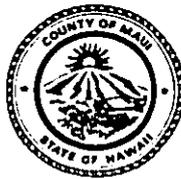


JAMES "KIMO" APANA  
Mayor

JOHN E. MIN  
Director

CLAYTON I. YOSHIDA  
Deputy Director



10/7/02

COUNTY OF MAUI  
**DEPARTMENT OF PLANNING RECEIVED**

October 7, 2002

02 OCT 10 A9:30

OFFICE OF ENVIRONMENTAL  
QUALITY CONTROL

Ms. Genevieve Salmonson, Director  
Office of Environmental Quality Control  
Department of Health  
235 South Beretania Street, #702  
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

RE: Final Environmental Assessment (EA) for the Front Street Commercial Building at 612 and 618 Front Street, TMK: 4-6-008: 48 and 53, Lahaina, Maui, Hawaii (EA 2002/0006)

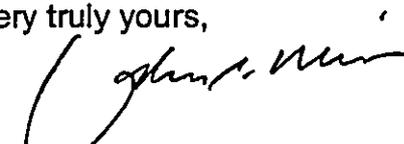
In accordance with the provisions of Chapter 343, Hawaii Revised Statutes and Title 11, Chapter 200 of the Administrative Rules of the State Department of Health, a Final Environmental Assessment (EA) has been prepared for the proposed project.

As the approving agency, the County of Maui, Planning Department finds that there will be no significant impacts as a result of the proposed action and is, therefore, filing a Finding of No Significant Impact (FONSI).

Enclosed are one (1) copy of the OEQC Publication form and four (4) copies of the Final EA. In addition, please be advised that the Project Summary has not changed since the publication of the Draft EA. We respectfully request that notice of the availability of the Final EA be published in the next edition of the Environmental Notice.

Thank you for your cooperation. If additional clarification is required, please contact Ms. Ann T. Cua, Staff Planner, of this office at 270-7735.

Very truly yours,

  
JOHN E. MIN  
Planning Director

JEM:ATC:jay  
Enclosures

c: Clayton Yoshida, AICP, Deputy Planning Director  
Becky Collins, AJI, LLC  
Glenn Tadaki, Munekiyo & Hiraga, Inc.  
Ann T. Cua, Staff Planner  
Project File (w/Enclosures)  
General File K:\WP\_DOCS\PLANNING\SM1\2002\FrontStCommercialProj\FinalEAOEQC

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793  
PLANNING DIVISION (808) 270-7735; ZONING DIVISION (808) 270-7253; FACSIMILE (808) 270-7634

Quality Seamless Service - Now and for the Future

97

OCT 23 2002

**FILE COPY**

2002-10-23-MA-FEA-

*Final  
Environmental Assessment*

---

**PROPOSED (FRONT STREET  
COMMERCIAL BUILDING)**

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Prepared for:

The Accepting Authority  
County of Maui,  
Department of Planning  
and  
AJI, LLC

October 2002

  
MUNEKIYO & HIRAGA, INC.

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**Preface**

The applicant, AJI, LLC, proposes to construct a new commercial building along Front Street in Lahaina, Maui. Identified by TMK 4-6-08:48 and 53, the subject parcels will be consolidated to form a single lot with a combined area of 14,671 square feet. Upon completion of the consolidation process, a one-story commercial building of approximately 4,400 square feet will be constructed on the site, as well as ancillary improvements.

Since the parcel is located within the limits of the Lahaina National Historic Landmark District, this Environmental Assessment (EA) has been prepared as required to document the project's technical characteristics, environmental impacts and alternatives, and advances findings and conclusions relative to the significance of the project.

# *Chapter 1*

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## *Project Overview*

## **I. PROJECT OVERVIEW**

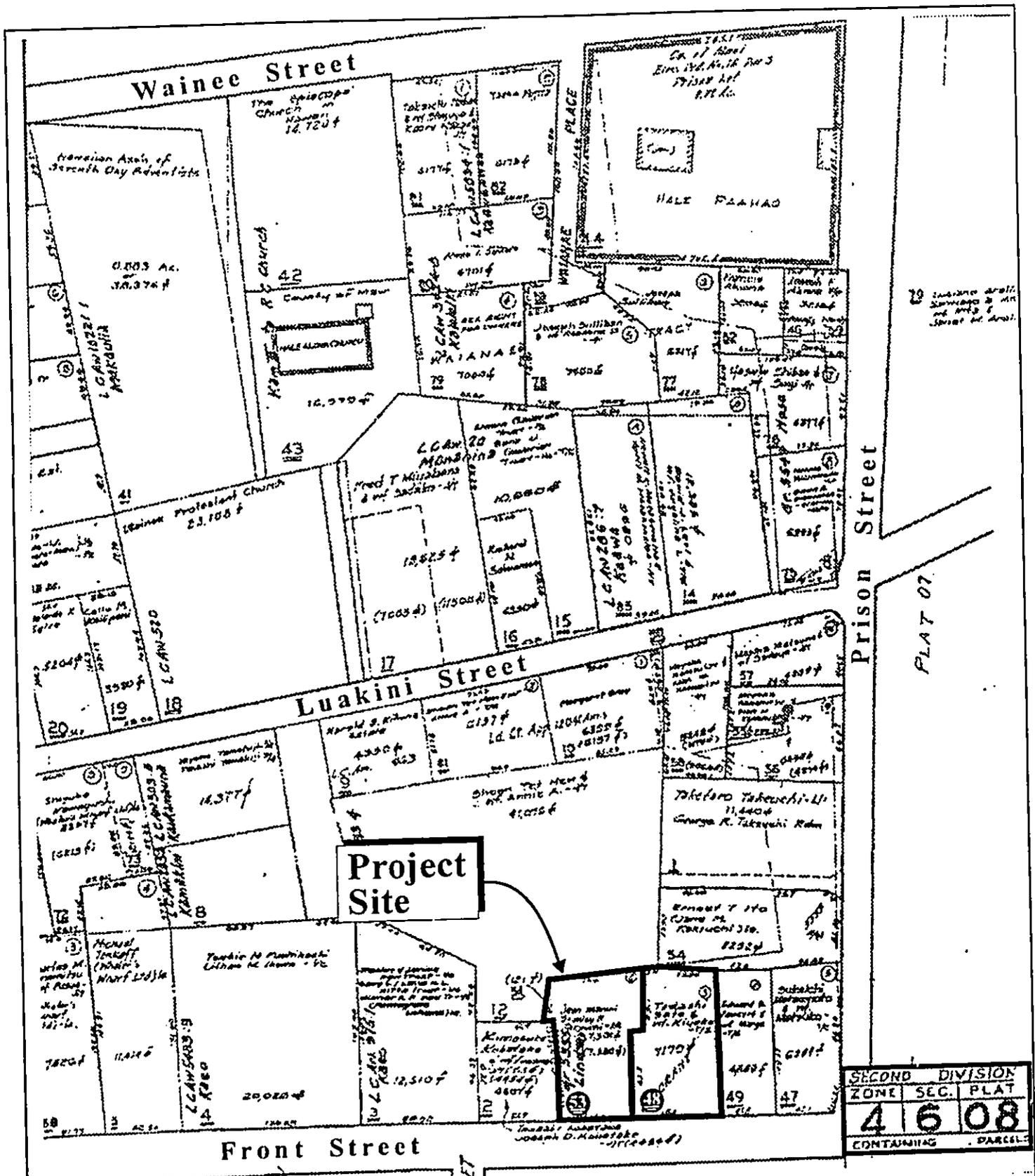
### **A. PROJECT LOCATION, EXISTING USE AND LAND OWNERSHIP**

The applicant, AJI, LLC, proposes to construct a new commercial building along Front Street in Lahaina, Maui. See Figure 1 and Figure 2.

The subject property is identified by TMK 4-6-08:48 and 53. Parcel 48 (7,170 sq. ft.) is presently vacant and undeveloped, and occupied by various grasses, weeds, and a few scattered trees. An existing driveway apron along Front Street is located near the southern boundary of the lot, while an approximately 4-foot high rock and CMU wall is situated along its eastern border. Parcel 53 (7,501 sq. ft.) contains an existing driveway apron that is located near its common boundary with Parcel 48. The apron leads to an existing 24-stall, asphalt-paved parking lot that is operated by Diamond Parking Service (DPS). This parking lot connects to a 0.9 acre DPS parking lot identified by TMK 4-6-08:12 that is situated to the rear of Parcel 53 and adjoining Parcels 2 and 3. In addition to Parcel 53, access to this 120-stall parking lot is provided from Front Street by a driveway on Parcel 3 and from Luakini Street via a driveway on Parcel 12. Park, school, business, residential, and public/quasi public uses characterize properties in the surrounding area. Access to Parcels 48 and 53 are provided via separate existing driveway aprons on Front Street.

The subject property is in the State "Urban" District and is designated "Business/Commercial" and "Historic District No. 2" by the West Maui Community Plan and Maui County zoning, respectively. In addition to the foregoing, the property falls within the limits of the County's Special Management Area. Kaupo Ranch Ltd. is the fee simple owner of the property.





Source: Realty Atlas (35th Edition, 2001)

Figure 2 Front Street Commercial Building NOT TO SCALE  
Site Location Map



Prepared for: AJI, LLC

MUNEKIYO & HIRAGA, INC.

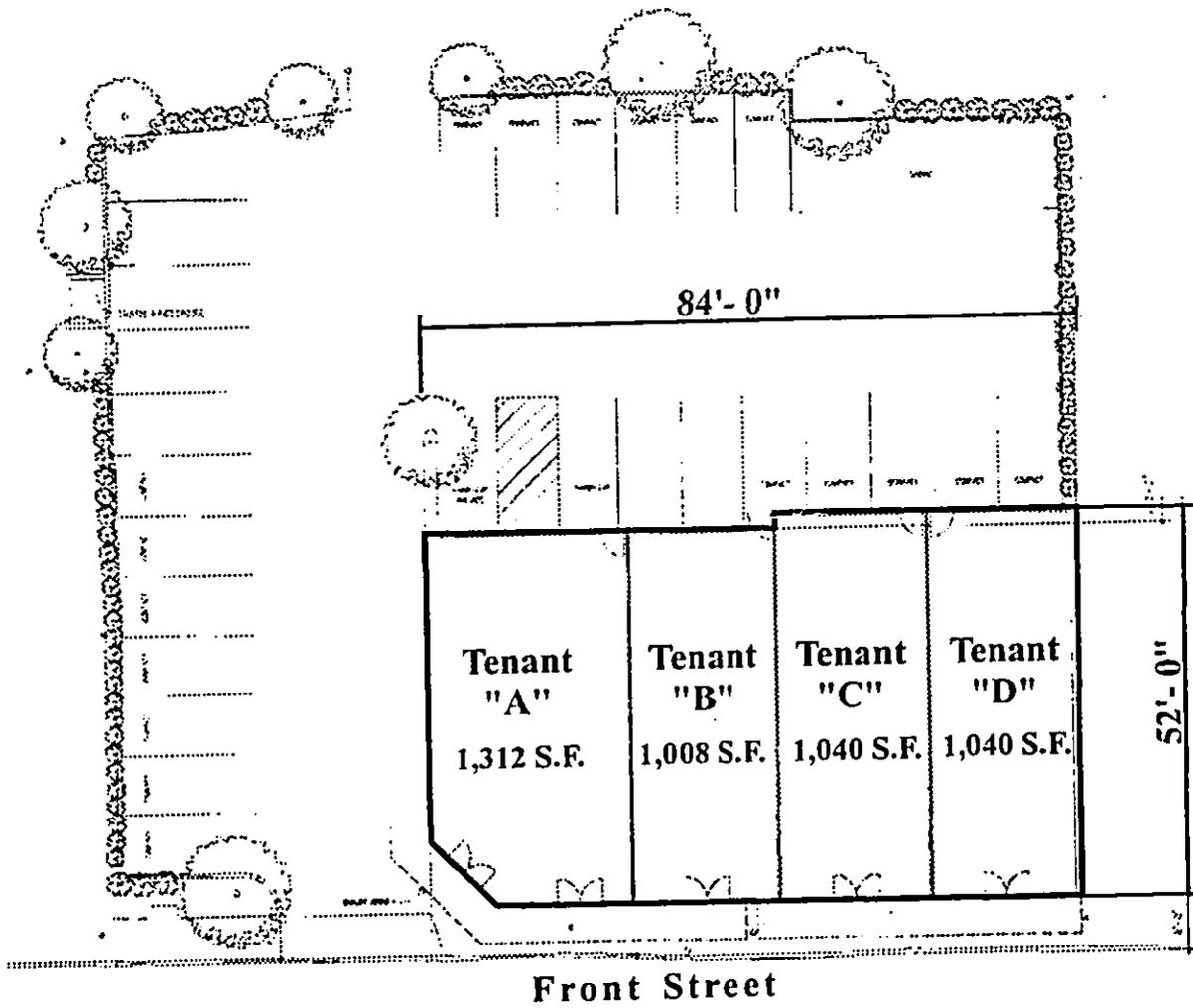
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**B. PROPOSED DEVELOPMENT**

Prior to the construction of the proposed commercial building, Parcels 48 and 53 will be consolidated to form a single lot consisting of 14,671 square feet. Upon completion of the consolidation process, a one-story commercial building of approximately 4,400 square feet will be constructed on the site. The new building will contain four (4) separate tenant spaces ranging in size from 1,008 to 1,312 square feet. See Appendix "A", Figure 3 and Figure 4. A portion of the existing parking lot on Parcel 53 will be retained for onsite parking for the new building, while the remaining portion of the parking lot, as well as the existing driveway apron on Parcel 48 will be demolished. In addition to the construction of the building, the proposed action includes the provision of utility connections and a trash enclosure, as well as site landscaping and irrigation. Based on County off-street parking standards, 9 parking stalls and a loading zone are required. A total of 27 parking stalls, including 2 handicapped, 7 regular, and 18 compact stalls, as well as a loading zone, will be provided. Parking for the new commercial building will be managed by Diamond Parking Service (DPS).

To foster and maintain the historic architectural character and ambience of Lahaina Town, the proposed commercial building will be designed in accordance with the design guidelines for Historic District Nos. 1 and 2 (which are both within Lahaina), as set forth by The Architectural Style Book for Lahaina that was adopted by the County of Maui, Historic Commission in October 1969. In addition, tenants of the new commercial building will be required to comply with the use regulations for Historic District Nos. 1 and 2.

The estimated cost of the project is about \$675,000.00. The project will be developed in a single phase, with construction expected to commence



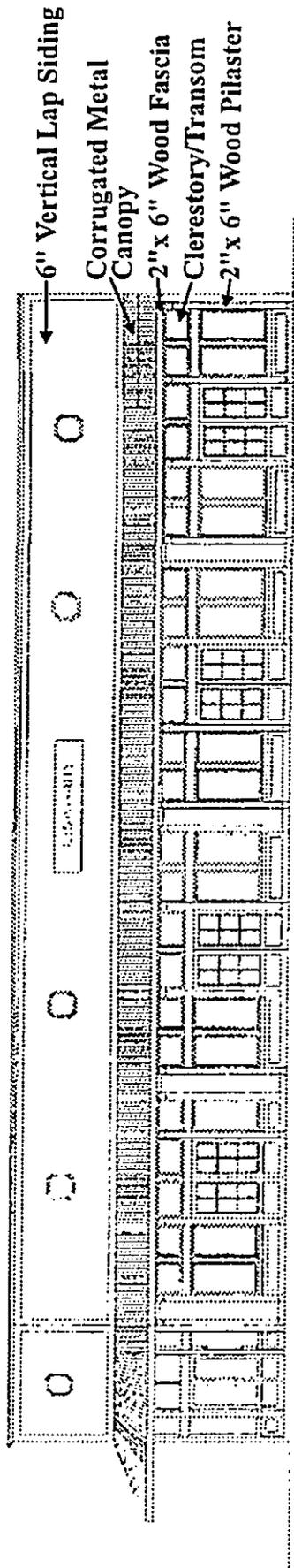
Source: Eric S. Taniguchi, AIA

**Figure 3** Front Street Commercial Building **NOT TO SCALE**  
 Preliminary Site/Floor Plan

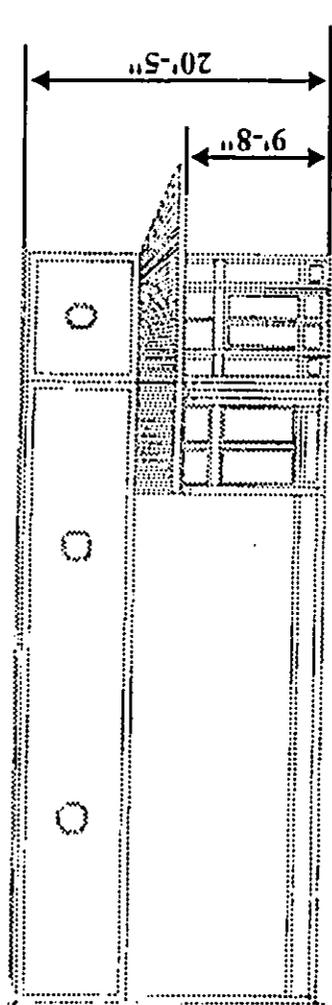


Prepared for: AJI, LLC

MUNEKIYO & HIRAGA, INC.



**Front Street Elevation**



**North Elevation**

Source: Eric S. Taniguchi, AIA

**Figure 4**



**Front Street Commercial Building  
Preliminary Building Elevations**

NOT TO SCALE

Prepared for: AJI, LLC

MUNEKIYO & HIRAGA, INC.

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upon the receipt of all applicable regulatory permits and approvals. The estimated construction time frame for the project is approximately 12 months.

Pursuant to Chapter 343, Hawaii Revised Statutes (HRS), this Environmental Assessment (EA) has been prepared since the subject property is located within the boundaries of the Lahaina National Historic Landmark District, an area listed on the National Register of Historic Places.

In addition, since the project site is located within the limits of the County's Special Management Area (SMA), as well as Historic District No. 2, applications for a SMA Use Permit and Historic District Approval have been prepared for review by the Maui Planning Commission and Maui County Cultural Resources Commission, respectively.

# ***Chapter II***

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***Description of the  
Existing Environment***

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## **II. DESCRIPTION OF EXISTING ENVIRONMENT**

### **A. PHYSICAL ENVIRONMENT**

#### **1. Surrounding Land Use**

The project site is situated near the southern fringe of Lahaina Town's business/commercial district.

Land uses to the immediate south of the project site are defined by a two-story building housing Maui Makana, a retail clothing store, and a one-story structure containing Duke's Surf Shop and an Activity Warehouse. To the north of the site lies a one-story edifice accommodating a Burger King, and a two-story structure housing Salon Salon, Skin Deep Tattoo, Tropical Tanlines, an Activity Mart, and the Sea Level Trading Company. Land uses to the immediate east of the site are defined by a single-family dwelling and a Diamond Parking Service parking lot, while to the west lies King Kamehameha III Elementary School.

In addition to Kamehameha Iki Park, Holy Innocents Episcopal Church, and several residences, Lahaina's historic Banyan Tree, courthouse, Pioneer Inn, and small boat harbor characterize other land uses in the area that are to the west of the project site, while a County public parking lot, the Maui Medical Group clinic, and Malu'uluolele Park typify other uses to the south. Other land uses in the vicinity to the north of the site are distinguished by the Banyan Inn Market Place, The Wharf Cinema Center and a host of retail stores, while to the east are scores of single-family residential properties.

Numerous retail stores and services are located in proximity of the site. To the south of the subject property, lies 505 Front Street, a

---

two-story, 75,000 square foot shopping center, while to the north of the property lie a myriad of visitor-oriented shops and restaurants, as well as shopping facilities such as the Banyan Inn Market Place, The Wharf Cinema Center, Dickenson Square, Lahaina Market Place, Mariner's Alley, Lahaina Shopping Center, Lahaina Square, Anchor Square, Lahaina Center, and Lahaina Cannery Mall.

**2. Land Use History**

According to Maui County real property tax records, Parcel 48 formerly contained a main dwelling with an attached studio, as well as a detached garage and an accessory dwelling. The structures were constructed in 1944 and subsequently demolished around 1988. Based on real property title records, the first recorded transfer of Parcel 48 occurred in 1944, followed by transactions in 1945, 1963, 1987, and 2001. Prior to its sale to Kaupo Ranch, Ltd. in 2001, the lot was owned by Lahaina Fashions, Inc. Maui County real property records do not indicate if Parcel 53 contained any structures prior to the construction of the existing parking lot. Real property title records indicate that the first recorded transfer of Parcel 53 took place in 1946, followed by transactions in 1948, 1951, 1975, 1990, 1992, 1994, and 2001. Before its sale to Kaupo Ranch in 2001, the property was owned by Lahaina Fashions, Inc. and the Jean H. Keanini Trust.

There are no known outstanding citations concerning violations of statutes, ordinances, or rules pertaining to the subject property.

---

3. **Climate**

Like most areas of Hawaii, Lahaina's climate is relatively uniform year-round. Lahaina's tropical latitude, its position relative to storm tracts and the Pacific anticyclone, and the surrounding ocean combine to produce this stable climate. Variations in climate among different regions, then, is largely left to local terrain.

In Lahaina, August is historically the warmest month with an average high temperature of approximately 88 degrees Fahrenheit and average low temperature of 70 degrees Fahrenheit. January is normally the coolest month of the year with an average high temperature of 80 degrees Fahrenheit and an average low temperature of approximately 62 degrees Fahrenheit.

Rainfall at Lahaina is highly seasonal, with most precipitation occurring from November to April when winter storms hit the area. Precipitation data for 1997 shows that on average, January was the wettest month, with 10.01 inches of rainfall, while May, August, September and October were the driest with no rainfall at all. Total precipitation for the year was 16.68 inches, and average monthly rainfall was 1.39 inches (Maui County Data Book, 2000).

The winds in the region are also seasonal. The northeasterly tradewind occurs 90 percent of the time during the summer, and just 50 percent of the time in the winter. Wind patterns also vary on a daily basis, with tradewinds generally being stronger in the afternoon. During the day, winds blow onshore toward the warmer land mass. In the evening, the reverse occurs, as breezes blow toward the relatively warm ocean.

---

4. **Flood and Tsunami Zone**

The Flood Insurance Rate Map (FIRM) for this area of the island designates the project site as being within Zone "C". See Figure 5. Zone "C" indicates an area of minimal flooding. The entire site is located mauka of coastal flood zones.

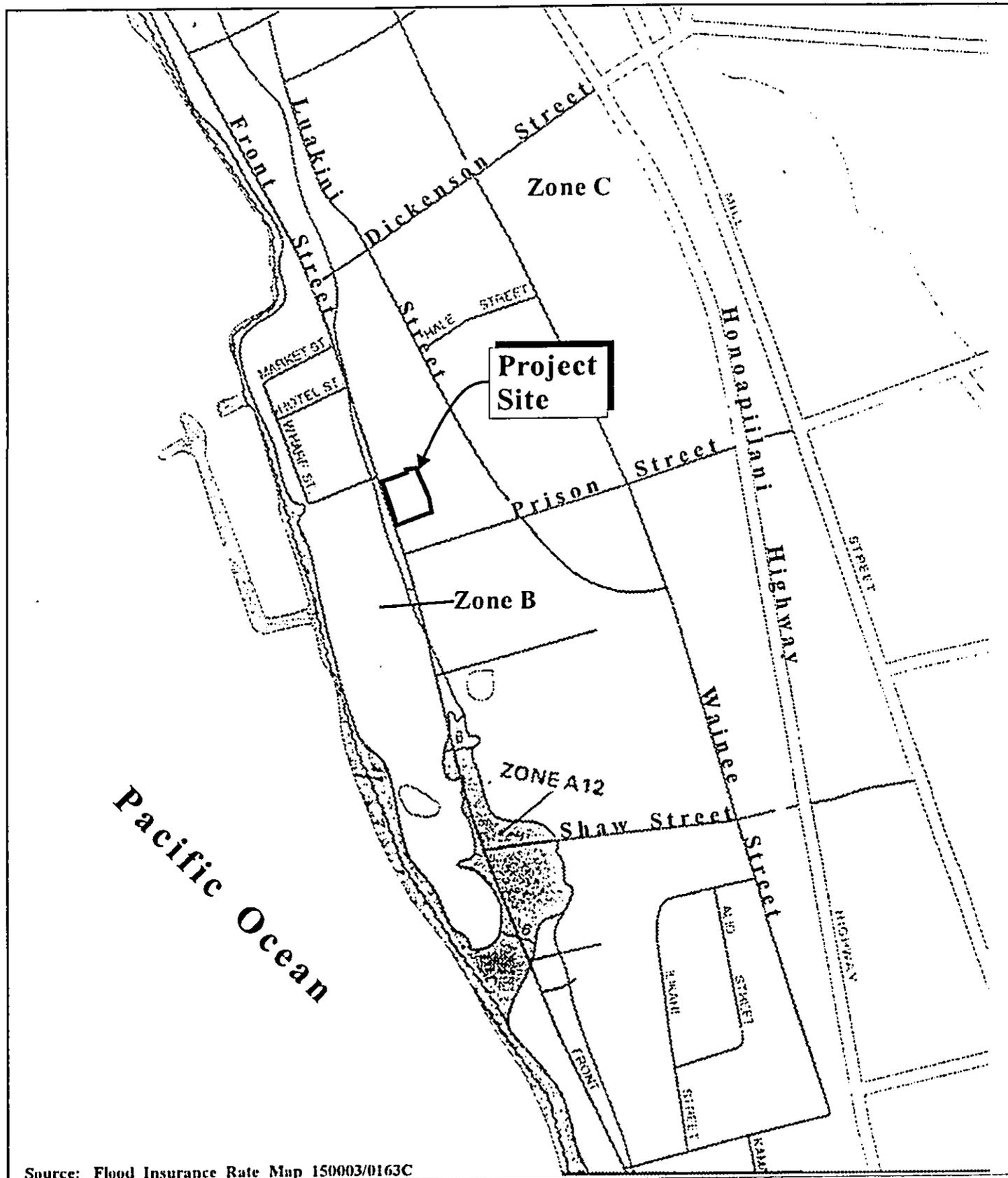
5. **Topography and Soils**

Locally, the average elevation is approximately 10 feet above mean sea level (amsl) and is characterized by westerly to southwesterly slopes of about 0 to 3 percent. The terrain on Parcel 48 gently slopes to a low lying area at its center, while the topography of Parcel 53 gently slopes to the west toward Front Street. Parcel 53 is approximately 2 to 3 feet higher in elevation than Parcel 48. The change in site conditions occurs at the common boundary of the two parcels.

Soils at the project site belong to the Pulehu-Ewa-Jaucas association. See Figure 6. Ewa silty clay loam (EaA) is the Ewa Series soil type specific to the site. See Figure 7. Ewa silty clay loam is characterized by slopes of 0 to 3 percent, very slow runoff, moderate permeability, and no more than slight erosion hazard. Vegetation normally associated with this series include fingergrass, kiawe, koa haole, klu and uhaloa.

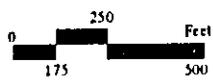
6. **Flora and Fauna**

As previously indicated, the subject property is identified by TMK 4-6-08:48 and 53. Parcel 53 contains an existing asphalt-paved parking lot, while Parcel 48 has been previously cleared and, with the exception of a few mature trees, is vegetated with various grasses and weeds. There are no rare, endangered or threatened



Source: Flood Insurance Rate Map 150003/0163C

**Figure 5** Front Street Commercial Building  
Flood Zone Designations

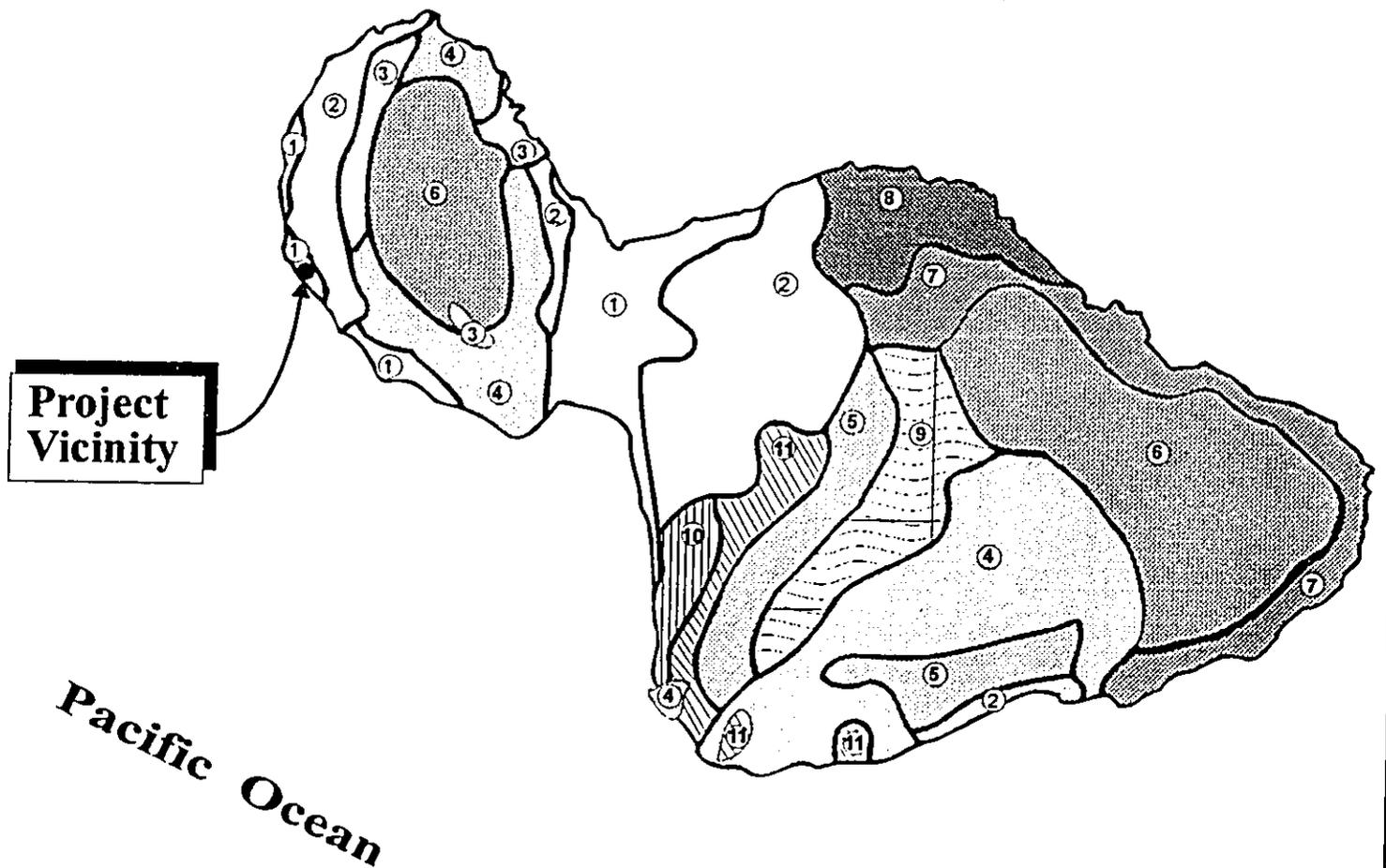


Prepared for: AII, LLC

MUNEKIYO & HIRAGA, INC.

## LEGEND

- |   |   |
|---|---|
| <p>① Pulehu-Ewa-Jaucus association</p> <p>② Waikoa-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-Makena association</p> <p>⑪ Kamaole-Oanapuka association</p> |
|---|---|



Map Source: USDA Soil Conservation Service

**Figure 6** Front Street Commercial Building  
Soil Association Map

NOT TO SCALE



Prepared for: AJI, LLC

MUNEKIYO & HIRAGA, INC.



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species of plants found at or in the vicinity of the property.

Animal life which may be found in this area is typical of the urbanized regions of West Maui. Domestic mammals found in the area include dogs and cats. Avifauna commonly found in this area include the common mynah, Japanese white-eye, spotted dove, barred dove and house finch. There are no known rare, endangered or threatened species found in the vicinity of the project site. In addition, the U.S. Department of the Interior's National Wetlands Inventory map does not reveal any stream or wetlands located within or in close proximity to the subject property.

7. **Air Quality**

The Lahaina region in general does not experience adverse air quality conditions. There are no point sources of airborne emissions in the immediate vicinity and the air quality at the subject property is considered good. Airborne pollutants that do exist can largely be attributed to vehicular exhaust from Honoapiilani Highway and other surrounding roadways. These sources are intermittent, however, and the prevailing tradewinds will disperse particulates generated by these temporary sources.

8. **Noise**

Existing background noise in the vicinity of the site is principally attributed to traffic on Honoapiilani Highway and surrounding local roadways. In addition, the flight paths of arriving and departing aircraft at the Kapalua West Maui Airport, located about 6.0 miles to the north of the project site, place the site beyond the limits of aircraft noise exposure.

---

9. **Archaeological Resources**

The subject property is located within the boundaries of the Lahaina National Historic Landmark District, an area listed on the National Register of Historic places. As previously noted, Parcel 53 contains an existing asphalt-paved parking lot, while Parcel 48 formerly included single-family residential improvements (about 44 years old) which were cleared from the site around 14 years ago. Given the extensive surface disturbance of the property, the project site is not considered significant in terms of historic and cultural resource value.

10. **Scenic and Open Space Resources**

The subject property is not located within a scenic view corridor. Scenic resources in the vicinity of the property include the West Maui Mountains, which are to the east of the project site, as well as the Pacific Ocean and the offshore island of Lanai, which are to the west of the site. Open space resources in the region are also characterized by the West Maui Mountains, as well as the vast expanse of present and former agricultural lands that lie between the mountains and existing urbanized areas near the coastline.

**B. SOCIO-ECONOMIC ENVIRONMENT**

1. **Regional Setting**

The majority of lands in West Maui are either State designated "Conservation" or "Agricultural". Generally, "Conservation" lands occupy the higher elevations, while the "Agricultural" district spans the foothills of the West Maui Mountains.

"Urban" designated lands occupy the lower elevations along the coast and include the communities of Kahana-Napili-Kapalua and

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Kaanapali. These resort communities include several hotels and visitor-oriented condominiums. Lahaina, meanwhile, is more typical of a residential community. Single-family, business, light industrial, and agricultural zones prevail in this part of West Maui.

The town of Lahaina is the commercial center for West Maui. The town contains a number of shopping centers and retail business areas, and serves as a core for the region's residential housing.

Part of West Maui's attraction can be attributed to its year-round dry and warm climate, complemented by many white-sand beaches and scenic landscape. Most of the visitor accommodations are located in Lahaina and the resort communities of Kaanapali, Honokowai, Kahana, Napili and Kapalua.

The Kapalua-West Maui Airport at Mahinahina conveniently links West Maui to Oahu and other neighbor islands.

Diversified agriculture and pineapple fields occupy much of the land in the area. Pioneer Mill Company, Ltd. cultivates their agricultural lands in the Kaanapali area with sweet corn, seed corn, and alfalfa. Maui Land & Pineapple Company's fields sprawl along the slopes of the West Maui Mountains north of Kaanapali.

## 2. Population

The resident population of the West Maui Community Plan region has demonstrated a substantial increase over the last three (3) decades. In 2000, the population of the island of Maui was 120,038, with 17,748 persons (15 percent) of the island's population residing in West Maui (U.S. Census Bureau, Census

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2000). Since 1970, West Maui has seen a growth in population, with the population increasing from about 5,500 persons in 1970, to approximately 10,300 persons in 1980, and to about 14,600 persons in 1990. These increases represent an 87 percent gain from 1970 to 1980, a 42 percent increase from 1980 to 1990, and a 22 percent gain from 1990 to 2000. The resident population of the West Maui region is projected to increase to 21,776 in the year 2010 (Community Resources, Inc., 1994).

West Maui's annual average population growth over the last three (3) decades has kept pace with that of Maui County. Between 1970 and 1980, Maui County grew at an average rate of 4.4 percent a year, while from 1980 to 1990, and from 1990 to 2000 it grew at an average rate of 3.5 percent and 2.8 percent a year, respectively. Compared to Maui County, West Maui had a higher average annual growth rate of 6.4 percent during the 1970's, but shared a 3.5 percent average growth rate between 1980 and 1990, and a slightly lower growth rate of 2.3 percent in the 1990's. The resident population of Maui County is projected to increase to 127,670 in the year 2010 (Community Resources, Inc., 1994).

### 3. Economy

The economy of Maui is heavily dependent upon the visitor industry. The dependency on the visitor industry is especially evident in West Maui, which is one of the State's major resort destination areas. Major hotels in this region include the Hyatt Regency Maui (806 rooms), the Westin Maui (759 rooms), the Royal Lahaina Resort (592 rooms), the Ritz-Carlton Kapalua (548 rooms), the Sheraton Maui Resort (510 rooms), the Kaanapali Beach Hotel (430 rooms) and the Kapalua Bay Hotel (196 rooms).

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West Maui's visitor orientation is reflected in the character of Lahaina Town, which serves as a center for visitor-related retail outlets and activities.

Agriculture, another vital component of the West Maui economy, is handled by Pioneer Mill Company and Maui Land & Pineapple Company, Inc. Until the termination of sugar cane cultivation in September 1999, Pioneer Mill cultivated most of its approximately 6,700 acres of fee simple and leased lands with sugar cane. Pioneer Mill is diversifying its agricultural operations by utilizing portions of its lands for sweet corn, seed corn, and alfalfa cultivation.

Maui Land & Pineapple's fields remain an important component of the region's agricultural base. In 1988, Maui Land & Pineapple entered the fresh fruit market, air shipping pineapples to the mainland in an effort to diversify its operations.

As of February 2002, the unemployment rate for both Maui County and the island of Maui stood at 5.1 percent (State Department of Labor and Industrial Relations, April 2002).

**C. PUBLIC SERVICES**

**1. Solid Waste Disposal**

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 is disposed at the County's 55-acre Central Maui Landfill, located 4.0 miles southeast of the Kahului Airport. In addition to County-collected refuse, the Central

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Maui Landfill accepts commercial waste from private collection companies.

A refuse transfer station located about 6.0 miles south of the project site at Olowalu serves West Maui residents and accommodates household refuse and green waste, as well as used oil; no commercial waste is accepted at this facility. A private waste disposal service has been contracted by the County to transport waste from this facility to the Central Maui Landfill.

**2. Medical Facilities**

The only major medical facility on the island is Maui Memorial Medical Center, located approximately 20.0 miles from Lahaina, midway between Wailuku and Kahului. The 196-bed facility provides general, acute, and emergency care services.

In addition, regular hours are offered by the Maui Medical Group, Lahaina Physicians, West Maui Healthcare Center, and Kaiser Permanente's Lahaina Clinic.

**3. Police and Fire Protection**

The project site is within the Maui Police Department's service area, which services all of the Lahaina district. The Department's Lahaina Station is located in the Lahaina Civic Center complex at Wahikuli, approximately one (1) mile east of the project site. The Lahaina Patrol includes 54 full-time personnel, including one (1) captain, one (1) lieutenant, seven (7) sergeants, and 39 police officers. The remaining six (6) personnel consist of public safety aides and administrative support staff.

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Fire prevention, suppression and protection services for the Lahaina District are provided by the Maui Fire Department's Lahaina Fire Station, also located in the Lahaina Civic Center and the Napili Fire Station, located in Napili. The Lahaina Fire Station includes an engine and a ladder company, and is staffed by 30 full-time personnel. The Napili Fire Station consists of an engine company including 15 full-time firefighting personnel.

4. **Educational Facilities**

The West Maui area is served by four (4) public schools operated by the State Department of Education: Lahainaluna High School, Lahaina Intermediate School, King Kamehameha III Elementary School, and Princess Nahienaena Elementary School. The region is also served by privately operated pre-elementary and elementary schools.

5. **Recreational Facilities**

West Maui is served by numerous recreational facilities offering diverse opportunities for the region's residents. There are nearly 20 County parks in West Maui. Approximately one-third of the County parks are situated along the shoreline and provide for excellent swimming, diving, and snorkeling, as well as fishing, surfing, picnicking, sun bathing, and other shoreline-related activities.

In addition, Kaanapali and Kapalua Resorts operate world-class golf courses which are available for public use.

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Recreational facilities in the vicinity of the project site include Puamana Park, the Lahaina Aquatic Center, the Lahaina Recreation Center, Malu'uluolele Park, and Kamehameha Iki Park.

**D. INFRASTRUCTURE**

**1. Roadway System**

Honoapiilani Highway (State Highway 30) is the main roadway serving the West Maui region. This highway is the only link between West Maui and the rest of the island (although an unimproved segment of highway extends around the north coast of the island to Waihee, providing limited access). The highway has a typical two-lane configuration except for a segment from Lahaina to Honokowai where four (4) travel lanes are provided.

Access to the project site is provided via Front Street, a two-lane County roadway aligned along a north-south axis. In the vicinity of the site, Front Street has a posted speed limit of 20 miles per hour (mph) and a pavement width of approximately 26 feet. Along this segment of Front Street, a sidewalk, with a minimum width of 4 feet, lies on the mauka side of the right-of-way. It should be noted that in 1997, the County completed improvements to Front Street (between Baker to Shaw Streets) to facilitate traffic and pedestrian movement within this corridor, as well as to upgrade and relocate (as necessary) the water, sewer, drainage, and utilities infrastructure within this segment.

Other roadways in close proximity to the site include Prison Street to the south and Canal Street to the north. Prison Street is a two-lane roadway with a speed limit of 20 mph and a pavement width of about 20 feet. Canal Street, a one-lane roadway with parallel

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parking stalls on both sides of the street, forms the final leg of a one-way traffic loop that provides access to the area around the Lahaina small boat harbor (Hotel and Wharf Streets comprise the first two legs of the loop).

2. **Water Systems**

The West Maui region is served by the domestic water system operated by the County's Department of Water Supply. The County water system services the coastal areas from Launiupoko to Kaanapali and from Honokowai to Napili. Three (3) surface sources and eight (8) wells are used to supply the County domestic system. In addition to the County system, the West Maui region is served by private water systems, including the Kaanapali Water Corporation, which services the Kaanapali Resort, and the Kapalua Water Company, which provides water service to the Kapalua Resort. An existing water meter (No. 20473624) and an existing waterline stubout on Parcel 48, as well as an existing 12-inch diameter waterline within the Front Street right-of-way are available to service the project site.

3. **Wastewater Systems**

The County's wastewater collection and transmission system and the Lahaina Wastewater Reclamation Facility (LWRF) accommodate the region's wastewater needs. The LWRF, located along Honoapiilani Highway just north of the Kaanapali Resort, has been upgraded and expanded to a design capacity of 9.0 million gallons per day (MGD). The cumulative wastewater flow currently allocated to the facility is approximately 6.138 MGD. An existing sewerline stubout by the common boundary between Parcels 48 and 53 provides a wastewater service connection for the project

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site. Wastewater from the site will be conveyed to an existing 8-inch diameter gravity sewerline located within the Front Street right-of-way. A series of force mains and gravity lines convey wastewater from Lahaina Town to the LWRF.

4. **Drainage**

Surface runoff generated onsite sheetflows across the project site in a easterly to westerly direction. An existing 38-inch x 24-inch oval reinforced concrete pipe (ORCP) drainline is situated within the Front Street right-of-way. Other existing drainage system improvements in the vicinity of the site include three (3) concrete drainage inlets at the intersection of Front and Prison Streets and another inlet at the north corner of the Front and Canal Street intersection.

5. **Electrical, Telephone and CATV Systems**

Electrical and telephone service to the West Maui region is provided by Maui Electric Company and Verizon Hawaii, respectively. Cable television (CATV) service is provided by Hawaiian Cablevision. In the vicinity of the project site, existing overhead powerlines and utility poles are located along the east side of Front Street, while existing telephone and CATV stubouts on the site are located by the common boundary between Parcels 48 and 53.

# **Chapter III**

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## **Potential Impacts and Mitigation Measures**

### **III. POTENTIAL IMPACTS AND MITIGATION MEASURES**

#### **A. PHYSICAL ENVIRONMENT**

##### **1. Geographic Features**

No significant impacts to topography and soils are anticipated. Given that the subject property currently consists of an existing asphalt-paved parking lot, as well as a vacant, cleared parcel which formerly contained residential structures, site work for the proposed commercial building is not expected to have an adverse effect on the existing physical environment.

In addition, the subject property is not located within a flood plain, tsunami zone, or erosion-prone area, nor is it situated on geologically hazardous lands or located by an estuary, fresh waters, or coastal waters. A review of the National Wetlands Inventory Maps for Maui and an inspection of the subject property did not reveal any wetlands or other environmentally sensitive areas on the property. The Flood Insurance Rate Maps for the island reflect that the project site falls within Zone C (an area of minimal flooding) and also lies beyond the limits of coastal flooding. In addition, the soils underlying the subject property are characterized by very slow runoff and an erosion hazard that is no more than slight.

##### **2. Surrounding Uses**

The subject property is located within the business/commercial district of Lahaina Town. In the vicinity of the project site and within Lahaina Town are a myriad of visitor-oriented shops and restaurants, as well as shopping facilities such as the Banyan Inn Market Place, The Wharf Cinema Center, Dickenson Square, Lahaina Market Place, Mariner's Alley, Lahaina Shopping Center,

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Lahaina Square, Anchor Square, Lahaina Center, and Lahaina Cannery Mall. The proposed commercial building will be designed to complement its surrounding environs, as well as enhance and preserve the historic architectural character and ambience of Lahaina Town. In this regard, the proposed use of the property for a commercial building is not anticipated to adversely impact existing surrounding land uses. In addition, the use of 14,671 square feet of urban designated land for the proposed commercial building is not expected to have an adverse impact on agriculture in the region, nor is it anticipated to affect lands that are available for agricultural use

3. **Flora and Fauna**

The subject property consists of TMK 4-6-08:48 and 53. Parcel 53 contains an asphalt-paved parking lot, while Parcel 48 is vacant and occupied by a few mature trees and various grasses and weeds. The proposed use of the property for a commercial building is not expected to have an adverse effect on flora and fauna in the vicinity.

4. **Air Quality**

Air quality impacts attributed to the project will include dust generated by short-term, construction-related activities. Site work such as clearing, grubbing and grading, and utilities installation and building pad construction for example, will generate airborne particulates. Dust control measures, such as regular watering and sprinkling, will be implemented to minimize nuisance impacts to the adjacent residents.

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Once the project is completed, project-related vehicular traffic will generate automotive emissions. However, these emissions are not expected to adversely impact local and regional ambient air quality conditions.

5. **Noise**

As with air quality, ambient noise conditions will be temporarily 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. Proper equipment and vehicle maintenance are anticipated to minimize noise levels. In addition, equipment mufflers or other sound attenuating devices may be utilized as required. All construction activities will be limited to normal, daylight working hours.

From a long-term perspective, the proposed project is not anticipated to generate adverse noise impacts.

6. **Scenic and Open Space Resources**

The proposed improvements will integrate a low-rise structure, landscaping and parking to provide facilities which satisfy spatial requirements and are compatible with the surrounding environment. In addition, the building will be compatible in height and mass with surrounding structures and will be in keeping with the existing townscape.

The subject property is not part of a scenic corridor and will not affect views from inland vantage points. Accordingly, the proposed

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project is not anticipated to have an adverse impact upon the visual character of the surrounding area.

The proposed commercial building and parking area will be designed and landscaped to complement and enhance the visual character of the area and will not encroach into view corridors.

7. *Archaeological Resources*

An Archaeological Inventory Survey report was prepared for the proposed project in March 2002 by Xamanek Researches and has been submitted to the State Historic Preservation Division for review and approval. See Appendix "B". As previously noted, the subject property is comprised of two (2) parcels, an existing asphalt-paved parking lot (Parcel 53) and a vacant undeveloped lot (Parcel 48) which formerly contained residential structures. Due to the existing developed condition of Parcel 53, the inventory survey assessed the 7,101 square feet comprising Parcel 48.

Subsurface testing of Parcel 48 consisted of six (6) backhoe trenches. One previously unidentified subsurface site was located during this sampling process. Site 5203 consists of four (4) refuse pits and an informal water worn pavement from the early to mid-20th century. The various features are thought likely associated with a plantation-era house that was formerly situated on the vacant parcel.

Subsurface results indicate that Parcel 48 was filled, probably during the late 1800s. The time of the construction of the former structure is not known, but it was likely to have been around the turn of the century. Intact beach sand deposits were located on

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the eastern portion of the project area. The ground water table was encountered between 110 and 130 cm below the existing surface. Perusal of old maps of Lahaina indicates that portions or all of these parcels had been part of the canal system in the mid-19th century.

As indicated by the report, no additional work beyond the inventory level is recommended for Site 5203 as the site has yielded sufficient information, and data recovery work does not appear warranted. However, intact sand deposits were located on the eastern portion of this parcel, and archaeological monitoring is recommended for any deeper subsurface excavations on the parcel. In the event that any future subsurface disturbance activities are scheduled for Parcel 53, additional inventory level work in the form of monitoring is recommended for this parcel. In a letter dated June 4, 2002, the State Historic Preservation Division (SHPD) accepted the report and indicated that the project will have "no effect" on significant historic sites. See Appendix "B-1".

However, should any archaeological or historic features be uncovered during construction activities, work will be immediately halted in the vicinity of the find and the find shall be protected from further damage. SHPD will be promptly contacted to ensure applicable procedures relating to Chapter 6E, HRS, are implemented.

**8. Cultural Impact Assessment**

The Lahaina District is described as a rich agricultural oasis watered from nearby valleys (Handy and Handy, 1972). This oasis "extended about three leagues in length (about nine miles along

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the coast) and one (three miles) in breadth. Beyond this, all is dry and barren". The name Lahaina ("cruel sun") likely refers to the droughts that affected the surrounding area from time to time (Pukui et al., 1974, p.127). In pre-contact times, Lahaina itself was apparently a garden-like area with taro lo'i, ditches ('auwai) and separating embankments creating a verdant landscape. Brackish water and fresh water ponds (loko) were also present. At lower elevations, dry land cultivation took place in areas around alluvial fans, while at higher elevations lo'i and 'auwai systems were constructed within valleys for taro production. In coastal settlement areas, marine resources were utilized for subsistence. In Lahaina, several fishponds existed, of which two were most prominent, Loko o Mokuhinia and the smaller Loko Puako, around which intensive taro and breadfruit cultivation occurred. Scattered around the fishponds and taro lo'i, and situated on higher ground, were the homes of the laborers who worked the land.

The project site lies within the ahupua'a of Puako and the smaller division ('ili) of Kiloani. This area lay to the north of the 'ili of Pakala, which was the home of many high-ranking chiefs and later, members of the royal family. As suggested by Handy (1940, 1972), by late pre-contact times, the fairly sizable population dwelling in the region utilized coastal fishing areas and inland garden plots for subsistence, cultivating sweet potatoes near shore, or taro in terraced lo'i in the wetter valleys inland.

By the time of contact, the Lahaina region had become an important socio-political center, and the residence of several powerful chiefs, most notably Kahekili, one of the highest ranking on Maui. Lahaina was considered by high chiefs to be a favorable

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place due to the abundance of natural resources and its close proximity to the islands of Lana'i and Moloka'i (Handy and Handy, 1972).

In 1789, Kamehameha I invaded Maui and defeated Kahekili at the Battle of Kepaniwai O Iao (Speakman, 1978). In post-contact times, Lahaina became the center of the Hawaiian monarchy. Kamehameha I spent time there between his battles of conquest, while his son, Kamehameha III, resided in Lahaina in preference to Honolulu. Many high status individuals connected with the monarchy lived in Lahaina, even after the official capitol of the kingdom was moved to Honolulu in 1845.

In 1820, about 40 years after Captain James Cook's discovery of the Hawaiian Islands, the islands experienced the crumbling of the ancient Hawaiian social system and the sudden arrival on the scene of the first New England whaling ships and missionaries. The population of West Maui continued to decline in the second half of the 19<sup>th</sup> century followed by the collapse of the Pacific whaling industry in the 1860's which was prompted by the discovery of oil in Pennsylvania a decade or so earlier. In the Lahaina area, sugar production developed in the mid-1800s, while further north, different crops were tried, including coffee and pineapples.

With the introduction of sugar cane cultivation and the importation of foreign labor to work on the plantation, the character of Lahaina changed. Combined with the industrialization of the local sugar industry, Lahaina emerged as a plantation town with residential camps surrounding the downtown commercial area. Although now

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reliant on the visitor industry, Lahaina Town's present character reflects a blend of its whaling and plantation era past.

In order to obtain a range of cultural perspectives, interviews were held with West Maui residents. Summaries of conversations with Mrs. Joan McKelvey and Mrs. Edna Bekeart follow.

(a) Joan McKelvey

Joan D'A.H. McKelvey was born in Australia. After leaving Australia in 1950, she traveled to Europe, Africa, America, and Japan where she lived in London, Germany, Casablanca, New York City and Tokyo. She first visited Lahaina in 1959 along with Jack Burns and William Shaw Richardson in connection with Burn's gubernatorial campaign. Joan and A.W. "Mac" McKelvey were married on Oahu in 1966. Kui Lee sang at the pre-wedding party for the couple. The McKelveys used to visit Maui on weekends where they stayed at a beach house at the site of the existing Kulakane Condominium. In 1969, the McKelveys moved to Maui where they resided at Puamana Place in the Farden Subdivision at Kahana. Later, in 1977, the McKelveys moved into their newly constructed home at Hale Malia Place near Napili.

Mac McKelvey was a former Amfac Vice President. During his tenure there, Mac was involved in spearheading the development of the Ka'anapali Resort. Later, Mac founded the Lahaina, Ka'anapali & Pacific Railroad and in 1974, opened the "World of Wines", the first business in the State to import California wines under controlled conditions. In 1971, Joan started the South Seas Trading Post in a space to the north of the existing Kimo's Restaurant on Front Street. Under Joan's guidance, South Seas Trading Post grew to seven locations throughout the islands except Oahu. In September 2000, she divested herself of South Seas Trading Post and in January 2002, started a new business, Trouvaille, in the historic Pioneer Inn building. A summary of Joan's recollections from her early years in Lahaina follows.

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In 1968, while visiting the Waiohoku Church Cemetery, Joan came upon the former grave site of Queen Keopuolani, the last of the female ali'i whose power was sacred. At the time, the cemetery was neglected and very poorly maintained; however, the discovery of this grave site launched efforts that lead to the eventual restoration of the cemetery. Joan mentioned that the old Queen Theater, the site of the present Hawaii Experience Domed Theater, used to show movies every Friday night for Pioneer Mill Company employees and that the old Pioneer Mill hospital used to be located on a portion of the existing Lahaina Center site. Joan also recalled that a bakery and a flower shop occupied an area in the existing Lahaina Market Place and that Don Ho and Kui Lee appeared in a film shoot for a store in the Nagasaki Building. It was also mentioned that a brothel used to be located in the existing two-story commercial building adjoining the Diamond Parking Service parking lot on Front Street by Burger King. Joan recalled that the Pioneer Mill manager's homes were located between Puamana and Shaw Street along the makai side of Front Street. She also mentioned that this area used to be more heavily vegetated then and that two lots adjoining Honoapiilani Highway, the site of the existing Maui Islander and a parcel known as the Sullivan property, were like a swamp and acted as natural drainage storage areas. In the early 1970's, Joan remembered that stormwaters caused flooding problems in the area around Wainee and Prison Streets. She recalled clearing mud that was two feet deep from the Jack Ackerman home and that a drainage channel was constructed by Kamehameha III Elementary School as a result.

Insofar as cultural resources are concerned, Joan could not recall observing cultural practices occurring at the project site.

**(b) Edna Bekeart**

Edna Pualani Farden Bekeart, the daughter of Charles and Annie Farden, and the twelfth of thirteen children, was born in 1917 at the Pioneer Mill Company Hospital, the site of the existing Lahaina Center at 900 Front Street. Her mother, Annie Kahalepouli Shaw, was born in Honolulu and raised on a private estate at Keka'a in Ka'anapali. While attending Mauna'olu Seminary at Makawao, she met Charles Kekua

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Farden, who had recently returned from Punahou College (re-named Punahou School). After her graduation in 1897, Annie and Charles were married at Mauna'olu Seminary and again at the historic Makawao Union Church. The Fardens moved to West Maui a year later where Charles was hired by Pioneer Mill as a Section Field Overseer.

At the time, political and social conditions were unstable; the people of Hawaii were living through trying times as the monarchy sought to retain control of their homeland. In the agricultural sector, plantations were thriving; wages were low but workers were provided with free housing and medical care. Plantation stores offered clothing, baked goods, fresh meat, and dairy products, as well as tools and household goods and supplies. Fishing, hunting, bartering, and home gardening also supplemented their needs.

As their family increased, the Fardens lived in three different locales, moving to larger plantation homes each time. With the coming of their eleventh child, the Fardens acquired a 0.5 acre oceanfront parcel across from the existing Malu-ulu-o-Lele Park, the site of the ancient Hawaiian capital of Moku'ula. The construction of a two-story, six-bedroom home soon commenced. Prior to the end of World War I, the Farden residence in Lahaina was completed and the family moved in, although, most of the children were attending boarding schools in Honolulu. Almost immediately, Charles saw to it that each of his children took time to plant and care for a sprouting coconut along the seaside border of the property. Many of the coconut trees still stand today. A song entitled "Puamana", composed by Charles and daughter Irmgard, describes the beauty and comfort of their home and its grounds. In 1956, long after Annie and Charles had passed on, the property was sold to American Factors and in a ceremony at the Pioneer Mill manager's estate nearby, the Fardens transferred the name "Puamana" to the plantation manager's grounds and to the park next door. Coconut trees were planted in memory of Annie and Charles.

Edna described her childhood and growing up years in Lahaina as "a time of innocence", a period when kids were kids and adults were in charge. Folks were gentle, kindly, and well-mannered. Dignified behavior and respect for others typified the people of that era. Geared to the daily

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rhythm of planting, cultivating, harvesting, and milling sugar cane, they were united in their common effort to live together in peace and harmony, despite their different cultures. Children of all ethnic backgrounds went to public schools together but lived in separate neighborhoods (by choice) due primarily to the different social lives of labor and management employees. Intermarriages were not encouraged. Fathers worked to support their families, while mothers were homemakers and looked after their children. Toys were scarce. Teenagers occupied themselves with school dances, home parties, hiking in the hills and valleys, picnics at Ka'anapali, tennis, swimming, and barefoot football. Dating or going-steady was unheard of in those days. Smoking and drinking were activities that only adults engaged in. Families attended church regularly and participated in important community events such as the Maui County Fair, the most anticipated event of them all.

Edna recalled that homes used to line the mauka side of Front Street from the Banyan Tree to the park by the Baldwin House. There once was a stream where Shaw Street is located and a small bridge that crossed the stream at Front Street. The site of the existing Lahaina Shores Condominium was once a swamp area and a National Guard Armory formerly stood where the 505 Front Street shopping complex is presently situated. Stage shows and community dances with orchestra music were held at the Armory. The County fire station was located on the site of the existing County public parking lot at the corner of Prison and Front Streets. Around the late 1930's, in the area across the street from Pioneer Inn, there was a small hotel with a restaurant downstairs and a bordello upstairs. Japanese stores, from the corner of Prison Street to the site of the former Furtado residence (today's Burger King) used to sell candy and ice cream, as well as orange guri-guri in a cup (five cents). On the block where Pioneer Inn is located, stood the Inn, the Pioneer Theater, a horse and buggy hack stand, and a Chinese store on the corner of Front and Hotel Streets that sold cracked seed and other Chinese sweets. The Freeland family used to live across the street from Pioneer Inn. Houses lined Lahainaluna Road just a little past the sugar mill. There, little lanes lead to camp houses with small gardens and yards with chickens, fruits and vegetables. A Japanese bakery at Front Street and Lahainaluna Road served free coffee and sold pies,

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cakes and donuts. During the evenings Edna would walk to the bakery for fresh donuts. Mill Street was a cane-haul road with plantation camps lying further mauka. A single row of homes lined both sides of Wainee Street, and fields of sugar cane lay mauka of the homes. On the mauka side of Front Street between Puamana and Shaw Street were middle class homes, while on the makai side were the homes of Pioneer Mill's senior management employees.

Open hospitality characterized the ambiance at the time. Pioneer Mill executive and senior management would entertain a lot since there was only one hotel in Lahaina (Pioneer Inn) so guests, who would arrive by steamship at Mala Wharf, would stay with their Pioneer Mill hosts. According to the practice at the time, Edna recalled that a Filipino gardener, a Portuguese laundress, a Japanese cook, and a Japanese housekeeper would attend to their family's needs. A Portuguese woman would come by regularly to bake sweet bread for the family in their Portuguese oven. The custom of making and giving a kihei pili (coverlet) to the mother of a new baby was still practiced during those times.

In the early to mid-1920's, Edna, who was around four to five years old at the time, entered an experimental kindergarten program with nine other children at the existing Baldwin House Museum site. Edna recalled being taken by horse-drawn carriage to the classroom building, which still stands today and is used as an art center. The kindergarten had a swing, see-saw and jungle gym. After kindergarten was over for the day, the children were taught ballet in the afternoon. Edna then entered Kamehameha III Elementary School. High school years followed, first at St. Andrew's Priory in Honolulu, then at Lahainaluna where she graduated and then went on to earn a degree in education at the University of Hawaii. In 1941 Edna and Lt. (jg) Robert Bekeart, U.S.N., were married in Lahaina at Holy Innocent's Episcopal Church. After World War II, the Bekearts returned to Hawaii, where they lived and worked on Oahu. After their children were married, the Bekearts moved to Maui to live in and care for the 70-year old home in Kahana where Edna's sister, Emma Farden Sharpe resided. Edna did not recall observing any cultural practices occurring at the project site.

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The proposed project is not anticipated to adversely affect cultural beliefs, practices, resources, or gathering rights. During construction, archaeological monitoring will take place for all ground-altering activities. In general, the proposed project will employ appropriate management and coordination practices to ensure that impacts to cultural resources are appropriately mitigated.

9. **Use of Chemicals and Fertilizers**

Use of herbicides will generally be limited to the initial plant establishment period on the property. Pesticides are anticipated to be used only as a treatment and not as a preventive measure. As a treatment, application usage will be minimal. In addition, plant selection for the project will be based on hardiness, drought tolerance, pest resistance, as well as aesthetic concerns.

Nitrogen/Phosphorus/Potash mixed fertilizers are anticipated to be applied to lawn areas, groundcover, and flowering shrubs. With proper irrigation management practices, leaching and runoff of fertilizers should be negligible.

No adverse effects on surface, underground and marine resources are anticipated.

**B. IMPACTS TO THE SOCIO-ECONOMIC ENVIRONMENT**

The proposed development of a commercial building on the subject property will support the construction industry in the short term. In the long term, the new commercial building will serve as a business use which will meet the needs of local businesses seeking retail space with ready accessibility to West Maui's commercial center. In this connection,

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the proposed use of the property for business use will enhance commercial services available to residents and visitors.

In itself, the project is not of a scale or magnitude which will affect the local population base. The project is intended to meet existing commercial space demands and is not considered a population generator.

**C. IMPACTS TO PUBLIC SERVICES**

Inasmuch as the proposed use of the property is not expected to increase the resident or visitor population, impacts of the proposed action upon public services are not anticipated. Specifically, demands upon existing recreational and educational facilities will not be adversely impacted by the development of the proposed commercial building. Similarly, the proposed project will not affect the requirements or service areas for fire, police, and emergency medical operations.

**D. IMPACTS TO INFRASTRUCTURE**

**1. Roadway System**

The proposed project is not anticipated to adversely affect existing traffic conditions. Appropriate traffic management controls will be utilized during the construction period to minimize impacts to traffic flow. It is noted that the project will provide 27 off-street parking stalls compared to the 24 stalls currently located on Parcel 53.

**2. Water System**

Water will be furnished by the Department of Water Supply's Lahaina-Alaeloa water system. The domestic water and irrigation demand for the proposed commercial building is not anticipated to have an adverse effect on existing County water source and storage facilities, as well as water transmission and distribution

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systems. Based on preliminary fixture unit quantities for the new commercial building, the domestic water use rate for the building's 19.2 fixture units is estimated to be 14 gallons per minute (gpm), while the landscape irrigation use rate is projected to be 6 gpm. Fire flow requirements for the building are estimated to be 2,500 gpm. See Appendix "C". The Department of Water Supply's (DWS) consumption guideline has also been used for roughly estimating the average daily water demand for the proposed project. Based on the 140 gallons/1,000 square feet standard, the estimated water demand is about 700 gallons per day (gpd), while based on the 6,000 gallons/acre standard, the projected water demand is approximately 2,000 gpd. These estimates are conservative; detailed water use, fireflow, and irrigation calculations will be submitted to the DWS for review in connection with the processing of the project's building permit application. All water system improvements will be designed in accordance with applicable regulatory design standards.

3. **Wastewater System**

The proposed project is not anticipated to impact existing County wastewater collection and treatment facilities. Wastewater generated by the new commercial building is estimated to be 360 gallons per day. Refer to Appendix "C". All wastewater system improvements will be designed in accordance with appropriate regulatory design criteria. The development schedule for the proposed commercial building will be coordinated with the Department of Public Works and Waste Management's Wastewater Reclamation Division to assure availability of treatment capacity at the LWRF.

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4. **Drainage and Erosion Control**

Under existing conditions, current onsite runoff is projected to be 1.16 cubic feet per second (cfs) based on a 10-year, 1-hour design storm. Under post-development conditions, runoff is projected to be 1.22 cfs for a 10-year, 1-hour storm event, an increase of 0.06 cfs. The incremental increase of 0.06 cfs is not expected to have an adverse effect on adjacent or downstream properties. The runoff from the project site will be directed toward the existing public drainage system fronting the site where it connects to an outfall. Refer Appendix "C".

Soil loss will be minimized during the construction period by implementing appropriate Best Management Practices (BMP's) and erosion control measures such as the following:

1. Minimize the time of construction.
2. Retain existing ground cover until the latest possible date to complete construction.
3. Early construction of drainage features.
4. Use temporary area sprinklers in non-active construction areas when ground cover is removed.
5. Station water truck on site during construction period to provide for immediate sprinkling, as needed, in active construction zones (weekends and holidays included).
6. Use temporary berms, filter berms, and cut-off ditches, where needed, for control of erosion.
7. Graded areas shall be thoroughly watered after construction activity has ceased for the day and on weekends.

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Other site specific measures will also be implemented, as appropriate. Refer to Appendix "C". All site work will conform to County standards and will be coordinated with the Department of Public Works and Waste Management.

5. **Electrical, Telephone and CATV Systems**

The installation of electrical, telephone, and CATV service connections will be coordinated with Maui Electric Company, Verizon Hawaii, and Hawaiian Cablevision, respectively.

**E. SECONDARY IMPACTS**

The proposed project is not expected to affect property values in the surrounding area, nor is it anticipated to create new demands for housing or public services and facilities. The proposed commercial building will be designed in accordance with historic district design guidelines, thereby enhancing and complementing existing surrounding land uses, as well as fostering and preserving the historic architectural character and ambience of Lahaina Town. In addition, the jobs created by the commercial building's tenants will provide primary and secondary employment opportunities for individuals.

# ***Chapter IV***

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***Relationship to Land Use  
Plans, Policies and Controls***

## **IV. RELATIONSHIP TO LAND USE PLANS, POLICIES AND CONTROLS**

### **A. STATE LAND USE DISTRICTS**

Pursuant to Chapter 205A, HRS, all lands in the State have been divided and placed into one (1) of four (4) land use districts by the State Land Use Commission. These land use districts have been designated "Urban", "Rural", "Agricultural", and "Conservation". The project site is located within the State "Urban" district. See Figure 8. The proposed action is compatible with, and permitted within, the State "Urban" land use district.

### **B. MAUI COUNTY GENERAL PLAN**

The 1990 update of the Maui County General Plan establishes broad objectives and policies to guide the long-range development of the County. As indicated by the Maui County Charter, "The purpose of the General Plan is to recognize and state the major problems and opportunities concerning the needs and development of the County and the social, economic, and environmental effects of such development and set forth the desired sequence, patterns, and characteristics of development".

The proposed action is in keeping with the following General Plan objectives relating to land use, economic activity and urban design:

#### **LAND USE**

##### **Objectives:**

- To use the land within the County for the social and economic betterment of the County's residents.
- To preserve for present and future generations existing geographic, cultural and traditional community lifestyles by limiting and

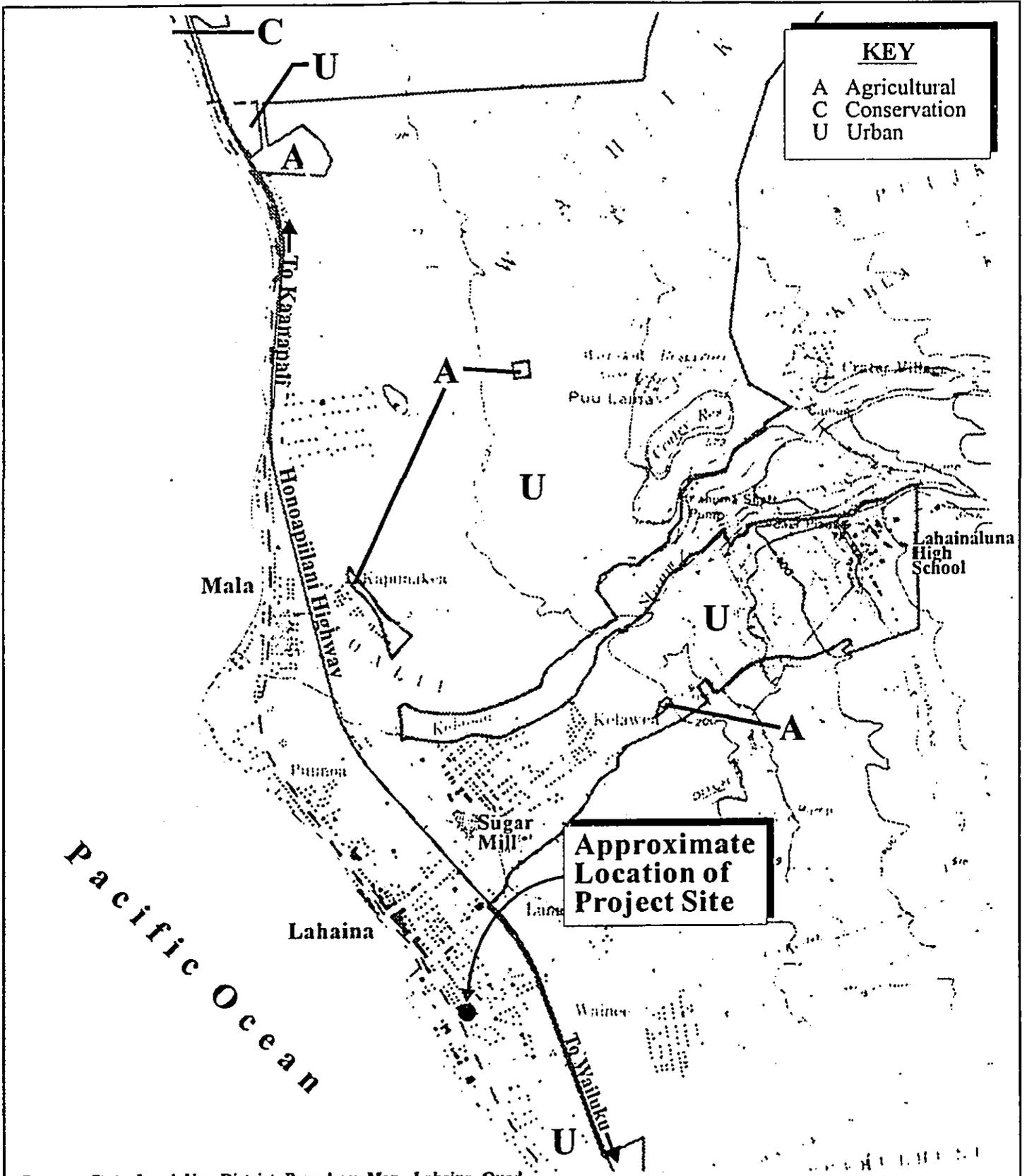


Figure 8 Front Street Commercial Building State Land Use District Classifications



Prepared for: AJI, LLC

MUNEKIYO & HIRAGA, INC.

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managing growth through environmentally sensitive and effective use of land in accordance with the individual character of the various communities and regions of the County.

**Policy:**

- Formulate a directed land use growth strategy which will encourage the redevelopment and infill of existing communities allowing for mixed land uses where appropriate.

**ECONOMIC ACTIVITY**

**Objective:**

- To provide an economic climate which will achieve stabilization, controlled expansion, and diversification of the County's economic base.

**URBAN DESIGN**

**Objective:**

- To see that all developments are well designed and are in harmony with their surroundings.

**Policy:**

- Require that appropriate principles of urban design be observed in the planning of all new developments.

**C. WEST MAUI COMMUNITY PLAN**

The project site is located in the West Maui Community Plan region, one (1) of the nine (9) 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 development in the region.

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Land use guidelines are established by the West Maui Community Plan land use map. The project site is designated for "Business/Commercial" uses by the Community Plan's land use map. See Figure 9. The proposed commercial building and related improvements are in keeping with the uses designated for the site by the West Maui Community Plan.

The West Maui Community Plan sets forth goals which are statements identifying preferred conditions. Goals, objectives, policies, and planning standards associated with the development of the proposed project include the following:

**GOALS, OBJECTIVES AND POLICIES**

**Goal (Land Use):**

An attractive, well-planned community with a mixture of compatible land uses in appropriate areas to accommodate the needs of residents and visitors in a manner that provides for the stable social and economic well-being of residents and the preservation and enhancement of the region's open space areas and natural environmental resources.

**Objectives and Policies for Lahaina Town:**

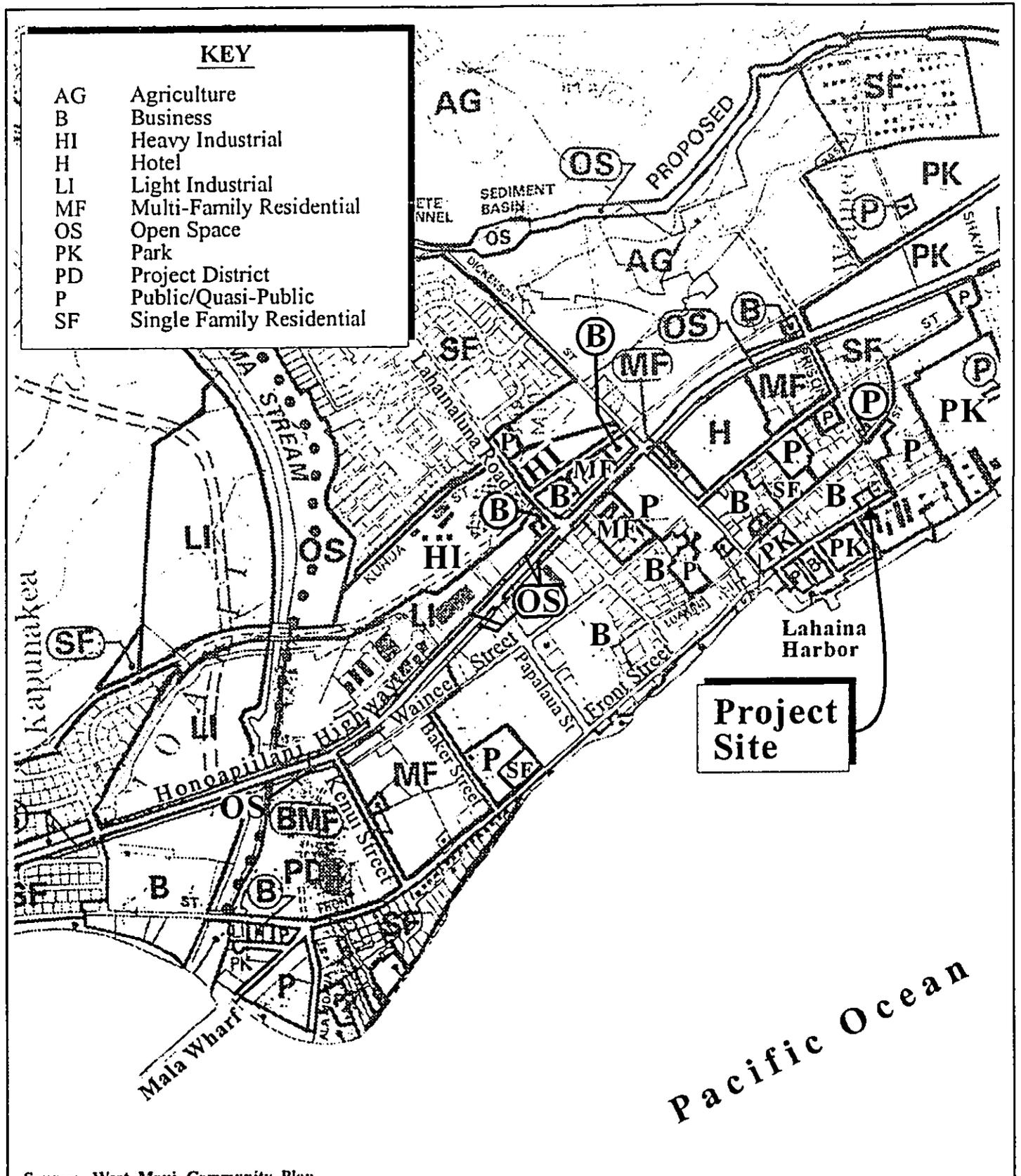
2. Emphasize visitor amenities, regional commercial activities and facilities which convey community identity along Front Street between Baker and Prison Streets.

**Goal (Economic Activity):**

A diversified economy that provides a range of stable employment opportunities for residents, allows for desired commercial services for the community, and supports the existing visitor and agricultural industries, all in a manner that will enhance both the community's quality of life and the environment.

**Objectives and Policies:**

1. Promote a diversified economic base which offers long-term employment to West Maui residents, and maintains overall stability



Source: West Maui Community Plan

Figure 9 Front Street Commercial Building

West Maui Community Plan  
Land Use Designations



MUNEKIYO & HIRAGA, INC.

Prepared for: AJI, LLC

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in economic activity in the areas of:

- b. Visitor-related service/commercial services.

**Goal (Urban Design):**

An attractive and functionally integrated urban environment that enhances neighborhood character, promotes quality design at the resort destinations of Kaanapali and Kapalua, defines a unified landscape planting and beautification theme along major public roads and highways, watercourses, and at major public facilities, and recognizes the historic importance and traditions of the region.

**Objectives and Policies for Lahaina Town**

- 1. Maintain the scale, building massing and architectural character of historic Lahaina town.
- 8. Building Character:
  - a. New building and renovation of existing buildings in Lahaina town should respect the scale, texture, materials, and facades of existing structures in the Lahaina Historic District.
  - b. Building heights should reflect the context of existing building heights and massing in the Lahaina Historic District. The maximum building heights shall be two stories or 35 feet with a mixture of one- to two-story building heights encouraged.
  - c. Building design should complement the pedestrian character of Lahaina town. Restraint and harmonious relationships with natural and man-made surroundings should characterize building form; harsh forms or shapes should be avoided; sloped roofs should be encouraged. Design elements which relate to human scale should be emphasized. Design features should reflect prevalent town themes through traditional or contemporary means.

**D. COUNTY ZONING**

There are three historic districts on the island of Maui - two in Lahaina (Historic District Nos. 1 and 2) and one in Wailuku (Historic District No. 3).

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Regulations on building and uses within these districts are governed by the provisions of Chapter 19.52 of the Maui County Code. As previously indicated, the subject property is designated for "Historic District No. 2" uses by Maui County zoning. The regulations for Historic District Nos. 1 and 2, which are both located in Lahaina Town, covers a multitude of uses ranging from single-family to public/quasi-public to business/commercial uses. A map depicting the limits of Historic District Nos. 1 and 2, as well as a detailed description of the uses permitted within these historic districts are reflected in Appendix "D".

The historic district review and approval process provides a means of insuring orderly, efficient growth and development within the County's historic districts. Toward this end, an application for Historic District Approval has been prepared for review and approval by the Maui County Cultural Resources Commission.

***E. COUNTY OF MAUI - SPECIAL MANAGEMENT AREA***

The subject property is located within the County of Maui's Special Management Area (SMA). Pursuant to Chapter 205A, HRS, and the Rules and Regulations of the Maui Planning Commission, actions proposed within the SMA are evaluated with respect to Hawaii Coastal Zone Management Program (HCZMP) and SMA objectives, policies and guidelines. This section addresses the project's relationship to applicable coastal zone management considerations, as set forth in Chapter 205A, HRS and the Rules and Regulations of the Maui Planning Commission.

An application for an SMA Use Permit has been prepared for review and approval by the Maui Planning Commission.

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1. **Recreational Resources**

**Objective:** Provide coastal recreational opportunities accessible to the public.

**Policies:53**

- a. Improve coordination and funding of coastal recreational planning and management; and
- b. Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:
  - (i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
  - (ii) Requiring replacement of coastal resources having significant recreational value including, but not limited to, surfing sites, fishponds, and sand 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;
  - (iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
  - (iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
  - (v) Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;
  - (vi) 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;
  - (vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and
  - (viii) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the

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land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of Section 46-6, HRS.

**Response:** The proposed action is not anticipated to impact coastal recreational opportunities or affect existing public access to the shoreline. The project is designed to provide leasable tenant space for Lahaina businesses and accordingly, is not a direct generator of, nor does it create a demand for, regional recreational resources.

2. **Historical/Cultural Resources**

**Objective:** Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

**Policies:**

- a. Identify and analyze significant archeological resources;
- b. Maximize information retention through preservation of remains and artifacts or salvage operations; and
- c. Support state goals for protection, restoration, interpretation, and display of historic resources.

**Response:** The subject property consists of an existing asphalt-paved parking lot (Parcel 53) and a lot which formerly contained single-family residential structures that have since been demolished (Parcel 48). An Archaeological Inventory Survey report was prepared for the proposed project and was submitted to, and recently approved by, the State Historic Preservation Division (SHPD). The survey located a previously unidentified site (Site 5203) on Parcel 48 that consists of four (4) refuse pits and an informal water worn pavement. As noted in the report, Site 5203

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has yielded adequate information and data recovery work is not recommended. Since Parcel 48 contains intact deposits of marine beach sand, archaeological monitoring during ground altering activities is recommended for Parcel 48. In addition, in the event subsurface excavation is planned for Parcel 53, archaeological inventory level work in the form of monitoring is recommended for the existing asphalt-paved parking lot. Should human remains be inadvertently discovered during earth moving activities, work shall cease at once in the immediate area of the find, and the find shall be protected from further damage. The SHPD shall also be immediately notified and procedures for the treatment of inadvertently discovered human remains shall be followed pursuant to Chapter 6E, HRS.

3. **Scenic and Open Space Resources**

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

**Policies:**

- a. Identify valued scenic resources in the coastal zone management area;
- b. Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;
- c. Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and
- d. Encourage those developments that are not coastal dependent to locate in inland areas.

**Response:** The proposed commercial building and site will be designed and landscaped in accordance with applicable regulatory standards to ensure visual compatibility with the surrounding land

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uses. The proposed action is not contrary to the objectives and policies for scenic and open space resources.

4. **Coastal Ecosystem**

**Objective:** Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

**Policies:**

- a. Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
- b. Improve the technical basis for natural resource management;
- c. Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;
- d. 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
- e. Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

**Response:** The proposed action is not expected to adversely impact coastal ecosystems. Drainage system improvements will be designed in accordance with applicable regulatory standards to ensure that there are no adverse effects to adjacent or downstream properties.

In addition, appropriate erosion control measures will be implemented to minimize the effects of stormwater runoff during

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construction of the project and to ensure that coastal ecosystems are not adversely impacted.

5. **Economic Use**

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

**Policies:**

- a. Concentrate coastal dependent development in appropriate areas;
- b. Ensure that coastal dependent development such as harbors and ports, and coastal related development such as 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
- c. 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:
  - (i) Use of presently designated locations is not feasible;
  - (ii) Adverse environmental effects are minimized; and
  - (iii) The development is important to the State's economy.

**Response:** The proposed project is consistent with the goals of the West Maui Community Plan, which guides growth and development in the region.

6. **Coastal Hazards**

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

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**Policies:**

- a. Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;
- b. Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint pollution hazards;
- c. Ensure that developments comply with requirements of the Federal Flood Insurance Program; and
- d. Prevent coastal flooding from inland projects.

**Response:** The project site falls within Zone C, an area of minimal flooding. Drainage improvements will be designed in accordance with the Drainage Standards of the County of Maui to ensure that the project will not adversely affect downstream and adjoining properties from the effects of flooding and erosion.

**7. Managing Development**

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

**Policies:**

- a. Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;
- b. Facilitate timely processing of applications for development permits and resolve overlapping of conflicting permit requirements; and
- c. Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

**Response:** All aspects of development will be conducted in accordance with applicable State and County requirements.

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Opportunity for review of the proposed action is offered through the various regulatory permit processes.

**8. Public Participation**

**Objective:** Stimulate public awareness, education, and participation in coastal management.

**Policies:**

- a. Promote public involvement in coastal zone management processes;
- b. Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and
- c. Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.

**Response:** The proposed project is subject to County of Maui Special Management Area (SMA) and Historic District Approval proceedings. Opportunities for public awareness, education, and participation in coastal management are provided through these entitlement processes.

**9. Beach Protection**

**Objective:** Protect beaches for public use and recreation.

**Policies:**

- a. Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;
- b. Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and

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- c. Minimize the construction of public erosion-protection structures seaward of the shoreline.

**Response:** At its closest point, the subject property is located approximately 350 feet from the shoreline and is not anticipated to impact shoreline activities.

**10. Marine Resources**

**Objective:**

Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

**Policies:**

- a. Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;
- b. Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;
- c. Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;
- d. Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and
- e. Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.

**Resources:** Best Management Practices (BMP's) will be incorporated during construction to support the policies of effective management of marine resources.

# ***Chapter V***

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***Summary of Adverse  
Environmental Effects  
Which Cannot Be Avoided***

**V. SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED**

The proposed development will result in unavoidable construction-related impacts as described in Chapter III, Potential Impacts and Mitigation Measures.

Potential effects include noise-generated impacts occurring from site preparation and construction activities. In addition, there may be temporary air quality impacts associated with dust generated from construction activities, and exhaust discharged by construction equipment. It should be noted, however, that these impacts are expected to be minimized through the implementation of the appropriate mitigative measures identified in Chapter III.

The proposed project is not anticipated to create any significant, long-term adverse environmental effects.

# ***Chapter VI***

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***Alternatives to the  
Proposed Action***

## **VI. ALTERNATIVES TO THE PROPOSED ACTION**

### **A. NO ACTION ALTERNATIVE**

The proposed project involves the development of a one-story commercial building with approximately 4,400 square feet of floor area on property consisting of 14,761 square feet. The proposed building will be located within the commercial district of Lahaina Town and is in consonance with existing surrounding business/commercial uses in the area.

The "no action" alternative would maintain the existing physical condition of the project site. When considering the land use context for the subject property, the "no action" alternative does not support the highest and best use of the property as reflected by the West Maui Community Plan (Business/Commercial) and Maui County zoning (Historic District No. 2) land use designations for the site. Accordingly, the "no action" alternative was not considered.

### **B. DEFERRED ACTION ALTERNATIVE**

A "deferred action" alternative would have similar consequences as the "no action" alternative in that the land use objectives of the proposed project would be delayed and would not be immediately realized.

This alternative could result in potentially higher development costs due to increases in labor and material costs or as a result of changes to infrastructure or the existing physical or socio-economic environment (i.e., window of opportunity and opportunity costs). Based on the preceding, the "deferred action" alternative was not considered.

### **C. SITE PLAN ALTERNATIVES**

During the project's site planning phase, the operational requirements of potential tenants for the proposed commercial building and the needs of

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their prospective customers were examined to ensure that spatial and functional criteria for the project were adequately addressed. The site planning process involved an analysis of space needs, missions and functions, area requirements, spaces and adjacencies, and people equipment activities schedule, and space relationships and layouts. Through the project's planning process, a site plan was prepared and reviewed to ensure that all operational and performance standards can be addressed.

# ***Chapter VII***

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***Irreversible and Irretrievable  
Commitments of Resources***

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## **VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES**

The development of the proposed project is anticipated to result in the irreversible and irretrievable commitment of land and fiscal resources. Other resource commitments include energy, labor, and material resources. Impacts relating to the use of these resources should be weighed against the expected positive socio-economic benefits to be derived from the project versus the consequences of taking no action.

In addition, the proposed project is not anticipated to require a substantial commitment of government services or facilities. In general, the proposed action is not anticipated to place significant additional requirements on police, fire, medical, and social services.

# ***Chapter VIII***

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## ***Findings and Conclusions***

## **VIII. FINDINGS AND CONCLUSIONS**

The "Significance Criteria", Section 12 of the Administrative Rules, Title 11, Chapter 200, "Environmental Impact Statement Rules", were reviewed and analyzed to determine whether the proposed project will have significant impacts to the environment. The following analysis is provided:

1. **No Irrevocable Commitment to Loss or Destruction of any Natural or Cultural Resource Would Occur as a Result of the Proposed Project**

The proposed project will not result in any adverse environmental impacts. There are no known, rare, threatened or endangered species of flora, fauna or avifauna located within the project site.

The archaeological inventory survey for the proposed project located a previously unidentified site (Site 5203) consisting of four (4) refuse pits and an informal water worn pavement. As noted by the survey, this site has yielded adequate information and data recovery work is not recommended. Archaeological monitoring is recommended for Parcel 48 due to intact deposits of marine beach sand. In addition, monitoring is recommended for Parcel 53 should subsurface work involving the existing asphalt-paved parking lot be undertaken. Should any cultural artifacts or human remains be encountered during construction, work will immediately stop in the vicinity of the find and the find will be protected from further damage. The State Historic Preservation Division will be immediately notified to establish an appropriate mitigation strategy.

2. **The Proposed Action Would Not Curtail the Range of Beneficial Uses of the Environment**

The proposed project and the commitment of land resources would not curtail the range of beneficial uses of the environment.

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3. **The Proposed Action Does Not Conflict with the State's Long-term Environmental Policies or Goals or Guidelines as Expressed in Chapter 344, Hawaii Revised Statutes**

The State's Environmental Policy and Guidelines are set forth in Chapter 344, Hawaii Revised Statutes. The proposed action is in consonance with the policies and guidelines.

4. **The Economic or Social Welfare of the Community or State Would Not be Substantially Affected**

The proposed project would have a direct beneficial effect on the local economy during construction. In the long term, the proposed project will support the local economy through the contribution of salaries, wages, and benefits, as well as through the purchases of goods and services from local merchants and service providers.

5. **The Proposed Action Does Not Affect Public Health**

No impacts to the public's health and welfare are anticipated as a result of the proposed project.

6. **No Substantial Secondary Impacts, Such as Population Changes or Effects on Public Facilities are Anticipated**

No significant population changes are anticipated as a result of the proposed project.

From a land use standpoint, the proposed project is compatible with surrounding business/commercial uses in the vicinity.

The proposed improvements will hookup to existing water and wastewater systems. No adverse impacts to water and wastewater capacities and facilities are anticipated. Best Management Practices (BMP's) and

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appropriate erosion control measures will be utilized during the construction period. Drainage system improvements will be constructed in accordance with applicable regulatory design standards to ensure that surface runoff will not have an adverse effect on adjacent or downstream properties. The project is not expected to significantly impact public services such as police, fire, and emergency medical operations. No adverse impacts to educational, recreational, and solid waste collection and disposal facilities and resources are anticipated.

7. **No Substantial Degradation of Environmental Quality is Anticipated**

During the construction phase of the project, there will be short-term air quality and noise impacts as a result of the project. In the long term, effects upon air quality and ambient noise levels should be minimal. The project is not anticipated to significantly affect the open space and scenic character of the area.

No substantial degradation of environmental quality resulting from the project is anticipated.

8. **The Proposed Action Does Not Involve a Commitment to Larger Actions, Nor Would Cumulative Impacts Result in Considerable Effects on the Environment**

The proposed project does not involve a commitment to larger actions.

9. **No Rare, Threatened or Endangered Species or Their Habitats Would be Adversely Affected by the Proposed Action**

There are no rare, threatened or endangered species of flora, fauna, avifauna or their habitats on the subject property.

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10. **Air Quality, Water Quality or Ambient Noise Levels Would Not be Detrimentially Affected by the Proposed Project**

Construction activities will result in short-term air quality and noise impacts. Dust control measures, such as regular watering and sprinkling, will be implemented to minimize wind-blown emissions. Noise impacts will occur primarily from construction-related activities. It is anticipated that construction will be limited to daylight working hours. Water quality is not expected to be affected.

In the long term, the project is not anticipated to have a significant impact on air and water quality or ambient noise levels.

11. **The Proposed Project Would Not Affect Environmentally Sensitive Areas, Such as Flood Plains, Tsunami Zones, Erosion-prone Areas, Geologically Hazardous Lands, Estuaries, Fresh Waters or Coastal Waters**

The project is not located within and would not affect environmentally sensitive areas. The project site is not subject to flooding or tsunami inundation. Soils of the project site are not erosion-prone. There are no geologically hazardous lands, estuaries, or coastal waters within or adjacent to the project site.

12. **The Proposed Action Would Not Substantially Affect Scenic Vistas and Viewplanes Identified in County or State Plans or Studies**

The project site is not identified as a scenic vista or viewplane. The proposed project will not affect scenic corridors and coastal scenic and open space resources.

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13. *The Proposed Action Would Not Require Substantial Energy Consumption*

The proposed project will involve the short-term commitment of fuel for equipment, vehicles, and machinery during construction activities. However, this use is not anticipated to result in a substantial consumption of energy resources. In the long term, the project will create an additional demand for electricity. However, this demand is not deemed substantial or excessive within the context of the region's overall energy consumption.

Based on the foregoing findings, it is concluded that the proposed action will not result in any significant impacts.

# ***Chapter IX***

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***List of Permits  
and Approvals***

## **IX. LIST OF PERMITS AND APPROVALS**

The following permits and approvals will be required prior to the implementation of the project.

### **County of Maui**

1. Special Management Area Use Permit
2. Historic District Approval
3. Construction Permits (e.g., building, driveway, demolition, electrical, plumbing, work-to-perform in County right-of-way).

# ***Chapter X***

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***Agencies Consulted During  
the Preparation of the Draft  
Environmental Assessment;  
Letters Received and Responses  
to Substantive Comments***

**X. AGENCIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED AND RESPONSES TO SUBSTANTIVE COMMENTS**

The following agencies were consulted during the preparation of the Draft Environmental Assessment. Agency comments and responses to substantive comments are also included in this section.

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| 1. Neal Fujiwara, District Conservationist<br>Natural Resources Conservation Service<br>U.S. Department of Agriculture<br>210 Imi Kala Street, Suite 209<br>Wailuku, Hawaii 96793-2100 | 7. Don Hibbard<br>State of Hawaii<br>Department of Land and Natural Resources<br>State Historic Preservation Division<br>601 Kamokila Blvd., Room 555<br>Kapolei, Hawaii 96707 |
| 2. William Lennan<br>U.S. Department of the Army<br>U.S. Army Engineer District, Hnl.<br>Attn: Operations Division<br>Bldg. T-1, Room 105<br>Fort Shafter, Hawaii 96858-5440           | 8. Fred Cajigal, Maui District Engineer<br>State of Hawaii<br>Department of Transportation<br>Highways Division<br>650 Palapala Drive<br>Kahului, Hawaii 96732                 |
| 3. Robert P. Smith<br>Pacific Islands Manager<br>U. S. Fish and Wildlife Service<br>300 Ala Moana Blvd., #3-122, Box 50088<br>Honolulu, Hawaii 96813                                   | 9. Colin Kippen, Deputy Administrator<br>Office of Hawaiian Affairs<br>711 Kapiolani Boulevard, Suite 500<br>Honolulu, Hawaii 96813  |
| 4. Gary Gill, Deputy Director<br>State of Hawaii<br>Department of Health<br>P.O. Box 3378<br>Honolulu, Hawaii 96801  | 10. Clayton Ishikawa, Chief<br>County of Maui<br>Department of Fire Control<br>200 Dairy Road<br>Kahului, Hawaii 96732   |
| 5. Herbert Matsubayashi<br>District Environmental Health<br>Program Chief<br>State of Hawaii<br>Department of Health<br>54 High Street<br>Wailuku, Hawaii 96793                        | 11. Alice Lee, Director<br>County of Maui<br>Department of Housing and<br>Human Concerns<br>200 South High Street<br>Wailuku, Hawaii 96793                                     |
| 6. Gilbert Coloma-Agaran<br>State of Hawaii<br>Department of Land and Natural Resources<br>P. O. Box 621<br>Honolulu, Hawaii 96809   | 12. John Min, Director<br>County of Maui<br>Department of Planning<br>250 South High Street<br>Wailuku, Hawaii 96793   |

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13. Floyd Miyazono, Director  
County of Maui  
**Department of Parks and Recreation**  
1580-C Kaahumanu Avenue  
Wailuku, Hawaii 96793
  14. Tom Phillips, Chief  
County of Maui  
**Police Department**  
55 Mahalani Street  
Wailuku, Hawaii 96793
  15. David Goode, Director  
County of Maui  
**Department of Public Works  
and Waste Management**  
200 South High Street  
Wailuku, Hawaii 96793
  16. David Craddick, Director  
County of Maui  
**Department of Water Supply**  
200 South High Street  
Wailuku, Hawaii 96793
  17. Ezekiel I. Kalua, Executive Assistant  
West Maui Taxpayers Association  
P.O. Box 10338  
Lahaina, Hawaii 96761
  18. Theo Morrison, Executive Director  
Lahaina Town Action Committee  
648 Wharf Street, Suite 102  
Lahaina, Hawaii 96761
  19. Keoki Freeland, Executive Director  
Lahaina Restoration Foundation  
120 Dickenson Street  
Lahaina, Hawaii 96761

**SUMMARY OF MEETINGS AND DISCUSSIONS WITH  
COMMUNITY GROUPS AND SURROUNDING NEIGHBORS**

In connection with the preparation of the EA and the processing of the project's SMA Use Permit and Historic District approval applications, meetings and discussions were held with community organizations and adjoining property owners/lessees to discuss the proposed project.

In the early fall of 2001, and in December 2001, the applicant met with Keoki Freeland, the Executive Director of the Lahaina Restoration Foundation. From August 2001 through the present, the applicant has had discussions with Marty Kenney, the holder of the master lease on the parcel (TMK 4-6-08:02) which borders the subject property to the north. Both Mr. Freeland and Mr. Kenney are very supportive of the project. Mr. Freeland indicated that the design of the building is consistent with the period and architecture for this part of Lahaina, while Mr. Kenney was pleased that the project would *create new business opportunities in this section of the town's business/commercial district along Front Street.*

On April 17, 2002, the applicant met with Diamond Parking Service (DPS), the operator of the parking lot on Parcel 53 and the lessee of the parking lot (TMK 4-6-8:12) that borders the subject property to the east. DPS has no objections to the project and will work with the applicant to minimize disruptions to their parking facilities during the construction of the project.

On April 23, 2002, the applicant met with the LahainaTown Action Committee (LAC) Board of Directors. The LAC voiced their support of the project and the architectural design of the building. In addition, the LAC indicated that the guidelines for the Front Street Improvement Project will need to be followed if there are any changes to the sidewalk abutting the subject property. Should the sidewalk be modified, the construction plans for the project will require the contractor to comply with the guidelines.

On September 26, 2002, the applicant met with Lindsay Ball, the Principal of King Kamehameha III Elementary School (TMK 4-6-02:14) which is located across the street from the subject property. Mr. Ball indicated that he had no objection to the project. While he acknowledged that construction-related noise and traffic will likely have an effect on ambient conditions, he appreciated the applicant's willingness to work with the school to minimize these impacts to the extent practicable.

On October 3, 2002, the applicant met with Jeffrey Kuwada, who along with his wife Susan, own the parcel (TMK 4-6-08:49) which adjoins the subject property to the south. Mr. Kuwada was very supportive of the project. In addition to being pleased with the building's architectural design, he mentioned that the project would enhance opportunities for businesses in this part of Lahaina.



DEPARTMENT OF  
**HOUSING AND HUMAN CONCERNS**  
COUNTY OF MAUI

MAR 19 2002  
JAMES "KIMO" APANA  
Mayor  
ALICE L. LEE  
Director  
PRISCILLA P. MIKELI  
Deputy Director

---

200 SOUTH HIGH STREET • WAILUKU, HAWAII 96793 • PHONE (808) 270-7805 • FAX (808) 270-7165

March 11, 2002

Mr. Glenn Tadaki, Planner  
Munekiyo & Hiraqa, Inc.  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

Dear Mr. Tadaki:

Subject: Front Street Commercial Building  
TMK: 4-6-08:48 and 53

We have reviewed your March 7, 2002 letter and enclosure and  
have no comment to offer.

Thank you for the opportunity to comment.

Very truly yours,

ALICE L. LEE  
Director

ETO:df

c: Housing Administrator



REPLY TO  
ATTENTION OF

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

MAR 18 2002

March 13, 2002

Regulatory Branch

Mr. Glenn Tadaki  
Munekiyo & Hiraga, Inc.  
305 High Street  
Wailuku, Hawaii 96793

Dear Mr. Tadaki:

This letter responds to your request for a jurisdictional determination for the Front Street Commercial Building, dated March 7, 2002. Based on the information you provided I have determined that a Department of the Army (DA) permit will not be required for this project.

If you have any questions concerning this determination, please contact William Lennan of my staff at 438-6986 or FAX 438-4060, and reference File No. 200200235.

Sincerely,

A handwritten signature in black ink, appearing to read "George P. Young".

George P. Young, P.E.  
Chief, Regulatory Branch

BENJAMIN J. CAYETANO  
GOVERNOR



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

MAUI DISTRICT  
650 PALAPALA DRIVE  
KAHULUI, HAWAII 96732

March 13, 2002

MAR 15 2002

BRIAN K. MINAAI  
DIRECTOR

DEPUTY DIRECTORS

JADINE Y. URASAKI  
Jean L. Oshita

IN REPLY REFER TO:

HWY-M2.067-01

Mr. Glenn Tadaki  
Munekiyo & Hiraga, Inc.  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

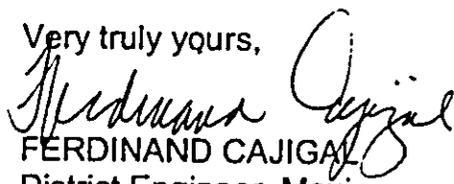
Dear Mr. Tadaki:

Subject: Front Street Commercial Building  
TMK: 4-6-08: 48 & 53  
Lahaina, Maui, Hawaii

Thank you for giving us the opportunity to review and comment on the proposed development. Based on our review of the project summary, it appears that the development should not have any significant impacts to our facilities, therefore, we have no comments to offer at this time.

If there are any questions or concerns, please call Paul M. Chung at 873-3535.

Very truly yours,

  
FERDINAND CAJIGA  
District Engineer, Maui

/pmc



JAMES "KIMO" APANA  
MAYOR

OUR REFERENCE  
YOUR REFERENCE

**POLICE DEPARTMENT**  
COUNTY OF MAUI

55 MAHALANI STREET  
WAILUKU, HAWAII 96793  
(808) 244-6400  
FAX (808) 244-6411

March 18, 2002



THOMAS M. PHILLIPS  
CHIEF OF POLICE

KEKUHAUPIO R. AKANA  
DEPUTY CHIEF OF POLICE

Mr. Glenn Tadaki, Planner  
Munekiyo & Hiraga, Inc.  
305 High Street, Suite 104  
Wailuku, HI 96793

Dear Mr. Tadaki:

SUBJECT: Front Street Commercial Building (TMK 4-6-08:48 and 53

Thank you for your letter of March 7, 2002, requesting comments on the above subject.

We have reviewed the proposed summary and have enclosed our comments and recommendations. Thank you for giving us the opportunity to comment on this project.

Very truly yours,

Acting Assistant Chief Lawrence Hudson  
for: Thomas M. Phillips  
Chief of Police

Enclosures

c: John E. Min, Planning Department

DOCUMENT CAPTURED AS RECEIVED

COPY

TO : THOMAS PHILLIPS, CHIEF OF POLICE, COUNTY OF MAUI  
VIA : CHANNELS  
FROM : SCOTT Y. MIGITA, P.O. III, LAHAINA BIKE PATROL  
SUBJECT : FRONT STREET COMMERCIAL BUILDING (TMK 4-6-08:48 AND 53)

This To-From is being submitted by Munekiyo and Hiraga, Inc. to the Police Department for comments regarding a proposed development of a new Front Street Commercial Building (TMK 4-6-08:48 and 53).

The proposed development pertains to Parcel 48, which is vacant and undeveloped and Parcel 53, containing a asphalt-paved parking lot, accessible via Front Street.

Plans are to consolidate Parcels 48 and 53 into a single lot and then to construct a one-story commercial building of approximately 4,800 square feet on the site. Part of the existing parking lot will be kept for onsite parking for the new building. Utility connections and site landscaping and irrigation are also proposed. Construction is expected to last about twelve months upon approval.

At this time, after reviewing the cover letter, project summary, and the four figure diagrams, the only concern from a police standpoint regarding traffic congestion and safety would be the impact on nearby King Kamehameha III School. My suggestion would be for movement of construction equipment on Front Street to be ceased or if not possible, kept to a bare minimum during the time the students are in the process of arriving and departing from the school premises in order to relieve traffic congestion and to allow a margin of safety for pedestrian traffic.

Upon checking with school officials, school hours for students are 7:45 am until 2:05 pm, Monday, Tuesday, Thursday, and Friday. Wednesdays hours are 7:45 am to 1:20 pm. Therefore, preventing additional traffic in the area, perhaps, twenty or so minutes before and after the beginning and ending school bells would be of great assistance. At this time, I have no further comment to add regarding this proposed project.

Submitted for your information and perusal.

*Concur w/ of Migita*  
*Off. [Signature]*

RESPECTFULLY SUBMITTED,

*[Signature]*  
SCOTT Y. MIGITA, E-1122  
P.O. III, BIKE PATROL OFFICER  
031302 AT 1500 HOURS

*PROVISIONS NEEDED TO BE IMPLEMENTED  
TO LESSEN THE IMPACT ON KING  
KAMEHAMEHA III SCHOOL.  
LT. [Signature] 3-5-12*



April 3, 2002

Thomas M. Phillips, Chief  
Police Department  
County of Maui  
55 Mahalani Street  
Wailuku, Hawaii 96793

**SUBJECT: Front Street Commercial Building**  
**TMK 4-6-08: 48 and 53**

Dear Chief Phillips:

Thank you for your March 18, 2002 letter including the department's early consultation comments on the subject. On behalf of the applicant, AJI, LLC, we would like to note the following.

To facilitate traffic in the area around King Kamehameha III School, immediately prior to and after school, the movement of construction equipment will be kept to a minimum or avoided to the extent possible. Appropriate traffic control measures will be implemented during the construction period to enhance safety and minimize disruptions to traffic flow.

Thank you again for providing us with your comments. Please feel free to call me should you have any questions.

Sincerely,

Glenn Tadaki, Planner

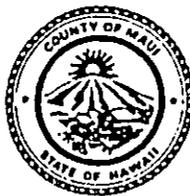
GT:to

cc: Becky Collins, AJI, LLC  
Bill Frampton, Pacific Rim Land, Inc.

pacnm/roads/impdir.001

planning environment

JAMES "KIMO" APANA  
Mayor



MAR 25 2002

FLOYD S. MIYAZONO  
Director

GLENN T. CORREA  
Deputy Director

(808) 270-7230  
Fax (808) 270-7934

**DEPARTMENT OF PARKS & RECREATION**  
1580-C Kaahumanu Avenue, Wailuku, Hawaii 96793

March 19, 2002

Glenn Tadaki, Planner  
Munekiyo Hiraga, Inc.  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

**RE: Front Street Commercial Building  
(TMK 4-6-08:48 and 53)**

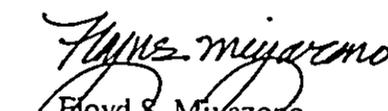
Dear Mr. Tadaki:

Thank you for the opportunity to review and provide early comment on the proposed improvements to the referenced parcels on Front Street in Lahaina.

At this time we have no comment to offer concerning this matter. We may have comments or questions upon review of the Draft Environmental Assessment.

Should you have any questions or need of other information, please call me, or Patrick Matsui, Chief of Parks Planning & Development at 808-270-7931.

Sincerely,

  
Floyd S. Miyazono  
Director

BENJAMIN J. CAYETANO  
GOVERNOR



MAR 25 2002

BRUCE S. ANDERSON, Ph.D., M.P.H.  
DIRECTOR OF HEALTH

LORRIN W. PANG, M.D., M.P.H.  
MAUI DISTRICT HEALTH OFFICER

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

March 22, 2002

Mr. Glenn Tadaki  
Planner  
Munekiyo & Hiraga, Inc.  
305 High Street, Suite 104  
Wailuku, Hawai'i 96793

Dear Mr. Tadaki:

Subject: **Front Street Commercial Building**  
**TMK: (2) 4-6-08: 48 and 53**

Thank you for the opportunity to participate in the environmental assessment early consultation process for the proposed commercial building. Comments from this office were transmitted to our Honolulu Office. A coordinated response is forthcoming.

Should you have any questions, please call me at 984-8230.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Matsubayashi".

Herbert S. Matsubayashi  
District Environmental Health Program Chief

c: Lance Tauoa

APR 09 2002

PHONE (808) 594-1888



FAX (808) 594-1865

STATE OF HAWAII  
OFFICE OF HAWAIIAN AFFAIRS  
711 KAPOLANI BOULEVARD, SUITE 500  
HONOLULU, HAWAII 96813

HRD02-524

March 28, 2002

Glenn Tadaki  
Munekiyo & Hiraga, Inc.  
305 High Street, Suite 104  
Wailuku, HI 96793

Subject: Front Street Commercial Building (TMK 4-6-08:48 and 53)

Dear Mr. Tadaki:

Thank you for the opportunity to comment on the above referenced project.

The Office of Hawaiian Affairs requests that the EA assess cultural resources in the project area. The EA should include ethnographic, historical, anthropological and other culturally-related documentary research on the site. The document should examine if the project would interfere with any known traditional trails or access ways. Procedures for handling inadvertent discoveries of human burials and cultural artifacts should also be included.

The EA should also include a substantive cultural impact statement based upon consultation with the Hawaiian community, as required by Act 50, Session Laws of 2000. The cultural impact statement must identify and describe the cultural practices located within the potentially affected area; assess the impact on these practices; examine alternatives to the proposed action; and propose mitigation measures. You should consult with Native Hawaiian individuals and organizations to determine the impact of the proposed structures and activities on cultural practices. The EA should include a discussion of the methods used to identify and select persons with knowledge of cultural practices and the results of consultation with them. At a minimum, the draft EA should identify individuals and organizations with expertise on cultural practices with whom consultation has occurred.

If you have questions, please contact Sharla Manley, policy analyst at 594-1944 or email her at sharlam@oha.org.

Sincerely,



Jalna S. Keala  
Acting Director, Hawaiian Rights Division

CK: sam

cc: Board of Trustees  
Clyde W. Namu'o, Administrator  
Maui CAC



April 11, 2002

Jalna S. Keala, Acting Director  
Hawaiian Rights Division  
Office of Hawaiian Affairs  
711 Kapi'olani Boulevard, Suite 500  
Honolulu, Hawai'i 96813

SUBJECT: Front Street Commercial Building  
TMK 4-6-08: 48 and 53

Dear Ms. Keala:

Thank you for providing us with your March 28, 2002 early consultation comments on the above-referenced project. On behalf of the applicant, AJI, LLC, we would like to note that a cultural impact assessment, prepared in accordance with Act 50, will be included in the subject's Environmental Assessment.

Thank you again for providing us with your comments. Please feel free to call me should you have any questions.

Very truly yours,

Glenn Tadaki, Planner

GT:yp  
cc: Becky Collins, AJI, LLC  
pacnm/ronst/ohalt/001

environment  
planning



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
P.O. BOX 621

HONOLULU, HAWAII 96809  
April 1, 2002

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND DIVISION  
STATE PARKS  
WATER RESOURCE MANAGEMENT

LD-NAV  
FRONTSTREETSD.RCM

L-1383/1644/1563

Munekiyo and Hiraga, Inc.  
Glenn Tadaki, Planner  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

Dear Mr. Tadaki:

SUBJECT: Review: Pre-Consultation for the Preparation of a Draft  
Environmental Assessment  
Applicant: AJI, LLC  
Project: Front Street Commercial Building  
Consultant: Munekiyo and Hiraga, Inc. (Glenn Tadaki)  
Location: Lahaina, Maui, Hawaii  
TMK: 2-1-1/ 4-6-08: 48 and 53

Thank you for your letter dated March 7, 2002, pertaining to the subject matter.

The Department of Land and Natural Resources' (DLNR) Land Division transmitted a copy of your letter and attachments covering the proposed project to the following DLNR Divisions for their review and comment:

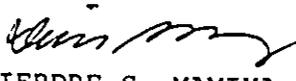
- Historic Preservation Division
- Commission on Water Resource Management
- Land Division Planning and Technical Services
- Land Division Engineering Branch
- Land Division Maui District Land Office

Attached herewith is a copy of the Commission on Water Resource Management and Land Division Engineering Branch comments.

The Department of Land and Natural Resources has no other comment to offer at this time. Please provide to us four (4) copies of the Draft Environment Assessment when they become available.

Should you have any questions, please contact Nicholas A. Vaccaro of the Land Division Support Services Branch at (808) 587-0438.

Very truly yours,

  
DIERDRE S. MAMIYA  
Administrator

C: Maui District Land Office

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



RECEIVED  
LAND DIVISION

GILBERT S. COLOMA-AGARAN  
CHAIRPERSON

BRUCE S. ANDERSON  
MEREDITH J. CHING  
CLAYTON W. DELA CRUZ  
BRIAN C. NISHIDA  
HERBERT M. RICHARDS, JR.

LINNEL T. NISHIOKA  
DEPUTY DIRECTOR

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
P.O. BOX 521  
HONOLULU, HAWAII 96809

March 20, 2002

TO: Mr. Harry Yada, Acting Administrator  
Land Division

FROM: Linnel T. Nishioka, Deputy Director  
Commission on Water Resource Management (CWRM)

SUBJECT: Front Street Commercial Building Draft EA

FILE NO.: FRONTSTREETSD.COM

Thank you for the opportunity to review the subject document. Our comments related to water resources are marked below.

In general, the CWRM strongly promotes the efficient use of our water resources through conservation measures and use of alternative non-potable water resources whenever available, feasible, and there are no harmful effects to the ecosystem. Also, the CWRM encourages the protection of water recharge areas, which are important for the maintenance of streams and the replenishment of aquifers.

- We recommend coordination with the county government to incorporate this project into the county's Water Use and Development Plan.
- We recommend coordination with the Land Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
- We are concerned about the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.
- A Well Construction Permit and/or a Pump Installation Permit from the Commission would be required before ground water is developed as a source of supply for the project.
- The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit from the Commission would be required prior to use of this source.
- Groundwater withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
- We are concerned about the potential for degradation of instream uses from development on highly erodible slopes adjacent to streams within or near the project. We recommend that approvals for this project be conditioned upon a review by the corresponding county's Building Department and the developer's acceptance of any resulting requirements related to erosion control.
- If the proposed project includes construction of a stream diversion, the project may require a stream diversion works permit and amend the instream flow standard for the affected stream(s).
- If the proposed project alters the bed and banks of a stream channel, the project may require a stream channel alteration permit.
- OTHER:

If there are any questions, please contact Charley Ice at 587-0251.

DLNR-LAND DIVISION  
ENGINEERING BRANCH

COMMENTS

LD-NAV/ LOG1383  
Ref.: FRONTSTREETSD.COM

COMMENTS

For your information, the project site, according to FEMA Community Panel Number 150003 0163 C (Dated August 3, 1998), is located in Zone C (No Shading). This is an area of minimal flooding.



DEPARTMENT OF WATER SUPPLY  
COUNTY OF MAUI

P.O. BOX 1109  
WAILUKU, MAUI, HAWAII 96793-7109  
Telephone (808) 270-7816 • Fax (808) 270-7833

April 1, 2002

Mr. Glenn Tadaki, Planner  
Munckiyo & Hiraga, Inc.  
305 High Street Suite 104  
Wailuku HI 96793

RE: Front Street Commercial Building  
TMK 4-6-008:048 & 053

Dear Mr. Tadaki:

Thank you for the opportunity to provide comments in preparation of the EA for this project. The Department of Water Supply provides the following information:

Fire flow and domestic calculations and other system requirements will be determined during the consolidation/building permit process. DWS-approved fire flow calculation methods include: "Guide for Determination of Required Fire Flow - Insurance Services Office, 1974" and "Fire Flow" - Hawaii Insurance Bureau, 1991.

The EA should include the sources and expected potable and non-potable water usage.

We recommend that the following water conservation measures be included in the EA and implemented in project design and construction:

Utilize Non-Potable Water for irrigation and dust control during construction where feasible

Eliminate Single-Pass Cooling: Single-pass, water-cooled system should be eliminated per Maui County Code Subsection 14.21.20. Although prohibited by code, single-pass water cooling is still manufactured into some models of air-conditioners, freezers, and commercial refrigerators.

Utilize Low-Flow Fixtures and Devices: Maui County Code Subsection 16.20A.680 requires the use of low-flow water fixtures and devices in faucets, showerheads, urinals, water closets and hose bibs. Water conserving washing machines, ice-makers and other units are also available.

Maintain Fixtures to Prevent Leaks: A simple, regular program of repair and maintenance can prevent the loss of hundreds or even thousands of gallons a day. Refer to the attached handout, "The Costly Drip".

Use Climate-adapted Plants: The project is located in the "Maui County Planting Plan" - Plant Zone 3. We encourage the applicant to utilize appropriate native and non invasive species in landscaping. Native plants adapted to the area conserve water and protect the watershed from degradation due to invasive alien species. Please refer to the attached brochure: "Saving Water In The Yard - What and How to Plant In Your Area".

Prevent Over-Watering By Automated Systems: Provide rain-sensors on all automated irrigation controllers. Check and reset controllers at least once a month to reflect the monthly changes in evapotranspiration"

rates at the site. As an alternative, provide the more automated, soil-moisture sensors on controllers.

The project overlies the Launipoko aquifer which has a sustainable yield of 8 mgd. The Department of Water Supply strives to protect the integrity of surface and groundwater resources by encouraging the applicant to adopt best management practices (BMPs) designed to minimize infiltration and runoff from all construction and vehicle operations. We have attached sample BMPs for principle operations for reference. Additional information can be obtained from the State Department of Health.

Should you have any questions, please contact our Water Resources and Planning Division at 270-7199.

Sincerely,



David Craddick  
Director

cam

c: engineering division

applicant, with attachments:

"The Costly Drip"

Maui County Planting Plan - Plant Zone 3 "Saving Water in the Yard-What and How to Plant in your Area"

A Checklist of Water Conservation Water Conservation Ideas for Commercial Buildings

Ordinance 2108 - An Ordinance Amending Chapter 16 20 of the Maui County Code, Pertaining to the Plumbing Code

Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters



April 9, 2002

David Craddick, Director  
Department of Water Supply  
County of Maui  
200 High Street  
Wailuku, Hawaii 96793

SUBJECT: Front Street Commercial Building  
TMK 4-6-08: 48 and 53

Dear Mr. Craddick:

Thank you for providing us with your April 1, 2002 early consultation comments on the above-referenced project. On behalf of the applicant, AJI, LLC, we would like to note the following.

Information on water sources and preliminary water use estimates will be included in the subject's Draft Environmental Assessment. Detailed domestic, fire protection, and irrigation calculations will be submitted to the department for review in connection with the project's building permit application process. In addition, the water conservation measures referenced in your letter will be considered and appropriate measures utilized.

Thank you again for providing us with your comments. Please feel free to call me should you have any questions.

Sincerely,

Glenn Tadaki, Planner

GT:sa

cc: Becky Collins, Pacific Rim Land, Inc.

pacnm/rontsf/dws 001

environment  
planning

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION  
KAKUMIHEWA BUILDING, ROOM 566  
801 KAMOKILA BOULEVARD  
KAPOLEI, HAWAII 96707

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND RESOURCES  
ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
AND  
STATE PARKS

10 2002  
GILBERT S. COLOMA-AGARAL, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCES MANAGEMENT

DEPUTIES  
ERIC T. MIRANO  
LUNNEL KISHIOKA

April 4, 2002

Mr. Glen Tadaki  
Munekiyo & Hiraga, Inc.  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

LOG NO: 29550 ✓  
DOC NO: 0204CD10

Dear Mr. Tadaki,

**SUBJECT: Chapter 6E-42 Historic Preservation Review Pertaining to an Information Request Pursuant to the Preparation of an Environmental Assessment and Application for a Special Management Area Use Permit for the Proposed Front Street Commercial Building Lahaina Ahupua`a, Lahaina District, Island of Maui  
TMK: (2) 4-6-008:0048 & 053**

Thank you for the opportunity to provide comments for the information request pursuant to the preparation of an Environmental Assessment and Application for a Special Management Area Use permit for the proposed Front Street Commercial Building. Our review is based on reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was conducted of the subject parcels.

Based on the submitted information request, we understand the proposed undertaking will consist of the consolidation of the above-mentioned parcels into one lot. Upon completion of the consolidation process, a one-story commercial building will be constructed. In addition, we understand that parcel 48 is currently vacant and undeveloped, while parcel 53 contains an asphalt-paved parking lot. A portion of the existing parking lot will be retained for on-site parking for the new building.

The proposed project area is located within the boundaries of the Lahaina District (State Site 50-50-03-3001). This area comprises the port town of the 1800s and is likely to have once been the location of pre-Contact farming, perhaps with scattered houses during the pre-Contact period.

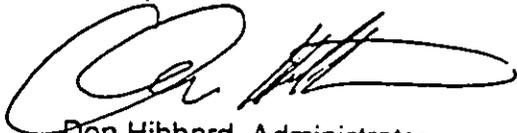
We understand that Xamanek Researches has recently completed an archaeological inventory survey of parcel 48, which included some subsurface testing). During this survey a single historic site, 50-50-03-5203, consisting of a series of four historic refuse pits was identified on parcel 48. However, the archaeological report documenting the findings of the survey has not been submitted to this office for review. We will be better able to address your information request upon the completion of our review of this report.

Mr. Glen Tadaki  
Page 2

Given that we are aware of the identification of one historic site on parcel 48, it is likely that we will recommend some type of archaeological coverage of parcel 53 when we review the EA and SMA. Based on the current information available to us, we most likely will recommend an archaeological inventory survey, either in the form of subsurface testing or in the form of monitoring, to be conducted of parcel 53 during the removal of the asphalt-pavement. However, our final comments will be based upon our review of the archaeological inventory survey.

Please call Cathleen Dagher at 692-8023 if you have any questions.

Aloha,

A handwritten signature in black ink, appearing to read "Don Hibbard", written over a horizontal line.

Don Hibbard, Administrator  
State Historic Preservation Division

CD:jen



April 12, 2002

Don Hibbard, Administrator  
State Historic Preservation Division  
Kakuihewa Building, Room 555  
601 Kamokila Boulevard  
Kapolei, Hawaii 96707

**SUBJECT:** Front Street Commercial Building  
TMK 4-6-08: 48 and 53

Dear Mr. Hibbard:

Thank you for providing us with your April 4, 2002, early consultation comments on the above-referenced project. On behalf of the applicant, AJI, LLC, we would like to note that the Archaeological Inventory Survey report that was prepared for the proposed project has been recently submitted to the State Historic Preservation Division's (SHPD) Maui office. A copy of the report has also been sent to the SHPD's Kapolei office.

Thank you again for providing us with your comments. Please feel free to call me should you have any questions.

Very truly yours,

Glenn Tadaki, Planner

GT:yp

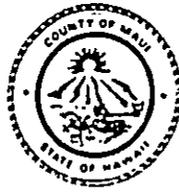
cc: Becky Collins, AJI, LLC  
Erik Fredericksen, Xamenek Researches

pacnm/ronistshpd/r.001

JAMES NIHO KEANE  
Mayor

JOHN E. MIN  
Director

CLAYTON IYOSHIDA  
Deputy Director



APR 11 2002

COUNTY OF MAUI  
DEPARTMENT OF PLANNING

April 4, 2002

Mr. Glenn Tadaki  
Munekiyo & Hiraga, Inc.  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

Dear Mr. Tadaki:

RE: Front Street Commercial Building, TMK: 4-6-008:048, Lahaina,  
Maui, Hawaii

The Maui Planning Department (Department) is in receipt of your March 7, 2002, letter requesting early consultation comments on the above project. Parcels 48 and 53 are proposed to be consolidated into one lot. Both parcels are located within Historic District No. 2. Chapter 19.52.090, Regulations for historic districts no. 1 and 2, Maui County Code, states that, "No off-street parking facility constructed in compliance with this section shall abut Front Street." As part of the overall development of the parcels, the parking stalls along Front Street should be moved to the rear or side of the lot so that it does not abut Front Street.

Since Lahaina is a sensitive area relative to archaeological and cultural resources, an archaeological study should be conducted for the site.

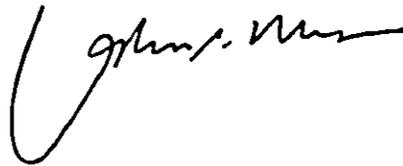
Discussions with various Lahaina community and business groups should take place and their comments included in the draft and/or final EA.

The project address should be identified in the draft EA.

Mr. Glenn Tadaki  
April 4, 2002  
Page 2

Thank you for your cooperation in this matter. If further clarification is required, please contact Ms. Ann T. Cua, Staff Planner, of this office at 270-7735.

Very truly yours,



JOHN E. MIN  
Planning Director

JEM:ATC:cmb

c: Clayton Yoshida, AICP, Deputy Planning Director  
Aaron Shinmoto, Planning Program Administrator (2)  
Ann T. Cua, Staff Planner  
Project File  
General File (s:\atlhann\ahainacommbldgparcels48&53)



April 18, 2002

John E. Min, Director  
Department of Planning  
250 High Street  
Wailuku, Hawaii 96793

**SUBJECT: Front Street Commercial Building**  
**TMK 4-6-08: 48 and 53**

Dear Mr. Min:

Thank you for providing us with your April 4, 2002 early consultation comments on the above-referenced project. On behalf of the applicant, AJI, LLC, we would like to note the following.

The department's comments concerning historic district standards, an archaeological inventory survey, comments from community groups, and the project address are duly noted and will be addressed in the subject's Draft Environmental Assessment (EA).

Thank you again for providing us with your comments. Please feel free to call me should you have any questions.

Very truly yours,

Glenn Tadaki, Planner

GT:to  
cc: Becky Collins, AJI, LLC  
Eric Taniguchi, AIA

pacnm/fronts/plann/tr.001

environment  
planning

APR 23 2002

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



BRUCE S. ANDERSON, Ph.D., M.P.H.  
DIRECTOR OF HEALTH

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

In reply please refer to  
File

02-060/epo

April 10, 2002

Mr. Glenn Tadaki, Planner  
Munekiyo & Hiraga, Inc.  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

Dear Mr. Tadaki:

Subject: Pre-Environmental Assessment (PEA)  
Front Street Commercial Building, Maui, Hawaii  
Tax Map Key: 4-6-08:48 and 53

Thank you for the opportunity to review and comment on the subject proposal. The PEA was routed to the various branches of the Environmental Health Administration. We have the following comments.

Clean Air Branch (CAB)

The proposed property is located within the boundary of the Special Management Area (SMA) for the island of Maui. An application for a SMA Use Permit must be prepared. In addition, the site is located within the Lahaina Historic District No. 2, requiring an application for historic district approval.

Control of Fugitive Dust:

Due to the nature and location of the project, there is a significant potential for fugitive dust emissions during the removal, transport, and installation activities. The site will be within close proximity to neighboring parks, businesses, residential establishments, schools and major thoroughfares. It is recommended that a dust control management plan be developed which identifies and addresses those activities that have a potential to generate fugitive dust. Implementation of adequate dust control measures during all phases of the project is warranted.

Construction activities must comply with provisions of Hawaii Administrative Rules, §11-60.1-33, on Fugitive Dust. The contractor must provide adequate means to control dust from all construction activities including but not limited to:

Mr. Glenn Tadaki, Planner  
April 10, 2002  
Page 2

- a. Planning the different phases of construction, focusing on minimizing the amount of dust-generating materials and activities, centralizing material transfer points and on-site vehicular traffic routes, and locating potentially dusty equipment in areas of the least impact;
- b. Providing an adequate water source at the site prior to start-up of construction activities.
- c. Landscaping and rapid covering of bare areas, including slopes, starting from the initial grading phase.
- d. Controlling of dust from shoulders, project entrances, and access roads;
- e. Providing adequate dust control measures during weekends, after hours, and prior to start-up of construction activities; and
- f. Controlling of dust from debris being hauled away from the project site.

If you have any questions please contact the Clean Air Branch at (808) 586-4200.

Noise, Radiation and Indoor Air Quality (NRIAQ) Branch

All project activities shall comply with the Administrative Rules of the Department of Health, Chapter 11-46, on Community Noise Control.

If you have any questions, please contact the Noise, Radiation and Indoor Air Quality Branch at (808) 586-4701.

Sincerely,



GARY GIL  
Deputy Director  
Environmental Health Administration

c: CAB  
NRIAQ  
Maui DHO



April 25, 2002

Gary Gill, Deputy Director  
for Environmental Health  
Department of Health  
State of Hawaii  
P.O. Box 3378  
Honolulu, Hawaii 96801

SUBJECT: Front Street Commercial Building  
TMK 4-6-08: 48 and 53

Dear Mr. Gill:

Thank you for your letter of April 10, 2002 providing the department's early consultation comments on the proposed project. On behalf of the applicant, AJI, LLC, we would like to note the following.

Applications for a Special Management Area Use Permit and Historic District Approval will be prepared for review and approval by the Maui Planning Commission and the Maui County Cultural Resources Commission, respectively. In addition, Best Management Practices (BMPs) will be utilized to control dust emissions and the contractor will be required to implement dust control measures in accordance with Section 11-60.1-33 regarding fugitive dust. Project-related construction will also comply with the provisions of Chapter 11-46 pertaining to Community Noise Control.

Thank you for providing us with your comments. )

Sincerely,

Glenn Tadaki, Planner

GT:to  
cc: Becky Collins, AJI, LLC  
pacnmyfronts/dohltr 001



# LAHAINATOWN

## A C T I O N C O M M I T T E E

Annual Events: Chinese New Year • WhaleFest • Banyan Tree Birthday • In Celebration of Canoes  
Lahaina Poster Contest • Maui Chefs • A Taste of Lahaina & the Best of Island Music  
Halloween • The Mardi Gras of the Pacific • Festival of Art and Flowers  
On-going Events: He U'i Cultural Arts Festival • Friday Night is Art Night

April 24, 2002

Mr. Glen Tadaki  
Munekiyo & Hiraga, Inc.  
305 High Street  
Wailuku, HI 96793

Dear Mr. Tadaki,

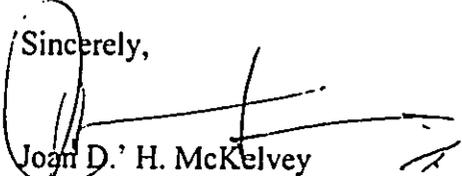
Thank you for your recent presentation to the LAC Board of Directors concerning the proposed new commercial building at TMK 4-6-08:48 and 53.

Your architect's research into and compliance with the Historic District Guidelines and the Architectural Stylebook impressed the Board. The building rendition we were presented captured both the spirit and the intent of the Lahaina Historic District.

As a reminder, if there are any changes or additions to the sidewalks abutting the property, the guidelines established by the Front Street Improvement Project must be followed.

Thank you again for your presentation.

Sincerely,

  
Joan D. H. McKelvey  
President of the Board



April 29, 2002

Joan D.H. McKelvey, President  
Board of Directors  
LahainaTown Action Committee  
648 Wharf Street  
Lahaina, Hawaii 96793

SUBJECT: Front Street Commercial Building  
TMK 4-6-08: 48 and 53

Dear Ms. McKelvey:

As a follow-up to our meeting on April 23, 2002, we appreciated the opportunity to discuss the project with the LahainaTown Action Committee (LAC) board of directors, as well as participate in the ensuing question and answer session.

On behalf of the applicant, AJI, LLC, and in response to the board's April 24<sup>th</sup> letter following up on our recent meeting, we would like to note that the board's comments regarding modifications to the sidewalk fronting the project site are acknowledged and have been forwarded to the project architect. Any changes or additions to the sidewalk abutting the property will conform to the guidelines of the Front Street Improvement Project and will be duly noted in the project's construction plans and specifications.

Thank you once again for providing us with your comments and the chance to meet with the LAC board. Please feel free to call me should you have any questions.

Very truly yours,

Glenn Tadaki, Planner

GT:to  
cc: Jack Kean and Becky Collins, AJI, LLC  
Eric Taniguchi, AIA

pacnmvfrontst/1tacltr 001

planning environment

# ***Chapter XI***

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***Letters Received During  
the Draft Environmental  
Assessment Public Comment  
Period and Responses to  
Substantive Comments***

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**XI. LETTERS RECEIVED DURING THE DRAFT ENVIRONMENTAL ASSESSMENT PUBLIC COMMENT PERIOD AND RESPONSES TO SUBSTANTIVE COMMENTS**

Pursuant to the requirements of the environmental review process, letters received during the Draft Environmental Assessment public comment period, as well as responses to substantive comments, are included in this section.

BENJAMIN J. CAYETANO  
GOVERNOR



GENEVIEVE SALMONSON  
DIRECTOR

STATE OF HAWAII  
OFFICE OF ENVIRONMENT QUALITY CONTROL  
233 SOUTH BERETANIA STREET  
SUITE 702  
HONOLULU, HAWAII 96813  
TELEPHONE (808) 586-4185  
FACSIMILE (808) 586-4186

July 8, 2002

John Min  
Maui Planning Department  
250 South High Street  
Wailuku, HI 96793

Attn: Ann Cua

Dear Mr. Min:

Subject: Draft environmental assessment (EA) for Front Street Commercial Building

We have the following comments:

Sustainable building techniques: Please consider applying sustainable building techniques presented in the "Guidelines for Sustainable Building Design in Hawaii." In the final EA include a description of any of the techniques you will implement. For a paper copy contact our office or go to our homepage at <http://www.state.hi.us/health/oeqc/guidance/sustainable.htm>.

Paving; landscaping: We recommend the use of recycled glass in paving materials whenever possible, and for landscaping, the use of native Hawaiian flora whenever and wherever possible.

Safety: During construction how will continued pedestrian access and pedestrian safety be assured? Will there be a staging area onsite for equipment, machines and supplies? If so, how will the area be secured to prevent theft and vandalism?

If you have any questions, please call Nancy Heinrich at 586-4185.

Sincerely,

A handwritten signature in cursive script that reads "Genevieve Salmonson".

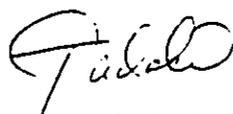
GENEVIEVE SALMONSON  
Director

c: Glenn Tadaki  
Becky Collins, AJI, LLC

Genevieve Salmonson, Director  
July 11, 2002  
Page 2

Thank you again for providing us with your comments. Please feel free to call me should you have any questions.

Sincerely,



Glenn Tadaki, Planner

GT:tn

cc: Becky Collins, AJI, LLC  
Eric S. Taniguchi Architect, AIA  
Ann Cua, Department of Planning

pacnm/ronsta/voeqc/r.002



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
54 South High Street, Room 101  
Wailuku, Hawaii 96793-2198

'02 JUL 29 12:54

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

**MEMORANDUM**

DATE: July 26, 2002

TO: Ann T. Cua, Staff Planner  
County of Maui, Planning Department

FROM: Jason K. Koga, District Land Agent *J. Koga*  
Maui District Land Office

SUBJECT: SM1 2002/0011, TMK. 4-6-008: 048 and 053  
Front Street Commercial Project (AJI, LLC)

Our office has reviewed the subject Special Management Area Use and Historic District Approval applications and has no comments at this time.

Thank you for allowing us to review the applications. Please call Louis Wada at 984-8105 should you have any questions.

JKK:lhv

c: N. Vacarro  
District Files

BENJAMIN J. CAYETANO  
GOVERNOR



GLENN M. OKIMOTO  
Comptroller

MARY ALICE EVANS  
Deputy Comptroller

STATE OF HAWAII  
DEPARTMENT OF ACCOUNTING  
AND GENERAL SERVICES  
SURVEY DIVISION  
P.O. BOX 119  
HONOLULU, HAWAII 96810-0119

'02 AUG -1 P2:01

DEPT -

July 29, 2002

**MEMORANDUM**

**TO:** John E. Min, Planning Director  
Maui County Planning Department

**ATTN:** Ann T. Cua, Staff Planner

**FROM:** Randall M. Hashimoto, State Land Surveyor *for mmm*  
DAGS, Survey Division

**SUBJECT:** I.D.: SM1 2002/0010, IIDC 2002/0011  
TMK: 4-6-008:048 and 053  
Project Name: Front Street Commercial Project  
Applicant: AJI, LLC (Contact Becky Collins)

The subject proposal has been reviewed and confirmed that no Government Survey Triangulation Stations or Benchmarks are affected. Survey has no objections to the proposed project.

09/4363



'02 AUG 12 P1:46

DEPT OF PLANNING  
COMMUNITY DEVELOPMENT  
RECORDS

August 8, 2002

Ms. Ann T. Cua  
Staff Planner  
Maui Planning Department  
250 S. High Street  
Wailuku, HI 96793

Dear Ms. Cua:

Subject: Front Street Commercial Project  
TMK: 4-6-008:048 and 053  
I.D.: SM1 2002/0010, HDC 2002/0011

Thank you for allowing us to comment on the subject project.

In reviewing the information transmitted and our records, we have no objection to the subject project. We encourage the developer's electrical consultant to meet with us as soon as practical to verify the project's electrical requirements so that service can be provided on a timely basis

If you have any questions or concerns, please call Dan Takahata at 871-2385.

Sincerely,

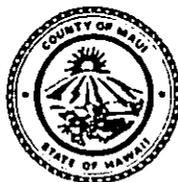
Neal Shinyama  
Manager, Energy Delivery

AUG -8 2002

JAMES "KIMO" APANA  
Mayor

JOHN E. MIN  
Director

CLAYTON I. YOSHIDA  
Deputy Director



COUNTY OF MAUI  
**DEPARTMENT OF PLANNING**

August 2, 2002

Mr. Jack Kean  
AJI, LLC  
381 Huku Li'i Place, Suite 202  
Kihei, Maui, Hawaii 96753

Dear Mr. Kean:

Re: Maui County Cultural Resources Commission Comments on the Draft Environmental Assessment for the Front Street Commercial Building at 612 and 618 Front Street, TMK: 4-6-008:048 and 053 Lahaina, Maui, Hawaii (EA 2002/0006)

At its regular meeting on August 1, 2002, the Maui County Cultural Resources Commission (Commission) was presented with an overview of the Front Street Commercial Building by the project's planning consultant and architect.

The Commission offered the following comments and suggestions on the project:

1. Project plans shall be revised to distinguish the building's doors from its windows. The Commission suggested that large plate glass be used for the windows and true divided lites be used for the doors. In addition, the transom windows should be changed from four (4) lights to two (2) lights.
2. Period type fixtures should be used on the building.
3. Relative to the landscaped buffer along Front Street, provisions shall be made to comply with the requirement in the Historic District ordinance which prohibits parking lots from abutting Front Street.
4. The Commission expressed concern about the safety of pedestrians walking along the north side of the building as there is no sidewalk along this elevation of the building. As vehicles will be entering the property and backing out into the turning radius, pedestrians will not be protected. As such, a sidewalk should be incorporated on the north side of the building. The applicant suggested that in lieu of a

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793  
PLANNING DIVISION (808) 270-7735; ZONING DIVISION (808) 270-7253; FACSIMILE (808) 270-7634

*Quality Seamless Service - Now and for the Future*

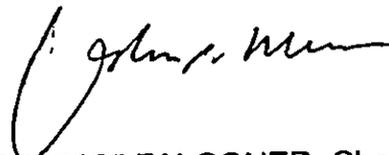
Mr. Jack Kean  
August 2, 2002  
Page 2

new sidewalk, the doors on the north elevation could be eliminated. There would still be a concern, however, with safety of pedestrians even if the doors on the north elevation were removed.

The aforementioned comments should be addressed by the applicant prior to scheduling of the Historic District Application with the Commission.

Thank you for your cooperation. If additional clarification is required, please contact Ms. Ann Cua, Staff Planner, of this office at 270-7735.

Very truly yours,

  
for JAMES "KIMO" FALCONER, Chair  
Maui County Cultural Resources Commission

JEM:ATC:smb

c: Clayton I. Yoshida, AICP, Deputy Planning Director  
Glenn Tadaki, Munekiyo & Hiraga, Inc., Applicant Consultant  
CRC Members  
Ann T. Cua, Staff Planner  
Project File  
General File  
(K:\WP\_DOCS\PLANNING\SM1\2002\FrontStreetCommercialProject\CRCdraftEAccomments080102)



September 3, 2002

James "Kimo" Falconer, Chair  
Maui County Cultural Resources Commission  
c/o Department of Planning  
County of Maui  
**Attention: Ann Cua**  
250 High Street  
Wailuku, Hawaii 96793

**SUBJECT: Front Street Commercial Building**  
**TMK 4-6-08: 48 and 53**

Dear Mr. Falconer:

Thank you for the Commission's August 2, 2002 letter commenting on the project's Draft Environmental Assessment (EA). On behalf of the applicant, AJI, LLC, we would like to note the following.

1. The project's architectural plans will be revised to differentiate the building's door and window treatments. True divided lites will be utilized for the doors and large plate glass panes for the windows. In addition, the number of true divided lites in the transom windows will be reduced from four (4) to two (2) lites. The revised plans will be included in the project's Final EA.
2. Design guidelines for the project will stipulate that tenants shall be required to utilize period-type light fixtures.
3. In connection with the consolidation of Parcels 48 and 53, an easement along the western boundary of the parking lot will be established to provide for landscape plantings and irrigation improvements, as well as to accommodate the existing pay phone, and Diamond Parking Service (DPS) parking sign and pay box.
4. The minimum aisle width criteria set forth by Chapter 19.36 of the Maui County Code (MCC) pertaining to access and specifications for off-street parking precludes the placement of a sidewalk along the north side of the building.

The MCC requires a minimum aisle width of 24 feet (for standard sized parking stalls at a 90 degree parking angle), a minimum parking stall length of 18 feet,

James "Kimo" Falconer, Chair  
September 3, 2002  
Page 2

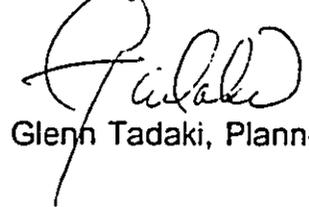
and a 2 foot wide planting area for side yards. Compliance with these requirements does not provide sufficient space for the installation of a sidewalk along the north side of the building. It should be noted that the project plans have been revised to eliminate the doors along this side of the building.

It should also be noted that conditions where driveways adjoin buildings and/or provide access to adjoining parking lots currently exists along Front Street. For example, the Burger King driveway not only has parking spaces, it also provides access to the restaurant's drive-thru lane, as well as access to the DPS parking lot at the rear of the parcel. Pedestrians utilize the driveway for parking and for entering and exiting the restaurant, as well as to gain access to the adjoining DPS parking lot. The absence of a sidewalk along the building does not seem to affect pedestrian safety.

In addition, the speed limit along this section of Front Street is 20 miles per hour. Vehicle traffic along Front Street (between Prison and Papalua Streets), proceeds slowly and carefully, especially during school and business hours, which in turn, enhances pedestrian safety.

Please feel free to call me should you have any questions.

Sincerely,



Glenn Tadaki, Planner

GT:tn

cc: Becky Collins and Jac Kean, AJI, LLC  
Eric Taniguchi, AIA

pacnmvfrontst/crcitr 003

BENJAMIN J. CAYETANO  
GOVERNOR



BRUCE S. ANDERSON, Ph.D., M.P.H.  
DIRECTOR OF HEALTH

LORRIN W. PANG, M.D., M.P.H.  
MAUI DISTRICT HEALTH OFFICER

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

'02 AUG -6 P 3:23

August 6, 2002

Mr. John Min  
Director  
Department of Planning  
County of Maui  
250 South High Street  
Wailuku, Hawai'i 96793

Attention Ms. Ann Cua

Dear Sir or Madam:

**Subject: Front Street Commercial Project**  
**TMK: (2) 4-6-008: 048 and 053**  
**SM1 2002/0010, HDC 2002/0011**

Thank you for the opportunity to comment on the land use applications for the Front Street Commercial Project. The following comments are offered:

The noise created during the construction phase of the project may exceed the maximum allowable levels as set forth in Hawaii Administrative Rules, Chapter 11-46 "Community Noise Control". A noise permit may be required and should be obtained before the commencement of work.

HAR, Chapter 11-46 sets maximum allowable sound levels from stationary equipment such as compressors and HVAC equipment. The attenuation of noise from these sources may depend on the location and placement of these types of equipment. This should be taken into consideration during the planning, design, and construction of the building and installation of these types of equipment.

Due to the nature and location of the project, there is a significant potential for fugitive dust emissions during site work preparations. It is recommended that a dust control management plan be developed. Implementation of adequate dust control measures during all phases of the project is warranted. Construction activities must comply with the provisions of HAR Chapter 11-60.

Mr. John Min  
August 6, 2002  
Page 2

Should you have any questions, please call me at 984-8230.

Sincerely,

A handwritten signature consisting of several overlapping loops and a tail stroke, characteristic of a cursive or stylized signature.

Herbert S. Matsubayashi  
District Environmental Health Program Chief

c: Clean Air Branch  
Ed Miyabara



September 3, 2002

Herbert S. Matsubayashi, District  
Environmental Health Program Chief  
Maui District Health Office  
Department of Health  
54 High Street  
Wailuku, Hawaii 96793

**SUBJECT:** *Front Street Commercial Building*  
TMK 4-6-08: 48 and 54  
SM1 2002/0010, HDC 2002/0011

Dear Mr. Matsubayashi:

Thank you for providing us with your August 6, 2002 letter commenting on the above-referenced project. On behalf of the applicant, AJI, LLC, we would like to note the following.

Construction activities will comply, as necessary, with the applicable provisions of Hawaii Administrative Rules, Chapter 11-46, pertaining to Community Noise Control and Chapter 11-60 relating to air pollution control.

Thank you again for providing us with your comments. Please feel free to call me should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Glenn Tadaki", written in a cursive style.

Glenn Tadaki, Planner

GT:tn

cc: Ann Cua, Department of Planning  
Becky Collins and Jac Kean, AJI, LLC

pacnm1fronta/dohltr 002

JAMES "KIMO" APANA  
Mayor

DAVID C. GOODE  
Director

MILTON M. ARAKAWA, A.I.C.P.  
Deputy Director

Telephone: (808) 270-7845  
Fax: (808) 270-7955



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

TRACY TAKAMINE, P.E.  
Wastewater Reclamation Division

LLOYD P.C.W. LEE, P.E.  
Engineering Division

BRIAN HASHIRO, P.E.  
Highways Division

JOHN D. HARDER  
Solid Waste Division

August 12, 2002

MEMO TO: JOHN E. MIN, PLANNING DIRECTOR

FROM: *for* DAVID GOODE, DIRECTOR OF PUBLIC WORKS AND WASTE  
MANAGEMENT *Milton Arakawa*

SUBJECT: SPECIAL MANAGEMENT AREA PERMIT, HISTORIC  
DISTRICT APPROVAL APPLICATIONS  
FRONT STREET COMMERCIAL PROJECT  
TMK: (2)4-6-008:048,053  
SM1 2002/0010, HDC 2002/0011

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

1. Submit a plan for construction and demolition waste disposal and recycling.
2. Although wastewater system capacity is currently available as of July 25, 2002, the developer should be informed that wastewater capacity cannot be ensured until the issuance of the building permit.
3. The developer is not required to pay assessment fees for this area at the current time. However, the developer is required to fund any necessary off-site improvements to collection system and wastewater pump stations.
4. Wastewater contribution calculations are required before a building permit is issued. Plans should show the installation of a service manhole prior to connection to the County sewer system. Indicate on the plans the ownership of each easement. The County will not accept sewer easement or lines that traverse private property.

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Memo to John E. Min, Planning Director  
August 12, 2002  
Page 2

5. A signed Hold-Harmless Agreement should be executed and will be required before Wastewater Reclamation Division will give recommendations for final subdivision approval.
6. Any food establishments at this location will be required to comply with County of Maui pre-treatment requirements. Provisions for future grease interceptor installation shall be considered in the planning of this project.
7. The sewer lateral connection shall be CCTV'd at high tide to verify there is no infiltration of ground water.
8. It appears that a metal corrugated canopy will extend over the public sidewalk on Front Street at a height of nine (9) feet, eight (8) inches above the sidewalk.
  - a. Will an easement be required for the "encroachment"?
  - b. Tall delivery vehicles often times collide with similar type canopies, causing damage. Can the canopy be set back away from the street?
  - c. The existing light pole and power pole 13 may be in conflict with the proposed canopy.
  - d. Traffic signs may conflict with the canopy.
9. Tall delivery vehicles may collide with the canopy when entering the parking lot, especially when another vehicle(s) is(are) in the opposite "lane" exiting the lot or from delivery vehicles entering the lot from the Prison Street side of Front Street.
10. No parking signs shall be installed along the Front Street frontage.
11. Landscaped planting which does not impede vehicular sight distance at the driveway entrance is recommended. Front Street, in this area, is very congested with on-street traffic, vehicles exiting from Canal Street and diagonally parked vehicles along Kam III school.

Memo to John E. Min, Planning Director  
August 12, 2002  
Page 3

12. The existing County drainage system is not adequate to handle increased flows resulting from the proposed development. Applicant shall retain any increase in flows on-site.
13. Construction of on-site improvements shall comply with the provisions of the grading ordinance and the drainage rules. Best management practices shall be implemented to provide erosion-, sedimentation-, and dust-control measures during construction.

If you have any questions regarding this memorandum, please call Milton Arakawa at Ext. 7845.

DG:RGM:msc  
S:\LUCA\CZM\frontstreetcommblgdg.wpd



September 30, 2002

David Goode, Director  
Department of Public Works  
and Waste Management  
County of Maui  
200 High Street  
Wailuku, Hawaii 96793

SUBJECT: Front Street Commercial Building  
TMK 4-6-08: 48 and 53; SM1 2002/0010; HDC2002/0011

Dear Mr. Goode:

Thank you for providing us with your August 12, 2002 comments on the above-referenced project. On behalf of the applicant, AJI LLC, we would like to note the following.

1. There are no building structures to demolish. However, the small remnant amount from the demolished section of the existing asphalt-paved parking lot will be broken up and recycled for use as fill material.
2. The applicant acknowledges that wastewater system capacity cannot be ensured until the issuance of the project's building permit.
3. The applicant recognizes that a pro-rata contribution may be required for funding necessary offsite improvements to the wastewater collection system and wastewater pump stations.
4. Wastewater contribution calculations will be submitted to the department in connection with the building permit application process. The construction plans will reflect the installation of a 4-inch sewer cleanout, and, as necessary, the ownership of any easements.
5. An executed Hold-Harmless Agreement will be submitted to the department prior to final approval for the consolidation of Parcels 48 and 53.

David Goode, Director  
September 30, 2002  
Page 2

6. The applicant has no plans to lease tenant space to food service establishments. A location for the installation of an above-ground grease interceptor will be provided as necessary.
7. To verify that there is no infiltration of ground water, the sewer lateral connection will be CCTV'd at high tide.
8.
  - a. Pursuant to discussions with the Land Use and Codes Administration, a license will be required for the portion of the canopy that extends over the sidewalk fronting the building. As such, a request for a license will be submitted to the department for the necessary processing.
  - b. The building is setback 3 feet from the Front Street property line. To minimize the potential of tall delivery vehicles colliding with the canopy, the width of the canopy has been reduced so that only 2 feet extends over the sidewalk.
  - c. The canopy will be inset to provide space for the existing light and power poles.
  - d. The canopy is not expected to affect the locations or visibility of existing traffic signs. As necessary, the design of the canopy will be modified to address the installation of any new traffic signs along the building's frontage.
9. As the canopy contributes to the architectural character of Lahaina Town and is consistent with the design guidelines for the Lahaina historic district, the applicant is willing to bear the cost of repairs for damages related to the canopy.
10. "No Parking" signs will be installed along the project's Front Street frontage.
11. Landscape plantings will be installed and maintained so as not to affect vehicle sight distance.
12. As the post-development runoff from the project is very small, the project's civil engineer is working with the department to determine if the capacity of the existing drainage system is sufficient to accommodate this minimal flow. Should the results of this analysis indicate that capacity is unavailable, an onsite drainage retention system will be installed for the project.

David Goode, Director  
September 30, 2002  
Page 3

13. Onsite drainage improvements will be constructed in accordance with County drainage standards. Best Management Practices will be implemented during construction to minimize soil erosion, sedimentation, and fugitive dust.

Thank you again for providing us with your comments. Please feel free to call me should you have any questions.

Sincerely,



Glenn Tadaki, Planner

GT:tn

cc: Ann Cua, Planning Department  
Becky Collins and Jac Kean, AJI LLC  
Eric Taniguchi Architect, AIA  
Mike Conway, Silversword Engineering, Inc.

pacnm/roads/dpwm/tn

0044440



JAMES "KIMO" APANA  
MAYOR

OUR REFERENCE  
tv  
YOUR REFERENCE

SEP 10 2002



# POLICE DEPARTMENT COUNTY OF MAUI

55 MAHALANI STREET '02 AUG 15 P1:58  
WAILUKU, HAWAII 96793  
(808) 244-6400  
FAX (808) 244-6411

THOMAS M. PHILLIPS  
CHIEF OF POLICE

KEKUAUPIO R. AKANA  
DEPUTY CHIEF OF POLICE

August 14, 2002

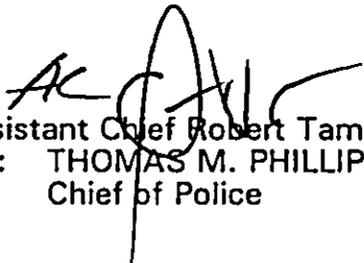
## MEMORANDUM

TO : JOHN E. MIN, PLANNING DIRECTOR  
FROM : THOMAS M. PHILLIPS, CHIEF OF POLICE  
SUBJECT : I.D.: SM1 2002/0010, HDC 2002/0011  
TMK: 4-6-008: 048 and 053  
Project  
Name: Front Street Commercial Project  
Applicant: AJI, LLC (Contact Becky Collins)

No further recommendation or comment is necessary or desired.

Refer to enclosed comments and/or recommendations.

Thank you for giving us the opportunity to comment on this project. We are returning the application booklet which was submitted for our review.

  
Assistant Chief Robert Tam Ho  
For: THOMAS M. PHILLIPS  
Chief of Police

Enclosure

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES 8

HISTORIC PRESERVATION DIVISION  
KAKUHIHEWA BUILDING, ROOM 556  
801 KAMOKILA BOULEVARD  
KAPOLEI, HAWAII 96707

2002 10 2002  
GILBERT S. COLOMA-AGARAN, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCES MANAGEMENT

DEPUTES  
ERIC T. HIRANO  
LINNELL NISHOKA

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND RESOURCES  
ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND  
STATE PARKS

HAWAII HISTORIC PRESERVATION  
DIVISION REVIEW

Log #: 30580  
Doc #: 0208CD38

Applicant/Agency: Mr. John E. Min, Planning Director  
Address: County of Maui  
Department of Planning  
250 South High Street  
Wailuku, Hawaii 96793

SUBJECT: Chapter 6E-42 Historic Preservation Review Pertaining to the  
Applications for Special Management Area Use Permit and Historic  
District Approval for the Proposed Front Street Commercial Building  
(Subject I.D.: SM1 2002/0010, HDC 2002/0011)

Ahupua'a: Puako  
District, Island: Lahaina, Maui  
TMK: (2) 4-6-008: 048 & 053

1. We believe there are no historic properties present, because:

- a) intensive cultivation has altered the land
- b) residential development/urbanization has altered the land
- c) previous grubbing/grading has altered the land
- d) an acceptable archaeological assessment or inventory survey found no historic properties
- e) other: see SHPD DOC NO.: 0205MK01/LOG NO.: 30020

2. This project has already gone through the historic preservation review process, and mitigation has been completed \_\_\_\_.

Thus, we believe that "no historic properties will be affected" by this undertaking.

Staff: Cathleen A. Dagher  
Cathleen A. Dagher  
Assistant Maui/Lana'i Island Archaeologist  
(808) 692-8023

Date 20 August 2002

09/14/02



SEP 13 2002

'02 AUG 23 A9:50

DEPT OF WATER SUPPLY

COMMUNICATIONS

RECEIVED

**DEPARTMENT OF WATER SUPPLY  
COUNTY OF MAUI  
P.O. BOX 1109  
WAILUKU, MAUI, HAWAII 96793-7109  
Telephone (808) 270-7816 • Fax (808) 270-7833**

August 21, 2002

Ms. Ann T. Cua, Planner  
Planning Department  
County of Maui  
250 S High Street  
Wailuku HI 96793

RE ID: SM1 2002/0010, HDC 2002/0011  
TMK: (2)4-6-008:048 and 053  
Project Name: Front Street Commercial Project

Dear Ms. Cua:

Thank you for the opportunity to review the subject proposal. The Department of Water Supply has the following comments:

The project area is being served by a 12-inch waterline along Front Street and a 5/8" water meter. One fire hydrant is located about 250' east of the property. The applicant will be required to provide service for fire protection, domestic use, and irrigation according to standards. During the building permit process fire, domestic and irrigation calculations will be required so that system improvements and adequate meter sizing can be determined. Actual fire demand for structures is determined by using fire flow calculations performed by a licensed engineer. DWS-approved fire flow calculation methods for use include: "Guide for Determination of Required Fire Flow - Insurance Services Office, 1974" and "Fire Flow" - Hawaii Insurance Bureau, 1991. The applicant is encouraged to contact our engineering division at 270-7835 to discuss the matter.

Based on system per acre standards, potential water usage for this project would be approximately 2,000 gallons per day (gpd). Actual demand will depend on intensity of use.

In order to conserve water resources, we recommend that the applicant adopt the following measures:

Use non-potable water, where feasible, for dust control and irrigation during and after construction.

Eliminate Single-Pass Cooling: Single-pass, water-cooled systems should be eliminated per Maui County Code Subsection 14.21.20. Although prohibited by code, single-pass water cooling is still manufactured into some models of air conditioners, freezers, and commercial refrigerators.

Utilize Low-Flow Fixtures and Devices: Maui County Code Subsection 16.20A.680 requires the use of low-flow water fixtures and devices in faucets, showerheads, urinals,

water closets and hose bibs. Water conserving washing machines, ice-makers and other units are also available.

Maintain Fixtures to Prevent Leaks: A simple, regular program of repair and maintenance can prevent the loss of hundreds or even thousands of gallons a day.

Use Climate-adapted Plants: The project is located in the "Maui County Planting Plan" - Plant Zones 3,4, & 5. We encourage the applicant to utilize appropriate native and non invasive species in landscaping. Native plants adapted to the area conserve water and protect the watershed from degradation due to invasive alien species.

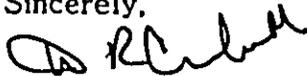
Prevent Over-Watering By Automated Systems: Provide rain-sensors on all automated irrigation controllers. Check and reset controllers at least once a month to reflect the monthly changes in evapotranspiration rates at the site. As an alternative, provide the more automated, soil-moisture sensors on controllers.

Look for Opportunities to Conserve Water: A few examples of these are as follows: When clearing driveways, etc. of debris, use a broom instead of a hose. When washing cars, use a hand-operated spray nozzle instead of an open hose. Additionally, check for leaks in faucets and toilet tanks.

The project overlies the Launiupoko aquifer which has a sustainable yield of 8 MGD. The Department of Water Supply strives to protect the integrity of surface and groundwater resources by encouraging the applicant to adopt best management practices (BMPs) designed to minimize infiltration and runoff from construction and vehicle operations. BMPs for principle operations can be obtained from the State Department of Health.

Should you have any questions, please contact our Water Resources and Planning Division at 270-7199.

Sincerely,



David Craddick  
Director

eam  
c:: engineering division  
applicant



September 17, 2002

David Craddick, Director  
Department of Water Supply  
County of Maui  
200 High Street  
Wailuku, Hawaii 96793

SUBJECT: Front Street Commercial Building  
TMK 4-6-08: 48 and 53; SM1 2002/0010; HDC2002/0011

Dear Mr. Craddick:

Thank you for providing us with your August 21, 2002 comments on the above-referenced project. On behalf of the applicant, AJI LLC, we would like to note the following.

The water conservation measures referenced in your letter will be considered and appropriate measures utilized. In addition, Best Management Practices will be utilized during construction to minimize infiltration and runoff from construction-related activities.

Thank you again for providing us with your comments. Please feel free to call me should you have any questions.

Sincerely,

Glenn Tadaki, Planner

GT:tn

cc: Ann Cua, Planning Department  
Becky Collins and Jac Kean, AJI LLC

pacnm/ronst/dwslr.001

PHONE (808) 594-1888

SEP 13 2002

FAX (808) 594-1865



STATE OF HAWAII  
OFFICE OF HAWAIIAN AFFAIRS  
711 KAPI'OLANI BOULEVARD, SUITE 500  
HONOLULU, HAWAII 96813

'02 AUG 27 P12:18

DEPT. OF  
C.

August 22, 2002

Ann T. Cua, Staff Planner  
Department of Planning  
County of Maui  
250 South High Street  
Wailuku, Maui, HI 96793

(HRD #02-524C)

Subject: Applications for Special Management Area Use Permit (SMA),  
Historic District Approval, and Draft Environmental Assessment  
(DEA) the Proposed Front Street Commercial Building  
TMK: 4-6-08:48 and 53  
Lahaina, Maui, Hawai'i

Dear Ms. Cua:

Thank you for the opportunity to comment on the above referenced project. At this time the Office of Hawaiian Affairs has no additional comments to the proposed project. If you have questions, please contact Mark A. Mararagan, policy analyst at 594-1756 or email him at [markm@oha.org](mailto:markm@oha.org).

Sincerely,

A handwritten signature in cursive script, appearing to read "Jalna S. Keala".

Jalna S. Keala  
Acting Director, Hawaiian Rights Division

cc: Board of Trustees  
Clyde W. Namu'o, Administrator  
Maui CAC

02/4645

SEP 17 2002



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
P.O. BOX 621  
HONOLULU, HAWAII 96809  
August 23, 2002

'02 AUG 27 12:18  
DEPT OF LAND AND NATURAL RESOURCES

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND DIVISION  
STATE PARKS  
WATER RESOURCE MANAGEMENT

LD-NAV  
Ref.: SM12002-0010.RCM

L-630/564/1112/743

Honorable John E. Min  
Planning Director  
County of Maui  
Planning Department  
250 S. High Street  
Wailuku, Hawaii 96793

Dear Mr. Min:

Subject: Application Amendment  
I.D. Nos.: SM1 2002-0010, HDC 2002/0011  
Applicant: AJI, LLC  
Name: Front Street Commercial Project  
Authority: County of Maui Department of Planning  
TMK: 2nd/ 4-8-003: 048 and 053

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

The Land Division distributed a copy of the document covering the subject matter to the following Department of Land and Natural Resources' Divisions for their review and comment:

- Division of Forestry and Wildlife
- Division of State Parks
- Commission on Water Resource Management
- Land Division Engineering Branch
- Land Division Planning and Technical Services

Attached herewith is a copy of the Land Division Engineering Branch comment.

Based on the attached responses, the Department of Land and Natural Resources has no other comment to offer.

Should the Land Division receives any comments pertaining to the subject matter, they will be forwarded to your office at that time.

If you have any question, please feel free to contact Nicholas A. Vaccaro of the Land Division Support Services Branch at 1-808-587-0384.

Very truly yours,

*for* *Charlene S. Mamiya*  
DIERDRE S. MAMIYA  
Administrator

C: Maui District Land Office



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

LAND DIVISION  
P.O. BOX 621  
HONOLULU, HAWAII 96809  
July 24, 2002

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND DIVISION  
STATE PARKS  
WATER RESOURCE MANAGEMENT

LD/NAV  
Ref.: SM12002-0010.CMT

Suspense Date: 8/18/02 L-564

MEMORANDUM:

- TO:
- Division of Aquatic Resources
  - XXX Division of Forestry & Wildlife
  - Na Ala Hele Trails
  - XXX Division of State Parks
  - Division of Boating and Ocean Recreation
  - XXX Commission on Water Resource Management
  - Land Division Branches of:
    - ✓ XXX Planning and Technical Services
    - XXX Engineering Branch
    - OOO Maui District Office (RD)

FROM: *JM* Dierdre S. Mamiya, Administrator *Chadler*  
Land Division

SUBJECT: Application: SM1 2002-0010, HDC 2002/001  
Name: Front Street Commercial Project  
Applicant: AJI, LLC  
Authority: County of Maui Department of Planning  
TMK: 2<sup>nd</sup>/ 4-6-008: 048 & 053

Please review the attached document covering the subject matter and submit your comments (if any) on Division letterhead signed and dated within the time requested above.

Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0438.

If this office does not receive your comments on or before the suspense date, we will assume there are no comments.

( ) We have no comments.

(x) Comments attached.

Signed: *RK*

Date: AUG 14 2002

02 JUL 24 PM 01:33 INTER & LRM



STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 LAND DIVISION  
 P.O. BOX 621  
 HONOLULU, HAWAII 96809  
 July 24, 2002

AQUATIC RESOURCES  
 BOATING AND OCEAN RECREATION  
 CONSERVATION AND  
 RESOURCES ENFORCEMENT  
 CONVEYANCES  
 FORESTRY AND WILDLIFE  
 HISTORIC PRESERVATION  
 LAND DIVISION  
 STATE PARKS  
 WATER RESOURCE MANAGEMENT

LD/NAV  
 Ref.: SM12002-0010.CMT

L-564  
 Suspense Date: 8/18/02

MEMORANDUM:

TO: ✓ Division of Aquatic Resources  
 XXX Division of Forestry & Wildlife  
 Na Ala Hele Trails  
 XXX Division of State Parks  
 Division of Boating and Ocean Recreation  
 XXX Commission on Water Resource Management  
 Land Division Branches of:  
 XXX Planning and Technical Services  
 XXX Engineering Branch  
 OOO Maui District Office (RD)

FROM: *JM* Dierdre S. Mamiya, Administrator *Chalene*  
 Land Division

SUBJECT: Application: SM1 2002-0010, HDC 2002/001  
 Name: Front Street Commercial Project  
 Applicant: AJI, LLC  
 Authority: County of Maui Department of Planning  
 TMK: 2<sup>nd</sup>/ 4-6-008: 048 & 053

Please review the attached document covering the subject matter and submit your comments (if any) on Division letterhead signed and dated within the time requested above.

Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0438.

If this office does not receive your comments on or before the suspense date, we will assume there are no comments.

We have no comments.

Comments attached.

Signed: *Randall W. Kennon*

Date: *DCFM Administrator*  
 7/25/02



STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 LAND DIVISION  
 P.O. BOX 621  
 HONOLULU, HAWAII 96809  
 July 24, 2002

AQUATIC RESOURCES  
 BOATING AND OCEAN RECREATION  
 CONSERVATION AND  
 RESOURCES ENFORCEMENT  
 CONVEYANCES  
 FORESTRY AND WILDLIFE  
 HISTORIC PRESERVATION  
 LAND DIVISION  
 STATE PARKS  
 WATER RESOURCE MANAGEMENT

LD/NAV  
 Ref.: SM12002-0010.CMT

L-564  
 Suspense Date: 8/18/02

MEMORANDUM:

TO: Division of Aquatic Resources  
 XXX Division of Forestry & Wildlife  
 Na Ala Hele Trails  
 ✓ XXX Division of State Parks  
 Division of Boating and Ocean Recreation  
 XXX Commission on Water Resource Management  
 Land Division Branches of:  
 XXX Planning and Technical Services  
 XXX Engineering Branch  
 000 Maui District Office (RD)

TO:  
 \_\_\_ ADMINISTRATOR  
 \_\_\_ ASST ADMIN  
 \_\_\_ DEV BR  
 \_\_\_ PLAN BR  
 \_\_\_ RES MGT BR  
 \_\_\_ CLERICAL  
 \_\_\_ ADMIN ASST  
 \_\_\_ INTERP BR

FROM: *J* Dierdre S. Mamiya, Administrator *Chalene*  
 Land Division

FOR:  
 \_\_\_ CIRC/POST/STAFF RM  
 \_\_\_ COMMENTS & REC  
 \_\_\_ DRAFT REPLY  
 \_\_\_ FILE  
 \_\_\_ FOLLOW UP  
 \_\_\_ INFO  
 \_\_\_ RUN COPIES \_\_\_\_\_  
 \_\_\_ RUSH DUE \_\_\_\_\_  
 \_\_\_ SEE ME \_\_\_\_\_  
 \_\_\_ FAX/SEND COPY TO \_\_\_\_\_

SUBJECT: Application: SM1 2002-0010, HDC 2002/001  
 Name: Front Street Commercial Project  
 Applicant: AJI, LLC  
 Authority: County of Maui Department of Planning  
 TMK: 2<sup>nd</sup>/ 4-6-008: 048 & 053

Please review the attached document covering the subject matter and submit your comments (if any) on Division letterhead signed and dated within the time requested above.

Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0438.

If this office does not receive your comments on or before the suspense date, we will assume there are no comments.

We have no comments.

Comments attached.

Signed: *Dierdre S. Mamiya*

Date: *7/25/02*

DLNR-LAND DIVISON  
ENGINEERING BRANCH

LD/NAV  
Ref.: SM12002-0010.CMT

COMMENTS

We confirm that that the project site is located in Zone C (No shading). This is an area of minimal flooding.

Should you have any questions, please call Mr. Eric Yuasa of the Project Planning Section at 587-0229.

Signed: Andrew M. Monden  
ANDREW M. MONDEN, CHIEF ENGINEER

Date: 8/14/02

# ***References***

---

### References

Interview of Edna Bekeart, May 3, 2002.

Community Resources, Inc., Maui County Community Plan Update Program Socio-Economic Forecast Report, January 1994.

County of Maui, Department of Public Works and Waste Management, Construction Plans for Front Street Improvements, May 1994.

County of Maui, West Maui Community Plan, February 1996.

Federal Emergency Management Agency, Flood Insurance Rate Map Community/Panel No. 150003/0163C, August 3, 1998.

Maui County Data Book, 2000.

Interview of Joan D'A.H. McKelvey, May 3, 2002.

Munekiyo, Arakawa & Hiraga, Inc., Final Environmental Assessment - Westside Resource Center, December 2000.

Munekiyo, Arakawa & Hiraga, Inc., Final Environmental Assessment - Wainee Office Building, July 1999.

State Department of Labor and Industrial Relations, personal communication with Janet Kaya, April 1, 2002.

University of Hawaii, Department of Geography, Atlas of Hawaii, Third Edition, 1999.

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

Vuich Environmental Consultants, Inc. Environmental Site Assessment: Phase I Investigation for Front Street Properties (TMK 4-6-08:48 and 53), November 2001.

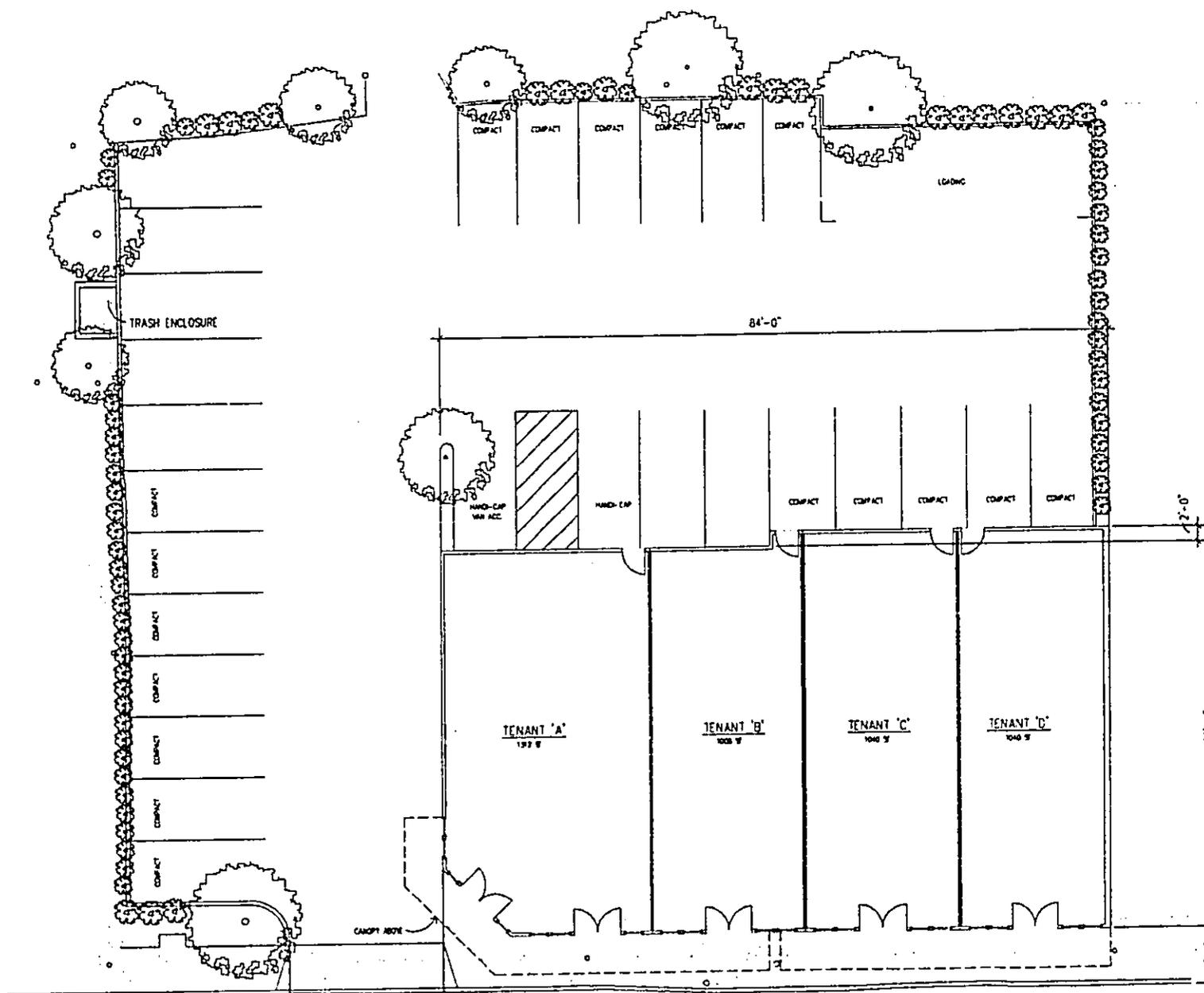
# ***Appendices***

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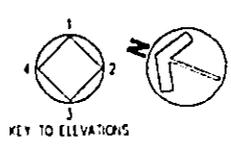
# *Appendix A*

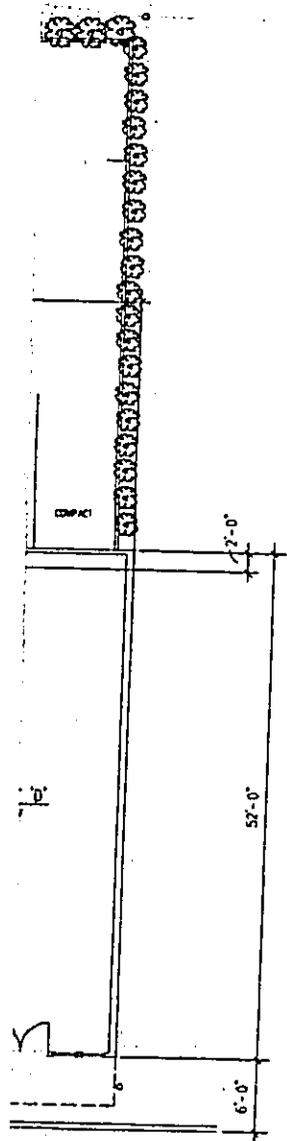
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*Preliminary  
Development Plans*



SITE PLAN  
SCALE: 1/8"=1'-0"





**PROJECT DATA**

TWK: 4 - 6 - 08 : 53 & 48  
 LOT AREA : 14, 671 SF  
 ZONING : HISTORIC DISTRICT HQ.2  
 COMMUNITY PLAN : BUSINESS/COMMERCIAL  
 STATE LAND USE: UPBAH

**BUILDING DATA**

BUILDING AREA: 4,400 CSF  
 BUILDING HEIGHT: ONE (1) STORY  
 TYPE CONSTRUCTION : V-N

PARKING REQUIREMENTS : 1 STALL / 500 SF  
 4,400 SF / 500 SF = 9 STALLS  
 PARKING STALLS PROVIDED : 27 STALLS  
 COMPACT ALLOWED : 25% OF REQUIRED STALLS  
 9 STALLS X 25% = 2 STALLS  
 LOADING : 1 ZONE REQUIRED

Eric S. Taniguchi, AIA  
 Architect

273 Hikianani Loop  
 Puukohala, Maui, Hawaii  
 96768

Ph: (808) 572-8219  
 e-mail: eric1@maui.net

**612 FRONT STREET**  
 LAHAINA, MAUI, HAWAII  
 TWK: 4 - 6 - 08 : 63 & 48

SITE PLAN



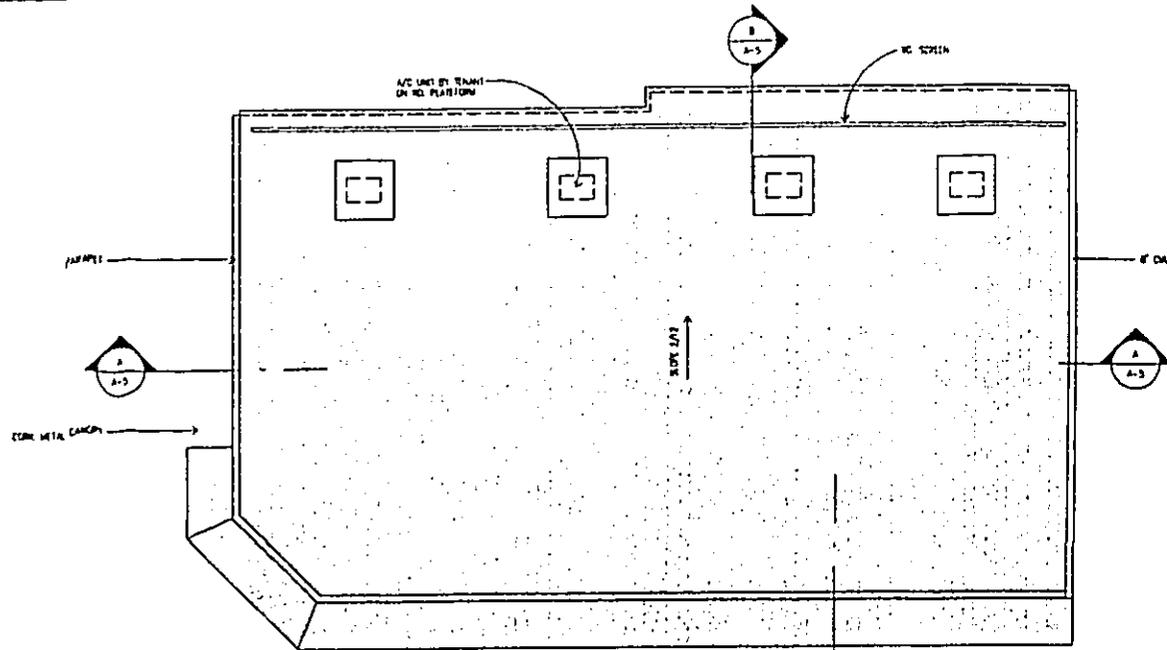
This work was prepared by me or under my supervision and certification. I am a duly licensed professional architect in the State of Hawaii, and I am duly licensed in the State of Hawaii as a Professional Engineer, Architect, Surveyor, and Landscape Architect.

Signature  
 \_\_\_\_\_  
 Date: \_\_\_\_\_

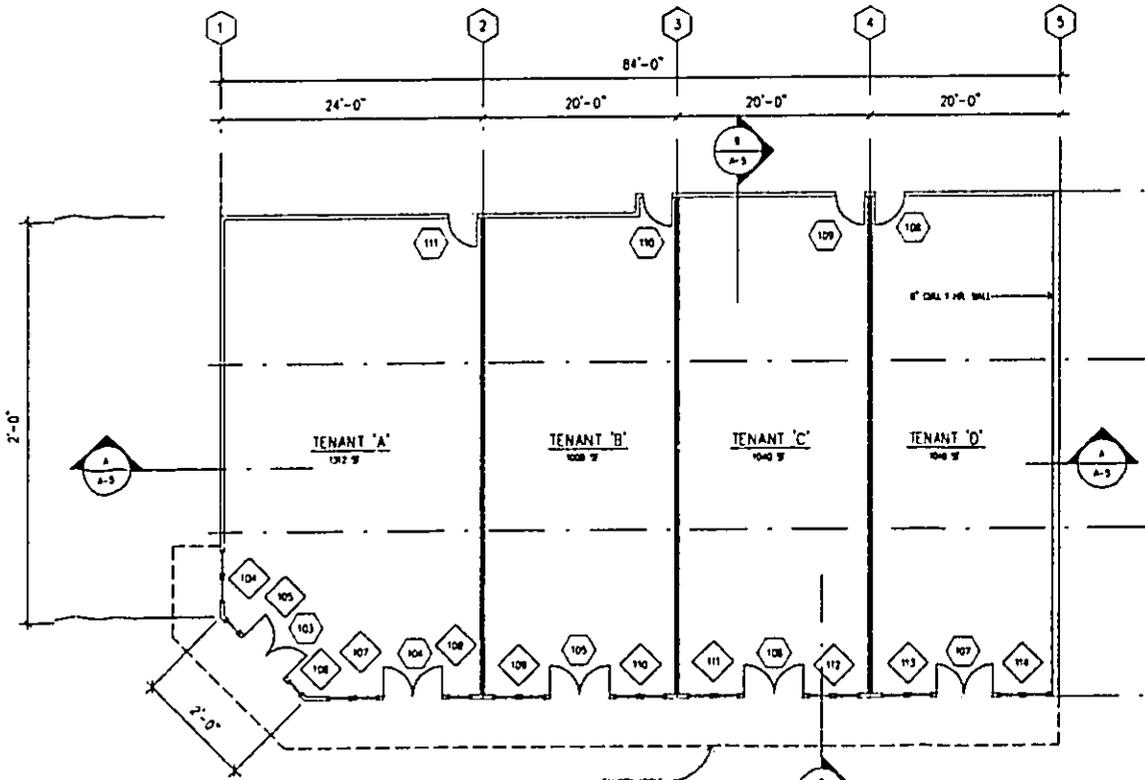
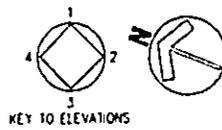
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Designed by: EST  
 Drawn by: EST  
 Project No: 008-01  
 Date: 7-10-02  
 Sheet No: \_\_\_\_\_

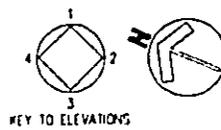
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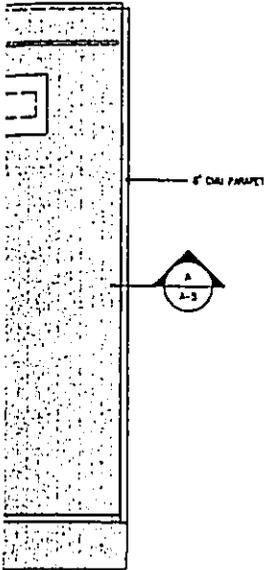


ROOF PLAN  
SCALE: 1/8"=1'-0"



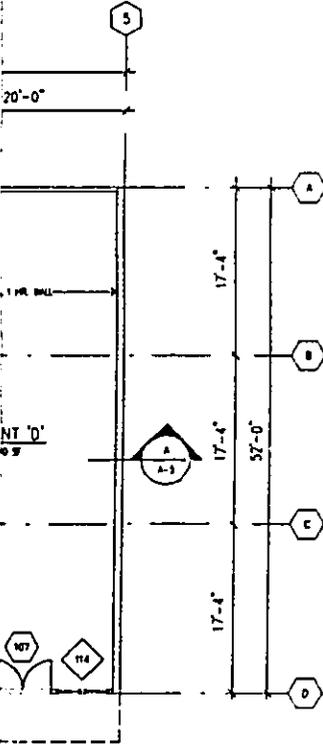
FLOOR PLAN  
SCALE: 1/8"=1'-0"





**ROOF NOTES:**

1. ROOF TO BE METAL COORCATED ROOF PANELS, UNLESS OTHERWISE NOTED.
2. FLASHING INSTALLATION WILL BE IN ACCORDANCE WITH SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION ARCHITECTURAL SHEET METAL MANUAL.
3. INSTALLATION OF ROOFING WILL BE IN ACCORDANCE TO MANUFACTURERS'S SPECIFACON AND NATIONAL ROOFING AND CONTRACTORS ASSOCIATION ROOFING AND WATERPROOFING MANUAL.
4. COORDINATE ALL ROOF PENETRATIONS AND VIR'S WITH MECHANICAL DRAWINGS.



**BUILDING NOTES:**

1. ALL DIMENSIONS ARE TAKEN FROM FACE OF FINISH, UNLESS OTHERWISE NOTED.
2. INTERIOR WALLS - 2 x 4 NO. STUDS @ 16" O.C. W/ 5/8" GYP. BD. ON BOTH SIDES. ALL WALLS TO PRIME AND PAINTED.
3. EXTERIOR WALLS - 2 x 4 NO. STUDS @ 16" O.C. W/ 5/8" 6" NO. LAP SIDING ON EXTERIOR FACE AND 5/8" GYP. BD. ON THE INTERIOR FACE. ALL WALLS TO BE PRIMED AND PAINTED, UNLESS OTHERWISE NOTED.
4. ALL CONSTRUCTION WILL CONFORM TO ALL APPLICABLE CODES AND REGULATIONS, 1997 IBC AND ADMENDMENTS NFA, FIRE CODE, NEC AND 1991 UPC.

Eric S. Tanguchi, AIA  
Architect

273 Hualani Loop  
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96768

Ph: (808) 572-8219  
e-mail: erict@maui.net

**612 FRONT STREET**

LAHAINA, MAUI, HAWAII  
TEL: 4 - 8 - 08 : 63 & 48

FLOOR PLAN  
ROOF PLAN



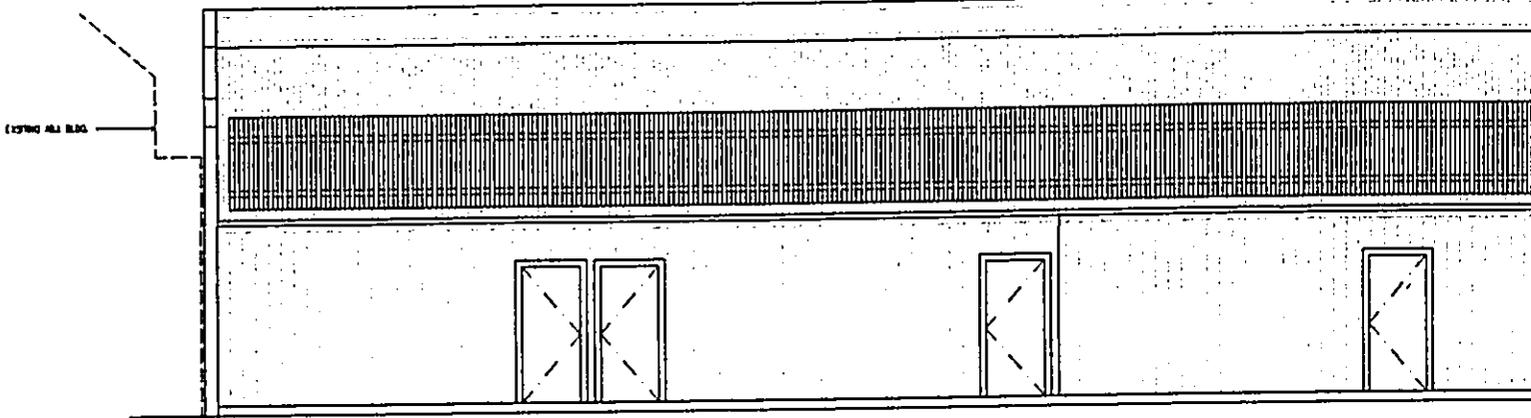
This seal was obtained by me in strict compliance with the provisions of the laws of the State of Hawaii, Chapter 100, Section 100-10, and Chapter 100-10-1, and I am a duly Licensed Professional Engineer, Architect, Surveyor, and Landscape Architect.

Signature  
Date: Certificate was issued and copy on file with the State of Hawaii on 08/20/07

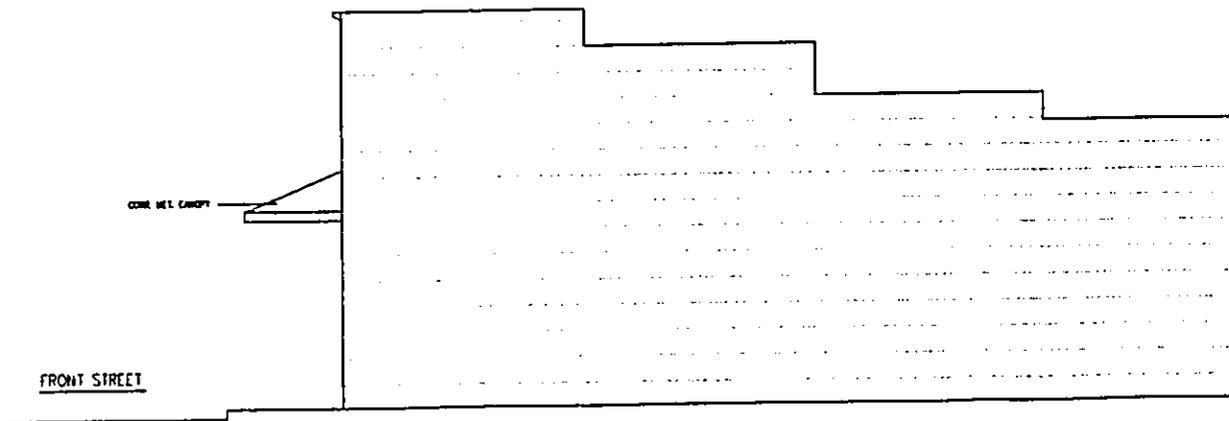
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EXTERIOR ELEVATION 1  
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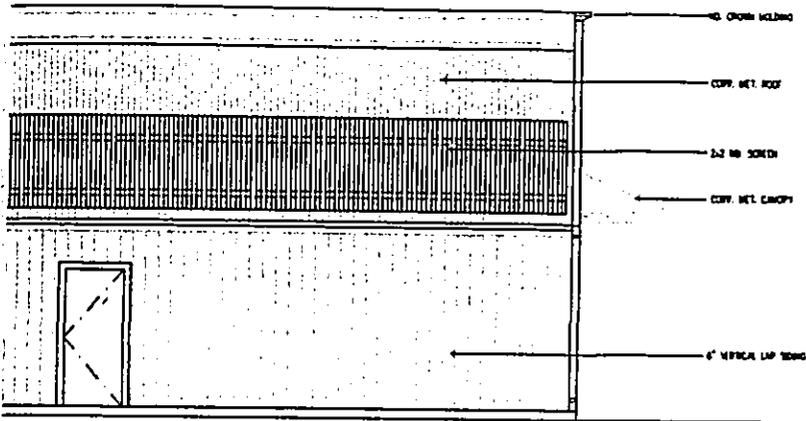


EXTERIOR ELEVATION 2  
SCALE: 1/4"=1'-0"

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612 FRONT STREET

LAHAINA, MAUI, HAWAII  
TAUC 4 - 8 - 08 : 63 & 48

EXTERIOR  
ELEVATIONS



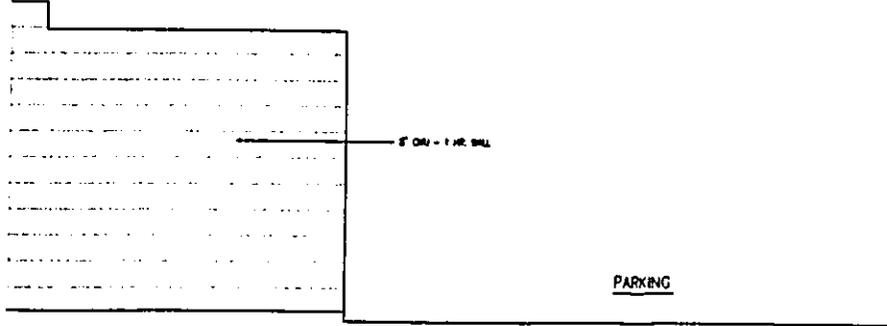
This work was prepared by me or under my supervision and control and I am a duly licensed and registered professional architect in the State of Hawaii. I am not providing any services in any other jurisdiction. I am not providing any services in any other jurisdiction. I am not providing any services in any other jurisdiction.

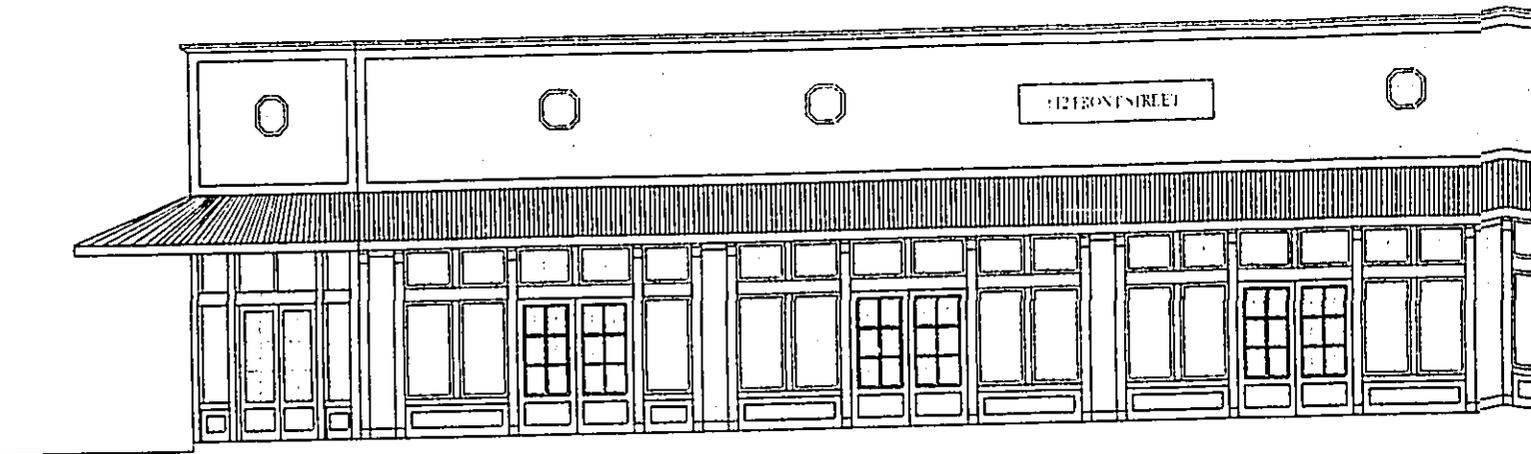
Notes:  
1. Contractor shall check and verify all dimensions at all stages throughout the work.

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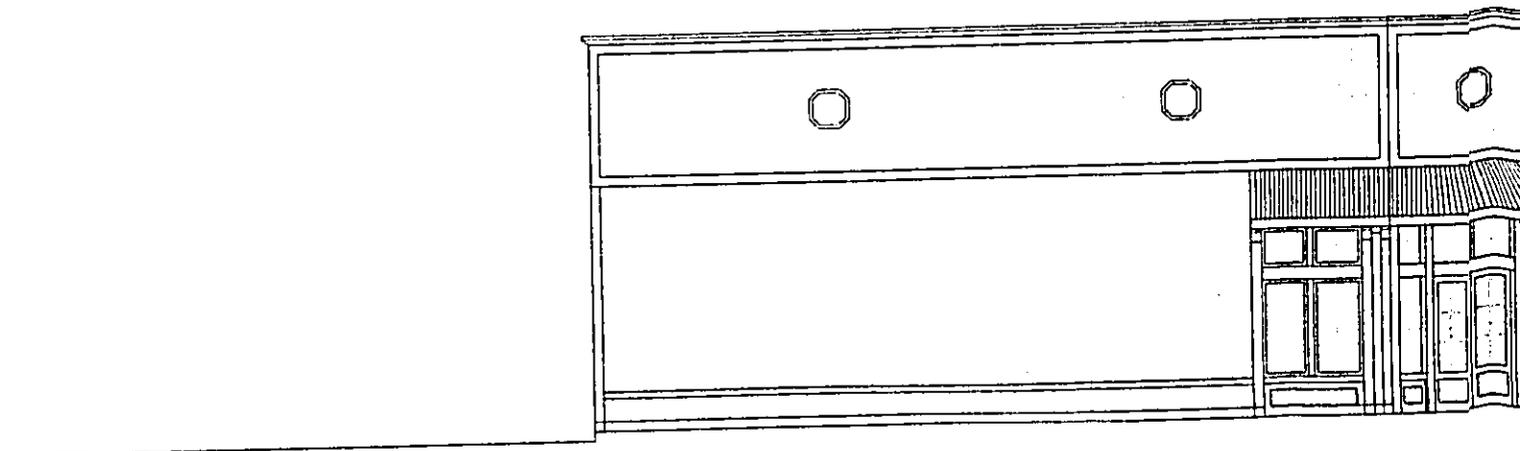
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A-3

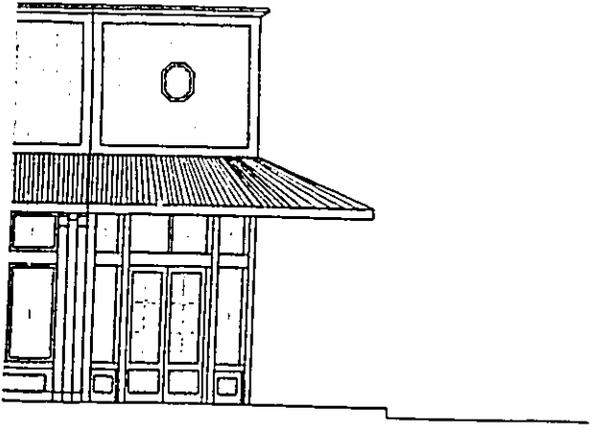
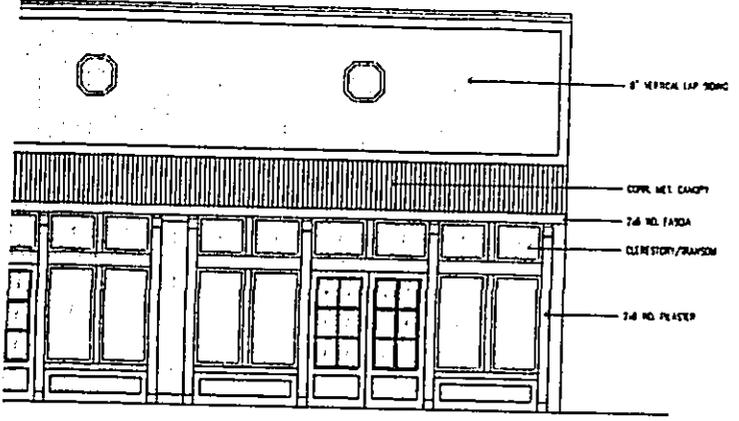




EXTERIOR ELEVATION 3  
SCALE: 1/4"=1'-0"



EXTERIOR ELEVATION 4  
SCALE: 1/4"=1'-0"



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**612 FRONT STREET**

LAHAINA, MAUI, HAWAII  
TMK: 4-6-08:63 & 48

EXTERIOR  
ELEVATIONS



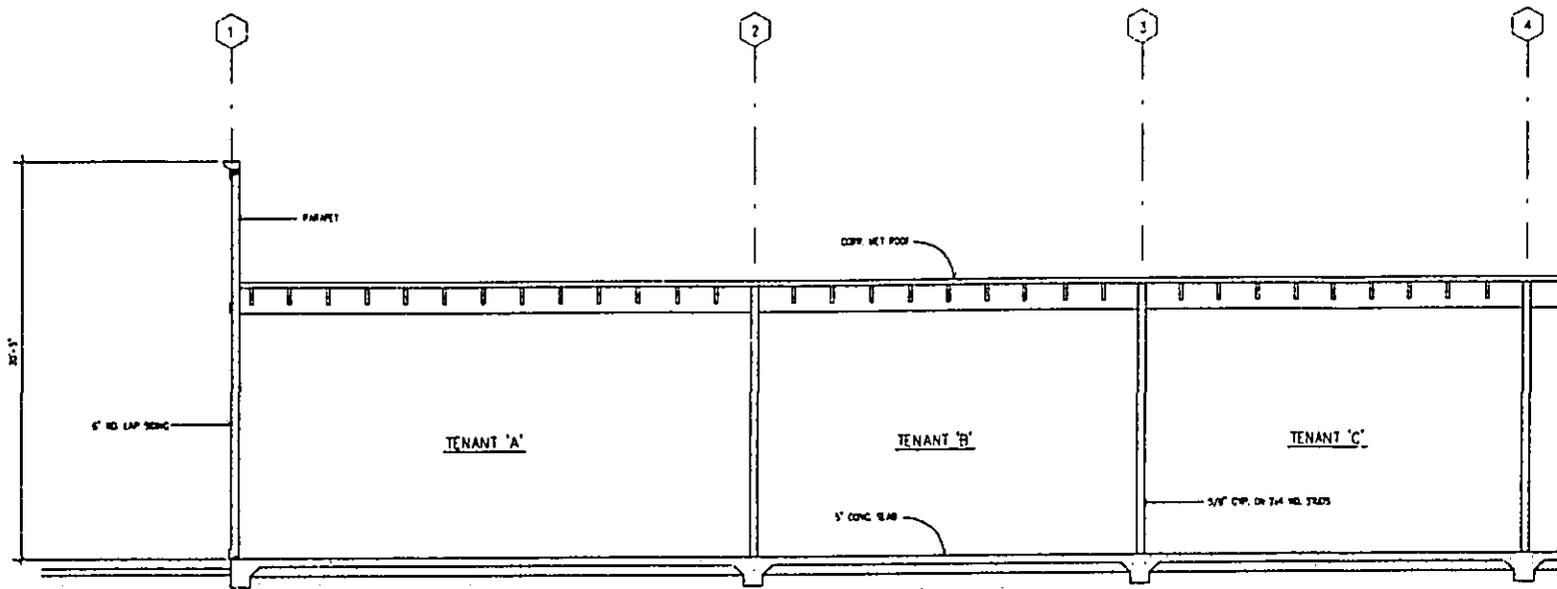
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Signature  
Name, Certificate and date and state of expiration as set forth in the public records of the State of Hawaii.

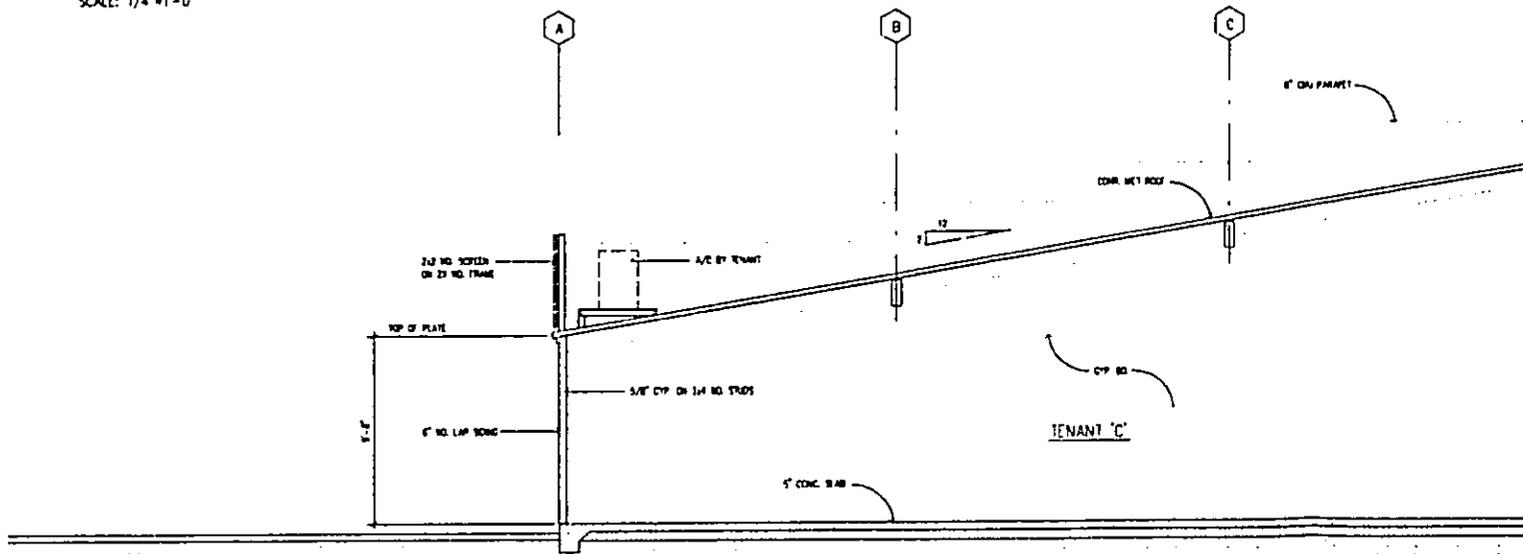
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Prepared by: EPT  
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**A-4**



BUILDING SECTION A-A  
SCALE: 1/4"=1'-0"



BUILDING SECTION B-B  
SCALE: 1/4"=1'-0"

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# 612 FRONT STREET

LAHAINA, MAUI, HAWAII  
TMK: 4-8-08:63 & 48

BUILDING  
SECTIONS



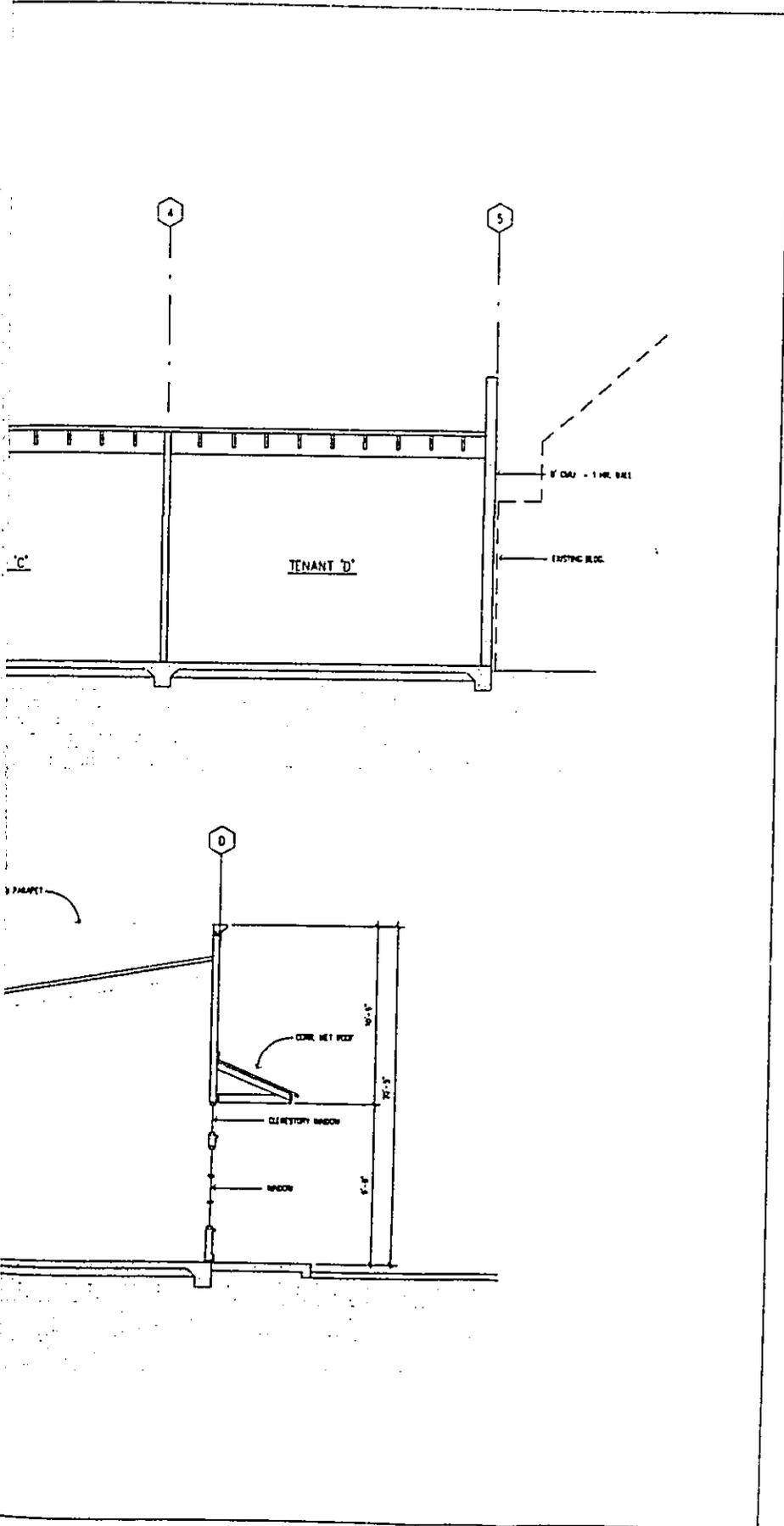
This seal was obtained by me in order to  
accept and construction of the project  
and to make my signature. (Transfer of  
responsibility to others shall be  
forfeited) or must accompany the  
Professional Engineer, Architect,  
Surveyor and Landscape Architect's

Signature: \_\_\_\_\_  
Name: Eric S. Tanguich and shall  
be valid only if signed by me before  
the seal is used.

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# ***Appendix B***

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***Archaeological  
Inventory Survey***

**Archaeological Inventory Survey Report for a  
Portion of Land in Puako  
*Ahupua'a*, Lahaina District, Lahaina, Maui  
(TMK 4-6-08: 53 and 48)**

**Prepared for:**

**Mr. John Kean  
Kihei, Maui**

**Prepared by:**

***Xamanek Researches  
Pukalani, Maui***

**Erik Fredericksen  
Demaris Fredericksen**

***March 26, 2002***

## ABSTRACT

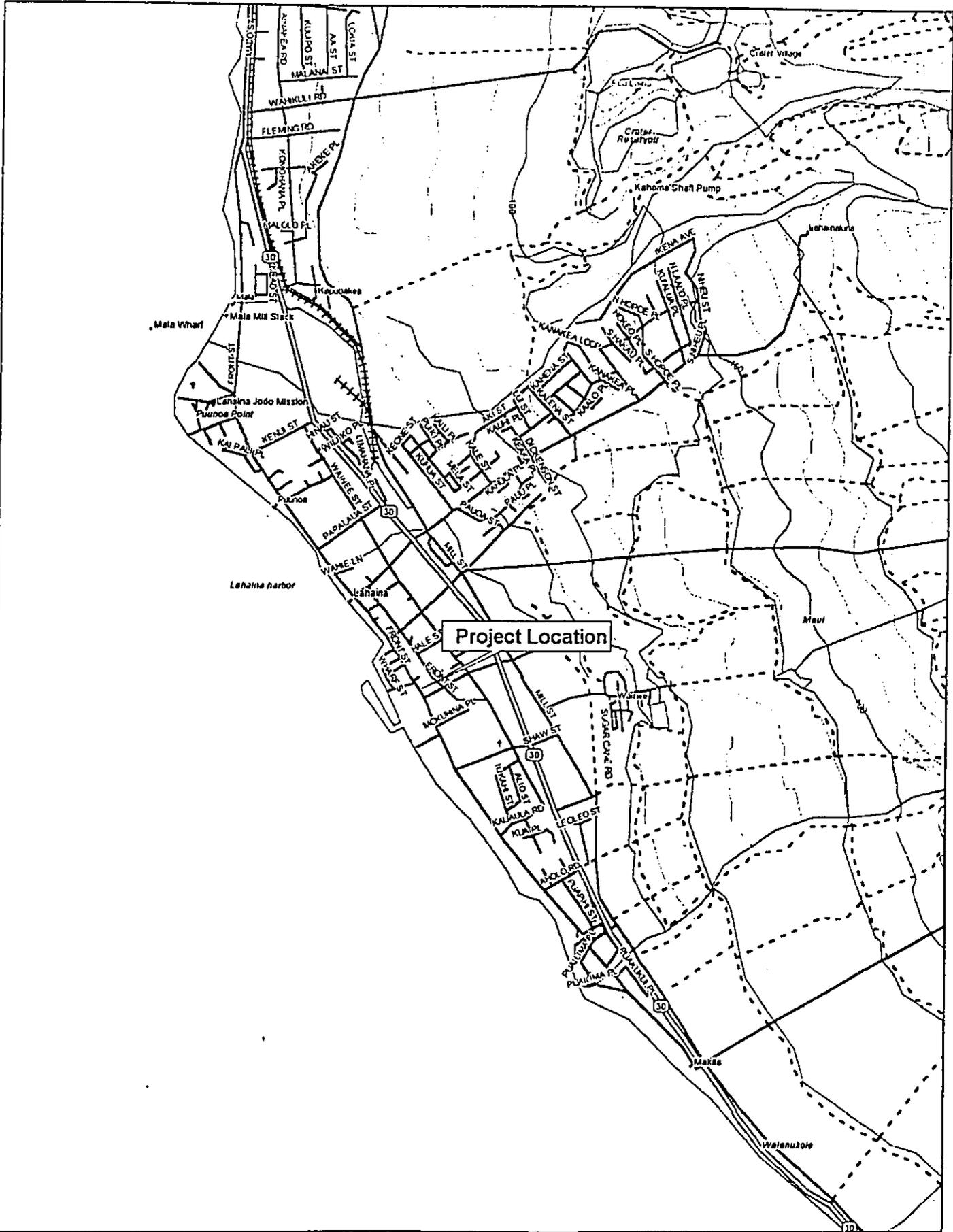
Xamanek Researches carried out an archaeological inventory survey on a portion of land in Lahaina, Maui in September 2001. The project area is located in Puako *ahupua`a*, Lahaina District, Island of Maui (TMK: 4-6-08: 48 and 53). The study area is composed of two parcels, one of which is currently paved and operated as a pay parking lot (TMK: 4-6-08: 53). Consequently, it was only possible to assess the vacant parcel. Subsurface testing on the c. 7,200 square foot parcel consisted of 6 backhoe trenches.

During the course of testing, it was determined that the parcel had been filled during the early to mid-20<sup>th</sup> century. An 1860 map of the general area indicates that the study parcels lie in a portion of the old canal system of Lahaina. Intact beach sand deposits were located on the eastern part of TMK: 4-6-08: 48, and the ground water table was encountered between 110 and 130 cmbs. One previously unidentified post-contact site consisting of four refuse pits and an informal water worn pavement were located. Material culture remains found in association with these features date from the early to mid-20<sup>th</sup> century. This site has been designated SIHP No. 50-50-03-5203.

Site 5203 qualifies for significance under Criterion "d" of Federal and State Historic Preservation guidelines because of its information content. This site has yielded adequate information and data recovery work is not recommended. However, additional archaeological work in the form of monitoring is recommended for Parcel 48, because it contains intact deposits of marine beach sand. In addition, archaeological inventory level work in the form of monitoring is recommended for the paved parking lot (Parcel 53) in the event that subsurface excavation activities are planned.

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**DELORME**

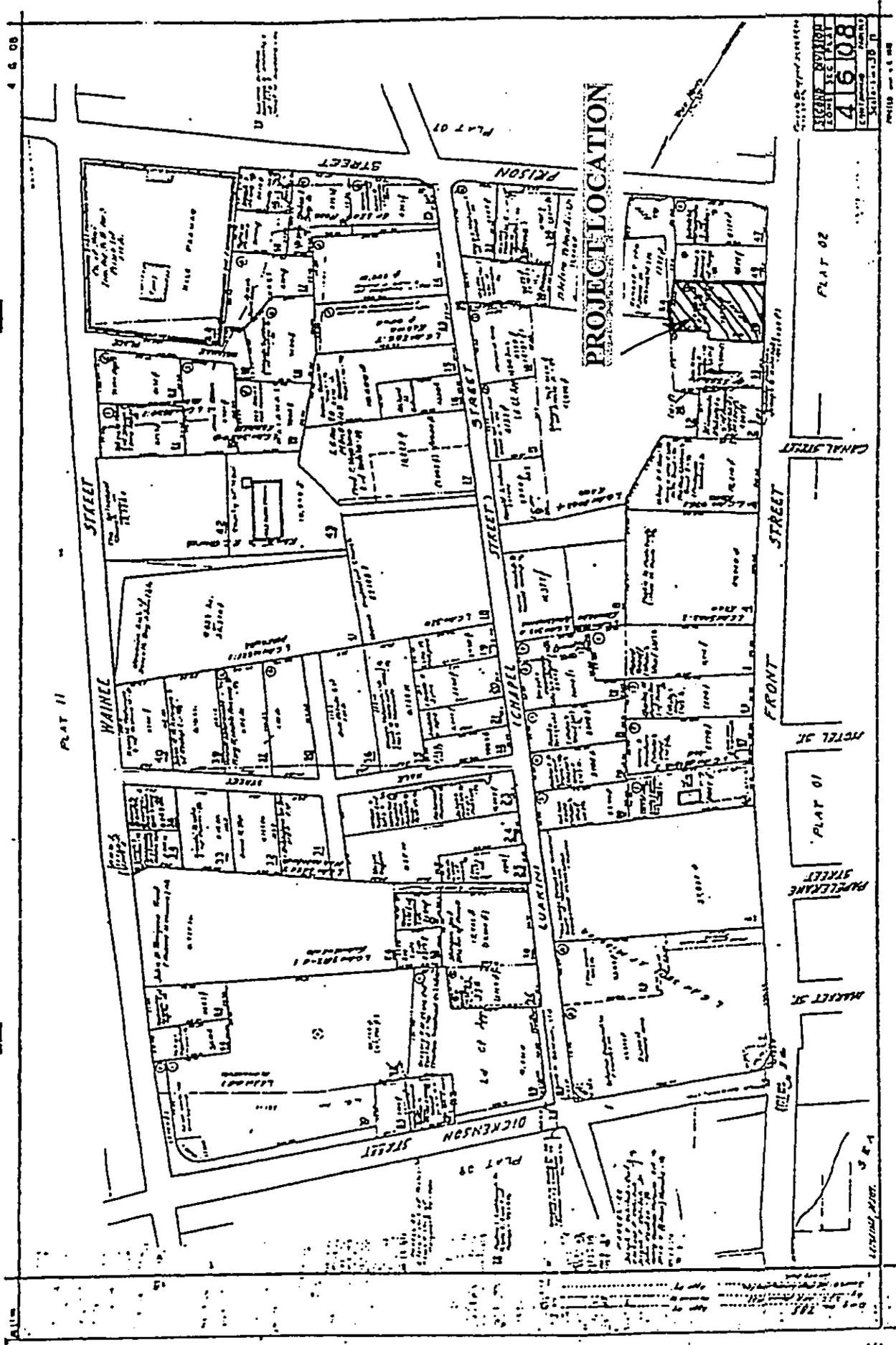
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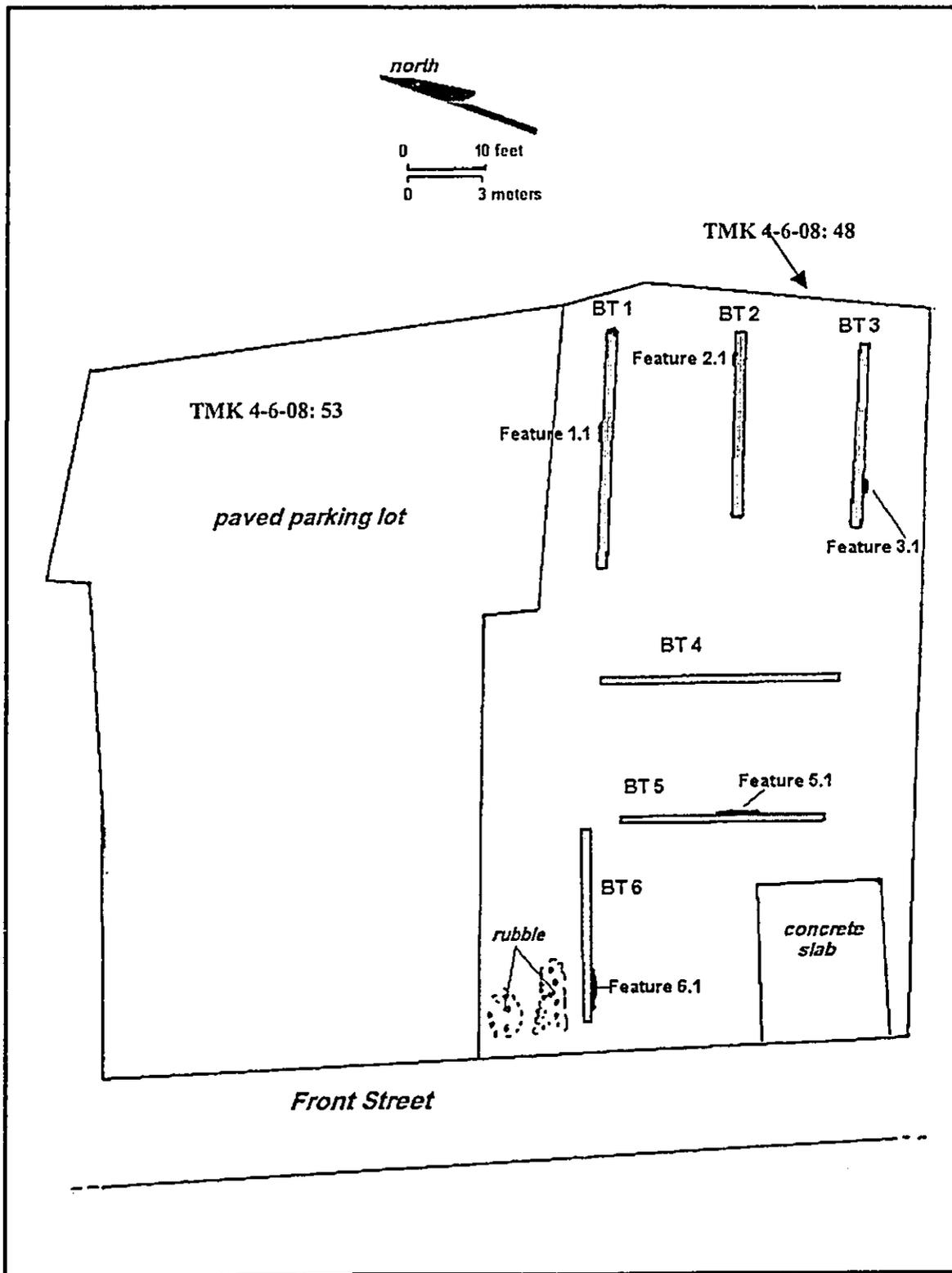
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1" = 609.61 m





Map 2 - Tax map—Zone 4, Section 6, Plat 08—State of Hawaii Tax Division.



Map 3 – Plan map showing locations of backhoe tests, on study parcels.

## INTRODUCTION

Mr. John Kean of Kihei contacted us in the late fall of 2001 about carrying out the necessary archaeological work for two parcels of land in Lahaina (TMK: 4-6-08: 48 and 53). The project area is located in Puako *ahupua`a*, Lahaina District, Maui. Front Street forms the western boundary of the study area. The northern, eastern and southern portions of the two parcels are bordered by business and residential properties.

The bulk of the project area has been heavily impacted by previous activities associated with the construction of a dwelling (demolished) on TMK: 4-6-08: 48<sup>1</sup>, and an existing private paved parking lot on TMK: 4-6-08: 53.

### Study Area

The project area is located in the Lahaina National Historic Landmark<sup>2</sup>, and lies adjacent to and *mauka* (east) of Front Street. The flat project area lies c. 6 ft. AMSL. Annual precipitation on this part of leeward Maui is typically less than 15 inches per annum (Juvik and Juvik, 1998).

The soils of the general vicinity of the study area are classified as Ewa series. The particular soil type (EaA) is a fine-textured, silty loam associated with a 0 to 3% slope. Runoff is very slow and erosion is slight. Plants have trouble establishing themselves in these soils unless they are irrigated (Foote et al., 1972, p. 169).

The shore of this part of the island typically has barrier beach sand berms, which prevent water from entering the ocean, except in a limited number of places. This causes ponding behind or inland of the sand formations, resulting in marshy conditions in low elevations. The study parcels themselves appear to be located on what was part of the old canal waterway system of Lahaina in the mid-1800s (See Maps 4 and 5 of this report).

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<sup>1</sup> The tax map shows the previous owners as being Tadashi Sato and wife Kiyoko. This house may well have been their dwelling, probably razed in the mid-1960s.

<sup>2</sup> Lahaina National Historic Landmark was established in September 16, 1974.

## BACKGROUND RESEARCH

The name—Lahaina—is said to refer to the “cruel sun”—which is probably a reference to the droughts that effected the surrounding area from time to time (Pukui et al., 1974, p. 127). In precontact times, Lahaina itself was apparently a garden-like area, with taro *lo`i*, ditches (*auwai*) and separating embankments creating a verdant landscape. Brackish-water and fresh water ponds (*loko*), were also present. The largest and most significant of these is Loko o Mokuhinia, which lies about 250 meters to the southeast. Given the limited rainfall on the leeward side of the island, the garden-like quality of Lahaina was a testament to the skill and ingenuity of Native Hawaiians farmers.

### Traditional history

The study area lies within the *ahupua`a* of Puako, and the smaller division or *ili* of Kiloani. This was a residential area in old Lahiana, and lay just to the north of the *ili* of Pakaia.

Pakala was the home of many high ranked chiefs and later on, members of the Royal family. It is sometimes referred to as Kalua`ehu (pit of the red one), which is in reference to the lizard goddess or *mo`o*, associated with the adjacent Loko o Mokuhinia. This lake was traditionally connected with the Pi`ilani family of Maui through the *mo`o*, or lizard—a deity or *aumakua* that traditionally took female form.

The *mo`o* of Loko o Mokuhinia were known by several names. One name is Kihawahine. This is also the name of the Maui chiefess who was a daughter of Pi`ilani. Here could be part of the connection that establishes the link to the Pi`ilani family. Kihawahine was the older sister of Kiha-a-Pi`ilani, a future king of Maui. Their sister Pi`ikea married Umi-a-Liloa, the descendents of whom formed the royal line on the island of Hawaii (Klieger et al., 1995, pp. 20-21). Kihawahine lived most likely in the latter part of the 16<sup>th</sup> century.<sup>3</sup>

Upon the death of Kiawahine, it is said that she was transformed into the *mo`o* named Mokuhinia. Kamakau (1991, p. 85) records that Chiefess Kihawahine was transformed into a *mo`o* named Kalanainu`u. Mary K. Pukui maintains that Kihawahine was deified and made a *mo`o* goddess after her death. This *mo`o* goddess became one of Kamehameha I's favorite goddesses, and served as a “land holder” deity (Klieger et al.,

<sup>3</sup> Another factor linking the Pi`ilani family with Loko O Mokuhinia, is the location of Pi`ilani's residence, which lies directly *makai* (Klieger et al., 1995, p. 20-21)

1995, p. 22). According to Kamakau (1991, P. 85) Kihawahine, as a *mo'o*, had the *kapu moe*, and was the *akua* of the high chiefesses of Maui during Kamehameha I's time.

A possible representation of Kihawahine was recovered from the Island of Hawaii in 1885<sup>4</sup>. It is reported that Kamehameha I carried this image around the islands on the Makahiki circuit. The female image had bleached hair and was once decorated with feathers. Its eyes were inlaid with pearl shell, and human teeth lined the mouth. It is also stated that the image was wrapped in a turmeric-dyed *tapa* cloth (Klieger et al., 1995, p. 26).

### The Kamehamehas in Lahaina

In the latter part of the 18<sup>th</sup> century a series of battles intended to unify all of the islands ensued, seriously disrupting the landscape and lifestyle of many areas of the archipelago. Lahaina did not escape this destructive struggle. Klieger comments on the warfare (1995, et al., p. 14):

*"In the mid-eighteenth century, Alapa'i-nui of Hawaii went to war against the O'ahu Mo'i Peleioholani on Maui, and focused his energies on Lahaina. The tactics were somewhat unusual—Alapa'i dried up the streams of Kaua'ula, Kahana, and Kahoma (probably the sources of water for Mokuhinia), toppled the terraces and 'auwai, and destroyed the productive capabilities of the lo'i system below (Kamakau 1992:74). It is not certain if Lahaina agriculture and aquaculture rebounded between the numerous battles for interisland supremacy. But years after Alapa'i's destructive path, Lahaina productivity still seemed marginal: Portlock confirmed in 1786 that western Maui had been devastated by the wars of unification (cited in Speakman 1978: 72-73). Lahaina then appears to have had little in the way of provisions to offer the passing explorers, perhaps much less to feed itself."*

In 1795, Kamehameha returned to Lahaina to provision his war fleet before continuing on to conquer the islands of Moloka'i and Oahu. Following the unification of those islands, between the years of 1798 and 1802, Kamehameha commissioned the construction of a "Brick Palace" which was built at Keawa'iki point in Lahaina. The building was reported to have been built by two foreigners—Mr. Miller and a man named "Black Jack" Keaka. They had been living on Oahu prior to Kamehameha's invasion of that island in 1796, and following the battle of Nuuanu, they joined his side. The "Brick Palace" structure was two stories in height, and measured 41 by 15 feet<sup>5</sup> on the outside.

Kamehameha used the "Brick Palace" as his encampment headquarters during his residence on Maui in the year of 1802, while waiting for the assembly of his fleet of war canoes to carry out the invasion of Kaua'i. Several historians suggest that the building was built as a residence for Queen Kaahumanu, but she apparently refused to live in it. She instead preferred to live in a traditional *hale pili* located a few feet to the south. A

<sup>4</sup> The image of Kihawahine was drawn by Robert C. Barnfield, and is shown in Klieger et al., 1995, p. 25.

<sup>5</sup> Several historians gave the measurements as 40 by 20 feet. The actual measurements were established during archaeological excavations undertaken in 1965 (Fredericksen and Fredericksen, 1965).

retinue of about 1,000 people accompanied the King and Queen during their stay. Their encampment probably extended southward to Loko o Mokuhinia.

By this time Lahaina had rebuilt most of its war-ravaged infrastructure, and was once again productive. A large taro pondfield *mauka* (inland) of the "Brick Palace" produced this sacred food for the royalty, and is referred to as the Royal Taro Patch in several sources.<sup>6</sup>

After leaving Lahaina to wage an unsuccessful battle to gain control of Kaua'i, Kamehameha established his court in Honolulu. On several occasions he revisited. In 1812, he stopped to collect tribute at the time of the Makahiki, and to appoint his brother-in-law Kahekili Ke'eaumoku<sup>7</sup> as governor of Maui (Klieger et al., p. 17).

Captain Louis Claude Desaulles de Freycinet visited the encampment at Keawa'iki in 1819, shortly after the death of Kamehameha. He observed the following (Klieger et al., p. 17):

*"We landed at Rahaina and immediately visited the water supply [probably Pahumanamana Stream] and chose a suitable place to set up our observatory. The governor, Keeaumoku, came with us, and allowed us to use the platform of a neighboring morai [heiau], and of a red brick house to set up our instruments. The red brick house was built by Tamehameha, who had originally wanted it to be a store, but the construction was so defective that, hardly finished, it began to sag in plain view. To the south was the habitation of the priests, and right next to it, a morai, constructed on a platform of stones, forming a sort of platform on the beach. The governor made our observatory taboo, so that we would not be bothered by curious onlookers. [Freycinet 1827-1839]"*

---

<sup>6</sup> Akoni Akana, President of the Friends of Moku'ula, and Hawaiian cultural specialist, says that the reference is because the King himself actually worked taro there, demonstrating to his people the value and sacredness of physical labor (personal communication, 1998).

<sup>7</sup> He was the brother of wives Ka'ahumanu and Kaheihimalie (Barrere, 1975, p. 23).



Photo 1 – View of Moku'ula and Mokuhinia pond in c. 1910. Photo from the Hawaii State Archives (in Kupau, 2001, p. 62).

While Kamehameha I moved the center of government to Honolulu, other members of the royal family remained in Lahaina. Kamehameha I died in 1819, and his son, Liholiho was crowned Kamehameha II. Liholiho's mother, Keopuolani, the last of the female *ali'i* whose power was sacred, continued to reside in Lahaina. In 1823 she died at the age of 54. Prior to her death she had requested a Christian funeral—issuing the strongest prohibitions against all traditional funeral customs—save wailing (Klieger

et al., p. 33). She was probably entombed at Halekamani, which was located near the beach in the royal compound of Pakala. The Reverend Hiram Bingham wrote that:

*"...her remains were deposited in a very tight stone and mud house. Around the house was built a stone wall from 6 to 12 feet thick, and from 4 to 10 feet high. This was a great work. The stones were all carried by hand, a distance of about a mile, and then laid in clay."* [Ibid., p. 36]

Other observers noted that mourners formed an encampment around the tomb, in an effort to remain close to the beloved queen. Kaumuali'i, the ruler of Kaua'i and husband of Kaahumanu, died in 1823. He had requested prior to his death that he be laid to rest beside his friend, Keopuolani. In 1825, when the bodies of Kamehameha II and his queen, Kamamalu, were returned to the islands following their deaths from measles in England, their coffins were taken ashore at Lahaina. Here they lay in state for a short time—next to the coffin containing the remains of the king's mother. The entourage was joined by Princess Nahi'ena'ena and Kauikeaouli, now King Kamehameha III, for the final funerary trip to Honolulu.

Princess Nahi'ena'ena lived near her mother's tomb, in Pa Halekamani, preferring Lahaina to the capitol in Honolulu. She was married at Waine'e Church in 1835 to her father's daughter's (Kiliwehi) son, a young Big Island chief named Leleiohoku. Following her marriage she then moved to Honolulu, and soon became pregnant. Some said that the child was fathered by Kauikeaouli, as their marriage would have been customary had the missionary influence not been so pervasive. Nahi'ena'ena gave birth to a child who died shortly afterward. She never recovered from the pregnancy, birth and death of her child, and died herself on December 30, 1836. Her body was returned to Lahaina, and a stately funeral procession wound through the town ending at Halekamani. There her remains were deposited next to those of her mother (Klieger et al., p. 52).

Kamehameha III (Kauikeaouli) immediately began to construct a mausoleum for his beloved sister at Moku'ula, the royal island in Loko o Mokuhinia. When completed her remains and possibly those of her deceased child, along with the remains of Keopuolani and other *ali'i*, were relocated there. Kamehameha III lived on the island for the next eight years—distancing himself from the pressures of government that existed in Honolulu, and allowing others to attend to the affairs of state.

In 1837, a missionary wife named Andelsia Lee Conde wrote about the tomb at Moku'ula:

*"...The room was a large chamber elegantly furnished with chairs, tables and large mirrors set under them, beautiful china matting and a small organ upon which he played for our entertainment. Nearly in the center of the room was placed a bedstead nearly the magnitude of 3 common bedsteads. Upon which was a bed neatly spread, and upon this were placed the three coffins, side by side, most splendidly ornamented. Each of these corpses were enclosed in 3 coffins—the first zinc—the second lead and the third or outside one of wood. These were covered with scarlet silk velvet, put on with a multitude of brass nails—gilded plates, with their names & c. upon them, and various*

*gilded ornaments, that gave us almost the impression but that of a tomb. ...*" [cited in *Ibid.*, p. 55]

King Kamehameha III eventually married Kalama, who bore him two sons, both of whom died somewhere between 1839 and 1842.<sup>8</sup> The sister of his new *aikane*, Keoni Ana (John Young II) bore Kamehameha III twin boys, although the two were not married in the Christian sense. One of the twins was Albert Kunuiakea Kuka'ilimoku (1851-1903), the only royal child that survived infancy. Although raised by Queen Kalama, the grandson of Kamehameha I was treated with scorn by the Calvinist Christians, even though he served as a House representative in 1880 (*Ibid.*, p. 65).

In 1840, Kamehameha III began building a western-style coral-block "palace" called Hale Pi'ula (House with the Iron Roof). A reference to the structure is found in Thrum's Almanac (1907, p. 173):

*"There was an attempt at a building of a so-called palace which answered for a time as the show place, a name which should properly attach itself to royalty. It was also occupied part of the time by the court of the kingdom. It was more of a curiosity than an adornment. It seemed out of place amid all the tropical profusion and exuberance of natural life to see this building intruding into the atmosphere. With some idea of making the building larger, they undertook to double its length and made a still further blotch on the landscape. Fortunately so far as beauty was concerned it was partly dismantled and never finished and remained quite a conspicuous figure on the beach. However, in later years, they had to transport its stones to the premises of the old for where they now appear in the government building which is much more in harmony with the surroundings."*

The Polynesian, in a July 25, 1846 article, reports that:

*"Lahaina contains many excellent and unoccupied houses which would find ready tenants could they be transported to Honolulu. The palace, as a huge graceless, incomplete, two-story building, encircled by a wide verandah...is a monument of a waste of government means which do credit to some old and dissolute monarchy verging to its downfall. Its site is the sandy beach, instead of, as it might have been had taste been consulted, a quarter of a mile back, amid one of the many beautiful groves that give Lahaina so picturesque an appearance. Mr. Baldwin's church and the adjoining house are most delightfully situated in this respect and are quite unique in their tout ensemble, for Hawaiian scenery. The white turrets of the church peer through the trees most prettily. But this palace, on which work seems to be still going on, is on a scale to accommodate a population in itself, nearly as large of that of Lahaina. The interior is not only wretchedly arranged as to rooms, but positively mangled; special pains being manifest to prevent ventilation, and make as many ill-shaped and comfortless apartments as possible."*

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<sup>8</sup> Named Keaweawe'ulaokalani I and II, these were the last immediate family members of Kamehameha III to be placed in the tomb at Moku'ula (Klieger et al., p. 65)

Judging from these comments, few were impressed with the building. By 1848 it was being used as a courthouse—until it was severely damaged by *kauaula* winds in 1858. Some of the remaining stones and coral blocks were incorporated into the Lahaina Court House, which still stands in Lahaina overlooking the small boat harbor (Fredericksen et al., 1988). Other coral blocks found their way into structures elsewhere in Lahaina.

In 1845 the royal court moved back to Honolulu. Kamehameha III took his trusted friend Keoni Ana and his wife, Julia Alapa'i<sup>9</sup> along with him. In that same year, upon the death of dowager Queen Kekauluohi--*hanai* mother of Queen Kalama and the last female *kuhina nui*<sup>10</sup>--Kamehameha III appointed Keoni Ana *kuhina nui* (Klieger et al., p. 69).

Keoni Ana became the Minister of Interior, and carried out the land reform known as the Mahele in 1848. King Kamehameha III died on December 16, 1854—leaving behind a constitutional government and a totally new land system (Klieger et al., p. 71).

### Land Commission Awards

Lahaina contains many Land Commission Awards, granted during the Mehele of 1848, and concentrated in a relatively limited space. Sixty-three are listed on the *mauka* and *makai* sides of Front Street, from Baker Street on the north, to Shaw Street on the south—a distance of c. one mile. Of these all were houselots, a few with associated *lo'i*. One Protestant Mission parcel was described as a canoe house (McGerty, Dunn and Spier, 1998, pp. 20-22).

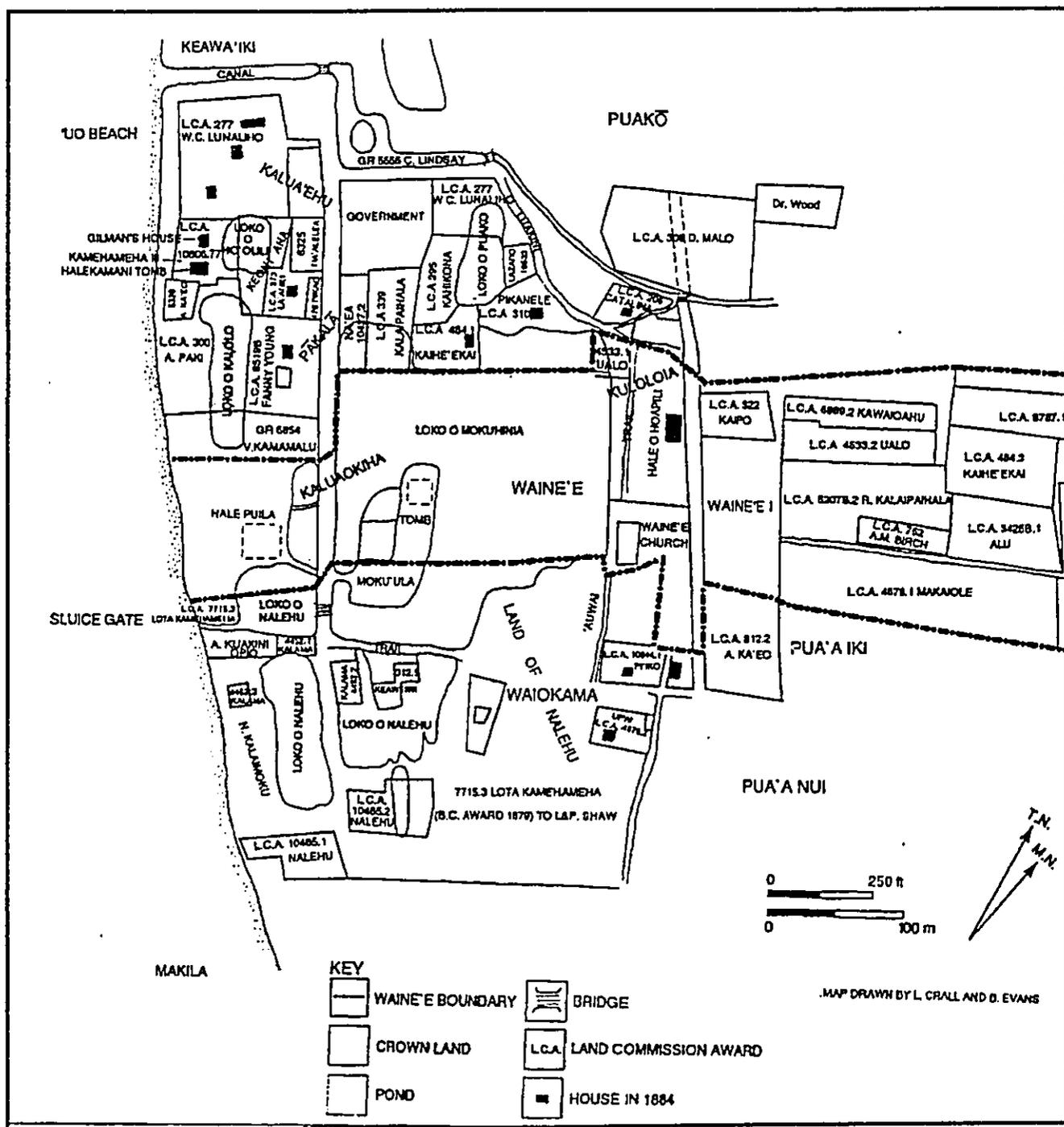
The study area is part of a Grant 5555 to C. Lindsey, according to the tax map (Map 2).<sup>11</sup> Directly *mauka* is LCA 5483, *apana* 4, which was awarded to J. Kaeo for use as a houselot. The Indices of Land Commission Awards lists the size as “2 acres 7 rods”. *Apana* 3 of the same award lies c. 200 feet to the north along Front Street. LCA 975, *apana* 1 is shown as being awarded to I. Kaeo, and is just c. 100 feet or less to the north. Other LCAs on the *mauka* side of Front Street to the north included lots awarded to the American Protestant Mission (LCA 387) and Keone Ana, a.k.a. John Young II (LCA 8515). Keone Ana's lot was used for habitation, and included stone houses, a fish pond, *kalo* patches and an enclosing adobe wall (McGerty, Dunn and Spier, 1998, p. 35). A springhouse was located next to LCA 387, and was classified as a *lihi*—a piece of land usually between two *ahupua'a*, and of uncertain ownership (Ibid.). The tax map (Map 2) shows the location of these grants, and the location of the springhouse.

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<sup>9</sup> Julia Alapa'i is the granddaughter of Alapa'i-nui, the king of Hawaii who ravaged Lahaina in the mid-1700s.

<sup>10</sup> Kaahumanu was the first, followed by Kina'u. Kekauluohi was appointed *kuhina nui* after the death of Kina'u in 1838. Kekauluohi was the daughter of Kaheiheimalie, who was a sister of Kaahumanu. Kaheiheimalie was married to Ulumaheihai Hoapili, the governor of Maui. Kekauluohi's father was a half-brother of Kamehameha I (Kame'eiehiwa, 1992, p. 125).

<sup>11</sup> It appears that this grant included a part of the old canal system of Lahaina in c. 1848—see Map 4.



Map 4 - Lahaina in c. 1848—adaptation from Mahele documents and the S.E. Bishop survey map of 1884. (Klieger, et al., 1995, p. 74)

### Land Use of Land Commission Awards in Project Vicinity

LCA Number	Awardee	'Ili / Ahupua'a	Land Use
5483: 3	J. Kaeo	Puako	Houselot
387	A.P. Mission	Paunau	2 houselots
8515	Keone Ana	Puako	Houselot
975	Iosua Kaeo	Puako	Houselot
4602	Hihio	Puako	Houselot
299	Kanehaku	Puako	Houselot

### Discussion

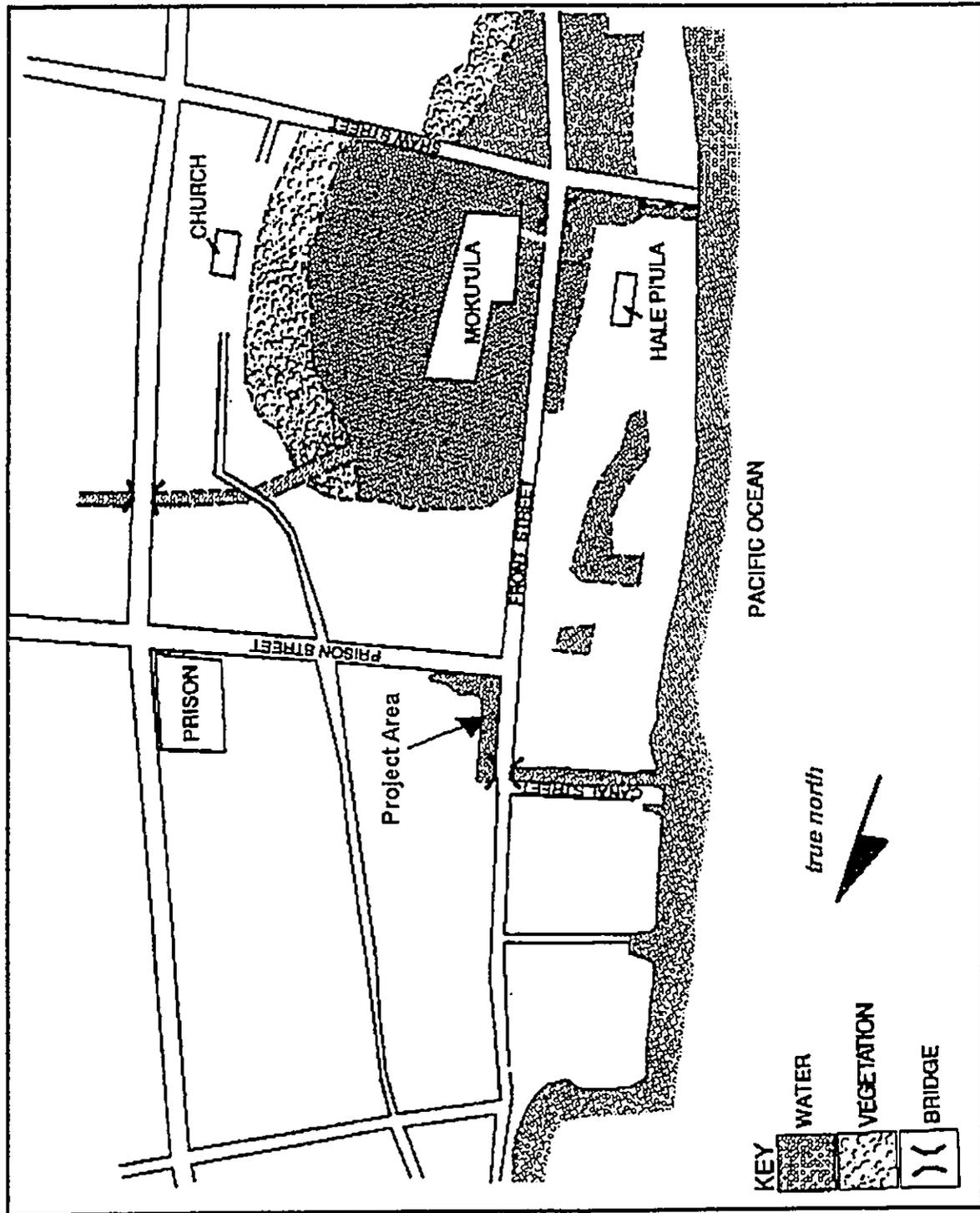
The significance and sacredness Lahaina was established long before the unification of the islands by Kamehameha I. The Pi'ilani family lived in the Lahaina area, *makai* of Loko o Mokuhinia, probably near the location of Kamehameha III's Hale Pi'ula. Another connection to Mokuhinia comes with the legendary transformation of Pi'ilani's daughter into the *mo'o*, Kihawahine. This deity became the *'aumakua* of Kamehameha the Great, who probably carried an image of her with him as he traveled around the island at Makahiki time. Prior to the arrival of Kamehameha, Kahekili had been ruler of all of the islands except for Hawaii. He maintained his home and royal court at Lahaina until his death in 1794.

After Kamehameha made Lahaina the capitol in 1802, the area between the point (Keawa'iki) on which he built the "Brick Palace", and Loko o Mokuhinia became the residences of chiefly families associated with the Kamehamehas. Keawa'iki lies *makai* of the present study area.

The royal court moved to Honolulu, but Lahaina still remained an important place, especially after the succession of King Kamehameha III to the throne. During the tumultuous times following the deaths of Kamehameha I and II, Kamehameha III often retreated to Lahaina and Lake Mokuhinia and the royal island within the lake—Moku'ula. On this island he built a mausoleum for his mother, sister, and other *ali'i* connected with the royal family.

After the death of his sister, he remained in Lahaina until 1845, when the court was permanently moved to Honolulu. Lahaina continued to be the residence of important people throughout the 19<sup>th</sup> century. King David Kalakaua held title to property north of Loko o Mokuhinia, and his heirs kept title to the land for two decades into the 20<sup>th</sup> century. William Charles Lunalilo (later King Lunalilo) also held title to the property to the south of the study area at one time.

By this time, forces of Christianity and commercialism had transformed the Hawaiian system of social stratification. Social status began to be based on acquired wealth, rather than on birth and rank. Chinese and Japanese laborers were imported to



Map 5 – Map of Lahaina c. 1860. Registered Map #500, State Survey Office. (Adapted from Klieger, p. 110). This map shows the water systems extant at the time. Note the location of the present study area in part of the canal system.

work in the sugar industry, and these immigrant groups settled in ethnic clusters throughout Lahaina. The sacred Lake Mokuhinia dried up as water was diverted to

irrigate sugarcane production in the fields to the east, as Lahaina shifted to more of a commercial than governing center toward the latter half of the 19<sup>th</sup> century.

## PREVIOUS ARCHAEOLOGICAL STUDIES IN LAHAINA

The first archaeological work in the Lahaina area was the inventory of religious structures compiled by Winslow Walker in 1929 and 1930 (Walker, 1931). He listed 3 *heiau* in the Lahaina environs—Wailehua *heiau*, located at Makila Beach in southern Lahaina (Site 50-50-03-6), Halekumukalani *heiau*, located in the Puehuhunui cane fields above Lahaina (Site 50-50-03-7), and Apahua *heiau* (Site 50-50-03-08) located in the cane fields above Waine`e.

Wailehua *heiau* is the structure that was dismantled at the death of Queen Keopuolani (Majors et al., 1996, p. 13). The stones were carried from its location at the shoreline to the tomb, Halekamani, which held the remains of the queen until they were redposited in the mausoleum on Moku`ula. Wailehua *heiau* is described as measuring 130 by 80 feet in Thrum (1909), and was said to have been built by Kauhi-ai-moku-kama, the son of Kekaulike, in or around 1738 (Walker, p. 109).

Halekumukalani *heiau* was a small sacrificial structure (*luakina*) in the cane fields above (*mauka*) of the Pioneer Mill Company railroad. It was totally destroyed at the time of Walker's survey (Ibid.). Apahua *heiau* is another structure that has been totally destroyed by cane cultivation. According to Thrum, it was built by "... Hua-nui, about 50 years later than Hua-a-Pohaku-kaina (Ibid.).

### Brick Palace of Kamehameha I

In 1965, Xamanek Researches (Fredericksen and Fredericksen, 1965) undertook a project to determine the nature and location of the "Brick Palace" of King Kamehameha I on Keawa`iki point. With the aid of several historical documents, the location was narrowed to an area immediately *makai* of the Lahaina Library. A *heiau* was said to have existed near the mouth of Pahumanamana Stream, and probably served as the location for the structure. Finds from subsurface testing included the foundation of the brick building. It measured 41 feet by 15 feet.

The remaining brick walls were 1 to 4 courses in height, and the bricks had been arranged in what was called "British bond". The bricks were not imported, but rather manufactured of local clays, probably from the nearby taro pondfield, sometimes identified as the "Royal Taro Patch". They were primitively fired, resulting in rather poor quality bricks—some under-fired and some over-fired. Shapes were not always consistent.

The structure was built on a stone platform, probably the unnamed *heiau*, which had been paved with small, waterworn pebbles. The bricks were bonded with a pinkish-colored, poor quality mortar, which was produced by burning coral to lime, and mixing that lime with beach sand and soil. Because of the lack of a solid foundation, the brick structure began to crack and sag, almost immediately after its completion. Consequently, to cover the cracks, the outside of the building was covered with a lime and sand plaster sometime in the 1820s or 30s.

The archaeological findings corroborated historical observations in terms of the general location, and the nature of the construction. However, the true size of the building was somewhat different from historical records, as most described the structure as measuring 20 by 40 feet.

In 1969 Xamanek Researches re-excavated the "Brick Palace" walls to determine what portions, if any, were still in a state of preservation that was good enough for public display. Additional excavation was also undertaken in the interior of the structure, in order to obtain additional archaeological details and information. Portions of the walls that were still reasonably intact were prepared for display. In the northwest corner of the structure there were 3 to 4 courses of brick that were still *in situ*, and in a good state of preservation. These were exhibited in an enclosure, which was covered with plexiglass. Unfortunately, the prevailing public attitude at that time was not focused on history or preservation, and within a few months of completion of the exhibit, vandals had broken the plexiglass dome covers, exposing the contents. Subsequently, deterioration of the architectural remains of the palace within the display areas occurred (Fredericksen and Fredericksen, February 1970).

### **Hale Pi'ula**

In 1988, Xamanek Researches had the opportunity to conduct subsurface testing at Armory Park—the general location of Hale Pi'ula, the large stone and coral-block "palace". King Kamehameha III began construction of this structure in 1840. Portions of the park that were covered with paved parking and buildings could not be tested at the time. The foundation of the structure was not located, but a large cairn containing masses of burned coral was located on the *makai* portion of the study parcel. This probably represented a "lime kiln" which produced the lime that was used in the construction of the building. It was predicted that the foundation of the building lays somewhere under either the concrete slab on which the modern buildings are situated, or under the parking lot near Front Street (Fredericksen et al., November 1988).

### Other archaeological studies in Lahaina Town

Xamanek Researches has conducted two additional archaeological projects in central Lahaina—one on Lahainaluna Road (Plantation Inn Site, Fredericksen, et al., August 1989; March 1990) and another on the *makai* side of Waine'e Street near the intersection of Dickenson Street (Aus Site, Fredericksen et al., June 1989).

The Plantation Inn Site was found to be on former cane producing land, and had nearly a meter of topsoil that had been disturbed by this historic activity. A few precontact artifacts were recovered during monitoring for the excavation of the swimming pool, but it could not be determined whether they had been *in situ* at the time of their discovery. A large cube-shaped block of coral was also recovered, and is probably one that came from the ruins of Hale Pi'ula (Fredericksen et al., March 1990).

The Aus project (Site #50-50-03-1797) was primarily data recovery and the monitoring of a large excavation for the basement parking area of a business office building on TMK 4-6-09: 21. The finds were almost exclusively historic, and were analyzed and placed into 4 periods: Late 18<sup>th</sup>—Early 19<sup>th</sup> Century; Mid-to-Late 19<sup>th</sup> Century; Early 20<sup>th</sup> Century; and Recent. The earliest artifacts consisted of a mix of historic and indigenous artifacts that would be expected at that transitional time period. The indigenous artifacts include, *leho he'e* (octopus lures), a stone bowl probably used for preparing bait, and adze fragments. Mixed with these were fish debris, and 4 flared-lip case gin bottle portions. Also a hobnail-embossed ink well, typical of those used in the late-18<sup>th</sup> century, was recovered. It was in 2 pieces, each found in a different part of the study area. The other time periods were represented by bottles, porcelain and crockery, which were dated by style, trademarks and manufacture technique (Fredericksen et. al., June 1989).

Archaeological subsurface testing for the Burger King restaurant, located between Luakini and Front Streets, was undertaken in 1989 (Kennedy, 1989). This is the site of the old canal on land that was conveyed to Charles Lindsey (Grant 5555—of which the present study parcel is a part), and J. Ka'eo, the husband of Gini Lahilahi Young (Klieger, p. 126). Historic artifacts from the 19<sup>th</sup> and 20<sup>th</sup> centuries, along with building materials were found, including a coral block, a red brick, glass, ceramics and porcelain sherds. No precontact archaeological materials were found. According to Klieger (Ibid.): "All indications suggest that this low-lying area was more recently a swamp, having perhaps earlier been a pond field for cultivation of taro by Ka'eo. The canal apparently provided drainage for parts of central Lahaina in the nineteenth century, and the region was eventually filled in with sand (Kennedy, 1989:6; Ashdown 1975)."

A monitoring program was carried out by Scientific Consulting Services during the Front Street Renovation project that was undertaken in 1997 and 1998 (McGerty, Dunn and Spear, October 1998). The project involved replacement of underground utilities, which required extensive subsurface disturbance. The entire project stretched from Lahainaluna Road to Shaw Street. In the sector that passed in front of the study property between Dickenson and Prison Streets, a pit feature—Site 4442—was located. This was interpreted as a precontact feature, based on recovered cultural material and

context (Ibid., p. 92). An historic map, the Duperrey Map, indicated that the area in which this site was found was in taro and *lo`i* in 1819 (Ibid., p. 33).

In January 1999, during part of the restoration of the Lahaina Courthouse, an inventory survey was carried out by Cultural Survey Hawaii. An inventory survey had been requested by the Maui Cultural Resources Commission, and SHPD, prior to any subsurface disturbance. However, the process was not followed which resulted in monitoring being the original fieldwork at the site (Borthwick and Hammatt, May 1999 [Draft], p. 1).

A subsurface testing phase was worked out and consisted of 4 backhoe trenches, sampling various areas of the Courthouse grounds. It had been assumed that the entire parcel consisted of historic fill. However, it was soon discovered that a precontact substratum was present, in which artifacts such as adzes, coral and urchin abraders, and volcanic glass were located. Radiometric dating placed this occupation at c. AD 1420 to 1660 (Ibid., p. 44). The site is designated as Site 4754.

Xamanek Researches conducted an archaeological inventory survey of a small parcel of land approximately 200 feet north of the present study area (TMK 4-6-08: por. 4). One site—Site 4978 was identified, and consisted of previously disturbed human skeletal remains within a large refuse pit. The pit cuts through 2 layers of sandy loam/loamy sand. A third layer of compact red clay lies underneath. A possibly worked pig tusk was found resting on this clay layer (Fredericksen and Fredericksen, August 2000).

In July of 2000, Xamanek Researches began a monitoring program for the upgrading of electrical service for Kamehameha III Elementary School (Fredericksen and Fredericksen, November 2001). It had been presumed that the construction of the school had sufficiently impacted the subsurface of the site, that monitoring would suffice, rather than a more involved archaeological inventory survey.

With almost the first shovel full of excavated soil, subsurface cultural materials began to emerge, including human skeletal remains. Four sites were identified during monitoring (Sites 4982-84, and 5174). Sites 4982-4984 contained human skeletal material and *in situ* burials. Site 4983 contained a remnant of a habitation layer, as well. Also recovered from Site 4984 were 17 pig tusk ivory beads, which were part of a type of bracelet that was generally associated with persons of high rank and status. Radiocarbon dating placed these finds in the late precontact through early post-contact time frame. These sites are located on LCA 10806:77—Kamehameha III's plot, and LCA 5320:2, belonging to Asa (Iosua) Kaeo. Site 5174 consisted of an *'ili 'ili* pavement and refuse pit that probably dates to the 19<sup>th</sup> century, and may be associated with residences located on Lunalilo's parcel (LCA 277).

#### Moku`ula

By far the most extensive work was conducted in 1993, by Bishop Museum archaeologists Steve Clark and Paul Klieger. They initiated an archaeological inventory

survey and test excavations at the site of King Kamehameha III's residence and family tomb on the island of Moku'ula (Klieger et al, 1995). The abstract (Ibid., p. xviii) states:

*"The site appears to have been very important to Kamehameha III, descended from both Maui and Hawai'i Island families. A few meters west of Moku'ula is the site of the Lahaina palace of the great Maui mo'i Pi'ilani of the sixteenth century, as well as the official palace of Kamehameha III, Hale Piula. Recent historical and archaeological inventory and survey research (Phase I) has rediscovered the location of Moku'ula under Malul'ulu o Lele Park. Archaeological excavations have shown that many architectural and other cultural features from the period of royal residence on Moku'ula are very well preserved. Data further indicate that although the fishpond of Mokuhinia is most likely natural, having been in existence for thousands of years, the island appears to have been largely man-made, probably in the early nineteenth century".*

Human remains were located in three test units. The remains of an articulated human right foot were identified in a location about 50 meters south of the Royal Tomb on Moku'ula. The presence of metal nails suggests that it was contained in a coffin. Another possible casket burial was located directly within the tomb location. It was not tested to determine whether human remains were still present (Klieger and Clark, 1995).

#### **Loko o Mokuhinia and environs**

In 1989, Xamanek Researches undertook an inventory survey on a parcel (TMK 4-6-07: 1) located on the southern edge of Loko o Mokuhinia, adjacent to the Waiola cemetery. Subsurface excavation did not reveal any architectural features, or significant findings. It was determined that the area had been a rubbish dump for many years, beginning in the early 20<sup>th</sup> century and continuing into the 1960s (Fredericksen et al., October 1989).

In 1995, the Bishop Museum conducted an inventory survey on a parcel located *mauka* of Loko o Mokuhinia (TMK: 4-6-07: 13). Surface and subsurface investigations located two sites—the buried remains of a habitation area and possible pondfield (Site 4118), and a plantation-style house possibly dating to 1908 (Site 4119), which was still occupied at the time of the inventory survey (Major et al., 1996). The subsurface habitation area produced domestic artifacts such as bottles, ceramic sherds and metal consistent with a late 19<sup>th</sup> or early 20 century house site (Ibid., p. 57).

Another parcel, which lay on the northern shore of Loko o Mokuhinia was inventoried by Xamanek Researches in October 1998 (Fredericksen and Fredericksen, October 1999). Subsurface testing located a precontact site remnant (Site 50-50-03-4690) that yielded a radiometric date of occupation at between AD 1475 and 1665. An historic wall was also documented, and appears to have been a largely rebuilt LCA boundary wall—one of the few remaining in Lahaina. It also incorporated a coral block in its structure.

## Settlement Patterns

This part of west Maui was much different in appearance in precontact times than it is today. There are numerous modified drainage systems in West Maui, that represent a likely pattern for in the Lahaina region. In the higher elevations within the valleys are *lo'i* and *'auwai* systems, built and maintained for the production of taro. In the areas at lower elevations, where much of the moisture dissipated into large alluvial fans, dry land cultivation took place. Along the coast where settlements occurred, it appears that people concentrated on exploitation of marine resources. In Lahaina, several fishponds existed as well. These inland ponds were formed because the sand beach deposits formed parallel to the shore and kept the run-off water from reaching the sea. Hawaiians took advantage of this natural feature, and utilized the ponds for the production of fish. Two of the prominent fishponds were Loko o Mokuhinia, and the smaller Loko Puako, around which intensive taro and breadfruit cultivation occurred. Dotted among the fishponds and taro pondfields, on higher ground, were the homes of the people who worked the land. A fish pond and taro patch were said to have existed on Keoni Ana's lot, adjacent to the north of the subject property.

In discussing the settlement patterns of Lahaina, Klieger et al. (1995) state:

*"We theorize that for most of Lahaina's past, the majority of habitation was along the beach, with secondary habitation/garden sites located inland along the shorelines of the fishponds. Intensive wetland taro production continued mauka of the coastline for about a kilometer or so (Klieger et al. 1995). Terraced fields continued up a few of the more prominent West Maui streams, and these lands probably included at least temporary habitation sites. Kula or open areas along the lower slopes of the mountains were probably ideal for raising dryland taro and sweet potato." (Major et al., 1996, p. 17)*

In post-contact times, Lahaina became the center of the Hawaiian Monarchy. Kamehameha I spent time there, between battles of conquest. His son, Kamehameha III resided in Lahaina in preference to Honolulu. Kamehameha I's wife, the sacred Keopuolani and his daughter, Nahi'ena'ena were buried there. Many high status individuals connected with the monarchy in one way or another lived in Lahaina, even after the official capitol of the kingdom was moved to Honolulu in 1845. King David Kalakaua and his heirs held title to a parcel, two decades into the 20<sup>th</sup> century.

With the introduction of sugarcane cultivation in the 1870s, and the importation of foreign labor to work in the plantation, the character of Lahaina changed. Loko o Mokuhinia began to dry up as water was diverted for irrigation. *Kuleana* land grants changed hands as plantation workers became affluent enough to purchase land from Hawaiians willing to sell. Commercial development became a driving force that would continue and intensify through the 20<sup>th</sup> century.

### Expectation of Findings

Subsurface habitation sites associated with precontact and post-contact periods could be present in portions of the study area. These could include midden deposits, charcoal, cooking pits, waterworn pebbles, stone features and the like would characterize such sites. Post-contact deposits could take the form of discarded bottles, crockery, and other domestic objects. Because human burials often accompany precontact habitation sites, there is a reasonable expectation of their occurrence during subsurface testing.

However, since these parcels are located on a portion of the former canal system in Lahaina, the likelihood of precontact subsurface features being present is lessened. However, one could expect post-contact cultural remains in the form of refuse pits and features associated with past residential usage.

## ARCHAEOLOGICAL METHODS

This archaeological inventory survey was carried out in two phases. The first portion of the survey consisted of a pedestrian inspection of accessible portions of the project area.<sup>12</sup> Ground surface visibility was good.

The second phase of the survey consisted of subsurface testing. A total of 6 backhoe trenches were utilized to sample subsurface conditions in the previously disturbed parcel (Map 3).

All backhoe trench profiles were visually inspected and recorded. In addition, trench backdirt was manually spot-checked with 1/8<sup>th</sup> inch screen. Mapping was carried out with metric survey tapes and hand held compasses. Photographs were taken, and written notes were kept in the field.

Hugh Coflin and Mark Donham participated in the fieldwork. Erik Fredericksen was the project director, and Demaris and Walter Fredericksen were the senior advisors. Demaris Fredericksen provided the background research, and contributed to the production and editing of the final report.

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<sup>12</sup> TMK: 4-6-08: 53 is currently paved and used as a pay parking lot.

## ARCHAEOLOGICAL FINDINGS

During the course of subsurface testing, it became apparent that much of the western half of Parcel 48 had been previously filled. Encountered stratigraphy in Backhoe Trenches 1-3 and most of BT 4 was composed of 2 to 3 fill layers. Two post-contact refuse pits from the early to mid 20<sup>th</sup> century were located in these trenches. Stratigraphy present on the eastern half of the vacant parcel consisted of fill and intact marine sand. There were two post-contact refuse pits located in these trenches as well. The ground water table was located between 1.1 and 1.4 mbs during testing on the parcel.

One previously unidentified site consisting of 4 refuse pits that date from the early to mid-20<sup>th</sup> century was encountered during subsurface testing on the study area. This site has been designated SIHP No. 50-50-03-5203. Subsurface results are discussed below.

### **Backhoe Trench 1 (Figure 1; Photos 4 and 10)**

This first subsurface test was located near the northwestern corner of the vacant parcel and. This trench was oriented NE/SW and was c. 11.5 m in length by a maximum of 1.3 m in depth. Four fill layers were encountered in this trench.

Layer I consisted of disturbed reddish brown (5 YR 4/3) clay. This c. 20-40 cm thick layer appeared to have been recently redeposited. Previously disturbed material culture remains noted included scattered bottle glass (modern), plastic and charcoal.

Layer IIA (c. 20-65 cmbs) consisted of brown (7.5 YR 4/4) sandy silty loam. This relatively compact stratum contained scattered early to mid-20<sup>th</sup> century artifacts including a Star Ice and Soda Works bottle, a Purex bottle, ceramic fragments, glass marbles, and a plastic toy soldier. In addition, a basalt disk artifact that is tentatively interpreted as a piece from a Chinese board game was found in this layer. One subsurface feature was located in the central portion of BT 1 in Layer II.

**Feature 1.1** was located between c. 20 and 34 cmbs. It consisted of numerous unsorted water worn pebbles. Several ceramic fragments and a piece of copper were noted in this feature. While this concentration did not appear to represent a formal habitation feature, it is tentatively interpreted as an informal "back yard" pavement dating from the early to mid 20<sup>th</sup> century.

Layer IIB extended from c. 45-65 cmbs and was composed of pale brown (10 YR 6/3) beach sand that contained scattered flecks of charcoal and isolated pieces of metal and clear bottle glass. This loose layer was only present in the western portion of BT 1.

Layer III (c. 40-120 cmbs) was made up of brown (7.5 YR 4/3) clay that contained low amounts of angular and water worn cobbles and some boulders. While no

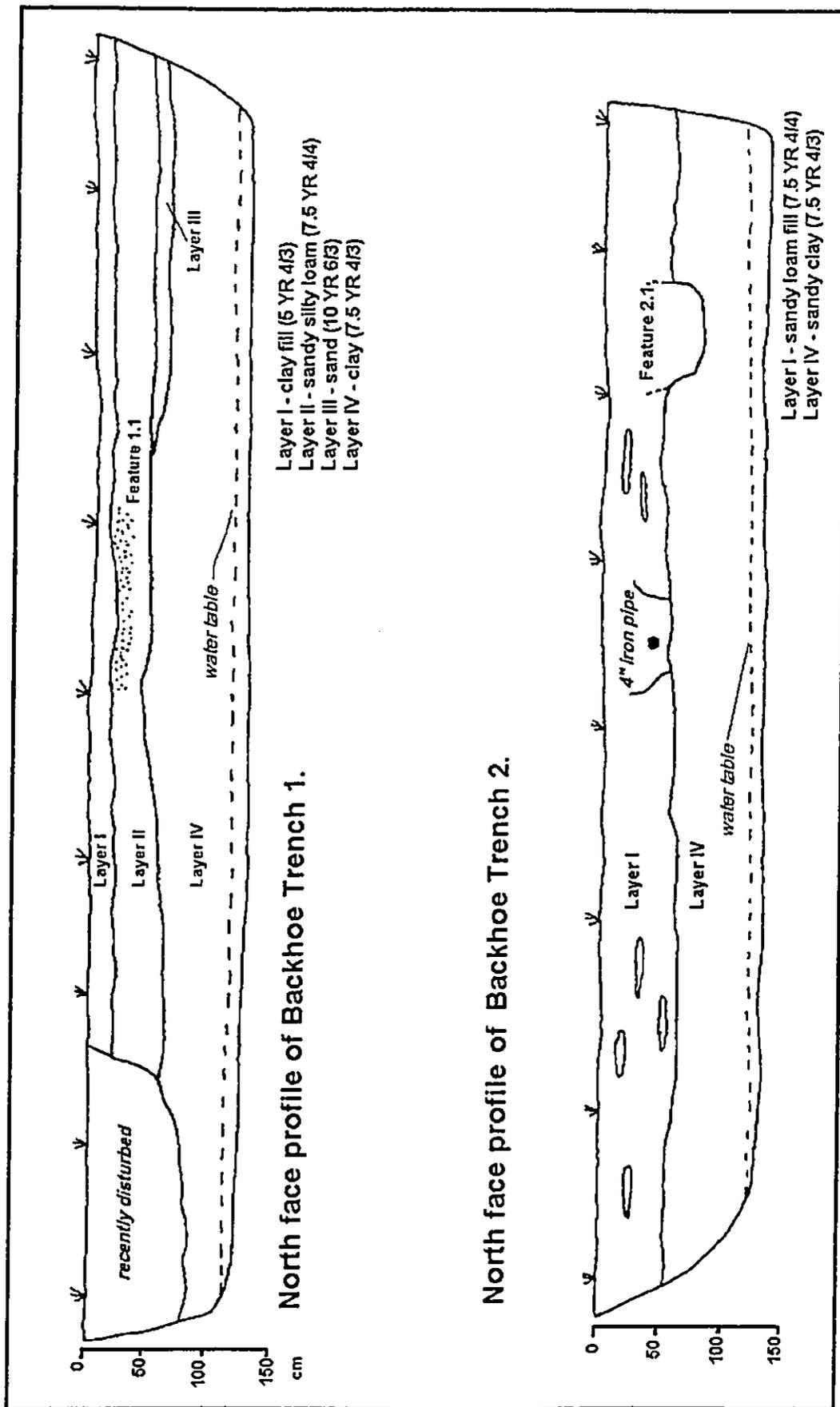


Figure 1 – Profiles of Backhoe Trenches 1 and 2.

material culture remains were noted in this layer, it appeared to have been redeposited, and is interpreted as fill. The ground water table was located at 110-120 cmbs in this trench.

#### **Backhoe Trench 2 (Figure 1; Photos 5 and 9)**

This second trench was located c. 10 m to the southwest of BT 1. It was c. 10 m in length by a maximum of 1.3 m in depth. Two fill layers were present in this subsurface test.

Layer I was up to 60 cm thick and consisted of brown (7.5 YR 4/4) sandy loam. This relatively compact fill contained material culture remains from the early to mid-20<sup>th</sup> century (see Table 1). An abandoned 4 in iron pipe was located c. 30 cmbs near the middle of BT 2. One subsurface feature, a refuse pit, was found in the western end of the trench.

Feature 2.1 extended from c. 25 to 75 cmbs and was up to 90 cm in width. This rubbish pit yielded several scattered bivalve shells, ceramic fragments, food containers, cosmetic jars, a bleach bottle, a blue on white tea cup, and beverage bottles dating from the 1930s-1940s, including a Lahaina Ice Co. Cream bottle.

Layer III (c. 45-130 cmbs) was composed of brown (7.5 YR 4/4) sandy clay. This relatively compact layer was similar to Layer IV in BT 1. No evidence of material culture remains was located in this apparent fill. The ground water table was encountered between 115 and 130 cmbs.

#### **Backhoe Trench 3 (Figure 2)**

This trench was placed c. 8 m to the southwest of BT 2. It was oriented NE/SW and was c. 10 m in length. Fill was present to the ground water table in this locale.

Layer I consisted of brown (7.5 YR 5/4) sandy loam that was up to 55 cm thick. Scattered cultural materials from the mid-20<sup>th</sup> century were noted in this slightly loose soil. Items noted but not collected included scattered bottle glass fragments, rusted metal, and ceramic pieces. One subsurface feature was located in the western portion of BT 3.

Feature 3.1 (c.50-115 cmbs) consisted of a pit that was up to 140 cm in width and 65 cm in depth. This feature is interpreted as refuse pit. Observed items included windowpane glass, rusted metal, several beverage bottles from the early to mid-20<sup>th</sup> century, and some rusted metal.

Layer II (c. 50-100 cmbs) was made up of pale brown (10 YR 6/3) beach sand. This loose layer contained scattered flecks of charcoal and some rusted metal.

Layer III consisted of brown (7.5 YR 4/4) silty clay that extended from c. 90 cmbs to the bottom of the trench. Several beverage bottles from the early 20<sup>th</sup> century were noted in this wet, compact fill. The ground water table was encountered between 1.2 and 1.3 mbs.

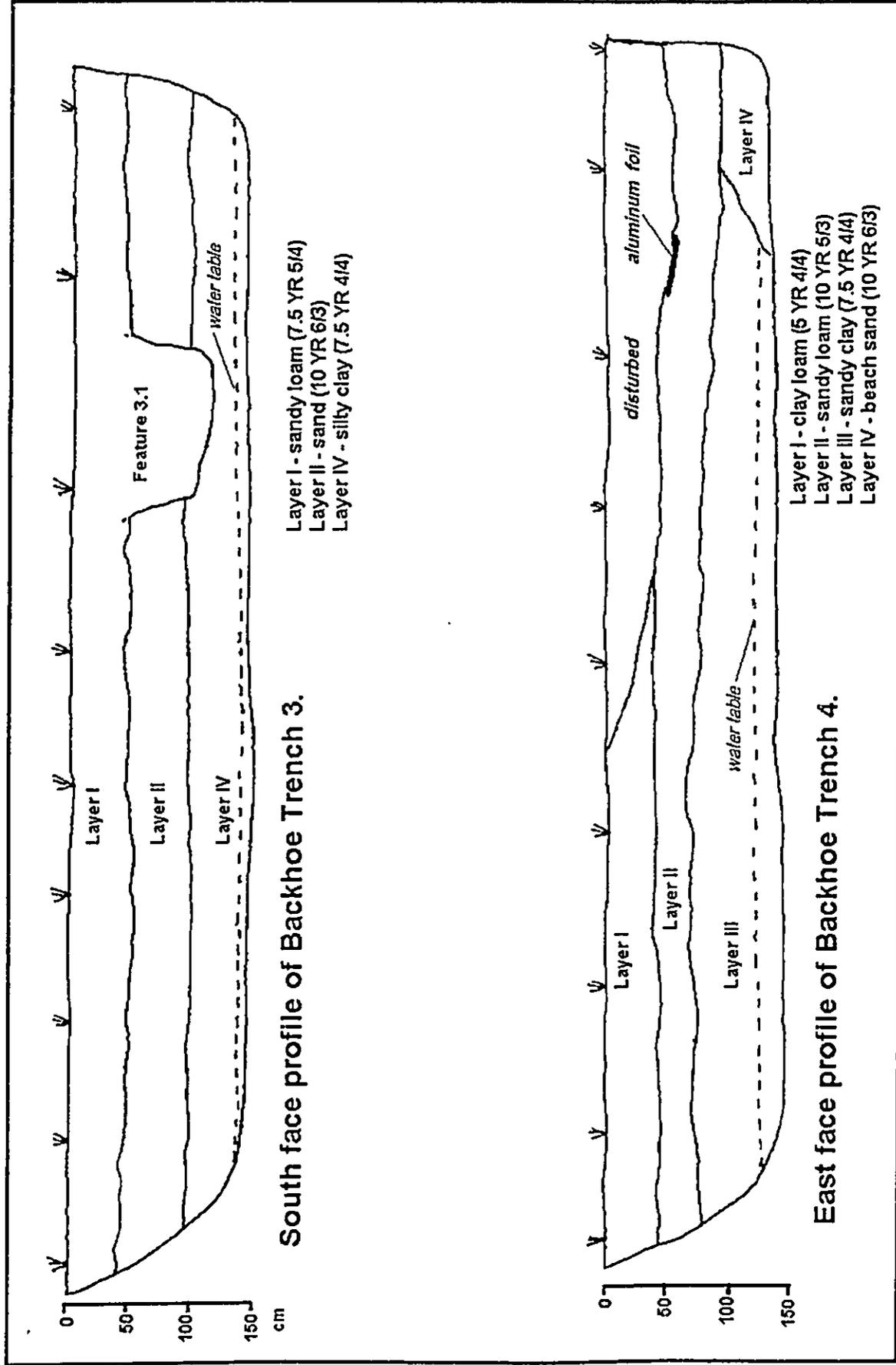


Figure 2 – Profiles of Backhoe Trenches 3 and 4.

#### **Backhoe Trench 4 (Figure 2; Photo 6)**

This fourth trench was located in the central portion of the vacant parcel. Fill was encountered to the bottom of most of this trench. A partly intact beach sand layer was located in the southeastern end of the trench.

Layer I (0-50 cmbs) consisted of reddish brown (5 YR 4/4) clay loam. This compact material contained scattered pieces of modern bottle glass, rusted metal, and some plastic.

Layer II was composed of brown (10 YR 5/3) sandy loam. It was up to 50 cm thick and extended to a maximum depth of 95 cmbs. Some aluminum foil was noted in the upper portion of this redeposited layer.

Layer III consisted of brown (7.5 YR 4/4) sandy clay that extended from c. 65 cmbs to the bottom of most of BT4. One Howdy bottle and a Lahaina Soda bottle from the mid-20<sup>th</sup> century were located in this slightly compact, moist layer. In addition, 2 pieces of cut bovine bone are thought to have originated in this fill.

Layer IV (c. 90-130 cmbs) was composed of a partly intact beach sand layer that had been displaced by Layer III to the north. This very pale brown (10 YR 7/3) sand did not appear to contain any material culture remains. The ground water table was located at c. 130 cmbs.

#### **Backhoe Trench 5 (Figure 3; Photo 7)**

This subsurface test was located c. 10 m to the southwest of BT 4 on the western part of the vacant parcel. A concrete slab that abuts an existing sidewalk lies c. 3 m southwest of BT 5. The fill layers and a mostly intact beach sand stratum were encountered in this locale.

Layer I (0-70 cmbs) consisted of reddish brown (5 YR 4/3) silty clay. This compact fill contained scattered material culture remains such as bottle glass (modern), rusted metal, plastic, and pieces of broken concrete.

Layer II was composed of pale brown (10 YR 6/3) sand that extended from c. 50 to 75 cmbs. This material is interpreted as fill and capped a subsurface feature.

Feature 5.1 extended from c. 60 cmbs and continued into the ground water table. This large feature was up to 2.4 m in width and is interpreted as a refuse pit. Material culture remains noted in this feature included early to mid-20<sup>th</sup> century bottles, ceramic fragments, scattered marine shellfish, and a few pieces of coral.

Layer III was encountered at c. 70 cmbs and extended to the bottom of the trench. This loose stratum consisted of an intact marine sand deposit. There were no material culture remains noted in this very pale brown (10 YR 7/4) coarse textured sand. The water table was located at c. 120 cmbs.

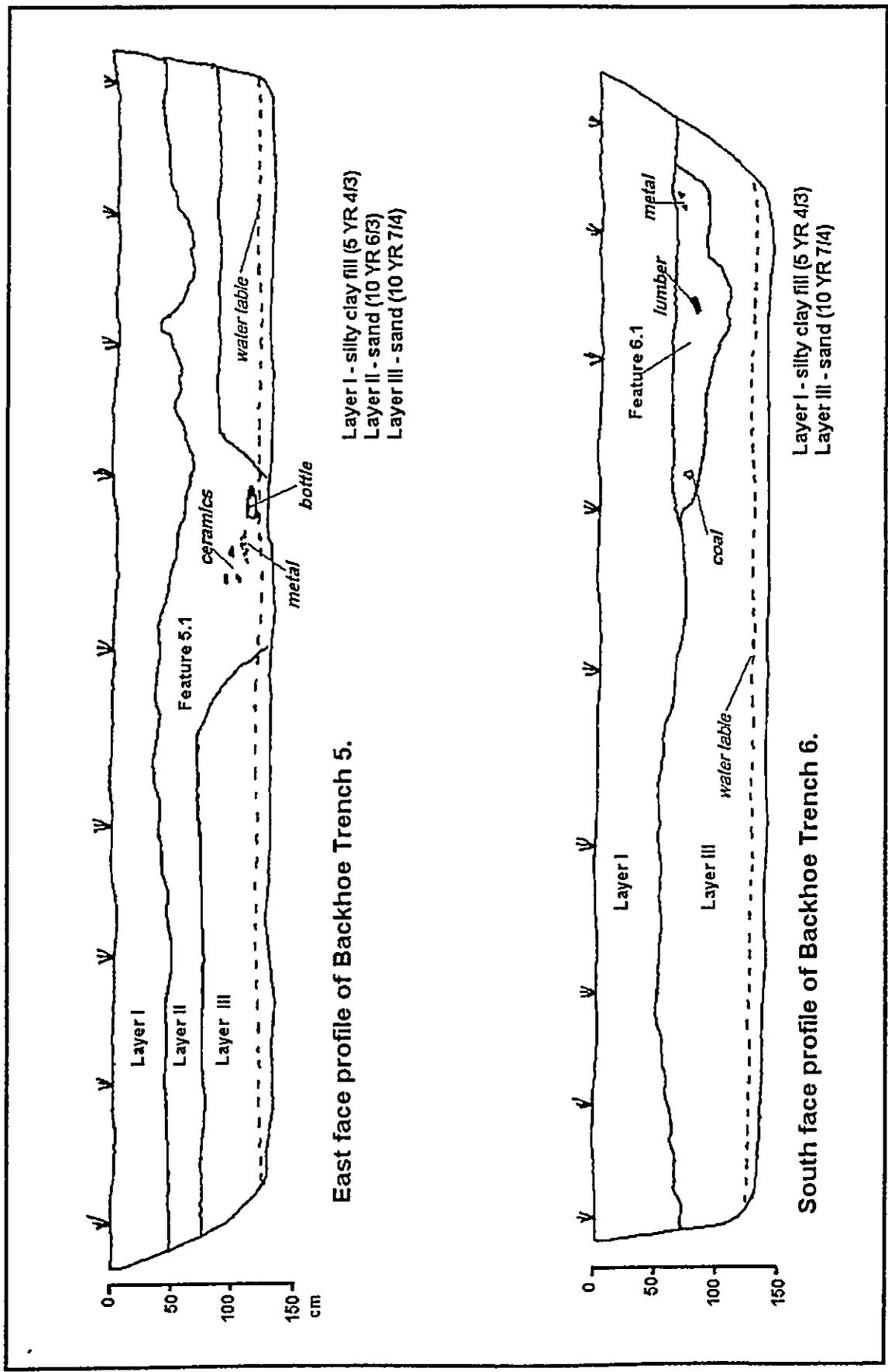


Figure 3 -- Profiles of Backhoe Trenches 5 and 6.

### **Backhoe Trench 6 (Figure 3; Photos 8)**

This last trench was excavated near the northwestern corner of the vacant parcel. Backhoe Trench 6 was oriented NE/SW and was c. 10 m in length by 1.4 m in depth. One fill layer and the intact beach sand stratum were located in this trench.

Layer I (0-75 cmbs) consisted of reddish brown (5 YR 4/3) silty clay fill. This compact fill contained scattered material culture remains such as bottle glass (modern), rusted metal, plastic, pieces of milled lumber, and several chunks of broken concrete. This layer appeared to have been relatively recently deposited. It overlaid a marine sand stratum and a remnant of a large pit.

Feature 6.1 extended from c. 60 cmbs to 110 cmbs. This large feature was up to 2.9 m in width and is interpreted as a refuse pit. Material culture remains noted in this pit included milled lumber, pieces of coal, ceramic fragments, pieces of rusted metal, a few pieces of coral, and scattered marine shellfish. Also recovered were beverage bottles, a ceramic tea cup, and a large copper basin.

Layer III was encountered between 60 and 75 cmbs and extended to the bottom of the trench. This loose stratum consisted of a coarse textured marine sand deposit. There were no material culture remains noted in this very pale brown (10 YR 7/4) sand. The water table was located at c. 120 cmbs.

### **Discussion**

Subsurface results indicate that much of the parcel was filled, possibly in the early 20<sup>th</sup> century. Scattered material culture remains from the early to mid-20<sup>th</sup> century were located in the fill layers that cover much of the vacant parcel (TMK: 4-6-08: 48). Four post-contact refuse pits and an informal "back yard" water worn pavement were located during testing. These features have been designated Site 50-50-03-5203.

Table 1

Summary of Historical artifacts recovered from Site 5203

Provenience	Description	Measurements (cms)	Comments
BT 1	Bleach bottle	23.0 tall x 9.5 dia.	Brown, 2-piece mold, flat base, PUREX on neck
	Soda bottle	20.0 x 6.0	Green, 2-piece mold, flat base, Star K.T. embossed on bottom, crown top. Labeled: A RITZY MIXER-AN EXCELLENT STRAWBERRY DRINK
	Soda bottle	20.0 x 5.0	Clear, 2-piece mold, crown top, shallow concave base, STAR ICE & SODA WORKS, WAILUKU, T.H.
	10 sherds of broken ceramic table ware		Decorated with blue on white patterns; plain white, red and green floral pattern
	Complete small porcelain condiment bowl	3.0 x 7.5	White with green leaves, small insect or bird in bowl. Made in Japan on bottom
	Plastic WWII toy soldier	5.7 tall x 0.7 thick	Light colored, carrying rifle.
	2 glass marbles	1.7 dia.	One white, one blue and white.
	Basalt disk	2.3 dia x 1.1 thick	Possibly a game piece.
BT 2	Bleach bottle	29.0 tall x 17.0 dia	Brown, screw top, shallow concave base PUREX on neck
	3 Beer bottles	29.9 x 7.5	Brown, crown top, shallow concave base
	Beer bottle	28.5 x 7.5	" plus JAPAN on bottom
	"	18.0 x 7.0	Brown, flat bottom, crown top
	3 beer bottles	17.0 x 6.5	2 Brown, 1 clear, crown top, NO DEPOSIT NO RETURN
	Vinegar bottle	23.5 x 9.0	Clear, shallow concave base.
	8-sided catsup bottle	21.0 x 6.0	"
	Vinegar bottle	18.5 x 8.0	" with screw cap
	Square/oval Mayonnaise jar	12.0 x 7.5	Flat base, screw cap, clear—BEST FOODS embossed
	Half-pint milk bottle	14.0 x 6.0	"L" on bottom. Still has cardboard cap—P.M.Co. DAIRY LAHAINA
	Condiment jar	13.0 x 5.5	Clear, shallow concave base, screw top
	Medicine bottle	7.0 x 3.5	"
	Pond's facial cream bottle	5.5 x 6.5	White, screw top—PONDS
	9 sherds of broken ceramic table ware		Blue on white patterns—small rice or shoyu bowls, tea cup, small plates
BT 3	5 Beer bottles	24.0 x 6.5	Light aqua, flat base, crown top—AB embossed on flat bottom. "Sick" glass.
	Champagne bottle	25.0 x 7.5	Green, kick-up base
	Wine bottle	24.5 x 6.5	Green, medium concave base
	Oval cosmetics jar	6.0 x 7.0-5.0	Clear, flat bottom w/Palmer embossed. Fluted design, screw top
	Small paint jar	5.5 x 3.5	Clear, traces of red paint, screw top
	Pond's facial cream jar	7.5 x 6.5	White, screw top—PONDS embossed
BT 5	Beer bottle	30.0 x 7.0	Aqua, flat base, crown top—AB embossed on bottom
	"	29.0 x 7.5	"
	Wine bottle	39.5 x 8.0	Aqua, medium concave base, paper label still attached—not legible

	2 Saki bottles	24.0 x 6.5	Green/blue, flat base, Japanese writing on bottom, applied ring of glass at base of neck
	6 sherds of broken ceramic table ware		Blue on white tea cup, small red on white plate, plain white ware
	Rectangular medicine bottle	10.0 x 6.0-7.0	Clear, rectangular bottom
BT 6	Beer bottle	24.0 x 6.5	Brown, shallow concave base, crown top
	Soda bottle	22.0 x 5.0	Clear, flat base, crown top—embossed HOWDY-HOWDY in a cross pattern
	"	20.5 x 6.0	Clear, flat bottom—LAHAINA ICE CO. LTD, LAHAINA, MAUI, T.H.
	Ceramic tea cup	7.3 x 6.5	Blue on white design
	Copper bowl	45.0 dia x 8.0 deep	Shallow bowl, perhaps used as a wash basin

## SUMMARY AND CONCLUSIONS

Inventory level testing was carried out of the southern half of the project area (TMK: 4-6-08 48). One previously unidentified subsurface site was located during this sampling process. Site 5203 consists of four refuse pits and an informal water worn pavement from the early to mid-20th century. The various features are thought likely associated with a plantation-era house that was formerly situated on the vacant parcel.

Subsurface results indicate that this parcel was filled, probably during the late 1800s. The time of the construction of the former structure is not known, but it was likely to have been around the turn of the century. Intact beach sand deposits were located on the eastern portion of the project area. The ground water table was encountered between 110 and 130 cm below the existing surface. Perusal of old maps of Lahaina indicates that portions or all of these parcels had been part of the canal system in the mid-19<sup>th</sup> century (Maps 4 and 5).

## Site Significance Evaluations

The following significance evaluations are based on the Rules Governing Procedures for Historic Preservation Review (DLNR 1996; Chapter 275). According to these rules, a site must possess integrity of location, design, setting, materials, workmanship, feeling and association and shall meet one or more of the following criteria:

**Criterion "a"**—Be associated with events that have made an important contribution to the broad patterns of our history;

**Criterion "b"**—Be associated with the lives of persons important in our past;

**Criterion "c"**—Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;

**Criterion "d"**—Have yielded, or is likely to yield, important information for research on prehistory or history;

**Criterion "e"**—Have an important traditional cultural value to the native Hawaiian people or to another ethnic group of the state due to associations with traditional cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts.

Based on the above criteria, Site 5203 qualifies for significance because of its information content under Criterion "d" of the Federal and State historic preservation guidelines.

## Site Mitigation Recommendations

No additional work beyond the inventory level is recommended for Site 5203 on TMK: 4-6-08: 48. This site has yielded sufficient information, and data recovery work does not appear warranted. However, intact sand deposits were located on the eastern portion of this parcel, and archaeological monitoring is recommended for any deeper subsurface excavations on the parcel. In the event that any future subsurface disturbance activities are scheduled for the existing parking lot—TMK 4-6-08: 53—then additional inventory level work in the form of monitoring is recommended for this parcel.

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Photo 2 - View to the east of paved parking lot—TMK 4-6-08: 53.

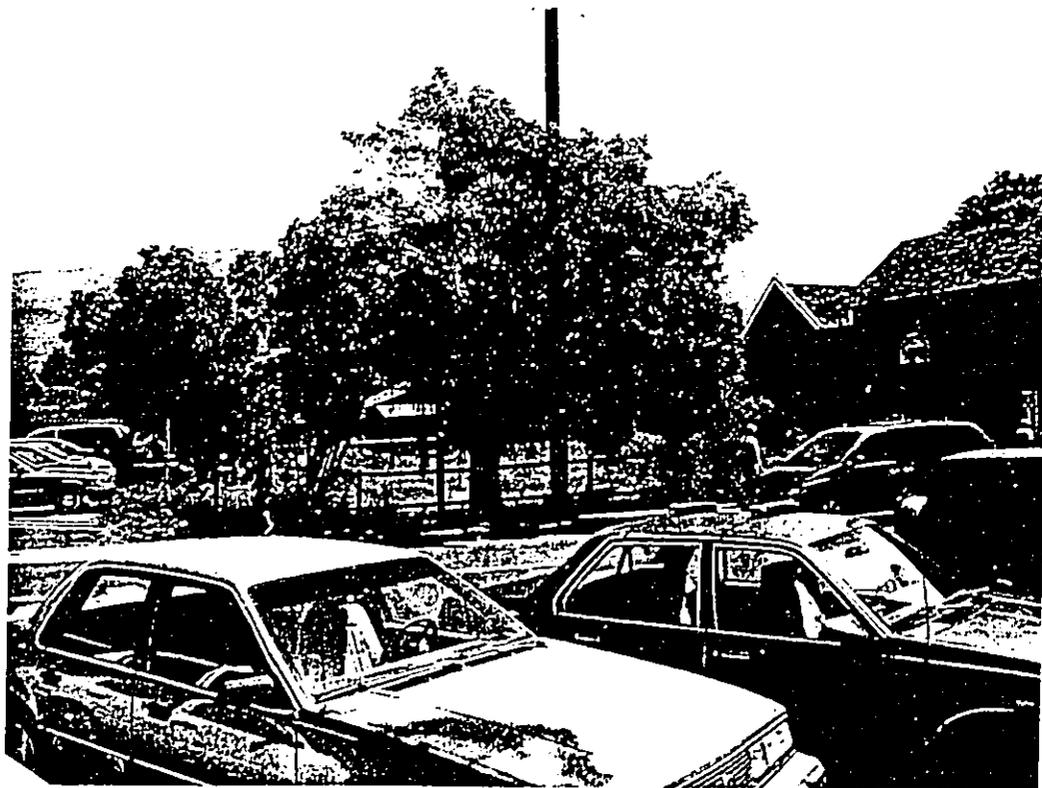


Photo 3 - View to the east—TMK 4-6-08: 48—parcel containing Site 5203.



Photo 4 – View to the north of BT 1—excavation in process. Parcel 53 parking lot in background.



**Photo 5 – View to the southwest of BT 2—excavation in process. Note broken iron pipe in upper right.**



Photo 6 - View to the southeast—BT 4—excavation complete.



Photo 7 - View to the southeast of BT 5—excavation complete.



Photo 8 – View to the southwest of BT 6—excavation complete. Front Street and King Kamehameha III Elementary School in background.

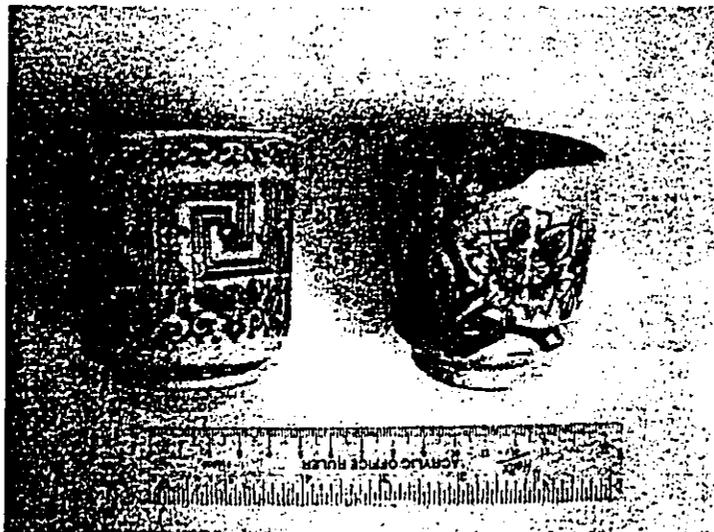


Photo 9 – Tea cups (from BT 6 left; and BT 2).

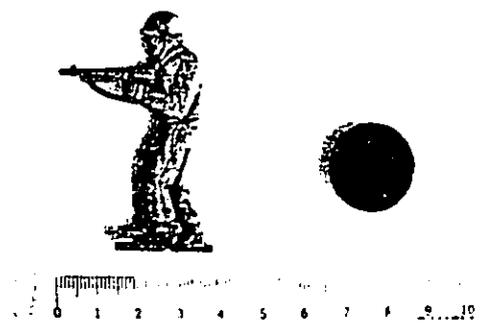


Photo 10 – WWII toy soldier, and basalt disk game piece from BT 1.

# ***Appendix B-1***

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***State Historic Preservation  
Division Letter, June 4, 2002***

BENJAMIN J. CAYetano  
GOVERNOR OF HAWAII



STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION  
KAKUIHIHEWA BUILDING, ROOM 556  
601 KAMOHOLA BOULEVARD  
KAPOLEI, HAWAII 96707

GILBERT S. GOLDMAN, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCES MANAGEMENT

DEPUTIES  
ERIC T. HIRANO  
LINNEL NISHIOKA

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND RESOURCES  
ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND  
STATE PARKS

LOG NO: 30020 ✓  
DOC NO: 0205MK01

June 4, 2002

Mr. Erik Fredericksen  
Xamanek Researches  
P.O. Box 880131  
Pukalani, Hawai'i 96788

Dear Mr. Fredericksen,

**SUBJECT: Historic Preservation Review - 6E-42 - Archaeological Inventory Survey Portion of Land in Puako, for Jack Kean on two parcels mauka Front Street Puako Ahupua'a, Lahaina District, Maui TMK (2) 4-6-08:53 and 48**

Thank you for the opportunity to review this report which our staff received on April 1, 2002 (Fredericksen and Fredericksen, 2002, *Archaeological Inventory Survey Report for a Portion of Land in Puako Ahupua'a, Lahaina District, Lahaina, Maui, TMK 4-6-08:53 and 48*).

The background section acceptably establishes the ahupua'a settlement pattern and predicts the likely site pattern in the project area. A portion of an old canal crosses the project area, and subsurface habitation sites were expected, as were post contact refuse pits associated with residential use of the area.

The survey has adequately covered the project area documenting one historic property in the project area. Site 50-50-03-5203 consisted of four post-contact refuse pits. Four backhoe trenches were excavated in the southern portion of the property. All of the trenches were on Parcel 48, as Parcel 53 consists of a paved parking lot.

We agree with the significance assessment that Site 5203 is significant under Criterion "d" and has yielded information important for an understanding of historic land use.

We also concur that no mitigation is warranted for Site 5203. No further preservation is warranted. We agree, however, that monitoring is the recommended mitigation for any work on the eastern portion of parcel 48, where intact sand deposits were encountered. In addition, parcel 53 should undergo inventory level survey in the form of monitoring if the existing parking lot is to be removed, or if construction is to occur on the parcel.

We find this report to be acceptable. The site needs no further protection. The historic preservation review process is concluded for Parcel 48. Development of 4-6-08:48 will have "no effect" on significant historic sites. As always, if you disagree with our comments or have questions, please contact Dr. Melissa Kirkendall (Maui/Lana'i SHPD 243-5169) as soon as possible to resolve these concerns.

Aloha,  
  
Don Hibbard, Administrator  
State Historic Preservation Division

MK:jen

c: John Min, Director, Department of Planning, County of Maui, FAX 270-7634  
Bert Ratte, County of Maui, Land Use and Codes, FAX 270-7972  
Glen Ueno, County of Maui, Land Use and Codes, FAX 270-7972

# ***Appendix C***

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***Preliminary  
Engineering Report***



*E*NGINEERING *R*EPORT

For A

COMMERCIAL BUILDING AT  
614 FRONT STREET

In

LAHAINA, MAUI, HAWAII

TMK (2) 4 - 6 - 08 : 48, 53

LUCA FILE NO. 4.

This work was prepared by  
me or under my supervision

  
\_\_\_\_\_  
*Michael Conway*

May 30, 2002  
Date



04/30/04  
Expiration Date of the License

# *I*NDEX

1. Proposed Action
2. Mitigative Measures
3. Hydrology
4. Erosion Control
5. Domestic and Fire Flow
6. Wastewater Requirements

## *P*ROPOSED *A*CTION

The site at 614 Front Street is the consolidation of two parcels in Lahaina Town, Maui, Hawaii. It is proposed to redevelop the property with a commercial building and parking.

## *I*NTRODUCTION

This report addresses engineering considerations with respect to the proposed redevelopment of the property at 614 Front Street on parcels 48 and 53, located on the east (mauka) side of Front Street in Lahaina Town, Maui, Hawaii (TMK (2) 4-6-08:48, 53.) The proposed actions include the repaving of existing parking and the construction of a new commercial building and parking.

The site contains approximately 0.3368 acres, and is bordered on three sides by commercial properties. Across the road to the west is diagonal street parking fronting the Kamehameha III Elementary School property on the ocean.

## MITIGATIVE MEASURES

To the highest extent possible the property will be developed in keeping with established architectural standards and in an environmentally sound manner.

### DISPOSAL OF DEBRIS

Solid waste material from clearing and grubbing operations and during construction will be disposed of as coordinated with the Solid Waste Division of the Department of Public Works and Waste Management at the county's 55 acre Central Landfill Facility.

### COASTAL PROTECTION

The applicant will comply, as applicable, with the provisions of the County Grading Ordinance regarding the protection of drainage infrastructures emptying into the ocean and in the use of Best Management Practices (BMPs) to control dust, erosion, and sedimentation.

### AQUIFER PROTECTION

Recommendations of the Environmental Protection Agency and the State Department of Health will be adopted with respect to management of potential non-point pollution sources and activities, so as to protect the integrity of both the Lahaina Aquifer and the coastal ecosystem.

### IMPACT ON UTILITIES

The proposed action involves the redevelopment of the subject property for commercial use. The fire, domestic and wastewater flow requirements for the proposed development is expected to be the same as for prior use. As such, it is anticipated that existing off-site utilities infrastructures can sufficiently accommodate the proposed improvements. Specific requirements are addressed later in this report.

# HYDROLOGY

## METHOD OF ANALYSIS

The hydrology for the drainage area was computed by the Rational Method, which is assumed accurate for areas of 100 acres or less. This method is fully described in the "Drainage Master Plan for the County of Maui, State of Hawaii (October, 1971)" and is the method required by the "Rules for the Design of Storm Drainage Facilities in the County of Maui - July 14, 1995."

The Rational Method gives the results of the storm water runoff as a peak discharge amount at a point. For sheet flow runoff, this peak discharge amount is the total over the entire surface area. The Rational Method utilizes four hydrologic and watershed characteristics for its analysis which are:

- 1) Time of concentration ( $T_c$ )
- 2) Rainfall intensity ( $I$ )
- 3) Runoff coefficient ( $C$ )
- 4) Tributary area ( $A$ )

The Rational Method calculates the peak discharges with the following equation:

$Q = CIA$ ; where:

$Q$  = Peak discharge, cubic feet per second (cfs)  
 $C$  = Runoff coefficient  
 $I$  = Rainfall intensity, inches per hour (in./hr.)  
 $A$  = Total contributing area, acres (ac.)

The time of concentration ( $T_c$ ) for the design storm is developed by estimating the travel time for the various overland flow watercourses.

The watercourses for future developed conditions consist of overland surface-flow. The time of concentration for the flow through each watercourse is determined upon the following factors:

- 1) Watercourse as a percent of total tributary area
- 2) Length of run of watercourse in feet
- 3) Type of watercourse

The design storm of the 10-year 1-hour storm event was used in the analysis of the future developed project site surface water runoff conditions. The design storm event is determined by the "Rainfall-Frequency Atlas of the Hawaiian Islands, US Weather Bureau (1962)" and the "Rules for the Design of Storm Drainage Facilities in the County of Maui - July 14, 1995."

The time of concentration ( $T_c$ ) and the design storm are used to develop the rainfall intensity ( $I$ ) needed for the rational equation.

The runoff coefficient ( $C$ ) is basically a percent of the land covered by an impervious surface. Weighted runoff coefficients are developed by using  $C$  values for different land uses and types given in the Storm Drainage Standards. The following equation is used to determine the weighted average runoff coefficient:

$$C \text{ weighted} = \frac{A_1C_1 + A_2C_2 + A_3C_3 \dots}{A_1 + A_2 + A_3 \dots} \quad \text{where } A_{(n)} \text{ is the area of contribution.}$$

The drainage area ( $A$ ) is determined by calculating the area, in acres, upstream of the point where the peak discharge is to be determined.

After all the hydrologic factors are determined, a hydrograph can be generated to determine the volume of storm water runoff. The volume of storm water runoff is used to calculate the storage volumes needed in the design of detention or sedimentation basins. The modified Rational Method gives an approximation of the storm water runoff volume.

## FLOODWAY ZONE

The site is within an area designated C (area of minimal flooding by the US Federal Emergency Management Agency, Federal Insurance Administration).

Reference: Flood Insurance Rate Map, Panel 150003 0163 C (08/03/98).

## EXISTING DRAINAGE CONDITION

Property retaining walls separate the site from neighboring properties while curb, gutter and sidewalk isolate the property from roadway runoff. The site is consolidated from two lots. The northern lot is paved for parking and slopes gently from the rear toward the driveway entrance and Front Street. The southern lot generally slopes gently toward a low lying area at its center. The building on the southern lot was demolished, leaving only a concrete driveway and walkway remnant abutting Front Street. See Appendix Figure 1 for the existing site plan.

The public storm water system fronting the subject project connects directly to an outfall.

For the 10-year 1-hour design storm, existing on-site drainage patterns described above would discharge 1.16 cfs by sheet flow.

## *FUTURE DRAINAGE CONDITION*

It is proposed to consolidate the lots and to erect a single story commercial building adjoining the sidewalk along Front Street between the existing parking lot driveway and the existing neighboring building on the south boundary. Parking for 27 cars including 2 ADA accessible stalls and a loading zone would occupy the remainder.

After redevelopment, 1.22 cfs would be discharged for the 10-year 1-hour design storm (an increase of 0.06 cfs). The storm water discharge can directly flow to the existing public storm sewer system without affecting any down stream properties. It is our opinion that the net increase of 0.06 cfs will not adversely affect the existing public system. The existing drainage condition does not take in to account that previously the site had a larger area of impervious conditions when the southern portion of the site contained a building. The building was razed for redevelopment. The existing drainage condition calculations were based on the present empty site.

See Appendix for hydrologic calculations. Figure 3 shows the future site plan.

## *CONCLUSION*

A net increase in runoff would result from redevelopment of approximately 0.06 cfs. It is our professional opinion that the proposed improvements on this site would not adversely affect the adjoining properties. The net increase is only a result of current conditions. The project site had a greater runoff when previously developed.

## APPENDIX

### HYDROLOGY CALCULATIONS

From Rainfall-Frequency Atlas of Hawaiian Islands:

10-year 1-hour rainfall for subject property = 1.7 inches

1. Total developed area

Total project area = 0.3468 acres

2. Runoff coefficient (C):

Table 1, Guide for the Determination of Runoff Coefficients for Built-up Areas

$$\text{Weighted C} = \frac{\text{Impervious area} \times (C_i) + \text{Pervious area} \times (C_p)}{\text{Total area}}$$

3. Time of concentration (Tc):

Plate 3, Overland Flow Chart

4. Rainfall intensity (I) for given Tc:

Plate 4, Intensity Duration 1 Hr. Rainfall Curves

5. Peak runoff (Q):

$$Q = CIA \text{ (cfs)}$$

### EXISTING CONDITIONS

Existing commercial development comprises roughly 5/8 impervious areas and 3/8 pervious areas.

Runoff coefficient (C):

Impervious areas (roofs, walks, driveways, etc.)  
Infiltration: 0.20

Relief: 0.00  
 Vegetal cover: 0.07  
 Development type: 0.55  
 C, impervious (Ci): 0.82

Pervious areas (open areas, grass, etc.)

Infiltration: 0.07  
 Relief: 0.00  
 Vegetal cover: 0.05  
 Development type: 0.55  
 C, pervious (Cp): 0.67

Adjusted C = 48%(0.82) + 52%(0.67) = 0.74, however,  
 Adjusted C = 0.80, \*(minimum C for business areas per Table 3)

Trib- utary	Area acres	Perv acres	Imperv acres	C	L ft	Average Cover	Slope %	Tc in	I <sub>10</sub> in/hr	Q <sub>10</sub> cfs
E1	0.154	0.009	0.135	0.80	110	Paved	1.4	4.5	4.6	0.57
E2	0.193	0.010	0.183	0.80	75	Poor Grass	4.0	7.8	3.8	0.59
Total Existing Project Runoff for 10-year 1-hour storm										1.16

See Figure 2 for Tc and I for the existing conditions.

## FUTURE CONDITIONS

Runoff coefficient (C):

Impervious areas (roofs, walks, driveways, etc.)

Infiltration: 0.20  
 Relief: 0.00  
 Vegetal cover: 0.07  
 Development type: 0.55  
 C, impervious (Ci): 0.82

Pervious areas (open areas, grass, etc.)

Infiltration: 0.07  
 Relief: 0.00  
 Vegetal cover: 0.03  
 Development type: 0.55  
 C, pervious (Cp): 0.65

Trib-utary	Area acres	Perv acres	Imperv acres	C	L ft	Average Cover	Slope %	Tc min	I <sub>10</sub> in/hr	Q <sub>10</sub> cfs
F1	0.347	0.013	0.244	0.82	90	Paved	0.5	5.2	4.3	1.22
Total Developed Project Runoff for 10-year 1-hour storm										1.22

See Figure 4 for Tc and I for the developed conditions.

## SUMMARY

### Runoff Quantities:

- 1.22 cfs future runoff for 10-year 1-hour storm
- 1.16 cfs existing runoff for 10-year 1-hour storm
- 0.06 cfs increased runoff following improvements

Figure 1

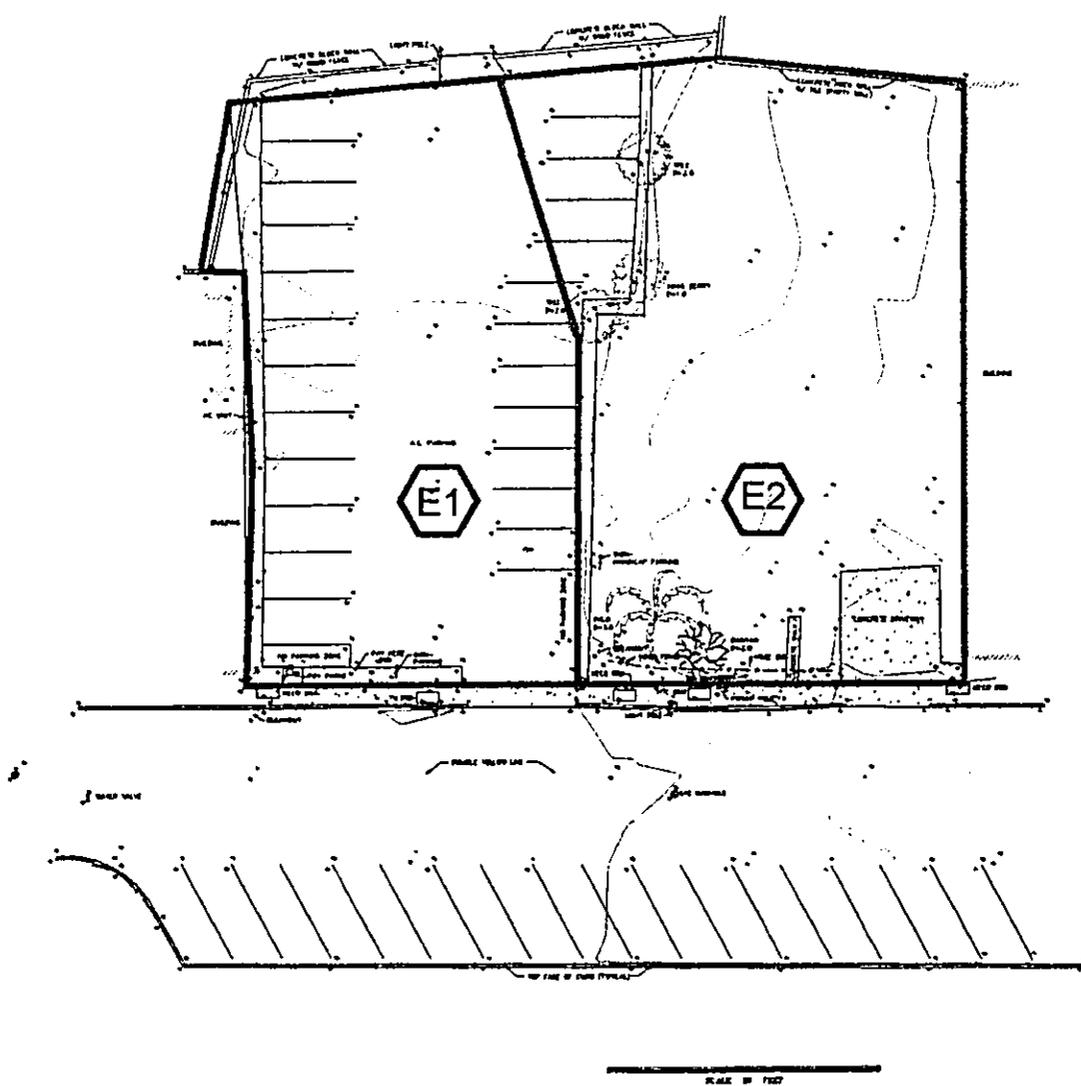


Figure 2

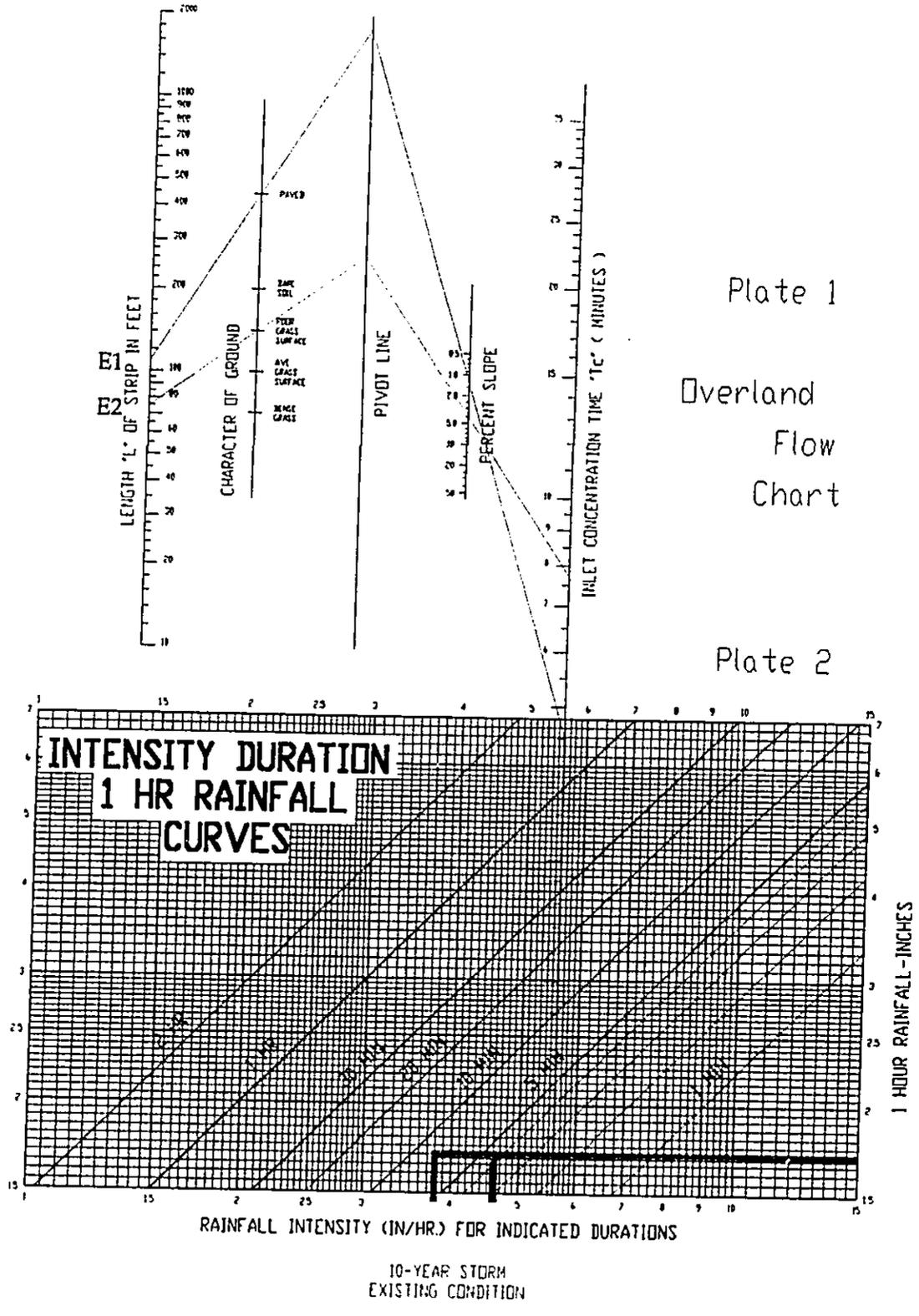


Plate 1

Overland Flow Chart

Plate 2

Figure 3

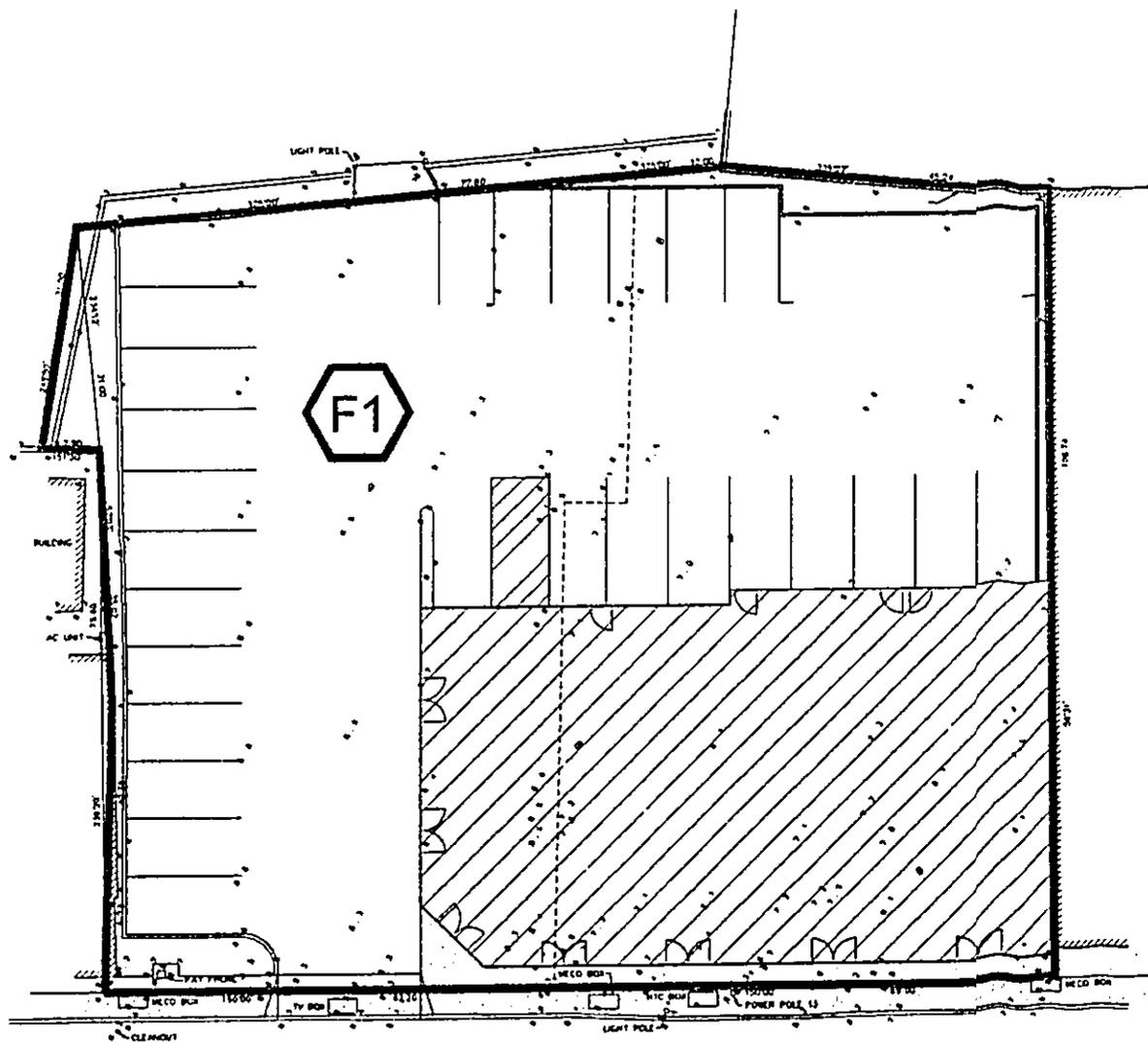


Figure 4

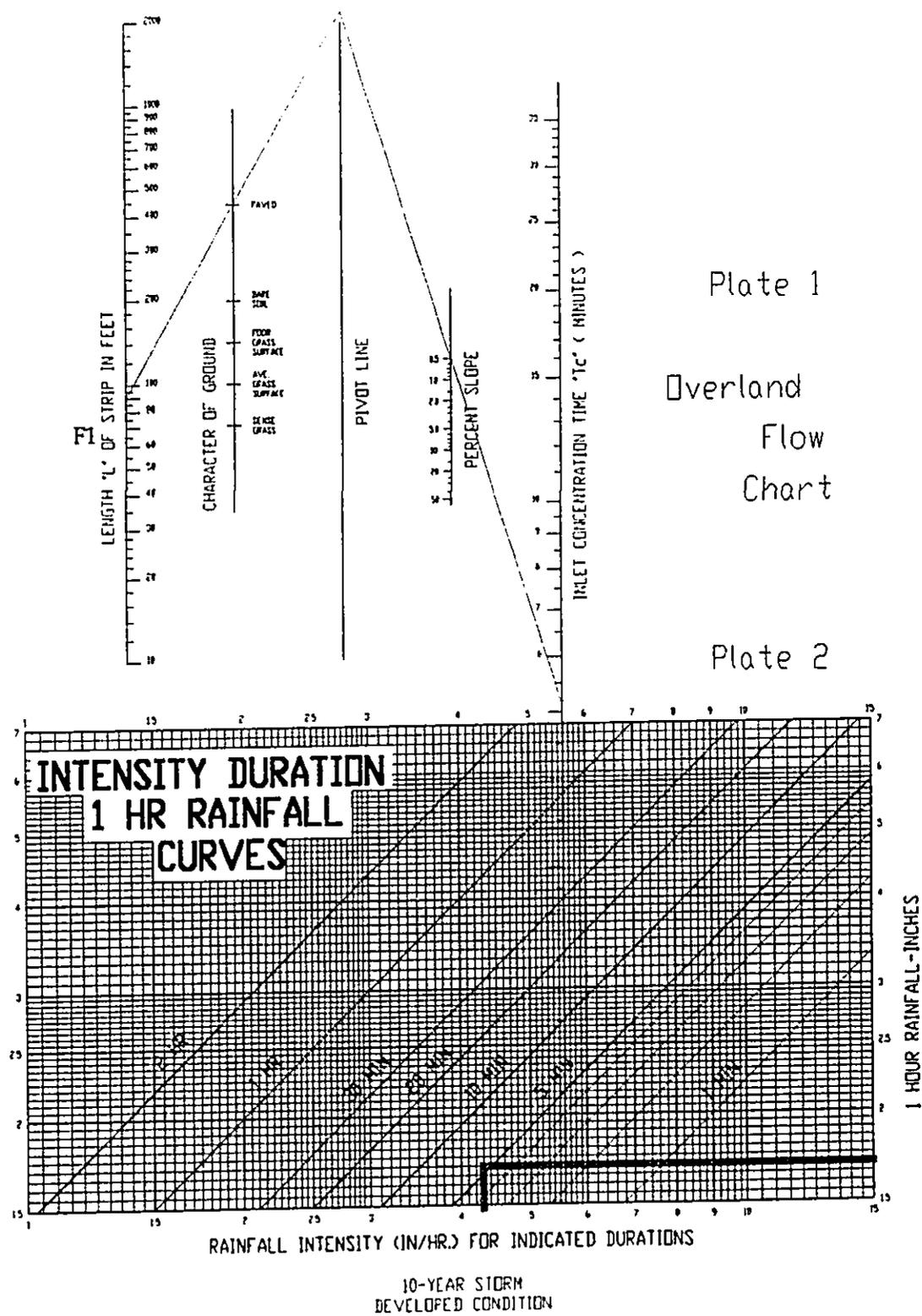


Plate 1

Overland  
Flow  
Chart

Plate 2

## EROSION CONTROL

This report presents an erosion analysis for the proposed redevelopment of the 614 Front Street site. It is located on the east (mauka) side of Front Street near the intersection of Prison Street and opposite the Kamehameha III Elementary School in Lahaina Town, Lahaina, Maui, Hawaii. It comprises the consolidation of two vacant commercial lots, TMK (2) 4-6-08:48 and 53. The proposed actions include the demolition of a portion of the existing parking lot and driveway and the construction of a new commercial structure and parking lot for 27 cars including two ADA accessible stalls as well as a loading bay.

The site contains approximately 0.3468 acres, and is flanked on two sides by commercial buildings and on its rear by a commercial parking lot. Across the road is a public school.

The proposed re-development action is consistent with prior and adjoining land use. The purpose of this analysis is to determine the impact of the proposed re-development on soil runoff and possible treatment required to reduce erosion and sedimentation to a level that will meet standards set by County, State and Federal statutes and regulations. The report details the method, site conditions, calculated runoffs, and control plan.

The analysis follows the procedures in the United States Department of Agriculture's handbook "Erosion and Sedimentation Control Guide for Hawaii".

## SOIL TYPE

The "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii (August, 1972)", page 30, classifies the soil at the project site and vicinity as Ewa Series, Ewa Silty Clay Loam, (EaA, 0 to 3 percent slopes). Permeability for this soil is moderate. Runoff is very slow, and the erosion hazard is no more than slight.

Reference Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii (Sheet Number 94).

## EROSION CONTROL STUDY

As indicated above, the soil at the project site and surrounding vicinity consists of the Ewa Series, Ewa Silty Clay Loam, (EaA, 0 to 3 percent slopes), characterized as having no more

than slight erosion hazard, with very slow runoff, and moderate permeability. This type of soil has a soil erodibility factor (K) of 0.17 according to the "Erosion and Sediment Control Guide for Hawaii, SCS (March, 1981)", page 54.

The area to be disturbed during construction is 0.340 acre.

The Universal Soil Loss Equation (USLE) is used to estimate the maximum average annual soil loss during construction. This equation is stated as follows:

$$E = R K L S C P, \text{ where}$$

R = Rainfall Factor = 150 tons/acre/year

K = Soil Erodibility Factor = 0.17

(L = Grade Length = 100 feet)

(S = Grade Slope = 1%)

LS = Slope Length Factor = 0.129

C = Cover Factor = 1.00 (Bare Soil)

P = Control Practice Factor = 1.00 (Non-agricultural)

$$E = 150 \times 0.17 \times 0.129 \times 1 \times 1 = 3.29 \text{ tons/acre/year]$$

Allowable Erosion Rate:

Maximum erosion rate x construction area = 5,000 tons/year

Graded site area = 0.340 acre

Allowable Erosion Rate (E') = 5,000/0.340 = 14,705 tons/acre/year

Severity Rating Number:

$$H = (2 F T + 3 D) A E, \text{ where}$$

H = Severity Rating Number

F = Downstream Hazard = 2

D = Coastal Water Hazard = 2

T = Duration of Site Work in Years = 0.5

A = Construction Area in Acres = 0.340

E = Uncontrolled Erosion Rate in Tons/Acre/Year = 3.29

$$H = (2 \times 2 \times 0.5 + 3 \times 2) (0.340 \times 3.29) = 8.95, \text{ within the maximum allowable value of 50,000.}$$

## EROSION CONTROL PLAN

Erosion control measures will be guided by Chapter 20.08, "Soil Erosion and Sedimentation Control", of the Maui County Code and the Hawaii State Department of Health Clean Water Branch. The site to be disturbed is less than five acres and therefore will not require a NPDES permit. The specific measures shall include:

1. Stabilize construction entrance (already accomplished by the existing asphalt driveway.)
2. Install sediment barrier fence around construction area.
3. Use sprinklers and/or water wagon during demolition/construction period to control wind borne dust.
4. Carry out demolition and grubbing operations over open areas to be re-developed. Remove demolition and grubbed material to either the Pohakulepo Concrete Recycling Facility or the Maui Demolition and Construction Landfill or other approved site.
5. Grass, plant or pave all exposed areas immediately upon completion of demolition/grading/construction work.
6. Excavate (trench) for underground utilities (electric, telephone, sewer, and water.) Backfill immediately or cover with plastic sheeting.
7. Excavate for foundations and columns, backfilling and compacting as soon as possible.
8. Pour retaining wall footings, as required.
9. Pour slabs and construct new concrete walkway and repave parking and driveway as appropriate.
10. Complete new building, including plumbing, electrical, fixtures, etc.
11. Establish permanent vegetation in planted areas.
12. Clean up site and remove any construction material to an approved landfill.

## DOMESTIC FLOW

### PROPOSED DOMESTIC WATER SYSTEM

The Proposed domestic water requirements will be served by an existing 5/8" water meter.

FIXTURE	QUANTITY	FU	TOTAL FU
Public Use			
Hose Bibb	2	5	10.0
Unit "A"			
Water Closet (FT)	1	1.7	1.7
Lavatory	1	0.6	0.6
Unit "B"			
Water Closet (FT)	1	1.7	1.7
Lavatory	1	0.6	0.6
Unit "C"			
Water Closet (FT)	1	1.7	1.7
Lavatory	1	0.6	0.6
Unit "D":			
Water Closet (FT)	1	1.7	1.7
Lavatory	1	0.6	<u>0.6</u>
TOTAL FIXTURE UNITS			19.2

Using Hunter's Curve (Ref.: Table 3-6 of the ASPE, "Fundamentals of Plumbing Design"):

19.2 FU  $\approx$  14 gpm

Landscape irrigation to be 6 gpm, for total of 20 gpm

Referencing AWWA standards (AWWA No. M6):

5/8" Meter = 20 GPM Maximum.

## IRRIGATION

The proposed building, parking lot and driveway access would occupy nearly all of the total area. The landscaped areas would require minimal irrigation. To the extent possible, native vegetation recommended by the Maui County Planting Plan would be employed to conserve water (and to protect the watershed from degradation due to invasive alien species). Irrigation requirements combined with domestic flow requirements are not expected to require any increase in existing meter size.

## FIRE FLOW

Fire hydrant number 224 on the 12" AC main on Front Street at the intersection with Canal Street provides fire protection for the property.

The proposed building will be within the service radii of this hydrant, which will meet or exceed the fire flow requirements for the proposed improvements.

Reference for Fire Flow Calculations is the "Fire Suppression Rating Schedule (1980)".

1. Type of Construction:  
Type I Occupancy:  
Fire Area (A) = 4400 s.f.  
CMU exterior on south side of building, wood frame otherwise  
Concrete slab-on-grade  
Corrugated metal roofing, no fire sprinkler  
CSP Construction Class 1, F = 1.5  
Occupancy Combustibility Class: C-3, O = 1.00
2. Fire flow adjusted for Construction Factor (C):  
 $C = 18F(A)^{0.2} = 18(1.5)[4400]^{0.2} = 1791$  or 1750 as per Section 310
3. Fire Flow adjustment for Exposure (X) and Communication (P):  
Distance: North = 42', South = 1', East = 57', & West = 72'  
RETAIL BUILDING (North): Length-Height of facing wall = 61' \* 2 = 122' (Class 1 Construction)  
RETAIL BUILDING (South): Length-Height of facing wall = 110' \* 2 = 220' (Class 1 Construction)  
RESIDENCE (East): Length-Height of Facing Wall = 18' \* 1 = 18' (Class 1 Construction)  
KING KAMEHAMEHA SCHOOL (West): Length-Height of facing wall = 32' \* 1 = 32' (Class 2 Construction)  
 $X = 0.13 + 0.24 + 0.12 + 0.06 = 0.55$  by Table 330(A).  
 $P = 0.0 + 0.0 + 0.0 + 0.0 = 0.0$  by Table 330(B).  
 $(X+P)_i = 1 + (X+P) = 1.55$
4. Needed Fire Flow:  
 $NFF = (C)(O)(X+P)_i = ([1750]1.00[1.55]) = 2712.5$  gpm or 2500 gpm as per Section 340.

## WASTEWATER REQUIREMENTS

### WASTEWATER REQUIREMENTS

Approximate wastewater requirements are as follows:

TYPE OF USAGE	QUANTITY	GPD	TOTAL GPD
Unit "A"	3	30	90
Unit "B"	3	30	90
Unit "C"	3	30	90
Unit "D"	3	30	90
NEW SPACE TOTAL:			<hr/> 360 GPD

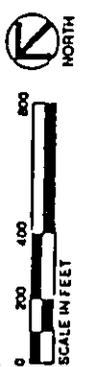
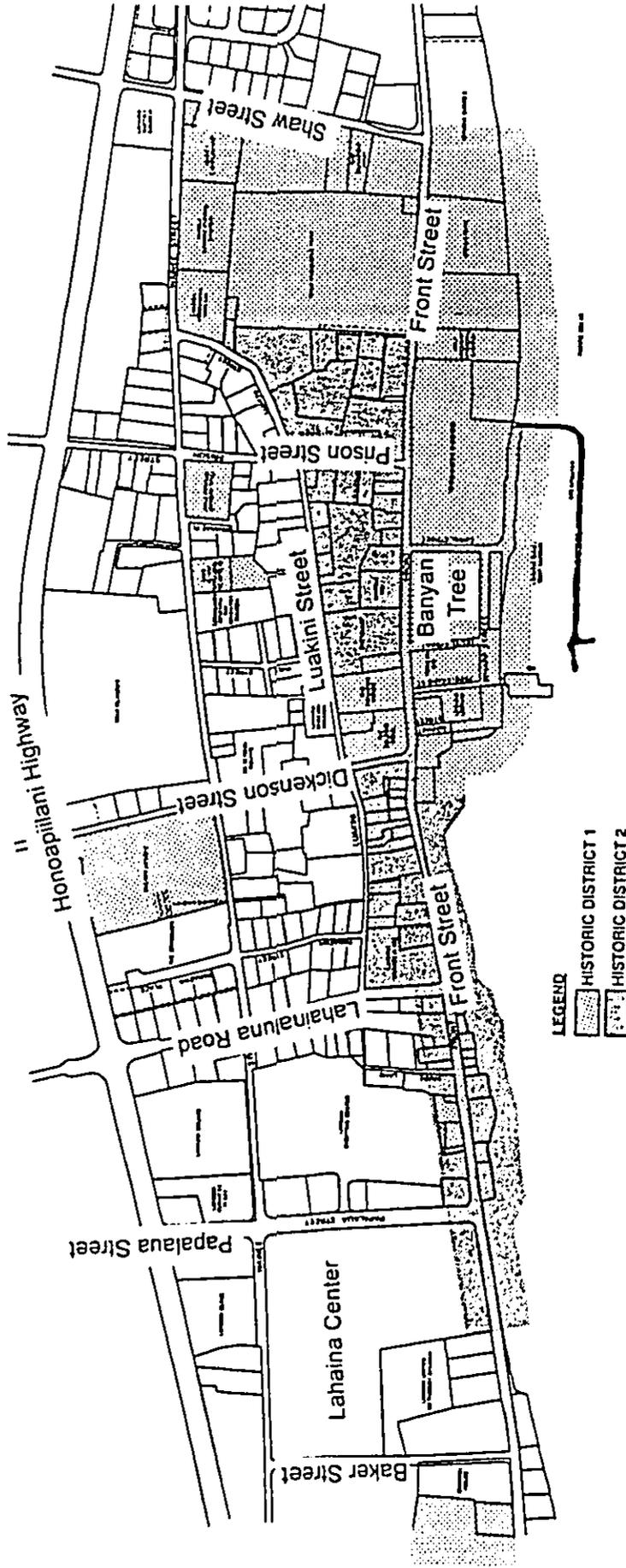
### DISPOSAL

Wastewater from the buildings flows by gravity sewer lateral to the existing sewer main fronting the project on Front Street.

# ***Appendix D***

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***Map and Use Regulations for  
Historic District Nos. 1 and 2***



LAHAINA  
HISTORIC DISTRICTS  
Design Study for Front Street Improvements  
Lahaina Town, Maui

19.52.090 Regulations for historic districts no. 1 and 2.

A. Establishment of Plan. For historic district no. 1 and historic district no. 2, the plans, reports, manuals and guidelines set forth in subsection 2.88.080 of this code on file with the department of planning shall be used as a guide to the determination of the required land use, height of buildings, style of architecture, parking requirements, yard spaces and lot areas, and any other matter pertaining to that particular historic district.

B. Use Regulations. Within historic district no. 1 and historic district no. 2, no building, structure or premises shall be used, and no structure shall hereafter be erected, structurally altered, replaced or enlarged, except for one or more of the following uses:

1. One-Family Dwellings. There may be accessory buildings located on the same lot, the use of which is customary and incidental to that of the residence. These may include servants' quarters or guest house; provided, that the servants' quarters or guest house shall not have a floor area of more than five hundred square feet and the lot size shall be seven thousand five hundred square feet, or greater.

2. Greenhouses;

3. Parks and Playgrounds — Community, Public or Privately Operated. Recreation, refreshment, amusement and service buildings or structures may be permitted in public parks and playgrounds when under the supervision of a government agency charged with the duties and responsibilities of maintaining and operating the parks and playgrounds;

4. Churches and dwellings of the clergy connected therewith as an incidental use to that of the church;

5. Schools;

6. Day care centers, nurseries, preschools, kindergartens;

7. Substations used by public utilities for the purpose of furnishing electricity, gas or telephone services, which are not and will not be hazardous, dangerous or a nuisance to the surrounding areas;

8. Buildings or premises used by the Federal, State, or County government for public purposes that are authorized by law;

9. Two-family dwellings (duplex);

10. Amusement enterprises, including billiard halls or poolhalls;

11. Antique shops;

12. Art galleries;

13. Auditoriums and theaters;

14. Banks;

15. Barber or beauty shops;

16. Baths — Turkish and the like, including masseurs;

17. Automobile service stations, without auto repairing;

18. Book, stationery, or gift stores;

19. Business offices and agencies;

20. Catering establishments;

21. Clinics, medical or dental;

22. Clothes cleaning agencies or pressing establishments;

23. Custom dressmaking or millinery shops;

24. Dancing studios, hula studios;

25. Delicatessens;

26. Drugstores;

27. Dry goods and/or department stores;

28. Grocery stores and meat markets;

29. Haberdasheries and women's apparel shops;

30. Hardware and garden supply stores;

31. Hotels;

32. Jewelry stores or fine art shops, including interior decorating;

33. Laundry agencies or self-service laundries;

34. Museums;

35. Music conservatories or studios;

36. Newsstands and magazine stands;

37. Photography shops;

38. Physical culture establishments;

39. Private clubs or fraternal organizations;

40. Professional buildings;

41. Religious, benevolent, philanthropic societies or functions;

42. Restaurants, cafes, or bars;

43. Shoestores;

44. Tailor, clothing or wearing apparel shops;

45. Apartments, boardinghouses or lodgings;

46. Auctioneer establishments;

47. Block printing establishments;

48. Printing, lithography or publishing shops;

49. Public parking areas; provided, that none shall abut Front Street;

50. Radio transmitting and television stations; provided, that antenna is not located in this district;

51. Retail stores or businesses;

52. Sign-painting shops, if conducted wholly within completely enclosed buildings;

53. Historical tours; provided, however, that only motor vehicle(s) shall be used, and the same parked or stored in an off-street parking area and that all customer transactions shall be conducted within an enclosed commercial building.