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UNIVERSITY OF HAWAII

OFFICE OF ENVIRONMENTAL QUALITY CONTROL August 23, 1994

SENIOR VICE PRESIDENT FOR ADMINISTRATION

Dr. Bruce Anderson
Director
Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, HI 96813

Subject: Negative Declaration for Long Range Development Plan
University of Hawaii, Manoa Campus
1994 Update

Dear Dr. Anderson:

The University of Hawaii has reviewed the comments received on the subject project during the 30-day public comment period which began on July 23, 1994 and ended on August 22, 1994. The agency has determined that this project will not have significant environmental effect and has issued a negative declaration. Please publish this notice in the September 8, 1994 OEQC Bulletin.

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

Please contact me at 956-7935 if you have any questions.

Sincerely,

Handwritten signature of Allan Ah San in cursive.

Allan Ah San
Associate Vice President for Administration

Enclosures

Note: The reports attached to the Draft Environmental Assessment have not changed and have not been resubmitted.

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1994-09-08 - OA - FEA - University of Hawaii
Long Range Development Plan

SEP - 8 1994

FILE COPY

**LONG RANGE DEVELOPMENT PLAN
UNIVERSITY OF HAWAII, MANOA CAMPUS
1994 UPDATE**

FINAL
ENVIRONMENTAL ASSESSMENT

Proposing Agency:

**Office of Senior Vice President for Administration
University of Hawaii
2444 Dole Street
Honolulu, HI 96822**

Prepared By:

**Group 70 International, Inc.
Architecture • Planning • Interior Design • Environmental Services
925 Bethel Street, Fifth Floor
Honolulu, HI 96813**

August 1994

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

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**LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT**

1.0 PREFACE

This Environmental Assessment (EA) has been prepared to determine if the actions proposed in the Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update (1994 LRDP), will have potential significant environmental impacts.

The 1994 LRDP, prepared for the University by Group 70 International, Inc., was adopted by the University's Board of Regents at its meeting of May 20, 1994. The following reports are attached as a part of the Environmental Assessment:

1. **Summary Report**
2. **LRDP Report**
3. **1990 Utilities Master Plan Update (to be updated)**
4. **Exterior Electrical Distribution System Study (to be updated)**

This document has been prepared in accordance with the provisions of Chapter 343, HRS as amended by Act 241, SLH 1992, and Title 11, Chapter 200, State Department of Health Administrative Rules, which set forth the requirements for the preparation of environmental assessments and environmental impact statements.

This Environmental Assessment encompasses the broad concepts, goals and objectives of the 1994 LRDP. Separate EA's will be filed for the individual projects prior to implementation with detailed information on the particular project.

2.0 PURPOSE AND NEED FOR 1994 LRDP

2.1 The 1987 LRDP

The 1987 LRDP was commissioned to provide a unifying vision for the campus and to guide subsequent development in a manner so as to address apparent deficiencies after decades of unrestrained growth. The LRDP was adopted by the University's Board of Regents in 1987 and has since served as the guiding document for campus development.

The 1987 LRDP addressed the physical problems of Manoa by envisioning a vital urban setting not unlike that of a successful small town. The plan proposed to reverse the existing orientation on campus from vehicles to pedestrians by proposing the removal of roads and parking facilities from the heart of the Central Campus to peripheral locations.

The number and importance of changes to the plan since its adoption, including changes in policies, programs and priorities, and the apparent shortcomings of the plan in providing sufficient design guidelines have made necessary this update.

2.2 The 1994 LRDP

The 1994 Update of the 1987 LRDP focuses on the following changes -- the locations of which are identified on the map on Page 2 of the Summary Report entitled "Revisions Diagram":

- Incorporate the construction of new projects since 1987.
- Acknowledge amendments to the 1987 LRDP approved by the Board of Regents.
- Incorporate amendments based on current UHM CIP and on current UHM policies, programs and priorities.
- Provide more comprehensive building and site design criteria to enhance the quality of design.
- Present proposals to strengthen the design review process by providing for the establishment of a design review panel.

3.0 INTRODUCTION

3.1 Background

The University of Hawaii at Manoa is the major comprehensive campus of the UH System, a center for research as well as undergraduate and graduate education. It began in 1907 as a land-grant college of agriculture and mechanic arts, called the College of Hawaii. The first classes were held at a temporary site in downtown Honolulu. In 1912, the school moved to its permanent location in Manoa Valley (Figure 1). With the addition of the College of Arts and Sciences in 1920, the college became the University of Hawaii. In 1972, the campus became the University of Hawaii at Manoa to distinguish it from the other units in the UH System.

Over 20,000 students are currently enrolled on the Manoa Campus, studying toward bachelor's degrees in 86 fields of study, master's degrees in 85 fields of study, doctorates in 50 fields of study, first professional degrees in law and medicine, professional diplomas in elementary and secondary education, the associate in science degree in nursing, and a number of certificates.

The University of Hawaii at Manoa is accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges. Professional programs are individually accredited by their respective agencies.

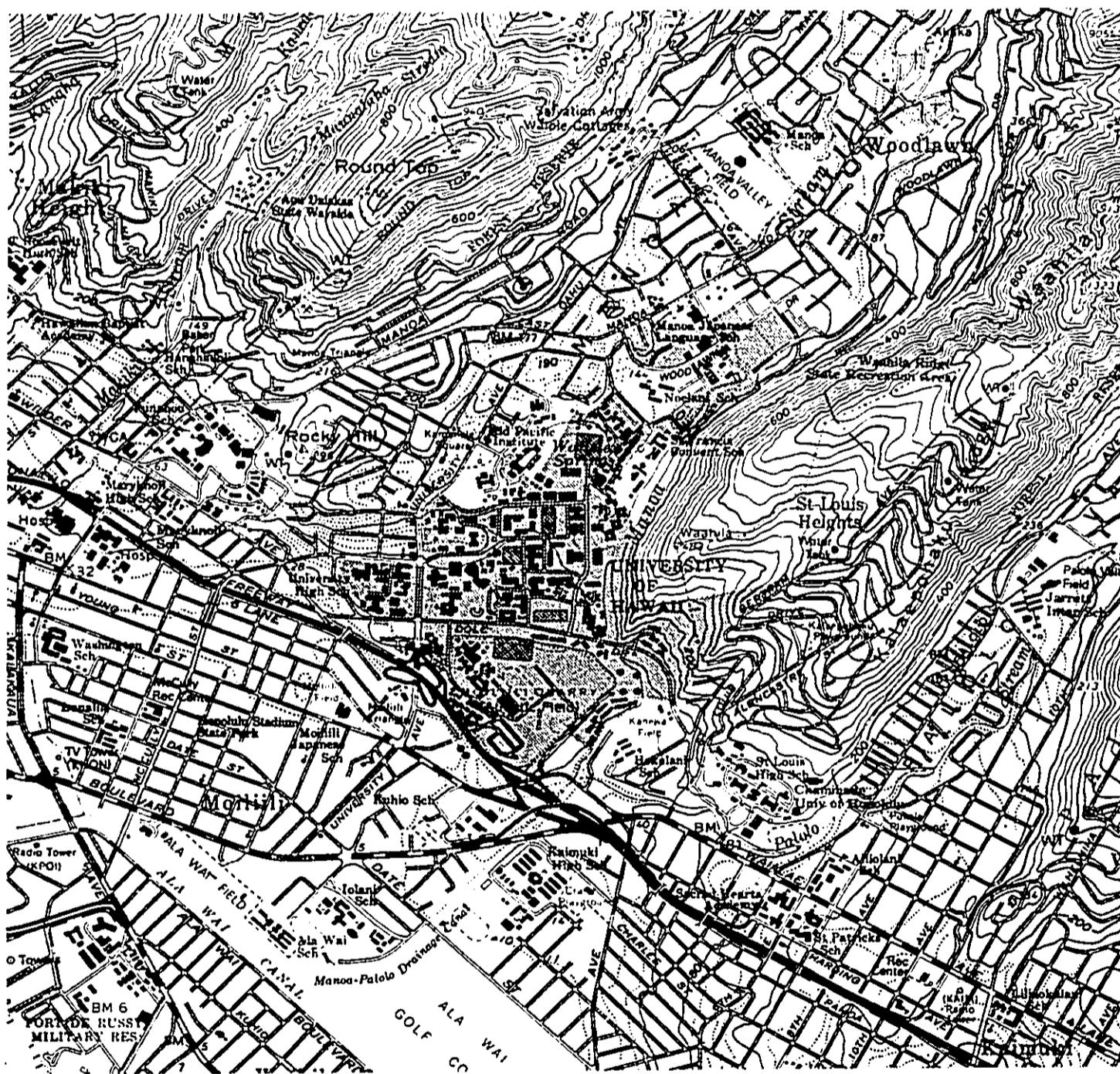
3.2 Mission Statement*

The mission of the University of Hawaii at Manoa is to serve society by increasing, refining, disseminating, and storing human knowledge, wisdom and values. The University carries out this mission through teaching, research, and service, in an atmosphere of academic freedom, and as a member of an international community of Universities.

Its special role in the University System is to serve as the center for advanced graduate and professional studies while emphasizing research and providing excellence in undergraduate programs.

* From Academic Development Plan IV, 1991-97

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT



LOCATION PLAN
Source: USGS Topographic Quadrangle (1983)

Figure 1

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
PLAN REVIEW USE

THE PROJECT PLAN

PATTERN FOR FUTURE DEVELOPMENT

Projected Night-time Campus Population

The night-time campus population excluding on-campus housing residents runs approximately 40% of the day-time population on Mondays thru Thursdays during the regular session. This number includes evening students, faculty/staff, visitors and day students utilizing library, computing center and other campus facilities. Thus, the night-time population during the planning period, exclusive of intercollegiate athletics and other special events, would range from 11,000 to 12,000 people, Monday thru Thursdays.

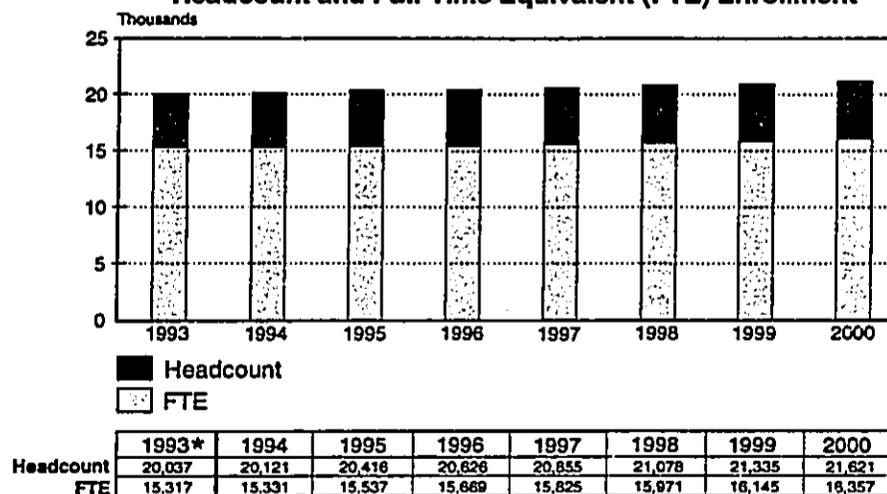
Generally on weekends, including Fridays, the evening students are largely replaced by visitors to UHM intercollegiate athletic, educational and cultural events. The facilities which are or will be used for these extracurricular events are the Special Events Center (10,000), the Baseball Stadium (4,312), Cooke Field (4,000), Kahanamoku Athletic Complex (1,800), Orvis Auditorium (409) and Kennedy Theater (634). On a periodic basis, Andrews Amphitheater is utilized for special events such as graduations, concerts, etc.

The athletic events are scheduled to limit conflicts on dates and times between the various sports and with other special events and academic activities. See Section 3.6, Hours of Operation.

Ultimate Day-time Enrollment Ceiling

The ultimate day-time enrollment ceiling established by the BOR for the Manoa Campus remains unchanged at 23,000 students.

Headcount and Full-Time Equivalent (FTE) Enrollment



* Actual

SOURCE: Institutional Research Office, University of Hawaii
March 1994

ENROLLMENT PROJECTIONS

Figure 2

Projected Night-time Campus Population

The night-time campus population excluding on-campus housing residents runs approximately 40% of the day-time population on Mondays thru Thursdays during the regular session. This number includes evening students, faculty/staff, visitors and day students utilizing library, computing center and other campus facilities. Thus, the night-time population during the planning period, exclusive of intercollegiate athletics and other special events, would range from 11,000 to 12,000 people, Monday thru Thursdays.

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The athletic events are scheduled to limit conflicts on dates and times between the various sports and with other special events and academic activities. See Section 3.6, Hours of Operation.

3.4 Number of Employees

The total number of employees under the University of Hawaii at Manoa in Fall 1993 was 5,441 including 4,375 BOR Appointees and 1,066 Civil Service Employees. These totals include both full-time and part-time personnel.

The total number of personnel at the University of Hawaii at Manoa is not expected to change appreciably through Fall 1999.

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INTRODUCTION

3.5 The Academic Year

The academic year on the Manoa Campus is divided into two seventeen-week semesters and a twelve-week summer session that offers two six-week terms.

In addition, the College of Continuing Education and Community Service offers evening programs which includes credit and non-credit courses--three terms yearly, concerts, lectures, and educational experiences designed for particular purposes or groups. The yearly enrollment for credit and non-credit courses is now about 18,000 for the three terms.

3.6 Hours of Operation

The normal hours of operation of academic activities on the Manoa Campus are as follows:

Regular Session: 07:30 am to 05:30 pm (Mon-Fri)
Summer Session: 07:30 am to 12:30 pm (Mon-Fri)
Evening Session: 05:30 pm to 10:30 pm (Mon-Thur)

The hours of operation of intercollegiate athletic programs are strictly controlled by the Department of Athletics to avoid conflicts with academic activities to alleviate impacts of traffic and parking and noise. The hours are also controlled to limit the periods of glare from floodlights into adjoining neighborhoods.

The hours of operation of the 10,000 seat Special Events Center which generates the more serious impacts on the Manoa Campus and its environs are controlled as follows:

Major Events: 08:00 am to 10:30 pm (Sun-Thur)*
08:00 am to 11:00 pm (Fri & Sat)*

No Major Events: 04:00 pm to 06:00 pm (Mon-Fri)*
(Excluding Holidays)

*Waivers from these restrictions in hours of operation may be obtained from the Department of Land Utilization upon presentation of "strong" justification and three weeks notice.

4.0 THE PROPOSED PROJECT

4.1 The Site

The Manoa Campus occupies some 304 acres of lands in lower Manoa Valley bounded by the Manoa, St. Louis Heights, Moiliili and Makiki communities. Its principal physical borders are the Manoa residential community on the mauka side, the Waahila Ridge on the kokohead side, the H-1 Freeway on the makai side and the lower Manoa and Makiki residential communities on the ewa side (Figure 3).

Its primary vehicular accesses are from the H-1 Freeway, University Avenue, Dole Street and Old Waialae Road. Public transportation is primarily provided by regular bus services on King Street, University Avenue, Dole Street and Metcalf Street. The bus service has recently been modified to include routes through the campus via East-West Road and Maile Way. The Manoa Campus is also served by direct express bus service from the outlying communities.

While there are about 3,200 students residing on the campus, the Manoa Campus remains largely a commuter campus.

4.2 The State Land Use District

The Manoa Campus is situated on lands designated as Urban in the State Land Use District Plan (Figure 4). The developments proposed for the Manoa Campus conforms to the Urban designation.

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
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MANOA CAMPUS COMMUNITY (AERIAL MAP)

Source: R.M. Towill Corporation (1992)

Figure 3

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

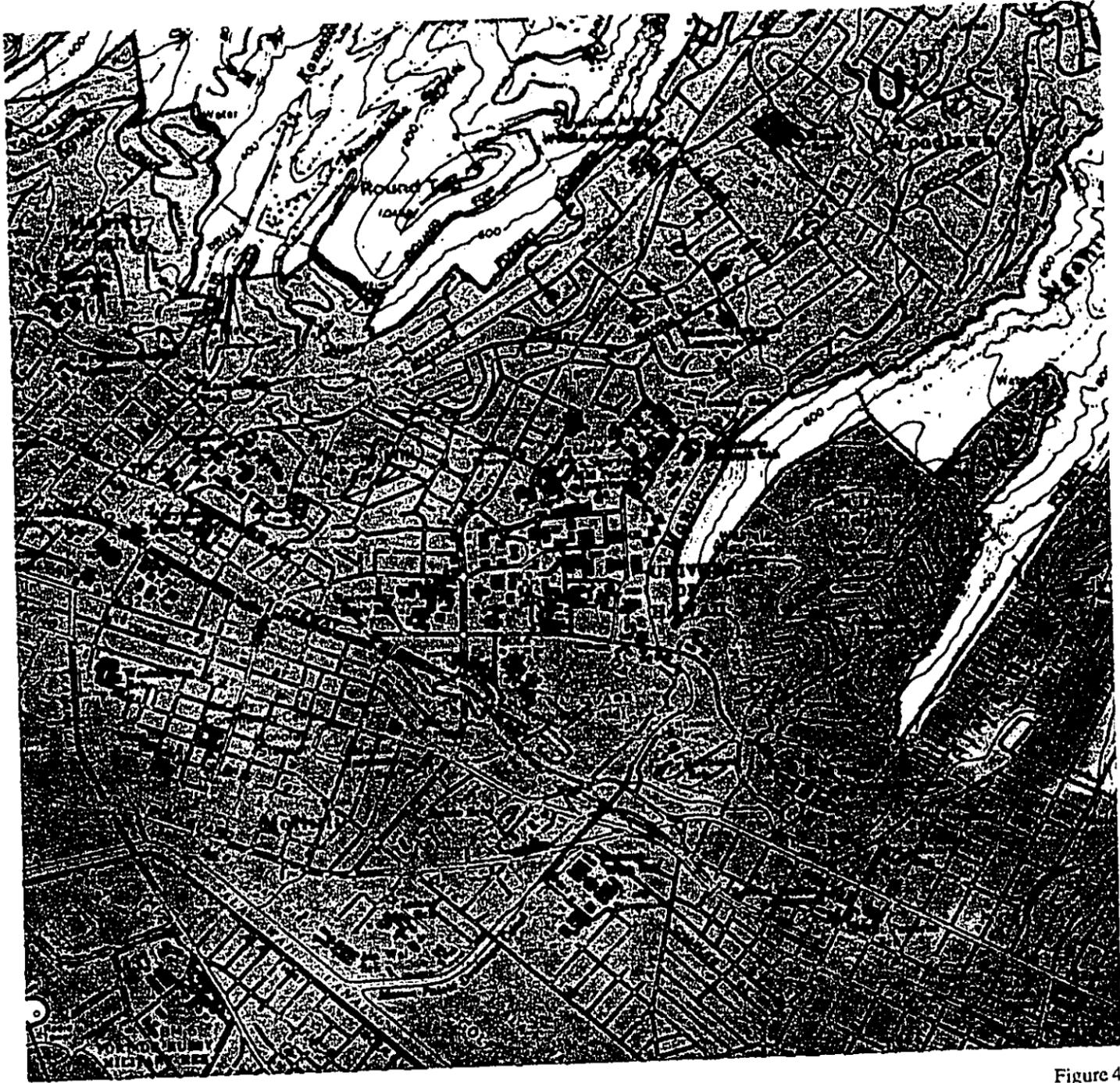


Figure 4

STATE LAND USE DISTRICT PLAN

Source: State of Hawaii

-  URBAN
-  CONSERVATION

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

THE PROPOSED PROJECT

4.3 Development Plan Use Map

The City's Development Plan Land Use Map indicates the Manoa Campus to be located on lands designated for Public Facilities (PF) (Figure 5).

The proposed improvements on the Manoa Campus during the planning period are permitted uses in a *Public Facilities* land use designation.

4.4 Zoning Map

The City's Zoning Map designates the existing Manoa Campus lands as R-5 and R-7.5 Residential (Figure 6).

The proposed improvements on the Manoa Campus during the planning period conforms to the residential zoning designations.

4.5 Plan Review Use

The Plan Review Use (PRU) of the Manoa Campus, University of Hawaii, as required by the City's Land Use Ordinance was approved by the City Council by Resolution No. 89-411, CD-2, dated August 24, 1989. This PRU was based on the 1987 LRDP, University of Hawaii, Manoa Campus (Figure 7).

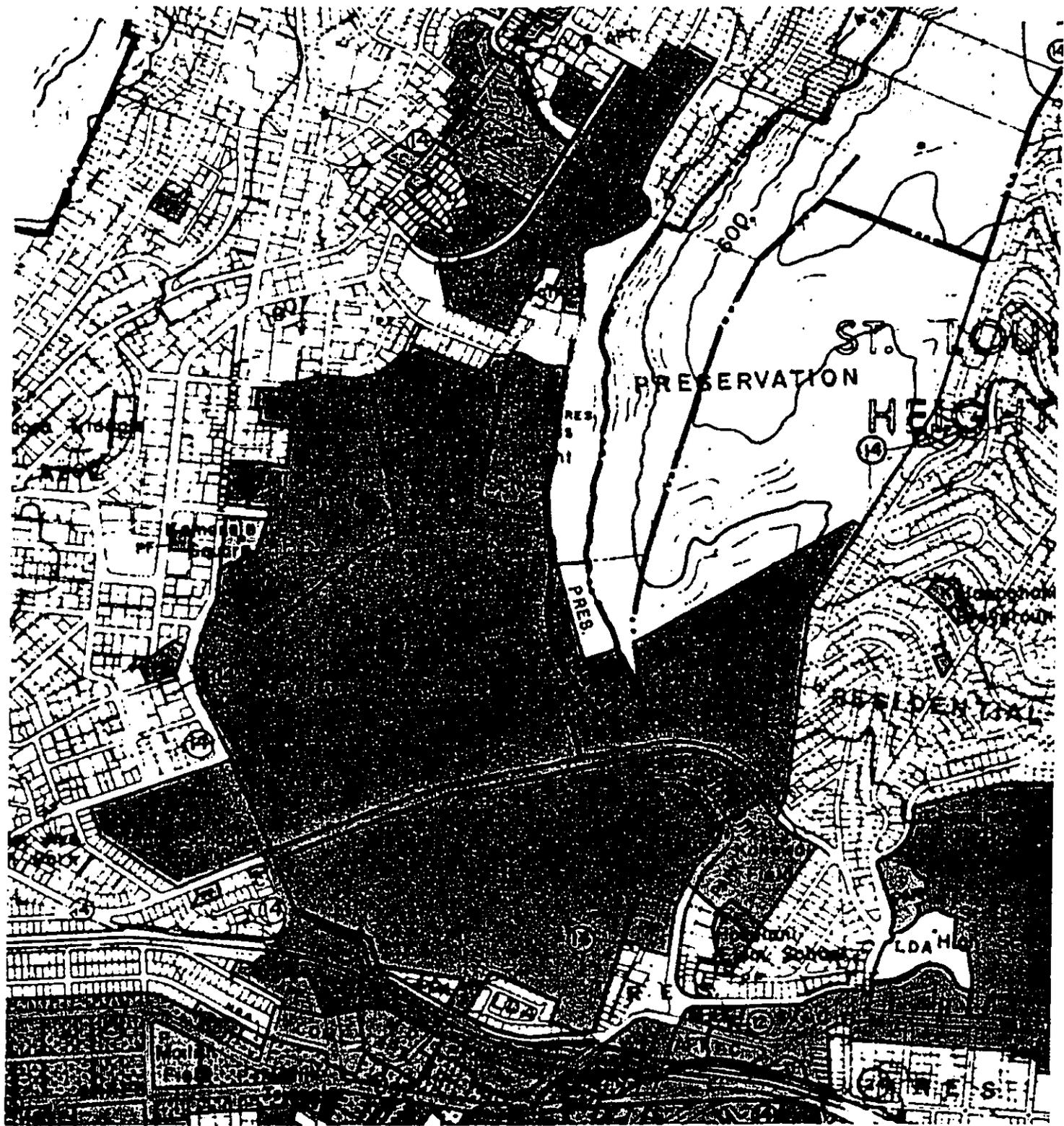
A new Plan Review Use Application based on the 1994 Update of the LRDP is under preparation and is scheduled to be filed with the City Department of Land Utilization this Summer. It will be subject to the approval of the City Council upon review and recommendation by the City DLU.

The approved PRU will become the Manoa Campus equivalent of the City's Land Use Ordinance and will govern the planning and design of all facilities on the Manoa Campus.

4.6 Tax Map Key

The existing Manoa Campus is identified as Tax Map Keys: 2-8-7: 29; 2-8-15: 1; 2-8-23: 3, 10, 11, 12, 13; 2-8-26: 14; 2-8-29: 1, 30, 31; 2-9-2: 12; 2-9-4: 5, 7; 2-9-23: 1, 26, 27; 2-9-26: 1, 2, 3, 37, 38; 2-9-27: 54; 2-9-13: 54; and 3-3-56: Portion of 1. Figures 8 (Zone 2, Section 8), 9 (Zone 2, Section 9) and 10 (Zone 3, Section 3).

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
 ENVIRONMENTAL ASSESSMENT

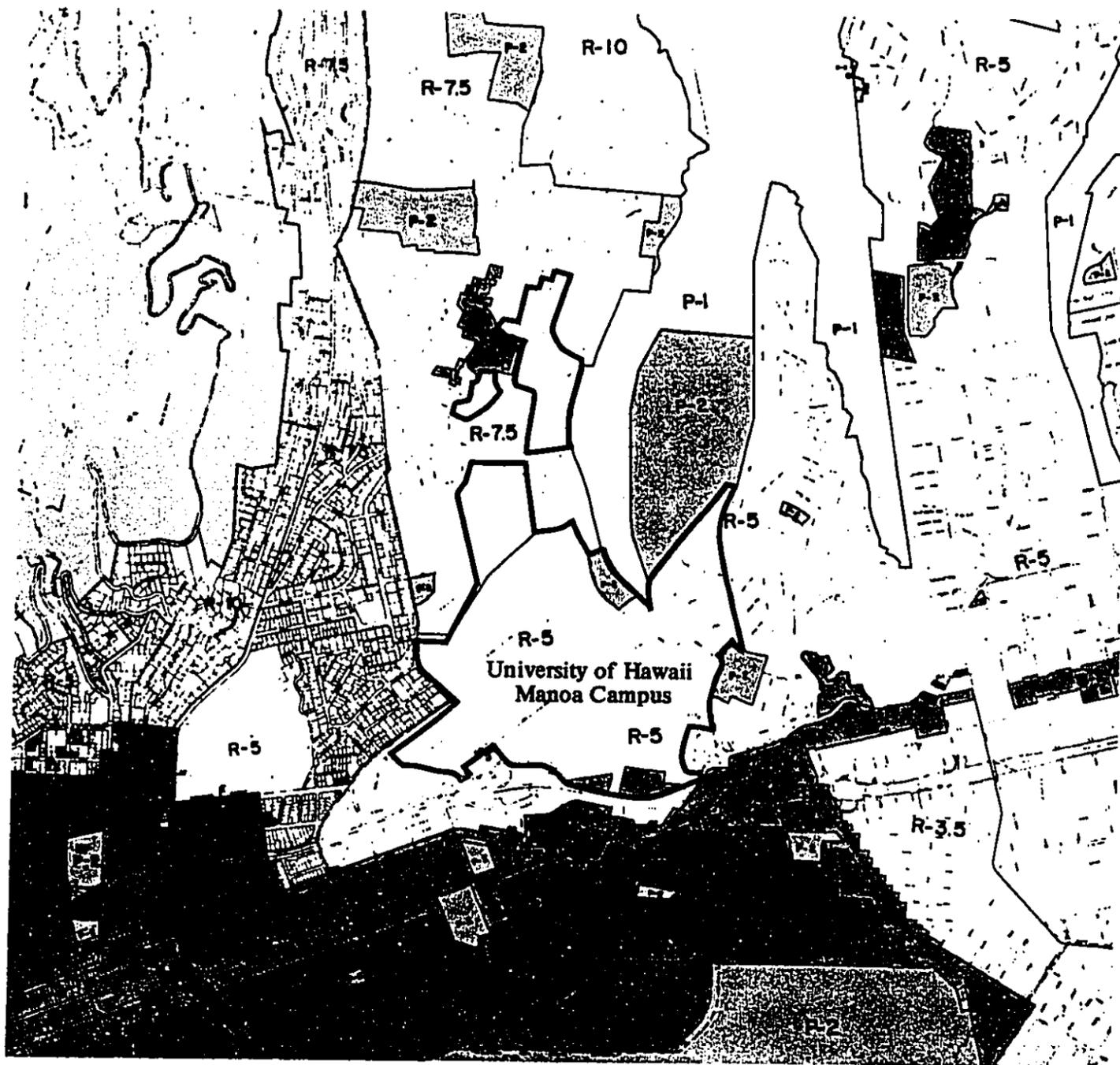


DEVELOPMENT PLAN LAND USE MAP Source: City & County of Honolulu

- | | | | |
|---|--------------------------|---|-------------------------|
|  | RESIDENTIAL |  | PUBLIC AND QUASI-PUBLIC |
|  | LOW DENSITY APARTMENT |  | PARK AND RECREATION |
|  | MEDIUM DENSITY APARTMENT |  | PRESERVATION |
|  | COMMERCIAL |  | STATE LAND USE BOUNDARY |

Figure 5

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
 ENVIRONMENTAL ASSESSMENT

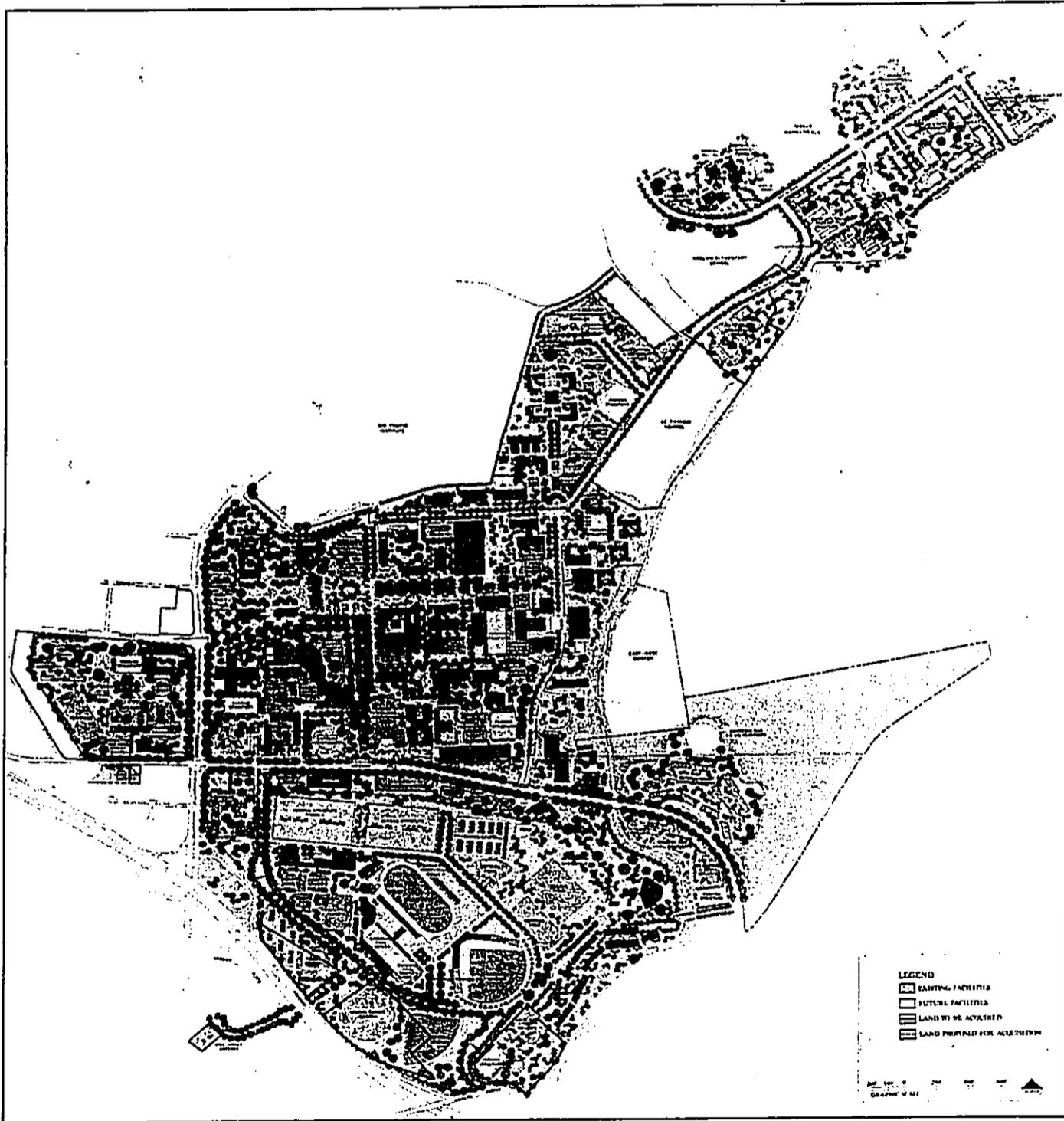


ZONING MAP Source: Department of Land Utilization, City & County of Honolulu

Figure 6

- | | |
|--|---|
| <p>RESIDENTIAL ZONES
 R-10, R-7.5, R-5, R-3.5 Residential</p> <p>BUSINESS ZONES
 B-1 Neighborhood Business
 B-2 Community Business
 BMX-3 Community Mixed Business</p> | <p>APARTMENT ZONES
 A-1, A-2, A-3 Apartment
 AMX-2 Medium Density Mixed Use
 AMX-3 High Density Mixed Use</p> <p>PRESERVATION ZONES
 P-1 Restricted P-2 General</p> |
|--|---|

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
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1987 LRDP MAP

Figure 7

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
 ENVIRONMENTAL ASSESSMENT

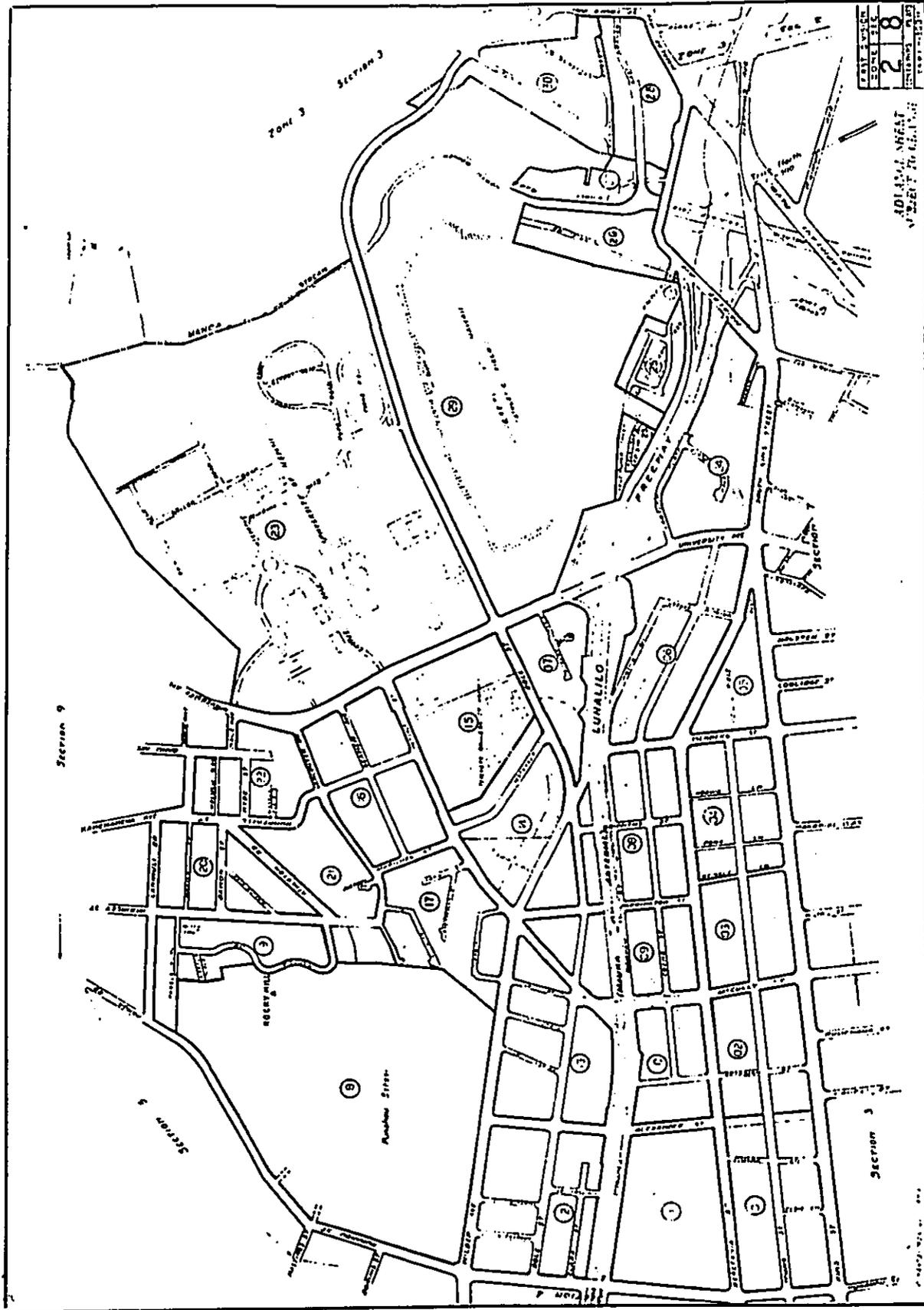


Figure 8

TAX MAP KEY: 2-8

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
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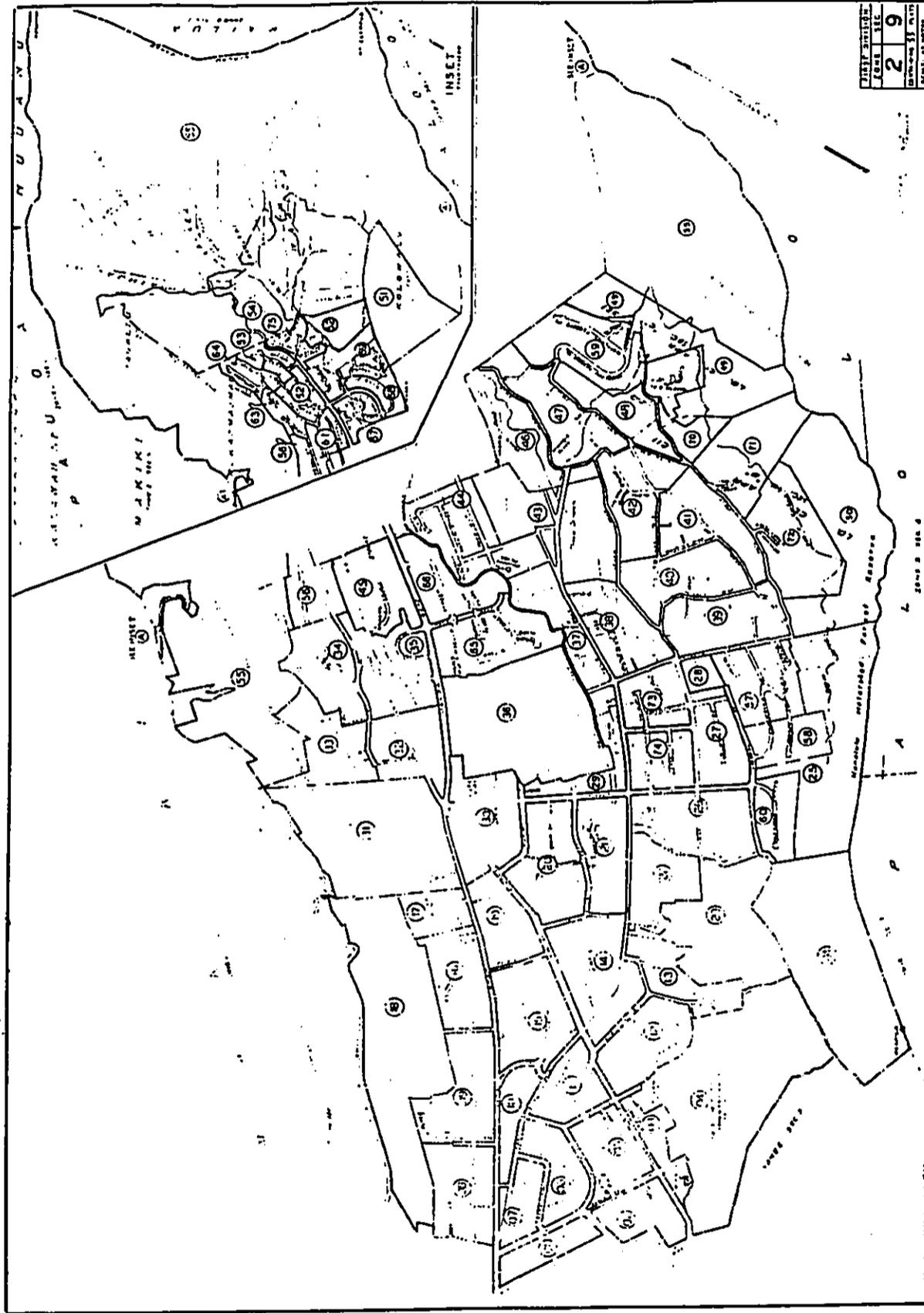


Figure 9

TAX MAP KEY: 2-9

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
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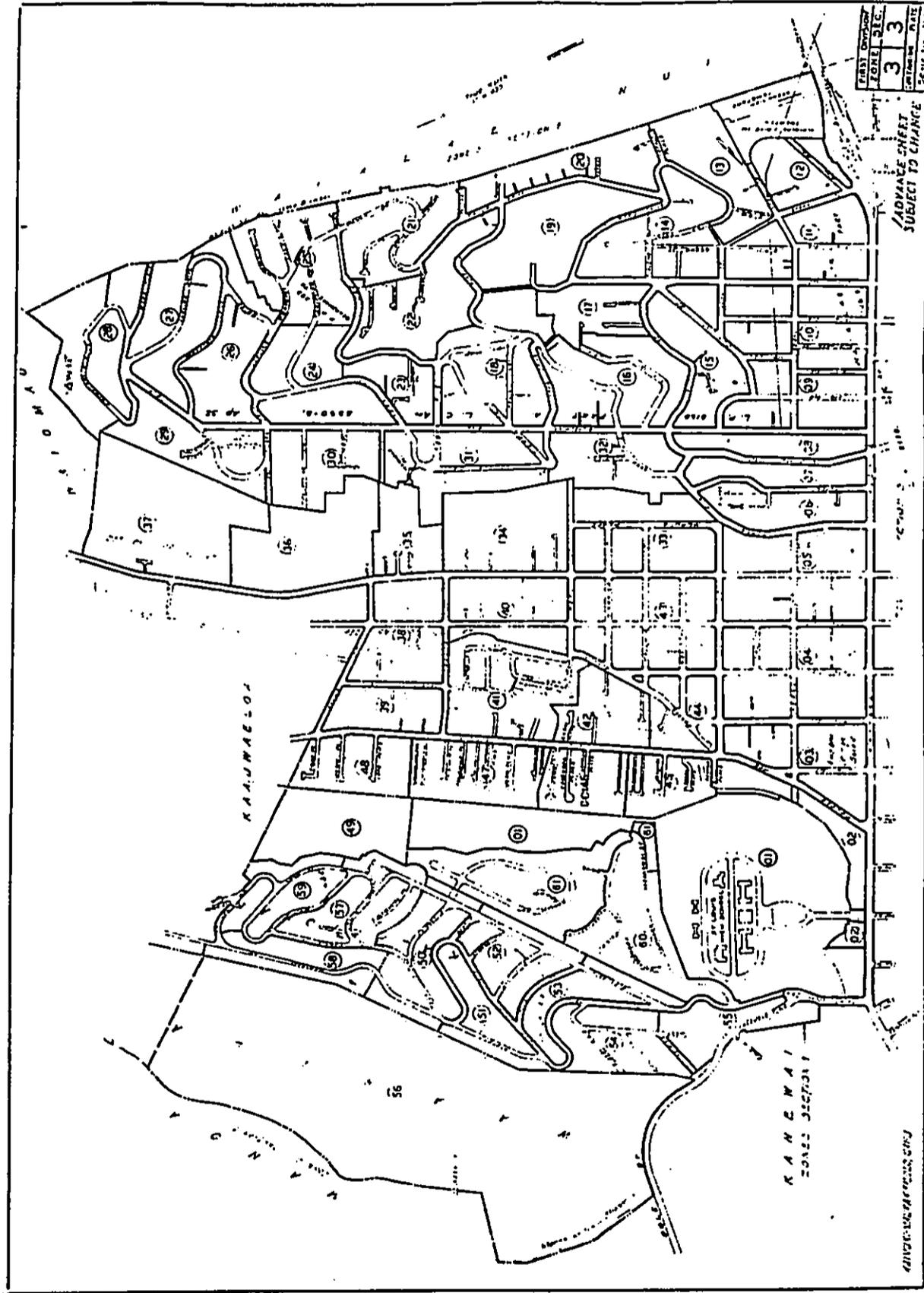


Figure 10

TAX MAP KEY: 3-3

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
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THE PROPOSED PROJECT

4.7 The Long Range Development Plan

The Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update, consists of the following documents:

<u>Report</u>	<u>Description</u>
• Summary Report	Summarizes in a magazine format, the contents of the detailed LRDP Report.
• LRDP Report	The detailed development plan, including planbooks and consultant reports.
• 1990 Utilities Master Plan Update (to be updated)	Master Plans for Drainage, Water and Sewage.
• Exterior Electrical Distribution System Study (to be updated)	Recommendations to correct deficiencies, improve reliability and support planned improvements.

The 1994 LRDP was prepared for the University by Group 70 International, Inc. It proposes a reasonable scheme for development which will provide the Manoa Campus with an educational environment in support of the mission of the University of Hawaii at Manoa.

This Environmental Assessment encompasses current projects which are included in the University's Six-Year Capital Improvements Program for FY 1993-94 to FY 1998-99, projects being considered for inclusion in the new CIP and future projects. The current projects are listed and described in Section 8.0.

This Assessment does not consider the following types of projects which do not have significant impacts on the environment.

- Minor building renovations to meet program requirements, health and safety requirements, energy conservation measures, and accessibility requirements for disabled persons.

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THE PROPOSED PROJECT

THE LONG RANGE DEVELOPMENT PLAN

- General site, utilities and landscape improvements to provide for infrastructure requirements for specific projects, to enhance the aesthetic environment and to meet accessibility requirements for disabled persons.
- Land acquisition projects. None are being considered as current projects.

When determined to be appropriate, however, environmental assessments will be prepared and filed for these projects.

5.0 PROPOSED ACTION

5.1 Proposed Amendments to the 1987 LRDP

A listing of amendments to the 1987 LRDP, including site plans for buildings which have been completed since 1987 or are presently under construction and amendments approved by the BOR and the City, have been incorporated into the 1994 Update as follows:

CENTRAL CAMPUS

A. Projects Under Construction (Site Plan Adjustments)

1. School of Architecture
2. Student Services Center
3. Food Service Facility
4. Pacific Ocean Science and Technology Center (POST)

B. Proposed Amendments

1. Add Sinclair Library Addition
2. Delete New Waahila Ridge Student Housing
(Existing Waahila Ridge Faculty Housing to be Converted into Student Housing)

UPPER CENTRAL CAMPUS

A. Projects Under Construction

1. None

B. Proposed Amendments

1. Delete Chinese Studies Center
2. Delete Japanese Castle
3. Add Health and Biological Sciences Complex
4. Add Library Storage Facility

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
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PROPOSED ACTION

PROPOSED AMENDMENTS TO THE 1987 LRDP

MAUKA CAMPUS

A. Projects Under Construction (Site Plan Adjustments)

1. Manoa Innovation Center (Completed Since 1987 LRDP)
2. Faculty Housing Facilities, Phase I

B. Proposed Amendments

1. Add Manoa Innovation Center Addition
2. Add Faculty Housing Facilities, Phase II (Alternative Scenario)
3. Add Proposed Manoa Library Expansion Site (On UH Lands)

MAKAI CAMPUS

A. Projects Under Construction (Site Plan Adjustments)

1. Center for Hawaiian Studies (See Figure 10a)
2. Special Events Center (10,000 seats)
3. Parking Structure, Phase IIA

B. Proposed Amendments

1. Add New Frear Hall (360 Beds)
2. Delete Dole Street Student Housing (Approved by BOR)
3. Delete Kalei Road Student Housing, Parking Structure, Land Acquisition
4. Relocate Physical Education Facilities, Phase II to Proposed Tennis Stadium Complex Site
5. Delete Proposed Tennis Stadium Complex
6. Delete Special Events Center (18,000 Seats) (Approved by BOR)
7. Delete New Softball Stadium
8. Leave Open Makai Campus Lands to be Acquired for Unspecified Future Improvements

The locations of these projects are shown on the map on Page 2 of the Summary Report entitled "Revisions Diagram".

5.2 **Projects Proposed in the 1994 LRDP**

The projects from the 1994 LRDP which are subjects of this Environmental Assessment are listed in Section 8.0 and shown on the LRDP map (future projects).

6.0 CONSULTATION WITH AGENCIES AND GROUPS

The following agencies and groups having jurisdiction have been consulted in the preparation of the Environmental Assessment for the proposed action.

STATE AGENCIES

- Department of Accounting and General Services
- Department of Agriculture
- Department of Business, Economic Development and Tourism
- DBEDT, State Energy Office
- Department of Defense

- Department of Education
- Department of Hawaiian Home Lands
- Department of Land and Natural Resources
- DLNR, State Historic Preservation Office
- Department of Health

- Department of Health, Environmental Management Division
- Department of Transportation
- Office of State Planning
- Office of Hawaiian Affairs

UNIVERSITY OF HAWAII

- Water Resources Research Center
- Environmental Center

EAST WEST CENTER

- President's Office

FEDERAL AGENCIES

- U.S. Department of Agriculture, Soil Conservation Service
- U.S. Army Corps of Engineers, Pacific Ocean Division
- U.S. Department of Commerce, National Marine Fisheries Service

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CONSULTATION WITH AGENCIES AND GROUPS

CITY AND COUNTY OF HONOLULU

- Board of Water Supply
- Building Department
- Department of Housing and Community Development
- Department of General Planning
- Department of Land Utilization

- Department of Parks and Recreation
- Department of Public Works
- Department of Transportation Services
- Department of Wastewater Management
- Fire Department
- Police Department

COMMUNITY GROUPS

- Neighborhood Board No. 5, Diamond Head/Kapahulu/St. Louis Heights
- Neighborhood Board No. 7, Manoa
- Neighborhood Board No. 8, McCully/Moiliili
- Neighborhood Board No. 10, Makiki, Lower Punchbowl, Tantalus
- Malama O Manoa

OTHER INSTITUTIONS

- Mid-Pacific Institute
- St. Francis School

PUBLIC UTILITIES

- The Gas Company
- GTE Hawaiian Tel
- Hawaiian Electric Company, Inc.

7.0 ENVIRONMENTAL SETTING

7.1 Physical Site Features

The Manoa Campus can be divided into four distinct districts for planning purposes: the Central Campus, the Upper Central Campus, the Makai Campus and the Mauka Campus (Figure 11).

A. CENTRAL CAMPUS

The Central Campus Core can further be divided into three parts as follows:

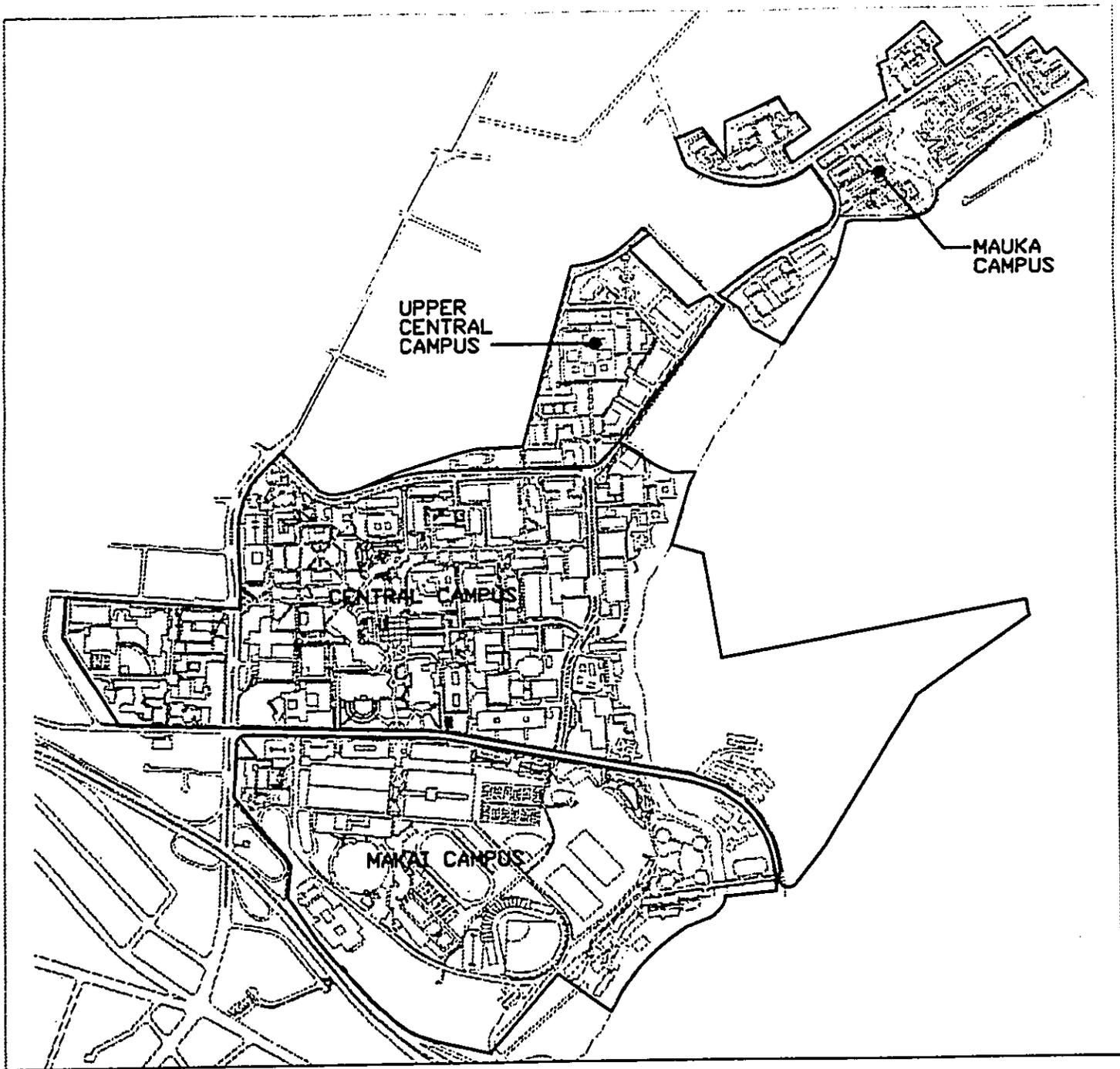
- **Central Campus Core**
This area is roughly bounded by University Avenue Maile Way, the Manoa Stream and Dole Street and contains the campus's instructional and research core as well as the East West Center. The existing lands flow gently down from Maile Way to Dole Street at about an average slope of 3%.
- **Central Campus West (College of Education/Lab School Site)**
This area is roughly bounded by University Avenue, Dole Street, a residential area fronting on Hoonanea Street, and Metcalf Street and contains the College of Education facilities and the University Laboratory School. After a sharp drop in elevation from Metcalf Street, of 4 ft. to 10 ft., the land flows makai towards Dole Street at a slope of 5%.
- **Central Campus East (Waahila Faculty Housing Site)**
This area is roughly bounded by National Marine Fisheries Service, the East West Center lands, the State's Waahila Ridge lands, a residential area on the ewa side of St. Louis Heights and Dole Street and contains the Waahila Faculty Housing Complex. These lands are located on the lower slopes of Waahila Ridge and contain severe slopes from 15% to 30%. The lower slopes have been cut to construct the existing faculty housing units on platforms at several levels.

B. UPPER CENTRAL CAMPUS

This area is roughly bounded by Mid-Pacific Institute, a Manoa residential area fronting on Pamoia Road, the St. Francis School and Maile Way and contains instructional and research facilities as well as auxiliary services and facilities planning and management offices and shops. The contours of these lands also flow gently in the makai direction but at a slightly steeper slope of 5%.

DOCUMENT CAPTURED AS RECEIVED

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
PLAN REVIEW USE



THE MANOA CAMPUS DISTRICTS

Figure 11

C. MAKAI CAMPUS

• **General**

The Manoa Campus lands below Dole Street are identified as the Makai Campus. It is bounded by Dole Street, the Kanewai Park, the Manoa Stream, some private residences off Kalei Road, the Old Waialae Road, the apartment district off Varsity Place, the H-1 Freeway and University Avenue and contains approximately 92 acres. The Makai Campus is also known as the "quarry" since about two thirds of the lands or about 60 acres lie in the bed of an old quarry.

• **Quarry**

The lands in the quarry, other than the filled multi-purpose playfields area, gently slope from mauka to makai at about a 5% slope. The area was subject to much flooding in the past, however, with the installation of drainage systems both at the upper and lower levels, the flooding has ceased. The quarry area is primarily used for physical education, recreation, athletic facilities and parking structures. The Central Accounting Office, the Contracts and Grants Office, the Procurement and Property Management Office, the Dance Studio, the Hearing Clinic and Hale Anuenue are also temporarily located there. A 10,000 seat Special Events Center is presently under construction in the quarry.

• **Quarry Rim**

The lands on the quarry rim areas generally slope from mauka to makai at about a 5% slope. The upper areas of the quarry are used for instruction (music and law) and for student housing facilities. The University House, which may house the UH Federal Credit Union, the Alumni Affairs Office, the University of Hawaii Foundation and the University Club, is scheduled to be constructed in the parking lot adjoining the Law School

• **Future Lands**

The 1994 LRDP calls for the future acquisition of several parcels of land between the present Makai Campus boundaries and the H-1 Freeway for the expansion of the quarry area for the PE Facilities, Phase III project and for building projects not yet identified. These lands are shown on the 1994 LRDP Map on Page 10 of the Summary Report

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ENVIRONMENTAL SETTING

PHYSICAL SITE FEATURES

D. MAUKA CAMPUS

• **Existing Lands**

The Mauka Campus located just north of the Upper Central Campus, comprises of five parcels of land containing approximately 30 acres separated by public streets and the Manoa Stream. The lands generally slope mauka to makai at about a 5% slope except for lands immediately abutting the Manoa Stream which slope downward towards the stream. These lands abutting the stream have been designated on FEMA's Flood Insurance Rate Map as flood hazard areas.

The three parcels of lands mauka of the Manoa Stream fronting on Woodlawn Drive and Lowrey Avenue are used for research (Manoa Innovation Center) and for faculty housing facilities (now under construction). The two parcels of lands makai of the Manoa Stream are used for research--one by the Institute for Astronomy and the University Press and one by the College of Tropical Agriculture and Human Resources for agricultural research. In an alternative scenario in this 1994 LRDP, the parcel of land used for agricultural research is being considered for future faculty housing facilities.

• **Future Lands**

The LRDP calls for the future acquisition of several parcels of lands between the Mauka Campus and the Upper Central Campus to:

- 1) provide additional lands for instruction and research and;
- 2) provide for physical connection between the two campus areas.

These lands are shown on the 1994 LRDP Map on Page 10 of the Summary Report.

ENVIRONMENTAL SETTING

7.2 Soil Characteristics

The soil characteristics for the Manoa Campus have been extracted from the Soil Survey of Oahu Island by the U.S. Department of Agriculture, Soil Conservation Service. A map showing the limits of various types of soils on the Manoa Campus is shown on Figure 12.

A. CENTRAL CAMPUS
Same as Upper Central Campus

B. UPPER CENTRAL CAMPUS
The soils of the Central Campus and the Upper Central Campus are for the most part comprised of Makiki stony clay loam (MLA), 0 to 3 percent slopes. This series consists of well-drained soils on alluvial fans and terraces. These soils formed in alluvium mixed with volcanic ash and cinders.

The exception is the mauka-ewa corner of the Central Campus where the College of Business Administration Complex is located. The soil there is comprised of Tantalus silty clay loam (TCC), 8 to 15 percent slopes.

In a representative profile of much of the Central Campus, the surface layer is dark brown clay loam about 20" thick. There are enough stones in the soil to hinder cultivation. The subsoil, about 10" thick, is dark-brown clay loam that has subangular blocky structure. It contains cinders and rock fragments. The subsoil is underlain by similar material, about 24" thick, that is massive. Below this are basalt or cinders which varies in depth from 20" to 60". Basalt outcrops are common. The soil is neutral to slightly acidic.

Permeability is moderately rapid. Runoff is slow, the erosion hazard no more than slight except for lands on the Mauka Campus adjoining the Manoa Stream.

C. MAKAI CAMPUS
The Makai Campus is an abandoned quarry and the soils there are either silt from runoffs above or imported fill and topsoil material.

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SOIL CHARACTERISTICS

D. MAUKA CAMPUS

The lower section of the Mauka Campus is comprised of the same soil from the Central Campus -- Makiki stony clay loam. The upper part is comprised of Hanalei Silty Clay Loam (Hna) 0 to 2 percent slopes. This soil is generally found on stream bottoms and flood plains.

In a representative profile, the surface layer, about 10 inches thick, is dark-grey and very dark gray silty clay that has dark-brown and reddish mottles. The subsurface layer is very dark gray and dark-gray silty clay about 3 inches thick. The subsoil, about 13 inches thick, is mottled, dark-gray and dark grayish-brown silty clay loam that has angular blocky structure. The substratum is stratified alluvium. The soil is strongly acid to very strongly acid in the surface layer and neutral in the subsoil. Permeability is moderate. Runoff is very slow, and the erosion hazard is no more than slight.

7.3 Average Temperature

Average daily minimum and maximum temperatures range from the low 60's (degrees Fahrenheit) to the low 90's depending on the time of the day and the season. Daily temperatures vary by about 6.5 degrees between winter and summer seasons, and 15 to 20 degrees Fahrenheit between day and night.

7.4 Annual Rainfall

The annual average rainfall on the Manoa Campus amounts to approximately 30 inches. Most of it falls between the months of December and April.

8.0 PROJECT DESCRIPTIONS

The projects proposed in the 1994 LRDP are divided into four groups as follows:

<u>Paragraph</u>	<u>Title</u>	<u>Remarks</u>
8.1	Current CIP Projects (Prior Appropriations)	Projects not yet under construction with prior appropriations
8.2	Current CIP Projects	Projects currently listed in the University's FB 1993-95 and Future CIP Budget
8.3	Current CIP Projects (Additions)	Projects being considered for inclusion in the University's FB 1995-97 and Future CIP Budget
8.4	Future CIP Projects	Future building and other projects shown on the 1994 LRDP Map.

The new building projects in the current CIP are shown on the map on Page 7 of the Summary Report, entitled "Building Diagram, Current CIP".

The buildings to be renovated can be found on the map on Page 10 of the Summary Report entitled "1994 Update".

All building projects will be designed and constructed to meet applicable codes and ordinances, rules and regulations governing the construction of facilities within the City and County of Honolulu. All frontage improvements within City right-of-ways that are required to support these projects will be constructed in accordance with City standards. The necessary permits will be secured prior to the commencement of construction.

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PROJECT DESCRIPTIONS

8.1 Current CIP Projects (Prior Appropriations)

Current CIP projects with prior construction appropriations not yet under construction are as follows:

<u>Project</u>	<u>Campus Location</u>	<u>Brief Description</u>
• College of Education Facilities, Phase IA (82,000 OGSF)	Central	Replacement of old, obsolete facilities with modern facilities which meets current program needs.

8.2 Current CIP Projects

The following Manoa Campus Capital Improvements Program Budget listing for the Fiscal Biennium 1993-95, including future requirements to 1999, clearly identifies proposed campus facilities on a priority basis. While these requests total approximately \$145 million, actual legislative appropriations may be less and may not follow the Campus' priorities.

<u>Project</u>	<u>Location</u>	<u>Brief Description</u>
• Agricultural Sciences Fac., Phase III (97,000 OGSF)	U Central	Replacement and expansion of CTAHR facilities.
• Student Housing Facilities, Phase V (141,000 OGSF)	Central	300 bed expansion of student housing facilities. (Campus Ctr)
• Hamilton Library, Phase III (135,000 OGSF)	Central	Expansion of library facilities to accommodate additional volumes and seating areas.
• Kennedy Theater Addition/ Parking Structure (102,500 OGSF) (475 cars)	Central	Expansion and refurbishing of Drama Dept facilities at Kennedy Theater. Replacement of 142 grade level parking facilities with parking structure for 475 vehicles.

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PROJECT DESCRIPTIONS

CURRENT CIP PROJECTS

<u>Project</u>	<u>Location</u>	<u>Brief Description</u>
• Crawford Hall Renovations (24,662 OGSF)	Central	Refurbishing of Old Quad building to meet current program needs, codes and ordinances.
• School of Hawaiian, Asian and Pacific Studies (128,872 OGSF)	Central	Consolidation of allied programs to enhance educational offerings and experience.
• College of Education Fac. Phase IB (29,900 OGSF)	Central	Continuing redevelopment of University Laboratory School.
• POST Parking Structure (170 cars)	Central	Replacement of 62 grade level parking facilities with parking structure for 170 vehicles.
• Parking Structure, Phase IIB (900 cars)	Makai	Completion of Parking structure Phase II by the addition of 900 spaces.
• Holmes Hall Renovation (19,800 OGSF)	Central	Renovations to meet current program needs.
• Krauss Hall Complex Renovation (24,759 OGSF)	Central	Refurbishing of buildings to meet current program needs, codes and ordinances.

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8.3 Current CIP Projects (Additions)

In addition to the projects included in the Fiscal Biennium 1993-95 and Future CIP Budget, projects under consideration for the Fiscal Biennium 1995-97 and Future CIP Budget are as follows:

<u>Project</u>	<u>Campus Location</u>	<u>Brief Description</u>
• Spalding Hall Renovations (33,012 OGSF)	Central	Refurbishing of building to meet current program needs, codes and ordinances.
• Snyder Hall Renovations (60,030 OGSF)	Central	Refurbishing of building to meet animal care standards and current codes and ordinances.
• Edmondson Hall Renovations (43,480 OGSF)	Central	Refurbishing of building to meet current program needs, codes and ordinances.
• Hawaii Hall Renovations (36,849 OGSF)	Central	Refurbishing of Old Quad building to meet current program needs, codes and ordinances.
• Dean Hall Renovations (18,768 OGSF)	Central	Refurbishing of Old Quad building to meet current program needs, codes and ordinances.
• Gartley Hall Renovations (24,493 OGSF)	Central	Refurbishing of Old Quad building to meet current program needs, codes and ordinances.
• HIG Building Renovations (126,708 OGSF)	Central	Refurbishing of building to meet current program needs, codes and ordinances.

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PROJECT DESCRIPTIONS CURRENT CIP PROJECTS (ADDITIONS)

<u>Project</u>	<u>Campus Location</u>	<u>Brief Description</u>
• Sinclair Library Addition and Renovations (38,000 OGSF)	Central	Addition to makai-diamond head side of library to provide spaces for additional volumes and seating areas.
• Library Storage Facility (25,000 OGSF)	U Central	A new on-campus library storage facility to support Hamilton and Sinclair Libraries.
• Health and Biological Sciences Complex (70,000 OGSF)	U Central	Additional space required for programs in health and biological sciences now housed in the Biomedical Sciences Bldg.
• University House (46,000 OGSF)	Makai	Multi-function facility may house the UH FCU, the University Foundation, the Alumni Affairs Office and the University Club.
• New Frear Hall (100,800 OGSF)	Makai	Replacement of aging Frear Hall (144 beds) with a modern facility containing 360 beds.
• New Johnson Hall (100,800 OGSF)	Makai	Replacement of aging Johnson Hall (195 beds) with a modern facility containing 360 beds.
• Spalding Hall Parking Structure (110 cars)	Central	Replacement of 70 grade level parking facilities with a parking structure for 110 vehicles.
• Hamilton Library Phase I and Phase II Renovations (280,000 OGSF)	Central	To provide for asbestos removal and for new arrangement of library services after completion of Phase III.

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PROJECT DESCRIPTIONS

8.4 Future CIP Projects

In addition to the projects listed under Sections 8.1, 8.2 and 8.3, the ultimate campus, based on the current enrollment ceiling and existing and projected programs, will require permanent facilities as follows:

	<u>Assignable Square Feet*</u>	<u>Outside Gross Square Feet**</u>
Required Permanent Facilities, Ultimate Campus	5,175,000 ASF	8,625,000 OGSF
<u>Permanent Inventory, Compl. of Current Projects</u>	<u>4,005,000 ASF</u>	<u>6,675,000 OGSF</u>
Future Facilities Requirements to Completion	1,170,000 ASF	1,950,000 OGSF

The building sites for future facilities requirements are indicated on the 1994 LRDP Map.

*Assignable Square Feet (ASF): Assigned program spaces

**Outside Gross Square Feet (OGSF): All spaces including lobbies, corridors, stairs, elevator shafts, toilets, janitor's closets, mechanical and electrical rooms, etc.

9.0 IMPACTS AND MITIGATION MEASURES

The socio-economic and environmental impacts of the proposed plan and the mitigation measures proposed are described in this section under the following paragraphs.

9.1 Socio-economic Impacts

- A. Economic Impacts
- B. Employment Impacts
- C. Public Service Impacts
 - 1. Refuse Collection
 - 2. Fire Protection
 - 3. Campus Security
 - 4. Medical Emergencies
 - 5. Natural Hazards
- D. Displacement of People, Resources and Functions
- E. Recreation Facilities
- F. Accessibility for Persons with Disabilities
- G. Traffic Circulation and Parking

9.2 Environmental Impacts

- A. Visual Resources
- B. Light and Air
- C. Archaeological Sites
- D. Historical Sites
- E. Flora
- F. Fauna
- G. Drainage
- H. Utilities Systems (Excluding Drainage)
- I. Air Quality
- J. Noise

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IMPACTS AND MITIGATION MEASURES

9.1 Socio-Economic Impacts

A. ECONOMIC IMPACTS

• Existing Conditions

The communities adjoining the Manoa Campus beyond its mauka (Manoa) and ewa (Lower Manoa) borders are largely older and stable neighborhoods of large single-family residences. Many of the homes were constructed in the first quarter of this century and are still maintained in good condition.

The Waahila Ridge, the Manoa Stream and private and public educational and recreational facilities borders the campus on the kokohead side.

The H-1 Freeway and the Moiliili residential and business communities border the campus on the makai side.

Manoa is generally considered a very desirable place to live and home values are extremely high. Many University students, faculty and staff live in the surrounding communities.

• Anticipated Impacts

The further development of the Manoa Campus with projects identified in the 1994 Update is not expected to adversely impact property values around the campus. In the past, major developments on campus have had no measurable impact on property values. The value of lands surrounding the campus is expected to continue to increase in step with islandwide increases.

• Mitigation Measures

The proposed improvements will have beneficial social and economic impacts on the campus and no long-term adverse impacts. There will be some short-term adverse impacts during construction but these will be controlled to minimize such impacts.

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SOCIO-ECONOMIC IMPACTS

B. EMPLOYMENT IMPACTS

• Existing Conditions

The total faculty/staff employment on the Manoa Campus including part-time personnel is now approximately 5,500.

In addition, the construction of various projects on the Manoa Campus has generated over 1,000 jobs annually during the past few years.

• Anticipated Impacts

The total employment on the Manoa Campus is expected to grow modestly from the present 5,500 faculty/staff personnel.

The construction of the various projects however, will continue to generate approximately 1,000 construction jobs annually on the campus if current University CIP Budget requests are approved.

• Mitigation Measures

The proposed improvements will have beneficial social and economic impacts on the campus and no long-term adverse impacts. It will provide jobs during construction and additional faculty and staff employment after completion including the employment of janitorial and maintenance personnel.

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SOCIO-ECONOMIC IMPACTS

C. PUBLIC SERVICE IMPACTS

1. REFUSE COLLECTION

• Existing Conditions

Refuse is collected and disposed by University personnel at County transfer stations or landfills. The exceptions are the student housing program and the food service program which separately contract out refuse collections to private refuse disposal firms.

The bulk of the "green" waste from the campus is now composted and is not disposed as refuse. There has been modest efforts on campus to recycle waste paper and aluminum cans and these efforts have met with limited success. The lack of a central collection and processing area and the general lack of public awareness have hampered the development of the recycling program.

• Anticipated Impacts

The proposed developments will marginally increase the volume of refuse to be collected and disposed by University personnel. The volume of refuse from the student housing facilities, however, will substantially increase if additional student housing facilities are constructed as proposed, but this increase will be handled by private refuse disposal firms.

• Mitigation Measures

While the impact of the additional volume of refuse collected is relatively small, the total amount collected is large and it continues to tax our limited landfill sites. To mitigate this situation, the University plans to expand its recycling program by (1) establishing a central collection and processing area; (2) establishing additional regional collection areas; (3) embarking on a public awareness program to encourage all to participate in this program. This program is being handled by the Building and Grounds Management Office.

Additional funding is being sought by the BGMO for personnel and equipment to enable the program to expand and to begin realizing its full potential. Existing resources will be utilized to initiate the expansion of the program.

As this recycling program expands, less refuse would be hauled out to landfills and more materials reused to help conserve our valuable natural resources.

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SOCIO-ECONOMIC IMPACTS

C. PUBLIC SERVICE IMPACTS

2. FIRE PROTECTION

• Existing Conditions

Fire protection is provided by the Honolulu Fire Department which has four (4) stations in the proximity of the campus.

Current University policy calls for access to fire apparatus, water supply and building construction to be in conformance with existing codes and standards.

• Anticipated Impacts

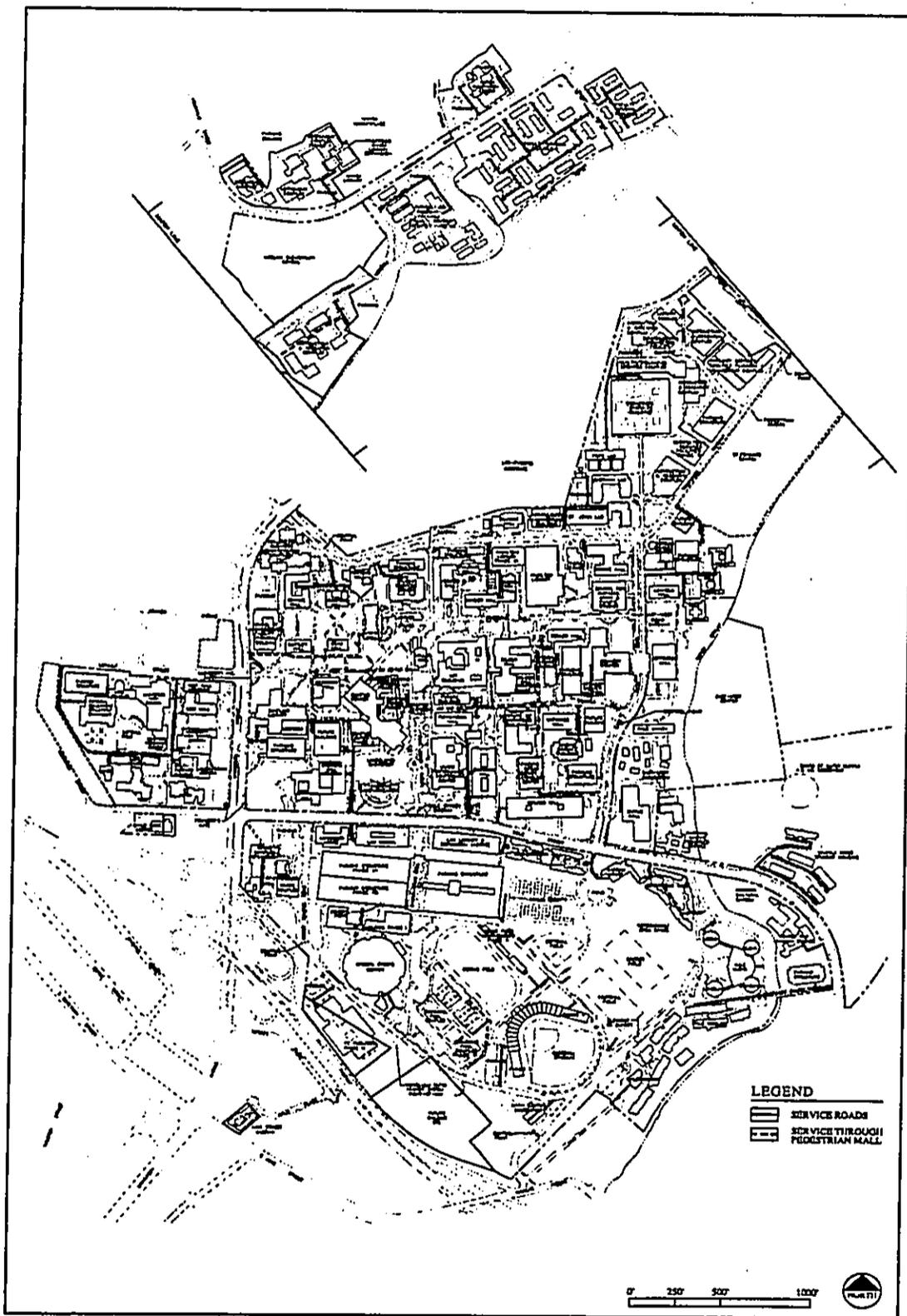
Access to many parts of the campus will be improved with the proposed improvements to the campus. Consideration of access to and thru building sites will be a focus on all new developments. (Figure 13)

The existing buildings to be refurbished during this planning period will be renovated to meet current fire protection codes which will improve fire safety on the campus.

• Mitigation Measures

The proposed improvements will improve fire protection on campus. The University needs to continue to work closely with the Honolulu Fire Department to identify fire routes and locations of hydrants and standpipes. These fire routes will be identified by the University in its detailed plans and submitted to the Honolulu Fire Department.

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BUILDING SERVICES

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SOCIO-ECONOMIC IMPACTS

C. PUBLIC SERVICE IMPACTS

3. CAMPUS SECURITY

• Existing Conditions

All routine patrols and surveillance are provided by the University's Campus Security Office. The Honolulu Police Department is called when situations arise which are beyond the capabilities of Campus Security or when arrests have to be made.

• Anticipated Impacts

The proposed improvements such as the construction of malls, paths and plazas are expected to improve student safety in the evenings as they will encourage students to use routes that are more heavily travelled and that are more easily patrolled.

The addition of more student housing will require additional surveillance especially during the evening hours but Campus Security personnel augmented by student patrols should overcome most problems attributed to this increased student population.

• Mitigation Measures

The proposed improvements will not require additional mitigation measures. While more and better trained Campus Security personnel is always desirable, the immediate availability of the Honolulu Police Department is sufficient to mitigate most emergencies.

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C. PUBLIC SERVICE IMPACTS

4. MEDICAL EMERGENCIES

- Existing Conditions
Routine and emergency medical services are now provided by the University's Student Health Service. If beyond its capabilities, such cases are referred to the patient's doctor and/or local hospitals. With six major hospitals in the relative proximity of the Manoa Campus (Kapiolani, Kaiser, Straub, Queen's, Kuakini and St. Francis Medical Centers), prompt attention is now given to patients in medical emergencies.
- Anticipated Impacts
The proposed improvements for the planning period will not impact the handling of medical emergencies on the campus. The Student Health Center will continue to function in its present location--not far from the campus core and in the proximity of student housing facilities.
- Mitigation Measures
Current practice and facilities for handling medical emergencies are adequate and no mitigation measures will be necessary as a result of the implementation of the proposed improvements.

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C. PUBLIC SERVICE IMPACTS

5. NATURAL HAZARDS

• Existing Conditions

The impacts of natural hazards such as earthquakes, flash floods, high winds and hurricanes on University facilities are addressed in the design of the facilities. The City's recently upgraded building codes and drainage standards which specify the design safety standards required to meet the impact of the forces of these natural hazards are fully met in the design of University facilities.

The University has adopted a Systemwide Emergency Operations Plan to be implemented whenever a disaster strikes. The UH Civil Defense Coordinator is responsible for the implementation of the Plan.

• Anticipated Impacts

The physical improvements to the Manoa Campus proposed by the 1994 LRDP will not result in increased impact from natural hazards. All new facilities will be designed to meet current safety codes and standards. All existing facilities to be completely renovated will also be upgraded to meet current safety codes and standards.

The campuses within the University System now have areas designated for use as public shelters during emergencies and these are registered with the Office of Civil Defense.

• Mitigation Measures

Mitigation measures for University facilities to meet natural hazards beyond those that are currently established are not required.

If additional shelter space needs to be designated to meet revised capacity requirements either in existing or new buildings, the Office of Civil Defense should consult with the UH Civil Defense Coordinator.

D. DISPLACEMENT OF PEOPLE, RESOURCES AND FUNCTIONS

• Existing Conditions

Being a mature campus, the existing lands on the Manoa Campus are fully utilized for various programs and activities--some on an interim basis but most on a permanent basis.

Thus, every new building project affects existing facilities such as temporary buildings, parking lots and open spaces. And, every major renovation to existing buildings involves the vacating of the buildings, either in part or whole, to make possible the renovation work.

• Anticipated Impacts

The relocation of programs from buildings scheduled to be demolished are often disruptive and extremely stressful to the people involved. Those moving to new buildings take these moves in stride; those moving to interim locations while their new buildings are being constructed bear these moves less well; and those being moved so that facilities for other programs can be built do not take these moves very well at all.

The parking facilities lost to make way for new building construction are usually planned to be replaced in parking structures to be located on the same site or in peripheral areas around the campus. Such losses are temporary in nature since the LRDP calls for the increase in the number of parking facilities on campus.

The detailed Environmental Assessment to be filed with each project will identify the programs and facilities affected by demolition and renovation work and the actions taken to accommodate such programs and facilities.

• Mitigation Measures

Every attempt is made by the University to provide equivalent facilities to programs being relocated on an interim basis. The detailed moves will be identified in the Environmental Assessment prepared for each project.

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SOCIO-ECONOMIC IMPACTS

9.1 Socio-Economic Impacts

E. RECREATION FACILITIES

• Existing Conditions

With the completion of the 10,000 seat Special Events Center on the Makai Campus in Fall 1994, at long last, a major multi-use facility will be available on the Manoa Campus. Many forms of activities will take place in the Center in addition to intercollegiate basketball and volleyball and these include health and physical education programs, intramural sports, concerts, plays, guest speakers, etc.

Klum Gymnasium which has long served as the home of men's volleyball, women's basketball and volleyball, as instruction facilities in health and physical education and as the site for intramural sports activities will be demolished to make way for Parking Structure, Phase IIB.

Other on-campus recreation facilities will continue to be maintained in the quarry such as the gymnasiums in the HPER Complex, Cooke Field, the Baseball Stadium, the Softball Field, the Tennis Courts, the Multi-Purpose Playfields, the Swimming Pool Complex and the outdoor basketball courts.

Neighborhood park facilities sometimes utilized by students include the Kanewai Community Park, the Kamanele Square Park, and the Manoa Valley District Park.

• Anticipated Impacts

There are no additional recreational facilities proposed for the Manoa Campus in the current CIP and no displacement of existing facilities are anticipated. There is renewed interest in the Manoa community to reactivate the Manoa Stream Park project which, when implemented, will enhance the recreational, educational and cultural offerings of the Manoa campus.

The 1994 LRDP does not delineate athletic and recreation facilities such as the Softball Stadium and the Tennis Stadium Complex specifically shown on the 1987 LRDP, however, it maintains sufficient open lands to include these facilities should the University give priority to these projects.

The construction of additional student housing facilities may place more demands on the use of on-campus recreational facilities and neighborhood parks in the future.

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9.1 Socio-Economic Impacts

E. RECREATION FACILITIES

• Mitigation Measures

To accommodate the additional demand for recreational facilities, the University may need to consider extending the hours of use of recreational facilities. The development of the proposed Manoa Stream Park will alleviate some of this additional demand.

If the proposed student housing facilities are authorized, the additional recreational facilities proposed in the LRDP should be considered for implementation.

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F. ACCESSIBILITY FOR PERSONS WITH DISABILITIES

• Existing Conditions

The University of Hawaii, Manoa Campus, almost two decades ago, embarked on a program to remove barriers for persons with disabilities. While measurable progress has been made, the Manoa Campus has not yet attained the status of an institution which is user friendly to persons with disabilities.

During this time, the University has removed barriers from many scattered locations throughout the campus base on very specific needs. It now seeks to join these disparate parts together into a network of accessible routes to all parts of the campus.

All new campus improvements will be in conformance with the provisions of the American With Disabilities Act (ADA) which has been incorporated into the City's Building Code (Ordinance No. 93-75).

• Anticipated Impacts

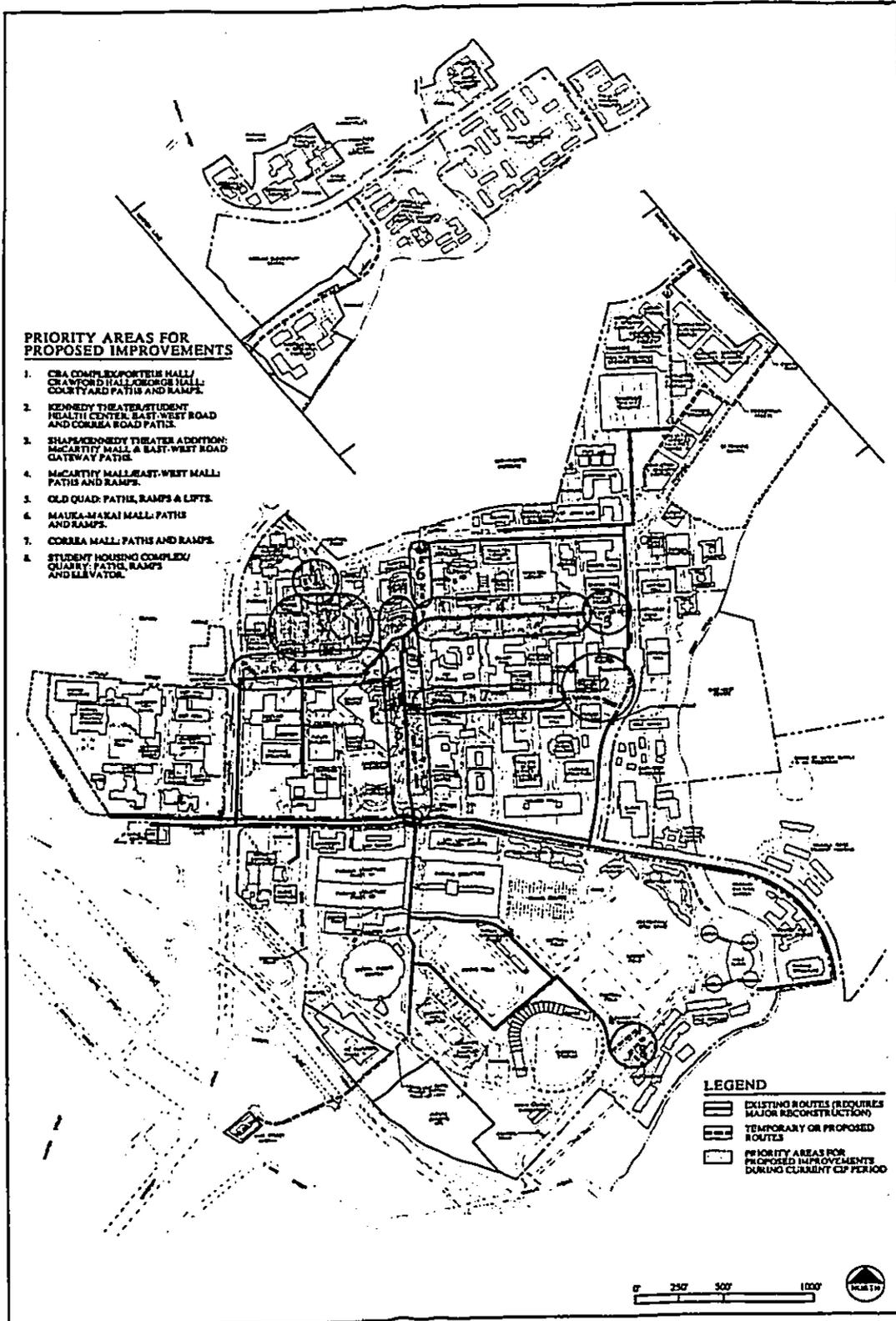
The LRDP proposes that the University begin to embark on a program to achieve this continuity and cohesiveness so that persons with disabilities will have clear, safe and convenient paths to follow to reach their chosen destinations. It proposes that the principal accessible routes be provided along the major malls on the campus as indicated on the enclosed map (Figure 14) entitled "Major Accessible Routes for Persons with Disabilities." The detailed accessibility requirements along these routes are included in a survey report prepared by the University.

In addition to the development of accessible routes on these malls, there are very specific areas that still require immediate attention to provide accessibility to persons with disabilities. The LRDP proposes that eight areas of immediate concern be addressed during the current planning period and they are identified, in priority order, on Figure 14.

These heavy traffic areas require accessible paths, ramps, lifts, elevators, special lighting, and signage for persons with disabilities -- all to be provided in conjunction with other proposed improvements including plazas, paths, seating areas, walls, signs and landscape work.

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MAJOR ACCESSIBILITY ROUTES

Figure 14

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IMPACTS AND MITIGATION MEASURES

SOCIO-ECONOMIC IMPACTS

F. ACCESSIBILITY FOR PERSONS WITH DISABILITIES

• Mitigation Measures

There are no measures appropriate to mitigate the anticipated impacts of improvements to accommodate persons with disabilities.

These improvements are mandated by Federal law and the University must undertake an aggressive program to meet these requirements or face the loss of Federal funding.

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G. TRAFFIC CIRCULATION AND PARKING

The 1987 LRDP made a series of proposals to alleviate the traffic circulation and parking dilemma at the Manoa Campus and many have been implemented with favorable results. They include:

Traffic Circulation

- Widen University Avenue, Dole Street and Lower Campus Road to facilitate automobile traffic.
- Implement a traffic and parking plan for special events.

Automobile Parking Facilities

- Construct Parking Structure Phase II. The Parking Structure is being constructed in two increments, Phase IIA (900 spaces) and Phase IIB (900 spaces). Only Phase IIA is authorized and is presently under construction.
- Implement a shuttle bus service to "remote" parking areas.

Ride-Sharing

- Encourage ride sharing by offering incentives to people who hare (i.e. parking spaces).

Motorcycles, Mopeds and Bicycles

- Encourage transportation modes other than cars including mopeds and bicycles.

Bus Service

- Increase and improve bus service to the University.

Although the 1987 LRDP encouraged the support and implementation of the Honolulu Rapid Transit System, the City chose not to proceed at this time. A well-planned and affordable system serving the Manoa Campus will provide the most significant relief to its transportation problems.

The impact of vehicular traffic by the improvements proposed under the 1994 LRDP are examined in detail in the "Traffic Impact Report" prepared by Austin, Tsutsumi & Associates, Inc. dated March 1994. The report concludes that the improvements proposed in the 1994 LRDP will not significantly impact traffic operations on and off the Manoa Campus.

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• **Existing Conditions**

1. **Traffic Circulation:** With the implementation of recent street improvements as recommended in the 1987 LRDP, the major traffic problem on the campus--that of ingress and egress from the Makai Campus has been alleviated.

The completion of the 10,000 seat Special Events Center will result in heavy traffic on and off campus roads and this has been addressed in the Environmental Assessment for the Special Events Center. The University's Special Events Parking and Traffic Plan which has been tested during recent commencement exercises will be implemented when large crowds are anticipated for events at the Center.

2. **Automobile Parking Facilities:** With the completion of Parking Structure Phase IIA project (900 spaces) and a restriping program on existing parking facilities, there will be 5,379 parking spaces on the Manoa Campus in Fall 1994. This is some 269 spaces more than the Fall 1987 inventory of 5,110 spaces. The ultimate goal is to provide 7,500 spaces on the Manoa Campus.

Based on the LUO, the number of parking spaces required on the Manoa Campus in Fall 1993 was approximately 3,400 spaces. The demand for parking spaces, however, suggests that this requirement may need to be updated. The traffic consultant in his report "Traffic Impact Report" suggests that the standards set forth in a publication by "The Eno Foundation for Transportation, Inc." be applied to the Manoa Campus. The application of these standards requires the Manoa Campus to provide 4,925 spaces for its current population and programs -- a more realistic measurement of need.

3. **Ride-Sharing:** The University has aggressively promoted ride-sharing programs and 300 parking spaces were allocated and filled by participants of the program in 1993-94.
4. **Motorcycles, Mopeds and Bicycles:** Motorcycles and bicycles have been far overshadowed by the proliferation of mopeds on campus. In Fall 1993, over 2700 motorcycle and moped parking permits were issued. The proliferation of mopeds has created problems of congestion, noise and safety in the campus. The present number of bicycles on campus are not known at this time as no permits are required; they are however, far outnumbered by mopeds.

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5. **Bus Service:** The improved services to the Manoa Campus, both express and regular, and the routing of buses through the campus have resulted in increased ridership. However, the frequency of bus runs and overcrowded busses during peak hours remains issues that need to be addressed.
 6. **Shuttle Service:** The providing of shuttle bus service by the ASUH from remote parking areas to the campus has somewhat alleviated the student parking demand on campus and on streets in the neighboring communities.
 7. **Student Housing Facilities:** There has been no student housing facilities completed on the campus since the adoption of the 1987 LRDP. Thus, the scenario to reduce parking demand by the construction of additional on-campus student housing has not been tested during this period.
- **Anticipated Impacts**
 1. **Traffic Circulation:** The Traffic Impact Report concludes that the improvements proposed in the 1994 LRDP will not significantly impact traffic operations on and off the campus. It does, however, recommend that certain planned improvements be implemented to insure the smooth flow of traffic.
 2. **Automobile Parking Facilities:** With significantly more parking facilities available in Fall 1994 (5,379) than in previous years, the demand for on-street parking in the surrounding neighborhoods will be lessened. However, the lure of free parking will continue to invite students to park on the streets. The additional 223 parking facilities currently under construction with building projects will boost the parking inventory to 5,602 spaces by Fall 1995.
 3. **Ride-Sharing:** The improvements proposed for the current planning period will not impact the ride-sharing program. The University will continue to promote ride-sharing to reduce parking demand. The 300 spaces allocated and filled in 1993-94 under this program encourages the expansion of this program.

G. TRAFFIC CIRCULATION AND PARKING

4. **Motorcycles, Mopeds and Bicycles:** Because of the noise they generate and the speeds which they travel, motorcycle parking have been restricted to areas adjoining campus gateways and areas adjoining major roads to reduce hazards to others. Their numbers are not significant and increases in their use are not anticipated.

The LRDP supports the use of bicycles for on campus transportation because they are quiet, safe and their uses can be readily controlled. The LRDP proposes that bicycle racks be provided at all building entries to further encourage their use. As limits are placed on the number of mopeds allowed on campus, they are expected to be replaced by bicycles.

The use of bicycles will be further encouraged by the City's proposed expansion of bicycle paths around the campus.

With the addition of additional parking facilities, the LRDP recommends that the University consider limiting the number of motorcycles and mopeds permitted on campus beginning in Fall 1994. The more than 2,700 permits issued in Fall 1993 had significant adverse impact on the campus environment because of noise and conflicts with pedestrian and vehicular movements.

With the completion of the Parking structure Phase IIA which will provide students with 900 additional spaces on campus, the LRDP recommends that the number of permits issued in Fall 1994 be reduced to about 2,000 or about 10% of the total enrollment.

As more vehicular parking facilities are constructed on campus, significant improvements made to the bus system and the ride sharing program expands, the number of motorcycle and mopeds permitted on campus can continue to be reduced and, one day, eliminated altogether.

5. **Bus Service:** The University continues to work with the City Department of Transportation Services to improve bus service to the University. With increased ridership, it is hoped that bus service to the University can be improved with more buses on a timely basis.
6. **Shuttle Service:** The LRDP recommends the maintenance of the ASUH shuttle bus service from remote parking areas to continue to minimize traffic and parking impacts on the Manoa Campus.

G. TRAFFIC CIRCULATION AND PARKING

7. **Student Housing Facilities:** With the conversion of Waahila Faculty Housing into student housing (200 beds) and with the construction of additional on campus student housing facilities such as Frear Hall Replacement, Johnson Hall Replacement and Student Housing Facilities, Phase V, the parking demand on the Manoa Campus would diminish if policies are maintained to prohibit residents from bringing their cars to the campus.

• **Mitigation Measures**

1. **Traffic Circulation:** To further enhance the traffic circulation systems on and off the Manoa Campus, the Traffic Consultant has recommended that the following planned improvements be implemented on a timely basis.
 - a. The construction of the internal roadway system between Upper Central and Mauka Campuses.
 - b. The connecting ramp to complete the Lower Campus Road loop road system be constructed under the Parking Structure, Phase IIB project.
 - c. More traffic be diverted through the Old Waialae Avenue gate after special events to reduce traffic demand at the Dole Street/University Avenue intersection.
 - d. Optimize the existing traffic signal system by computerization.
2. **Automobile Parking Facilities:** Four (4) additional parking structures are proposed during the planning period which should further reduce the demand for on street parking in the communities surrounding the Manoa Campus. These include the Kennedy Theater Parking Structure (475 spaces); the POST Parking Structure (170 spaces); the Parking Structure Phase IIB (900 spaces); and the Spalding Hall Parking Structure (110 spaces).

The construction of these parking structures, however, are subject to funding by the State of Hawaii and because of its current financial crisis, they may not all be constructed in the planning period. The ultimate number of parking spaces proposed for the Manoa Campus in the 1994 Update is 7,500 spaces. The locations and proposed capacities of all parking structures are shown on Page 4 of the Summary Report.

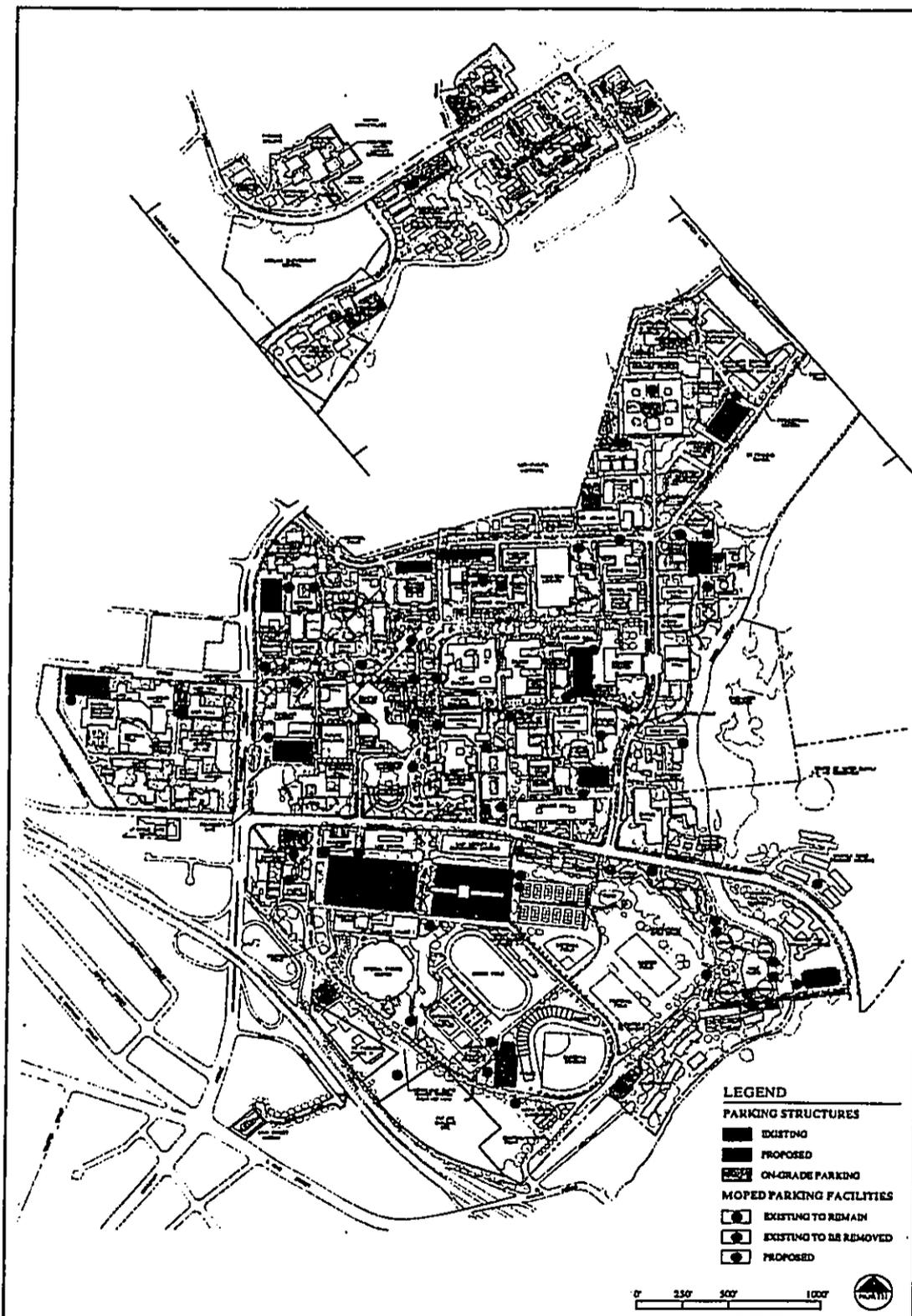
G. TRAFFIC CIRCULATION AND PARKING

3. **Ride-Sharing:** There are no mitigation measures proposed for the Ride-Sharing program. Ride-sharing will continue to be encouraged to reduce the parking demand and to alleviate the impact of vehicular traffic.
4. **Motorcycles, Mopeds and Bicycles:** There are no mitigation measures required for motorcycles and bicycles as no significant impacts are expected from these modes of transportation.

The University needs to adopt policies in limiting the number of mopeds permitted on campus and the locations where they may park. The LRDP recommends that the number be limited to about 2,000 in Fall 1994 with further reductions as more parking facilities are constructed. It further recommends that all existing moped parking facilities in the campus core be eliminated as shown on Figure 15, "Parking Structures and Moped Parking Facilities".

5. **Bus Service:** There are no mitigation measures proposed for the bus service. Increased and improved bus service will encourage more people to use the system and reduce the demand for parking spaces and alleviate the impact of vehicular traffic.
6. **Shuttle Service:** There are no mitigating measures proposed since the LRDP proposes the maintenance of an existing service.
7. **Student Housing Facilities:** There are no mitigation measures required for the construction of additional student housing facilities on the Manoa Campus. Their construction is expected reduce the impact of vehicular traffic and parking demand on campus. The ultimate number of beds proposed for the Manoa Campus under this plan is 4,000 beds.

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PARKING STRUCTURES AND MOPED PARKING FACILITIES

Figure 15

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9.2 Environmental Impacts

A. VISUAL RESOURCES

• Existing Conditions

The University of Hawaii, Manoa Campus, is located on approximately 304 acres of land in Manoa Valley surrounded by schools, residences and commercial areas in an urban environment. (Figure 16) It is a bustling institution of higher learning, research and service with an enrollment of over 20,000 students, 3,500 faculty and 2,000 staff members.

The Manoa Campus experiences the same problems as other urban centers such as needs for parking and housing, high density development, deterioration of life-style, loss of identity and other urban problems. It lacks consistency, continuity and cohesiveness in architectural character, landscaping and building and space relationships and this lack of consistency has been a major cause of criticism of the physical appearance of the Manoa Campus.

• Anticipated Impacts

The more comprehensive design criteria included in the 1994 Update and an effective design review process will help insure that the future development of the campus will begin to unify its disparate elements to provide "a sense of place".

• Mitigation Measures

There should be no measures taken to alleviate the anticipated impacts. The University has to make a commitment that all new developments will comply with the established design criteria and that the design review process will be implemented to insure this compliance.

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MANOA CAMPUS COMMUNITY (BIRD'S EYE VIEW)
Source: R.M. Towill Corporation (1993)

Figure 16

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9.2 Environmental Impacts

B. LIGHT AND AIR

• Existing Conditions

The existing facilities on the Manoa Campus do not significantly affect the light and air (sunlight and trade winds) of adjoining developments. Generally, the taller buildings are located towards the heart of the campus and the lower buildings located closer to the property lines.

Also, most buildings are set back generous distances from the property lines and landscaping is provided to screen the buildings and the reflected sunlight from neighbors. And, most developments near property lines are clusters of smaller buildings with openings which pass ample light and air.

• Anticipated Impacts

The more prescriptive design guidelines in the LRDP would insure that the new developments will have minimum adverse impacts on light and air to the adjoining properties.

• Mitigation Measures

None are proposed. The proposed developments and the design criteria established for them will insure that they will not have significant impact on light and air to adjoining properties.

C. ARCHAEOLOGICAL SITES

• Existing Conditions

According to the State's Historic Preservation Division, the following two (2) sites where human remains have been uncovered on the Manoa Campus during past construction activities have been included in its inventory of archaeological sites.

Building Site

Keller Hall Site
Dole Street near Kanewai Park

Location

Central Campus
Makai Campus

In addition, a site on the Makai Campus below Dole Street adjoining the Manoa Stream and the Center for Hawaiian Studies, identified as Ka Papa Lo'i Kalo (traditional agricultural terraces), has also been included in the inventory by the State Historic Preservation Division.

• Anticipated Impacts

Although there are no known archaeological sites, during project construction, there is the remote possibility of encountering unknown or unexpected cultural features, deposits or burials. To insure their protection, clearing, grading, and excavation activities for the new developments proposed under the 1994 LRDP will be monitored for the possible presence of such features.

To insure their protection, clearing, grading, and excavation activities for the new developments proposed on the campus will be monitored for the possible presence of such features.

• Mitigation Measures

In a situation where a burial or other potentially significant cultural feature is encountered on the site, work in the area will be suspended immediately, and the State's Historic Preservation Office notified to determine the appropriate action to take for its disposition.

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D. HISTORIC SITES

• Existing Conditions

The following places on the Manoa Campus have been placed on the State Historical Register to date:

Hawaii Hall
Gartley Hall
Dean Hall
George Hall
Founders' Gates

Wist Hall
Castle Memorial Hall
Crawford Hall
Andrews Amphitheater
Varney Circle Fountain

• Anticipated Impacts

The LRDP calls for the removal of Krauss Hall in the future to make way for the Music Performance and Conference Center.

The University will, at the appropriate time, initiate action to permit the construction of the Music Performance and Conference Center on that site.

• Mitigation Measures

There are no mitigation measures proposed at this time since the Music Performance and Conference Center is not being considered for construction in the near future.

The Krauss Hall site is considered the best site for the Center because of its visibility and accessibility from Dole Street and the Mauka-Makai Mall. Its proximity to the Parking Structures on the Makai Campus and other parking facilities on the Central Campus and to the student housing facilities also supports the site for the Center.

However, the University will continue to seek an alternative sites for the facility.

E. FLORA

• Existing Conditions

The vegetation on the Manoa Campus is entirely urban in character. There are, however, many rare trees (i.e. Teak, Baobab, etc.) located around the campus and these will be maintained in their existing locations to the extent possible.

• Anticipated Impacts

While every effort will be made to maintain existing mature trees in their present locations, it may be necessary to remove some trees to make way for new construction. These trees will be relocated to other sites to the extent possible, however, due to the abundance of trees on campus, some of the more common species may have to be removed.

• Mitigation Measures

The LRDP proposes that the rare trees on campus be identified by proper signs and a location map and listing be prepared. This should be made available to consultants and maintenance personnel to discourage and prevent their removal or relocation.

Appropriate barriers will be erected around the existing and relocated trees to preclude burial of root zones and collisions with vehicles and equipment during construction.

Additional trees, shrubs, and other landscape materials will be provided with the new projects included in the LRDP according to plans prepared by landscape architects.

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F. FAUNA

• Existing Conditions

The Manoa Campus is urban in character and provides poor habitats for wildlife. Thus, no rare, endangered or threatened animal species presently exist on campus.

• Anticipated Impacts

Being an urban campus, the proposed projects on the Manoa Campus will have negligible impact on wildlife. Any wildlife currently utilizing building sites will most likely move on to other sites. They may return after construction is completed.

• Mitigation Measures

No mitigation measures are proposed. Newly landscaped areas to be provided under the construction projects may provide opportunities to establish new wildlife habitats.

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G. DRAINAGE

• Existing Conditions

The entire Manoa Campus, other than the banks along Manoa Stream and two low areas adjoining the stream, are located in Zone X (500 year flood) in FEMA's Flood Insurance Rate Map (FIRM) (Figure 17).

The two low areas are at the Mauka Campus where Woodlawn Drive crosses Manoa Stream and at the Makai Campus below Dole Street where Manoa Stream passes the Taro Patch area. Both of these areas are in Zone AE where the Base Flood Elevations are specified in the FIRM. Developments in these areas need to be coordinated with City Public Works Department and the U.S. Corps of Engineers.

The Manoa Campus has a storm drain system which is connected to the City's drainage system on University Avenue and Dole Street. There are pockets on campus where adequate area storm drains have not yet been installed as indicated in the Drainage Master Plan. (See Utilities Master Plan, Section III.)

• Anticipated Impacts

On a long-term basis, the improvements proposed in the LRDP will not have significant impacts on campus drainage. As recommended in the Drainage Master Plan, specific improvements required to meet the Master Plan will be implemented with individual projects. Short term runoffs during construction, however, may result in an increase in turbidity in the city drainage system during a major storm.

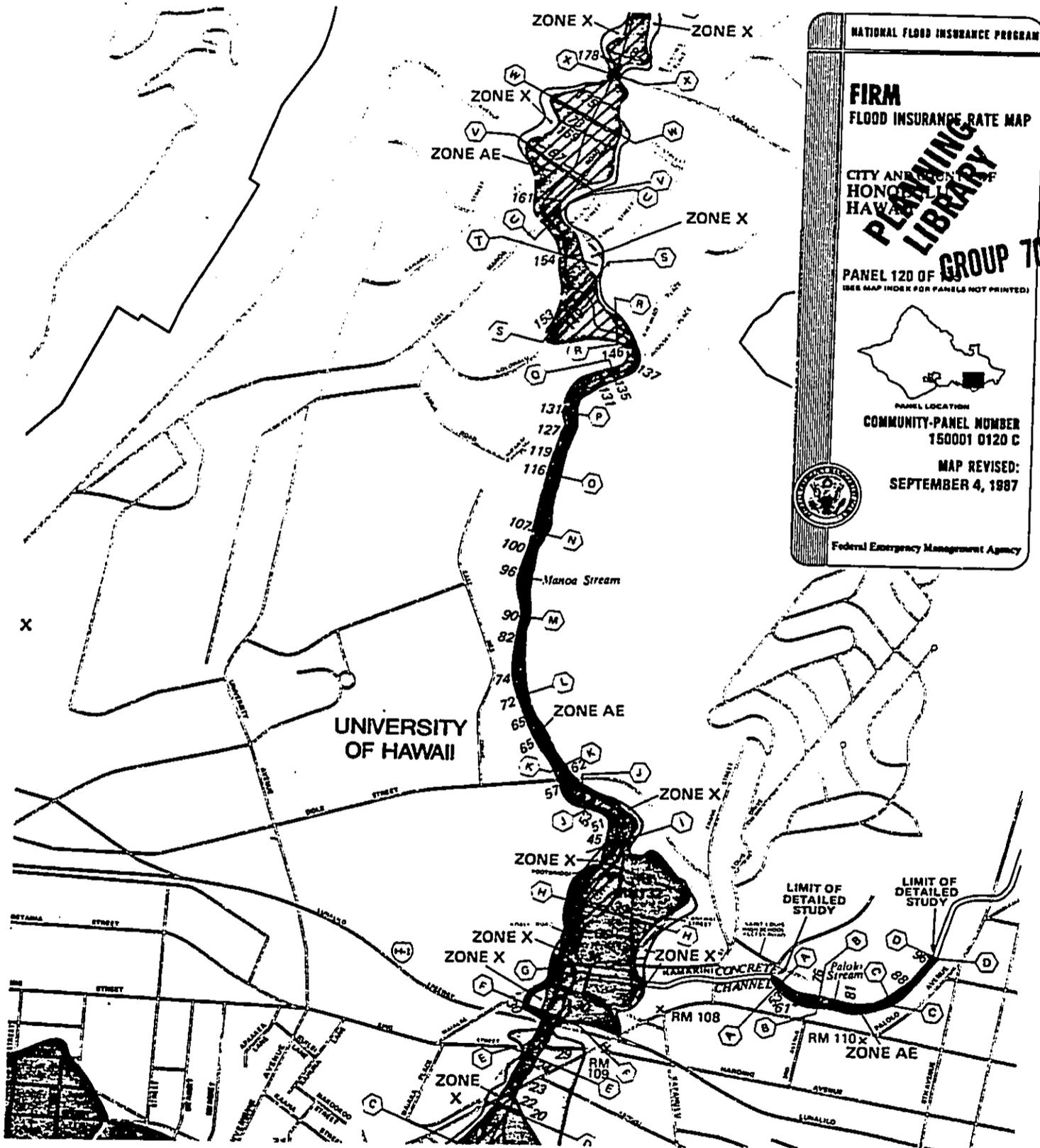
The Best Management practice will be utilized by the University as a guide in controlling runoff and sediment into the City and County drainage system.

• Mitigation Measures

The small pockets on campus where permanent systems have not yet been installed are isolated and should not present flooding problems. The permanent drainage systems will be installed when these areas are developed according to the LRDP.

Strict adherence to erosion control measures will minimize the impact of silt runoff from construction activities during a major storm.

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FLOOD INSURANCE RATE MAP (FIRM)

Figure 17

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H. UTILITIES SYSTEMS (EXCLUDING DRAINAGE)

- **Wastewater Disposal System**
The Manoa Campus wastewater is disposed through the City system which runs past the campus. Other than those sections on the campus not yet fully improved due to impending construction of new facilities, the system is complete and meets current standards. On a long range basis, the Sewer Master Plan makes specific project recommendations to complete the University's Sewer System. (See Figure V-5, 1990, Utilities Master Plan)
- **Potable Water Supply System**
The existing Manoa Campus is served by the City's Board of Water Supply and the existing service is adequate to meet current and future campus needs. Fire flow requirements for specific areas not yet adequate may be developed with the construction of new facilities in those areas as recommended in the 1990 Potable Water Master Plan. (See Figure IV-4, 1990 Utilities Master Plan)
- **Electric Power**
With the completion of the Makai Campus Electric Substation now under construction and the related electrical distribution projects, the Manoa Campus will have sufficient power to meet the requirements of projects proposed in the LRDP. The power is provided by the Hawaiian Electric Company, Ltd. (See Option 2A, Exterior Electrical Distribution Study)
- **Gas Supply**
The gas service required by the Manoa Campus is provided by The Gas Company. The service is required primarily to serve laboratories and food service facilities and is adequate to meet current and future campus needs.
- **Communication System**
The Manoa Campus communication system which has been recently upgraded, is adequate to meet current and future needs of the campus. (See Communication System Master Plan)

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I. AIR QUALITY

• Existing Conditions

Present air quality in the Manoa Campus area is mostly affected by air pollutants exhausted from motor vehicles with carbon monoxide being the most abundant of the pollutants emitted. No recent air pollutant monitoring data are available for the University area.

Exhaust from laboratories, mechanical rooms etc., are isolated and dispersed through systems that meet air quality standards.

Based on monitoring data from similar conditions elsewhere in Honolulu, an assessment done by Barry D. Root and Barry C. Neal indicates that some locations around the Manoa Campus may already exceed the State AAQS for carbon monoxide during periods of serious traffic congestion and poor meteorological conditions. However, Root and Neal also reported that the probability of this happening is very low and could occur only during peak morning traffic disrupted by an accident or other serious occurrence together with the worst case meteorological conditions.

• Anticipated Impacts

The improvements proposed in the planning period will add more parking facilities on campus and the additional traffic will result in increased emission of carbon monoxide gas. The availability of more parking facilities, however, will result in the heavy morning traffic being spread over a longer period of time resulting in less traffic congestion and concentrations of emissions.

There will be two types of short-term air quality impacts that will result from the proposed projects. They are (1) fugitive dust generation and (2) on-site emissions from construction equipment and off-site emissions from moving construction equipment and commuting construction workers.

• Mitigation Measures

With recently completed improvements on University Ave., Dole St. and Lower Campus Rd., with proposed further improvements to Lower Campus Road (to complete loop system), and the implementation of the University's "Special Events Parking and Traffic Plan", major traffic

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I. AIR QUALITY

Anticipated Impacts (continued)

congestion around the campus should no longer occur even with increased parking facilities. The occurrence of concentration of carbon monoxide fumes from motor vehicles that would exceed State AAQS, therefore, will be rare.

The situation, however, will be monitored by the University and the City Department of Transportation Services to insure that the opportunities for such congestion are minimized.

Strict compliance with State of Hawaii Pollution Control Regulations regarding dust-watering programs and covering of dirt-hauling trucks will mitigate fugitive dust emissions from construction activities. On-site emissions from construction equipment can be controlled, if appropriate, by controlling working hours; off-site emissions can be controlled in the same manner.

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J. NOISE

• Existing Conditions

The existing and anticipated noise problems on the Manoa Campus have been generally discussed in the Noise Impact Study by Y. Ebisu & Associates, October 1989. Ambient noise levels on the campus were measured at that time to be 55 dBA or less.

While this study was done in connection with the Special Events Center project on the Makai Campus, it considers the worst case scenario as the Makai Campus is the most noise prone location on the Manoa Campus with its proximity to the H-1 Freeway, Dole Street and University Avenue, Parking Structures and athletic facilities. The noise levels measured there at that time did not exceed the Department of Health Guidelines.

• Anticipated Impacts

The improvements proposed in the planning period will not result in an increase in ambient noise levels on the Manoa Campus. They will, however, generate significant amounts of noise during the construction period. Construction activities will be monitored by the University and State to comply with the provisions of Title II, Administrative Rules, Chapter 43, "Community Noise Control for Oahu".

The contractor will be required to obtain a noise permit if the noise levels from construction activities are expected to exceed the allowable levels. Heavy vehicles travelling to and from project sites will be minimized within residential areas and will comply with Title II, Administrative Rules, Chapter 42, "Vehicular Noise Control for Oahu".

• Mitigation Measures

No extraordinary mitigation measures are proposed at this time since the noise generated by current and proposed activities are not expected to exceed the allowable levels of Department of Health Administrative Rules.

10.0 COMPATIBILITY WITH PUBLIC POLICIES

The Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update is compatible with current public policies regarding higher education in the State of Hawaii. These public policies deal with the higher education programs, the required facilities, the lands upon which they are located.

10.1 State of Hawaii Policies

- A. The LRDP is consistent with the provisions of the Hawaii State Plan (Chapter 226, Hawaii Revised Statutes) which serves as a guide for the future long-range development of the State of Hawaii.
- B. It is consistent with the provisions of the State Education Functional Plan (Chapter 226, Hawaii Revised Statutes, as amended by Act 336, SLH 1987) which delineates specific strategies of policies and priority actions that should be addressed in the short-term.
- C. The Manoa Campus is situated on lands designated as Urban in the State Land Use District plan. The use of the lands for a university campus conforms to the Urban designation.
- D. The development of projects adjacent to the Manoa stream will be scrutinized for compliance with statutory Coastal Zone Management objectives and policies of Chapter 205A.

10.2 University of Hawaii Policies

A. General University Policies

- The LRDP is consistent with the University's development plans adopted by the Board of Regents and general BOR policies. These plans include:
 1. A Strategy for Academic Quality, 1985-95, University of Hawaii, July 1984
 2. A Master Plan for the University of Hawaii UH Board of Regents, January 1991
 3. Academic Development Plan IV, 1991-97 University of Hawaii at Manoa, April 19, 1994
- The Physical LRDP
 1. The Physical LRDP, 1994 Update, was approved by the UH Board of Regents on May 20, 1994. The 1994 LRDP updated the 1987 LRDP which was approved by the BOR and the City Council (PRU) in 1989.

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COMPATIBILITY WITH PUBLIC POLICY

10.3 City and County of Honolulu Requirements

A. General Plan*

"The General Plan for the City and County of Honolulu is a comprehensive statement of objectives and policies which sets forth the long-range aspirations of Oahu's residents and the strategies of actions to achieve them."

The objectives and policies for education in the General Plan call for "a wide range of educational opportunities, development of employable skills, efficient use of facilities, appropriate location and the promotion of Honolulu as a center of higher education in the Pacific."

These objectives and policies for education are consistent with the general University policies for the University of Hawaii at Manoa. The specific educational objective and policies are outlined in Chapter IX, Health and Education, of the General Plan under Objective B - to provide a wide range of educational opportunities for the people of Oahu and Objective C - to make Honolulu the center of higher education in the Pacific.

B. Development Plan Land Use Map for the Primary Urban Center

The City's Development Plan Land Use Map identifies the Manoa Campus site for public facility. College and University campuses fall within this land use designation. Thus, the improvements proposed for the planning period as well as other future improvements are actions that are compatible with the City's Development Plan.

C. Zoning

The existing underlying zoning of the Manoa Campus is R-5 and R-7.5. The use of the lands for University facilities are permitted uses under R-5 and R-7.5 zones.

D. Plan Review Use

The current Capital Improvements Program projects on the Manoa Campus, under design or under construction, was included in the City's approved Plan Review Use (PRU) by Resolution No. 89-411, CD-2, as amended.

The Plan Review Use Application for the 1994 LRDP Update, which includes improvements proposed for the current planning period, will shortly be filed with the City Department of Land Utilization. Upon its approval by the City Council, the improvements proposed therein will be considered consistent with City plans.

*from General Plan, Objectives and Policies, Department of General Planning City and County of Honolulu, 1992

11.0 SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES

In support of the University's current goals, the CIP projects listed in the LRDP for this planning period focuses on the areas of Health and Safety, Completion of On-going Projects, Renovation of Existing Facilities, Accessibility to Persons with Disabilities, Infrastructure Improvements, Student Dormitories and the Implementation of Other Projects in the approved LRDP.

The projects under the areas of Health and Safety, Accessibility to Persons with Disabilities, and Infrastructure Improvements are funded from general appropriations and does not involve significant impacts. They are, therefore, not discussed here in terms of individual projects.

In pursuit of improvements to meet these goals, the major impacts of these projects and the alternatives considered are described under Paragraphs 11.1 and 11.2.

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SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES

11.1 Socio-Economic Impacts

A. Economic and Employment Impacts

1. Irreversible and Irretrievable Commitments of Resources

- **Labor and Material Resources**
The labor and materials used for construction are non-renewable and are irretrievable commitments of resources. However, the earnings of construction workers and materials suppliers will have positive impacts on employment and on the economy.
- **Natural and Cultural Resources**
A major natural resource commitment of the LRDP will be the commitment of lands for new projects.

2. Alternatives

- **No Action (The 1994 LRDP)**
The absence of the new construction activities provided for in the 1994 LRDP will reduce employment and may adversely impact the economy. Specific educational programs will be hampered by the lack of adequate space and by the continued use of old, obsolete and inefficient facilities.
- **Relocation (Another Campus)**
The construction program and its accompanying economic and employment impacts would be transferred to another campus under this alternative. The absence of adequate facilities to be provided under the 1994 LRDP, however, would inhibit the teaching and learning processes on the Manoa Campus.

The relocation of programs and facilities to a new campus could be considered a more reasonable alternative in the future. At the present time, the development of UH-West Oahu, the proposed new campus, appears to be a number of years away. Waiting for facilities on this campus to be developed when specific facilities are now required will have a significant impact on the current quality of education and will impact the overall development of the UH System.

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES

SOCIO-ECONOMIC IMPACTS

B. Public Service Impacts, Refuse Collection

1. Irreversible and Irretrievable Commitments of Resources

• **Labor and Material Resources**

The bulk of the "green" waste from the campus is now composted and is not disposed off as refuse. This program will not be affected by the 1994 LRDP.

However, the proposed developments will marginally increase the volume of other refuse (waste paper and aluminum cans) to be collected and disposed by the University at landfill sites and will require the commitment of additional human resources.

• **Natural and Cultural Resources**

While the impact of additional volume of refuse collection is relatively small, the total amount collected is large and continues to tax the City's limited landfill sites. This disposal of recyclable materials leads to the waste of our valuable natural resources.

2. Alternatives

• **No Action (The 1994 LRDP)**

Despite the apparent shortage of manpower, space and equipment, the University plans to expand its recycling program by (1) establishing a central collection and processing area; (2) establishing additional regional collection areas; and (3) embarking on a public awareness program to encourage all to participate in this program. This expansion should lead to a meaningful reduction in the amount of refuse now collected and disposed at the City's landfill sites. Additional manpower and equipment requested in the budget, if approved, could lead to a substantial reduction in the volume of refuse disposed.

This reduction in refuse disposal and expansion of the recycling program will support the conservation of our valuable natural resources.

• **Relocation Alternative (Another Campus)**

The relocation of the proposed facilities to a new campus will only marginally reduce the volume of refuse collection on the Manoa Campus. If these facilities were constructed on UH-West Oahu, the burden of refuse collection and disposal will only shift there from the Manoa Campus.

C. Impact from Displacement of People, Resources and Functions

1. Irreversible and Irretrievable Commitment of Resources

• **Labor and Material Resources**

Because the Manoa Campus is a mature campus in an urban community, most of the existing lands are already utilized for buildings housing various programs and lands used for different activities (i.e. parking lot). Thus, every new project will result in the irretrievable commitment of resources to move people and programs and to demolish existing facilities.

• **Natural and Cultural Resources**

The projects proposed for this planning period will not result in the irretrievable commitment of natural and cultural resources on the Manoa Campus.

2. Alternatives

• **No Action (The 1994 LRDP)**

If the projects under the 1994 LRDP are not implemented, the existing inadequate facilities will continue to be utilized by the various programs thus inhibiting the teaching and learning processes.

• **Relocation (Another Campus)**

The relocation of programs and people from Manoa Campus to facilities at UH-West Oahu may be acceptable strictly from an academic viewpoint. The economic and other impacts on current faculty and staff on the Manoa Campus need also be considered on such relocation. However, this is not a viable alternative for this planning period since the new campus facilities will not be ready.

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES

SOCIO-ECONOMIC IMPACTS

D. Traffic Circulation and Parking

1. Irreversible and Irretrievable Commitment of Resources

• **Labor and Material Resources**

Traffic circulation and parking on and off the Manoa Campus has been the sources of major complaints from the campus community and from the communities adjoining the campus. Congestion on streets leading to the campus and student parking in neighborhood streets have been serious problems confronting the University for many years.

The involvement of the University Administration, Honolulu Police Department, the City Council and Neighborhood Boards in this problem has been a lengthy one and considerable effort have been expended by all to alleviate this problem. While the situation has improved, the problems continue--although to a lesser degree.

Significant relief from traffic circulation and parking problems at the Manoa Campus cannot be attained without the benefit of a mass rapid transit system. Its construction would involve a huge irretrievable commitment of financial resources by the City, the State and Federal Governments.

• **Natural and Cultural Resources**

The resolution of traffic and parking problems would require the commitment of lands for roadways and parking structures.

The mass rapid transit system, if implemented, would require the commitment of large amounts of lands -- including air and underground rights -- for the route, the stations and service facilities.

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES

SOCIO-ECONOMIC IMPACTS

D. Traffic Circulation and Parking

2. Alternatives

- **No Action (The 1994 LRDP)**
According to the "Traffic Impact Report" prepared by Austin, Tsutsumi & Associates, Inc., the improvements proposed in the 1994 LRDP will not significantly impact traffic operations, on and off the Manoa Campus. The proposed improvements include four (4) parking structures with spaces for 1,655 cars.

The 1994 LRDP suggests that a mass rapid transit system is the best means of providing significant relief to the traffic circulation and parking problems at the Manoa Campus. If no action is taken on this alternative transportation proposal, the problems on the Manoa Campus can only be alleviated to a certain degree.

- **Relocation (Another Campus)**
The relocation of programs to the UH-West Oahu campus and reducing the total enrollment at the Manoa Campus could have positive impact on traffic circulation and parking at the campus. Such relocation will have to be significant to have measurable impact on the traffic circulation and parking problems on the Manoa Campus.

Irrespective of such action, a mass rapid transit system will be required to substantially alleviate the University's and City's transportation problems.

However, since the new campus is not expected to open during the planning period of the LRDP, this alternative is not a viable option at this time.

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES

11.2 Environmental Impacts

A. Visual Resources

1. Irreversible and Irretrievable Commitment of Resources

• **Natural and Cultural Resources**

The Manoa Campus experiences the same problems as other urban centers such as shortage of parking and housing, high density development, deterioration of life-style, loss of identity and other urban ills. It lacks consistency, continuity and cohesiveness in architectural character, landscaping and building and space relationships and it is this lack of consistency which has been a major cause of criticism of the physical appearance of the Manoa Campus.

The 1994 Update proposes, in addition to building projects, the implementation of site improvements to enhance the physical environment. These improvements include the construction of gateways, malls, paths, and plazas with considerable landscape work to provide the campus with a "sense of place". The attainment of this vision involves the irretrievable commitment of financial and land resources.

2. Alternatives

• **No Action (The 1994 Update)**

The more comprehensive design criteria included in the 1994 Update and an effective design review process will insure that the future development of the campus will begin to unify its disparate elements to provide "a sense of place". The lack of action on the 1994 Update will result in the continuance of the present process which has yielded results which are less than satisfactory insofar as consistency and cohesiveness is concerned.

• **Relocation (Another Campus)**

The transfer of financial resources to enhance the visual resources of the campus to another campus for the same or other purposes will result in the Manoa Campus looking like much it does today--a collection of buildings and facilities of varying types of architecture with little relationship with each other and with no unifying elements such as malls and paths, and landscaping and color.

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES

ENVIRONMENTAL IMPACTS

B. Drainage

1. Irreversible and Irretrievable Commitment of Resources

• **Natural and Cultural Resources**

The improvements proposed in the 1994 LRDP will not have significant long-term impacts on campus drainage. Short-term runoffs during construction, however, may result in an increase in turbidity in the City drainage system during a major storm.

Since much of the storm waters from the Manoa Campus empties into the Manoa Stream via the City's drainage system, the damage to the Manoa Stream environmental, cultural and historical resources may be irreversible if runoff and sediment are not now adequately controlled.

These extraordinary controls will require the irretrievable commitment of human resources and equipment.

2. Alternatives

• **No Action (The 1994 LRDP)**

All construction activities on the Manoa Campus will conform to the City's Soil Erosion Standards and Guidelines as required by construction permits.

In addition to these standards and guidelines, "Best Management Practices" will be utilized by the University's Building and Grounds Management Offices in controlling runoff and sediment into the Manoa Stream. Despite these safeguards, some runoff and sediment may find its way into the Manoa Stream.

• **Relocation (Another Campus)**

The transfer of financial resources for the relocation of proposed developments to the new UH-West Oahu campus is not feasible at this time since its construction is still some years away.

Although the site selected for UH-West Oahu campus does not have a stream running through the site, conformance to the City's Standards and Guidelines will be required. The "Best Management Practices" will be utilized as guide in the development of the new campus as well.

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES

ENVIRONMENTAL IMPACTS

C. Air Quality

1. Irreversible and Irretrievable Commitment of Resources

• **Natural and Cultural Resources**

The increase in the number of motor vehicles arriving and departing the campus especially during peak traffic hours could seriously affect air quality at parts of the Manoa Campus and adjoining areas. The carbon monoxide in the air may exceed State AAQS during periods of heavy traffic congestion and worst case meteorological conditions.

To minimize such impacts, the LRDP proposes improvements to roads, traffic signal system and traffic controls (Campus Security and Honolulu Police Department) to facilitate traffic circulation. This will require the irretrievable commitment of financial resources for construction and for personnel.

2. Alternatives

• **No Action**

Without improvements and operational plans to alleviate congestion during peak traffic conditions, the potential of air quality hazards being present in specific locations which presents health hazards is higher.

• **Relocation**

The relocation of functions to a new campus is no longer feasible since the major structures which will generate the most traffic and potential air quality hazards have already been constructed on the Manoa Campus. These structures include the Andrews Amphitheater, the Special Events Center, the Baseball Stadium and Cooke Field.

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES

ENVIRONMENTAL IMPACTS

D. Noise

1. Irreversible and Irretrievable Commitment of Resources

• **Natural and Cultural Resources**

The noise from activities at the Special Events Center and from the heavy traffic they may generate are the causes of most concern to the neighboring communities. This noise problem has been separately addressed in the Environmental Assessment for the Special Events Center.

Other noise generating activities involve concerts at the Andrew's Amphitheater and sporting events at Cooke Field, at the Baseball Stadium and at the Softball Stadium. While the crowd noise from activities in these open facilities cannot be controlled, the decibel levels of sound systems are strictly monitored to alleviate the noise to the adjoining communities. Thus, the monitoring efforts, although not extensive, require irretrievable commitment of personnel resources.

The control of traffic to reduce congestion, air quality and now noise have been discussed in another section. It was noted in that section that traffic control efforts by Campus Security and the Honolulu Police Department requires the irretrievable commitment of personnel resources.

2. Alternatives

• **No Action**

The improvements proposed during the planning period include a 900 car parking structure addition (Phase IIB) to Parking Structure Phase IIA on the Makai Campus and three other parking structures. If these structures are not built under a no action alternative, relief from the parking and traffic problems on the campus and in the neighboring communities may be delayed.

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES

ENVIRONMENTAL IMPACTS

2. Alternatives

• **No Action (continued)**

This will lead to additional traffic congestion and noise in the adjoining neighborhoods where people will be seeking parking spaces. The Parking Structure Phase IIB project also includes the completion of the loop system for the Lower Campus Road to facilitate internal traffic circulation.

• **Relocation**

The relocation to another campus of projects and/or funding proposed in the LRDP for the Manoa Campus, especially the parking structure projects, will delay the alleviation of parking and traffic problems on and off the campus. These problems are one of the primary noise generators on the Manoa Campus.

12.0 SUMMARY OF FINDINGS AND DETERMINATION

A summary of findings and a determination that the impacts are not significant enough to warrant an Environmental Impact Statement are indicated below.

12.1 Summary of Findings

A summary of findings to support the determination are as follows:

- The LRDP is consistent with The Hawaii State Plan; the City's General Plan Development Plan; the City's Zoning Ordinance; the University's Strategic Plan, 1985-95; the BOR Master Plan; and, the UHM Academic Development Plan IV.
- The enrollment ceiling for the Manoa Campus established by the BOR remains unchanged (from the 1987 LRDP) at 23,000 students; the Fall 1993 enrollment of 20,037 students is projected to increase only to 21,335 (Fall 1999).
- The current Capital Improvements Program (CIP) in the LRDP addresses critical program needs in instruction (College of Education Facilities, Phase IA), in research (Snyder Hall Renovations), in academic support (Hamilton Library, Phase III), in Student Services (New Frear Hall) and in Institutional Support (Parking Structure, Phase IIB). The CIP, through general appropriations, also addresses needs in infrastructure improvements such as for utilities systems, for site improvements, for health and safety improvements, for modifications to provide accessibility to persons with disabilities and for energy conservation measures.
- The improvements proposed in the LRDP do not have significant socio-economic and environmental impacts. The EA addresses economic and employment impacts; public service impacts; the impact of displacement of people, resources and function; impacts on recreation facilities; and impacts on traffic circulation and parking. The LRDP includes mitigation measures to alleviate such impacts.
- The improvements proposed in the LRDP do not have significant environmental impacts. It makes proposals to improve the quality of building design, to create "a sense of place", to preserve the natural and cultural resources, and, to improve the overall student experience--all to provide an enhanced educational environment in support of the mission of the University of Hawaii at Manoa.

LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT

SUMMARY OF FINDINGS AND DETERMINATION

12.1 Summary of Findings

- The EA discusses the alternatives to the action considered and the selected action.
- The proposals in the 1994 LRDP are less ambitious than those in the 1987 LRDP and its impacts will be less significant.

12.2 Determination

Based in the findings presented in this Environmental Assessment and supporting technical studies, the potential impacts of the construction of improvements listed in the LRDP have been sufficiently examined and discussed. With the execution of mitigation measures recommended in this Environmental Assessment, the action will not result in significant adverse impacts on the natural and human environment.

Thus, further consideration of the impacts of the proposed improvements through the preparation of an Environmental Impact Statement is not necessary.

13.0 REFERENCES

UNIVERSITY OF HAWAII

A Strategy for Academic Quality
1985-95
University of Hawaii
July 1984

A Master Plan for the University of Hawaii
by the University of Hawaii Board of Regents
January 1991

University of Hawaii at Manoa
Academic Development Plan IV
1991-97
April 19, 1991

General and Graduate Information Catalog
1993-95
University of Hawaii at Manoa

GROUP 70 INTERNATIONAL, INC.

Long Range Development Plan
University of Hawaii, Manoa Campus
1987

University of Hawaii at Manoa
Long Range Development Plan
1994 Update
Summary Report
Group 70 International, Inc.

Long Range Development Plan Report
University of Hawaii, Manoa Campus
1994 Update

- Traffic Impact Report
Austin, Tsutsumi & Associates, Inc.
- Landscaping
Walters, Kimura, Motoda, Inc.
- Signs and Graphics
Clarence Lee Design

**LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT**

REFERENCES

OTHER REFERENCES

**Exterior Building Coloration
University of Hawaii, Manoa Campus
Wm Wmson
1994 Update**

**1990 Utilities Master Plan
University of Hawaii at Manoa
Fukunaga & Associates
(to be updated)**

**Exterior Electrical Distribution System Study
at the University of Hawaii, Manoa Campus
Ronald N. S. Ho & Associates
October 23, 1991**

**Air Quality Assessment for the
University of Hawaii-Manoa.
Sports Arena Alternatives Study
Root and Neal
October 1989**

**Noise Impact Study
University of Hawaii, Manoa Campus
HPE Facilities Alternatives
Y. Ebisu & Associates
1989**

**The Hawaii State Plan
1991**

**Soil Survey
Island of Oahu, State of Hawaii
U.S. Department of Agriculture, Soil Conservation Service
U.H. Agricultural Experiment Station
August 1972**

14.0 PRE-ASSESSMENT CONSULTATION

The agencies and groups having jurisdiction which have been consulted in the preparation of the Draft Environmental Assessment are listed under Section 6.0.

The following record of pre-assessment consultations to date are enclosed.

- Summary of Responses
- Typical Letter to Agencies and Groups
- Copies of Comments Received and Responses Thereto (If Required)

**LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT**

SUMMARY OF AGENCY RESPONSES

	Draft EA Mailed	Agency Response	Group 70 Response	Revision to DEA
1) Dept of Accounting & General Services	6/13/94			
2) Dept of Agriculture	6/09/94			
3) Dept of Business & Economic Development	6/09/94			
4) Dept of Business & Economic Development - State Energy Office	6/09/94	6/22/94	7/08/94	Yes
5) Dept of Defense	6/09/94	6/24/94	7/08/94	Yes
6) Dept of Education	6/09/94	6/27/94	NR	
7) Dept of Hawaiian Home Lands	6/09/94	7/06/94	NR	
8) Dept of Land & Natural Resources	6/09/94	6/30/94	7/07/94	Yes
9) DLNR - State Historic Preservation Office	6/13/94	6/24/94	6/28/94	Yes
		7/08/94	7/20/94	No
10) Dept of Health	6/09/94	7/27/94	8/09/94	Yes
11) Dept of Health - Environmental Mgmt Division	6/09/94			
12) Dept of Transportation	6/09/94	6/27/94	7/06/94	No
13) Office of State Planning	6/09/94	6/23/94	7/11/94	Yes
14) Office of Hawaiian Affairs	6/09/94			
15) UH- Water Resources Research Center	6/09/94			
16) UH - Environmental Center	6/09/94	6/23/94	7/11/94	Yes
17) East-West Center	6/13/94	6/28/94	7/07/94	No
18) U. S. Dept of Agriculture	6/13/94	7/05/94	7/11/94	Yes
19) U. S. Army Corps of Engineers	6/09/94	6/27/94*	NR	
20) U. S. Dept of Commerce - National Marine Fisheries	6/13/94			
21) City & County - Board of Water Supply	6/09/94	6/22/94	NR	
22) City & County - Building Department	6/09/94	6/17/94	NR	

**LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF HAWAII, MANOA CAMPUS, 1994 UPDATE
ENVIRONMENTAL ASSESSMENT**

SUMMARY OF AGENCY RESPONSES

	Draft EA	Agency Response	Group 70 Response	Revision to DEA
23) City & County - Dept of Housing & Community Development	Mailed			
24) City & County - Dept of General Planning	6/09/94	6/23/94	7/07/94	No
25) City & County - Dept. of Land Utilization	6/09/94	6/23/94	7/07/94	Yes
26) City & County - Dept of Parks & Recreation	6/09/94	7/12/94	7/21/94	No
27) City & County - Dept of Public Works	6/09/94	6/21/94	6/24/94	Yes
28) City & County - Dept of Transportation Services	6/09/94			
29) City & County - Dept of Wastewater Management	8/18/94	8/19/94	8/19/94	Yes
30) City & County - Fire Department	6/09/94	6/24/94	NR	
31) City & County - Police Department	6/09/94	6/17/94	NR	
32) Neighborhood Board No. 5 Diamond Head/Kapahulu/St. Louis Hgt.	6/09/94			
33) Neighborhood Board No. 7 Manoa	6/09/94			
34) Neighborhood Board No. 8 McCully/Moiliili	6/09/94			
35) Neighborhood Board No. 10 Makiki. Lower Punchbowl, Tantalus	6/09/94			
36) Malama o Manoa	6/13/94	7/14/94	8/01/94	No
37) Mid-Pacific Institute	6/09/94			
38) St Francis High School	6/09/94			
39) The Gas Company	6/09/94			
40) GTE Hawaiian Telephone	6/09/94			
41) Hawaiian Electric Company	6/09/94	8/15/94 ✓	NR	

NR= Not Required

DEPARTMENT OF WASTEWATER MANAGEMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

JEREMY HARRIS
MAYOR

AUG 24 1994



FELIX B. LIMTIACO
ACTING DIRECTOR

WPP 94-339

August 18, 1994

Mr. Walter K. Muraoka, Associate
Group 70 International Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Muraoka:

Subject: Draft Environmental Assessment-Long Range
Development Plan, University of Hawaii,
Manoa Campus-1994 Update

Thank you for the opportunity to review the subject draft environmental assessment. Please list the Department of Wastewater Management under the City and County of Honolulu on Page 23 of this document.

Since the draft environmental assessment refers to the 1990 Utilities Master Plan Update for the University of Hawaii Manoa Campus in regard to the wastewater disposal system, the following comments are directed towards the utilities master plan:

- * We recommend that the Sewer System section of the 1990 Utilities Master Plan Update be revised to reflect the effects of changes to the City's sewer collection system upon the sewer master plan for the university. These changes were due to construction of the Sewer Tunnel Relief, Increment 3, project which was completed subsequent to preparation of the 1990 Utilities Master Plan Update report.
- * The existing 10-inch sewer line in Metcalf Avenue is up to capacity and cannot accept any additional wastewater flows from the university without the section between University Avenue and Hoonanea Street being upgraded.
- * Wastewater flows from the Central Campus West (Lab School) area should be directed to Dole Street rather than University Avenue.

Mr. Walter K. Muraoka

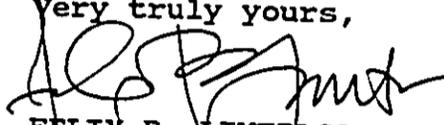
- 2 -

August 18, 1994

- * Wastewater flows from the Makai Campus should be directed into the 60-inch interceptor sewer located in Dole Street, possibly via the wastewater pump station which will serve the multi-function facility currently being constructed.

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

Very truly yours,



FELIX B. LIMTIACO
Acting Director



22 August 1994

Felix B. Limtiaco
Acting Director
Department of Wastewater Management
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96814

Dear Mr. Limtiaco:

**Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus
1994 Update**

Thank you for your letter of August 19, 1994 in which you submitted comments on the Draft Environmental Assessment, Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update (1994 LRDP).

We have discussed your comments with the University of Hawaii and its utilities consultant, Fukunaga & Associates, Inc. and offer the following responses:

1. **Update of the 1990 Utilities Master Plan**
The 1990 Utilities Master Plan is being updated by Fukunaga and Associates, Inc. to reflect the results of changes to the City's sewer collection system by the construction of the Sewer Tunnel Relief, Increment 3 in Dole Street. Fukunaga and Associates, Inc. will consult with your office on the update work on the 1990 Utilities Master Plan. ok
2. **Wastewater Flows from Central Campus West (University Laboratory School)**
The 1990 Utilities Master Plan will be amended to indicate the wastewater flows from the Central Campus West to be directed to Dole Street rather than University Avenue—the existing 10-inch sewer line in Metcalf Avenue being up to capacity. ok
3. **Wastewater Flows from Makai Campus**
The 1990 Utilities Master Plan will be amended to indicate the wastewater flows from the Makai Campus to be directed into the 60-inch interceptor sewer located in Dole Street. This will probably require the construction of a new wastewater pump station on the makai side of the quarry which would not only serve the physical education/athletic facilities but to would also intercept and direct current flows from the student housing facilities to Dole Street. ok

The University will forward to your office a copy of the updated 1990 Utilities Master Plan upon completion.

- Francis S. Oda, AIA, AICP
- Norman G.Y. Hong, AIA
- Sheryl B. Seaman, AIA, ASID
- Robert K.L. Wong, AIA
- Hiroshi Hida, AIA
- Roy H. Nihei, AIA, CSI
- James I. Nishimoto, AIA
- Ralph E. Pommore, AICP
- Stephen H. Yuen, AIA
- Paul P. Chorney, AIA
- Dean H. Kitamura, AIA
- Norma J. Scott, AIA
- Jane Fukushima-Lee, ASID
- Stephen E. Gallo, CPA
- Walter R. Ikell, AIA, CSI, CCS
- Walter K. Muraoka
- George I. Atta, AICP
- Jeffrey H. Ovenson, AICP
- Michael A. Garni
- Eric G. Crispin, AIA
- Linda L. Chung, AIA
- Janet M. Buchholdt
- Ronald L. Proctor
- Charles F. Schriever, AIA
- Teresa P. Davidson, AIA
- Jian-Cheng Bao

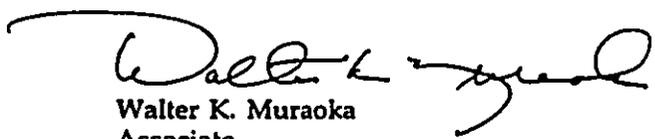
COPY

Mr. Felix B. Limtiaco
Department of Wastewater Management
22 August 1994
page two

We hope that our responses on behalf of the University of Hawaii meet with your satisfaction. Please call me at 523-5866 or forward a fax to 523-5874 if you have any further concerns on the 1994 LRDP. We sincerely appreciate your comments on the Draft Environmental Assessment.

Sincerely,

GROUP 70 INTERNATIONAL INC.



Walter K. Muraoka
Associate

cc University of Hawaii - Allan Ah San
Michael Yoneda
Clyde Akita

JOHN WAIHEE
GOVERNOR OF HAWAII



PETER A. SYBINSKY, Ph.D.
DIRECTOR OF HEALTH

RECEIVED

AUG - 1 1994

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HAWAII 96801

July 27, 1994

In reply, please refer to:

94-126/epo

GROUP 70

Mr. Walter K. Muraoka
Associate
Group 70 International
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4398

Dear Mr. Muraoka:

Subject: Pre-Assessment Consultation
Environmental Assessment (Draft), Long Range Development
Plan, University of Hawaii, Manoa Campus, 1994 Update
TMK: 2-8-07:29

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

Wastewater

The subject project is located within the county sewer service system. As the area is sewered, we have no objections to the proposed long range development plan, provided that all projects are connected to the public sewer.

The developer should work closely with the County to assure the availability of additional treatment capacity and adequacy for the project. Non-availability of treatment capacity will not be an acceptable justification for use of any private treatment works or individual wastewater system.

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

Solid Waste

The University of Hawaii Long Range Development Plan should address the impacts of the construction and development upon solid waste management practices at the university and in relation to the City and County of Honolulu's efforts to reduce waste generation by 25 % by 1995, and 50 % by the year 2000. The document should also include a discussion of the mitigation efforts the University could implement to reduce the volume of solid waste needing disposal. The State of Hawaii, in Chapter 342G, Hawaii Revised Statutes, formally adopted recycling and waste reduction goals of 25% by 1995, and 50% by the year 2000. The same chapter mandates that all State and County offices implement white office paper recycling programs. In keeping with the State's waste reduction goals, the University should commit resources to

Mr. Walter K. Muraoka
July 27, 1994
Page 2

collect recyclable materials in all existing and proposed facilities. New facilities should include secondary resources (recycled materials) whenever available. Locally produce compost is available for landscaping purposes, and crushed glass in asphalt is available for road paving purposes.

Should you have any questions on this matter, please contact Ms. Carrie McCabe of the Office of Solid Waste Management at 586-4240.

Noise

1. Construction activities must comply with the provisions of Title 11, Administrative Rules, Chapter 43, "Community Noise Control for Oahu."
 - a. The contractor must obtain a noise permit if the noise levels from construction activities are expected to exceed the allowable levels of the rules.
 - b. Construction equipment and on-site vehicles requiring an exhaust of gas or air must be equipped with mufflers.
 - c. The contractor must comply with the requirements pertaining to construction activities as specified in the rules and the conditions issued with the permit.
2. Heavy vehicles travelling to and from the project site should be minimized within residential areas and must comply with the Title 11, Administrative Rules Chapter 42, "Vehicular Noise Control for Oahu."

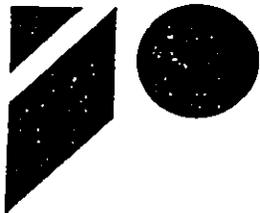
Should you have any questions on this matter, please contact Mr. Jerry Haruno, Environmental Health Program Manager, Noise and Radiation Branch at 586-4701.

Sincerely,



PETER A. SYBINSKY, Ph.D.
Director of Health

c: Wastewater Branch
Solid Waste Branch
Noise & Radiation Branch



GROUP 70
INTERNATIONAL

9 August 1994

Peter A. Sybinsky, Ph.D.
Director of Health
Department of Health
State of Hawaii
P. O. Box 3378
Honolulu, Hawaii 96801

Dear Dr. Sybinsky:

**Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus
1994 Update**

Thank you for your letter of July 27, 1994 in which you submitted comments on the Draft Environmental Assessment for the Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update (1994 LRDP).

We have discussed your comments with the University of Hawaii and offer the following responses:

1. Wastewater

All developments proposed in the 1994 LRDP will be connected to the City and County Municipal Sewer System in which there are sufficient capacities to accommodate future Manoa Campus facilities.

The 1990 Utilities Master Plan prepared for the University by Fukunaga and Associates, Inc. includes the Sewer Master Plan which indicates the University's plans for connections to the County System. This plan is presently being updated to acknowledge current amendments to the Manoa Campus LRDP.

2. Solid Waste

The need to reduce the volume of solid waste needing disposal from the Manoa Campus is of concern by the University and it is now implementing measures to expand its present limited recycling program to effect such reductions. The University's past programs has been hampered by the lack of a centralized collection and processing area, the uncertainties in the local recycling industries and the general lack of public (campus) awareness of the program.

The University's Buildings and Grounds Management Office (BGMO) is now actively seeking a centralized collection and processing area which is readily accessible and where all activities may deposit their recyclable materials for further processing. Once established, it hopes to publicize the program to secure more active campus participation. The establishment of regional collection areas will be next sought by the BGMO and, finally, building collection areas. The regional and building collection areas could be provided in either existing or new

*why isn't
space
dedicated
in long-
range plans?*

FILE

- Francis S. Oda, AIA, AICP
- Norman G.Y. Hong, AIA
- Sheryl B. Seaman, AIA, ASID
- Robert K.L. Wong, AIA
- Hitoshi Hida, AIA
- Roy H. Nihei, AIA, CSI
- James I. Nishimoto, AIA
- Ralph E. Portmore, AICP
- Stephen H. Yuen, AIA

- Paul P. Chomey, AIA
- Dean H. Kitamura, AIA
- Norma J. Scott, AIA
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- Jeffrey H. Overton, AICP
- Michael A. Gami
- Eric G. Crispin, AIA
- Linda L. Chung, AIA
- Janet M. Bucholdt
- Ronald L. Proctor
- Charles F. Schriever, AIA
- Teresa P. Davidson, AIA
- Jian-Cheng Han

9 August 1994
Dr. Peter A. Sybinsky, Ph. D
Director of Health
page two

buildings. The expansion of the recycling program to realize its full potential, however, requires a substantive commitment of financial resources.

The BGMO is continuing its search for funds to more actively pursue the expansion of the recycling program for it realizes that, properly conceived and executed, the economies of avoided hauling and disposal costs could contribute significantly to both the environmental and fiscal goals of the University. While the program will continue to expand, it will not realize its full potential until the program is better funded with personnel and facilities.

The University now generates its own compost from green waste collected from campus grounds. The green waste from campus roads are disposed of because it often contains traces of petroleum products used by motor vehicles. The use of crushed glass in asphalt products is encouraged by the University in its paving contracts.

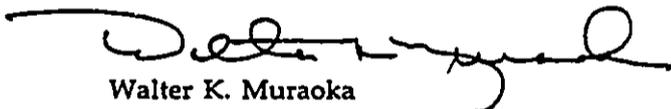
3. Noise

All University construction contracts call for the contractor's conformance to the noise regulations of the Department of Health. The University's construction contracts have been administered in the past by the State Department of Accounting and General Services.

We hope our responses on behalf of the University of Hawaii meet with your satisfaction. Please call me at 523-5866 or forward to 523-5874 if you have any further concerns on the 1994 LRDP. We sincerely appreciate your comments on the Draft Environmental Assessment.

Sincerely,

GROUP 70 INTERNATIONAL, INC.



Walter K. Muraoka
Associate

wkm/mjh

cc: University of Hawaii - Allan Ah San
Clyde Akita

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU

170 SOUTH BERETANIA STREET

HONOLULU, HAWAII 96843



June 22, 1994

FRANK F. FASI, Mayor

WALTER O. WATSON, JR., Chairman
MAURICE H. YAMASATO, Vice Chairman
SISTER M. DAVILYN AH CHICK, O.S.F.
JOHN W. ANDERSON, JR.
REX D. JOHNSON
MELISSA Y.J. LUM
KENNETH E. SPRAGUE
KAZU HAYASHIDA
Manager and Chief Engineer

RECEIVED
JUN 24 1994

Mr. Walter Muraoka
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

GROUP 70

Dear Mr. Muraoka:

Subject: Your Letter of June 9, 1994 Regarding the Pre-Assessment Consultation for the Draft Environmental Assessment for the 1994 Update of the Long Range Development Plan for the University of Hawaii, Manoa Campus

We are still reviewing the Draft Environmental Assessment and development plan and will be sending you our reply by July 8, 1994.

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

Very truly yours,


FOR KAZU HAYASHIDA
Manager and Chief Engineer



Mālama o Mānoa

P.O. Box 61961 • Honolulu, Hawaii 96839

July 14, 1994

RECEIVED

JUL 14 1994

Group 70 International
Attention: Mr. Walter Muraoka
924 Bethel Street
Honolulu, HI 96813

GROUP 70

Re: Long Range Development Plan for the University of Hawaii, Manoa
Campus, 1994 Update

Dear Mr. Muraoka:

Thank you for allowing Malama o Manoa to comment on the University's Development Plan. The University and the Manoa residential community are jointly committed to the long term stewardship of Manoa Valley. Toward this end, we view our role in the Development Review process as being one which comes back to Malama's purpose which is to work to preserve, protect and enhance the special qualities of Manoa Valley on behalf of the residents.

In reviewing the plan, Malama o Manoa has focused primarily on the interface aspects of University development as it integrates itself with the community, especially the proposal to link the mauka and the main Manoa campus. We view this concept as a very healthy and far sighted one. We are excited at the prospect of seeing this move forward. There is marvelous potential for strong architectural, open space and environmental benefits, in addition to the operating benefits which we realize must be the basic consideration for the University in the use of its land.

As an opening thought, Malama o Manoa requests the privilege of nominating a member to the University of Hawaii Board of Review for those specific projects which occur in the mauka link. Such a nominee would be a professional from the Hawaii planning or architectural community, and would be jointly agreed upon by Malama o Manoa and the University.

A primary interest of Malama o Manoa relates to the development of the strip of land (Hipowai property) which we understand may be purchased by the University to create a land link between the makai campus and the mauka campus for purposes of faculty housing. Malama o Manoa encourages the integration of open space into this development and the use of architecture and planning consistent with the historical character of Manoa.

A special concern is the selection of architects and planners. We would hope the University's slate is proposed on demonstrated capability to produce sensitive design complimentary to valley architecture, to execute the project on a timely basis, and to provide a cost effective project. We are especially concerned about establishing a process which arrives at selection based on professional and project-specific factors.

Specific comments on the Long Range Plan relate to the entries on pages 18, 49, 61 and 62.

Page 18 under Mauka Campus Item B:

Malama o Manoa would be interested in specifics for the additions to the Manoa Innovation Center, Faculty Housing and the Library Extension.

Page 49 Main Roads:

We would value a more specific understanding of the widening of University Avenue. This is one of the two main entries to Manoa Valley and the "tree lined streets without sidewalks and quiet residential" character is important to valley residents. Malama o Manoa's focus is on maintaining the present feeling of entry into the valley.

As a related subject, we view the proposed new road link between the mauka and makai campuses as a very positive idea and would also value details for that link.

Residents attending the two sessions of community planning workshops co-sponsored by the Manoa Neighborhood Board and Malama o Manoa to "Help Plan Manoa's Future" in January and June of this year expressed great concern about the heavy use of Manoa streets for University daytime parking. We suggest a special meeting to discuss this issue and identify options.

Page 61 Environmental Impacts, Flora:

Malama o Manoa would suggest that elimination of existing Monkeypod trees to provide an expanded architectural entry at the entrance to the University at the corner of University Avenue and Dole Street, may be short sighted. We would hope that keeping the trees, as well as enhancing the architectural entry to include them might be a stronger approach. Please refer to page 3 at the bottom of the Long Range Development Plan summary brochure which contrasts the present Founder's Gate with the future Founder's Gate.

Page 62, Fauna.

With stream cleanup plans just underway, Malama o Manoa will prove to be a strong partner in identifying aquatic species in Manoa Stream. We are working with the State D. L. N. R. Stream Management Task Force to identify and combat non point source pollution, hoping to reestablish the aquatic fauna.

Finally, we would hope in the planning and development process, that the University would follow existing city development regulations as they relate to allowable density, as opposed to utilizing the legislative rights-of-waiver as has been done on other State projects.

We are extremely grateful to the University for allowing input by Malama o Manoa on this Long Range Development Plan. We realize that some of the above comments may be viewed as intrusive on University prerogative but also understand that the University Manoa Campus, to an increasing degree, views itself as a member of the Manoa community. We are confident that we can move ahead as a constructive partnership.

Very truly yours,

Mary M. Cooke

Mary M. Cooke, President

Charles W. Pearson

Charles W. Pearson, Stream Chairman



August 1, 1994

Mary M. Cooke, President
Malama o Manoa
P. O. Box 61961
Honolulu, Hawaii 96839

**Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus
1994 Update**

Dear Ms. Cooke:

Thank you for your letter of July 14, 1994 in which you submitted comments on the Draft Environmental Assessment for the Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update.

We have discussed your general comments with the University of Hawaii and offer the following responses:

1. The University appreciates your offer to nominate a member selected by Malama o Manoa to serve on the Design Review Panel discussed in the 1994 LRDP Summary Report. While the policies and guidelines on the composition and operations of the Design Review Panel have yet to be formulated, when developed, it is very likely to call for a community representative to serve on the panel. When appropriate, the University will communicate with the Manoa Neighborhood Board to name a nominee to this panel. Your organization may want to consult with the Board in the selection of this nominee at that time.
2. Your particular interest in the development of the land between the Upper Central Campus and the Mauka Campus proposed to be acquired by the University is understood and appreciated. While this acquisition is not expected to take place in the near future, the University plans to discuss its plans for acquisition and use of the property with the Manoa Neighborhood Board and Malama o Manoa when the acquisition proposal becomes a reality.
3. Your concern on the selection of architects and planners for University projects has been noted by the University. In the past, the selection of architects and planners for University projects was accomplished by the State Department of Accounting and General Services, based on its procedures for selection. With the passage of the new State public procurement law, such selections will be accomplished by the University of Hawaii. This law outlines the procedures for selection in great detail and the University intends to adhere to these procedures in the selection of its consultants. The work produced by these consultants will be subject to the review of the Design Review Panel who will ensure that the consultants comply with the 1994 LRDP and project specific guidelines issued by the University.

FILE

August 1, 1994
Ms. Mary M. Cooke, President
Malama o Manoa
page two

In response to your specific comments on the DEA, the following comments are offered:

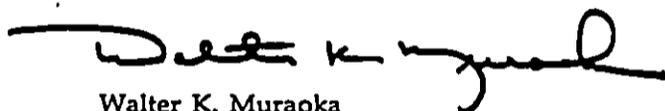
1. The specifics for the additions to the Manoa Innovation Center, Faculty Housing and Manoa Library Extension will be discussed by the University with the Manoa Neighborhood Board on a timely basis. The Manoa Innovation Center additions involve officials from the Center; the Manoa Library Extension on University lands involves the Hawaii State Public Library System. —
2. The widening of University Avenue discussed on Page 49 of the DEA has already been implemented between the H-1 Freeway University Avenue Off-ramp and Dole Street. No other widening of University Avenue is proposed by the University in the 1994 LRDP. The proposed road link between the Upper Central Campus and the Mauka Campus will be discussed in detail with the Manoa Neighborhood Board at the time of acquisition of the property as discussed under Item 2 above. ✓
3. The University is aware of the problem of the heavy use of Manoa streets for University daytime parking and will continue to meet with the Manoa Neighborhood Board to address this problem. With the completion of Parking Structure IIA which will provide 900 additional spaces for students, the heavy use of Manoa streets for University daytime parking should be somewhat alleviated this Fall. Other parking structures proposed during the current planning period should further alleviate the problem in the future. ✓
4. The University has no plans to remove the Monkeypod Trees along University Avenue when implementing the project to enhance the Founder's Gate entry to the Manoa Campus as shown on the 1994 LRDP. The detailed plans for the improvements which has not yet been developed could call for the trees to either remain in place or to be relocated in the proximity to enhance the gateway entry. —
5. The University supports Malama o Manoa's efforts to clean up the Manoa Stream to reestablish aquatic fauna. The University is utilizing Best Management Practices as a guide in controlling runoff and sediment from its grounds into the City and County drainage system which empties into Manoa Stream. ✓
6. The University of Hawaii follows existing city development regulations as they relate to design, siting, landscaping, screening and buffering of its facilities. The City's Land Use Ordinance provides that a Plan Review Use (PRU) Application be filed by the University on its master plan which indicates general height and bulk concepts, land expansion, landscaping, setbacks and buffering of adjacent parcels. This PRU, after approval by the City Council upon recommendation by the Department of Land Utilization, governs the land uses of University lands and all plans for building permits must conform to the approved PRU. No "legislative rights-of-waiver" is invoked in this process. ✓

August 1, 1994
Ms. Mary M. Cooke, President
Malama o Manoa
page three

We hope that our responses on behalf of the University of Hawaii meet with your satisfaction. Please call me at 523-5866 or forward a fax to 523-5874 if you have any further concerns on the 1994 LRDP. We sincerely appreciate your comments on the Draft Environmental Assessment and are confident that we can all move forward in a constructive and rewarding partnership.

Sincerely,

GROUP 70 INTERNATIONAL, INC.



Walter K. Muraoka
Associate

wkm/mjh

cc: Charles W. Pearson
Allan Ah San
Clyde Akita



RECEIVED

JUL 21 1994

GROUP 70

STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813-5248
PHONE (808) 594-1888
FAX (808) 594-1865

July 14, 1994

Mr. Walter K. Muraoka
Group 70 International, Inc.
925 Bethel St., Fifth Floor
Honolulu, HI 96813-4307

Dear Mr. Muraoka:

Thank you for the opportunity to review the Draft Environmental Assessment (DEA) concerning the Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update.

We find the DEA sufficient and have no objections to the University's development plans. Please contact me or Linda Delaney, Land and Natural Resource Officer, at 594-1938, should you have any questions on this matter.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Dante K. Carpenter".

Dante K. Carpenter
Administrator

LM:lm
cc: BOT

DRAFT 6/9/94

**LONG RANGE DEVELOPMENT PLAN
UNIVERSITY OF HAWAII, MANOA CAMPUS
1994 UPDATE**

ENVIRONMENTAL ASSESSMENT

Proposing Agency:

**Office of Senior Vice President for Administration
University of Hawaii
2444 Dole Street
Honolulu, HI 96822**

Prepared By:

**Group 70 International, Inc.
Architecture • Planning • Interior Design • Environmental Services
925 Bethel Street
Honolulu, HI 96813**

1994

JOHN WAINEE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

July 8, 1994

Mr. Walter Muraoka
Group 70
925 Bethel Street
Honolulu, Hawaii 96813

LOG NO.: 12135
DOC NO.: 9407C004
Architecture

Dear Mr. Muraoka:

**SUBJECT: Long Range Development Plan
University of Hawaii, Manoa Campus
TMK 2-8 & 2-9, Honolulu, Oahu**

Thank you for the submittal of the Long Range Development Plan University of Hawaii, Manoa Campus. We offer the following comments in regards to Historic Sites:

- 1) Krauss Hall demolition should be eliminated from the plan. Recently, bids on plans for the rehabilitation of the structure were received. We expect the contract to be awarded soon. This should probably be considered a current project.
- 2) Alterations to historic structures including the Founder's Gates and the Varney Circle Fountain should follow the Secretary of the Interiors Standards for Rehabilitation (included).
- 3) The long range development plan should take into consideration all historic buildings, including those which may not be listed on the Hawaii Register of Historic Places. Under the Hawaii Revised Statutes Chapter 6E, proposed state projects should take into consideration any historic property.

Thank you for the opportunity to comment. Should you have any questions, please contact Carol Ogata at 587-0004.

Sincerely,


DON HIBBARD, Administrator
State Historic Preservation Division

CO:ab

enclosure

KETH AHUI, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

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JOHN P. KEPPELER II
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AQUACULTURE DEVELOPMENT
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RESOURCE ENFORCEMENT
CONVEYANCES

FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
DIVISION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT



GROUP 70
INTERNATIONAL

Francis S. Oda, AIA, AICP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
Robert K.L. Wong, AIA
Hitoshi Hida, AIA
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Linda L. Chung, AIA
Janet M. Bucholdt
Ronald L. Proctor
Charles F. Schriever, AIA
Teresa P. Davidson, AIA
Jian-Cheng Bao

20 July 1994

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

**Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus
1994 Update**

Dear Mr. Hibbard:

Thank you for your letter of July 8, 1994 in which you submitted comments in regards to historic sites on the Draft Environmental Assessment, Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update (1994 LRDP).

We have discussed with the University your request to eliminate the proposed demolition of Krauss Hall from the 1994 LRDP and the University has indicated that until a suitable alternative site for the Music Performance and Conference Center is found, it cannot consider its removal from the plan. While the facility is scheduled to be soon rehabilitated, such work will not impact the University's plans as the demolition work, if it takes place, will be at some yet undetermined future date. Appropriate action will be taken by the University as provided for under the National and State Registers of Historic Places programs to secure authorization for the demolition of Krauss Hall if and when needed. ✓

The University intends to follow the Secretary of the Interior's Interiors Standards for Rehabilitation on all historic structures including Founder's Gates and the Varney Circle Fountain. ✓

Any "significant" historic building will be considered by the University for inclusion in the Hawaii State Register of Historic Places. In addition to age, the building must be "significant in the history, architecture, archeology, or culture of this State, its communities or the nation" to be considered for inclusion in the Register as provided for in the Hawaii Revised Statutes. Other than Krauss Hall, the 1994 LRDP does not project the possible removal of such buildings from the Manoa Campus. ✓

FILE

Mr. Don Hibbard
State Historic Preservation Division
Department of Land and Natural Resources
page two

We hope that our responses meet with your satisfaction. If you have any further questions, please call me at 523-5866 or forward a fax to 523-5874.

Sincerely,

GROUP 70 INTERNATIONAL, INC.



Walter K. Muraoka
Associate

wkm/mjh

cc: University of Hawaii

Mr. Allan Ah San
Mr. Clyde Akita

JOHN WAIHEE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 8TH FLOOR
HONOLULU, HAWAII 96813

July 8, 1994

Mr. Walter Muraoka
Group 70
925 Bethel Street
Honolulu, Hawaii 96813

LOG NO.: 12135
DOC NO.: 9407CO04
Architecture

Dear Mr. Muraoka:

**SUBJECT: Long Range Development Plan
University of Hawaii, Manoa Campus
TMK 2-8 & 2-9, Honolulu, Oahu**

Thank you for the submittal of the Long Range Development Plan University of Hawaii, Manoa Campus. We offer the following comments in regards to Historic Sites:

- 1) Krauss Hall demolition should be eliminated from the plan. Recently, bids on plans for the rehabilitation of the structure were received. We expect the contract to be awarded soon. This should probably be considered a current project.
- 2) Alterations to historic structures including the Founder's Gates and the Varney Circle Fountain should follow the Secretary of the Interiors Standards for Rehabilitation (included).
- 3) The long range development plan should take into consideration all historic buildings, including those which may not be listed on the Hawaii Register of Historic Places. Under the Hawaii Revised Statutes Chapter 6E, proposed state projects should take into consideration any historic property.

Thank you for the opportunity to comment. Should you have any questions, please contact Carol Ogata at 587-0004.

Sincerely,


DON HIBBARD, Administrator
State Historic Preservation Division

CO:ab

enclosure

duplicate

KOTH AHUE, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

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JOHN P. KEPPeler II
DONA L. HANAKE

AQUACULTURE DEVELOPMENT
PROGRAM

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LAND MANAGEMENT

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DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813



RECEIVED

JUL 14 1994

GROUP 70

WALTER M. OZAWA
DIRECTOR

ALVIN K. C. AU
DEPUTY DIRECTOR

FRANK F. FASI
MAYOR

July 12, 1994

Mr. Walter K. Muraoka
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Muraoka:

Subject: Preassessment Consultation
Draft Environmental Assessment (DEA)
Long-Range Development Plan
University of Hawaii, Manoa Campus, 1994 Update

We have reviewed the DEA and offer the following comment and recommendation.

The Long-Range Development Plan for the University of Hawaii should include elements of the Manoa Stream Greenbelt Plan which was cosponsored by the University of Hawaii and the City's Department of Parks and Recreation.

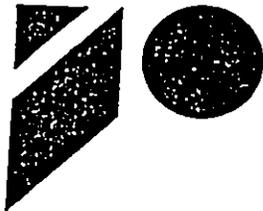
Should you have any questions, please call Donald Griffin of our Advance Planning Branch at 527-6324.

Sincerely,

A handwritten signature in black ink, appearing to read "Walter M. Ozawa", is written over the word "Sincerely".

For WALTER M. OZAWA, Director

WMO:ei



GROUP 70
INTERNATIONAL

21 July 1994

Walter M. Ozawa, Director
Department of Parks and Recreation
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Ozawa:

**Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus - 1994 Update**

Thank you for your letter of July 12, 1994 in which you submitted comments on the Draft Environmental Assessment, Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update.

In response to your comments on the Manoa Stream Greenbelt Plan (Manoa Stream Park Plan), the University of Hawaii has the following comments:

1. The Manoa Stream Park Conceptual Plan and the Manoa Stream Park Urban Design Plan was developed in the 1970's for the University of Hawaii by consultants under the guidance of an Advisory Committee which included representatives from the City Department of Parks and Recreation and the Division of State Parks. The Chair of the committee was Delos Seeley, retired official of the Department of Parks and Recreation.
2. The plan delineated the tremendous potential in the development of a linear park to expose and enhance the stream's natural and historical resources. The report concluded that the Manoa Stream Park could enrich the communities through which it passes, including the University of Hawaii, and the fabric of the City of Honolulu, in general.
3. Because community parks and recreation facilities and programs are not functions of the University of Hawaii, it was not in a position to secure priority or funding for the project through the State budgeting system. It, therefore, recommended that the City Department of Parks and Recreation or the Division of State Parks assume responsibility for implementing the project.
4. Because of other departmental priorities, neither the City nor the State have been able to secure funds for the development of the Manoa Stream Park project and the project has remained on hold to this date.
5. A community organization in Manoa, Malama O Manoa, now has expressed interest in the development of the linear park and intends to lend its full support of the project, including funding proposals.

Francis S. Oda, AIA, AICP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
Robert K.L. Wong, AIA
Hitoshi Hidai, AIA
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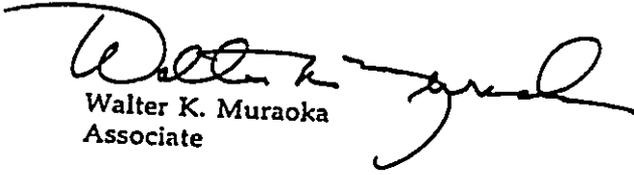
21 July 1994
Mr Walter M. Ozawa, Director
Department of Parks and Recreation
page two

6. The University, of course, fully supports of the project.

A brief discussion of the park along Manoa Stream is included in the Appendix to the 1994 LRDP Report and a copy of the Section is attached for your information.

We hope that our responses in behalf of the University of Hawaii meets with your satisfaction. Please call me at 523-5866 or forward a fax to 523-5874 if you have any further concerns on the 1994 LRDP. We sincerely appreciate your comments on the Draft Environmental Assessment.

Sincerely,
GROUP 70 International, Inc.



Walter K. Muraoka
Associate

wkm/mjh

enclosure

cc: University of Hawaii - Allan Ah San
Clyde Akita

LANDSCAPING

LANDSCAPING by Walters, Kimura, Motoda, Inc.

GENERAL STATEMENT: THE LANDSCAPE MASTER PLAN

The landscape of the Manoa Campus does not function as a unifying element for the entire campus. Along with the buildings, the landscape of the campus has been developed on a project by project basis, primarily to frame individual structures or projects. The result of this type of development is that, with the exception of the Old Quadrangle, Andrews Amphitheater and McCarthy Mall, the existing outdoor spaces exhibit no continuity, pattern or order, and are in fact exclusionary spaces, existing primarily by default.

The principal goal of the Landscape Master Plan is to provide guidelines for the development of a campus landscape which will be an organizing device to tie all of the separate elements of campus development together into a unified whole. In many cases patterns which can be used as organizing devices have already been established, but are incomplete in their execution. Dole Street and University Avenue along the Campus are partially lined with Monkeypod trees. If this treatment were continued along all of the Campus frontage, it would immediately have a unified appearance along these major roadways. All campus roads should be landscaped with a continuous line of street trees to achieve this visual unity along vehicular corridors.

From the roadways, students will proceed to parking structures which will be hidden from adjacent uses by a continuous line of vertical trees and hedges.

Primary pedestrian gateways to the campus will be articulated by a line of trees which will lead the student into the campus from the roads and parking structures. In most cases, the street tree will also be the gateway tree.

From the gateways, students will proceed into the campus along malls lined with trees. Each of these malls will have its own individual character primarily derived from large existing trees along each route. The East-West Mall will be distinguished by the mature botanic specimens which form an almost continuous grove from University Avenue to Varney Plaza. The character of the Mauka-Makai Mall at Dole Street has been set by the very large Banyan trees located along the proposed path. McCarthy Mall will continue as a uniform line of Monkeypod trees up to the East-West Road Gateway. The mall from the Mauka Gateway (Mauka-Makai Mall extension) is the only mall whose character has been predetermined not by existing trees but by the narrow confines of the buildings which define it. Although each mall will have a character of its own, they will all have one thing in common: they will all be wide walkways shaded by an almost continuous canopy of trees. The student could proceed from the road to the center of campus through a totally landscaped environment characterized primarily by large canopy trees and lawn.

The three major malls converge on Varney Plaza, the hub and central park of the campus. In contrast to the shaded malls, Varney Plaza is an open, sunny place, with canopy trees sited around the periphery of the space. It should be seen and experienced as a logical progression and terminus of the malls.

THE CENTRAL AND UPPER CENTRAL CAMPUSES

The Central Campus is the oldest and most intensively developed sector of the Manoa Campus. As such, it is the area that most of the public usually visualizes whenever the University of Hawaii is discussed. The image of the Central Campus along its public edges of University Avenue and Dole Street is a fairly positive one of buildings set back from the street by wide bands of lawn and large canopy trees. The existing pattern can easily be continued and enhanced to provide a more completely unified appearance of the campus from these public edges which are experienced primarily by motorists.

Unfortunately, all semblance of unity and order are lost as soon as we enter the campus as a pedestrian. Except for McCarthy Mall, which has often been described as a mall going from nowhere to nowhere, there are no clearly defined pedestrian systems in a campus which has been designated as a pedestrian precinct. The goal of the Landscape Master Plan is to provide a means of organizing the campus through a systematic development of outdoor spaces which until now have always been remnant areas existing by default rather than by design. This system of outdoor spaces consists of a continuous network of malls and paths opening into plazas and parks and linking together all of the buildings of the Central Campus.

MALLS

The principal organizing device for the Central Campus are the two major pedestrian streets or malls, the Mauka-Makai Mall (north-south) and the McCarthy/East-West Malls which divide the campus into 4 quadrants or districts. While the malls function as major open spaces dividing the campus into smaller, more comprehensible units, they also function as seams binding the various segments together with a common thread of life and activity.

Mauka-Makai Mall

Each mall should have a character of its own, from its gateways to Varney Plaza. The Mauka-Makai Mall at the Dole Street Gateway is the main pedestrian link from the quarry parking structures to the Central Campus. As such, paved surfaces should be wide enough to accommodate the large numbers of students moving toward the center of campus during the morning hours. In addition to the main pathway, alternate parallel routes should be provided to allow for more flexibility in movement and to provide a different sense of scale.

An existing grove of large Banyan trees immediately establishes the landscape character of the mall from Dole Street to the Campus Center. Two of the Banyan trees have well-developed surface root systems which are significant elements in the landscape floor and should be featured as such. Several Banyan trees have already been relocated from other areas of campus to extend the feeling of the

Banyan grove along the mall. Future landscape projects along the Mall should extend the line of Banyan trees up to Varney Plaza. In areas where Banyan trees are not used, flowering trees such as Gold, Pink Tecomas, Jacaranda, Poinciana and Rainbow Shower Trees should be introduced to add seasonal color to the otherwise continuous line of dark green, large canopy trees.

East-West Mall

This mall is not characterized by any single type of tree, but rather by a collection of large botanic curiosities. This mall should be developed as a walk through a botanic garden, with a number of informal sitting areas along the way for students to stop and pass the time before and after classes. Although the main walkway could be projected as a straight line, paving along the edges could randomly flow among the trees and accommodate intimate sitting areas. Additional unusual trees which will require removal in future campus projects should be relocated to this area to extend the "botanic garden" to Campus Center and to the edge of the Old Quadrangle. All trees within this area should be identified by signs with a brief description of the botanic significance of each tree.

McCarthy Mall

The theme of this mall is one of large canopy trees and lawn flanking a central walkway with circular planter seat walls and perpendicular connections to adjacent buildings. This treatment should be continued up to Varney Plaza from the East-West Road Gateway. Additional seating areas should be developed along the walkways which connect to the

buildings flanking the mall to allow more students to use this area and to relieve congestion at the center mall. Entry plazas with seating should be developed at buildings generating the most traffic such as Bilger Hall and Keller Hall.

Mauka-Makai Mall Extension (To Mauka Gateway)

This section of the mall is relatively short and narrow and functions primarily as a corridor between the Maile Way Parking Structures (Spalding Hall and Porteus Hall) and Varney Plaza. The landscaping of this mall should consist of a double row of closely spaced flowering canopy trees such as the Rainbow Showers used along Maile Way, which could provide a continuous tree canopy along the length of the mall.

In addition to the major malls there will be secondary malls, such as the Correa Mall along existing Correa Road. This mall subdivides the large southeast quadrant of the Central Campus into two (2) subdistricts. Medium sized flowering trees, such as Rainbow Shower, or Gold trees should be used to augment the trees that randomly occur along this mall.

As a general guideline, the mall should be visualized as a continuous, unified element, having unique design features which will differentiate it from other malls. This feature may consist of a paving texture or configuration, a special type of bench or seatwall, a particular light fixture or a consistent use of one tree type, and should serve in some way to identify the mall to the pedestrian wherever he enters it.

PLACES

Along the malls and among groups of buildings, there are outdoor gathering places which function as focal points for student activity. While the malls serve to organize the campus into districts, these places tend to organize the districts by giving a sense of focus to the buildings or groups of buildings which surround them. Places are either plazas, which occur at important crossroads or centers of student activity, or parks which more often are quiet or passive open areas which serve as breathing spaces for the campus community.

Varney Plaza should be the functional as well as symbolic central gathering place of the campus. It should become the place of choice for students to meet and interact at all times of the day. There should be formal and informal areas; open and semi-enclosed areas; sunny and shady areas; active and passive areas. As the symbolic and ceremonial heart of the campus, Varney Plaza should convey a sense of formality at the center, where an active fountain symbolizing the well-spring of the campus should occur. This formality should be reinforced by paving, and seating around the fountain. The remainder of the Plaza could be more informal with random groupings of flowering trees planted along the edges where malls and paths converge upon the plaza. Except for the area of the central feature, the plaza should be seen as a broad expanse of lawn intersected by walkways directing students through the plaza from all directions as they go to classes and participate in the life of the campus.

The Campus Center Plaza will have a more urban quality contrasted to the park-like quality of Varney Plaza. It will be about 1/4 the size of Varney Plaza while sustaining twice the amount of pedestrian traffic due to its proximity to both the Campus Center and the Dole Street Gateway. A major work of art should be located within this plaza on axis with both the Mauka-Makai Mall and the Correa Mall. Additional Banyan trees should be used to form the mauka, makai and Diamond Head edges of the space as a continuation of the Mauka-Makai mall Banyan theme. The Campus Center Plaza should be primarily a paved plaza with a minimum of obstructions to pedestrian movement. This would imply the use of tree wells with grates rather than planter walls, and benches rather than seat walls. Medium sized flowering trees should be used along the facade of the Campus Center to tie into the theme of flowering trees along the Correa Mall.

Parks should occur within every district and near every building complex of campus. A park for our purposes can be defined as an significant open space which provides the campus community with opportunities for rest and relaxation in a landscaped environment consisting primarily of grass, trees, benches and walkways. With this definition in mind, many of the campus open spaces such as the Old Quadrangle and the Webster/Spalding Courtyard would immediately qualify as parks with the addition of benches. Both of these areas are presently under-utilized primarily because most people linger in areas where they can sit, and most people won't sit on the damp ground typical of the Manoa Campus during much of the year. When the

development of the Central Campus is realized as indicated in this master plan, there should be at least 12 campus parks in addition to the malls and plazas already discussed. These parks may occur at the following locations:

1. University Park (Hamilton Library)
2. Webster/Spalding Court
3. Old Quadrangle
4. Sinclair Library
5. Andrews Amphitheater
6. Hawaii Institute of Geophysics
7. Kuykendall Hall
8. Pacific Ocean Science and Technology Center (POST)
9. Biomedical Sciences Building
10. University High School
11. Manoa Stream
12. Bachman Hall

BUILDINGS

One criticism of existing campus landscaping is that the landscaping of each new building seems to be totally unrelated to the landscaping of the adjacent building. The result is that the landscaping contributes to rather than diminishes the visual disparity from building to building. In the development of future projects on campus, architects and landscape architects should illustrate how the proposed building and landscaping both relate to the buildings and landscaping which exist adjacent to them. A conscious effort must be made to add to the sense of visual unity between building complexes and their related landscape developments.

MAKAI CAMPUS

The Makai Campus is divided into two separate and distinct functional and topographic areas: the physical education and athletic related areas within the quarry, and the non-athletic areas along the quarry edge.

The landscaping of the Makai Campus similarly reflects the location and the use of these two (2) distinct areas. The upper quarry edge contains low and mid-rise buildings set in fairly dense landscaping of large Monkeypod, Coconut and Eucalyptus trees. The quarry, on the other hand, is characterized by large expanses of open playing fields and large scale structures such as stadia, gymnasias, courts and parking structures. With all of these large scale uses, any tree planting done in the interstices which remain must also be expressed in a large-scale way in order to have any visual or physical impact on the area. Wherever possible, large canopy trees such as Monkeypods and Banyans should be planted continuously along all roadways. Where size is a limiting factor, medium canopy trees can be used, but in a tighter spacing. Where space and litter are limiting factors, such as play courts and stadia, tall litterless trees such as Norfolk Pine should be used in tight plantings of 10 ft. to 15 ft. apart.

Narrow, but tight lines of trees, such as Norfolk Pine should also be used wherever possible between large adjacent areas such as Cooke Field and the Baseball Stadium. Such plantings will help to reduce the enormous scale of these areas as well as help to achieve one of the stated design

objectives of making the various facilities within the quarry appear as though they had been placed in a landscaped park-like setting.

As areas abutting the freeway are developed, some attempt should be made to provide a landscaped buffer between the freeway and the various sports facilities. This planting might consist of Norfolk Pine/Eucalyptus, Be-still and additional African Tulip trees to augment the existing sparse plantings of African Tulip trees. Judicious tree massing should still permit views across the quarry to Central Campus and Manoa Valley beyond.

MAINTENANCE

Efforts to improve the quality of the campus environment should include a commitment by the Administration to an effective maintenance program. Ideally, the workload for each member of the landscape maintenance crew should not exceed 4 acres. Historically, the landscape maintenance crew has been greatly overburdened and understaffed. The poor quality of the existing campus grounds is largely due to this lack of sufficient work force compounded by the use of inadequate or outdated equipment.

If increased funding for landscape maintenance is not a viable option, then perhaps the aid of the University Community should be enlisted. Precincts of responsibility could be determined around each building housing a relatively stable community of faculty, staff and students

such as the Art Building, Biomedical Sciences Building and Music Complex. Volunteers from each complex could determine a number of tasks for which they would be willing to be responsible, such as supplemental planting of grass and groundcover, minor trimming and maintenance of special areas such as courtyards or planters. Some of these tasks could be undertaken on a monthly, bi-monthly or quarterly basis. A program such as this would require some guidance and minor funding, but it would encourage the residents of each complex or building to take a greater personal interest in the visual and physical enhancement of their particular precinct and perhaps the campus as a whole. With a reduced load, landscape maintenance crews could then devote their efforts to larger scale areas such as the malls, plazas and parks as well as buildings such as classroom buildings without a resident community.

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UH ENVIRONMENTAL CENTER

FAA NO. 806-453300

r. 02



University of Hawai'i at Mānoa

Environmental Center
A Unit of Water Resources Research Center
Crawford 317 - 2550 Campus Road - Honolulu, Hawai'i 96822
Telephone: (808) 956-7301 - Facsimile: (808) 956-3980

June 23, 1993
EA:00068

Mr. Walter Muraoka, Associate
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Muraoka:

Pre-Assessment Consultation
Draft Environmental Assessment (EA), Long Range Development Plan
University of Hawaii Manoa Campus
Honolulu, Oahu

In response to your request, the Environmental Center has briefly reviewed the referenced draft EA. The document appears to adequately fulfil requirements of Sections 11-200-9, -10, and -12 of the DOH Administrative Rules, and we concur that individual projects would appropriately be assessed in more detail at the time of their imminent implementation. In addition, we note two areas of the LRDP which raise substantive concerns among our reviewers.

Section 9.1 C.1. Refuse Collection

Reference to a "limited" recycling program under the heading of mitigation measures is somewhat of an overstatement. Presently, the Facilities Management Office has distributed a number of aluminum can bins around the campus, and most green waste is processed for compost. Voluntary participation in paper recycling efforts is hampered by the lack of a designated central collection and processing area, by uncertainties in the local recycling industries, and by a general lack of public awareness. A number of proposed programs for campus recycling have been developed, but no modest degree of resources has been committed to the effort by the University, and there are no plans to make substantive commitments in the foreseeable future. Hence, assumptions of expansion of what exists are not presently verifiable.

It would seem appropriate in the context of this LRDP to incorporate recycling into design considerations, both for proposed buildings and for solid waste infrastructure. Properly conceived and executed, the economies of avoided hauling and disposal costs could contribute significantly to both environmental and fiscal

goals of the university community. In addition, community leadership through adoption of an exemplary recycling program would make a strong contribution to the desired "sense of place" envisioned in the LRDP.

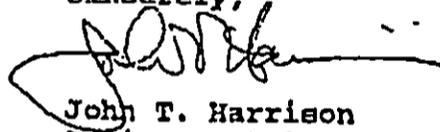
Section 9.1 G. Traffic Circulation and Parking

Although ingress and egress from the Makai Campus has been improved by recent street and intersection improvements, there is no apparent consideration of anticipated effects of proposed parking facility increases on the Central and Upper Central campuses. At full build-out, 1,425 spaces will be available in new parking structures located on the Central campuses. The significantly greater number of automobiles will still be entering and leaving the Central campuses largely on East-West Road and Maile Way. Some consideration should be given to means of alleviating rush hour congestion at these intersections.

Also, although bicycle use is supported by the LRDP, mostly through the proposed provision of additional bicycle racks, it would seem appropriate to consider more substantive measures to promote bicycle use. For instance, bike lanes on roads peripheral to the university could be improved and expanded, and new buildings could be provided with shower and locker facilities for bicycle commuters.

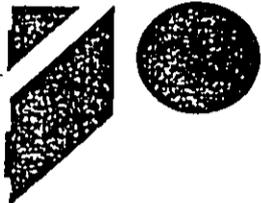
We appreciate the opportunity to have participated in the pre-assessment consultation on this document, and we hope our comments are helpful.

Sincerely,



John T. Harrison
Environmental Coordinator

cc: R. Fujioka, WRRC
C. Akita, Fac. Plan. & Mgt.
R. Horii, VP Fin.



GROUP 70
INTERNATIONAL

11 July 1994

John T. Harrison, Environmental Coordinator
University of Hawaii at Manoa
Environmental Center
Crawford 317
2550 Campus Road
Honolulu, Hawaii 96822

**Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus - 1994 Update**

Dear Mr. Harrison:

Thank you for your letter of June 23, 1994 in which you submitted comments on the Draft Environmental Assessment for the Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update.

We have discussed your concerns on "Refuse Collection" with the University's Building and Grounds Management Office (BGMO) and the Facilities Planning and Management Office (FPMO) and on "Traffic Circulation and Parking" with the Traffic Consultant and offer the following comments:

Refuse Collection

Both the BGMO and the FPMO concur with your comments that their efforts have been hampered by, among other factors, the lack of a centralized collection and processing area, the uncertainties in the local recycling industries and the general lack of public (campus) awareness of the program. While the recycling program has been marginally successful on a limited scale, they feel that more could be and should be done.

As its first major step towards this goal, the BGMO and the FPMO are now actively seeking a centralized collection and processing area which is readily accessible and where all activities may deposit their recyclable materials for further processing. Once this is established, it hopes to publicize the program to secure more active campus participation. The establishment of regional collection areas will be next sought by the BGMO and the FPMO and finally, building collection areas. The regional and building collection areas could be provided in either existing or new buildings. The expansion of the recycling program to its full potential, however, requires substantive commitment of resources.

Thus, the BGMO and the FPMO will again seek funds in the next biennium budget to more actively pursue the expansion of the recycling program as they are in agreement with your office that "properly conceived and executed, the economies of avoided hauling and disposal costs could contribute significantly

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Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
Robert K.L. Wong, AIA
Hitoshi Hida, AIA
Roy H. Nihei, AIA, CSI
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July 11, 1994

Mr. John T. Harrison, Environmental Coordinator
University of Hawaii at Manoa
Environmental Center
page two

to both environmental and fiscal goals of the University community". But in these times of stringent fiscal restraints, they are not optimistic of early funding of the program. Thus, the program may operate at modest levels with existing personnel and facilities until more adequately funded.

The State of Hawaii is now actively seeking to resolve the problem of uncertainties in the local recycling industries and the University is hopeful that the disposal of recyclable materials will not be a problem in the future.

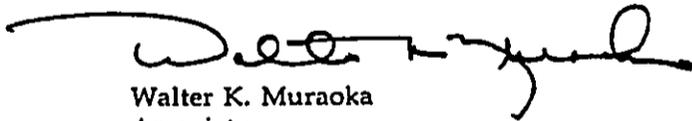
Traffic Circulation and Parking

The Traffic Engineer's response to your concern on ingress and egress from the Central and Upper Central Campuses at full build-out is transmitted for your information. He reports that optimization of the existing traffic signal system will be sufficient to maintain an acceptable level of performance at the Maile Way and East-West Road intersections with public streets. No geometric improvements are necessary and proposed to maintain this acceptable level.

The University of Hawaii has always supported bikeways on public roadways peripheral to the campus and continues to encourage the City's efforts to improve and expand such systems. The City has budgeted additional funds to improve bikeways to serve the Manoa Campus.

We hope that our response on behalf of the University Administration meets with your satisfaction. Please call me at 523-5866 or forward a FAX to 523-5874 if you have any further concerns on the LRDP.

Sincerely,
GROUP 70 INTERNATIONAL, INC.



Walter K. Muraoka
Associate

wkm/mjh

cc University of Hawaii -

Allan Ah San
Clyde Akita



DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM

ENERGY DIVISION, 335 MERCHANT ST., RM. 110, HONOLULU, HAWAII 96813 PHONE: (808) 587-3800 FAX: (808) 587-3820

RECEIVED
JUN 27 1994

GROUP 70

JOHN WAIHEE
Governor
MUFU HANNEMANN
Director
JEANNE SCHULTZ
Deputy Director
RICK EGGED
Deputy Director
TAKESHI YOSHIHARA
Deputy Director

June 22, 1994

Mr. Walter K. Muraoka
Associate
Group 70 International Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Muraoka:

Subject: Pre-Assessment Consultation, Environmental Assessment (Draft),
Long Range Development Plan, University of Hawaii, Manoa
Campus, 1994 Update

Thank you for the opportunity to provide input in the pre-assessment for the long range development plan of the University of Hawaii, Manoa Campus.

We urge that the project reflect a "Hawaiian sense of place" which can be accomplished through innovative architectural design incorporating natural ventilation.

Draft Environmental Impact Statements should comply with the requirements found in State laws for evaluating any energy impacts that the project will have. The mandate for such an evaluation is found in Chapter 344, HRS ("State Environmental Policy") and Chapter 226, HRS ("Hawaii State Planning Act"). In particular Chapter 226-18 (a)(2) and (c)(3); 226-52 (a) and (b)(2)(D); and 226-103 (f)(1) and (2) should be considered.

We also would like to call your attention to the Model Energy Code which may be used as a guide for energy efficiency. If you do not already have a copy of the Energy Code, please call my office and we will forward one to you.

Sincerely,

Maurice H. Kaya
Energy Program Administrator

MHK/ER:do



GROUP 70
INTERNATIONAL

8 July 1994

Maurice H. Kaya
Energy Program Administrator
Department of Business, Economic Development & Tourism
335 Merchant Street, Room 110
Honolulu, Hawaii 96813

Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus
1994 Update

Francis S. Oda, AIA, AICP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
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Hitoshi Hida, AIA
Roy H. Nihei, AIA, CSI
James I. Nishimoto, AIA
Ralph E. Pomore, AICP
Stephen H. Yuen, AIA

Dear Mr. Kaya:

Thank you for your letter of June 22, 1994 in which you submitted comments to the Draft Environmental Assessment, Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update.

The following responses to your comments are submitted for your information:

Paul P. Chomey, AIA
Dean H. Khamura, AIA
Nonna J. Scott, AIA
June Fukushima-Lee, ASID
Stephen E. Callo, CPA
Walter R. Bell, AIA, CSI, CCS
Walter K. Muraoka
George I. Atta, AICP
Jeffrey H. Overton, AICP
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Janet M. Bucholdt
Ronald L. Proctor
Charles F. Schriever, AIA
Teresa P. Davidson, AIA
Jian-Cheng Bao

1. Innovative Architectural Design Incorporating Natural Ventilation
The Manoa Campus has no definitive policy that calls for air conditioning of its facilities. While it prefers buildings without air conditioning to save on energy costs, the limited lands have forced the construction of buildings of higher densities to meet program requirements. Building and fire safety codes, health regulations, acoustical needs, program requirements (i.e. libraries, research laboratories, computer centers) and the variable Manoa weather makes the design of these buildings difficult while meeting the above requirements, without the installation of air conditioning systems.

However, facilities like student dormitories, recreation gymnasiums, parking structures, building maintenance facilities and minor structures do not usually face these same restrictions and are not air conditioned.

2. Energy Conservation
The University of Hawaii projects have been handled in the past by the State Department of Accounting and General Services which has mandated the evaluation of energy impacts by projects. All statutory requirements are met in implementing such projects.

The Energy Conservation measures mandated by the Building Code of the City and County of Honolulu are incorporated into all projects on the Manoa Campus.

The State's Model Energy Code is, at this time, utilized only as a general guide for energy efficiency by the D.A.G.S. in the design of University facilities. It will be used as a design standard when adopted by the State of Hawaii.

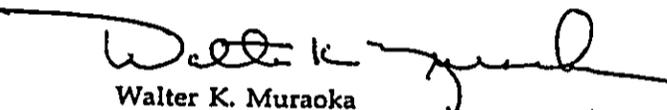
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8 July 1994
Mr. Maurice H. Kaya
Energy Program Administrator
Department of Business, Economic Development & Tourism
page two

2. Energy Conservation (continued)
To reduce energy consumption, some of the energy conservation measures presently utilized by the University include solar water heating systems, centralized chilled water plants, computerized energy management systems, restrictions on the hours of operations of buildings and outdoor recreation facilities and other measures.

We hope that these responses on behalf of the University of Hawaii meets with your satisfaction. Please call me at 523-5866 or forward a fax to 523-5874 if you have any further concerns on the DEA for the LRDP.

Sincerely,
GROUP 70 INTERNATIONAL, INC.


Walter K. Muraoka
Associate

wkm/mjh

cc: University of Hawaii - Allan Ah San
Clyde Akita

JOHN WAIHEE
GOVERNOR
MAJOR GENERAL EDWARD V. RICHARDSON
DIRECTOR OF CIVIL DEFENSE
ROY C. PRICE, SR.
VICE DIRECTOR OF CIVIL DEFENSE



PHONE (808) 734-2161

STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE DIRECTOR OF CIVIL DEFENSE
3949 DIAMOND HEAD ROAD
HONOLULU, HAWAII 96816-4495

RECEIVED
JUN 27 1994

June 24, 1994

GROUP 70

TO: Mr. Walter K. Muraoka, Associate
Group 70 International, Inc.

FROM: Roy C. Price, Sr.
Vice Director of Civil Defense *Roy Price*

SUBJECT: PRE-ASSESSMENT CONSULTATION; DRAFT ENVIRONMENTAL ASSESSMENT
(DEA), LONG RANGE DEVELOPMENT PLAN (LRDP), UNIVERSITY OF HAWAII,
MANOA (UHM) CAMPUS, 1994 UPDATED

We appreciate this opportunity to comment on the Pre-assessment Consultation, DEA-LRDP, by the University of Hawaii, State of Hawaii, on the island of Oahu.

State Civil Defense (SCD) does not have negative comments specifically directed at the DEA. The major portion of the proposed development plan area appears to be covered by sirens. However, SCD proposes that the University of Hawaii purchase and install an indoor siren simulator and support infrastructure. This simulator will help alert personnel of an impending or actual event that threatens the area. The location for a simulator is normally in any 24-hour manned office, such as the Security Office. If none is available, any manned office during normal working hours can be used.

A siren simulator is a large, suitcase size portable siren complete with built-in battery backup power. This device is triggered by the same radio signal that triggers the outdoor sirens. The installation of the proposed device consists of a siren simulator, an antenna, an antenna cable duct, 120 volt AC electrical power and a backup source for AC electrical power, if one is available. The design for the antenna cable would typically provide ducting from the simulator location to the rooftop/antenna site.

Mr. Walter K. Muraoka
June 24, 1994
Page 2

Section 7.0, page 22, "Environmental Setting," describes four (4) distinct districts of the Manoa Campus. The slopes range from 0 to 30 percent with a variety of soils. The design and construction for facilities with the aforementioned terrain features must address the impact of natural hazards that Hawaii is subject to year-round--earthquakes, flash floods, high winds and the seasonal threat of tropical cyclones and hurricanes. The result of the above investigation could dictate the type of facility/structures needed to withstand the impact of such forces. Additionally, with the projected increase in enrollment, such structures could then be surveyed for use as potential public shelters and help alleviate the exacerbated inventory of public shelter space.

Our SCD planners and technicians are available to discuss this further if there is a requirement. Please have your staff call Mr. Mel Nishihara of my staff at 734-2161.



8 July 1994

Mr. Roy C. Price, Sr.
Vice Director of Civil Defense
Office of the Director of Civil Defense
Department of Defense
State of Hawaii
3949 Diamond Head Road
Honolulu, Hawaii 96819-4495

Subject: **Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus - 1994 Update**

Dear Mr. Price:

Thank you for your letter of June 24, 1994 in which you submitted comments on the Draft Environmental Assessment for the Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update (LRDP).

The following responses to your comments are transmitted for your information:

1. **Siren Simulator:** The UH Civil Defense Coordinator who is responsible for disaster operations at all University of Hawaii campuses may consider the purchase and installation of siren simulators for UH campuses in the future if priority for their real need can be established.

The Civil Defense coordinator wishes to further discuss the matter with your office to determine the need for siren simulators. At the present time, although their acquisitions may be desirable, because of other pressing needs and current and anticipated budget restrictions, it is not possible to purchase of siren simulators.

2. **Natural Hazards:** The impacts of natural hazards such as earthquakes, flash floods, high winds and hurricanes on University structures are addressed in the design of the facilities. The City's recently upgraded building codes and drainage standards which specify the design safety standards required to meet the impact of the forces of these natural hazards are fully met in the design of University facilities. It is not practical to design facilities that exceed these standards because of the high costs of construction.

The campuses within the University System have areas designated for use as public shelters during emergencies and these are registered with the Office of Civil Defense. If additional shelter space needs to be designated to meet capacity requirements either in existing or new buildings, the Office of Civil Defense should consult with the University's Civil Defense Coordinator.

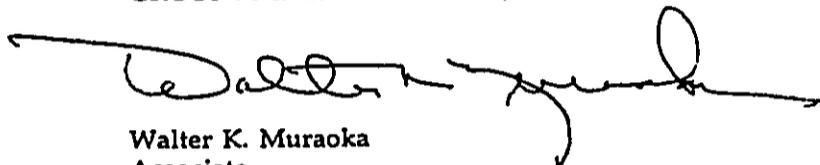
We hope that the above responses meet with your satisfaction. We appreciate your interest in University development and your prompt response to the DEA.

FILE 6

7 July 1994
Mr. Roy C. Price, Sr.
Vice Director of Civil Defense
Office of the Director of Civil Defense
Department of Defense
page two

Please call me at 523-5866 or forward a FAX to 523-5874 if you have any further concerns on the LRDP.

Sincerely,
GROUP 70 INTERNATIONAL, INC.



Walter K. Muraoka
Associate

wkm/mjh

cc: University of Hawaii - Mr. Allan Ah San
Mr. Clyde Akita

JOHN WAIHEE
GOVERNOR

RECEIVED

JUL - 8 1994



HERMAN M. AIZAWA, PH.D.
SUPERINTENDENT



GROUP 70

STATE OF HAWAII
DEPARTMENT OF EDUCATION

P. O. BOX 2360
HONOLULU, HAWAII 96804

OFFICE OF THE SUPERINTENDENT

June 27, 1994

Mr. Walter K. Muraoka, Associate
Group 70 International
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4398

Dear Mr. Muraoka:

SUBJECT: Environmental Assessment (Draft)
Long-Range Development Plan
University of Hawaii, Manoa Campus, 1994 Update

We have reviewed the subject assessment and have no comment on
the proposed long-range development plan at this time.

Thank you for the opportunity to respond.

Sincerely,


Herman M. Aizawa, Ph.D.
Superintendent

HMA:hy

cc: A. Suga
J. Sosa

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

JOHN WAIHEE
GOVERNOR
STATE OF HAWAII



HOALIKU L. DRAKE
CHAIRMAN
HAWAIIAN HOMES COMMISSION

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
P. O. BOX 1879
HONOLULU, HAWAII 96805

RECEIVED

JUL - 7 1994

July 6, 1994

GROUP 70

Mr. Walter K. Muraoka, Associate
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4398

Dear Mr. Muraoka:

Environmental Assessment (Draft), Long Range Development
Plan, University of Hawaii, Manoa Campus, 1994 Update

Thank you for allowing our review of the Environmental Assessment for the above project. The proposed project will have no direct impacts on programs and projects of this department. Consequently, we have no comments to offer.

Should you have any questions, please call Joe Chu of our Planning Office at 586-3838.

Warmest aloha,


Hoaliku L. Drake, Chairman
Hawaiian Homes Commission

HLD:DY:JC/3324L2

JOHN W. WEE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621
HONOLULU, HAWAII 96809

RE: OCEA: DKP

RECEIVED
JUL - 5 1994

FILE NO.: 94-698
DOC. ID.: 4630

GROUP 70

Mr. Walter Muraoka, Associate
Group 70 International
924 Bethel Street
Honolulu, Hawaii 96813-4398

JUN 30 1994

Dear Mr. Muraoka:

SUBJECT: Pre-Assessment consultation for a Draft Environmental Assessment (DEA): Long Range Development Plan, University of Hawaii, Manoa Campus, Oahu, TMK: various

We have reviewed the information for the upcoming DEA transmitted by your letter dated June 9, 1993 and have the following comments:

Historic Preservation Division

The Historic Preservation Division (HPD) comments that a review of their records shows that there are several archaeological sites located on and near the University of Hawaii Manoa Campus. Site 50-80-14-4498, Ka Papa Lo'i Kalo, a traditional agricultural terrace, is located adjacent to the new Center for Hawaiian Studies in the makai campus district. A human burial (Site 50-80-14-4191) was uncovered during construction near Keller Hall in the central campus district. Human remains (Site 50-80-14-4266) were also recovered during excavation of Dole Street near Kanewai Field Park. The DEA should be revised to reflect the archaeological resources known for this area.

It is possible that historic sites, including human burials, will be uncovered during routine construction activities. Should this be the case all work in the vicinity must stop and the Historic Preservation Division must be contacted at 587-0047.

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

146
KEITH W. AHUE, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY
JOHN P. KEFFELER II
DONAL HANAIKE

AQUACULTURE DEVELOPMENT PROGRAM
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND ENVIRONMENTAL AFFAIRS
CONSERVATION AND RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Mr. Muraoka

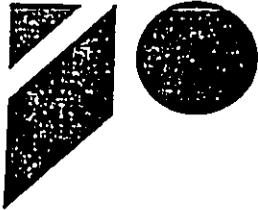
- 2 -

File No.: 94-698

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

Very truly yours,


KEITH W. AHUE



7 July 1994

GROUP 70
INTERNATIONAL

Keith Ahue, Chairperson
Board of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809
Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus - 1994 Update

- Francis S. Oda, AIA, AICP
- Norman G.Y. Hong, AIA
- Sheryl B. Seaman, AIA, ASID
- Robert K.L. Wong, AIA
- Hitoshi Hida, AIA
- Roy H. Nihel, AIA, CSI
- James I. Nishimoto, AIA
- Ralph E. Portmore, AICP
- Stephen H. Yuen, AIA

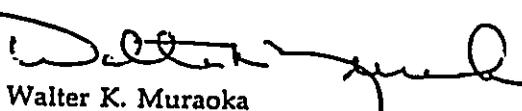
Dear Mr. Ahue:

Thank you for your letter of June 30, 1994 in which you submitted comments on the Draft Environmental Assessment for the subject project.

We have received similar comments directly from your Historic Preservation Division on June 24, 1994 and we have responded to those comments by letter of June 28, 1994, a copy of which is attached.

We hope that our response to the Historic Preservation Division meets with your satisfaction. We appreciate your comments on the Draft Environmental Assessment.

Sincerely,
GROUP 70 INTERNATIONAL, INC.


Walter K. Muraoka
Associate

wkm/mjh

cc: University of Hawaii- Allan Ah San
Clyde Akita

- Paul P. Chomey, AIA
- Dean H. Kitamura, AIA
- Norma J. Scott, AIA
- Jane Fukushima-Lee, ASID
- Stephen E. Callo, CPA
- Walter R. Bell, AIA, CSI, CCS
- Walter K. Muraoka
- George I. Atta, AICP
- Jeffrey H. Overton, AICP
- Michael A. Gami
- Eric G. Crispin, AIA
- Linda L. Chung, AIA
- Janet M. Bucholdt
- Ronald L. Proctor
- Charles F. Schriever, AIA
- Teresa P. Davidson, AIA
- Jian-Cheng Bao

FILE

JOHN WAIKEE
GOVERNOR OF HAWAII

RECEIVED
JUN 28 1994



GROUP 70 STATE OF HAWAII

June 24, 1994 DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

Walter K. Muraoka, Associate
Group 70 International
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Muraoka:

LOG NO: 11932
DOC NO: 9406EJ20

SUBJECT: Draft Environmental Assessment (DEA): Long Range
Development Plan, University of Hawaii, Manoa Campus,
1994 Update
Honolulu, Kona, O'ahu
TMK: 2-8; 2-9;3-3

Thank you for the opportunity to review the DEA for the Long Range Development Plan, University of Hawaii, Manoa Campus. A review of our records shows that there are several archaeological sites located on and near the University of Hawaii Manoa Campus. Site 50-80-14-4498, Ka Papa Lo'i Kalo, a traditional agricultural terraces, is located adjacent to the new Center for Hawaiian Studies in the makai campus district. A human burial (Site 50-80-14-4191) was uncovered during construction near Keller Hall in the central campus district. Human remains (Site 50-80-14-4266) were also recovered during excavation of Dole Street near Kanewai Field Park. The DEA should be revised to reflect the archaeological resources known for this area.

It is possible that historic sites, including human burials, will be uncovered during routine construction activities. Should this be the case all work in the vicinity must stop and the Historic Preservation Division must be contacted at 587-0047.

Sincerely,

Don Hibbard
for Don Hibbard, Administrator
State Historic Preservation Division

EJ:jk

KEITH AHUE, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCE

DEPUTIES

JOHN P. KEPPELER II
DONA L. MANAHE

AQUACULTURE DEVELOPMENT
PROGRAM

AQUATIC RESOURCES
CONSERVATION AND

ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES

FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
DIVISION

LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT



28 June 1994

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

**Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus -1994 Update**

Francis S. Oda, AIA, AICP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
Robert K.L. Wong, AIA
Hitoshi Hida, AIA
Roy H. Nihei, AIA, CSI
James I. Nishimura, AIA
Ralph E. Portmore, AICP
Stephen H. Yuen, AIA

Dear Mr. Hibbard:

Thank you for your letter of June 24, 1994 on the Draft Environmental Assessment on the subject project. We appreciate your prompt response on the DEA.

The DEA will be revised to reflect the archaeological resources of the two burial sites on and adjoining the Manoa Campus and the site of traditional agricultural terraces (Ka Papa Lo'i Kalo) located below Dole St. adjacent to the Center for Hawaiian Studies now under construction. ✓

Paul P. Clomey, AIA
Dean H. Kitamura, AIA
Norma J. Scott, AIA
June Fukushima-Lee, ASID
Stephen E. Callo, CPA
Walter R. Bell, AIA, CSI, CCS
Walter K. Muraoka
George I. Atta, AICP
Jeffrey H. Overton, AICP
Michael A. Gami
Eric G. Crispin, AIA
Linda L. Chung, AIA
Janet M. Buchholdt
Ronald L. Proctor
Charles F. Schriever, AIA
Teresa P. Davidson, AIA
Jian-Cheng Bao

As indicated in the DEA, if burials or other potentially significant cultural features are encountered on the site during construction, work in the area will be suspended immediately and the State Historic Preservation Division notified to determine the appropriate action to take for its disposition. ✓

Sincerely,
GROUP 70 INTERNATIONAL, INC.

Walter K. Muraoka
Associate

wkm/mjh

cc: Clyde Akita - University of Hawaii, Manoa

FILE

JOHN WAIHEE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

July 8, 1994

Mr. Walter Muraoka
Group 70
925 Bethel Street
Honolulu, Hawaii 96813

LOG NO.: 12135
DOC NO.: 9407CO04
Architecture

Dear Mr. Muraoka:

**SUBJECT: Long Range Development Plan
University of Hawaii, Manoa Campus
TMK 2-8 & 2-9, Honolulu, Oahu**

Thank you for the submittal of the Long Range Development Plan University of Hawaii, Manoa Campus. We offer the following comments in regards to Historic Sites:

- 1) Krauss Hall demolition should be eliminated from the plan. Recently, bids on plans for the rehabilitation of the structure were received. We expect the contract to be awarded soon. This should probably be considered a current project.
- 2) Alterations to historic structures including the Founder's Gates and the Varney Circle Fountain should follow the Secretary of the Interiors Standards for Rehabilitation (included).
- 3) The long range development plan should take into consideration all historic buildings, including those which may not be listed on the Hawaii Register of Historic Places. Under the Hawaii Revised Statutes Chapter 6E, proposed state projects should take into consideration any historic property.

Thank you for the opportunity to comment. Should you have any questions, please contact Carol Ogata at 587-0004.

Sincerely,


DON HIBBARD, Administrator
State Historic Preservation Division

CO:ab

enclosure

duplicate
KETH AHUE, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

JOHN P. KEPPELER II
DONA L. HANAKE

AQUACULTURE DEVELOPMENT
PROGRAM

AQUATIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES

FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
DIVISION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

JOHN WAIHEE
GOVERNOR



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

REX D. JOHNSON
DIRECTOR

DEPUTY DIRECTORS
KANANI HOLT
GLENN M. OKIMOTO
JOYCE T. OMINE
CALVIN M. TSUDA

IN REPLY REFER TO:
STP 8.6119

June 27, 1994

JUN 30 1994

GROUP 70

Mr. Walter K. Muraoka
Associate
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Muraoka:

Subject: Pre-Assessment Consultation
Draft Environmental Assessment
Long Range Development Plan
University of Hawaii, Manoa Campus, 1994 Update

The Traffic Impact Report concludes that the roadway improvements on University Avenue and Dole Street has alleviated much of the traffic congestion during peak hour traffic for inbound traffic to the Makai Campus. The University of Hawaii should continue to monitor the operating conditions of that intersection, particularly on days when the sports arena is conducting special events. We are concerned about traffic queuing back to the on-ramp and eventually onto H-1. We also strongly recommend that the established ride-share program with the ride-share coordinator be continued.

We appreciate the opportunity to provide comments.

Sincerely,

A handwritten signature in black ink, appearing to be "R. Johnson".

Rex D. Johnson
Director of Transportation



GROUP 70
INTERNATIONAL

6 July 1994

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

**Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus - 1994 Update**

Dear Mr. Johnson:

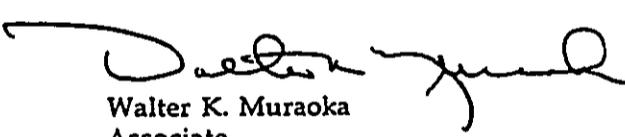
Thank you for your letter of June 27, 1994 in which you submitted comments on the Draft Environmental Assessment for the subject project.

The University of Hawaii will continue to monitor the operating conditions at the University Avenue/Dole Street intersection especially during major events at the Special Events Center, which may attract capacity or near capacity crowds, to prevent queuing of traffic back to the on-ramp and onto H-1. This commitment to continue monitoring was included in the Traffic Consultant's recommendations in the Environmental Assessment for the Special Events Center.

As indicated in the DEA under Traffic Circulation and Parking, the University of Hawaii will continue to encourage ride sharing to and from the Manoa Campus through a ride-share program coordinator. While the impact of such a program to the overall traffic circulation and parking problems on the Manoa Campus may be relatively small, every car off the road will help alleviate the impact of cars on the campus.

We hope that our responses on behalf of the University meets with your satisfaction. Should you have any additional concerns, please call me at 523-5866 or forward a fax to 523-5874. We appreciate your prompt response to the Draft Environmental Assessment.

Sincerely,
GROUP 70 INTERNATIONAL, INC.


Walter K. Muraoka
Associate

wkm/mjh

cc: University of Hawaii- Allan Ah San
Clyde Akita

- Francis S. Oda, AIA, AICP
- Norman G.Y. Hong, AIA
- Sheryl B. Seaman, AIA, ASID
- Robert K.L. Wong, AIA
- Hiroshi Hida, AIA
- Roy H. Nihei, AIA, CSI
- James I. Nishimoto, AIA
- Ralph E. Portmore, AICP
- Stephen H. Yuen, AIA
- Paul P. Chomey, AIA
- Dean H. Kitamura, AIA
- Norma J. Scott, AIA
- June Fukushima-Lee, ASID
- Stephen E. Gallo, CPA
- Walter R. Bell, AIA, CSI, CCS
- Walter K. Muraoka
- George I. Atta, AICP
- Jeffrey H. Oventon, AICP
- Michael A. Gami
- Eric G. Crispin, AIA
- Linda L. Chung, AIA
- Janet M. Buchholdt
- Ronald L. Proctor
- Charles F. Schriever, AIA
- Teresa P. Davidson, AIA
- Jian-Cheng Bao



GROUP 70
INTERNATIONAL

11 July 1994

Harold S. Masumoto, Director
Office of State Planning
250 South Hotel Street, 4th Floor
Honolulu, HI 96813

**Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus - 1994 Update**

Dear Mr. Masumoto:

Thank you for your letter of June 23, 1994 in which you submitted comments on the Draft Environmental Assessment for the Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update.

The following responses to your comments are submitted for your information:

1. The University concurs that the Manoa Stream is an ecological and historic resource and careful consideration should be given to the impacts that development may have on these resources. Some years ago, under the University's guidance, the Manoa Stream Park Conceptual Plan and the Manoa Stream Park Urban Design Plan were prepared so that the stream's ecological and historical resources could be enhanced and be made accessible through the development of a linear park which would run from Manoa Falls to the Pacific Ocean. This plan is now being revived by the Manoa Community group known as Malama O Manoa who is encouraging and supporting the development of the Manoa Stream Park. ✓
2. The University is aware that developments along the Manoa Stream could adversely impact coastal ecosystems. The design and construction of these facilities will be carefully monitored for adherence to the State's Coastal Zone Management (CZM) law, for conformance to flood zone (FEMA) requirements of the U.S. Corps of Engineers and for consistency with the University's Manoa Stream Park Plans. Each project will be separately scrutinized for compliance with statutory CZM objectives and policies, with Federal and City requirements and with University policies. ✓
3. The DEA will be amended to include an updated site plan of the Center of Hawaiian Studies to reflect the changes required for State CZM compliance. ✓

Francis S. Oda, AIA, AICP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
Robert K.L. Wong, AIA
Hitoshi Hida, AIA
Roy H. Nihei, AIA, CSI
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Michael A. Gami
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Linda L. Chung, AIA
Janet M. Bucholdt
Ronald L. Proctor
Charles F. Schriever, AIA
Teresa P. Davidson, AIA
Jian-Cheng Hsiao

July 11, 1994
Harold S. Masumoto, Director
Office of State Planning
page two

We hope that our responses on behalf of the University of Hawaii meets with your satisfaction. Please call me at 523-5866 or forward a FAX to 523-5874 if you have any further concerns on the LRDP. We sincerely appreciate your comments on the Draft Environmental Assessment.

Sincerely,
GROUP 70 INTERNATIONAL, INC.



Walter K. Muraoka
Associate

wkm/mjh

cc: University of Hawaii - Mr. Allan Ah San
Mr. Clyde Akita



OFFICE OF STATE PLANNING

Office of the Governor

MAILING ADDRESS: P.O. BOX 3540, HONOLULU, HAWAII 96811-3540
STREET ADDRESS: 250 SOUTH HOTEL STREET, 4TH FLOOR
TELEPHONE: (808) 587-2846, 587-2800

FAX: Director's Office 587-2848
Planning Division 587-2824

Ref. No. C-665

June 23, 1994

JUN 28 1994

GROUP 70

Mr. Walter K. Muraoka
Group 70 International, Inc.
925 Bethel Street
Honolulu, Hawaii 96813

Dear Mr. Muraoka:

Subject: Draft Environmental Assessment for The Long
Range Development Plan of the University of
Hawaii, Manoa Campus, 1994 Update.

We have reviewed the Draft Environmental Assessment for the Long Range Development Plan (LRDP) of the University of Hawaii at Manoa, and offer the following comments

Manoa stream is an important ecological and historic resource. Much of Manoa stream is still in its original condition. In addition, several areas neighboring the stream are historically and culturally important. Thus, careful consideration should be given to the impacts that development may have on these ecological and historic resources.

The proposed construction of a parking structure and bridge next to Manoa stream, across from Hale Aloha, and adjacent to the Center for Hawaiian Studies raises several concerns. One objective of the State's Coastal Zone Management (CZM) law is to, "Protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems." Conditioning of the area such as hardening of the banks of the stream may cause loss of vegetation, degradation of stream ecosystems, runoff, increased flooding, and other impacts. The LRDP's maps display many proposed projects adjacent to or near Manoa stream. Each should be scrutinized for compliance with the statutory CZM objectives and policies of Chapter 205A.

Mr. Walter K. Muraoka
Page 2
June 23, 1994

With regard to the Center for Hawaiian Studies, the depiction's of the student services wing in the LRDP and the Draft Environmental Assessment do not show the changes required for State CZM compliance.

If there are any questions, please contact our CZM Program at 587-2876.

Sincerely,


Harold S. Masumoto
Director

cc: Department of Accounting and General Services
UH, Office of Senior Vice President for Administration

- duplicate



RECEIVED

JUL - 8 1994

University of Hawai'i at Mānoa

GROUP 70

Environmental Center
A Unit of Water Resources Research Center
Crawford 317 • 2550 Campus Road • Honolulu, Hawai'i 96822
Telephone: (808) 956-7361 • Facsimile: (808) 956-3980

June 23, 1993
EA:00068

Mr. Walter Muraoka, Associate
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Muraoka:

Pre-Assessment Consultation
Draft Environmental Assessment (EA), Long Range Development Plan
University of Hawaii Manoa Campus
Honolulu, Oahu

In response to your request, the Environmental Center has briefly reviewed the referenced draft EA. The document appears to adequately fulfil requirements of Sections 11-200-9, -10, and -12 of the DOH Administrative Rules, and we concur that individual projects would appropriately be assessed in more detail at the time of their imminent implementation. In addition, we note two areas of the LRDP which raise substantive concerns among our reviewers.

Section 9.1 C.1. Refuse Collection

Reference to a "limited" recycling program under the heading of mitigation measures is somewhat of an overstatement. Presently, the Facilities Management Office has distributed a number of aluminum can bins around the campus, and most green waste is processed for compost. Voluntary participation in paper recycling efforts is hampered by the lack of a designated central collection and processing area, by uncertainties in the local recycling industries, and by a general lack of public awareness. A number of proposed programs for campus recycling have been developed, but no modest degree of resources has been committed to the effort by the University, and there are no plans to make substantive commitments in the foreseeable future. Hence, assumptions of expansion of what exists are not presently verifiable.

It would seem appropriate in the context of this LRDP to incorporate recycling into design considerations, both for proposed buildings and for solid waste infrastructure. Properly conceived and executed, the economies of avoided hauling and disposal costs could contribute significantly to both environmental and fiscal

goals of the university community. In addition, community leadership through adoption of an exemplary recycling program would make a strong contribution to the desired "sense of place" envisioned in the LRDP.

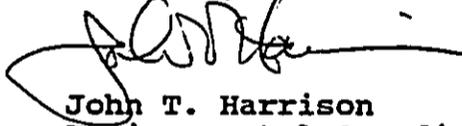
Section 9.1 G. Traffic Circulation and Parking

Although ingress and egress from the Makai Campus has been improved by recent street and intersection improvements, there is no apparent consideration of anticipated effects of proposed parking facility increases on the Central and Upper Central campuses. At full build-out, 1,425 spaces will be available in new parking structures located on the Central campuses. The significantly greater number of automobiles will still be entering and leaving the Central campuses largely on East-West Road and Maile Way. Some consideration should be given to means of alleviating rush hour congestion at these intersections.

Also, although bicycle use is supported by the LRDP, mostly through the proposed provision of additional bicycle racks, it would seem appropriate to consider more substantive measures to promote bicycle use. For instance, bike lanes on roads peripheral to the university could be improved and expanded, and new buildings could be provided with shower and locker facilities for bicycle commuters.

We appreciate the opportunity to have participated in the pre-assessment consultation on this document, and we hope our comments are helpful.

Sincerely,



John T. Harrison
Environmental Coordinator

cc: R. Fujioka, WRRRC
C. Akita, Fac. Plan. & Mgt.
R. Horii, VP Fin.



GROUP 70
INTERNATIONAL

11 July 1994

John T. Harrison, Environmental Coordinator
University of Hawaii at Manoa
Environmental Center
Crawford 317
2550 Campus Road
Honolulu, Hawaii 96822

Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus - 1994 Update

Dear Mr. Harrison:

Thank you for your letter of June 23, 1994 in which you submitted comments on the Draft Environmental Assessment for the Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update.

We have discussed your concerns on "Refuse Collection" with the University's Building and Grounds Management Office (BGMO) and the Facilities Planning and Management Office (FPMO) and on "Traffic Circulation and Parking" with the Traffic Consultant and offer the following comments:

Refuse Collection

Both the BGMO and the FPMO concur with your comments that their efforts have been hampered by, among other factors, the lack of a centralized collection and processing area, the uncertainties in the local recycling industries and the general lack of public (campus) awareness of the program. While the recycling program has been marginally successful on a limited scale, they feel that more could be and should be done.

As its first major step towards this goal, the BGMO and the FPMO are now actively seeking a centralized collection and processing area which is readily accessible and where all activities may deposit their recyclable materials for further processing. Once this is established, it hopes to publicize the program to secure more active campus participation. The establishment of regional collection areas will be next sought by the BGMO and the FPMO and finally, building collection areas. The regional and building collection areas could be provided in either existing or new buildings. The expansion of the recycling program to its full potential, however, requires substantive commitment of resources.

Thus, the BGMO and the FPMO will again seek funds in the next biennium budget to more actively pursue the expansion of the recycling program as they are in agreement with your office that "properly conceived and executed, the economies of avoided hauling and disposal costs could contribute significantly

- Francis S. Oda, AIA, AICP
- Norman G.Y. Hong, AIA
- Sheryl B. Seaman, AIA, ASID
- Robert K.L. Wong, AIA
- Hitoshi Hida, AIA
- Roy H. Nihei, AIA, CSI
- James I. Nishimoto, AIA
- Ralph E. Portmore, AICP
- Stephen H. Yuen, AIA

- Paul P. Chorney, AIA
- Dean H. Kitamura, AIA
- Norma J. Scott, AIA
- June Fukushima-Lee, ASID
- Stephen E. Callo, CPA
- Walter R. Bell, AIA, CSI, CCS
- Walter K. Murakami
- George I. Atta, AICP
- Jeffrey H. Overton, AICP
- Michael A. Gami
- Eric G. Crispin, AIA
- Linda L. Chung, AIA
- Janet M. Buchholdt
- Ronald L. Proctor
- Charles F. Schriever, AIA
- Teresa P. Davidson, AIA
- Jian-Cheng Bao

July 11, 1994

Mr. John T. Harrison, Environmental Coordinator
University of Hawaii at Manoa
Environmental Center
page two

to both environmental and fiscal goals of the University community". But in these times of stringent fiscal restraints, they are not optimistic of early funding of the program. Thus, the program may operate at modest levels with existing personnel and facilities until more adequately funded.

The State of Hawaii is now actively seeking to resolve the problem of uncertainties in the local recycling industries and the University is hopeful that the disposal of recyclable materials will not be a problem in the future.

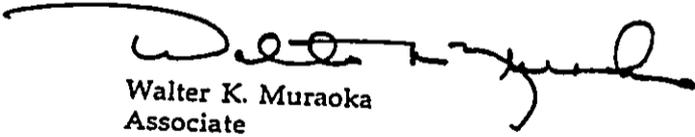
Traffic Circulation and Parking

The Traffic Engineer's response to your concern on ingress and egress from the Central and Upper Central Campuses at full build-out is transmitted for your information. He reports that optimization of the existing traffic signal system will be sufficient to maintain an acceptable level of performance at the Maile Way and East-West Road intersections with public streets. No geometric improvements are necessary and proposed to maintain this acceptable level.

The University of Hawaii has always supported bikeways on public roadways peripheral to the campus and continues to encourage the City's efforts to improve and expand such systems. The City has budgeted additional funds to improve bikeways to serve the Manoa Campus.

We hope that our response on behalf of the University Administration meets with your satisfaction. Please call me at 523-5866 or forward a FAX to 523-5874 if you have any further concerns on the LRDP.

Sincerely,
GROUP 70 INTERNATIONAL, INC.


Walter K. Muraoka
Associate

wkm/mjh

cc: University of Hawaii -

Allan Ah San
Clyde Akita



AUSTIN, TSUTSUMI & ASSOCIATES, INC. CIVIL ENGINEERS • SURVEYORS
CONTINUING THE ENGINEERING PRACTICE FOUNDED BY H. A. R. AUSTIN IN 1934

TED S. KAWAHIGASHI, P.E.
GEORGE M. NEUFFER, P.E.
KENNETH K. KUROKAWA, P.E.
THOMAS S. OTAGURO
NAN K. NAKATSUKA, P.E.

#92-49.4

June 30, 1994

JUN 30 1994

Mr. Walter Muraoka
Group 70 International, Inc.
925 Bethel Street • 5th Floor
Honolulu, HI 96813

Dear Walter:

Subject: UH-Manoa LRDP Update

This is in response to the University of Hawaii at Manoa Environmental Center's comment, dated June 23, 1994, relative to traffic circulation and parking.

While the projected traffic demands for ingress and egress to the Central Campus during peak hours of traffic at Maile Way and East-West Road will increase at build-out, no intersection geometric improvements are proposed, but, rather, optimization of the existing traffic signal system is recommended to maintain an acceptable level of performance at these intersection.

Geometric improvement at the Maile Way/University Avenue intersection should be part of a planned improvement of University Avenue into Manoa Valley to be cost effective. The Dole Street/East-West Road intersection is projected to operate at a high level of performance (LOS "B") and, therefore, requires no geometric improvements.

The City Department of Transportation Services has currently budgeted funds to prepare bikeway plans for Oahu, which include the roadways in the vicinity of the campus.

Very truly yours,

AUSTIN, TSUTSUMI & ASSOCIATES, INC.

By

Ted S. Kawahigashi
TED S. KAWAHIGASHI, P.E.
President

TSK:CDG

REPLY TO:
501 SUMNER STREET, SUITE 521 • HONOLULU, HAWAII 96817-5031
PHONE 808/533-3545 • FAX NO. 525-1267

OFFICES IN:
HONOLULU, HAWAII
MAAII (HII) MAOII (HAWAII) & O HAWAII



EAST-WEST CENTER

RECEIVED
JUL - 1 1994

1777 East-West Road
Honolulu, Hawaii 96848
Telephone: 808-944-7103

Fax: 808-944-7970

Telex: 989171

Cable: EASWESCE

OFFICE OF THE
PRESIDENT

June 28, 1994

GROUP 70

Mr. Walter Muraoka
Associate
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4398

Dear Walter:

Thank you for sharing your draft of the Environmental Assessment for the University of Hawaii Manoa Campus LRDP. Because of our close proximity to the Manoa campus, and the direct support we receive in areas such as parking, security, traffic control and other issues related to the physical environment, we are vitally interested in the long range development plan. We therefore appreciate the opportunity to review the environmental assessment, and would further request a copy of the updated LRDP that was approved by the BOR last month.

Our review of your environmental assessment indicates that the updated UHM LRDP will not have any significant impact on the East-West Center, and we do not have any comment to offer at this time. You should know, however, that we are also updating our physical long-range development plan covering our 21-acre site. We do not anticipate any significant changes to our existing physical plant that would impact your environmental assessment. We will keep the University informed as we proceed with our planning.

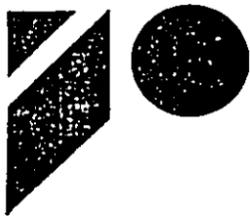
Sincerely,

Kenji Sumida
Executive Vice President

KS:pm

cc: Ralph Horii
Clyde Akita
Lloyd Yamada
Arnold Kishi

Center for Cultural and Technical
Interchange between East and West, Inc.
A national educational institution
established by the United States Congress
and incorporated by the State of Hawaii.
An Equal Opportunity Employer.



7 July 1994

GROUP 70
INTERNATIONAL

Kenji Sumida
Executive Vice President
East-West Center
1777 East-West Road
Honolulu, Hawaii 96848

**Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus - 1994 Update**

Francis S. Oda, AIA, AICP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
Robert K.L. Wong, AIA
Hitoshi Hida, AIA
Roy H. Nihei, AIA, CSI
James I. Nishimoto, AIA
Ralph E. Portmore, AICP
Stephen H. Yuen, AIA

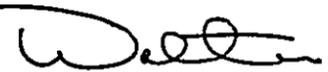
Dear Kenji:

Thank you for your letter of June 28, 1994 in which you submitted comments on the Draft Environmental Assessment for the subject project.

As requested, one (1) copy of the LRDP Report will be forwarded directly to your office by Allan Ah San of the University of Hawaii. The Summary Report forwarded to you with the DEA summarizes the contents of the LRDP Report.

We appreciate your prompt response to the Draft Environmental Assessment.

Sincerely,
GROUP 70 INTERNATIONAL, INC.


Walter K. Muraoka
Associate

wkm/mjh

cc: University of Hawaii- Allan Ah San
Clyde Akita

Paul P. Clomey, AIA
Dean H. Kitamura, AIA
Norma J. Scott, AIA
June Fukushima-Lee, ASID
Stephen E. Callo, CPA
Walter R. Bell, AIA, CSI, CCS
Walter K. Muraoka
George I. Atta, AICP
Jeffrey H. Overton, AICP
Michael A. Gami
Eric G. Crispin, AIA
Linda L. Chung, AIA
Janet M. Bucholdt
Ronald L. Proctor
Charles F. Schriever, AIA
Teresa P. Davidson, AIA
Jian-Cheng Kao

FILE



11 July 1994

Kenneth M. Kaneshiro
Acting State Conservationist
United States Department of Agriculture
Soil Conservation Service
P. O. Box 50004
Honolulu, Hawaii 96850-0001

Dear Mr. Kaneshiro:

Subject: **Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus - 1994 Update**

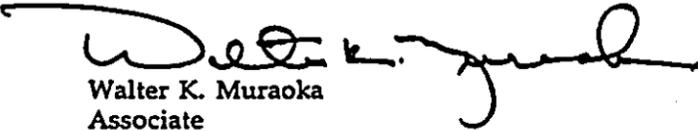
Thank you for your letter of July 5, 1994 in which you submitted comments on the Draft Environmental Assessment, Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update.

We have discussed your concern of runoff and sediment into the City and County Drainage System which could impact the Ala Wai Watershed with the Building and Grounds Management Office at the University of Hawaii, and it has indicated that it shares your concern on the continued pollution of the Ala Wai Basin. While it has not yet formally incorporated Best Management Practices into its landscaping program, it agrees with its intent and the Office will utilize such practices as a guide in its programs to the extent personnel and funding permit.

According to the Facilities Planning and Management Office, the design of all new projects will consider Best Management Practices as a guide in controlling pollution. Securing adequate funding, however, to incorporate some of the practices could be an obstacle in implementation. Thus, between improved landscape maintenance programs and measures incorporated into new construction, the pollution from University sources of the Ala Wai Basin should be reduced in the future.

We appreciate your prompt response on the DEA. If you have any further questions or concerns, please call me at 523-5866 or fax the query to me at 523-5874.

Sincerely,
GROUP 70 INTERNATIONAL INC.


Walter K. Muraoka
Associate

wkm/mjh

cc: Univeristy of Hawaii - Allan Ah San
Clyde Akita
Farouk Wang

Francis S. Oda, AIA, AICP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
Robert K.L. Wong, AIA
Hitoshi Hida, AIA
Roy H. Nihui, AIA, CSI
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Ronald L. Proctor
Charles F. Schriever, AIA
Teresa P. Davidson, AIA
Jian-Cheng Bao



United States
Department of
Agriculture

Soil
Conservation
Service

P. O. Box 50004
Honolulu, HI
96850-0001

July 5, 1994

RECEIVED

JUL - 6 1994

GROUP 70

Mr. Walter K. Muraoka
Group 70 International, Inc.
925 Bethel Street
Honolulu, Hawaii 96813

Dear Mr. Muraoka:

Subject: PRE-ASSESSMENT CONSULTATION
Environmental Assessment (Draft), Long Range
Development Plan
University of Hawaii, Manoa Campus, 1994 Update

We have completed our review of the updated environmental assessment. Because of the sensitivity of the Ala Wai Watershed, we encourage the incorporation of Best Management Practices into the landscaping program that ultimately reduces the amount of runoff and sediment into the City & County Drainage System. Sediment basins used during the land grading and construction phases can easily be incorporated into the landscaping program. Parking lots can be designed and constructed to act as filtering basins.

The University of Hawaii should seize this opportunity to assist the Ala Wai Watershed community in reducing nonpoint pollution of the Ala Wai Basin. We are concerned about the potential of the Long Development Program to compound the existing pollution problem.

Thank you for the opportunity to provide comments on the plan. Should you have any questions, please do not hesitate to contact Mr. Michael C. Tulang at (808) 541-2606 or Mr. Michael Bajinting at (808) 861-8520.

Sincerely,

KENNETH M. KANESHIRO
Acting State Conservationist



"To lead the way in helping our customers conserve, sustain, and enhance Hawaii's natural resources through efficient service of the highest quality."



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

REPLY TO
ATTENTION OF

June 27, 1994

Planning Division

JUN 30 1994

Mr. Walter K. Muraoka
Group 70 International Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Muraoka:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the Long Range Development Plan for the University of Hawaii, Manoa Campus - 1994 Update (TMK 2-8, 2-9, and 3-3). The following comments are provided pursuant to Corps of Engineers authorities to disseminate flood hazard information under the Flood Control Act of 1960 and to issue Department of the Army (DA) permits under the Clean Water Act; the Rivers and Harbors Act of 1899; and the Marine Protection, Research and Sanctuaries Act.

a. As noted on page 63 of your assessment, any work performed in or affecting streams or wetlands will need to be coordinated with our Operations Division for DA permit requirements. Please contact them at 438-9258 for further information.

b. The flood hazard information provided on page 63 of the environmental assessment is correct.

Sincerely,

Ray H. Jyo, P.E.
Director of Engineering

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU

630 SOUTH BERETANIA STREET

HONOLULU, HAWAII 96843



July 5, 1994

FRANK F. FASI Mayor

WALTER O. WATSON, JR. Chairman
MAURICE H. YAMASATO Vice Chairman
SISTER M. DAVILYN AH CHICK, O.S.F.
JOHN W. ANDERSON, JR.
REX D. JOHNSON
MELISSA Y. J. LUM
KENNETH E. SPRAGUE

KAZU HAYASHIDA
Manager and Chief Engineer

RECEIVED
JUL - 8 1994

Mr. Walter Muraoka
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

GROUP 70

Dear Mr. Muraoka:

Subject: Your Letter of June 9, 1994 Regarding the Pre-Assessment Consultation for the Draft Environmental Assessment (DEA) for the 1994 Update of the Long Range Development Plan for the University of Hawaii (UH), Manoa Campus

Thank you for the opportunity to review the DEA. We have no objections at this time, however, we have the following comments:

1. A water allocation from the State Department of Land and Natural Resources will be required for any increase in water service. In addition, UH will be required to pay our Water System Facilities Charges for transmission and daily storage for increased water service due to new development.
2. The 1990 UH Master Plan should be updated.
3. Cross connection control requirements will be determined during the building permit application phase.
4. The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

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

Very truly yours,

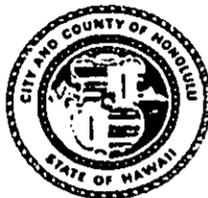
KAZU HAYASHIDA
Manager and Chief Engineer

BUILDING DEPARTMENT
CITY AND COUNTY OF HONOLULU

HONOLULU MUNICIPAL BUILDING
650 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK F. FASI
MAYOR

RECEIVED
JUN 27 1994



HERBERT K. MURAOKA
DIRECTOR AND BUILDING SUPERINTENDENT

WILLIAM F. REMULAR
DEPUTY

GROUP 70

PB 94-610

June 17, 1994

Group 70 International, Inc.
925 Bethel Street
Fifth Floor
Honolulu, Hawaii 96813-4307

Gentlemen:

Subject: Pre-assessment Consultation
Draft Environmental Assessment, Long
Range Development Plan, University of
Hawaii, Manoa Campus, 1994 Update

We have reviewed the subject draft Environmental Assessment and have no comments to offer. Thank you for considering us in your review process.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Herbert K. Muraoka".

HERBERT K. MURAOKA
Director and Building Superintendent

cc: J. Harada

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR
HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498



FRANK F. FASI
MAYOR

GAIL M. KAITO
Acting Director
RONALD S. LIM
Acting Deputy Director

June 23, 1994

RECEIVED

JUN 28 1994

Mr. Walter K. Muraoka, Associate
Group 70 International, Inc.
925 Bethel Street
Honolulu, Hawaii 96813

GROUP 70

Dear Mr. Muraoka:

Subject: Long Range Development Plan
University of Hawaii, Manoa Campus, 1994 Update
Draft Environmental Assessment

This is in response to your letter of June 13, 1994 requesting our comments on the Draft Environmental Assessment (DEA) for the Long Range Development Plan (LRDP), covering the planning period FY 1993-94 to FY 1998-99 for the University of Hawaii, Manoa Campus. Proposing agency for the DEA is the Office of Senior Vice President for Administration, University of Hawaii.

The City and County of Honolulu recently acquired a parcel of land located on Vancouver Drive, one block Ewa of the University of Hawaii campus. The Department is proposing to develop a 49-unit transitional housing project for non-traditional students to enable lower-income households become self-sufficient and economically independent through education, job training and life skills classes.

The Department of Housing and Community Development (DHCD) sees no significant impact within the DEA to this proposed City project. However, as stated in the DEA, individual building projects with more detailed information will be covered by separate Environmental Assessments to be filed at the time of implementation of the particular project.

Should you have any questions, please contact Charlotte Yoshioka of our Planning and Analysis Division at 527-5090.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to be "R. S. Lim", written over a horizontal line.

RONALD S. LIM
Acting Director



GROUP 70
INTERNATIONAL

7 July 1994

Ron Lim, Acting Director
Department of Housing and Community Development
City and County of Honolulu
650 South King Street, 5th Floor
Honolulu, Hawaii 96813

**Subject: Draft Environmental Assessment
Long Range Development Plan
University of Hawaii, Manoa Campus - 1994 Update**

Francis S. Oda, AIA, AICP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
Robert K.L. Wong, AIA
Hitoshi Hida, AIA
Roy H. Nihei, AIA, CSI
James I. Nishimoto, AIA
Ralph E. Portmore, AICP
Stephen H. Yuen, AIA

Dear Mr. Lim:

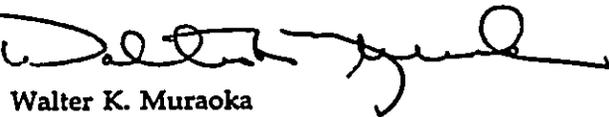
Thank you for your letter of June 23, 1994 in which you submitted comments on the Draft Environmental Assessment on the subject project.

Ul P. Chomey, AIA
Dean H. Kitamura, AIA
Norma J. Scott, AIA
June Fukushima-Lee, ASID
Stephen E. Callo, CPA
Walter R. Bell, AIA, CSI, CCS
Walter K. Muraoka
George I. Atta, AICP
Jeffrey H. Overton, AICP
Michael A. Gami
Eric G. Crispin, AIA
Linda L. Chung, AIA
Janet M. Bucholdt
Ronald L. Proctor
Charles F. Schriever, AIA
Teresa P. Davidson, AIA
Jian-Cheng Bao

We have discussed your proposed transitional housing project for non-traditional students with Toy Arre, Student Housing Director, and he has indicated that he is very pleased that the DHCD is taking the initiative to provide housing facilities for these students. These facilities, he added, will provide much needed housing assistance to students who otherwise would not have the opportunity to attend classes at the Manoa Campus or at other University campuses.

The University has assured us that your office will have an opportunity to review and comment on the Environmental Assessments for the particular projects on the Manoa Campus.

Sincerely,
GROUP 70 INTERNATIONAL, INC.


Walter K. Muraoka
Associate

wkm/mjh

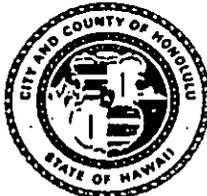
cc: University of Hawaii - Allan Ah San
Clyde Akita

COPY

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

FRANK F. FASI
MAYOR

RECEIVED
JUN 28 1994



ROBIN FOSTER
CHIEF PLANNING OFFICER
ROLAND D. LIBBY, JR.
DEPUTY CHIEF PLANNING OFFICER

BS 6/94-3752

GROUP 70

June 23, 1994

Group 70 International, Inc.
925 Bethel Street
Honolulu, Hawaii 96813

Attn: Mr. Walter K. Muraoka

Gentlemen:

Pre-Assessment Consultation
Draft Environmental Assessment,
Long Range Development Plan:
University of Hawaii, Manoa Campus, 1994 Update

In response to the pre-assessment consultation request for the subject preliminary Draft Environmental Assessment and Long Range Development Plan, we are offering the following comments.

The term "Long Range" for the subject plan is somewhat misleading since the plan was formulated for only the next five (fiscal) year period. We are concerned that a much longer time horizon for "long-range planning" is needed. A longer time frame would be advantageous in planning for future capital facilities investment decisions for both the UH Manoa campus and UH West Oahu campus. The EA should explain the inter-relationship of programs and facilities contemplated for these campuses over a twenty-year period and assess the impacts to current land use policies.

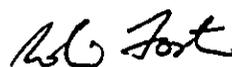
In Section 10 of the subject EA misquotes the City's General Plan. The General Plan's section on "Health and Education" includes two objectives and several policies which are relevant. The EA should make specific reference to those policies and objectives and explain the extent to which the proposal is or is not consistent.

In addition, it should be noted that references to the current "Development Plan Land Use Map" should be changed to: "Development Plan Land Use Map for the Primary Urban Center."

Group 70 International, Inc.
June 23, 1994
Page 2

Thank you for the opportunity to comment on the subject request. Should you have any further questions on the matter, you may contact Brian Suzuki of our staff at 527-6073.

Sincerely,


ROBIN FOSTER
Chief Planning Officer

RF:lh



7 July 1994

Robin Foster, Chief Planning Officer
Planning Department
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Francis S. Oda, AIA, AICP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
Robert K.L. Wong, AIA
Hitoshi Hida, AIA
Roy H. Nihei, AIA, CSI
James I. Nishimoto, AIA
Ralph E. Portmore, AICP
Stephen H. Yuen, AIA

**Subject: Draft Environmental Assessment (DEA)
Long Range Development Plan
University of Hawaii, Manoa Campus - 1994 Update**

Dear Mr. Foster:

Thank you for your letter of June 23, 1994 in which you submitted comments on the Draft Environmental Assessment for the subject project. Your early response to the DEA is much appreciated.

Paul P. Chorney, AIA
Dean H. Kitamura, AIA
Norma J. Scott, AIA
June Fukushima-Lee, ASID
Stephen E. Callo, CPA
Walter R. Bell, AIA, CSI, CCS
Walter K. Muraoka
George I. Atta, AICP
Jeffrey H. Oventon, AICP
Michael A. Gami
Eric G. Crispin, AIA
Linda L. Chung, AIA
Janet M. Bucholdt
Ronald L. Proctor
Charles F. Schriever, AIA
Teresa P. Davidson, AIA
Jian-Cheng Bao

We may have misled you and others by stating that the period covered by the Environmental Assessment is FY 1993-94 to FY 1998-99. While the primary focus of the EA may be the next five years due the City's Plan Review Use requirement of a 5-year master plan and the State's CIP Budget planning period of six years, the broad concepts, goals and objectives of the 1994 Update was developed for the ultimate campus. Thus, every major action for the ultimate campus as presently envisioned is reflected in the plan. The DEA will be revised to delete specific references to the current planning period.

It is to be noted that Universities are exponents and edifiers of change and changes will take place in the future that will require further updating of the plan. The interrelationships and interdependency of the Manoa Campus and the UH-West Oahu Campus are now being reviewed by the University and there is now little doubt that the development of one would have profound impacts on the other—especially in a period of very limited financial resources. This relationship and dependency has not yet been clearly defined and their impacts cannot be properly assessed at this time. However, this will be accomplished before the commencement of construction documents for the the facilities at the UH-West Oahu Campus.

Section 10 of the DEA quotes verbatim, the general provisions on Health and Education contained in the Preamble of the General Plan. We concur with you, however, that more specific references to the policies and objectives of the General Plan as they relate to Health and Education may be appropriate and these references will be included in the Draft Environmental Assessment.

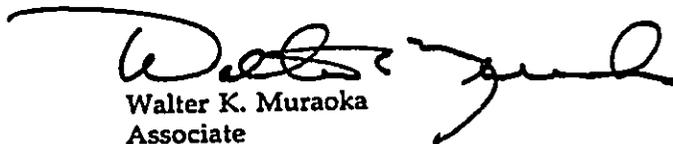
FILE

7 July 1994

Mr. Robin Foster
Draft Environmental Assessment (DEA)
page 2

We will amend the references to the current "Development Plan Land Use Map" to "Development Plan Land Use Map for the Primary Urban Center" as noted by your office.

Sincerely,
GROUP 70 INTERNATIONAL, INC.



Walter K. Muraoka
Associate

wkm/mjh

cc: Allan Ah San - University of Hawaii

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK F. FASI
MAYOR

RECEIVED

JUN 22 1994



KENNETH E. SPRAGUE
DIRECTOR AND CHIEF ENGINEER

ENV 94-149

GROUP 70

June 21, 1994

Mr. Walter K. Muraoka
Associate
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Muraoka:

Subject: Preliminary Environmental Assessment (PEA)
Long Range Development Plan
University of Hawaii at Manoa Campus, 1994 Update

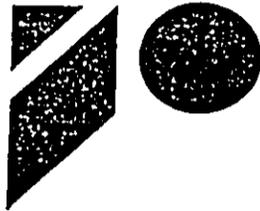
We have reviewed the subject document and have the following comments:

1. Frontage improvements within the City right-of-way that are required to support the project should be constructed in accordance with the City standards.
2. Access improvements should be installed in accordance with the Americans with Disabilities Act Accessibility Guidelines.
3. Adequate on-site parking should be provided for the proposed project.
4. Traffic study to alleviate vehicular congestion should be conducted.
5. Best management practices (BMPs) should be provided during construction to minimize turbidity. Also, permanent BMPs should be considered to reduce the increase of stormwater runoff rate.

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

Very truly yours,


KENNETH E. SPRAGUE
Director and Chief Engineer



GROUP 70
INTERNATIONAL

24 June 1994

Mr. Kenneth E. Sprague
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

**Subject: Pre-assessment Consultation
Environmental Assessment (Draft)
Long Range Development Plan
University of Hawaii, Manoa Campus 1994 Update**

Dear Mr. Sprague:

Thank you for your letter of 21 June 1994 (ENV 94-149) in which you submitted comments on the Draft Environmental Assessment (EA) for the Long Range Development Plan, University of Hawaii, Manoa Campus, 1994 Update.

The following responses to your comments are submitted for your information:

1. Section 8.0 will be modified with the addition of a provision that would indicate that all frontage improvements within the City right-of-way will be constructed in accordance with City standards.
2. Section 9.1 (F) will be modified to indicate that all campus improvements will be in conformance with the provisions of the Americans with Disabilities Act.
3. Section 9.1 (G) will be modified with the addition of information that the existing number of parking spaces on the Manoa Campus (5,379 spaces) exceeds the LUO provisions for parking facilities (3,400 approx.) spaces. Since the LUO provisions for University requirements appear to be outdated, the traffic consultant has suggested that another standard be used in the determination of parking requirements for the Manoa Campus. This standard from "The Eno Foundation for Transportation, Inc." which would require 4,925 spaces appears to provide for a more realistic measurement of need.
4. A traffic study to alleviate vehicular congestion has been conducted for the University by Austin, Tsutsumi & Associates, Inc. and a copy of the report entitled "Traffic Impact Report" is enclosed for your information.
5. Section 9.2 (G) will be modified to indicate that the University's construction documents will include provisions for the best management practices to control erosion as set forth in the City's Soil Erosion Standards and Guidelines.

FILE COPY

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Teresa P. Davidson, AIA
Jian-Cheng Bao

24 June 1994

Mr. Kenneth E. Sprague
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
page two

We hope that our responses on behalf of the University of Hawaii meets with your satisfaction. Please call me at 523-5866 or forward a fax to 523-5874 if you have any further concerns on the LRDP. We appreciate your comments on the Draft Environmental Assessment.

Very truly yours,

GROUP 70 INTERNATIONAL, INC.


Walter K. Muraoka
Associate

wkm/mjh

cc: Allan Ah San University of Hawaii
Clyde Akita University of Hawaii

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

3375 KOAPAKA STREET, SUITE M425
HONOLULU, HAWAII 96819-1869

FRANK F. FASI
MAYOR

RECEIVED
JUN 27 1994



RICHARD R. SETO-MOOK
FIRE CHIEF

June 24, 1994

GROUP 70

Mr. Walter K. Muraoka, Associate
Group 70 International, Inc.
925 Bishop Street, 5th Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Muraoka:

SUBJECT: PRE-ASSESSMENT CONSULTATION
Environmental Assessment (Draft), Long Range Development Plan
University of Hawaii, Manoa Campus, 1994 Update

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

Access for fire apparatus, water supply and building construction shall be in conformance to existing codes and standards.

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

Sincerley,

A handwritten signature in cursive script that reads "Attilio K. Leonardi".

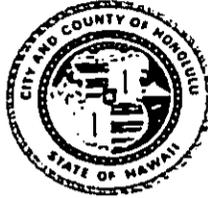
(for) RICHARD R. SETO-MOOK
Fire Chief

AKL:ny

Environmental Assessment report attached

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU
801 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96813 - AREA CODE (808) 529-3111

FRANK F. FASI
MAYOR



MICHAEL S. NAKAMURA
CHIEF

HAROLD M. KAWASAKI
DEPUTY CHIEF

OUR REFERENCE BS-LK

RECEIVED
JUN 21 1994

June 17, 1994

GROUP 70

Mr. Walter K. Muraoka, Associate
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813-4307

Dear Mr. Muraoka:

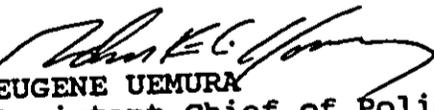
This is in response to your request for comments on a Draft Environmental Assessment for the Long Range Development Plan of the University of Hawaii, Manoa Campus, 1994 update.

This project is expected to have no significant impact on police services. We have no additional comments to make at this time.

Thank you for the opportunity to review this document.

Sincerely,

MICHAEL S. NAKAMURA
Chief of Police

By 
EUGENE UEMURA
Assistant Chief of Police
Administrative Bureau