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STATE OF HAWAII

DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

LETTER NO. PM-1050.4

P. O. BOX 119, HONOLULU, HAWAII 96810

FEB 9 1994

Mr. Brian J. J. Choy
Director
Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Mr. Choy:

Subject: Maui Community College
Building "J" - Phase II
D.A.G.S. Job No. 15-31-6244
TMK 3-8-7:40, Kahului, Maui, Hawaii

In accordance with the requirements of Chapter 343, Hawaii Revised Statutes, and Chapter 200 of Title 11, Administrative Rules, a Final Environmental Assessment has been prepared for the subject project.

Notice of availability of the Draft Environmental Assessment was published in the OEQC Bulletin on January 8, 1994. No comments were received during the public review period.

As the proposing agency, we have determined that there will be no significant impacts as a result of the project and, therefore, are filing the Final Environmental Assessment as a negative declaration. One copy of the OEQC Bulletin Publication Form and four copies of the Final Environmental Assessment are being forwarded to you under separate cover. We respectfully request that the notice of Final Environmental Assessment be published in the OEQC Bulletin.

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

EN/si

cc: Gima, Yoshimori, Miyabara, Deguchi - Eric Taniguchi
Michael T. Munekiyo Consulting, Inc. - Milton Arakawa
UHCC Planning Office - Maynard Young

1994-02-23-MA-~~FEA~~ - Maui Community College Building "J" Phase II FEB 2, 1994

Maui Community College Building "J" Phase II

Final Environmental Assessment and Negative Declaration

Prepared for:



February 1994



Michael T. Munekiyo Consulting, Inc.

Maui Community College Building "J" Phase II

Final Environmental Assessment and Negative Declaration

Prepared for:



February 1994


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Preface

The State of Hawaii, Department of Accounting and General Services, proposes to construct a new classroom building, designated as Building "J" Phase II and a parking lot expansion, at Maui Community College (TMK 3-8-07:40) located in Kahului, Maui, Hawaii. Pursuant to Chapter 343, Hawaii Revised Statutes, and Chapter 200, of Title 11, Administrative Rules, Environmental Impact Statement Rules, this Final Environmental Assessment documents the project's technical characteristics and environmental impacts, and advances findings and conclusions relative to the significance of the project.

Final Environmental Assessment and Negative Declaration

Summary

Applicant and Landowner

The Applicant for the proposed project is the State of Hawaii, Department of Accounting and General Services. The landowner of the affected property is the University of Hawaii.

Contact Person

For further information, contact Eric Nishimoto, State of Hawaii, Department of Accounting and General Services, Kalanimoku Building, 1151 Punchbowl Street, Honolulu, Hawaii 96813, or at telephone (808) 586-0468.

Property Location and Description

The proposed project involves lands located on the campus of the Maui Community College in Kahului, Maui, Hawaii (TMK 3-8-7:40).

Lands to the north and northeast of the campus are occupied by the Maui Community Arts and Cultural Center, Kahului Beach Road, Kahului Harbor, and Pacific Ocean. Lands to the east of the campus, are occupied by the Harbor Lights Condominium complex. Kaahumanu Avenue forms the southern border of the MCC campus. Kaahumanu Shopping Center and the Kahului residential area lie beyond Kaahumanu Avenue. To the west of the MCC campus, lies the War Memorial Center and Baldwin High School.

Proposed Action

The proposed project involves the construction of a new classroom building, designated as Building "J" Phase II, on the Maui Community College campus. Along with the proposed structure, an extension to the existing parking lot is proposed.

Building "J" Phase II is proposed to be located on the west side of the MCC campus, adjacent to the existing library and Building "J" Phase I which is currently under construction. The two story structure contains approximately 18,926 square feet of gross floor area. There are eight classrooms as well as faculty office spaces proposed within the structure. Building "J" Phase II would extend up to approximately 43 feet in height.

The parking lot extension is proposed to be located to the northwest of the existing lot. A total of 94 at-grade parking stalls are proposed.

Determination

Construction of the proposed project will involve short-term environmental impacts typically associated with construction activities. These include air quality and noise impacts. Dust control measures such as watering and sprinkling will be undertaken as needed to minimize dust. Construction activities are also anticipated to be limited to daylight hours. Impacts generated from construction activities are not considered adverse.

From a long-term perspective, the proposed project is not anticipated to result in adverse environmental impacts. The sites of Building "J" and the parking lot extension have already been extensively modified. However, should human osteological material or other cultural remains be uncovered during construction activities, applicable procedures to ensure compliance with Chapter 6E, HRS, will be followed. There are no rare/threatened species of flora and fauna at the site.

Impacts to the local economy are anticipated to be positive involving support for construction-related employment in the short-term. After completion of construction, the project will provide liberal arts, vocational and technical training to benefit the local employment market.

With regard to traffic, there are a number of proposed new roadways in the region which provide alternative travel routes in the Wailuku-Kahului region. With these regional improvements, traffic demand on Kaahumanu Avenue is anticipated to decrease. There are a number of intersection and site access improvements which are needed at full build-out of the campus master plan at the year 2000 with 5,000 full-time equivalent students. The timing of implementation of improvements and the pro-rata distribution of costs associated with the improvements will be coordinated with the Department of Transportation and the Department of Public Works and Waste Management.

With regard to drainage improvements, there are two interim desilting basins being proposed which would accommodate the additional runoff created by the project. No adverse effects to adjacent and downstream properties are anticipated.

The project is also not anticipated to have adverse impacts upon medical, police, and fire protection services as well as other infrastructure systems.

In light of the foregoing findings, it is concluded that the proposed action will not result in any significant impacts. Thus, this Final Environmental Assessment is being filed as a negative declaration.

Chapter 1

Project Overview

I. PROJECT OVERVIEW

A. PROPERTY LOCATION, BACKGROUND AND LAND OWNERSHIP

The applicant, State of Hawaii, Department of Accounting and General Services (DAGS), proposes to construct a new classroom building, designated as Building "J" Phase II, on the Maui Community College (MCC) campus (TMK 3-8-7:40) located in Kahului, Maui, Hawaii. See Figure 1. Along with the proposed building, an extension to the parking lot on the northwest side of the existing lot is proposed.

The history of MCC dates back to 1931, when it was called Maui Vocational School, and offered courses in carpentry, auto mechanics and machine shop. In 1950-51, the physical plant expanded and new programs were added. In 1958, the school changed its name to Maui Technical School.

In 1964, the State Legislature established the statewide community college system as part of the University of Hawaii. In 1966, the school's name was changed to Maui Community College. Course offerings were broadened to include vocational, technical as well as liberal arts classes. Currently, MCC services approximately 1,397 full-time equivalent students.

In the long-term, MCC's master plan anticipates future expansion of facilities and programs. This expansion could provide for additional classroom space to accommodate as many as 5,000 full-time equivalent students by the year 2000.

The MCC site is owned by the University of Hawaii.

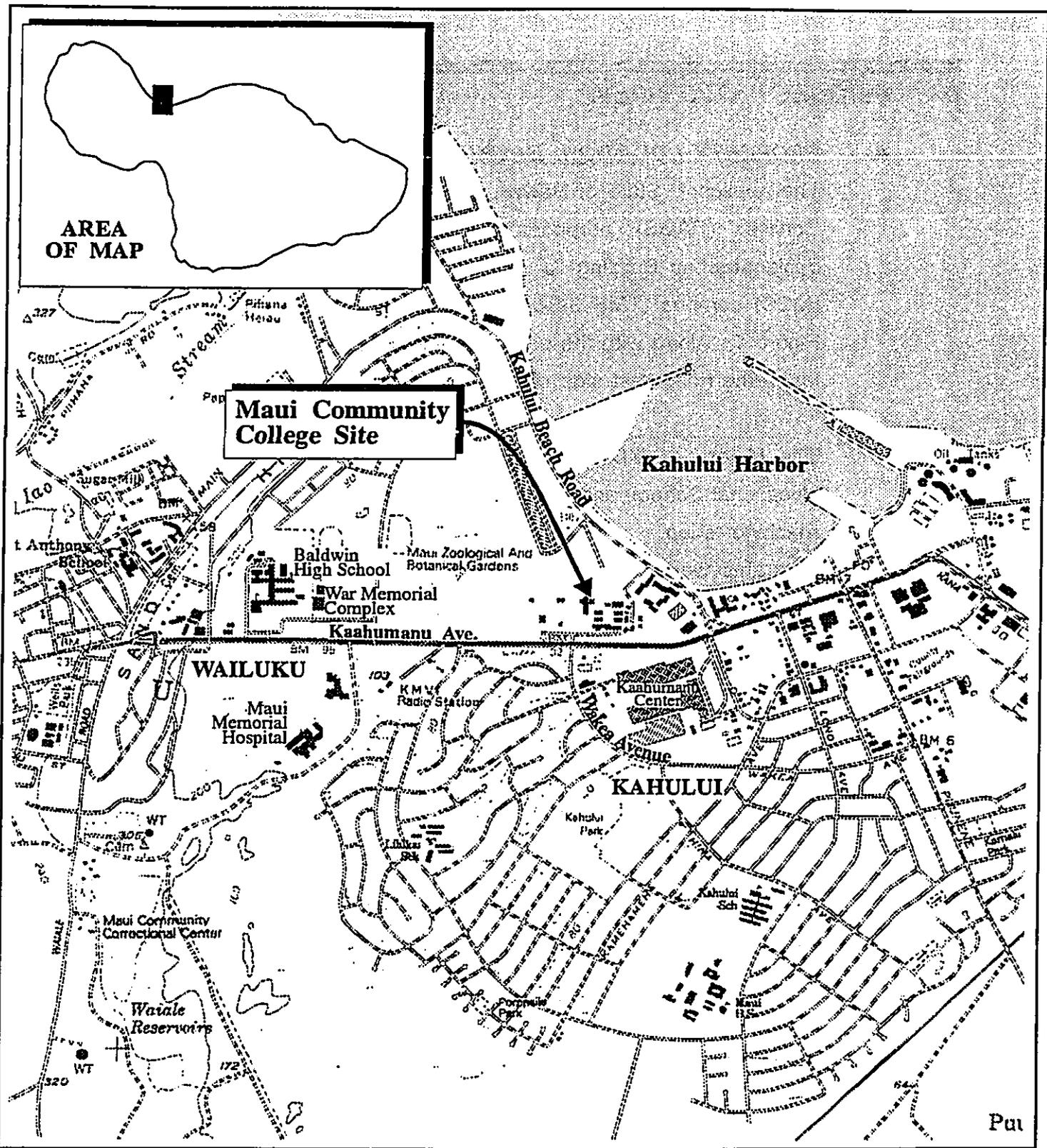


Figure 1 Maui Community College
 Building "J" Phase II
 Regional Location Map



2000 Prepared for: State of Hawaii, Dept. of Accounting and General Services



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B. PROPOSED ACTION

1. Project Need

At its present enrollment, the MCC campus exceeds capacity. During the past three years, student population has increased by approximately 35 percent. Many faculty members do not have offices of their own or must use storerooms and closets for office space. Moreover, classes which might otherwise be offered are commonly not made available for students because of lack of classroom and lecture hall space. The proposed Building "J" Phase II is necessary in order to help meet the increase in student population as well as faculty needs.

2. Proposed Improvements

Building "J" Phase II is proposed to be located on the west side of the MCC campus adjacent to the existing library and Building "J" Phase I which is currently under construction. See Figure 2. The two story structure contains approximately 18,926 square feet of gross floor area. There are eight classrooms as well as faculty office spaces proposed within the structure. See Figure 3 and Figure 4. Building "J" Phase II would extend up to approximately 43 feet in height. See Figure 5.

The parking lot extension would contain an additional 94 stalls by constructing a new row of parking.

The total cost of all improvements for the project is estimated to be \$3.6 million. Assuming all approvals are obtained, construction is scheduled to begin in September 1994 with completion targeted for August 1995.

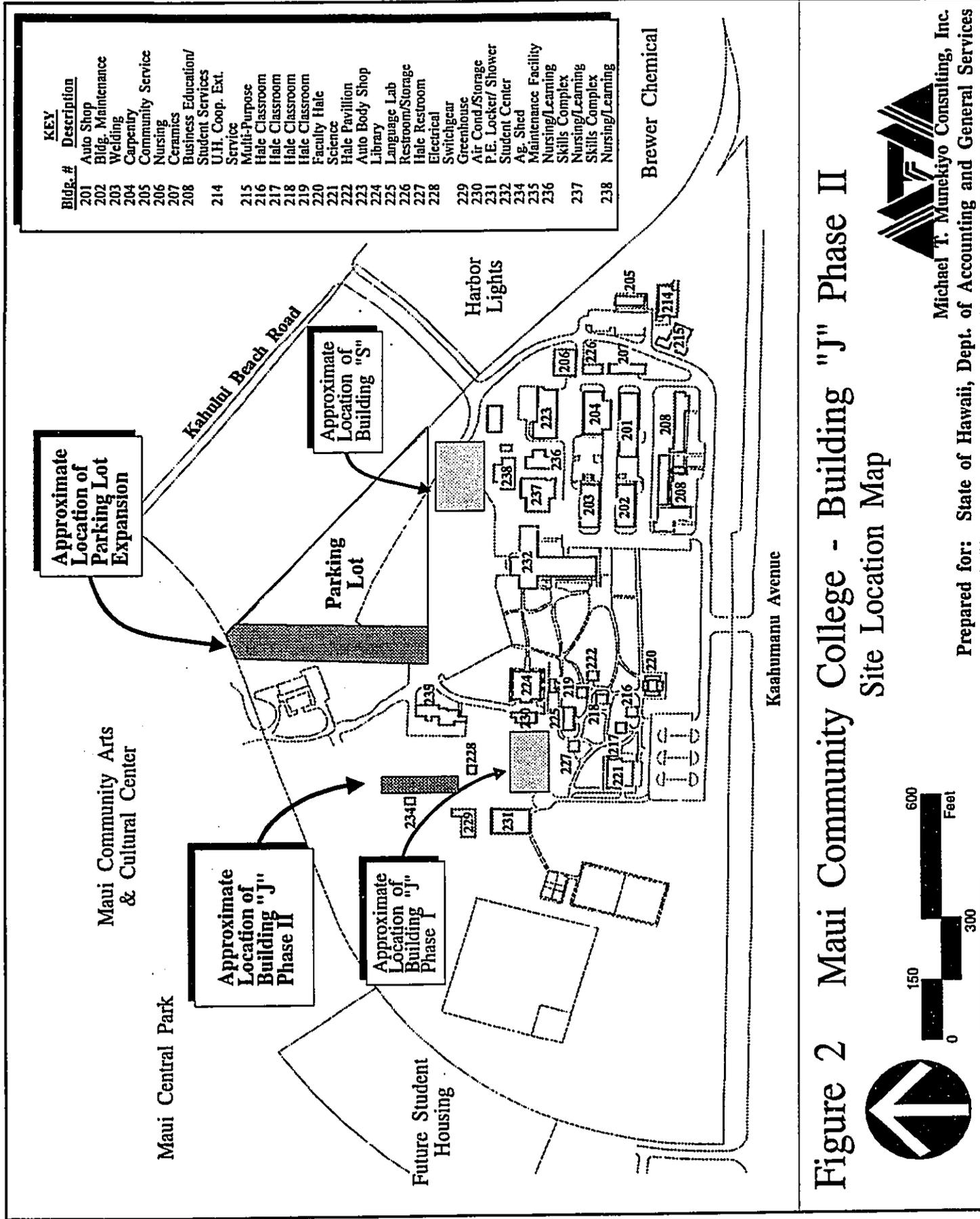


Figure 2 Maui Community College - Building "J" Phase II Site Location Map

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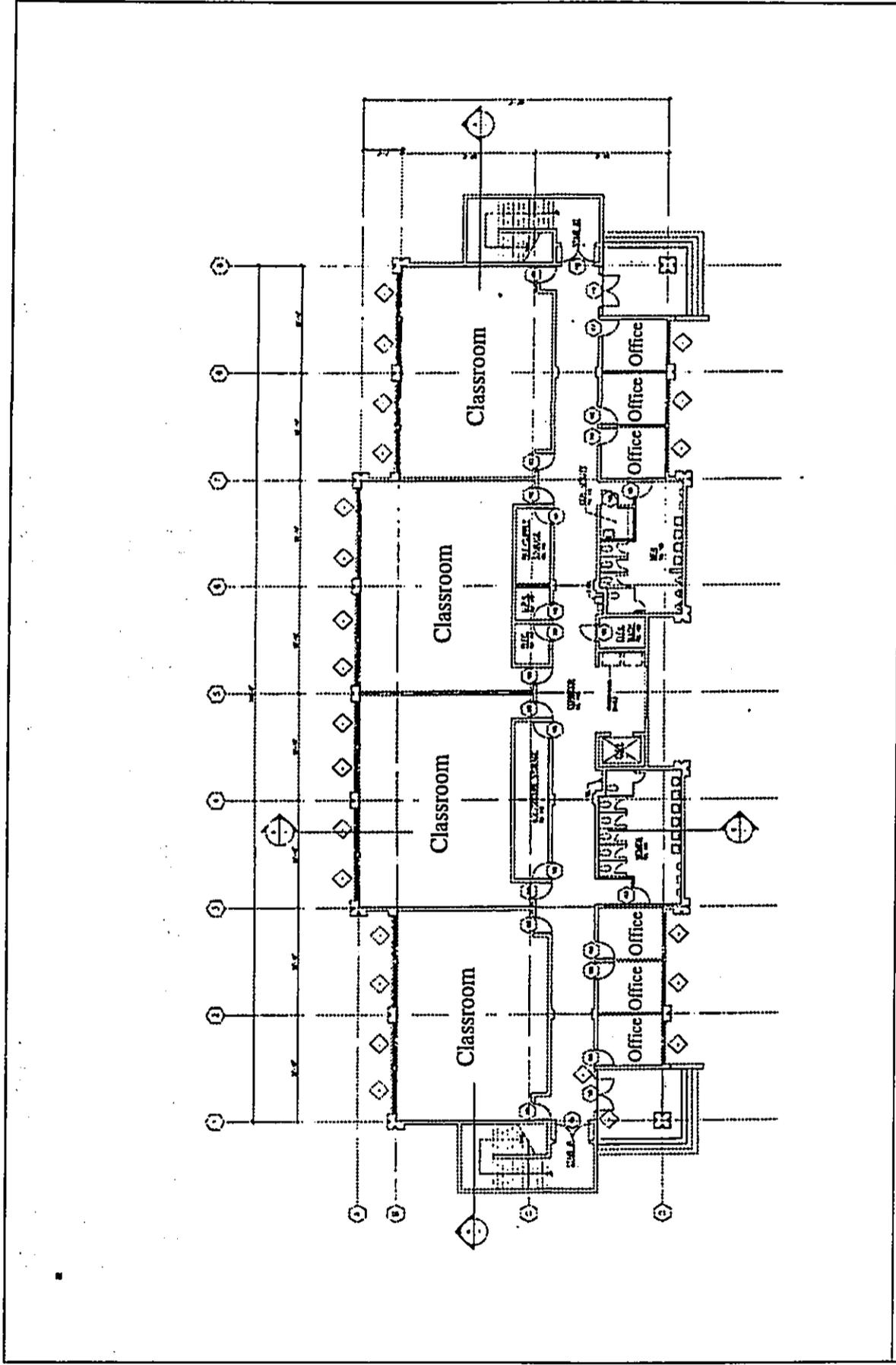


Figure 3 Maui Community College Building "J" Phase II
First Floor Plan



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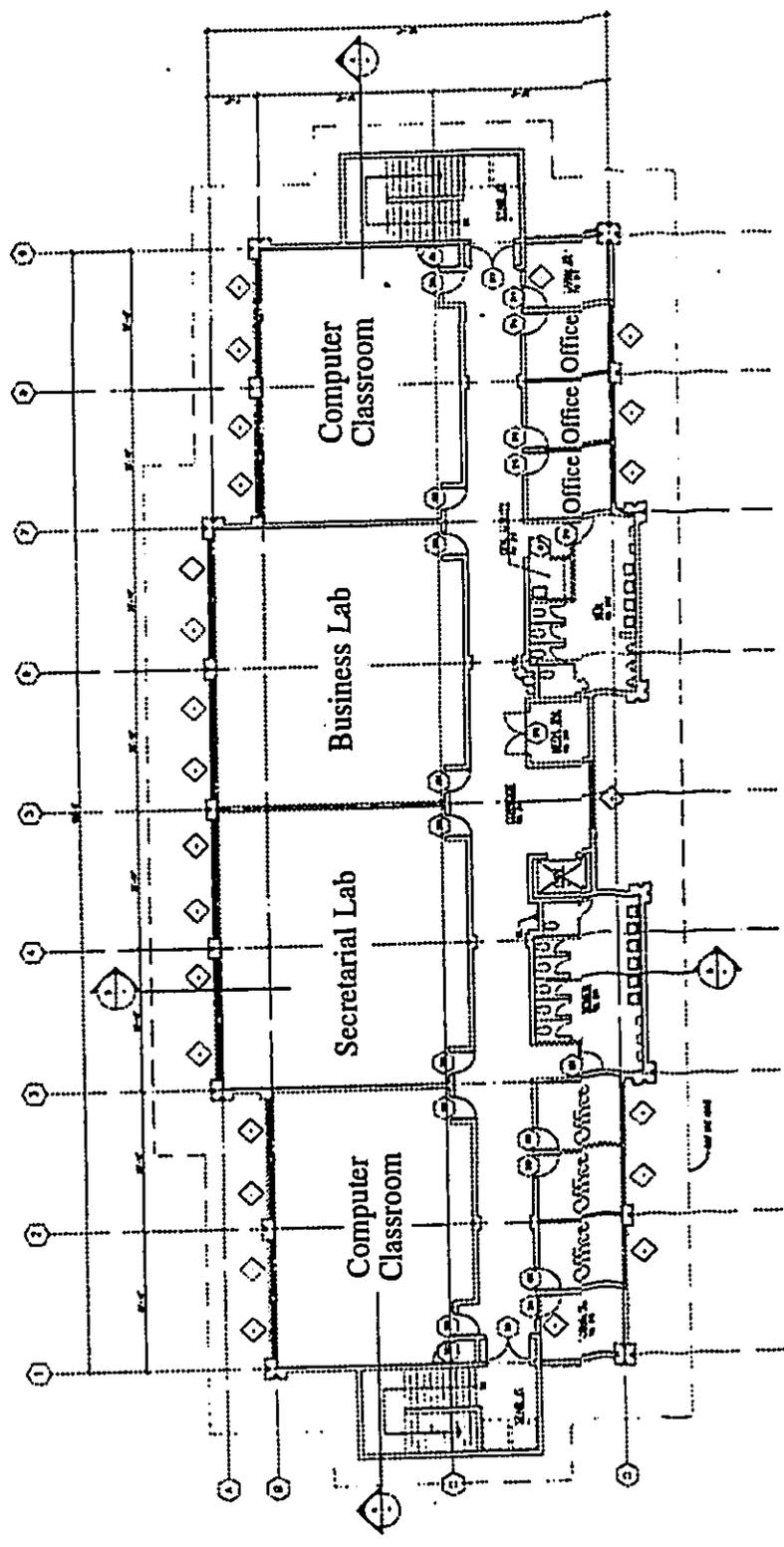


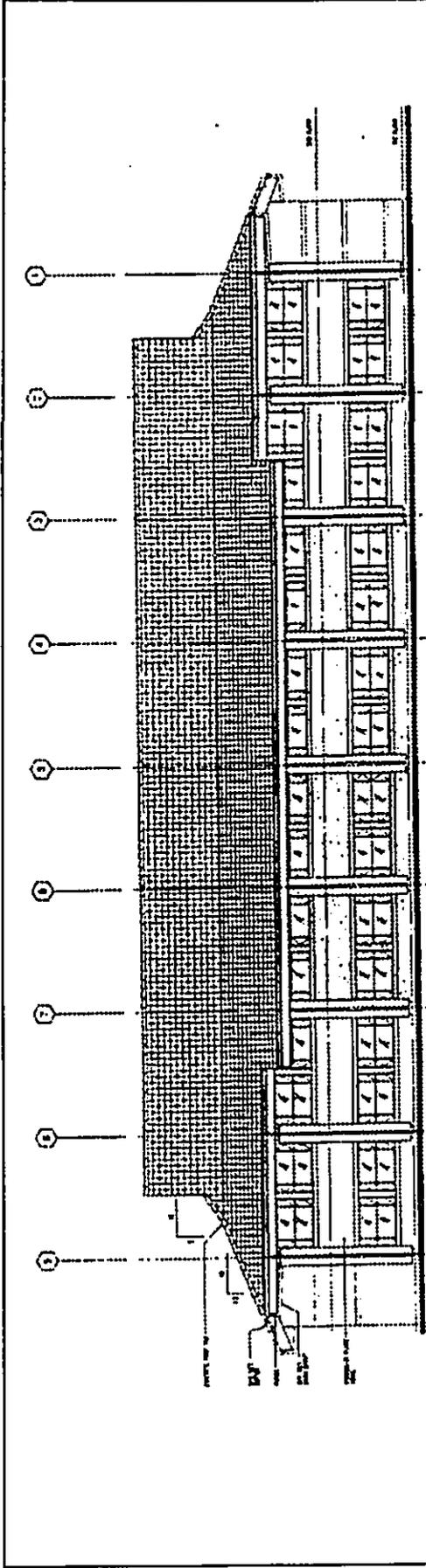
Figure 4 Maui Community College Building "J" Phase II
Second Floor Plan



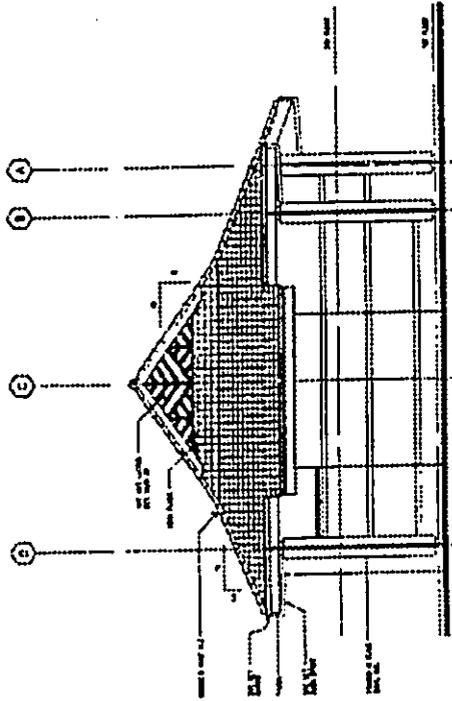
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West Elevation



North Elevation

Figure 5 Maui Community College Building "J" Phase II Elevations



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Chapter II

Description of the Existing Environment

II. DESCRIPTION OF THE EXISTING ENVIRONMENT

A. PHYSICAL ENVIRONMENT

1. Surrounding Land Uses

MCC is located in the heart of Kahului, the Island of Maui's center of commerce. Kahului is home to Kahului Harbor, the Island's only deep water port, and the Kahului Airport, the second busiest airport in the State. With its proximity to the Harbor and Airport, the Kahului region has emerged as the focal point for heavy industrial, light industrial and commercial activities and services such as warehousing, baseyard operations, automotive sales and maintenance, and retailing for equipment and materials suppliers. The region is considered Central Maui's commercial retailing center with the Kaahumanu Center, the Maui Mall and the Kahului Shopping Center, located within a mile of MCC.

MCC, the only Community College on Maui, is also centrally located in Kahului.

Surrounding this commercial core is an expansive residential area comprised principally of single-family residential units. Residential uses encompass the area extending from Maui Memorial Hospital to Puunene Avenue.

Building "J", Phase II is proposed to be located in the western portion of the MCC campus. The parking lot extension is proposed to be expanded to the northwest of the existing parking lot.

The site is currently used as a construction staging area for Building "J" Phase I. Access to the parking lot is from Kaihee Place, which extends to Kahului Beach Road. Kahului Harbor and

the Pacific Ocean borders the Kahului Beach Road. Lands to the southeast of Kaihee Place are occupied by the Harbor Lights Condominium. To the northwest of the site is the Maui Community Arts and Cultural Center Project which is currently under construction.

2. **Climate**

Like most areas of Hawaii, Maui's climate is relatively uniform year-round. Characteristic of Hawaii's climate, the project site experiences mild and uniform temperatures year round, moderate humidity and a relatively consistent northeasterly tradewind. Variation in climate on the Island is largely left to local terrain.

Average temperatures at the project site (based on temperatures recorded at Kahului Airport) range from lows in the 60's to highs in the 80's. August is historically the warmest month, while January and February are the coolest. Rainfall at the project site averages approximately 20 inches per year. Winds in the Kahului region are predominantly out of the north-northeast and northeast.

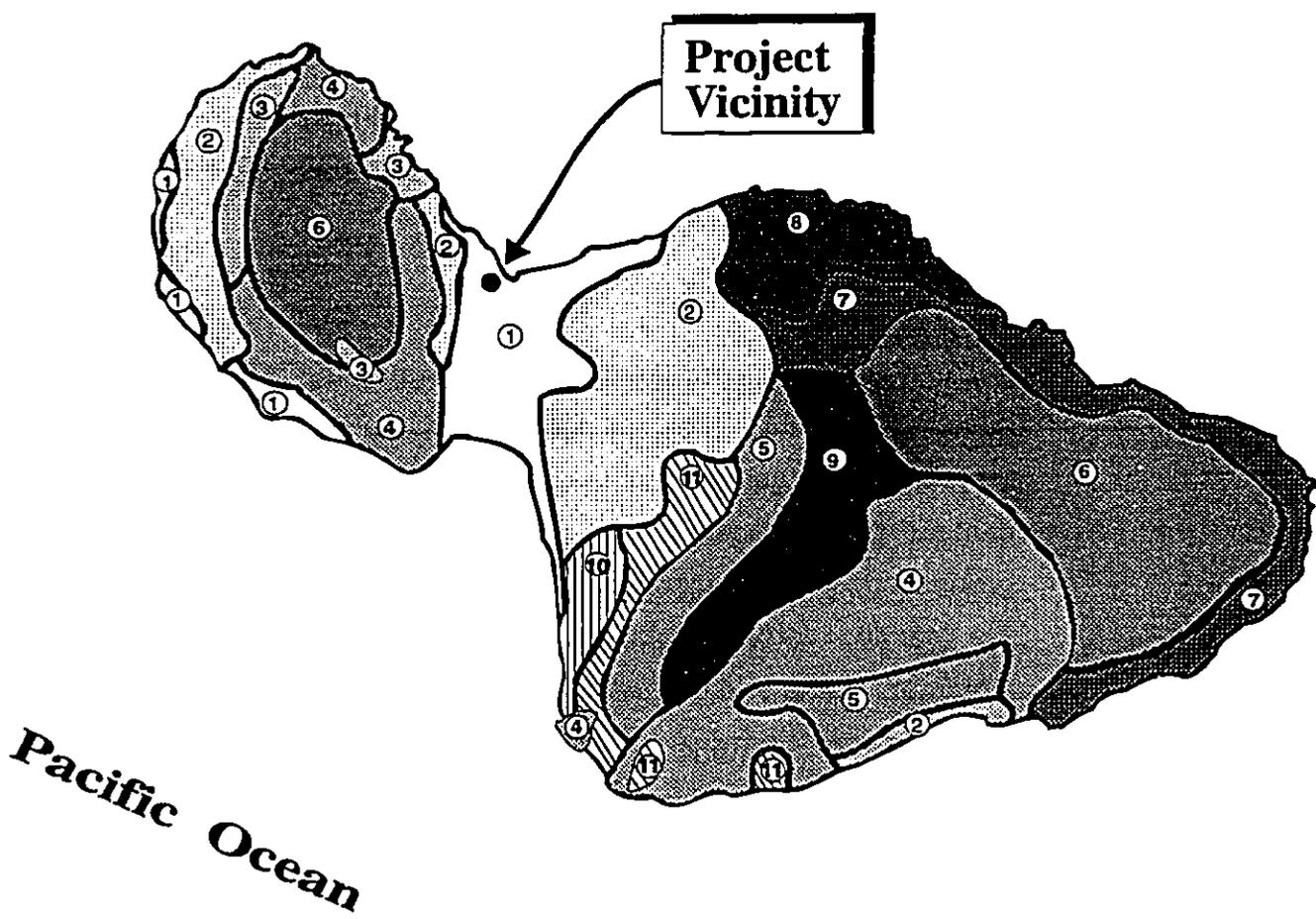
3. **Topography and Soil Characteristics**

The MCC campus is located on Maui's flat central isthmus ranging in elevations from 8 to 40 feet. The high point, along the west side of campus, near Kaahumanu Avenue, gently slopes down to the northeast side of campus. There are no significant topographical constraints within the project site.

Underlying the proposed site and surrounding lands are soils belonging to the Pulehu-Ewa-Jaucas association. See Figure 6. This soil association is characteristically deep and well-drained and

LEGEND

- | | |
|--|---|
| <p>① Pulehu-Ewa-Jaucas association</p> <p>② Waiakoa-Keahua-Molokai association</p> <p>③ Honolulu-Olelo association</p> <p>④ Rock land-Rough mountainous land association</p> <p>⑤ Puu Pa-Kula-Pane association</p> <p>⑥ Hydrandepts-Tropaquods association</p> | <p>⑦ Hana-Makaalae-Kailua association</p> <p>⑧ Pauwela-Haiku association</p> <p>⑨ Laumaia-Kaipoi-Olinda association</p> <p>⑩ Keawakapu-Makens association</p> <p>⑪ Kamaole-Oanapuka association</p> |
|--|---|



Map Source: USDA Soil Conservation Service

Figure 6

**Maui Community College
Building "J" Phase II
Soil Association Map**



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located on alluvial fans and in basins. The soil type specific to the project site is of the Puuone Series' Puuone Sand classification (PZUE). See Figure 7. PZUE soils predominate in the Kahului region and is typified by a sandy surface layer underlain by cemented sand. Naturally occurring vegetation on this series include bermuda grass, kiawe, and lantana.

4. **Flood and Tsunami Hazard**

The sites for Building "J" Phase II and the extension of the parking lot are designated Zone "C" by the Flood Insurance Rate Map. See Figure 8. Zone "C" is an area of minimal flooding. The area makai of the parking lot extension is designated as Zone "A-4" (areas inundated by the 100-year flood with a base flood elevation of 16 feet above mean sea level).

5. **Flora and Fauna**

Surrounding the project site to the south and east is the urbanized center of Kahului. Areas of the MCC campus that surround the project are characteristic of the urban nature of Kahului. Lands on campus are landscaped with palm trees and other shade trees, ground cover, and other exotic vegetation. Lands to the north of the parking lot extension would be occupied by the Maui Community Arts and Cultural Center. The project site contains koa haole, kiawe, bermuda grass, fingergrass, lowland shrubs and other exotic vegetation. There are no known rare, endangered or threatened species of plants within the project sites.

Fauna and avifauna are also characteristic of urban areas. Fauna typically found in the vicinity include mongoose, rats, dogs and cats. Avifauna typically include mynas, several types of doves, and

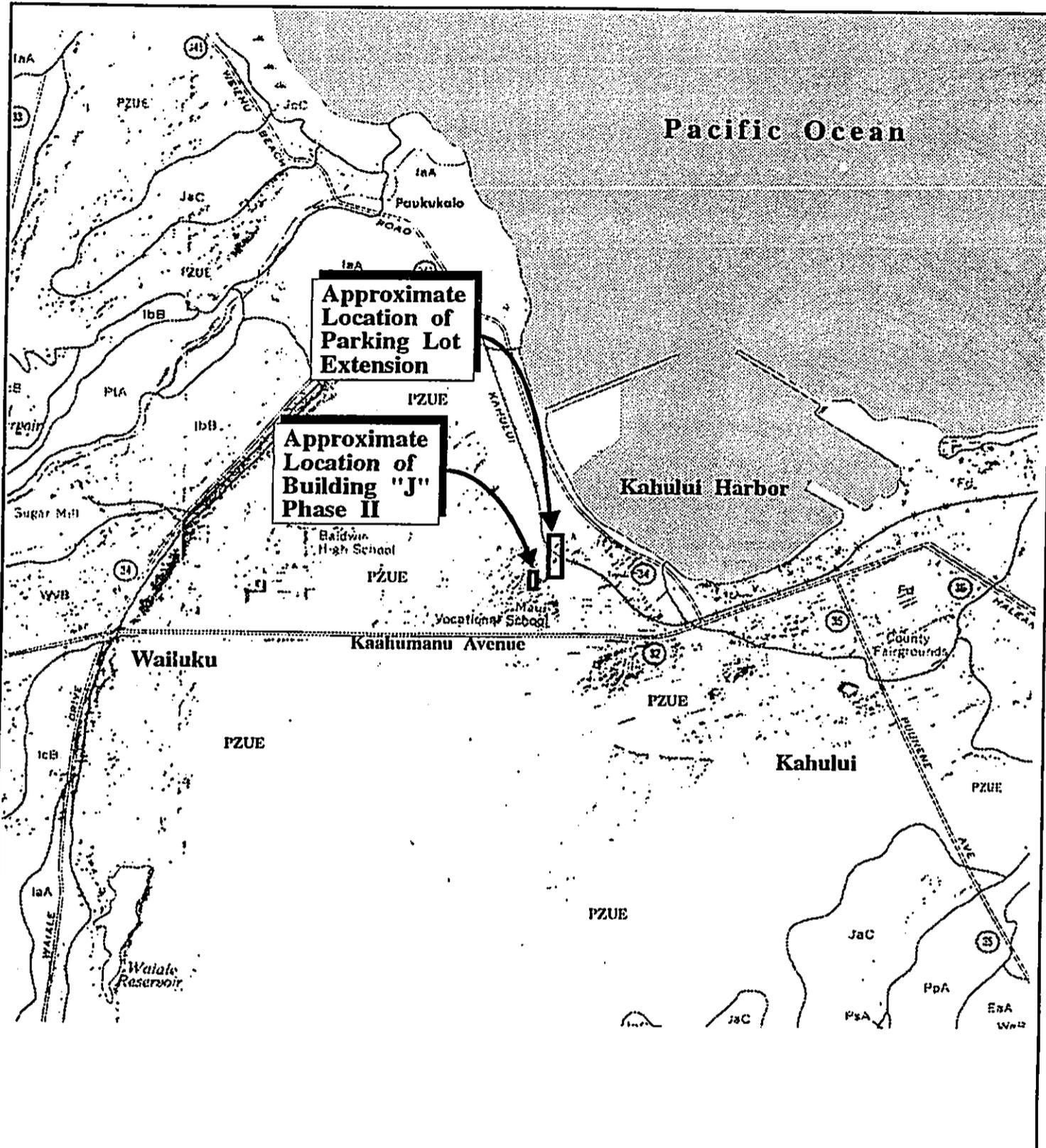
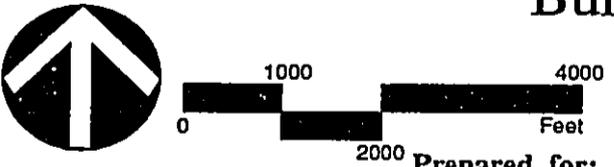


Figure 7 Maui Community College
 Building "J" Phase II
 Soil Classification



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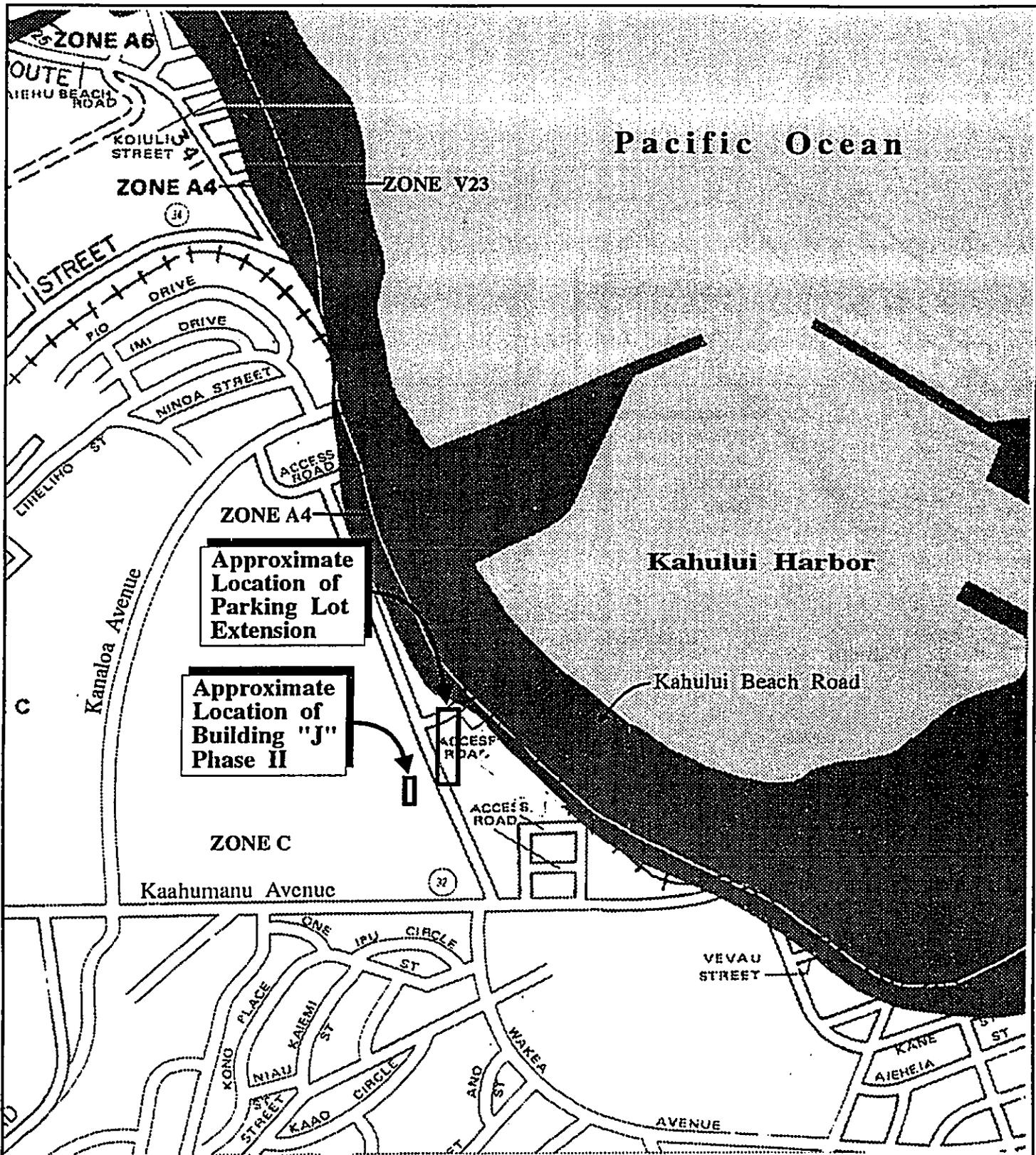


Figure 8 Maui Community College
 Building "J" Phase II
 Flood Insurance Rate Map



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house sparrows. There are no rare or endangered species of fauna or avifauna found at the project site.

6. **Archaeological Resources**

An archaeological inventory survey was done for Maui Community College Building "J" Phase I and Building "S". The study area is in close proximity to the proposed Building "J" Phase II site.

In the general area, the archaeological study found considerable quantities of refuse as well as remains of various poured, concrete floors and foundations of buildings which were associated with the 18th U.S.M.C. Service Battalion Camp during World War II. The study also found considerable signs of surface and subsurface disturbance from earthmoving equipment. Landfill materials have also been freely deposited in the area. Other materials in the area include discarded construction material and equipment, rusted automobiles and parts, and household litter.

The study also included the excavation of 22 subsurface trenches. No recognizable features or identifiable pre-contact Hawaiian artifacts were recovered from any of the trenches.

Regarding the site of Building "J" Phase II and the proposed parking lot extension, the surface has already been significantly disturbed through construction activities. No surface archaeological features are present at the sites.

7. **Air Quality**

Air quality in the Wailuku-Kahului region is considered good as point sources (e.g., Maui Electric Power Plant, HC&S Mill) and non-

point sources (e.g., automobile emissions) of emission are not significant to generate high concentration of pollutants. The relatively high quality of air can also be attributed to the region's constant exposure to winds which quickly disperse concentrations of emissions. This rapid dispersion is evident during burning of sugar cane in fields located to the southeast of the Kahului residential core.

8. **Noise**

Traffic noise is the predominant source of background noise in the vicinity of the projects. To the east, the Kahului Harbor activity can also add to the background noise levels in the surrounding region.

9. **Visual Resources**

Scenic resources to the west of MCC include Iao Valley and the West Maui Mountain Range. Looking southeast, Haleakala is clearly visible. To the northeast, lies the Kahului Harbor and the Pacific Ocean. South of MCC, the Kahului commercial center is visible.

B. **SOCIO-ECONOMIC ENVIRONMENT**

1. **Population**

The population of the County of Maui has exhibited relatively strong growth over the past decade with the 1990 population estimated to be 100,374, a 41.7% increase over the 1980 population of 70,847. Growth in the County is expected to continue, with resident population projections to the years 2000 and 2010, estimated to be 123,900 and 145,200, respectively (DBED, 1990).

The Wailuku-Kahului Community Plan region follows the Countywide pattern of population growth, with the region's 1990 population of 32,816 expected to rise to 40,119 by the year 2000 and to 47,597 by the year 2010 (Community Resources, Inc., 1992).

2. **Economy**

As noted previously, the Kahului region is the Island's center of commerce. Combined with neighboring Wailuku, the region's economic character encompasses a broad range of commercial, service, and governmental activities. In addition, the region is surrounded by significant agricultural acreages which include sugar cane fields, pineapple fields, and macadamia nut orchards. The vast expanse of agricultural land, managed by Hawaiian Commercial & Sugar (HC&S) and Wailuku Agribusiness Company, is considered a key component of the local economy.

C. **PUBLIC SERVICES**

1. **Recreational Facilities**

The Wailuku-Kahului region encompasses a full range of recreational opportunities, including shoreline and boating activities at the Kahului Harbor and adjoining beach parks, and individual and organized athletic activities offered at numerous County parks and the War Memorial Complex. MCC is in close proximity to the Kahului Community Center, the County's Kanaha Beach Park and Iao Valley State Park.

2. **Police and Fire Protection**

Police protection for the Wailuku-Kahului region is provided by the County Police Department headquartered at the Wailuku Station,

approximately 0.8 mile from MCC. The region is served by the Department's Central Maui patrol.

Fire prevention, suppression, and protection services for the Wailuku-Kahului region is provided by the County Department of Fire Control's Wailuku Station, located in Wailuku Town, approximately 1.8 miles from MCC. In addition, the Department has constructed a new Kahului Station (located on Dairy Road). Portions of the MCC campus are within the 2.0 mile service radius of the Kahului Station.

3. **Solid Waste**

Single-family residential solid waste collection service is provided by the County of Maui on a once-a-week basis. Residential solid waste collected by County crews are disposed at the County's 55-acre Central Maui Landfill, located four miles southeast of the Kahului Airport. In addition to County-collected refuse, the Central Maui Landfill accepts commercial waste from private collection companies. Refuse collection for MCC is provided by a private collection company.

4. **Health Care**

Maui Memorial Hospital, the only major medical facility on the Island, services the Wailuku-Kahului region. Acute, general and emergency care services are provided by the 145-bed facility. In addition, numerous privately operated medical/dental clinics and offices are located in the area to serve the region's residents.

5. **Schools**

The Wailuku-Kahului region is served by the State Department of Education's public school system as well as several privately operated schools accommodating elementary, intermediate and high school students. Department of Education facilities in the Kahului area include Lihikai and Kahului Schools (Grades K-5), Maui Waena Intermediate School (Grades 6-8), and Maui High School (Grades 9-12). Existing facilities in the Wailuku area include Wailuku Elementary School (Grades K-5), Iao Intermediate School (Grades 6-8), and Baldwin High School (Grades 9-12). MCC, a branch of the University of Hawaii, serves as the Island's only Community College.

D. **INFRASTRUCTURE**

1. **Roadways**

The Wailuku-Kahului region is served by a roadway network which includes arterial, collector and local roads. Major roadways include Kaahumanu Avenue, the principal linkage between Wailuku and Kahului, Lower Main/Kahului Beach Road, Hana Highway, and Puunene Avenue.

Access to MCC is provided by a primary entry at the four-way signalized intersection of Kaahumanu Avenue and Wakea Avenue. Kaihee Place provides a secondary access to the campus from Kahului Beach Road.

2. **Wastewater**

Domestic wastewater generated in the Wailuku-Kahului region is conveyed to the County's Wailuku-Kahului Wastewater Reclamation Facility located one-half mile south of Kahului Harbor.

The design capacity of the facility is 7.9 million gallons per day (MGD). Average daily flow currently processed through the plant is approximately 5.3 MGD.

The MCC campus is currently serviced by two separate sewer lines. Wastewater from the west side of campus discharges into a 30-inch sewer trunk line which bisects the campus from its Waiehu border to the area near the intersection of Kaahumanu and Wakea Avenues. Wastewater from the east side of campus gravity flows into an on-campus sewage pump station (SPS) which is then pumped to an existing 24-inch line which extends from Kaahumanu Avenue along Kane Street.

3. Water

The Wailuku-Kahului region is served by the Board of Water Supply's (BWS) domestic water system. Water drawn from the Iao Aquifer System is conveyed to this region for distribution and consumption. The Iao Aquifer, which serves the Central Maui region, has an estimated sustainable yield of 20 MGD. Recent estimates place the monthly average withdrawal from the aquifer at over 18 MGD.

Water service to MCC is provided via a 12-inch waterline located along Kaahumanu Avenue, and a 16-inch waterline that crosses through the campus originating from the Waiehu Heights reservoir.

4. Drainage

In general, the majority of the on-site MCC campus runoff sheet flows across the campus towards Kahului Harbor, collected by an existing underground drainage collection and retention system, and

discharged under Kahului Beach Road via an off-site drainage ditch and drainline system. Ultimate disposal of the on-site campus runoff is directed into Kahului Harbor. The remaining on-site campus runoff drains towards the east and percolates into the ground.

An existing 72 inch by 44 inch arch pipe conveys off-site runoff through the campus from Kaahumanu Avenue to the existing northern MCC parking area. The off-site drainage area is approximately 16 acres and is located south of Kaahumanu Avenue. The arch pipe outlets into an on-site drainage ditch which then connects to an existing on-site underground drainage collection and retention system and then into an existing off-site ditch and drainline system before ultimate disposal into Kahului Harbor.

The storm water runoff from the tributary area just mauka of the proposed Building "J" Phase II site (4.87 cfs) is controlled by an existing temporary drainage system constructed for the existing agricultural facilities. This drainage system consists of two drain inlets, interconnecting drainlines and a temporary desilting basin. Presently, the existing runoff from the proposed Building "J" site area (0.58 cfs) flows downhill into an undeveloped area and percolates into the ground.

The stormwater runoff from the proposed parking area and access road site is presently controlled by an existing underground drainage collection and retention system.

Chapter III

Potential Impacts and Mitigation Measures

III. POTENTIAL IMPACTS AND MITIGATION MEASURES

A. PHYSICAL ENVIRONMENT

1. Surrounding Uses

The proposed project contains classrooms which are compatible to uses within the MCC campus. The project is also compatible with surrounding land uses close to MCC, such as the Maui Community Cultural Arts and Cultural Center, Kaahumanu Center, Haleakala Dairy, the Maui Land and Pineapple Company cannery, Harbor Lights Condominium, and the single-family residential area adjacent to Wakea Street.

2. Flora and Fauna

There are no known significant habitats or rare, endangered or threatened species of flora and fauna located within the project sites. The proposed project is therefore not considered an adverse impact upon these environmental features.

3. Archaeological Resources

The sites for Building "J" Phase II and the extension of the parking lot involve lands which have been extensively modified. There are no surface archaeological features located at the subject sites.

An archaeological inventory survey was done for a nearby project, Building "J" Phase I and Building "S", also located on the MCC campus. This project also involved a parking lot extension as well as the construction of a retention basin. The study noted the extreme construction disturbance in the area from previous construction projects. The study also notes that historic references to this area are of its unused and barren nature. Subsurface

testing was also done with no cultural features or early artifacts being discovered.

With regard to Building "J" Phase II and the parking lot extension, it is very unlikely that significant archaeological materials are present on the property. Should human osteological material or other cultural remains be uncovered during construction activities, applicable procedures to ensure compliance with Chapter 6E, HRS, will be followed.

4. **Air Quality**

Air quality impacts attributed to the project will include dust generated by short-term, construction-related activities. Site work such as grading and utilities and parking lot construction, for example, will generate airborne particulates. Dust control measures such as regular watering and sprinkling will be implemented as needed to minimize wind-blown emissions.

The proposed redevelopment provides additional classroom space within the MCC campus. An increase in student enrollment would involve a larger volume of traffic flowing in and out of MCC during school hours. However, since MCC-related traffic represents a relatively small portion of overall traffic activity in the Kahului region, the proposed project is not anticipated to be detrimental to local air quality.

5. **Noise**

As with air quality, ambient noise conditions will be impacted by construction activities. Heavy construction equipment, such as bulldozers, front end loaders, and materials-carrying trucks and

trailers, would be the dominant source of noise during the site construction period. Impact tools such as jack hammers and hand-held pneumatic tools are also a major source of noise. To aid in the mitigation of construction noise impacts upon surrounding uses, construction activities will be conducted during the daylight hours only.

On a long term basis, the project will not generate adverse noise conditions.

6. Visual Resources

The addition of a new classroom building to MCC, along with the parking lot expansion will enhance the visual character of the site and its immediate environs. The architectural design of the building is similar to Building "J" Phase I and Building "S". The project is located mauka of Kahului Beach Road and will not encroach into view corridors along the shoreline.

B. SOCIO-ECONOMIC ENVIRONMENT

1. Population and Local Economy

On a short-term basis, the project will support construction and construction-related employment.

On a long-term basis, the project will supply the facilities to provide upper-level educational classes, as well as vocational and technical training to students which will benefit the local employment market. Since MCC has been the fastest-growing community college in the State, the proposed project will help to fill student needs and the demands of the market place.

2. **Police, Fire, and Medical Services**

Medical, police and fire protection services are not expected to be adversely impacted by the proposed project. The project will not extend existing service area limits for emergency services.

3. **Solid Waste**

During construction, the State will be working with the contractor to minimize construction solid waste, in all phases of construction. The disposal of the solid waste will be the responsibility of the contractor.

Once the project is completed, solid waste will be handled by a private refuse collection company. It is noted that a solid waste management plan is being implemented on the MCC campus. The College has a Recycling Plan for staff, faculty, and students whereby there are storage containers for newspapers (and any other recyclable paper products) and aluminum products for disposal at Maui Scrap Metal or any other recycling company.

A composting program also is in effect at the college. All landscaping debris (grass clippings, leaves) are used as mulch or composted at the campus at the Agricultural Facility for future use. To increase program efficiency, a chipper or mulcher will be purchased and put into use. If there is an excess of landscaping debris, MCC utilizes the "Green Waste" disposal site at Waikapu or any other future site as they become available.

C. INFRASTRUCTURE

1. Traffic

A traffic impact analysis was done for Building "J" Phase I and Building "S" on the MCC campus. The report analyzed traffic conditions at full-buildout of MCC's master plan of 5,000 full-time equivalent (FTE) students by the year 2000. There were 1,397 full-time equivalent students at MCC during the fall semester of 1993.

The report notes that there are a number of proposed highway improvements in the Wailuku-Kahului area which would provide alternative travel routes. This would relieve much of the traffic congestion on Kaahumanu Avenue in the project vicinity. Roadway improvements include:

1. The extension of Mahalani Street to Waiale Road;
2. The construction of Maui Lani Parkway, a new roadway between Kaahumanu Avenue and Kuihelani Highway;
3. The extension of Kamehameha Avenue through the new Maui Lani Parkway;
4. The extension of Onehee Avenue to the new Maui Lani Parkway;
5. The extension and widening of Waiale Road to Honoapiilani Highway;
6. Roadway widening of Waiale Road between the Kahekili extension and the Mahalani extension; and
7. The Puunene Bypass Road between Mokulele Highway and Kuihelani Highway, connecting to the Maui Lani Parkway.

Based on the traffic analysis, the report noted improvements which would be required to mitigate existing roadway deficiencies:

-
1. Provide exclusive left-turn, through, and right-turn lanes on the north bound Mahalani Street approach at Kaahumanu Avenue; and
 2. Construct an exclusive left-turn lane, an optional left/through lane, and an exclusive right-turn lane on the north bound approach of Wakea Avenue at Kaahumanu Avenue.

The report also notes a number of site access recommendations:

1. Restrict access from Kaihee Place and utilize the new road connecting Kanaloa Avenue to Kahului Beach Road as the access to the faculty/student parking lot located north of the campus;
2. Provide an exclusive right-turn lane and an optional left/through lane on the south bound approach exiting the MCC campus at the intersection of Kaahumanu Avenue and South Papa Avenue;
3. Provide an exclusive right-turn lane and an optional left/through lane on the south bound approach exiting the MCC campus at the intersection of Kaahumanu Avenue and Wakea Avenue;
4. Each of the campus parking lot driveways on the South Papa Avenue Extension should have exclusive left-turn and right-turn lanes for vehicles exiting the parking areas; and
5. Left-turn lanes to the parking lot driveways should be constructed to maintain through traffic flow on the South Papa Avenue Extension.

According to the traffic study which analyzed traffic conditions at full build-out of MCC's master plan, there should be no significant traffic impact on the vicinity of the campus with the implementation of roadway improvements and the construction of new roads providing alternative travel routes in the Wailuku-Kahului region. Based on the travel forecasts developed in the Wailuku-Kahului

Plan, the traffic demand on Kaahumanu Avenue is expected to decrease. As a result, the recommendations of the traffic report contain primarily site-access improvements.

With regard to the subject project, the timing of implementation of improvements and the pro-rata distribution of costs associated with the improvements will be coordinated with the Department of Transportation and the Department of Public Works and Waste Management.

2. **Wastewater System**

The design capacity of the County's Kahului Wastewater Treatment Facility is 7.9 million gallons per day (MGD). The facility serves the Kahului, Wailuku, Paia, Kuau and Spreckelsville areas. Current wastewater flows treated by the Kahului facility are approximately 5.2 MGD, excluding groundwater and stormwater infiltration.

The proposed project is estimated to generate a peak flow of approximately 110 gallons per minute of wastewater. An allocation of capacity as well as any necessary wastewater contribution calculations would be coordinated with the Department of Public Works and Waste Management as part of the building permit process.

3. **Water System**

Water will be furnished by the domestic system servicing the area. The domestic water peak flow for the project is estimated to be approximately 110 gallons per minute.

4. **Drainage and Erosion Control**

The proposed drainage plan for the Building "J" Phase II site incorporates an underground drainage collection system. The system will consist of two manholes and underground piping which will discharge into a storm drainage desilting basin system. The desilting basin system will be composed of a 5-foot deep desilting basin, three headwalls, and a 12-inch diameter discharge pipe.

The storm water runoff created by the proposed building (2 cfs) will be piped to one of the proposed manholes and then directed to the proposed desilting basin. The existing drainage system constructed for the existing agricultural facilities will also be directed to the same desilting basin.

The desilting basin will detain the difference in runoff volume (1 cfs) between the existing on-site runoff (1 cfs) and the on-site runoff generated from the proposed improvements (2 cfs). The on-site runoff will then be discharged at a flow limited to not exceed existing discharge levels. The runoff would continue to follow existing drainage patterns and discharge into an undeveloped area for disposal by percolation.

The subject storm drainage desilting basin system is considered to be temporary and will be removed and/or abandoned as permanent drainage systems for future buildings are implemented.

The proposed drainage plan for the proposed parking area and access road site consist of utilizing the existing underground drainage collection and retention basin system. A second temporary desilting basin will also be constructed.

The existing underground drainage and retention system will accommodate the additional runoff created by the construction of the proposed parking area and access road (2 cfs).

The proposed project will produce no adverse effect by storm runoff to adjacent and downstream properties.

Soil loss will be minimized during the construction period by the implementation of appropriate erosion control measures. Dust will also be minimized during construction by the implementation of water sprinkling. All drainage improvements will conform to County standards and will be coordinated with the County of Maui, Department of Public Works and Waste Management.

5. **Electrical and Telephone Systems**

Electrical power requirements associated with the proposed project will be supplied by Maui Electric Company, Ltd. Telephone system requirements will be addressed by GTE Hawaiian Telephone Company Incorporated.

Chapter IV

***Relationship to Governmental
Plans, Policies and Controls***

IV. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES AND CONTROLS

A. STATE LAND USE DISTRICTS

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission, establishes the four major land use districts in which all lands in the State are placed. These districts are designated "Urban", "Rural", "Agricultural", and "Conservation". The subject parcel is within the "Urban" district. See Figure 9. The proposed action involves the use of the property for a new classroom building with attendant parking improvements. The proposed use of the property is consistent with "Urban" district provisions.

B. MAUI COUNTY GENERAL PLAN

The Maui County General Plan (1990 Update) sets forth broad objectives and policies to help guide the long-range development of the County. As stated in the Maui County Charter, "The purpose of the General Plan is to recognize and state the major problems and opportunities concerning the needs and the development of the County and the social, economic and environmental effects of such development and set forth the desired sequence, patterns and characteristics of future development".

The proposed action is in keeping with the General Plan's objectives:

1. To see that all developments are well designed and are in harmony with their surroundings.
2. To provide Maui residents with continually improving quality educational opportunities which can help them better understand themselves and their surroundings and help them realize their ambitions.
3. Improve the delivery of services by government agencies to all community plan areas.

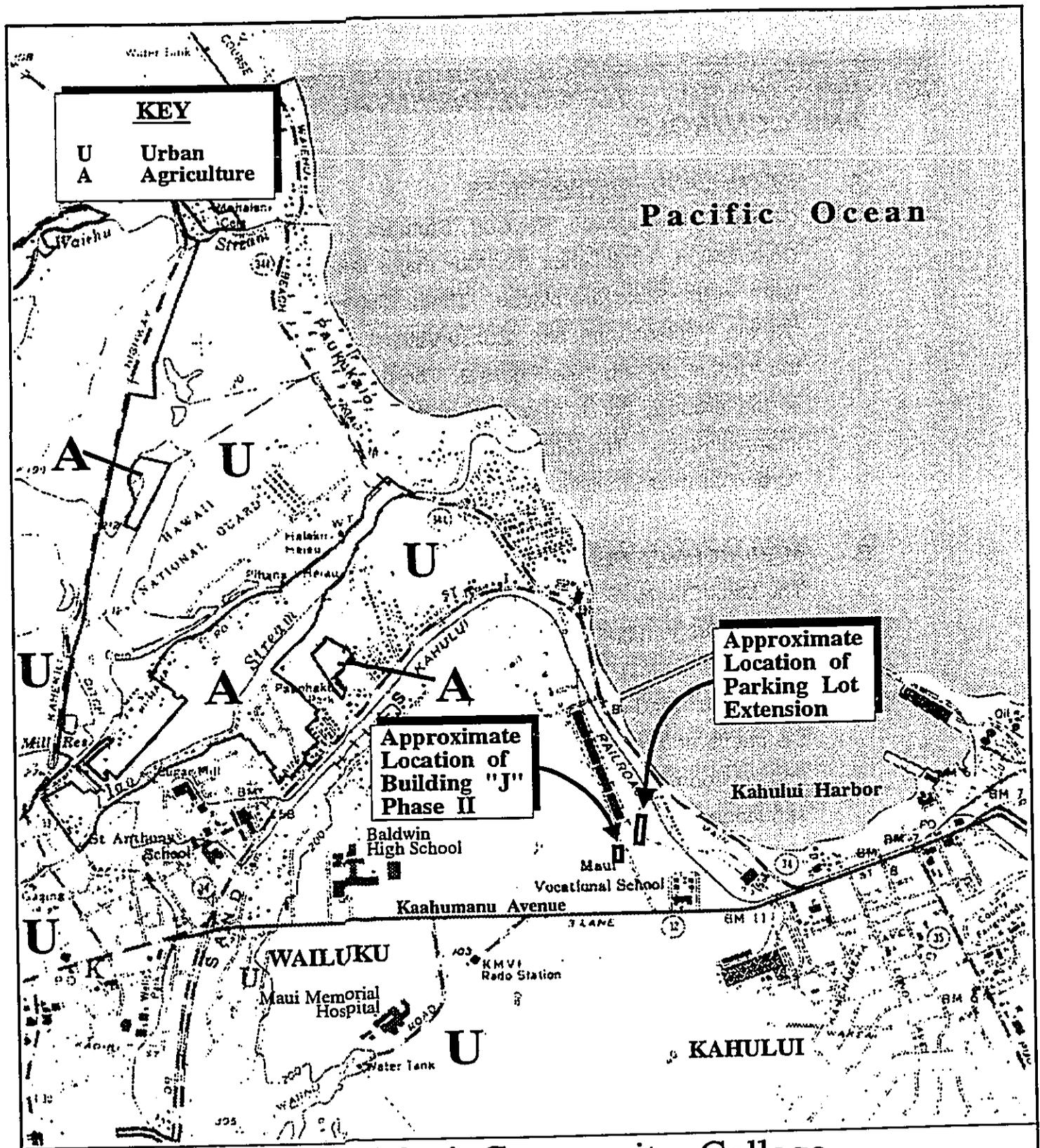
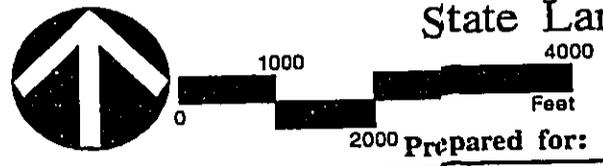


Figure 9 Maui Community College
 Building "J" Phase II
 State Land Use District Designations



Michael T. Munekiyo Consulting, Inc.
 Prepared for: State of Hawaii, Dept. of Accounting and General Services

C. WAILUKU-KAHULUI COMMUNITY PLAN

The subject parcel is located in the Wailuku-Kahului Community Plan region which is one of nine Community Plan regions established in the County of Maui. Planning for each region is guided by the respective Community Plans, which are designed to implement the Maui County General Plan. Each Community Plan contains recommendations and standards which guide the sequencing, patterns and characteristics of future development in the region.

Land use guidelines are set forth by the Wailuku-Kahului Community Plan Land Use Map. See Figure 10. The subject parcel is designated "Public/Quasi-Public" by the Community Plan.

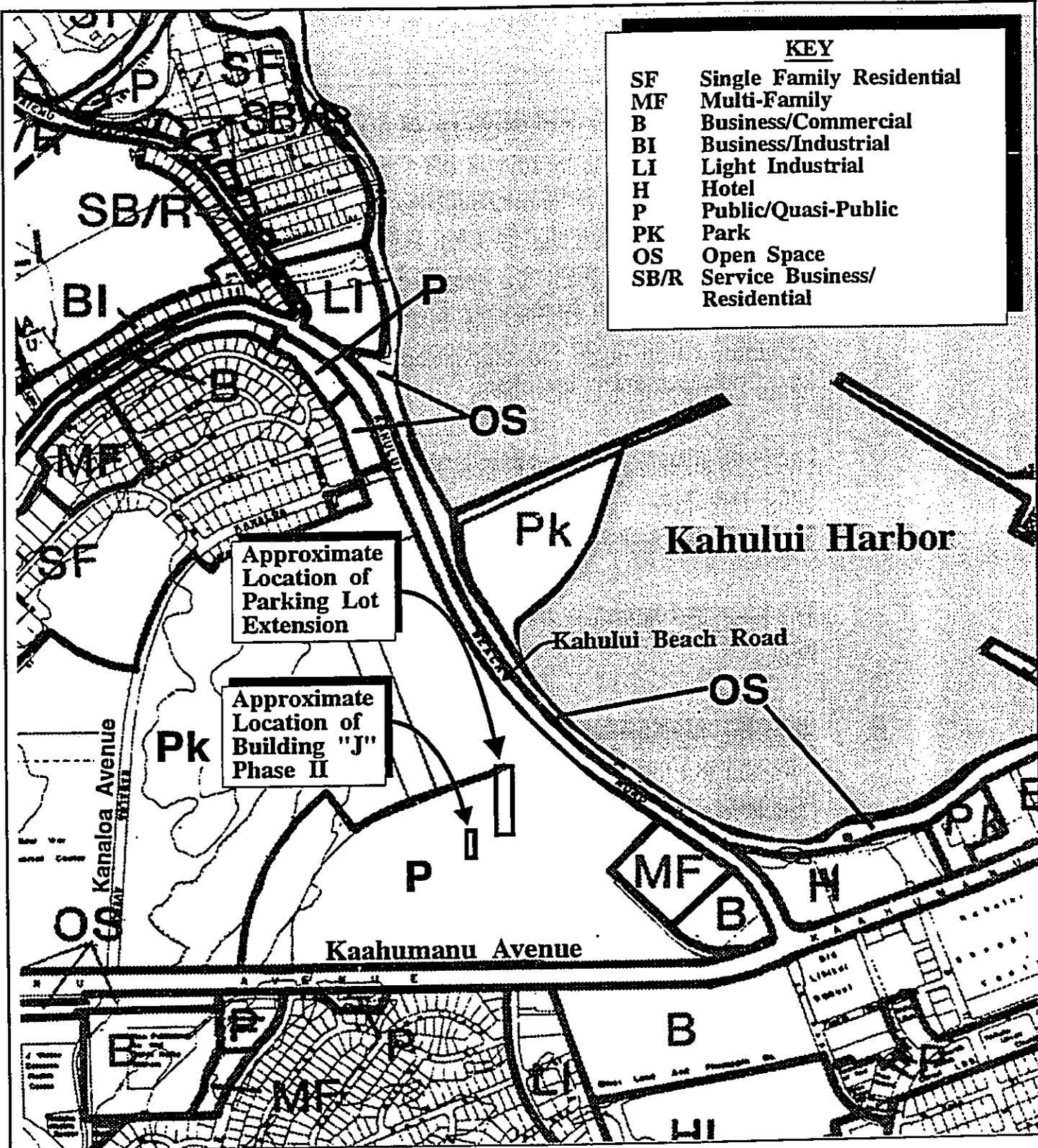
The proposed project is consistent with the Wailuku-Kahului Community Plan.

D. SPECIAL MANAGEMENT AREA OBJECTIVES AND POLICIES

Pursuant to Chapter 205A, Hawaii Revised Statutes, and the Rules and Regulations of the Planning Commission of the County of Maui, projects located within the SMA are evaluated with respect to SMA objectives, policies and guidelines. This section addresses the project's relationship to applicable coastal zone management considerations, as set forth in Chapter 205A and the Rules and Regulations of the Planning Commission.

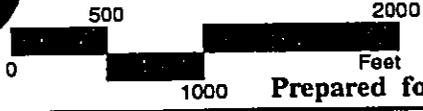
1. Recreational Resources

Objective: Provide coastal recreational resources accessible to the public.



KEY	
SF	Single Family Residential
MF	Multi-Family
B	Business/Commercial
BI	Business/Industrial
LI	Light Industrial
H	Hotel
P	Public/Quasi-Public
PK	Park
OS	Open Space
SB/R	Service Business/Residential

Figure 10 Maui Community College
 Building "J" Phase II
 Wailuku-Kahului Community Plan Land
 Use Designations



Michael T. Munekiyo Consulting, Inc.
 Prepared for: State of Hawaii, Dept. of Accounting and General Services

Policies:

1. Improve coordination and funding of coastal recreation planning and management; and
2. Provide adequate, accessible and diverse recreational opportunities in the coastal zone management area by:
 - a. Protecting coastal resources uniquely suited for recreation activities that cannot be provided in other areas,
 - b. Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites and sandy beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;
 - c. Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
 - d. Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
 - e. Encouraging expanding public recreational use of county, state, and federally owned or controlled shoreline lands and waters having recreational value;
 - f. Adopting water quality standards and regulating point and non-point sources of pollution to protect and where feasible, restore the recreational value of coastal waters; and
 - g. Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits, and crediting such dedication against the requirements of Section 46-6 of the Hawaii Revised Statutes.

Response:

The proposed project will not affect coastal zone recreational opportunities. Accessibility to shoreline areas will not be impacted by the proposed action.

2. Historical/Cultural Resources

Objective: Protect, preserve and where desirable, restore those natural and man-made historic and prehistoric resources in the coastal zone

management areas that are significant in Hawaiian and American history and culture.

Policies:

1. Identify and analyze significant archaeological resources;
2. Maximize information retention through preservation of remains and artifacts or salvage operations; and
3. Support state goals for protection, restoration, interpretation and display of historic resources.

Response:

The sites for Buildings "J" Phase II and the parking lot extension have already been extensively altered through construction activities. An archaeological inventory survey for neighboring project sites did not find any pre-contact Hawaiian artifacts. The project is not anticipated to adversely affect significant historic or archaeological resources.

3. Scenic and Open Space Resources

Objective: Protect, preserve and where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

1. Identify valued scenic resources in the coastal zone management area;
2. Insure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural land forms and existing public views to and along the shoreline;
3. Preserve, maintain and, where desirable, improve and restore shoreline open space and scenic resources; and
4. Encourage those developments which are not coastal dependent to locate in inland areas.

Response:

The proposed project will not adversely impact scenic or open space resources. The proposed project will not involve significant alteration to the existing topographic character of the site and will not significantly affect public views to the shoreline.

4. **Coastal Ecosystems**

Objective:

Protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

1. Improve the technical basis for natural resource management;
2. Preserve valuable coastal ecosystems of significant biological or economic importance;
3. Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
4. Promote water quantity and quality planning and management practices which reflect the tolerance of fresh

water and marine ecosystems and prohibit land and water uses which violate state water quality standards.

Response:

Appropriate soil erosion mitigation measures will be implemented during the construction of the project to minimize disruption of coastal water ecosystems. On-site storm drainage desilting basins will be constructed to detain the difference in runoff between existing and proposed site conditions. The completion of the proposed project will not significantly disrupt or impact coastal ecosystems.

5. Economic Uses

Objective: Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

1. Concentrate in appropriate areas the location of coastal dependent development necessary to the state's economy;
2. Insure that coastal dependent development such as harbors and ports, visitor facilities, and energy-generating facilities are located, designed, and constructed to minimize adverse social, visual and environmental impacts in the coastal zone management area; and
3. Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:
 - a. Utilization of presently designated locations is not feasible,
 - b. Adverse environmental effects are minimized, and
 - c. Important to the state's economy.

Response:

The proposed project is designed to provide additional and improved facilities for MCC. Graduating students provide an educated and trained workforce which are important to fulfill the demands of the marketplace and to the State's economy. This project will not generate any adverse economic impacts.

6. Coastal Hazards

Objective: Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion and subsidence.

Policies:

1. Develop and communicate adequate information on storm wave, tsunami, flood, erosion and subsidence hazard;
2. Control development in areas subject to storm wave, tsunami, flood, erosion and subsidence hazard;
3. Ensure that developments comply with requirements of the Federal Flood Insurance Program; and
4. Prevent coastal flooding from inland projects.

Response:

The project site is located within Zone C, which is an area of minimal flooding. Portions of the campus in the area of the existing retention basin are in Zone A4, which has a base flood elevation of approximately 16 feet above mean sea level. Storm runoff should be addressed through construction of on-campus drainage improvements and the construction of 2 desilting basins. This would control the discharge rate to not exceed discharge levels. The project is not anticipated to adversely impact downstream or adjacent properties.

7. **Managing Development**

Objective: Improve the development review process, communication, and public participation in the management of coastal resources and hazard.

Policies:

1. Effectively utilize and implement existing law to the maximum extent possible in managing present and future coastal zone development;
2. Facilitate timely processing of application for development permits and resolve overlapping of conflicting permit requirements; and
3. Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life-cycle and in terms understandable to the general public to facilitate public participation in the planning and review process.

Response:

Early consultation is provided through the process of preparing the Environmental Assessment. Public comments are also afforded during the review period of the Draft Environmental Assessment. The County's Special Management Area permitting process provides another avenue for review.

Applicable State and County requirements will be adhered to in the design and construction of the proposed project.

Chapter V

Findings and Conclusion

V. FINDINGS AND CONCLUSION

The proposed project would involve the construction of Building "J" Phase II on the MCC campus, as well as an extension to the parking lot.

Construction of the proposed project will involve short-term environmental impacts typically associated with construction activities. These include air quality and noise impacts. Dust control measures such as watering and sprinkling will be undertaken as needed to minimize dust. Construction activities are also anticipated to be limited to daylight hours. Impacts generated from construction activities are not considered adverse.

From a long-term perspective, the proposed project is not anticipated to result in adverse environmental impacts. The sites of Building "J" and the parking lot extension have already been extensively modified. However, should human osteological material or other cultural remains be uncovered during construction activities, applicable procedures to ensure compliance with Chapter 6E, HRS, will be followed. There are no rare/threatened species of flora and fauna at the site.

Impacts to the local economy are anticipated to be positive involving support for construction-related employment in the short-term. After completion of construction, the project will provide liberal arts, vocational and technical training to benefit the local employment market.

With regard to traffic, there are a number of proposed new roadways in the region which provide alternative travel routes in the Wailuku-Kahului region. With these regional improvements, traffic demand on Kaahumanu Avenue is anticipated to decrease. There are a number of intersection and site access improvements which are needed at full build-out of the campus master plan at the year 2000 with 5,000 full-time equivalent students. The timing of

implementation of improvements and the pro-rata distribution of costs associated with the improvements will be coordinated with the Department of Transportation and the Department of Public Works and Waste Management.

With regard to drainage improvements, there are two desilting basins being proposed which would accommodate the additional runoff created by the project. No adverse effects to adjacent and downstream properties are anticipated.

The project is also not anticipated to have adverse impacts upon medical, police, and fire protection services as well as other infrastructure systems.

In light of the foregoing findings, it is concluded that the proposed action will not result in any significant impacts. Thus, this Final Environmental Assessment is being filed as a negative declaration.

Chapter VI

***Agencies Contacted in
the Preparation of the
Environmental Assessment
and Responses Received***

VI. AGENCIES CONTACTED IN THE PREPARATION OF THE ENVIRONMENTAL ASSESSMENT AND RESPONSES RECEIVED

The following agencies were contacted during the preparation of the Environmental Assessment:

1. U.S. Army Corps of Engineers
Pacific Ocean Division
Building 230
Fort Shafter, Hawaii 96858
2. Mr. David Nakagawa, Chief Sanitarian
Department of Health
54 High Street
Wailuku, Hawaii 96793
3. Mr. Tom Arisumi, Division Chief
Department of Health
Environmental Management Division
Five Waterfront Plaza, Suite 250
500 Ala Moana Boulevard
Honolulu, Hawaii 96813
4. Mr. Robert Siarot, Maui District Engineer
Department of Transportation
650 Palapala Drive
Kahului, Hawaii 96732
5. Department of Land and Natural Resources
State Historic Preservation District
1325 L. Main Street, #108
Wailuku, Hawaii 96793
6. Mr. Brian Miskae, Director
Department of Planning
250 South High Street
Wailuku, Hawaii 96793
7. Mr. David Craddick, Director
Department of Water Supply
200 South High Street
Wailuku, Hawaii 96793
8. Mr. Lloyd Lee
Department of Public Works
Division of Engineering
200 South High Street
Wailuku, HI 96793
9. Mr. Aaron Shinmoto
Chief Staff Engineer
Department of Public Works
200 South High Street
Wailuku, Hawaii 96793
10. Mr. Eassie Miller
Department of Public Works
Wastewater Reclamation Division
200 South High Street
Wailuku, Hawaii 96793
11. Mr. James Lawrence
Kahului Town Association
P. O. Box 156
Kahului, Hawaii 96732



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

NOV 29 1993

November 26, 1993

REPLY TO
ATTENTION OF

Planning Division

Mr. Michael T. Munekiyo
Michael T. Munekiyo Consulting, Inc.
1823 Wells Street, Suite 3
Wailuku, Maui, Hawaii 96793

Dear Mr. Munekiyo:

Thank you for the opportunity to review and comment on the Environmental Assessment Preparation Notice for the Proposed Construction of the Maui Community College, Building "J" Phase II. We do not have any additional comments to offer beyond those provided in our previous letter dated October 28, 1992.

Sincerely,


Kisuk Cheung, P.E.
Director of Engineering

NOV 30 1993

JOHN WAIHEE
GOVERNOR OF HAWAII



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

STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
54 HIGH STREET
WAILUKU, MAUI, HAWAII 96793

RONALD METLER, M.D.
Acting DISTRICT HEALTH SERVICES ADMINISTRATOR (M.D.)

November 29, 1993

Mr. Michael T. Munekiyo, A.I.C.P.
Michael T. Munekiyo Consulting, Inc.
1823 Wells Street, Suite 3
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

Subject: Proposed Construction of MCC Building "J" Phase II

Thank you for the opportunity to review and comment on the subject project. We have no comments to offer at this time.

Sincerely,


DAVID H. NAKAGAWA
Chief Sanitarian, Maui

OHN WAIHEE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MAUI DISTRICT
660 PALAPALA DRIVE
KAHULUI, HAWAII 96732

REX D. JOHNSON
DIRECTOR

DEPUTY DIRECTORS
KANANI HOLT
JOYCE T. OMINE
AL PANG
CALVIN M. TSUDA

IN REPLY REFER TO:

TELECOPIER TRANSMISSION NOTE

DATE 11/27/97

NUMBER OF PAGES 3 (INCLUDING THIS SHEET)

TO Mike Munekiyo

FROM F. Cajigas

COMMENTS:

Comments made to county during
EA and SUEA for buildings "S" and "J"
need to be addressed.

Major concerns are traffic and
drainage.

HWY-M 2.167-93

March 17, 1993

Mr. Brian Miskae
Planning Director
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Miskae:

SUBJECT: SMA PERMIT APPLICATION, 93/SM1-003, TMK NO. 3-8-7:40
MCC BUILDINGS "J" AND "S"

Thank you for the opportunity to comment on the subject application.

The traffic impact analysis report should include interim traffic mitigation measures and an implementation schedule for the required roadway improvements. The applicant should commit to providing required traffic signals and intersection/roadway improvements at no cost to the State DOT.

We have no comments at this time on the preliminary grading plan and drainage report. Comments will be made during construction plan review.

Plans for construction within state highway right-of-way must be submitted for our review and approval.

Very truly yours,

Robert O. Siarot
District Engineer, Maui

/fmc

HWY-M 2.640-92

December 23, 1992

Mr. Brian Miskae
Planning Director
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Miskae:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR MAUI COMMUNITY
COLLEGE BUILDINGS "S" AND "J", TMK NO. 3-8-7:40, 125

Thank you for the opportunity to comment of the project application. These are our comments:

The Traffic Impact Analysis Report should include an implementation schedule with corresponding roadway mitigation measures up to the year 2000. There is no definitive date to implement the roadway improvements recommended in the Maui Long Range Planning Study. therefore, TIAR should include interim mitigation measures.

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

Very truly yours,

Robert O. Siarot
District Engineer, Maui

/fmc

LINDA CROCKETT LINGLE
Mayor



DEC 17 1993

BRIAN W. MISKAE
Director

GWEN Y. OHASHI
Deputy Director

COUNTY OF MAUI
PLANNING DEPARTMENT
250 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96793

December 14, 1993

Mr. Michael Munekiyo, AICP
Michael T. Munekiyo Consulting, Inc.
1823 Wells Street Suite 3
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

Subject: Proposed Construction of MCC Building "J"
Phase II Pre-EA Consultation

Your company is preparing an Environmental Assessment and a Special Management Area Minor Permit application for the State Department of Accounting and General Services (DAGS) to construct a new classroom building (Building "J" Phase II) on the Maui Community College campus, TMK: 3-8-07:40, Kahului, Maui. This letter is written in response to your letter requesting comments during pre-EA consultation phase.

We wish to note that the Maui Community College property has the following land use designations:

- a. Wailuku/Kahului Community Plan -- Public/Quasi-Public
- b. State Land Use -- Urban
- c. County Zoning -- M-1 Light Industrial; R-2 Residential
- d. Special Management Area -- The project site lies within the Special Management Area.

On May 4, 1993, the Maui Planning Commission granted a Special Management Area (SMA) Permit for the construction of Buildings "J" and "S"; informational kiosks and ground signs appurtenant to the buildings; an expansion of the existing parking area from 397 to 611 parking stalls; and an off-site drainage retention basin. Many of the agency comments on that application may be relevant to the current application for Building "J" Phase II such as resolving the issue of interference of building sites with water lines to the satisfaction of the Department of Water Supply. Therefore, we have attached copies of the SMA approval letter and the staff report for Buildings "J" and "S", Docket No. 93/SM1-003 for your reference.

Should you have any further questions, please contact Clayton Yoshida of this office.

Very truly yours,

Brian Miskae
70 Brian Miskae
Planning Director

Encl.

cc: Gwen Ohashi, Deputy Director
Colleen Suyama
Clayton Yoshida, AICP

NOV 29 1993

LINDA CROCKETT LINGLE
Mayor
GEORGE N. KAYA
Director
CHARLES JENCKS
Deputy Director
AARON SHINMOTO, P.E.
Chief Staff Engineer



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

RALPH NAGAMINE, L.S., P.E.
Land Use and Codes Administration
EASSIE MILLER, P.E.
Wastewater Reclamation Division
LLOYD P.C.W. LEE, P.E.
Engineering Division
DAVID WISSMAR, P.E.
Solid Waste Division
BRIAN HASHIRO, P.E.
Highways Division

November 22, 1993

Mr. Michael T. Munekiyo, A.I.C.P.
1823 Wells St., Suite 3
Wailuku, HI 96793

SUBJECT: PROPOSED CONSTRUCTION OF MCC BUILDING "J" PHASE II

Dear Mr. Munekiyo,

Wastewater Reclamation Division has reviewed your proposed project and provides the following comments:

- a. The developer should be informed that WWRF cannot insure that wastewater system capacity will be available for the project.
- b. An assessment fee ordinance is currently being finalized and the developer may be assessed impact fees for the Wailuku-Kahului Wastewater Reclamation Facility expansion.
- c. Wastewater contribution calculations are required before building permit is issued.

If you have any questions, please call Mr. Tracy Takamine at 2443-7424.

Sincerely,

Eassie Miller, Chief
Wastewater Reclamation Division

TT.tt(93141.SD)



References

REFERENCES

Community Resources, Inc. Maui County Community Plan Update Program Socio-Economic Forecast Report, March 1992.

County of Maui, The General Plan of the County of Maui, 1990 Update.

County of Maui, Wailuku-Kahului Community Plan, 1987.

State of Hawaii, Department of Business and Economic Development, Data Book, 1990.

U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii, 1972.

University of Hawaii, Department of Geography, Atlas of Hawaii, Second Edition, 1983.

Appendix A

Drainage Report

**GRADING AND DRAINAGE REPORT -
MAUI COMMUNITY COLLEGE
BUILDING "J", PHASE 2**
Kahului, Maui, Hawaii
TMK: 3-8-7:40

December 1993

State of Hawaii
Department of Accounting and General Services
Division of Public Works



Austin, Tsutsumi & Associates, Inc.
Civil Engineers • Surveyors
501 Sumner Street, Suite 521
Honolulu, Hawaii 96817-5031
Telephone: (808) 533-3646
Facsimile: (808) 526-1267
Honolulu • Wailuku • Hilo, Hawaii

**GRADING AND DRAINAGE REPORT
FOR
MAUI COMMUNITY COLLEGE
BUILDING "J", PHASE 2
Kahului, Maui, Hawaii
TMK: 3-8-7:40**

PREPARED FOR:

**STATE OF HAWAII
Department of Accounting and General Services
Division of Public Works**

PREPARED BY:

**Austin, Tsutsumi & Associates, Inc.
Civil Engineers • Surveyors
Honolulu • Wailuku • Hilo, Hawaii**

December 1993



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

**GRADING AND DRAINAGE REPORT
FOR
MAUI COMMUNITY COLLEGE
BUILDING "J", PHASE 2**

I. INTRODUCTION

The purpose of this report is to evaluate the existing site drainage conditions and to develop a grading and drainage plan for the proposed project.

II. PROPOSED PROJECT

A. Location

The project site is located within the Maui Community College (MCC) campus in Kahului on the island of Maui, Hawaii. The MCC campus is located on the Makai side of Kaahumanu Avenue across the Kaahumanu Shopping Center. The campus site encompasses 61 acres and is designated by Tax Map Key Number 3-8-7, Parcel 40. (See Exhibit 1 for the location of the MCC campus.)

B. Project

The proposed project consists of a new classroom building, two temporary desilting basins, a new parking area and a new access road to Kanaloa Parkway. The new classroom building and desilting basin are located in one area and the new parking area, access road and second desilting basin are located in a second area. (See Exhibit 2 for the location of the proposed improvements.)



III. EXISTING CONDITIONS

A. Topography and Soil Conditions

The general slopes of the MCC campus ranges from 0.5 percent at the eastern part of the campus to 2 percent at the western end. The majority of the campus slopes toward the northeast to Kahului Beach Road and the remaining area slopes toward the east. On-site elevations range from 8 feet to 50 feet mean sea level (MSL). The MCC property is presently covered with building sidewalks, parking areas, tennis courts, cultivated agricultural areas, and open grassed and overgrown areas. The soil classification for the MCC area is Puuone Sand (PZUE) as described by the USDA Soil Conservation Service ("Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai").

B. Climate

Kahului is generally sunny and warm throughout the year. The annual rainfall is about 27 inches with a mean annual temperature of 75 degrees Fahrenheit.

C. Drainage

In general, the majority of the on-site MCC campus runoff sheet flows across the campus towards Kahului Harbor, collected by an existing underground drainage collection and retention system, and discharged under the Kahului Beach Road via an off-site drainage ditch and drainline system. Ultimate disposal of the on-site campus runoff is directed into Kahului Harbor. The remaining on-site campus runoff drains towards the east and percolates into the existing ground.

An existing 72" x 44" arch pipe conveys off-site runoff through the campus from Kaahumanu Avenue to the existing northern MCC parking area. The off-site drainage area is approximately 16 acres and is located south of Kaahumanu Avenue. The arch pipe outlets into an on-site



drainage ditch which then connects to an existing on-site underground drainage collection and retention system and then into an existing off-site ditch and drainline system before ultimate disposal into Kahului Harbor.

The storm water runoff from the tributary area just mauka of proposed Building "J", Phase 2 site (4.87 cfs) is controlled by an existing temporary drainage system constructed for the existing agricultural facilities. This drainage system consists of two drain inlets, interconnecting drainlines and a temporary desilting basin. Presently, the existing runoff from the proposed Building J site area (0.58 cfs) flows downhill into an undeveloped area and percolates into the ground.

The stormwater runoff from the proposed parking area and access road site is presently controlled by an existing underground drainage collection and retention system.

D. Flood Zone

The Flood Insurance Rate Map (FIRM) for the area indicates that the majority of the campus is within Zone C, which is an area of minimal flooding. The remaining portion of the site lies within zone A4, which has a base flood elevation of approximately 16 feet MSL. (See Exhibit 3 for flood map).

IV. GRADING AND DRAINAGE PLAN

A. Grading Plan

The proposed project encompasses two separate sites. (See Exhibit 2.) The first site involves Building J, Phase 2 and a temporary desilting basin, and the second site involves a new parking area, an access road to Kanaloa Parkway and a second temporary desilting basin.

The proposed grading plan will require embankment to bring the finish floor elevation of the proposed building to elevation 33 feet MSL. The proposed parking area will also require embankment to bring the pavement



surface to required finish grades which vary from elevation 14 feet MSL to 20 feet MSL. The site will be graded to dispose of the on-site storm runoff generated from the proposed improvements as shown in Exhibit 4 (Grading and Drainage Plan). An on-site storm drainage desilting basin will be constructed in the area between the proposed building and the existing retention basin to detain the difference in runoff between existing and proposed site conditions. Erosion control measures will be incorporated during the construction period to minimize soil loss. (See Appendix A for the Soil Erosion and Sedimentation Hazard Report).

B. Drainage Plan

The proposed drainage plan for the Building "J", Phase 2 site incorporates an underground drainage collection system. The system will consist of two manholes and underground piping which will discharge into a storm drainage desilting basin system. The desilting basin system will be composed of a 5-foot deep desilting basin, three headwalls, and a 12-inch diameter discharge pipe. (See Exhibit 4 for drainage system.)

The storm water runoff (2 cfs) created by the proposed building will be piped to one of the proposed manholes and then directed to the proposed desilting basin. The existing drainage system constructed for the existing agricultural facilities will also be directed to the same desilting basin.

The desilting basin will detain the difference in runoff volume (1 cfs) between the existing on-site runoff (1 cfs) and the on-site runoff generated from the proposed improvements (2 cfs). The on-site runoff will then be discharged at a flow limited to not exceed existing discharge levels. Runoff to continue to follow existing drainage patterns and discharge into an undeveloped area for disposal by percolation.

The subject storm drainage desilting basin system is considered to be temporary and will be removed and/or abandoned as permanent drainage systems for future buildings are implemented.



The proposed drainage plan for the proposed parking area and access road site consist of utilizing the existing underground drainage collection and retention basin system. A second temporary desilting basin will also be constructed.

The existing underground drainage and retention system will accommodate the additional runoff created by the construction of the proposed parking area and access road (2 cfs).

C. Hydrology

The Rational Method, as described in the "Storm Drainage Standards", May 1988, by the City and County of Honolulu, was used to compute the storm water runoff quantity. Runoff calculations were based on a 10-year storm recurrence intervals. The rainfall intensities were interpolated from the "Rainfall Frequency Atlas of the Hawaiian Islands", by the U.S. Department of Commerce, Weather Bureau.

The existing on-site storm runoff for the proposed Building J, Phase 2 for the 10-year storm event is approximately 1 cfs. The existing storm runoff for the proposed parking and access area is approximately 2 cfs. For the improved site conditions, the projected runoff for the proposed Building J, Phase 2 and the parking and access road area are 2 cfs and 4 cfs, respectively. The difference in runoff volume for the proposed Building J, Phase 2 for the 10-year storm is 0.04 acre-feet. The desilting basin will be designed to detain the 10-year storm difference in runoff volume. (See Exhibit 5 for the drainage sub basins.)

V. CONCLUSION

The proposed grading and drainage design for this project will produce no adverse effect by storm runoff to adjacent and downstream properties. Building "J", Phase 2 will be designed to be constructed within the campus area designated by the FIRM as Zone C. The desilting basin system will detain the increase of

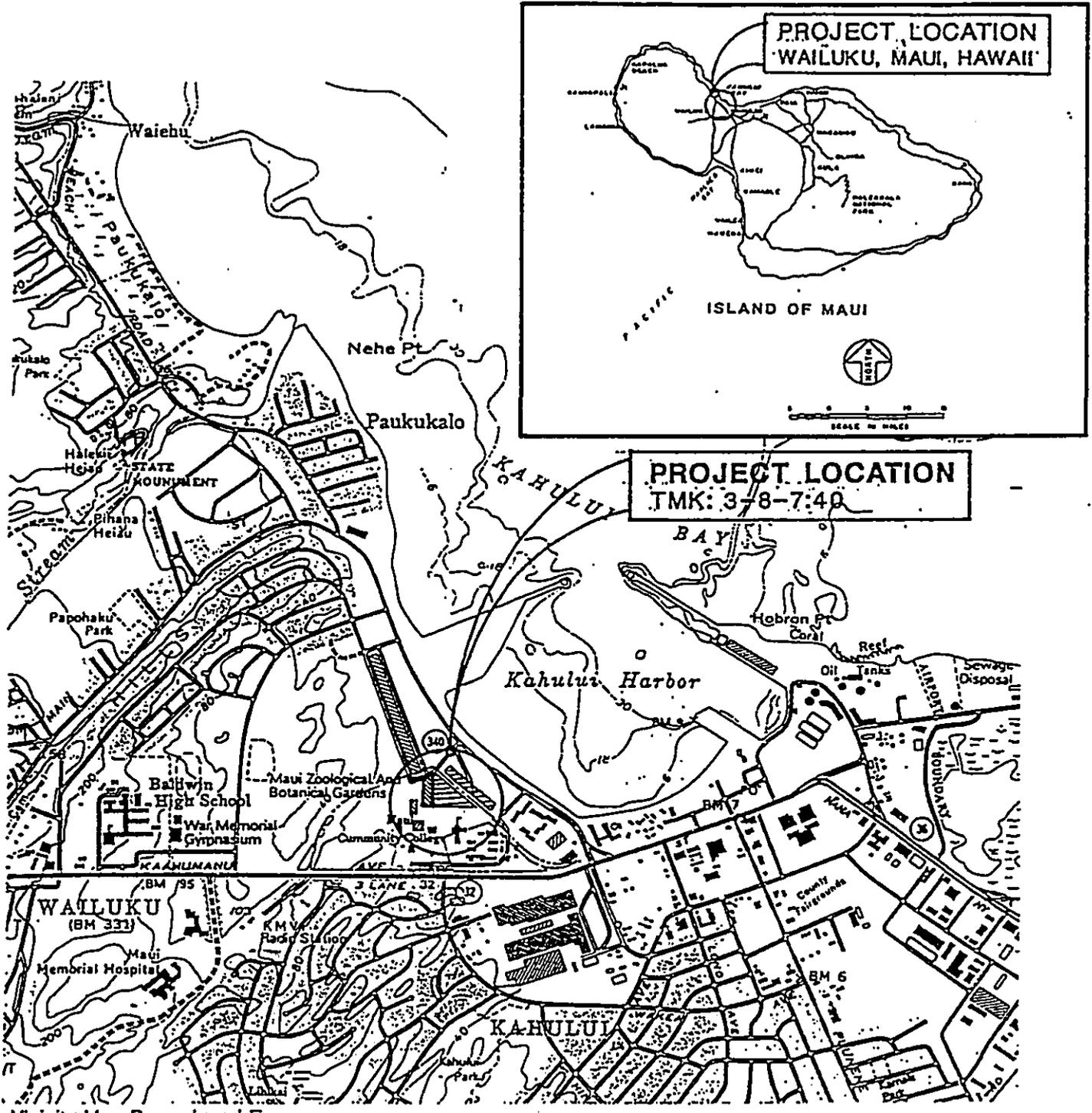


runoff generated from the proposed Building J, Phase 2 site area. The temporary desilting basin will regulate the discharge rate into the existing undeveloped area to not exceed existing values. The existing underground drainage and retention system will accommodate the additional runoff generated from the proposed parking and access road area. Soil loss will be minimized during the construction period by the implementation of appropriate erosion control measures. Dust will also be minimized during construction by the implementation of water sprinkling. All drainage improvements will conform to the County Standards and will be coordinated with the Department of Public Works, County of Maui.

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EXHIBITS



Vicinity Map Reproduced From
 U.S.G.S. Quadrangle Map:
 Wailuku, Hawaii
 Datum: M.S.L.

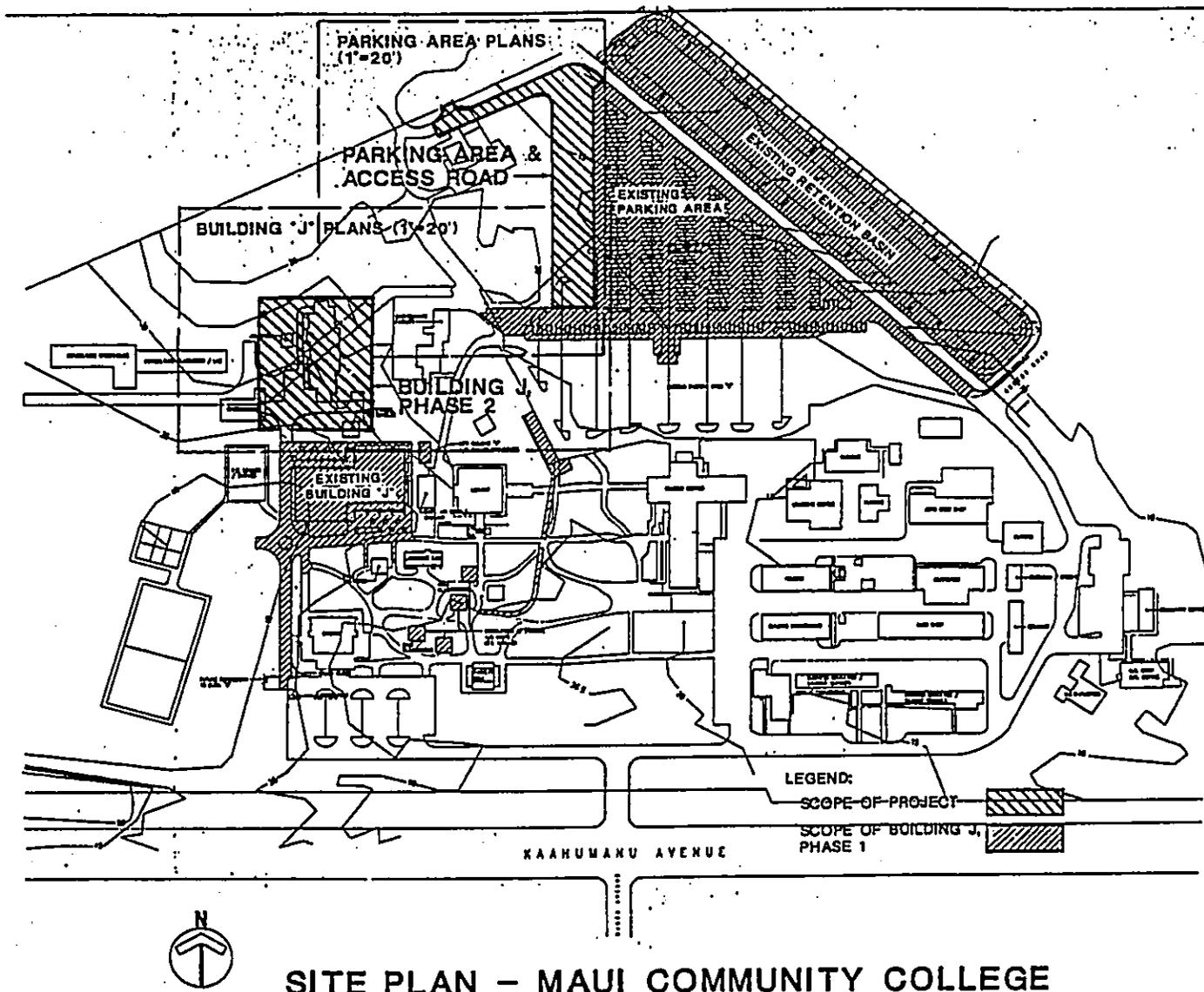
VICINITY MAP
 Scale: 1"=2000'

**GRADING AND DRAINAGE REPORT
 MAUI COMMUNITY COLLEGE BUILDING "J", PHASE 2
 KAHULUI, MAUI, HAWAII**

ATA
 Austin, Tsutsumi & Associates, Inc.
 Civil Engineers • Surveyors
 Honolulu • Wailuku • Hilo, Hawaii

**VICINITY MAP
 EXHIBIT 1**

PREPARED FOR:
 Department of Accounting and General Services
 Division of Public Works
 State of Hawaii



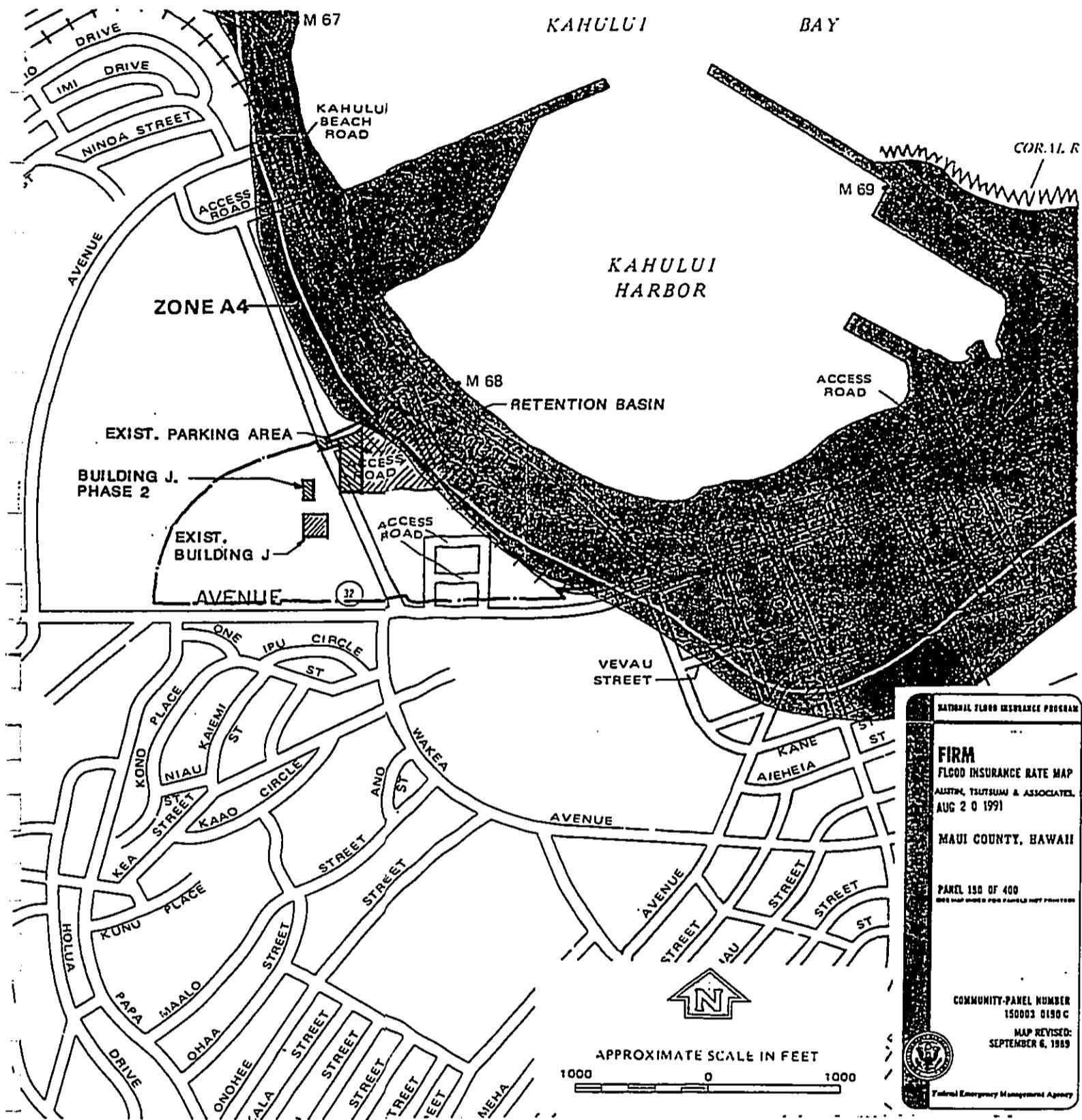
SITE PLAN - MAUI COMMUNITY COLLEGE
 SCALE: 1"=300'

GRADING AND DRAINAGE REPORT
 MAUI COMMUNITY COLLEGE BUILDING "J", PHASE 2
 KAHULUI, MAUI, HAWAII

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 Honolulu • Wailuku • Hilo, Hawaii

SITE PLAN
EXHIBIT 2

PREPARED FOR:
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 Division of Public Works
 State of Hawaii

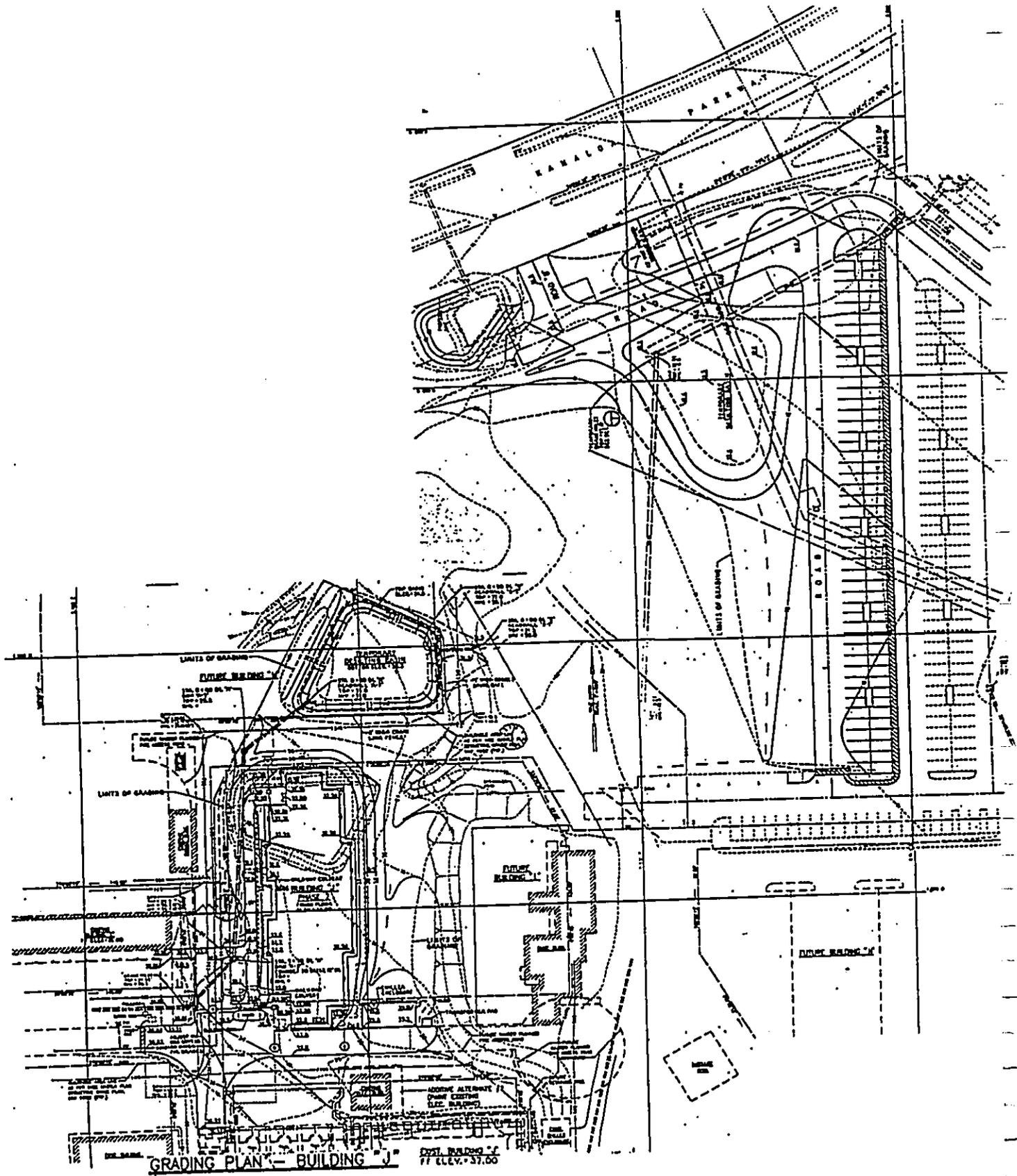


GRADING AND DRAINAGE REPORT
MAUI COMMUNITY COLLEGE BUILDING "J", PHASE 2
KAHULUI, MAUI, HAWAII

FLOOD ZONING MAP
EXHIBIT 3

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 Division of Public Works
 State of Hawaii



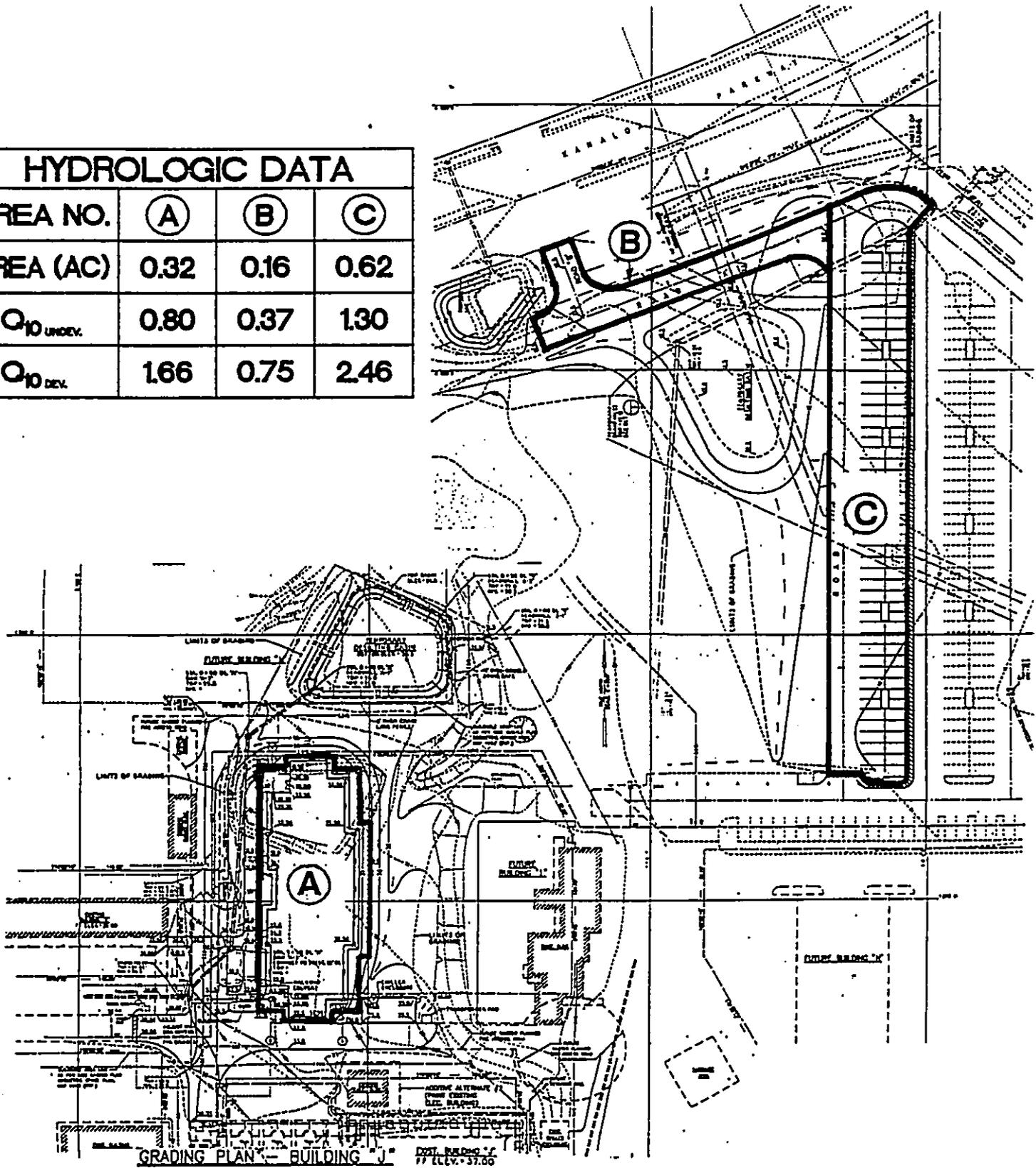
GRADING AND DRAINAGE REPORT
 MAUI COMMUNITY COLLEGE BUILDING "J", PHASE 2
 KAHULUI, MAUI, HAWAII

GRADING AND DRAINAGE PLAN
EXHIBIT 4

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PREPARED FOR:
 Department of Accounting and General Services
 Division of Public Works
 State of Hawaii

HYDROLOGIC DATA			
AREA NO.	(A)	(B)	(C)
AREA (AC)	0.32	0.16	0.62
Q_{10} UNDEV.	0.80	0.37	1.30
Q_{10} DEV.	1.66	0.75	2.46



GRADING AND DRAINAGE REPORT
 MAUI COMMUNITY COLLEGE BUILDING "J", PHASE 2
 KAHULUI, MAUI, HAWAII

DRAINAGE SUB BASINS PLAN

EXHIBIT 5

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APPENDIX

APPENDIX A

Soil Erosion and Sedimentation Hazard Report

SOIL EROSION AND SEDIMENTATION HAZARD REPORT

FOR THE

MAUI COMMUNITY COLLEGE

BUILDING "J", PHASE 2

KAHULUI, MAUI HAWAII

TMK: 3-8-07:40

PREPARED FOR

DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

DIVISION OF PUBLIC WORKS

STATE OF HAWAII

Prepared By

**Austin, Tsutsumi & Associates, Inc.
Engineers • Surveyors
Honolulu • Wailuku • Hilo, Hawaii**

December 1993



SOIL EROSION AND SEDIMENTATION HAZARD REPORT

NAME OF DEVELOPMENT: MAUI COMMUNITY COLLEGE
BUILDING "J", PHASE 2

DEVELOPER: DEPARTMENT OF ACCOUNTING AND
GENERAL SERVICES

ENGINEER: AUSTIN, TSUTSUMI & ASSOCIATES, INC.

LOCATION: KAHULUI, MAUI, HAWAII

TAX MAP KEY: 3-8-07:40

AREA: 2.0 ACRES

DATE: DECEMBER 8, 1993

SOILS: Puuone Sand, with slopes 7 to 30 percent (PZUE). This soil series is located on sand hills near the ocean. A representative profile of this soil series is grayish-brown, calcareous sand about 20 inches thick underlain by grayish-brown, cemented sand.

EROSION HAZARD: Wind erosion hazard is moderate to severe. Rainfall Erosion Index is 160 tons/acre/year. Runoff is slow and permeability is rapid above the cemented layer, as described by the USDA Soil Conservation Service "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai; State of Hawaii."

The general slope of the site is approximately 4 percent. On-site elevations range from 24 feet to 31.5 feet mean sea level for the Building J, Phase 2 site and 14 feet to 20 feet for the proposed parking area and access road to Kanaloa Parkway.

Presently, the majority of the on-site runoff sheets flows across the campus towards Kahului Harbor, collected by an existing underground drainage collection and retention system, and under the Kahului Beach Road via an off-site drainage ditch and drainline system. Ultimate disposal of on-site runoff is directed into Kahului Harbor. The remaining on-site runoff drains towards the east and percolates into the existing ground.



CONSTRUCTION SCHEDULE:

1. Clear and grub project site - November 1-18, 1994. Construct temporary storm runoff desilting basins.
2. Mass grade building site. Fine grade parking area and access road to Kanaloa Parkway. Provide base course for new parking area. Grass all slopes, exposed areas and pads as soon as final grades have been established - November 21 - December 16, 1994.
3. Complete construction of Building J, fire access road, parking area, access road to Kanaloa Parkway, and all other improvements. Install permanent vegetative cover in open space areas - December 19, 1994 - July 7, 1995.
4. Clean up, final landscaping and inspection - July 10-31, 1995.

TEMPORARY EROSION CONTROL MEASURES:

1. Control dust by means of waterwagons or by installing temporary sprinkler system.
2. Graded areas to be thoroughly watered after construction activity has ceased for the day, weekends and holidays.
3. Grass all exposed areas and slopes as soon as finished grading is completed.
4. Provide temporary desilting basin.

PERMANENT EROSION CONTROL MEASURES:

1. Permanent drainage system.
2. Construction of concrete paved roads and parking areas.
3. Permanent landscaping of slopes and exposed areas.



SEVERITY RATING CALCULATIONS:

1. Values of Equation Factors

Downstream Hazard	F = 4
Duration of Site Work	T = 9 Months, (0.75 year)
Coastal Water Hazard	D = 2: Class A
Area of Graded Land	A = 2.0 Acres
Erosion Rate	E = RK (LS) (CP)
Rainfall Factor	R = 160

To find weighted R, use Expected Monthly Distribution of Erosive Rainfall Chart H-15:

Jan 1 – July 31 = 61.5%
Nov 1 = 66.5%
Nov 1 - Dec 31 = 100% - 66.5% = 33.5%
61.5% + 33.5% = 95%
160 (.95) = 152
Weighted R = 152

Soil Erodibility Factor:

K = 0.10; Soil Symbol: PZUE

(LS): Slope Gradient, S = 4% ; Slope length, L = 100'
Topographic Factor (LS) = 0.400

Cover and Management Factor, C and Erosion Control Practice Factor, P:

(CP): Grading in Summer Months: C = (0.4) (4 mo.) = 1.6
Grading in Winter Months: C = (0.75) (5 mo.) = 3.75
C = $\frac{1.6 + 3.75}{9 \text{ mo.}}$
C = 0.59

Erosion Control Measures:

Incremental Grading, P = 0.7

(CP) = 0.59 (0.7) = 0.41



2. Calculations

Allowable Erosion Rate: E:

$$\begin{aligned} E &= RK (LS) (CP) \\ &= 152 (0.10) (0.400) (0.41) \\ E &= 2.49 \end{aligned}$$

Maximum Allowable Construction Area X Erosion Rate = 5000/ton/year.
Allowable Erosion Rate = 5000/A = 5000/2.0 = 2,500 tons/acre/year.
Allowable E = 2500 > 2.49

Severity Number, H:

$$\begin{aligned} H &= (2 \text{ FT} + 3D) AE \\ &= [2 (4) (.75) + 3 (2)] [(2.0) (2.49)] \\ H &= 60 \end{aligned}$$

Maximum Allowable Severity Rating = 50,000
Therefore: 60 < 50,000

REFERENCES: "Erosion and Sediment Control - Guide for Hawaii",
USDA Soil Conservation Service, March 1981.

"Soil Erosion Standards and Guidelines", Department of Public Works,
City and County of Honolulu
November 1975.

APPROVED:

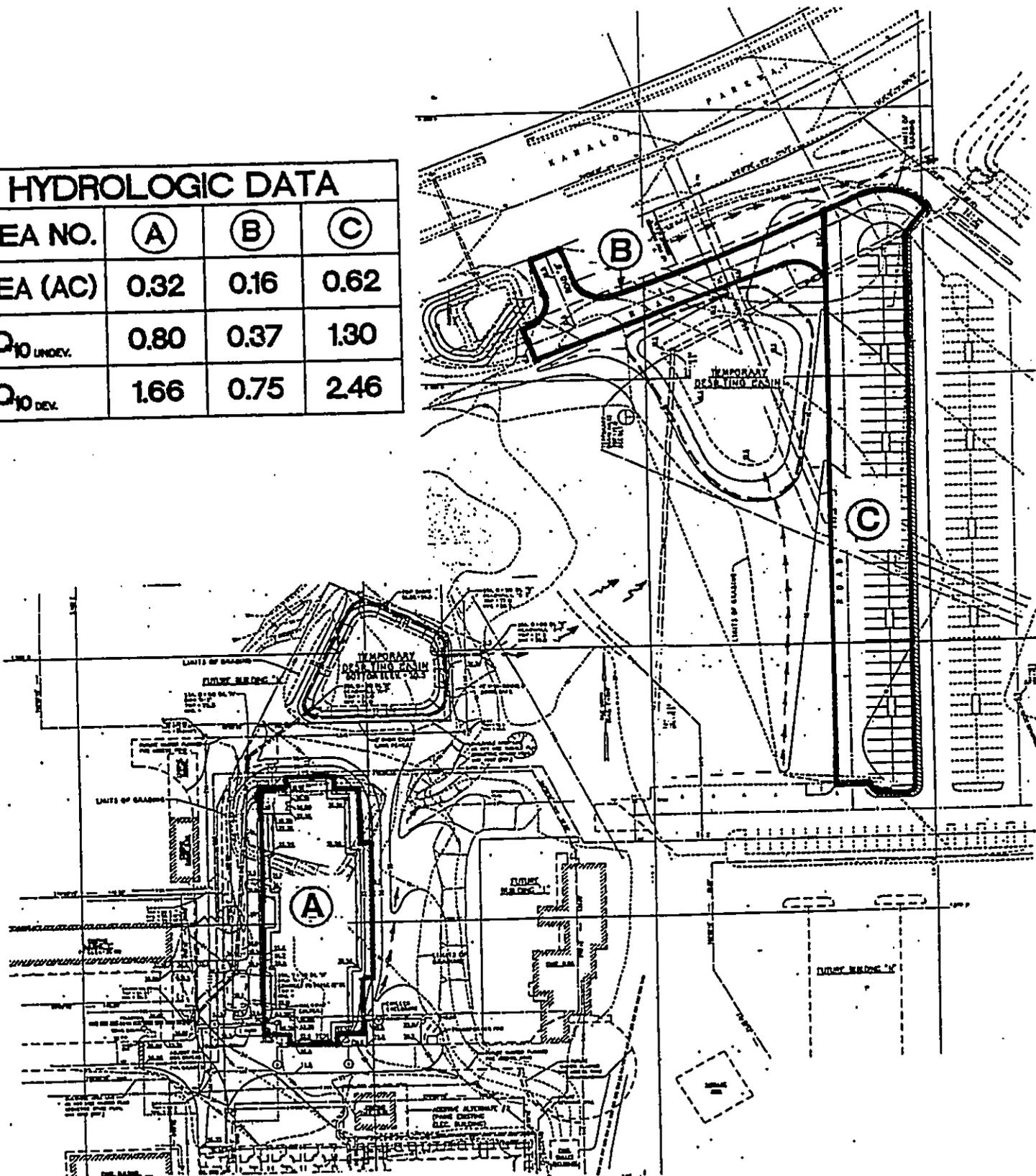
Director and Chief Engineer
Department of Public Works

Date

Chief, Division of Engineering
Department of Public Works

Date

HYDROLOGIC DATA			
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$Q_{10 \text{ DEV.}}$	1.66	0.75	2.46



SOIL EROSION AND SEDIMENTATION HAZARD REPORT
 MAUI COMMUNITY COLLEGE BUILDING "J", PHASE 2
 KAHULUI, MAUI, HAWAII

EROSION CONTROL PLAN
EXHIBIT 1

ATA
 Austin, Tsutsumi & Associates, Inc.
 Civil Engineers • Surveyors
 Honolulu • Wailuku • Hilo, Hawaii

PREPARED FOR:
 Department of Accounting and General Services
 Division of Public Works
 State of Hawaii