torque device with a small diameter plate that has vanes situated perpendicular to the plate. The vanes are pushed into the soil and torque is applied until failure occurs. The torque required to cause failure is converted to approximate undrained strength of the soil.

# LOG OF BORING NO. 1

EQUIPMENT USED: SIMCO

DATE: February 15, 1993

ELEVATION:

DEPTH OF BORING: 25.0'

DEPTH TO GROUNDWATER: 8.2'

DEPTH (FT.)	GRAPHIC SYMBOL	UNIFIED SOIL CLASSIFICATION	DESCRIPTION	SAMPLE	BLOWS/FOOT	COLOR	MOISTURE	CONSISTENCY	DRY DENSITY (PCF)	MOISTURE CONTENT (%)
0		SP	<p>FILL: SAND; calcareous, with gravel, few roots, few pieces of glass &amp; fines</p> <p>no glass, some calcareous gravel</p> <p>no gravel</p> <p>some gravel</p>		20	light brown tan white	sl. moist	mod. dense	79	8.3
5								loose		
10										
15										
10		?	PROBE		14	?		90	27.2	
					13					
					11					
					10					
					13					
15			continue		11					

PROJECT NAME: AWEOWEO BEACH PARK

PROJECT NO.: H-2138-F



PLATE

3

**LOG OF BORING NO. 1**

EQUIPMENT USED: SIMCO

DATE: February 15, 1993

ELEVATION:

DEPTH OF BORING: 25.0'

DEPTH TO GROUNDWATER: 8.2'

DEPTH (FT.)	GRAPHIC SYMBOL	UNIFIED SOIL CLASSIFICATION	DESCRIPTION	SAMPLE	BLOWS/FOOT	COLOR	MOISTURE	CONSISTENCY	DRY DENSITY (PCF)	MOISTURE CONTENT (%)
15		?	PROBE?			?	SAT.	loose		
					4					
					8					
					5			very loose		
					9					
20					2/18"					
					1			loose		
					15					
					14					
					26			mod. dense		
25			End of Boring @ 25.0'		30					

PROJECT NAME: AWEOWEO BEACH PARK

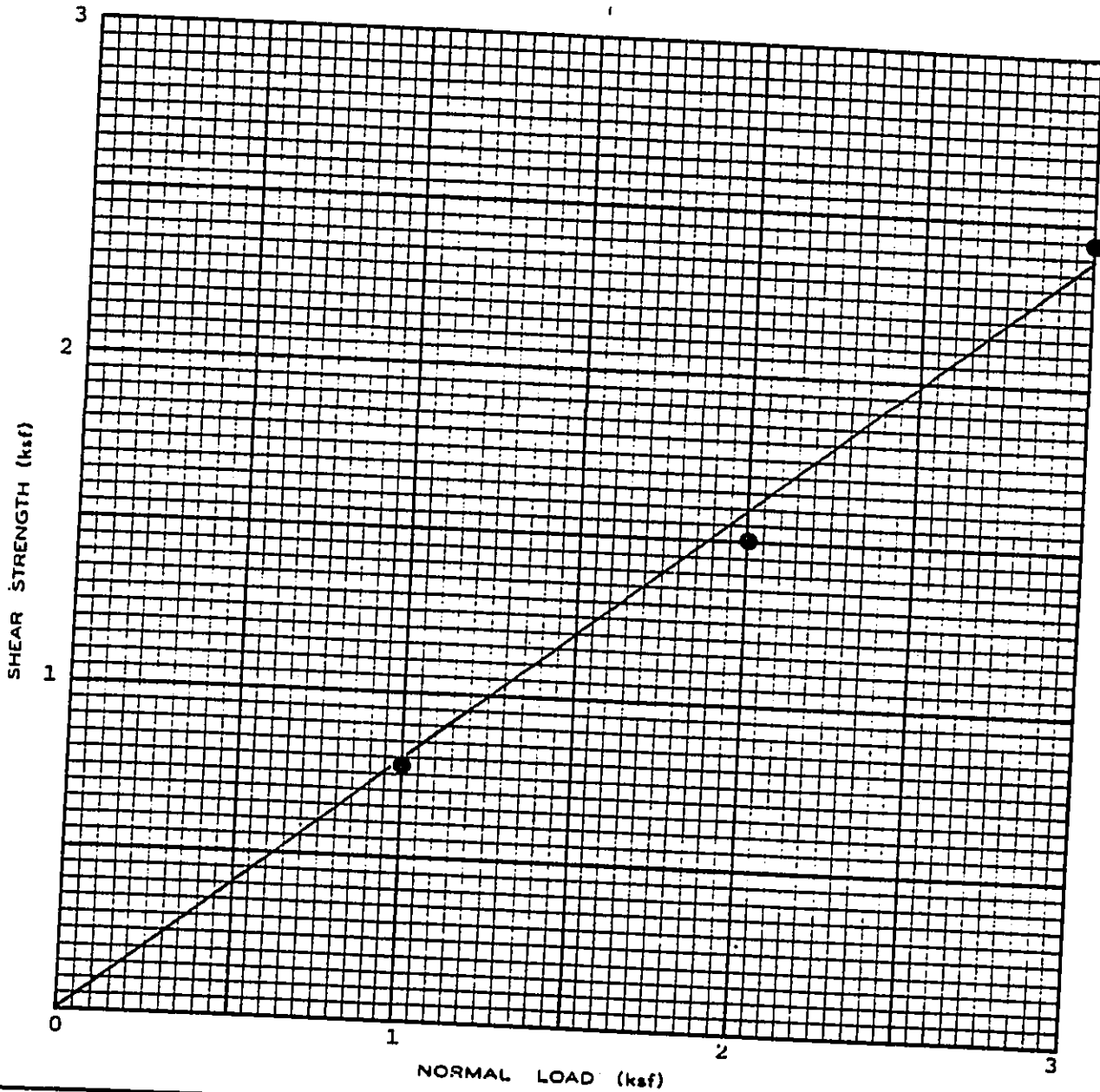
PROJECT NO.: H-2138-F



PLATE

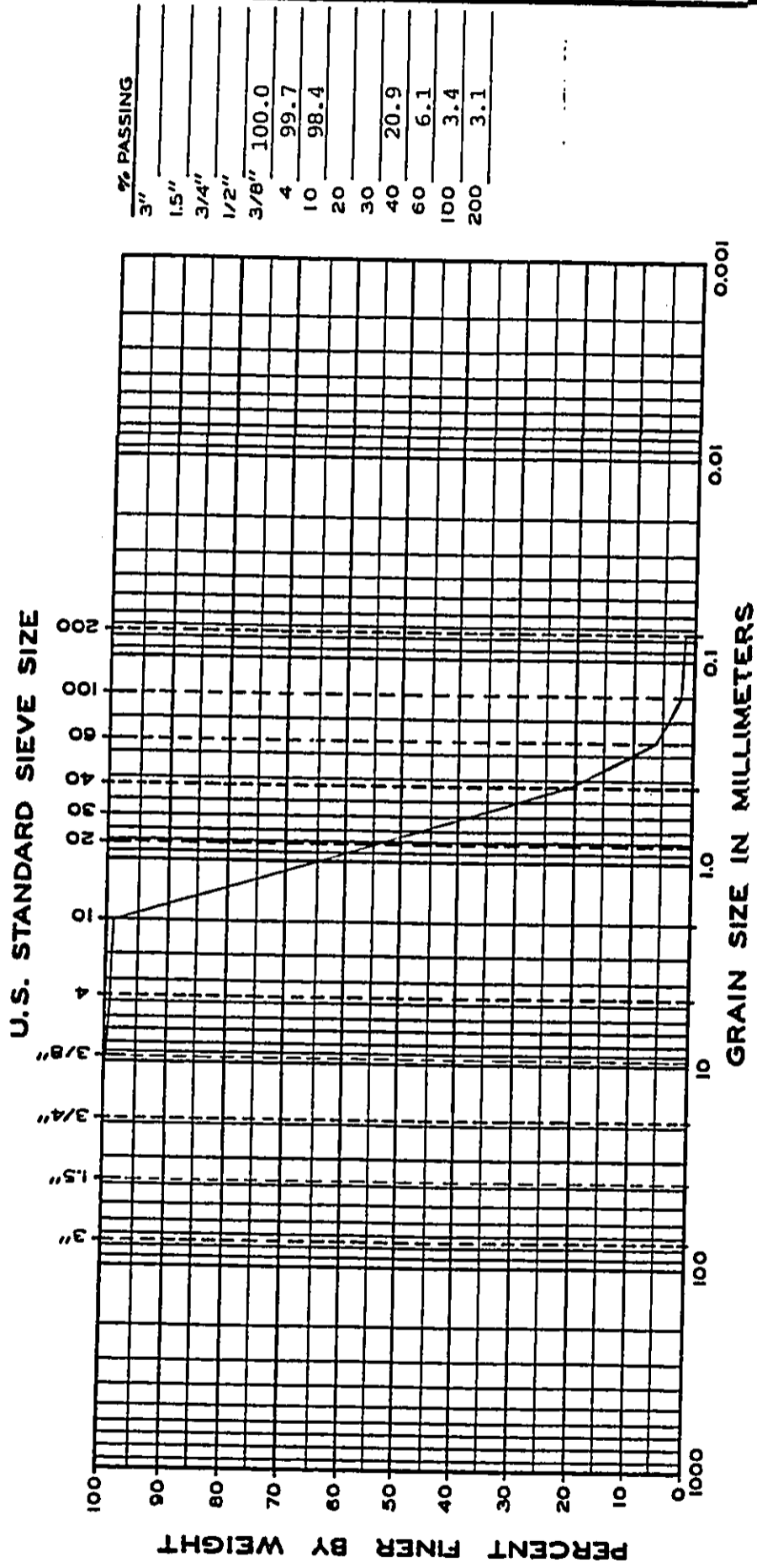
4

# DIRECT SHEAR TEST



	LOCATION	DEPTH (ft.)	COHESION (psf)	ANGLE OF INTERNAL FRICTION	TEST CONDITIONS				
●	B-1, S-2	4.5	0	38.5	Field Density - Peak Strength				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 5px;">PROJECT: AWEOWEO BEACH PARK</td> <td style="width: 20%; padding: 5px;">PROJECT NO. H-2138-F</td> <td style="width: 30%; padding: 5px;">SOILS INTERNATIONAL 99-1255 WAIUA PLACE AIEA, HAWAII 96701</td> <td style="width: 10%; padding: 5px; text-align: center;">PLATE 5</td> </tr> </table>						PROJECT: AWEOWEO BEACH PARK	PROJECT NO. H-2138-F	SOILS INTERNATIONAL 99-1255 WAIUA PLACE AIEA, HAWAII 96701	PLATE 5
PROJECT: AWEOWEO BEACH PARK	PROJECT NO. H-2138-F	SOILS INTERNATIONAL 99-1255 WAIUA PLACE AIEA, HAWAII 96701	PLATE 5						

# GRAIN SIZE DISTRIBUTION



<b>LOCATION</b> B-1, S-2	<b>DEPTH</b> 4.5'	<b>GROUP SYMBOL</b> SP	<b>CLASSIFICATION</b> tan/white, SAND; calcareous, few gravel, traces of fines			<b>MOISTURE CONTENT</b>	<b>ATTERBERG LIMITS</b>		
			<b>COBBLE</b>	<b>GRAVEL</b>	<b>SAND</b>		<b>SILT OR CLAY</b>	<b>LL</b>	<b>PL</b>
			PROJECT NO. H-2138-F						
			SOILS INTERNATIONAL						
			PLATE			6			

**SITE EVALUATION/PERCOLATION TEST (P-1)**

Data/Time: February 15, 1993 (1:21 p.m.)

Test performed by: SOILS INTERNATIONAL

Owner: CITY AND COUNTY OF HONOLULU

Tax Map Key: TMK: 6-8-11: 37, 38 & 6-8-12: 53, 54

Elevation: \_\_\_\_\_ ft

Depth to Groundwater Table: 8'-2" ft below grade

Depth to Bedrock (if observed): greater than 25 ft below grade

Diameter of Hole: 4 in

Depth to Hole Bottom: 25.0 ft below grade

Depth, below grade	Soil Profile (color, texture, other)
<u>0-42"</u>	<u>tan/white, slightly moist, loose SAND (calcareous)</u>
_____	_____
_____	_____
_____	_____

**PERCOLATION READINGS**

Time 12 in of water to seep away: \*less than 1 min (first trial reading) \* NOTE: too rapid to presoak

Time 12 in of water to seep away: \_\_\_\_\_ min (second trial reading)

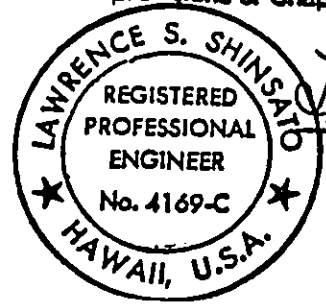
For percolation tests in sandy soils, record time intervals and water drops at least every 10 minutes for at least 1 hour.

For percolation tests in non-sandy soils, presoak the test hole for at least 4 hours. Record time intervals and water drops at least every 10 minutes for 1 hour; or if the time for the first 6 inches to seep away is greater than 30 minutes, record time intervals and water drops at least every 30 minutes for 4 hours or until 2 successive drops do not vary by more than 1/16 inch.

Time interval	Drop in inches	Time Interval	Drop in inches
<u>12 seconds</u>	<u>6</u>	_____	_____
<u>13 seconds</u>	<u>6</u>	_____	_____
<u>13 seconds</u>	<u>6</u>	_____	_____
<u>14 seconds</u>	<u>6</u>	_____	_____
<u>13 seconds</u>	<u>6</u>	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Percolation Rate (time/final water level drop): less than 1 min/in

As the engineer responsible for gathering and providing site information and percolation test results, I attest to the fact that above site information is accurate and that the site evaluation was conducted in accordance with the provisions of Chapter 11-62, "Wastewater Systems" and the results were acceptable.



Lawrence S. Shinsato  
 \_\_\_\_\_  
 Engineer's Signature/Stamp

revised 5/92

**SITE EVALUATION/PERCOLATION TEST (P-2)**

Date/Time: February 15, 1993 (1:30 p.m.)

Test performed by: SOILS INTERNATIONAL

Owner: CITY AND COUNTY OF HONOLULU

Tax Map Key: TMK: 6-8-11:37, 38 & 6-8-12: 53, 54

Elevation: \_\_\_\_\_ ft  
 Depth to Groundwater Table: 8'-2" ft below grade  
 Depth to Bedrock (if observed): greater than 25 ft below grade  
 Diameter of Hole: 4 in  
 Depth to Hole Bottom: 25 ft below grade

Depth, below grade	Soil Profile (color, texture, other)
<u>0-48"</u>	<u>tan/white, slightly moist, loose SAND (calcareous)</u>

**PERCOLATION READINGS**

Time 12 in of water to seep away: \* less than 1 min (first trial reading) \* NOTE: too rapid to presoak  
 Time 12 in of water to seep away: \_\_\_\_\_ min (second trial reading)

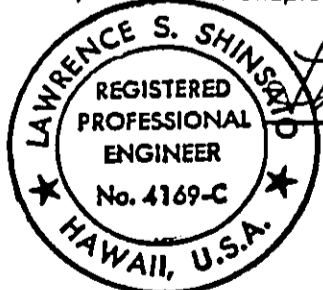
For percolation tests in sandy soils, record time intervals and water drops at least every 10 minutes for at least 1 hour.

For percolation tests in non-sandy soils, presoak the test hole for at least 4 hours. Record time intervals and water drops at least every 10 minutes for 1 hour; or if the time for the first 6 inches to seep away is greater than 30 minutes, record time intervals and water drops at least every 30 minutes for 4 hours or until 2 successive drops do not vary by more than 1/16 inch.

Time interval	Drop in inches	Time interval	Drop in inches
<u>13 seconds</u>	<u>6</u>		
<u>16 seconds</u>	<u>6</u>		
<u>7 seconds</u>	<u>6</u>		
<u>9 seconds</u>	<u>6</u>		
<u>9 seconds</u>	<u>6</u>		

Percolation Rate (time/final water level drop): less than 1 min/in

As the engineer responsible for gathering and providing site information and percolation test results, I attest to the fact that above site information is accurate and that the site evaluation was conducted in accordance with the provisions of Chapter 11-62, "Wastewater Systems" and the results were acceptable.



Lawrence S. Shinsato  
 Engineer's Signature/Stamp

**SITE EVALUATION/PERCCLATION TEST (P-3)**

Date/Time: February 15, 1993 (1:40 p.m.)  
 Test performed by: SOILS INTERNATIONAL  
 Owner: CITY AND COUNTY OF HONOLULU  
 Tax Map Key: TMK: 6-8-11: 37, 38 & 6-8-12: 53, 54

Elevation: \_\_\_\_\_ ft  
 Depth to Groundwater Table: 8'-2" ft below grade  
 Depth to Bedrock (if observed): greater than 25 ft below grade  
 Diameter of Hole: 4 in  
 Depth to Hole Bottom: 25 ft below grade

Depth, below grade	Soil Profile (color, texture, other)
<u>0-54"</u>	<u>tan/white, slightly moist, loose SAND (calcareous)</u>
_____	_____
_____	_____
_____	_____

**PERCOLATION READINGS**

Time 12 in of water to seep away: \* less than 1 min (first trial reading) \* NOTE: too rapid to presoak  
 Time 12 in of water to seep away: \_\_\_\_\_ min (second trial reading)

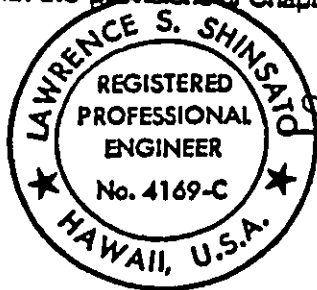
For percolation tests in sandy soils, record time intervals and water drops at least every 10 minutes for at least 1 hour.

For percolation tests in non-sandy soils, presoak the test hole for at least 4 hours. Record time intervals and water drops at least every 10 minutes for 1 hour, or if the time for the first 6 inches to seep away is greater than 30 minutes, record time intervals and water drops at least every 30 minutes for 4 hours or until 2 successive drops do not vary by more than 1/16 inch.

Time interval	Drop in inches	Time Interval	Drop in inches
<u>9 seconds</u>	<u>6</u>	_____	_____
<u>17 seconds</u>	<u>6</u>	_____	_____
<u>16 seconds</u>	<u>6</u>	_____	_____
<u>16 seconds</u>	<u>6</u>	_____	_____
<u>15 seconds</u>	<u>6</u>	_____	_____
<u>15 seconds</u>	<u>6</u>	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Percolation Rate (time/final water level drop): less than 1 min/in

As the engineer responsible for gathering and providing site information and percolation test results, I attest to the fact that above site information is accurate and that the site evaluation was conducted in accordance with the provisions of Chapter 11-62, "Wastewater Systems" and the results were acceptable.



Lawrence S. Shinsato  
 Engineer's Signature/Stamp



*APPENDIX E*

*THE NATURE CONSERVANCY OF  
HAWAII -- FLORA AND FAUNA*

# The Nature Conservancy of Hawaii

2  
JASON YIM  
833-4764  
ROY KAM  
TEL (808) 537-4503

• 116 SMITH STREET • SUITE 201 • HONOLULU, HAWAII • 96817 • TEL (808) 537-1506 • FAX (808) 545-2019

February 17, 1993

Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim,

Attached is a copy of the Heritage Haleiwa quadrangle map. According to the Heritage database, your project area (Aweoweo Beach Park) currently has no rare or endangered species. Please do not accept this as being a final statement that no rare species occur in the area. There is the possibility that no one has surveyed the area. Only a biological survey can definitely state that no species are found there.

On the map, map reference #158 is somewhat in the vicinity of your project area. The Hawaiian Stilt has been recorded at that location.

Due to the unavailable information, the cost for this request has been waived. Thank you for using the Hawaii Heritage Program, Natural Diversity Database.

Sincerely,

Roy Kam  
Data Manager  
Hawaii Heritage Program

Bill M. Miller, Chairman  
John D. Miller  
Kenneth F. Brown  
John W. Brown, Jr.  
Robert H. Clark  
David C. Cox

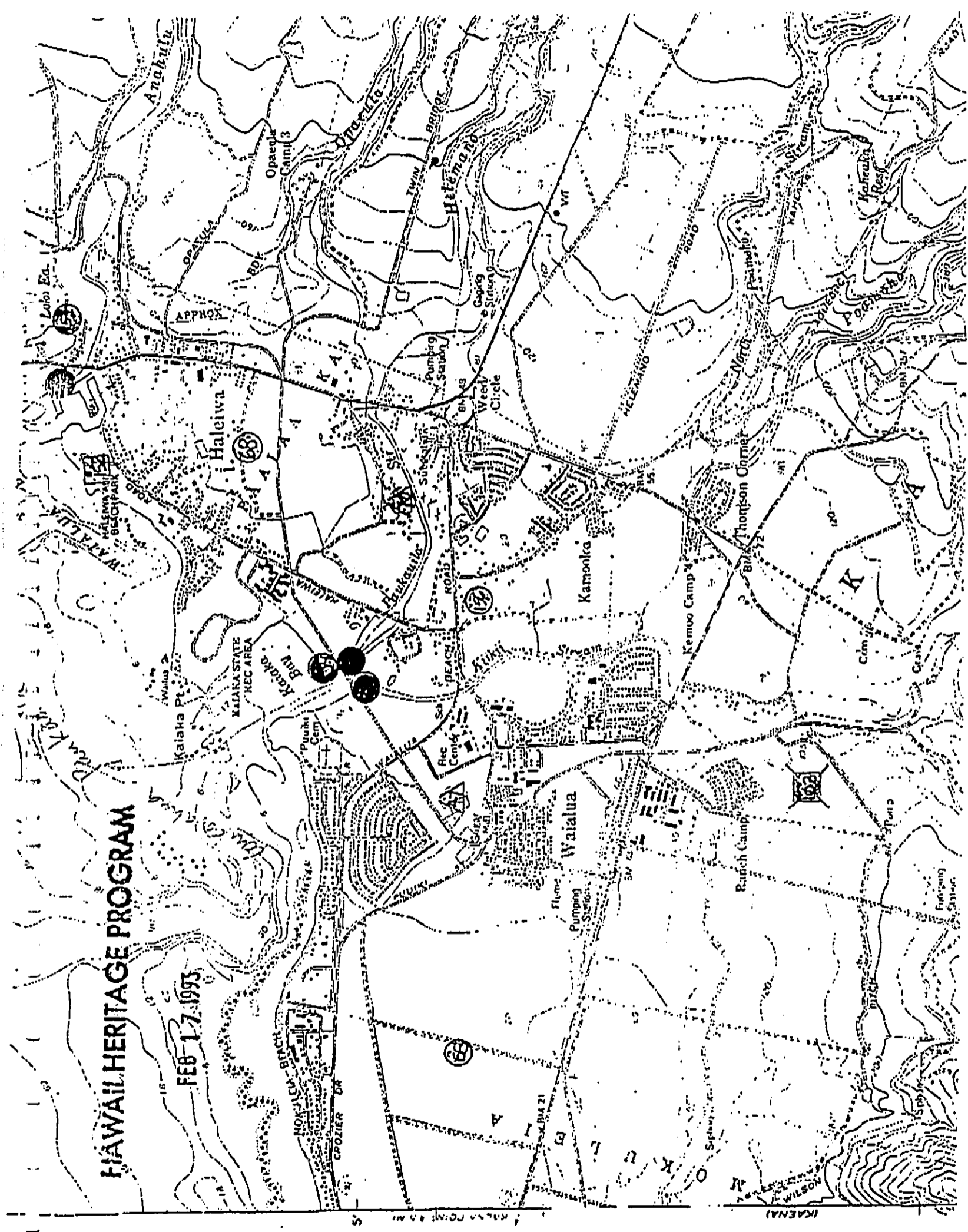
Samuel A. Cook  
George M. Edwards  
Walter A. Dashi  
Gus Fagnano  
Frank J. Hall  
Mark H. Hays

Robert T. Jones  
Loretta S. Johnson  
Frank C. Lippert  
Frank J. Mangan  
Margaret M. Pelt  
Charles L. Pelt

Robert D. Quinn  
John W. Quinn  
John W. Quinn  
John W. Quinn  
John W. Quinn  
John W. Quinn

Richard D. Miller  
Richard D. Miller  
Richard D. Miller  
Richard D. Miller  
Richard D. Miller

DOCUMENT CAPTURED AS RECEIVED



*APPENDIX F*

*ARCHAEOLOGICAL REPORT*

ARCHAEOLOGICAL INVESTIGATIONS  
AT THE PROPOSED  
'ĀWEOWEO BEACH PARK, MOKULĒ'IA, O'AHU  
(TMK 6-8-11:37, 38 and 6-2-12:53, 54)

Submitted to:

Stanley Yim and Associates, Inc.  
2850 Pa'a Street, Suite 200  
Honolulu, Hawai'i 96819

Prepared by:

Ingrid K. Carlson, B.A.  
and  
Paul L. Cleghorn, Ph.D.

BioSystems Analysis, Inc.  
1051 Keolu Drive, Suite 104B  
Kailua, Hawai'i 96734

Revised November 1993  
J-4049

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## ABSTRACT

BioSystems Analysis, Inc. (BioSystems), under contract to Stanley Yim and Associates, Inc., conducted two levels of archaeological investigations within four beach-front house lots of the proposed City and County of Honolulu Department of Parks and Recreation 'Āweoweo Beach Park. The first level of archaeological investigation consisted of a walkthrough survey of the project area. No surface cultural features were observed. The second level of archaeological investigation consisted of a subsurface testing of the area using a hand-driven auger. A spatially-restricted cultural layer, measuring 8.4 m N/S by 8.5 m E/W, was located at a depth of 42 cm below surface. It was assigned Site number 50-80-04-4657. Cultural material was found during a single shovel probe, and two soil samples were collected and analyzed. Soil Sample 1 revealed a small amount of marine shell, a single fish scale, and unidentified organic material. Soil Sample 2 revealed similar cultural material, but in larger quantities. A single basalt flake was also recovered. Charcoal was collected for radiocarbon dating and revealed an age range of A.D. 1440-1700. Site 50-80-04-4657 appears to be significant based on fulfillment of Criterion D; it has yielded, and may likely yield information important to prehistory or history. BioSystems is recommending that the site be left undisturbed; however, if subsurface excavations are planned that will disturb the site, then data recovery is needed.



### ACKNOWLEDGEMENTS

BioSystems wishes to acknowledge Jason Yim of Stanley Yim and Associates for providing the base map of the project area. In addition, BioSystems would like to thank Cathy Dagher for her assistance in the field and to Frank Eblé, who came out on the last day to help us backfill the numerous auger holes.

## 1.0 INTRODUCTION

BioSystems, under contract to Stanley Yim and Associates, conducted an archaeological inventory survey consisting of two levels of archaeological investigations within four beach-front house lots which are presently being used as a non-improved beach park by local residents. This parcel is the proposed site of the 'Aweoweo Beach Park that is to be developed by the City and County of Honolulu Department of Parks and Recreation. The first level of archaeological investigation consisted of a surface survey of the property, the second level consisted of a series of auger tests to determine subsurface stratigraphy and to determine the presence or absence of cultural layers. These investigations were conducted to determine the presence or absence of cultural resources in the project area and to determine any possible effects on cultural resources from the construction of the beach park.

### 1.1 PROJECT AREA LOCATION

The project area is located within the Waialua District in the *ahupua'a* of Mokulē'ia near the border of Kamananui Ahupua'a on the island of O'ahu (Figure 1). The project area consists of c. 0.58 hectares (1.43 acres) and is bordered by the ocean to the northeast, Au Street to the southwest, and property fences to the northwest and southeast (Figure 2). The project area is situated in TMK 6-8-11:37, 38 and 6-2-12:53, 54.

## 2.0 ENVIRONMENT SETTING

### 2.1 ENVIRONMENTAL SETTING

The coastal area of Mokulē'ia consists of a relatively narrow beach that is affected by high tides. In many areas high water undercuts the coastal sand dunes. In the project area, the coastal sand berm rises abruptly from the high water mark and slopes inland to a foot or two above sea level. The topography of Mokulē'ia along the coast consists of a flat coastal plain. This plain rises gradually towards the foothills of the Wai'anae Mountain Range.

The inland area of Mokulē'ia and Waialua can be described as:

... part of the north facing slope of the Waianae Mountain Range. The upper reaches of this area are cut by many ephemeral streams running northward from the main crest of the Waianae Range, forming steep gulches and narrow ridges that are somewhat parallel to each other. Deposition of detrital material from the streams has formed the flat alluvial floors of the Waialua Plain, a large area of low relief that comprises the lower portion of Mokuleia (Drolet and Schilz 1991:4).

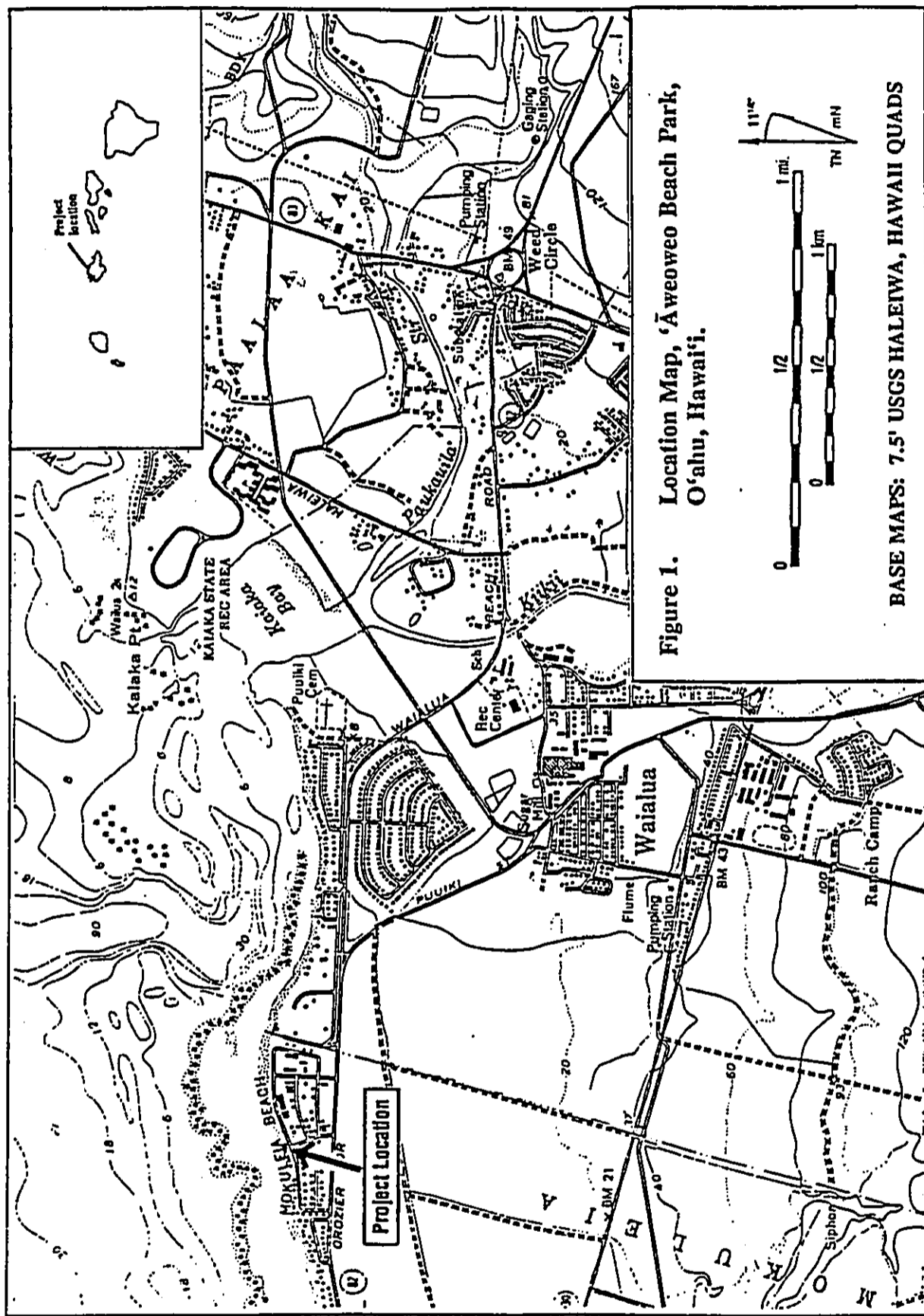
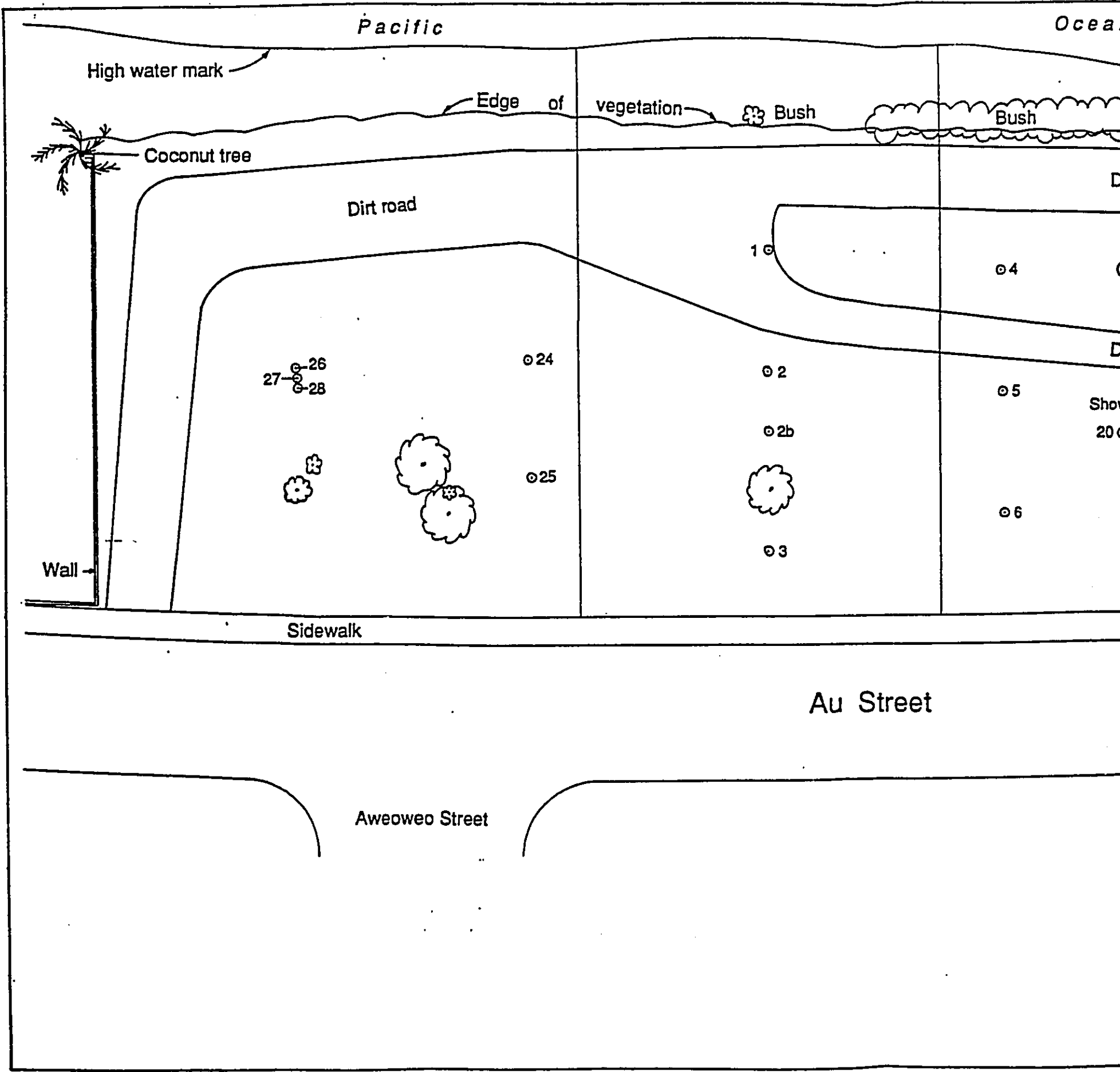


Figure 1. Location Map, 'Āweoweo Beach Park, O'ahu, Hawaii.

BASE MAPS: 7.5' USGS HALEIWA, HAWAII QUADS



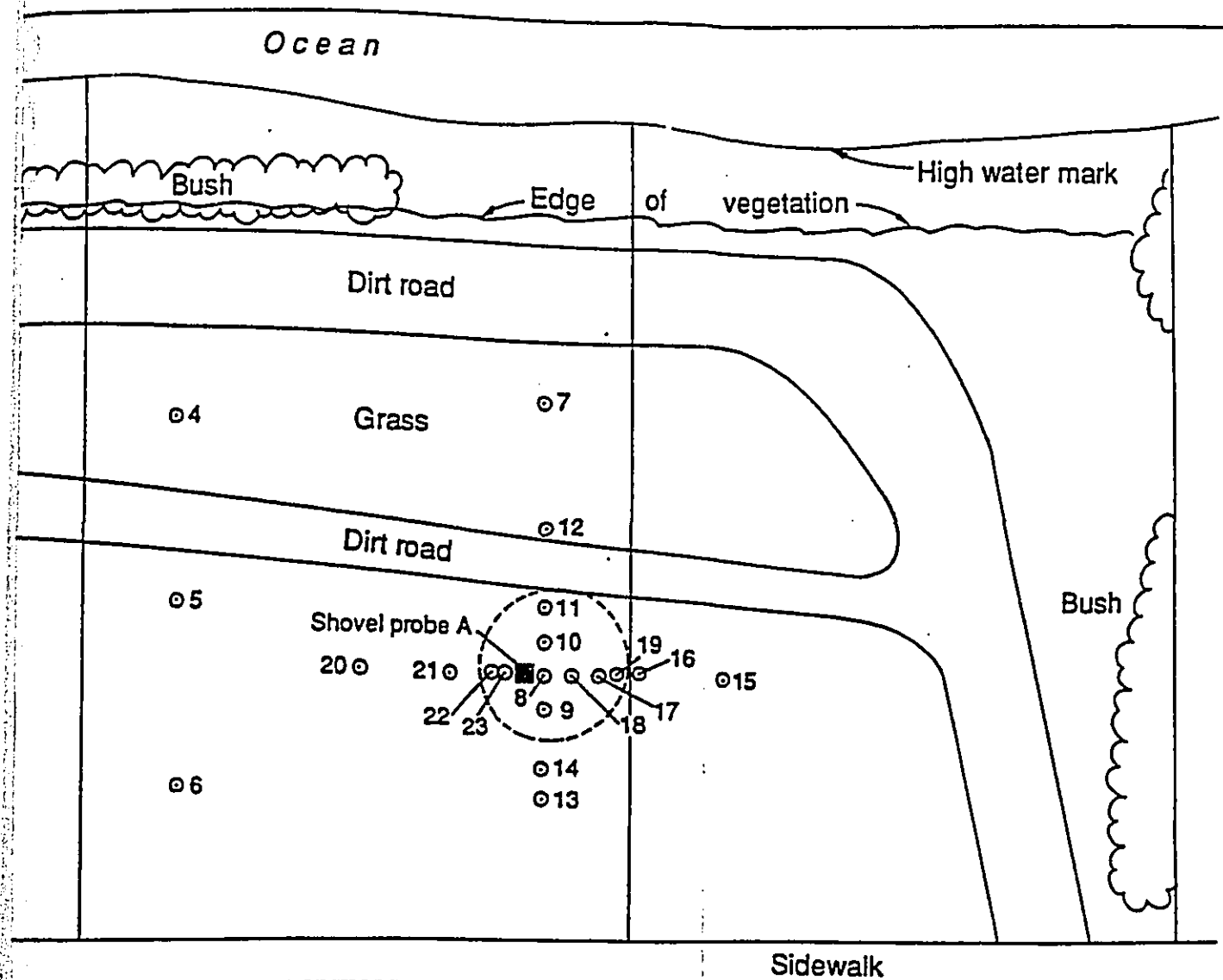
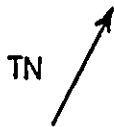


Figure 2. 'Āweoweo Beach Park project site.

Legend

- ⊙11 Core Location
- Shovel probe
- Cultural layer boundary
- ☼ Ironwood tree



0 20 40 ft.

Prepared by BioSystems Analysis, Inc.

heet

The project area contains only one soil type—Jaucas sand. Jaucas sand is defined as being “single grain, pale brown to very pale brown, sandy and more than 1.52 m (60 inches) deep” (Foote et al. 1972:48). Erosion from runoff is slight, but wind erosion is severe where the vegetation has been removed.

The average temperature at Waialua varies depending upon the season. During the summer months the temperature ranges from 18.3° to 29.4°C (65° to 85°F), while during the winter months the temperature ranges from 16.1° to 23.9°C (61° to 75°F) (Armstrong 1983). The average rainfall for the area is 30–40 inches with greater precipitation occurring in the mountains and footlands than along the coast.

In the project area, a dirt road runs from the northwest boundary, up to the beach berm, along the length of the project area, and then divides into two roads and exits onto Au Street along the southeast boundary. Most of the project area consists of this dirt road, while the remainder consists of low-lying grasses. There is a cluster of ironwood trees (*Casuarina equisetifolia* L.) along the driveway at the northwest entrance, and a single ironwood tree is near the center of the project area. Since the project area is located within a housing development, the surrounding vegetation consists of a variety of domesticated, landscaped species.

### 3.0 BACKGROUND INFORMATION

#### 3.1 TRADITIONAL ACCOUNTS AND LEGEND

The name Mokulē'ia means “district of abundance” (Pukui and Elbert 1971:184), while others have interpreted the name to mean “isle of abundance” (Pukui et al. 1974:155).

A historic (1880s) translation for Mokulē'ia is as follows:

Moena pawehe o Mokuleia—the patterned mat of Mokuleia. Mokuleia often likened to a “patterned mat.” The patterns of cultivation on the flat land making a striking resemblance (Sterling and Summers 1978:101).

One of the *luakini heiau* in the area is Kalakiki Heiau (a *luakini heiau* is a ceremonial structure where human sacrifice was offered). This *luakini heiau* was first recorded and described by McAllister in 1930. The following legend explains its name:

Kalakiki, the Shark

Kalakiki was also a shark god of Waialua, Barenaba tells me (March 16, 1907) that the heiau built for its worship and called Ka heiau o Kalakiki, is just makai of Kaupakuhale on the west side of Makaleha Valley, Waialua, O'ahu (Sterling and Summers 1978:103).

John Papa Ii mentions Mokulē'ia, but he refers to it only as a terminating point for Kumaipo Trail. "The trail, Kumaipo, went down to the farms of Makaha and the homes of that land. A branch trail which led up Mount Kaala and looked down on Waialua and Mokuleia could be used to go down to those level lands" (1959:97).

### 3.2 HISTORIC LAND USE

Handy and Handy describe Mokulē'ia as generally sweet potato country, though

. . . there were at least two extensive lo'i areas in the land strip named Mokuleia near the sea. One of these was watered by underground flow originating in a gulch. The other received its water from Makaleha Stream, in whose valley we found an abundance of wild taro in 1935" (Handy and Handy 1972:467).

It is likely, then, that during the prehistoric period, the area surrounding the project area was utilized for sweet potato cultivation, as well as some irrigated taro cultivation.

In the early 1800s, the plains were used as pasture lands for cattle and other animals. Then after the middle of the nineteenth century, the pasture lands were plowed and sugar cane was planted (it is still cultivated today). By 1895, the Halstead Brothers operated a sugar mill in Hale'iwa (Yardley 1981:103).

From 1848 to 1850, the Great Mahele changed the land ownership from the traditional Hawaiian system of land tenure, with all land being the property of the *mō'ī* (king), to the Western system of private ownership of land (Kuykendall 1938:269-298).

Following the Great Mahele, lands owned by the Hawaiian government were sold through a system of grants. No Land Commission Awards were made near the project area; however several land grants were given to individuals. A total of 27 grants were awarded in the *ahupua'a* of Mokulē'ia, with a total of 82 grants being awarded in Kamananui Ahupua'a. A total of nine land grants were located relatively close to our project area; five are located within Mokulē'ia and four are within Kamananui. In Mokulē'ia, land grants were given to the following individuals:

Grant 239	P. J. Gulick	255.2 ha (632 acres)
Grant 261	Kealiihuluhulu	36.4 ha (90 acres)
Grant 340	Palakaluhi & Co.	40.5 ha (100 acres)
Grant 341	Kealohanai	19.4 ha (48 acres)
Grant 502	J. S. Emerson	218.5 ha (540 acres)

In Kamananui, land grants were given to the following:

Grant 267	Kupaa	28.3 ha (70 acres)
Grant 268	Kaoo	28.3 ha (70 acres)
Grant 276	Kuhe	26.7 ha (66 acres)
Grant 281	Mano	27.5 ha (68 acres)

Each grant boundary was meticulously recorded in Hawaiian. None of the Kamananui land grants information was recorded in English, and only two of the Mokulē'ia land grants had their monetary transactions in English: Kealohanai purchased Grant 341 for \$12.00 on July 27, 1850, and J. S. Emerson paid \$202.50 for Grant 502 on January 22, 1851 (Book of Land Grants, Vols. 2 and 3).

In 1898, the railroad line of the O'ahu Railway and Land Company (O. R. and L.) was extended to the Waialua Mill of the Halstead Sugar Plantation (Yardley 1981:195). With the construction of the railroad, it became easy to move the sugar cane crop to Honolulu for exportation. This led to the production of sugar cane to be greatly expanded.

B. F. Dillingham saw the opportunity for development in the Waialua District. He envisioned a large and modern sugar plantation that would include thousands of acres to the east and the west of the existing Halstead Sugar Plantation. With the purchase of several thousands of acres of land, Dillingham founded the Waialua Agricultural Company, with the support of Castle and Cooke. It took about a decade of development, including the construction of a vast irrigation system for the expansive plantation, before it became a profitable venture. The Waialua Agricultural Company went on to become "one of the leading sugar producers in the islands" (Yardley 1981:197 in Nees et al. 1991:28).

By 1900, the majority of cane land controlled by Dillingham had been sold. He maintained a strip of land in Mokulē'ia, which became his personal ranch. Under the management of his son, Walter Dillingham, the property was fashioned into a horse ranch with stables, pastures, and a polo field. By 1902, the ranch became a focus for polo competition. Over the next three decades Castle and Cooke purchased extensive land holdings to the east and west of Dillingham's Ranch. Sugar cane was cultivated on this property with the help of an extensive irrigation system (Drolet and Schilz 1991:11).

During the 1940s, extensive building occurred in Mokulē'ia due to the military buildup on the island. The Dillingham Airfield, airplane hangars, bunkers, and an extensive roadway system were all established at this time. With the end of World War II, the military presence in Mokulē'ia decreased, with the exception of the Dillingham Airfield, which continues to operate to this day (Drolet and Schilz 1991:11-12).



#### 4.0 PREVIOUS ARCHAEOLOGY

In 1930, J. G. McAllister conducted an extensive archaeological survey on the island of O'ahu, and is responsible for the first archaeological investigations in Waialua. The majority of work in the Waialua District, however, has been conducted in just the past 10 years. It was not until 1982 that the next archaeological study was carried out by Robert J. Hommon. Subsequent work was completed by Kennedy (1987, 1991), Barrera (1986), and Drolet and Schilz (1991).

McAllister located a total of 18 sites within the *ahupua'a* of Mokulē'ia and Kamananui. Of these, only two are located near our project area. Site 201 is a "Keauau fishing shrine (*ko'a*) once located on the beach at Puuiki at the Kaena end of a long row of ironwood trees. Nothing remains of the site" (McAllister 1933:132). McAllister was informed that this site existed, but he did not see any remains of the shrine.

Site 202 is located to the east of Site 201, where McAllister noted the existence of skeletal remains near Pu'uiki Station, Waialua. The present location of this site appears to be across from the modern roadway of Kiapoko Place.

In 1982, Robert J. Hommon conducted an archaeological surface survey for portions of the Waialua-Hale'iwa Wastewater Facilities Systems. His survey area stretched from Kawaihoa Beach to Mokulē'ia Beach, which included our present survey area. He investigated 30 archaeological sites that had been previously recorded, as well as one newly located site, Site 50-80-04-3400, which Hommon described as two adjacent, mortarless structures possibly dating to historic times (Hommon 1982).

In 1987, Joseph Kennedy conducted an archaeological survey within the *ahupua'a* of Mokulē'ia, Kawaihapai and Keālia. He relocated seven of McAllister's sites. Kennedy reported three destroyed sites (Sites 190, 193, 195), three sites that appear to contain significant information (Sites 191, 194, 196), and a remaining site that could not be located with accuracy. Kennedy speculated that this may have been due to the site's strong connection to Hawaiian mythology and that further study was needed (Kennedy 1987:3).

Kennedy also notes that Barrera (1986) had conducted a survey in this area, but had located only two sites that consisted of rock walls. One of the sites was located south of the Dillingham Ranch and the other was located southeast of the Kawaihapai Reservoir. Since both Barrera and Kennedy had limited time for their surveys, Kennedy recommended further work for the area.

In 1991, Joseph Kennedy conducted a survey in the hills behind the Waialua High School, which is located to the southeast of the project area. He relocated McAllister's Site 197, Kalakiki Heiau. Sterling and Summers (1978) mention Kalakiki Heiau in conjunction with Onehana Heiau, which McAllister never recorded. Sterling and Summers describe Onehana Heiau as being "quite a large heiau and tradition says that it was used as a place of human sacrifice . . . Its name was Onehana and adjoining it was a smaller one called Kalakiki" (Sterling and Summers 1978:104). Sterling and Summers suggest that Onehana may have been destroyed. Kennedy

states that the map of Kalakiki Heiau produced by McAllister is nearly identical in outline to the one produced by his field staff, except for its size. While McAllister has the large southern terrace measuring 80 feet, Kennedy recorded the same terrace with a measurement of 250 feet. Further research reveals that Stokes (1916) recorded Kalakiki and Onehana as actually a single *heiau* with differently named sections (Kennedy 1991:2). Thrum in 1907 states that the Onehana Heiau was located behind the Agricultural Company's mill, while Kalakiki Heiau was more towards Mokulē'ia, but higher up the ridge (Thrum 1907:47). Kennedy believes that these two *heiau* are actually a single structure. It is relatively rare to have two *luakini heiau* in such close proximity. There is also ethnohistoric documentation of Hawaiian *heiau* structures being renamed and reused for the current needs of the people (Kennedy 1991:3).

In 1991, Robert Drolet and Allan Schilz surveyed west of the project area. Their survey consisted of 840 acres and was located *mauka* of Farrington Highway between Waialua and Dillingham Field. The majority of their project area was located within Mokulē'ia Ahupua'a, with a small portion also being located within Kawaihapai Ahupua'a. In addition to relocating three of McAllister's sites (194, 195, and 196), they also located three site clusters. These site clusters were all located in the upland portion of the survey at an elevation of 40-75 feet above sea level. All three site clusters were architecturally similar and appeared to support the theory that complex agricultural field systems existed prior to European contact. The three site clusters seem to "represent a single, extensive agricultural field complex established over the gently sloping coastal upland terraces" (Drolet and Schilz 1991:17). They "seem to define a large village unit in the Mokuleia uplands only minimally disturbed by historic military activities and modern crop farming" (Drolet and Schilz 1991:20).

#### 4.1 SETTLEMENT PATTERN SUMMARY

During the 1970s and 1980s, Marshall Sahlins and Patrick Kirch conducted extensive ethno-archaeological field and archival research for Anahulu Valley. The valley is located approximately 10 km to the east of Mokulē'ia and provides the best example of settlement patterns for the surrounding area.

Kirch established the earliest occupation of the valley as A.D. 1300 based upon analysis of identified cultural deposits collected from several sites. The evidence indicates that during this time the population was sparsely scattered throughout the area and was localized in seasonal locations. Based upon information obtained from four rock shelters and eight open sites from the interior of Anahulu Valley, it appears that this settlement pattern continued to the end of the 1700s with the major economic activity centered on coastal fishing with some interior horticulture (Kirch 1982, 1985).

Based on a review of previous archaeological research and archival resources of the area, we would predict that prehistoric settlement would be concentrated along the coast of Mokulē'ia. We would expect to find evidence of temporary habitations dating to after A.D. 1300 that would be occupied on a recurrent basis to exploit marine resources. Fishing shrines, similar to McAllister's Site 201, should be located along the coast in order to assure fishing success.

We also predict that human burials might be found in the coastal sand dunes. Sand dunes were preferred burial areas in coastal areas of Hawai'i. Evidence of sand dune burials have already been documented by McAllister (Site 202).

Mokulē'ia is located on a flat plain, but may have been used only minimally for agriculture. The area is fertile, but the lack of rain limited agricultural development. With irrigation, however, the area was able to produce vast quantities of produce. Early agriculture probably occurred close to springs and permanent stream beds. Once the extensive irrigation systems were developed in Mokulē'ia, agriculture would have increased dramatically.

## 5.0 FIELD METHODS

Archaeological investigations in the project area were conducted on March 17 and 18, 1993. The survey took about one hour due to the small size of the parcel. The subsurface auger testing was completed within two days.

### 5.1 SURVEY METHODS

The survey area was bounded by the ocean to the northeast, Au Street to the southwest, and property fences to the northwest and southeast. During the survey, two crew members walked transects spaced about 10-15 m apart in an east to west direction from one property wall to the far property wall. Since no surface cultural resources were identified (see Section 6.1 below), no recording was necessary.

### 5.2 AUGER AND SUBSURFACE TESTING METHODS

The entire project area was systematically tested with a hand-driven 3-inch diameter auger. Testing operations proceeded by the placement of five N-S transect lines across the parcel. Three of the transect lines were situated to the east of the project datum (the lone ironwood tree in the center of the property, and two that were situated to the west). Individual auger tests were spaced 10 m apart along the transect line, except for the two western transects, where the auger tests were spaced 20 m apart.

## 6.0 RESULTS

### 6.1 SURVEY RESULTS

A large portion of the project area consisted of a dirt road, while the remainder of the area was covered with short grass. It was, therefore, quite easy to see the ground surface. No prehistoric

sites or features were observed on the surface, nor were any prehistoric cultural artifacts observed; however, the project area was covered with considerable modern debris.

## 6.2 TESTING RESULTS

We completed 28 auger test cores of which 15 tests reached bedrock. The remaining 13 auger tests were not excavated to bedrock because they were dug solely to determine the horizontal extent of the cultural deposit encountered in Transect 3 (see below).

The second auger test along Transect 3 (Auger 8) revealed a dark cultural layer at a depth of 42 cm below surface, subsequently designated as Site 50-80-04-4657. The third auger test along this transect revealed charcoal, cowrie, *kukui* nut shell and a possible fish bone from a depth of 41-57 cmbs. A series of auger tests were then conducted to determine the boundaries of this deposit, which measured 8.4 m N/S by 8.5 m E/W.

In order to observe the cultural layer in its stratigraphic context and to provide a means of sample collection, a shovel probe was excavated 10.0 cm west of Auger Test 8. The shovel probe measured 0.5 m by 0.5 m and reached a depth of 60.0 cm below surface. The unit was terminated once the clean sand of Layer III was clearly established in the wall profiles. The south and east faces of this unit were drawn to scale. A series of photographs were taken of each wall and of the base of excavation.

## 6.3 SITE DESCRIPTION

Site 50-80-04-4657, the cultural deposit identified in Transect 3, measures 8.4 m by 8.5 m and extends from 41 cm to 64 cm below surface. It consists of a cultural layer that contains marine shell midden and a basalt flake.

Two soil samples were collected from the shovel probe. Soil Sample 1 was collected from Layer I at a depth of 28-30 cm below surface. A total of 2.9 gm of midden was recovered. The midden sample recovered from Soil Sample 1 is too small for meaningful quantitative analyses. The midden inventory includes:

- *Trochus*
- Columbellidae
- Echinodermata
- Organic Material
- Unidentified Marine Shell
- Fish Scale

A small charcoal sample was collected, but not submitted for radiocarbon dating because of its small size and the assumption that it would not produce meaningful results.

Soil Sample 2 was collected from Layer II (the cultural deposit) at a depth of 41-44 cm below surface. A total of 6.5 gm of midden was recovered from Soil Sample 2. The midden inventory includes:

- Cypraeidae
- Conidae
- Echinodermata
- Organic Material
- Unidentified Marine Shell
- Fish Scale

In addition, a single basalt flake was recovered from Layer II. Charcoal present in Soil Sample 2 was submitted for radiocarbon dating and returned a calibrated age of A.D. 1440-1700.

#### 6.4 STRATIGRAPHY

The program of systematically augering the project area revealed that the stratigraphy is composed of a series of relatively unconsolidated calcareous sands that overlay bedrock. The only area where there is a silt fraction is in the cultural deposit identified in Transect 3, which can be described as a loamy sand. Four stratigraphic layers were identified. While the texture and consistency of these layers were generally uniform throughout the project area, there is considerable variability in color. The majority of the cores consists of layers of sand, with the cores from the cultural deposit containing loamy sand. Six auger tests had a thin surface humic layer located above Layer I. A generalized stratigraphic profile is as follows:

- Layer I was 12-30 cm thick with three cores reaching a depth of 50 cm below surface. A variety of Munsell colors were recorded for Layer I and range from a dark reddish brown (5 YR 3/4), to a dark brown (7.5 3/2), to brown (10 YR 5/3), to light brownish gray (10 YR 6/2), to very pale brown (10 YR 7/3).
- Layer II was 16-53 cm thick with four cores having a maximum depth of 70-92 cm below surface. Eight different Munsell colors were recorded for Layer II which range from dark grayish brown (10 YR 4/2) to light brownish gray (10 YR 6/2) and from dark reddish brown (5 YR 2/2) to dark reddish gray (5 YR 4/2).
- Layer III was 28-46 cm thick, reached a maximum depth of 105 cm below surface and was spatially restricted to the area surrounding the cultural deposit. The Munsell colors for this layer consists of 7.5 YR 6/2 (pinkish gray), and 7.5 YR 7/4 (pink). Layer III was discovered in Auger test 3. In this core, Layer III (pink) is clearly visible above the Jaucas sand of Layer IV (very pale brown). It would appear that Layer III represents a second depositional phase of sand in addition to Jaucas sand.

- Layer IV was 10-157 cm thick and reached a maximum depth of 226 cm below surface. The Munsell colors include 7.5 YR 6/4 (light brown), 10 YR 7/3 (very pale brown), and 10 YR 8/4 (very pale brown). This layer is consistently a clean sand with various percentages of coral pebbles and cobbles present. Layer IV is interpreted as the original sand dune deposit.

The profiles of the south and east faces of the shovel probe revealed three stratigraphic layers (Figures 3 and 4).

Layer I (0-32 cm below surface) is a dark grayish brown (10 YR 4/2) loamy sand; structureless, very fine crumb; loose, nonsticky and nonplastic; contains many rootlets with small cobbles and pebbles present; and contains cultural material.

Layer II (32-49 cm below surface) is a dark reddish brown (5 YR 2/2) loamy sand; structureless, very fine to fine crumb; loose, nonsticky and nonplastic; less than 30 percent pebble- and cobble-sized coral fragments; diffuse, smooth boundary; contains cultural material. The east face profile revealed a high percentage of charcoal, while no charcoal was visible in the south face profile.

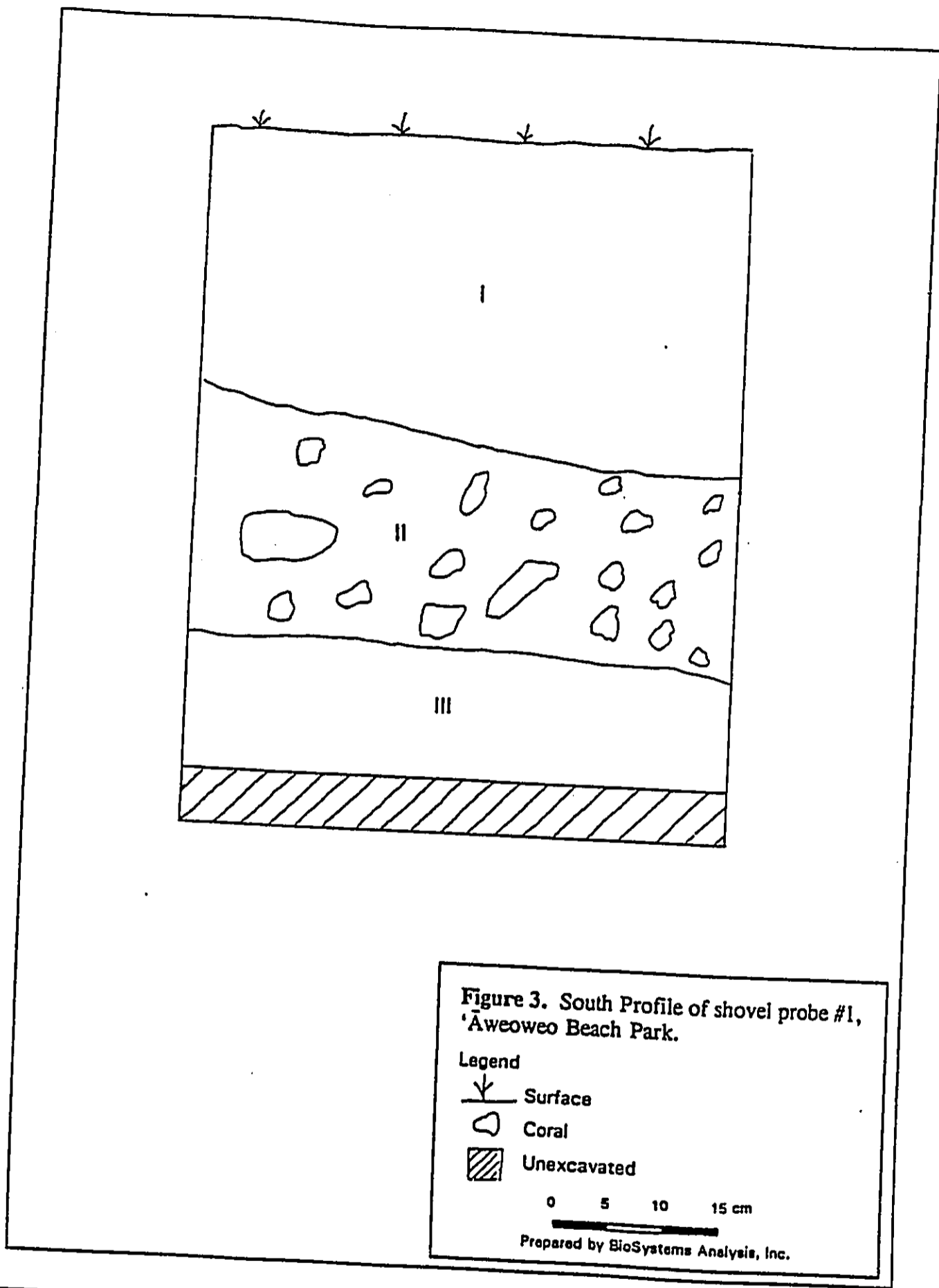
Layer III (49-60 cm below surface) is a pinkish gray (7.5 YR 6/2) sand; structureless, very fine crumb; loose, nonsticky and nonplastic; abrupt, smooth boundary. Several medium-sized coral cobbles were observed in the northern corner at the base of excavation in the east profile. It is possible that the east face profile could be a fire hearth area or a place where ashes were placed when the hearth was being cleaned.

## 6.5 RADIOCARBON ANALYSIS

One radiocarbon sample was submitted to Beta Analytic, Inc., for radiocarbon analysis. The charcoal was collected from Soil Sample 2, which was collected from Layer II of Shovel Probe 1, and was screened in the laboratory. A total of 13.3 gm of charcoal and a few fragments of *kukui* endocarp were removed from the screened fraction with forceps and placed in aluminum foil; this is the sample that was submitted to Beta Analytic.

At Beta Analytic, the sample underwent standard laboratory pretreatment, which included examination and removal of any rootlets. It was then given an acid, alkali, acid series of soakings to remove carbonates and humic acids. The subsequent benzene synthesis and counting went normally.

Table 1 presents: the sample number; its provenience; the carbon 14 age in years before present; the  $^{13}\text{C}/^{12}\text{C}$  ratio; the carbon 13 adjusted age; the calibrated ranges of dates that the sample could fall between, based on Stuiver and Pearson's model; and the probability for the accuracy of the listed date range.



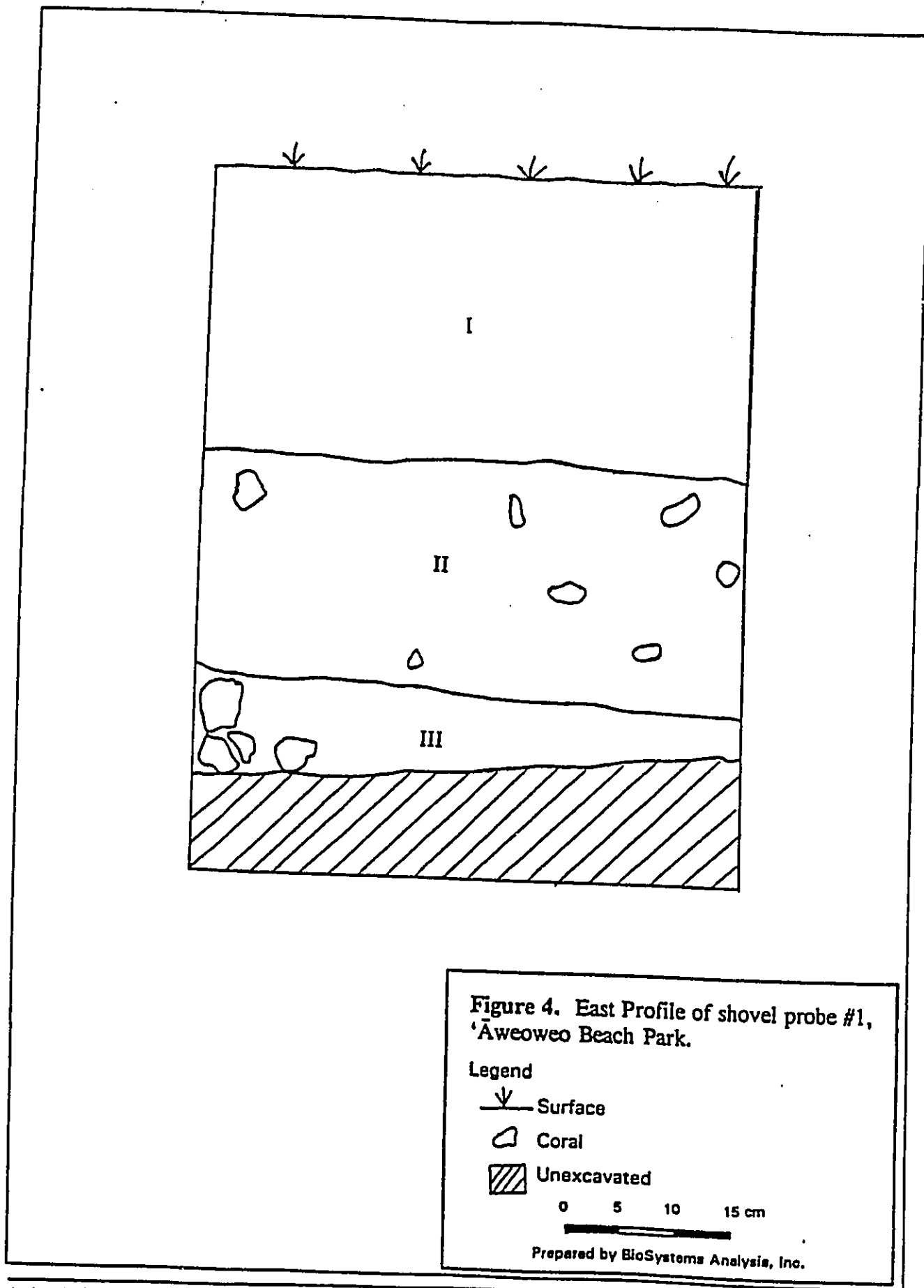




Table 1. 'Āweoweo radiocarbon age determinations.

Sample Number	Provenience	C14 Age Years B.P.	C13/C12	C13 Adjusted Age (two sigma)	Calibrated Age <sup>1</sup> A.D.	Absolute Probability
BETA-62524	Shovel Probe 1 Layer II	250±80	-22.4 0/00	290±80	1440-1700	75%

<sup>1</sup>Calibrations based on Stuiver and Pearson 1993.

There is a 75-percent probability that the cultural deposit of Site 50-80-04-4657 dates to the period between A.D. 1440-1700 at two standard deviations (this probability was calculated by multiplying the percentage area enclosed [95.4] by the area under probability distribution [.79]). There is a high probability, then, that this deposit is of prehistoric origin.

## 7.0 DISCUSSION

While the results of the surface survey did not reveal any archaeological resources, the subsurface auger testing was successful in determining the depositional history of the project area and locating a prehistoric cultural deposit. The findings of these results are briefly discussed below.

From the analysis of the cores, both stratigraphically and by maximum depth attained, it would appear that there is a raised coral ledge roughly in the center of the project area. This is based on Auger tests 24, 2, and 5. All three cores are in rough alignment and none reached a depth of 30 cm below surface. It also appears that there are two large sand dune deposits located within the project area. These are represented by Auger tests 7, 25, and 3. Both Auger tests 7 and 25 were terminated before reaching coral substrata due to wall collapse. Auger test 3 reached a maximum depth of 157 cm below surface, Auger test 7 reached a depth of 227 cms, and Auger test 25 reached a depth of 98 cm below surface.

The dominant sand deposit, described earlier as pale to very pale brown, occurs in six cores. These are Auger tests 1, 3, 7, 25, and 28. They appear to represent the original dune feature. The occurrence of Layer III, pink (7.5 YR 7/4) and pinkish gray (7.5 YR 6/2), appears to occur in those cores closest to Au Street. These cores include Auger test 3, 6, 8, and 15. It is possible that they represent a second depositional episode of sand that is slightly different in color.

The cultural deposit is most likely associated with fishing or some other form of marine exploitation. The cultural deposit is small in size, which suggests that it may have functioned as a temporary habitation site. The radiocarbon date of A.D. 1440-1700 places the use of this

site during the prehistoric period. This cultural deposit is located relatively close to McAllister's Site 201, a fishing shrine, which would further support the idea that the site was utilized as a fishing camp. The recovery of two fish scales from the bulk soil samples collected from the shovel probe further supports the notion that fishing occurred here.

## 8.0 INITIAL SIGNIFICANCE ASSESSMENT

The following site significance assessments are based on the findings documented in this report, and on the four criteria:

- A. Properties 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 that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important in prehistory or history.

The cultural deposit appears to fulfill criterion D based on the information obtained during our subsurface investigations. With a high concentration of charcoal being observed and the presence of a basalt flake along with the remains of marine resources, the potential for this cultural deposit to reveal important information about Hawaiian prehistory appears to be high.

## 9.0 RECOMMENDATIONS

BioSystems recommends that the cultural layer be preserved and avoided during construction of the 'Āweoweo Beach Park. Since the majority of the work involves surface grubbing, the likelihood of disturbing the cultural deposit is minimal. If in the future, however, it became necessary to install an underground sprinkler system in the area of the cultural deposit, or some other form of subsurface construction is necessary, then data recovery excavations are recommended before the construction proceeds.

BioSystems also recommends that construction activities be monitored for possible burials. This would include both the grubbing phase and trenching during the construction of the comfort station. Because the beach park is being constructed on top of a prehistoric sand dune, there is a high probability that burials are present.

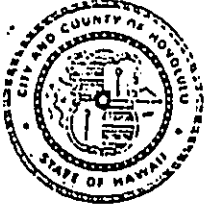
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*APPENDIX G*

*REFERENCE LETTERS*



**CITY COUNCIL**  
CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII 96813 / TELEPHONE 523-4000

NEIL ABERCROMBIE  
COUNCILMEMBER

RECEIVED

January 18, 1989

TO: COUNCILMEMBER DONNA MERCADO KIM  
CHAIR, COMMITTEE ON ZONING

FROM: COUNCILMEMBER NEIL ABERCROMBIE *NA*  
CHAIR, COMMITTEE ON HUMAN SERVICES

SUBJECT: ACQUISITION OF BEACH FRONT LANDS FOR A PUBLIC PARK  
BILL 177

At its January 17, 1989 meeting, the Committee on Human Services voted to recommend to the Committee on Zoning that four parcels of land at Mokuleia remain zoned as P-2, rather than be rezoned to R-7.5 as proposed in Bill 177.

The Committee on Human Services also voted to recommend that the City take steps to acquire the four parcels for a possible future beach park.

Speaking on behalf of the Committee on Human Services, I strongly concur with the Department of Parks and Recreation which declared in its September 23, 1988 letter to Councilmember John DeSoto that: "There is a pressing and immediate need to acquire as much of the remaining beach front land because of sky-rocketing costs."

It is also my understanding that the rapid growth of the district in which the parcels are located has precipitated a need for more parks and recreational services.

Thank you for bringing this matter to my attention. Please feel free to contact me if I can be of further assistance.

cc: Councilmember Rene Mansho

Return DPR

DPR/ADVANCE PLANNING

*Approved B.P.  
(p)*

'89 FEB 28 A9:45

MANAGING  
DIRECTOR'S OFFICE  
C & C HONOLULU

February 28, 1989

Councilmember, Donna Mercado Kim  
Chair, Committee on Zoning  
City Council  
City and County of Honolulu  
Honolulu, Hawaii 96813

Dear Chair Kim and Members of the Zoning Committee:

Subject: Acquisition of Beachfront Lands for a Public Park in Waialua  
Bill No. 177 (1988)  
Tax Map Key: 6-8-11:37 and 38 and 6-8-12:53 and 54

The Department of Parks and Recreation has reevaluated its previous position of no objection to the rezoning of the subject parcels from P-2 General Preservation District to R-7.5 Residential District on the parcels identified above in Mokualeia.

In view of the strong community support for priority acquisition of these four parcels for beach access and as a community playground in a high density subdivision which has no playground, the Department of Parks and Recreation endorses leaving them zoned P-2.

Sincerely,

*Walter M. Ozawa*

WALTER M. OZAWA, Director

APPROVED:

Duke Kawasaki

FOR JEREMY HARRIS  
MANAGING DIRECTOR

WMO:dh

Attach.

REPORT OF THE COMMITTEE ON PLANNING

Leigh-Wai Doo, Chair; Rene Mansho, Vice-Chair  
Neil Abercrombie, John Henry Felix, David W. Kahanu, Members

---

Committee Meeting Held  
September 13, 1989

Honorable Arnold Morgado, Jr.  
Chair, City Council  
City and County of Honolulu

Mr. Chair:

The Committee on Planning considered Bill 93 entitled:

"A BILL FOR AN ORDINANCE TO AMEND A PORTION OF THE DEVELOPMENT PLAN PUBLIC FACILITIES MAP FOR THE NORTH SHORE BY ADDING A SYMBOL FOR A PUBLICLY FUNDED PARK, SITE DETERMINED, WITHIN 6 YEARS AT MOKULEIA BEACH, MOKULEIA, OAHU, HAWAII,"

transmitted by Department Communication 529 dated June 14, 1989, which passed Second Reading at the July 26, 1989 Council meeting, and reports as follows:

The purpose of Bill 93 is to add a symbol for a publicly funded park, site determined, within 6 years, to the North Shore Development Plan Public Facilities Map so that funds may be budgeted for acquisition of four vacant lots totalling 1.4 acres along Mokuleia Beach.

The Committee notes that this site has been long been used as an unofficial beach park and is a popular fishing and swimming area. The amendment will permit the city to proceed with its proposed Aweoweo Beach Park development, which is a top priority of the Department of Parks and Recreation.

The Committee further notes that this amendment was initiated by the Council through the adoption of Resolution 88-517 which assigned to the Chief Planning Officer a Council proposal to amend the North Shore Development Plan Public Facilities Map by independent consideration.

---

CITY COUNCIL

CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

ADOPTED ON \_\_\_\_\_

COMMITTEE REPORT NO. 543



REPORT OF THE COMMITTEE ON PLANNING

Leigh-Wai Doo, Chair; Rene Mansho, Vice-Chair  
Neil Abercrombie, John Henry Felix, David W. Kahanu, Members

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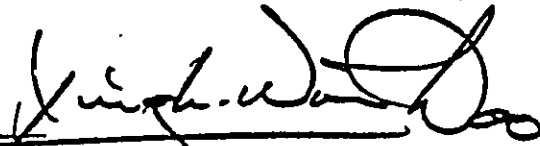
Committee Meeting Held  
September 13, 1989  
Page 2

The Committee finds that the Planning Commission, after a public hearing on May 12, 1989, voted to recommend approval in accordance with the recommendation of the Chief Planning Officer.

The Committee finds that at a public hearing held on August 9, 1989 by the City Council, no testimony was received concerning Bill 93.

The Committee on Planning is in accord with the intent and purpose of Bill 93 and recommends without objection that it pass Third Reading and that the Findings of Fact, attached hereto, be adopted.

Respectfully submitted,



Committee Chair

---

CITY COUNCIL

CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

DOPTED ON SEP 20 1989

COMMITTEE REPORT NO. 540

CITY COUNCIL  
CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

AP  
Circuit

A.P. file  
No. 88-517

RESOLUTION

Don - Name of Park?  
New file AWEOWEC  
BEACH PARK

ASSIGNING TO THE CHIEF PLANNING OFFICER A COUNCIL PROPOSAL TO AMEND THE NORTH SHORE DEVELOPMENT PLAN PUBLIC FACILITIES MAP BY INDEPENDENT CONSIDERATION.

WHEREAS, there is a continuing need for additional new recreational facilities in Mokuleia to service community needs; and

WHEREAS, the proposed park site is currently designated Park on the North Shore Development Plan Land Use Map; and

WHEREAS, the proposed park site is currently zoned P-2 General Preservation District; and

WHEREAS, the Land Use Ordinance (LUO) permits public park use in the P-2 General Preservation District; and

WHEREAS, the proposed park site is now vacant and would provide access to the beach; and

WHEREAS, lands may not be acquired and monies budgeted therefor unless the project is first placed on the North Shore Development Plan Public Facilities Map; now, therefore,

BE IT RESOLVED by the Council of the City and County of Honolulu that the Chief Planning Officer, pursuant to Article 1, Chapter 32, ROH, be assigned the responsibility to review the proposal contained in Council Communication 256 attached hereto and by reference made a part of this resolution, and to transmit in a timely manner the required reports, findings and recommendations to the Council for its consideration; and

CITY COUNCIL OF THE CITY AND COUNTY OF HONOLULU

STATE OF HAWAII

ADOPTION	)	
OF	)	DEVELOPMENT PLAN
AN AMENDMENT TO THE	)	AMENDMENT
NORTH SHORE	)	BILL NO. 93 (1989)
DEVELOPMENT PLAN	)	
PUBLIC FACILITIES MAP	)	

FINDINGS OF FACT

The Council of the City and County of Honolulu ("Council"), having considered a proposal to amend the North Shore Development Plan Public Facilities Map ("Map"), Article 8, Chapter 32, ROH, to add a symbol for a publicly funded park, site determined, within 6 years at Mokuleia Beach, Mokuleia, Oahu, Hawaii, hereby makes, concurrent with its adoption of Bill No. 93 (1989) on third reading and in accordance with the requirements of Section 5-413(2) of the Revised Charter of the City and County of Honolulu 1973, as amended ("Charter"), the following findings of fact:

FINDINGS

1. This amendment proposal was initiated by the City Council through the adoption of Resolution 88-517 assigning to the Chief Planning Officer a Council proposal to amend the North Shore Development Plan Public Facilities Map by independent consideration.
2. This amendment was then prepared and processed by the Chief Planning Officer to amend the North Shore Development Plan Public Facilities Map by adding a symbol for a publicly funded park, site determined, within 6 years at Mokuleia Beach, Mokuleia, Oahu, Hawaii.

The purpose of the proposal is to authorize the acquisition of four vacant beach front parcels totaling 1.4 acres in the Au Street area of Mokuleia in order to preserve a popular fishing and swimming area and to develop the Aweoweo Beach Park there.



**NORTH SHORE NEIGHBORHOOD BOARD NO. 27**

P.O. BOX 607 • HALEIWA, HAWAII 96712

RECEIVED

'94 DEC 20 P4:38

FACILITIES  
PARKS & RECREATION  
C & C OF HONOLULU

December 17, 1994

James T. Nakasone  
Assistant Chief, Facilities Development  
City and County Department of Parks and Recreation  
650 South King Street  
Honolulu, Hawaii 96813

RECEIVED  
DEC 21 1994

STANLEY YIM & ASSOC., INC.  
Time \_\_\_\_\_

Dear Mr. Nakasone,

In response to your request that the off-street parking requirement be waived at Auweoweo Park, the North Shore Neighborhood Board at its July 26th meeting unanimously recommended that such a waiver be granted because of the small size of the park.

Sincerely yours,

*James Awai*  
James Awai  
Chairman

ja/ebe



Oahu's Neighborhood Board System - Established 1973

*APPENDIX H*

*COMMENTS AND RESPONSES DURING  
CONSULTATION PHASE*

## CONSULTATION PHASE COMMENTS AND RESPONSES

The following list indicates the agencies, organizations, and individuals who were sent a copy of the Aweoweo Beach Park Environmental Assessment. A total of thirteen comment letters were received. The comment letters and responses are included in this section.

<u>AGENCIES, ORGANIZATIONS, INDIVIDUALS</u>	<u>PROVIDED COMMENTS</u>
<b>CITY AND COUNTY OF HONOLULU</b>	
Planning Department .....	Yes
Dept of Land Utilization .....	Yes
Dept of Parks & Recreation .....	No
Dept of Public Works.....	Yes
Dept of Transportation Services.....	No
Board of Water Supply .....	Yes
Police Department.....	Yes
Fire Department.....	Yes
<b>STATE OF HAWAII</b>	
Commission On Persons With Disabilities.....	Yes
Dept of Agriculture .....	No
Division of Water & Land Development, Dept of Land & Natural Resources .....	Yes
State Historic Preservation Division, Dept of Land & Natural Resources .....	Yes
Coastal Zone Management Program, Office of State Planning .....	No
Dept of Health.....	Yes
Environmental Management Division, Dept of Health.....	No
Dept of Transportation .....	Yes
Office of Hawaiian Affairs.....	No
Environmental Center, University of Hawaii at Manoa .....	No
<b>FEDERAL</b>	
Corps of Engineers, Dept of Army.....	Yes
Soil Conservation Service, Dept of Agriculture .....	No
Fish and Wildlife Services, Dept of Interior.....	No
<b>OTHERS</b>	
Hawaiian Electric Company, Inc.....	Yes
Northshore Neighborhood Board (#27).....	No



DEPARTMENT OF THE ARMY  
U. S. ARMY ENGINEER DISTRICT, HONOLULU  
FORT SHAFTER, HAWAII 96858-5440

PLANNING DIVISION

September 15, 1993



DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU  
430 SOUTH KING STREET  
HONOLULU, HAWAII 96813



January 18, 1994

STANLEY YIM

Planning Division

RECEIVED  
SEP 17 1993

STANLEY YIM AND ASSOCIATES, INC.  
1700

Mr. Jason Yim  
Stanley Yim and Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the Aveoeho Beach Park, Wai'alua, Oahu (TMK 6-8-12: 53 and 54). The following comments are provided pursuant to Corps of Engineers authorities to disseminate flood hazard information under the Flood Control Act of 1960 and to issue Department of the Army (DA) permits under the Clean Water Act; the Rivers and Harbors Act of 1899; and the Marine Protection, Research and Sanctuaries Act.

- a. The project does not involve work in waters of the U.S.; therefore, a DA permit will not be required.
- b. The flood hazard information presented on page 5 of the report is correct.

Sincerely,

*Stanley Yim*  
Stanley Yim  
Director of Engineering

WALTER H. OZAWA  
DIRECTOR

Mr. Kisuk Cheung, P. E.  
Director of Engineering  
U. S. Army Engineer District, Honolulu  
Department of the Army  
Fort Shafter, Hawaii 96858-5440

Dear Mr. Cheung:

Subject: Response to Department of the Army's Comments  
Aveoeho Beach Park  
TMK: 6-08-11: 37 & 38 and 6-08-12: 53 & 54

The following responds to the Department of the Army's comments:

Thank you for participating in the pre-assessment consultation phase for the proposed Aveoeho Beach Park Draft Environmental Assessment. Your comments have been noted and your letter, along with this response will be included in the Environmental Assessment.

If you have any questions, please contact Mr. Yukio Taketa, Chief of Facilities Development, at 527-6301.

Sincerely,

*Walter H. Ozawa*  
WALTER H. OZAWA  
Director

WMO:gf

*We Add Quality to Life*



**COMMISSION ON PERSONS WITH DISABILITIES**

Five Waterfront Plaza, Suite 210, 500 Ala Moana Blvd., Honolulu, HI 96813, Ph: 586-7664 (TDD)  
 586-8121 (V/TDD)  
 586-8129 (FAX)

**Technical Assistance Review**

CFD Job #: 93-316  
 Project Name: Aweoweo Beach Park- Wallua  
 Project Number: N/A  
 Project Manager: Jason Yim  
 Design Consultant: Stanley Yim and Associates

Documents Reviewed: September 10, 1993

The following comments identify those areas of this project which do not meet the minimum design requirements set forth in HRS 103-59. These comments represent technical assistance only and do not constitute a Final Document Review required by HRS 103-50. A written reply or submittal of plans addressing the noted deficiencies is requested. The Final Document Review will be provided upon submittal of the final construction documents.

Item	Page	Deficiency and/or Finding	ADAAG
1	16	Mention is made here that proposed construction will include facilities that will need to conform to guidelines of ADAAG. Since the project is still in the conceptual stages, I have listed the elements proposed to be constructed and their adjoining reference to ADAAG.	
		An accessible route needs to be provided on the site to access telephones, bathrooms, picnic tables, drinking fountains, public transportation stops, parking, etc.	4.12 4.3 4.5
		If a curb is included in the project, then a curb ramp needs to be provided	4.7
		If parking stalls are included on the adjacent roadway, then an accessible parking stall needs to be provided.	4.1.2(b), b.c. 4.6
		Bathrooms that are provided need to be accessible.	4.16 4.17 4.23 4.24
		Telephones that are provided need to be accessible.	4.1.3(17) 4.31

Item	Page	Deficiency and/or Finding	ADAAG
		Drinking fountains that are provided need to be accessible.	4.1.3(10) 4.15
		5 % of the picnic tables but not less than one need to be accessible.	AA.15.2 4.32
		Where accessible parking and bathrooms are provided, accessible signage needs to be included.	4.1.3(18) 4.30

NOTE: I have included on a separate page, a diagram of an accessible picnic table.

Reviewed By:

*Patricia A. Peppard*

Patricia A. Peppard  
 Facility Access Technican



DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**  
 535 SOUTH KING STREET  
 HONOLULU, HAWAII 96813



WALTER M. OSAYAMA  
 DIRECTOR  
 ALVIN K. KU  
 DEPUTY DIRECTOR

January 18, 1994

Ms. Patricia A. Peppard  
 Facility Access Technician  
 Commission on Persons with Disabilities  
 Five Waterfront Plaza, Suite 210  
 500 Ala Moana Boulevard  
 Honolulu, Hawaii 96813

Dear Ms. Peppard:

Subject: Responses to Commission on Persons With Disabilities  
 Aveoheo Beach Park  
 TMK: 6-08-11: 37 & 38 and 6-08-12: 53 & 54  
 CPD Reference: Job No. 36-316

The following responds to the Commission on Persons with Disabilities' comments:

Thank you for participating in the pre-assessment consultation phase for the proposed Aveoheo Beach Park Draft Environmental Assessment. Your comments have been noted and will be addressed on the construction plans for the project.

The proposed improvements will provide the necessary access and will conform to the Americans with Disabilities Act Accessibility Guidelines. The plans, upon completion, will be submitted to the Commission for review and approval.

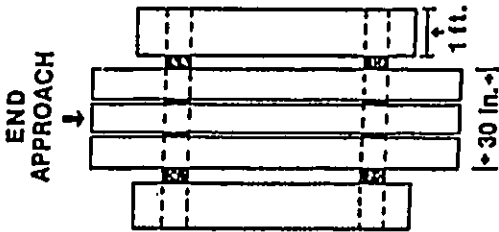
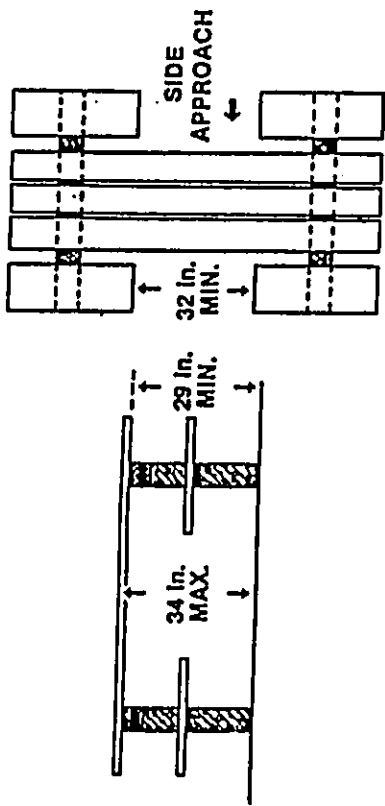
Should you have any questions, please contact Mr. Yukio Taketa, Chief of Facilities, at 527-6301.

Sincerely,

WALTER M. OSAYAMA, Director

WMO:gf

*We Add Quality to Life*



**ACCESSIBLE PICNIC TABLE**



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. BOX 2079  
HONOLULU, HAWAII 96819

JOHN C. LEWIS, M.D.  
DIRECTOR OF HEALTH

IN REPLY, PLEASE REFER TO:

93-261/epo

October 11, 1993

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Pea Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Draft Environmental Assessment for  
Aweoep Beach Park  
68-197 Au Street  
Waialua, Oahu  
Honolulu, Hawaii 96791  
THK: 6-8-11: 37 & 38  
6-8-12: 53 & 54

RECEIVED  
OCT 13 1993

STANLEY YIM & ASSOC. INC.  
THK

Thank you for allowing us to review and comment on the subject project. We have the following comments to offer:

Wastewater

The document proposes to construct the new Aweoep Beach Park on four adjoining lots in Mokualea, Oahu. The subject project is located below the Underground Injection Control (UIC) Line, in the Pass Zone and in the critical wastewater disposal area as determined by the Oahu Wastewater Advisory Committee. No new cesspools will be allowed in the subject area.

As there is no existing sewer service system in the area, the Department of Health (DOH) concurs with the planned use of a wastewater system such as a septic tank with soil absorption systems to be constructed on-site. Because of the low elevation, shallow water table and proximity to the shoreline, seepage pits will not be allowed for the disposal of the septic tank effluent. Effluent irrigation should be used wherever possible. The siting of the individual wastewater system (IWS) disposal component should be situated as far inland as possible. The use of low-flow fixtures and urinals that do not constantly drain water should be a requirement.

All wastewater plans must conform to applicable provisions of the DOH's Administrative Rules, Chapter 11-62, "Wastewater Systems" and we reserve the right to review these plans.

If you should have any questions on this matter, please contact Ms. Lori Kajiwara of the Wastewater Branch at 586-4290.

Mr. Jason Yim  
October 11, 1993  
Page 2

Drinking Water

1. The proposed park is located below the Underground Injection Control (UIC) Line.
2. The proposed drainage drywells and drywell trench may require a UIC permit to construct and operate. Drywell design information should be submitted to the UIC program for review and comment.
3. If the individual wastewater system's disposal component receives greater than one thousand gallons per day of wastewater, a UIC permit may be required. The disposal system design information should be submitted to the UIC program for review and comment.
4. Please be advised that Hawaii Administrative Rules, Title 11, Chapter 23, "Underground Injection Control," Section 12(a) states: "No person shall operate, modify or abandon an injection well or wells without first obtaining a UIC permit from the Department. Further, no person shall start construction of an injection well without first applying for a permit and obtaining the Department's approval for the start of construction."

If you have any questions on this matter, please contact Mr. Norris Uehara of the Underground Injection Control Section of the Safe Drinking Water Branch at 586-4258.

Noise

We have concerns regarding potential noise impacts on the existing residential community from the proposed beach park. Noise from recreational activities associated with parks, including people shouting, yelling or screaming, and sound production and reproduction devices, may impact surrounding residences in terms of annoyances. Noise mitigation measures should be considered for the east and west boundaries of the park.

If you should have any questions on this subject, please call Jerry Haruno, Environmental Health Program Manager, Noise and Radiation Branch at 586-4701.

Litter

Our main concern for this project involves the use of well placed, visible, easy-to-use trash containers. The attention given to this area will have an impact on how littered the park is on a daily basis. A littered park takes away from the enjoyment of that park.

The minimization of litter should be considered when looking at the number of receptacles to be purchased and used and the design of the containers themselves.

Mr. Jason Yim  
October 11, 1993  
Page 3

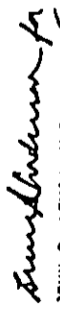
It has been our experience that when receptacles are easily seen and convenient to get to and use, people will place their waste material in them. If they are few and far between or not emptied often enough, people will leave their waste where they are, or at best, in the vicinity of other waste (which may be near an overflowing receptacle).

We recommend choosing a receptacle design that is user friendly; i.e., a design that makes it easy to deposit waste. Also, consideration should be given to a design that would prevent wind from blowing waste out of the receptacle.

Finally, we strongly recommend that sufficient park staff be budgeted so that these receptacles can be emptied on a timely basis, particularly during the weekends and holidays.

If there are any questions on this matter, please contact Dale Hoffmann at the State Litter Control Office at 973-9700.

Very truly yours,

  
JOHN C. LEWIN, M.D.  
Director of Health

c: Wastewater Branch  
Safe Drinking Water Branch  
Noise and Radiation Branch  
Litter Control Branch

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU

430 SOUTH KING STREET  
HONOLULU, HAWAII 96813



HALLEIGH CHANG  
DIRECTOR  
ALUMNA C AU  
SERVICES DIVISION

January 18, 1994

Mr. John C. Lewin, M.D.  
Director of Health  
Department of Health  
State of Hawaii  
Post Office Box 3378  
Honolulu, Hawaii 96801

Dear Dr. Lewin:

Subject: Responses to State Department of Health's Comments  
Aweoweo Beach Park  
TRM: 6-08-11: 37 & 38 and 6-08-12: 53 & 54

The following responds to the State Department of Health's comments:

Thank you for participating in the pre-assessment consultation phase for the proposed Aweoweo Beach Park Draft Environmental Assessment. The following responses are itemized in the same order as the comments in your October 11th letter.

1. **Wastewater:** The Individual Wastewater System (IWS) for the project will be designed to conform to the applicable provisions of the Administrative Rules, Chapter 11-62, "Wastewater Systems." The construction plans showing the IWS will be submitted to the DOH for review and approval.
2. **Drinking Water:** The present project design does not anticipate using drywells. If however their use becomes necessary, its design will be submitted to the UIC Section for review and approval. If a UIC permit is needed, an application for such a permit will be made when the plans are submitted for approvals.

*We Add Quality to Life*

Mr. John C. Levin, M.D.  
Page 2  
January 18, 1994

3. Noise: There is an existing 4.0 to 4.5 ft. high CMU wall along the west boundary and there is also a 3 ft. and a 6 ft. high fence along the east boundary. The Project's landscape planting plan calls for new sea grape hedges to be planted along both boundaries next to the CMU wall and the fences. In addition to the hedges, there will be new Kamani trees to be planted in groups on the park side of the hedges (ten trees on the west side and nine trees on the east side - See Appendix A "Proposed Aveveo Beach Park Masterplan"). These groups of trees will cause the open activity areas to be located closer to the central portion of the park. The walls, fences, hedges, trees, and the siting of the activity areas closer to the center of the park should help to mitigate noise problems.
4. Litter: There will be 14 trash containers throughout the park. Two for each picnic area (four picnic areas); four along the beach side of the park; and two at the comfort station. Your suggestion for using a user friendly receptacle, and request for a design to minimize wind blowing waste out of the receptacle is noted and will be addressed in plans. Your recommendation for a sufficient park staff for emptying these receptacles on a timely basis, particularly during the weekends and holidays is also noted.

If you have any questions, please contact Mr. Yukio Taketa, Chief of Facilities Development, at 527-6301.

Sincerely,



For WALTER M. OZAWA, Director

WHO:gf

DEAN WALKER  
GOVERNOR OF HAWAII



STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION  
33 SOUTH KING STREET, 8TH FLOOR  
HONOLULU, HAWAII 96813

SEITE AREA, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

JOHN A. SCHWELER  
DONAL L. HANAUER

ADJUTANT GENERAL

AGRICULTURE DEVELOPMENT  
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CONSERVATION AND  
ENVIRONMENTAL AFFAIRS

CONSERVATION AND  
RECREATION DEVELOPMENT  
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MANAGEMENT

FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
DIVISION  
LAND AND NATURAL  
RESOURCES

PLANNING AND  
WATER AND LAND DEVELOPMENT

September 16, 1993

Jason Yim  
Stanley Yim & Associates  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

RECEIVED  
SEP 20 1993

LOG NO: 9348  
DOC NO: 9309TD22

Dear Mr. Yim:

SUBJECT: Draft Environmental Assessment (DEA), Aweoweo Beach Park  
Mokule'ia, Waialua, O'ahu  
TRK: 6-8-11: 37, 38; 6-8-12: 53, 54

Thank you for the opportunity to review this DEA, which contains as Appendix E a draft archaeological report (Carlson and Cleghorn 1993). This report is poorly written and appears not to have been edited. It is unacceptable as an archaeological inventory survey report for a number of reasons, one being that the basic descriptive sections are lacking much important detail. We are unsure, on the basis of this report, if information was adequately collected in the field, so we cannot rule out the possibility that additional fieldwork will be needed to complete tasks that are incompletely reported. A list of specific comments is attached. These comments should aid in revision of the draft report, but we cannot guarantee that successful revision of these specific points will result in an acceptable report.

If you have any questions please call Tom Dye at 587-0014.

Sincerely,

DON HIBBARD, Administrator  
State Historic Preservation Division

TD/jt

SPECIFIC COMMENTS

BACKGROUND

Spelling and Typos

Page 11, Settlement Pattern and Summary: It is "Sablins."

Meaning Unclear

Page 4, 2nd paragraph: We cannot find "foothills" in the dictionary. Is the correct word "foothills?"

Page 6, 2nd paragraph: The meaning of the last sentence is not clear. The referent of "at this time" is vague. Is it the case that there are no records of sugar cane cultivation in Mokule'ia that map the extent of cultivation?

Page 8, Last paragraph: "earthen airplane hangers"???????

Page 9, 3rd paragraph: The location of site 202 is given as "across from the modern roadway of Kiapoko Place." Across what?

Substantive Discrepancies

Page 2, Environmental Setting: What are "coastal banks?" The sentence that begins "In the project area, ..." is confusing. Given that the "water cut sand berm" (???) slopes inland to a foot above sea level, it is difficult to imagine how it can rise abruptly from the high water mark. Also, please use metric measures throughout. How big is the project area?

Page 2, Extended quote, bottom: Please note that this quote describes more than the inland area of Mokule'ia.

Page 2, Project Area Location: This section lacks tax map keys. It also includes information on modern-day features of the project area that don't contribute to an understanding of the project location. Perhaps these observations could be placed in the following section.

Page 6, 1st paragraph: The subject does not agree with the verb in the sentence that begins "Handy and Handy ..." Also, this sentence appears to contradict with the quote that it introduces, since the Handys refer to "extensive" lo'i areas.

Page 7, 2nd paragraph: We can't figure out the purpose of this paragraph, which appears to be contradictory. Also, the use of the verb "transcribed" suggests that the original was in a language other than Hawaiian. Was this the case?

Page 9, 4th paragraph: What is meant by "undeterminate age?" Why is site 3400 singled out for mention here? Why is the review of McAllister's work restricted to two ahupua'a, and Hommon's not? It is confusing to read that McAllister found 18 sites and then to read that Hommon found 30 previously recorded sites.

Page 12, 2nd paragraph: We can't make any sense out of this paragraph.

#### Figures

Page 3, Figure 1: We will need, in addition to this useful figure, a project location map that is based on the USGS quadrangle.

#### METHODS

##### Substantive Discrepancies

Page 13, Auger and Subsurface Testing: We can't understand this section.

Page 13, Survey methods: Is it the case that sites and features were flagged and photographed? Or is this boilerplate that hasn't been sufficiently modified to describe what actually took place?

#### DESCRIPTIONS

##### Meaning Unclear

Page 9, last paragraph: Many of us use the word "relocate" to mean "re-identify." Actually, it means to take something from one location to another. Clearly, this is not what Kennedy did during his survey.

##### Substantive Discrepancies

Page 14, Testing results, 1st paragraph: This paragraph is confusing. It implicitly distinguishes between auger tests taken on transects and those used to find the extent of the cultural deposit. The meaning of "substrata" is not clear as it is used.

Page 15, Last sentence: It is not clear if charcoal was collected from Soil Sample 2, or from Layer II more generally.

Page 15, Site description: What does "midden was collected in a qualitative, non-quantitative manner" mean? How much charcoal was collected from Soil Sample 1? Was this too little for accelerator mass spectrometry dating?

Page 16, Stratigraphy: The auger cores should yield sufficient data to establish a stratigraphic section for the property as a whole. The soil descriptions in this section are incomplete, since they do not indicate provenience and are mostly limited to a list of colors.

Page 17, Layer III: There is an apparent contradiction between the statements that the layer "contains no cultural material" and "the east profile could be a fire hearth area."

Page 17, Radiocarbon analysis: There is insufficient provenience information for this sample to be usefully interpreted. Was the charcoal (?) dispersed, or was a piece of burned wood dated? Could this sample have been old driftwood? Stuiver is misspelled. There should be a reference to the calibration curve of Stuiver and Pearson. Was this the 1993 curve?

Page 20, 1st paragraph: The description of the 75% figure appears to contradict the heading "Absolute Probability" in Table 1. Is 75% the figure given by CALIB, or is this the conditional probability? Also, it is not clear that the deposit is prehistoric. There are other possibilities.

Page 20, Table 1: The C13/C12 ratio is incorrect.

Page 21, 3rd paragraph: Jaucas refers to a soil series, which includes a range of soils developed from calcareous sands. The report appears to use the term Jaucas to refer to the parent sand material, although the level of description is often so minimal that it is difficult to determine if this is the case.

Page 21, Last paragraph: This paragraph contains some fairly unorthodox impressions of Hawaiian prehistory and history. We are not particularly interested in defending orthodox ideas, but we will need quite a bit of supporting argumentation to conclude that the ideas expressed in this report are not naive misinterpretations of a portion of the literature.

#### Figures

Page 18, Figure 2: The scale of this figure appears to be incorrect. Layer I is shown with a maximum depth of about 21 cm, but the text gives this depth as 32 cm. There are similar problems with the depths of the other layers. Also, what does the stippling represent?

Page 19, Figure 3: The scale of this figure also appears to be incorrect. It seems odd that charcoal is found in the east profile of Layer II, but not in the south profile, as shown in Figure 2. Is this distribution significant?

#### SIGNIFICANCE ASSESSMENTS

##### Substantive Discrepancies

Page 23, Initial significance assessment: This appears to be a City and County of Honolulu project. Unless there is Federal funding there is no need to cite the Section 106 significance criteria. It would be more appropriate here to cite the State criteria.

#### GENERAL COMMENTS

##### Other Comments

Page 26, Bibliography: The reference to Stokes is incorrect. Stuiver's name is spelled incorrectly.

End of comments.

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU  
845 SOULI'U KING STREET  
HONOLULU HAWAII 96813



WALTER H. OZAWA  
DIRECTOR  
ALYSHA L. ALI  
DEPUTY DIRECTOR

January 18, 1994

Mr. Don Hibbard, Administrator  
State Historic Preservation Division  
Department of Land and Natural Resources  
State of Hawaii  
33 South King Street, 6th Floor  
Honolulu, Hawaii 96813

Dear Mr. Hibbard:

Subject: Response to State Historic Preservation Division's  
Comments - Aveoeho Beach Park  
TMK: 6-08-11: 37 & 38 and 6-08-12: 53 & 54  
DLNR Reference No.: Log No.: 9348  
Doc. No.: 9309TD22

The following responds to the State Historic Preservation  
Division's comments:

Thank you for participating in the pre-assessment  
consultation phase for the proposed Aveoeho Beach Park  
Draft Environmental Assessment.

Your comments have been noted and have been forwarded  
to the project's archaeologist. He is presently  
working with your staff in addressing the comments  
presented in your September 16, 1993 letter.

Your letter, along with this response will be included  
in the Environmental Assessment. The revised  
archaeological report will also appear in the  
Environmental Assessment.

If you have any questions, please contact Mr. Yukio Taketa, Chief  
of Facilities Development, at 527-6301.

Sincerely,

WALTER H. OZAWA, Director

WMO:gf

*We Add Quality to Life*



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

P.O. BOX 821  
HONOLULU, HAWAII 96809

Office of Conservation  
Office of Land and Natural Resources  
DENVER  
CENT. ADMIN. BLDG.  
1001 MARKET

AQUATIC DEVELOPMENT  
ADVISORY BOARD  
BOATING AND RECREATION  
CONSERVATION AND  
RECREATION AFFAIRS  
HONOLULU OFFICE  
RECREATION DEVELOPMENT  
STATE PARKS  
STATE AND LAND DEVELOPMENT

REF:OCEA:SNK

OCT 25 1993

FILE NO.: 94-133  
DOC. NO.: 3622

Mr. Jason Yin  
Stanley Yin & Associates, Inc.  
2850 Pa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yin:

SUBJECT: Draft Environmental Assessment (DEA): Aweoweo Beach Park,  
Hokuleia, Oahu, TK: 6-8-11: 37, 38; 6-8-12: 53, 54

We have reviewed the DEA information for the subject park transmitted by  
your letter dated August 30, 1993, and have the following comments.

Brief Description:

The City & County of Honolulu, Department of Parks and Recreation proposes  
to construct a new beach park on four adjoining lots in Hokuleia, Oahu.  
The proposed park would include a comfort station, 11 picnic tables, a  
drinking water fountain, 4 charcoal disposal areas, a shower tree for  
rinsing and showering, landscaping and a new driveway and service parking  
area.

Division of Aquatic Resources

The Division of Aquatic Resources comments that the following concerns  
should be addressed for the proposed beach park project as follows:

- 1) The applicant take all measures to prevent foreign and toxic material  
from entering or polluting the adjacent ocean waters during the  
construction and landscaping phases;
- 2) Special filter material may be required in the dry well trenches to  
reduce the percolation rates from the shower facility;

Mr. Jason Yin

-2-

FILE NO.: 94-133

- 3) The shower tree should be moved from its position indicated on the  
master plan to a location closer to the comfort station. Moving the  
shower tree closer to the comfort station may help minimize runoff of  
soapy shower water into the ocean and shorten the distance of the  
water lines that need to be laid from the main line along the roadway.

Division of State Parks

The Division of State Parks comments that since the park is located within  
a special flood hazard area, any structures to be constructed should be  
elevated above the base flood elevation.

Office of Conservation and Environmental Affairs

The Office of Conservation and Environmental Affairs comments that any  
work within areas seaward (makai) of the certified shoreline will be  
subject to Conservation District regulations of Chapter 183-41, Hawaii  
Revised Statutes and Title 13, Chapter 2, Hawaii Administrative Rules.

We will forward our Historic Preservation Division comments as they become  
available.

We have no other comments to offer at this time. Thank you for the  
opportunity to comment on this matter.

Please feel free to call Steve Tegawa at our Office of Conservation and  
Environmental Affairs, at 587-0377, should you have any questions.

Very truly yours,

*Keith W. Arue*  
KEITH W. ARUE

RECEIVED  
OCT 27 1993

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES



DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**  
430 SOUTH KING STREET  
HONOLULU HAWAII 96813



FRANK P. KAHU  
DIRECTOR

WALTER M. OZAWA  
DIRECTOR  
ALVIN C. KU  
DEPUTY DIRECTOR

January 18, 1994

Mr. Keith W. Ahue, Chairperson  
Department of Land and Natural Resources  
State of Hawaii  
Post Office Box 621  
Honolulu, Hawaii 96809

Dear Chairperson Ahue:

Subject: Responses to Department of Land and Natural Resources' Comments - Aweoeco Beach Park  
TKM: 6-08-11: 37 & 38 and 6-08-12: 53 & 54  
DLNR Reference No.: OCEA:SKK  
File No.: 94-113; Doc. No.: 3622

The following responds to the Department of Land and Natural Resources' comments:

Thank you for participating in the pre-assessment consultation phase for the proposed Aweoeco Beach Park Draft Environmental Assessment. Your comments have been noted and your letter, along with this response will be included in the Environmental Assessment.

As for the responses to your comments:

1. A note will be added to the construction plans instructing the contractor to exercise care when doing the construction and landscaping work to prevent foreign and toxic material from entering the adjacent ocean waters.
2. Filter material if needed, will be used to reduce the perc rates from the shower facility.
3. The final location of the shower tree is still being discussed. Your comment regarding moving it closer to the comfort station for the reasons given in your letter will be a factor in setting the final location of the shower tree.

*We Add Quality to Life*

Mr. Keith W. Ahue, Chairperson  
Page 2  
January 18, 1994

4. The finished floor for the new comfort station will be set above the base flood elevation for the area.
5. The project does not anticipate doing any work seaward of the certified shoreline.

If you have any questions, please contact Mr. Yukio Taketa, Chief of Facilities Development Division, at 527-6301.

Sincerely,

WALTER M. OZAWA, Director

WMO:gf

DEPARTMENT OF LAND UTILIZATION  
**CITY AND COUNTY OF HONOLULU**  
650 SOUTH KING STREET  
HONOLULU HAWAII 96813 P. 808-525-4212



RECEIVED  
OCT 07 1993  
DONALD A. CLEGG  
DIRECTOR  
DEPARTMENT OF LAND UTILIZATION

October 6, 1993

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Draft Environmental Assessment (DEA)  
Comments For Aveveo Beach Park  
68-197 Au Street, Maialua, Oahu  
Tax Map Keys: 6-8-11: 37, 38 and 6-8-12: 51, 54

Thank you for the opportunity to review the DEA for the proposed improvements to Aveveo Beach Park. We offer the following comments:

1. Visual Concerns

A Special Management Area Use Permit (SMP) will be required for the proposal. Profiles and Elevation drawings showing the proposed comfort station as seen from the roadway should be provided in the Final EA. A topographic map showing proposed ground elevations and proposed building elevations and dimensions should also be included in the Final EA.

2. Grading

A discussion of the volume of cut and fill required for project development should be included in the Final EA.

3. Drainage/Runoff

Page 17 of the DEA mentions that drainage for the project will be provided by way of ground infiltration using drywells. A drawing and capacity of the drywell should be included in the Final EA.

Mitigative measures to prevent runoff during construction should be discussed in the Final EA.

JASON YIM  
Page 2  
October 6, 1993

4. Flood Zone

The Final EA should explain how the project will meet flood zone requirements as stated in Section 7.10 of the Land Use Ordinance.

5. Shoreline Setback Variance (SV)

The vegetation line should be indicated on the Site Plan. Any structures within the 40-foot shoreline setback line will require a SV.

Very truly yours,

DONALD A. CLEGG  
Director of Land Utilization

DAC:dt  
aewvs.djt

DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**  
310 SOUTH KING STREET  
HONOLULU, HAWAII 96813



PARKS & RECREATION

WALTER M. OZAWA  
DIRECTOR  
ALOWA E. AU  
SUPERVISOR

January 18, 1994

**MEMORANDUM**

**TO:** DONALD A. CLEGG, DIRECTOR  
DEPARTMENT OF LAND UTILIZATION

**FROM:** WALTER M. OZAWA, DIRECTOR  
DEPARTMENT OF PARKS AND RECREATION

**SUBJECT:** RESPONSE TO DEPARTMENT OF LAND UTILIZATION'S COMMENTS  
AWEOWEO BEACH PARK  
TAX MAP KEY: 6-08-11: 37 & 38 AND 6-08-12: 53 & 54  
DLU REFERENCE: 93-06907 (DT)

The following responds to the Department of Land Utilization's comments:

Thank you for participating in the pre-assessment consultation phase for the proposed Aweoweo Beach Park Draft Environmental Assessment (DEA). The responses presented below coincide with the order of comments as contained in your October 6th letter.

1. **Visual Concerns:** The project will be applying for a Special Management Area Use Permit once a negative declaration can be determined. Plans showing the elevations and floor plan for the proposed comfort station will be included as an Exhibit A in the revised Environmental Assessment. The project's site and grading plans will also be included as separate Exhibits B & C to show the siting of the project and the proposed and existing elevations for the site and the new building. The grading plan will already include the topographic map features.
2. **Grading:** A discussion of the approximate volume of cut and fill required for the project will be included in the revised EA.

Mr. Donald A. Clegg, Director  
Page 2  
January 18, 1994

3. **Drainage/Runoff:** Page 18 of the revised DEA is revised to omit the use of drywells for the project's drainage and runoff. The existing site is already comprised of mostly sandy material. Such material has an extremely high percolation rate that allows runoff to readily infiltrate into the ground. The project's grading will result in mostly gentle slopes with no depressions to collect and detain runoff. Consequently, the existing sheet flow pattern of drainage over the project area is maintained. In addition, the finished project will have landscaping and the open areas will be planted with grass. Both the new landscaping and the grassing will not impede the percolating of runoff directly into the ground. This arrangement therefore, precludes the need for drywells for drainage and runoff as originally discussed on page 17 of the DEA.

Mitigative measures for handling runoff during construction will be discussed in the revised EA.

4. **Flood Zone:** The new comfort station floor will be set at an elevation higher than the base flood elevation for the area.

5. **Shoreline Setback Variance (SV):** The vegetation line will be shown on the project's site plan. There will be new trash cans, trees, and picnic tables located in the 40-foot setback area as measured from the vegetation line. Based on a recent discussion with the staff at DLU, a shoreline setback variance is needed. Therefore, the variance will be requested and pursued at the time the application for the SMA permit is made.

These five items address the DLU comments as contained in their October 6, 1993 letter. If you have any questions, please contact Mr. Yukio Taketa, Chief of Facilities Development, at 527-6301.

WALTER M. OZAWA, Director

WMO:gf

*We Add Quality to Life*

DEPARTMENT OF PUBLIC WORKS  
**CITY AND COUNTY OF HONOLULU**  
430 SOUTH KING STREET  
HONOLULU HAWAII 96813



FRANK P. PAE  
DIRECTOR

C. MICHAEL STREET  
DIRECTOR AND CHIEF ENGINEER  
GENUINE SPACE  
MULTI-DIRECTION

PRO 93-203

September 27, 1993

Mr. Jason Yim  
Page 2  
September 27, 1993

Should you have any questions, please contact Mr. Alex Ho, Environmental Engineer, at 523-4150.

Very truly yours,

*C. Michael Street*

C. MICHAEL STREET  
Director and Chief Engineer

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Draft Environmental Assessment (DEA)  
Aweoweo Beach Park  
IMK:6-08:11.37 & 38; 6-08-12:53 & 54

RECEIVED  
SEP 30 1993

STANLEY YIM & ASSOC., INC.  
P.O. BOX 1000

We have reviewed the subject DEA and have the following comments:

1. The DEA should address the potential impact of the storm water discharge associated with construction activities on water quality of the receiving waters.
2. The DEA should also state what structural or non-structural best management practices (BMP) will be provided to control and reduce discharge of pollutants from construction activities.
3. Construction of a new driveway as well as improvements within the City right-of-way should be in accordance with City standards.
4. We suggest a copy of this DEA be forwarded to the Department of Wastewater Management for their review and comment.

DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**

430 SOUTH KING STREET  
HONOLULU, HAWAII 96813




FRANK P. VEHI  
MAYOR

WALTER M. OZAWA  
DIRECTOR  
ALVIN C. NG  
DEPARTMENT CHIEF

Mr. Kenneth Sprague  
Page 2  
January 18, 1994

If you have any questions, please contact Mr. Yukio Taketa, Chief  
of Facilities Development, at 527-6301.

January 18, 1994

  
For WALTER M. OZAWA, Director

WHO:gf

**MEMORANDUM**

**TO:** KENNETH SPRAGUE, ACTING DIRECTOR AND CHIEF ENGINEER  
DEPARTMENT OF PUBLIC WORKS

**FROM:** WALTER M. OZAWA, DIRECTOR  
DEPARTMENT OF PARKS AND RECREATION

**SUBJECT:** RESPONSE TO DEPARTMENT OF PUBLIC WORKS' COMMENTS  
ANEWEO BEACH PARK  
TAX MAP KEY: 6-08-11: 37 & 38 AND 6-08-12: 53 & 54  
DPW REFERENCE NO.: PRO..93-203

The following responds to the Department of Public Works' comments:

Thank you for participating in the pre-assessment consultation phase for the proposed Aneoweo Beach Park Draft Environmental Assessment (DEA). The following responses have been itemized to be in the same order as the comments contained in your September 27th letter.

1. The DEA will address the potential impact of storm water discharge associated with construction activities, if any, on the water quality of the receiving waters.
2. The DEA will discuss the Best Management practices to control and reduce pollutants discharge, if any, from the construction activities.
3. The new driveway improvements in the City's right-of-way will be in accordance with City standards. Plans will be submitted for your review and approval.
4. Per your suggestion, a copy of the DEA will be forwarded to the Department of Wastewater Management for their review and comment.

*We Add Quality to Life*

JOHN WALKER  
COMMISSIONER



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

September 15, 1993

REX D. JOHNSON  
DIRECTOR  
DEPARTMENT OF TRANSPORTATION  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

BY REPLY REFER TO  
STP 8-5177

FRANK P. PASH  
DIRECTOR



DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU  
430 SOUTH KING STREET  
HONOLULU, HAWAII 96813

FRANK P. PASH  
DIRECTOR  
DEPARTMENT OF PARKS AND RECREATION  
430 SOUTH KING STREET  
HONOLULU, HAWAII 96813

January 18, 1994

RECEIVED  
IN SEP 20 1993  
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Faa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Environmental Assessment  
Proposed Aweoweo Beach Park  
TRK: 6-8-11: 37 & 38  
6-8-12: 53 & 54

After reviewing the environmental assessment for the proposed Aweoweo Beach Park, we find the project will not have a significant impact on our highway facilities.

We appreciate the opportunity to provide comments.

Sincerely,

*Rex D. Johnson*  
Rex D. Johnson  
Director of Transportation

Mr. Rex D. Johnson, Director  
Department of Transportation  
State of Hawaii  
869 Punchbowl Street  
Honolulu, Hawaii 96813-5097

Dear Mr. Johnson:

Subject: Response to State Department of Transportation  
Aweoweo Beach Park  
TRK: 6-08-11: 37 & 38 and 6-08-12: 53 & 54

The following responds to the State Department of Transportation's comments:

Thank you for participating in the pre-assessment consultation phase for the proposed Aweoweo Beach Park Draft Environmental Assessment. Your comment has been noted and your letter, along with this response, will be included in the Environmental Assessment.

If you have any questions, please contact Mr. Yukio Taketa, Chief of Facilities Development, at 527-6301.

Sincerely,

*Walter H. Ozawa*  
WALTER H. OZAWA, Director

WHO:gf

*We Add Quality to Life*

BOARD OF WATER SUPPLY  
CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU HAWAII 96813



October 7, 1993

FRANK F. EASI, Mayor  
WALTER O. WATSON, JR., Chairman  
MAURICE H. TAMASATO, Vice Chairman  
SISTER M. DAYLYN, PH.D., D.S.F.  
JOHN W. ANDERSON, JR.  
REX D. JOHNSON  
MELISSA T.J. LUM  
C. MICHAEL STREET  
KAZU HAYASHIDA  
Manager and Chief Engineer

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Your Letter of August 30, 1993 on the Draft Environmental Assessment (DEA) for Aweoweo Beach Park, Waialua, Oahu, TMK: 6-8-11: 37, 38; 6-8-12: 53, 54

Thank you for the opportunity to review and comment on the DEA for the proposed beach park project.

We have the following comments to offer:

1. The off-site water system in the vicinity of the project site is presently adequate to accommodate the proposed beach park.
2. Our records indicate that no Board of Water Supply (BWS) water meter serves the project site. However, "as-built" construction plans for the Mokuieia Beach Subdivision confirm that each of the four parcels do have one existing water lateral. The document's discussion on existing and proposed installations should therefore, be revised to reflect the current conditions.
3. The availability of domestic water will be confirmed when the Building Permit Application is submitted for our review and approval. If water is made available, the applicant will be required to pay our Water System Facilities Charges for Source-Transmission and Daily Storage.
4. BWS Rules and Regulations require the use of non-potable water for the irrigation of large landscaped areas if a suitable supply is available. Since this project is relatively small, it may not be feasible to develop a nonpotable

Mr. Jason Yim  
Page 2  
October 7, 1993



system for this park alone. However, it may be feasible in conjunction with the other two planned parks mentioned in the DEA. The applicant should investigate all of these possibilities and document his findings in a report. This report must be submitted for our review before we will consider the use of potable water for irrigation.

5. The proposed plans do show the use of approved drought tolerant/low water use and native Hawaiian plants. We recommend that an efficient irrigation system be considered, such as a drip system. The irrigation system should also incorporate moisture sensors to avoid operating the system while it is raining or if the ground has adequate moisture.

6. BWS approved backflow prevention assemblies will be required installations after all domestic water meters serving the park. The type of backflow preventer will be dictated by the type of water used in the irrigation system. A decision will be made once the source of irrigation water has been determined.

If you have any questions, please contact Roy Doi at 527-5235.

Very truly yours,

KAZU HAYASHIDA  
Manager and Chief Engineer

cc: C&C, Department of Parks and Recreation

DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**  
850 SOUTH KING STREET  
HONOLULU, HAWAII 96813



FRANK C. PARK  
DIRECTOR

WALTER M. OZAWA  
DIRECTOR  
ALVIN C. AU  
DEPUTY DIRECTOR

January 18, 1994

**MEMORANDUM**

**TO:** KAZU HAYASHIDA, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

**FROM:** WALTER M. OZAWA, DIRECTOR  
DEPARTMENT OF PARKS AND RECREATION

**SUBJECT:** RESPONSE TO BOARD OF WATER SUPPLY'S COMMENTS  
AWEOWEO BEACH PARK  
TAX MAP KEY: 6-08-11: 37 & 38 AND 6-08-12: 53 & 54

The following responds to the Board of Water Supply's comments:

Thank you for participating in the pre-assessment consultation phase for the proposed Aweoweo Beach Park Draft Environmental Assessment. The following responses are itemized to appear in the same sequence as the comments in your October 7th letter:

1. No response.
2. Document will be revised to reflect no existing water meters and only four existing water laterals for the four existing parcels. The existing water meter referred to in the document bears the number 10905610. Based on the BWS letter, it can only be surmised this existing meter must be for the adjoining lot west of the park.
3. No response. The availability of domestic water will be confirmed when the Building Permit Application is submitted for the BWS review and approval, and the requirement to pay the Water System Facilities Charges for Source Transmission and Daily Storage are both acknowledged.
4. The use of nonpotable water for the irrigation of large landscaped areas for this project is not feasible. First, a nonpotable water source in the area is not available. Second, the amount of effluent from this

*We Add Quality to Life*

Mr. Kazu Hayashida  
Page 2  
January 18, 1994

park alone will not justify the costs for its treatment and storage for reuse. Third, even if the other two planned parks are considered, their locations are somewhat distant from this Aweoweo Beach Park. The nearest would be the Makaleha Beach Park which is just over two miles away. The Hokualea Beach Park is over a mile beyond, or over three miles away from the Aweoweo Beach Park. To interconnect these three parks would be a major cost. Another cost would be the treatment of the effluent for reuse. The development schedule for both of these parks are not definite and may be years hence. Finally, the present proposal of using an IWS for the Aweoweo Beach Park for handling its sanitary sewer needs will not result in adequately treated effluent for reuse in landscaped areas. Therefore, the project will need to rely on potable water for irrigation.

5. No response. This comment will be forwarded to the Project's Landscape Architect for possible implementation on the landscape plans.
6. No response. BWS approved backflow prevention assembly after the water meter will be provided for this project.

Your comments and these responses will both be included as part of the revised Draft Environmental Assessment.

If you have any questions, please contact Mr. Yukio Taketa, Chief of Facilities Development, at 527-6301.

*Walter M. Ozawa*  
for WALTER M. OZAWA, Director

WMO:gf



FIRE DEPARTMENT  
CITY AND COUNTY OF HONOLULU  
3375 KAPAPA STREET, SUITE #425  
HONOLULU, HAWAII 96819-1000



FRANK F. PARR  
DIRECTOR

DONALD S. M. CHANG  
FIRE CHIEF  
RICHARD B. SETO MOORE  
DEPUTY FIRE CHIEF

FRANK F. PARR  
DIRECTOR

September 13, 1993

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

SUBJECT: AWEOWEO BEACH PARK  
TMK 6-08-11: 37 & 38  
6-08-12: 53 & 54

We have reviewed the subject material provided and foresee no adverse impact in Fire Department facilities or services.

Should you have any questions, please call Assistant Chief Attilio Leonardi of our Administrative Services Bureau at 831-7775.

Very truly yours,

  
DONALD S. M. CHANG  
Fire Chief

AKL:ny

Environmental Assessment Report returned

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU  
630 SOUTH KING STREET  
HONOLULU, HAWAII 96813



WALTER H. OZAWA  
DIRECTOR  
ALVIN C. AU  
DEPUTY DIRECTOR

January 18, 1994

MEMORANDUM

TO: DONALD S. M. CHANG, FIRE CHIEF  
HONOLULU FIRE DEPARTMENT

FROM: WALTER H. OZAWA, DIRECTOR  
DEPARTMENT OF PARKS AND RECREATION

SUBJECT: RESPONSE TO FIRE DEPARTMENT'S COMMENTS  
AWEOWEO BEACH PARK  
TAX MAP KEY: 6-08-11: 37 & 38 AND 6-08-12: 53 & 54

The following responds to the Fire Department's comments:

Thank you for participating in the pre-assessment consultation phase for the proposed Aweoweo Beach Park Draft Environmental Assessment. Your comments have been noted and your letter, along with this response, will be included in the Environmental Assessment.

If you have any questions, please contact Mr. Yukio Taketa, Chief of Facilities Development, at 527-6301.

  
For WALTER H. OZAWA, Director

WMO:gf

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PLANNING DEPARTMENT  
CITY AND COUNTY OF HONOLULU  
640 SOUTH KING STREET  
HONOLULU HAWAII 96813



FRANK F. PASI  
MAYOR

ROBIN FOSTER  
CHIEF PLANNING OFFICER  
ROLAND G. LURST, JR.  
DEPUTY CHIEF PLANNING OFFICER

MH 8/93-2083

September 27, 1993

RECEIVED  
SEP 29 1993  
PLANNING DEPARTMENT

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Draft Environmental Assessment (DEA)  
for the Proposed Aweoweo Beach Park

In response to your request of August 30, 1993, we have reviewed the subject DEA and offer the following comments:

1. The proposed project site is consistent with the current Park use designation on the North Shore Development Plan Land Use Map.
2. The proposed project is also consistent with the North Shore Development Plan Public Facilities Map, which shows a symbol for a publicly funded park, site determined, within six years, for the proposed Aweoweo Beach Park (see attached Ordinance No. 89-119).

Should you have any questions, please contact Matthew Higashida of our staff at 527-6056.

*Robin Foster*  
ROBIN FOSTER  
Chief Planning Officer

RF:ft  
Attachment

cc: Department of Parks and Recreation  
Office of Environmental Quality Control

ORDINANCE NO. 89-119

BILL NO. 93 (1989)

A BILL FOR AN ORDINANCE TO AMEND A PORTION OF THE DEVELOPMENT PLAN PUBLIC FACILITIES MAP FOR THE NORTH SHORE BY ADDING A SYMBOL FOR A PUBLICLY FUNDED PARK, SITE DETERMINED, WITHIN 6 YEARS AT MOKULEIA BEACH, MOKULEIA, OAHU, HAWAII.

BE IT ORDAINED by the People of the City and County of Honolulu:

SECTION I. A portion of the Development Plan Public Facilities Map for the North Shore is hereby amended by adding a symbol for a publicly funded park, site determined, within 6 years, as shown on the map attached hereto, marked Exhibit A, and by reference made a part hereof.

SECTION II. This Ordinance shall take effect upon its approval.

INTRODUCED BY:

*Robin Foster* (SP)

DATE OF INTRODUCTION:

June 21, 1989

Honolulu, Hawaii

APPROVED AS TO FORM AND LEGALITY:

*Frank F. Pasi*  
Deputy Corporation Counsel

Approved this 4th day of October, 1989

*Frank F. Pasi*  
FRANK F. PASI, MAYOR  
City and County of Honolulu

Councilmembers

89-119

(D-529/6-14-89)

P

DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**  
 410 SOUTH KING STREET  
 HONOLULU, HAWAII 96813



WALTER M. OZAWA  
 Director  
 DEPARTMENT OF PARKS AND RECREATION

January 18, 1994

FRANK F. PARI  
 Mayor

**MEMORANDUM**

**TO:** ROBIN FOSTER, CHIEF PLANNING OFFICER  
 PLANNING DEPARTMENT

**FROM:** WALTER M. OZAWA, DIRECTOR  
 DEPARTMENT OF PARKS AND RECREATION

**SUBJECT:** RESPONSE TO PLANNING DEPARTMENT'S COMMENTS  
 AWEOWEO BEACH PARK  
 TAX MAP KEY: 6-08-11: 37 & 38 AND 6-08-12: 53 & 54

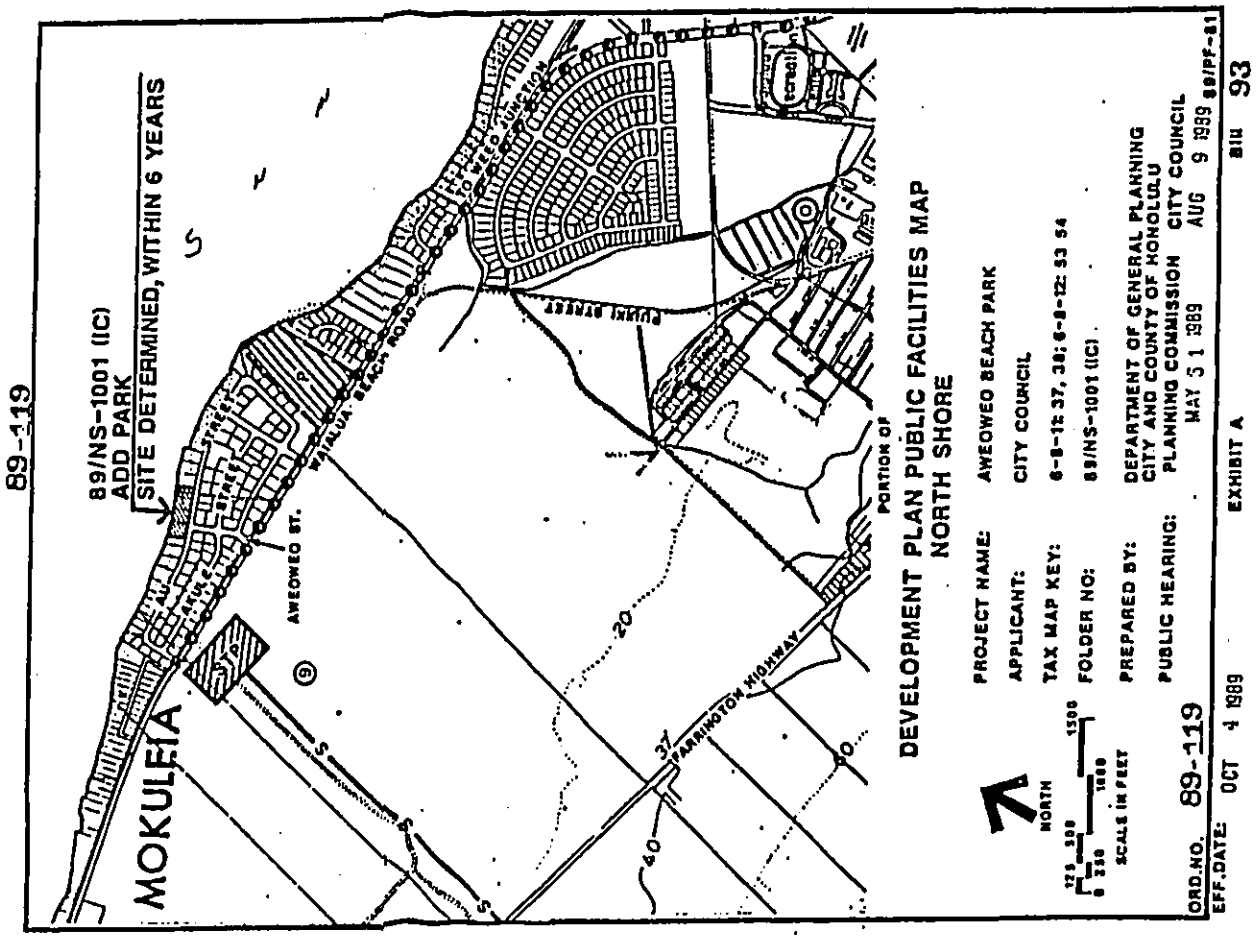
The following responds to the Planning Department's comments:

Thank you for participating in the pre-assessment consultation phase for the proposed Aweoweo Beach Park Draft Environmental Assessment. Your comments have been noted and your letter, along with this response, will be included in the Environmental Assessment.

If you have any questions, please contact Mr. Yukio Taketa, Chief of Facilities Development, at 527-6301.

*Walter M. Ozawa*  
 WALTER M. OZAWA, Director

KMO:gc



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POLICE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**  
801 SOUTH BERTANHA STREET  
HONOLULU, HAWAII 96813 - AREA CODE (808) 538-3111

FRANK F. FARI  
MAYOR



MICHAEL S. NAKAMURA  
CHIEF  
HAROLD M. KAWASAKI  
DEPUTY CHIEF

FRANK F. FARI  
MAYOR



DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**  
830 SOUTH KING STREET  
HONOLULU, HAWAII 96813

WALTER M. OZAWA  
DIRECTOR  
ALVIN S. CHAN  
DEPUTY DIRECTOR

OUR REFERENCE BS-LX

September 3, 1993

January 18, 1994

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

This is in response to your request of August 30, 1993 for comments on a draft environmental assessment for the proposed Aveoeco Beach Park.

We note that short-term air quality, noise, and traffic impacts associated with construction will be mitigated. The Honolulu Police Department is not opposed to this proposal and has no further comment on the subject.

Thank you for the opportunity to review this document.

Sincerely,

MICHAEL S. NAKAMURA  
Chief of Police

By *[Signature]*  
EUGENE UEMURA  
Assistant Chief of Police  
Administrative Bureau

MEMORANDUM

TO: MICHAEL S. NAKAMURA, CHIEF OF POLICE  
HONOLULU POLICE DEPARTMENT

FROM: WALTER M. OZAWA, DIRECTOR  
DEPARTMENT OF PARKS AND RECREATION

SUBJECT: RESPONSE TO POLICE DEPARTMENT'S COMMENTS  
AWEOECO BEACH PARK  
TAX MAP KEY: 6-08-11: 37 & 38 AND 6-08-12: 53 & 54  
HONOLULU POLICE DEPARTMENT REFERENCE: BS-LX

The following responds to the Police Department's comments:

Thank you for participating in the pre-assessment consultation phase for the proposed Aveoeco Beach Park Draft Environmental Assessment. Your comments have been noted and your letter, along with this response, will be included in the Environmental Assessment.

If you have any questions, please contact Mr. Yukio Taketa, Chief of Facilities Development, at 527-6301.

*[Signature]*  
For WALTER M. OZAWA, Director

WMO:gf

*We Add Quality to Life*



William A. Bonnet  
Manager  
Environmental Department

October 13, 1993

**RECEIVED**  
OCT 19 1993

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Pa'a Street, Suite 200  
Haleiwa, HI 96813

STANLEY YIM & ASSOC., INC.  
Time \_\_\_\_\_

Dear Mr. Yim:

Subject: Draft Environmental Assessment (DEA)  
Aweoweo Beach Park  
Waiialua, Oahu

We have reviewed the subject DEA and have no comments on the proposed beach park project. HECO shall reserve further comment pertaining to the protection of existing electrical facilities surrounding the project area until construction plans are finalized. Thank you for the opportunity to comment.

Sincerely,

An HEI Company



William A. Bonnet  
Manager  
Environmental Department

September 28, 1993

**RECEIVED**  
SEP 30 1993

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Pa'a Street, Suite 200  
Honolulu, HI 96819

STANLEY YIM & ASSOC., INC.  
Time \_\_\_\_\_

Dear Mr. Yim:

Subject: Draft Environmental Assessment (DEA)  
Aweoweo Beach Park  
Waiialua, Oahu

We have reviewed the subject DEA and have no comments on the proposed beach park project. HECO shall reserve further comment pertaining to the protection of existing electrical facilities surrounding the project area until construction plans are finalized. Thank you for the opportunity to comment.

Sincerely,

for William A. Bonnet

An HEI Company



*APPENDIX I*

*COMMENTS AND RESPONSES DURING  
DRAFT PHASE*

## DRAFT PHASE COMMENTS AND RESPONSES

The following list indicates the agencies, organizations, and individuals who were sent a copy of the Aweoweo Beach Park Draft Environmental Assessment. A total of seventeen comment letters were received. The comment letters and responses are included in this section.

<u>AGENCIES, ORGANIZATIONS, INDIVIDUALS</u>	<u>PROVIDED COMMENTS</u>
<b>CITY AND COUNTY OF HONOLULU</b>	
Planning Department .....	Yes
Dept of Land Utilization .....	No
Dept of Parks & Recreation .....	Yes
Dept of Public Works.....	Yes
Dept. of Wastewater Management.....	Yes
Dept of Transportation Services.....	Yes
Board of Water Supply .....	Yes
Police Department.....	No
Fire Department.....	Yes
<b>STATE OF HAWAII</b>	
Commission On Persons With Disabilities.....	Yes
Dept of Agriculture .....	No
Dept of Land & Natural Resources .....	Yes
State Historic Preservation Division, Dept of Land & Natural Resources .....	Yes
Coastal Zone Management Program, Office of State Planning .....	Yes
Dept of Health.....	Yes
Environmental Management Division, Dept of Health.....	No
Dept of Transportation .....	Yes
Office of Hawaiian Affairs.....	Yes
Environmental Center, University of Hawaii at Manoa .....	No
Office of Environmental Quality Control.....	No
<b>FEDERAL</b>	
Corps of Engineers, Dept of Army.....	Yes
Soil Conservation Service, Dept of Agriculture .....	Yes
Fish and Wildlife Services, Dept of Interior.....	Yes
<b>OTHERS</b>	
Hawaiian Electric Company, Inc.....	No
Northshore Neighborhood Board (#27).....	No



PLANNING DEPARTMENT  
CITY AND COUNTY OF HONOLULU  
430 SOUTH KING STREET  
HONOLULU, HAWAII 96813



FERNAND FOSTER  
DIRECTOR

ROBIN FOSTER  
CHIEF PLANNING OFFICER  
ROLANDO LIBAL, JR.  
DEPUTY CHIEF PLANNING OFFICER  
PH 4/94-3441

April 22, 1994

RECEIVED  
APR 26 1994  
STANLEY YIM & ASSOC., INC.  
TIME 10:15 A

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Draft Environmental Assessment (DEA) for  
the Proposed Aweoweo Beach Park  
Tax Map Key: 6-08-11: 37 & 38 and 6-08-12: 53 & 54

We have reviewed the subject DEA and have the following  
comments to offer:

1. The proposal is consistent with the North Shore Development Plan Public Facilities Map which shows a publicly funded park, site determined, within six years, for the subject area.
2. The proposal is also consistent with the North Shore Development Plan Land Use Map which shows Park designation for the subject area.
3. The subject area is within the Special Management Area and will require a Special Management Area Use Permit from the Department of Land Utilization.

Thank you for the opportunity to comment on this matter. Should you have any questions, please contact Mel Murakami of our staff at 527-6020.

Sincerely,

*R. Foster*

ROBIN FOSTER  
Chief Planning Officer

RF:js

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU  
430 SOUTH KING STREET  
HONOLULU, HAWAII 96813



JEREMY HARRIS  
DIRECTOR

DONA L. HANA'IKE  
DIRECTOR  
ALYNN C. AU  
DEPUTY DIRECTOR

October 3, 1995

RECEIVED  
OCT 11 1995  
STANLEY YIM & ASSOC., INC.  
TIME

MEMORANDUM

TO: CHERYL SOON, CHIEF PLANNING OFFICER  
PLANNING DEPARTMENT

FROM: DONA L. HANA'IKE, DIRECTOR

SUBJECT: RESPONSE TO PLANNING DEPARTMENT'S COMMENTS  
AWEOWEO BEACH PARK  
TAX MAP KEY: 6-08-11: 37 & 38 AND 6-08-12: 53 & 54

The following responds to the Planning Department's April 22, 1994 letter:

Thank you for participating in the review process for the Draft Environmental Assessment for the proposed Aweoweo Beach Park project. Your April 22, 1994 letter confirming the contents of the EA and this response will be included in the Final Environmental Assessment. Applications for the SMA and Shoreline Variance will be submitted to your office along with a set of the construction plans to process for the two permits.

If you have any questions, please contact Mr. James T. Makasone, Acting Chief of Facilities Development Division, at 527-6306.

*J. Makasone*  
DONA L. HANA'IKE  
Director

DLH:go

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU  
480 SOUTH KING STREET  
HONOLULU HAWAII 96813



PLANNING DIVISION

WALTER M. OZAWA  
DIRECTOR  
ALUMNA C. AD  
CHIEF PLANNING OFFICER

May 9, 1994

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Pea Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Draft Environmental Assessment (DEA)  
For Aveoeeo Beach Park  
Tax Map Keys 6-08-11: 37 & 38  
6-08-12: 53 & 54

We have reviewed the DEA and have no comments to offer at this time.

Should you have any questions, please contact Bob Bevacqua of our Advance Planning Branch at 527-6316.

Sincerely,

For WALTER M. OZAWA, Director

WMO:ei

RECEIVED  
MAY 11 1994

STANLEY YIM & ASSOC., INC.  
Time

DEPARTMENT OF PUBLIC WORKS  
CITY AND COUNTY OF HONOLULU  
480 SOUTH KING STREET  
HONOLULU HAWAII 96813



PLANNING DIVISION

KENNETH E. SPRAGUE  
DIRECTOR AND CHIEF ENGINEER

ENV 94-121

April 25, 1994

Mr. Jason Yim  
Stanley Yim and Associates, Inc.  
2850 Pea Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Draft Environmental Assessment (DEA)  
Aveoeeo Beach Park  
TK: 6-8-11: 37 and 38: 6-8-12: 53 and 54

We have reviewed the subject DEA and have the following comments:

1. For your information, the proposed project site is located in VE zone as depicted in the Flood Insurance Rate Map (FIRM).
2. Adequate parking should be provided on site.
3. Improvements within the City's right-of-way should be in accordance with City standards and American with Disability Act Guidance requirements.
4. The Best Management Practices (BMPs) used to control storm water discharges during construction should be modified and retained as permanent BMPs to trap pollutants from discharging directly into the surf zone.

Should you have any questions, please contact Mr. Alex Ho, Environmental Engineer, at 523-4150.

Very truly yours,

KENNETH E. SPRAGUE  
Director and Chief Engineer

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APR 26 1994

STANLEY YIM & ASSOC., INC.  
Time 10:5 A

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU

REGISTRATION DIVISION  
HONOLULU, HAWAII



JEREMY HARRIS  
DIRECTOR

DONA L. HANA'AIKE  
DIRECTOR

RECEIVED  
OCT 11 1995

STANLEY YIM & ASSOC., INC.

October 10, 1995

MEMORANDUM

TO: KENNETH E. SPRAGUE, DIRECTOR AND CHIEF ENGINEER  
DEPARTMENT OF PUBLIC WORKS

FROM: DONA L. HANA'AIKE, DIRECTOR

SUBJECT: RESPONSE TO DEPARTMENT OF PUBLIC WORKS' COMMENTS  
ANONIMO BEACH PARK  
TAX MAP KEY: 6-08-11: 37 & 38 AND 6-08-12: 53 & 54  
DPW REFERENCE NO.: PRO. 93-203

The following responds to the Department of Public Works' April 25, 1994 letter:

Thank you for participating in the review process for the proposed Aveveo Beach Park Draft Environmental Assessment (DEA). The following responses are itemized to be in the same order as the comments in your April 25th letter.

1. This information (site is in Zone VE in the FIRM) is already a part of the DEA. See page III-3 of the DEA.
2. The Department of Land Utilization has stated on-site parking is not required for this project. Therefore none is provided.
3. Improvements for this project will meet ADAAG guidelines. The Commission On Persons With Disabilities have already reviewed the DEA and have issued a final document review for the DEA. Construction Plans for the project are being submitted to them for review and approval.
4. This project will not have a retention/detention pond. Drainage will be surface percolation into the ground. The ground is sandy and has a good percolation rate enabling it to lose the runoff effectively.

Mr. Kenneth E. Sprague  
Page 2  
October 10, 1995

If you have any questions, please contact Mr. James T. Nakasone,  
Acting Chief of Facilities Development Division, at 527-6306.

For DONA L. HANA'AIKE  
Director

DLH:go

DEPARTMENT OF WASTEWATER MANAGEMENT  
CITY AND COUNTY OF HONOLULU

830 SOUTH KING STREET  
HONOLULU, HAWAII 96813



FRANK P. PAI  
DIRECTOR

KENNETH M. RAPPOLT  
DIRECTOR  
FELIX LIMTIACO  
DEPUTY DIRECTOR

WPP 94-137

April 20, 1994

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Aweoweo Beach Park  
TMK: 6-B-11: 37 & 38: 6-8-12: 53 & 54

We confirm that there are no municipal wastewater facilities in the vicinity of the proposed project site. The State Department of Health has jurisdiction over the disposal of wastewater from this facility.

Should you have any questions, please call Thomas Tamanaha at 523-4671.

Very truly yours,  
  
KENNETH M. RAPPOLT  
Director

TT:wk

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APR 29 1994

STANLEY YIM & ASSOC., INC.

Time

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU

230 SOUTH KING STREET  
HONOLULU, HAWAII 96813



JEREMY HARRIS  
DIRECTOR

DONA L. HANAIIKE  
DIRECTOR  
ALAN K. CAU  
DEPUTY DIRECTOR

October 3, 1995

RECEIVED  
OCT 11 1995

MEMORANDUM

TO: FELIX LIMTIACO, DIRECTOR  
DEPARTMENT OF WASTEWATER MANAGEMENT  
STANLEY YIM & ASSOC., INC.

FROM: DONA L. HANAIIKE, DIRECTOR

SUBJECT: RESPONSE TO THE DEPARTMENT OF WASTEWATER MANAGEMENT'S  
COMMENTS - AWEOWEO BEACH PARK  
TAX MAP KEY: 6-08-11: 37 & 38 AND 6-08-12: 53 & 54

The following responds to the Department of Wastewater Management's April 20, 1994 letter:

Thank you for participating in the review process for the Draft Environmental Assessment for the proposed Aweoweo Beach Park project. Your April 20, 1994 letter stating there are no municipal sewers in the vicinity of the proposed project site will be included in the Final Environmental Assessment.

If you have any questions, please contact Mr. James T. Nakasone, Acting Chief of Facilities Development Division, at 527-6306.

DONA L. HANAIIKE  
Director

DLH:go

DEPARTMENT OF TRANSPORTATION SERVICES  
CITY AND COUNTY OF HONOLULU

PACIFIC PARK PLAZA  
2111 APOLOANUI BOULEVARD SUITE 1200  
HONOLULU HAWAII 96813



PACIFIC PARK  
PLAZA

JOSEPH M. MAGALDI, JR.  
DIRECTOR  
AMERICAN  
ENGINEERS

Mr. Jason Yim  
Page 2  
May 23, 1994

7. Construction plans for all work within the City right-of-way should be submitted to our department for review.

Should you have any questions, please contact Lance Watanabe of my staff at 523-4199.

Sincerely,

JOSEPH M. MAGALDI, JR.  
Director

TE-1583  
PL94.1.113

May 23, 1994

RECEIVED  
MAY 25 1994

STANLEY YIM & ASSOC., INC.  
Time

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Aweoweo Beach Park  
Draft Environmental Assessment  
TMK: 6-8-11: 37 & 38; 6-8-12: 53 & 54

This is in response to your letter of April 6, 1994 requesting our comments on the proposed beach park.

Based on our review, we have the following concerns:

1. A standard City dropped driveway should be constructed at the access point to Au Street.
2. The driveway grade should not exceed 5 percent (5%) for a minimum distance of 35 feet from the curb line, and adequate sight distance to pedestrians and other vehicles should be provided and maintained.
3. Landscaping should be placed in locations where it does not obstruct vehicular sight lines.
4. The chained access should be recessed such that vehicles servicing the park will be clear of the sidewalk area.
5. Although on-site parking is not required by the Department of Land Utilization, we recommend providing off-street parking for park users to avoid any conflicts with residents in the area. It is our understanding that on-street parking is already limited in the area.
6. A traffic and parking assessment of the area should be provided with future submittals.

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU

830 SOUTH KING STREET  
HONOLULU, HAWAII 96813



RECEIVED  
OCT 16 1995

DONA L. HANAIIKE  
DIRECTOR

STANLEY YMA & ASSOC., INC.  
Time

ALVIN C. AU  
SECURITY DIRECTOR

JEREMY HARRIS  
PLANNING  
MAYOR

Mr. Charles O. Swanson  
Page 2  
October 10, 1995

October 10, 1995

MEMORANDUM

TO: CHARLES O. SWANSON, DIRECTOR  
DEPARTMENT OF TRANSPORTATION SERVICES

FROM: DONA L. HANAIIKE, DIRECTOR

SUBJECT: RESPONSE TO DEPARTMENT OF TRANSPORTATION SERVICES'  
COMMENTS, AWOKEO BEACH PARK  
TAX MAP KEY: 6-08-11: 37 & 38 AND 6-08-12: 53 & 54

The following responds to the Department of Transportation Services' May 23, 1994 letter:

Thank you for participating in the review process for the proposed Awokeo Beach Park Draft Environmental Assessment. The following responses are itemized in the same order as your May 23, 1994 comments.

1. A standard City driveway will be constructed along Au Street for access to a parking stall that will be utilized by the Department of Parks and Recreation maintenance personnel.
2. The existing grades of the site and the close proximity of the driveway to the comfort station and ocean may not allow the driveway grade to be less than 5 percent. The final location and slope of the driveway will consider this criteria and shall try to come close if not meet the 5 percent criteria. A set of construction plans have been submitted to the Department of Transportation Services and will be revised accordingly to meet both your comments and the comments received on the construction plans.
3. The landscaping is within the park where it will not obstruct vehicular sight lines. The landscaping plans have also been submitted to the Department of Transportation Services to show their location.

4. The chained access will be recessed such that vehicles servicing the park will be clear of the sidewalk area.
5. The North Shore Neighborhood Board No. 27 at its July 26, 1994 meeting unanimously recommended that a parking waiver be granted because of the small size of the park. Based on this information, the project is proceeding with no off-street parking for the park.
6. As discussed with your staff, it is our understanding that the traffic and parking assessment will not be required, since the North Shore Neighborhood Board recommended a parking waiver be granted for this project. Also, the traffic in the area is anticipated to be heavier during the weekends than the weekdays; however, since the park is small and located across an access intersection in a residential area, the traffic impact is expected to be minimal and during daytime hours on the nearby residential areas.
7. Construction plans for the project have been submitted to the Department of Transportation Services for review and approval.

If you have any questions, please contact Mr. James T. Nakasone, Acting Chief of Facilities Development Division, at 527-6306.

DONA L. HANAIIKE  
For Director

DLH:go

BOARD OF WATER SUPPLY  
CITY AND COUNTY OF HONOLULU  
630 SOUTH BERTANIA STREET  
HONOLULU HAWAII 96813

FRANK F. PAS, Mayor  
WALTERO WATSON, JR. Chairman  
WALTER H. YAMAMOTO, Vice Chairman  
STEPHEN DAVENPORT, ARCHD. DIST.  
JOHN W. ANDERSON, JR.  
KEVIN J. JOHNSON  
MILISA Y. LUM  
KENNETH E. SPRAGUE  
KAZU HAYASHIDA  
Manager and Chief Engineer

  
April 28, 1994

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Your Letter of April 6, 1994 on the Draft Environmental Assessment (DEA)  
for Aweoweo Beach Park, Waialua, Oahu, TMK: 6-8-11: 37, 38;  
6-8-12: 53, 54

Thank you for the opportunity to review and comment on the DEA for the proposed beach park project.

Our previous comments of October 7, 1993, have been adequately addressed by the City and County Department of Parks and Recreation's response memorandum of January 18, 1994.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,



KAZU HAYASHIDA  
Manager and Chief Engineer

cc: Department of Parks and Recreation  
City and County of Honolulu

RECEIVED  
MAY 3 1994  
STANLEY YIM & ASSOC., INC.  
Time \_\_\_\_\_

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU  
830 SOUTH BERTANIA STREET  
HONOLULU HAWAII 96813



JEREMY HARRIS  
MANAGER

DONA L. HANAIAI  
DIRECTOR  
ALYSSA E. AU  
MANAGER

October 3, 1995

RECEIVED  
OCT 11 1995

STANLEY YIM & ASSOC., INC.  
Time \_\_\_\_\_

MEMORANDUM

TO: RAYMOND SATO, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

ATTENTION: BARRY USAGAWA


FROM: DONA L. HANAIAI, DIRECTOR

SUBJECT: RESPONSE TO BOARD OF WATER SUPPLY'S COMMENTS  
AWEOWEO BEACH PARK  
TAX MAP KEY: 6-08-11: 37 & 38 AND 6-08-12: 53 & 54

The following responds to the Board of Water Supply's April 28, 1994 letter:

Thank you for participating in the review process for the Draft Environmental Assessment for the proposed Aweoweo Beach Park project. Your April 28, 1994 letter stating the previous Board of Water Supply comments have been adequately addressed and will be included in the Final Environmental Assessment.

If you have any questions, please contact Mr. James T. Nakasone, Acting Chief of Facilities Development Division, at 527-6306.

  
DONA L. HANAIAI  
Director

DLH:go

FIRE DEPARTMENT  
CITY AND COUNTY OF HONOLULU  
3375 KAPAPA STREET SUITE 200  
HONOLULU HAWAII 96819



FRANK PASK  
DIRECTOR

RICHARD R. SETO-MOOK  
ACTING FIRE CHIEF

May 4, 1994

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Environmental Assessment  
Aweoweo Beach Park, Waiialua, Oahu  
Tax Map Key: 6-8-11: 37 & 38 and 6-8-12: 53 & 54

We have reviewed the application and made an on-site assessment of the above subject request, and have no objections to the proposal providing the following conditions are complied with prior to approval. Compliance with Article 10 of the Uniform Fire Code should also be made, but not limited to the following:

1. Submit construction plans to the building and fire departments for permit review and approval prior to commencement of the project.

If you have any further questions, please call Captain Miles Fonseca of our Fire Prevention Bureau - Plans Examining Section at 523-4186.

Very truly yours,

*Richard R. Seto-Mook*  
RICHARD R. SETO-MOOK  
Acting Fire Chief

MF:ey

RECEIVED  
MAY 12 1994  
STANLEY YIM & ASSOC., INC.  
Time

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU  
830 SOUTH KING STREET  
HONOLULU, HAWAII 96813



JEREMY HARRIS  
MANAGER

DOHA L. HANAIKE  
DIRECTOR  
ALVIN K. KU  
DEPUTY DIRECTOR

November 16, 1995

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NOV 27 1995  
STANLEY YIM & ASSOC., INC.  
Time

TO: ANTHONY J. LOPEZ, JR., FIRE CHIEF  
HONOLULU FIRE DEPARTMENT

ATTENTION: CAPTAIN MILES FONSECA  
FIRE PREVENTION BUREAU - PLANS EXAMINING SECTION

FROM: DOHA L. HANAIKE, DIRECTOR  
DEPARTMENT OF PARKS AND RECREATION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR AWEOWEO BEACH PARK

Thank you for participating in the review process for the proposed Aweoweo Beach Park Draft Environmental Assessment. Your comments have been noted and a set of construction plans will be submitted for your review and approval prior to construction. Your May 4, 1994 letter, along with this response, will be included in the Final Environmental Assessment.

If you have any questions, please contact Mr. James T. Nakasone, Assistant Chief of Facilities Development Division, at 527-6306.

*Doña L. Hanaike*  
For DOHA L. HANAIKE  
Director

DLH:go





**COMMISSION ON PERSONS WITH DISABILITIES**

Five Waterfront Plaza, Suite 210, 500 Ala Moana Blvd., Honolulu, HI 96813, Ph. 586-8121 (V/TDD)  
586-8125 (FAX)

**DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU**

585 SOUTH KING STREET  
HONOLULU, HAWAII 96813



DONALD HANAIKE  
DIRECTOR  
ALVIN K. AU  
DEPUTY DIRECTOR

**FINAL DOCUMENT REVIEW**

April 14, 1994  
Aweoweo Beach Park  
Draft Environmental Assessment

CPD Job # 93-316  
Project # N/A  
Project Manager: City and County of Honolulu, Dept of Parks and Recreation  
Design Consultant: Stanley Yim Associates/Jason Yim  
Documents Reviewed: Assessment dated: March, 1994  
Transmittal Letter dated: April 4, 1994:

As submitted, the document(s) reviewed appear(s) to meet the Americans with Disabilities  
Accessibility Guidelines (ADAAG) as required by HRS 103-50.

The above constitutes review and recommendations on this project to determine whether or  
not the building or facility is designed in accordance with the Americans with Disabilities  
Accessibility Guidelines (ADAAG), per Hawaii Revised Statutes (HRS) 103-50. Final  
responsibility to comply with HRS 103-50 rests with the State or County agency overseeing  
the project.

Reviewed by:  
*Patricia A. Peppard*  
Patricia A. Peppard  
Facility Access Technician

**RECEIVED**  
APR 18 1994

STANLEY YIM & ASSOC., INC  
Time

October 3, 1995

**RECEIVED**  
OCT 11 1995  
STANLEY YIM & ASSOC., INC  
Time

Ms. Patricia A. Peppard  
Facility Access Technician  
Commission on Persons with Disabilities  
Five Waterfront Plaza, Suite 210  
500 Ala Moana Boulevard  
Honolulu, Hawaii 96813

Dear Ms. Peppard:

Subject: Responses to Commission on Persons With  
Disabilities Comments, Aweoweo Beach Park  
TRK: 6-08-11: 37 & 38 and 6-08-12: 53 & 54  
CPD Reference: Job No. 36-316

The following responds to the Commission on Persons with  
Disabilities' April 14, 1994 letter:

Thank you for participating in the review process for the  
Draft Environmental Assessment for the proposed Aweoweo  
Beach Park project. Your April 14, 1994 letter stating the  
project meets ADAAG guidelines will be included in the Final  
Environmental Assessment.

If you have any questions, please contact Mr. James T. Nakasone,  
Acting Chief of Facilities Development Division, at 527-6306.

Sincerely,  
*Donna L. Hanaike*  
DONNA L. HANAIKE  
Director

DLH:go

STANLEY YIM & ASSOCIATES, INC.



LETTERS AND COMMENTS  
PLEASE RETURN TO THE OFFICE OF THE  
DEPUTY ATTORNEY GENERAL  
DEPT. OF LAND AND NATURAL RESOURCES  
1505 KALANIKULANI DRIVE  
HONOLULU, HAWAII 96813

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 521  
HONOLULU, HAWAII 96809  
File No.: 94-590  
DOC. NO.: 4467

Mr. Jason Yin  
Stanley Yim & Associates, Inc. 1/17 1994  
2850 Pae Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yin:

SUBJECT: Draft Environmental Assessment (DEA): Aweoweo Beach Park,  
Makuleia, Oahu, Trk: 6-8-11: 37, 38; 6-8-12: 53, 54

We have reviewed the DEA information for the subject project transmitted  
by your letter dated April 6, 1994, and have the following comments:

Brief description:

The City & County of Honolulu, Department of Parks and Recreation proposes  
to construct the Aweoweo Beach Park on four adjoining lots in Makuleia,  
Oahu. Park construction includes a comfort station, 11 picnic tables, a  
drinking water fountain, 4 charcoal disposal area, 14 refuse disposal  
cans, a shower tree for rinsing and showering, new landscaping and a new  
driveaway and service parking area.

Division of Aquatic Resources

The Division of Aquatic Resources (DAR) comments that the applicant  
acknowledges their previous comments (attached in Appendix G) and states  
that a note to the contractor to "exercise care" to prevent foreign and  
toxic materials from entering into the ocean will be added to the  
construction plans, that filter material "if needed" will be used, and  
that the final location of the shower tree is still being discussed. The  
proposed mitigation measures should be included in the Final EA and  
submitted to the Department for review.

We will forward our Historic Preservation Division concerns as they become  
available.

If you have any questions, please feel free to call Steve Tegawa at our  
Office of Conservation and Environmental Affairs, at (808)587-0385.

Very truly yours,

*Keith W. Auld*  
KEITH W. AULD

RECEIVED  
MAY 18 1994

STANLEY YIM & ASSOC., INC.  
Time

OFFICE OF THE ATTORNEY GENERAL  
STATE OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
P.O. BOX 621  
HONOLULU, HAWAII 96809

ALTIMAN AND COMPANY  
BOARD OF LAND AND NATURAL RESOURCES  
DEPT. OF LAND AND NATURAL RESOURCES  
1505 KALANIANA'OLEHI AVE., SUITE 200  
HONOLULU, HAWAII 96813

Mr. J. Yin -2- File No.: 94-590a

REF:OCD:DJF

File No.: 94-590a  
DOC. NO.: 4483

MAY 20 1994

Mr. Jason Yin  
Stanley Yim & Associates, Inc.  
2850 Baa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yin:

SUBJECT: Draft Environmental Assessment (DEA): Aweoweo Beach Park,  
Mo'aulaia, Oahu, TNS: 6-8-11: 37, 38; 6-8-12: 53, 54

The following are our additional comments on the subject project which supplement those forwarded by our previous letter dated May 17, 1994:

Historic Preservation Division

The Historic Preservation Division (HPD) comments that the DEA contains as Appendix F, a revised report of Archaeological Investigations at the Proposed Aweoweo Beach Park (Carlson and Cleghorn, November 1993). This report responds adequately to HPD's earlier comments, and will be acceptable when Figures 3 and 4 are corrected so that the profiles match along their common edge.

The DEA should be revised to include specific measures to ensure that the buried cultural deposit is not disturbed during beach park construction. Typically, these specific measures include:

1. Submit construction plans to the HPD office for review.
2. Identify and mark the location of the cultural deposit prior to construction.
3. Brief construction workers on the presence of the deposit and the need to ensure its preservation so that routine construction activities do not inadvertently disturb the deposit.

We have no further comments to offer at this time. Thank you for the opportunity to comment on this matter.

If you have any questions, please feel free to call Steve Tagawa at our Office of Conservation and Environmental Affairs, at 587-0385.

Very truly yours,

*Elizabeth W. Ahue*  
ELIZABETH W. AHUE

RECEIVED  
MAY 23 1994

STANLEY YIM & ASSOC., INC.  
Time

DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**  
 830 SOUTH KING STREET  
 HONOLULU, HAWAII 96813



ADMINISTRATIVE  
 SECTION

EDMUND MARSHALL  
 DIRECTOR  
 ALVIN S. CAU  
 DEPUTY DIRECTOR

November 16, 1995

**RECEIVED**  
 NOV 27 1995

Mr. Michael D. Wilson, Chairperson  
 Department of Land and  
 Natural Resources  
 State Office Box 621  
 Honolulu, Hawaii 96809

STANLEY YIM & ASSOC., INC.  
 Time

Attention: Mr. Steve Tagawa, Planner  
 Office of Conservation and Environmental Affairs

Dear Mr. Wilson:

Subject: Draft Environmental Assessment for Aweoweo Beach Park  
 Your file nos. 94-590/Doc. No. 4467 & 94-590a/Doc. No. 4483

Thank you for participating in the review process for the proposed Aweoweo Beach Park Draft Environmental Assessment. Your May 17 and May 20, 1994 comments have been noted and will be addressed in the Final Environmental Assessment and/or the construction plans. A set of construction plans has already been sent and reviewed by the State Historic Preservation Division. Their comments are attached for your information. Also, construction plans have already been sent to the Department of Land and Natural Resources for their review and approval. This response and your May 17 and May 20, 1994 letters will be included in the Final Environmental Assessment.

If you have any questions, please contact Mr. James T. Nakasone,  
 Assistant Chief of Facilities Development Division, at 527-6306.

Sincerely,  
  
 For DOHA L. HAHAIKE  
 Director

DLH:90

*We Add Quality to Life*

DEPUTY CHIEF, DIVISION  
 BOARD OF LAND AND NATURAL RESOURCES

DEPUTY  
 DONALD L. HAHAIKE

ADJUTANT GENERAL  
 PROGRAM

ADJUTANT GENERAL  
 COMBAT AND

ENVIRONMENTAL AFFAIRS  
 COMBAT AND

COMBAT AND  
 IN SOURCE IMPROVEMENT

CONVICTS  
 MONETARY AND POLICE

NATIONAL RESOURCES  
 LAND MANAGEMENT

STATE PARKS  
 WATER AND LAND DEVELOPMENT

LOG NO: 11531  
 DOC NO: 9405TD17



STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION  
 33 SOUTH KING STREET, 4TH FLOOR  
 HONOLULU, HAWAII 96813

May 18, 1994

Jason Yim  
 Stanley Yim & Associates  
 2850 Pan Street, Suite 200  
 Honolulu, Hawaii 96819

Dear Mr. Yim:

SUBJECT: Plan Review, Aweoweo Beach Park  
 Wai'alea, O'ahu  
 TIME: 6-8-11: 37 & 38; 6-8-12: 53 & 54

Thank you for the opportunity to review the construction plans for this project. The location of the cultural deposit is clearly indicated on Drawings C-2 and C-3, which also include construction notes indicating appropriate treatment. We believe that construction according to these plans will result in "no effect" to the cultural deposit.

If you have any questions please call Tom Dye at 587-0014.

Sincerely,

DON HIBRARD, Administrator  
 State Historic Preservation Division

TD:j

**RECEIVED**

MAY 19 1994

STANLEY YIM & ASSOC., INC.  
 Time

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU



DONA L. HANAIKE  
DIRECTOR  
ALVIN C. AU  
DEPUTY DIRECTOR

May 3, 1994  
STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
STATE HISTORIC PRESERVATION DIVISION  
33 SOUTH KING STREET, 6TH FLOOR  
HONOLULU, HAWAII 96813

Jason Yim  
Stanley Yim & Associates  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

**RECEIVED**  
MAY 4 1994  
STANLEY YIM & ASSOC., INC.  
Tmc

LOG NO: 11314  
DOC NO: 9404TD20

DEPT. LAND & NATURAL RESOURCES  
DIVISIONS:  
DONALD L. HANAIKE  
ADMINISTRATIVE DEVELOPMENT PROGRAM  
ADAPTIVE RE-SOURCE  
ENVIRONMENTAL ANALYSIS  
CONSERVATION AND  
RE-SOURCE ENHANCEMENT  
CONSERVATION  
HISTORIC AND MONUMENTS  
DIVISION  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

SUBJECT: Draft Environmental Assessment (DEA), Aweoweo Beach Park  
Kamamamui, Waiiua, O'ahu  
TMK: 6-8-11: 37 & 38; 6-8-12: 53 & 54

Thank you for the opportunity to review this DEA, which contains as Appendix F a revised report of Archaeological Investigations at the Proposed Aweoweo Beach Park (Carlson and Cleghorn, November 1993). This report responds adequately to our earlier comments, and will be acceptable when Figures 3 and 4 are corrected so that the profiles match along their common edge.

The DEA should be revised to include specific measures to ensure that the buried cultural deposit is not disturbed during beach park construction. Typically, these specific measures include: 1) submit construction plans to our office for review; 2) identify and mark the location of the cultural deposit prior to construction; and 3) brief construction workers on the presence of the deposit and the need to ensure its preservation so that routine construction activities do not inadvertently disturb the deposit.

If you have any questions please call Tom Dye at 587-0014.

Sincerely,  
  
DON HIBBARD, Administrator  
State Historic Preservation Division

TD:jt

October 3, 1995

Mr. Don Hibbard, Administrator  
State Historic Preservation Division  
Department of Land and Natural Resources  
State of Hawaii  
33 South King Street, 6th Floor  
Honolulu, Hawaii 96813

**RECEIVED**  
OCT 11 1995  
STANLEY YIM & ASSOC., INC.  
Tmc

Dear Mr. Hibbard:

Subject: Responses to State Historic Preservation Division's  
Comments - Aweoweo Beach Park  
TMK: 6-08-11: 37 & 38 and 6-08-12: 53 & 54  
DLNR Reference No.: Log No.: 11314  
Doc. No.: 9404TD20

The following responds to the State Historic Preservation Division's May 3, 1994 letter:

Thank you for participating in the review process for the proposed Aweoweo Beach Park Draft Environmental Assessment.

Your comments have been noted and have been forwarded to the project's archaeologist. Construction plans for the project will be submitted to your office for review and approval. The plans will contain comments 2 and 3 as noted in your May 3rd letter.

Your letter, along with this response will be included in the Environmental Assessment. The revised archaeological report will also appear in the Environmental Assessment.

If you have any questions, please contact Mr. James T. Nakasone, Acting Chief of Facilities Development Division, at 527-6306.

Sincerely,  
  
DONA L. HANAIKE  
Director

DLH:go



**OFFICE OF STATE PLANNING**

Office of the Governor  
MAILING ADDRESS: P. O. BOX 21461, HONOLULU, HAWAII 96821-3460  
STREET ADDRESS: 210 SOUTH BEECH STREET, 6TH FLOOR  
TELEPHONE: (808) 547-2844, 547-2882

FILE NUMBER  
PLANNING DIVISION 587-2883

Ref. No. C-603

May 11, 1994

**RECEIVED**  
MAY 13 1994

STANLEY YIM & ASSOC., INC.  
Tms

Mr. Jason Yim  
Stanley Yim and Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

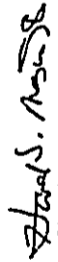
We have reviewed the Draft Environmental Assessment for Awcowed Beach Park and have the following comments.

An applicable Coastal Zone Management policy is to: "Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate state water quality standards".

As stated in the document, significant landscaping will be performed on the park site. Pesticides and herbicides used in the maintenance of the landscaping may contribute to coastal water quality degradation given the close proximity to the shoreline. An integrated landscaping management plan should be discussed in the environmental impact statement. Measures to minimize water quality degradation such as water quality monitoring and alternative pest control techniques should also be considered.

Thank you for the opportunity to review this document. If you have any questions, please contact Harold Lao at 587-2883.

Sincerely,

  
Harold S. Masumoto  
Director

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU  
430 SOUTH KING STREET  
HONOLULU, HAWAII 96813



JEREMY HARRIS  
DIRECTOR

DONALD HARRIS  
DIRECTOR  
ALYNN C. AU  
SUPERVISOR

November 22, 1995

Mr. Gregory Pai, Director  
Office of State Planning  
Office of the Governor  
State Office Hawaii  
Post Office Box 3540  
Honolulu, Hawaii 96813-3540

Attention: Mr. Harold Lao

Dear Mr. Pai:

Subject: Draft Environmental Assessment for  
Aweoweo Beach Park, Your Reference No. C-603

Thank you for participating in the review process for the Draft Environmental Assessment for the proposed Aweoweo Beach Park project. Your May 11, 1994 letter and the following response will be included in the Final Environmental Assessment. Please note that the project is anticipating a negative declaration to the Final Environmental Assessment and an environmental impact statement is not anticipated for the project. Therefore, your comment regarding an integrated landscaping management plan should be discussed in the environmental impact statement is noted and will be addressed in the Final Environmental Assessment in the following fashion.

Landscaping Managing Plan: The project is anticipated to have a minimal amount of insect infestation on the landscaping since the project's location is in close proximity to the ocean. The salt in the air reduces the chance of having large amounts of infestation on the park's landscaping. Therefore, the amount of pesticide spraying on the park's landscaping is anticipated to be minimal for the project. Any pesticide and/or herbicide spray that is carried in the air off the project site is expected to be minimal and should dissipate from the ocean onto the land, the amount of pesticide and/or herbicide spray leaving the site toward the ocean is further reduced. As for the landscaping maintenance of the project, it will be in accordance with the Department of Parks and Recreation Maintenance Program.

*We Add Quality to Life*

Mr. Gregory Pai  
Page 2  
November 22, 1995

If you have any questions, please contact Mr. James T. Makasone,  
Assistant Chief of Facilities Development Division, at 527-6306.

Sincerely,

DONNA L. HAMAIRE  
Director

DLH:go

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NOV 27 1995

STANLEY YIM & ASSOC., INC.  
Time

JOHN LEWIS, M.D.  
DIRECTOR OF HEALTH



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. BOX 319  
HONOLULU, HAWAII 96801

JOHN C. LEWIS, M.D.  
DIRECTOR OF HEALTH

In reply, please refer to:

**RECEIVED**  
MAY 24 1994

STANLEY YIM & ASSOC., INC.  
Time \_\_\_\_\_

May 19, 1994

93-261/epo

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Draft Environmental Assessment  
Aweoweo Beach Park  
68-197 Au Street  
Kalaheo, Oahu  
TKX: 6-8-11: 37 & 38, 6-8-12: 53 & 54

Thank you for allowing us to review and comment on the subject project. We have previously commented on this project by letter dated October 11, 1993, and we have no further comments to add this time.

Very truly yours,

*John C. Lewis*  
JOHN C. LEWIS, M.D.  
Director of Health

DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**  
805 SOUTH KING STREET  
HONOLULU, HAWAII 96813



JOSEPH HARRIS  
DIRECTOR

DONAL HARRIS  
DIRECTOR  
ALVIN K. FU  
DEPUTY DIRECTOR

November 22, 1995

**RECEIVED**  
NOV 27 1995

STANLEY YIM & ASSOC., INC.  
Time \_\_\_\_\_

Lawrence Hiike, M.D.  
Director of Health  
Department of Health  
State of Hawaii  
Post Office Box 3378  
Honolulu, Hawaii 96801

Dear Dr. Hiike:

Subject: Draft Environmental Assessment for  
Aweoweo Beach Park, Your Reference No. 93-261/EPO

Thank you for participating in the review process for the proposed Aweoweo Beach Park Draft Environmental Assessment. Your May 19, 1994 letter stating the Department of Health has no further comments and this response will be included in the Final Environmental Assessment.

If you have any questions, please contact Mr. James T. Hakasono, Assistant Chief of Facilities Development Division, at 527-6306.

Sincerely,  
*Donna L. Hamaike*  
DONNA L. HAMAIKE  
Director

DLH:go

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JOHNANKE  
CLANNA



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
889 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813

May 12, 1994

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Draft Environmental Assessment  
Aweoweo Beach Park, Kamananui, Waialua, Oahu  
TMK: 6-8-11: 37 & 38, 6-8-12: 53 & 54

The proposed improvements to Aweoweo Beach Park will not have a significant impact on our State highway facilities.

We appreciate the opportunity to provide comments.

Sincerely,

*Rex D. Johnson*  
Rex D. Johnson  
Director of Transportation

REED JOHNSON  
DIRECTOR  
DEPARTMENT OF TRANSPORTATION  
889 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813

WIREPLY REFER TO  
STP 8.5997

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU  
810 SOUTH KING STREET  
HONOLULU, HAWAII 96813



November 22, 1995

Mr. Kazu Hayashida, Director  
Department of Transportation  
State of Hawaii  
889 Punchbowl Street  
Honolulu, Hawaii 96813

Dear Mr. Hayashida:

Subject: Draft Environmental Assessment for  
Aweoweo Beach Park - Your Reference No. STP 8.5997

Thank you for participating in the review process for the proposed Aweoweo Beach Park Draft Environmental Assessment. Along with this response, your comment stating that the project will not have a significant impact on the State highway facilities will be included in the Final Environmental Assessment.

If you have any questions, please contact Mr. James T. Nakasone, Assistant Chief of Facilities Development Division, at 527-6306.

Sincerely,

*Donna Hanaike*  
DONNA HANAIAKE  
Director

DLH:go

DONALD HANAIKE  
DIRECTOR

ALVIN K. AU  
DEPUTY DIRECTOR

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NOV 27 1995

STANLEY YIM & ASSOC., INC.  
Time

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MAY 16 1994

STANLEY YIM & ASSOC., INC.  
Time

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STATE OF HAWAII  
 OFFICE OF HAWAIIAN AFFAIRS  
 311 KAPOLANI BOULEVARD, SUITE 140  
 HONOLULU, HAWAII 96813-2749  
 PHONE: (808) 546-3177  
 FAX: (808) 546-3799

May 12, 1994

Mr. Jason Yim  
 Stanley Yim & Associates, Inc.  
 2650 Paa Street, Suite 200  
 Honolulu, HI 96819

Dear Mr. Yim:

Thank you for the opportunity to review the Draft Environmental Assessment (DEA) concerning the proposed Aweoweo Beach Park at Waiiua on the Island of Oahu.

We find the DEA sufficient and have no objections to the proposed development. Please contact me or Linda Delaney, Land and Natural Resource Officer, at 594-1938, should you have any questions on this matter.

Sincerely yours,

*Lynde K. Carpenter*  
 Lynde K. Carpenter  
 Administrator

LM:lm

RECEIVED  
 MAY 18 1994

STANLEY YIM & ASSOC., INC.  
 Time

DEPARTMENT OF PARKS AND RECREATION  
 CITY AND COUNTY OF HONOLULU

480 SOUTH KING STREET  
 HONOLULU HAWAII 96813



STREMY MARINE  
 HAWAII

DONALD MERRINE  
 DIRECTOR  
 ALVIN C. CHU  
 DEPUTY DIRECTOR

November 16, 1995

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 NOV 27 1995

STANLEY YIM & ASSOC., INC.  
 Time

Ms. Linda Colburn  
 Administrator  
 Office of Hawaiian Affairs  
 State of Hawaii  
 711 Kapiolani Boulevard, Suite 600  
 Honolulu, Hawaii 96813-5249

Attention: Ms. Linda Delaney  
 Land and Natural Resource Officer

Dear Ms. Colburn:

Subject: Draft Environmental Assessment for  
 Aweoweo Beach Park

Thank you for participating in the review process for the proposed Aweoweo Beach Park Draft Environmental Assessment (DEA). Along with this response, your comment stating that the Office of Hawaiian Affairs finds the DEA sufficient and have no objections to the proposed development will be included in the Final Environmental Assessment.

If you have any questions, please contact Mr. James T. Makasone, Assistant Chief of Facilities Development Division, at 527-6306.

Sincerely,

*Donna L. Hamaike*  
 For DONNA L. HAMAIKE  
 Director

DLH:go

*We Add Quality to Life*



DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, HONOLULU  
FT. SHAFTER, HAWAII 96819-5440

MAIL TO  
ATTENTION OF

May 2, 1994

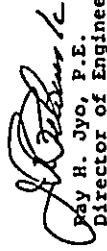
Planning Division

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Dear Mr. Yim:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the proposed Aveoeco Beach Park, Waialua, Oahu (TRK: 6-8-12: 53 and 54). We do not have any additional comments to offer beyond those provided in our previous letter dated September 15, 1993.

Sincerely,

  
Ray H. Jyo, P.E.  
Director of Engineering

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MAY 3 1994

STANLEY YIM & ASSOC., INC.  
Time \_\_\_\_\_

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU

835 SOUTH KING STREET  
HONOLULU, HAWAII 96813



JEREMY HARRIS  
DIRECTOR

DONALD MARRAS  
DIRECTOR  
ALTHEA C. AU  
SENIOR MANAGER

October 3, 1995

Mr. Kisuik Cheung, P. E.  
Director of Engineering  
U. S. Army Engineer District, Honolulu  
Department of the Army  
Fort Shafter, Hawaii 96858-5440

Dear Mr. Cheung:

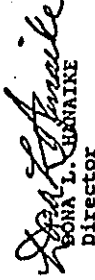
Subject: Responses to Department of the Army's Comments  
Aveoeco Beach Park  
TRK: 6-08-11: 37 & 38 and 6-08-12: 53 & 54

The following responds to the Department of the Army's May 2, 1994 letter:

Thank you for participating in the review process for the Draft Environmental Assessment for the proposed Aveoeco Beach Park project. Your May 2, 1994 letter stating there are no additional comments will be included in the Final Environmental Assessment.

If you have any questions, please contact Mr. James T. Nakasone, Acting Chief of Facilities Development Division, at 527-6306.

Sincerely,

  
BONA L. CHANVAINE  
Director

DLH:go

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OCT 11 1995

STANLEY YIM & ASSOC., INC.  
Time \_\_\_\_\_

AUG-22-94 MON 13:08

PARKS & REC

FAX HQ 8085234767

P.02

United States  
Department of  
Agriculture

Soil  
Conservation  
Service

P. O. Box 50004  
Honolulu, HI  
96850-0001

August 11, 1994

Mr. Walter Ozaa, Director  
City and County of Honolulu  
Department of Parks and Recreation  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Ozaa:

Subject: Draft Environmental Assessment for proposed  
Aweewe Beach Park, Waialua, Oahu

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1994 AUG 12 P 2:41

DEPT. OF PARKS  
& RECREATION  
C & C OF HONOLULU

We have completed our review of the Draft Environmental Assessment for the proposed Aweewe Beach Park. We disagree with the determination that the contractor need not install a temporary irrigation system (VIAC). All plants need some moisture to allow successful propagation. Furthermore, we question the logic of using temporary plantings when you're trying to install a permanent erosion control measure with permanent ground cover (VIAC).

Should you have any questions, please do not hesitate to contact Mr. Michael C. Tulang at (808) 541-2696 or Mr. Michael Rejnting (808) 561-8510. Thank you for the opportunity to provide comment on such a worthy project.

Sincerely,

*M. K. K.*  
KENNETH M. KANESHIRO  
State Conservationist

8/22 13

94-2379  
8/12/94 dtd.

cc: Michael Rejnting, D.C., Honolulu Field Office, Honolulu, Hawaii

#101  
8/15

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU  
435 SOUTH KING STREET  
HONOLULU, HAWAII 96813



JEFFREY MARSH  
DIRECTOR

DONALD MANNING  
DIRECTOR  
ALVIN C. AU  
DEPUTY DIRECTOR

October 3, 1995

Mr. Ken Kaneshiro  
State Conservationist  
Soil Conservation Service  
U.S. Department of Agriculture  
Post Office Box 50004  
Honolulu, Hawaii 96850

Dear Mr. Kaneshiro:

Subject: Responses to U.S. Department of Agriculture,  
Soil Conservation Services' Comments  
Aweveo Beach Park  
TRK: 6-08-11: 37 & 38 and 6-08-12: 53 & 54

The following responds to the U.S. Department of Agriculture,  
Soil Conservation Services' August 11, 1994 letter:

Thank you for participating in the review process for the  
proposed Aweveo Beach Park Project Draft Environmental  
Assessment (EA). Your August 11, 1994 letter and the  
following responses will be included in the Final  
Environmental Assessment.

Your August 11th letter contains two comments. The first  
disagrees with a part of the determination in the EA  
regarding "the contractor need not install a temporary  
irrigation system." This comment does not give any  
consideration to the remaining half of the discussion in the  
same statement in the EA wherein it is also  
stated "...Provided he (the contractor) maintains and cares  
for the growth of the temporary plantings." Your concern  
that "all plants need some moisture to allow successful  
propagation" was already addressed in this second part of  
the statement in the EA. Maintaining and caring for the  
growth of the temporary plantings includes providing for the  
plants with enough moisture for their successful  
propagation.

Mr. Ken Kaneshiro  
Page 2  
October 3, 1995

The other comment in your letter concerns the use of  
temporary plantings versus permanent ground cover.  
Temporary plantings would occur as a part of the temporary  
erosion control measures. These measures, while made  
available to the contractor, may or may not be used by the  
contractor depending upon the contractor's scheduling and  
phasing of the work. Temporary erosion control measures are  
used for areas that have been exposed by the contractor's  
work but not yet constructed upon. Permanent ground cover  
that is called for under the permanent erosion control  
measures are used for those exposed areas that have been  
designated to be final yard spaces or landscape planting  
areas. Since the contractor's schedule is unknown at this  
time, the EA provides for some flexibility by giving both  
temporary and permanent erosion control measures for the  
contractor to use. The temporary erosion control measures  
are not intended to replace the permanent erosion control  
measures.

If you have any questions, please contact Mr. James T. Nakasone,  
Acting Chief of Facilities Development Division, at 527-6306.

Sincerely,

DONA L. HAMAIKE  
Director

DLH:go

RECEIVED  
OCT 11 1995

STANLEY T. ASSOC. INC.



United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Pacific Islands Office  
P.O. Box 50167  
Honolulu, Hawaii 96850



JERRY HARRIS  
DIRECTOR

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU

88 SOUTH KING STREET  
HONOLULU, HAWAII 96813



DOAN L. HANAIKE  
DIRECTOR  
ALAN P. CAU  
RECREATION DIRECTOR

In Reply Refer To: CAW

MAY 02 1994

October 3, 1995

Mr. Jason Yim  
Stanley Yim & Associates, Inc.  
2850 Paa Street, Suite 200  
Honolulu, Hawaii 96819

Mr. Robert P. Smith, Field Supervisor  
Pacific Islands Office  
Fish and Wildlife Service  
U. S. Department of the Interior  
Post Office Box 50167  
Honolulu, Hawaii 96850

Re: Draft Environmental Assessment for the proposed Aweoweo Beach Park, Mokolua,  
Oahu, Hawaii.

Dear Mr. Yim:

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Assessment (DEA) for the proposed Aweoweo Beach Park, Mokolua, Oahu, Hawaii. The proposed park would consist of four individual lots consolidated into a single parcel. Construction of park facilities would include: 11 picnic tables, a drinking water fountain, 4 charcoal disposal areas, 14 refuse disposal cans, a shower tree for rinsing and showering, new landscape planting, a new septic tank and leach field for sewage handling and disposal, a new driveway and parking area for maintenance use, and new concrete walks. Based on the information provided in the DEA, the Service does not anticipate significant adverse impacts to fish and wildlife resources in the project area.

We appreciate the opportunity to provide these comments.

Sincerely,

*Robert P. Smith*

Robert P. Smith  
Field Supervisor  
Pacific Islands Office

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MAY 3 1994

STANLEY YIM & ASSOC., INC.  
THR

RECEIVED  
OCT 11 1995

STANLEY YIM & ASSOC., INC.  
THR

Dear Mr. Smith:

Subject: Responses to Department of the Interior's Comments  
Aweoweo Beach Park

TRK: 6-08-11: 37 & 38 and 6-08-12: 53 & 54  
USD1 Reference: CAW

The following responds to the Department of the Interior's May 2, 1994 letter:

Thank you for participating in the review process for the Draft Environmental Assessment for the proposed Aweoweo Beach Park project. Your May 2, 1994 letter stating the U. S. Fish and Wildlife Service does not anticipate significant adverse impacts to fish and wildlife resources in the project area will be included in the Final Environmental Assessment.

If you have any questions, please contact Mr. James T. Nakasone, Acting Chief of Facilities Development Division, at 527-6306.

Sincerely,

*Dona L. Hanaike*

DONA L. HANAIKE  
Director

DLH:go