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Mr. William W. Paty
Chairperson
Board of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

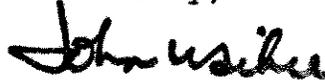
Dear Mr. Paty:

Based on the recommendation of the Office of Environmental Quality Control, I am pleased to accept the Final Environmental Impact Statement for the proposed Aiea Bay State Recreation Area as satisfactory fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes, and the Executive Order of August 23, 1971. This environmental impact statement will be a useful tool in the process of deciding whether the action described therein should be allowed to proceed. My acceptance of that statement is an affirmation of the adequacy of that statement under the applicable laws, and does not constitute an endorsement of the proposed action.

When you make your decision regarding the proposed action itself, I hope you will weigh carefully whether the societal benefits justify the environmental impacts which will likely occur. These impacts are adequately described in the statement, and, together with the comments made by the reviewers, will provide you with a useful analysis of alternatives to the proposed action.

With kindest regards,

Sincerely,



JOHN WAIHEE

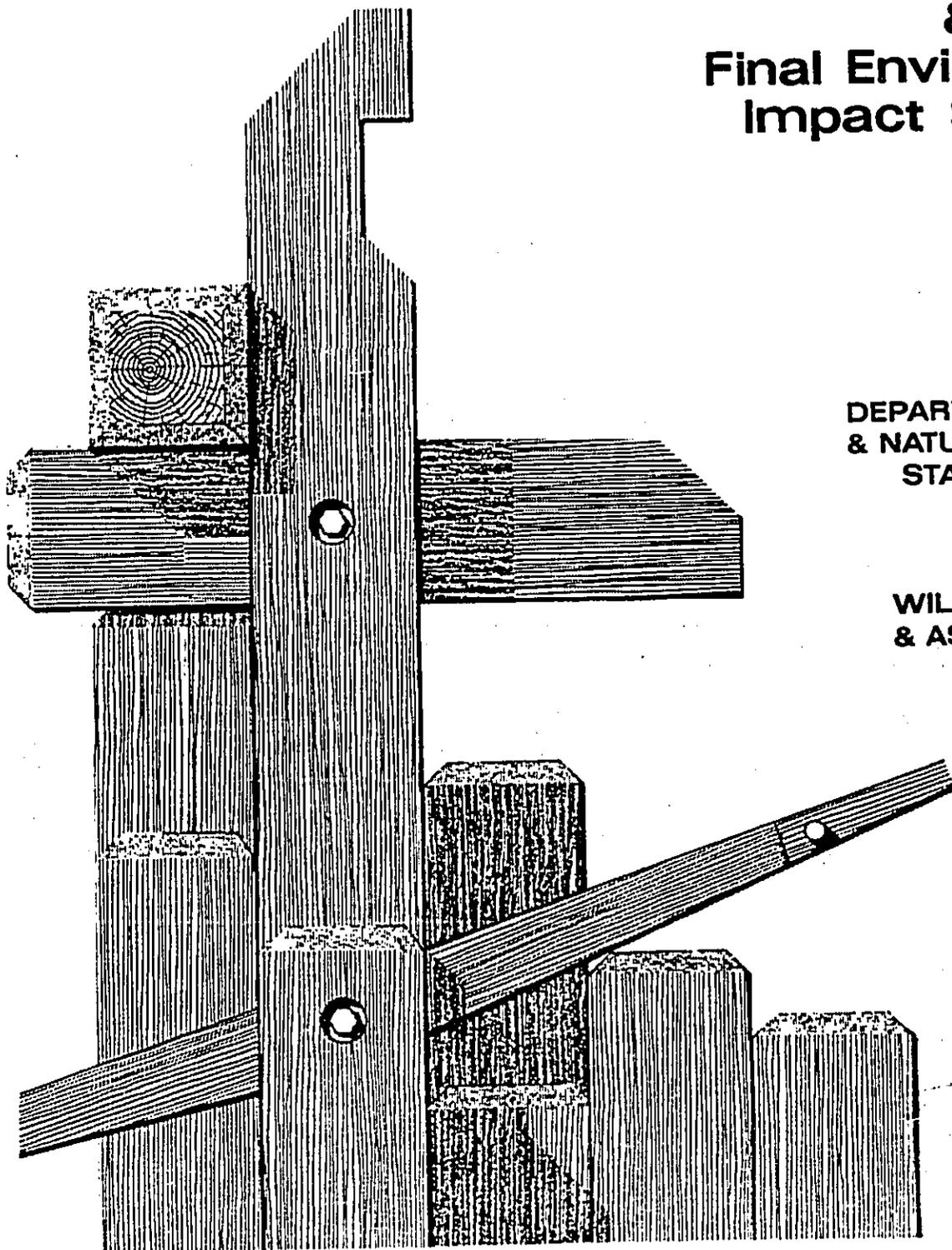
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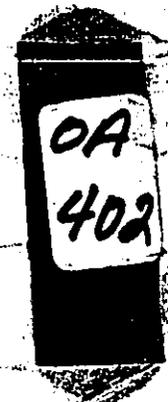
AIEA BAY STATE RECREATION AREA

Conceptual Master Plan & Final Environmental Impact Statement



prepared for:
DEPARTMENT OF LAND
& NATURAL RESOURCES
STATE OF HAWAII

prepared by:
WILSON OKAMOTO
& ASSOCIATES, INC.



CONCEPTUAL MASTER PLAN AND FINAL ENVIRONMENTAL IMPACT STATEMENT
AIEA BAY STATE RECREATION AREA

Aiea, Oahu, Hawaii

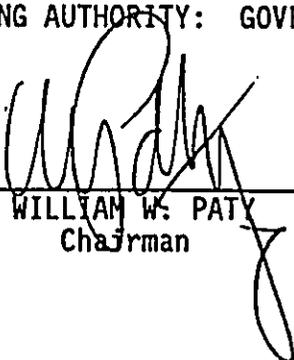
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9-9- 3: 29, 30, 32, 35, 38
9-9- 4: 1, 2, 3, 4, 6, 24
9-9-12: 4, 5, 10, 11, 46, 47

This Environmental Document is Submitted
Pursuant to Chapter 343, Hawaii Revised Statutes

PROPOSING AGENCY: DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE OF HAWAII

ACCEPTING AUTHORITY: GOVERNOR, STATE OF HAWAII

RESPONSIBLE
OFFICIAL: _____


WILLIAM W. PATY
Chairman

DATE: NOV 2 1988

Prepared by

WILSON OKAMOTO AND ASSOCIATES, INC.
Planners, Engineers, Architects
Honolulu, Hawaii

TABLE OF CONTENTS

	<u>PAGE NO.</u>
PREFACE	
SUMMARY	
CHAPTER I. PROJECT BACKGROUND	I-1
A. Project Location	I-1
B. Historic Perspective	I-1
C. Park Development Objectives	I-5
D. Project User Assessment	I-6
1. Recreational Need	I-6
2. Anticipated Park Users	I-6
3. Park Use Concepts	I-7
CHAPTER II. PROJECT DEVELOPMENT CONSIDERATIONS	II-1
A. Land Suitability	II-1
B. Infrastructure Availability	II-1
C. State-U.S. Navy Agreements	II-2
D. Park Design Concepts	II-3
CHAPTER III. PROPOSED CONCEPTUAL MASTER PLAN	III-1
A. Rationale	III-1
B. Components	III-3
1. Phase I Subarea	III-3
2. Central and South Subareas	III-5
3. McGrew Point Footpath	III-6
C. Development Phasing	III-7
1. Initial Phase	III-7
2. Subsequent Phases	III-7
D. Park Management and Organization	III-7
CHAPTER IV. PROJECT SETTING	IV-1
A. Existing Land Use	IV-1

	<u>PAGE NO.</u>
B. Surrounding Land Use	IV-3
C. Landownership	IV-3
D. Physical Environment	IV-6
1. Climate	IV-6
2. Soils	IV-6
3. Flood Hazard	IV-7
4. Scenic Characteristics	IV-7
5. Flora	IV-7
6. Fauna	IV-8
7. Archaeological/Historic Sites	IV-10
8. Geology/Topography	IV-11
9. Water Quality	IV-12
10. Air Quality	IV-13
11. Ambient Noise	IV-13
E. Socioeconomic Characteristics	IV-16
1. Population	IV-16
2. Employment and Income	IV-16
3. Recreational Facilities	IV-20
4. Other Public Facilities	IV-26
F. Infrastructure	IV-30
1. Water System	IV-30
2. Sewer System	IV-32
3. Fuel System	IV-32
4. Electrical and Telephone Systems	IV-35
5. Signal Cable System	IV-37
6. Drainage System	IV-37
7. State Energy Corridor	IV-40
8. U.S. Navy Utility Corridor	IV-40
 CHAPTER V. RELATIONSHIP TO PLANS, POLICIES AND CONTROLS . .	 V-1
A. Plans	V-1
1. Hawaii State Plan	V-1
2. State Recreation Functional Plan	V-3
3. City and County of Honolulu General Plan	V-5
4. City and County of Honolulu, Long Range Recreation Plan	V-6

	<u>PAGE NO.</u>
B. Land Use Policies	V-6
1. State Land Use District	V-6
2. City and County of Honolulu Development Plan	V-7
3. City and County of Honolulu Land Use Ordinance	V-7
C. Shoreline and Environmental Permits	V-9
1. Department of the Army Permit	V-9
2. Hawaii Coastal Zone Management Program Federal Consistency Review	V-9
3. Conservation District Use Application	V-11
4. Special Management Area Permit	V-11
5. Shoreline Setback Variance	V-12
D. U.S. Navy Requirements	V-12
CHAPTER VI. PROBABLE IMPACTS OF PARK DEVELOPMENT	VI-1
A. Short-Term Impacts	VI-1
1. Noise	VI-1
2. Air Quality	VI-1
3. Water Quality	VI-2
4. Archaeological	VI-2
5. Traffic	VI-2
6. Public Safety	VI-3
7. Economy	VI-3
B. Long-Term Impacts	VI-3
1. Recreational	VI-3
2. Visual	VI-4
3. Traffic	VI-4
4. Flora and Fauna	VI-4
5. Noise	VI-4
6. Future Plans	VI-5
7. Public Safety	VI-5
8. Water Quality	VI-6
CHAPTER VII. RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY	VII-1
CHAPTER VIII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES	VIII-1

	<u>PAGE NO.</u>
CHAPTER IX. ALTERNATIVES TO THE PROPOSED ACTION	IX-1
A. No Action	IX-1
B. Alternative Sites	IX-1
C. Alternative Conceptual Plans	IX-1
1. Alternative "A"	IX-2
2. Alternative "B"	IX-4
D. Alternative Implementation Phasing	IX-7
CHAPTER X. UNRESOLVED ISSUE	X-1
CHAPTER XI. LIST OF NECESSARY APPROVALS	XI-1
CHAPTER XII. LIST OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED	XII-1
CHAPTER XIII. COMMENTS AND RESPONSES TO THE EIS PREPARATION NOTICE	XIII-1
CHAPTER XIV. COMMENTS AND RESPONSES TO THE CONCEPTUAL MASTER PLAN AND DRAFT EIS	XIV-1
CHAPTER XV. LIST OF PREPARERS OF THE EIS DOCUMENT	XV-1
REFERENCES	
APPENDIX A - Rainbow Bay Conceptual Master Plan, 1974	
APPENDIX B - Grant of Easement - Document Number 714984	
APPENDIX C - Communication Between the State of Hawaii and the U.S. Navy	

LIST OF FIGURES

<u>FIGURE NO.</u>	<u>TITLE</u>	<u>PAGE NO.</u>
1	Location Map	I-2
2	Site Map	I-3
3	Development Suitability Zones	II-6
4	Proposed Conceptual Masterplan	III-2
5	Existing Land Use	IV-2
6	Landownership	IV-5
7	Hydrographic Survey Stations	IV-14
8	Recreational and Park Facilities	IV-22
9	Other Public Facilities	IV-27
10	Existing Water System	IV-31
11	Existing Sewer System	IV-33
12	Existing Fuel System	IV-34
13	Existing Electrical Systems	IV-36
14	Existing Communication Systems	IV-38
15	Existing Drainage System	IV-39
16	City and County of Honolulu Development Plan Land Use Map	V-8
17	City and County of Honolulu LUO Zoning Districts	V-10
18	Conceptual Plan - Alternative "A"	IX-3
19	Conceptual Plan - Alternative "B"	IX-5

LIST OF TABLES

<u>TABLE NO.</u>	<u>TITLE</u>	<u>PAGE NO.</u>
1	Development Suitability Zones	II-5
2	Aiea Bay Landownership	IV-4
3	Species List for Pearl Harbor-East Loch, Oahu	IV-9
4	Hydrographic Data for Aiea Bay	IV-15
5	Resident Population, 1970 and 1980	IV-17
6	Resident Population by Military Status, 1980 . .	IV-18
7	Recreational Park and Facility Standards	IV-21
8	Recreational Park Facilities	IV-23
9	Other Recreational Facilities in the Region . .	IV-25
10	Schools - 1983 Enrollment	IV-28

PREFACE

The preparation of the Aiea Bay State Recreation Area Conceptual Master Plan and Environmental Impact Statement was conducted in several phases. The initial phase of the project involved gathering and compiling land use, resource, socio-economic, and related data pertinent to the project site and its environs.

The second phase of the project involved formulation of the objectives, rationale, and concepts for the park. Two alternative conceptual plans were developed in this phase based on park objectives and identified constraints. These were presented in the Draft Master Plan and Investigative Report for Aiea Bay State Recreation Area. The document also presented a third, composite alternative plan that reflects input from the U.S. Navy and the State of Hawaii on the initial two alternatives. Pertinent research findings and analyses, descriptions of the proposed alternative plans, philosophies, and recommendations have been documented.

This document, the Conceptual Master Plan and Final Environmental Impact Statement and the previously completed Conceptual Master Plan and Draft Environmental Impact Statement, were prepared pursuant to the requirements of Chapter 343, Hawaii Revised Statutes, and Title 11, Chapter 200, Environmental Impact Statement Rules (Department of Health, State of Hawaii), and are consistent with content requirements established by OPNAVINST 5090.1, U.S. Navy Regulations. The documents assess the potential environmental impacts of the composite plan which is presented as the proposed project. The two alternative plans developed earlier are discussed as alternatives to the proposed action.

SUMMARY

PROPOSING AGENCY: Department of Land and Natural Resources, State of Hawaii

PROPOSED PROJECT: Aiea Bay State Recreation Area

I. PROPOSED ACTION

The Rainbow Bay Conceptual Plan, 1974, (McAuliffe, Oka & Associates) established the initial conceptual basis for the Aiea Bay State Recreation Area. The 1974 Plan envisioned the proposed park as a passive recreational facility providing opportunities such as picnicking, walking, biking and aesthetic enjoyment.

The following are the objectives for the Aiea Bay State Recreation Area:

Objective 1

Maximize public recreational use of waterfront lands insofar as consistent with the theme of the park facilities.

Objective 2

Maintain and enhance where possible, the natural characteristics and scenic vistas which exist at the site.

Objective 3

Create an efficient circulation system which separates and defines modes and types of traffic.

Objective 4

Provide sufficient flexibility in the park's development concept to allow for future shoreside use of the park for docking purposes.

Objective 5

Seek funding to assure maximum productivity of public park lands, including funds to relocate displaced Navy facilities, as required.

The Conceptual Master Plan for the Aiea Bay State Recreation Area will be implemented in phases. While implementation of the entire plan is considered the proposed action for the purposes of this environmental impact statement, only Phase I of the plan is programmed for implementation in the near future.

The major features of the Master Plan encompassing the entire site include the following:

- o Centrally located comfort stations

Comfort stations will be centrally placed to facilitate access from various points in the park. (Note: Comfort station design may also incorporate a pavilion and storage space for park maintenance).

- o Extended jogging and bicycle pathways

An internal pathway system for joggers, walkers, and cyclists will be both a functional and landscape feature. It will integrate observation points, water fountains and exercise stations. Pathway design features such as distance markers and posted route maps may also be employed to further enhance pathway activities.

- o Centrally located exercise stations and tot-lots

Exercise stations will be sited adjacent to the pathway to complement pathway activities such as jogging and walking. Tot-lots will be sited to offer secure play areas specifically designed for children.

- o Strategically placed view stations

View stations will be sited at various locations within the park to facilitate scenic appreciation of the park's environs. The Waianae Range, Pearl Harbor/Ford Island, U.S.S. Arizona Memorial and other sections of the park are examples of scenery which will be viewed from the stations.

Phase I of the Master Plan will encompass approximately 10 acres and be developed as a "stand alone" park capable of providing recreational opportunities independent of subsequent phases. Nevertheless, it is designed to be fully compatible with subsequent phases of development. Development of Phase I will proceed in increments based on the availability of funds. Features of Phase I include:

- o Vehicular Access and Parking

Access for the Phase I Subarea will be via McGrew Loop, off of Kamehameha Highway. Approximately 30 parking stalls will be provided at the end of the access driveway and turnaround. Additional parking may be provided in the future, based upon park usage, which will be monitored. To minimize traffic noise generated along this access, a concrete masonry unit (CMU) wall and a landscape buffer is proposed along the segment bordering the U.S. Navy's McGrew Housing development.

o Comfort Station

A comfort station will be provided in the vicinity of the parking lot. The comfort station may be incorporated as part of a larger pavillion facility.

o Picnic Areas

Picnic tables will be provided within landscaped areas which, to the maximum extent practicable, will utilize existing trees and landscape features, to create a scenic environment for passive recreational pursuits. Shoreline improvements such as rock cover may be used to minimize erosion.

o Pedestrian/Bicycle Path

An existing pedestrian/bicycle path that traverses the site will be upgraded to meet detailed design requirements. An exercise station will be installed along the path near the comfort station.

o Tot Lot

A tot lot will be provided near the comfort station and exercise station to facilitate adult supervision and access to the restrooms.

o View Stations

Views overlooking Aiea Bay and Pearl Harbor are planned from various points in the Phase I Area. Clearing of existing mangrove will further enhance views.

o Fishing Area

The estuary at the mouth of Aiea Stream is an easily accessible recreational fishing area. While these waters do not contain many desirable game fish, they offer an enjoyable recreational experience for children and adults. If during periodic State Department of Health water quality, sediment and biota sampling in the area, harmful levels of toxic pollutants are detected, signs will be posted warning that fish caught may be contaminated and advising against consumption.

II. SITE DESCRIPTION

The proposed site for the Aiea Bay State Recreation Area is along the shoreline of Pearl Harbor's East Loch (TMK: 9-8-19: 2, 3, 6; 9-9-3: 29, 30, 32, 35, 38; 9-9-4: 1, 2, 3, 4, 6, 24; 9-9-12: 4, 5, 10, 11, 46, 47), in Aiea, on the island of Oahu. Stretching along 5,590 feet of shoreline in Aiea Bay, the site consists of approximately 29.2 acres.

III. EXISTING ENVIRONMENT

The project site currently encompasses both civilian and military uses. Much of the site, however, is undeveloped. For example, in the northwest sector of the site, the area along the seaward edge of the U.S. Navy's McGrew Point Housing, is overgrown with trees and shrubs such as kiawe, koa haole, and mangrove. A significant feature of the site is the City and County of Honolulu's bicycle path which traverses the site along its course from Lehua Avenue, in Pearl City, to the Richardson Recreation Area. The portion of the path traversing the park site is aligned with the U.S. Navy's utility corridor. The northwest portion of the site has been cleared, landscaped and developed with interim park facilities by the State of Hawaii, Department of Land and Natural Resources (DLNR).

The southern area of the project site is occupied primarily by U.S. Navy structures and facilities including the CINCPACFLT Boathouse and parking lot as well as an abandoned electrical substation, the Old Aiea Pump Station, a boat repair area for Navy personnel, and a clubhouse utilized by the Pearl Harbor Yacht Club. A private trucking firm and a towing company occupy State Lease lands adjacent to Kamehameha Highway.

The shoreline area is utilized as a launch site by the Honolulu Canoe Club which has a Navy sponsor. The Club beaches its canoes in an area immediately south of the Boathouse facilities.

Inspection of the entire park site revealed substantial amounts of debris, abandoned facilities and remnants of previous developments. At McGrew Point, there are abandoned piers and metal pilings in the water and, on shore, trash and remnants of a Landing Ship Tank (LST) site at the tip of the point.

Along the northwest portion of the site, there are submerged pilings, protective rock revetments and submerged automobile tires scattered within the shoreline area. Aluminum cans and other trash litter the Aiea Stream estuary.

An island formation in the southeastern portion of the bay appears to be made of fill material and concrete pilings.

The proposed park site is adjacent to the U.S. Navy McGrew Point Housing development, Kamehameha Highway, the Richardson Recreation Center, the proposed State Energy Corridor, and the Rainbow Bay Marina. To the south of the Marina is the U.S. Navy's shoreside support facilities for the U.S.S. Arizona Memorial boat tour.

At a regional level, the park site is nearby commercial and residential areas of the Aiea and Pearl City communities, Aloha Stadium, and military activities at the Pearl Harbor Naval Base.

IV. RELATIONSHIP TO PLANS, POLICIES, AND CONTROLS

The proposed Aiea Bay State Recreation Area is supportive of and will comply with applicable Federal, State, and City and County of Honolulu plans, policies, and controls, including the following:

A. Plans

1. Hawaii State Plan
2. State Recreation Plan
3. City and County of Honolulu General Plan
4. City and County of Honolulu Long Range Recreation Plan

B. Land Use Policies

1. State Land Use District
2. City and County of Honolulu Development Plan
3. City and County of Honolulu Land Use Ordinance (LUO)

C. Shoreline and Environmental Permits

1. Department of the Army Permit
2. Hawaii Coastal Zone Management Program Federal Consistency Review
3. Conservation District Use Application
4. Special Management Area Permit
5. Shoreline Setback Variance

V. PROBABLE IMPACTS

Short-term construction related impacts include those associated with noise, air quality, water quality, archaeology, traffic, public safety and economy.

Long-term impacts of the proposed project addressed are those associated with recreation, aesthetics, traffic, flora and fauna, noise and future plans.

VI. ALTERNATIVES

Alternatives to the proposed action discussed include:

- A. No Action
- B. Alternative Sites
- C. Alternative Conceptual Plans
- D. Alternative Implementation Phasing

CHAPTER I
PROJECT BACKGROUND

I. PROJECT BACKGROUND

A. PROJECT LOCATION

The proposed site for the Aiea Bay State Recreation Area is along the shoreline of Pearl Harbor's East Loch (TMK: 9-8-19: 2, 3, 6; 9-9-3: 29, 30, 32, 35, 38; 9-9-4: 1, 2, 3, 4, 6, 24; 9-9-12: 4, 5, 10, 11, 46, 47), in Aiea, on the island of Oahu (see Figure 1). Stretching along 5,590 feet of shoreline in Aiea Bay, from the tip of McGrew Point to a point about 500 feet northeast of the Rainbow Bay Marina, the site consists of approximately 29.2 acres (see Figure 2).

B. HISTORIC PERSPECTIVE

Aiea Bay was intensively developed by the U.S. Navy during World War II with facilities such as fueling piers, barge moorings, a fire-fighting school and small boat landings. McGrew Point was the site of a field hospital. The area now known as Richardson Recreation Center continues to serve the Navy's recreational needs. As naval requirements changed following the war, the Navy built family housing on McGrew Point. Except for the CINCPACFLT boat operation, the bay perimeter is now little used by the Navy.

Rainbow Bay Marina was constructed in 1973 as a replacement facility for a former Navy recreation area displaced by the Honolulu International Airport Reef Runway.

In post-war years, tourism grew in Hawaii. Boat tours of Pearl Harbor, particularly to the U.S.S. Arizona Memorial, have become increasingly popular. Greater civilian use of the bay and surrounding areas, together with rapid urbanization of lands around Pearl Harbor have mounted pressure for public recreational uses in the area. This led to discussions between the State, the City and County of Honolulu and the U.S. Navy about potential multi-purpose uses of Aiea Bay. In 1974, the State Department of Land and Natural Resources published the Rainbow Bay Conceptual Plan, prepared by McAuliffe, Oka and Associates, Inc.

The plan encompassed the entire bay perimeter from McGrew Point to the Rainbow Bay Marina, immediately adjacent to the U.S.S. Arizona Memorial boat tour facilities. (See Appendix A). A passive recreational theme was proposed based on general public needs, U.S. Navy desires and existing site conditions.

Discussions between the State and the U.S. Navy continued after the plan was published with respect to acquiring lands for the park, including a 2.6 acre private holding. The State subsequently acquired the privately owned land through eminent domain in 1980.

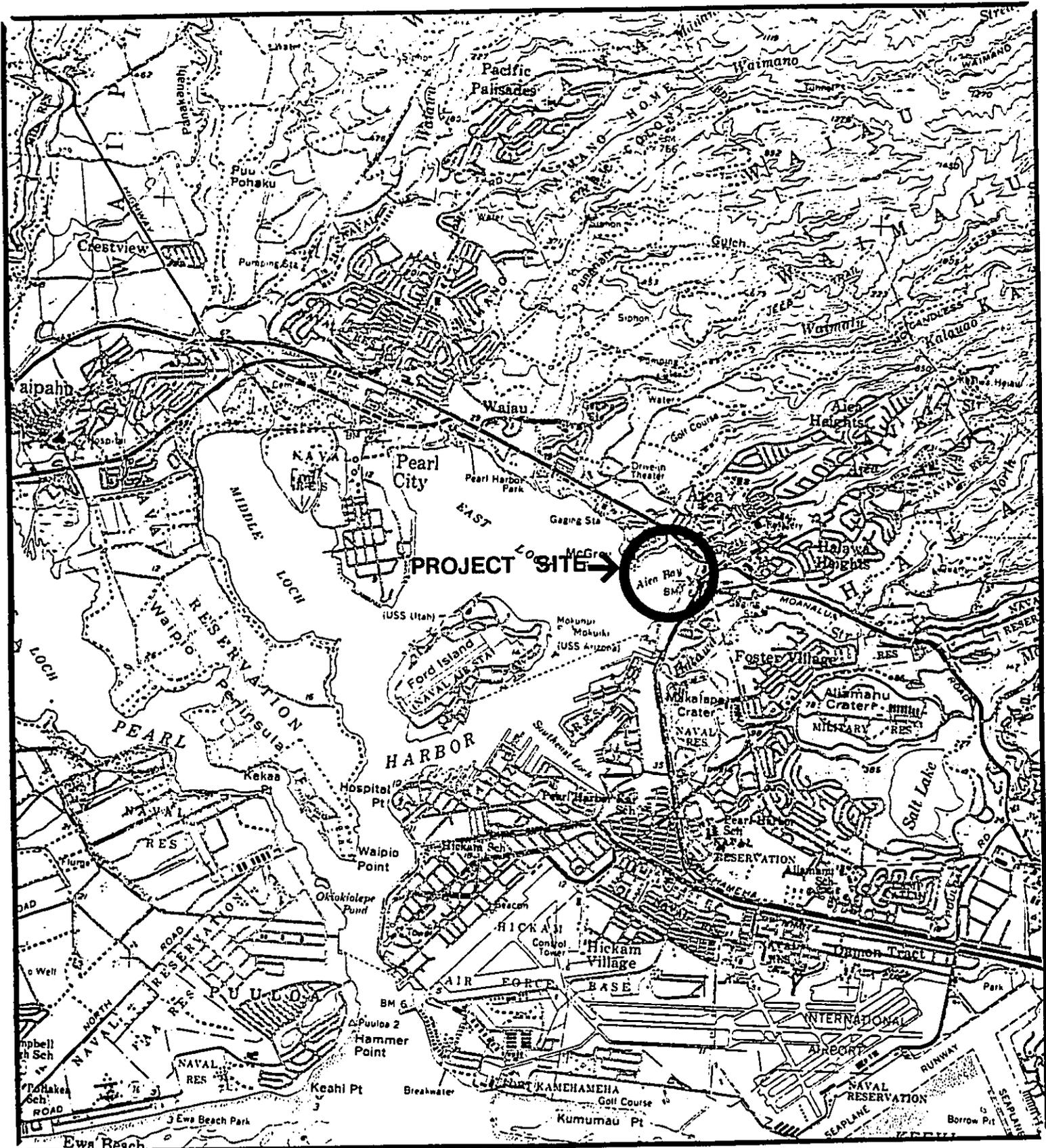
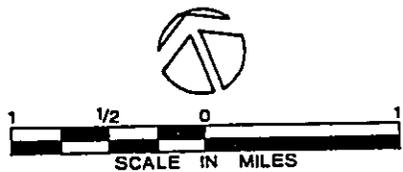


fig.1
Location Map



AIEA BAY STATE RECREATION AREA
 DIVISION OF STATE PARKS, OUTDOOR RECREATION & HISTORIC SITES
 DEPARTMENT OF LAND & NATURAL & RESOURCES
 STATE OF HAWAII
 Prepared by:
WILSON OKAMOTO & ASSOCIATES, INC. PLANNING • ARCHITECTURE • ENGINEERING

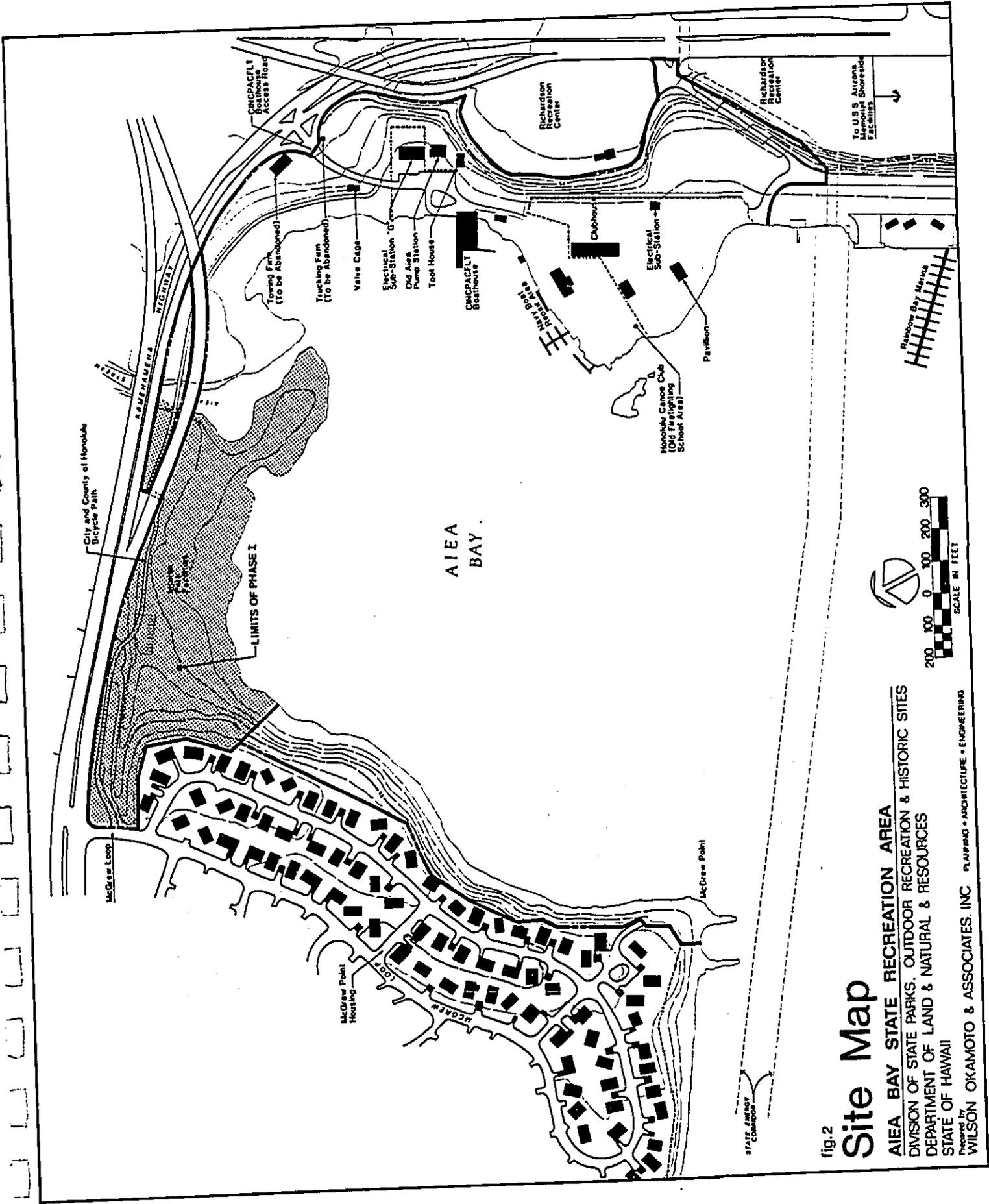


fig. 2
Site Map

AIEA BAY STATE RECREATION AREA
 DIVISION OF STATE PARKS, OUTDOOR RECREATION & HISTORIC SITES
 DEPARTMENT OF LAND & NATURAL RESOURCES
 STATE OF HAWAII
 Prepared by
WILSON OKAMOTO & ASSOCIATES, INC. PLANNING • ARCHITECTURE • ENGINEERING

In 1981, the State and the U.S. Navy entered into the "Memorandum of Understanding on Rainbow Bay State Park" (MOU). The terms of the MOU are summarized as follows:

- a. The park would include both Federal and State lands, with Federal lands to be leased to the State. The State would contribute 7 acres while the Navy would lease the remaining 18 acres to the State.
- b. Public access to the park would be from an existing roadway off of Kamehameha Highway to the CINCPACFLT Boathouse.
- c. Relocation of the CINCPACFLT Boathouse would be financed by the State.
- d. The park would emphasize passive activities such as strolling, picnicking (including family or organized group picnics), minor boating (dinghys and paddleboats) and shoreside fishing. Provision for more significant boating is subject to further discussion and negotiation.
- e. Enforcement of park boating activities would be the responsibility of the State. In this regard, coordination between the State DLNR and Department of Transportation (DOT) will be pursued to define and implement enforcement roles and responsibilities.

In 1982, interim park facilities including an unpaved parking area and two picnic tables were provided. The State Legislature has appropriated \$950,000 for construction of the Aiea Bay State Recreation Area.

Since the MOU between the State and the U.S. Navy was executed, the U.S. Navy has reconsidered its earlier commitments to park development. As a result of recent world events, the U.S. Navy has reassessed its security measures at all of its installations. At Pearl Harbor Naval Base, the Navy has initiated a major program to enhance physical security in and around the base. Development of the entire park will be contingent on implementation of security measures, consistent with U.S. Navy security concerns. While current plans for park expansion are not endorsed by the U.S. Navy, the State of Hawaii proposes development of an approximately 10 acre strip of land along the shoreline between the mouth of Aiea Stream and McGrew Loop, provided that U.S. Navy approval is secured. This area is identified as Phase I in this study (see Figure 2). Access would be available via McGrew Loop. Subsequent phases of park development will also depend upon implementation of security measures in consonance with U.S. Navy concerns.

C. PARK DEVELOPMENT OBJECTIVES

The Rainbow Bay Conceptual Plan, 1974 (McAuliffe, Oka & Associates) established the initial conceptual basis for the Aiea Bay State Recreation Area. The 1974 Plan envisioned the proposed park as a passive recreational facility providing opportunities such as picnicking, walking, biking, and aesthetic enjoyment. Toward this end, the Plan advanced five objectives. While three of them remain applicable, two relating to the accommodation of the then-proposed Stadium Ferry system have been omitted in favor of a more general objective providing for future shoreside docking facilities. The final objective, relating to the relocation of displaced Navy facilities has been replaced by a new objective relating the need to acquire funding for improving the park, including the relocation of Navy facilities.

The following are the objectives for the Aiea Bay State Recreation Area:

Objective 1

Maximize public recreational use of waterfront lands insofar as consistent with the theme of the park facilities.

Objective 2

Maintain and enhance where possible, the natural characteristics and scenic vistas which exist at the site.

Objective 3

Create an efficient circulation system which separates and defines modes and types of traffic.

Objective 4

Provide sufficient flexibility in the park's development concept to allow for future shoreside use of the park for docking purposes.

Objective 5

Seek funding to assure maximum productivity of public park lands, including funds to relocate displaced Navy facilities, as required.

D. PROJECT USER ASSESSMENT

1. Recreational Need

The need for a passive recreational facility in the Aiea-Pearl City area was concluded by the Rainbow Bay Conceptual Plan, 1974. Since then, the population in this region has grown by over 30 percent, underscoring the need for such a facility.

The State Recreation Functional Plan Technical Reference Document indicates a need for coastal recreation facilities within the area identified as the West Primary Urban Center. Expressed as degrees of "need for action" for various recreational activities, the document identifies a high need for beach picnicking and a medium need for swimming/ sunbathing, boating and fishing. It projects a high need for walking and jogging.

Equally significant are residents' attitudes towards recreational opportunities. A 1983 survey conducted for the City and County of Honolulu (Hawaii Opinion, 1983) indicated that a large majority of residents in the Moanalua-Pearl City region consider passive recreational opportunities very important.

2. Anticipated Park Users

In general, park users will include Oahu residents, military personnel and dependents, and tourists.

Siting the park in Aiea would provide coastal recreational opportunities to the immediate Aiea community as well as the adjoining Pearl City and Halawa communities. The park would also be convenient to residents of Waipahu, Mililani, and Wahiawa, where coastal recreational opportunities are unavailable. Moreover, studies indicate that Oahu residents, in general, are willing to travel to other areas of the island for recreation (State of Hawaii, Department of Land and Natural Resources, 1980). Therefore, the park can be regarded as having a regional service area.

U.S. Navy personnel and dependents will have convenient access to the park. In 1985, there were about 7,354 military personnel employed at Pearl Harbor by the Department of Defense (State of Hawaii Department of Planning and Economic Development, December, 1986). A significant proportion of these workers and their dependents reside in U.S. Navy quarters close to Pearl Harbor (e.g., McGrew Point Housing and Halawa Quarters).

Additionally, a majority of personnel and dependents who live "off-base" reside in the vicinity of Pearl Harbor Naval Base.

Existing recreational areas within the Pearl Harbor Naval Base are primarily oriented toward sports such as softball, football, basketball, and tennis. The proposed park will complement such active recreation by providing U.S. Navy personnel and dependents with alternative passive recreational opportunities.

In addition to resident civilian and military users, tourists visiting the U.S.S. Arizona Memorial and U.S.S. Bowfin may be enticed to extend their sightseeing to the proposed park. The distance between the U.S.S. Arizona Memorial Shoreside Facilities and the south end of the proposed park is approximately 0.3 mile.

Visitors to the U.S.S. Arizona Memorial in 1983 numbered approximately 1.5 million, or more than 4,000 per day. With proper design, pedestrian access between the U.S.S. Arizona Memorial Shoreside Facilities and the proposed park can be enhanced to encourage use of the park by tourists.

3. Park Use Concepts

The potential volume of park users and types of activities they will engage in is presently undetermined. However, based on the opportunities that will be offered by the site, the likely range of potential users groups to be served can be summarized in the following categories:

- Bicycle path users, including cyclists, joggers and walkers;
- Commuters (by bus and car);
- U.S.S. Arizona Memorial visitors;
- Organized groups.

a. Bicycle Path Users

The City and County's bicycle path, which traverses the project site, extends from Lehua Avenue in Pearl City to the Richardson Recreation Center. Joggers, walkers, and cyclists may access the bicycle path at various points along its route, e.g., Neal Blaisdell Park, Lehua Avenue, Aiea Kai Way. The bicycle path is periodically used for 10 kilometer races.

The proposed park will serve bicycle path users, as both a rest area and destination. As a rest area, the park will offer comfort stations and water fountains and enhance the aesthetic and scenic quality of the bikeway. As a destination, the park offers recreational opportunities which may be accessed via the bicycle path, as opposed to arriving by automobile.

b. Usage by Commuters

"Commuters" refers to park users arriving by bus and car to engage in activities such as picnicking, including family gatherings, walking, boating or shoreside fishing. Such uses are anticipated to be heaviest during weekends.

Commuters may also utilize the park as a point of departure for extended jogging, walking or biking activities.

c. Usage by U.S.S. Arizona Memorial Visitors

To the more than 1.5 million persons visiting the U.S.S. Arizona Memorial annually, the proposed park offers scenic landscaping and vistas of Pearl Harbor as an extension to their sightseeing, as well as a place to relax.

d. Usage by Organized Groups

Usage by organized groups refers to park use by relatively large groups of people, such as canoe clubs and community organizations. These organizations may engage in group activities, perhaps meetings and social gatherings, at the proposed park.

CHAPTER II
PROJECT DEVELOPMENT CONSIDERATIONS

II. PROJECT DEVELOPMENT CONSIDERATIONS

A. LAND SUITABILITY

Physical characteristics of the site provide a suitable environment for park development. There are no significant archaeological or historic sites found within the proposed park limits, and no endangered species of flora or fauna.

The terrain and flood hazard conditions dictate, in part, the conceptual layout for the park. However, sufficient usable lands are available to allow for development of a perimeter shoreline park on the bay.

From a scenic standpoint, the park's location offers quality scenic vistas, and, as a planned open space, will provide scenic relief from adjoining commercial, military, and residential activities.

B. INFRASTRUCTURE AVAILABILITY

As the park site is situated within a highly urbanized environment, service utilities such as sewer, water, and electrical systems, are readily accessible.

As will be discussed in Chapter IV, water transmission facilities maintained by the City and County of Honolulu Board of Water Supply (BWS) are located on Kamehameha Highway, bordering the project site. However, confirmation of water availability by the BWS will be made during the building permit review stage. In addition, water for park irrigation will be sought in coordination with the on-going effort by the State Department of Transportation and City and County of Honolulu Board of Water Supply to implement the Kalauao Springs non-potable water system. The system involves the installation of an irrigation transmission main from Kalauao Springs, adjacent to Pearlridge Shopping Center, for highway landscape irrigation in the Aiea-Honolulu International Airport vicinity, including Aiea Interchange, Halawa Interchange, Pearl Harbor Interchange, Airport Interchange, Keehi Interchange, and the Honolulu International Airport (M & E Pacific, 1984). The alignment of the transmission main is along a portion of Kamehameha Highway bordering the park site, and provision has been made for future connection to the park's irrigation system.

A 30-inch/36-inch City and County of Honolulu gravity sewerline aligned within the bike path/utility corridor provides a major trunk to which comfort station hook-ups can be made. Prior to design, a sewer connection application will be submitted to the City and County of Honolulu Department of Public Works, Division of Wastewater Management.

Hawaiian Electric Company electrical lines are also located within the bike path/utility corridor.

Details of connection requirements for each utility system will be defined during the design phase of project implementation.

C. STATE-U.S. NAVY AGREEMENTS

Broad program guidelines for park development have been established through the MOU between the State and the U.S. Navy, as well as other agreements and discussions between State and U.S. Navy representatives. These guidelines define the fundamental policies and understandings for concept development.

1. Project Scope:

- a. The Conceptual Master Plan for the Aiea Bay State Recreational Area shall encompass the entire site, between McGrew Point and the area bordering Richardson Recreation Center and Rainbow Bay Marina. This was the planning area delineated in the MOU between the State and the U.S. Navy.
- b. Phase I of park development shall be limited to the area between McGrew Loop and Aiea Stream, providing the U.S. Navy allows park development to proceed.
- c. Future park development of the area to the east of Aiea Stream, and the strip of land fronting the shoreline along McGrew Point Housing is contingent upon implementation of security measures in consonance with U.S. Navy concerns.

2. Permissible Uses:

- a. Permissible uses shall include passive walking and sightseeing, jogging, strolling, picnicking, family gathering and play, and shoreside fishing. Minor boating (dinghys and paddle boats) may be permitted in the future.
- b. Bathing, water skiing, and recreational swimming in the waters of Pearl Harbor are prohibited.
- c. Recreational fishing from non-Federal lands bordering on Pearl Harbor is subject to State DLNR Aquatic Resources Division regulations.
- d. Fishing in Pearl Harbor from U.S. Navy-controlled lands is limited to military personnel and their dependents.

3. Vehicular Access:

- a. Access for Phase I of the park shall be via McGrew Loop. This access shall be designed to minimize traffic noise impacts to McGrew Point Housing residents.
- b. A second access via the CINCPACFLT Boathouse Access Road would be developed if the park is extended to incorporate the eastern and southern portions of the site.

4. Easements:

- a. Existing utility easements and rights-of-way shall be maintained by the current grantee of such easement or rights-of-way.
- b. The existing City and County bicycle path will remain in its current alignment. The Navy has recently indicated a desire for the bicycle path on Kamehameha Highway to be extended to connect with the City and County bicycle path to allow closure of the bicycle path fronting the CINCPACFLT Boathouse.

5. Concessions:

- a. Concessions, if any, will be limited to rentals of small boats (e.g., paddle boats) and food stands.

6. Other Requirements:

- a. Boating activities may be allowed subject to the State's implementation of an enforcement program.
- b. Civilian boating activities shall not extend beyond limits to be agreed upon by the U.S. Navy and the State of Hawaii.
- c. Development east of Aiea Stream shall not proceed until the State has relocated the CINCPACFLT Boathouse.
- d. Pedestrian access to the park from the U.S.S. Arizona Memorial Shoreside Facilities, as well as neighboring residential areas, shall be provided.

D. PARK DESIGN CONCEPTS

Within the context of the aforementioned planning guidelines, physical parameters for development were identified. These parameters define the physical suitability of the site for

accommodating proposed park uses. Five development zones were formulated for this purpose: (1) shoreline zone; (2) flood plain; (3) naturalized slope; (4) nonmaintained urban; and (5) maintained urban. The characteristics and development considerations for each of these zones are shown in Table 1. Figure 3 presents the zoning delineations for each of these categories.

In general, development potential is highest in the maintained urban areas where relatively flat, expansive open areas can be developed. The shoreline zone, flood plain, and naturalized slope areas are more limited with respect to development opportunities for passive recreation. The nonmaintained urban areas have the lowest potential for recreational development, but can serve as a buffer zone between the park and its urbanized environs.

Based on the land suitability constraints, and agreements between the State and U.S. Navy, the following features were regarded as central to conceptual park design:

- o Centrally located comfort stations

Comfort stations will be centrally placed to facilitate access from various points in the park. (Note: Comfort station design may also incorporate a pavilion and storage space for park maintenance).

- o Extended jogging and biking pathways

An internal pathway system for joggers, walkers, and cyclists will be both a functional and landscape feature. It will integrate observation points, water fountains and exercise stations. Pathway design features such as distance markers and posted route maps may also be employed to further enhance pathway activities.

- o Centrally located exercise stations and tot-lots

Exercise stations will be sited adjacent to the pathway to complement pathway activities such as jogging and walking. Tot-lots will be sited to offer secure play areas specifically designed for children.

TABLE 1

DEVELOPMENT SUITABILITY ZONES

SUITABILITY FOR DEVELOPMENT

DEVELOPMENT CONSIDERATIONS

CHARACTERISTICS

DESCRIPTION

Excellent

- o Access to water
- o Shoreline activities
- o Retain major plantings

- o Elevation 0-15 feet
- o Sparsely to heavily vegetated (range of various ornamental species)
- o Maintained and partially irrigated
- o Existing structures

Maintained Urban

Limited

- o Access to water
- o Shoreline activities
- o Viewing (continuous)
- o Viewing (point)
- o Preservation

- o Elevations 0-5 feet
- o Heavily vegetated (Mangrove, Milo)
- o Tidal areas
- o Partially inaccessible

Shoreline Zone

Limited

- o Subject to possible flooding
- o Large areas
- o Relationship to Aiea Stream

- o Elevation 0-5 feet
- o Flat topography (less than 5%)
- o Sparsely vegetated (grasses)

Flood Plain

Limited

- o Viewing (higher elevations)
- o Circulation (pedestrian only)

- o Elevation 5-35 feet
- o Steep topography (25% - 100%+)
- o Heavy vegetated (Kiawe, Opiuma, Koa Haole)
- o Shallow soil, rock outcrops

Naturalized Slopes

Poor

- o Circulation potential
- o Functional as buffer zone

- o Elevations 5-25 feet
- o Moderately vegetated (Koa Haole)
- o Generally sloping topography (5%-25%)
- o Shallow soil, rock outcrops

Nonmaintained Urban

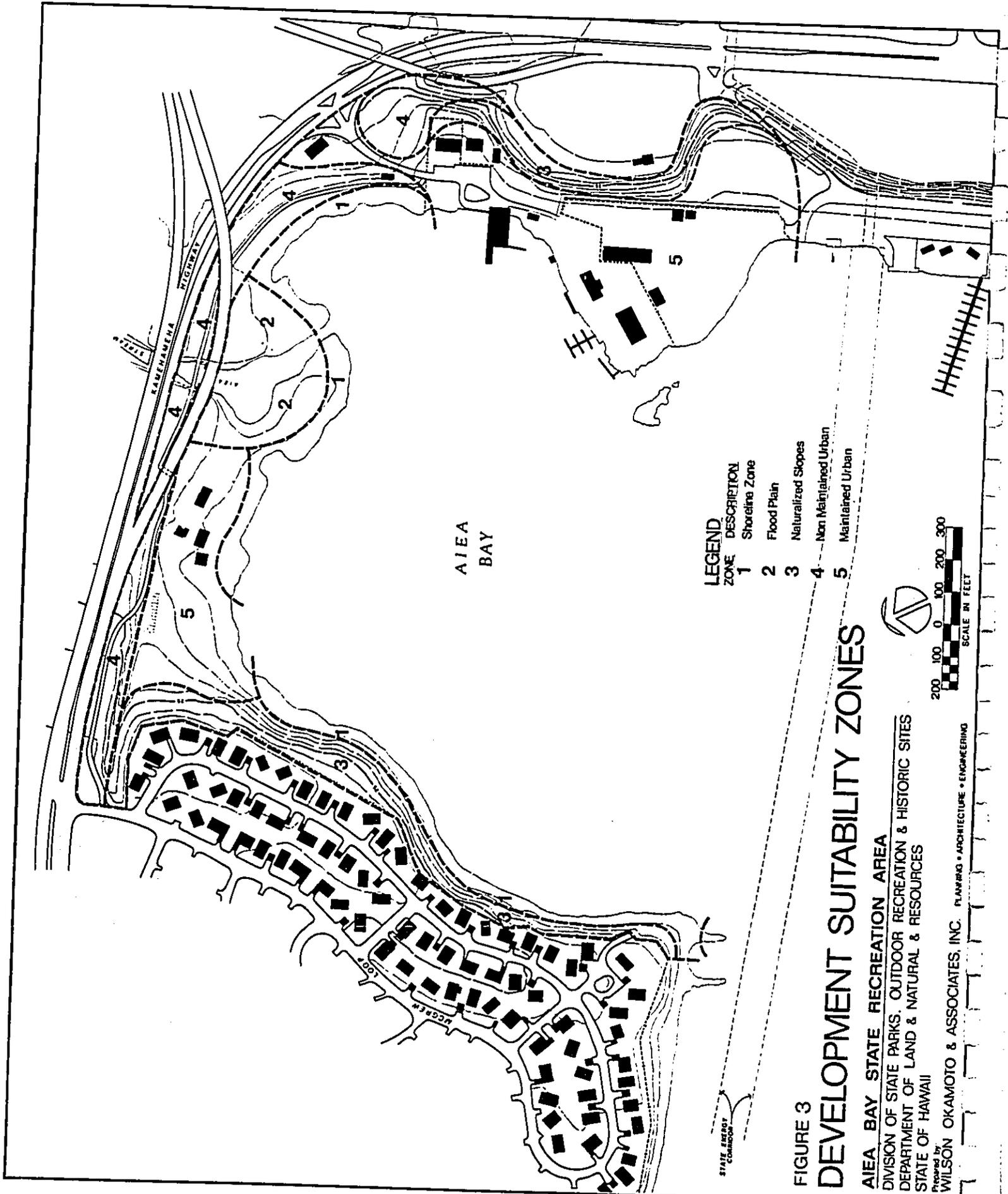


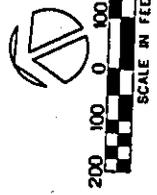
FIGURE 3

DEVELOPMENT SUITABILITY ZONES

AIEA BAY STATE RECREATION AREA
 DIVISION OF STATE PARKS, OUTDOOR RECREATION & HISTORIC SITES
 DEPARTMENT OF LAND & NATURAL & RESOURCES
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ZONE	DESCRIPTION
1	Shoreline Zone
2	Flood Plain
3	Naturalized Slopes
4	Non Maintained Urban
5	Maintained Urban



STATE ENERGY COMMISSION

o Strategically placed view stations

View stations will be sited at various locations within the park to facilitate scenic appreciation of the park's environs. The Waianae Range, Pearl Harbor/Ford Island, U.S.S. Arizona Memorial and other sections of the park are examples of scenery which will be viewed from the stations.

III. PROPOSED CONCEPTUAL MASTER PLAN

III. PROPOSED CONCEPTUAL MASTER PLAN

A. RATIONALE

The Proposed Conceptual Master Plan (see Figure 4) is a composite plan formulated through an interactive process involving State DLNR and U.S. Navy review and refinement of two initially proposed conceptual plan alternatives. These earlier alternatives are presented in Chapter IX - Alternatives to the Proposed Action.

Based on the U.S. Navy's position regarding park development, the park site can be divided into four geographic subareas. The first subarea, referred to as the "Phase I Subarea" encompasses the park site between McGrew Loop and Aiea Stream, including the existing grassed area which will be integrated with all other functions of the proposed park. The State of Hawaii proposes initial park development of this subarea provided U.S. Navy approval is secured. The second subarea, referred to as the "Central Subarea," extends from Aiea Stream, east, to the CINCPACFLT Boathouse. In the original MOU, this subarea could have been developed before the State would be required to relocate the Boathouse. The third subarea includes the park site south of the CINCPACFLT Boathouse and is referred to as the "South Subarea". According to the MOU, this subarea could only be developed after Boathouse functions have been relocated. The fourth subarea, referred to as the McGrew Point Foot Path, is the narrow strip of land makai of the McGrew Point Housing, extending from McGrew Loop to the tip of McGrew Point. This area is also excluded from development under the current U.S. Navy position. The Proposed Conceptual Master Plan, however, addresses the entire project site, as delineated in the MOU, to establish a basis for future park planning should U.S. Navy security concerns be addressed.

Key criteria used in developing the Proposed Conceptual Master Plan are summarized below.

General:

- o Given the limitations of park development imposed by U.S. Navy security concerns, Phase I is proposed as a "stand alone" park (see Figure 4). Future park expansion will be pursued if U.S. Navy security concerns can be addressed.
- o Phase I shall be designed to facilitate integration with the Central Subarea (east of Aiea Stream) and the McGrew Point Foot Path.

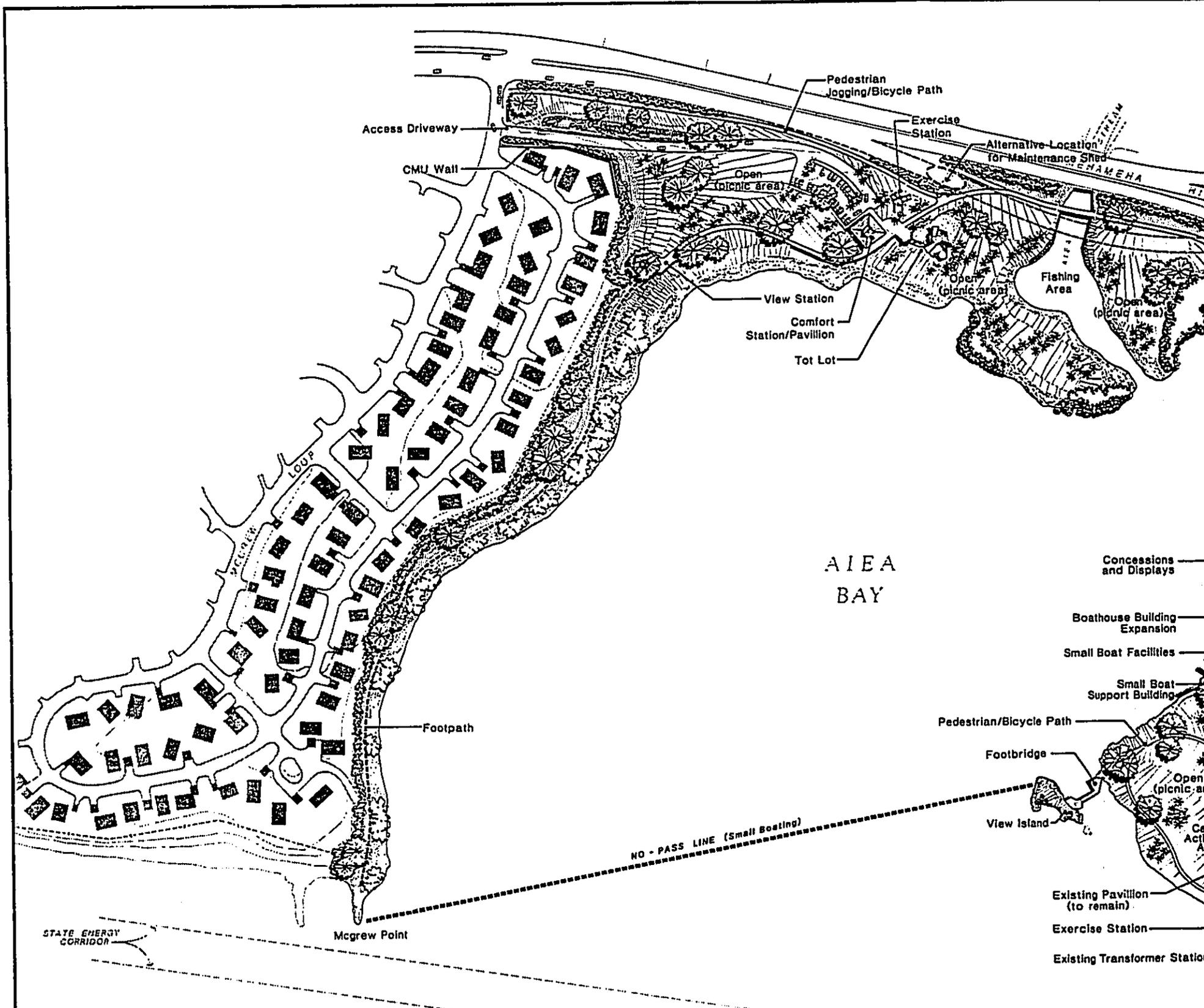
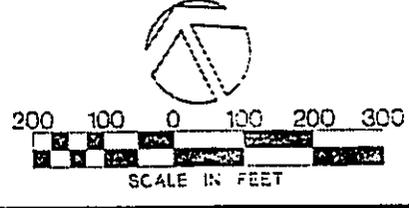


fig.4

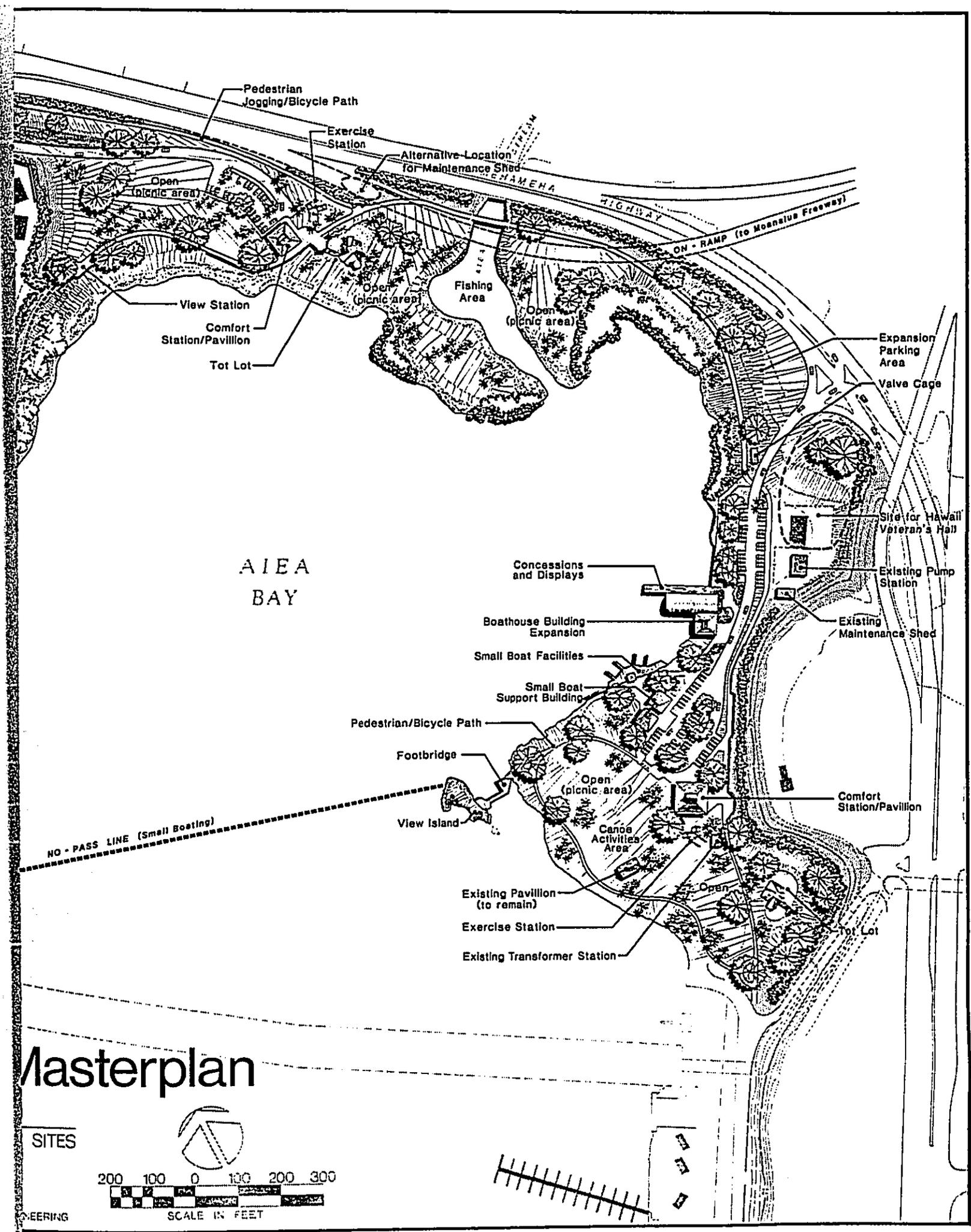
Proposed Conceptual Masterplan

AIEA BAY STATE RECREATION AREA
 DIVISION OF STATE PARKS, OUTDOOR RECREATION & HISTORIC SITES
 DEPARTMENT OF LAND & NATURAL & RESOURCES
 STATE OF HAWAII

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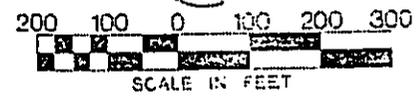
- Concessions and Displays
- Boathouse Building Expansion
- Small Boat Facilities
- Small Boat Support Building
- Pedestrian/Bicycle Path
- Footbridge
- View Island
- Existing Pavillion (to remain)
- Exercise Station
- Existing Transformer Station



AIEA
BAY

Masterplan

SITES



ENGINEERING

Vehicular Access:

- o McGrew Loop shall serve as the access point for Phase I.
- o Should Central and South Subarea plans be implemented, the CINCPACFLT Boathouse Access Road shall also be utilized.
- o Access from Arizona Memorial Drive shall be limited to pedestrians.

Relocation of U.S. Navy Functions:

- o The Proposed Conceptual Master Plan assumes that all U.S. Navy functions presently within the project limits will be relocated off-site by the State of Hawaii. This assumption allows flexibility in planning for the Central and South Subareas.
- o In keeping with the above assumption, the CINCPACFLT Boathouse is assumed to be available for park use upon relocation of current functions.

Limits of Boating:

- o Assuming that the CINCPACFLT Boathouse functions are relocated off-site, the original boating area delineated by the U.S. Navy could be implemented. This would allow boaters to navigate within Aiea Bay from the shoreline to a seaward "no pass line" drawn between McGrew Point and View Island, an island formation comprised of fill material and concrete pilings, located in the southeast portion of the bay.

Hawaii Veterans' Hall:

- o The Proposed Conceptual Master Plan provides for the future incorporation of a Hawaii Veterans' social hall for public use. The social hall would be intended to recognize and memorialize the accomplishments of Hawaii's veterans.

B. COMPONENTS

The following summarizes key elements of the Proposed Conceptual Master Plan (see Figure 4).

1. Phase I Subarea (approximately 10 acres)

a. Vehicular Access and Parking

Access for the Phase I Subarea will be via McGrew Loop, off of Kamehameha Highway. Approximately 30 parking stalls will be provided at the end of the

access driveway and turnaround. Additional parking may be provided in the future, based upon park usage, which will be monitored. To minimize traffic noise generated from this access, a concrete masonry unit (CMU) wall and a landscape buffer is proposed along the segment of the accessway bordering McGrew Point Housing.

b. Comfort Station

A comfort station will be provided in the vicinity of the parking lot. The comfort station may be incorporated as part of a larger pavilion facility.

c. Picnic Areas

Picnic tables will be provided within landscaped areas which, to the maximum extent practicable, will utilize existing trees and landscape features to create a scenic environment for passive recreational pursuits. Shoreline improvements such as rock cover may be used to minimize erosion.

d. Pedestrian/Bicycle Path

An existing pedestrian/bicycle path that traverses the site will be upgraded to meet detailed design requirements. An exercise station will be installed along the path near the comfort station.

e. Tot Lot

A tot lot will be provided near the comfort station and exercise station to facilitate adult supervision and access to the restrooms.

f. View Stations

Views overlooking Aiea Bay and Pearl Harbor are planned from various points in the Phase I Area. Clearing of existing mangrove will further enhance views.

g. Fishing Area

The estuary at the mouth of Aiea Stream provides a convenient area for recreational fishing. While these waters do not contain many desirable game fish they offer an enjoyable recreational experience for children and adults. If during periodic State Department of Health water quality, sediment and biota sampling in the area, harmful levels of toxic

pollutants are detected, signs will be posted warning that fish caught may be contaminated and advising against consumption.

2. Central and South Subareas

The Central and South Subareas are comprised of about 16 acres and extend from the mouth of Aiea Stream, southward to the terminus of Arizona Memorial Drive. Key features of these areas are described below.

a. Vehicular Access and Parking

The CINCPACFLT Boathouse Access Road will provide access to the Central and South Subareas. Two parking lots are envisioned within these subareas with space reserved for further parking expansion.

While the Proposed Conceptual Master Plan does not include vehicular access to the site from the U.S.S. Arizona Memorial Shoreside Facilities, pedestrian access is available to facilitate use of the park by U.S.S. Arizona Memorial visitors.

b. Interpretive Center/Concession (Boathouse)

The CINCPACFLT Boathouse is a significant feature of the site which is planned for incorporation in the park. The Proposed Conceptual Master Plan shows a concession or interpretive center to be located within the Boathouse. Specific uses in this context may include displays depicting war-time history, a snack bar or boat rental concession.

Acquisition of the CINCPACFLT Boathouse by the State may prompt the U.S. Navy to ease its current prohibition on boating activities and to allow the park's boat users to navigate within the proposed boating area, initially delineated by the U.S. Navy. The seaward boundary of this area is a "no pass line" from McGrew Point to View Island.

c. View Island

The Proposed Conceptual Master Plan provides a foot bridge linking the South Subarea to View Island. This connection would enhance passive use potentials such as picnicking, viewing or fishing.

d. Other Marine Activities

A portion of the South Subarea is designated for various marine related uses which may include small boating concessions and canoe club activities. Boating activities associated with the park will be restricted to the area delineated by the "no-pass" line. Public navigation in waters outside this area is prohibited.

e. Comfort Station

A comfort station will be provided in the vicinity of the parking lot and the picnic area. This comfort station may be incorporated as part of a larger pavilion facility.

f. Picnic Areas

Picnic areas will be landscaped to include, where possible, existing trees and landscape features.

g. Pedestrian/Bicycle Path

A pedestrian/bicycle path will be provided and linked with the existing paths. An exercise station will also be provided along the path near the comfort station.

h. Tot Lot

A tot lot will be located near the comfort and exercise stations, within a picnic area. This will facilitate adult supervision and access to the restrooms.

i. Hawaii Veterans' Hall

A potential site for the Hawaii Veterans' Hall has been indicated east of the CINCPACFLT Boathouse Access Road. This location would place the hall near parking facilities and enhance security should it be utilized during evening hours.

3. McGrew Point Foot Path

Landscaping on the mauka side of the McGrew Point Foot Path is proposed to buffer McGrew Point Housing from activities on the foot path. The makai side of the foot path would be cleared, and landscaped with low vegetation to enhance views of Aiea Bay and to provide greater security for foot path users. Improvements are not anticipated to be

extensive, since heavy use of this area would not be desirable.

C. DEVELOPMENT PHASING

1. Initial Phase

Since it is uncertain whether all lands encompassed by the Proposed Conceptual Master Plan will eventually be developed, initial programming and development is limited to the Phase I Subarea. Approximate development cost of Phase I is on the order of \$1.1 million (in 1988 dollars), exclusive of any U.S. Navy security requirements such as fencing. Development of Phase I will proceed in increments based on the availability of funds. The first increment should, at minimum, include necessary improvements to the McGrew Loop/Kamehameha Highway intersection, an access driveway, parking stalls, and comfort station. Construction time for the first increment is estimated to be between 3 to 6 months.

If additional funds are available, other Phase I elements that could be pursued include landscaping and irrigation, a pedestrian/bicycle path, tot lot, and exercise station.

2. Subsequent Phases

In the event the U.S. Navy makes available to the State lands necessary to fully implement the Proposed Conceptual Master Plan and security concerns are adequately addressed, development of the McGrew Point Foot Path and the Central and South Subareas could also proceed. Development of the Central and South Subarea would require the relocation of U.S. Navy activities related to the CINCPACFLT Boathouse.

D. PARK MANAGEMENT AND ORGANIZATION

Upon implementation, the Aiea Bay State Recreation Area will be managed by the DLNR's State Parks, Outdoor Recreation, and Historic Sites Division. Park personnel will be required to assure the continued upkeep, cleanliness and security of the park. The number of groundskeepers assigned to the park will depend upon the park's stage of development. In addition to park maintenance personnel, DLNR enforcement personnel will be required to assure public compliance with established prohibitions. As each phase is developed, maintenance and security requirements will be evaluated to determine if additional personnel are required. Additionally, other specific operational and managerial requirements will be defined as a result of on-going monitoring of public usage.

Park management requirements relating to public health and safety will also be considered, as follows:

- o Need for appropriately sited fencing and barriers to separate park users from physical hazards such as drainageways and traffic routes.
- o Need for appropriately sited signs warning the public of potentially contaminated aquatic fauna that may be caught in Pearl Harbor or Aiea Stream.

CHAPTER IV
PROJECT SETTING

IV. PROJECT SETTING

A. EXISTING LAND USE

The project site currently encompasses both civilian and military uses (see Figure 5). Much of the site however, is undeveloped. For example, the northwest sector of the site, along the U.S. Navy's McGrew Point Housing, is overgrown with trees and shrubs such as kiawe, koa haole, and mangrove. Similar vegetative growth is found along the middle section of the project site (north of the CINCPACFLT Boathouse).

A significant feature of the site is the City and County of Honolulu's bicycle path which traverses the site in its course from Lehua Avenue, in Pearl City, to the Richardson Recreation Area. The path is ten feet wide, paved, and is maintained by the City and County of Honolulu. The portion of the path traversing the park site is aligned with the U.S. Navy's utility corridor.

The northwest portion of the site has been cleared, landscaped and developed with interim park facilities by the State of Hawaii, Department of Land and Natural Resources (DLNR). Currently, there are two picnic tables, a large grassed open space and an unpaved parking area.

The southern area of the park site is occupied primarily by U.S. Navy structures and facilities including the CINCPACFLT Boathouse and parking lot as well as an electrical substation, the Old Aiea Pump Station, a boat repair area for Navy personnel, and a clubhouse. A private trucking firm and a towing company occupy State lands, on 30 day revocable permits, adjacent to Kamehameha Highway.

The shoreline area is utilized as a launch site by the Honolulu Canoe Club which has a Navy sponsor. The canoe club beaches its canoes in an area immediately south of the Boathouse.

The Pearl Harbor Yacht Club is located in the clubhouse adjacent to the area utilized by the Honolulu Canoe Club. The Yacht Club membership of more than 100 includes military personnel and civilians and their families.

Inspection of the entire park site revealed a substantial amount of debris, abandoned facilities and remnants of previous developments. At McGrew Point, there are abandoned piers and metal pilings in the water and, on shore, trash and remnants of a Landing Ship Tank (LST) site at the tip of the point.

Along the northwest portion of the site, there are submerged pilings, protective rock revetments and submerged automobile

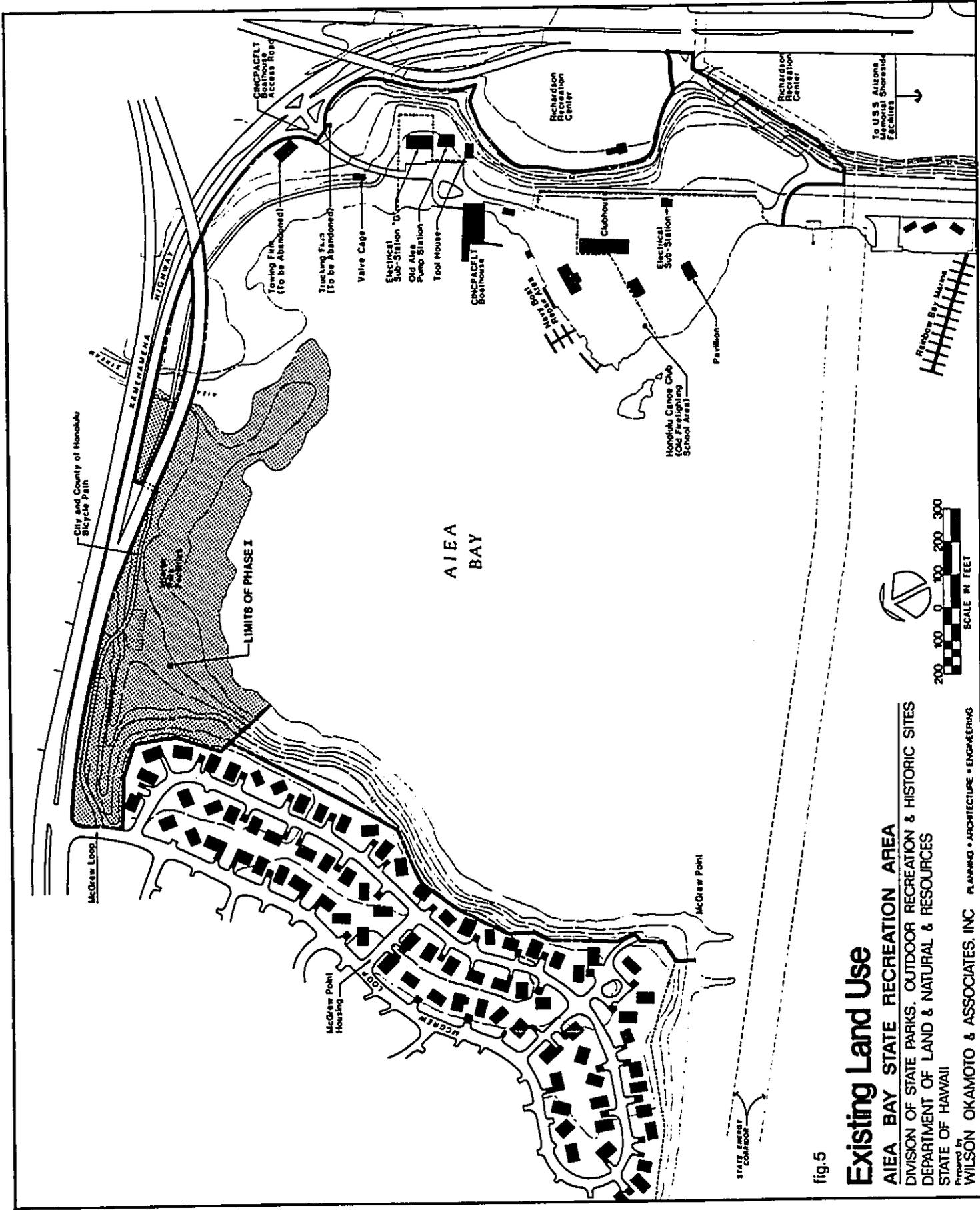


fig.5

Existing Land Use

AIEA BAY STATE RECREATION AREA

DIVISION OF STATE PARKS, OUTDOOR RECREATION & HISTORIC SITES

DEPARTMENT OF LAND & NATURAL RESOURCES

STATE OF HAWAII

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tires scattered within the shoreline area. Aluminum cans and other trash litter the Aiea Stream estuary.

An island formation in the southeastern portion of the bay appears to be made of fill material and concrete pilings. The island is designated "View Island" in the Proposed Conceptual Master Plan.

B. SURROUNDING LAND USE

The proposed park site is adjacent to the U.S. Navy McGrew Point Housing development, Kamehameha Highway, the Richardson Recreation Center, the proposed State Energy Corridor, and the Rainbow Bay Marina. To the south of the Marina is the U.S. Navy's shoreside support facilities for the U.S.S. Arizona Memorial boat tour.

At a regional level, the park site is nearby commercial and residential areas of the Aiea and Pearl City communities, Aloha Stadium, and military activities at the Pearl Harbor Naval Base.

C. LANDOWNERSHIP

Lands within the project site are owned by the State of Hawaii and the U.S. Navy as listed in Table 2 and depicted in Figure 6. Portions of the State land are unencumbered and some are under Department of Transportation (DOT) jurisdiction.

The City and County of Honolulu has a twenty year easement (effective until October 7, 1994) for the bikeway which is aligned along the U.S. Navy's utility corridor. The easement agreement between the U.S. Navy and the City and County of Honolulu is contained in Appendix B. Terms and conditions of the easement include:

- o Construction, maintenance, operation, repair and use of the bikepath shall be performed without cost or expense to the U.S. Navy.
- o Landscaping plans are subject U.S. Navy approval.
- o The grantee shall maintain the bikepath.
- o The grantee's rights to the easement shall not interfere with government activities.
- o The City and County shall formulate and make public a code of regulations (to include government regulations) for the safe operation of the bikepath. Specifically, the code shall include the following: no camping, no vendors or commercial operations of any type, no intoxicating beverages, no littering, no fires, no permanent

TABLE 2
AIEA BAY LANDOWNERSHIP

PARCEL NO.	TAX MAP KEY NO.	AREA	OWNERSHIP
1	9-8-19:6 (por)	1.727 (1.0)	USA
2	9-8-19:2	2.597	State
3	9-8-19:3 (por)	48.525 (3.5)	USA
4	9-9-04:4	1.735	State
5	9-9-04:3	.195	State
6	9-9-04:6	1.278	USA
7	9-9-04:2	1.626	USA
8	9-9-04:1	.179	USA
9	9-9-04:24	.899	State
10	9-9-12:10	1.135	USA
11	9-9-12:4	.724	USA
12	9-9-12:46	.315	State (leased)
13	9-9-12:5	.204	State
14	9-9-12:47	.275	State (leased)
15	9-9-12:11	.14	USA
16	9-9-03:35	.844	State
17	9-9-03:38	.307	USA
18	9-9-03:32	5.209	USA
19	9-9-03:30 (por)	5.249 (2.0)	USA
20	9-9-03:29 (por)	25.575 (5.0)	USA

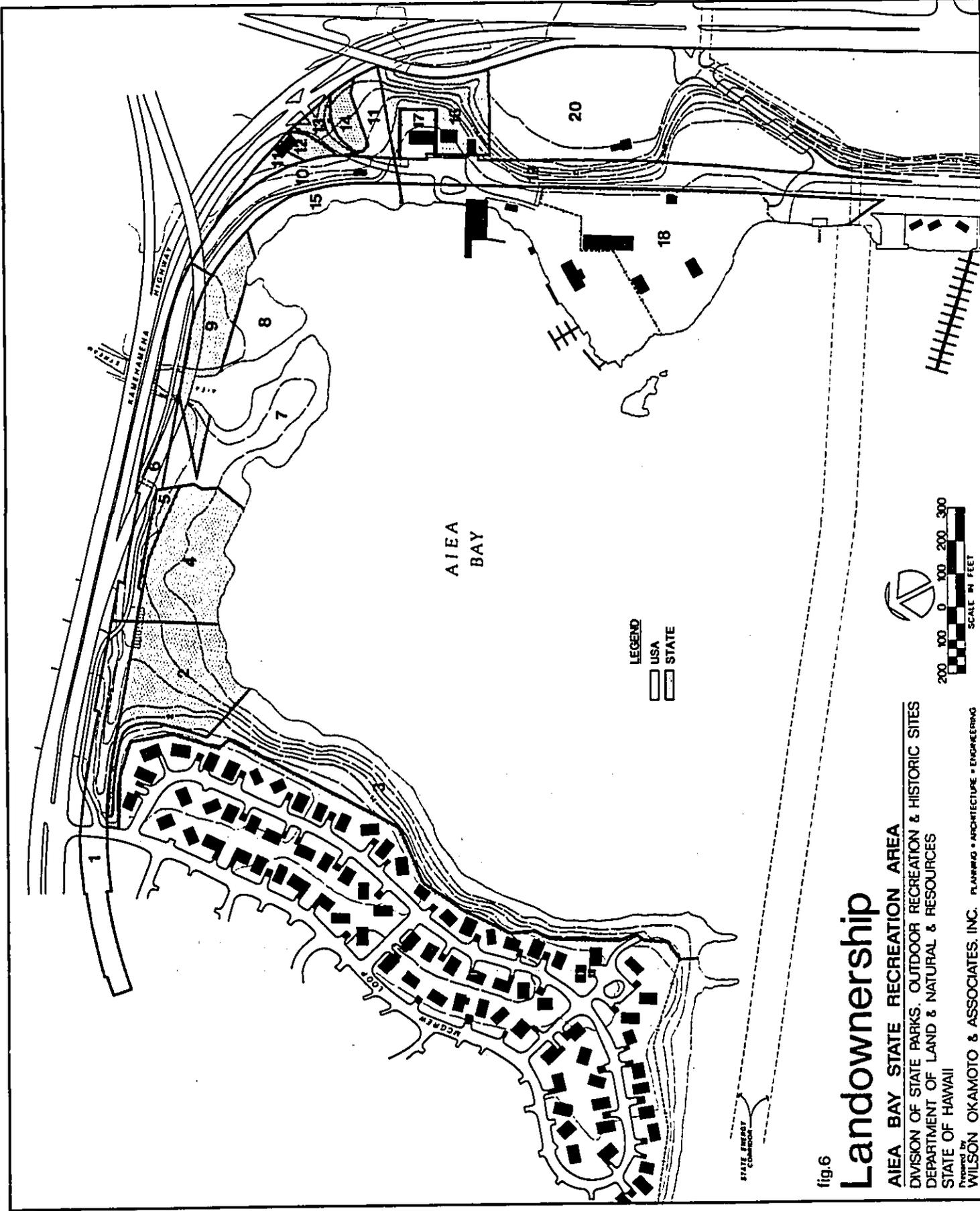


fig.6

Landownershhip

AIEA BAY STATE RECREATION AREA
 DIVISION OF STATE PARKS, OUTDOOR RECREATION & HISTORIC SITES
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structures. Enforcement of rules is the responsibility of the grantee.

- o The government, Standard Oil Company, or any parties having easement rights over the bikepath shall restore the portion of the bikepath affected by construction operations for utility lines to the condition in which it existed prior to the commencement of work.
- o Grantee is responsible for damage to Standard Oil Company's pipelines within the 40-foot right-of-way caused by the grantee's negligence or exercise of rights to the easement.

Private firms occupy two parcels of State lease land near the CINCPACFLT Boathouse Access Road entrance. (TMK: 9-9-12: 46, 47). Both parcels are held on revocable permits which can be cancelled with thirty days notice.

The State DOT has a right-of-way which extends 15-feet beyond the edge of the Moanalua Road off-ramp.

D. PHYSICAL ENVIRONMENT

1. Climate

The climate of the Aiea Bay area is semi-tropical with average temperatures in the 70's. The prevailing winds vary from 10 to 20 miles per hour and originate from the northeast. The annual precipitation for this area is about 30 inches.

2. Soils

Soil characteristics vary within the project site. Soils along the McGrew Point shoreline are comprised mostly of Waipahu Silty Clay, with a 6 to 12 percent slope. This soil has a high shrink-swell potential and therefore, is not well suited for buildings. It is, however, a fair topsoil.

The existing open-grassed picnic area is situated on soil that is classified as Pearl Harbor Clay. This soil is also unsuitable for buildings due to its high shrink-swell potential.

The eastern shore of Aiea Bay, extending south from the Aiea Stream mouth, is classified as Rock Land where exposed rock covers 25 to 90 percent of the surface.

3. Flood Hazard

The majority of the project site is within the Zone D and X designations of the Federal Flood Insurance Rate Map (FIRM). Zone D is described as an area in which flood hazards are undetermined. Zone X is an area determined to be outside the 500-year flood plain. The portions of the project site south of the CINCPACFLT Boathouse and west of Phase I are within the Zone D designation.

The remainder of the project site is within the Zone X designation except for a relatively small area of the proposed park site which lies within the 100-year flood boundary. Extending from the shoreline to Kamehameha Highway along the banks of Aiea Stream, this area is designated as Zone A, an area with a one percent probability of flood occurrence in any given year for which base flood elevations have not been determined. The entire park site is protected from tsunami inundation by the narrow Pearl Harbor Channel entrance.

4. Scenic Characteristics

The physical configuration of the proposed park offers panoramic vistas of the Waianae Mountain Range, the Koolau Mountain Range, Ford Island, Pearl Harbor and other portions of the park itself. The scenic value of the area is an important asset for the proposed use.

5. Flora

The Pearl Harbor Wetlands, which includes the East Loch of Pearl Harbor, have been transformed dramatically during the past one hundred years. Hawaiian fishponds once dotted the coastline which is now developed for shipping and military use. Areas once cultivated with taro and rice, (such as the Northern Bay portion of the project site) have been altered by military operations and construction.

Natural modification of original wetlands began approximately 40 years ago with the introduction of mangrove. Currently, the site is characterized by a variety of vegetative types. The narrow strip of land along East Loch near the McGrew Point Housing, for example, is heavily vegetated with Rhizophora mangle (Mangrove). Also found in this area are Leucaena leucocephala (Koa-haole), Thespesia populnea (Milo), Batis maritima L. ('Akulikuli-kai or Pickleweed), and Prosopis pallida (Kiawe) which borders the shore.

Other varieties of vegetation include Brachiaria mutica (California grass), Scirpus validus (Great Bulrush), and

Ludwigia octivalvis (Kamole) which can be found in the vicinity of the Aiea Stream mouth. This area is shallow, marshy, and also densely vegetated with mangrove.

Trees found within or near the interim park facilities include Cocos nucifera (Coconut), Mangifera indica (Mango), Samanea saman (Monkeypod) and Ficus variety (Banyan). There are no endangered tree species on the site.

Trees such as the milo, monkeypod, coconut and banyan which are well adapted to the site, would also be suitable for the park's landscaping. Retaining some of the established vegetation would help to preserve the natural state of the site, as well as create an aesthetically pleasing park environment, without replanting trees.

An indication of the types of vegetation which can be found in the vicinity of the park site is provided in Table 3.

6. Fauna

The project site encompasses shorewaters, stream waters and terrestrial environments, thus, offering a wide range of habitats for aquatic and terrestrial fauna. Surrounding development, however, has had a significant impact on the fauna of the site. Aiea Stream, for example, which bisects the site, has been modified and concrete lined. The stream reach within and adjacent to the site is tidally influenced, providing habitats for both freshwater and marine species which can tolerate brackish conditions. The most abundant fish in the stream is Tilapia mossambica (Tilapia). Other stream species that may inhabit the area are mollies and guppies (Poecilia spp.). Marine species that may venture into the stream include Mugil cephalus (Mullet or Ama ama), Kuhlia sandvicensis (Aholehole) and Sphyraena barracuda (Barracuda or Kaku). Metropograpus messor (Shore crabs or Alamihi) and Palaemon debilis (Shrimp or Opae) may be found along the shore.

A variety of fish species inhabit Pearl Harbor. As many as 90 species from 46 families of fishes have been collected or sighted. These include Stolephorus purpureus (Nehu), Sphyraena barracuda (Barracuda or Kaku), Mugil cephalus (Mullet or Ama ama), Chanos chanos (Milkfish or Awa), Cranagidae (Jack or Papio), and Aetobatus narinari (Eagle ray or Hihimanu).

TABLE 3

SPECIES LIST FOR PEARL HARBOR-EAST LOCH, OAHU

<u>SPECIES</u>	<u>COMMON NAME</u>
<u>Samanea saman</u>	Monkeypod
<u>Ficus variety</u>	Banyan
<u>Batis maritima L.</u>	Pickleweed
<u>Cocos nucifera</u>	Coconut
<u>Mangifera indica</u>	Mango
<u>Azolla filiculoides</u>	Azolla
<u>Colocasia esculenta</u>	Taro
<u>Scirpus validus</u>	Great bulrush
<u>Brachiaria mutica</u>	California grass
<u>Coix lachryma-jobi</u>	Job's tears
<u>Echinochloa colona</u>	Jungle rice
<u>Echinochloa crusgalli</u>	Barnyard grass
<u>Eclipta alba</u>	False daisy
<u>Pluchea indica</u>	Indian pluchea
<u>Youngia japonica</u>	Oriental hawksbeard
<u>Ipomoea aquatica</u>	Swamp cabbage
<u>Ipomoea obscura</u>	--
<u>Nasturtium microphyllum</u>	Watercress
<u>Hibiscus tiliaceus</u>	Hau
<u>Ludwigia octivalvis</u>	Kamole
<u>Rhizophora mangle</u>	American mangrove
<u>Plantago major</u>	Broad-leaved plantain
<u>Cardiospermum halicacabum</u>	Balloon vine

Source: Margaret E. Elliott and Erin M. Hall, Wetlands and Wetland Vegetation of Hawaii, 1977.

A wide range of invertebrate and vertebrate organisms also inhabit this area of Pearl Harbor. Some, such as various species of crab and shrimp, are a potential food source for waterbirds. Aquatic invertebrates include Opheodesoma spectabilis (Sea Cucumbers), Family Sabellidae (Feather Duster Worms) and sponges attached to rocks. Oyster shells were found on the banks near the mouth of Aiea Stream, however, no live oysters or clams could be found in the vicinity of the project site. Terrestrial animals likely to inhabit the Pearl Harbor area include mice, rats, mongoose, and domestic and feral dogs and cats.

On the northwestern corner of Pearl Harbor's East Loch, opposite the proposed park site, is a key preservation and wildlife refuge for endangered waterbirds. The stilt, coot, and heron search for food in this area.

East Loch is also frequented by migratory waterfowl and shorebirds, indicative of the diversity of habitats available.

Birds which are likely to be found on the site include the Japanese White-eye, Barred Dove, Spotted Dove, Common Myna, Spotted Munia, Northern Cardinal, Red-crested Cardinal, House Finch, Red-vented Bulbul and Shama.

7. Archaeological/Historic Sites

The proposed site for the Aiea Bay State Recreation Area lies within the boundaries of the Pearl Harbor Naval Reservation which was declared a National Historic Landmark in 1964. In 1966, because of its success in supporting the Pacific Fleet and its historic role in Pacific defense, particularly during World War II, Pearl Harbor was included in the National Register of Historic Places. In 1979, a Memorandum of Agreement (MOA) was executed by the U.S. Navy, the Advisory Council on Historic Preservation, and the Hawaii State Historic Preservation Office to define the actions necessary to avoid or mitigate adverse effects of development on the historic characteristics of Pearl Harbor. The Pearl Harbor Historic Preservation Plan, a central document for the MOA action, classifies structures within the Landmark according to their contribution to its historic character. There are no structures within the proposed park site that are considered to be major contributions to the historic character of the naval complex. (Naval Facilities Engineering Command, February 1984).

It is noted that the former railroad right-of-way which is coaligned with the existing bicycle path has been proposed for inclusion on the National Register of Historic Places.

Determination of the historic status of the railroad right-of-way is currently pending.

No known archaeological sites exist at the project site. Intense development of the area by the U.S. Navy prior to and during World War II have probably destroyed anything of archaeological importance on the land surface. Historically, the Pearl Harbor Lochs were favored sites for Hawaiian fishponds. For example, Kahakupohaku Pond was located in the vicinity of the Old Navy Firefighting School/Boat Repair Facility before it was filled around 1939. It was a small pond of approximately three acres with a semicircular wall and no outlet gates.

8. Geology/Topography

The Pearl Harbor geologic formation is a plateau created by advancing lava from the Koolau Mountain Range which buried lavas from the older Waianae Range. The area has a complex geologic history, profoundly affected by fluctuating sea levels. During periods of higher sea levels and as the island sank, the entire area was submerged and silt from surrounding hills accumulated in the broad embayment. Coral reefs formed across much of the broad Ewa plain. During periods of lower sea levels, erosion cut into the lifted plain. This erosion cut easily into the deltaic sediments in the upper reaches of the plain, forming wide valleys. The lower reaches, however, where coral growth was abundant, resisted erosion. Thus, the valleys that were formed were broad at their heads and narrowed into a single stream mouth at the present entrance of Pearl Harbor. A subsequent rise in sea level drowned the river valleys which now form the three lochs of Pearl Harbor.

The park site itself consists of gently sloping terrain with an elevation approximately 5 feet above sea level, increasing to an elevation of approximately 10 feet at the northeast inner perimeter of the site. Slopes within the presently developed park area range from 0 percent to approximately 5 percent.

The area southeast of Aiea Stream is characterized by greater variations in ground elevation and slope. After a short expanse of relatively level shoreline, the ground may abruptly rise to an elevation of 50 feet, such as at the makai perimeter of Richardson Recreation Center.

The shoreline area bordered by McGrew Point Housing is characterized by a relatively steep slope that extends to an elevation of approximately 25 feet.

The topography of the site is well suited for park development due to substantial areas of gently sloping terrain as well as its variations in elevation. Gentle slopes are ideal for passive activities such as picnicking, while variations in elevation provide for excellent scenic walks and, in some areas, help to separate the park from adjoining U.S. Navy uses.

9. Water Quality

Pearl Harbor estuaries are presently classified as Class 2 waters, under Chapter 54 of Title 11, Water Quality Standards of the State Department of Health Administrative Rules. Class 2 waters are intended to be protected for recreational purposes, propagation of aquatic life, and agricultural and industrial water supply.

While similar with regard to temperature and salinity, the water quality of Pearl Harbor is considerably different from that of the adjacent ocean in several respects (Naval Undersea Center, 1974):

- o Particulate matter and, hence, turbidity is greater in the Harbor than in the surrounding ocean.
- o Harbor waters contain more nutrients than ocean water as a likely result of stream runoff, runoff from agricultural areas, and groundwater seepage.
- o Coliform bacteria enter harbor waters from soil runoff and are, therefore, present in higher concentration than in the ocean.
- o Trace metals, including iron, manganese, and zinc are present in harbor waters in greater concentrations than in the surrounding ocean. Sources of these trace metals include industrial wastes and terrestrial runoff.

Water quality varies within Pearl Harbor with better water quality in mid-harbor locations than along the shoreline. Sewage treatment plant discharges into Pearl Harbor have been terminated.

Effluent from the California and Hawaii Refinery is discharged into Aiea Stream under a National Pollution Discharge Elimination System (NPDES) permit and a Zone of Mixing permit. As such, the discharge must comply with specific effluent quality standards.

Affecting over 40 percent of Aiea Bay, the discharge enters the East Loch of Pearl Harbor. As a consequence of this

discharge, as well as the influence of surrounding urbanization, the water quality of Aiea Stream is considered of low environmental and biological quality.

The flow of freshwater from eight streams into Pearl Harbor during dry weather has been estimated at 39.9 million gallons per day (mgd). These streams drain a watershed of 89.6 square miles, or more than 15 percent of Oahu's land area. Stream sediments entering the harbor accumulate on the bottom or are dispersed in the water column by surface winds, ocean currents or vessel-caused turbulence. (Naval Facilities Engineering Command, September 1978).

Hydrographic data collected at various locations in Aiea Bay (see Figure 7) are presented in Table 4.

10. Air Quality

Air quality in the Honolulu District is most influenced by motor vehicles. Urbanization in Honolulu tends to concentrate operation of large numbers of motor vehicles in confined areas. Nevertheless, air quality at a State Department of Health sampling station in Downtown Honolulu is better than the National Ambient air quality standards for total suspended particulates and sulfur oxides. This may be attributed in part to tradewinds which provide sufficient air circulation to disperse pollutants. In comparison to Downtown Honolulu, air quality at the project site is considered to be better, as the Aiea Bay area is not as urbanized as Downtown Honolulu.

As documented in the Statement for Management, U.S.S. Arizona Memorial (August 1983), the U.S.S. Arizona Memorial is located within an air quality "attainment" area where air quality exceeds National Ambient Air Quality Standards. To prevent significant deterioration of existing air quality, the U.S.S. Arizona Memorial and its vicinity are designated as an area wherein prescribed limits on maximum allowable increases of sulfide and particulate matter would accommodate only well-managed industrial growth.

11. Ambient Noise

As documented in the Rainbow Bay Conceptual Plan 1974, perception of traffic noise at the mauka extent of the site (closest to Kamehameha Highway) is minimal because the highway is elevated. The next closest source of noise is Aloha Stadium, however, noise from the stadium is periodic, coinciding with its use, and is not anticipated to affect park activities.

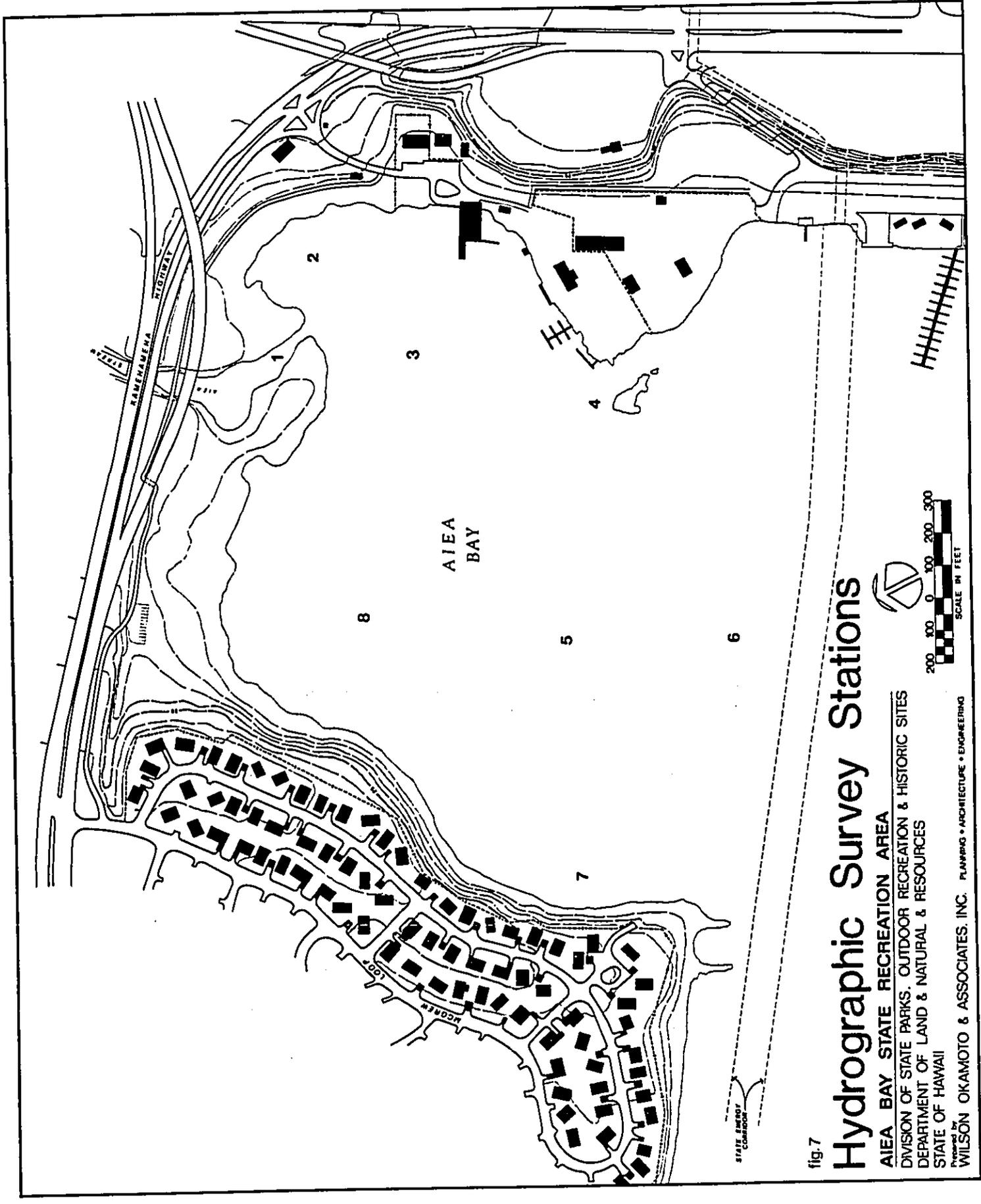
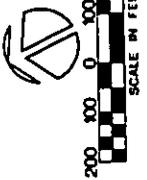


fig. 7

Hydrographic Survey Stations

AIEA BAY STATE RECREATION AREA
 DIVISION OF STATE PARKS, OUTDOOR RECREATION & HISTORIC SITES
 DEPARTMENT OF LAND & NATURAL RESOURCES
 STATE OF HAWAII
 Prepared by
WILSON OKAMOTO & ASSOCIATES, INC. PLANNING • ARCHITECTURE • ENGINEERING



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

TABLE 4
HYDROGRAPHIC DATA FOR AIEA BAY

Station Number ^a	Depth (ft) ^b	Sample Depth	Temp. °C	DO (ppm)	Salinity (ppt)	pH	Water Clarity (ft)	Bottom Composition (%)
1	2.5	1.0	26.1	5.8	8	7.9		75% mud/25% gravel
2	1.0	1.0	22.0	5.9	22	7.6		100% mud
3	5.0	1.0	27.0	5.2	28	7.8	5.0	90% mud/10% gravel
		5.0	26.0	6.0	32	7.9		
4	13.2	1.0	26.1	6.1	32	7.8	10.5	muddy
		6.5	25.5	6.7	32	7.9		
		13.0	25.5	5.0	33	7.8		
5	13.7	1.0	25.3	6.8	32	8.0	10.5	muddy
		6.5	25.2	6.9	31	8.1		
		13.0	25.4	5.9	34	7.9		
6	2.2	1.0	25.1	6.9	34	8.1	10.5	muddy
		10.0	25.2	6.7	32	8.1		
		19.5	25.2	5.5	34	8.0		
7	5.5	1.0	25.0	7.0	33	8.1	5.0	10% mud/90% gravel
		5.0	25.0	7.1	33	8.1		
8	9.5	1.0	25.1	6.9	31	8.1	8.5	90% mud/10% gravel
		4.0	25.0	6.9	30	8.1		
		8.0	25.0	6.5	33	8.1		

^a Hydrographic Stations are identified in Figure 7.

^b Corrected to approximate level of Mean Lower Low Water.

Source: Division of Fish & Game, Kakenaka, Brian K., Rainbow Bay Aquatic Resource Survey.

E. SOCIOECONOMIC CHARACTERISTICS

Socio-economic characteristics were assessed for the region defined by the former State Recreation Functional Plan (Department of Land and Natural Resources, January 1980) Planning Area 29-Aiea-Pearl City, which encompasses 44,585 acres. It should be noted, however, that the proposed park would contribute to the island-wide supply of shoreline parks to serve the needs of Oahu's residents and visitors.

1. Population

a. Existing Population

The resident population of the planning area was 157,681 in 1980 (see Table 5). This represented a 34 percent increase over the 1970 population of 117,319. In 1980, there were approximately 41,032 households in the area averaging 3.84 persons per household. Most residents reside in single-family dwelling units, in the mauka sections of the planning area.

In 1980, 26,711 residents of the planning area were listed members of the armed forces. They accounted for approximately 16.9 percent of the total population within the planning area (see Table 6). The high concentration of military personnel and their dependents in some census tracts in this area is due to the fact that several such census tracts lie entirely within the borders of military installations.

b. Population Projection

Population projections for public facility planning purposes are made for each of eight City and County of Honolulu Development Plan areas. The proposed park is within the City and County's Primary Urban Center (PUC) which has a projected residential population range of approximately 453,400 to 501,100 in the year 2005. The residential population for the PUC in 1980 was about 417,240.

2. Employment and Income

Most economic activity in the area occurs along the coast, in the vicinity of the major transportation routes of Kamehameha Highway, the H-1 Freeway and Salt Lake Boulevard. Both commercial and industrial activities are supported by the area's population.

Table 5
RESIDENT POPULATION, 1970 AND 1980

County, island and census tract 1/	Land area (acres)	Resident population			Percent change	Popula- ion per acre, 1980	House- holds, 1980
		1980	1970				
66.....	1,418	2,716	3,424	-20.7	1.9	696	
67.01.....	4,726	7,477	7,502	-0.3	1.6	1,851	
67.02.....	105	2,755	2,317	18.9	26.2	853	
68.01.....	1,273	20,689	2,968	597.1	16.3	6,568	
68.02.....	163	4,890	4,532	7.9	30.0	1,176	
68.03.....	277	-	-	-	-	-	
69.....	280	3,109	3,694	-15.8	11.1	913	
70.....	704	4,251	4,899	-13.2	6.0	1,294	
71.....	227	2,588	1,402	84.6	11.4	609	
72.....	3,446	1,364	3,864	-64.7	0.4	155	
73.....	1,661	6,393	7,530	-15.1	3.8	1,732	
73.99 2/.....	-	-	3,034	-100.0	-	-	
74.....	1,313	3,138	4,016	-21.9	2.4	713	
74.99 2/.....	-	7,593	5,070	49.8	-	-	
75.01.....	563	7,467	4,946	51.0	13.3	2,005	
75.02.....	5,070	444	1,496	-70.3	0.1	16	
75.03.....	559	4,865	4,982	-2.3	8.7	1,306	
76.....	212	1,556	2,934	-47.0	7.3	413	
77.01.....	309	4,645	4,880	-4.8	15.0	1,210	
77.02.....	1,420	4,838	4,752	1.8	3.4	1,421	
78.01 (78 pt. and 79).....	6,703	12,813	5,559	130.5	1.9	3,527	
78.02 (78 pt.)....	3,219	11,367	895	1,165.8	3.5	4,051	
80.01.....	225	1,498	1,268	18.1	6.7	477	
80.02.....	263	2,987	3,347	-10.8	11.4	826	
80.03.....	360	3,377	2,811	20.1	9.4	895	
80.05.....	3,100	7,465	7,846	-4.9	2.4	1,839	
80.06 (80.04 pt.)..	436	5,906	4,349	35.8	13.5	1,427	
80.07 (80.04 pt.)..	372	6,473	4,708	37.5	17.4	1,591	
81.....	1,141	2,580	3,167	-18.5	2.3	607	
81.99 2/.....	-	-	368	-100.0	-	-	
82.....	1,858	-	-	-	-	-	
83.....	3,182	12,437	4,759	161.3	3.9	2,861	
TOTALS	44,585	157,681	117,319	+ 34%	3.54	41,032	

1/ Most tract boundaries either remained unchanged between 1970 and 1980 or underwent only minor changes. In cases where the 1970 tracts were split or merged for 1980, however, the 1980 tract designation is followed in parentheses by the 1970 designations.

2/ The ".99" census tracts consist of vessels anchored off the indicated tract; for example, persons living aboard ships in Kewalo Basin, adjacent to tract 38, are assigned to tract 38.99.

Source: State of Hawaii, Department of Planning and Economic Development, The State of Hawaii Data Book 1983, December, 1983.

Table 6
RESIDENT POPULATION BY MILITARY STATUS, 1980

Census Tract	Total	Armed <u>1</u> / forces	Military <u>1</u> / dependents	Other <u>2</u> / civilians	Percent of Total Population in Census Tract Consisting of Armed Forces and Military Dependents
City and County of Honolulu					
66.....	2,716	929	1,613	174	93.6
67.01.....	7,477	662	737	6,078	18.7
67.02.....	2,755	180	489	2,086	24.3
68.01.....	20,689	2,983	5,283	12,423	40.0
68.02.....	4,890	82	48	4,760	2.7
69.....	3,109	842	1,999	268	91.4
70.....	4,251	1,238	2,824	189	95.6
71.....	2,588	599	1,811	178	93.1
72.....	1,364	949	325	90	93.4
73.....	6,393	1,775	4,437	181	97.2
74.....	3,138	1,827	1,181	130	95.9
74.99.....	7,593	7,614	-	-	100.0
75.01.....	7,467	928	2,101	4,438	40.6
75.02.....	444	319	16	109	75.5
75.03.....	4,865	91	81	4,693	3.5
76.....	1,556	70	68	1,418	8.9
77.01.....	4,645	173	364	4,108	11.6
77.02.....	4,838	85	44	4,709	2.7
78.01.....	12,813	388	464	11,961	6.6
78.02.....	11,367	1,564	766	9,037	20.5
80.01.....	1,498	26	69	1,403	6.3
80.02.....	2,987	-	-	2,987	0.0
80.03.....	3,377	386	804	2,187	35.2
80.05.....	7,465	166	242	7,057	5.5
80.06.....	5,906	39	95	5,772	2.3
80.07.....	6,473	62	96	6,315	2.4
81.....	2,580	918	1,415	247	90.4
83.....	12,437	1,816	4,183	6,438	48.2
TOTALS	157,681	26,711	31,555	99,436	

1/ Tracts do not add up to totals because of suppression on tract data.
2/ Data are computed by subtracting armed forces and military dependents from the total population. The numbers of armed forces and dependents are based on a sample and because of the weighing procedures, may produce negative results when subtracted from total population, which is based on the full count.

Source: State of Hawaii, Department of Planning and Economic Development, Population Characteristics of Hawaii by Military Status, 1980, Statistical Report 163, September 30, 1983.

a. Major Employment Centers

Three major employment centers are located within the region, including the Pearl Harbor Naval Base, the airport/industrial area, and the Pearlridge Shopping Center.

i. Pearl Harbor

The Pearl Harbor Naval Base is the major military installation in the State and is a major contributor to the State's economy, through federal expenditures. There were approximately 7,354 military and 10,995 civilian personnel employed on location at Pearl Harbor in 1985. (State of Hawaii, Department of Planning and Economic Development, December, 1986).

Support facilities for U.S. Navy activities are quite extensive and include the Pearl Harbor Shipyard, Submarine Base, Naval Station, Marine Barracks, Supply Center, Public Works Center, Inactive Ship Maintenance Detachment and Fleet Training Centers.

Another significant economic feature of Pearl Harbor is the U.S.S. Arizona Memorial. This monument to the battle fought on December 7, 1941 is one of the most heavily visited sightseeing attractions in Hawaii, receiving more than one million visitors per year. Visitors to the sunken vessel are ferried from a shoreside visitor center, which is located south of the proposed park site.

ii. Airport/Industrial Area

The second major employment center is the Honolulu International Airport/Hickam Air Force Base and the surrounding industrial area.

The Honolulu International Airport is the only commercial airport on Oahu and is the busiest airport in the State. In 1985, approximately 9.7 million overseas passengers and about 160 thousand tons of overseas cargo passed through the airport (State of Hawaii, Department of Planning and Economic Development, December, 1986). There were approximately 15,000 persons employed in airport and related activities in 1980.

At the adjacent Hickam Air Force Base, the Department of Defense employed 6,559 military and 2,315 civilian personnel in September, 1985.

A variety of light industrial and commercial activities are located in the airport industrial area, some of which support, or complement airport uses.

iii. Pearlridge Shopping Center

The third major employment center in the region is the Pearlridge Shopping Center. The Shopping Center is a regional hub of commercial retail outlets and provides employment opportunities in the field of sales and services.

b. Income

In general, military personnel and their dependents differ from their civilian counterparts with respect to income and other socioeconomic characteristics. In 1979, families headed by a member of the armed forces had a median family income of \$14,055, 42.0 percent less than the \$24,234 reported by civilian families. This income difference is somewhat offset by the benefits military families receive, such as base exchange, medical and commissary privileges and on-base housing or housing allowances for off-base housing.

3. Recreational Facilities

Active recreational facilities are parks that accommodate active sports such as field and court games, swimming, and golf.

Passive recreational facilities are parks that are intended for passive activities such as camping, picnicking, sitting, strolling and viewing.

An explanation of different park types and recreation facility standards is presented in Table 7.

The planning area offers active and passive recreational facilities including neighborhood, community, and district parks, resource areas, private country clubs, Aloha Stadium and Castle Park. See Figure 8 and Tables 8 and 9. Also located proximate to the project site are the U.S.S. Arizona Memorial Shoreside Facilities and the U.S.S. Bowfin submarine display.

Table 7

RECREATIONAL PARK AND FACILITY STANDARDS

	MINI PARKS	NEIGHBORHOOD PARKS	COMMUNITY PARKS	DISTRICT PARKS	OTHER: URBAN PARKS AND SQUARES	ISLAND WIDE PARKS
Minimum Area Required for 1,000 Population		(350 sq. ft. dwelling unit)*	2 acres		(10% of Maximum Floor Area for Business Districts)	County Parks: (8) acres State Parks: Resource Based
Service Area Population	---	approximately 5,000	approximately 10,000	approximately 25,000	---	<u>PARK TYPES</u> Regional Parks Large recreation complexes (beach, inland or urban sites) Beach and Shoreline Parks Day Use Parks primarily for swimming, sunbathing, and picnicking Nature Parks and Reserves Significant natural areas Stream Greenbelts Historical & Archaeological Places Zoos and Botanic Gardens Golf Courses (Public, Semi-Public) 18 holes/100,000
Average Site Size		4-6 acres	10 acres	15-20 acres	---	Beach Rights-of-Way Approx. interval of half a mile Small Boat Harbors and Launching Ramps
Service Area	1/2 mile*	1/2 mile*	1 mile*	2 miles*	---	*Park Dedication Ordinance, 1976 Joint Use Agreement between City & State, 1966
School Relationship	1 Joint Use with Elementary School	Children's Play Area	Possible Joint Use with Intermediate Schools Children's Play Area	Possible Joint Use with Intermediate & High Schools Children's Play Area	---	
Basic Facilities (May be adjusted to meet particular community needs)	Land-scaping Benches, Tables	2 Basketball Cts. 2 Volleyball Cts. 1-2 Softball Fields Comfort Station	3-4 Basketball Cts. 3-4 Volleyball Cts. 2 Softball Fields Comfort Station/ Recreation Bldg.	3-4 Basketball Cts. 3-4 Volleyball Cts. 2 Softball Fields 1 Baseball Field 1 Soccer/Football Field 4-6 Tennis Courts	---	
Additional Desirable Facilities	Children's Shelter Play Area	Passive Area	Passive Area 1 Baseball Field Tennis Courts	Passive Area Jogging Trail Archery	Comfort Station	

Source: City and County of Honolulu, Department of Parks and Recreation, 1980.

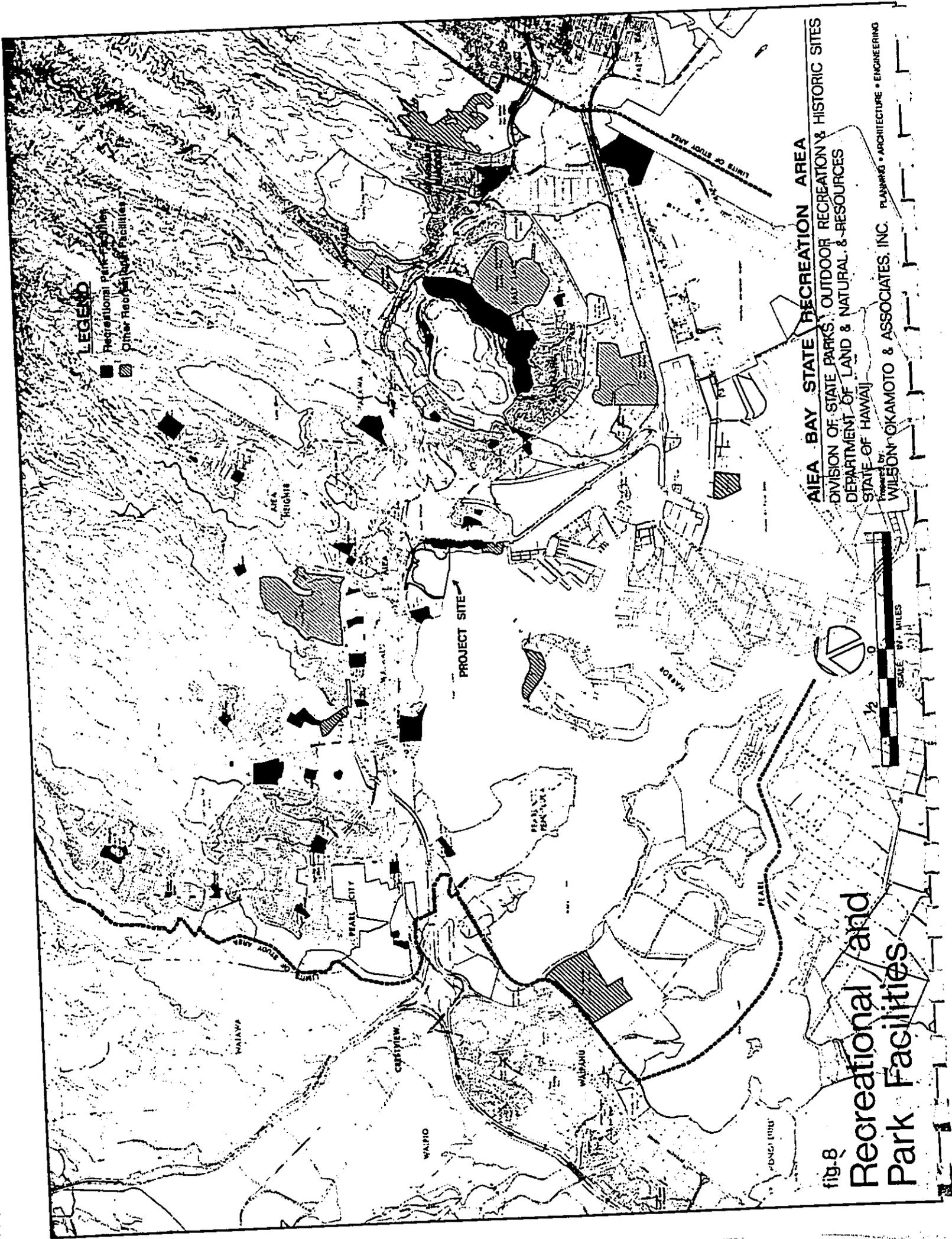


fig. 8
**Recreational and
 Park Facilities**

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Table 8

RECREATIONAL PARK FACILITIES

Park Name	Activity Level	Type of Park	Remarks
Aiea Field Annex	Active		
Aiea Lani Recreation Center	Active		Adjacent to townhouse
Aiea Recreation Center	Active	District	Part of district park
Aliamanu Playground	Active	Neighborhood	
Century Plaza Park	Active		Adjacent to condominium
East Foster Village Community Association Recreation Center	Active	Community	
Foster Village Community Association Recreation Center	Active	Community	
Franklin Park	Active		Navy facility
Halawa District Park	Active	District	
Hoaloha Park	Active	Urban	Landscaped
Ieie Park	Active	Neighborhood	Adjacent to school
Kaonohi Playground	Active	Neighborhood	
Keaiwa Heiau State Recreation Area	Passive	State Recreation	Nature park
Keehi Lagoon Beach Park	Active	Beach park	
Makalapa Park	Active	Neighborhood	
Manana Kai Park	Active	Neighborhood	
Manana Playground	Active	Neighborhood	Adjacent to school
Manana Neighborhood Park	Active	Neighborhood	
Moanalua Gardens Park	Passive	Urban	
Moanalua Playground	Active	Community	
Mokulele Park	Active	Neighborhood	Adjacent to school
Nahele Neighborhood Park	Active	Neighborhood	
Napuanani Park	Active	Neighborhood	
Neal Blaisdell Park	Passive	Urban	
Neighborhood Park at McGrew Point	Active	Military	Adjacent to military housing

Table 8 (Continued)

Park Name	Activity Level	Type of Park	Remarks
Newtown Park	Active	Neighborhood	
Pacheco Playground	Active	Neighborhood	
Pacific Palisades Entrance Park	Active	Urban	
Pacific Palisades Playground	Active	Community	
Palisades Tennis Courts	Active		Near Pacific Palisades Playground
Pearl City Kai Playground	Active	Community	Military facility
Pearl City Recreation Center	Active	District	
Pearl Ridge Community Park	Active	Community	
Pearl Ridge Park	Active	Community	Adjacent to school
Richardson Recreation Center	Active	Military	
Salt Lake Regional Park	Active	District	
Waiau District Park	Active	District	
Waiau Gardens Kai Neighborhood Park	Active	Neighborhood	Adjacent to condominium
Waiau Neighborhood Park	Active	Neighborhood	
Waimalu Playground	Active	Neighborhood	
Wailana Swim Club	Active		Adjacent to townhouse development

Table 9

OTHER RECREATIONAL FACILITIES IN THE REGION

<u>Facility</u>	<u>Use</u>
Aloha Stadium	State-Operated Stadium
U.S.S. Arizona Memorial Shoreside Facilities	Military Memorial Facility
Castle Park Hawaii	Amusement Park
Moanalua Golf Course	Municipal Golf Course
Honolulu International Country Club	Private Golf Course
Pearl Country Club	Private Golf Course
U.S. Navy Rainbow Bay Marina	Military Marina
Pacific Fleet Submarine Museum (U.S.S. Bowfin)	Military Museum
Navy/Marine Golf Course	Military Golf Course
Ford Island Golf Course	Military Golf Course
Fort Shafter Golf Course	Military Golf Course
Hickam Golf Course	Military Golf Course
Ted Makalena Golf Course	Municipal Golf Course
Newtown Driving Range	Golf Practice Range

The Richardson Recreation Center, a U.S. Navy facility reserved for military personnel and their dependents, provides a variety of facilities for active recreation such as playing fields and a swimming pool. An open park, which includes a football field, is located along the northwestern extent of McGrew Point Housing.

4. Other Public Facilities

Public facilities within the region are illustrated in Figure 9.

a. Schools

The suburban character of the planning area is evidenced by the numerous primary and secondary schools it encompasses. Area schools are listed in Table 10.

b. Police Protection

The proposed park site is within the service area of the City and County of Honolulu's Pearl City Police Station. The station, in turn, is within Police District 3 which services the area between Red Hill and Kaena Point. The district has 50-60 uniformed officers per shift assigned to its stations, and 7 officers per shift who have various special assignments.

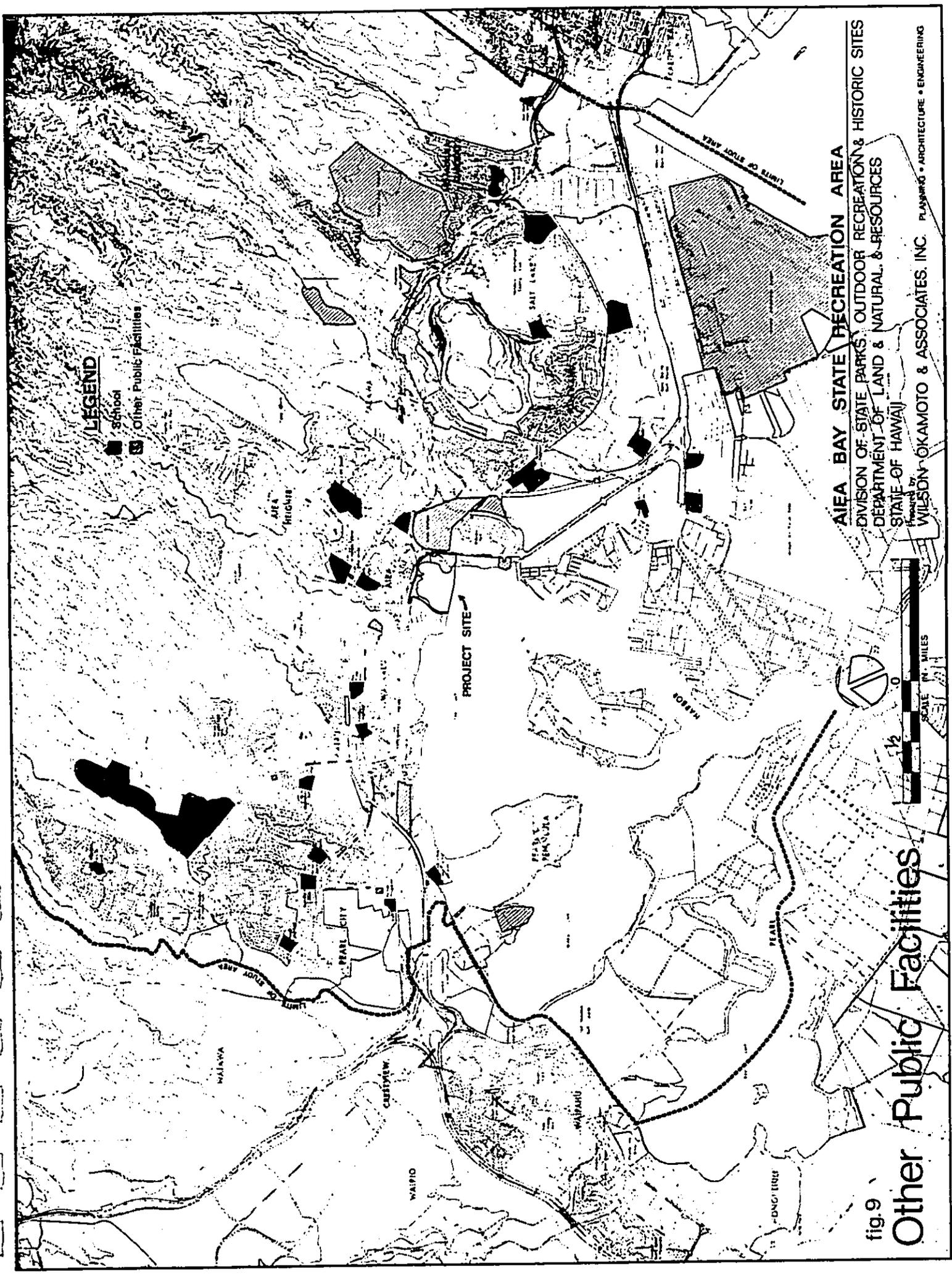
c. Fire Protection

There are four City and County of Honolulu fire stations in the planning area including the Aiea, Pearl City, Mokulele and Moanalua Fire Stations.

The proposed park site is within the service area of the Aiea Fire Station. This station has one fire engine and is staffed by one officer and four firefighters.

d. Health Care Facilities

Various health services and facilities are available in the Aiea-Pearl City region. The Tripler Army Medical Center, located in nearby Moanalua, offers both acute and extended care facilities to servicemen and their dependents. The hospital also has emergency services that can be made available to civilians if necessary.



LEGEND
 School
 Other Public Facilities

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fig. 9
Other Public Facilities

Table 10
SCHOOLS
1983 ENROLLMENT

<u>School</u>	<u>1983 Enrollment</u>
Aiea Elementary School	442
Aiea High School	1,688
Aiea Intermediate School	904
Aliamanu Elementary School	966
Aliamanu Intermediate School	1,147
Alvah Scott Elementary School	733
Children's House, The	264 - private K-4
Hale Keiki School	154 - Navy K-2
Hickam Elementary School	857
Highlands Intermediate School	1,270
Holy Family School	528 - private K-8
Lehua Elementary School	415
Makalapa Elementary School	577
Manana Elementary School	418
Moanalua Elementary School	739
Moanalua High School	1,874
Moanalua Intermediate School	969
Mokulele Elementary School	580
Momilani Elementary School	318
Nimitz Elementary School	878
Pacific Palisades Elementary School	452
Pearl City Elementary School	554
Pearl City High School	2,333
Pearl City Highlands Elementary School	501
Pearl Harbor Elementary School	696
Pearl Harbor Kai Elementary School	657
Pearl Ridge Elementary School	432
Radford High School	1,715
Red Hill Elementary School	725
St. Elizabeth's School	283 - private K-8
Salt Lake Elementary	678
Waiiau Elementary School	490
Waimalu Elementary School	774
Webbing Elementary School	440

Source: State of Hawaii, Department of Education, Public and Private School Enrollment, September 13, 1983, December, 1983.

The Moanalua Medical Center, which opened on September 30, 1985 is a full service hospital, offering acute medical care and extended care services. The Moanalua Medical Center is part of the Kaiser Permanente Medical Care Program.

Other medical facilities in the area include the Waimano Training School and Hospital, which primarily serves extended care needs, The Medical Clinic, Straub Family Health Center, and the Fronk Clinic Pearlridge.

e. **Transportation**

i. **Ground Transportation**

In addition to Kamehameha Highway which borders the site, two other major thoroughfares pass nearby: Salt Lake Boulevard and the H-1 Interstate Freeway. The Average Daily Traffic (ADT) on Kamehameha Highway between Kaonohi Street and Honomanu Street (McGrew Loop makai of Kamehameha Highway) was 57,802 in 1980 (Oahu Metropolitan Planning Organization, 1980).

ii. **Ocean Transportation**

Vessel transit in the Pearl Harbor Basin is regulated by the military for security reasons. Civilian travel is limited to the U.S.S. Arizona Memorial tours, sightseeing cruises in the Harbor, Honolulu Canoe Club activities, commercial fishing access, and special events.

Pearl Harbor is a very active, strategic naval base. Military activities include the Commander in Chief U.S. Pacific Fleet (CINCPACFLT) boat operation and the Pacific Fleet activities.

iii. **Air Transportation**

In addition to the Honolulu International Airport/Hickam AFB complex, an additional airfield is located on Ford Island. This airfield is used by civilian light aircraft for practice landings under a license agreement with the State of Hawaii. The runway is used occasionally by military helicopters.

F. INFRASTRUCTURE

Infrastructure improvements affecting existing easements and valve areas will need to be coordinated with the U.S. Navy, City and County of Honolulu, and companies having facilities within the easements. Restrictions and conditions on grants of easements for utilities within parcels containing the bikepath are contained in Appendix B. Development of the proposed park will consider and respect all easement conditions. It is noted that optimum design of the park may eventually require adjustments to the existing bikeway alignment. Such adjustments shall be coordinated with the appropriate agencies and authorities.

1. Water System

Water service in the Aiea Bay area is provided by the City and County of Honolulu Board of Water Supply (BWS) and the U.S. Navy.

The Board of Water Supply maintains two water mains in the vicinity of the proposed park. A 36-inch underground transmission main is located mauka of the project site, generally following Kamehameha Highway (see Figure 10). This transmission main, portions of which traverse under the project site, serves an area extending from Pearl City to Salt Lake, conveying water from the BWS' Punanani Wells. Water service connections for park development will not be made to this BWS 36-inch transmission main.

The second main, an 8-inch line, is part of a water network serving the Aiea area. It runs along the mauka edge of Kamehameha Highway from the Pearlridge Shopping Center, Phase II, to a point approximately 200 feet ewa of the Aiea Stream. From here, the line turns mauka to Kauhale Street.

The U.S. Navy maintains a 36-inch transmission line which also crosses under the project site. Originating from the Navy's Waiawa Pumping Station, this main serves the Pearl Harbor Naval Base. It enters the project site at the McGrew Loop-Kamehameha Highway intersection, generally following an alignment parallel to Kamehameha Highway. An 8-inch line branches from the 36-inch line, and crosses a State-owned parcel of land to service the McGrew Point Housing area. The 36-inch line branches into a 30-inch and 24-inch line in the vicinity of the Aiea Interchange. The 24-inch line runs along the makai side of the Richardson Recreation Center facilities, with branches servicing the CINCPACFLT Boathouse and Old Firefighting School area. The line continues to the U.S. Navy Rainbow Bay Marina, U.S.S. Arizona Memorial Shoreside Facilities, Ford Island Ferry Landing and crosses Halawa Stream to serve the rest of the

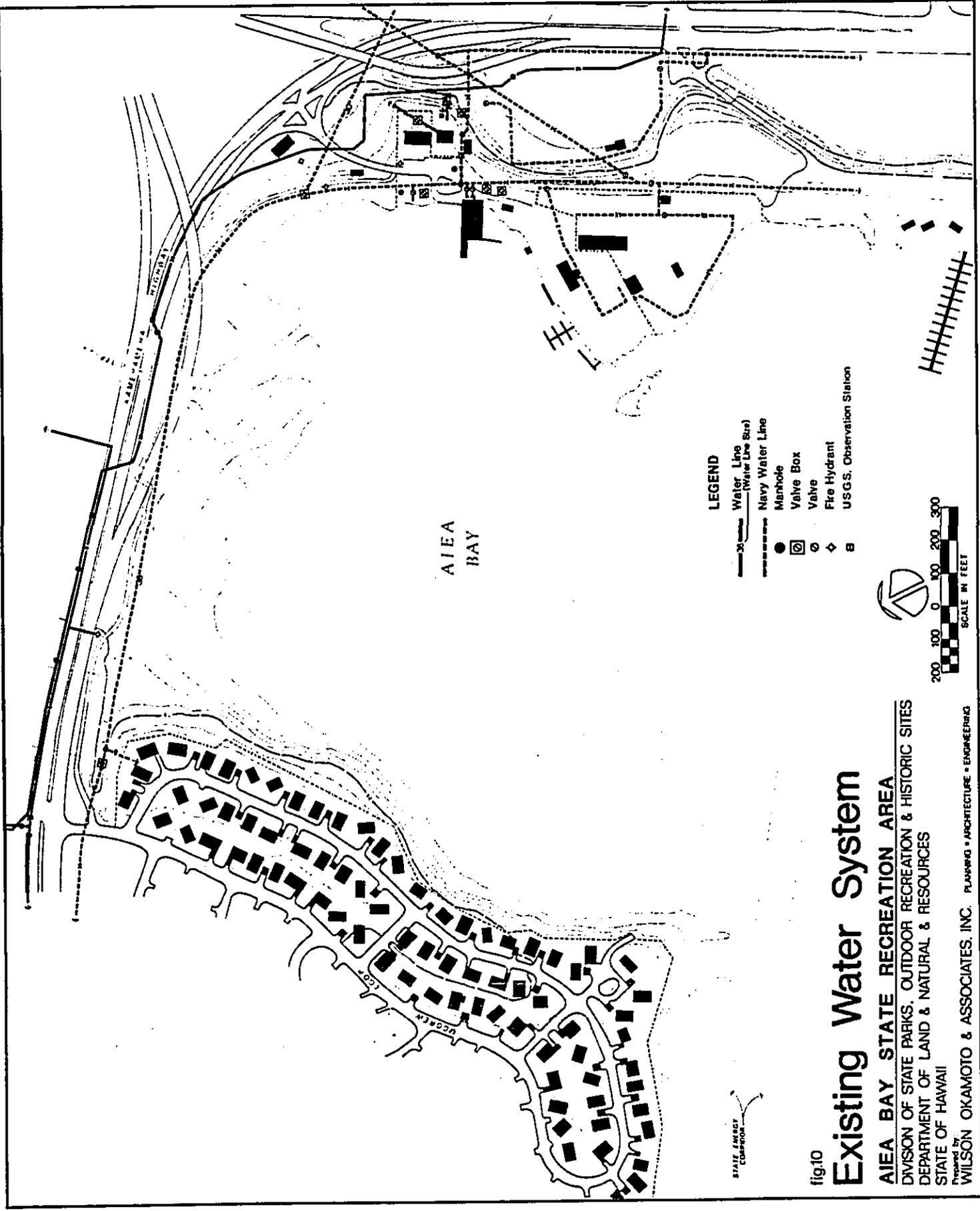


fig.10
Existing Water System

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Pearl Harbor Naval Base. The 30-inch line runs southeast toward Aloha Stadium and connects to a second 24-inch U.S. Navy water line which services Camp Smith.

In the proximity of the CINCPACFLT Boathouse, a 16-inch U.S. Navy water line is connected to the 24-inch water line and runs in a mauka direction to the Old Aiea Pump Station. The line size increases to a 24-inch diameter pipe and runs to Kamehameha Highway, in the Honolulu direction. The Old Aiea Pump Station is not in operation, however, it could be activated for emergency firefighting purposes.

In addition to the water system facilities described above, the U.S. Geological Survey maintains an observation well for the purpose of collecting hydraulic and hydrologic data. This well is located mauka of the CINCPACFLT Boathouse.

2. Sewer System

A portion of the City and County of Honolulu's East Loch Interceptor Sewer underlies the project site. It transports flows in the ewa direction along the makai side of Kamehameha Highway (see Figure 11). Within the project site limits, the line includes a 30-inch reinforced concrete pipe (RCP) near Richardson Recreation Center, a 5-foot x 1 1/2-foot box segment, and a 36-inch RCP that lies along the site's northern boundary, all of which convey wastewater by gravity. The sewer line crosses Aiea Stream through a siphon.

A network of sewer lines connect with the East Loch Interceptor Sewer in the vicinity of Aiea Stream, including a 6-inch/8-inch sewer line situated along Kamehameha Highway.

An 8-inch sewer line, maintained by the U.S. Navy, runs from the CINCPACFLT Boathouse area toward the U.S. Navy Rainbow Bay Marina. This line serves the CINCPACFLT Boathouse and the Old Firefighting School area, conveying flows southward.

3. Fuel System

Gasco, Inc. (GASCO) and Hawaiian Independent Refinery, Inc. (HIRI) maintain four fuel lines (16-inch gas, 10-inch gas, 4-inch gas and 10-inch oil) in the vicinity of the project area (see Figure 12). Both GASCO and HIRI are subsidiaries of Pacific Resources, Inc.

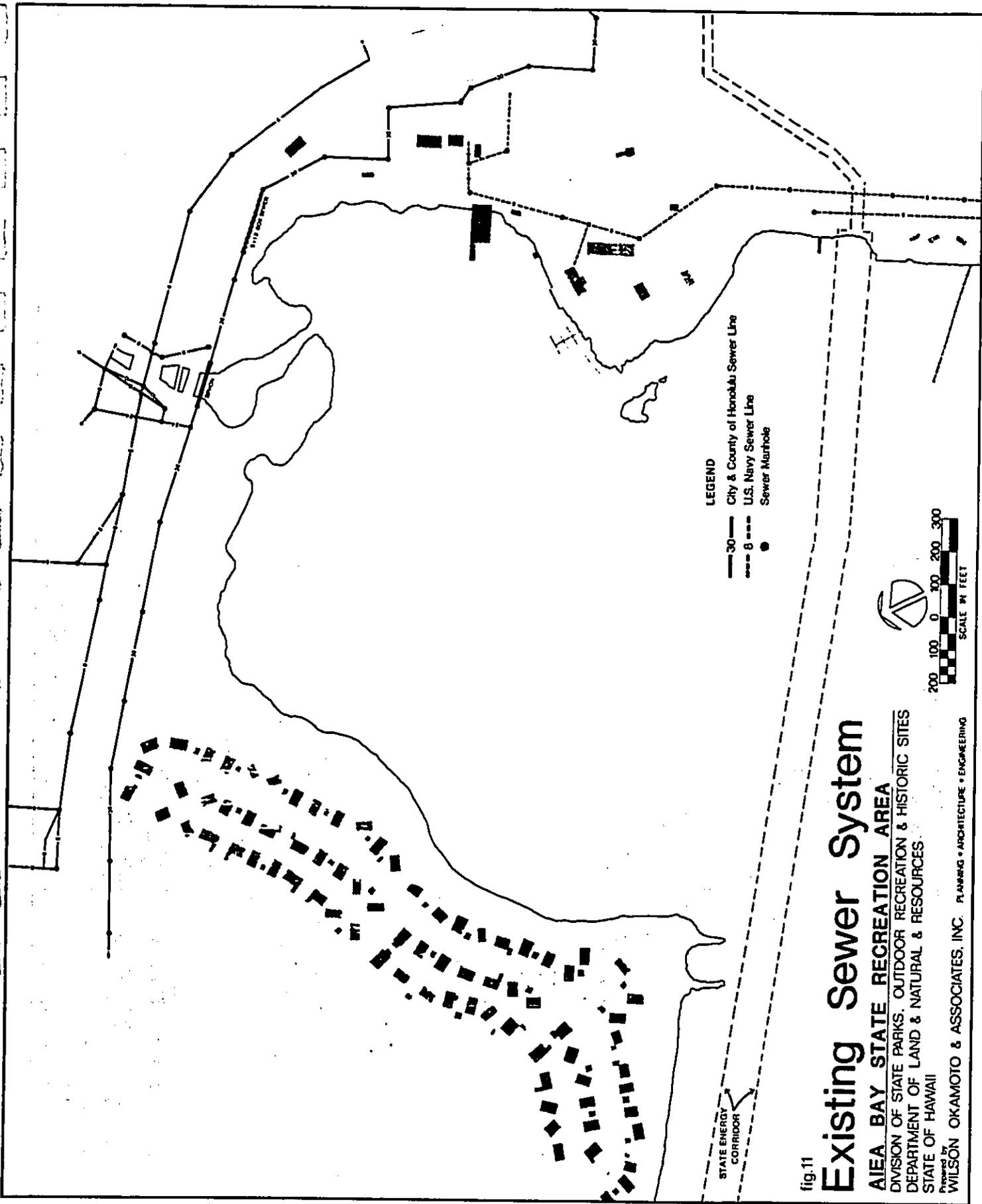


fig.11

Existing Sewer System

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LEGEND
 ——— 30" City & County of Honolulu Sewer Line
 - - - - 8" U.S. Navy Sewer Line
 ● Sewer Manhole

STATE ENERGY CORRIDOR

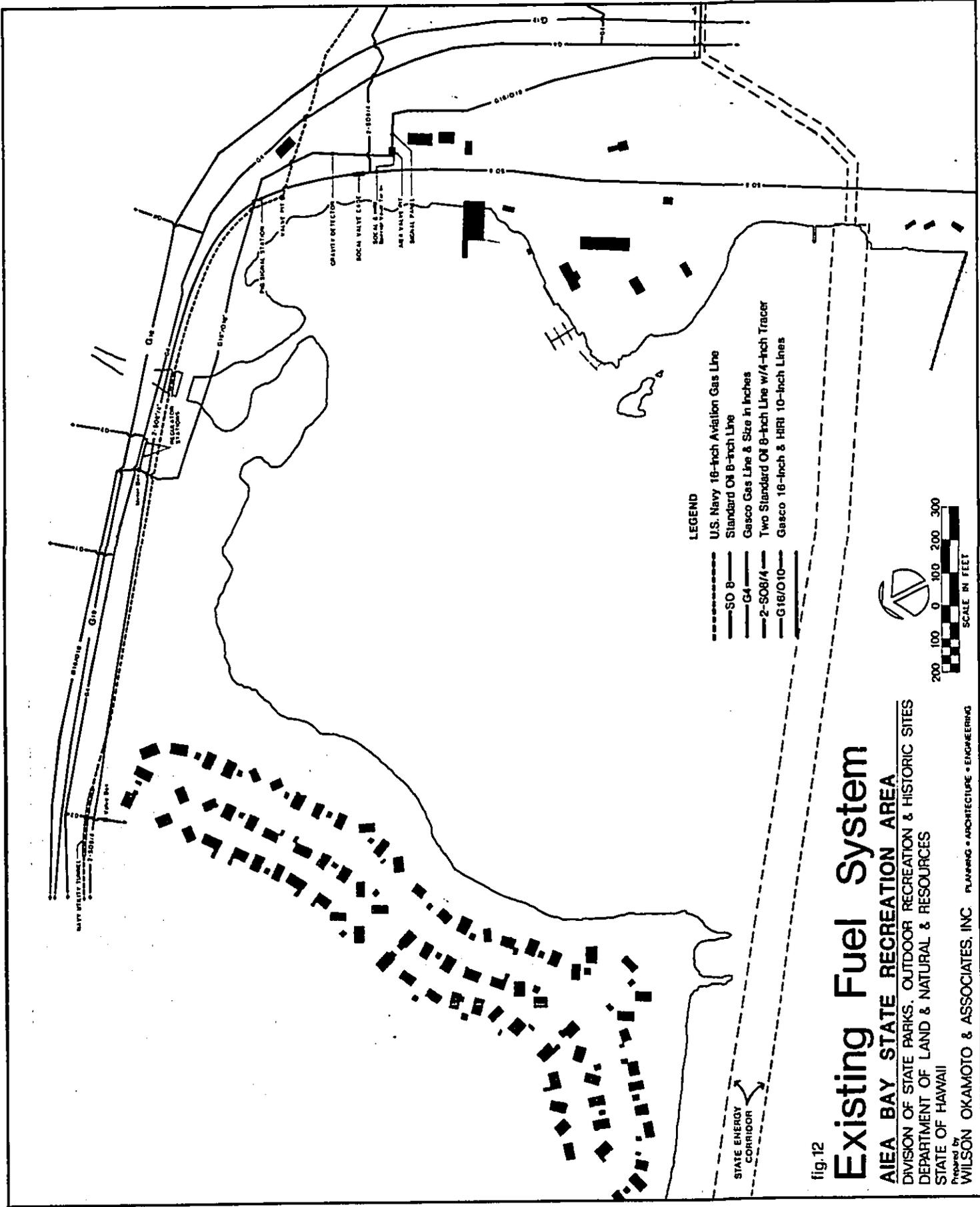


fig. 12

Existing Fuel System

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The 16-inch gas (GASCO) and 10-inch oil (HIRI) lines follow parallel alignments along Kamehameha Highway, and under the project site. Facilities appurtenant to these lines, in the vicinity of Aiea Interchange, include a pig signal station, gravity detector, signal panel, one-inch PVC signal conduit, and the Aiea Valve Station. The lines originate at Campbell Industrial Park and convey fuel to Honolulu. The 16-inch line is GASCO's major natural gas transmission line to Honolulu.

The 10-inch gas line runs along Kamehameha Highway between the McGrew Loop-Honomanu Street intersection and Salt Lake Boulevard. The 4-inch gas line, which follows the makai side of Kamehameha Highway, provides gas service in the Aiea Bay area.

In addition to the GASCO and HIRI lines, Standard Oil, a subsidiary of Chevron U.S.A., Inc. maintains two 8-inch oil lines with an adjacent 4-inch tracer which pass under the project site. These pipelines are used for the transmission of petroleum products at high temperature and pressure. In the vicinity of the Aiea Interchange, one of the two 8-inch lines branches into two 8-inch lines. One branch is directed southeast, with the other branch continuing in the direction of the U.S. Navy Rainbow Bay Marina. The latter is the main fuel line supplying the Pearl Harbor facilities. A valve cage is located where the two lines diverge.

The U.S. Navy also maintains a 16-inch aviation gas line which passes under the project site. The line generally follows the same alignment as the two 8-inch Standard Oil lines until it reaches the vicinity of the valve pit where the aviation gas line is directed southeast.

4. Electrical and Telephone Systems

The electrical systems in the project area are maintained by the Hawaiian Electric Company (HECO) and U.S. Navy (see Figure 13). HECO's 44 kilovolt (kv) overhead lines pass over the project site. These lines extend from Waiiau to Puuloa. Also in the vicinity of the project site are HECO's 138 kv and 46 kv overhead lines which follow the Aiea Access Road overpass to Kamehameha Highway.

The U.S. Navy's electrical distribution system is located in the vicinity of the Richardson Recreation Center and includes underground and overhead lines.

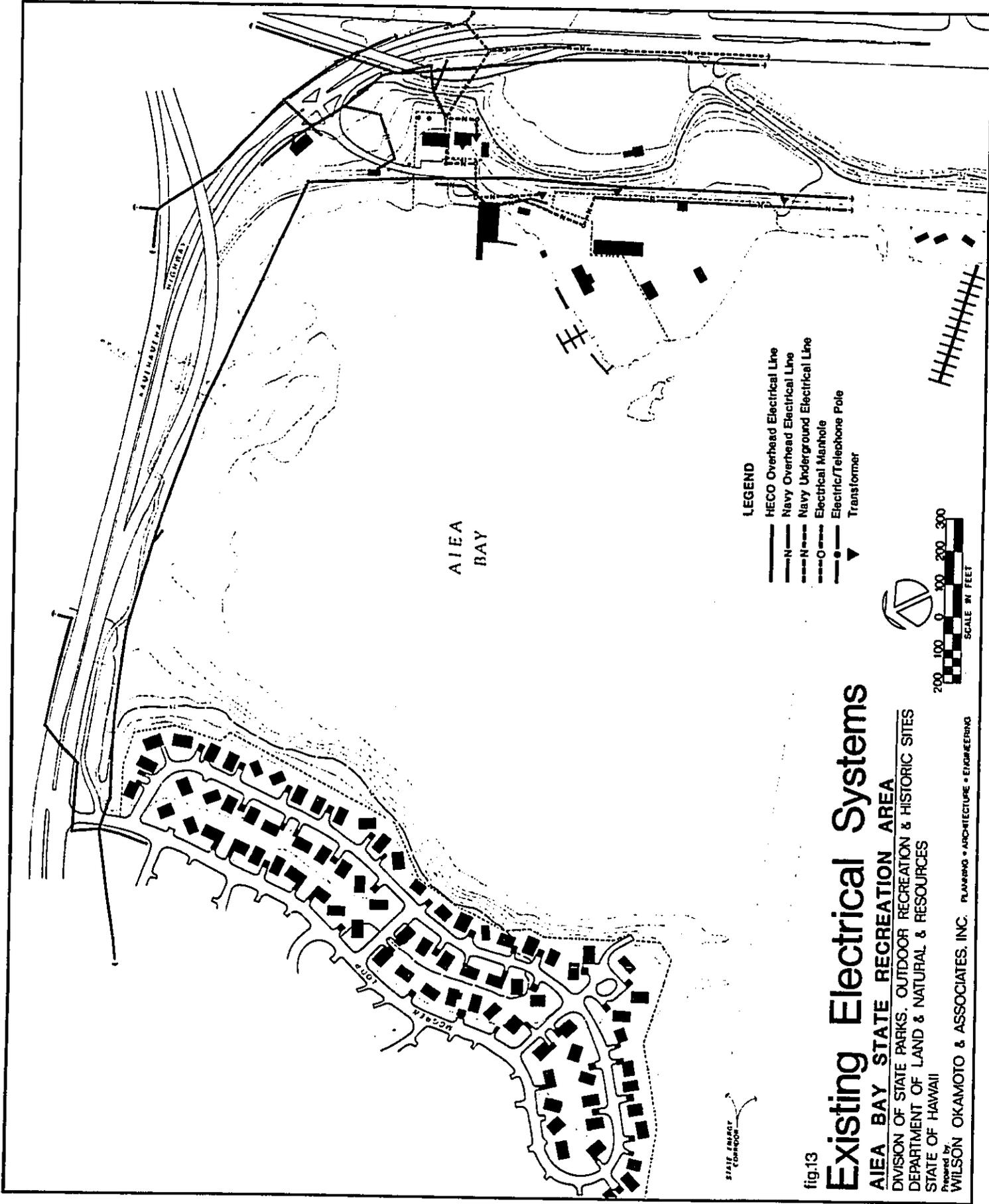


fig.13

Existing Electrical Systems

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Overhead lines run makai of the bicycle path from the U.S. Navy Rainbow Bay Marina to the CINCPACFLT Boathouse where they continue underground to a substation located to the south of the Boathouse.

Underground lines are also buried along Kamehameha Highway, and ultimately lead to another substation located east of the Boathouse. This substation is not presently in use and, therefore, electrical lines connected to it may not be active.

Telephone service in developed areas of the project site is provided by the Hawaiian Telephone Company (see Figure 14). While the Navy also owns telephone lines in the area, maintenance responsibilities of these lines have been delegated to the Hawaiian Telephone Company.

A main underground telephone cable traverses the project site, paralleling Kamehameha Highway. Other underground systems branch out from this line to serve the Aiea Bay area.

5. Signal Cable System

The U.S. Army maintains an underground signal cable which is used for communication purposes. The signal cable crosses the project site between McGrew Loop and the vicinity of the CINCPACFLT Boathouse Access Road.

6. Drainage System

The project site lies within the Aiea drainage basin. This basin encompasses an area of 2.01 square miles and is drained by Aiea Stream.

Within the project site, Aiea Stream has been improved for flood control purposes. The stream reach includes a 74-foot wide x 10-foot high vertically lined channel and a trapezoidal, rip-rap channel section (see Figure 15).

Two concrete drainage ditches on the makai side of Kamehameha Highway flow into the Aiea Stream channel. The ditch located on the ewa side of the channel discharges runoff from the highway into the channel. The other ditch, located on the Honolulu-side of the channel, is aligned along Kamehameha Highway and is approximately 160 feet in length. This ditch primarily conveys overflow from a 36/24-inch pipe culvert which crosses Kamehameha Highway and discharges runoff into Pearl Harbor.

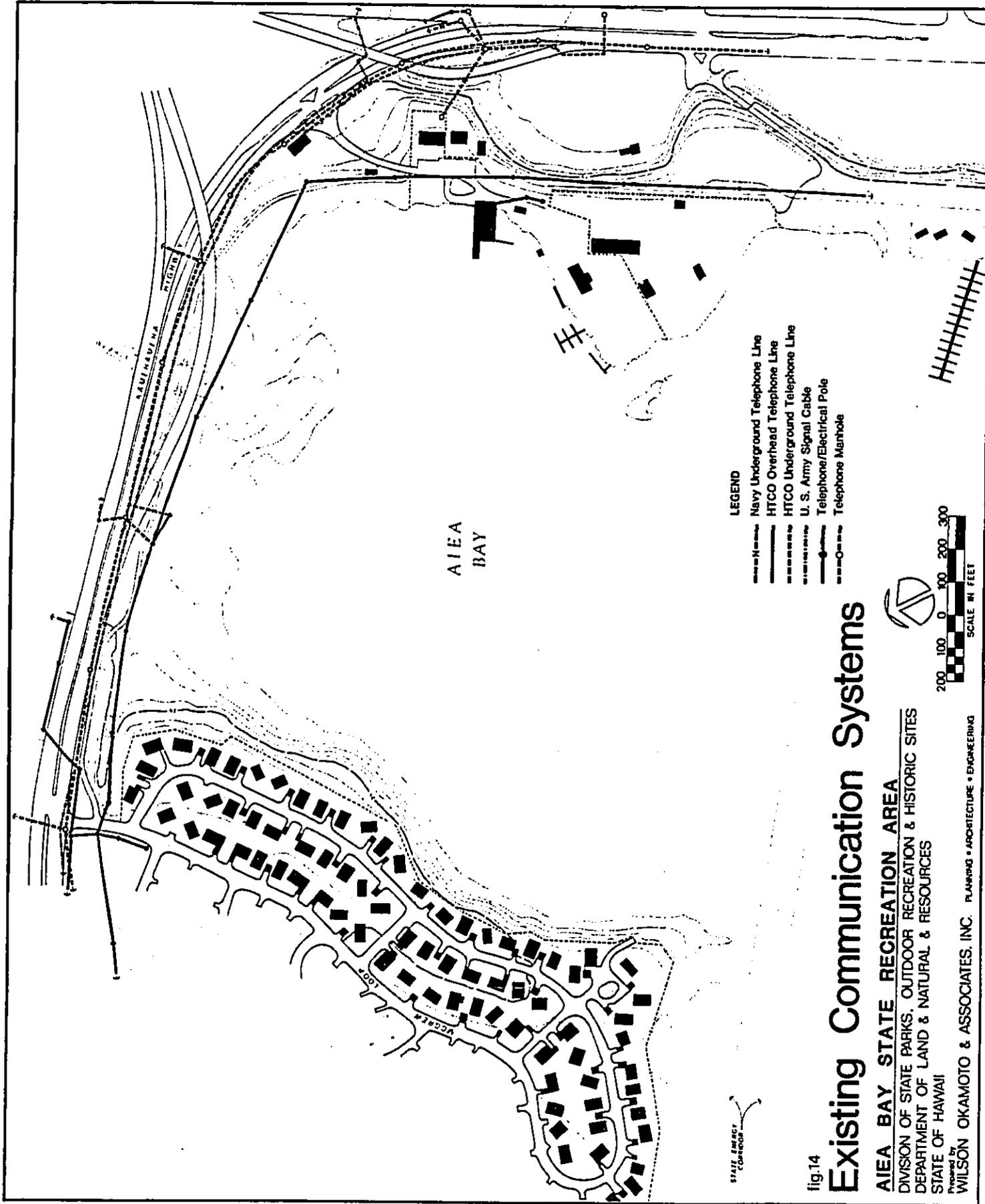
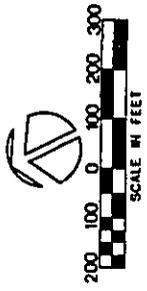
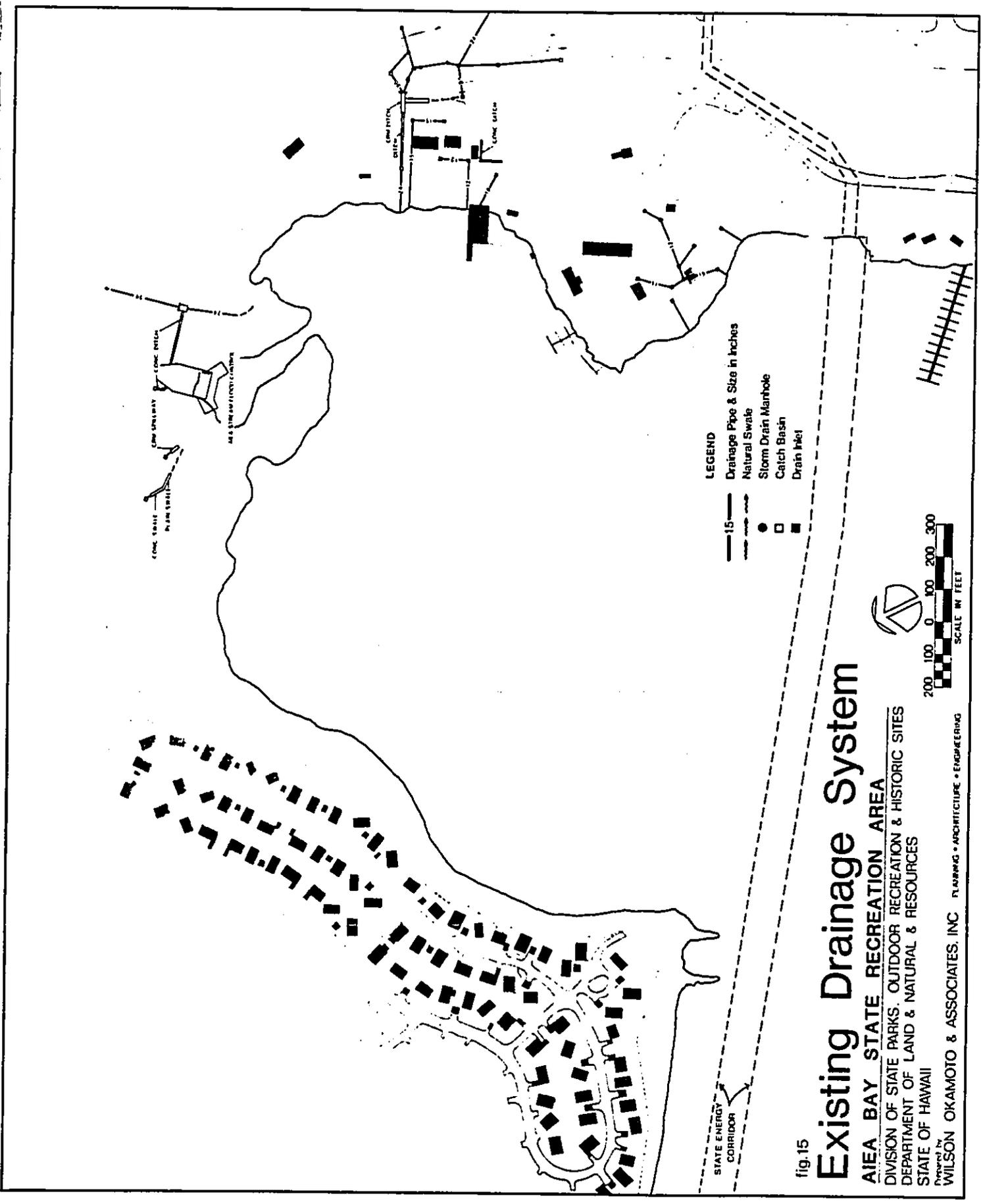


fig.14

Existing Communication Systems

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On the ewa side of Aiea Stream, within the project site, are two drainage structures. A catch basin approximately 350 feet ewa of Aiea Stream collects runoff from the highway and conveys it into a pipe culvert/concrete swale, ultimately discharging into a natural drain. The second structure is a concrete rubble (CRM) spillway located approximately 230 feet ewa of the Aiea Stream.

A network of drainlines and structures are also located in the vicinity of the CINCPACFLT Boathouse and Old Firefighting School area. The drainlines collect runoff from this locale and discharge it into Pearl Harbor.

7. State Energy Corridor

The State of Hawaii has established an energy corridor from Campbell Industrial Park to Sand Island for the purpose of providing a right-of-way for transmission of energy-related products. This corridor includes a 100-foot offshore easement from Campbell Industrial Park to the vicinity of the U.S. Navy Rainbow Bay Marina. The offshore segment of the corridor is adjacent to the tip of McGrew Point, and crosses Aiea Bay at the seaward limit of the project site. There are presently no tenants utilizing the offshore segment of the corridor.

The "landside" segment of the corridor follows Salt Lake Boulevard, ultimately ending at Sand Island. This portion of the corridor is utilized by GASCO and HIRI.

8. U.S. Navy Utility Corridor

The U.S. Navy has established a utility corridor upon which the City and County of Honolulu's bicycle path is coaligned (see Section IV.C.).

CHAPTER V
RELATIONSHIP TO PLANS, POLICIES AND CONTROLS

V. RELATIONSHIP TO PLANS, POLICIES AND CONTROLS

The Aiea Bay State Recreation Area will be developed in consonance with various governmental land use plans, policies, and regulatory controls. These controls, as well as those specified by the U.S. Navy, are discussed in this section.

A. PLANS

1. Hawaii State Plan

The purpose of the Hawaii State Plan is to establish a statewide planning system that will serve as a long-range guide to Hawaii's future. As a passive use recreational facility emphasizing restoration and preservation of natural systems, the proposed project is consistent with a State goal to achieve "a desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.

The park would also support the objectives for land-based, shoreline and marine resources by providing for:

- o Prudent use of Hawaii's land-based, shoreline, and marine resources.
- o Effective protection of Hawaii's unique and fragile environmental resources.

To achieve these objectives, the following State Plan policies were considered in formulating the Aiea Bay State Recreation Area Conceptual Master Plan:

- o Exercise an overall conservation ethic in the use of Hawaii's natural resources.
- o Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.
- o Take into account the physical attributes of areas when planning and designing activities and facilities.
- o Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.
- o Pursue compatible relationships among activities, facilities, and natural resources.

- o Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes.

Development of the proposed project will provide scenic relief from a developed urban environment and will provide vistas of the nationally significant U.S.S. Arizona Memorial and Pearl Harbor. As such, the Aiea Bay State Recreation Area will be consistent with the State Plan objective "of enhancement of Hawaii's scenic assets, natural beauty, and multicultural/historical resources" and its respective policies for achievement of this objective:

- o Promote the preservation and restoration of significant natural and historic resources.
- o Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.
- o Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage.
- o Encourage the design of developments and activities that complement the natural beauty of the islands.

The proposed park will help to satisfy the need for a passive recreational shoreline facility in the growing Aiea-Pearl City area. Therefore, the Aiea Bay State Recreation Area is supportive of and consistent with the State Plan objective for socio-cultural advancement with regard to leisure which is the "adequate provision of resources to accommodate diverse cultural, artistic, and recreational needs for present and future generations". In helping to achieve this objective, the proposed park is intended to implement the following State Plan policies:

- o Foster and preserve Hawaii's multi-cultural heritage through supportive cultural, artistic, recreational, and humanities-oriented programs and activities.
- o Provide a wide range of activities and facilities to fulfill the cultural, artistic, and recreation needs of all diverse and special groups effectively and efficiently.
- o Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance.

- o Promote the recreational and educational potential of natural resources having scenic, open space, cultural, historical, geological, or biological values while ensuring that their inherent values are preserved.
- o Ensure opportunities for everyone to use and enjoy Hawaii's recreational resources.
- o Assure the availability of sufficient resources to provide for future cultural, artistic, and recreational needs.
- o Assure adequate access to significant natural and cultural resources in public ownership.

As the proposed project is proximate to the nationally significant visitor destinations of Pearl Harbor and the U.S.S. Arizona Memorial, the Aiea Bay State Recreation Area is supportive of a State Plan policy for the economy with respect to the visitor industry which is to "improve the quality of existing visitor destination areas". With respect to federal expenditures, the proposed park will "... promote the mutually beneficial exchanges of land between federal agencies, the State and the counties."

The Aiea Bay State Recreation Area will help to implement the following State Plan priority guidelines regarding regional growth distribution and land resource utilization.

- o Utilize Hawaii's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, conservation lands and other limited resources for future generations.
- o Protect and enhance Hawaii's shoreline, open spaces, and scenic resources.

2. State Recreation Functional Plan

The State Recreation Functional Plan, prepared by the DLNR, is one of twelve State functional plans intended to implement the Hawaii State Plan. The plan is also an update and revision of the 1981 State Comprehensive Outdoor Recreation Plan prepared under Federal requirements administered by the Department of the Interior, Heritage, Conservation, and Recreation Service. The State Recreation Functional Plan Technical Reference Document (1985) is a resource base for the State Recreation Functional Plan, providing an inventory of recreational resources, assessment of demand and projected recreational need.

The purpose of the State Recreation Functional Plan is to further refine and implement the broader objectives, policies and priority directions of the Hawaii State Plan. This functional plan also guides State and County agencies in acquiring or preserving lands of recreation value, providing adequate recreation facilities and programs and ensuring public access to recreation areas.

The proposed park is consistent with the State's recreation objectives for land use and planning, conservation and resource management, recreation facilities and programs, access and coordination, as outlined below:

o Land Use and Planning:

Achieve a pattern of land and water resources usage which is compatible with community values, physical resources, recreational potential, and recreation uses which support comprehensive public land use policies.

The park will service the needs of the existing community, as well as the needs of a growing population.

o Conservation and Resource Management:

Establish a system of maintaining natural and cultural resources for present and future generations, and of managing recreation and other uses in accordance with sound conservation principles.

The site offers unique scenic vistas of the U.S.S. Arizona Memorial and Pearl Harbor, both nationally significant, and provides shoreline open space as part of a system that creates relief and contrast to the urbanized environment. Development of the site will include retention of natural vegetation, particularly trees, for landscaping. The shoreline configuration will not be changed.

o Recreation Facilities and Programs:

Provide a comprehensive range of opportunities which fulfill the needs of all recreation groups effectively and efficiently.

The State Recreation Functional Plan Technical Reference Document designates the area encompassing the proposed park as a portion of Recreational Planning Area 29-West Primary Urban Center. Expressed as degrees of "need for action" for various recreational activities, the document identifies a

high need for beach picnicking and a medium need for swimming/sunbathing, boating and fishing activities at coastal recreation facilities within the planning area. A high need for walking and jogging is projected. Due to the limited coastal resources within the West Primary Urban Center, the document notes that coastal recreation needs must be filled by other areas. However, the implementation of planned new coastal recreation areas, such as the Aiea Bay State Recreation Area, is a proposed alternative action. Access to water recreational opportunities at Pearl Harbor may be allowed within the "limits of boating" proposal by the U.S. Navy.

o Access:

Assure the provision of adequate public access to lands and waters with public recreation value.

The proposed park will provide adequate access to a passive shorefront park facility for the public. Access to waterborne activities, however, is limited by the U.S. Navy.

o Coordination:

Provide adequate recreation opportunities which meet expressed needs and are available as a result of the cumulative effectiveness and cooperation of recreation suppliers and users.

Coordination with Federal, State, and City and County of Honolulu agencies, as well as the public, has been a primary element of the formulation and refinement of the Proposed Conceptual Master Plan. Significantly, continuing coordination between the U.S. Navy and the State over a period exceeding 13 years has produced a well planned resource management strategy for the Aiea Bay State Recreation Area.

3. City and County of Honolulu General Plan

The General Plan of the City and County of Honolulu provides long-range objectives for the general welfare and prosperity of the people of the Island of Oahu and policies to implement these objectives.

The proposed park promotes achievement of the City and County's General Plan recreational objective to "provide a wide range of recreational facilities and services that are readily available to all residents of Oahu" by supporting the following policies:

- o Encourage the State to develop and maintain a system of natural resource-based parks, such as beach, shoreline, and mountain parks.
- o Provide for safe and secure use of public parks, beaches, and recreation facilities.
- o Encourage the safe use of Oahu's ocean environments.

Park development will also conform with General Plan natural environment objectives to "protect and preserve the natural environment of Oahu" and to "preserve and enhance the natural monuments and scenic views of Oahu for the benefit of both residents and visitors". Specifically, the park will comply with the following Plan policies:

- o Require development projects to give due consideration to natural features such as slope, flood and erosion hazards, water-recharge areas, distinctive land forms, and existing vegetation.
- o Provide opportunities for recreational and educational use and physical contact with Oahu's natural environment.

4. City and County of Honolulu, Long Range Recreation Plan

The City and County's Long Range Recreation Plan provides detailed information concerning recreation oriented goals, objectives, and policies regarding recreation sites and proposals. Recreation sites and proposals are incorporated into the State Recreation Plan inventory.

The Long Range Recreation Plan describes the short and long term needs for recreation beautification, and outlines proposals to meet these needs. The proposed park is programmed in the Plan for development between 1980-1990. It is intended to facilitate the effort to meet the community's need for additional beach or shoreline parks.

B. LAND USE POLICIES

1. State Land Use District

Pursuant to the Hawaii Land Use Law (Chapter 205, HRS) the State Land Use Commission has classified all lands in the State into four land use districts: Urban, Agricultural, Conservation and Rural. The proposed park site is in the Urban district, except for lands and submerged lands seaward of the shoreline which are defined as lying in the Conservation District. Inasmuch as the proposed development would be permitted under the Urban

designation, no boundary amendment to reclassify the site is necessary.

Development in those portions of the site within the Conservation District will be reviewed under the Conservation District Use Application process discussed in the subsection on Shoreline and Environmental Permits (V.C.3).

2. City and County of Honolulu Development Plan

Eight Development Plans were established to provide detailed schemes for "implementing and accomplishing the objectives and policies of the General Plan." The Development Plans guide the desired sequence, patterns and characteristics of future development. These plans also provide maps that indicate: 1) the planned distribution and intensity of land uses and public facilities; 2) statements of standards and principles, with respect to land use; 3) statements of urban design principles and controls; and 4) statements indicating the sequence in which future development is to occur.

The Primary Urban Center Development Plan, which encompasses the proposed park site, extends from the Waialae - Kahala area to Pearl City. The General Plan provides for increased urbanization in this area.

The Development Plan Public Facilities Maps designate proposed facilities required to accommodate the growth objectives of the Development Plans by providing adequate facilities to meet existing and projected needs. Prior to construction, all proposed public facilities must be designated on the appropriate Development Plan Public Facilities Map. The proposed park is designated on the Development Plan Public Facilities Map.

The proposed park is consistent with the Development Plan Land Use Map designations for the site and will help to satisfy the need for a passive park in the area (see Figure 16).

3. City and County of Honolulu Land Use Ordinance

The City and County of Honolulu Land Use Ordinance (LUO) regulates land uses to encourage orderly development in accordance with adopted land use policies, including the General Plan and Development Plans. The purpose of the LUO also encompasses the promotion and protection of public health, safety and welfare.

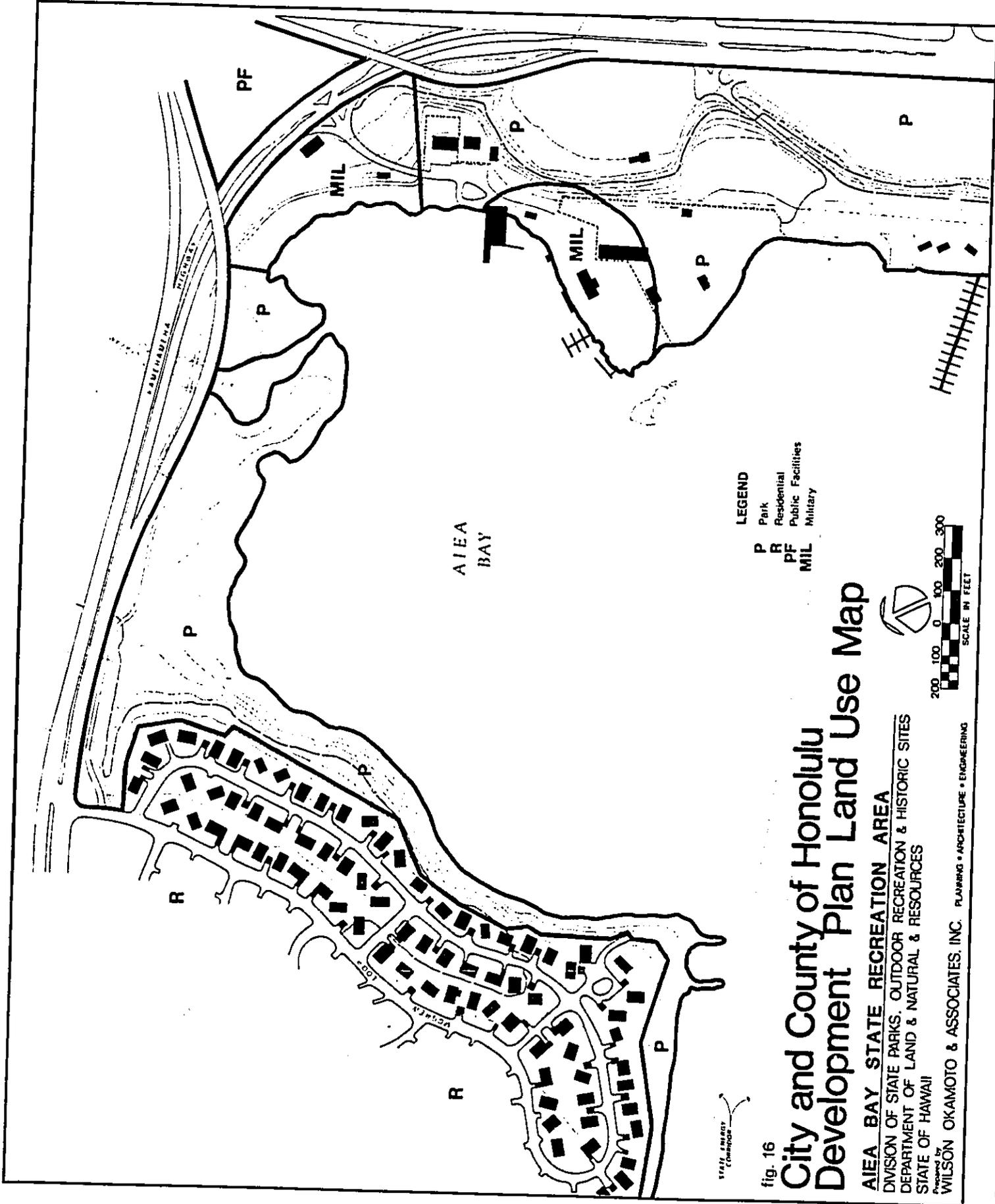


fig. 16

City and County of Honolulu Development Plan Land Use Map

AIEA BAY STATE RECREATION AREA

DIVISION OF STATE PARKS, OUTDOOR RECREATION & HISTORIC SITES
DEPARTMENT OF LAND & NATURAL & RESOURCES
STATE OF HAWAII

Prepared by

WILSON OKAMOTO & ASSOCIATES, INC. PLANNING • ARCHITECTURE • ENGINEERING

- LEGEND**
- P Park
 - R Residential
 - PF Public Facilities
 - MIL Military



STATE ENERGY Channel

AIEA BAY

PALIHANUIA
HIKUBA

VERONA

R

R

P

PF

P

MIL

MIL

P

P

P

P

Zoning for various portions of the project site includes Residential (R-5), Military and Federal Preservation (F-1), General Preservation (P-2), and Medium-Density Apartment (A-2) (see Figure 17). Military and Federal districts are not under the jurisdiction of the City and County of Honolulu. Parks are a permitted use within the other zones. No habitable structures will be developed within flood hazard districts.

C. SHORELINE AND ENVIRONMENTAL PERMITS

1. Department of the Army Permit

The Department of the Army permit is administered by the U.S. Army Corp of Engineers, Honolulu District under Section 10 of the Rivers and Harbors Act (33 USC 403), Section 404 of the Clean Water Act (33 USC 1344) and Section 103 of the Marine Protection, Research and Sanitation Act of 1972 (33 USC 1413). The permit is required for all work within waters of the United States, including ocean and coastal waters, inland and tidal waters, tidal ponds, fishponds, rivers, streams, and adjacent wetlands improvements, perched wetlands, and intermittent streams.

Issuance of the permit is based on an evaluation of the probable impact of the proposed activity on the public interest, reflecting national concern for both protection and utilization of important resources. Factors considered include those relating to: conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, land use, energy needs, safety, food production and, in general, the needs and welfare of the people. Preparation of a National Environmental Protection Act (NEPA) Environmental Impact Statement may be required, if deemed necessary to elucidate such concerns.

While no offshore work is planned for Phase I of the proposed project, subsequent phases may involve offshore construction such as shoreline stabilization, development of View Island, and improvements to the CINCPACFLT Boathouse. Therefore, a Department of the Army permit may be required. Detailed plans of the proposed project will be submitted to the U.S. Army Corps of Engineers for permit determination.

2. Hawaii Coastal Zone Management Program Federal Consistency Review

Section 307 of the National Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1451 et. eq.) provides for

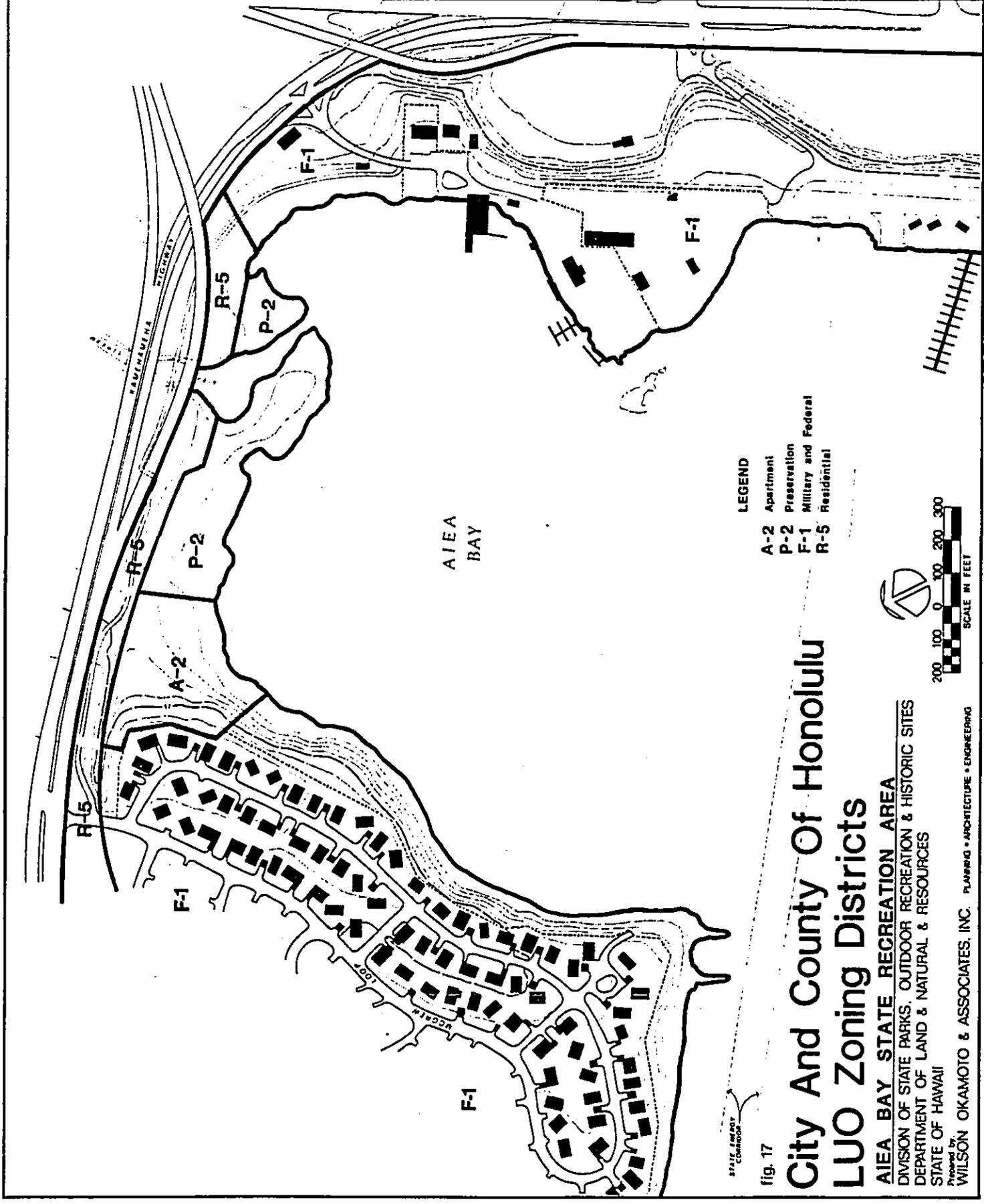


fig. 17

City And County Of Honolulu LUO Zoning Districts

AIEA BAY STATE RECREATION AREA
 DIVISION OF STATE PARKS, OUTDOOR RECREATION & HISTORIC SITES
 DEPARTMENT OF LAND & NATURAL & RESOURCES
 STATE OF HAWAII
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State review of Federal actions including Federal development activities, issuance of Federal permits and Federal grants for activities affecting the coastal zones of States with approved Coastal Zone Management Programs.

Hawaii's Coastal Zone Management (CZM) Program, established pursuant to Chapter 205A, HRS was Federally approved in 1977. It is administered by the State Department of Business and Economic Development (DBED).

The proposed project is subject to review since it involves the leasing of Federal land for development that could affect the State's coastal zone. Moreover, the project may require issuance of a Department of the Army permit. In its review, the DBED must determine the proposed project's consistency with the enforceable policies of the Hawaii CZM Program. These policies encompass broad concerns such as impacts on recreational resources, historic and archaeological resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards and the management of development.

3. Conservation District Use Application

Any use of lands, including submerged lands within the State's Conservation District, as established by the State Land Use Commission, is subject to review pursuant to Chapter 183-41, HRS and Title 13, Chapter 2 of the Department of Land and Natural Resources Regulations. The authority for permit approval lies with the Board of Land and Natural Resources.

Conservation lands to be used by the proposed park include those seaward of the shoreline. The exact delineation of the shoreline has been determined by a shoreline survey performed by a licensed surveyor and certified by the State Surveyor. It is anticipated that shoreline improvements will be subject to review.

4. Special Management Area Permit

The Hawaii Coastal Zone Management Law (Chapter 205A, HRS) charges the Counties with designating and administering Special Management Areas (SMA) along the State's coasts. Any "development," as defined by the law, within the SMA requires an SMA permit. On Oahu, this permit is administered by the City and County of Honolulu Department of Land Utilization, pursuant to Ordinance No. 84-4.

The entire project site lies within the SMA and is, therefore, subject to review under the SMA permit procedures. The City Council is the decision-making authority for the permit.

In reviewing the permit, the Department is guided by the objectives and policies of Chapter 205A, HRS and the guidelines of Sections 3 and 4 of Ordinance No. 84-4. The object of the review is to determine if the proposal will have "significant environmental effects" on the SMA with respect to areas of concern such as recreational, historic/archaeological and scenic/open space resources, coastal ecosystems, coastal hazards, economic uses, and managing development.

5. Shoreline Setback Variance

The State's Shoreline Setback Law, Chapter 205-31, HRS prohibits virtually any development or development-related activity including the removal of sand, rocks, soil, etc. from the shoreline setback area, a 40 foot (20 feet in some areas) strip of land along the shoreline. The counties, however, are authorized to grant variances for construction that would encroach in the setback area. The City and County of Honolulu, Department of Land Utilization administers this variance under its shoreline setback regulations.

Variances may be granted in consideration of a structure, or activity being in the public interest, hardship to the applicant if the proposed structure or activity is not allowed and the effect a structure or activity would have on natural shoreline processes, particularly with regard to shoreline erosion. The need for a variance will be determined by the City and County of Honolulu Department of Land Utilization.

D. U.S. NAVY REQUIREMENTS

The Proposed Conceptual Master Plan considers requirements imposed by the U.S. Navy. Significantly, use of the Pearl Harbor waters along the park site will not be permitted. Boating may be permitted in the future within the proposed "limits of boating." One of the requirements that must be met before the U.S. Navy will consider public boating in this area is the establishment of an enforcement program to assure compliance with U.S. Navy safety and security restrictions.

The U.S. Navy also requires that all environmental assessment documents, including this Final Environmental Impact Statement, meet content requirements outlined in OPNAVINST 5090.1, U.S. Navy EIS Regulations. The U.S. Navy EIS Regulations are

consistent with the National Environmental Policy Act (NEPA) and insure that the policies and goals of the NEPA are infused into the ongoing programs and actions of the U.S. Navy.

CHAPTER VI
PROBABLE IMPACTS OF PARK DEVELOPMENT

VI. PROBABLE IMPACTS OF PARK DEVELOPMENT

A. SHORT-TERM IMPACTS

Short-term impacts are those associated with construction activities such as grading, utility installation, construction of structures and landscaping.

1. Noise

The use of construction equipment during working hours will generate noise at levels that may be audible to residents of McGrew Point Housing and U.S. Navy personnel stationed at the CINCPACFLT Boathouse. Construction activities will, however, be limited to daylight hours.

If noise levels are anticipated to exceed allowable levels specified under Title 11, Administrative Rules, Department of Health, Chapter 43, the contractor will be required to obtain a noise permit. The contractor shall be responsible for properly maintaining all construction equipment to minimize noise during construction operations.

Any heavy vehicles required for construction must comply with Title 11, Administrative Rules, Department of Health, Chapter 42, Vehicular Noise Control for Oahu.

Other land uses surrounding the park site are not anticipated to be adversely affected by construction noise since the site is bordered by the heavily-traveled Kamehameha Highway.

2. Air Quality

Ambient air quality at and adjacent to the project site is expected to decline during construction, particularly during grading operations. In keeping with State Department of Health and City and County of Honolulu rules and ordinances, the contractor will be required to take necessary measures to minimize airborne particulates. Adherence to approved erosion control plans and use of methods such as water sprinkling will reduce the potential for adverse air quality impacts caused by site work.

Emissions from construction equipment could also degrade ambient air quality. With proper equipment maintenance by the contractor, however, the adverse impacts of emissions from equipment can be minimized.

3. Water Quality

It is anticipated that grading operations will temporarily degrade the water quality of adjacent Pearl Harbor by facilitating runoff and, consequently, increasing turbidity. To minimize the impacts of runoff, the contractor will be required to comply with an approved erosion control plan. The City and County of Honolulu "Soil Erosion Standards and Guidelines" (Department of Public Works) will be employed to assure that appropriate management practices and land treatment methods are used to minimize erosion. Measures such as temporary berms, cut-off ditches and silting basins may be considered. Development of the Phase I construction schedule will consider seasonal advantages. Removal of some of the existing vegetation (i.e., some mangroves) is proposed. Where practical, scheduling of grassing and landscaping will be coordinated with the removal of vegetation to minimize exposure of soil.

Should removal of debris from Aiea Bay such as abandoned piers, submerged pilings and tank remnants be pursued, methods of removal, including the use of equipment, shall be coordinated with the U.S. Navy and the City and County of Honolulu. Ultimate park development will include removal of debris and trash from the Aiea Stream estuary. The State DLNR will be responsible for coordinating the removal of debris from the project site. The volume and extent of debris removal will be defined during the project design phase. Proper debris disposal will be the responsibility of the contractor.

4. Archaeological

As discussed in Section IV.D.7, there are no known significant archaeological sites within the proposed project site. However, in the event unanticipated sites or remains such as shells, bones, rock or wall alignments are encountered during construction, the DLNR's Division of State Parks, Outdoor Recreation and Historic Sites will be notified.

5. Traffic

Probable access roads for construction activities include the CINCPACFLT Boathouse Access Road and McGrew Loop (at Kamehameha Highway). These access roads will be used by vehicles importing construction materials and hauling away rubbish and debris. Local traffic along construction accessways may occasionally encounter minor delays. Such delays will, however, be of short duration since the nature of construction operations anticipated for park development

(i.e., primarily grading and landscaping) does not require a high volume of construction vehicle activity.

6. Public Safety

The existing City and County of Honolulu bicycle path traversing the project site is used throughout the day by the public for biking, jogging, and walking. Construction activities may pose potential safety hazards for users of the bicycle path where it traverses the site. To minimize such hazards, the contractor will be required to implement necessary detours, barricades, flagmen or other devices to reduce conflicts between construction activities and bicycle path users.

Similar measures will also maintain the safety of residents at the McGrew Point Housing area and personnel at U.S. Navy facilities in the immediate vicinity.

7. Economy

The short-term economic impacts resulting from construction include the provision of jobs to local construction personnel. Local material suppliers and retail businesses may also benefit from the increased construction activities.

B. LONG-TERM IMPACTS

1. Recreational

The new park will provide needed passive recreational opportunities for the Leeward Oahu area. Currently, passive recreational activities often occur at the fringes of active recreational areas, such as ballfields. The quality of the experience, however, is often compromised as passive users may have to tolerate nearby active recreation.

Also lacking in sufficient quantity in the area are recreational facilities related to water or shoreside amenities. The water-related amenities of the proposed park will greatly enhance the quality of the passive recreational experiences in the area, in spite of U.S. Navy imposed limitations on use of the bay.

Canoe club activities within the waters of Aiea Bay are not anticipated to be affected by development of the proposed park. Landside improvements will provide a staging area for canoe club activities.

2. Visual

Development of the Aiea Bay State Recreation Area will significantly improve the scenic quality of the park site. Replacement of uncontrolled vegetative growth on the site with landscaping will provide scenic relief for adjoining areas. Comfort stations and other physical improvements will be located and designed to complement and enhance the overall scenic quality of the park.

3. Traffic

Park development will create additional traffic access points. The increased park traffic is not anticipated to affect safety or operational conditions at the McGrew Loop-Kamehameha Highway signalized intersection.

Traffic conditions at the potential future access point, the CINCPACFLT Boathouse Access Road, are not anticipated to adversely impact safety or operational conditions at its signalized intersection with Kamehameha Highway. Sight distances for vehicles exiting CINCPACFLT Boathouse Access Road were determined to be adequate based on field measurements taken at the intersection. Additionally, the storage lane for vehicles turning left into the park from Kamehameha Highway was deemed sufficient.

4. Flora and Fauna

The proposed project will involve removal of some of the existing vegetation (i.e., some mangroves) and associated displacement of existing terrestrial fauna. However, no significant species of flora or fauna are known to exist on the site. Existing vegetation removed for park development will be replaced with appropriate landscaping which will prevent erosion along the shoreline. Existing trees which can be suitably incorporated into park landscaping will be retained. Estuarine fauna is not anticipated to be adversely impacted by park development.

5. Noise

Noise generated by the proposed passive recreational facility is not anticipated to result in long-term adverse impacts to the surrounding uses. To minimize noise impact to McGrew Point Housing, a CMU wall will be erected and a landscaped buffer planted between the access road and the housing area. Picnic areas and the tot lot will be located and landscaped to minimize noise impacts.

No long-term adverse noise impacts of the surrounding area on the project site are anticipated. As documented in the

Final Supplement to the Interstate Route H-3 Environmental Impact Statement, a steady, typical noise level from an automobile at 50 feet traveling at a speed of 60 miles per hour is about 60 dBA. The Federal Highway Administration (FHWA) design noise level for picnic or recreation areas shall not exceed 70 dBA more than 10 percent of the time. As the majority of park usage will occur more than 50 feet from Kamehameha Highway, at a different elevation, and with planned intervening landscape buffers, no adverse long-term noise impacts to the Aiea Bay State Recreation Area are anticipated.

6. Future Plans

The State of Hawaii, Department of Transportation (DOT) is considering the development of a busway system to service West Oahu using the former Oahu Railway and Land (OR&L) right-of-way as a basis for the alignment. This alignment is coextensive with the bicycle path within the project site and, therefore, may conflict with the proposed park use. As currently conceived, the proposed transportation system would involve the construction of a tunnel from Salt Lake Boulevard extending to the OR&L right-of-way makai of Kamehameha Highway. This tunnel would traverse the proposed park site along the bicycle path.

Should this transportation system improvement concept be implemented, detailed design coordination between the State DLNR and DOT will be required to provide for maximum compatibility and public safety.

7. Public Safety

Debris present in the nearshore waters of the proposed park will be removed for public safety reasons. The removal of all debris along the shoreline is envisioned for ultimate park development.

With respect to public fishing, if during periodic State Department of Health water quality, sediment and biota sampling in the area, harmful levels of toxic pollutants are detected, signs will be posted warning that aquatic fauna may be contaminated and should not be consumed.

The need for appropriately placed fencing and barriers to separate park users from physical hazards such as drainageways and traffic routes will be incorporated in the design phase of the proposed development. Pedestrian access safety measures are included in the Proposed Conceptual Master Plan. There is an existing pedestrian crosswalk at the signalized intersection of McGrew Loop and Kamehameha Highway which will provide for pedestrian access

to the proposed park from the northern side of Kamehameha Highway.

8. Water Quality

No adverse long-term water quality impacts are anticipated as a result of park development. Appropriate landscaping along the shoreline will prevent erosion.

The proposed project is not anticipated to have any adverse impacts to potable ground water resources.

CHAPTER VII
RELATIONSHIP BETWEEN SHORT-TERM USES
OF MAN'S ENVIRONMENT AND THE MAINTENANCE
AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

VII. RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Implementation of the proposed project will involve short-term tradeoffs associated with environmental impacts during construction phases. While such temporary effects as noise and dust generation, soil runoff and construction-related traffic will be minimized through appropriate mitigation measures, they may create minor disruptions and be regarded as nuisances in the vicinity of the project site. Also in conjunction with construction phases, temporary economic benefits will result from construction expenditure and employment opportunities.

In the long-term, the project will enhance the recreational potential of the site, while responding to a recognized need for passive shoreline recreational opportunities in the region.

CHAPTER VIII

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

VIII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Implementation of the proposed action will involve the commitment of fuel, labor and materials for the construction of the proposed Aiea Bay State Recreation Area. Labor, materials, utilities would also be required for operation and maintenance of the proposed facility.

The natural resources of the site are not pristine. Introduced mangrove and other plant species as well as extensive surrounding urban and military facility development long ago altered natural systems. Development of a park at this site is not intended to restore the natural systems although landscaping will emphasize the use of existing trees to create a scenic natural setting. The park is intended to invite greater human presence in the area. In view of the present condition of the surrounding areas, however, such presence is unlikely to have a significant impact.

Development of the proposed project will involve the commitment of land for park use. While this would not preclude options for other urban or military uses, future conversion of the park to such uses would probably not be viewed as being in the public interest. Therefore, use of this site for a park is ostensibly an irreversible and irretrievable commitment. In the interest of national security, however, the U.S. Navy reserves the right to revoke State use of Federal land in the event of war or other national emergency.

CHAPTER IX
ALTERNATIVES TO THE PROPOSED ACTION

IX. ALTERNATIVES TO THE PROPOSED ACTION

A. NO ACTION

The need for a passive recreational facility in the Aiea-Pearl City area was concluded by the Rainbow Bay Conceptual Plan, 1974. Since then, the population in this region has grown over 30 percent, underscoring the need for such a facility.

The State Recreation Functional Plan Technical Reference document indicates a need for coastal recreational facilities within the West Primary Urban Center. A high "need for action" for beach picnicking and a medium "need for action" for swimming/sunbathing, boating and fishing are indicated. A high "need for action" for walking and jogging is projected.

Equally significant are resident's attitudes towards recreational opportunities. A 1983 survey conducted for the City and County of Honolulu (Hawaii Opinion, 1983) indicated that a large majority of residents in the Moanalua-Pearl City region consider passive recreational opportunities very important.

A "no action" alternative would preclude achievement of the State Recreation Functional Plan objectives relating to Recreation Facilities and Programs, and Access, respectively, as follows:

"Provide a comprehensive range of opportunities which fulfill the needs of all recreation groups effectively and efficiently."

"Assure the provision of adequate public access to lands and waters with public recreation value".

B. ALTERNATIVE SITES

Locating the Aiea Bay State Recreation Area at the proposed site was pursued as an opportunity to develop U.S. Navy lands previously reserved for military uses. Therefore, potential alternative sites were not considered.

C. ALTERNATIVE CONCEPTUAL PLANS

Based on programming and site parameters, two alternative park plan concepts were initially developed. These alternatives were eventually drawn upon to formulate the third composite plan presented in this report as the Proposed Conceptual Master Plan. Both of the earlier alternatives encompass the entire site covered by the MOU between the State and the U.S. Navy. It should be noted, however, that these alternatives were developed

prior to the U.S. Navy's change in position regarding the limits of project development with regard to its recent reassessment of security needs for the Pearl Harbor Naval Base.

The main difference between these alternatives is the assumption regarding the use of the CINCPACFLT Boathouse. Because the cost to the State for relocating the Boathouse may be significant, one alternative assumes the Boathouse will retain its current Navy function and that the park will be developed around it. The second alternative assumes acquisition of the Boathouse site for inclusion in the park. The inclusion or exclusion of the Boathouse site generally implies differences in circulation concepts and perceptions of park continuity.

1. Alternative "A"

Assuming that the CINCPACFLT Boathouse will be retained by the U.S. Navy, the Boathouse area would be excluded from the park. This results in the separation of the Central Subarea from the South Subarea (see Figure 18). However, connection between the two subareas is maintained through the provision of a jogging/bicycle path which is aligned east of the Old Aiea Pump Station and the abandoned concrete electrical substation.

Key features of this alternative are summarized below:

a. Access, Circulation and Parking

Three access points are proposed: Arizona Memorial Drive; CINCPACFLT Boathouse Access Road; and McGrew Loop.

Because the Central and the South Subareas are separated by the CINCPACFLT Boathouse, separate access, via Arizona Memorial Drive, and parking within the South Subarea is needed, particularly since this subarea provides a relatively large area for picnicking.

A bus parking area is also shown in the South Subarea to facilitate access by U.S.S. Arizona Memorial tour groups (e.g., group lunches/picnics). The CINCPACFLT Boathouse Access Road would provide access to the Central Subarea.

McGrew Loop would also be used as a point of access. To minimize traffic noise generated from the McGrew Loop access, a concrete masonry unit (CMU) wall is proposed along the segment of the accessway bordering McGrew Point Housing.

b. Integration of the South Subarea with U.S.S. Arizona Memorial Shoreside Facilities

Integration of the South Subarea with the U.S.S. Arizona Memorial Shoreside Facilities is a key feature of this alternative. In addition to direct automobile and bus access via Arizona Memorial Drive, signs may be posted to inform and direct visitors to the park.

c. Canoe Club Area

The South Subarea includes an area set aside for canoe club activities. This designation assumes the continued, long-term use of the South Subarea by the Honolulu Canoe Club.

d. Limits of Boating

The Navy's continued use of the CINCPACFLT Boathouse requires that limits of boating be established to separate park boat users from the CINCPACFLT Boathouse users. To accomplish this separation, the public small boat "no-pass line" would be delineated as a straight line from McGrew Point to a point north of the Boathouse, as shown in Figure 18. This delineation is intended to keep park boat users within the bay waters, north of the navigable channel used by the Boathouse.

2. Alternative "B"

Under this alternative, the CINCPACFLT Boathouse site is assumed to be acquired by the State for incorporation into the park (see Figure 19). The inclusion of the Boathouse site enables the Central and South Subareas to be integrated.

A summary of this alternative's key features is presented below.

a. Access, Circulation and Parking

The CINCPACFLT Boathouse Access Road is designated as the single access point under Alternative "B". Parking would be provided in the Central and South Subareas. Access via Arizona Memorial Drive is considered an option, with parking and a possible bus turnaround area for U.S.S. Arizona Memorial visitors.

A key feature of this alternative is the provision of access to the McGrew Subarea (including the Phase I subarea and McGrew Point Foot Path) over a proposed

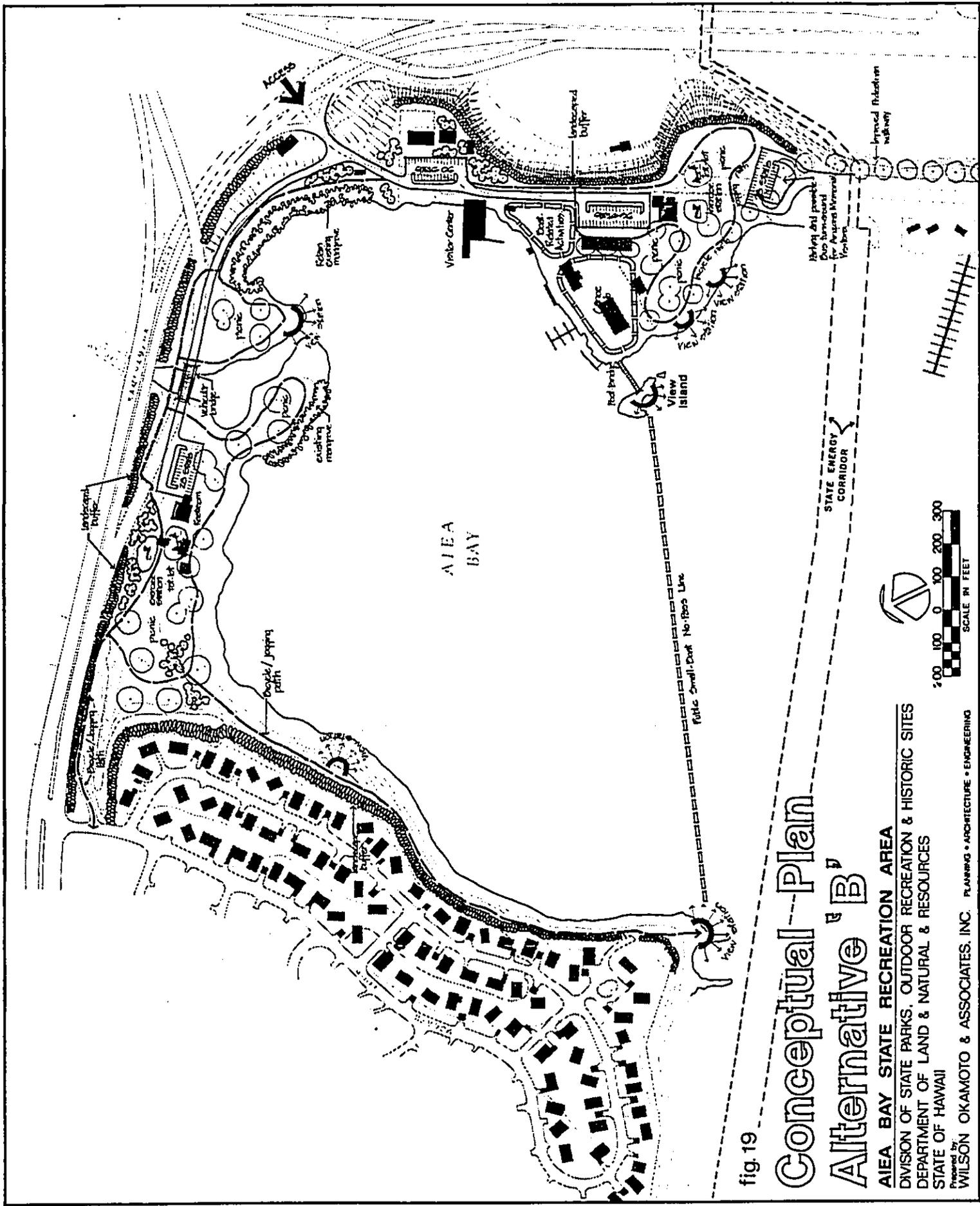


fig. 19

Conceptual Plan Alternative 'B'

AIEA BAY STATE RECREATION AREA
 DIVISION OF STATE PARKS, OUTDOOR RECREATION & HISTORIC SITES
 DEPARTMENT OF LAND & NATURAL RESOURCES
 STATE OF HAWAII
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vehicular bridge across Aiea Stream. Since the McGrew Subarea comprises a major portion of the park, convenient access to this subarea is important to assure balanced usage of all areas of the park.

b. CINCPACFLT Boathouse

The inclusion of the CINCPACFLT Boathouse site in the park under Alternative "B" provides an opportunity to use the Boathouse as a significant park feature. For conceptual plan purposes, the Boathouse is designated as a visitor center. Specific uses within this context may include a mini-museum and/or concession outlets.

c. Integration with U.S.S. Arizona Memorial Shoreside Facilities

Alternative "B" suggests an approach to connecting the park with the U.S.S. Arizona Memorial Shoreside Facilities. The key element in this regard is the provision of an improved pedestrian walkway between the park and the Shoreside Facilities. The improved pedestrian walkway would include:

- o A pedestrian path on the mauka side of Arizona Memorial Drive, between the Shoreside Facilities and the park.
- o Park landscaping along the connection between the two points.
- o Appropriately placed signs to direct visitors to the park.

Optionally, vehicular access could be provided to further encourage use of the park by the U.S.S. Arizona Memorial visitors.

d. Marine Support

A portion of the South Subarea is designated for marine support functions under Alternative "B". Marine support functions include canoe club activities as well as "minor" boating concessions and activities. This function is situated in the vicinity of existing piers to allow their use.

e. View Island

Alternative "B" provides for a foot bridge between the South Subarea and View Island. The use of View

Island's unique physical relationship to the park can further enhance the park's passive character.

f. Limits of Boating

The acquisition of the CINCPACFLT Boathouse by the State enables the park's boat users to navigate in waters which would otherwise have been reserved for the U.S. Navy. As such, the public small boat "no-pass" line under Alternative "B" can be established south of the Boathouse. Figure 19 shows the proposed limits of boating as a straight line from McGrew Point to View Island.

D. ALTERNATIVE IMPLEMENTATION PHASING

In view of the U.S. Navy's current position regarding park development, the portion described as Phase I is proposed as a "stand alone" park. Thus, it will continue to provide recreational opportunities even if the other subareas are not developed. If U.S. Navy security concerns can be addressed and further park development is permitted by the U.S. Navy, additional subareas will be incorporated with Phase I. Should the U.S. Navy decide to retain the CINCPACFLT Boathouse, alternative conceptual design "A" may be pursued.

CHAPTER X
UNRESOLVED ISSUE

X. UNRESOLVED ISSUE

The major unresolved issue at this time is whether the U.S. Navy will permit development of the entire site encompassed by the Proposed Conceptual Master Plan. As a result of the U.S. Navy's program to enhance physical security in and around the Pearl Harbor Naval Base, the U.S. Navy does not currently endorse park development. Communication with the U.S. Navy is contained in Appendix C.

CHAPTER XI
LIST OF NECESSARY APPROVALS

XI. LIST OF NECESSARY APPROVALS

Development of park facilities will be subject to various governmental requirements and approvals, including:

- o Consistency with content requirements established by OPNAVINST 5090.1, U.S. Navy Regulations
- o Environmental Impact Statement Rules, pursuant to Chapter 343, HRS
- o Special Management Area Permit
- o Shoreline Setback Variance (depending upon a determination by the City and County of Honolulu, Department of Land Utilization).
- o Conservation District Use Application
- o Department of the Army Permit (depending upon type of improvements proposed)
- o Hawaii Coastal Zone Management Program Federal Consistency Review (depending upon type of improvements proposed)
- o Various grading and construction permits

CHAPTER XII

LIST OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED

XII. LIST OF AGENCIES, ORGANIZATIONS, AND INDIVIDUALS CONSULTED

FEDERAL AGENCIES

District Planning Office
U.S. Department of Transportation
United States Coast Guard
Commander, Fourteenth Coast
Guard District
300 Ala Moana Boulevard
Honolulu, Hawaii 96850

Soil Conservation Service
U.S. Department of Agriculture
P. O. Box 50004
Honolulu, Hawaii 96850

U.S. Army Support Command Hawaii
Attention: Environmental
Management
Office
Fort Shafter, Hawaii 96858-5000

Corps of Engineers
U.S. Department of the Army
Honolulu District
Building 230
Fort Shafter, Hawaii 96858

Office of Ecological Services
Fish and Wildlife Service
U.S. Department of Interior
P. O. Box 50167
Honolulu, Hawaii 96850

Commander, Naval Facility
Command Pacific Division
U.S. Department of the Navy
Pearl Harbor, Hawaii 96860

National Park Service
300 Ala Moana Boulevard
P. O. Box 50165
Honolulu, Hawaii 96850

STATE AGENCIES

Department of Accounting and
General Services
State of Hawaii
P. O. Box 119
Honolulu, Hawaii 96810

Department of Agriculture
State of Hawaii
1428 South King Street
Honolulu, Hawaii 96814

Department of Defense
Office of the Adjutant General
State of Hawaii
3949 Diamond Head Road
Honolulu, Hawaii 96816-4495

Department of Health
State of Hawaii
P. O. Box 3378
Honolulu, Hawaii 96801

Office of Hawaiian Affairs
Kawaiahao Plaza Suite 100
567 S. King Street
Honolulu, Hawaii 96813

Department of Social Services
and Housing
State of Hawaii
1390 Miller Street, #209
Honolulu, Hawaii 96813

Department of Planning and
Economic Development
State of Hawaii
P. O. Box 2359
Honolulu, Hawaii 96804

Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

State Boating Manager
Boating Branch
Harbors Division
Department of Transportation
State of Hawaii
79 S. Nimitz Highway
Honolulu, Hawaii 96813

STATE AGENCIES - Continued

Environmental Center
University of Hawaii
Crawford 317
2250 Campus Road
Honolulu, Hawaii 96822

Marine Programs
University of Hawaii
1000 Pope Road
Honolulu, Hawaii 96822

Water Resources Research Center
University of Hawaii
Holmes Hall 283
2540 Dole Street
Honolulu, Hawaii 96822

Office of Environmental Quality
Control
State of Hawaii
465 South King Street, Room 115
Honolulu, Hawaii 96813

COUNTY AGENCIES

Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96813

Department of General Planning
City and County of Honolulu
650 S. King Street, 8th Floor
Honolulu, Hawaii 96813

Department of Housing and Community
Development
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Office of Information and
Complaint
City and County of Honolulu
530 S. King Street, 3rd Floor
Honolulu, Hawaii 96813

Department of Land Utilization
City and County of Honolulu
650 S. King Street, 7th Floor
Honolulu, Hawaii 96813

Department of Parks and Recreation
City and County of Honolulu
650 S. King Street, 10th Floor
Honolulu, Hawaii 96813

Department of Public Works
City and County of Honolulu
650 S. King Street
Honolulu, Hawaii 96813

Department of Transportation
Services
City and County of Honolulu
650 S. King Street
Honolulu, Hawaii 96813

Fire Department
City and County of Honolulu
1455 S. Beretania Street, Room 305
Honolulu, Hawaii 96814

Police Department
City and County of Honolulu
1455 S. Beretania Street
Honolulu, Hawaii 96814

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

GOVERNMENT OFFICIALS

Honorable Richard Wong
Senate President
State Capitol, Room 003
Honolulu, Hawaii 96813

Honorable Henry H. Peters
Former House Speaker
State Capitol
Honolulu, Hawaii 96813

GOVERNMENT OFFICIALS - Continued

Honorable Norman Mizuguchi
State Senate
State Capitol, Room 219
Honolulu, Hawaii 96813

Honorable Joseph Kuroda
State Capitol, Room 218
Honolulu, Hawaii 96813

Ms. Marilyn Bornhorst, Former Chair
City Council
City and County of Honolulu
Honolulu Hale
Honolulu, Hawaii 96813

Honorable Richard Kawakami
House Speaker
State Capitol, Room 335
Honolulu, Hawaii 96813

Honorable Clarice Hashimoto
State Capitol, Room 404
Honolulu, Hawaii 96813

Honorable Tom Okamura
State Capitol, Room 434
Honolulu, Hawaii 96813

Honorable Arnold Morgado, Jr.
Chairman
City Council
City and County of Honolulu
Honolulu Hale
Honolulu, Hawaii 96813

NEIGHBORHOOD BOARDS

Aiea Neighborhood Board No. 20
c/o Aiea Library
99-143 Moanalua Road
Aiea, Hawaii 96701

Aliamanu-Salt Lake-Foster Village
Neighborhood Board No. 18
c/o Neighborhood Commission Office
City Hall, Room 400
530 South King Street
Honolulu, Hawaii 96813

Pearl City Neighborhood Board No.
21
P. O. Box 1025
Pearl City, Hawaii 96782

McGrew Loop Neighborhood
Association

ORGANIZATIONS

Life of the Land
250 South Hotel Street
Room 251
Honolulu, Hawaii 96813

Mr. Gary Andersen
Conservation Chair
Sierra Club
Honolulu Executive Committee
P. O. Box 11070
Honolulu, Hawaii 96828

Outdoor Circle
200 N. Vineyard Boulevard
Honolulu, Hawaii 96817

Bishop Museum
P. O. Box 19000-A
Honolulu, Hawaii 96819

Pearl Harbor Yacht Club
P. O. Box 6357
Honolulu, Hawaii 96818

Mr. Gardner Brown
Na Opio Canoe Clubs Association
2407 Booth Road
Honolulu, Hawaii 96813

Mrs. Joan Malama
Oahu Hawaiian Canoe Racing
Association
933 Lunahelu Street
Kailua, Oahu, Hawaii 96834

Mr. John P. Kapua, Jr.
Na Ohana O Na Hui Waa
2407 Booth Road
Honolulu, Hawaii 96813

ORGANIZATIONS - Continued

American Lung Association
245 North Kukui Street
Honolulu, Hawaii 96817

Mr. and Mrs. Takeo Sampei
98-140 Keanae Street
Aiea, Hawaii 96701

UTILITY COMPANIES

Hawaiian Electric Company, Inc.
P. O. Box 2750
Honolulu, Hawaii 96840-0001

Hawaiian Telephone Company
P. O. Box 2200
Honolulu, Hawaii 96841

Pacific Resources, Inc.
Attention: Chief Engineer
P. O. Box 3379
Honolulu, Hawaii 96842

Chevron U.S.A., Inc.
P. O. Box 29789
Honolulu, Hawaii 96820

CHAPTER XIII
COMMENTS AND RESPONSES TO THE EIS PREPARATION NOTICE

XIII. COMMENTS AND RESPONSES TO THE EIS PREPARATION NOTICE

The following agencies and organizations provided comments on the EIS Preparation Notice. A total of 14 comment letters were received.

A double asterisk (**) indicates those which submitted written comments requiring substantive responses. The comment and response letters are reproduced in this section.

A single asterisk (*) indicates those which submitted written comments not requiring substantive responses.

A. FEDERAL AGENCIES

- **1. U.S. Army Corps of Engineers**
- *2. U.S. Department of Agriculture, Soil Conservation Service**
- **3. U.S. Department of Defense, Department of the Navy, Headquarters, Naval Base Pearl Harbor**
- **4. U.S. Department of the Interior, Fish and Wildlife Service**

B. STATE AGENCIES

- *1. Department of Accounting and General Services**
- **2. Department of Health**
- **3. Department of Planning and Economic Development**
- **4. Department of Transportation**
- **5. University of Hawaii, Water Resources Research Center**

C. CITY AND COUNTY OF HONOLULU AGENCIES

- **1. Department of General Planning**
- *2. Department of Parks and Recreation**
- **3. Department of Public Works**
- **4. Department of Transportation Services**

D. GOVERNMENT OFFICIAL

- **1. Senator Norman Mizuguchi, 21st Senatorial District**



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FT. SHAFTER, HAWAII 96856-5440

March 16, 1986

ATTENTION

Mr. Michael Huneikiyo, Project Manager
Wilson Okamoto and Associates, Inc.
P. O. Box 3530
Honolulu, Hawaii 96811

Dear Mr. Huneikiyo:

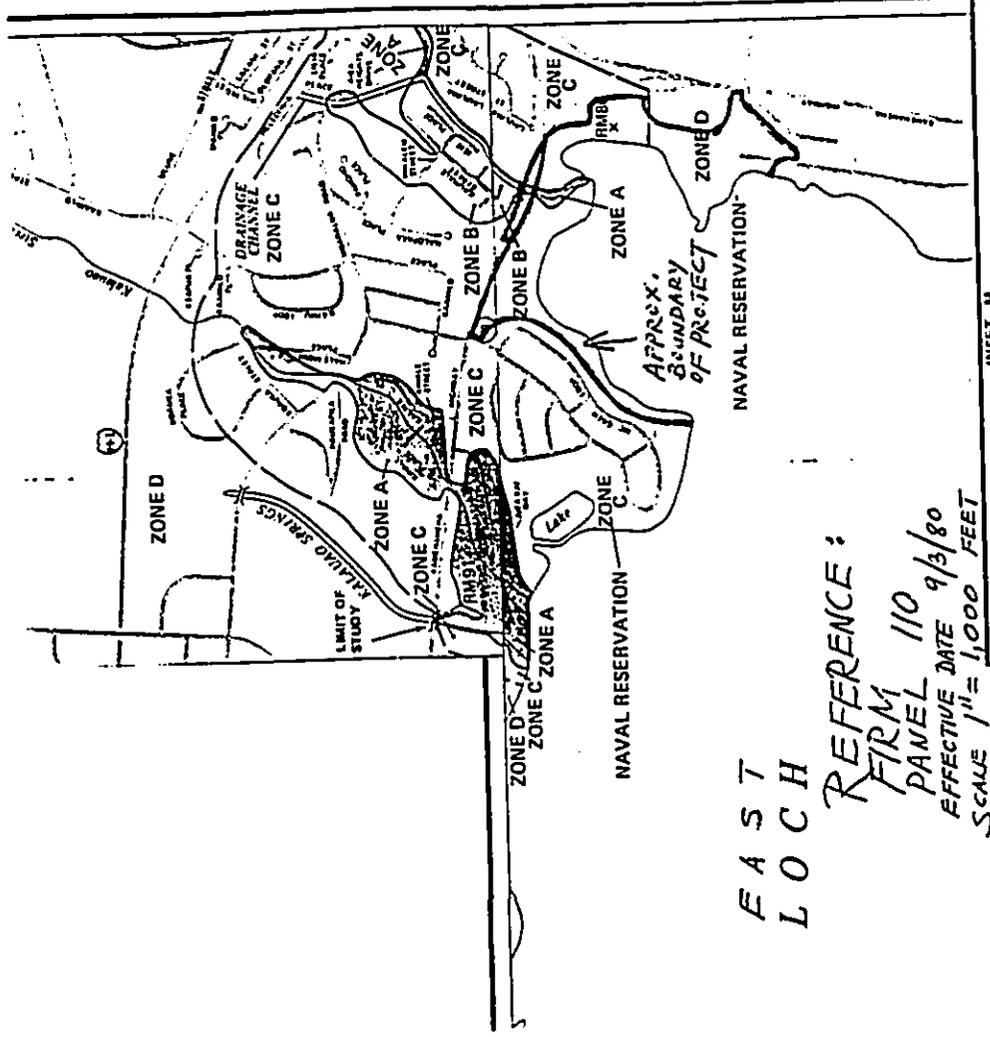
Thank you for the opportunity to review and comment on the EIS Preparation Notice for Aiea Bay State Recreation Area. The following comments are offered:

- a. A Department of the Army permit may be required. Suggest you contact the Operations Branch at 438-9258.
- b. As shown in enclosure 1, most of the project area is in Zone C. A smaller portion is in Zone D and an even smaller portion is in Zone A. An explanation of the zone designations is included as enclosure 2.

Sincerely,

Kisuk Cheung
Kisuk Cheung
Chief, Engineering Division

Enclosures



Enclosure 1

DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE OF HAWAII
P. O. BOX 821
HONOLULU, HAWAII 96809



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 821
HONOLULU, HAWAII 96809

Mr. Kiouk Cheung
Chief, Engineering Division
Department of the Army
U.S. Army Engineer District, Honolulu
Port Shafter, Hawaii 96858-5440

Dear Mr. Cheung:

SUBJECT: Your Letter of March 18, 1986 Regarding the
Environmental Impact Statement
Preparation Notice for the Proposed
Aiea Bay State Recreation Area

Thank you for your comments concerning the Environmental Impact
Statement Preparation Notice (EISP) for the proposed Aiea Bay
State Recreation Area.

The EIS document will include a discussion of the possible need
for a Department of the Army permit.

Flood hazard designations for the project site will be documented
in the EIS document.

A copy of your letter will be appended to the EIS document. If
there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

[Signature]
SUSUMU ONO
Chairperson of the Board

cc: Wilson Okamoto and Associates, Inc.

EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AK	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
AL-A30*	Areas of 100-year flood, base flood elevations and flood hazard factors determined.
A59	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Median shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
E	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
F2-F3*	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.
G	The numerals indicate the magnitude of difference between the 100-year and 15-year flood elevations. For numerals between 1-20, the difference is one half of the value; for values greater than 20, the difference is 10 less than the numeral shown. This information is used in establishing insurance rates.
H	100-year annual or return elevation line, with elevation in feet above mean sea level.
I	Zone boundary line

Enclosure 2



DEPARTMENT OF THE NAVY
HEADQUARTERS
NAVAL BASE PEARL HARBOR
BOX 110
PEARL HARBOR, HAWAII 96860-5020

Mr. Michael Munekiyo
Project Manager
Wilson Okamoto and Associates
P.O. Box 3530
Honolulu, Hawaii, 96811

Dear Mr. Munekiyo:

Aiea Bay State Recreation Area
Environmental Impact Statement
Preparation Notice

The subject notice provided by the State Office of Environmental Quality Control to this Command by transmittal of March 13, 1986 has been reviewed.

Also, an additional copy of the subject notice provided by your letter of March 6, 1986 to PACNAVFACENCOM has been received. The opportunity to make joint Navy response is appreciated. The following comments may assist you towards the preparation of your statement.

Since the first sketch proposals for "Rainbow Bay", there has been an evolution of plans and of current use of existing facilities. One noticeable increase has been the use of the Pearl Harbor bikepath for running and jogging, including periodic races of 10 kilometer distance. It is assumed that reference to this heavy use will be made in the statement.

Any changes in the shoreline that have been made or will be made to implement the plan should be addressed. Also, the implications of siltation in the designated stream fishing area from runoff in flash floods might be addressed.

No comment on the proposed park development beyond the Phase I area is provided since such development is not endorsed by the Navy.

Sincerely,

P. O'CONNOR
Captain, U.S. Navy
Chief of Base

GEORGE R. JANTONIS
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 811
HONOLULU, HAWAII 96809
APR 9 1986

DEPARTMENT OF LAND AND NATURAL RESOURCES
GOVERNOR GEORGE R. JANTONIS
OFFICE OF THE GOVERNOR
STATE OF HAWAII
DIVISIONS:
AGRICULTURE DEVELOPMENT
FORESTRY
LAND AND NATURAL RESOURCES
PLANNING AND DEVELOPMENT
WATER AND LAND DEVELOPMENT

Mr. P. O'Connor
Captain, U.S. Navy
Chief of Staff
Department of the Navy
Headquarters
Naval Base Pearl Harbor
Box 110
Pearl Harbor, Hawaii 96860-5020

Dear Captain O'Connor:

SUBJECT: Your Letter of April 7, 1986 Regarding the
Environmental Impact Statement Preparation
Notice for the Proposed Aiea Bay State
Recreation Area

Thank you for your comments concerning the Environmental Impact Statement Preparation Notice (EISP) for the proposed Aiea Bay State Recreation Area.

The EIS document will update the discussion of the Pearl Harbor bikepath to reference heavy usage for running, jogging and periodic races.

The EIS document will include a discussion of anticipated shoreline work and attendant environmental permits required.

The proposed project will not alter existing conditions for construction of the stream fishing area and, therefore, will not modify rates of siltation due to stream runoff. The proposed Conceptual Master Plan was developed considering the physical suitability of the site for accommodating proposed park uses. Five development zones, including flood plain, were formulated for this purpose.

Mr. P. O'Connor
Captain, U.S. Navy
Page 2

We look forward to working with you towards achieving a recreational area which will be of benefit to both the U.S. Navy and the State of Hawaii.

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,


DAN QUINN
Chairperson of the Board

cc: Wilson Okamoto and Associates, Inc.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

100 ALA MOANA BOULEVARD
P. O. BOX 50187
HONOLULU, HAWAII 96850

ES
Room 6107

APR 0 8 1986

Mr. Michael Munchiyo
Project Manager
Wilson Okamoto and Associates, Inc.
P.O. Box 3320
Honolulu, Hawaii 96811

Re: Aiea Bay State Recreation Area, Environmental Impact
Statement Preparation Notice, Aiea, Oahu

Dear Mr. Munchiyo:

We have reviewed the referenced document and offer the following
comments for your consideration.

The Draft Environmental Impact Statement (EIS) should include a
discussion of the following:

- a. A detailed description of the biological resources in
the project area, including fishery resources in Aiea Bay and
adjacent migratory shorebirds, wetlands, and wetland/strand
vegetation.
- b. A discussion on the use of heavy equipment in the
intertidal zone to remove embedded metal debris, and mitigation
measures to control turbidity and suspended sediments in the
adjoining waters.
- c. A discussion on whether any filling of intertidal
habitats is planned. Any fill activity should be coordinated
with the U.S. Army Corps of Engineers.
- d. Though the mangrove is an introduced species to Hawaii,
the EIS should discuss whether any mangroves or other wetland
plants will be removed.
- e. A discussion on potential impacts of modifying the
intertidal mudflats on migratory shorebirds.
- f. Studies conducted by the U.S. Fish and Wildlife Service
indicate high levels of organochlorine residues in freshwater
fishes collected from Mauna and Waikole Streams (National
Pesticide Monitoring Program; Organochlorine Residues in
Freshwater Fish, 1976-1979, Resource Publication 152, U.S. Fish
and Wildlife Service, 1983). In view of the location of the

proposed fishing area downstream from the Aiea upper wall, we
recommend that water quality, sediment, and benthic sampling be
conducted to determine the levels of organochlorine and heavy
metal contaminants in the proposed fishing area.

We appreciate this opportunity to comment.

Sincerely,

John A. Aho

John A. Aho
Project Leader
Office of Environmental Services

cc: DENR
NMFS
WPTO



Save Energy and You Save America!

ERNEST R. ARTZBERG
Governor of Hawaii



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 851
HONOLULU, HAWAII 96808

APR 9 1986

ERNEST R. ARTZBERG
GOVERNOR OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISIONS:
ADMINISTRATIVE DEVELOPMENT
PLANNING AND DESIGN
CONSERVATION AND
RECREATION
COMMITMENTS
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Mr. Ernest Kosaka, Project Leader

Page 2

APR 9 1986

Mr. Ernest Kosaka, Project Leader
Office of Environmental Services
Fish and Wildlife Service
U.S. Department of the Interior
P. O. Box 50167
Honolulu, Hawaii 96850

Dear Mr. Kosaka:

SUBJECT: Your letter of April 8, 1986 regarding
the Environmental Impact Statement
Preparation Notice for the Proposed
Aiea Bay State Recreation Area

Thank you for your comments concerning the Environmental Impact
Statement Preparation Notice (EISP/N) for the proposed Aiea Bay
State Recreation Area.

Our responses to your comments are as follows:

- a. The EIS document will include a discussion of biological resources in the project area including aquatic fauna, birds, wetlands and wetland vegetation.
- b. The EIS document will include a discussion of water quality impacts of the proposed project and appropriate mitigation measures. Should removal of debris from Aiea Bay be pursued, methods of removal shall be coordinated with the U.S. Navy.
- c. No modification of intertidal habitats is planned. No offshore work is planned for Phase I of the proposed project. Off-shore improvements which may be required in subsequent phases of park development will be evaluated with respect to Department of the Army permit requirements.
- d. The long-term impact of the proposed project to flora and fauna will be discussed in the EIS document. The proposed project will involve the removal of some of the existing vegetation, including mangrove. Existing trees which can be suitably incorporated into park landscaping will be retained.

e. No adverse impacts to migratory shorebirds are anticipated as a result of the development of the proposed park as modification of intertidal mudflats is not anticipated.

f. The need for conducting water quality, sediment and biotic sampling to determine the desirability of allowing public fishing will be incorporated in the EIS document.

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

SUSUMU ONO
Chairperson of the Board

cc: Wilson Okamoto and Associates, Inc.

LESLIE R. MATSUOKA
Governor of Hawaii



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 319
HONOLULU, HAWAII 96801

LESLIE S. MATSUOKA
Deputy Director of Health

IN REPLY, PLEASE REFER TO
1 PHSO

March 31, 1986

Mr. Michael Munekiyo
March 31, 1986
Page 2

Mr. Michael Munekiyo, Project Manager
Wilson Okamoto & Associates
1150 S. King St.
Honolulu, Hawaii 96814

Dear Mr. Munekiyo:

Subject: Request for Comments on the Alea Bay State Recreation Area Environmental Impact Statement Preparation Notice

Thank you for allowing us to review and comment on the subject EIS. We provide the following comments for your consideration:

Coastal Waters

We wish to mention again (previously mentioned in our September 12, 1984 letter on the same subject) that the condenser cooling water and boiler blowdown from the California and Hawaii Sugar Company refinery is discharged into Aiea Stream and enters the East Loch of Pearl Harbor. The discharge affects over 40% of the Alea Bay area.

Wastewater Disposal

The development plan devotes a section for the construction of a comfort station which could be incorporated as part of a larger pavilion facility. Since comfort stations always generate domestic sewage, a method designed to dispose of this sewage satisfactorily should be included; however, no disposal system is mentioned.

This area is located in a zone which is neither a "pass" or "no pass" zone according to the Board of Water Supply designation. Furthermore, there is no record of cesspool construction in our files to evaluate cesspool performance. From a cursory observation of the parcel, it appears that the subsoil formation is of silty clay and muck with high water table. These features are not favorable for percolating sewage. We recommend that the plumbing connections be made to the public sewerage system.

Noise

The following noise comments should be considered when preparing the environmental impact statement:

1. The noise from activities associated with the use of recreational facilities can have adverse effects in terms of annoyances on residents from the adjacent McGrew Point Navy Quarters. The project should be designed to minimize noise impact to the neighboring community.
2. Construction activities must comply with the provisions of Title II, Administrative Rules Chapter 47, Community Noise Control for Oahu:
 - a. The contractor must obtain a noise permit if the noise levels from the construction activities are expected to exceed the allowable levels of the regulations.
 - b. Construction equipment and on-site vehicles or devices requiring an exhaust of gas or air must be equipped with mufflers.
 - c. The contractor must comply with the conditional use of the permit as specified in the regulations and the conditions issued with the permit.
3. Traffic noise from heavy vehicles travelling to and from the construction site must be minimized near residential areas and must comply with the provisions of Title II, Administrative Rules Chapter 42, Vehicular Noise Control for Oahu.

Sincerely yours,


JAMES K. IKEDA
Deputy Director for
Environmental Health

GEORGE R. ARYTON
Secretary of State



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 631
HONOLULU, HAWAII 96809

DIVISION OF LAND, CHAIRMAN
EDGAR A. HANAUAN
DEPUTY CHAIRMAN
DEPARTMENT OF LAND AND NATURAL RESOURCES
DEVELOPMENT
AGRICULTURE
INDUSTRIAL DEVELOPMENT
PROBLEMS
AGRICULTURE
CONSERVATION
COMMITTEES
FOREST AND WILDLIFE
MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Mr. James K. Ikeda
Deputy Director for Environmental Health
State of Hawaii
Department of Health
1250 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Ikeda:

SUBJECT: Your Letter of March 31, 1986 Regarding the
Environmental Impact Statement Preparation Notice
for the Proposed Aiea Bay State Recreation Area

Thank you for your comments concerning the Environmental Impact
Statement Preparation Notice (EISP) for the proposed Aiea Bay
State Recreation Area.

Our responses to your comments are as follows:

Coastal Waters

The EIS document will include a discussion of the water quality
of Aiea Stream and Pearl Harbor. The discharge of effluent into
Aiea Stream will be incorporated in this discussion.

Wastewater Disposal

Wastewater disposal for the proposed park is planned to be by the
municipal sewer system, and will be discussed in the EIS document.

Noise

The EIS document will include a discussion of both short and
long-term noise impacts. The Proposed Conceptual Master Plan
includes design measures to minimize impact to the neighboring
residential community, including the construction of a CHU noise
barrier along a portion of the housing perimeter.

Mr. James K. Ikeda
Page 2
9 1986

Construction activities will comply with the provisions of
Chapters 42 and 43 of Title 11, Administrative Rules.

A copy of your letter will be appended to the EIS document. If
there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

SUSUMU ONO
Chairperson of the Board

cc: Wilson Okamoto and Associates, Inc.



DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

KAWAHAU BUILDING, 250 SOUTH KING STREET, HONOLULU, HAWAII
MAILING ADDRESS: P.O. BOX 2098 HONOLULU, HAWAII, TEL: 533-2000 HFTD

GEORGE R. ANTOSH
DIRECTOR
KENT M. KEITH
DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT
AUBREY E. BOWEN
DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT
LINDA KAPURIAJI ROSEHIL
DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

DIVISIONS:
PLANNING AND POLICY DEVELOPMENT DIVISION
RESEARCH AND ECONOMIC ANALYSIS DIVISION
ADMINISTRATIVE SERVICES DIVISION
REGISTRATION DIVISION
DESIGN DIVISION
LAND USE DIVISION
PLANNING AND POLICY DEVELOPMENT DIVISION
RESEARCH AND ECONOMIC ANALYSIS DIVISION
ADMINISTRATIVE SERVICES DIVISION
REGISTRATION DIVISION
DESIGN DIVISION
LAND USE DIVISION

Ref. No. P-3780

March 31, 1986

Mr. Michael Munekiyo
Project Manager
Wilson Okamoto and Associates, Inc.
P.O. Box 3530
Honolulu, Hawaii 96811

Dear Mr. Munekiyo:

Subject: EIS Preparation Notice for Aiea Bay State Recreation Area,
Oahu

We have reviewed the subject preparation notice and have the following comment on it.

The preparation notice has identified the proposed park site to be adjacent to the proposed State Energy Corridor. The draft EIS should address the possible impacts of the proposed development on the energy corridor.

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

Very truly yours,

Mary G. Tani
Kent M. Keith

cc: Mr. Dan Quinn
Department of Land and Natural Resources



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

P. O. BOX 681
HONOLULU, HAWAII 96809
MAY 9 1986

Mr. Kent M. Keith, Director
Department of Planning and Economic Development
State of Hawaii
250 South King Street
Honolulu, Hawaii 96813

Dear Mr. Keith:

SUBJECT: Your Letter of March 31, 1986 Regarding the
Environmental Impact Statement Preparation Notice
for the Proposed Aiea Bay State Recreation Area

Thank you for your comments concerning the Environmental Impact Statement Preparation Notice (EISP) for the proposed Aiea Bay State Recreation Area.

The proposed Aiea Bay State Recreation Area is not anticipated to impact the proposed State Energy Corridor. The proposed Conceptual Master Plan considers requirements imposed by the U.S. Navy. Significantly, use of Pearl Harbor waters along the park site will not be permitted. However, even if boating is permitted in the future within the proposed "limits of boating", this use would not adversely impact the State Energy Corridor. The "limits of boating" would encompass the waters mauka of a line drawn from McGraw Point to the manmade island (designated as View Island on the Master Plan) near the existing canoe club area. The proposed State Energy Corridor is located seaward of the "limits of boating."

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

SUSUMU OKAMOTO
SUSUMU OKAMOTO
Chairperson of the Board

cc: Wilson Okamoto and Associates, Inc.

GERENCE A. MATOSHI
Governing



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
1555 KALANOAU AVENUE, SUITE 100
HONOLULU, HAWAII 96813

March 31, 1986

Mr. Michael Muneakiyo, Project Manager
Wilson, Okamoto and Associates
P.O. Box 3530
Honolulu, Hawaii 96811

Dear Mr. Muneakiyo:

Aiea Bay State Recreation Area
EIS Preparation Notice

We have reviewed the subject preparation notice and our comments are presented below.

Boating

Due to the limited water area available as dictated by the "no pass" line, a full-scale boat launching ramp facility would be inappropriate at this park site. However, should the military relax their restrictions on small craft use of Pearl Harbor, then it may be desirable to locate a boat ramp at the tip of the Waipio Peninsula to provide the shortest distance to the ship channel and open ocean.

The small size of the available water area is also insufficient to support meaningful canoe club practice and racing events. Approval for use of more space within Pearl Harbor would be necessary to accommodate these canoe activities.

Since Phase II funds are questionable, the area is ideal for non-motorized activities such as small craft sailing, windsurfing, and paddle boats. We therefore recommend that provisions be made in Phase I to include an equipment rental concession.

Highway

Our future plans indicate a possible conflict with this project. An important element that we are considering is to provide a busway system to service West Oahu using the former Oahu Railway and Land right-of-way as a basis for the alignment. Unless the busway is allowed, we may not be able to provide the

WAYNE J. YAMASAKI
Date: 3/31/86

DEPUTY DIRECTOR
ADMINISTRATIVE SERVICES DIVISION
HONOLULU, HAWAII 96813
CAROL D. STOK
ADAM D. WALSH

MR. MICHAEL MUNEAKIYO
STP 8.1257

Mr. Michael Muneakiyo
Page 2

STP 8.1257

necessary transportation facilities through this area. We would be happy to discuss this matter further to help resolve this potential problem.

We appreciate this early opportunity to provide comments.

Very truly yours,

Wayne J. Yamasaki
Director of Transportation

GEORGE R. ARTHUR
Governor of Hawaii



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 451
HONOLULU, HAWAII 96808
MAY 9 1986

BUSUNU ONO, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES
EDGAR A. HALLMAN
SECRETARY TO THE COMMISSION
DIVISIONS:
ADMINISTRATIVE DEVELOPMENT
PLANNING
ACQUISITION
CONSERVATION AND
RECREATION
CONTRACTS
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Mr. Wayne J. Yamasaki, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Yamasaki:

SUBJECT: Your Letter of March 31, 1986 Regarding the
Environmental Impact Statement Preparation Notice
for the Proposed Aiea Bay State Recreation Area

Thank you for your comments concerning the Environmental Impact
Statement Preparation Notice (EISP) for the proposed Aiea Bay
State Recreation Area.

Our responses to your comments are as follows:

Boating

The Proposed Conceptual Master Plan considers requirements
imposed by the U.S. Navy. Significantly, use of Pearl Harbor
waters along the park site is currently not permitted. Boating
may be limited in the future within the proposed "limits of
boating". One of the requirements that must be met before the
U.S. Navy will consider public boating in this area is the
establishment of an enforcement program to assure compliance with
U.S. Navy safety and security restrictions. Should boating
activities be permitted within the context of the Proposed
Conceptual Master Plan, we shall coordinate with the Department
of Transportation to formulate a viable enforcement program.

As currently conceived, small boating activities would be limited
to non-motorized crafts. Equipment rental concessions for this
type of boating is designated as a master plan component beyond
Phase I.

Mr. Wayne J. Yamasaki

Page 2
MAY 9 1986

Highway

The EIS document will include a discussion of the possible
conflict between the proposed project and the Department of
Transportation's proposed busway system. We look forward to
working with you in the development of conceptual and detail
designs to maximize transportation and recreational objectives of
the project area.

A copy of your letter will be appended to the EIS document. If
there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

SUSUMU ONO
Chairperson of the Board

cc: Wilson Okamoto and Associates, Inc.



University of Hawaii at Manoa

Water Resources Research Center
Holmes Hall 253 • 2540 Dole Street
Honolulu, Hawaii 96822

2 April 1986

Mr. Michael Munekiyo
Project Manager
Wilson Okamoto and Associates
1150 South King Street
Honolulu, Hawaii 96814

Dear Mr. Munekiyo:

Subject: Environmental Impact State Preparation Notice for Alea Bay State Recreation Area, March 1986

We have reviewed the subject EISPN and offer the following comments:

1. The EIS needs to address the air quality and lead content at the site inasmuch as it is immediately downwind from the heavy vehicular traffic on Kamehameha Highway as well as the ramp to Moanalua Freeway which passes over the site.
2. Noise levels should similarly be addressed.
3. Pedestrian access safety across Kamehameha Highway from the mauka side, where most of the population resides, needs to be addressed considering the limited parking available particularly at the Ewa end.
4. The potential flooding at the mouth of Alea stream needs to be taken into account in the design and landscaping so that the waters can pass over without damaging anything.

Thank you for the opportunity to comment. This material was reviewed by WRRRC personnel.

Sincerely,
Edwin T. Murabayashi
Edwin T. Murabayashi
EIS Coordinator

ETH:jm

AN EQUAL OPPORTUNITY EMPLOYER

EDWIN T. MURABAYASHI
EIS COORDINATOR
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
1515 ALI'I DRIVE, SUITE 200
HONOLULU, HAWAII 96815



STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 631
HONOLULU, HAWAII 96809

Mr. Edwin T. Murabayashi
EIS Coordinator
Water Resources Research Center
University of Hawaii at Manoa
Holmes Hall 283
2540 Dole Street
Honolulu, Hawaii 96822

Dear Mr. Murabayashi:

Subject: Your Letter of April 2, 1986 Regarding the Environmental Impact Statement Preparation Notice for the Proposed Alea Bay State Recreation Area

Thank you for your comments concerning the Environmental Impact Statement Preparation Notice (EISPN) for the proposed Alea Bay State Recreation Area.

Our responses to your comments are as follows:

1. The EIS document will include a discussion of air quality of the existing environment.
2. The EIS document will include a discussion of the noise levels of the existing environment as well as long term noise impacts.
3. Pedestrian access safety measures are included in the Proposed Conceptual Master Plan. There is an existing pedestrian crosswalk at the signalized intersection of McGrew Loop and Kamehameha Highway which will provide pedestrian access to the Ewa end of the parks from the mauka side of Kamehameha Highway.

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



HONOLULU OFFICE
DEPARTMENT OF GENERAL PLANNING
450 SOUTH KING STREET
HONOLULU, HAWAII 96813

JB/DGP 3/86-7832

March 18, 1986

Wilson Okamoto & Associates
P. O. Box 3530
Honolulu, Hawaii 96811

Attention: Michael Huneakiyo
Gentlemen:

Aiea Bay State Recreation Area
EIS Preparation Notice
Your Letter Dated March 6, 1986

We have the following comments for your consideration.

1. Implementation of the Aiea Bay State Recreation Area project along the East Loch shoreline of Pearl Harbor is consistent with the Development Plan Public Facilities (DP/PP) Map for the Primary Urban Center. The relationship of this proposal to the County's policy reflected in the DP/PP Map, not noted in the Prep Notice, should be indicated in the EIS.
2. Confined within the Special Management Area (SMA), the proposed project will be subject to the provisions and requirements of Ordinance No. 84-4, effective February 10, 1984.

For details on filing of an SMA application, you may contact Robin Foster of the Department of Land Utilization at 527-5027.

Statements regarding the project's compliance to or the steps being taken to bring the proposal into conformity with the SMA ordinance should be mentioned in the EIS.

Wilson Okamoto & Associates
March 18, 1986
Page 2

3. Among several alternatives presently being proposed by the State DOT to address the growing traffic demands in Leeward and Central Oahu is the construction of a tunnel from Salt Lake Boulevard extending to the old OR&L right-of-way makai of Kamehameha Highway. (See Exhibit A.)

The effects of the proposed tunnel on the recreation area project should be discussed in the EIS.

4. The Energy Corridor pipeline, already in place along the central and eastern portion of the project site, will be affected by the development of the Aiea Bay State Recreation Area project. (See Exhibit B.) The converse is also true.

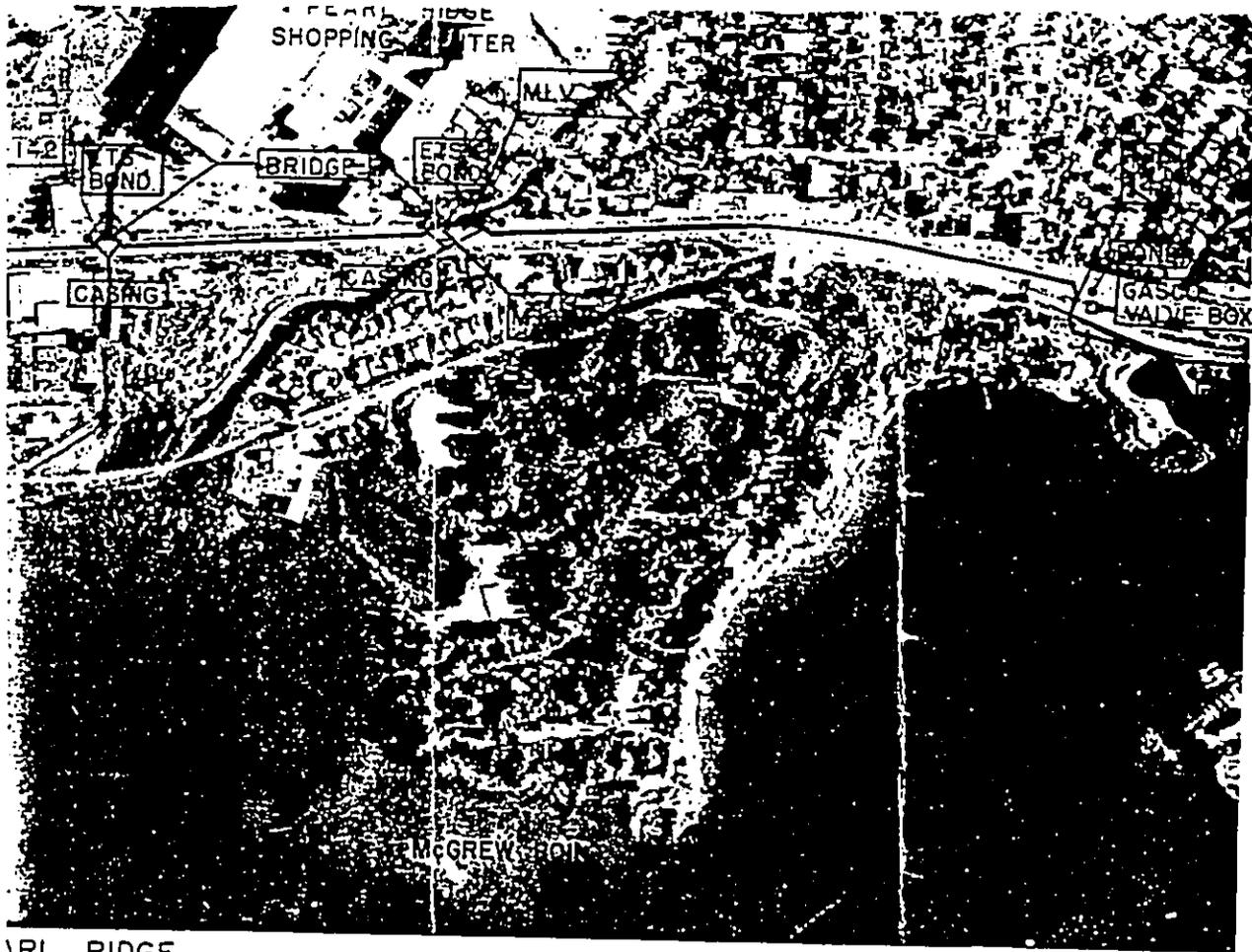
The EIS should describe the impact this will have on the Energy Corridor and vice versa.

5. The section under Existing Land Use (page 11-4) should be expanded to indicate which governmental agency(ies) will be responsible for cleaning up and removing the debris, abandoned piers, submerged pilings, and the remnants of an LST tank along the shoreline and within Aiea Bay.

6. Discussion dealing with "Project Need" should be enlarged to include population data for the Waiala, Waiala district for 1970 & 1980, a list of the existing County parks within this area, and an evaluation as to why this shoreline recreational area is needed.

7. How much will it cost to develop the improvements programmed within the 10-acre site under Phase I and for the entire project site comprising the approximately 29.2 acres of shoreline property? When will the Phase I development begin and how long will the construction period be?

Construction cost figures to implement the Aiea Bay Recreation Area project should be provided.

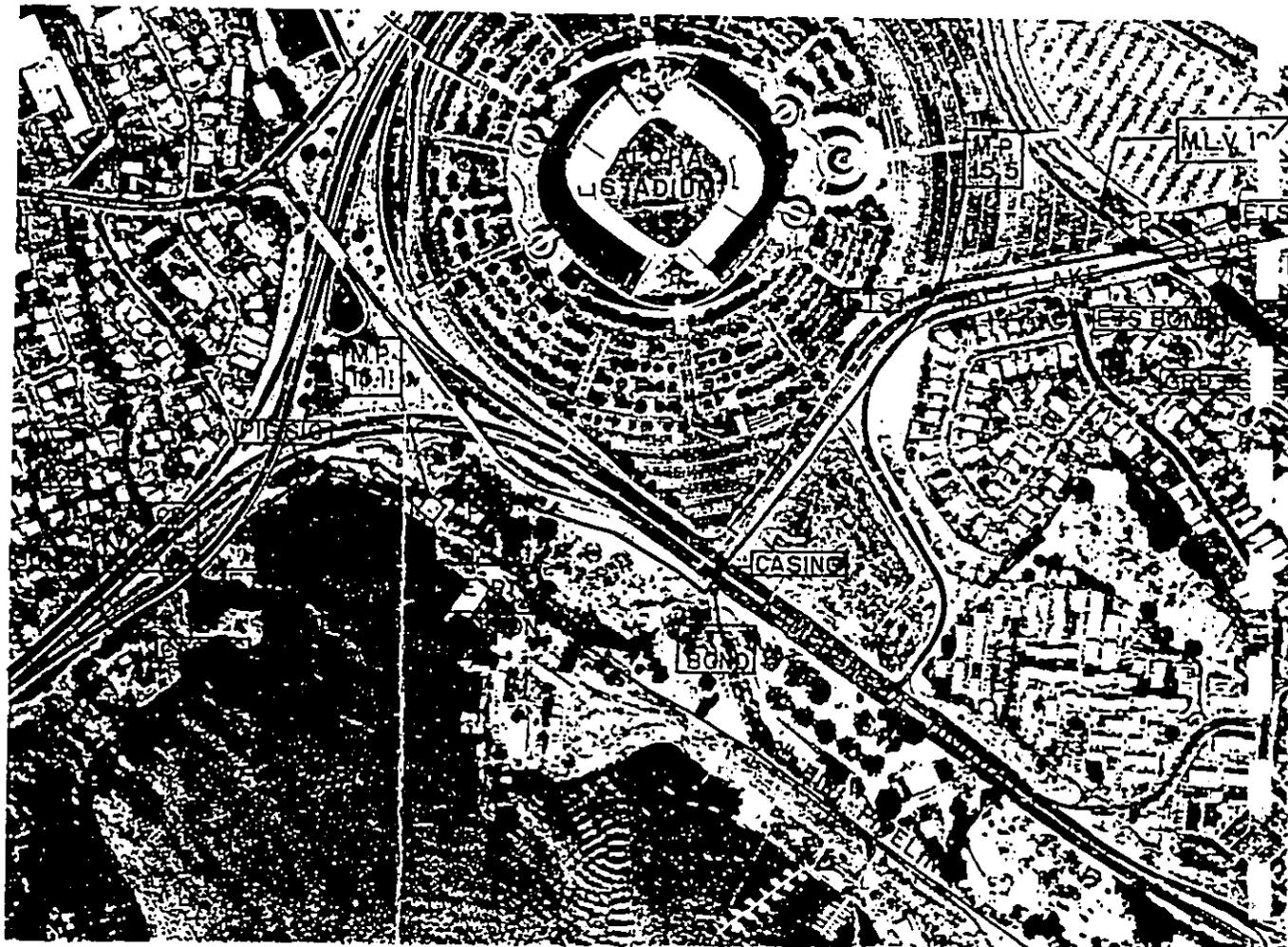


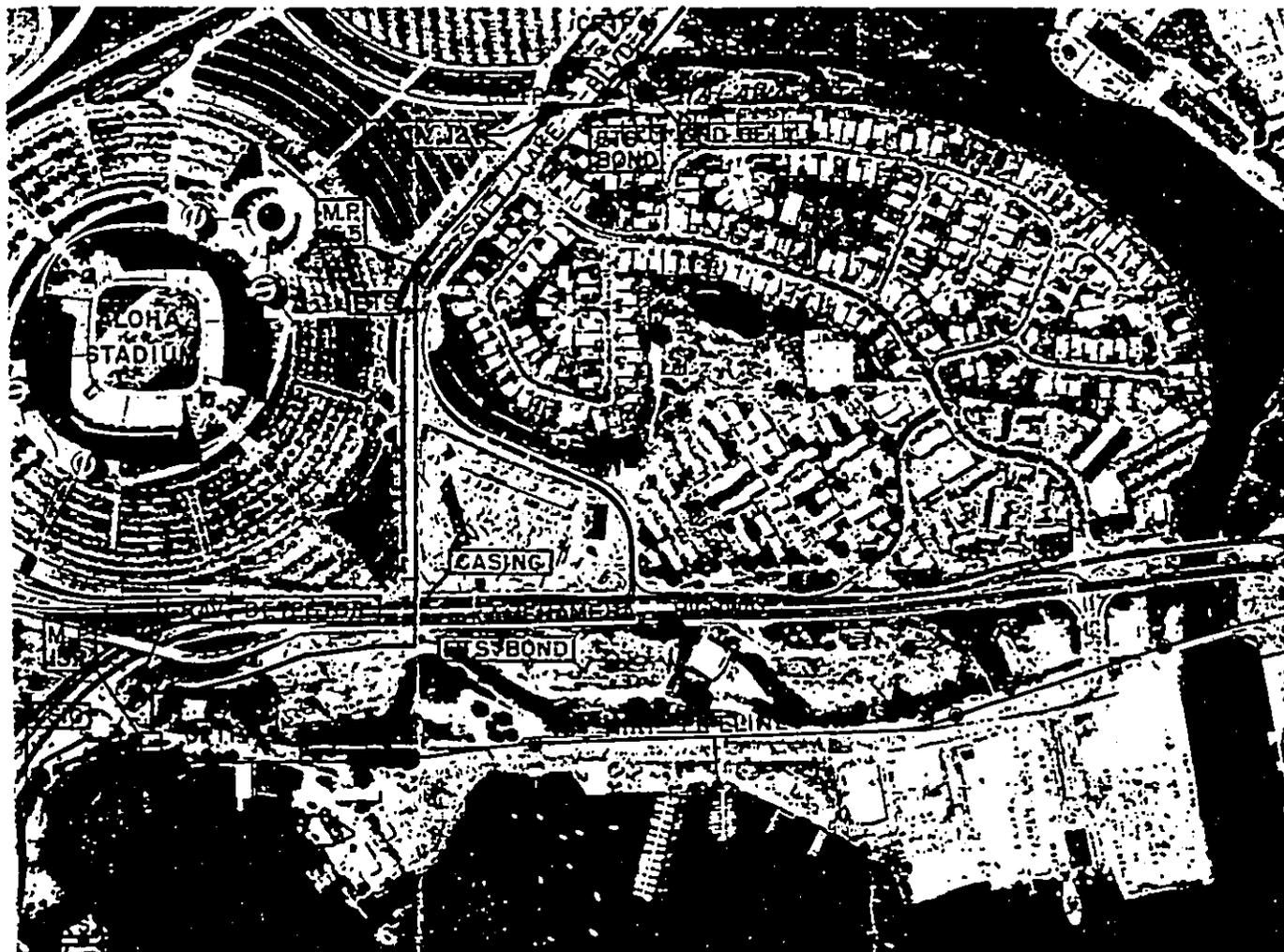
PEARL RIDGE

Exhibit 5

PHOTO DATE: 12/19/76
REVISED: 12/9/81
CONSTRUCTION INDUSTRY USE

11





PROX. SCALE: 1"=400'

PEARL HARBOR AREA

GEORGE R. ANTONIO
DEPARTMENT OF LAND AND NATURAL RESOURCES



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HONOLULU, HAWAII 96809
P. O. BOX 621
JUN - 9 1986

EDWARD C. CHAMBERLAIN
CHIEF OF BUREAU OF LAND AND NATURAL RESOURCES
EDGAR A. MALHEU
SECRETARY TO THE COMMISSIONER
DIVISIONS:
AGRICULTURE DEVELOPMENT
ARCHAEOLOGY
CONSERVATION AND
RECREATION
CONTRACTS
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Mr. Donald A. Clegg
Page 2
JUN - 9 1986

5. The State DLNR will assume the lead in coordinating removal of debris from Alea Bay such as abandoned piers, submerged pilings and tank remnants.

6. The socioeconomic characteristics, including population and available recreational facilities, of the planning area will be discussed in the EIS document. The EIS document will also include a discussion of the need for the proposed shoreline recreational area.

7. The estimated construction cost for Phase I will be incorporated in the EIS. In 1983, the State Legislature appropriated \$450,000 for construction of the Alea Bay State Recreation Area. This amount was supplemented by an additional \$65,000 in 1984, specifically for a comfort station and shower. Construction time for the first increment of Phase I is estimated to be between 3 to 6 months. Phase I development is expected to begin during mid or late 1987.

Mr. Donald A. Clegg
Chief Planning Officer
Department of General Planning
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Clegg:

SUBJECT: Your letter of March 18, 1986 regarding the Environmental Impact Statement Preparation Notice for the Proposed Alea Bay State Recreation Area

Thank you for your comments concerning the Environmental Impact Statement Preparation Notice (EISPN) for the proposed Alea Bay State Recreation Area.

Our responses to your comments are as follows:

1. The EIS document will include a discussion of the proposed project's consistency with the Development Plan Public Facilities Map.
2. The EIS document will include a discussion of the steps needed to bring the proposed project into conformity with the SHA ordinance.
3. The EIS document will include a discussion of the possible conflict between the proposed project and the DOT's proposed busway system. Should this transportation system improvement concept be implemented, detailed design coordination between the State DLNR and DOT will be undertaken to provide for maximum compatibility and public safety.
4. The EIS document will include a discussion of the Navy Utility Corridor located within the project site. Development of the proposed park will consider and respect all easement conditions.

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

SUSUMU ONO
Chairperson of the Board

cc: Wilson Okamoto and Associates, Inc.

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



FRANK F. PAH
Director

RUSSELL L. SMITH, JR.
Director and Chief Engineer

ENV 86-62

March 17, 1986

Mr. Michael Munekiyo
Project Manager
Wilson, Okamoto & Associates
P. O. Box 3530
Honolulu, Hawaii 96811

Dear Mr. Munekiyo:

Re: EISPN for Alea Bay Recreation Area

We are responding to your letter dated March 6, 1986 (2511-01) regarding the subject project. Our comments are as follows:

1. The proposed project will include at least two comfort stations. It is not stated whether these stations will be connected to the municipal sewers.
2. A drainage report should be submitted to the Drainage Section, Division of Engineering, when construction plans are prepared.
3. Will the existing bike path through the recreation area be maintained by the State.

Very truly yours,

RUSSELL L. SMITH, JR.
Director and Chief Engineer

SALVATORE G. CHAMBERS
Mayor of Honolulu



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 831
HONOLULU, HAWAII 96808

Mr. Russell L. Smith, Jr., Director
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Smith:

SUBJECT: Your Letter of March 17, 1986 Regarding the Environmental Impact Statement Preparation Notice for the Proposed Alea Bay State Recreation Area

Thank you for your comments concerning the Environmental Impact Statement Preparation Notice (EISPN) for the proposed Alea Bay State Recreation Area.

Our responses to your comments are as follows:

1. Connection of the comfort station(s) for the proposed project to the municipal sewer system is desired. Prior to design of the comfort station (S) a sewer connection application will be submitted to the Department of Public Works, Division of Wastewater Management.
2. A drainage report will be submitted to the Drainage Section, Division of Engineering.
3. Park development is not anticipated to affect the easement agreement between the City and County of Honolulu and the U.S. Navy. However, since significant enhancement of the bikeway is anticipated as a result of park development, we hope to work closely with the City and County of Honolulu in defining a cooperative maintenance program which will be of mutual benefit.

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU
HONOLULU MUNICIPAL BUILDING
650 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK P. FABI
DIRECTOR

JOHN E. HIRTEN
DIRECTOR

JOSEPH M. MACALUSO, JR.
DEPUTY DIRECTOR

TE-1181
PL1.0240

March 12, 1986

Wilson Okamoto & Associates, Inc.
P. O. Box 3530
Honolulu, Hawaii 96811

Gentlemen:

Subject: Aiea Bay State Recreation Area Environmental
Impact Statement Preparation Notice

This is in response to your letter of March 6, 1986 regarding
your EIS Preparation Notice for the above project.

The EIS should address the traffic impact of the project. The
traffic impact assessment should address the following concerns:

1. The amount of vehicular traffic to be generated by the project and its impact on the surrounding streets. A capacity analysis for the critical intersections servicing the project is needed for the a.m. and p.m. peak hours.
2. The adequacy of the off-street parking spaces that will be provided to support the proposed use.
3. The need for street improvements on the surrounding streets to support the proposed use.

If there are any questions, please contact Kenneth Hirata of my staff at 527-5009.

Sincerely,

Mr. JOHN E. HIRTEN

GEORGE S. ANTONIO
DEPUTY DIRECTOR



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 631
HONOLULU, HAWAII 96808
JUN 9 1986

DEBORAH CHOI, CHAIRPERSON
BOARD OF LAND & NATURAL RESOURCES
GEORGE S. ANTONIO
DEPUTY TO THE CHAIRPERSON
DIVISIONS:
ARCHAEOLOGICAL DEVELOPMENT
PLANNING
PUBLIC RELATIONS
RECREATION
RESOURCES MANAGEMENT
CONSERVATION
FORESTRY AND WILDLIFE
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Mr. John E. Hirten, Director
Department of Transportation Services
City and County Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Hirten:

SUBJECT: Your Letter of March 12, 1986 Regarding the
Environmental Impact Statement Preparation Notice
for the Proposed Aiea Bay State Recreation Area

Thank you for your comments concerning the Environmental Impact
Statement Preparation Notice (EISP) for the proposed Aiea Bay
State Recreation Area.

The EIS document will include a discussion of long-term traffic
impacts of the proposed project. The increase in traffic due to
park use is not anticipated to adversely affect operational
conditions at the McGrew Loop-Kamehameha Highway signalized
intersection or the CINPACFLT Boathouse Access Road -
Kamehameha Highway intersection, particularly since peak usage of
the park will not coincide with a.m. and p.m. peaks on Kamehameha
Highway. Sight distances for vehicles exiting CINPACFLT
Boathouse Access Road were determined to be adequate. Storage
for vehicles turning left from Kamehameha Highway was deemed
sufficient.

An adequate number of parking spaces will be provided to support
the proposed use. Initial programming and development is limited
to the Phase I area. In the event subsequent phases are
developed, parking areas will be provided for these phases. As
phases are developed, specific parking requirements can be
defined based on on-going monitoring of public usage.

Mr. John E. Hirten
Page 2

5/1/83

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,



SUSUMU OHNO
Chairperson of the Board

cc: Wilson Okamoto and Associates, Inc.



- HOWARD H. WONG
- DUNE I. KAWASAKI
- JOSEPH I. KUROKI
- GEORGE T. MURAO
- STEVE COBB
- NORMAN MIZUGUCHI
- PAUL A. POLSO
- HOWARD HENDERSON
- W. BLOOMER
- FRED DISTRICT
- SECOND DISTRICT
- THIRD DISTRICT
- FOURTH DISTRICT
- FIFTH DISTRICT
- SIXTH DISTRICT
- SEVENTH DISTRICT
- EIGHTH DISTRICT
- NINTH DISTRICT
- TENTH DISTRICT
- ELEVENTH DISTRICT
- TWELFTH DISTRICT
- THIRTEENTH DISTRICT
- FOURTEENTH DISTRICT
- FIFTEENTH DISTRICT
- SIXTEENTH DISTRICT
- SEVENTEENTH DISTRICT
- EIGHTEENTH DISTRICT
- NINETEENTH DISTRICT
- TWENTIETH DISTRICT
- TWENTY-FIRST DISTRICT
- SEVENTEENTH DISTRICT
- STATE OFFICE

The Senate
of the
State of Hawaii

STATE CAPITOL
HONOLULU, HAWAII 96813

March 7, 1986



GEORGE R. JARVIS
Secretary of State

DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 521
HONOLULU, HAWAII 96809



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 521
HONOLULU, HAWAII 96809

JUL 9 1986

Senator Norman Mizuguchi
State Senate
State Capitol
Honolulu, Hawaii 96813
Dear Senator Mizuguchi:

SUBJECT: Your Letter of March 7, 1986 Regarding the Environmental Impact Statement Preparation Notice for the Proposed Alea Bay State Recreation Area

I have received the report prepared by your office entitled, Environmental Impact Statement Preparation Notice for Alea Bay State Recreation Area.

Thank you for placing the Hawaii Veteran's Hall structure on the Proposed Conceptual Masterplan and including it as one of the key features in the Park Development East of Alea Stream. Your support in this regard helps promote the concept and realization of the Hawaii Veteran's Hall.

Hopefully, the final development of the Alea Bay State Recreation Area in its entirety is quickly forthcoming.

Sincerely,
Norman Mizuguchi
NORMAN MIZUGUCHI
State Senator

Thank you for your comments concerning the Environmental Impact Statement Preparation Notice (EISP) for the proposed Alea Bay State Recreation Area.

We look forward to working with you in integrating the Hawaii Veteran's Hall concept with the development of the Alea Bay State Recreation Area.

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,
Susumu Ono
SUSUMU ONO
Chairperson of the Board

cc: Wilson Okamoto and Associates, Inc.

CHAPTER XIV

COMMENTS AND RESPONSES TO THE CONCEPTUAL MASTER PLAN AND DRAFT EIS

XIV. COMMENTS AND RESPONSES TO THE CONCEPTUAL MASTER PLAN AND DRAFT EIS

The following agencies and organizations provided comments on the Conceptual Master Plan and Draft EIS. A total of 31 comment letters were received.

A double asterisk (**) indicates those which submitted written comments requiring substantive responses. The comment and response letters are reproduced in this section.

A single asterisk (*) indicates those which submitted written comments not requiring substantive responses.

A triple asterisk (***) indicates those which submitted written comments after the comment period. Concerns expressed will, however, be addressed during subsequent phases of project development.

A. FEDERAL AGENCIES

- **1. U.S. Army Corps of Engineers
- *2. U.S. Department of Agriculture, Soil Conservation Service
- *3. U.S. Department of Defense, Department of the Navy, Commander, Naval Base Pearl Harbor
- *4. U.S. Department of the Interior, Fish and Wildlife Service
- *5. U.S. Department of the Interior, National Park Service
- **6. U.S. Department of Transportation, United States Coast Guard, Commander, Fourteenth Coast Guard District

B. STATE AGENCIES

- *1. Department of Accounting and General Services
- **2. Department of Agriculture
- *3. Department of Defense
- **4. Department of Health
- **5. Department of Land and Natural Resources, Division of Forestry and Wildlife
- **6. Department of Land and Natural Resources, Division of Land Management

- **7. Department of Land and Natural Resources, Division of Water and Land Development
 - *8. Department of Planning and Economic Development
 - ***9. Department of Transportation
 - **10. Department of Transportation, Harbors Division
 - *11. Hawaii Housing Authority
 - **12. University of Hawaii, Environmental Center
 - *13. University of Hawaii, Water Resources Research Center
- C. CITY AND COUNTY OF HONOLULU AGENCIES
- **1. Board of Water Supply
 - *2. Building Department
 - **3. Department of General Planning
 - **4. Department of Housing and Community Development
 - *5. Department of Land Utilization
 - **6. Department of Public Works
 - *7. Department of Transportation Services
 - *8. Fire Department
 - *9. Police Department
- D. UTILITY COMPANY
- ***1. Hawaiian Electric Company, Inc.
- E. ORGANIZATIONS
- **1. Na Opio Canoe Clubs Association
 - **2. The Outdoor Circle



DEPARTMENT OF THE ARMY
 U. S. ARMY ENGINEER DISTRICT, HONOLULU DIVISION OF STATE PARKS
 BUILDING 220
 FT. SHAFTER, HAWAII 96848-5460
 July 2, 1986
 Jul 9 11 01 AM '86

REPLY TO ATTENTION OF:

TO: ASST. DIR. CHIEF OF STAFF
 DIST. DIR. CHIEF OF ENGINEERING
 DIST. DIR. CHIEF OF CONSTRUCTION
 DIST. DIR. CHIEF OF OPERATIONS
 DIST. DIR. CHIEF OF PLANNING
 DIST. DIR. CHIEF OF RESEARCH & DEVELOPMENT
 DIST. DIR. CHIEF OF SPECIAL STUDIES
 DIST. DIR. CHIEF OF UTILITIES

FROM: CHIEF OF ENGINEERING
 CHIEF OF CONSTRUCTION
 CHIEF OF OPERATIONS
 CHIEF OF PLANNING
 CHIEF OF RESEARCH & DEVELOPMENT
 CHIEF OF SPECIAL STUDIES
 CHIEF OF UTILITIES

Mr. Dan Quinn
 Department of Land and Natural Resources
 State of Hawaii
 P. O. Box 621
 Honolulu, Hawaii 96809

Dear Mr. Quinn:

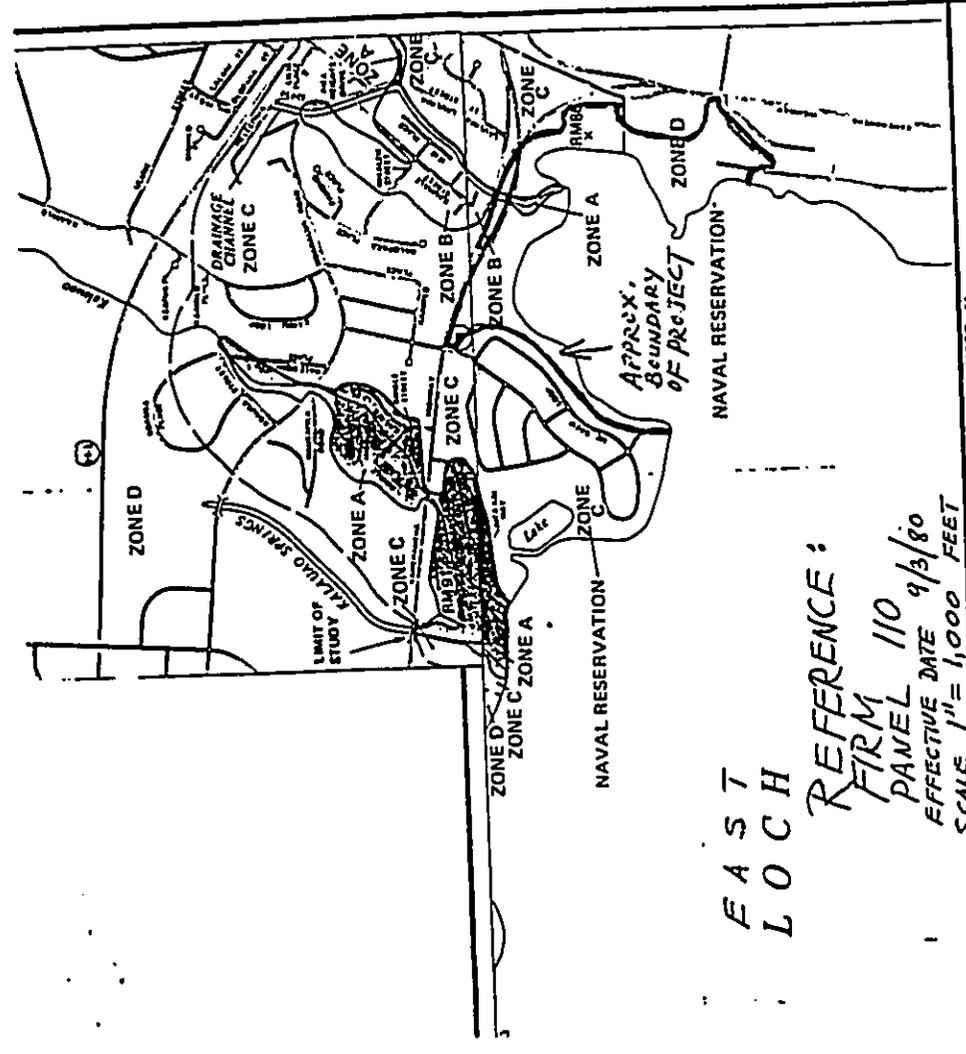
Thank you for the opportunity to review and comment on the EIS for Aiea Bay State Recreation Area, Aiea, Oahu. The following comments are offered:

- a. A Department of the Army permit would be required if any element of the proposed park (e.g. revetment, boat facilities, footbridges, etc.) would involve construction, excavation or deposition of materials in, over, or under waters of the U.S. Suggest submittal of detailed plans to Operations Branch for permit determination when available (telephone: 438-9258).
- b. According to Flood Insurance Study for the City and County of Honolulu by the Federal Insurance Administration, the majority of the proposed project area is in Zone C, an area of minimal flooding. The Flood Insurance Rate Map (FIRM), enclosed, outlines the approximate boundaries of the project site. A portion of the project area south of the CINCPACFLT boathouse is in Zone D, an area of undetermined, but possible, flood hazards. A small area below Kamehameha Highway is in Zone A, an area within the 100-year flood but base flood elevations and flood hazard factors have not been determined.

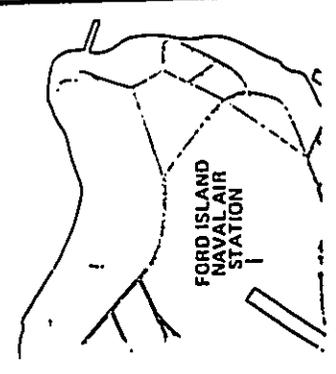
Sincerely,

Alauk Cheung
 Alauk Cheung
 Chief, Engineering Division

Enclosure



EAST LOCH
 REFERENCE:
 FIRM PANEL 110
 EFFECTIVE DATE 9/3/80
 SCALE 1" = 1,000 FEET



Enclosure 1

GEORGE E. KATZDORF
Secretary for Public



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF STATE PARKS
P. O. BOX 811
HONOLULU, HAWAII 96809

SUSUKU ONO, CHAIRMAN
Board for Land & Natural Resources

EDGAR A. MUMFORD
Secretary to the Chairman

DIVISIONS:
AGRICULTURAL DEVELOPMENT
CIVIL ENGINEERING
COASTAL RESOURCES
CONSERVATION AND
RECREATION
CORRECTIONS
FOREST AND WILDLIFE
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

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

Dear Mr. Cheung:

Subject: Your Letter of July 2, 1986 Regarding the Draft
Environmental Impact Statement for the Proposed
Aiea Bay State Recreation Area

Thank you for your comments concerning the Draft Environmental
Impact Statement (EIS) for the proposed Aiea Bay State Recreation
Area.

Detailed plans of the proposed project will be submitted to the
Operations Branch for permit determination when available.

Flood hazard designations for the project site are identified in
the EIS document.

A copy of your letter will be appended to the EIS document. If
there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

Susuku Ono
SUSUKU ONO
Chairperson of the Board

cc: Wilson Okamoto & Associates, Inc.

US Department
of Transportation
United States
Coast Guard



Commander
Fourteenth Coast Guard District

Prince Kahanui
Federal Building
300 Ala Moana Blvd.
Honolulu, Hawaii 96850
Phone: (808) 546-2861

GEORGE A. JAYBERMAN
Chairman of the Board



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 821
HONOLULU, HAWAII 96850

SUSUOHU OHO, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES
EDGAR A. HANAU
MEMBER OF THE BOARD
DEPARTMENT OF LAND & NATURAL RESOURCES
P. O. BOX 821
HONOLULU, HAWAII 96850

Ms. Letitia N. Uyehara, Director,
Office of Environmental Quality Control
465 South King Street, Room 104,
Honolulu, HI 96813

Re: Aiea Bay State Recreation Area EIS

Dear Ms. Uyehara:

The subject document reflects a well developed project and a fine addition to Oahu's parklands.

The issues appear to be developed in depth, with the exception of the long-term impacts section (VI-B). It is mentioned here that some of the existing vegetation will be removed, including mangroves and other wetland species, but there is no discussion as to what effects this will have on the water quality and estuarine fauna of the Aiea Bay area. This should be covered in the final Environmental Impact Statement.

Thank you for the opportunity to comment on this document.

Sincerely,

Jay Silberman
Environmental Protection Specialist
District Planning Office
By direction of Commander,
Fourteenth Coast Guard District

cc: Department of Land and Natural Resources
Wilson Okamoto and Associates

Mr. Jay Silberman
Environmental Protection Specialist
District Planning Office
U.S. Department of Transportation
United States Coast Guard
Commander, Fourteenth Coast Guard District
300 Ala Moana Blvd.
Honolulu, Hawaii 96850

Dear Mr. Silberman:

Subject: Your letter of June 25, 1986 Regarding the Draft
Environmental Impact Statement for the Proposed
Aiea Bay State Recreation Area

Thank you for your comments concerning the Draft Environmental Impact Statement (EIS) for the proposed Aiea Bay State Recreation Area.

Existing vegetation removed for park development will be replaced with appropriate landscaping which will prevent erosion along the shoreline. Therefore, no negative long-term water quality impacts are anticipated. Additionally, estuarine fauna is not anticipated to be adversely impacted by park development.

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

SUSUOHU OHO
Chairperson of the Board

cc: Wilson Okamoto & Associates, Inc.

GEORGE R. ABIYOSHI
GOVERNOR



JACK K. SUWA
CHAIRMAN, BOARD OF AGRICULTURE
SUZANNE D. PETERSON
DEPUTY TO THE CHAIRMAN

GEORGE R. ABIYOSHI
GOVERNOR



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 So. King Street
Honolulu, Hawaii 96814

Mailing Address:
P. O. Box 22159
Honolulu, Hawaii 96822

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 631
HONOLULU, HAWAII 96808

SUSUMU OKO, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES
EDGAR A. HAMAHA
DEPUTY TO THE CHAIRMAN
DIVISIONS:
AGRICULTURE DEVELOPMENT
PROGRAM
AGRICULTURAL RESEARCH
CONSERVATION AND PROGRESS
CONSERVATION
FORESTRY AND WILDLIFE
STATE PARKS
WATER AND LAND DEVELOPMENT

June 26, 1986

MEMORANDUM

To: Ms. Letitia N. Uyebara, Director
Office of Environmental Quality Control

Subject: Draft Environmental Impact Statement (DEIS) for
Aiea Bay State Recreation Area
Department of Land and Natural Resources
THK: 9-8-19: 2, 3, 6
9-9-03: 29, 30, 32, 35, 38
9-9-04: 1, 2, 3, 4, 6, 24
9-9-12: 4, 5, 10, 11, 46, 47
Aiea, Oahu
Area: 29.162 Acres

The Department of Agriculture has reviewed the subject DEIS and offers the following comments.

According to the proposed development plan as submitted, the entire project is located on the shoreline of East Loch in Pearl Harbor. The site has been previously developed for various uses and is now mostly abandoned and vacant land. Much of the site is overgrown with brush, or is cleared and utilized by the State of Hawaii as an "interim park".

We do not foresee any negative impacts on agriculture or the plans, programs and activities of the Department of Agriculture should the proposed project be approved and constructed.

Thank you for the opportunity to comment.

Jack K. Suwa
JACK K. SUWA
Department of Agriculture

cc: Mr. Dan Quinn, DLNR
Mr. Michael Muneakiyo, Wilson Okamoto and Associates ✓

Mr. Jack K. Suwa, Chairman
Board of Agriculture
State of Hawaii
1428 South King Street
Honolulu, HI 96814

Dear Mr. Suwa:

Subject: Your Letter of June 26, 1986 Regarding the Draft Environmental Impact Statement for the Proposed Aiea Bay State Recreation Area

Thank you for your comments concerning the Draft Environmental Impact Statement (EIS) for the proposed Aiea Bay State Recreation Area.

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

Susumu Oko
SUSUMU OKO
Chairperson of the Board

cc: Wilson Okamoto & Associates, Inc.

"Supply Quality Water Products"

STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 DIVISION OF FORESTRY AND WILDLIFE
 1111 KAUHAUOUE STREET
 HONOLULU, HAWAII 96813



STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 DIVISION OF STATE PARKS
 P. O. BOX 511
 HONOLULU, HAWAII 96809

SEP 5 1986

GEORGE B. ANTOSH
 DEPT. CHIEF OF PARKS

STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 DIVISION OF FORESTRY AND WILDLIFE
 1111 KAUHAUOUE STREET
 HONOLULU, HAWAII 96813

STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 DIVISION OF STATE PARKS
 JUL 2 11 03 AM '86

STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 DIVISION OF FORESTRY AND WILDLIFE
 1111 KAUHAUOUE STREET
 HONOLULU, HAWAII 96813
 June 27, 1986

24400

MEMORANDUM

To: Ralston H. Nagata, Administrator
 State Parks, Outdoor Recreation & Historic Sites Div.

Through: Libert K. Landgraf, Administrator

From: Herbert H. Kikukawa, Oahu Forestry Manager

Subject: Aiea Bay State Recreation Area Conceptual Master Plan and Draft Environmental Impact Statement

This document does not address emergencies that might warrant the services of the Honolulu Fire Department and the Honolulu Police Department. These two agencies should be consulted.

Herbert H. Kikukawa
 HERBERT H. KIKUKAWA

TO: ADM. ASST. AGENCY
 DEPT. CHIEF
 PLAN. DIV.
 RES. MGT. BR.
 PROT. CONTROL
 SW. REC. PLAN.
 CLERICAL STAFF
 HIST. SITES SEC.

FOR: CIRC.
 COMMENTS & REC.
 DRAFT REPLY
 FILE
 FOLLOW UP
 INFO
 SEE ME
 SIGNATURE

MEMORANDUM

TO: Division of Forestry and Wildlife

FROM: Division of State Parks, Outdoor Recreation and Historic Sites

SUBJECT: Your Memorandum of June 27, 1986 Regarding the Aiea Bay State Recreation Area Conceptual Master Plan and Draft Environmental Impact Statement

Thank you for your comments concerning the proposed project. The Honolulu Fire Department and Police Department are consulted parties for the EIS document and will be added to the list of County agencies consulted. A copy of your memorandum will be appended to the EIS document.

RALSTON H. HAGATA
 State Parks Administrator



RECEIVED
 DIVISION OF LAND AND NATURAL RESOURCES
 JUN 24 3 00 PM '86
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 DIVISION OF STATE PARKS
 P. O. BOX 811
 HONOLULU, HAWAII 96808
 JUN 26 9 30 AM '86
 DIVISION OF LAND AND NATURAL RESOURCES
 DIVISION OF STATE PARKS
 P. O. BOX 811
 HONOLULU, HAWAII 96808

TABLE 2

ALIEA BAY LANDOWNERSHIP

PARCEL NO.	TAX MAP KEY NO.	AREA	OWNERSHIP
1	9-8-19:6 (por)	1.727 (1.0)	USA
2	9-8-10:2-9-8-19:2 (por)	2.597	State
3	9-8-19:3 (por)	48.525 (3.5)	USA
4	9-9-04:4	1.735	State
5	9-9-04:3	.195	State
6	9-9-04:6	1.278	USA
7	9-9-04:2	1.626	USA
8	9-9-04:1	.179	USA
9	9-9-04:24	.899	State
10	9-9-12:10	1.135	USA
11	9-9-12:4	.724	USA
12	9-9-12:46	.315	State (leased)
13	9-9-12:5	.204	State
14	9-9-12:47	.275	State (leased)
15	9-9-12:11	.14	USA
16	9-9-03:35	.844	State
17	9-9-03:38	.307	USA
18	9-9-03:32	5.209	USA
19	9-9-03:30 (por)	5.249 (2.0)	USA
20	9-9-03:29 (por)	25.575 (5.0)	USA

MEMORANDUM

TO: Aquatic Resources, DOCARE, DOPAW, DONALD, (Land Management, OCEA)

FROM: Division of State Parks, Outdoor Recreation and Historic Sites

SUBJECT: Aiea Bay State Recreation Area Conceptual Master Plan and Draft Environmental Impact Statement

Attached is a copy of the Conceptual Master Plan and Draft EIS for Aiea Bay State Recreation Area. Please review and make comments with respect to your programs and areas of responsibility.

[Signature]
RALSTON H. HAGATA

Encl.

TO: Division of State Parks, Outdoor Recreation and Historic Sites

Please Correct

Page IV-7 (Table 2 Aiea Bay Landownership)

Parcel 2 is listed as Tax Map Key No. 9-8-10:2

It should be 9-8-19:2 (see attachment)

Please correct accordingly.

[Signature]
JAMES J. DETOR

June 26, 1986



STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 DIVISION OF STATE PARKS
 P. O. BOX 511
 HONOLULU, HAWAII 96809

SUPPLY DIV. CHAIRMAN
 Camp of Land & Natural Resources
 EDGAR A. MULLER
 DEPUTY TO THE CHAIRMAN
 DIVISIONS:
 LAND DEVELOPMENT
 RECREATION
 AQUATIC RESOURCES
 CONSERVATION AND
 RESTORATION
 PLANT AND ANIMAL
 CONSERVATION
 LAND MANAGEMENT
 STATE PARKS
 TRAILS AND LAND DEVELOPMENT

SEP 5 1986

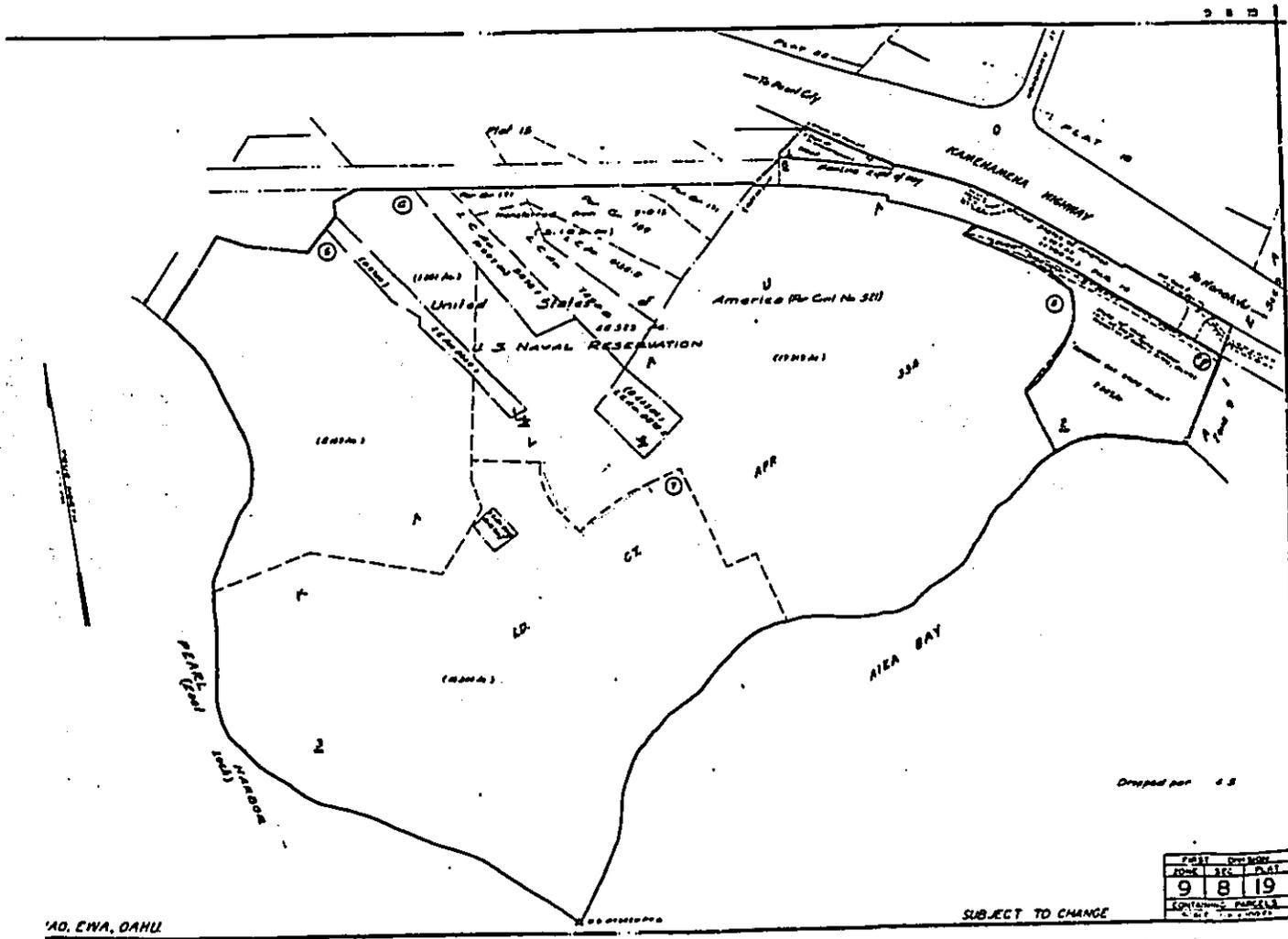
GEORGE R. ARVIDSON
 DEPUTY TO THE CHAIRMAN

MEMORANDUM

TO: Division of Land Management
FROM: Division of State Parks, Outdoor Recreation
 Historic Sites
SUBJECT: Your Memorandum of June 26, 1986 Regarding the
 Aiea Bay State Recreation Area Conceptual Master
 Plan and Draft Environmental Impact Statement

Thank you for your comments concerning the proposed project.
 Table 2, "Aiea Bay Landownership", will be corrected to identify
 Parcel 2 as Tax Map Key No. 9-8-19:2.
 A copy of your memorandum will be appended to the EIS document.

ERLSTON H. NAGATA
 State Parks Administrator



GEORGE R. ANTONIO
DIRECTOR



DIVISION OF
STATE PARKS
JUL 19 12 AM '86

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER AND LAND DEVELOPMENT

P. O. BOX 373
HONOLULU, HAWAII 96809

SUBMIT TO: DIRECTOR, DIVISION OF WATER AND LAND DEVELOPMENT
FROM: MR. TAGOMORI
SUBJECT: ALEA BAY STATE RECREATION AREA CONCEPTUAL MASTER PLAN AND DRAFT EIS

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July 3, 1986

MEMORANDUM

TO: Mr. Ralston Nagata, State Parks
FROM: Manabu Tagomori, DONALD
SUBJECT: Alea Bay State Recreation Area Conceptual
Master Plan and Draft EIS

Thank you for the opportunity to review the conceptual master plan and draft EIS for the proposed Alea Bay State Recreation Area. We offer the following comments for consideration.

Potable and Non-Potable Water Supply. Potable water is to be supplied from the Board of Water Supply system. Confirmation of water availability will be made at the Building Permit stage. Non-potable water is to be obtained from the county's Kalauso Springs non-potable water system (pg. 11-2).

The project site is located in the Pearl Harbor Ground Water Control Area, as designated by the Department of Land and Natural Resources under Chapter 177, HRS, and administered under the Department's Administrative Rules Chapter 166 of Title 13. As such, permits from DLNR are required if the project calls for development of ground water within the Pearl Harbor Ground Water Control Area.

Erosion and Sediment Control. Grading operations for park development are expected to temporarily degrade nearshore water quality (pg. VI-3). We encourage and support the project proposals to consider measures such as temporary berms, cut-off ditches and silt basins. Every effort should be made to control sediment and turbidity. We suggest that grading be done only during the drier summer months. It may be useful to reserve shoreline work such as mangrove removal until muku arens are grassed and landscaped.

Flood Control. As noted on pg. IV-10, portions of the project lie within areas of minimal flooding (Zone C), and areas of undetermined but possible flood hazard (Zone D). A small portion of the site along the Area Stream lies within the 100-Year Flood boundary.

Memo to Mr. Ralston Nagata

-2-

July 3, 1986

Instream Use Protection. Hawaii's Instream Use Protection Act applies only to Windward Oahu streams; however, protection of instream uses, including maintenance and enhancement of stream fauna habitat, is always of concern. Where possible removal of debris, aluminum cans and trash litter from the stream estuary should be undertaken. Some consideration should be given to maintaining most of the mangroves and other riparian vegetation to provide shelter for stream fauna.

MANABU TAGOMORI

SS:ko

GEORGE A. ANTONIO
Specialist in Planning



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF STATE PARKS
P. O. BOX 511
HONOLULU, HAWAII 96809

SUZUKU ONO, CHAIRMAN
Board of Land & Natural Resources

EDGAR A. MAALUU
OFFICE OF THE COMMISSIONER

DIVISIONS:
Administration of Wetlands
Administration of State Parks
Administration of State Forests
Administration of State Lands
Administration of State Waters
Administration of State Minerals
Administration of State Cultural Resources
Administration of State Historic Sites
Administration of State Monuments
Administration of State Reserves
Administration of State Trust Lands
Administration of State Public Lands
Administration of State Private Lands
Administration of State Fee Lands
Administration of State Lease Lands
Administration of State Conveyance Lands
Administration of State Encroachment
Administration of State Eminent Domain
Administration of State Right-of-Way
Administration of State Utility
Administration of State Water
Administration of State Land Use Development

SEP 5 1986

MEMORANDUM

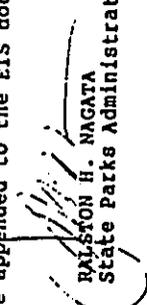
TO: Division of Water and Land Development
FROM: Division of State Parks, Outdoor Recreation and Historic Sites
SUBJECT: Your Memorandum of July 3, 1986 Regarding the Aiea Bay State Recreation Area Conceptual Master Plan and Draft Environmental Impact Statement

Thank you for your comments concerning the proposed project. Groundwater development is not anticipated for the project.

Development of the Phase I construction schedule will consider seasonal advantages to construction. Where practical, scheduling of grassing and landscaping will be coordinated with the removal of mangrove.

Ultimate park development will include removal of debris and trash from the Aiea Stream estuary.

A copy of your memorandum will be appended to the EIS document.


RALPH H. NAGATA
State Parks Administrator

GEORGE S. ARYOSH
Contractor



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
160 PEACOCK STREET
FOURTH FLOOR, SUITE 400

August 1, 1986

Ms. Letitia Uyehara, Director
Office of Environmental Quality Control
465 South King Street, Room 115
Honolulu, Hawaii 96813

Dear Ms. Uyehara:

DEIS - Aiea Bay State Recreation Area
Aiea, Oahu

From past experience, we have learned that lengthy delays can occur when a park is located near a future transportation facility. Although the DEIS recognizes highway projects may conflict with the proposed recreation area, we feel it is insufficient to insure both projects can be developed.

We note that the conceptual master plan lacks a transit corridor (as shown on the City's Development Plan (DP) Public Facilities map) or the DOR's proposed busway route. Therefore, DLNR's offer to work with us to develop "...conceptual and detail designs to maximize transportation and recreational objectives," also does not appear to provide the necessary assurance that both projects will be accommodated. To date, Ewa developers have agreed to a 40-foot setback on each side of the old O, R and L right-of-way for the busway route. In the event the busway does not materialize, the right-of-way could be used for the City's rapid transit system. Without this transit corridor, the only alternative would be to use H-1 freeway lanes, an alternative which we strongly oppose. We would like to stress that, unless a transit corridor is provided along the alignment indicated on the City's DP Public Facilities map, it will be extremely difficult to find another route to service future developments in Ewa.

We would like to inform DLNR that the construction of a tunnel is dependent on the City's alignment of their rapid transit system. Any busway constructed by DOT would probably

WAYNE J. YAMASAKI
DIRECTOR

DEPUTY DIRECTORS
JOHN W. SAKAGUCHI, P.E.
WALTER M. HO
C-ERL D. SOON
ADAM D. VINCENT

MANAGER/ASST TO

STP 8.1488

Ms. Letitia Uyehara
Page 2

STP 8.1488

terminate at Halawa where it would connect to the City's transit terminal, wherever it may be located.

Thank you for this opportunity to provide comments.

Very truly yours,

Wayne J. Yamasaki
Director of Transportation

SUSUMU ONO, CHAIRPERSON
 BOARD OF LAND & NATURAL RESOURCES
 1000 KALANIAN'OLUHANA DRIVE
 HONOLULU, HAWAII 96813
 DIVISIONS:
 LAND DEVELOPMENT
 AGRICULTURE
 CONSERVATION AND
 RECREATION
 CONSTRUCTION
 PLANNING AND DESIGN
 LAND ACQUISITION
 STATE LANDS
 TRUST AND LAND DEVELOPMENT

STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 DIVISION OF STATE PARKS
 P. O. BOX 511
 HONOLULU, HAWAII 96809

GEORGE B. LANTIERO
 DEPARTMENT OF PARKS

WAYNE J. PANASART
 DIRECTOR
 DEPARTMENT OF TRANSPORTATION
 HARBORS DIVISION
 750 SOUTH KING STREET
 HONOLULU, HAWAII 96813

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HARBORS DIVISION
 750 SOUTH KING STREET
 HONOLULU, HAWAII 96813

GEORGE B. LANTIERO
 DEPARTMENT OF PARKS

SEP 9 1986

HAR-B 281

July 24, 1986

MEMORANDUM

TO: Ms. Letitia Uyehara, Director
 Office of Environmental Quality Control
FROM: D. E. Parsons, State Boating Manager
 Harbors Division, Department of Transportation
SUBJECT: CONCEPTUAL MASTER PLAN AND DRAFT ENVIRONMENTAL
 IMPACT STATEMENT (DEIS) FOR THE AIEA BAY STATE
 RECREATION AREA

Thank you for the opportunity to review and submit
 comments on the Conceptual Master Plan and Draft Environmental
 Impact Statement (DEIS) for the Aiea Bay State Recreation Area.

We have no further comments to offer regarding this DEIS.
 The concerns of this office were adequately addressed by the
 Department of Land and Natural Resources' letter of June 9,
 1986 to the Director of Transportation; responding to the
 March 31, 1986 comments concerning the EIS Preparation Notice
 for this project.

Handwritten signature

D. E. PARSONS

cc: Mr. Dan Quinn, Department of Land and
 Natural Resources

Mr. Michael Munekiyo,
 Wilson Okamoto and Associates

Mr. David E. Parsons
 State Boating Manager
 Harbors Division
 Department of Transportation
 State of Hawaii
 79 South Nimitz Highway
 Honolulu, Hawaii 96813

Dear Mr. Parsons:

Subject: Your letter of July 24, 1986 Regarding the Draft
 Environmental Impact Statement for the Proposed
 Aiea Bay State Recreation Area

Thank you for your comments concerning the Draft Environmental
 Impact Statement (EIS) for the proposed Aiea Bay State Recreation
 Area.

A copy of your letter will be appended to the EIS document. If
 there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

Handwritten signature
 SUSUMU ONO
 Chairperson of the Board

cc: Wilson Okamoto & Associates, Inc.





University of Hawaii at Manoa

Environmental Center
Crawford 317 • 2550 Campus Road
Honolulu, Hawaii 96822
Telephone (Hon) 918-7361

Ms. Letitia Uyehara, Director
Office of Environmental Quality Control
465 South King Street, Room 104
Honolulu, Hawaii 96813

Dear Ms. Uyehara:

Draft Environmental Impact Statement Alaea Bay Recreation Area Alaea, Oahu

July 21, 1986
RE:0436

Ms. Letitia Uyehara

-2-

July 21, 1986

Yours truly,
Jacquelin N. Miller
Jacquelin N. Miller
Acting Associate Director

cc: Patrick Takahashi
Dan Quinn
Michael Munekiyo
DeWolfe Miller
Scott Derrickson

The Environmental Center has reviewed the Draft Environmental Impact Statement (EIS) for the proposed Alaea Bay Recreation Area with the assistance of DeWolfe Miller, School of Public Health; and Scott Derrickson, Environmental Center. We hope that the following comments will assist you in the preparation of the Final EIS for the Alaea Bay project.

Water Quality (p. IV-19)

The water quality of Alaea Bay (Pearl Harbor) is poor, particularly the nearshore areas. Although the purpose of the recreation area is to provide passive recreation, small children are likely to play at the water's edge and some people will fish. The Final EIS needs to discuss clean up plans; addressing potential health hazards due to existing water quality such as microbial pollutants, and provide assurances that the shoreline area will be safe for the proposed recreational uses.

If fishing is to be emphasized, as is indicated (p. I-5), then the Department of Health should assess the pesticide and heavy metal body burdens from representative species of fish caught from the proposed recreation area to assure that consumption of fish might in these waters will not present a health hazard.

Public Safety (p. VI-4)

The ingress and egress from the proposed recreation area needs to be carefully laid out to avoid creating a traffic or pedestrian hazard. Consideration should be given to constructing a multi-use pathway under the Kamehameha highway bridge which could link to the existing bikepath. Such a pathway would serve both to reduce pedestrian crossings over the highway and encourage use of the proposed recreation area by the mauka residential population.

GEORGE R. ANTONER
Director of Parks



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 821
HONOLULU, HAWAII 96809

SUPERVISOR, CHAIRMAN
Board of Land & Natural Resources
EUGENE A. HANAU
OFFICE 1010
DIVISIONS:
AGRICULTURE DEVELOPMENT
CIVIL ENGINEERING
MARINE RESOURCES
CONSERVATION AND
RECREATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

AUG 19 1986

Ms. Jacqueline N. Miller
Acting Associate Director
Environmental Center
University of Hawaii at Manoa
2550 Campus Road
Crawford 317
Honolulu, Hawaii 96822

Dear Ms. Miller:

Subject: Your Letter of July 21, 1986 Regarding the Draft
Environmental Impact Statement for the Proposed
Aiea Bay State Recreation Area

Thank you for your comments concerning the Draft Environmental
Impact Statement (EIS) for the proposed Aiea Bay State Recreation
Area.

Our responses to your comments are as follows:

Water Quality

Bathing, water skiing and recreational swimming in the waters of
Pearl Harbor are prohibited. Water quality sampling of Aiea
Stream will be undertaken by the State to determine whether
recreational fishing will be allowed.

Public Safety

Pedestrian access safety measures are included in the Proposed
Conceptual Master Plan. There is an existing pedestrian
crosswalk at the signalized intersection of McGrew Loop and
Kamehameha Highway which will provide pedestrian access to the
Ewa end of the park from the mauka side of Kamehameha Highway.

Jacqueline N. Miller
Page 2

Park traffic is not anticipated to affect safety or operational
conditions at the McGrew Loop-Kamehameha Highway signalized
intersection or the future potential access point at the
intersection of Kamehameha Highway and the CINCPACFLT Boathouse
Access Road.

A copy of your letter will be appended to the EIS document. If
there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

S. Susumu Ono
SUSUMU ONO
Chairperson of the Board

cc: Wilson Okamoto & Associates, Inc.

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU



COPY

CLARENCE S. ANDERSON
DIRECTOR



SUSUMU OHNO, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES
1000 ALI'OLE DRIVE
HONOLULU, HAWAII 96813
OFFICE: (808) 535-2000
TELEPHONE: (808) 535-2000
FACSIMILE: (808) 535-2000
TELETYPE: (808) 535-2000
MAILING ADDRESS: (808) 535-2000

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P O BOX 821
HONOLULU, HAWAII 96808

July 11, 1986

Ms. Lotitia N. Uyehara
Director
Office of Environmental
Quality Control
State of Hawaii
465 South King Street, Room 104
Honolulu, Hawaii 96813

Dear Ms. Uyehara:

Subject: Your Letter of June 20, 1986 on the Draft
Environmental Impact Statement for Aiea Bay State
Recreation Area

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

We have the following comments:

1. The project is not anticipated to have any adverse
impacts to potable ground water resources.
2. We have indicated to the State that non-potable
water may be made available from our Kalouao
Springs facility.
3. We do not permit water service connections from our
36-inch transmission main.
4. The availability of potable water will be
determined when the construction plans are
submitted for our review and approval.

If you have any questions, please contact Lawrence Khung at
527-6138.

Very truly yours,

For KAZU HAYASHIDA
Manager and Chief Engineer

cc: DLNR (Dan Quinn)
Wilson Okamoto & Assoc. (Mike Huneke)

Mr. Kazu Hayashida
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, HI 96813

Dear Mr. Hayashida:

Subject: Your Letter of July 11, 1986 Regarding the Draft
Environmental Impact Statement for the Proposed
Aiea Bay State Recreation Area

Thank you for your comments concerning the Draft Environmental
Impact Statement (EIS) for the proposed Aiea Bay State Recreation
Area.

Construction plans for the proposed project will be submitted
for your review and approval. Water service connections will not
be made at the Board of Water Supply's 36-inch transmission main.

A copy of your letter will be appended to the EIS document. If
there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

SUSUMU OHNO
Chairperson of the Board

cc: Wilson Okamoto & Associates, Inc.

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



DONALD A. CLEGG
Chief Planning Officer
GENE CONNELL
Deputy Chief Planning Officer

JB/DGP 6/86-8860

July 17, 1986

Ms. Letitia N. Uyebara, Director
Office of Environmental Quality Control
State of Hawaii
465 South King Street, Room 104
Honolulu, Hawaii 96813

Dear Ms. Uyebara:

Aiea Bay State Recreation Area
Draft Environmental Impact Statement
Your Letter Dated June 20, 1986

This is in reference to the draft environmental impact statement (dEIS) for the Aiea Bay State Recreation Area project. The dEIS makes no mention of which State agency will assume the lead in coordinating the removal of the substantial debris such as abandoned piers, submerged pilings, tank remnants, etc. at McGrew Point. Moreover, the dEIS does not indicate which City or Federal landfill(s) will be used in disposing of these debris; and the impact on these landfill facilities. These issues should be addressed in the dEIS.

Thank you for this opportunity to comment on this document. We would appreciate your sending us a copy of the Final EIS when that becomes available.

Sincerely,
Donald Clegg
DONALD A. CLEGG
Chief Planning Officer

cc: DLNR (Dan Quinn)
Wilson Okamoto & Associates (Mike Munekiyo)



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

JUL 19 1986

Mr. Donald A. Clegg, Director
Department of General Planning
City and County of Honolulu
650 South King Street
Honolulu, HI 96813

Dear Mr. Clegg:

Subject: Your Letter of July 17, 1986 Regarding the Draft Environmental Impact Statement for the Proposed Aiea Bay State Recreation Area

Thank you for your comments concerning the Draft Environmental Impact Statement (EIS) for the proposed Aiea Bay State Recreation Area.

The Department of Land and Natural Resources will be responsible for coordinating the removal of debris from the site. The volume and extent of debris removal will be defined during the design phase of the project. It is anticipated that the debris material requiring off-site haul away, if any, will become the property and responsibility of the contractor. The contractor will be required to dispose of debris material in a lawful manner.

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,
Dan Quinn
DAN QUINN
Chairperson of the Board

cc: Wilson Okamoto & Associates, Inc.

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813
PHONE 825-1151



FRANK F. FARI
DIRECTOR

GEORGE R. ARYON
DIRECTOR



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621
HONOLULU, HAWAII 96809

AUG 19 1986

DEPARTMENT OF LAND AND NATURAL RESOURCES
1000 ALI'OLE DRIVE, SUITE 100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 535-1151
FACSIMILE: (808) 535-1152
TELETYPE: (808) 535-1153
MAILING ADDRESS: P.O. BOX 621
HONOLULU, HAWAII 96809

July 1, 1986

Ms. Letitia M. Uyebara, Director
Office of Environmental Quality Control
465 South King Street, Room 115
Honolulu, Hawaii 96813

Dear Ms. Uyebara:

Subject: Environmental Impact Statement
Aiea Bay State Recreation Area
THK: 9-8-19; 9-9-3; 9-9-4; 9-9-12
Area: 29.2 Acres

Thank you for the opportunity to review the Environmental Impact Statement for the proposed Aiea Bay State Recreation Area.

We have no objections to the development of passive recreational opportunities in the Aiea district for picnicking, walking and jogging. Siting the park in Aiea would provide coastal recreational opportunities to the immediate area as well as the adjoining Pearl City and Halawa areas. The population in this region has grown by over 30 percent, underscoring for such a facility.

We will retain the EIS for our files.

Sincerely,
Alvin K. H. Pang
ALVIN K. H. PANG

cc: Mr. Dan Quinn
Dept. of Land & Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Mr. Michael Munekiyo
Wilson Okamoto & Associates
P. O. Box 3530
Honolulu, Hawaii 96811

Mr. Alvin K. H. Pang, Director
Department of Housing and Community Development
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Pang:

Subject: Your Letter of July 1, 1986 Regarding the Draft Environmental Impact Statement for the Proposed Aiea Bay State Recreation Area

Thank you for your comments concerning the Draft Environmental Impact Statement (EIS) for the proposed Aiea Bay State Recreation Area.

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

Susumu Oho
SUSUMU OHO
Chairperson of the Board

cc: Wilson Okamoto & Associates, Inc.

GEORGE B. ANTONIO
COMMISSIONER OF PUBLIC WORKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF STATE PARKS
P. O. BOX 511
HONOLULU, HAWAII 96809

1986 JUL 19 10 30



EDUARDO ONO, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES

EDUARDO A. HAHAKU
DIRECTOR IN THE CHIEF

DIVISIONS:
AGRICULTURE
FORESTRY
LAND USE & DEVELOPMENT
NATURAL RESOURCES
PLANNING
RECREATION
WATER RESOURCES

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



RUSSELL L. SMITH, JR.
DIRECTOR AND CHIEF ENGINEER
ENV 86-143

July 2, 1986

Ms. Letitia N. Uyehara
Director
Office of Environmental Quality
Control
State of Hawaii
465 South King Street, Room 104
Honolulu, Hawaii 96813

Dear Ms. Uyehara:

Re: Draft EIS for Aiea Bay State Recreation Area,
Aiea, Oahu, Hawaii

We have reviewed the subject Draft Environmental Impact Statement and have the following comments.

1. Municipal sewers are available to serve the proposed comfort station in Phase I.
2. The other proposed comfort station, located near Richardson Center, appears to be close to a Navy's 8-inch sewer. We assume that this comfort station will be connected to the Navy sewerage system, unless informed otherwise.

Very truly yours,

Russell L. Smith, Jr.

RUSSELL L. SMITH, JR.
Director and Chief Engineer

cc: Mr. Dan Quinn, State DLNR
Mr. Michael Munekiyo,
Wilson Okamoto & Associates

Mr. Russell L. Smith, Jr.
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Smith:

Subject: Your Letter of July 2, 1986 Regarding the Draft Environmental Impact Statement for the Proposed Aiea Bay State Recreation Area

Thank you for your comments concerning the Draft Environmental Impact Statement (EIS) for the proposed Aiea Bay State Recreation Area.

Comfort stations, including the comfort station near the Richardson Recreation Area, are proposed to be connected to the municipal sewer system. Prior to design, a sewer connection application will be submitted.

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

Eduardo Ono
EDUARDO ONO
Chairperson of the Board

cc: Wilson Okamoto & Associates, Inc.

Ms. Letitia N. Uyehara
August 5, 1986
Page 2

August 5, 1986



Banner Mungel, Ph.D. PE.
Manager
Environmental Department
(808) 548 6580

Ms. Letitia N. Uyehara, Director
Office of Environmental Quality Control
465 South King St., Room 104
Honolulu, Hawaii 96813

Dear Ms. Uyehara:
Subject: Environmental Impact Statement (EIS) for Aiea Bay State Recreation Area

We have reviewed the above subject EIS and have the following comments:

1. The above subject will be in close proximity of existing HECO facilities including 46 KV and 138 KV transmission lines. These facilities will remain energized during construction, the following HECO Notes are to be included as part of the final construction plans.
 - a. The existence and location of HECO's overhead facilities are shown on the plans. The Contractor is to exercise extreme caution when the excavation and construction crosses or is in close proximity of our lines and is to maintain 13'-0" clearance for his equipment while working close to and/or under the overhead facilities.
 - b. The Contractor is to comply with the directions of the State of Hawaii Occupational Safety and Health Law (DOSH).
 - c. When excavation is adjacent to or under existing structures or facilities, the Contractor is responsible for properly sheeting and bracing the excavation and stabilizing the existing ground to render it safe and secure from possible slides, cave-ins and settlement, and for properly supporting existing structures and facilities with beams, struts or underpinning to fully protect it from damage.

- d. Should field conditions and/or construction procedures require that the project will be in close proximity to the steel pole foundations, the Contractor is to contact W. Okudara at 455-7022 a minimum of 72 hours in advance.
- e. Should it become necessary, any work required to relocate HECO facilities shall be done by HECO. The Contractor shall be responsible for all costs and coordination
- f. The Contractor shall be liable for any damages to HECO's facilities.
- g. The Contractor shall report any damages to HECO's facilities to the HECO Trouble Dispatch at Phone Number 548-7961.
2. The preliminary alignment for the Waiiau-Makalapa #2 138 KV line would pass through the mauka boundary of the park. The report points out that the existing utility easements and rights-of-way shall be maintained by the current grantee of such easement of rights-of-way.
3. We do not agree with the following statement found on Page II-3:

"Hawaiian Electric Company electrical lines are also located within the bike path/utility corridor, facilitating hook-up to meet park electrical power requirements". The project will be served from our existing 12 kv distribution system in the area and not directly from the 46 kv line now located within the bike path/utility corridor.

Sincerely,

Banner Mungel

cc: Mr. Dan Quinn
Department of Land & Natural Resources
Mr. Michael Munekiyo
Wilson Okamoto & Associates



NA OPIO CANOE CLUBS ASSOCIATION
2407 BOOTH ROAD
HONOLULU, HAWAII 96813

DEPT OF LAND AND NATURAL RESOURCES
STATE OF HAWAII
1151 PINCHBOWL ST
HONOLULU, HAWAII, 96813

Aloha Kaua.

The NA OPIO CANOE CLUBS ASSN who had provided a small input towards the AIEA BAY STATE RECREATION AREA, further submits the following;

What is the maximum limit use of the Pearl Harbor waters?

There is no implementation of canoes although paddle boats are listed as possible intergration of the proposed park.

Everything is pointed to a passive park of such events as jogging and bike riding with limited boating and fishing.

Many impressive statistics figures are listed with the need for such a facility in the CENTRAL AREA and the surrounding communities.

POINTS OF INTEREST

Will there be improvements related to shore depth of muddy and constant erosion from the streams pouring into the recreation area.

Our concern is the growth of CANOEING for the surrounding community and the none availability of a practice site for the students and youth of the area. The none consideration for a HAWAIIAN HERITAGE as declared for in the PREAMBLE of the STATE OF HAWAII CONSTITUTION.

The waters is declared a safe inclosed waters and could be of a benefit to the youth of Hawaii for practices and regattas. It also can provide a program to help decelerate juvenile delinquency for the surrounding area.

Most important as is being declared the negotiating and requesting for permission to conduct regattas with the necessary prequisite requirements in an coordinated effort could afford another race site for the canoeing program of OAHU. It also could afford another area for safe and close practice site to the surrounding community and schools if permission is granted.

Mahalo for allowing us to submit the listed and we hope that any further questions and coordination for the Na Opio Canoe Clubs Assn please feel free to call GARDNER BROWN-- 5315685 or 6712871.

Pomaikai Na Mea Apana-- ALL GOOD THINGS ARE BLESSED.

GARDNER BROWN
ADULT COORDINATOR
2407 Booth Road
Honolulu Hawaii 96813
5315685-6712871

GEORGE R. ANTONIO
Secretary for Parks



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF STATE PARKS
P. O. BOX 511
HONOLULU, HAWAII 96813

AUG 15 1986

Mr. Gardner Brown
Adult Coordinator
Na Opio Canoe Clubs Association
2407 Booth Road
Honolulu, Hawaii 96813

Dear Mr. Brown:

Subject: Your Letter Regarding the Draft Environmental Impact Statement for the Proposed Aiea Bay State Recreation Area

Thank you for your comments concerning the Draft Environmental Impact Statement (EIS) for the proposed Aiea Bay State Recreation Area.

Civilian boating activities within Aiea Bay shall not extend beyond limits to be agreed upon by the U.S. Navy and the State of Hawaii. However, canoe club activities within the waters of Aiea Bay are not anticipated to be affected by the development of the proposed project. Landside improvements will provide for canoe club activities.

No negative long-term water quality impacts are anticipated as existing vegetation removed for park development will be replaced with appropriate landscaping, thereby preventing erosion along the shoreline.

A copy of your letter will be appended to the EIS document. If there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

Stephen
STEPHEN S. OKAMOTO
Chairperson of the Board

cc: Wilson Okamoto & Associates, Inc.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

BYRONY DICK, CHAIRMAN
 Board of Land & Natural Resources
 EDGAR A. WAIKUKI
 DEPT 10 1st Floor
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 HONOLULU, HAWAII 96809



STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 P O BOX 821
 HONOLULU, HAWAII 96809

1986 19 1235

STANLEY B. ANTHONY
 DEPARTMENT OF LAND AND NATURAL RESOURCES

DEPT. OF
 STATE PARKS



THE OUTDOOR CIRCLE JUL 16 4 23 PM '86

200 No. Vineyard, Suite 502, Honolulu, Hawaii 96813

HUR 521 (M74)

July 17, 1986

Mr. Dan Quinn
 Dept. of Land & Natural Resources
 State of Hawaii
 1151 Punchbowl Street
 Honolulu, Hawaii 96813

Subject: Aiea Bay State Recreation Area
 Conceptual Master Plan and Draft Environmental
 Impact Statement

The Outdoor Circle has reviewed the Draft EIS Statement and
 most highly agree with the plan and feel it most appropriate
 to have open space in a growing Aiea-Pearl City area.

We have always approved of a project that promotes a "lei of
 green" around the islands.

Sincerely,

Betty Crocker

Mrs. Theodore Crocker
 President

BC:isp

TO: _____
 ASST. ADMIN. _____
 DIV. 02 _____
 PLAN. BR. _____
 GIS. MGT. BR. _____
 PROJ. CONTROL _____
 SCHED. PLAN _____
 CTR. STAFF _____
 MISL. SITES SEC. _____
 FOR: _____
 CONC. _____
 COMMENTS & REC. _____
 DRAFT COPY _____
 FILE _____
 FOLLOW UP _____
 16-1970 _____
 SEE ME _____
 SIGNATURE _____

KAREN L. CHURCHILL
 ADVISORY BOARD
 MANAULANI-OLUPE UNIT
 STATE PARKS

BRANCHES
 MANAULANI-OLUPE UNIT
 THE RAUAI-OLUPE UNIT
 STATE PARKS

LAURENCE M. CHURCHILL
 WAIKUKI UNIT
 STATE PARKS

Mrs. Theodore Crocker, President
 The Outdoor Circle
 200 N. Vineyard Boulevard
 Suite 502
 Honolulu, Hawaii 96817

Dear Mrs. Crocker:

Subject: Your letter of July 17, 1986 regarding the Draft
 Environmental Impact Statement for the Proposed
 Aiea Bay State Recreation Area

Thank you for your comments concerning the Draft Environmental
 Impact Statement (EIS) for the proposed Aiea Bay State Recreation
 Area.

A copy of your letter will be appended to the EIS document. If
 there are any questions, please contact Mr. Dan Quinn at 548-7455.

Very truly yours,

Susumu Ono
 SUSUMU ONO
 Chairperson of the Board

cc: Wilson Okamoto & Associates, Inc.

CHAPTER XV
LIST OF PREPARERS OF THE EIS DOCUMENT

XV. LIST OF PREPARERS OF THE EIS DOCUMENT

WILSON OKAMOTO & ASSOCIATES, INC.

Earl Matsukawa: Director, Planning Department
University of Hawaii, MURP, 1983, Land Use and Environmental Planning
Western Washington University, 1975, B.S., Environmental Planning
Area of Expertise for Project: Project Management, Land Use and
Environmental Planning

Michael Munekiyo: Director, Planning Department (up to March, 1987)
University of Hawaii, MURP, 1976, Land Use and Environmental Planning
Colorado State University, BSCE, 1974, Civil Engineering
Area of Expertise for Project: Project Management, Land Use and
Environmental Planning, Civil Engineering

Nami Hamaguchi: Planner and Civil Engineer
University of Hawaii, BSCE, 1984, Civil Engineering
Engineer-in-Training Phase of Hawaii Board regular examination for
registration, Part I - Fundamentals of Engineering, 1987
Area of Expertise for Project: Land Use and Environmental Planning

Barry Toyota: Civil Engineer
University of Hawaii, BSCE, 1980, Civil Engineering
Registered Professional Engineer, 1983, Hawaii, Civil Engineering
Area of Expertise for Project: Civil Engineering

Eric Nishimoto: Civil Engineer
University of Hawaii, BSCE, 1984, Civil Engineering
Engineer-in-Training Phase of Hawaii Board regular examination for
registration, Part I - Fundamentals of Engineering, 1984
Area of Expertise for Project: Civil Engineering

Malcolm Ching: Graphic Designer
Leeward Community College, A.S., 1986, Graphic Arts
Leeward Community College, Certificate in Graphic Arts, 1986
Area of Expertise for Project: Maps, Figures, and Production

REFERENCES

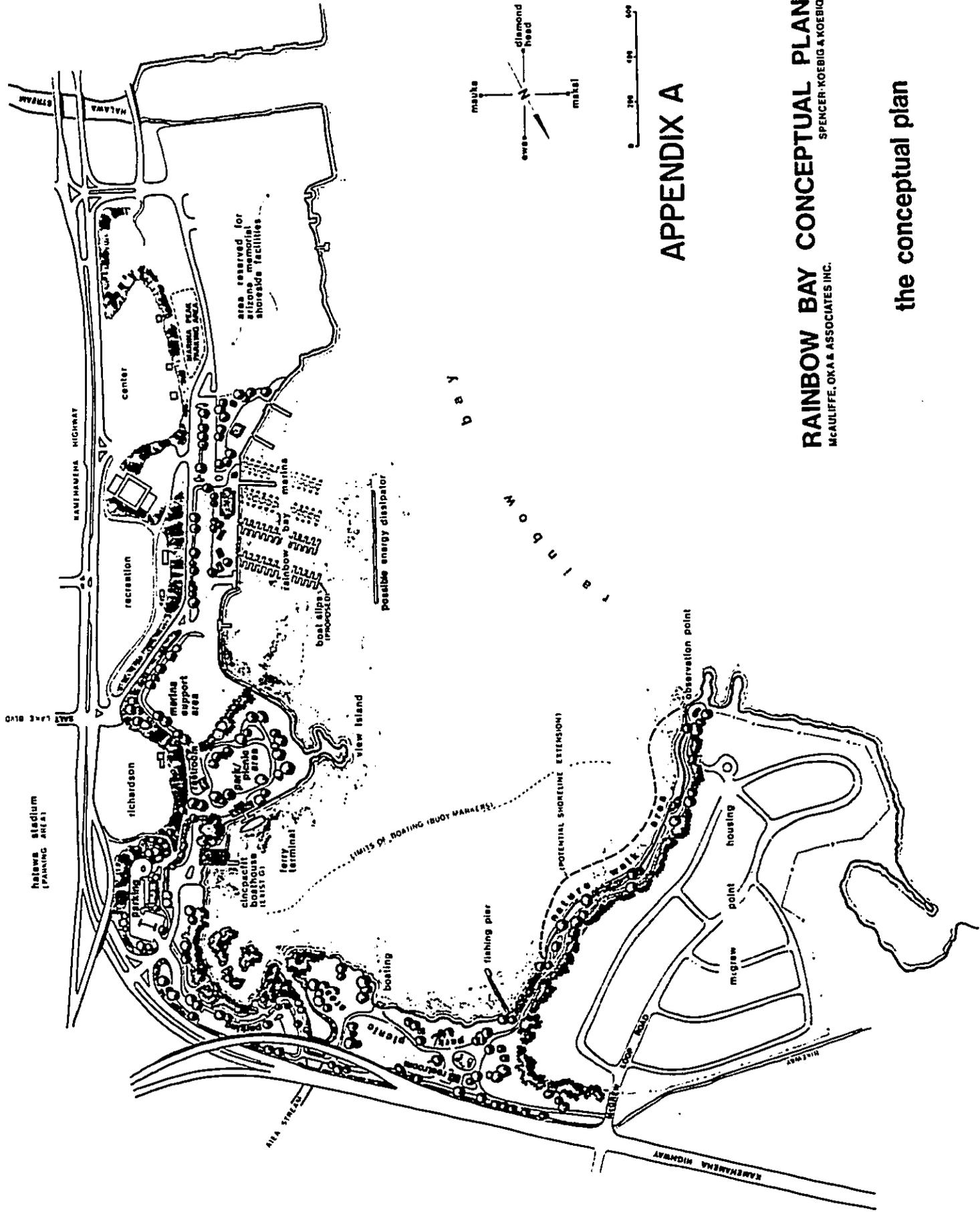
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APPENDIX A
RAINBOW BAY CONCEPTUAL MASTER PLAN, 1974



APPENDIX A

RAINBOW BAY CONCEPTUAL PLAN
 SPENCER KOEBIG & KOEBIG
 McCAULIFFE, OXA & ASSOCIATES INC.

the conceptual plan

APPENDIX B
GRANT OF EASEMENT - DOCUMENT NUMBER 714984

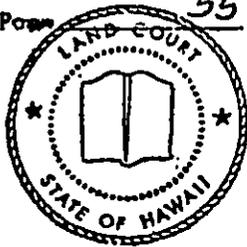
OFFICE OF THE
ASSISTANT REGISTRAR, LAND COURT
STATE OF HAWAII
(Bureau of Conveyances)

Honolulu, Hawaii, MAR 25 1975

DOC NO 714984

The attached instrument is a true copy of _____, received
for registration in this office, MAR 25 1975, at 9:18 o'clock A. M, and
noted on Certificate (S) of Title Number (S) 30395, 32984, 95940 & 173597
and from which Certificate (S) of Title Number (S) _____ has (have) been issued.

and also recorded in the Bureau of Conveyances in
Liber 10530 Page 559



Attest: *Leiana A. Mokuauia*
Assistant Registrar, Land Court
State of Hawaii

RECORDATION REQUESTED BY:
NAVY REAL ESTATE

AFTER RECORDATION, RETURN TO:
H. GODFREY, PHONE 4713217

RETURN BY: MAIL () PICKUP ()

NF(R)-22579

GRANT OF EASEMENT

THIS INDENTURE, made the 7th day of October,
1974, between the United States of America, herein called
the Government, acting by and through the Department of the
Navy and the City and County of Honolulu, whose principal
place of business and address is Honolulu Hale, Honolulu,
Hawaii, 96813, herein called the Grantee.

WHEREAS, the Government owns that certain real
property known and identified as the Navy Utility Corridor,
herein called the Facility, together with Parcels 12 and 13,
hereinafter described; and

WHEREAS, the Grantee has requested the conveyance
of an easement for the construction, use, maintenance,
operation, repair and replacement of a Public Bikepath
through, over, across and along Parcels 12 and 13 and that
portion of the Facility hereinafter described; and

WHEREAS, the Secretary of the Navy has found that
the grant of such easement on the terms and conditions
hereinafter stated is not incompatible with the public
interest:

NOW, THEREFORE, this Indenture witnesseth that in
consideration of One Dollar (\$1.00), paid by the Grantee to
the Government, the receipt of which is hereby acknowledged,

FINAL ORIGINAL

the Government pursuant to the authority of Title 10, USC Section 2668, hereby grants unto the said City and County of Honolulu an easement for a period of 20 years from the date hereof for the construction, use, maintenance, operation, repair and replacement of a Public Bikepath herein called the Bikepath, such easement to extend through, over, across and along and be confined to the parcels described in Exhibit "A" attached hereto and made a part hereof, herein called the Premises, and as shown on the City and County of Honolulu, Department of Public Works Parcel Maps File Nos. 18-1-3-45, 18-1-3-46, and 18-1-3-47, to which reference is hereby made, said maps being also on file in the Real Estate Division of the Pacific Division of the Naval Facilities Engineering Command.

THIS EASEMENT is granted subject to the following terms and conditions:

1. All work in connection with the construction, maintenance, operation, repair and use of the Bikepath shall be done without cost or expense to the Department of the Navy and its assigns and in accordance with plans previously approved by the Commander, Pacific Division, Naval Facilities Engineering Command, hereinafter referred to as the Commander.

2. All landscaping plans shall be subject to the prior approval of the Commander.

3. The Grantee shall always keep the premises reasonably clean and the Bikepath in reasonably good condition and shall promptly make all repairs to the Bikepath which it deems necessary.

4. The Grantee's rights hereunder shall be subject to such reasonable rules and regulations as may be promulgated by the Government to insure that the exercise of such rights shall not interfere with the Government activities at the Station.

5. The City and County shall formulate and make public a code of regulations for the safe operation of the Bikepath. Said code shall include such rules and regulations as may from time to time be promulgated by the Government and shall specifically include, without limitation, the following: no camping, no vendors or commercial operations of any type, no intoxicating beverages, no littering, no fires, no permanent structures. Enforcement of all rules and regulations and the policing and law enforcement within the premises shall be the responsibility of the Grantee.

6. Upon termination of the easement granted herein, the Grantee shall, if requested by the Government, remove at the expense of the Grantee, any and all improvements installed or constructed hereunder and restore the Premises to the same or as reasonably good condition as that which existed prior to the exercise by the Grantee of its rights hereunder, such restoration to be effected to the satisfaction of the Commander.

7. The Government reserves to itself and its assigns rights-of-way for all purposes across, over and/or under the right-of-way herein granted; provided, however, that such rights shall be used in a manner that will not unreasonably interfere with the use and enjoyment by the Grantee of the

easement rights granted herein. The rights herein reserved shall specifically include but not be limited to, the right of the Government and its assigns to operate vehicles over and across the paved portion of the Bikepath. Neither the Government nor its assigns shall be responsible for any items of maintenance arising from operation of vehicles of all types along, over and across the Premises.

8. The Government, Standard Oil Company or other parties having easement rights over the Premises shall restore those portions of the Bikepath which may be affected by trenching operations required for repairs or relocations of existing lines or for the installation of new underground lines following completion of said work to as reasonably good condition as that which existed prior to the commencement of said work.

9. The Government shall maintain the structural portions of the bridges on the Premises to the extent that the bridge bents are required to support its pipelines. The Government shall not be responsible for maintenance of any bridge features or improvements thereon which are required solely for the safe operation of the public Bikepath.

10. Parties whose operations necessitate the temporary removal of any fencing installed on the bridges by the Grantee shall be responsible for the removal and resetting of the fencing.

11. The Grantee shall be liable and responsible for any damage to Standard Oil Company's pipelines within the 40-foot width of the Navy right-of-way caused by the

Grantee's negligence or resulting from the exercise by the Grantee of the rights herein granted.

12. That all or any part of the rights-of-way herein granted may be terminated upon failure on the part of the Grantee to reasonably comply with any and all terms and conditions of this grant; upon abandonment of the rights granted herein or upon nonuse for a period of two (2) consecutive years.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed the day and year first above written.

UNITED STATES OF AMERICA

By

John R. Fisher
JOHN R. FISHER

By direction of the Commander, Naval Facilities Engineering Command, acting under the direction of the Secretary of the Navy

CITY AND COUNTY OF HONOLULU

By

Frank F. Fasi
FRANK F. FASI, Mayor

STANDARD OIL COMPANY OF CALIFORNIA

By

A. A. Smith
Its Contract Agent

By

Robert L. Perry
Its Asst. Secretary

APPROVED AS TO CONTENTS:

By James Nelson
Department of Public Works

APPROVED AS TO FORM AND LEGALITY

Wesley F. Fong
Deputy Corporation Counsel

STATE OF CALIFORNIA
City and County of San Francisco

I, Robert J. Hare, County Clerk and Clerk of the Superior Court of the State of California, in and for the City and County of San Francisco, which Court is a Court of Record having by law a seal, DO HEREBY CERTIFY: That
GERALDINE D. COHEN

whose name is subscribed to the attached certificate of acknowledgment, proof or affidavit, was at the time of taking said acknowledgment, proof or affidavit, a Notary Public in and for the City and County of San Francisco, duly commissioned and sworn in said City and County, and was as such, an officer of said State, duly authorized by the laws thereof to take and certify the same, as well as to take and certify the proof and acknowledgment of deeds and other instruments in writing to be recorded in said State, and that full faith and credit are and ought to be given to his official acts; that the certificate of such officer is required to be under seal; that the impression of his official seal is not required by law to be on file in the office of the County Clerk; I further certify that I am well acquainted with the handwriting of said notary and verily believe that the signature to the attached certificate is genuine, and further that the annexed instrument is executed and acknowledged according to the laws of the State of California.

In witness whereof, I have hereunto set my hand and annexed the seal of the Superior Court of the State of California, in and for the City and County of San Francisco.

Dated: JAN 6 1975 *Robert J. Hare* Clerk.

CALIFORNIA
of San Francisco
6th

} ss.
day of January in the year one thousand nine hundred and Seventy Five

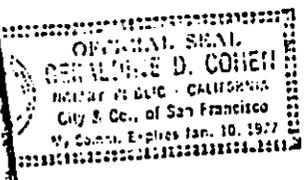
me. GERALDINE D. COHEN a Notary Public in and for the City and County of San Francisco, State of California, residing therein, duly commissioned and sworn, personally appeared A. T. Smith and

Barbara F. Perez known to me to be the Contract Agent and Ass't Secretary of Standard Oil Company of California

of the corporation described in and that executed the within instrument, and also known to me to be the person who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal in the City and County of San Francisco the day and year in this certificate first above written.

Geraldine D. Cohen
GERALDINE D. COHEN,
Notary Public in and for the City and County of San Francisco, State of California.
My Commission Expires January 10, 1977



STATE OF HAWAII)
: ss.
CITY AND COUNTY OF HONOLULU)

On this 7th day of May, 1974, before me appeared FRANK F. FASI, to me personally known, who, being by me duly sworn, did say that he is the Mayor of the CITY AND COUNTY OF HONOLULU, a municipal corporation and that the seal affixed to said instrument is the corporate seal of said municipal corporation, and that the instrument was signed and sealed in behalf of said municipal corporation by authority of its City Council, and said FRANK F. FASI acknowledged the instrument to be the free act and deed of said municipal corporation.

[Signature]
Notary Public, First Judicial
Circuit, State of Hawaii

My commission expires 6.28.78

STATE OF _____)
: ss.
_____)

On this _____ day of _____, 1974, before me appeared _____, to me personally known, who, being by me duly sworn, did say that he is the Attorney-in-Fact of STANDARD OIL COMPANY OF CALIFORNIA, and that the foregoing instrument was executed in the name and behalf of STANDARD OIL COMPANY OF CALIFORNIA by _____ as its Attorney-in-Fact; and acknowledged said instrument to be the free act and deed of said corporation.

Notary Public,

My commission expires _____

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 1

(Bikepath Easement)

Being a portion of the Navy Utility Corridor and being also portions of L. P. 8168, L. C. Aw. 8305, Apana 2, Part 12 to Paulo Kanoa (Certificate of Boundaries No. 108) and R. P. 4475, L. C. Aw. 7713, Apana 47 to V. Kamamalu. Situate at Manana-Nui and Waimano, Ewa, Oahu, Hawaii.

Beginning at the Northwest corner of this easement, and on the Southeast side of Lehua Avenue, the coordinates of the said point of beginning referred to Government Survey Triangulation Station "EWA CHURCH" being 896.59 feet South and 2,801.89 feet East, as shown on Division of Land Survey and Acquisition Parcel Map File No. 18-1-3-45, thence running by azimuths measured clockwise from true South:

1. 252° 29' 596.72 feet along Block B, across First Street and along Block 1 of the Pearl City Lots;
2. Thence along the South side of Interstate Highway Federal Aid Project No. I-H1-1(13), on a curve to the left with a radius of 3,686.00 feet, the chord azimuth and distance being 284° 19' 32.5" 107.27 feet;
3. 72° 31' 17.41 feet along the South side of Interstate Highway, Federal Aid Project No. I-H1-1(13);
4. 72° 31' 253.12 feet along remainder of the United States Naval Reservation Tract 1 of Portion L of U. S. Civil No. 598 and along remainders of R. P. 4475, L. C. Aw. 7713, Apana 47 to V. Kamamalu and L. P. 8168, L. C. Aw. 8305, Apana 2, Part 12 to Paulo Kanoa (Certificate of Boundaries No. 108);
5. 162° 29' 15.07 feet along remainder of L. P. 8168, L. C. Aw. 8305, Apana 2, Part 12 to Paulo Kanoa (Certificate of Boundaries No. 108);
6. 72° 29' 450.57 feet along same;
7. Thence along the Southeast side of Lehua Avenue, on a curve to the right with a radius of 3,779.72 feet, the chord azimuth and distance being 201° 28' 10" 51.46 feet to the point of beginning and containing an area of 30,188 square feet.

EXHIBIT "A"

SUBJECT, HOWEVER, to the following:

1. The restriction of the rights of all access of ingress and egress into and from Interstate Highway, Federal Aid Project No. I-H1-1(13), over and across Courses 2 and 3 of the above described Parcel 1, and permitted access under Interstate Highway Structure only over and across Course 2 of the above described Parcel 1, as set forth in instrument dated November 15, 1967 and recorded in Liber 5924, Page 241.
2. A grant of easement of variable widths in perpetuity for pipeline purposes in favor of Standard Oil Company of California dated May 16, 1960 and recorded in Liber 3871, Page 1.
3. Grants of easements in perpetuity for sanitary sewer purposes in favor of the City and County of Honolulu, dated August 31, 1964 and November 30, 1964 and recorded in Liber 4869, Page 409 and Liber 4955, Page 52, respectively.
4. Grants of easements for fifty (50) years each for electric power pole line purposes in favor of the Hawaiian Electric Company, Inc., dated September 15, 1959 and May 24, 1969 and recorded in Liber 5062, Page 1, and Liber 6542, Page 193, respectively.
5. Existing 16-inch aviation gasoline pipeline in favor of the United States Government.
6. To all licenses and easements, whether recorded or unrecorded, across, over, along or under the Railroad Line, belonging to or in any way vested in others as the same shall now exist, dated March 16, 1951 and recorded in Liber 2442, Page 425.

Encumbrances referred to by Liber and Page are recorded in the Bureau of Conveyances of the State of Hawaii, at Honolulu, Hawaii.

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Description Compared
and Checked
by _____ of Land Survey

WC:dh
6/24/74

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 2

(Bikepath Easement)

Being a portion of the United States Naval Reservation, Tract 1 of Portion "L" of U. S. Civil No. 598 and being also a portion of R. P. 4475, L. C. Aw. 7713, Apana 47 to V. Kamamalu. Situate at Waimano, Ewa, Oahu, Hawaii.

Beginning at the Northeast corner of this parcel of land, on the South side of Interstate Highway, Federal Aid Project No. I-H1-1(13), the coordinates of the said point of beginning referred to Government Survey Triangulation Station "EWA CHURCH" being 808.47 feet South and 3,754.86 feet East, as shown on Division of Land Survey and Acquisition Parcel Map File No. 18-1-3-45, thence running by azimuths measured clockwise from true South:

1. 318° 30' 62.44 feet along Lot 2-B-1 in Section 4 (Map 15) of Land Court Application 945;
2. Thence along remainder of United States Naval Reservation, Tract 1 of Portion "L" of U. S. Civil No. 598, along remainder of R. P. 4475, L. C. Aw. 7713, Apana 47 to V. Kamamalu, on a curve to the right with a radius of 3,735.00 feet, the chord azimuth and distance being 101° 00' 38.5" 353.60 feet;
3. 107° 07' 60.25 feet along same;
4. 252° 31' 70.32 feet along remainder of R. P. 4475, L. C. Aw. 7713, Apana 47 to V. Kamamalu;
5. Thence along the South side of Interstate Highway Project No. I-H1-1(13), on a curve to the left with a radius of 3,695.00 feet, the chord azimuth and distance being 281° 22' 50" 302.16 feet to the point of beginning and containing an area of 14,325 square feet.

SUBJECT, HOWEVER, to a grant of easement for fifty (50) years for power pole line and guys in favor of the Hawaiian Electric Company, Inc., dated May 24, 1969 and recorded in Liber 6542, Page 193.

SUBJECT, ALSO, to the restriction of the rights of all access of ingress and egress, into and from Interstate Highway, Federal Aid Project No. I-H1-1(13), over and across Course 5 of the above described Parcel 2 dated July 26, 1965 and recorded in Liber 5191, Pages 519-538.

Encumbrances referred to by Liber and Page are recorded in the Bureau of Conveyances of the State of Hawaii, at Honolulu, Hawaii.

M.L.C.

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 3

(Bikepath Easement)

Being the whole of Easement K, area 0.447 acre, as shown on Map 19, over and across Lot 2-B-1, as shown on Map 15, filed in the Office of the Assistant Registrar of the Land Court of the State of Hawaii with Land Court Application 945, Section 4, of Hawaiian Trust Company, Limited, Trustee under the Will and of the Estate of James Armstrong, deceased, and being a portion of the land described in Transfer Certificate of Title No. 32,984 issued to the United States of America.

Situate at Waimano, 'Ewa, Oahu, Hawaii.

SUBJECT, HOWEVER, to the following easement:

1. Designation of Easement 2 (Map 10) of Land Court Application 945 for sanitary sewer purposes (abandoned), dated June 20, 1961 as set forth by Land Court Order No. 19115.
2. Grant of easement fifteen (15.00) feet wide in perpetuity for sanitary sewer purposes as shown on Map 14 of Land Court Application 945 in favor of the City and County of Honolulu, dated March 25, 1965 and filed as Document No. 360181.
3. The restriction of the rights of all access of ingress and egress into and from Interstate Highway, Federal Aid Project No. I-H1-1(13), over and across Course 5 of the above described Parcel 3 dated July 26, 1965 as set forth in Document No. 371102.

Encumbrances referred to by Document Numbers and Land Court Order Number are on file in the Office of the Assistant Registrar of the Land Court of the State of Hawaii, at Honolulu, Hawaii.

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Description Compared
and Checked
Division of Land Survey
and Acquisition

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6/24/74

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 4

(Bikepath Easement)

Being Lot 2-A-1, area 786 square feet, in Section 4, as shown on Map 15, filed in the Office of the Assistant Registrar of the Land Court of the State of Hawaii with Land Court Application 945 of Hawaiian Trust Company, Limited, Trustee under the Will and of the Estate of James Armstrong, deceased, and being a portion of the land described in Transfer Certificate of Title No. 95,940 issued to United States of America.

Situate at Waimano, Ewa, Oahu, Hawaii.

SUBJECT, HOWEVER, to the following:

1. The restriction of rights of all access of ingress and egress, into and from Interstate Highway, Federal Aid Project No. I-HI-1(13), over and across the Northerly boundary of Lot 2-A-1 shown thusly and noted "no access permitted" on Map 15 of Land Court Application 945, dated July 26, 1965 as set forth in Document No. 371102.
2. Easement 2 (Map 10) of Land Court Application 945 for sanitary sewer purposes (abandoned), dated June 20, 1961 as set forth by Land Court Order No. 19115.

Encumbrances referred to by Document Number and Land Court Order Number are on file in the Office of the Assistant Registrar of the Land Court of the State of Hawaii, at Honolulu, Hawaii.

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Description Compared
and Checked
Division of Land Survey
and Acquisitions

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6/24/74

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 5

(Bikepath Easement)

Being a portion of the United States Naval Reservation, Tract 4 of Portion L of Civil No. 598, and being also portions of R. P. 4475, L. C. Aw. 7713, Apana 47 to V. Kamamalu and Grant 215 to Nahi. Situate at Waimano, Ewa, Oahu, Hawaii.

Beginning at the Northwest corner of this parcel of land, being also the Northeast corner of Lot 2-A-1 in Section 4 (Map 15) of Land Court Application 945, and on the South side of Interstate Highway, Federal Aid Project No. I-H1-1(13), as shown on Division of Land Survey and Acquisition Parcel Map File No. 18-1-3-45, thence running by azimuths measured clockwise from true South:

1. Along the South side of Interstate Highway, Federal Aid Project No. I-H1-1(13), on a curve to the left with a radius of 3,695.00 feet, the chord azimuth and distance being 266° 55' 25" 548.41 feet;
2. Thence along the Westerly side of Waimano Stream along remainder of Grant 215 to Nahi, on a curve to the right with a radius of 460.00 feet, the chord azimuth and distance being 339° 13' 52" 41.11 feet;
3. Thence along the remainder of United States Naval Reservation, Tract 4 of Portion L of Civil No. 598, along remainders of Grant 215 to Nahi and R. P. 4475, L. C. Aw. 7713, Apana 47 to V. Kamamalu on a curve to the right with a radius of 3,735.00 feet, the chord azimuth and distance being 86° 31' 16" 521.05 feet;
4. 133° 59' 58.50 feet along Lots 2-B-1 and 2-A-1 in Section 4 (Map 15) of Land Court Application 945 to the point of beginning and containing an area of 21,417 square feet;

SUBJECT, HOWEVER, to the restriction of the rights of all access of ingress and egress, into and from Interstate Highway, Federal Aid Project No. I-H1-1(13), over and across Course 1 of the above described Parcel 5, dated July 26, 1965 and recorded in Liber 5191, pages 519-538 in the Bureau of Conveyances of the State of Hawaii, at Honolulu, Hawaii.

WC:dh
6/24/74

H. L. C.
Description Compared
and Checked
Division of Land Survey
and Acquisition

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 7

(Bikepath Easement)

Being portions of R. P. 4475, L. C. Aw. 7713, Apana 47 to V. Kamamalu (Certificate of Boundaries No. 59) and Grant 215 to Nahi. Situate at Waimano, Ewa, Oahu, Hawaii.

Beginning at the Northwest corner of this parcel of land, and on the South side of Interstate Highway, Federal Aid Project No. I-H1-1(13), the coordinates of said point of beginning referred to Government Survey Triangulation Station "EWA CHURCH" being 811.13 feet South and 4,898.62 feet East, as shown on Division of Land Survey and Acquisition Parcel Map File No. 18-1-3-45, thence running by azimuths measured clockwise from true South:

1. Along the South side of Interstate Highway, Federal Aid Project No. I-H1-1(13), on a curve to the left with a radius of 3,695.00 feet, the chord azimuth and distance being 260° 45' 03" 61.80 feet;
2. 318° 35' 46.91 feet along Lot 6-A-2 (Map 10) of Land Court Application 1525;
3. Thence along remainders of R. P. 4475, L. C. Aw. 7713, Apana 47 to V. Kamamalu (Certificate of Boundaries No. 59) and Grant 215 to Nahi, on a curve to the right with a radius of 3,735.00 feet, the chord azimuth and distance being 80° 30' 30" 80.14 feet;
4. Thence along the East side of Waimano Stream along remainders of R. P. 4475, L. C. Aw. 7713, Apana 47 to V. Kamamalu (Certificate of Boundaries No. 59) and Grant 215 to Nahi, on a curve to the left with a radius of 550.00 feet, the chord azimuth and distance being 161° 19' 53" 40.60 feet to the point of beginning and containing an area of 2,829 square feet.

SUBJECT, HOWEVER, to the restriction of the rights of all access of ingress and egress, into and from Interstate Highway, Federal Aid Project No. I-H1-1(13), over and across Course 1 of the above described Parcel 7.

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Description Compared
and Checked
Division of Land Survey
and Acquisition

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 8

(Bikepath Easement)

Being Lot 6-A-2, area 8,031 square feet, as shown on Map 10, filed in the Office of the Assistant Registrar of the Land Court of the State of Hawaii with Land Court Application 1525 of The Hawaiian Electric Company, Inc. and being a portion of the land described in Transfer Certificate of Title No. 157,749 issued to State of Hawaii.

Situate at Waimano, Ewa, Oahu, Hawaii.

SUBJECT, HOWEVER, to the restriction of the rights of all access of ingress and egress, into and from Interstate Highway, Federal Aid Project No. I-H1-1(13), over and across the North and Northwest boundaries of Lot 6-A-2, shown thusly o o o o o and noted "no access permitted" on said Map 10.

SUBJECT, ALSO, to an easement for sanitary sewer purposes in favor of the City and County of Honolulu, and being on file in the Office of the Assistant Registrar of the Land Court of the State of Hawaii, Honolulu, Hawaii as Document No. 359086.

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Description Compared
and Checked
Division of Land Survey
and Acquisition

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6/21/74

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 9

(Bikepath Easement)

Being a portion of the Navy Utility Corridor and being also portions of R. P. 4475, L. C. Aw. 7713, Apana 47 to V. Kamamalu (Certificate of Boundaries No. 208); R. P. 180, L. C. Aw. 9391 to Keo; Grant 385 to J. Maria; L. P. 8462, L. C. Aw. 11029, Apana 2 to John Stevenson; R. P. 4526, Mahele Award 18 to Paewahine; Grant 2861 to Narcizo Jose; R. P. 6557, L. C. Aw. 10605, Apana 5 to I. Piikoi; R. P. 174, L. C. Aw. 9327 to Kaaiakia; R. P. 170, L. C. Aw. 9326, Apana 2 to Kekaina; Government Land (Ili of Honokawailani); R. P. 7268, L. C. Aw. 3834 and 7244, Part 1 to Puhi; R. P. 202, L. C. Aw. 9410-B to Wahaolelo; and L. C. Aw. 11,216, Apana 9 to M. Kekuaonohi. Situate at Waimano, Waiau and Waimalu, Ewa, Oahu, Hawaii.

Beginning at the Southwest corner of this parcel of land, being also the Northeast corner of Lot 6-A-2 (Map 10) of Land Court Application 1525, and on the South side of Interstate Highway, Federal Aid Project No. I-H1-1(13), as shown on Division of Land Survey and Acquisition Parcel Map File No. 18-1-3-45, thence running by azimuths measured clockwise from true South:

1. Along the South side of Interstate Highway, Federal Aid Project No. I-H1-1(13), on a curve to the left with a radius of 3,686.00 feet, the chord azimuth and distance being 257° 36' 36" 73.12 feet;
2. Thence along Lot 7-B (Map 9) of Land Court Application 1525, on a curve to the right with a radius of 2,087.09 feet, the chord azimuth and distance being 292° 31' 04" 65.48 feet;
3. 293° 25' 2,083.56 feet along Lot 7-B (Map 9) of Land Court Application 1525, Lot 8 (Map 1) of Land Court Application 1640, Lot 7 (Map 1) of Land Court Application 1640, Lot 4 (Map 1) of Land Court Application 1185, Lot 1-A (Map 2) of Land Court Application 114, Lot 6 (Map 1) of Land Court Application 1640, Lot 3 (Map 1) of Land Court Application 1185, Lot 13 (Map 1) of Land Court Application 1640 and Lot 4 (Map 1) of Land Court Application 1525;
4. Thence along Lot 4 (Map 1) of Land Court Application 1525 and remainder of R. P. 7268, L. C. Aw. 3834 and 7244, Part 1 to Puhi partly along remainder of R. P. 202, L. C. Aw. 9410-B to Wahaolelo, on a curve to the right with a radius of 975.37 feet, the chord azimuth and distance being 309° 17' 533.33 feet;

5. 325° 09' 119.78 feet along the remainder of R. P. 7268, L. C. Aw. 3834 and 7244, Part 1 to Puhi;
6. Thence still along same, on a curve to the left with a radius of 1,412.69 feet, the chord azimuth and distance being 314° 03' 50" 543.28 feet;
7. Thence along Lot 4-B-4-A (Map 11) of Land Court Application 950, on a curve to the left with a radius of 1,453.48 feet, the chord azimuth and distance being 284° 33' 50" 918.25 feet;
8. 266° 09' 224.55 feet along Lot 4-B-4-A (Map 11) of Land Court Application 950;
9. 353° 37' 40.04 feet along the West side of Waimalu Stream;
10. 86° 09' 226.32 feet along Lot 5 (Map 1) of Land Court Application 950 and remainder of L. C. Aw. 11216, Apana 9 to M. Kekaunohi;
11. Thence along remainder of L. C. Aw. 11216, Apana 9 to M. Kekaunohi and along the North shore of Pearl Harbor (East Loch), on a curve to the right with a radius of 1,493.48 feet, the chord azimuth and distance being 104° 33' 50" 943.52 feet;
12. Thence along the North shore of Pearl Harbor (East Loch), on a curve to the right with a radius of 1,452.69 feet, the chord azimuth and distance being 134° 03' 50" 558.66 feet;
13. 145° 09' 119.78 feet along same;
14. Thence along the North shore of Pearl Harbor (East Loch) and along remainder of R. P. 7268, L. C. Aw. 3834 and 7244, Part 1 to Puhi, on a curve to the left with a radius of 935.37 feet, the chord azimuth and distance being 129° 17' 51.46 feet;
15. 113° 25' 2,083.56 feet along Lot 5 (Map 1) of Land Court Application 1525, Lot 5 (Map 1) of Land Court Application 1185, partly along Lot 2 (Map 1) of Land Court Application 114, along Lot 11 (Map 1) of Land Court Application 1640, Lot 6-A-1 (Map 10) of Land Court Application 1525, partly along Lot 10 (Map 1) of Land Court Application 1640;

16. Thence along Lots 6-A-1 and 6-A-2 (Map 10) of Land Court Application 1525, on a curve to the left with a radius of 2,047.09 feet, the chord azimuth and distance being 111° 40' 10" 124.83 feet to the point of beginning and containing an area of 182,169 square feet or 4.182 acres.

SUBJECT, HOWEVER, to the following:

1. The restriction of the rights of all access of ingress or egress, into and from Interstate Highway, Federal Aid Project No. I-H1-1(13), over and across Course 1 of the above described Parcel 9. Access permitted under Interstate Highway Structure only, dated November 15, 1967 and recorded in Liber 5924, Page 241.
2. Grant of perpetual easement of variable widths for pipeline purposes in favor of Standard Oil Company of California, dated May 16, 1960 and April 10, 1972 and recorded in Liber 3871, Page 1 and Liber 8318, Page 365, respectively.
3. The following grants of easements in favor of Hawaiian Electric Co., Inc.:
 - a) in perpetuity for intake and discharge tunnels dated July 11, 1945 and June 18, 1958 and recorded in Liber 1902, Page 4 and Liber 3456, Page 21, respectively.
 - b) for a period of fifty (50) years for electric power pole lines and guys dated May 24, 1969, March 22, 1965 and August 11, 1972 and recorded in Liber 6542, Page 193; Liber 5002, Page 532 and Liber 8528, Page 67, respectively; for a period commencing with date hereof and continuing for one and a half (1-1/2) years, and thereafter from year to year until terminated by either party for electric power pole lines and guys dated March 25, 1946 and recorded in Liber 1942, Page 447.
 - c) in perpetuity for underground drain pipes, sewers and pipelines dated July 27, 1955 and recorded in Liber 3008, Page 35.
 - d) for a period of fifty (50) years for underground electric power transmission lines, dated July 27, 1955 and recorded in Liber 3008, Page 41.
 - e) for a period of fifty (50) years for roadways, dated May 26, 1972 and September 21, 1960 and recorded in Liber 8391, Page 293 and Liber 3934, Page 476, respectively, in perpetuity for roadways dated July 27, 1955 and August 21, 1964 and recorded in Liber 3008, Page 47 and Liber 4836, Page 235, respectively.
 - f) in perpetuity for overhead fuel oil pipelines dated November 6, 1970 and August 21, 1964 and recorded in Liber 7279, Page 64 and Liber 4836, Page 222, respectively.
 - g) for a period of fifty (50) years, for electrical conduits and support structure, dated May 26, 1972 and recorded in Liber 8391, Page 307.

- h) for a period of fifty (50) years, for storm drain, dated September 21, 1960 and recorded in Liber 3934, Page 482.
- i) in perpetuity for circulating water tunnels, dated August 21, 1964 and recorded in Liber 4836, Page 229.
4. Grants of perpetual easements of variable widths in favor of the City and County of Honolulu for the following purposes:
- a) sanitary sewer fifteen (15.00) feet wide, dated March 4, 1964 and recorded in Liber 5693, Page 242.
- b) right of way thirty-two (32.00) feet wide, dated July 15, 1963 and recorded in Liber 4596, Page 317.
- c) two water pipelines and a pedestrian easement dated April 5, 1967 and recorded in Liber 5996, Page 134.
- d) drainage channel, dated June 25, 1970 and recorded in Liber 7447, Page 86.
5. The United States Government's existing 36-inch water pipeline, U. S. Signal Corps Communication Cable Lines and 16-inch Aviation Gas pipeline.
6. To all licenses and easements, whether recorded or unrecorded, across, over, along or under the Railroad Line, belonging to or in any way vested in others as the same shall now exist, dated March 16, 1951 and recorded in Liber 2442, Page 425.
- Encumbrances referred to by Liber and Page are recorded in the Bureau of Conveyances of the State of Hawaii, at Honolulu, Hawaii.

M/LC
Description, ~~Checked~~
and Checked
Bureau of Land Survey
and Acquisition

WC:dh
6/24/74

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 10

(Bikepath Easement)

Being a portion of the Navy Utility Corridor and being also portions of Grant 715, Apana 3 to John W. Oponui; R. P. 4472, Mahele Award 1, Apana 1 to Kamanoualani; R. P. 4497, L. C. Aw. 8559, Apana 1 to C. Kanaina; L. P. 8209, L. C. Aw. 8525-B, Part 3 to J. A. Kauwa; R. P. 1963, L. C. Aw. 5524, Apana 6 to L. Konia; L. P. 8145, L. C. Aw. 2494, Apana 2 to Julia Kekoa, Grant 171 to Kuaana; L. C. Aw. 9393, Apana 1 to J. W. Oponui; R. P. 114, L. C. Aw. 5878, Apana 1 to Kukiiahu; and Grant 169 to W. E. Gill, and also including portions of Waimalu Stream and Kalauao Stream. Situate at Waimalu and Kalauao, Ewa, Oahu, Hawaii.

Beginning at the Southwest corner of this parcel of land on the West side of Waimalu Stream, being also the Northeast corner of Lot 5 (Map 1) of Land Court Application 950, the coordinates of said point of beginning referred to Government Survey Triangulation Station "SALT LAKE" being 7,720.60 feet North and 15,416.90 feet West, as shown on Division of Land Survey and Acquisition Parcel Map File No. 18-1-3-46, thence running by azimuths measured clockwise from true South:

1. 173° 37' 40.04 feet along remainder of the Navy Utility Corridor along L. C. Aw. 11216, Apana 9 to M. Kekauonohi;
2. 266° 09' 438.50 feet across Waimalu Stream and along remainders of Grant 715, Apana 3 to J. W. Oponui and R. P. 4472, Mahele Award 1, Apana 1 to Kamanoualani;
3. Thence along remainders of R. P. 4472, Mahele Award 1, Apana 1 to Kamanoualani and R. P. 4497, L. C. Aw. 8559, Apana 1 to C. Kanaina, on a curve to the right with a radius of 1,452.50 feet, the chord azimuth and distance being 281° 12' 30" 754.73 feet;
4. 296° 16' 236.00 feet along remainder of R. P. 4497, L. C. Aw. 8559, Apana 1 to C. Kanaina;
5. Thence still along same, on a curve to the right with a radius of 2,685.00 feet, the chord azimuth and distance being 300° 16' 402.50 feet;
6. Thence still along same and along Lot 5 (Map 2) of Land Court Application 1796, on a curve to the right with a radius of 1,930.00 feet, the chord azimuth and distance being 310° 34' 423.57 feet;

7. 316° 52' 587.04 feet along Lot 5 (Map 2) of Land Court Application 1796 and along remainders of R. P. 1963, L. C. Aw. 5524, Apana 6 to L. Konia and L. P. 8145, L. C. Aw. 2494, Apana 2 to Julia Kekoa and along Lots 9 and 10 of the Kalauao Industrial Park, Unit I (File Plan 754);
8. Thence along Lots 10, 11, 12, 13 and 14 of the Kalauao Industrial Park, Unit I (File Plan 754) and Lots 3 and 2 of the Kalauao Industrial Park, Unit II (File Plan 992), on a curve to the left with a radius of 1,890.00 feet, the chord azimuth and distance being 304° 23' 30" 816.53 feet;
9. 201° 55' 5.00 feet along Lot 2 of the Kalauao Industrial Park, Unit II (File Plan 992);
10. Thence still along same and across Kalauao Stream, on a curve to the left with a radius of 1,885.00 feet, the chord azimuth and distance being 284° 45' 470.33 feet;
11. 277° 35' 1,391.61 feet along Lot 2 of the Kalauao Industrial Park, Unit II (File Plan 992), Lots 20, 23, 24, 25 and 26 of Aiea Kai Tract, Lots 2-M, 2-N and 2-P (Map 18) of Land Court Application 334, remainder of R. P. 114, L. C. Aw. 5878, Apana 1 to Kukiiahu, Lots 29 thru 37 of Aiea Kai Tract and remainders of Grant 171 to Kuaana and Grant 169 to W. E. Gill;
12. 7° 35' 50.00 feet along remainder of the Navy Utility Corridor along remainder of Grant 169 to W. E. Gill;
13. 97° 35' 1,391.61 feet along United States Naval Reservation (U. S. Civil No. 521) and along remainder of Grant 171 to Kuaana;
14. Thence along remainders of Grant 171 to Kuaana and R. P. 1963, L. C. Aw. 5524, Apana 6 to L. Konia and the North shore of Pearl Harbor (East Loch), on a curve to the right with a radius of 1,935.00 feet, the chord azimuth and distance being 104° 45' 482.81 feet;
15. 201° 55' 5.00 feet along the North shore of Pearl Harbor (East Loch);
16. Thence still along same, on a curve to the right with a radius of 1,930.00 feet, the chord azimuth and distance being 124° 23' 30" 833.81 feet;

17. 136° 52' 587.04 feet along the North shore of Pearl Harbor (East Loch) and along remainders of L. P. 8145, L. C. Aw. 2494, Apana 2 to Julia Kekoa, R. P. 1963, L. C. Aw. 5524, Apana 6 to L. Konia, and L. P. 8209, L. C. Aw. 8525-B, Part 3 to J. A. Kauwa;
18. Thence along remainders of L. P. 8209, L. C. Aw. 8525-B, Part 3 to J. A. Kauwa and R. P. 4497, L. C. Aw. 8559, Apana 1 to C. Kanaina, on a curve to the left with a radius of 1,890.00 feet, the chord azimuth and distance being 130° 34' 414.80 feet;
19. Thence along remainder of R. P. 4497, L. C. Aw. 8559, Apana 1 to C. Kanaina, on a curve to the left with a radius of 2,845.00 feet, the chord azimuth and distance being 120° 16' 396.91 feet;
20. 116° 16' 236.00 feet along remainder of R. P. 4497, L. C. Aw. 8559, Apana 1 to C. Kanaina;
21. Thence still along same, on a curve to the left with a radius of 1,412.50 feet, the chord azimuth and distance being 101° 12' 30" 733.94 feet;
22. 86° 09' 436.73 feet along remainders of R. P. 4497, L. C. Aw. 8559, Apana 1 to C. Kanaina and Grant 715, Apana 3 to John W. Opunui and across Waimalu Stream to the point of beginning and containing an area of 240,096 square feet or 5.512 acres.

SUBJECT, HOWEVER, to the following:

1. Grant of perpetual easement of variable widths for pipeline purposes in favor of Standard Oil Company of California, dated May 16, 1960, and recorded in Liber 3871, Page 1.
2. Grant of perpetual easement over Easements 1, 2, 3 and 4, for road and sewer and water pipeline purposes in favor of Elizabeth Loy Marks, et al, dated May 4, 1960, and recorded in Liber 3907, Pages 20 and 32, respectively. Said Easements 2 and 3 were assigned to H C & D, LTD by instrument dated May 22, 1961, and recorded in Liber 4065, Page 22. Said Easement 2 was further assigned to Jos. Schlitz Brewing Company by instrument dated December 27, 1963, and recorded in Liber 4661, Page 591.

3. The following grants over Easements A and B in favor of H C & D LTD:

- a. Perpetual road easement and easement for water and sewer pipeline purposes dated August 2, 1961, and recorded in Liber 4106, Pages 117 and 131, respectively.
- b. An easement for power and communication lines, for a period of fifty (50) years, dated August 2, 1961, and recorded in Liber 4106, Page 124.

Said Easement A was assigned to American Factors, Limited by instrument dated August 10, 1961, and recorded in Liber 4120, Page 155.

Said Easement B was assigned to Jos. Schlitz Brewing Company by instrument dated December 27, 1963, and recorded in Liber 4661, Page 591, as corrected by instrument dated July 8, 1966, and recorded in Liber 5402, Page 58.

4. Grant of easement over and across Easement B for overhead conveyor purposes, for a period of twenty (20) years, in favor of Jos. Schlitz Brewing Company dated August 7, 1967, and recorded in Liber 5757, Page 48.
5. Grant of easements over Easements C and D, extending to August 7, 1987, for overhead pipeline purposes, in favor of Jos. Schlitz Brewing Company, dated April 11, 1969, and recorded in Liber 6479, Page 294.
6. Grant of perpetual drainage channel easement in favor of the City and County of Honolulu dated June 25, 1970, and recorded in Liber 7447, Page 86.
7. Grant of roadway easements, for twenty (20) years, in favor of Hawaii Brewing Company dated April 5, 1973, and recorded in Liber 9089, Page 284.
8. Grants of utility easements, for fifty (50) years, in favor of the Hawaiian Electric Company, Inc. dated October 26, 1964 and March 22, 1965, and recorded in Liber 4876, Page 448 and Liber 5002, Page 532, respectively.
9. Grants of sewer easements, in perpetuity, in favor of the City and County of Honolulu dated March 4, 1965 and January 19, 1968, and recorded in Liber 5063, Page 524 and Liber 5983, Page 308, respectively.
10. Grants of perpetual road easement and easement for sewer and water pipelines purposes in favor of Herbert T. Hayashi dated May 6, 1960, and recorded in Liber 3930, Pages 181 and 186, respectively.

11. Grant of sewer easement, for a period of fifty (50) years, in favor of Island Construction Company, Inc. and Waiahole Water Company, Limited, dba Pearl Harbor Heights Developers, dated September 12, 1960, and recorded in Liber 3920, Page 166. Said easement was assigned to the City and County of Honolulu by Assignment dated March 8, 1962, and recorded in Liber 4509, Page 286, and reassigned to Island Construction Company, Inc. and Waiahole Water Company, Limited, dba Pearl Harbor Heights Developers, by assignment dated September 24, 1970, and recorded in Liber 7209, Page 210.
12. Grant of perpetual easement for open drainage channel purposes in favor of Island Construction Company, Inc. and Waiahole Water Company, Limited, dba Pearl Harbor Heights Developers, dated April 9, 1962, and recorded in Liber 4279, Page 194. Said easement was assigned to the City and County of Honolulu by Assignment dated February 19, 1963, and recorded in Liber 4524, Page 503.
13. The Government existing 36-inch water pipeline, 16-inch Aviation Gasoline pipeline and U. S. Signal Corps communication cable lines.
14. To all licenses and easements, whether recorded or unrecorded, across, over, along or under the Railroad Line, belonging to or in any way vested in others as the same shall now exist, dated March 16, 1951, and recorded in Liber 2442, Page 425.

Encumbrances referred to by Liber and Page are recorded in the Bureau of Conveyances of the State of Hawaii, at Honolulu, Hawaii.

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Description Compared
and Checked
Division of Land Survey
and Acquisition

WC:ch
6/24/74

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 11

(Bikepath Easement)

Being a portion of the Navy Utility Corridor and being also portion of Parcel E of U. S. Civil No. 430 Governor's Executive Order No. 1038 dated November 18, 1943 being also portions of R. P. 797, L. C. Aw. 2102 to Kaohe; R. P. 790, L. C. Aw. 2052 to Kekoanui; R. P. 793, L. C. Aws. 5918 and 9337 to Pua, and R. P. 2875, L. C. Aw. 2141 to Keapoahiwa, and portions of R. P. 787, L. C. Aw. 7344 to Kulani no Kalohi, Government (Crown) Land of Aiea (Governor's Executive Order No. 1894), Grant 3121 to J. S. McGrew, R. P. 5687, L. C. Aw. 5365 to W. Stevens and Grant 169 to W. E. Gill. Situate at Kalauao and Aiea, Ewa, Oahu, Hawaii.

Beginning at the south corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "SALT LAKE" being 4,067.51 feet North and 8,740.63 feet West, as shown on Division of Land Survey and Acquisition Parcel Map File No. 18-1-3-47 and running by azimuths measured clockwise from true South:

1. 209° 00' 120.00 feet along United States Naval Reservation (Presidential Executive Order No. 2566);
2. Thence along U. S. Naval Reservation (Presidential Executive Order No. 2566) and remainder of Government (Crown) Land of Aiea, on a curve to the left with a radius of 454.40, the chord azimuth and distance being 168° 37' 588.81 feet;
3. 128° 14' 475.95 feet along remainder of Government (Crown) Land of Aiea and United States Naval Reservation (U. S. Civil No. 430);
4. 201° 29' 13.00 feet along Lot B (Map 1) of Land Court Application 328;
5. 127° 38' 298.50 feet along same;
6. 53° 06' 30" 9.60 feet along same;
7. 128° 14' 464.71 feet along remainder of Government (Crown) Land of Aiea and Lot 1-D-3 (Map 11) of Land Court Application 334;

8. Thence along Lot 1-D-3 (Map 11) of Land Court Application 334 and United States Naval Reservation (U. S. Civil No. 521) (Lot 8 (Map 19) of Land Court Application 334), on a curve to the left with a radius of 1,392.69 feet, the chord azimuth and distance being 119° 06' 442.13 feet;
9. 199° 58' 10.00 feet along United States Naval Reservation (U. S. Civil No. 521) along Lot 8 (Map 19) of Land Court Application 334;
10. Thence still along same, on a curve to the left with a radius of 1,402.69 feet, the chord azimuth and distance being 103° 40' 30" 307.44 feet;
11. 187° 23' 5.00 feet along United States Naval Reservation (U. S. Civil No. 521);
12. 187° 35' 50.00 feet along remainder of the Navy Utility Corridor along remainder of Grant 169 to W. E. Gill;
13. 277° 35' 4.91 feet along remainder of Grant 169 to W. E. Gill;
14. Thence still along remainders of Grant 169 to W. E. Gill and R. P. 5687, L. C. Aw. 5365 to Wm. Stevens, on a curve to the right with a radius of 1,457.69 feet, the chord azimuth and distance being 278° 43' 30" 58.09 feet;
15. 189° 52' 5.00 feet along remainder of R. P. 5687, L. C. Aw. 5365 to Wm. Stevens;
16. Thence along United States Naval Reservation (U. S. Civil No. 521) along Lot 3-A-1 (Map 12) of Land Court Application 334, on a curve to the right with a radius of 1,462.69 feet, the chord azimuth and distance being 284° 55' 257.50 feet;
17. 199° 58' 10.00 feet along same;
18. Thence along U. S. Naval Reservation (U. S. Civil No. 521) along Lot 3-A-2 (Map 12) of Land Court Application 334, being also the Southwest side of Kamehameha Highway, on a curve to the right with a radius of 1,472.69 feet, the chord azimuth and distance being 293° 36' 00.5" 186.66 feet;
19. Thence along the Southwest side of Kamehameha Highway, on a curve to the right with a radius of 3,280.55 feet, the chord azimuth and distance being 305° 46' 35.2" 281.26 feet;

20. 308° 14' 89.05 feet along same;
21. 218° 14' 5.00 feet along same;
22. 308° 14' 394.22 feet along same;
23. 53° 06' 30" 11.15 feet along same;
24. 307° 38' 270.20 feet along same;
25. 201° 29' 4.00 feet along same;
26. 233° 14' 4.25 feet along same;
27. 308° 14' 441.83 feet along same;
28. Thence still along same, on a curve to the right with a radius of 1,035.48 feet, the chord azimuth and distance being 315° 44' 42" 270.73 feet;
29. Thence still along same and along United States Naval Reservation (U. S. Civil No. 430) Governor's Executive Order No. 1038 dated November 18, 1943, on a curve to the right with a radius of 534.40 feet, the chord azimuth and distance being 00° 30' 30" 509.85 feet;
30. 29° 00' 120.00 feet along United States Naval Reservation (U. S. Civil No. 430) Governor's Executive Order No. 1038 dated November 18, 1943 and Government Land of Aiea;
31. 119° 00' 80.00 feet along remainder of Navy Utility Corridor to the point of beginning and containing an area of 196,494 square feet or 4.511 acres.

SUBJECT, HOWEVER, to the following:

1. A perpetual easement of fifteen (15.00) feet wide for pipeline purposes in favor of Standard Oil Company of California, dated May 16, 1960 and recorded in Liber 3871, Page 1 and amendment dated December 14, 1972 and recorded in Liber 9139, Page 332.
2. A perpetual easement of forty-four (44.00) feet wide for roadway purposes in favor of John Yoi Ing, dated October 20, 1961 and recorded in Liber 4155, Page 355.
3. A perpetual easement for rights-of-way for a controlled access highway purposes in favor of the State of Hawaii, Department of Transportation, dated May 20, 1964 and recorded in Liber 4782, Page 285.
4. An easement for a period of fifty (50) years for power line purposes in favor of Hawaiian Electric Company, Inc., dated March 22, 1965 and recorded in Liber 5002, Page 532.

5. Easement "J" fifteen (15.00) feet wide, in perpetuity for oil pipeline purposes in favor of Standard Oil Company of California, dated October 26, 1964 and recorded in Liber 4931, Page 556.
6. A perpetual easement (Parcel A-3) for Cathodic Protection System in favor of Standard Oil Company of California, dated December 14, 1972 and recorded in Liber 9139, Page 336.
7. A perpetual easement (Parcel D-4) for drainage channel purposes in favor of the City and County of Honolulu, dated December 14, 1972 and recorded in Liber 9139, Page 353.
8. Easement "B" twenty (20.00) feet wide, in perpetuity for storm drain purposes in favor of the State of Hawaii, Department of Transportation, dated May 21, 1964 and recorded in Liber 4782, Page 278.
9. The Government's vehicular and utility support structure, existing 36-inch water pipeline and 16-inch Aviation Gasoline pipeline and U. S. Signal Corps communication cable lines.
10. A perpetual easement for sewer line purposes in favor of the City and County of Honolulu, dated January 19, 1968 and recorded in Liber 5983, Page 308-321.
11. A perpetual easement (Parcels S-9 and S-10) for sewer pipeline purposes in favor of the City and County of Honolulu, dated December 14, 1972 and recorded in Liber 9139, Page 345.
12. An easement five (5.00) feet wide, for a period of twenty (20) years for pipeline purposes in favor of Standard Oil Company of California, dated March 16, 1962 and recorded in Liber 4239, Page 161.
13. An easement for a period of sixteen (16) years for sewer line purposes in favor of the City and County of Honolulu, dated May 27, 1957 and recorded in Liber 5086, Page 63.
14. To all licenses and easements, whether recorded or unrecorded, across, over, along or under the Railroad Line, belonging to or in any way vested in others as the same shall now exist, dated March 16, 1951 and recorded in Liber 2442, Page 425.

Encumbrances referred to by Liber and Page are recorded in the Bureau of Conveyances of the State of Hawaii, at Honolulu, Hawaii.

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 and Checked
 Division of Land Survey
 and Acquisition

WC:dh
 6/24/74

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 12

(Bikepath Easement)

Being Lot 3-A-2, area 13,039 square feet, as shown on Map 12, filed in the Office of the Assistant Registrar of the Land Court of the State of Hawaii with Land Court Application 334 of McGrew Estate, Limited, and being a portion of the land described in Transfer Certificate of Title No. 30,395 issued to United States of America.

Situate at Kalauao, Ewa, Oahu, Hawaii.

SUBJECT, HOWEVER, to grant of a perpetual easement for public highway and utility purposes in favor of the State of Hawaii, dated July 9, 1948, on file in the Office of the Assistant Registrar of the Land Court of the State of Hawaii, at Honolulu, Hawaii, as Document No. 103710.

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Description Compared
and Checked
Division of Land Survey
and Acquisition

WC:dh
6/24/74

PEARL HARBOR BIKEPATH

(Pearl City to Halawa)

PARCEL 13

(Bikepath Easement)

Being a portion of the United States Naval Reservation, being also portion of Parcel D of U. S. Civil No. 430 Governor's Executive Order No. 1038 dated November 18, 1943, being also a portion of the Government (Crown) Land of Aiea. Situate at Aiea, Ewa, Oahu, Hawaii.

Beginning at the most Southerly corner of this parcel of land, and on the East side of the Navy Utility Corridor, the coordinates of said point of beginning referred to Government Survey Triangulation Station "SALT LAKE" being 4,046.18 feet North and 8,660.93 feet West, as shown on the Division of Land Survey and Acquisition Parcel Map File No. 18-1-3-47, thence running by azimuths measured clockwise from true South:

1. 209° 00' 100.00 feet along the East side of the Navy Utility Corridor;
2. Thence still along same, on a curve to the left with a radius of 534.40 feet, the chord azimuth and distance being 207° 46' 48" 22.76 feet;
3. Thence along remainder of United States Naval Reservation (U. S. Civil No. 430) Governor's Executive Order No. 1038 dated November 18, 1943, on a curve to the right with a radius of 270.00 feet, the chord azimuth and distance being 237° 12' 17" 10.97 feet;
4. 16° 30' 41.87 feet along Governor's Executive Order No. 1241;
5. 333° 20' 4.15 feet along same;
6. Thence along remainder of United States Naval Reservation (U. S. Civil No. 430) Governor's Executive Order No. 1038 dated November 18, 1943, on a curve to the left with a radius of 240.00 feet, the chord azimuth and distance being 39° 54' 30" 90.83 feet to the point of beginning and containing an area of 901 square feet.

SUBJECT, HOWEVER, to the following:

1. A perpetual easement, fifteen (15.00) feet wide for pipeline purposes in favor of Standard Oil Company of California, dated October 22, 1959 and recorded in Liber 3712, Page 49-61.

2. A perpetual easement, fifteen (15.00) feet wide in favor of the City and County of Honolulu for sanitary sewer purposes, dated January 19, 1968 and recorded in Liber 5983, Pages 308-321.

Encumbrances referred to by Liber and Page are recorded in the Bureau of Conveyances of the State of Hawaii, at Honolulu, Hawaii.

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Description Compared
and Checked
Division of Land Survey
and Acquisition

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6/24/74

APPENDIX C
COMMUNICATION BETWEEN THE STATE OF HAWAII
AND THE U.S. NAVY



RECEIVED
27 APR 10 08:10

DEPARTMENT OF THE NAVY
COMMANDER IN CHIEF
UNITED STATES PACIFIC FLEET
PEARL HARBOR, HAWAII 96860

see me plan
WPS

1750

IN REPLY REFER TO:

11010
Ser 44/ 3610
08 APR 1987

Mr. William Paty
Chairperson of the Board
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

DIVISION OF
STATE PARKS
APR 14 1 40 PM '87

Dear Mr. Paty:

AIEA BAY STATE RECREATION AREA

Thank you for your letter of February 26, 1987.

As stated in our letters of June 16, 1986 and September 8, 1986 recent world events have caused the Navy to reassess its security measures at all naval installations. As a result, we have initiated a major program to enhance physical security in and around the Pearl Harbor Naval Base.

Ship berthing areas are a major security concern. The line of sight from the shore behind Aiea Bay is directly toward the berthing piers of some of our largest warships. The CINCPACFLT boathouse, on the "Diamond Head" side of Aiea Bay is also a major target. It is regularly used as a reception area for heads of state and high ranking military officers from foreign nations as well as the United States. The Navy must be able to guarantee the safety of these visitors. Because of the above concern, we cannot endorse your current plans for park expansion. We again ask that you defer any park development until certain security measures are provided and the boathouse has been relocated.

If because of community pressures you must proceed with the proposed park expansion at this time, we request that the State administration and the State legislature give a high priority to appropriating the funds needed to provide the required security, including construction of a replacement boathouse, so that Navy concerns will be satisfied and the area between Aiea Stream and Richardson Center can be made available for park development.

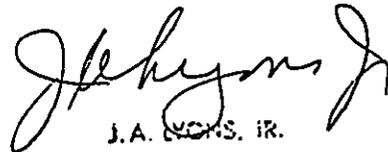
If funding will not be forthcoming in the near term, measures must be taken at this time to improve security in the vicinity of the proposed park. We ask for the cooperation and assistance of the State in this effort. We request the following:

- a. That the State provide fencing, lighting, and other security measures as part of its current planned park expansion "Ewa" of Aiea Stream to satisfy Navy's security concerns.

b. That the State terminate the current agreements which allow use of the State land on both sides of the boathouse access road so that these areas can be kept clear and provide a security buffer for the boathouse. In conjunction with this action, the Navy is prepared to enter into land exchange negotiations for the purpose of conveying ownership of all State land parcels "Diamond Head" of the Aiea Stream to the Navy. Once ownership has been transferred, the Navy will be able to secure this entire area. If a land exchange is not desired, the Navy is willing to enter into an agreement whereby it will assume all maintenance and care of this State property until such time as the replacement boathouse is constructed and the area becomes available for park expansion.

c. That the State work with the Navy to arrange for the extension of the State bikepath on Kamehameha Highway to connect with the City and County of Honolulu bikepath at Aiea Bay State Recreation Area so that the bikepath in front of the boathouse may be closed to the public. The Navy will cooperate with the State by making suitable right-of-way areas available for this extension.

I am confident that by working together on this issue, it can be resolved to the satisfaction of both the State and the Navy. Please contact Mr. Bill Liu, phone 471-3203, at your earliest convenience to discuss this matter further and arrange any meetings which might be appropriate.


J.A. LYONS, JR.

JOHN WAIHEE
GOVERNOR OF HAWAII



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

WILLIAM W. PATY, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

LIBERT K. LANDGRAF
DEPUTY

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

OCT 22 1987

Admiral David Jeremiah
Commander in Chief
United States Pacific Fleet
Pearl Harbor, Hawaii 96860

Dear Admiral Jeremiah:

SUBJECT: Aiea Bay State Recreation Area

Since the early 1970's, we have been working together with the Navy to develop a State Park at Aiea Bay. The concept calls for the use of State and Navy land to provide recreational opportunities in the area. Over the years we have developed a conceptual plan, purchased a critical parcel of private property, made "interim" park improvements, and most recently have hired a consultant to prepare a Master Plan/Environmental Impact Statement (EIS) addressing ultimate park development. We are now ready to publish the final EIS.

The most recent Navy position on park development, as outlined in Admiral Lyon's letter of April 8, 1987, (attached) is being appended to the EIS. If there has been any change in the Navy's position, it would be more appropriate to include the most recent posture in lieu of the April 8 letter. If this is the case, please notify us as soon as possible as we anticipate publishing the EIS during October.

If the Navy's position remains unchanged, we have the following comment in reply to your letter of April 8, 1987:

While we appreciate the security concerns that you have expressed, we are committed to implement Phase I of our park improvements.

Regarding your request that the State administration and legislature give a high priority to appropriating funds to provide security, including construction of a replacement boathouse, we will apprise the legislature of your concerns but are not in a position to speak for them regarding the prioritization of this relative to other state projects. In addition to the funds which were appropriated in previous years, the legislature has recently approved the appropriation of an additional \$500,000 intended to complete improvements to Phase I.

Concerning your other requests we have the following comments:

Admiral David Jeremian

Page 2

OCT 2 1981

- 1) As part of the Memorandum of Understanding of 1981 between the State and the Navy, we agreed to provide a buffer wall along part of the property boundary at McGrew Point Housing. Navy and State chain link fences secure the remainder of that boundary. The remainder of the Phase I area boundary is formed by Aiea Bay, Aiea Stream, Kamehameha Highway and McGrew Loop. We do not intend to fence off the waterfront areas as they are the major park resources. The McGrew Loop park boundary will have a vehicular gate which will be secured at night. We had not proposed to fence the Kamehameha Highway boundary of the park, however, if the Navy chooses not to provide land for recreational use, we will separate the State and Navy land with a fence.
- 2) As the park is expected to be closed at night, we did not propose to provide night lighting. The funds currently available for park improvement will not be adequate to provide major night lighting. We will look into providing lights at the proposed comfort station. However, night lighting may tend to serve as an implied invitation to the public to use the facility at night.
- 3) Regarding the State land currently occupied by the State permittees and the boathouse access road, we do not propose to terminate those permits until improvement of the occupied area is imminent. Those permits generate over \$10,000 annually in revenue for the State and if difficulty to implement the Phase I park improvements is an indication of what is to be expected in the future, termination of those permittees now could represent several hundred thousand dollars in potential revenue lost to the State.
- 4) We would like to meet with you regarding the possibility of land exchange. While we are not abandoning our goal of development of the entire park master plan, we are interested in discussions primarily to better understand your land exchange suggestion.

Admiral David Jeremiah
Page 3

- 5) The question of the bike path brings several other agencies into the picture. The path does not currently pass over any land under our control, therefore we would be willing to assist in making contact with the appropriate agencies to help you resolve the issue.

We intend to proceed with publication of our Environmental Impact Statement and will address your security concerns as an unresolved issue. We will continue to work with you on this toward reaching a satisfactory solution.

Very truly yours,

/S/ WILLIAM W. PATY

WILLIAM W. PATY
Chairperson of the Board

