

JOHN WAIHEE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 119, HONOLULU, HAWAII 96810

94 NOV 10 P2:45

ROBERT P. TAKUSHI
COMPTROLLER

LLOYD I. UNEBASAMI
DEPUTY COMPTROLLER

LETTER NO. (P) 1958.4

NOV 10 1994

Mr. Bruce Anderson
Interim Director
Office of Environmental
Quality Control
Central Pacific Plaza
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Mr. Anderson:

Subject: Negative Declaration for University of
Hawaii at Manoa, College of Education
Phase 1 of Master Plan
TMK 2-8-15:01

The Department of Accounting and General Services has reviewed the comments received during the 30-day public comment period which began on September 23, 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 November 23, 1994 OEQC Bulletin.

We have enclosed a completed OEQC Bulletin Publication Form and four copies of the final EA. If there are any questions, please have your staff call Mr. Ralph Morita of the Planning Branch at 586-0486.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Gordon Matsuoka".
GORDON MATSUOKA
State Public Works Engineer

BM:jk
Attachments

156

1994-11-23-0A-*FEA-University of Hawaii*
College of Education Master Plan, Phase I

NOV 23 1994

FILE COPY

UNIVERSITY OF HAWAII - MANOA
COLLEGE OF EDUCATION

PHASE I OF COLLEGE MASTER PLAN

**FINAL
ENVIRONMENTAL ASSESSMENT**



The Department of Accounting
and General Services

STATE OF HAWAII

DAGS Job No. 12-31-3199

November 1994

UNIVERSITY OF HAWAII/MANOA
COLLEGE OF EDUCATION
PHASE I OF COLLEGE MASTER PLAN

FINAL
ENVIRONMENTAL ASSESSMENT

Applicant:

Department of Accounting and General Services
1151 Punchbowl Street
P. O. Box 119
Honolulu, Hawaii 96810-119

Prepared by:

Group 70 International, Inc.
Architecture • Planning • Interior Design • Environmental Services
925 Bethel Street
Honolulu, Hawaii 96813
(808) 523-5866

November 1994

TABLE OF CONTENTS

	<u>PAGE</u>
Table of Contents.....	i
List of Figures.....	iii
List of Tables.....	iii
Project Summary.....	iv
1.0 INTRODUCTION	
1.1 Identification of the Proposing Agency.....	1-1
1.2 Identification of the Approving Agency.....	1-1
1.3 Identification of Agencies Consulted in Making Assessment.....	1-1
1.4 Summary of Major Impacts and Mitigating Measures.....	1-1
1.5 Summary of Alternatives Considered.....	1-3
1.6 Determination.....	1-3
2.0 PROJECT DESCRIPTION	
2.1 Description of the Property.....	2-1
2.2 Description of the College of Education.....	2-1
2.3 Project Objectives.....	2-2
2.4 University of Hawaii, Manoa Campus Long Range Development Plan.....	2-2
2.5 College of Education Master Plan.....	2-7
2.6 Phasing.....	2-8
2.6.1 Phase I.....	2-8
2.6.2 Phases II and III.....	2-15
2.7 Description of Construction During Phase I.....	2-16
2.8 Estimated Cost of Construction.....	2-17
2.9 Estimated Schedule of Completion for Phase I.....	2-17
3.0 DESCRIPTION OF THE ENVIRONMENTAL SETTING, ANTICIPATED IMPACTS, AND MITIGATIVE MEASURES	
3.1 Climate.....	3-1
3.2 Topography.....	3-1
3.3 Soils.....	3-2
3.4 Drainage and Water Quality.....	3-2
3.5 Flora and Fauna.....	3-3
3.6 Archaeological/Historical Resources.....	3-4
3.7 Roadways and Traffic.....	3-5
3.8 Utilities.....	3-16
3.9 Noise.....	3-17
3.10 Air Quality.....	3-19
3.11 Visual Resources.....	3-23
3.12 Socio-Economic Characteristics.....	3-29

	<u>PAGE</u>
4.0 ALTERNATIVES	
4.1 Alternatives Which Could Feasibly Attain the Objectives of the Action	4-1
4.1.1 1987 LRDP COE Campus Development Scheme.....	4-1
4.1.2 Expansion of Site.....	4-2
4.2 Alternatives Which Would Not Attain the Objectives of the Action	4-3
4.2.1 No Action.....	4-3
4.2.2 Renovation of Existing Facilities.....	4-3
4.2.3 Sharing Facilities With Rest of the Manoa Campus	4-4
5.0 RELATIONSHIP TO EXISTING POLICIES AND PLANS FOR THE AFFECTED AREA	
5.1 Hawaii State Plan.....	5-1
5.1.1 Objectives and Policies.....	5-1
5.1.2 Priority Guidelines.....	5-5
5.2 State Functional Plans.....	5-6
5.2.1 State Higher Education Functional Plan.....	5-6
5.2.2 State Historic Preservation Functional Plan.....	5-6
5.3 University of Hawaii, Manoa Campus Long Range Development Plan.....	5-7
5.4 General Plan for City and County of Honolulu	5-8
5.5 City and County of Honolulu Development Plan	5-10
5.5.1 Land Use Map.....	5-10
5.5.2 Public Facilities Map	5-10
5.5.3 Common Provisions.....	5-11
5.5.4 Special Provisions.....	5-11
5.6 Land Use Ordinance.....	5-11
5.7 Plan Review Use.....	5-11
5.8 Approvals and Permits Needed	5-12
6.0 DETERMINATION, FINDINGS, AND REASONS SUPPORTING DETERMINATION	6-1
7.0 REFERENCES, CONSULTED PARTIES, LIST OF PREPARERS	
7.1 References.....	7-1
7.2 Consulted Parties.....	7-1
7.3 List of Preparers	7-2

8.0 APPENDIX
 Letters from Government Agencies Consulted
 Records of Conversations

LIST OF FIGURES

<u>FIGURE NO.</u>	<u>TITLE</u>	<u>PAGE</u>
1	Location Map	2-3
2	Existing Site Conditions	2-5
3	Revised Master Plan	2-9
4	Master Plan - Phase I	2-11
5	Completed Master Plan - Phases I, II & III	2-13
6	Existing 1993 Traffic Volumes & Level of Service	3-9
7	Year 2000 With Project - Traffic Volumes & Level of Service	3-13
8A	View of Retaining Wall and Castle Memorial Hall from Dole Street	3-25
8B	View of University Elementary School #1 from Metcalf Street	3-25
9A	View of Elementary School and Wist Annex from Hoonanea Street Residences	3-27
9B	View of Wist Hall, University High School 1 and Elementary School Buildings from Metcalf Street	3-27

LIST OF TABLES

<u>TABLE NO.</u>	<u>TITLE</u>	<u>PAGE</u>
1	Level-of-Service (LOS) Definitions for Signalized and Unsignalized Intersections	3-7
2	Summary of Carbon Monoxide Measurements at DOH Monitoring Station in Waikiki	3-21

PROJECT SUMMARY

1. PROPOSING AGENCY: State of Hawaii
Department of Accounting and General Services
1151 Punchbowl Street
P. O. Box 119
Honolulu, HI 96810-0119

Contact: Brian Major, Project Manager
Telephone: (808) 586-0485
2. ACCEPTING AUTHORITY: Department of Accounting and General Services
3. PROJECT LOCATION: University of Hawaii at Manoa, Honolulu, Hawaii
4. TAX MAP KEY: TMK 2-8-15:1
5. LANDOWNER: State of Hawaii (Board of Regents of the University of Hawaii)
6. AREA: 15.430 acres
7. REQUEST: Demolition or renovation and/or expansion of obsolete and inadequate facilities, and construction of new College of Education facilities
8. ESTIMATED COST: Total cost ranges from \$50 to \$54 million (1993 dollars);
Phase I cost ranges from \$14.8 to \$16 million (1993 dollars)
9. STATE LAND USE: Urban
10. COUNTY DEVELOPMENT PLAN: Public and Quasi-public
11. COUNTY ZONING: R-5

1.0 INTRODUCTION

This Environmental Assessment (EA) has been prepared in accordance with the content requirements of Chapter 343, HRS and Title 11, Chapter 200 of the State Department of Health Administrative Rules, as the proposed action involves the use of State land and funds.

1.1 IDENTIFICATION OF THE PROPOSING AGENCY

The proposing agency is the State Department of Accounting and General Services (DAGS).

1.2 IDENTIFICATION OF THE APPROVING AGENCY

The approving agency is DAGS.

1.3 IDENTIFICATION OF AGENCIES CONSULTED IN MAKING ASSESSMENT

Listed below are the agencies and organizations consulted in the preparation of the Environmental Assessment.

FEDERAL AGENCIES

U.S. Fish and Wildlife Service

STATE AGENCIES

Office of Environmental Quality Control (OEQC)

Department of Accounting and General Services

Department of Land and Natural Resources (DLNR), State Historic Preservation Division

Department of Transportation

University of Hawaii at Manoa, Facility Planning and Management Office

University of Hawaii at Manoa, College of Education (COE)

COUNTY AGENCIES

Department of Land Utilization (DLU)

Department of Transportation Services

Department of Public Works

Department of Wastewater Management

ORGANIZATIONS

Manoa Neighborhood Board

1.4 SUMMARY OF MAJOR IMPACTS AND MITIGATING MEASURES

Potential major impacts identified in this EA include: potential for soil erosion and air pollution during construction, construction-related noise and traffic impacts, and visual related impacts. No adverse impacts are expected to: groundwater resources; surface water resources; endangered plant, bird or mammal species; significant habitats; historical/archaeological and cultural sites; the character of the surrounding area;

economic conditions; or the social environment. The following measures are proposed to mitigate the aforementioned potential impacts:

Potential for Soil Erosion. The impact of construction activities can be mitigated by conforming to strict erosion control measures, particularly those specified in the State Department of Health's Water Quality Standards, Chapter 37-A, Public Health Regulations, 1968; and the Soil Conservation Service's Erosion and Sediment Control Guide for Hawaii, 1968. Primary fugitive dust control methods include wetting down loose soil areas, good housekeeping on the job site, installation of siltation fencing along the perimeter of disturbed soil areas, and landscaping of bare soil areas after construction is completed.

Potential for Air Pollution During Construction. Short-term construction-related impacts are principally in the form of fugitive dust emissions. Department of Health regulations stipulate control measures that are to be employed to reduce this type of emission. Primary control consists of wetting down loose soil areas, good housekeeping on the job site and the prompt pavement or landscaping of bare soil areas.

Construction-Related Traffic. Construction activities will be phased to limit impact to traffic bordering the project area. Within the affected roadways, the contractors will be required to provide, install, and maintain all necessary signs and other protective facilities, which shall conform with rules adopted by the City and County of Honolulu Department of Transportation Services (DTS) guidelines. Work on any of the streets bordering the project area will be performed only between the hours of 8:00 a.m. to 3:30 p.m., Monday through Friday, unless otherwise permitted by DTS. During working hours, to the extent possible, the contractors are required to provide a lane for through traffic. During non-working hours, all trenches are required to be covered with a safe, non-skid bridging material and to the extent possible, all lanes are to remain open to traffic. Where pedestrian walkways exist, they are required to be maintained in passable condition or other facilities for pedestrians are to be provided. Passage between pedestrian walkways at intersections must also be maintained.

The pick up and drop off of Lab School students will need to be adjusted during construction periods. Presently, parents let students off in front of the University High School Building #1. Construction activities during Phase I will probably make this unfeasible. An alternative drop-off point along the perimeter of the COE Campus, but protected from traffic, will be identified prior to beginning construction.

Construction-Related Noise. Construction-period noise impacts will be mitigated through compliance with the provisions of Title 11, Administrative Rules, Chapter 43, Community Noise Control for Oahu, of the State Department of Health. The hours of construction activities will be limited, and mufflers will be required of all equipment.

Visual Impact. The construction of the two story Phase I facilities on the COE Campus will replace existing one story buildings. Therefore, the proposed facilities will be taller in height than the existing buildings. Although higher than the buildings to be replaced, the proposed new buildings will be compatible in height and design with Wist Hall. Most existing buildings which remain are two stories. The Learning Resource Center is intended to be a focal point within COE Campus.

15 SUMMARY OF ALTERNATIVES CONSIDERED

Chapter 200 of Title 11, Environmental Impact Statement Rules (11-200-17[f]) requires a reasonable discussion of "any known alternatives...which could feasibly attain the objectives of the action." Alternatives which could feasibly attain the objectives of the COE are implementation of the plan for the COE Campus as proposed in the 1987 University of Hawaii at Manoa Long Range Development Plan (LRDP), and the expansion of the COE Campus site. In addition, other alternatives which would not attain the objectives of the proposed action have been identified, these include: no action; renovation of existing facilities; and sharing facilities with the rest of the University of Hawaii Manoa Campus. Although the alternatives of implementing the LRDP and expanding the COE site could possibly meet the objectives of the proposed action, both alternatives would require the expenditure of more funds than the proposed action. In addition, expansion of the site would displace the Hawaii Public Television Station and the residents along the Diamond Head side of Hoonanea Street.

16 DETERMINATION

Based upon the findings presented in this Environmental Assessment and supporting technical studies, it is felt that the potential impacts of the construction and operation of the facilities proposed in the COE Master Plan have been sufficiently examined and discussed. After reviewing the significance criteria outlined in Section 11-200-12, EIS Rules, Contents of Environmental Assessment, it has been determined that the action is not expected to result in significant adverse effects on the natural or human environment. It is felt that further consideration of the project's impacts through the preparation of a Environmental Impact Statement is not necessary.

2.0 PROJECT DESCRIPTION

2.1 DESCRIPTION OF THE PROPERTY

The University of Hawaii at Manoa College of Education (COE) is located on 15.430 acres bounded by Metcalf Street, University Avenue, Dole Street and residences along the Diamond Head side of Hoonanea Street (Figures 1 and 2). The site is identified as TMK: 2-8-15: 1 and is owned by the State of Hawaii (Board of Regents of the University of Hawaii). Generally, most of the structures on the site are of wood construction built prior to, or during, World War II as temporary structures. The exceptions are Wist Hall, the Wist Hall Addition, the Multi-Purpose Building, Wist Annex, and the University High School #3 Building which are of masonry or concrete construction. The older, wooden buildings are deteriorating structurally, and the spaces are functionally inadequate and obsolete. These buildings also pose safety and health hazards which will worsen over time.

2.2 DESCRIPTION OF THE COLLEGE OF EDUCATION

The University of Hawaii at Manoa is the main campus of the multi-campus, state-wide system. The present enrollment is approximately 20,000 students for the regular session. One of eleven colleges (and numerous schools) comprising the University, the COE exists to develop and enhance education at all levels, including pre-school, elementary, secondary, college, and adult education.

The COE is comprised of nine instructional departments and the Curriculum Research and Development Group (CRDG). The nine instructional departments are Curriculum and Research; Educational Administration; Educational Technology; Counselor Education; Educational Foundations; Health, Physical Education, and Recreation; Special Education; Educational Psychology; and Field Services. Also under the direction of the Dean of the College are offices for Administrative Services, Student Services, and Academic Affairs. The CRDG encompasses both a Lab School and curriculum research functions, although organizationally these distinctions are blurred.

The Bachelor's in Education and Bachelor's in the Science of Recreational Leadership degrees are offered by the College, as well as Master's and Doctorate degrees in Education and Educational Psychology. The College also offers a Fifth-Year Professional Diploma program for teaching certification in elementary and secondary education. Currently the College graduates approximately 425 students a year.

The COE is a college and graduate school with the following functions:

- To prepare teachers, recreational leaders, and other educational personnel;
- To provide continuing education and training for current teachers and recreational personnel;
- To provide information for understanding educational issues to school and community groups;
- Through the CRDG arm of the College, to develop school curricula and trial demonstrations of instructional materials and methods;

• UH COLLEGE OF EDUCATION ENVIRONMENTAL ASSESSMENT •

- Through the Laboratory School (Lab School) facility of the CRDG, to conduct basic and applied research concerning issues in education.

The CRDG conducts research and development in the subject areas and concerns of the school curriculum, publishes related materials, and provides training services to Hawaii's schools. The Lab School is the principal place where CRDG's educational research and development takes place. The Lab School is a small but comprehensive laboratory center serving approximately 325 pre-school, elementary, and secondary school students.

2.3 PROJECT OBJECTIVES

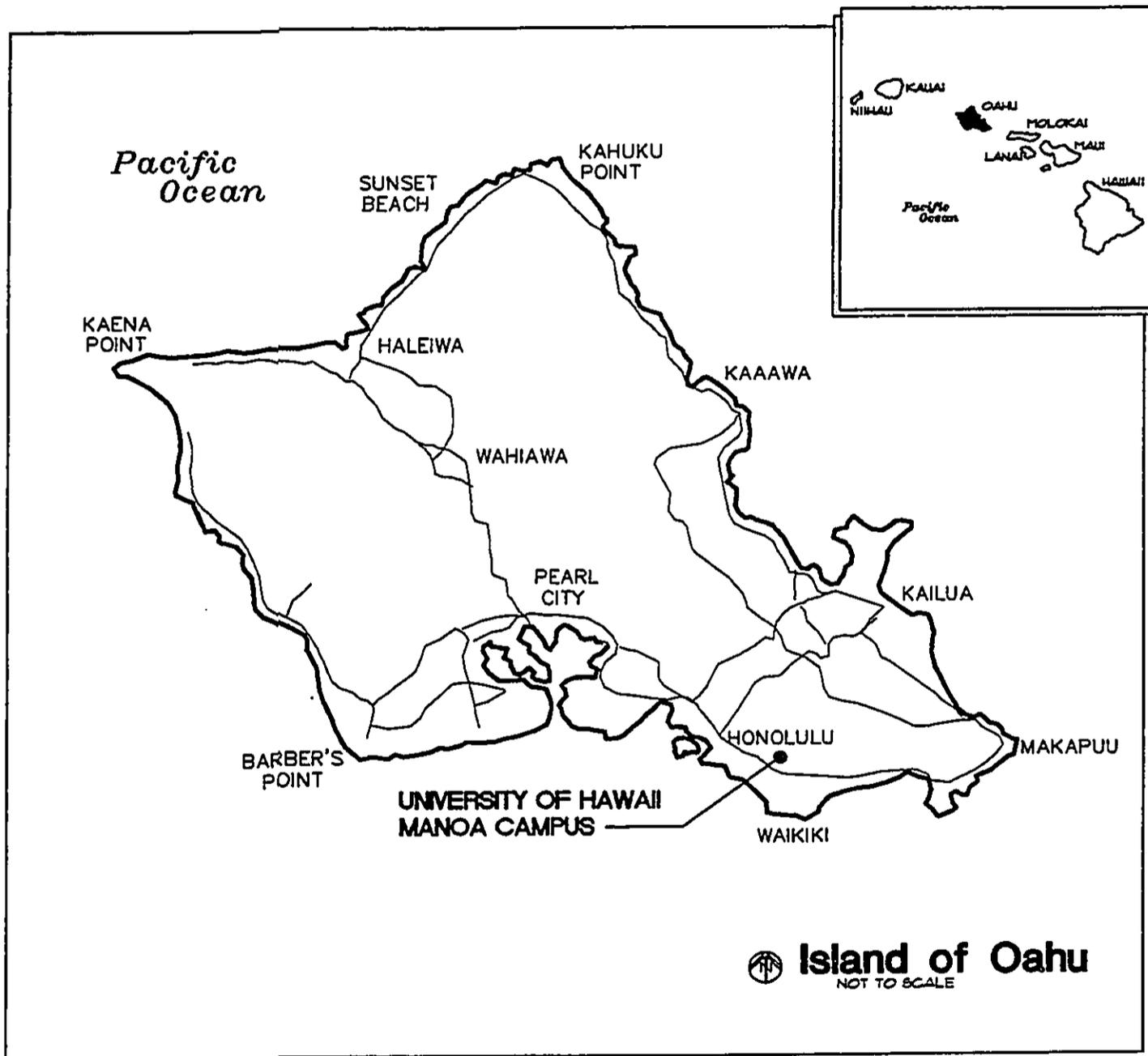
The COE's primary goal is to bring its current programs up to an acceptable level where they are academically strong and serve the needs of Hawaii by providing outstanding teachers, administrators, and support personnel for State Department of Education (DOE) schools. A measure of the College's effectiveness in achieving this goal would be by attaining national accreditation from the National Council for Accreditation of Teacher Education. Accreditation is presently hampered by a severe lack of modern, quality facilities. Present facilities are seriously overcrowded, noisy, hot and are inappropriately designed for teaching with modern tools and equipment, such as computers and audio/visual equipment. Although the renovation of Wist Hall eliminated many of the physical deficiencies, expansion and additional improvements are necessary. In addition, the Lab School needs quality facilities on par with other State public schools.

Another of the College's major goals is to graduate an additional 125 students a year, increasing its annual graduation figure from 425 to 550 students. This is because the College anticipates receiving additional State money to expand its enrollment to help alleviate the existing and projected State teacher shortage on Oahu. To accomplish this goal, as well as to meet the need for more time for faculty research, it will be necessary to increase the number of faculty within the College.

Due to the planned expansion of COE educational programs, as well as the need to improve physical facilities as a condition toward attaining national accreditation, major new construction, expansion and renovation, as well as the phased demolition of many of the older structures, is being proposed on the site.

2.4 UNIVERSITY OF HAWAII, MANOA CAMPUS LONG RANGE DEVELOPMENT PLAN

In 1987, the University of Hawaii Board of Regents adopted the Long Range Development Plan (LRDP) for the University of Hawaii Manoa Campus, to guide campus development through the year 2010. The LRDP included the College of Education within its planning area. However, since the adoption of the LRDP in 1987, COE program requirements have changed. Also, changing economic conditions necessitated reviewing the plan for the COE site as shown on the 1987 LRDP. In May 1994 the Board of Regents adopted a comprehensive revision of the LRDP which included building configuration changes for the College of Education site.

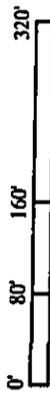
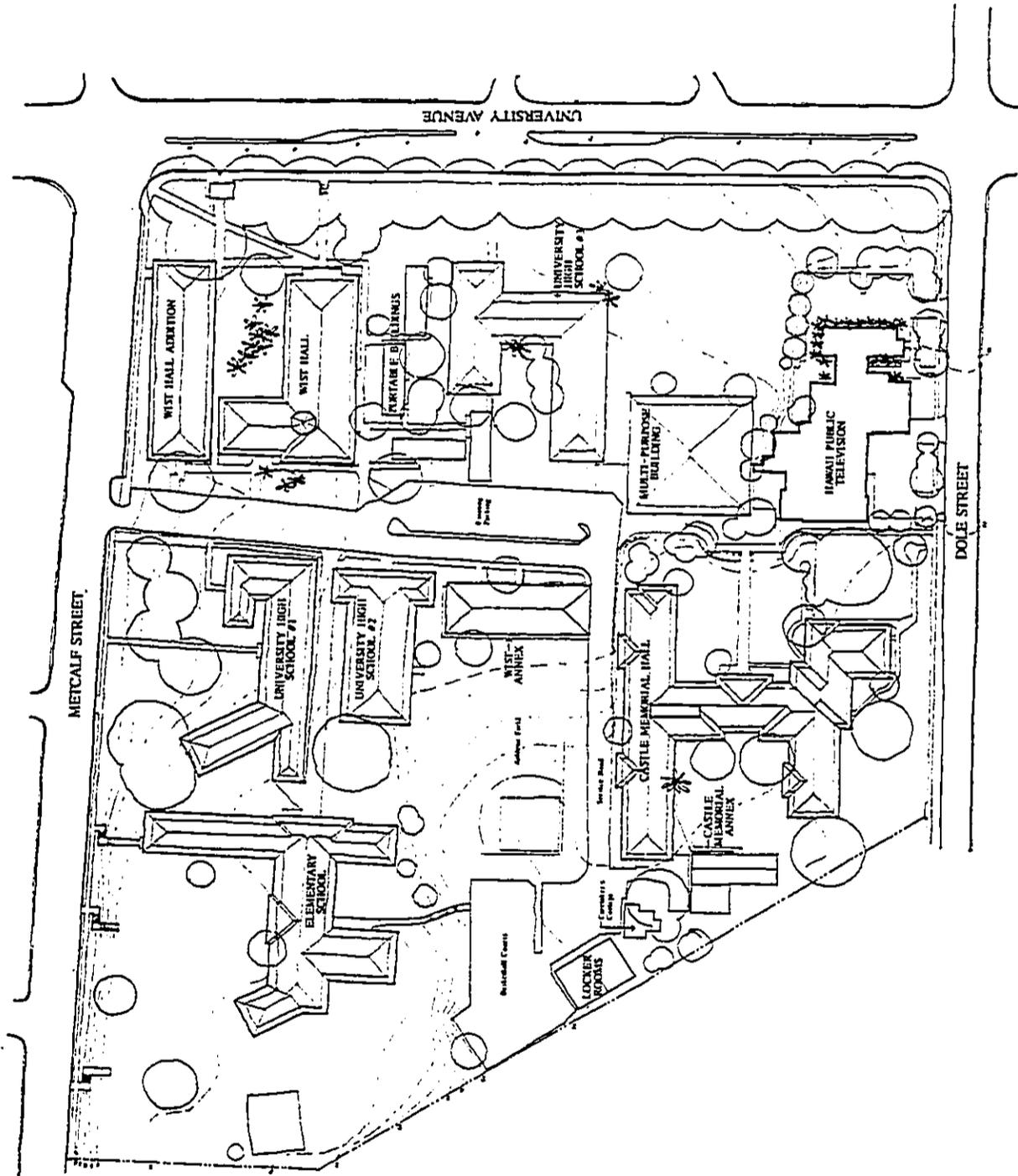


Location Map

College of Education/University Lab School

Figure 1

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000



Existing Site Conditions

College of Education/University Lab School

Figure 2

2.5 COLLEGE OF EDUCATION MASTER PLAN

The LRDP notes that due to the separation of the COE site from the rest of the Central Campus of the University of Hawaii at Manoa, and the general self-enclosed characteristic of the site (delineated by three major streets), the COE site should be treated as a campus within the greater Manoa Campus. The LRDP recommends that only Wist Hall, Wist Hall Addition, and the Hawaii Public Television Building be retained in implementing the plan for the COE site.

Working closely with the College, a revised plan has been prepared for the COE Campus (refer to Figure 3) which allows for phased development and the retention of Wist Hall, Wist Hall Addition, University High School #3, the Multi-Purpose Building, Castle Memorial Hall, Castle Memorial Annex, and the Hawaii Public Television Building.

The design concept for the COE is to create a closely knit group of two- to three-story College and Lab School buildings which are arranged around several large, outdoor courtyard spaces. Buildings serving the College and those serving the Lab School would be grouped to avoid inordinate mixing of College and Lab School students. Buildings within the campus would be linked by ground floor and second floor arcades to accommodate physically challenged students and staff, and to provide more efficient circulation of College and Lab School students.

The COE Master Plan (Figure 3) shows the location of the various proposed facilities. Proposed facilities include:

- Learning Resource Center;
- Lab School Classrooms (Phase I Facilities);
- Parking facilities;
- University High School #3 Addition and Renovation;
- Drama/Auditorium Music Facilities Addition (renovation and addition to the Multi-Purpose Building);
- Physical Education/Athletics/Gymnasium; and
- Arts Facilities.

The above proposed facilities will require the phased removal of the following existing buildings:

- University High School #1 (to be replaced by the Lab School Classrooms [Phase I Facilities]);
- University High School #2 (to be replaced by the Lab School Classrooms [Phase I Facilities]);
- Wist Annex (to be replaced by the Phase I Facilities);
- Wist Hall "Portables" (to be replaced by the University High School #3 Addition and Renovation); and
- Elementary School (to be replaced by the Physical Education/Athletics/Gymnasium and the Arts Facilities).

Existing buildings that remain in the Master Plan are:

- Wist Hall;
- Wist Hall Addition;
- Castle Memorial Hall;
- Castle Memorial Annex;
- University High School #3 (addition and renovation);
- Multi-Purpose Building (addition and renovation);
- Caretaker's Cottage; and
- Hawaii Public Television Building.

2.6 PHASING

In 1991, the Hawaii State Legislature approved an appropriation of \$11.4 million for constructing the first phase of the COE Master Plan. Additionally, \$5 million has been requested from the Federal government for the project, for a total budget of \$16.4 million for the construction of Phase I. Additional funding will be requested in upcoming biennium budget sessions of the State Legislature to complete the remaining phases of the COE Master Plan. Based on current needs, college classrooms and research functions are to be built in the first phase. Arts, Drama, Auditorium, Music, Physical Education, Athletics, and Gym facilities, will be built in subsequent phases.

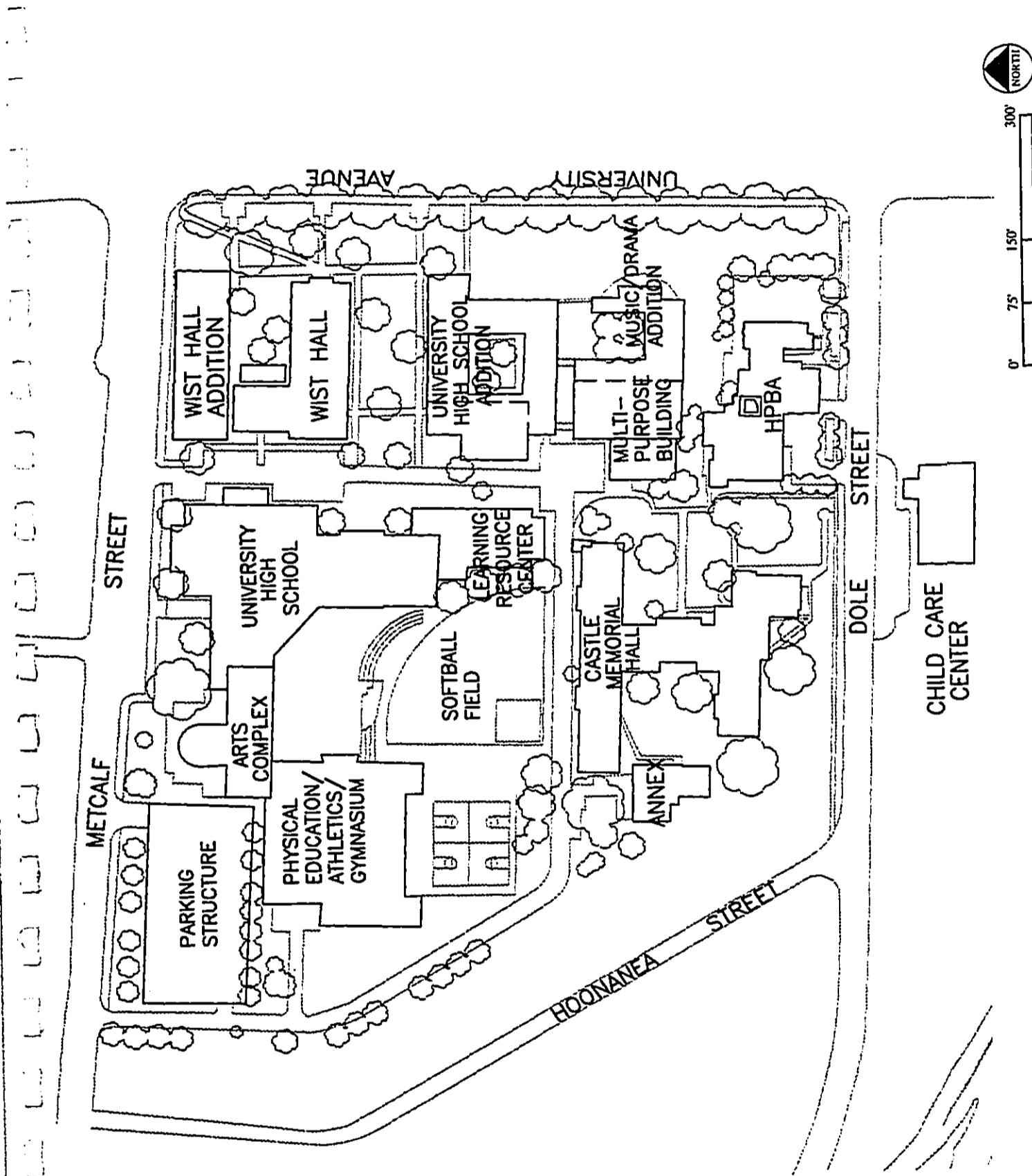
Figures 4 and 5 present the COE Master Plan from Phase I to ultimate build-out in Phase III.

2.6.1 Phase I

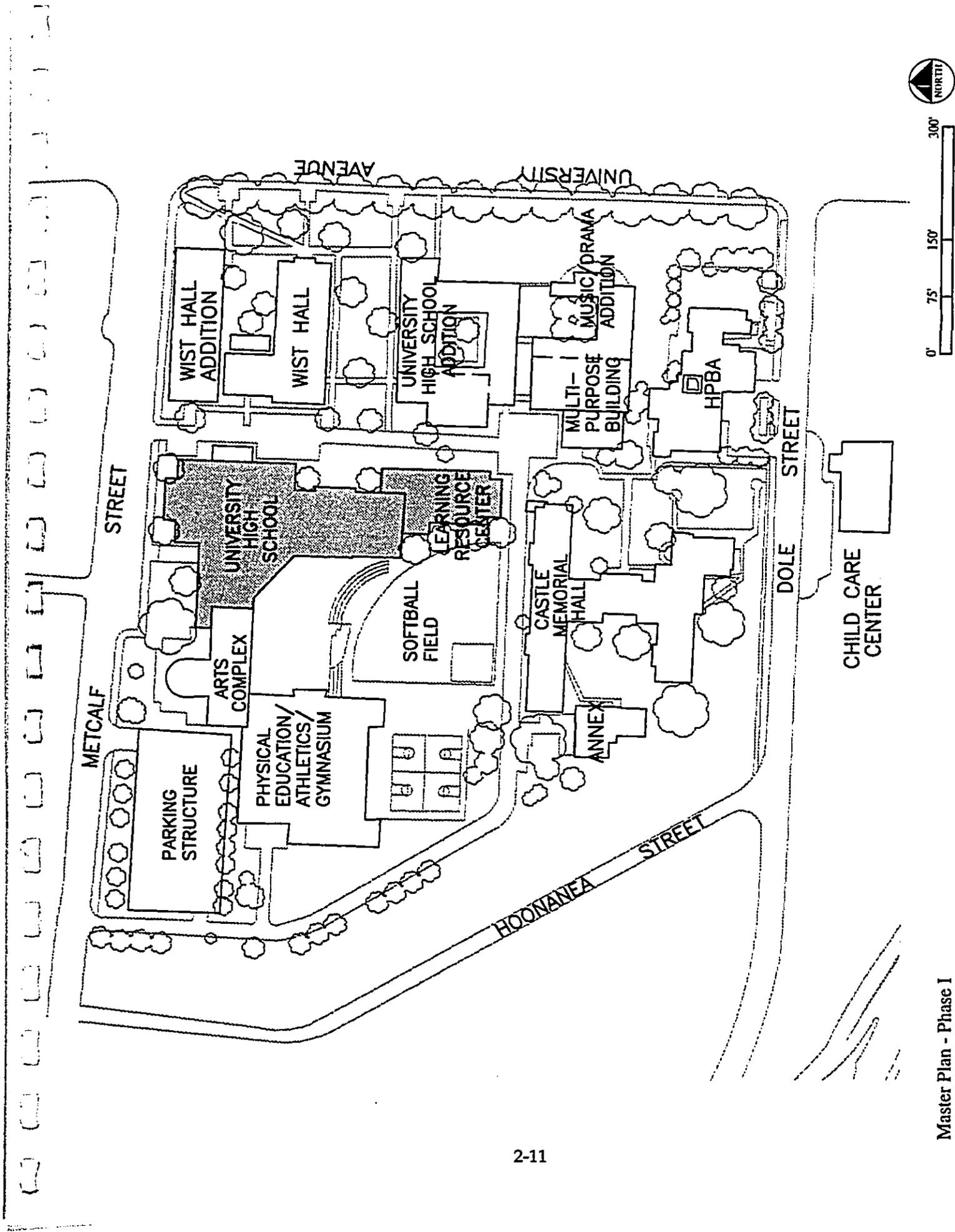
The COE Master Plan locates the new Learning Resource Center to be built during Phase I at what is presently occupied by the University High School #1 Building. The first floor of the Learning Resource Center, the more public floor, is to be primarily dedicated to the curriculum resource collection, and the second floor is for outreach program offices, HITS classroom for television broadcasting, a classroom laboratory for vocational education, and a microcomputer lab.

The University High School Buildings #1 & #2 will have to be demolished to make room for the new Lab School classroom and office facilities of Phase I. The new Lab School Classroom building would include a ground floor lobby that will serve as a lounge and gathering area which will open up to a small amphitheater built on the natural slope on the ewa-makai of this building. Phase I facilities shown in the COE Master Plan accommodate all of the designated program spaces.

The Elementary School Building, which is presently largely unoccupied, would be used to provide temporary classrooms and research spaces lost in the demolition of the University High School #1 and #2 Buildings and the Wist Annex. If additional space is needed, temporary portables will be constructed on site for the duration of the



Revised Master Plan
 College of Education/University Lab School
 Figure 3



Master Plan - Phase I

College of Education/University Lab School

Figure 4

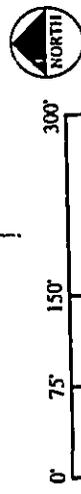
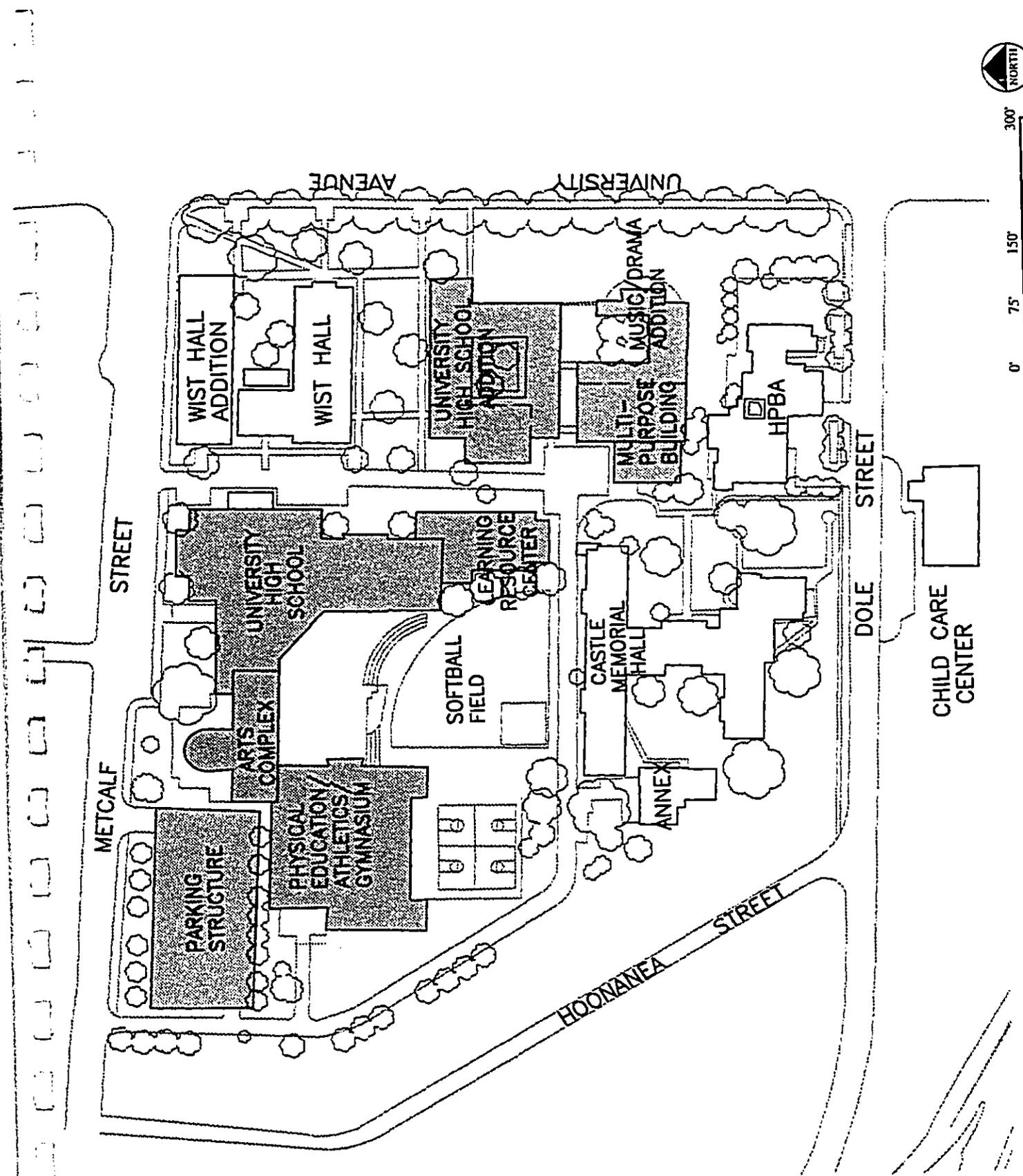


Figure 5

Completed Master Plan - Phase I, II & III
College of Education/University Lab School

construction period. After the Phase I facilities are completed, the functions temporarily housed in the Elementary School Building can be moved out, and the mauka wing of the building can be demolished to allow the construction of a surface parking lot, with a capacity for approximately 130 cars (current parking capacity on the COE Campus is about 100 cars). Depending upon the availability of funds (the proposed parking lot is currently not budgeted in Phase I), this portion of the COE Master Plan may be implemented immediately after the completion of Phase I, or prior to starting the construction of the facilities to be built during Phase II. Thus, the construction of the surface parking lot is identified as occurring during Phase IIA. Completion of the surface parking area will allow the removal of the existing parking lot in the center of the COE Campus, and its replacement with a formal, grassed quadrangle with walkways.

The COE has the option of increasing the number of parking spaces by later erecting a parking deck structure above the surface parking area. It is proposed that a new service road be constructed to service the facilities of the COE Campus. This new road would be built immediately ewa of the new parking lot/parking structure and also serve as the entry to the lower level of the parking structure. The new road should be of minimal width to accommodate emergency vehicles, refuse collection vehicles, as well as the delivery of paper and distribution of curriculum materials from the Media Production Center in Castle Memorial Annex.

The COE Master Plan shows courtyards being created by the Phase I buildings. These courtyards defined by buildings, should serve as models for developing public spaces for the rest of the COE Campus. These features are intended to contribute to the spatial integrity and compatibility of the new facilities with the existing architectural character of the greater Manoa Campus and to provide outdoor gathering spaces for students and faculty.

2.6.2 Phases II and III

Phase II facilities are to be developed after the relocation of the existing parking area. Once the existing parking area is removed, then pedestrian movement in the central portion of the COE Campus can be improved by creating a traditional campus quadrangle. This quadrangle will be bordered by Wist Hall, the Wist Hall Addition, the Learning Resource Center, the new Lab School Classrooms and the addition and renovation of the Multi-Purpose Building and University High School #3 Building. The Drama, Auditorium and Music functions are to be accommodated in a renovated and expanded Multi-Purpose Building. The University Avenue-side of the addition to the Multi-Purpose Building should maintain the existing setback distances set by Wist Hall, the Wist Hall Addition and the University High School #3 Building.

A renovated and expanded University High School #3 Building would contain additional College classrooms and research office functions. The addition would complete the enclosure of an existing courtyard space. This building should be linked to the Phase I Facilities with a two-story arcade. The arcades would help to rectify present deficient fire exit standards and handicapped access in University High School #3 Building.

• UH COLLEGE OF EDUCATION ENVIRONMENTAL ASSESSMENT •

The Arts Facilities and the Physical Education/Athletics/Gymnasium buildings would be located east of the Phase I facilities and adjacent to the new parking lot/structure. These buildings would be developed in Phase II or III after the renovation and additions to the University High School #3 and the Multi-Purpose buildings, depending upon the timing of funding. Another courtyard space, dominated by a large, existing banyan tree, could be created by this juxtaposition of these new structures, and extends the pattern of spatial interplay.

Eventually, limited renovation of Castle Memorial Hall will be necessary to meet practical building and accessibility standards. The phasing of this renovation has not been determined as it may be undertaken at any time without adversely affecting other phases of the COE Master Plan implementation.

No move is planned for the Media Production Center, which is presently located in the Castle Memorial Annex. However, it should be noted that the Annex needs to remain accessible to delivery vans for pickup of curriculum materials and to receive paper and other supplies.

Due to funding questions the new Lab School will be built first. The Learning Resource Center portion will commence construction when Federal funding sources are obtained. Wist Annex will be demolished at that time.

2.7 DESCRIPTION OF CONSTRUCTION DURING PHASE I

Construction of the proposed Learning Resource Center and the new Lab School Classrooms will require the demolition of three existing structures (University High School #1 Building, University High School #2 Building, and the Wist Annex). After the aforementioned buildings are demolished, the site will be graded, leaving the four existing kiawe trees in front of the University High School #1 Building and the large banyan tree east of the building. To avoid damage during construction, the root zones of these trees will be protected. The grading operations will conform with the City's requirements for grading, soil erosion and sediment control under Chapter 23, Revised Ordinances of Honolulu.

Excavations will be required for constructing building foundations, and installing electrical and communication cables, water, wastewater, and drainage utilities. Additional excavation work may be necessary along Metcalf Street to connect proposed utilities to existing utility lines. Excavated materials are expected to be used on-site. If large rocks are encountered, it may be necessary to conduct drilling to remove them. Rock debris will be utilized on-site, if possible, and not transported off-site for disposal.

Construction of the new facilities will probably involve reinforced concrete structures with CMU and gypsum board partitions and built-up roofing.

The proposed facilities will be landscaped as soon as possible. The existing four large kiawe trees and the large banyan tree will be retained as major elements of the landscape plan for the facilities proposed during Phase I.

2.8 ESTIMATED COST OF CONSTRUCTION

Based on a construction cost estimate of \$185 to \$200 per square foot (in 1993 dollars), the estimated cost of construction for all of the facilities proposed in the COE Master Plan ranges from \$50 million to \$54 million. The cost for constructing the Phase I facilities alone is estimated at \$12.6 million in 1993 dollars.

The cost for a new parking area is not included in the estimates above. A separate estimate for this cost is approximately \$1.75 million (1992 dollars) including the cost of demolition and reconstruction of the mauka wing of the Elementary School Building, construction of a surface parking area as shown on the COE Master Plan (Figure 4), and a new service road from Metcalf Street to the termination of the existing service road at the basketball practice courts. Necessary electrical work, such as parking area lighting, is included in the estimate.

Also not included in the Phase I cost estimate is the renovation of Castle Memorial Hall for voluntary compliance with fire and life safety codes. These latter improvements have been estimated to cost approximately \$130,000 (1991 dollars).

2.9 ESTIMATED SCHEDULE OF COMPLETION FOR PHASE I

Preparation of construction documents is estimated to require approximately 12 months, not including plan review, City and County permit approval, and bidding/negotiation. Construction could begin approximately 18 months after the beginning of design, and it is anticipated that construction would take approximately 20 months.

3.0 DESCRIPTION OF THE ENVIRONMENTAL SETTING, ANTICIPATED IMPACTS, AND MITIGATIVE MEASURES

3.1 CLIMATE

3.1.1 Existing Conditions

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

Precipitation is seasonal. The adjusted median annual rainfall for this location amounts to approximately 30 inches. The months of December through April typically have the most rainfall.

3.1.2 Anticipated Impacts and Mitigative Measures

The proposed project will have no effect on climatic conditions, and no mitigative measures are required.

3.2 TOPOGRAPHY

3.2.1 Existing Conditions

Elevations on the site range from 40 feet above mean sea level (msl) at Dole Street, to approximately 80 feet above msl in the mauka-Diamond Head portion of the site at Metcalf Street and University Avenue. The general topography of the COE Campus site is shown on Figure 2.

3.2.2 Anticipated Impacts and Mitigative Measures

Construction of the new facilities proposed in the COE Master Plan will not require substantial alteration of the existing topography of the site. Grading will be required to construct the new educational facilities, sidewalks, and utilities. In order to construct the facilities proposed in Phase I, approximately 2.0 acres will need to be graded.

All grading operations will be conducted in compliance with dust and erosion control requirements of the City and County of Honolulu Grading Ordinance. A Grading Permit must be obtained from the City and County of Honolulu in order to begin construction. During Grading Permit review and approval the grading plans for the site are reviewed by the Department of Public Works and specific conditions may be attached.

3.3 SOILS

3.3.1 Existing Conditions

According to the U.S. Department of Agriculture Soil Conservation Service (SCS), soils on the property are comprised of Makiki Stoney Clay Loam. This series consists of well-drained soils, and this particular soil type is found on slopes of 0 to 3 percent. Stones make up about 15 percent of this soil type by volume. The depth of the underlying bedrock or ash varies from 20 to 60 inches.

3.3.2 Anticipated Impacts and Mitigative Measures

The impact of the proposed construction on soils is limited to the potential for erosion. Clearing and grubbing activities during construction will temporarily disturb the soil retention values of the existing vegetation, exposing the soils to erosional forces. The impact of construction activities on soils can be mitigated by practicing strict erosion control measures, particularly those specified in the following:

- City and County of Honolulu Grading Ordinance
- State of Hawaii, Department of Health, Water Quality Standards, Chapter 37-A, Public Health Requirements (1968);
- USDA Soil Conservation Service, Erosion and Sediment Control Guide for Hawaii (1968).

Primary fugitive dust control methods include wetting down loose soil areas, good housekeeping on the job site, and prompt landscaping, covering or paving of bare soils in areas where construction is completed.

3.4 DRAINAGE AND WATER QUALITY

3.4.1 Existing Conditions

According to the City and County of Honolulu Flood Insurance Rate Map, the COE Campus is located within Zone X, or areas outside of the 500-year flood plain. No off-site stormwater runoff flows onto the COE Campus. On-site runoff either flows to University Avenue and Dole Street, where it is collected by the street gutter and stormwater drainage system or to the Ewa boundary wall (adjacent to houses fronting Hoonanea Street), along a gutter, through a short 30-inch diameter culvert behind Castle Memorial Annex, along another segment of wall gutter, and then into a drop intake which connects to the City's drain on Dole Street. The system's capacity is adequate for the anticipated 39.6 cubic feet per second (cfs) which would be generated by a 10-year storm. No major drainage problems are associated with existing conditions.

3.4.2 Anticipated Impacts and Mitigative Measures

During construction, when soil is exposed and there is a heavy storm, there is a potential for runoff to carry soil to downstream sources. Strict adherence to erosion control measures (outlined in 3.3.2) will minimize the impact of silt runoff on surface water quality during construction activities.

Long-term impacts should be insignificant. Implementation of the COE Master Plan will not significantly alter the character of runoff surface (replacing existing buildings, pavement, and landscaping with the same types of land uses). Overall site coverage by the new two- and three-story buildings will be approximately equal to the land area occupied by the existing one-story buildings they will replace.

3.5 FLORA AND FAUNA

3.5.1 Existing Conditions

The project area is urban in character predominated by school activities, structures and streets. Vegetation consists primarily of campus-type landscaping, including: Monkeypod (*Samanea Saman*), Elephant Ear (*Enterolobium cyclocarpum*), Royal Ponciana (*Delonix regia*), Royal Palm (*Roystonea regia*), Shower Tree (*Cassia sp.*), Satin Leaf, Banyan (*Ficus retusa*), Mock Orange (*Murraya paniculata*), Kiawe (*Prosopis pallida*), African Tulip (*Spathodea campanulata*), Plumeria (*Plumeria spp.*), Wiliwili (*Erythrina sp.*) and Coconut (*Cocos nucifera*). Kiawe and Monkeypod trees are found primarily along Metcalf Street and University Avenue, respectively. There are two large Banyan trees on the COE campus: one at Castle Memorial Hall and one near Metcalf Street.

Within this urban environment, bird species sighted or presumed to frequent the project area are those common to urban Honolulu, including: lace-necked and barred doves, house sparrows, common mynahs, cardinals and Japanese white-eyes. Other animals presumably found within the project area include domestic pets and strays, mongooses, rats and mice. No rare, endangered, or threatened plant or animal species are presently known to exist on the project site.

3.5.2 Anticipated Impacts and Mitigative Measures

Larger trees on the site will be preserved and protected as much as possible from damage or destruction during the construction process. Erection of appropriate barriers around these trees should preclude the burial of soil around their root zones, or damage by vehicles and equipment.

The proposed parking area (to be built after the completion of Phase I) should be designed to minimize removal of as many of the large Wiliwili trees in front of the Elementary School Building as possible.

Since the vegetation within the project area consists almost entirely of landscaped materials, the impact of the proposed project on flora will primarily consist of removal of some of the existing landscaping and its eventual replacement with new landscaping.

It is expected that during construction, birds that frequent each building site will move to nearby undisturbed areas and will return when disturbances cease. Similarly, stray domestic animals, mongooses, rats and mice will move to adjoining areas during construction and return when construction is completed.

3.6 ARCHAEOLOGICAL/HISTORICAL RESOURCES

3.6.1 Existing Conditions

According to the State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources (DLNR), no archaeological sites are known to exist on the project site. Castle Memorial Hall, built in 1941, Wist Hall, and Wist Annex are listed on the State Historic Register. Wist Hall and Wist Annex are currently undergoing renovation. In a future phase of the COE Master Plan, Castle Memorial Hall is scheduled for renovation to meet various building code deficiencies.

In a comment letter submitted by SHPD, it was noted that University High #1 and #2 Buildings, although not listed on either the Hawaii or National Registers of Historic Places, may have potential historic significance. SHPD stated that historic properties may be considered important for their information. A copy of the comment letter is included in the Appendix of this EA.

Recent conversations with SHPD included a discussion on the potential historic value of the Elementary School Building (see Appendix, 11-3-94 Record of Conversation). The Elementary School Building is not listed on the Hawaii or National Registers of Historic Places, but may have some historic significance. As discussed in section 2.6.2 of this EA, future phases of the COE Master Plan will include the demolition of the Elementary School Building and subsequent construction of an Arts Complex and a building for Physical Education/Athletics/Gymnasium activities.

According to the University's Facilities Planning Department, there have been no findings of any kind during recent extensive construction activities in the vicinity of the COE. The site of the new School of Architecture across University Avenue from the COE has undergone extensive groundwork throughout the summer. Also, trenching for a water line occurred through the College of Education's "mini-campus"; from the interior side of Wist Hall down to Castle Memorial Hall. No evidence of historical artifacts was found during either activity.

3.6.2 Anticipated Impacts and Mitigative Measures

Since there may be some potential historic value of High School Buildings #1 and #2, further studies will be conducted to assess their values. A Historic American Buildings Survey (HABS) report including photographic documentation of the buildings and a historic summary will be completed prior to construction. The original building plans

will be located, if they exist. All documentation will be archived and SHPD will be consulted in the process.

Since the Elementary School Building may have some historic value, SHPD suggests that the Building be assessed via a HABS report. In the future, when funds become available for implementing Phases II and III of the COE Master Plan, the HABS report should be prepared prior to construction activities that will impact the Elementary School Building.

Since the COE Master Plan includes the retention of Castle Memorial Hall, Wist Hall, and Wist Annex, no impacts to archaeological or historical resources are anticipated. Furthermore, the design intent for the new structures is compatible with Wist Hall and the new structures are sited with an open field buffer from Castle Memorial Hall, thus the new buildings should have no effect upon the registered buildings. In the event that any previously unidentified historic sites such as walls, platforms, pavements and mounds, or remains such as artifacts, burials, concentration of charcoal or shells are encountered during site work and construction phases, work in the immediate area will cease and the find will be protected from further damage. The SHPD will be notified immediately to assess the impact and make further recommendations for appropriate mitigative actions, if necessary.

3.7 ROADWAYS AND TRAFFIC

3.7.1 Existing Conditions

Regional access to the University of Hawaii Manoa Campus is provided by the Lunalilo (H-1) Freeway. As previously noted, the COE Campus is a "mini-campus" included within the Manoa Campus, but physically separated from the Central Campus area by University Avenue. This six-lane divided roadway serves as an arterial road for Manoa Valley as well. The COE Campus is also bounded by two parallel streets which run in the Diamond Head-Ewa direction: Metcalf Street and Dole Street. Metcalf Street is a two-lane roadway that provides access from the McCully area and intersects with University Avenue. Dole Street is a roadway between St. Louis Heights Drive and Punahou Street that varies in width. Between Manoa Stream and Lower Campus Road, Dole street is four lanes wide. Between Lower Campus Road and University Avenue, Dole Street is five lanes wide. Ewa of University Avenue, the area occupied by the COE, Dole Street becomes two-lanes wide and remains at that width until it reaches Punahou Avenue.

The COE Campus generates College-related traffic from faculty, staff and visitors, and the Lab School generates traffic when students are dropped off and picked up. Given the relatively small population of the COE Campus (1,000 of the Manoa Campus daytime population of 30,000) and the limited number of off-street parking stalls available (approximately 100, all permit-only), COE Campus-related traffic represents a relatively small amount of the traffic in the area.

A field investigation was conducted on March 30, 1993 and April 1, 1993 to establish the baseline traffic condition on the roadways in the vicinity of the UH Manoa Campus. The study was conducted by Austin, Tsutsumi & Associates.

The field investigation consisted of a site inspection of all the roadways in the project vicinity, observation of traffic operations on the roadways, and the taking of manual turning movement counts at key roadway intersections. The traffic count survey was conducted between the hours of 6:30 AM and 8:30 AM and between 3:30 PM and 5:30 PM.

Manual counts were taken at eight (8) intersections:

- Metcalf Street/Wilder Avenue;
- University Avenue/Maile Way;
- Metcalf Street/University Avenue;
- Dole Street/East-West Road;
- Dole Street/Wilder Avenue;
- University Avenue/Dole Street;
- University Avenue /King Street; and
- Dole Street/Lower Campus Road.

In addition to the manual traffic counts, 24-hour traffic count data of roadways in the vicinity of the campus were obtained from the City Department of Transportation Services and the State Department of Transportation. Also, previously prepared traffic reports for the University were reviewed.

The traffic capacity analysis technique utilized was based upon procedures taken from the Highway Capacity Manual, 1985, (HCM) Transportation Research Board, and the "Highway Capacity Software," Federal Highway Administration. Traffic movements at intersections can be described in terms of a Level-of-Service (LOS) rating. Levels-of-Service ratings for signalized and unsignalized intersections are defined in Table 1. Generally, all of the intersections on the roadways operate at acceptable Levels-of-Service.

The existing 1993 traffic volumes and LOS ratings for the weekday AM and PM peak hours are shown in Figure 6.

In the UH Manoa Campus area, the AM peak hour of traffic occurs between 7:00 and 8:00 AM. The morning traffic demand is comprised of both University traffic (students, faculty, and staff), as well as residential traffic from the Manoa area. While the employee and residential traffic demands are work oriented, the student traffic demand is a result of both class times and parking availability. The most critical intersection in the UH Manoa Campus area is the intersection of University Avenue and Dole Street. The intersection operates at Level-of-Service (LOS) "C," however vehicles west bound approaching Dole Street experience delays of up to 45 seconds, (LOS) "E" per vehicle.

The PM peak hour of traffic occurs generally between 4:00 and 5:00 PM. This is a result of overlapping peak traffic components consisting of day students and staff leaving the Manoa Campus, "pau hana" residential traffic, and evening class students arriving at the University.

TABLE 1

**LEVEL-OF-SERVICE (LOS) DEFINITIONS
FOR SIGNALIZED AND UNSIGNALIZED INTERSECTIONS**

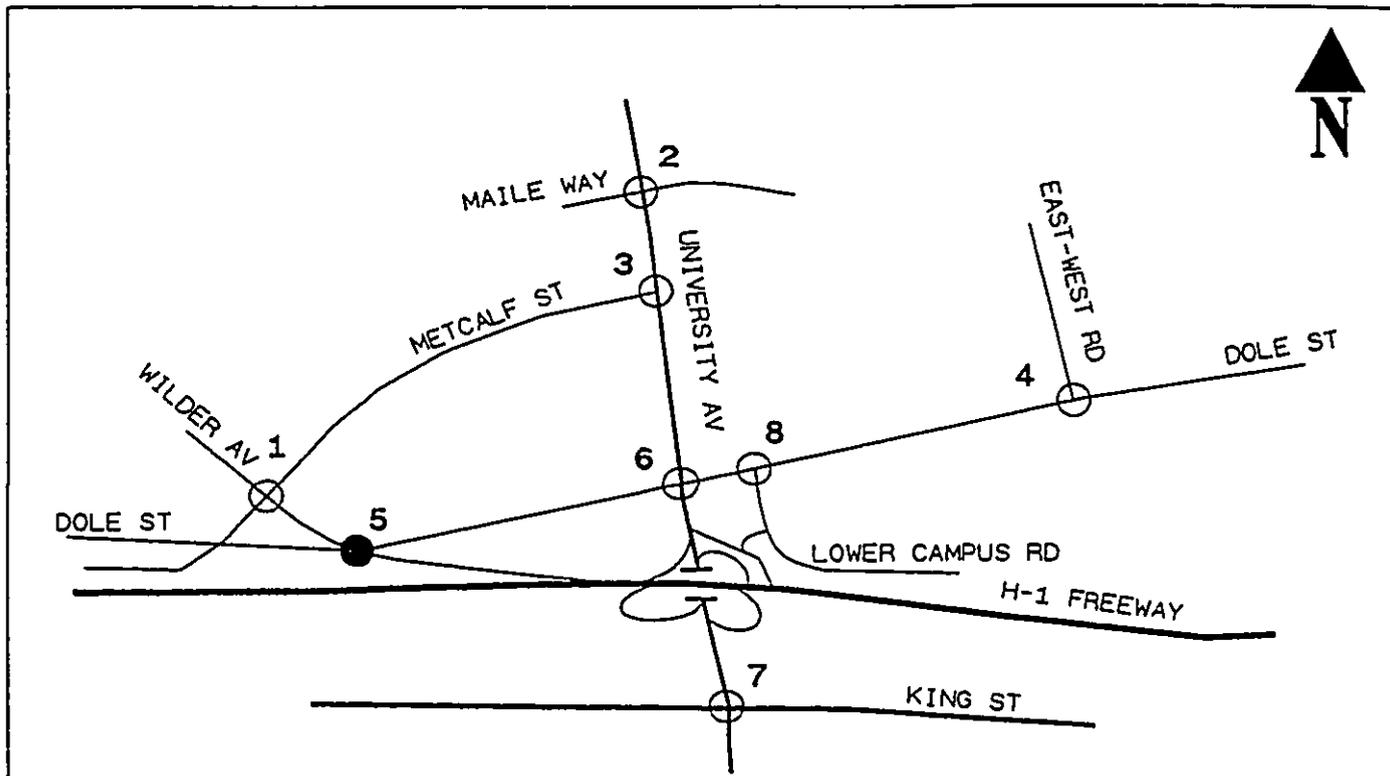
SIGNALIZED INTERSECTIONS

<u>Level-of-Service</u>	<u>Volume to Capacity Ratio</u>	<u>Interpretation</u>
A,B	0.000 - 0.700	Uncongested operations; all vehicles clear in a single cycle.
C	0.701 - 0.800	Light congestion; occasional backups on critical approaches.
D	0.801 - 0.900	Congestion on critical approaches, but intersection functional. Vehicles required to wait through more than one cycle during short peaks. No long-standing lines formed.
E	0.901 - 1.000	Severe congestion with some long-standing lines on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements.
F	>1.001	Total breakdown with stop-and-go operation

UNSIGNALIZED INTERSECTIONS

<u>Level-of-Service</u>	<u>Reserve Capacity</u>	<u>Interpretation</u>
A	>400	Little or no delay
B	300 - 399	Short traffic delays
C	200 - 299	Average traffic delays
D	100 - 199	Long traffic delays
E	0 - 99	Very long traffic delays
F	-	Extreme delays, usually warrants improvements

SOURCE: Highway Capacity Manual, 1985



○ SIGNALIZED INTERSECTION DATE OF COUNT: 3/30/93 - 4/1/93
 ● STOP-CONTROLLED INTERSECTION A/A = AM/PM PEAK HOUR LEVEL OF SERVICE

<p>1 C/B</p>	<p>2 B/C</p>	<p>3 B/B</p>	<p>4 B/B</p>
<p>5 STOP-CONTROLLED INTERSECTION</p> <p>E/B</p> <p>E/D</p>	<p>6 C/D</p>	<p>7 C/C</p>	<p>8 A/B</p>

Existing 1993 Traffic Volumes & Level of Service
 College of Education/University Lab School

Source: Austin, Tsutsumi & Associates, Inc.

Figure 6

As is the situation with the AM peak hour, the most critical intersection during the PM peak hour is University Avenue and Dole Street. The overall intersection operates at LOS "D."

The intersections surrounding the College of Education Campus that were included in the 1993 traffic study were the intersections of University Avenue at Metcalf Street and Wilder Avenue at Metcalf Street. The University Avenue/Metcalf Street intersection operates at LOS "B" during the AM peak hour and LOS "C" during the PM peak hour. The Wilder Avenue/Metcalf Street intersection operates at a LOS "C" during the AM peak hour and at LOS "B" during the PM peak hour.

3.7.2 Anticipated Impacts and Mitigative Measures

3.7.2.1 Trip Generation

Implementation of Phase I of the COE Master Plan will not immediately or directly generate additional vehicle trips. Phase I is intended to accommodate the present and generally stable Lab School enrollment, and its faculty and staff. Since the Lab School enrollment is not projected to increase, traffic from Lab School students being dropped off and picked up is not expected to increase.

Presently, some of the COE faculty and staff have permits to park in the approximately 100 stall parking lot located within the bounds of the COE. Access to the parking lot is from Metcalf Street. All permits for this lot are awarded to UH faculty and staff, none to COE students. COE students do not have parking privileges within this parking lot, therefore, the increase in enrollment will not create necessarily increase vehicle trips to the existing COE parking lot. Increase in the UH Manoa enrollment population will likely increase vehicle trips in the vicinity of the campus. The projected increase in traffic volumes were included in the 1993 Austin, Tsutsumi & Associates traffic study that is further discussed below.

Trip generation rates were taken from *Trip Generation*, 5th Edition, developed by the Institute of Transportation Engineers. The trip rates include all trips generated by the University, including faculty, staff, visitors, as well as students. The UH Board of Regents has set a maximum student enrollment of 23,000 for the University of Hawaii at Manoa. The Fall 1993 student enrollment was 20,037.

The rates listed in *Trip Generation* include all trips generated by a university including faculty, staff, and visitors, as well as students. Large universities, such as the University of Hawaii at Manoa, fall near the average rate. Because many students park in the surrounding neighborhoods and walk to classes, it is difficult to measure the number of trips generated by the Manoa Campus. The trip generation analysis has factored into its traffic projections a total full-time University of Hawaii Manoa Campus enrollment of 23,000 students. Projections for the COE are included within this university-wide enrollment increase.

The University of Hawaii Manoa campus is constructing additional housing for about 2,750 students. The accommodations for student housing should offset over one-half of the difference between the existing enrollment and the projected enrollment of 23,000.

Since these housing units will be located on campus, students will not need to drive to school, thus discounting the number of vehicle trips that would have increased as enrollment increased.

3.7.2.2 Short-term Construction Traffic Impacts

Short-term traffic impacts will occur as a result of construction-related traffic entering and exiting the COE project site. Traffic generated by construction workers will occur during the morning and afternoon hours and when workers enter and leave the project site.

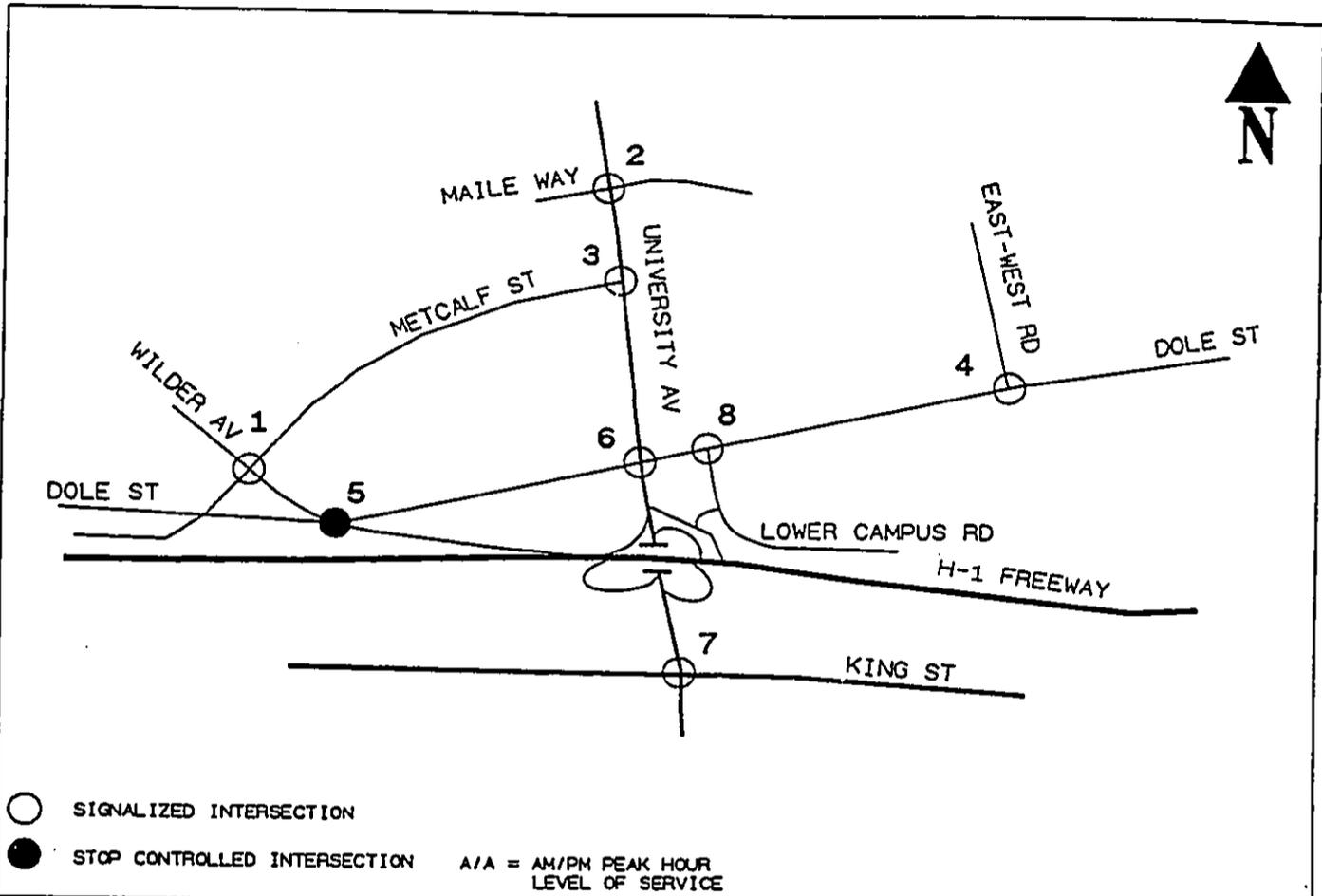
3.7.2.3 Projected Long-Term Traffic Impacts

Figure 6 shows the existing (1993) AM and PM peak hour traffic counts at various intersections around the UH-Manoa campus. Figure 7 shows the traffic forecast (year 2000) for the same intersections. Most of the intersections are expected to continue the current Level Of Service (LOS), with the exception of three intersections: Metcalf Street/Wilder Avenue; Dole Street/Lower Campus Road; and Dole Street/Wilder Avenue. Metcalf/Wilder will experience slightly longer delays in LOS during the AM peak hour, while the same will be true at Dole/Lower Campus in the afternoon. Metcalf/Wilder, which currently operates at LOS "E" in the mornings is anticipated to have even longer delays and increased congestion in the future. However, the changes in LOS at these intersections should not be attributed to COE Master Plan activities since the forecasts are traffic projections for the entire UH Manoa campus and includes traffic generated by the Manoa community. COE is not expected to dramatically increase its enrollment (refer to Section 3.12) nor its number of parking stalls, therefore will not generate significant increases in vehicular trips.

3.7.2.4 Parking Impacts

The anticipated increase in COE Campus population is expected to have a relatively small impact on demand for on-street parking and traffic. The existing COE parking area is planned to be replaced with a new parking lot/structure in the mauka-ewa corner of the COE Campus (Figure 5), fronting Metcalf Street. This project will begin after Phase I is complete. The existing grade-level parking lot in the center of the COE Campus will then be demolished. Construction of the proposed parking facilities will increase the parking capacity on the COE Campus by between 30 to 120 stalls depending on the design of the new facility.

The LRDP includes a parking plan which generally redistributes the parking towards the periphery of the Manoa Campus, and increases the number of parking spaces available from a total of 4,402 existing spaces to 7,500 spaces when all parking projects listed in the LRDP (discussed on pp. 19-20 Austin, Tsutsumi report) are complete. In the interim period, the parking situation will vary depending upon the sequencing of projects, as existing parking areas may be built upon or used for staging areas for building materials during construction.



1	2	3	4
<p>D/B</p>	<p>B/C</p>	<p>B/B</p>	<p>B/B</p>
<p>5 STOP CONTROLLED INTERSECTION</p> <p>F/C</p> <p>F/D</p>	<p>C/D</p>	<p>C/C</p>	<p>A/C</p>

Year 2000 With Project - Traffic Volumes & Level of Service

Source: Austin, Tsutsumi & Associates, Inc.

College of Education/University Lab School

Figure 7

3.7.3 Mitigative Measures

Short-Term

Construction activities will be phased to limit impact to traffic bordering the project area. Within the affected roadways, the contractors will be required to provide, install, and maintain all necessary signs and other protective facilities, which shall conform with rules adopted by the City and County of Honolulu Department of Transportation Services (DTS) guidelines. Work on any of the streets bordering the project area will be performed only between the hours of 8:00 AM to 3:30 PM, Monday through Friday, unless otherwise permitted by DTS. During working hours, to the extent possible, the contractors are required to provide a lane for through traffic. During non-working hours, all trenches are required to be covered with a safe, non-skid bridging material and to the extent possible, all lanes are to remain open to traffic. Where pedestrian walkways exist, they are required to be maintained in passable condition or other facilities for pedestrians are to be provided. Passage between pedestrian walkways at intersections must also be maintained.

The pick up and drop off of Lab School students will need to be adjusted during the Phase I construction period. Presently, parents let students off in front of the University High School #1 Building. Construction activities will probably make this unfeasible. An alternative drop-off point along the perimeter of the COE Campus, but protected from traffic, will be identified prior to beginning construction.

Long-Term

The long-term mitigation pertinent to the College of Education involve the construction of the parking structure which will alleviate some of the existing and future parking demands and the development of a safer student drop-off area. Both actions will improve traffic circulation and increase safety. The increase in student and faculty use of the improved facilities is partially mitigated by the fact that many of these students will tend to be non-traditional students and the trend for classes and activities is towards scheduling these events at off-peak, evening and weekend hours.

In 1993, roadway improvements on University Avenue and on Dole Street were completed. An additional exclusive right turn lane from University Avenue onto Dole Street was constructed. This lane provided an optional through/right-turn lane north-bound/Diamond Head bound traffic. Improvements to Dole Street included the construction of an auxiliary lane between University Avenue and Lower Campus Road. This new auxiliary lane created an exclusive right turn lane from Dole Street onto Lower Campus Road.

3.8 UTILITIES

3.8.1 Existing Conditions

A Utilities Master Plan for the University of Hawaii Manoa Campus was prepared by Fukunaga and Associates to coordinate utilities development with new building facilities.

3.8.1.1 Water

The Board of Water Supply (BWS) owns and operates two separate water supply systems in the Manoa area. The BWS high pressure system, at an elevation of 405 feet above mean sea level, generally serves the central University of Hawaii Manoa Campus area. The low pressure system, at an elevation of 180 feet, serves the COE Campus and the Makai Campus of the University of Hawaii. Based upon the BWS policy of limiting service zones to 100 feet below the reservoir spillway, the dividing line between the two service zones lies along the 80-foot elevation, or slightly above Dole Street and Metcalf Street. The COE Campus presently suffers from low water pressure in most of its buildings.

3.8.1.2 Wastewater

The COE Campus is presently served by a network of four-, six-, and eight-inch sewer lines which connect to a 12-inch sewer main running below University Avenue. A network of four- and six-inch lines serve Castle Memorial Hall and the Elementary School Building in the far Ewa portion of the COE Campus, and empty directly to a 60-inch sewer tunnel below Dole Street. The COE Campus sewer system appears to be adequately sized for current demands.

3.8.1.3 Stormwater Drainage

A description of the existing stormwater drainage system is provided in 3.4.1. The capacity of the existing drainage system is adequate for the runoff which would be generated by a 10-year storm (approximately 39.6 cubic feet per second).

3.8.1.4 Electrical Power

While most of the buildings on the COE Campus are connected to the University of Hawaii's primary electrical system, some of the buildings are serviced directly by HECO. The buildings serviced directly by HECO are the Elementary School Building, Castle Memorial Hall and Castle Memorial Annex.

3.8.2 Anticipated Impacts and Mitigative Measures

3.8.2.1 Water

During the processing of the various building permits for future facilities, the Board of Water Supply will determine whether there is adequate supply to meet future demands. To improve the existing water transmission system, it is proposed that a new 12-inch

water line be constructed for the COE Campus which will connect to a new 12-inch main running below University Avenue. The proposed COE Campus water line will have a loop configuration intended to facilitate pipeline repairs and to serve all of the existing and future buildings planned for the COE Master Plan. The proposed improvements to the water transmission system within the COE Campus is expected to correct existing deficiencies, including the lack of adequate coverage by fire hydrants and insufficient fire flows.

3.8.2.2 Wastewater

The existing wastewater system will be upgraded as necessary to fulfill State and County standards. No major changes to the present system are anticipated.

3.8.2.3 Stormwater Drainage

Runoff generated on-site is not expected to increase appreciably as a result of the implementation of the COE Master Plan. Implementation of the COE Master Plan will not significantly alter the character of surface (replacing existing buildings, pavement, and landscaping with the same). Overall site coverage by the new two- and three-story buildings will be approximately equal to the land area occupied by the existing one-story buildings they will replace. Consequently, no changes to the present system are proposed.

3.8.2.4 Electrical Power

To accommodate projected demand for electricity on the University of Hawaii Manoa Campus (including the proposed facilities at the COE), the construction of an additional electrical substation and switching station is under construction in the Makai Campus. This station is scheduled for completion in 1994.

3.9 NOISE

3.9.1 Existing Conditions

Existing noise conditions have not been monitored in the vicinity of the COE Campus. However, administrators at the COE and the Lab School have reported that traffic noise from University Avenue often disrupts classes held in the University High School #3 Building if classroom windows are open. Within the COE Campus, the only significant source of noise are the Lab School student lockers which can disrupt nearby classes if many are opened or closed simultaneously.

3.9.2 Anticipated Impacts

Development of the proposed educational facilities will involve construction activities, such as demolition, clearing, grubbing, excavating, grading, structure erection/pouring, finishing, and paving. The various phases of construction may generate significant amounts of noise, and the actual amounts are dependent upon the methods employed during each phase. Earth moving equipment, such as bulldozers and diesel trucks will

probably be the loudest equipment used during construction, generating noise levels as high as 95 dB at the nearest COE and Lab School areas, and somewhat less in the surrounding residential areas. However, such exposures are only a short-term condition, occurring during normal working hours. Since construction noise will occur during working hours, and as it attenuates with distance, it will disrupt COE and Lab School classes to a much greater extent than the neighboring residential area. There are no hospitals or other similar facilities nearby that would be affected by construction noise from the project area.

Peak hour traffic volumes on University Avenue resulting from the implementation of the LRDP are expected to decrease somewhat over the next three to four years. However, the noise impact of this change on the COE will be negligible.

3.9.3 Mitigative Measures

Construction-period noise impacts will be mitigated through compliance with the provisions of Title 11, Administrative Rules, Chapter 43, Community Noise Control for Oahu, of the State Department of Health. It is recommended that the construction activities comply with the following DOH regulations:

"No... construction activities creating excessive noise [shall be allowed] before 7:00 a.m. and after 6:00 p.m. of the same day."

"No ... construction activities which emit noise in excess of ninety-five dBA ... [shall be allowed] except between 9:00 a.m. and 5:30 p.m. of the same day."

"No ... construction activities which exceed the allowable noise levels on Sundays and on... [certain] holidays [shall be allowed]. Activities exceeding ninety-five dBA shall [also] be prohibited on Saturdays."

All construction equipment and on-site vehicles or devices requiring an exhaust of gas or air should be equipped with mufflers.

Traffic noise from heavy vehicles travelling to and from the construction site must be minimized near existing residential areas and schools, and must comply with the provisions of Title 11, Administrative Rules, Chapter 42, Vehicular Noise Control for Oahu.

Traffic noise from University Avenue is not expected to affect long-term activities in Phase I facilities which are located 300 feet away from University Avenue and shielded by COE buildings and vegetation in between.

3.10 AIR QUALITY

3.10.1 Existing Conditions

Present air quality in the project area is mostly affected by air pollutants exhausted from motor vehicles, with carbon monoxide being the most abundant of the air pollutants emitted. No recent air pollutant monitoring data are available for the Manoa Campus area. However, a 1989 Air Quality Assessment for the UH Arena project at the Makai Campus by Barry D. Root and Barry D. Neal made reference to records of carbon monoxide concentrations at the DOH monitoring station in Waikiki, at Kalakaua Avenue, near the intersection with Saratoga Avenue. Their report stated that carbon monoxide concentrations recorded at the Waikiki station "are likely indicative of concentrations that occur at traffic congested locations in the project area due to the relatively short distance between the two locations and the similarity of dispersal conditions." A summary of carbon monoxide measurements from this monitoring station is presented in Table 2. "There were six exceedances of the State 1-hour or 8-hour AAQS during 1985. No exceedances of the State 1-hour or 8-hour AAQS for carbon monoxide were recorded during 1986 and 1987."

For carbon monoxide, both State and Federal regulations have established maximum allowable concentrations for averaging times of eight hours and one hour. State of Hawaii Ambient Air Quality Standards (AAQS) for carbon monoxide are considerably more stringent than the comparable Federal AAQS. The Federal 8-hour standard is 10 mg/m³ while the State standard is 5 mg/m³. The Federal 1-hour standard is 40 mg/m³ while the State standard is 10 mg/m³.

3.10.2 Anticipated Impacts

The principal source of potential short-term air pollution will be fugitive dust emissions. Site preparation and earth moving will create particulate emissions as will building and on-site road construction. Additionally, there is a potential for additional air pollution from construction equipment and vehicles, and from vehicular emissions due to traffic disruptions from construction equipment. On-site mobile and stationary construction equipment will also emit some air pollutants in the form of engine exhausts. The larger types of equipment are usually diesel-powered. Nitrogen oxide emissions from diesel engines can be relatively high compared to gasoline-powered equipment, but the standard for nitrogen dioxide is set on an annual basis and is not likely to be violated by short-term construction equipment emissions. Carbon monoxide emissions from diesel engines, on the other hand, are very low and should be relatively insignificant compared to normal vehicular emissions at the intersection of Dole Street and University Avenue.

Long-term impacts to air quality from COE Campus-related traffic are expected to be minimal, due to the relatively small increase in traffic expected to be generated as a result of implementing the COE Master Plan. Proposed measures to improve traffic flow at the intersection of Dole Street and University Avenue, and to reduce the amount of traffic to and from the Manoa Campus, should result in an improvement of air quality at the Dole Street/University Avenue intersection.

TABLE 2

SUMMARY OF CARBON MONOXIDE MEASUREMENTS
AT DOH MONITORING STATION IN WAIKIKI

Parameter	YEAR		
	1985	1986	1987
No. of Days of 1-hour Samples	292	352	354
Range of Daily Max. 1-hour Values (mg/m ³)	0.6 - 14.4	0.9 - 9.0	0.6 - 8.3
Avg. Daily Maximum 1-hour Value (mg/m ³)	4.7	3.0	2.3
No. of State 1-hour AAQS Exceedances	6	0	0
No. Days of 8-hour Samples	-	282	223
Range of Daily Max. 8-hour Values (mg/m ³)	-	0.6 - 4.5	0.3 - 4.5
Avg. Daily Maximum 8-hour Value (mg/m ³)	-	1.9	1.8
No. of State 8-hour AAQS Exceedances	-	0	0

SOURCE: State of Hawai'i Department of Health (DOH)

3.10.3 Mitigative Measures

The impact of construction activities will be mitigated by conforming to strict erosion control measures, particularly those specified in the State Department of Health's (DOH) Water Quality Standards, Chapter 37-A, Public Health Regulations, 1968; and the U.S. Soil Conservation Service's Erosion and Sediment Control Guide for Hawaii, 1968. Primary fugitive dust control measures include wetting down loose soil areas, good housekeeping on the job site and the prompt paving or landscaping of bare soil areas. In addition, State of Hawaii Air Pollution Control Regulations require that fugitive dust emissions be controlled to such an extent that no visible emissions of fugitive dust from construction activity should occur beyond the property line.

Increased vehicular emissions due to disruption of traffic by construction equipment and/or commuting construction workers can be alleviated by moving equipment and personnel to the site during off-peak traffic hours.

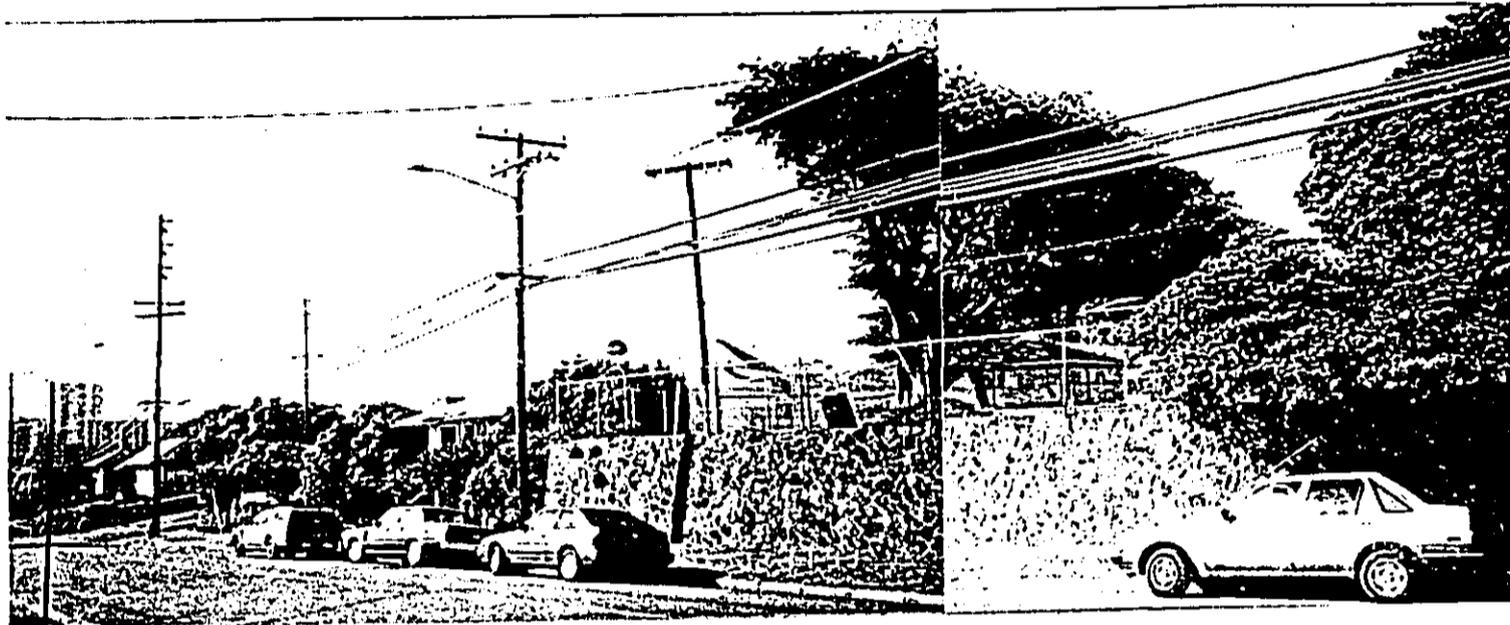
3.11 VISUAL RESOURCES

3.11.1 Existing Conditions

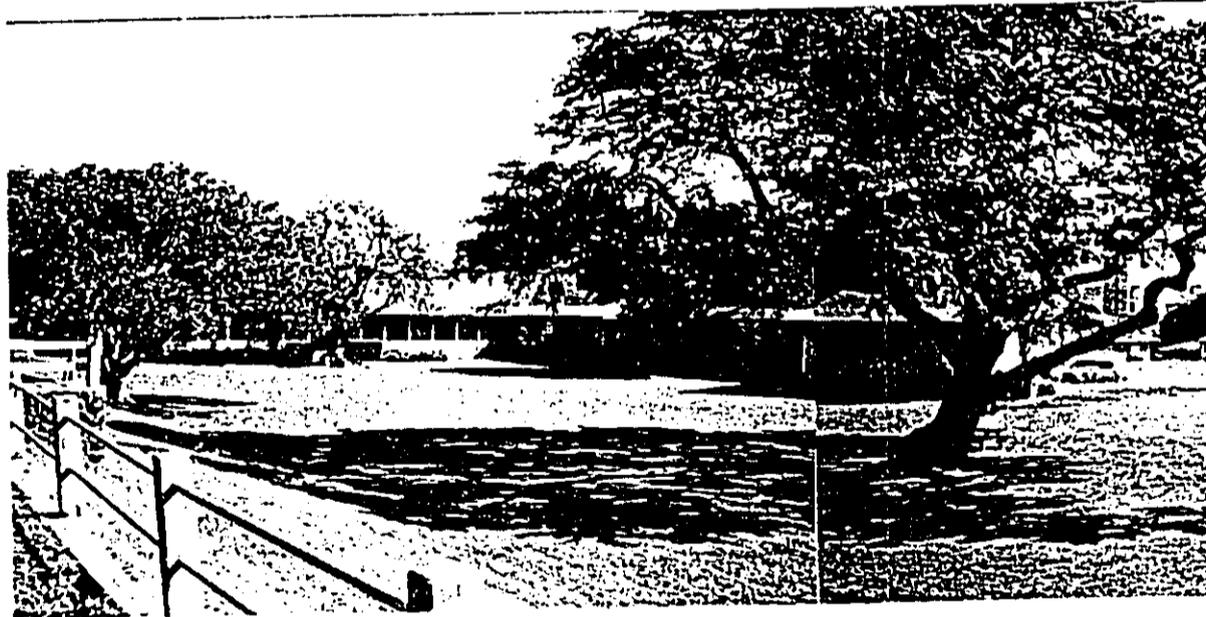
Some views of the COE Campus and the project site from adjoining residential areas are shown in the photographs on Figures 8 and 9.

3.11.2 Anticipated Impacts

The design of Phase I facilities will be compatible with the massing and character of Wist Hall; as directed by the design criteria for the COE Campus in the LRDP. The proposed buildings will be two stories in height and will replace existing one story buildings. Although the proposed Phase I facilities will be taller in height than the existing one story buildings, the visual impact is anticipated to be minimal. As shown on Figure 8A, the proposed Phase I facilities will not be visible from residences along Dole Street as a retaining wall and Castle Memorial Hall will block views of the proposed facilities. Residences along Hoonanea Street with backyard views similar to those shown on Figure 9A will be able to see the makai portion of the Phase I facilities, in the areas currently occupied by University High School #2 Building and Wist Annex (buildings to the center of Figure 9B). However, these facilities are over 300 feet away from residences along Hoonanea Street. The greatest visual impact to surrounding residences will be to those along Metcalf Street (Figure 9B shows a view of the University High School #1 Building and the Elementary School from the closest residence across Metcalf Street). The University High School #1 Building already obstructs views of the ocean. It is felt that the existing large kiawe trees in front of the High School Building, which will be retained, will provide scale and a visual buffer of the proposed Phase I facilities.



View of Retaining Wall and Castle Memorial Hall from Dole Street (8A)



View of Elementary School 1 Building from Metcalf Street (8B)

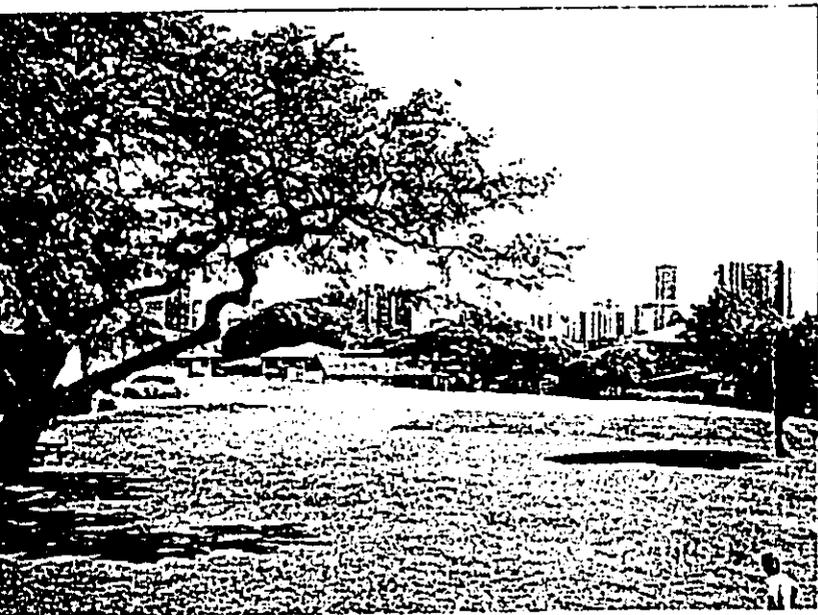
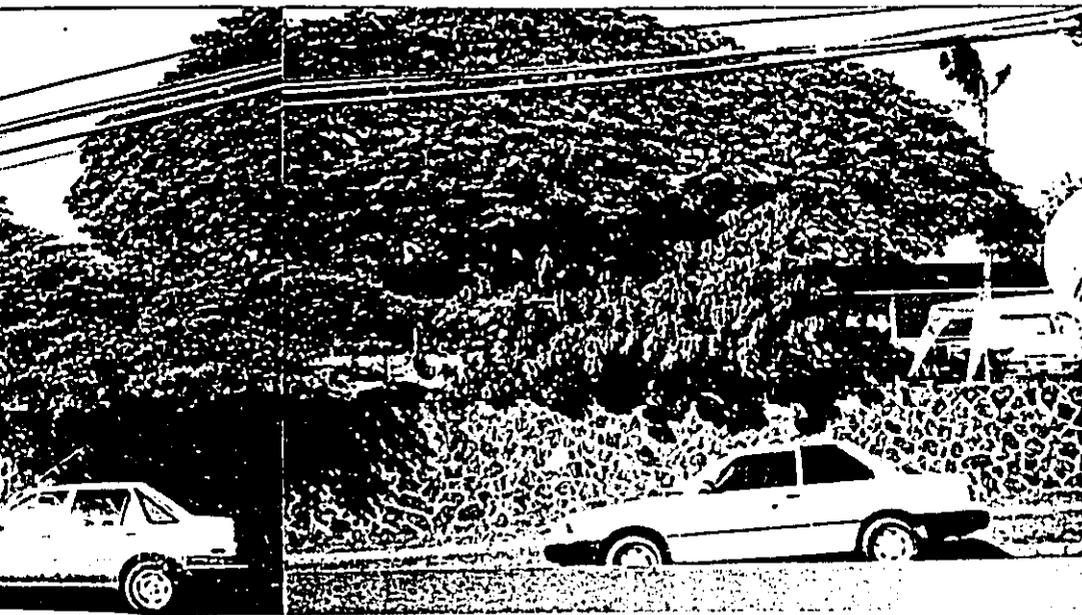
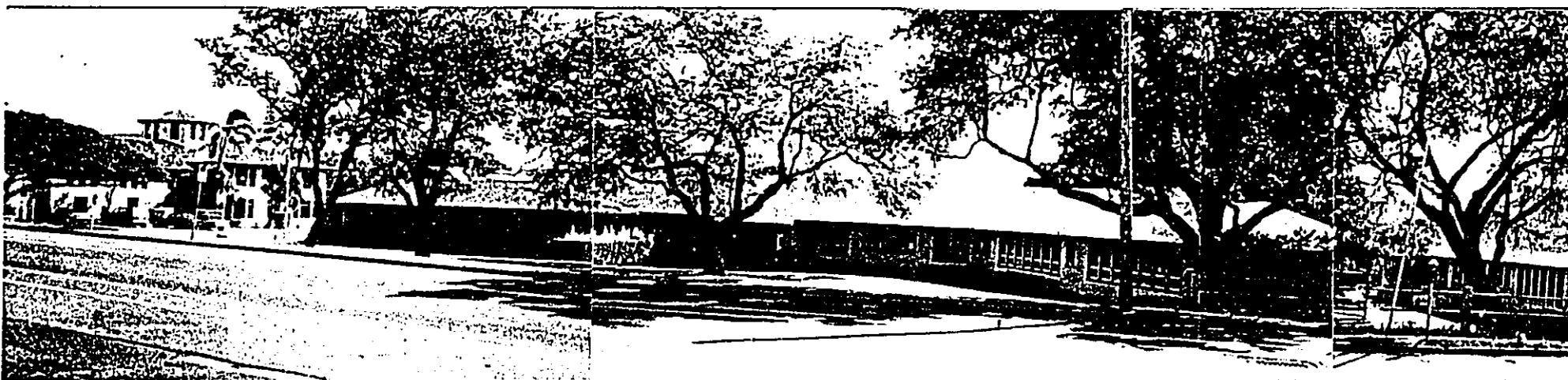


Figure 8



View of Elementary School and Wist Annex from Hoonanea Street Residences (9A)



View of Wist Hall, University High School 1 and Elementary School Buildings from Metcalf Street (9B)



Street Residences (9A)

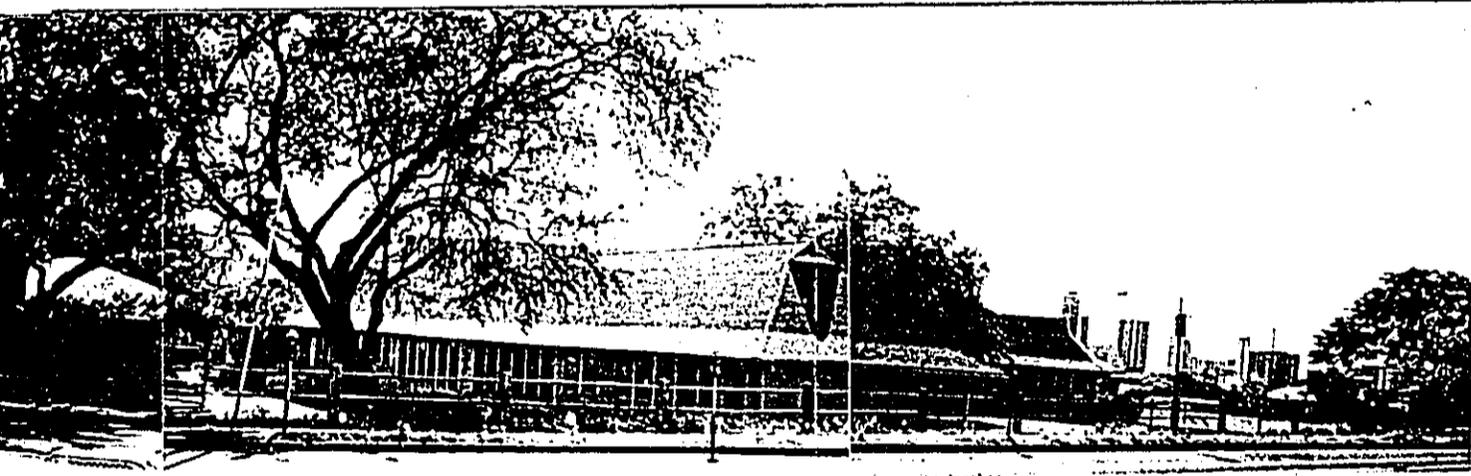


Figure 9

3.11.3 Mitigative Measures

The only long-term impact will be the alteration of the view of the COE Campus and views beyond from Metcalf Street and from some residences along Hoonanea Street. Although the LRDP permits buildings up to three stories in height on the COE Campus, presently no building on this site is taller than two stories. The proposed Phase I facilities will be two stories high and will be compatible in height and design with the existing Wist Hall.

3.12 SOCIO-ECONOMIC CHARACTERISTICS

3.12.1 Existing Conditions

The proposed project is located in an area where University facilities are an established use. The Manoa Campus, and in particular, the COE Campus is surrounded by mostly residential use. The major influence of the University on surrounding residential areas is the demand for on-street parking and traffic.

The present COE Campus population during the regular term is approximately as follows:

College Population

<u>Type</u>	<u>Count</u>
Student	835
Faculty	120
Staff	7
TOTAL	962

Lab School Population

<u>Type</u>	<u>Count</u>
Student	325.0
Faculty	53.5
Staff	3.5
TOTAL	382.0

Current total population on the COE Campus, then, is approximately 1,344. The College and the Lab School provide employment for 184 faculty and staff.

3.12.2 Anticipated Impacts and Mitigative Measures

Implementation of the COE Master Plan will generate employment during the construction of the project and its operation. The estimated cost of construction for all of the facilities proposed in the COE Master Plan ranges from \$50 million to \$54 million (1993 dollars). The cost for constructing the Phase I facilities alone is estimated at \$12.6 million in 1993 dollars.

• UH COLLEGE OF EDUCATION ENVIRONMENTAL ASSESSMENT •

One of the goals of the COE Master Plan is improve the facilities of the Campus so that an additional 125 teachers a year can be graduated. As shown below, if the same faculty to student and staff to students ratios are maintained, an increase in enrollment will generate employment for additional faculty and staff:

Increase in COE Population Based on Enrollment Goals

<u>Type</u>	<u>Count</u>
Student	125
Faculty	18
Staff	1
TOTAL	144

Implementation of the COE Master Plan, then, is anticipated to generate new, long-term employment for 19 faculty and staff positions over the next 20 years.

No changes to the Lab School student, faculty and staff population are expected. The total population on the COE Campus is expected to increase by 144 students, faculty and staff, or an increase of approximately 10 percent.

The expected increase in COE Campus population is expected to have a relatively small impact on the demand for on-street parking and traffic. Construction of the proposed parking facilities will increase the parking capacity on the COE Campus by between 30 to 120 stalls. Since the Lab School enrollment is not projected to increase, traffic from Lab School students being dropped off and picked up is not expected to increase.

The most important impact will be the improvement in the quality of teacher training at University of Hawaii Manoa Campus, as well as the quality of education of Lab School students. Planned physical improvements are expected to facilitate the accreditation of the COE programs. Also, through the closed circuit television and advanced computer and telecommunications facilities which would be provided as part of the proposed facilities, the COE will be better able to serve neighbor island DOE teachers in continuing education programs and other outreach services. These improvements can be expected to have a long-term, overall positive economic return to the State's capital investment, as better educated teachers and students will be more productive citizens.

4.0 ALTERNATIVES

Chapter 200 of Title 11, Environmental Impact Statement Rules (11-200-17[f]) requires a reasonable discussion of "any known alternatives...which could feasibly attain the objectives of the action." As previously noted, the COE's primary goal is to bring its current programs up to an acceptable level where they are academically strong and serve the needs of Hawaii by providing outstanding teachers, administrators, and support personnel for DOE schools. A measure of the College's effectiveness in achieving this goal would be by attaining national accreditation from the National Council for Accreditation of Teacher Education. Another of the College's major goals is to graduate an additional 125 students a year, increasing its annual graduation figure from 425 to 550 students. In addition, the Lab School needs quality facilities on par with other State public schools.

Alternatives which could feasibly attain the objectives of the COE are implementation of the plan for the COE Campus as proposed in the 1987 LRDP, and the expansion of the COE Campus site. In addition, other alternatives which would not attain the objectives of the action have been identified, these include: no action; renovation of existing facilities; and sharing facilities with the rest of the University of Hawaii Manoa Campus.

4.1 OBJECTIVES WHICH COULD FEASIBLY ATTAIN THE OBJECTIVES OF THE ACTION

4.1.1 1987 LRDP COE Campus Development Scheme

In 1987, the University of Hawaii Board of Regents adopted the LRDP to guide development on the Manoa Campus through the year 2010. The LRDP includes the College of Education within its planning area and was amended in 1994. To implement the LRDP COE Campus development scheme, the following buildings would have to be demolished:

- Elementary School Building;
- University High School #1;
- University High School #2;
- University High School #3;
- Wist Annex;
- Wist Hall "Portables";
- Multi-Purpose Building;
- Castle Memorial Hall;
- Castle Memorial Annex; and
- Caretaker's Cottage.

Only Wist Hall, Wist Hall Addition, and the Hawaii Public Television Building were originally planned for retention in implementing the LRDP proposals for the COE site. However, subsequent to the adoption of the LRDP in 1987, the availability of state funds has decreased, and COE program requirements have changed. Also, Castle Memorial Hall has been designated a State Historic Site. These changes have resulted in Castle Memorial Hall, High School Building #3 and the multi-purpose building being added to the buildings which will be retained.

The new Master Plan allows for phased development and the retention of Wist Hall, Wist Hall Addition, University High School Building #3, the Multi-Purpose Building, Castle Memorial Hall, Castle Memorial Annex, and the Hawaii Public Television Building. Due to current economic conditions, the current COE Master Plan is considered more desirable and realistic than the alternative presented by the 1987 LRDP.

4.1.2 Expansion of Site

The LRDP has established a building height limit of three stories, for the site. After providing the required total enclosed spaces, little area is available for accommodating the outdoor recreational needs of Lab School students given the building height limit. An alternative, then, is to expand the developable area of the COE Campus by using the entire block formed by Metcalf Street, University Avenue, Dole Street and Hoonanea Street. Implementing this alternative, however, would require the displacement of the Hawaii Public Television Building and the acquisition of residences along the Diamond Head side of Hoonanea Street. The State, of course, has the power to condemn land and to compensate owners according to market rates for the property. It has been estimated that acquisition of the residences and the removal of Hawaii Public Television would expand the COE site by an additional three to four acres, thus giving it more flexibility in siting new facilities and providing more needed open space. The additional acreage could also give the COE more flexibility in the design of new buildings by allowing heights of one or two stories. In addition, Hoonanea Street could be used in conjunction with the proposed parking structure for access to Metcalf Street. Also, the length of the proposed internal service roadway could be reduced somewhat depending on the access point selected for the COE Campus from Hoonanea Street.

Development of new COE facilities on an expanded site area would result in greater impacts to topography, soils, drainage and water quality, flora, fauna, noise, and air quality compared to the proposed project. This alternative would probably have similar impacts on employment, utilities as the proposed project since it would involve approximately the same new floor area, but in a lower density development. Development of the COE Campus on an expanded site would result overall in somewhat less visual impact to neighboring residents than the proposed project. The acquisition of the properties along Hoonanea Street would result in the displacement of existing residents and greater government expenditures.

The cost of acquiring the properties along the Diamond Head side of Hoonanea Street would probably be prohibitive given the current economic climate. Considering the present scarcity of funds relative to the other projects in the Capital Improvement Program, acquisition of these properties is unlikely. The process of condemning land would also probably be a lengthy process, and could delay the process of meeting the project's objectives.

Although the alternatives of implementing the 1987 LRDP and expanding the COE site could possibly meet the objectives of the proposed action, both alternatives would require the expenditure of more funds than the proposed action. In addition, expansion of the site would displace the Hawaii Public Television Station and the residents along the Diamond Head side of Hoonanea Street.

4.2 ALTERNATIVES WHICH WOULD NOT ATTAIN THE OBJECTIVES OF THE ACTION

4.2.1 No Action

The no-action alternative would involve no changes to the existing project site for the foreseeable future. The existing substandard University High School Buildings #1 and #2, Elementary School Building, Wist Hall "Portables" and the Wist Annex would remain and serve the College and Lab School poorly, as they do today. Also the no-action alternative would not include proposed renovations to Castle Memorial Hall.

Implementation of this alternative would result in minimal or no changes to the natural environment. However, implementation of this alternative would not result in the social and economic benefits expected from the improvement of the COE and Lab School facilities. The goal of attaining national accreditation would not be achieved and planned expansion in College enrollment of 125 more students per year would not be possible using existing facilities, thus adversely affecting the State's ability to hire faculty for its schools from within the state. The College will be unable to expand its outreach program to neighbor islands given the limitations of present facilities. The COE's ability to attract and maintain educational research funding would also be negatively impacted. The Lab School could potentially be restricted in improving its teaching methods by continuing to rely on increasingly outmoded and inadequate physical facilities. Fire and other safety hazards associated with deteriorating facilities will increase over time.

4.2.2 Renovation of Existing Facilities

This alternative involves the renovation of existing COE and Lab School facilities. Wist Hall, for example, is presently undergoing renovation to improve the classroom and office spaces for College use, as well as providing, in the interim, a small Learning Resource Center (but of a more limited scope than the proposed Phase I facility). The University High School Building #3 and the Multi-Purpose Building have the potential for yielding more useful space if they underwent renovation. In fact, future implementation phases of the COE Master Plan include renovation of these latter buildings, but some of the oldest wooden buildings on the COE Campus are in such poor condition that renovation would be impractical. The structural conditions of the University High School Buildings #1 and #2 and the Elementary School Building have visibly deteriorated. The cost of renovating these facilities would clearly exceed the value which could be obtained from them. Except for its historical and architectural qualities, a similar evaluation could be made for Castle Memorial Hall. Of the buildings proposed to be demolished in order to implement the COE Master Plan, Wist Annex is a solid, one-story masonry building which probably could be renovated. However, Wist Annex is a relatively small building (less than 5,000 assignable square feet), occupying a key location in the center of the COE Campus. Thus, the utility of renovating this building is outweighed by the value of its site for construction of a cohesive campus with newer and more useful facilities.

The COE Master Plan already includes future renovation of three buildings: Wist Hall, University High School Building #3, and the Multi-Purpose Building. Implementation

of the proposed project will ultimately lead to the cost efficiencies of renovating these facilities in any case.

Renovation of existing facilities would have similar impacts to the no-action alternative, except for generating noise during construction. Similarly to the no action alternative, there would be no visual impact to surrounding areas.

Like the no-action alternative, renovation would create slightly fewer environmental effects, but would also not realize many of the same social and economic benefits expected from improved and expanded College and Lab School facilities. Although this alternative would have negligible impact on surrounding areas, it would probably be unable to satisfy State requests to educate more teachers, or achieve its goal of attaining national accreditation. The planned expansion in College enrollment of 125 more students per year would probably not be possible by merely using renovated facilities because significantly more enclosed space for offices, research areas, and classrooms are needed. The University High School Buildings #1 and #2 would continue to deteriorate and accompanying hazardous conditions would continue to increase since it is not practical to renovate them.

4.2.3 Sharing Facilities with Rest of the Manoa Campus

The last alternative that has been considered is the sharing of facilities with the rest of the Manoa Campus. To a certain extent this already takes place. Most COE classes make use of classrooms in University of Hawaii at Manoa's Central Campus. Although the proposed action includes the construction of new facilities, except for the proposed new Learning Resource Center, much of the additional floor space proposed in Phase I is for the Lab School. The Lab School teaches elementary, intermediate, and high school students, and because of the younger ages of its students, it is prudent to generally separate the Lab School functions from other University facilities.

A possible exception is the Lab School's use of UH Physical Education (PE) facilities for PE classes due to the limited facilities on the COE Campus for these activities. Lab School administrators have considered this possible shared use, preferably as an interim measure until better PE facilities can be provided on the COE Campus.

The functions of the proposed Learning Resource Center include closed circuit television broadcasting and editing studios, computer work center, student conference rooms, and curriculum and audio-visual resource collections and reading rooms. Instead of building new facilities, the COE could conceivably use the television studio equipment at Kuykendall Hall for closed circuit broadcasting to neighbor islands. The present facilities, however, are heavily used by students from other departments of the University, and access would probably be too limited for the COE's purposes. Likewise, computer facilities and student conference rooms are generally available for UH students at several locations on the Manoa Campus, including the libraries, but these facilities are already intensively used. The College's curriculum and audio-visual materials could be housed in the University's general library collections at Sinclair or Hamilton Libraries. However, these facilities are presently being strained in providing adequate space for their own growing collections. Although an expansion to Hamilton

• UH COLLEGE OF EDUCATION ENVIRONMENTAL ASSESSMENT •

Library is a proposed CIP project, the addition, if built, has not been programmed to include the collections or functions of the COE.

Although sharing of facilities has served the COE for many years, and will continue to do so for some time in the future for certain functions, the COE Campus physically lends itself to the development of functionally coordinated COE and Lab School-only facilities.

Sharing of space, would have similar impacts to the no-action alternative. Similarly to the no action alternative, there would be no visual impact to surrounding areas.

Like the no-action alternative, sharing of space would create slightly fewer environmental effects than the proposed action, but would also not realize many of the same social and economic benefits expected from improved and expanded College and Lab School facilities. Although this alternative would have negligible impact on surrounding areas, it would probably be unable to satisfy State requests to educate more teachers, or achieve its goal of attaining national accreditation. The planned expansion in College enrollment of 125 more students per year would probably not be possible by merely using limited facilities spread out over the Manoa Campus because significantly more enclosed space for offices, research areas, and classrooms are needed. The University High School #1 and #2 Buildings would continue to deteriorate and accompanying hazardous conditions would continue to increase since it is not practical to renovate them.

5.0 RELATIONSHIP TO EXISTING POLICIES AND PLANS FOR THE AFFECTED AREA

This section includes a discussion of the relationship of the project to the following: Hawaii State Plan; the State Functional Plans; the University of Hawaii, Manoa Campus Long Range Development Plan (LRDP); the County General Plan; the County Development Plan; the Land Use Ordinance; and the Plan Review Use for the LRDP.

5.1 HAWAII STATE PLAN

This section includes an assessment of the conformity of the facilities proposed in the COE Master Plan to the applicable goals, objectives, and policies of the Hawaii State Plan, Chapter 226, HRS.

5.1.1 Objectives and Policies

Section 12(a): Objective for the physical environment - scenic, natural beauty, and historic resources:

Enhancement of Hawaii's scenic assets, natural beauty, and multicultural/historical resources.

Section 12(b): Applicable policies:

(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage.

Discussion: The implementation of Phase I of the COE Master Plan will not conflict with the preservation of historic and culturally significant buildings at the University of Hawaii Manoa Campus. The State Historic Preservation Division of the Department of Land and Natural Resources (DLNR) has determined that the project is not likely to affect any such resources. The three buildings to be demolished to allow the construction of Phase I, the University High School #1 and University High School #2 Buildings, and the Wist Annex, are not considered historically or culturally significant by DLNR.

Implementation of the COE Master Plan will not involve the removal of any of the large, older trees or significantly diminish the open space quality of the COE Campus. The new construction will occupy roughly the same footprint area of the existing one-story buildings to be demolished, increasing gross floor area by going two to three stories high.

Section 13(a): Objectives for the physical environment - land, air, water quality:

(1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.

Section 13(b): Applicable policies:

(2) *Promote the proper management of Hawaii's land and water resources.*

(3) *Promote effective measures to achieve desired quality in Hawaii's surface, ground, and coastal waters.*

(5) *Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters.*

Discussion: Implementation of the COE Master Plan will not require the alteration of existing drainage patterns. Strict adherence to erosion control measures will minimize the impact of silt runoff on surface water quality during construction activities.

Section 14(a): Objective for facility systems - in general:

Water, transportation, and waste disposal, and energy and telecommunications systems that support statewide social, economic, and physical objectives.

Section 14(b): Applicable policies:

(2) *Encourage flexibility in design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.*

(4) *Pursue alternative methods of financing programs and projects and cost-saving techniques in the planning, construction, and maintenance of facility systems.*

Discussion: The Phase I facility, in its pre-design stage, is conceived to be flexible, in its ability to respond to changing uses by the Lab School and the COE. It is proposed that similar classroom and office-type functions be grouped together. General classrooms and offices are both flexible types of spaces. Science and art classrooms, on the other hand, will need to accommodate special furniture and equipment.

The University of Hawaii at Manoa is pursuing federal funding to help defray approximately 30 percent of the total cost of the Phase I construction. Approximately \$5 million has been requested of the federal government for the purpose of building new facilities for improving the College's teacher training and research programs. The State has funded \$11.8 million of the Phase I construction costs.

Section 17(a): Objective for facility systems - transportation:

A statewide transportation system consistent with planned growth objectives.

Section 17(b): Applicable policies:

(6) Encourage transportation systems that serve to accommodate present and future development needs of communities.

(10) Encourage the design and development of transportation systems sensitive to the needs of affected communities and the quality of Hawaii's natural environment.

Discussion: Improvements were made to University Avenue/Dole Street and Dole Street/Lower Campus Road. These recently completed improvements should enhance smoother traffic flows in the area. Also, the City and County of Honolulu has recently implemented a computerized traffic control system which should improve traffic flow in the vicinity.

Both the City and County of Honolulu and the State are implementing programs for ride-sharing, park-and-ride, and other transportation system management alternatives to reduce the number of vehicles entering the Primary Urban Center. The University of Hawaii Manoa Campus has also prepared a commuter plan for the University which includes many similar proposals geared specifically to the Manoa Campus.

Increased construction of student and faculty housing on-campus should help offset more than half of the increase in traffic resulting from an increase in student enrollment.

With the above factors taken into consideration, it is believed that the net increase in traffic, resulting from a future enrollment of 23,000 students at the Manoa Campus will be mitigated.

Section 18(a): Objectives and policies for facility systems - energy/telecommunications:

(1) Dependable, efficient, and economical statewide energy and telecommunication systems capable of supporting the needs of the people.

(2) Increased energy self-sufficiency.

Section 18(b): Applicable energy/telecommunications policy: *Ensure the provision of adequate, reasonably priced, and dependable power and telecommunication services to accommodate demand.*

• UH COLLEGE OF EDUCATION ENVIRONMENTAL ASSESSMENT •

Section 18(c): Applicable energy policies:

(3) *Promote prudent use of power and fuel supplies through conservation measures including education and energy-efficient practices and technologies.*

(4) *Ensure that the development or expansion of power systems and sources adequately consider environmental, public health, safety concerns, and resource limitations.*

Section 18(d): Applicable telecommunications policies:

(3) *Promote efficient management and use of existing telecommunication systems and services.*

(4) *Facilitate the development of education and training of telecommunication personnel.*

Discussion: The Learning Resource Center will be air conditioned to prevent damage to the COE's collection of curriculum materials, computers, and other sensitive electronic equipment. Faculty offices and selected storage areas, with other sensitive material, will also be air conditioned. The remaining Phase I facilities will be naturally ventilated to conserve energy and to minimize operating costs. All air conditioned facilities will be zoned to optimize temperature control over the whole building and to cool only those zones being used. The proposed facilities are required, by University of Hawaii policy, to be designed with operable window units which can be opened if air conditioning is not operating. Such conditions may occur during equipment failure, power outages or during emergency situations.

The COE will continue using existing telecommunication resources owned by the State to improve its extension service to neighbor island teachers and communities. The COE will train its own students and staff to operate the telecommunications equipment for closed circuit broadcast to neighbor islands for its outreach educational programs.

Section 21(a): Objective and policies for socio-cultural advancement - education:

(a) *A variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations.*

Section 21(b): Applicable policies:

(2) *Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.*

(5) *Provide higher educational opportunities that enable Hawaii's people to adapt to changing employment demands.*

• UH COLLEGE OF EDUCATION ENVIRONMENTAL ASSESSMENT •

(8) Emphasize quality educational programs in Hawaii's institutions to promote academic excellence.

(9) Support research programs and activities that enhance the education programs of the State.

Discussion: The COE Master Plan was designed to improve COE facilities for current and future enrollments. The proposed Learning Resource Center will bring the College up-to-date with necessary equipment and facilities, and with state-of-the-art computer and telecommunication resources. With these resources, the College will be able to most efficiently make accessible continuing education and training to teachers on neighbor islands via closed circuit television and telecommunications. The proposed project will promote academic excellence with the ultimate objective of achieving national accreditation for the College by the National Council for Accreditation of Teacher Education (NCATE).

The UH Lab School mutually benefits the elementary through high school students enrolled in the school and teaching research in general. Improvement of its facilities to standards comparable to other DOE schools on Oahu will support the research work and promote academic excellence of the Lab School students.

5.1.2 Priority Guidelines

The purpose of the State Plan priority guidelines is to address areas of statewide concern. The following discussion provides an assessment of how the proposed project conforms to the relevant priority guidelines.

Section 107(3):

Initiate efforts to improve the quality of education by improving the capabilities of the education work force.

Section 107(5):

Increase and improve the use of information technology in education and encourage programs which increase the public's awareness and understanding of the impact of information technologies on our lives.

Section 107(6):

Pursue the establishment of Hawaii's public and private universities and colleges as research and training centers of the Pacific.

Discussion: As stated above, the proposed Learning Resource Center will address the needs for improved and expanded teacher training, improved educational research facilities, and use of advanced telecommunications technology to reach communities on the neighbor islands more efficiently and effectively. It is anticipated with the expansion of present facilities and with the addition of faculty, the COE will have a greater role in educating teachers in the Pacific region.

5.2 STATE FUNCTIONAL PLANS

The State Functional Plans translate the broad goals and objectives of the Hawaii State Plan into detailed courses of action. The relationship of the proposed actions within the project to the relevant State Functional Plan objectives and implementing actions is described below.

5.2.1 State Higher Education Functional Plan

The Higher Education Functional Plan has just three policy statements which are pertinent to this project.

Sections C(1) and (2) Applicable Policies:

Provide appropriate options within the state's postsecondary community for all qualified people of Hawaii, in which each participant has a reasonable chance for success.

Extend educational opportunities to persons who are unable to attend classes on a campus through off-campus outreach programs.

Discussion: One of the major functions of the Learning Resource Center will be to house closed circuit television and telecommunications facilities to help realize the above policies. Of the total gross floor area of 15,000 assignable square feet, approximately 2,500 square feet are designed for television studios and support spaces for the COE's outreach program.

Section C(3). Applicable Policy:

Remove artificial barriers to educational opportunity and career choice related to ethnic origin, sex, or handicap.

Discussion: The proposed Phase I buildings will share one or more hydraulic elevators which will provide access for the physically challenged to the second and third floors. Ultimately, in a later phase of implementing the COE Master Plan, the Phase I buildings will be connected to a renovated University High School #3 Building by ground floor and second floor arcades. Elevators in the Phase I buildings, then, will also be able to provide the physically challenged access to the second floor of the University High School Building #3 .

5.2.2 State Historic Preservation Functional Plan

Applicable Implementing Action C.2.d. -

Encourage State and County agencies to maintain and preserve historic buildings under their administration.

Discussion: According to the State Historic Preservation Division (SHPD) of DLNR, the Castle Memorial Hall, Wist Hall and Wist Annex are the only structures on the COE Campus that are designated as State Historic Sites.

No action is specifically proposed during Phase I to alter Castle Memorial Hall. However, upgrading of the fire protection system and other features of the building to meet life safety concerns can be conducted at any time without affecting the COE Master Plan or the physical, natural or social environment. Wist Hall is being presently being renovated in accordance with State requirements.

As discussed in section 3.6 of this EA, SHPD has stated that University High #1 and #2 Buildings may have some potential historic significance. A HABS report will be prepared prior to any demolition and/or construction impacting #1 and #2 Buildings. Likewise, in the future a HABS report should be prepared for the Elementary School Building.

The remaining functional plans regarding Transportation, Employment, Recreation, Water Resources Development, Conservation Land, Health, Housing, Tourism, Human Services, and Energy, are not directly relevant to the proposed project.

53 UNIVERSITY OF HAWAII, MANOA CAMPUS LONG RANGE DEVELOPMENT PLAN

The following describes the conformity of the proposed COE Master Plan with the specific design criteria for the COE campus as recommended in the LRDP.

- a. *The College of Education and Lab School site should be organized around a quadrangle. The buildings surrounding the quadrangle should be linked together by an arcade. All other buildings on site should be connected by a system of paths.*

As shown on Figure 3, a Central Quadrangle would be established in the area presently occupied by the road and parking lot servicing the COE Campus. It is around this Quadrangle that the proposed renovated and new classroom facilities would be located. The COE Master Plan also shows that all buildings would be linked together by arcades and paths.

- b. *Parking in the center of the site should be discontinued and a parking structure should be developed along the mauka boundary of the site. Taking advantage of topographical conditions, it will be possible to build a two level parking structure, with only the top level being visible from Metcalf Street.*

• UH COLLEGE OF EDUCATION ENVIRONMENTAL ASSESSMENT •

The proposed COE Master Plan (Figure 3) shows parking for the Campus being relocated to the periphery, at the mauka-ewa corner. Parking could be developed in 2 phases. The first phase would be to construct on-grade parking. The second phase would be the construction of a two-level parking structure. Although the parking structure shown on the COE Master Plan has been relocated from the site shown on the LRDP, siting of the parking structure in a different location along the mauka boundary will still take advantage of differences in elevation between Metcalf Street and the mauka portion of the campus. In fact, the ground level of the proposed parking structure at its newest location would be less likely to be seen from Metcalf Street in the new location.

- c. *New buildings should be designed to maintain the architectural character of Wist Hall...In addition, new buildings should not exceed three stories in height. Sloped roofs should be used throughout the complex.*

A draft project development report has been prepared for Phase I of the COE Master Plan. The report notes that the proposed facilities should be designed to maintain the character of Wist Hall and that the height of all new buildings should not exceed three stories. The COE Master Plan shows sloped roofs for all proposed facilities.

5.4 GENERAL PLAN FOR CITY AND COUNTY OF HONOLULU

The following discussion provides an assessment of how the proposed project conforms to and implements the updated 1988 General Plan adopted by the City and County of Honolulu.

PHYSICAL DEVELOPMENT AND URBAN DESIGN

Objective E:

To promote and enhance the social and physical character of Oahu's older towns and neighborhoods.

Policy 3:

Provide and maintain roads, public facilities, and utilities without damaging the character of older communities.

Discussion: As stated in Sections 3.7 and 3.8, the proposed project will not require major utilities or roadway improvements which will disrupt or change the character of surrounding residential areas. The most visible change on the COE Campus from surrounding areas will be the replacement of three one-story buildings near the center of the campus with one two- and three-story building having approximately the same footprint. The additional building height is within the prescribed limits of the LRDP. The architectural character of the buildings will be compatible with Wist Hall.

• UH COLLEGE OF EDUCATION ENVIRONMENTAL ASSESSMENT •

HEALTH AND EDUCATION

Objective B:

To provide a wide range of educational opportunities for the people of Oahu.

Policy 3:

Encourage after-hours use of school buildings, grounds, and facilities.

Policy 4:

Encourage the construction of school facilities that are designed for flexibility for high levels of use.

Discussion: The proposed Lab School facilities in Phase I include classrooms seating 25 to 30 students each, and individual offices for faculty and administrators. The classrooms can be used for community or special program functions which occur during after-school hours. Alternatively, some rooms may be used for College classes as the Lab School schedule allows. The Learning Resource Center is intended for daily use by COE students from early morning to evening hours. The facilities will also be available for public and Lab School student use on a limited basis.

Objective C:

To make Honolulu the center of higher education in the Pacific.

Policy 1:

Encourage continuing improvement in the quality of higher education in Hawaii.

Discussion: The construction of the proposed Phase I project will improve the COE. It will enhance the College's chances of acquiring accreditation of its college programs, increase the potential for educational research, and increase the number of teachers available to teach in Hawaii's schools. It will also serve both the local, statewide, Pacific, and international communities by providing better trained teachers.

CULTURE AND RECREATION

Objective B:

To protect Oahu's cultural, historic, architectural, and archaeological resources.

Policy 2:

Identify, and to the extent possible, preserve and restore buildings, sites, and areas of social, cultural, historic, architectural, and archaeological significance.

Discussion: According to the State Historic Preservation Division (Appendix 8.1), the three buildings of the COE Campus planned for demolition in Phase I are not deemed to be significant in any of the areas listed above. Only two buildings on the COE Campus are considered to be architecturally and historically significant: Wist Hall and Castle Memorial Hall. The COE Master Plan calls for both structures to be preserved. At a later phase of implementation of the COE Master Plan, when funding permits, Castle Memorial Hall will undergo some minor renovations to bring it into voluntary compliance with life safety codes.

5.5 CITY AND COUNTY OF HONOLULU DEVELOPMENT PLAN

The City and County of Honolulu's Development Plan (DP) provides a relatively detailed framework for implementing General Plan objectives and policies on an area-wide basis. A total of eight DP regions have been established on Oahu. The Primary Urban Center DP area encompasses the area from Pearl City to Palolo, including the University of Hawaii Manoa Campus.

The DP Ordinances consist of four elements: Common Provisions (applicable for all DP regions), and Special Provisions, DP Land Use Maps and DP Public Facilities Maps (for each DP region).

5.5.1 Land Use Map

The property is designated Public Facility on the DP Land Use Map for the Primary Urban Center. Section 32-1.3 of the DP Common Provisions describes the various land use categories found within each of the eight DP regions. According to the DP Common Provisions, Public Facilities include "...schools, colleges, and universities;..." The existing use and the proposed action are consistent with the DP Land Use Map designation for the property.

5.5.2 Public Facilities Map

No utility improvements are currently planned to be sited on the COE Campus, although roadway improvements are designated for Metcalf and Dole Streets, and sewage improvements are identified along Dole Street.

5.5.3 Common Provisions

Section 32-1.8 of the DP Common Provisions provides the following policies for public buildings:

(1) *Public Buildings*

Public buildings are those owned by the City and County of Honolulu, the State of Hawaii, and the Federal Government, except for buildings on military bases. Public buildings that generate large amounts of traffic shall, whenever possible, be centrally located in their service area and on sites that are easily accessible to public and private transportation.

The design of public buildings shall strive for energy efficiency and where feasible make use of natural ventilation and alternate energy sources such as solar and wind. Life cycle costs shall be used in the selection of operating equipment.

The proposed facilities will be located on the COE Campus, a well-established location within the University of Hawaii Manoa Campus, with access from the H-1 Freeway and public bus routes.

The proposed facilities will be mostly naturally ventilated except where certain uses, such as the Drama Auditorium or where computers are used, require the use of air conditioning.

5.5.4 Special Provisions

The University of Hawaii Manoa Campus is not located within any of the Special Areas identified in the DP Special Provisions for the Primary Urban Center.

5.6 LAND USE ORDINANCE

The COE Campus is zoned R-5 Residential District. According to the Land Use Ordinance, elementary, intermediate and high schools are a principal use within the R-5 District. Colleges and universities are permitted within the R-5 District with Plan Review Use approval.

5.7 PLAN REVIEW USE

Plan Review Use (PRU) approval is required for a number of public and private uses including colleges and universities. A PRU was approved for the 1987 LRDP. The LRDP included the COE Master Plan. Since 1987, the building configurations in the COE Master Plan have changed and those changes were included in the 1994 LRDP. In August 1994, a PRU was submitted.

5.8 APPROVALS AND PERMITS NEEDED

The acceptance of a PRU application is necessary. In addition to an accepted PRU application, the permits required prior to the construction of the proposed Phase I facilities are those permits associated with building and construction (e.g. City building permit and City Grading Permit).

6.0 DETERMINATION, FINDINGS, AND REASONS SUPPORTING DETERMINATION

Based upon the findings presented in this Environmental Assessment and supporting technical studies, it is felt that the potential impacts of the construction and operation of the facilities proposed in the COE Master Plan have been sufficiently examined and discussed. After reviewing the significance criteria outlined in Section 11-200-12, EIS Rules, Contents of Environmental Assessment, it has been determined that the action is not expected to result in significant adverse effects on the natural or human environment. This determination was based on the assessment that the proposed action does not:

- o Involve an irrevocable loss or destruction of any natural or cultural resource;
- o Curtail the range of beneficial uses of the environment;
- o Conflict with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS;
- o Substantially or adversely affect the economic or social welfare of the community or State;
- o Substantially or adversely affect public health;
- o Involve substantial or adverse secondary impacts, such as population changes or effects on public facilities;
- o Involve a substantial degradation of environmental quality;
- o Cumulatively have a considerable effect upon the environment or involve a commitment for larger actions;
- o Affect a rare, threatened or endangered species, or its habitat;
- o Detrimentially affect air or water quality or ambient noise levels; or
- o Affect an environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

It is felt that further consideration of the project's impacts through the preparation of a Environmental Impact Statement is not necessary.

7.0 REFERENCES, CONSULTED PARTIES, AND LIST OF PREPARERS

7.1 REFERENCES

- Austin, Tsutsumi & Associates, Inc.; March 1994; *Traffic Impact Study for the Long-Range Development Plan, University of Hawaii, 1994 Update* Honolulu, Hawaii.
- Ebisu, Y. & Associates, Inc.; October 1989; *Noise Impact Study, University of Hawaii Manoa Campus HPE Facility Alternatives*; Honolulu, Hawaii.
- Federal Emergency Management Agency; September 4, 1987; *Flood Insurance Rate Map, County of Oahu*; Panel No. (150001 0120 C), Washington, D.C.
- Fukunaga & Associates, Inc.; [No Date]; *Utilities Master Plan, University of Hawaii - Manoa Campus*; Honolulu, Hawaii.
- Group 70 International Inc.; April 1994; *Long Range Development Plan University of Hawaii, Manoa Campus 1994 Update* Honolulu, Hawaii.
- Land Study Bureau, University of Hawaii; December 1972; *Detailed Land Classification - Island of Oahu (L.S.B. Bulletin No. 11)*; Honolulu, Hawaii.
- Root, Barry D. and Barry D. Neal, October 1989; *Air Quality Assessment for the University of Hawaii - Manoa Sports Arena Alternatives Study*; Honolulu, Hawaii.
- U.S. Department of Agriculture; August 1972; *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai and Lanai; State of Hawaii*; (Soil Conservation Service, in cooperation with the University of Hawaii Agricultural Experiment Station); Washington, D.C.

7.2 CONSULTED PARTIES

Listed below are the agencies and organizations consulted in the pre-assessment consultation stage of the preparation of this Environmental Assessment. Those agencies marked with an asterisk (*) are the agencies that wrote comment letters. Copies of the comment letters are included in Section 8 of this document. If a response to the comment letter was made, a copy of it is also included in Section 8. A presentation was made to the Manoa Neighborhood Board earlier this year.

FEDERAL AGENCIES

U.S. Fish and Wildlife Service*

STATE AGENCIES

Office of Environmental Quality Control*

Department of Land and Natural Resources, State Historic Preservation Division*

Department of Transportation*

STATE AGENCIES (con't)

University of Hawaii at Manoa, Facility Planning and Management Office
University of Hawaii at Manoa, College of Education
Department of Accounting and General Services

COUNTY AGENCIES

Department of Land Utilization (DLU)
Department of Transportation Services*
Department of Public Works
Department of Wastewater Management

ORGANIZATIONS

Manoa Neighborhood Board

7.3 LIST OF PREPARERS

This Environmental Assessment has been prepared by the planners and environmental analysts at GROUP 70 International, Inc., 925 Bethel Street, Honolulu, Hawaii 96813, Telephone (808) 523-5866. The GROUP 70 staff involved in the preparation of this document included:

Francis S. Oda, AIA, AICP	Chairman of Group 70
George Atta, AICP	Project Manager
Gwen Zakahi	Planner
Cookie Tsukano	Graphics

Several technical consultants to GROUP 70 were employed to provide specific assessments of environmental factors for this project.

Ted Kawahigashi, P.E.	Austin, Tsutsumi & Associates, Inc.	Traffic Engineering
Kay Muranaka, P.E. Engineering Kwansei Kaneshiro	Engineering Concepts, Inc.	Civil
Louis Cheng, P. E. Kevin Au	Mechanical Engineers Hawaii Corp.	Mechanical Engineering
Michael Muramoto	Okita Kunimitsu & Associates	Architecture
Theodore J. Suzuki, P.E.	Robert Englekirk Consulting Structural Engineers, Inc.	Structural Engineering
Harold T. Fujimoto	Toft Moss Farrow Assoc., Inc.	Electrical Engineering

8.0 APPENDIX

JOHN W. WAZE
GOVERNOR OF HAWAII

RECEIVED
OCT 20 1994
COMPTROLLER'S OFFICE
STATE OF HAWAII



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

RECEIVED
OCT 20 11 10 AM '94

George Chang 10/20/94
Brenda Meyer
STATE HISTORIC PRESERVATION DIVISION
DEPARTMENT OF LAND AND NATURAL RESOURCES

- DOONES
- JOHN F. EDWARDS
- JOHN L. WAZE
- AGRICULTURE DEVELOPMENT PROGRAM
- ADULT RESOURCES
- CONSERVATION AND ENVIRONMENTAL AFFAIRS
- CONSERVATION AND ENVIRONMENTAL AFFAIRS
- RECREATION DEPARTMENT
- COMMITTEES
- FORESTRY AND WILDLIFE HISTORIC PRESERVATION DIVISION
- GENERAL INVESTIGATIVE DIVISION
- LAND AND NATURAL RESOURCES
- STATE PARKS
- WATER AND LAND DEVELOPMENT

October 13, 1994

MEMORANDUM

To: The Honorable Robert P. Takushi, State Comptroller
Department of Accounting and General Services

From: Keith Ahue, Chairperson

Subject: University of Hawaii at Manoa College of Education Master Plan
Draft Environmental Assessment
TMK 2-8-15-1, Honolulu, Oahu

LOG NO: 12815
DOC NO: 9410009
Architecture

Thank you for your letter dated September 26, 1994, regarding University of Hawaii, College of Education Master Plan Environmental Assessment. In the discussion of Archaeological/Historical Resources (3.6) and Objectives and Policies (5.1.1) we would like to clarify our position regarding some of the structures proposed for demolition. We believe that the buildings referred to in the assessment as University High #1 & #2 buildings, and the West Annex, although they are not listed on either the Hawaii or National Registers of Historic Places, may meet the criteria for listing. Historic properties may be considered important for their information and mitigation measures for structures include archival stable original plans and archival processed photographs of the structures. Further, research should be undertaken to determine the significance of the structures.

The impact of the proposed projects on the registered buildings should be addressed in the environmental assessment. It appears that the design intent for the new structures is compatible with West Hall and that the new structures are sited with an open field buffer from Castle Memorial Hall, thus the new buildings should have no effect upon the registered buildings.

Should historic sites such as walls, platforms, pavements and mounds, remains such as artifacts, burials, concentration of charcoal or shells are encountered during construction work, work shall cease in the immediate vicinity of the find and the find shall be protected from further damage. The contractor shall immediately contact the State Historic Preservation Division (587-0047), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary.

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

CO:JK

OCT 18 1994



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96810

NOV 9 1994

ROBERT P. TAKUSHI
COMPTROLLER
LLOYD UNERASAKA
DEPUTY COMPTROLLER
(P) 1952.4
LETTER NO. _____

Honorable Keith Ahue
Chairperson
Department of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Dear Mr. Ahue:

Subject: University of Hawaii at Manoa,
College of Education, Master Plan
and Draft Environmental Assessment
DAGS Job No. 12-31-3199

Thank you for your October 13, 1994 comments on the subject project. DAGS provides the following responses:

1. Potential Historic Value of High School Buildings No. 1 and 2 and West Annex:

It is DAGS' understanding based on discussions between our consultant and the Historic Preservation Division office that:

- a. Your department is not objecting to the proposed demolition of these structures.
- b. Studies are to be done prior to action on these buildings to record available information.

Therefore, DAGS will start a project very soon based on the following understandings (unless otherwise notified):

- a. Studies will be conducted to assess the value of the subject buildings and to document available information.
- b. Original construction plans will be located and compiled (if possible).

- c. Photographs (using large format 4 x 5 film) will be taken of the existing structures.
- d. Documentation will be archivally processed. The Historic Preservation Division will be consulted in this process.
- e. Studies shall be completed prior to final action on these buildings (i.e. demolition).

2. Impact of Proposed Projects on Registered Historic Buildings:

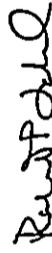
The potential impact of the proposed project on registered historic buildings is discussed in Section 3.6.2 of the draft EA. This section will be expanded in the final EA to incorporate your comments.

3. Historic Sites and Remains Encountered During Construction:

Mitigative measures for unidentified historic sites or remains found during construction is discussed in Section 3.6.2 of the draft EA. This section will be expanded to incorporate your comments.

Thank you once again for your assistance on this project. If there are any questions on this matter, please have your staff contact Mr. Ralph Morita of the Public Works Division at 586-0486.

Very truly yours,



ROBERT P. TAKUSHI
State Comptroller





GROUP 70
INTERNATIONAL

Francis Odu, AIA, ACP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
Robert K.L. Wong, AIA
Hiroshi Hata, AIA
Roy H. Nibel, AIA, CSI

RECORD OF CONVERSATION

Group 70 International, Inc.
Architects • Planners • Interior Designers • 924 Bernal St. • Honolulu, HI 96813-4398 • PH: (808) 523-5866 • FAX: (808) 523-5874

SUBJECT: UHI College of Education EA

DATE: OCTOBER 27, 1994 TIME: 9:30 AM

PERSON CALLED: Carol Ogata AGENCY: SHIPD 587-6065

PERSON CALLED: George Aia AGENCY: G70 523-5866

SUMMARY

Called Carol Ogata in response to the DLNR response memo dated October 13, 1994 Doc No. 9410009. I asked Ms. Ogata for some clarification of their comments regarding University High buildings #1 and 2. Specifically, comments about the eligibility of the buildings for placement on the Historic register, mitigation measures, and the need for further research to determine significance. Ms. Ogata said that the comments do not mean that they are necessarily recommending preservation. Even if the buildings are demolished, mitigation may mean recording information, taking photos and preparing a short historical narrative. These documents would then be housed in Hamilton Library as archival records. She said it would be good if we had buildings plans. In any case, further research is recommended.

Ms. Ogata commented that these buildings have beautiful roof forms and pleasing architectural styles and proportion. I mentioned that the wooden members in the building were termite eaten and their structural stability was uncertain. However, the structures were roofed in the last few years. She questioned the reroofing if the UHI was planning to demolish them. I said there was a continuing need to use them until the new facilities become available.

I asked Ms. Ogata about the level of research needed. She said she would send me a copy of a sample HAHS (Historic American Buildings Survey) report for my information. She said the photos should be taken with a large format camera, such as a 4 x 5 camera, and angles should present a good representation of the interior and exterior of the building. Existing building plans; especially floor plans, would be desirable.

I said I would speak to the people at DAGS and we would respond appropriately.

cc: Brian Major/Ralph Morita (DAGS)

Francis
Gwen

UNLESS WRITTEN OTHERWISE RECEIVED WITHIN SEVEN DAYS WE ASSUME STATEMENTS CONTAINED WITHIN ARE ACCEPTED



GROUP 70
INTERNATIONAL

Francis Odu, AIA, ACP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, ASID
Robert K.L. Wong, AIA
Hiroshi Hata, AIA
Roy H. Nibel, AIA, CSI

RECORD OF CONVERSATION

Group 70 International, Inc.
Architects • Planners • Interior Designers • 924 Bernal St. • Honolulu, HI 96813-4398 • PH: (808) 523-5866 • FAX: (808) 523-5874

SUBJECT: UHCOB EA

DATE: 11-3-94 TIME: 11:30 am

PERSON CALLED: George Aia AGENCY: G70 523-5866

PERSON CALLED: Carol Ogata AGENCY: SHIPD 587-6065

SUMMARY

Ms. Ogata called to share her conversation with Augie Salbova regarding archival photos of High School Buildings One and Two (HS 1&2). She thought we were also doing a report for the Elementary School building. I said the phase one work will only affect HS 1 and 2. Ms. Ogata said she noticed that the master plan shows new buildings in the elementary school building area. I said that while that is the plan, construction funding is only for phase one and we have no idea when any future funding will be available. In all likelihood it would probably be more than 10 years before anything more happens. Ms. Ogata said that before anything happens to the Elementary School building a similar report should be done. I said I could write a memo for the files or include something in the EA regarding this pre-condition on the Elementary School Building. Ms. Ogata felt that a comment in the EA as better because memos get lost. I said we would make the comment that in the development of future phases of the COE Master Plan which impact the Elementary School Building, an HAHS report will be prepared prior to any construction. This comment will be included in the appropriate sections of the EA. She said that would be good.

Ms. Ogata added that she informed Mr. Salbova that interior photos of the HS 1&2 buildings were not necessary because these interiors have been severely altered. I concurred and added that the spaces had been converted to offices and storage spaces. She mentioned that she thought the Elementary School building still has some representative classroom interiors.

cc: Brian Major/Ralph Morita (DAGS)

Francis
Gwen

UNLESS WRITTEN OTHERWISE RECEIVED WITHIN SEVEN DAYS WE ASSUME STATEMENTS CONTAINED WITHIN ARE ACCEPTED

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

HONOLULU MUNICIPAL BUILDING
550 SOUTH KING STREET
HONOLULU, HAWAII 96813



RECEIVED
JUL 31 1992

JOSEPH H. MAGALDI, JR.
DIRECTOR
ANAR SAPPAL
DEPUTY DIRECTOR

TE-2805
PL92.1.221

GROUP 70
LIMITED

July 27, 1992

Mr. George Atta, AICP
Group 70 International, Inc.
924 Bethel Street
Honolulu, Hawaii 96813-4398

Dear Mr. Atta:

Subject: University of Hawaii at Manoa
College of Education
Draft Environmental Assessment
TMK: 2-8-15: 1

This is in response to your letter of June 26, 1992 requesting our comments on the subject draft environmental assessment.

Based on our review, we have the following comments:

1. All vehicular access and egress points should be constructed as standard City dropped driveways. The widths of the driveways should be specified and shown on the site plan.
2. Driveway grades should not exceed 5 percent (5%) for a minimum distance of 35 feet from the curb line, and adequate site distance to pedestrians and other vehicles should be provided and maintained.
3. Landscaping should be placed in locations where it does not obstruct vehicular sight lines.
4. The method of determining the amount of traffic generated should be estimated by using trip rates and equations from the ITE, Trip Generation, Fifth Edition.
5. The projected number of peak hour trip generated, as shown on Figure 6, should be verified and substantiated. In addition to the increase in staff and students, an ambient traffic growth factor should be included. The year in which the projected traffic is based on should also be specified.

Mr. George Atta, AICP
Page 2
July 27, 1992

6. Standard City roadway sections on Metcalf Street should be provided along the project's frontage.
7. The proposed student drop-off area should be moved within the project site. A porte-cochere type of drop-off area should be provided and should be wide enough to accommodate two-way traffic.
8. The proposed service road should be wide enough to accommodate two-way traffic.
9. It should be noted that there is no existing street across from the proposed multi-level parking structure. The site plans should be revised accordingly.
10. Additional on-site parking should be provided to the greatest extent practical to alleviate street parking demand on the surrounding roadway system.
11. Construction plans for off-site work should be submitted to our department for review.

Sincerely,

JOSEPH H. MAGALDI, JR.
Director

JOHN HARRIS
DIRECTOR

JAN 17 1992



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

WILLIAM W. PATY, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
BY: KEVIN W. LAKE
MAKANA TAZONON
DUET ROOS
AGRICULTURE DEVELOPMENT
PROGRAMS
AQUATIC RESOURCES
COASTAL ZONING AND
LIFE HISTORY
CONSERVATION AND
RESOURCES ENFORCEMENT
COMMITTEES
FORESTRY AND WILDLIFE
MANAGEMENT
PROGRAMS
LAND MANAGEMENT
EDGE FUND
WATER RESOURCE MANAGEMENT

January 14, 1992

LOG NO.: 4456
DOC NO.: 0495t

Terry L. Hildebrand, AICP
Group 70, Ltd.
924 Bethel Street
Honolulu, Hawaii 96813

Dear Mr. Hildebrand:

SUBJECT: Environmental Assessment Preparation for a Proposed
Project at the College of Education, University of
Hawaii at Manoa
Waikiki, Kona, O'ahu
THK: 2-8-15: 1

This responds to your letter of December 10, 1991, asking for
information regarding historic sites.

There are no known archaeological sites at the project location,
but the area has not been inventoried for subsurface historic
sites, so these may be present. The construction history of the
project location is not clear from your letter, so it may be that
previous construction activities have destroyed sites, if any,
that were present. If subsurface sites are present they might
include prehistoric habitation or agricultural features, or human
burials. Human burials are frequently found during routine
construction activities in Manoa valley, including the University
of Hawaii campus.

The environmental assessment should make clear the construction
history of the project location, and assess the likelihood that
subsurface historic sites remain. If it is likely that subsurface
sites remain, then a subsurface inventory survey to determine the
presence or absence of sites should be completed and a proposed
burial treatment plan worked out with the O'ahu Island Burial
Council, as needed.

Terry Hildebrand
January 14, 1992
Page 2

Castle Memorial Hall is listed on the State Register of Historic
Places and, therefore, any projects which may affect this building
must be reviewed by our office. In addition, because of the close
proximity of the project site to Castle Memorial Hall, Wist Hall
and the Wist Annex, all Hawaii Register properties, the
environmental assessment should address the impact of the proposed
project on these buildings.

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

Sincerely,

DON HIBBARD, Administrator
State Historic Preservation Division

TD:jle

JOHN HANKE
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

FEB 12 1992

GROUP 70

February 7, 1992

DOC NO.: 920204dp

WILLIAM W. PATY, CHAIRMAN
BOARD OF LAND AND NATURAL RESOURCES

DEBRA J. JENSEN
MAMUNU MAGDOON
DAN T. ROON

AGRICULTURE DEVELOPMENT
ADULTIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CULTURAL RESOURCES AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER RESOURCE MANAGEMENT

Mr. Terry L. Hildebrand, AICP
Group 70, Ltd.
924 Bethel Street
Honolulu, Hawaii 96813

Dear Mr. Hildebrand:

SUBJECT: Proposed Project at the College of Education,
University of Hawaii at Manoa

In response to your call of February 5, 1992, we have rechecked our files regarding the extent of properties on the State Register within the College of Education project site. Wist Annex 3, located at the corner of Metcalf and University, is not part of the University of Hawaii nomination. We regret any delays this oversight may have caused.

If you have any further questions, please call Daina Penkiunas at 587-0005.

Sincerely,

DON HILDEBRAND, Administrator
State Historic Preservation Division

DP:aa



GROUP 70
INTERNATIONAL

Francis S. Oba, AIA, AICP
Norman G. Y. Hoang, AIA
Sueyid Scammon, AIA, ASID
Robert K. L. Wong, AIA
Ileohi Ilika, AIA
Roy H. Hulet, AIA, CSI
Linda H. Anlyz
Derrick T. Schi
Rajni E. Parmore, AICP
Edward T. Green
Paul P. Courtney, AIA
Stephen H. Yuen, AIA
Debra H. Kazanow, AIA
Nancy J. Scott
June Fukuhama Inc, ASD
Anne Thomas, AIA, ASID
Stephen E. Cilio, CPA
Bradford A. Wedelical, AIA
Walter R. M.A. AIA, CSI, CCS
Robert K. Hurd
George T. Aita, AICP
Xilley H. Overton, AICP
Janice I. Robinson, AIA
Jan Clair-Jack, Inc, AIA
Hilary A. Gant
Erik G. Chyke, AIA
Dennis H. Herrera

29 November 1993

Mr. Don Hildebrand
Administrator
State Historic Preservation Division
33 South King Street, 6th Floor
Honolulu, Hawaii 96813

Subject: Environmental Assessment Preparation for a Proposed project
at the College of Education, University of Hawaii at Manoa.
TMK: 2-8-15: 01

Dear Mr. Hildebrand:

Thank you for your response regarding information on historic sites. Attached is a copy of your letter dated 14 January 1992.

A Draft Environmental Assessment is being prepared for the University of Hawaii - Manoa, College of Education Phase I of College Master Plan. Your comments regarding the potential for subsurface historic sites in the project area and the existing historic structures will be addressed and incorporated in the final version.

Your office will receive a copy of the Draft Environmental Assessment for review and comment when it is distributed.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

George J. Aita, AICP
Vice President, Director for Planning

cc Carol Nakasone

Group 70 International, Inc. Architects • Planners • Interior Designers • 254 Kolu Street • Honolulu, HI 96813 • (808) 553-3940 • FAX (808) 553-5871



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Office
P.O. Box 50167
Honolulu, Hawaii 96850



December 17, 1991

RECEIVED
DEC 18 1991

Mr. Terry L. Hildebrand
Group 70 Limited
924 Bethel Street
Honolulu, Hawaii 96813-4398

GROUP 70
LIMITED

Dear Mr. Hildebrand:

This responds to your December 10, 1991 letter regarding the proposed College of Education construction project at the University of Hawaii at Manoa, Oahu, Hawaii. Specifically, you requested we review the project to determine if any listed or proposed species of endangered or threatened species of plants or animals may be found in the vicinity of the project.

To the best of our knowledge, there are no listed or proposed species of plants or animals which would be found in the vicinity of, or would be affected by, your proposed action.

Thank you for your concern for listed species.

Sincerely,

William R. Kramer
Acting Field Supervisor
Pacific Islands Office



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

278 SOUTH KING STREET
FOURTH FLOOR
HONOLULU, HAWAII 96813
TELEPHONE: 808/534-4116

RECEIVED
JUL 21 1992

July 17, 1992

GROUP 70
LIMITED

Mr. George Atta, AICP
Group 70 International, Inc.
924 Bethel Street
Honolulu, Hawaii 96813

Subject: University of Hawaii/Manoa College of Education
Phase I of College Master Plan Pre-Assessment

Dear Mr. Atta,

Thank you for the opportunity to review the above document. We have the following comments.

Chapter 200 of Title 11, Administrative Rules in section 11-200-9(a) states: "In the assessment process, the agency shall consult with other agencies having jurisdiction or expertise as well as citizen groups and individuals." The project will have impacts on those families whose children attend the Lab School as well as on the surrounding community in such areas as changes in traffic patterns, increased congestion and construction noise. Thus, we recommend that consultation with community groups be initiated. Any substantive comments should be incorporated into the Draft Environmental Assessment (EA) and the names of the groups included on the List of Parties Consulted.

When the document is formally submitted to our office, it will be published in the OEQC Bulletin as a Draft EA. This will begin a 30-day period in which the public and other agencies have the opportunity to review and comment on the project before a determination is made by the approving agency. Following the end of this period, the agency must incorporate any comments along with their responses into the EA. If necessary, the text and any maps, tables, figures and diagrams should be revised. A determination will be made by the agency as to whether the final EA will result in either a Negative Declaration or an EIS Preparation Notice. The document is then resubmitted to OEQC and published in the Bulletin. A copy of the guidelines for complying with these recent changes is enclosed for your reference.

July 17, 1992
Page Two

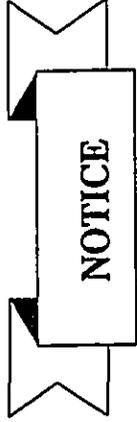
If you have any questions, please call Karen Mau at 586-4185. Thank you for your cooperation.

Sincerely,

Brian J. Choy
Brian J. Choy
Director

Encl. Notice of Act 241, SLH 1992

BC:km



ACT 241 REQUIRES COMMENT PERIOD FOR ENVIRONMENTAL ASSESSMENTS (for anticipated Negative Declarations)

Act 241 Session Laws of Hawaii (SLH) 1992, was approved by the Governor on June 17, 1992, and became effective on that date. All environmental assessments received with letters of determination dated after June 17, 1992, will be subject to this Act.

The Act changes the EIS review process in the following ways:

1. Environmental assessments (EA), for which a negative declaration is anticipated, will now undergo a formal 30-day comment period before a determination is made by an agency. The notice of availability of the Draft EA will be published in the *OEOC Bulletin*.

Note: This new comment period does not replace the "early assessment" provisions in §11-200-9, Hawaii Administrative Rules.

2. The public and other agencies have the opportunity to comment on a Draft EA before a final determination is made. The applicant or agency must respond in writing to comments postmarked within the 30-day review period. The agency must then prepare a final EA which includes all comment letters and their responses. If appropriate, the text, figures, tables, and maps/diagrams in the EA should be revised. The agency must then determine whether the final EA will result in either a negative declaration or an EIS preparation notice.

3. The former 60-day period to initiate judicial proceedings concerning a negative declaration determination has been reduced to 30 days from the date of the *OEOC Bulletin* in which the notice of the final determination is published. (The 60-day period to initiate judicial proceedings concerning an EIS preparation notice determination remains unchanged.)

If you have any questions, please call OEOC staff at 586-4185. Thank you for your cooperation.

GUIDELINES FOR IMPLEMENTING ACT 241, SLH 1992 RELATING TO ENVIRONMENTAL ASSESSMENTS

The following guidelines apply to all Environmental Assessments (EA) for which a negative declaration determination is anticipated.

- 1) Submit Draft EA to OEOC with the following:
 - Letter stating that a negative declaration is anticipated and that notice of the Draft EA should be published in the *OEOC Bulletin*.
 - 4 copies of the Draft EA (same number as before)
 - *OEOC Bulletin Publication Form* (July, 1992 revision of form included in this publication)
- 2) The 30-day comment period begins when notice of availability of the Draft EA is published in the *OEOC Bulletin*. The agency must respond to all comment letters received. Once the 30 days have passed, the agency must include all comment letters and their responses in the final EA. If appropriate, the text and graphics of the EA should be revised.
- 3) Submit Final EA and determination to OEOC with the following:
 - Letter of determination (Negative Declaration or EIS Preparation Notice)
 - 4 copies of the Final EA
 - *OEOC Bulletin Publication Form*
- 4) A 30-day period to initiate litigation will begin once the notice of the final determination of a Negative Declaration is published in the *OEOC Bulletin*.

OEOC will be revising the "Guidebook for the Hawaii State Environmental Review Process," to reflect the changes brought about by Act 241. If you have any questions, please call the OEOC staff at 586-4185. We appreciate your cooperation.



GROUP 70
INTERNATIONAL

- Francis S. Oda, AIA, ACP
- Norman G. Y. Hong, AIA
- Sherrie S. Seaman, AIA, ASID
- Muriel K. L. Wang, AIA
- Iffrahil Huda, AIA
- Roy H. Mack, AIA, CSI
- Leodan A. Lopez
- Denise E. Smith
- Ralph E. Portmore, ACP
- Edward T. Green
- Paul P. Chorney, AIA
- Stephen H. Yuen, AIA
- Dean H. Ramirez, AIA
- Harna J. Scott
- Jane Fukushima Lee, ASID
- Anne Thielen, AIA, ASID
- Stephen L. Chlo, CPA
- Dickson A. Wehner, AIA
- Walter R. Iker, AIA, CSI, CCS
- Walter K. Harbols
- George I. Arai, ACP
- Jeffrey H. Overton, ACP
- Jane S. Nishimura, AIA
- Jon Clark, Jack T. Inc., AIA
- Alk H. Alk. Canal
- Elaine G. O'Connell, AIA
- Daniel M. Herrera

29 November 1993

Mr. Joseph M. Magaldi, Director
Department of Transportation Services
City and County of Honolulu
650 South King Street
Honolulu, HI 96813

Dear Mr. Magaldi:

This is in response to your comments on the University of Hawaii at Manoa, College of Education - Phase I of College Master Plan - Draft Environmental Assessment (EA) February 1992. A copy of your comment letter is attached for reference.

To briefly review, the EA focuses on Phase I of the College of Education (COE) Master Plan which does not change any interior traffic circulation or parking areas. There will also be no changes to Metcalf Street.

Comment #1: As noted above, the configuration of existing parking areas and driveways will not be changed during Phase I. All future vehicular access and egress points will be specified and shown on the site plans for that portion of the COE Master Plan which is being built. Subsequent phases of the Master Plan which will change driveways, have not yet been designed. However, as those portions are designed and implemented, the appropriate drawings will be submitted.

Comment #2: At the appropriate phase of future construction, driveway grades will not exceed 5 percent (5%) for a minimum distance of 35 feet from the curb line, and adequate site distance to pedestrians and other vehicles will be provided and maintained.

Comment #3: Landscaping will be placed in locations where it will not obstruct vehicular sight lines.

Comments #4 & #5: Austin, Tsutsumi & Associates, Inc. are currently working on an update of their 1987 Traffic Impact Report for the University of Hawaii Long Range Development Plan for the Manoa Campus. Their report will be included with the Plan Review Use Update which will be submitted in early 1994. A response to comments #4 & #5 can be provided as soon as the Austin, Tsutsumi report is complete. The appropriate traffic sections of the COE Environmental Assessment will be updated to include the new data.

However, the proposed improvements do not include any change in density or use from the Master Plan which is currently adopted under the University's PRU. The changes represent configuration changes and should not alter previous trip generation projects.

Comment #6: As we discussed in our meeting of 19 November, 1993, Phase I of the COE Master Plan will not alter the current configuration of Metcalf Street. Discussions should occur between the University's Facilities Planning Office and the City Department of Transportation Services at the earliest onset of any subsequent phases of the Master Plan which may warrant improvements to Metcalf Street. Metcalf Street improvements may be addressed during the comprehensive UHLRDP and PRU update that is currently underway.

Comment #7: Phase I of the COE Master Plan will not change the configuration of existing parking areas and driveways and thus will not alter current conditions. We are unable to provide a porte-cochere type of drop-off. There is inadequate space between the proposed Learning Resource Center building and Metcalf Street in which a porte-cochere could be accommodated. In future phases as the parking structure is developed, a safer drop-off and circulation system will be incorporated.

Comment #8: The proposed service road depicted in Phase II of the Master Plan will be wide enough to accommodate two-way traffic.

Comment #9: The drawings have been corrected to reflect that there is no existing street access from the proposed parking structure.

Comment #10: Parking at the University of Hawaii is provided through a campus-wide system of parking lots and structures. The provision of a parking structure adjacent to a building does not mean that the parking structure is reserved for that building in particular. The University is working on a campus-wide plan to alleviate parking problems through additional parking areas and facilities which include the Phase II A multi-deck parking structure which will provide 900 parking stalls and a number of other smaller parking facilities. An overall plan is under preparation as part of the PRU amendment and will be sent to you for review shortly.

Phase I of the College of Education (COE) Master Plan will retain all existing parking, and may potentially provide an additional surface parking lot in the maaka-ewa corner of the COE "mini-campus". There will be an increase in parking in the COE area due to the surface lot which is eventually planned to be a two-story parking structure with approximately 300 stalls.

Comment #11: Construction plans will be submitted when that stage of the project is completed.

Should you have any further comments or questions, please feel free to contact me or Mary O'Leary at 523-5866. Your office will receive a copy of the Environmental Assessment which we anticipate will be submitted to the Office of Environmental Quality Control within the next few months.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Mary O'Leary

George Alta, AICP
Vice President, Director of Planning

cc Carol Nakasone, UH-Manoa Facilities Planning
Austin, Tsutsumi & Associates, Inc.