ALAN M. ARAKAWA Mayor MICHAEL W. FOLEY Director WAYNE A. BOTEILHO Deputy Director



COUNTY OF MAUI DEPARTMENT OF PLANNING

February 22, 2006

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

Dear Ms. Salmonson:

RE:

Final Environmental Assessment (FEA) for the Proposed Redevelopment of the Wailea Renaissance Hotel located at Tax Map Key: 2-1-008: 067 and 088, Wailea, Island of Maui, Hawaii (EA 2005/0016)

The Maui Planning Commission at its regular meeting on February 14, 2006, accepted the Final Environmental Assessment (FEA) for the subject project, and issued a Finding of No Significant Impact (FONSI). Please publish the FEA in the **March 8, 2006**, Office of Environmental Quality Control (OEQC) Environmental Notice.

We have enclosed a completed OEQC Publication Form and four (4) copies of the FEA. If you have any questions, please call Ms. Kivette Caigoy, Environmental Planner, of our office at 270-7735.

Sincerely,

MICHAEL W. FOLEY

Planning Director

MWF:KAC:sec Enclosure

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Ann Cua, Staff Planner Munekiyo & Hiraga EA Project File General File

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OF TAVISOR OUALITY CONTENT

Final Environmental Assessment

PROPOSED REDEVELOPMENT OF THE RENAISSANCE WAILEA BEACH RESORT

Prepared for:

February 2006

Kobayashi Group, LLC

MUNERLY CAPPIDAGA INC

Final Environmental Assessment

PROPOSED REDEVELOPMENT OF THE RENAISSANCE WAILEA BEACH RESORT

Prepared for:

February 2006

Kobayashi Group, LLC

MUNEKIYO & HIRAGA, INC.

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Executive Summary

Project Name:

Proposed Redevelopment of the Renaissance Wailea Beach

Resort

Type of Document:

Final Environmental Assessment

Legal Authority:

Chapter 343, Hawaii Revised Statutes

Agency Determination: FONSI

Applicable Environmental Assessment

Review "Trigger":

Action in the Shoreline Area

Location:

Maui Island

Wailea

TMK: (2) 2-1-008:067 and 088

Applicant:

Kobayashi Group, LLC Pauahi Tower, Suite 1570

1001 Bishop Street Honolulu, Hawaii 96813

Contact: Elton Wong, Project Manager

Phone: (808) 284-5734

Accepting Authority:

County of Maui

Department of Planning 250 South High Street Wailuku, Maui 96793

Contact: Michael W. Foley, Director

Phone: (808) 270-7735

Consultant:

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

Contact: Matthew Slepin, Planner

i

Phone: (808) 244-2015

Project Summary:

The applicant is proposing a total redevelopment of the existing Renaissance Wailea Beach Resort Hotel, located in the master-planned resort area of Wailea, Maui. redevelopment includes the demolition of all existing structures, including the free-standing Mokapu Wing, located

in the shoreline setback. The redeveloped property will consist of 193 condominium units with hotel amenities to be operated as a condominium hotel. Related improvements in the setback include the provision of a grass-paved emergency vehicle access road, utility lines, and landscaping.

Chapter I

Project Overview

I. PROJECT OVERVIEW

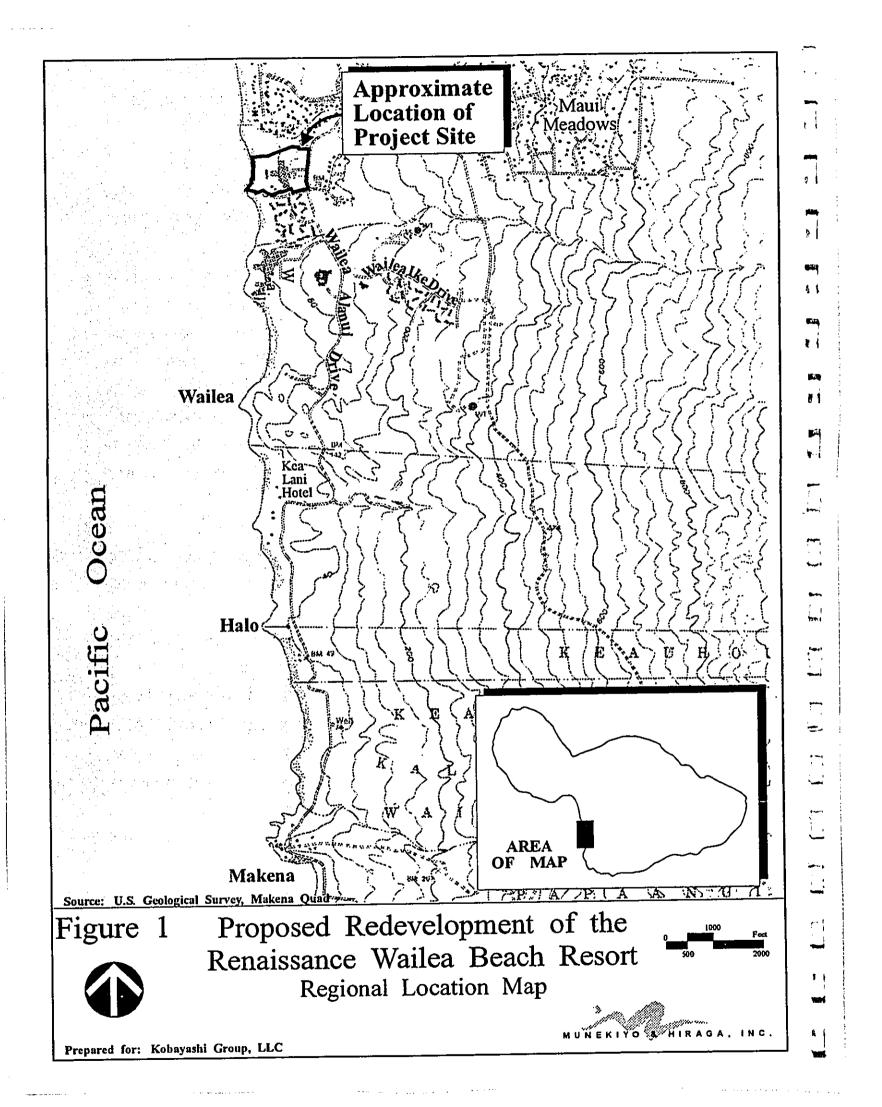
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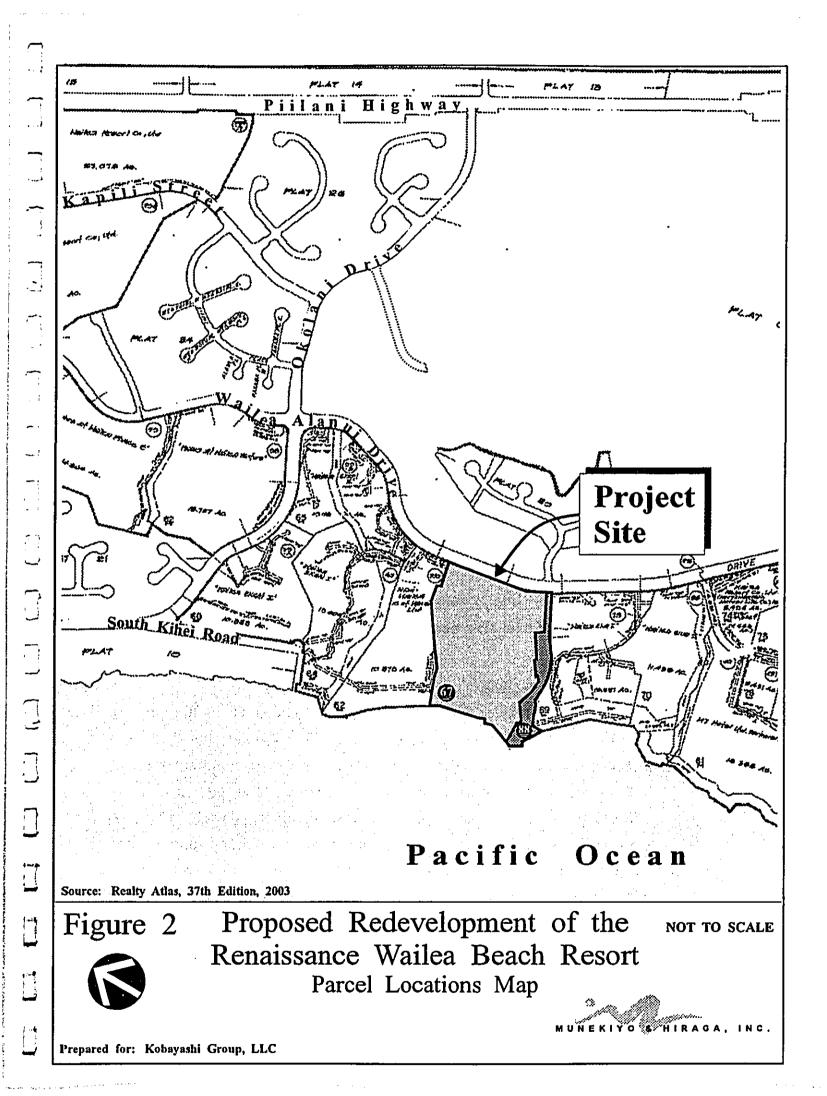
A. PROJECT LOCATION, EXISTING USE AND LAND OWNERSHIP

The applicant, Kobayashi Group, LLC, on behalf of owner Wailea Hotel and Beach Resort, L.L.C., proposes to redevelop the existing Renaissance Wailea Beach Resort in Wailea, Maui, Hawaii. This property is located within the limits of the Wailea Resort, a master-planned resort-residential community consisting of hotels, condominiums, single-family residences, a shopping center, a tennis center, golf courses, parks, and open space areas. The primary project site is identified by TMK 2-1-008:067 and encompasses an area of 15.578 acres. A secondary project site is the County of Maui's Ulua/Mokapu Beach Park, located adjacent to the primary project site. It is identified by TMK 2-1-008:088 and encompasses an area of 2.16 acres. See Figure 1 and Figure 2.

The Renaissance Wailea Beach Resort was originally constructed in 1978 with 349 guest rooms. With the exception of 26 guest rooms in the Mokapu Wing, a 2-story freestanding structure situated mauka of the shoreline area, the remaining rooms are located in the resort's 7-story main building, which contains three (3) attached wings: the Kihei Wing to the north, the Makai Wing to the west, and the Makena Wing to the south. In addition to the hotel rooms, the Renaissance Wailea Beach Resort contains several restaurants and retail stores, a business center, meeting and conference rooms, a fitness and massage center, swimming pools and water features, landscaped grounds, a greenhouse, at-grade parking areas, a two-story parking garage, as well as administrative and back-of-house support facilities.

The primary project site is bordered on the north by Maluhia at Wailea, a single-family residential project. To the east, the site abuts Wailea Alanui





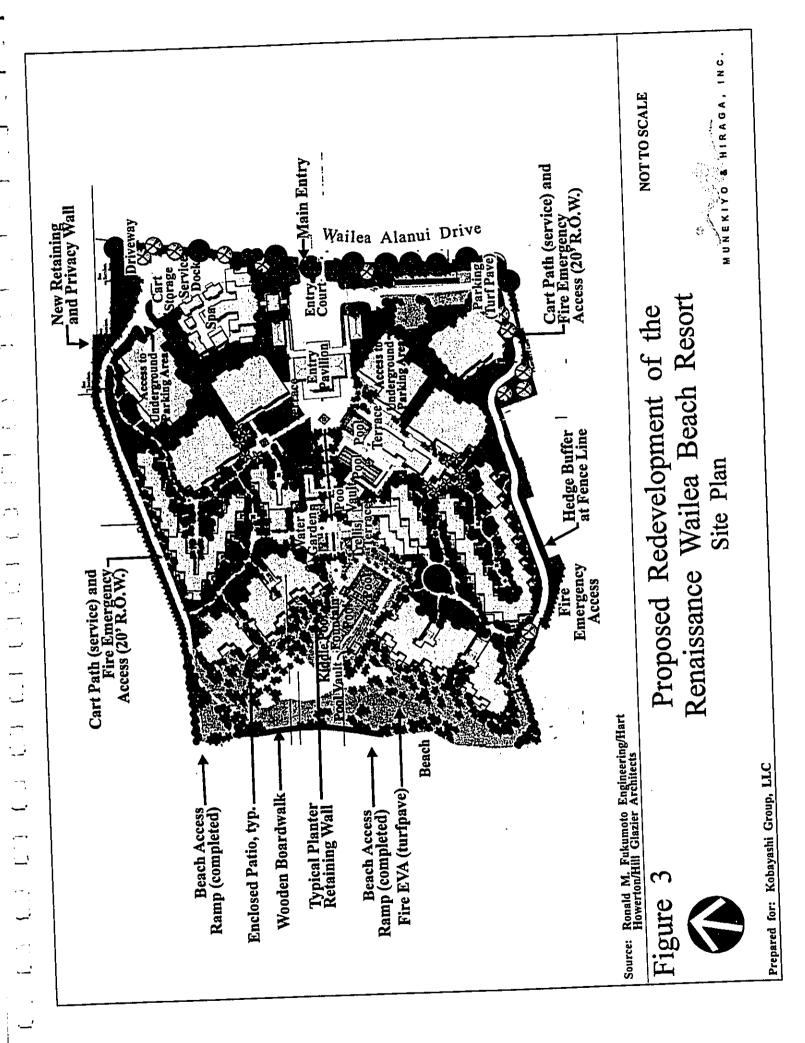
Drive, a County roadway which serves as one of the main thoroughfares through Wailea. The secondary project site, a County public beach access and parking lot (Ulua/Mokapu Beach Park), adjoins the primary project site to the south, while Mokapu Beach and the Pacific Ocean is located to the west. Wailea Elua, a residential condominium development, is located to the south. The secondary project site consists of two (2) public parking areas, public showers, an accessway to the beach, as well as a sewer pump station. Access to the subject property is provided via a driveway onto Wailea Alanui Drive.

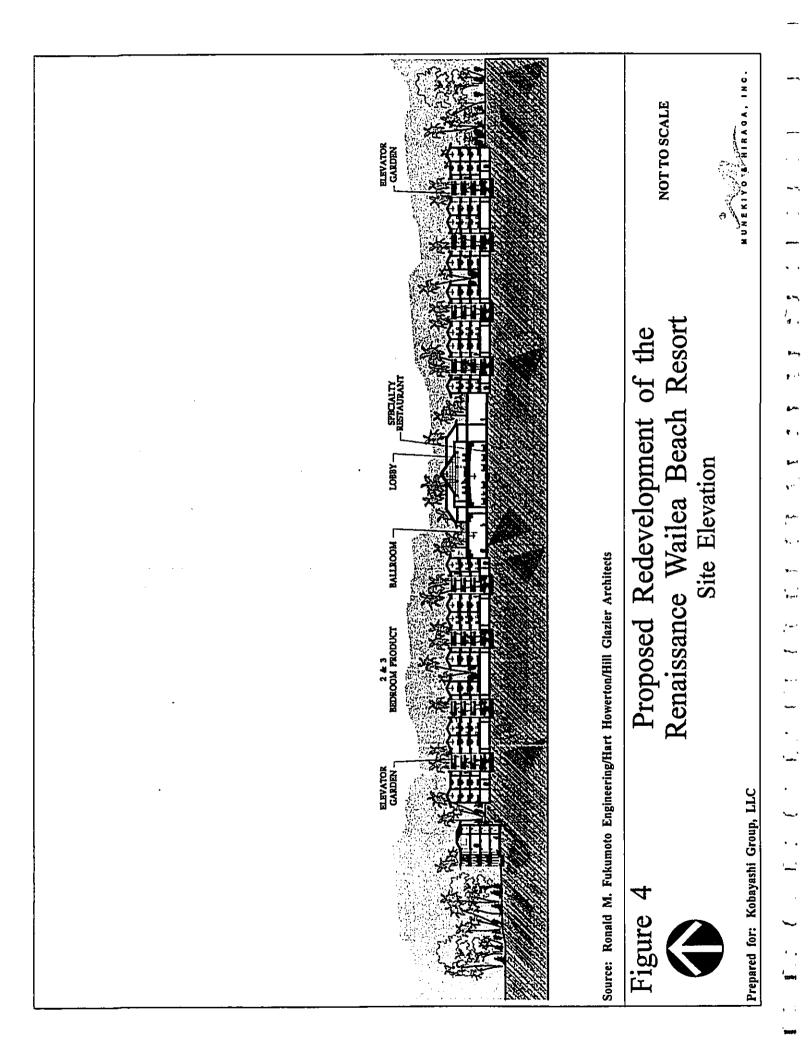
Both parcels are situated on lands within the State Urban District. In addition, the primary site is designated for Hotel and Open Space uses by the Kihei-Makena Community Plan and is zoned for H-2, Hotel District and OS, Open Space uses by the County of Maui. The secondary site is designated for Public/Quasi-Public uses in the Community Plan and zoned Interim by the County.

Wailea Hotel & Beach Resort, L.L.C. is the fee simple owner of the primary project site. The secondary site is owned by the County of Maui.

B. PROPOSED ACTION

The proposed project involves a total redevelopment of the primary property to consist of condominium units with full hotel amenities as a hybrid "condominium hotel". See Figure 3. This redevelopment concept will involve the demolition of all existing structures. The redeveloped site will comprise approximately 193 condominium units, of which 100 one-bedroom, 29 two-bedroom, 60 three-bedroom and 4 four-bedroom units are planned. The two-, three- and four-bedroom units are located on the makai portion of the property. The one (1) bedroom units are located in the middle portion of the site. One-, two- and three-bedroom units are located in the mauka portion of the site. See Figure 4 and Figure 5 for





NOT TO SCALE Renaissance Wailea Beach Resort Proposed Redevelopment of the Sample Condominium Unit Elevation Source: Ronald M. Fukumoto Engineering/Hart Howerton/Hill Glazier Architects Prepared for: Kobayashi Group, LLC Figure

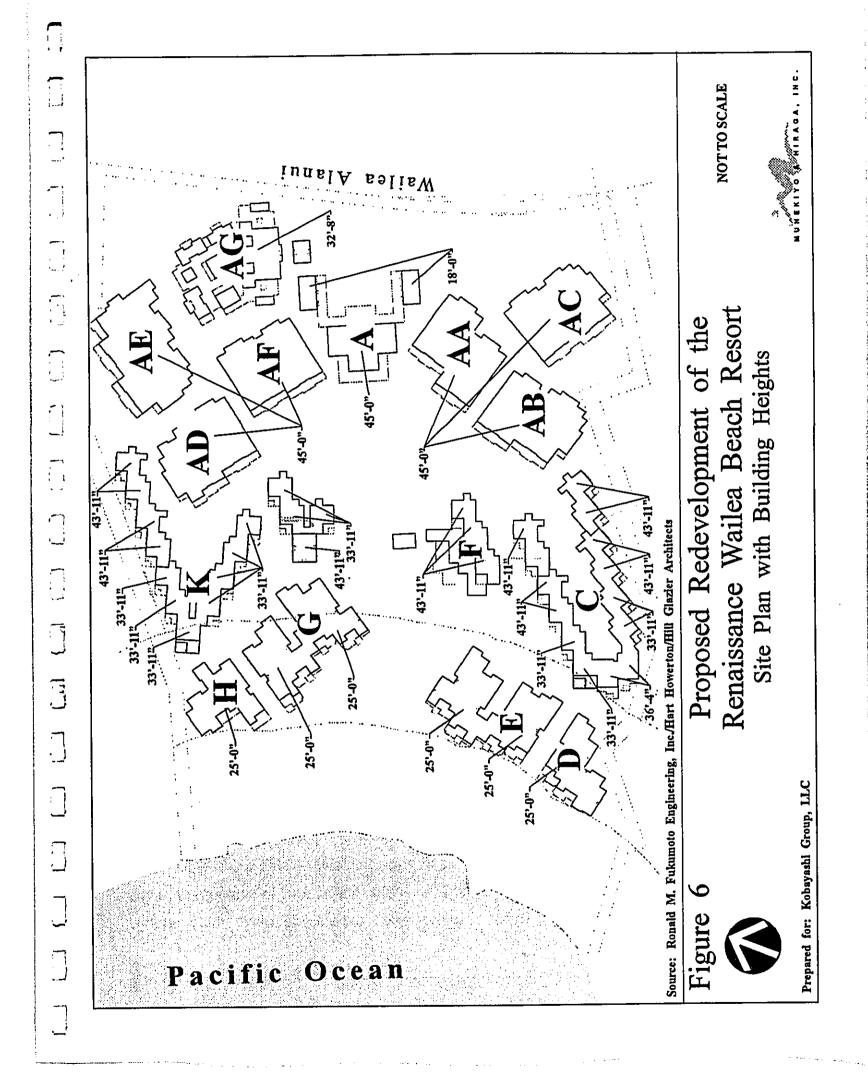
representative elevations. The 193 condominium units represent a significant reduction from the current 349 key count.

The condominium units will contain interior floor areas ranging in size from approximately 954 to 3,307 square feet plus lanais. Based on current market conditions, sales prices for these units are expected to start at approximately \$1.5 million. It is anticipated that the majority of the condominium unit purchasers will be utilizing their units on a seasonal or intermittent basis as vacation or second homes. Many of these owners will contract their units to the hotel operator to be rented on a transient basis.

In contrast to the existing hotel's maximum seven (7) stories and 67-foot height, the proposed buildings will be two (2) stories and 25 feet high along the shoreline rising inland to a maximum four (4) stories and 45 feet high. See Figure 6.

A spa facility of approximately 10,000 square feet will be located north of the main entrance and lobby. Refer to Figure 3. The spa will be constructed of individual huts arranged in a design intended to evoke a traditional Hawaiian village atmosphere. It will appear to be situated over water elements, gardens and feature private, free—standing, Hawaiian-type treatment rooms. A second entrance north of the spa will lead guests to the underground parking and will also be used by service vehicles. The primary back of house operations will also be underground. Other recreational features include four (4) swimming pools, an event lawn with amphitheater seating, a gym, and a yoga lawn.

All-weather, access-controlled fire lanes will be provided along the northern and southern boundaries of the project site. Access to the fire

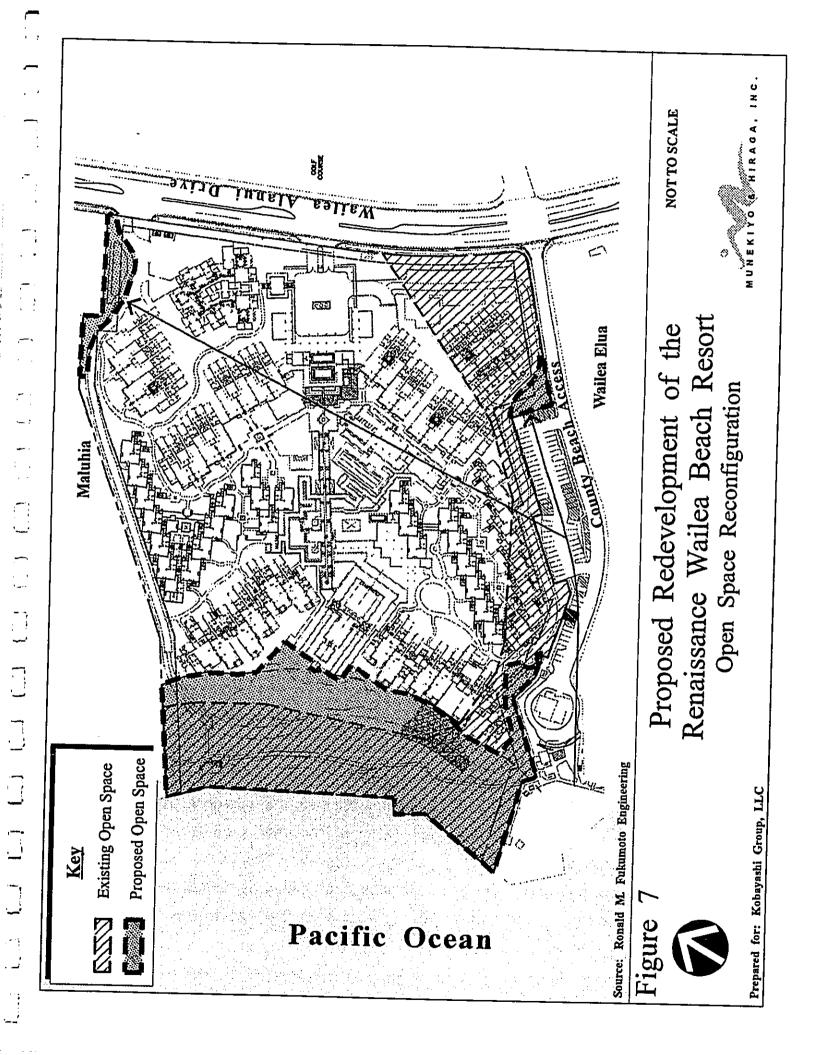


lane on the north will be from Wailea Alanui Drive, while access to the fire lane on the south will be from the surface parking area at the southeast corner of the project site or the adjoining Ulua/Mokapu Beach Park parking lot via an existing fire access gate. A new cooling tower will be located close to the spa and the service entrance in the northeastern portion of the site. The proposed cooling units will be enclosed in a CMU wall lined with exterior grade acoustical panels to mitigate noise, and screened by planting material.

The proposed project will require re-grading and installation of new utilities for water, sewer, electrical, drainage, telephone, and cable TV systems. Proposed infrastructure improvements include realignment of an existing 84-inch storm drain along the south side of the project and the installation of detention/retention drainage basins and/or storm water filtration units for on-site drainage.

The proposed redevelopment will further involve the reconfiguration of the existing 3-acre open space area currently located along the southern and western boundaries of the subject property. The new configuration will provide three (3) acres of open space areas with the majority of open space located along the shoreline portion of the property and additional areas along the southern property adjacent to the County beach park access, as well as the northeastern corner of the property. Opportunities for the reconfiguration of this open space are provided by the Planned Development Approval process. A map showing the reconfigured open space area is presented in Figure 7.

The site plan is designed to discourage vehicular traffic within the project by eliminating the roads for automobile traffic and to encourage more pedestrian traffic, enhancing the resort experience within the property.



Parking is primarily located in an underground structure located on the eastern side of the property, with some surface parking areas located in the southeastern corner. A total of 424 regulation parking stalls will be provided to comply with County requirements; of those, 377 will be provided by the underground structure, with an additional 47 surface stalls.

The easternmost (mauka) condominium units will be accessed from the underground garage by taking an elevator. Other condominium homeowners or hotel guests may park their cars in the garage and walk through the landscaped pathways to their units or valet their cars and have a butler drive them to their unit via quiet, more environmentally friendly electric golf carts. Central butler stations near the condominiums will provide shuttle service so that homeowners, hotel guests, or physically challenged individuals can ride from their units to the garage or lobby. The cart paths run in a mauka-makai direction and are located along the project boundaries branching off to the buildings.

Landscape and recreational amenities will be interspersed throughout the project to provide visual relief and quiet areas. The majority of the ground floor units will have semi-private recreational areas, such as plunge pools with tanning areas and private gardens. The site plan and landscaping will be terraced with small garden walls to both take advantage of the site's sloping topography while providing privacy between units and over rooftops. The roofs of the buildings are designed so that the ridges are running perpendicular to the ocean, which promotes an unobstructed view of the ocean. Where possible, existing landscaping will be moved to the boundaries to partially screen construction activities, as well as to provide dust and noise buffers. Other landscaping may be relocated for reuse. For example, the Ulua/Mokapu Beach Park to the south may be able to

use existing landscaping material from the hotel site. However, many of the onsite trees have reached full maturity and are not transplant candidates. The new landscaping will increase the visual buffer between the structures of the project area and the neighboring properties, while the open space resources at the shoreline will increase lateral, beach views.

The main entry at the property's mid-point will be off Wailea Alanui Drive onto a quiet, heavily landscaped *porte cochere* that will access an open lobby with traditional Hawaiian design features. A second access drive at the northern extent of the property will provide access to the underground parking garage.

The specialty restaurant and bar will sit on the floor level below the lobby with a view of the property and the ocean beyond. To the north is a small meeting area with a pre-function area. Moving toward the ocean is a health and fitness center that will open to oversee a lap pool and the landscaping and ocean beyond. Toward the makai end of the property, another restaurant and bar are situated in proximity to the main pools, which will be the day time center of activity.

A further component of the project involves improvements to the secondary project site, the adjacent Ulua/Mokapu Beach Park. Twenty-two (22) new parking stalls will be provided to create a total of 75 stalls. The additional stalls are being created through consolidation of existing separate parking sites within the park and restriping. One (1) new street light and two (2) new picnic benches will also be provided. Other park improvements include general landscaping, as well as landscaping of the pump station building site, and a new 6-foot, blue stone privacy wall between the property area and the park. See Figure 8. Improvements to the County beach park is being undertaken in coordination with the

Wailea Alanui Drive NOT TO SCALE Proposed Redevelopment of the Renaissance Wailea Beach Resort Ulua/Mokapu Beach Park Improvements Prepared for: Kobayashi Group, LLC Source: Hart Howerton ∞ Figure

County's Department of Parks and Recreation (DPR) and with the input and participation of the Wailea Community Association.

Improvements proposed within the shoreline setback area include the installation of utility lines and of a grasscrete, emergency vehicle access (EVA) lane, as well as the demolition of the Mokapu Wing. An existing, permitted walkway and boardwalk within the shoreline setback area provides lateral access along the shoreline for hotel guests and the public; improvements to the walkway and boardwalk are not proposed at this time. In addition, the applicant is seeking "after-the-fact" approvals for the installation of two (2) beach access ramps at the northern and southern extents of the property. There are no improvements proposed in the setback for the secondary project site. Further detailing of improvements within the shoreline setback is provided in Chapter IV, Section G of this report.

The estimated construction cost of the proposed project is approximately \$250 million. Demolition is anticipated to commence in the Spring of 2006 with construction to commence thereafter. Construction of the project will be undertaken in phases and is expected to take about 28 months to complete. Upon completion of the redevelopment project, the new facility will be operated as a St. Regis resort.

C. REGULATORY REQUIREMENTS

As noted, improvements within the 150-shoreline setback are proposed on TMK 2-1-008:067, the existing hotel site. The improvements are subject to review pursuant to the "Shoreline Rules for the Maui Planning Commission". Accordingly, an application for Shoreline Setback Variance (SSV) has been prepared for action by the Maui Planning Commission. It is noted that work within the shoreline setback is a trigger for the

preparation and processing of a Chapter 343, Hawaii Revised Statutes environmental assessment.

The subject property also falls within the limits of the Special Management Area (SMA) for the island of Maui. Accordingly, an application for a SMA Use Permit has been prepared for review and action by the Maui Planning Commission.

Finally, since the Wailea Resort, including the subject property, is a Planned Development, applications for Planned Development Step I and Step II approval have been prepared for the proposed project for review and approval by the Maui Planning Commission.

The SSV, SMA and Planned Development Step I and Step II applications are being processed concurrently.

Chapter 11

Description of the Existing Environment

II. DESCRIPTION OF THE EXISTING ENVIRONMENT

A. PHYSICAL ENVIRONMENT

1. Surrounding Environment

The project site is located in the Wailea Resort, Maui, adjacent to the southern portion of the Kihei District. The subject property is situated in an area of existing urban development characterized by hotel, multi-family resort residential, commercial and single-family residential uses.

The project site is bordered on the west by Mokapu Beach and the Pacific Ocean beyond; on the south by the Wailea Elua I multifamily residential development; on the east by Wailea Alanui Drive and Wailea's Blue Golf Course; and on the north by the Maluhia at Wailea single-family residential project.

Along Wailea Alanui Drive to the north are the Wailea Ekahi Phase I and Phase II multi-family resort residential project, as well as the Palms at Wailea multi-family resort residential project. Wailea Alanui Drive, the primary north-south collector through the Wailea Resort, is located immediately east of the subject property. The Shops at Wailea, as well as a number of resort condominium and hotel properties, are located along Wailea Alanui to the south.

2. Climate

The Wailea Resort area is generally sunny, warm and dry the entire year. The average annual high temperature is in the low 90's with the average low temperature being in the low 60's. June through August are historically the warmer months of the year, while the cooler months are January to March.

Average rainfall distribution in the Kihei-Makena region varies from under 10 inches per year to 20 inches per year in the higher elevations. Rainfall in the Kihei-Makena region is highly seasonal, with most of the precipitation occurring in the winter months.

Northeast tradewinds prevail approximately 80 to 85 percent of the time. Winds average 10 to 15 miles per hour during afternoons, with slightly lighter winds during mornings and nights.

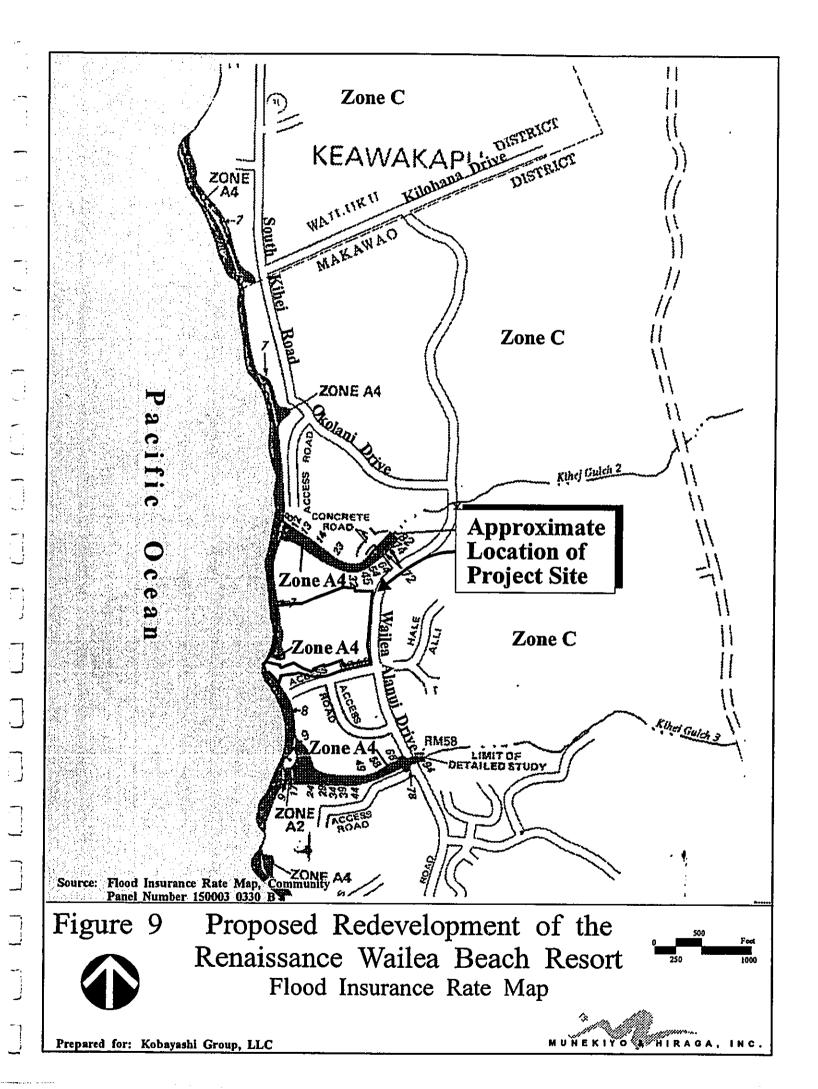
3. Flood and Tsunami Hazards

According to the Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency, the project site is located mainly in Zone C, an area of minimal flooding. A small, makai portion is located in Zone A4, a special flood hazard area inundated by the 100-year flood with a base elevation of 7 feet. See Figure 9.

4. Topography and Soils Characteristics

The project site slopes in an easterly to westerly direction ranging in elevation from approximately 80 feet above mean sea level (MSL) in the eastern portion of the site to sea level in the western portion of the site. The average slope is approximately 8.4 percent.

Underlying the project site is the Keawekapu-Makena soil association. See Figure 10. The Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii characterizes the soils of this association as gently sloping to moderately steep and well-drained. The underlying material is fine-textured to medium-textured subsoil, ranges in depth from shallow



LEGEND

① Pulchu-Ewa-Jaucas association

Waiakoa-Keahua-Molokai association

3 Honolua-Olelo association

(4) Rock land-Rough mountainous land association

(6) Puu Pa-Kula-Pane association

Hydrandepts-Tropaquods association

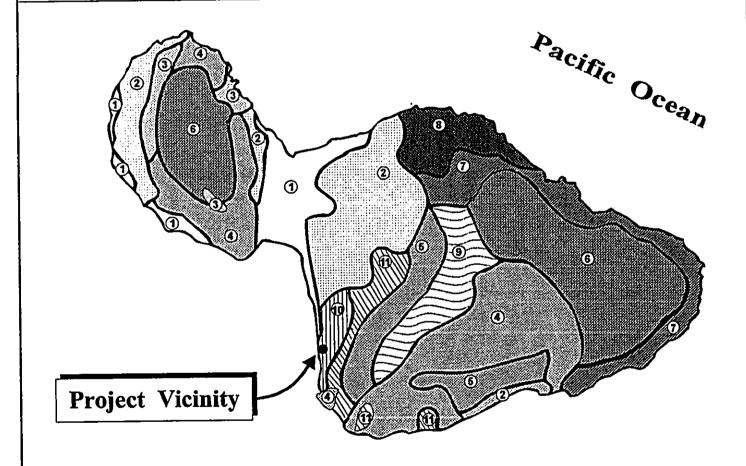
Hana-Makaalae-Kailua association

Pauwela-Haiku association

Laumaia-Kaipoipoi-Olinda association

Kcawakapu-Makena association

Kamaole-Oanapuka association



Source: USDA, Soil Conservation Service

Figure 10 Proposed Redevelopment of the Renaissance Wailea Beach Resort Soils Association Map

Mar

NOT TO SCALE

Prepared for: Kobayashi Group, LLC

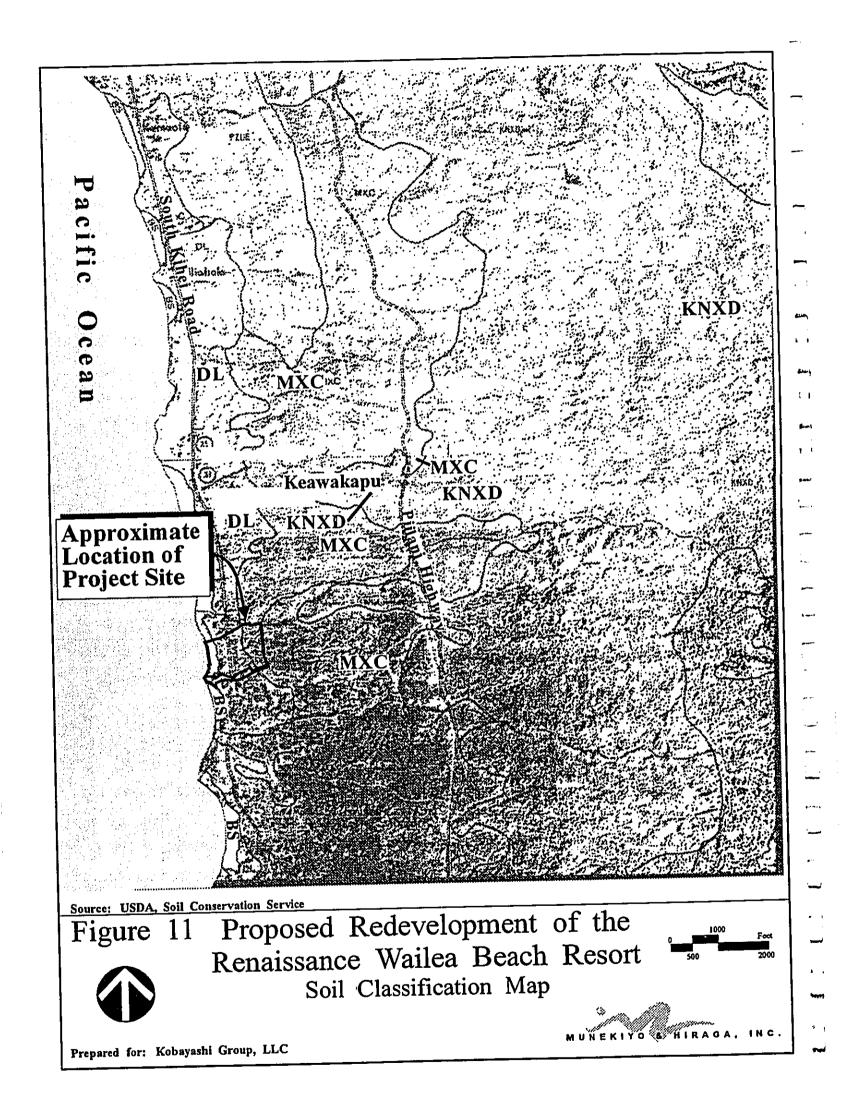
to deep and is comprised of fragmental Aa lava.

The soil type in the project area largely consists of Makena loam, stony complex, 3 to 15 percent slopes (MXC). See Figure 11. The MXC soil series is typically found on the lower leeward slopes of Haleakala, between Makena and Kamaole. Stony land occurs on low ridges and comprises 30 to 60 percent of the complex. Makena loam occurs as gently sloping areas between the low ridges of Stony land. On the Makena part of the complex, permeability is moderately rapid, runoff is slow to medium, and the erosion hazard is slight to moderate. On the Stony land part, permeability is very rapid and there is no erosion hazard.

A small, makai portion of the property rests on dune land (DL) and beaches (BS) soil types. Dune land consists of hills and ridges of sand-sized particles piled by the wind. The ridges are actively shifting. Elevations range from nearly sea level to 150 feet. Beaches occur as sandy, gravelly, or cobbly areas washed by the ocean waves. Like dunes, the sand is formed mainly from coral and seashells. They are considered highly suited for recreation and resort development.

5. Flora

The subject property is fully developed and utilized for hotel, beach access, and associated resort activities. The site is landscaped with ornamental and native plants typically representative of hotel properties in the Wailea Resort. Landscaping across the entire project area consists of native and introduced vegetation. Plant species found at the site include monkeypod trees, coconut palms, sago palms, hala, Hong Kong Orchid, Plumeria, Bougainvillea,



Pohinahina, Dwarf Laua'e, hibiscus, red and torch gingers, heliconia and Queen Emma Spider Lily, as well as grass lawns.

No wetlands are found on the subject property.

6. <u>Fauna</u>

Avifauna and mammals in the vicinity of the subject property and surrounding area are typical of species found in the urbanized Wailea Resort area. Feral mammals typically found in the area include cats, rats and mice. Species of birds commonly found in the area include spotted dove, American cardinal, Japanese Whiteeye, common mynah, house sparrow, warbling silverbill, and house finch. There are no known rare, threatened or endangered wildlife species in the vicinity of the subject property.

7. Air Quality

There are no point sources of airborne emissions in the immediate vicinity of the project site. The air quality of the Wailea Resort area is considered good with existing airborne pollutants attributed primarily to automobile exhaust from the region's roadways. Another source of airborne emissions is the smoke from sugar cane burning which occurs in the Central Maui isthmus. This source is intermittent, however, and prevailing tradewinds quickly disperse particulates which are generated.

8. Near-shore Water Quality

The hotel property receives stormwater runoff from mauka properties, including the Wailea Blue Golf Course. This runoff eventually is discharged into the ocean. A baseline water quality survey has been prepared for the near-shore vicinity of the project. See Appendix "A".

Noise Characteristics 9.

Background noise in this locale can be attributed to ocean surf and traffic travelling along Wailea Alanui Drive. Aside from temporary construction activities occurring in the resort, there are no point source of noise in the vicinity which would impact ambient noise conditions.

Archaeological Resources 10.

An archaeological assessment survey was carried out on the hotel property in July 2003. See Appendix "B". The subject property had never been investigated in the course of any previous archaeological surveys, since it was fully developed several decades ago. The entire property had been extensively modified during the development for hotel uses and related resort activities. However, in the course of the inspection fieldwork for the assessment survey, no evidence of any kind indicating the possible presence of any type of potentially significant cultural remains was observed. The likelihood of encountering potentially significant archaeological-historic resources within the subject property appear to be minimal.

Cultural Resources 11.

A cultural impact assessment was prepared for the project by Scientific Consulting Services. See Appendix "C".

Geopolitical Division a.

Prior to Western contact in Hawaii, land was divided into units called ahupua'a. Ideally, each ahupua'a was selfsufficient, running from *mauka*, the mountain, to *makai*, the ocean (MacKenzie). These divisions served as both cultural and settlement systems as traditional Hawaiian life was tied intimately to the land. Hunting, gathering, cultivation, and habitation took place within three (3) zones which characterized the *ahupua'a*: the *Mauka* Zone, the Agricultural Zone, and the Coastal Zone. The *Mauka* Zone provided access to a variety of trees, plants, and herbs for various needs, customs and practices. Planting of yams, sweet potato, sugar cane, taro, and other foods took place in the Agricultural Zone, where gradual slopes of land allowed terraces to be constructed for more efficient irrigation. The Coastal Zone and low-lying areas was where most of the *kauhale*, group of houses, were found, as well as temples, fishing shrines, and fishponds (Minerbi).

Western contact brought changes to the Hawaiian land system along with the introduction of private ownership of land, a concept foreign to the Native Hawaiians. A Board of Land Commissioners was established in 1845 to uphold or reject all private land claims of both foreigners and Hawaiians. The Commission adopted rules pertaining to the proof of claims, right of tenants, and commutation to the government in attempts to achieve the goal of totally partitioning undivided lands. All lands not claimed by February 1848 were to be forfeited to the government (MacKenzie).

Following the enactment of these rules, the *Mahele* division of 1848 divided all lands of Hawaii between the king and

chiefs. Two (2) years later the *Kuleana* act completed the *Mahele* process by authorizing the Land Commission to award fee simple titles to native tenants for their land. These *kuleana* parcels, also known as Land Commission Awards (LCA), were generally among the richest and most fertile in the islands and came from the king, government, or chief's land. All claims and awards were numbered and recorded in the *Mahele* Book (MacKenzie). In addition, government lands were sold as "Royal Patent Grants" or "Grants" in order to meet the increasing costs of government. These grants differed from LCAs, as it was not necessary for the recipients to obtain an award for their land from the Land Commission (Chinen).

The project is located in the old district of Honoua'ula (which is presently known as the Makawao District) in the *ahupua'a* of Paeahu. This area was traditionally part of the "Wailea lands". In more recent times, the project site was part of the Ulupalakua Ranch until the development of this region into a resort area in the 1970's.

b. Traditional and Customary Rights

Hawaiian customs and practices are recognized as "Hawaiian usage" if it can be shown to have been exercised prior to November 25, 1892, which was when the Hawaiian Kingdom Legislature adopted British common law into the Hawaiian legal system (Minerbi). The traditional and customary rights of Native Hawaiians can be broken down into access rights, gathering rights, burial rights, and religious rights.

Access

Native Hawaiians generally share the same access rights as the general public. However, they have the unique access rights to *kuleana* parcels and between *ahupua'a*. Access to *kuleana* parcels may involve access along ancient trails or expanded access not limited to any route. Additionally, the *Kuleana* Act granted unobstructed access within the *ahupua'a* to obtain items necessary to make the *kuleana* parcel productive. Access rights between *ahupua'a* involve access along ancient or well established trails (MacKenzie).

Gathering

In terms of gathering rights, the Hawaii Supreme Court has upheld gathering rights within an ahupua'a for firewood, house-timber, aho cord, thatch, and ki-leaf under three (3) conditions. The tenant must physically reside within the ahupua'a, the right to gather can only be exercised upon undeveloped lands within the ahupua'a, and the right must be exercised only for the purpose of practicing Native Hawaiian customs and traditions (MacKenzie).

Burial

According to traditional Hawaiian burial beliefs, following death, the 'uhane, or spirit, must remain near the na iwi, or bones. Burial sites are chosen by Hawaiians for symbolic purposes in places for safekeeping. Often, bones were hidden in caves, cliffs, sand dunes, or deposited in the ocean. Today, federal and state laws protect both unmarked and marked burial sites. Island Burial Councils assist the State Historic Preservation Division with inventory and identification of unmarked Hawaiian burial sites and determine the preservation or relocation of native Hawaiian burial sites (MacKenzie).

<u>Religious</u>

Hawaiian religion and beliefs were intimately tied to the land. While some practices and traditions were lost over the years, basic Hawaiian religious concepts remain. The terms "aloha 'aina," love the land and "malama 'aina," care for and protect the land, convey the unity of humans, nature, and the gods in Hawaiian philosophy (Minerbi). Furthermore,

Hawaiians honored and worshiped aumakua, deities, and akua, gods. There were numerous akua of farming, fishing, tapa making, dancing, sports, and any other activity of Hawaiian life. The concept of mana or sacred attachment to places, people, or things also remains as a significant aspect of Hawaiian religion (MacKenzie).

12. <u>Scenic and Open Space Resources</u>

The subject property is not a part of or within a scenic view corridor. The project site, which is screened from Wailea Alanui by landscaping, provides views of the Pacific Ocean and the offshore islands of Kahoolawe and Molokini. Open space in the Kihei-Makena region is defined by a broad expanse of undeveloped lands mauka of Piilani Highway which extend in an easterly direction toward Kula. Along its southerly and westerly boundaries, the hotel site includes three (3) acres which is zoned and utilized as Open Space.

B. <u>SOCIO-ECONOMIC ENVIRONMENT</u>

1. Land Use and Community Character

From a regional standpoint, the subject parcel is part of the Kihei-Makena Community Plan region which stretches from Maalaea to La Perouse Bay. The region includes a diverse range of physical and socio-economic environments. With its dry and mild climate and proximity to recreation-oriented shoreline resources, the visitor-based economy has grown steadily over the past few years. The town of Kihei serves as the commercial and residential center of the region with the master-planned communities of the Wailea and Makena Resorts serving as the focal point for visitor activities.

As previously noted, the area surrounding the project site includes

resort facilities, retail commercial uses, condominium and multiand single-family residential uses.

2. <u>Population and Economy</u>

The population of the County of Maui has exhibited relatively strong growth over the past decade, with the 2000 population of 128,241 increasing about 28 percent over the 1990 population of 100,504. Growth in the County is expected to continue, with a population projection for the year 2010 estimated to be 151,269 (SMS, June 2002).

Just as the County's population has grown, the resident population of the Kihei-Makena region has increased dramatically in the last few decades. Population gains were especially pronounced in the 1970's as the rapidly developing visitor industry attracted many new residents. The current resident population of the Kihei-Makena region is approximately 22,870. A projection of the resident population for the year 2010 is 27,181 (SMS, June 2002).

The economy of Maui is heavily dependent upon the visitor industry. The dependency on the visitor industry is especially evident in Kihei-Makena, which is one of the State's major resort destination areas. The foundation for the region's visitor strength lies in world-class resorts and recreational facilities located in Wailea Resort and Makena. Support for the visitor industry is found in Kihei, where numerous retail commercial centers are found.

Renaissance Wailea Beach Resort operations presently support 370 direct full- and part-time jobs.

C. PUBLIC SERVICES

1. Police and Fire Protection

The County of Maui's Police Department is headquartered at its Wailuku Station. The Department consists of several patrol, investigative and administrative divisions. The Department's Kihei Patrol, which covers the Kihei-Makena region, has a substation at the Kihei Town Center located about 4 miles to the north of the subject property.

Fire prevention, suppression and protection services are provided by the County's Department of Fire Control. The Kihei Station, which services the Kihei-Makena region, is located on South Kihei Road near Kalama Park approximately 2.5 miles north of the project site. The new Wailea Station is located along Kilohana Drive, about 1.0 mile to the northeast of the project site. The new Wailea Station services the area from Makena to Kamaole Park II and provides back-up support for the Kihei Station.

2. <u>Health Care</u>

Maui Memorial Medical Center is the only major medical facility on the island, and services the Kihei-Makena region. Acute, general and emergency care services are provided by the 196-bed facility which is located in Wailuku. Privately operated medical/dental offices are located in the Kihei area to serve the region's residents.

3. Recreation

Diverse recreational opportunities are available in the Kihei-Makena region. In addition to Ulua and Mokapu Beach, which border the project site to the west, recreational resources in proximity to the site include Wailea Beach and Polo Beach. To the north in Kihei,

recreational facilities include Kalepolepo Park, Elleair Maui Golf Club, Kalama Park, Kamaole Beach Parks I, II and III, and numerous other beach parks along the Kihei coastline. Shoreline recreation includes swimming, fishing, surfing, picnicking, kayaking, snorkeling and windsurfing.

The Makena Resort, located to the south of the project site, offers additional opportunities for golf, tennis and ocean-related activities.

4. Education

The existing school service area encompasses approximately 32 square miles. The State Department of Education (DOE) operates three (3) schools in the Kihei area. Kihei Elementary School and Kamali'i Elementary School cover grades K to 5. Lokelani Intermediate School includes grades 6 to 8. Public school students in grades 9 through 12 attend Maui High School in Kahului.

5. Solid Waste

Single-family residential solid waste collection service is provided by the County of Maui on a once-a-week basis. Residential solid waste collected by County crews are disposed of at the County's Central Maui Landfill located 4.0 miles southeast of the Kahului Airport. In addition to County-collected refuse, the Central Maui Landfill accepts commercial waste from private collection companies.

D. <u>INFRASTRUCTURE</u>

1. Roadways

Access to the Wailea Resort is provided by North and South Kihei Road from West Maui and the Wailuku area, and Mokulele

Highway and Piilani Highway from the Kahului area and "Upcountry". North Kihei Road becomes South Kihei Road, near its junction with Mokulele Highway and continues southward through Kihei Town. South Kihei Road terminates just south of Okolani Drive approximately 0.3 mile northwest of the project site. The intersection with Okolani Drive is channelized so that traffic between South Kihei Road and Okolani Drive is a through movement. South Kihei Road is a two-lane, two-way County roadway generally following the coastline through Kihei Town. The County has upgraded portions of South Kihei Road to urban collector standards.

Access to the project site is provided by Wailea Alanui Drive via South Kihei Road and Okolani Drive to the north and Wailea Ike Drive and Piilani Highway to the south. Wailea Alanui Drive is predominantly a four-lane, two-way County of Maui roadway that serves as the main access road through the Wailea Resort. At the northern end of the roadway, Wailea Alanui Drive intersects with Kilohana Drive. This intersection is unsignalized and all approaches to the intersection serve left-turn, through and right-turn traffic movements.

Piilani Highway, approximately 0.75 mile east of the project site, is the primary arterial highway for South Maui. This four-lane, two-way high quality State highway runs parallel to and mauka of South Kihei Road. In addition to paved shoulders, Piilani Highway has traffic signals, as well as left- and right-turn deceleration lanes at major intersections. Piilani Highway begins at North Kihei Road and terminates at Wailea Ike Drive in the Wailea Resort. In the vicinity of the Wailea Resort, the posted speed limit along Piilani

Highway is 35 mph. The Piilani Highway, Kilohana Drive and Mapu Place intersection is signalized. The intersection approaches provide for separate turn lanes. The State Department of Transportation restriped a 5.9 mile section of Piilani Highway, from the intersection of Mokulele Highway to the intersection of Kilohana Drive, to provide two travel lanes in each direction. The project was completed in the summer of 2003.

Kilohana Drive is a collector road, oriented in an east-west direction. This two-lane, two-way roadway belongs to the State of Hawaii and A&B Wailea LLC. The portion of Kilohana Drive that extends east of Kapili Street falls under the control of the Department of Transportation's Highways Division, while the remainder of the road falls under the control of the A&B Wailea LLC. The posted speed limit on Kilohana Drive is 25 mph.

Okolani Drive is a east-west oriented collector which connects Piilani Highway and South Kihei Road. The intersection with Piilani Highway is unsignalized. Between Piilani Highway and Wailea Alanui Drive, Okolani Drive is a two-lane, two-way roadway. Between Wailea Alanui Drive and South Kihei Road, the roadway is a four-lane, two-way roadway. Okolani Drive is owned and maintained by the County of Maui. The posted speed limit on Okolani Drive is 30 mph.

Approximately 0.75 mile south of the intersection with Okolani Drive, Wailea Alanui Drive intersects Wailea Ike Drive. At this signalized T-intersection, the northbound approach of Wailea Alanui Drive has one (1) lane that serves through and right-turn traffic movements while the southbound approach has three (3)

lanes that serve left-turn and through traffic movements. Wailea Ike Drive is a predominantly two-lane, two-way County of Maui roadway that serves as a connector road between Wailea Alanui Drive and Piilani Highway. The Wailea Ike Drive approach of the intersection at Wailea Alanui Drive has two (2) lanes that serve left-turn and right-turn traffic movements.

2. Water

Domestic water and fire flow to the Wailea Resort is provided by the County Department of Water Supply (DWS).

Separate systems serve the upper elevations, middle elevations, and lower elevations of the resort. The project site is served by the lower system, which consists of several reservoirs and distribution lines. The distribution lines near the project site include a 20-inch main along Wailea Alanui Drive, and a 12-inch on-site branch and fire hydrant at the front of the existing Wailea Renaissance Beach Resort.

Two (2) groups of domestic and fire protection laterals and meters connect to the 12-inch on-site branch. The first group, located near the porte cochere, includes two (2) 3-inch meters for domestic use and one (1) 8-inch detector check meter for fire protection. The domestic and fire protection lines from these meters connect to the building water systems near the front of the hotel. The second group, located along the entry driveway, includes one (1) 3-inch meter for domestic use and one (1) 6-inch detector check meter for fire protection. The domestic line from the 3-inch meter runs along the northerly and westerly sides of the property, branches off, and connects to the Mokapu Wing, the pool area, and other areas on

the westerly side of the site. The fire protection line follows the alignment of the domestic line and ends at a fire hydrant at the Mokapu Wing.

Irrigation water for the site is provided through a separate irrigation system and water meter along Wailea Alanui Drive. The Wailea Community Association maintains this system and the landscape planting within the streets in the Wailea Resort. The source of the irrigation water is the Department of Water Supply system.

Actual domestic water consumption for the hotel property averaged 149,000 gallons per day (gpd) based on records from a 34-month period from December 2000 through September 2003. During this period, domestic consumption ranged from about 121,000 gpd to about 188,000 gpd. Actual irrigation water usage ranged from about 42,000 gpd to about 81,000 gpd. See Appendix "D".

3. Wastewater

The County of Maui provides a wastewater collection system for the area. The collection system carries wastewater to the Kihei Wastewater Reclamation Facility for treatment, reuse and disposal. The wastewater collection system includes gravity sewers, force mains, and pump stations along Wailea Alanui Drive and South Kihei Road.

Existing gravity sewer lines and manholes convey wastewater through the hotel site. An interceptor line, consisting of 12-inch and 15-inch pipe, runs along the westerly side of the site and receives wastewater from various branch lines. These branch lines, consisting of 4-inch and 8-inch pipe, collect wastewater from

the buildings and convey it to the interceptor line. The interceptor line also receives wastewater from the adjoining Maluhia at Wailea site to the north. The interceptor line carries wastewater to the County's wastewater pump station located in the adjacent, secondary project site. The wastewater is then pumped through a 10-inch force main to a 24-inch gravity sewer main along Wailea Alanui Drive.

The estimated wastewater flow for existing conditions at the hotel site is 150,000 gallons per day (gpd). This amount is based on 349 hotel rooms, and various restaurant and employee components. The computed wastewater flow is 144,000 gpd, or 92 percent of the actual domestic water use of 149,000 gpd and is, therefore, a reasonable estimate. Refer to Appendix "D".

4. Drainage

Existing on-site drainage improvements at the hotel site include curb inlet catch basins, grated drain inlets, drain pipes, storm drain manholes, outlet structures, rock-lined channels, and grassed swales. Catch basins and drain inlets collect storm runoff from the parking lots and driveways on the mauka side of the site, and drain pipes carry the collected runoff to the makai side of the site. The runoff is then discharged from the pipes and allowed to flow over the site and to the ocean. There are limited drainage improvements on the makai side of the site. On the makai side of the site, storm drainage is generally directed away from buildings and dispersed by surface flows.

The on-site drain pipes also carry off-site flows through the site. At the northeasterly corner of the site, an 18-inch drain collects runoff from the golf course and discharges it along the northerly property line. At the easterly side of the site, three (3) 60-inch culverts carry off-site runoff into the site. An 84-inch drain pipe connects to the 60-inch culverts, carries the runoff under the southeasterly parking lot, and discharges the runoff through an outlet structure at the southerly property line. This runoff continues downstream through a rock-lined channel at the outlet structure and a grassed channel that leads to the ocean. southeasterly corner of the site, a 24-inch drain collects runoff from the golf course and ties in to the 84-inch drain pipe at the southeasterly parking lot.

The off-site areas that drain into the on-site system are as follows. The 18-inch drain receives runoff from 4.8 acres of golf course area to the east of the project site. The triple 60-inch culverts receive runoff from 67.2 acres of Wailea Resort land, and 125.6 acres of land on the mauka side of Piilani Highway. The culverts under Piilani Highway are designed to handle a 50-year storm with a peak flow of 430 cubic feet per second (cfs). The 84-inch drain pipe through the project site is designed to handle a 100-year storm with a peak flow of 520 cfs. Refer to Appendix "D".

Power, Telephone and CATV Services 5.

The existing utility distribution systems within the Wailea Resort are underground. Electrical, telephone and cable television services to the project site are currently provided by Maui Electric Company, Ltd., Hawaiian Telcom and Oceanic Time Warner Cablevision, respectively.

Chapter III

Potential Impacts and Mitigation Measures

III. POTENTIAL IMPACTS AND MITIGATION MEASURES

A. IMPACTS TO THE PHYSICAL ENVIRONMENT

1. Surrounding Environment

Various land uses, encompassing hotel, business, resort condominium, recreational, and multi- and single-family activities, are found within the general vicinity of the project site.

Residential properties within the project vicinity include the Maluhia at Wailea and Wailea Ekahi to the north, the Fairway Homesites and Grand Champions Villas to the east. The Wailea Marriott Resort, Four Seasons Resort and Grand Wailea Resort typify the hotel land uses nearby the project area.

The proposed project is in keeping with the existing parameters of the site and Wailea Resort's land use master plan. The primary project site's underlying H-2, Hotel zoning permits the redevelopment of the site to accommodate the proposed uses and improvements. Processing the proposed project under Maui County Code Chapter 19.32, Planned Development, permits the proposed site reconfiguration provided that overall density and open space standards are respected. The project was reviewed by the Wailea Community Association Design Review Committee at their July 14, 2005 and August 11, 2005 meetings and was given preliminary approval. See Appendix "E". The proposed project, including modifications to the Ulua/Mokapu Beach Park, is deemed consistent with Wailea Resort's master plan and is not anticipated to create adverse land use impacts to the resort and its operations.

2. Flora

The project site is fully landscaped. A new landscape concept has

been developed for the proposed project. Where possible, existing landscaping will be moved to the boundaries to partially screen construction activities, as well as to provide dust and noise buffers. Existing landscaping on the hotel site may be relocated for reuse, for example to the secondary project site, the Ulua/Mokapu Beach Park to the south. However, many of the trees have reached full maturity and are not transplant candidates. There are no rare or protected native species within the project area and, therefore, the proposed project is not expected to have a negative impact to botanical resources.

3. Fauna

No endangered mammal, bird or insect species are present in the project area. Additionally, no unique or special habitats are found on the property. In this context, the proposed project is not anticipated to have an adverse impact on fauna activity or populations in the project vicinity.

4. Air Quality and Noise

Emissions from construction equipment and other vehicles involved in construction activities may temporarily affect the ambient air quality within the immediate vicinity. However, these effects shall be minimized by properly maintaining construction equipment and vehicles.

In addition, dust generated during construction, especially from earth-moving operations, such as clearing, excavating and trenching, may also result in a temporary decrease in ambient air quality. Mitigation measures include utilizing dust barriers, waterwagons and/or sprinklers to control dust, and watering graded

areas.

As with air quality, ambient noise conditions will be temporarily impacted by construction activities. Power tools, heavy construction equipment, such as bulldozers, front-end loaders, and materials-carrying trucks and trailers, would be the dominant source of noise during the construction period. Construction activities will be limited to normal daylight working hours. Hotel operations will cease during the construction period.

5. Near-Shore Water Quality

The proposed project is not anticipated to result in any adverse impacts to near-shore marine quality. As noted in the water quality report, since land use is not being notably altered, there are no anticipated significant impacts to nearshore water quality. Refer to Appendix "A". The project includes improvements to the drainage system to improve discharge water quality. See Section III.B.4 and Appendix "D".

6. Archaeological Resources

As previously mentioned, an archaeological assessment was conducted for the primary project site. The project site was extensively altered during earlier construction of the hotel and development of resort facilities. Although unlikely, it is possible that buried cultural resources may be present beneath existing structures and facilities. Therefore, it is proposed that archaeological monitoring will be carried out during demolition and ground altering activities to mitigate potential impacts to archaeological and cultural resources. An archaeological monitoring plan was prepared for the proposed demolition and

construction activities, submitted to the State Historic Preservation Division for review, and approved by that agency. See Appendix "B-1".

7. Cultural Impact Assessment

The project site is a developed property in active hotel and public, beach access use. The Cultural Impact Assessment has determined that there are no anticipated impacts to cultural or traditional practices and beliefs. Refer to Appendix "C".

8. Scenic and Open Space Resources

The project's site plan has been developed to provide for the efficient use of land while considering topographic, drainage, site, open space requirements and view parameters. The proposed project will be compatible in mass and scale with surrounding properties which have already been or are currently being developed. Landscape designs will be integrated with the existing features to ensure that the project will provide a coherent visual context for the Wailea Resort area. The project site development strategy was developed to maximize views, maintain privacy and maintain public view corridors and open space resources. Heights of the new condominium buildings will range from 25 to 45 feet. It is noted that the building height envelopes for the proposed redevelopment project were established in consultation with the Maui County Planning Department.

It is noted that site grading and building placement considered the relationship between the existing project site and Wailea Alanui Drive and the open space areas to ensure that visual impacts were minimized to the extent practicable.

The proposed project will involve a reconfiguration of the present open space areas within the subject property. Generally, the proposed project will reapportion most of the existing open space area along the southern part of the project site to the western portion of the site, with some open space relocated to the northeastern portion. Overall, with the proposed reconfiguration of the Open Space zoned area, 20 percent of the project site will be designated open space which meets the 20 percent open space requirement for a planned development project.

In general, given the scale of the proposed action (including upgrades to Ulua/Mokapu Beach Park), no adverse impacts to scenic and open space resources are anticipated. Rather, the removal of the existing Mokapu Wing and the use of its vacated area for open space purposes will further enhance and complement the existing shoreline character of the subject property.

B. <u>IMPACTS TO SOCIO-ECONOMIC ENVIRONMENT</u>

1. Land Use and Community Character

As previously noted, the proposed action is consistent with the overall Wailea Resort master plan. The proposed project is consistent with community plan land use and zoning designations which establish the land use context for the subject property. The redevelopment of the existing hotel unit into a 193 room condominium will maintain existing use parameters and is in keeping with the overall quality and character of the Wailea Resort.

2. Economy

The existing Wailea Renaissance Beach Resort operations support approximately 370 jobs. The redevelopment of the hotel should support a roughly proportionate number of hotel-related jobs. Preliminary estimates indicate that approximately 300 full- and part-time jobs will be required for project operations.

As the hotel will be closed due to demolition and construction activities, unavoidable short-term impacts associated with this closure include the layoff of the hotel's employee work force and the loss of revenue to businesses that provide goods and services which support hotel operations. Other hotels on the island may provide laid off employees with new employment opportunities during the period of closure. In addition, the short-term revenue loss to businesses which support hotel operations may be offset by income generated by construction-related employment and purchases.

From a long-term perspective, the proposed project will transform the existing 27-year old hotel to an upscale property which will continue to support the visitor industry and allow it to successfully compete with other newer resort destinations, as well as newer, renovated hotel properties. Over the long term, the project will support the economy through the contribution of taxes, wages, and salaries, as well as through the purchase of goods and services from local businesses.

3. Police, Fire and Health Care

The proposed project is not anticipated to adversely affect the service capabilities of police, fire and emergency medical

operations. The project will not extend the existing service area limits for emergency services.

4. Recreation

During the project's preliminary planning phase, the applicant met with the County Department of Parks and Recreation (DPR) to discuss parks and playgrounds requirement for the project.

This early consultation process included discussion of the applicant's proposal for improvements to the adjacent Ulua/Mokapu Beach County Park, including the provision of an additional 22 parking spaces. Coordination with DPR will continue to ensure that requirements for recreational improvements, such as the Ulua/Mokapu Beach Park upgrades, are addressed as applicable. Overall, the proposed improvements to Ulua/Mokapu Beach Park are deemed enhancements for public use both from visual and functional standpoints.

5. Education

Condominium units are intended to serve as either short-term recreational or second homes. The intended market is not anticipated to capture long-term residential owner occupants with school age children. In this regard, no adverse impacts to educational facilities are anticipated as a result of the proposed project.

6. Solid Waste

On a short-term basis, construction activities will require the disposal of construction-related solid waste. The applicant will work with the contractor to minimize the amount of solid waste

generated during the construction of the project. Existing material will be recycled whenever feasible. Following demolition, building materials will be separated into concrete, for fill, and metal waste, for recycling purposes, in addition to green wastes. Approximately 90 percent of the material, by weight, will be available for recycling. As appropriate, a private construction waste disposal facility will be utilized by the contractor for the disposal of waste materials. See Appendix "F".

Upon completion, the project will be served by a private refuse collection services. There are no adverse impacts to the collection system or disposal capacities attributed to the proposed development.

7. <u>Housing</u>

Although early coordination with the County of Maui's Department of Housing and Human Concerns (DHHC) has indicated that the proposed project might be subject to the provisions of Chapter 2.94 of the Maui County Code, relating to the provision of affordable housing, further coordination with that agency has determined that the project is not subject to those provisions. Nevertheless, the applicant has agreed to provide for the County's affordable housing needs in line with the Affordable Housing Policy of the County. An Affordable Housing Agreement will be created with DHHC, in which the applicant agrees to donate approximately \$1.96 million to a non-profit organization for the provision of affordable housing.

C. IMPACTS TO INFRASTRUCTURE

1. Roadways

A report entitled Traffic Impact Report, Wailea Hotel and

Residences was prepared for purposes of addressing traffic impacts attributed to the proposed project and to identify appropriate measures to mitigate these impacts. See Appendix "G". The study examined existing traffic conditions and future traffic conditions with and without the project utilizing accepted methodological protocols for trip generation, traffic assignment and level-of-service (LOS) analysis. (LOS is a qualitative measure used to describe the conditions of traffic flow, with values ranging from free flow conditions at LOS A to congested conditions at LOS F.) Corresponding to each level-of-service is a volume/capacity ratio (V/C). This is the ratio of either existing or projected traffic volumes to the capacity of the intersection. Capacity is defined as the maximum number of vehicles that can be accommodated by the roadway during a specific period of time. LOS A and B has a corresponding V/C of 0.0 to 0.700; LOS C has a V/C of 0.701 to 0.800; LOS D has a V/C of 0.801 to 0.900; LOS E has a V/C of 0.901 to 1.000; and LOS F has a V/C greater than 1.001. A volumes-to-capacity analysis of the study intersections was also carried out to assess project related impacts.

The following intersections were analyzed as part of the study: (1) Wailea Alanui Drive and Okolani Drive; and (2) Wailea Alanui Drive and Wailea Ike Drive. Peak hour traffic analysis were based on traffic counts and projections for a morning peak period of between 7:00 a.m. and 8:00 a.m. and an afternoon peak period between 3:15 p.m. and 4:15 p.m. The conclusions of the existing level-of-service analysis is that traffic operates at an acceptable level-of-service during the morning peak hour. The Wailea Alanui Drive and Okolani Drive intersection operates at LOS A and LOS B during the a.m. and p.m. peak hours of traffic, respectively. The

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Wailea Alanui Drive and Wailea Ike Drive intersection operates at LOS C during both the a.m. and p.m. peak hours of traffic.

As noted above, the traffic study examined two (2) sets of future conditions, one without the project (cumulative) and one with the project (cumulative plus). In preparing estimates of future traffic volume conditions, historical data was analyzed to obtain an annual traffic growth rate of approximately 4.9 percent in the project vicinity. A growth rate factor of 1.54 was applied to the existing traffic demands at the intersections of Wailea Alanui Drive with Okolani Drive and Wailea Ike Drive to simulate projected Year 2008 traffic demands at those intersections. In analyzing future traffic conditions, the horizon year 2008 was evaluated, when full build-out of the project is anticipated.

It should be noted that the traffic report was prepared based upon a redevelopment concept of 206 units, rather than the 193 proposed. The traffic study is considered appropriate as a conservative analysis for traffic operations evaluation.

a. <u>Traffic Impact Analysis</u>

The Year 2008 projected a.m. and p.m. peak hour traffic conditions without the project and with the project for the study intersections are summarized in Table 1.

Table 1

	TRAFFIC		CONDITION		,
Intersection	Critical Movement	AM Year 2008		PM Year 2008	
		Wailea Alanui Dr/Okolani Dr	Westbound (LT-TH)	В	В
Northbound (LT)	В		В	С	С
Wailea Alanui Dr/Wailea Ike Dr	Westbound (LT)	С	С	С	С
	Northbound (TH-RT)	С	С	С	С
	Southbound (LT)	C	С	С	С

Traffic operations along Wailea Alanui Drive with the project are expected to remain similar to Year 2008 (without project) conditions. At the intersection of Wailea Alanui Drive with Okolani Drive, the critical movements on the westbound and northbound approaches to the intersection are expected to remain at LOS B during the a.m. peak period and LOS B and LOS C, respectively, during the p.m. peak period. At the intersection of Wailea Alanui Drive with Wailea Ike Drive, the critical movements on the westbound, northbound and southbound approaches are expected to remain at LOS C during both peak hours of traffic.

Based on the analysis of traffic data, the proposed project is

not anticipated to have a significant impact on traffic operations in the project vicinity. The critical traffic movements at both study intersections are expected to operate at acceptable levels of service during the morning and afternoon peak hours of traffic.

The following are recommendations of the traffic study:

- a. Provide sufficient driveway width to accommodate safe vehicle ingress and egress.
- b. Provide adequate turning radii at all project driveways to avoid or minimize vehicle encroachments to oncoming traffic lanes.
- c. Maintain adequate sight distances for motorists to safely enter and exit all project driveways.
- d. Provide adequate on-site loading and off-loading areas to prevent off-site loading operations.

2. Water

Effective July 21, 2003, the lao Aquifer was designated as a ground water management area by the State of Hawaii, Commission on Water Resource Management. Under this designation, no person shall make a withdrawal, diversion, impoundment, or consumptive use of ground water in the lao Aquifer System without a permit from the Commission. Based on this designation, the Department of Water Supply has indicated that the remaining water supply from the aquifer will be allocated on an availability basis.

With regard to specific project demand, the net change in domestic water consumption is anticipated to be a decrease of approximately

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9,400 gallons per day (gpd), a decrease of approximately 6 percent of current water consumption. This estimate is based upon water system standards for multi-family residential units (560 gpd), demand from restaurants and employees, and evaporation from the swimming pool area. Total domestic water demand is estimated to be 139,600 gpd. Refer to Appendix "D".

Water system improvements are proposed for the hotel site and include relocation of the existing domestic water meters; installation of a new double check detector assembly for fire protection; installation of 8-inch fire protection water lines and fire hydrants; and installation of 4-inch potable water lines.

Projected irrigation water usage is estimated to be reduced by approximately 14,800 gpd, or approximately 24 percent of current daily usage. This decrease primarily results from a reduction in the planted areas from 10.0 acres to 7.7 acres, resulting in a savings of approximately 14,400 gpd. Reflecting ponds throughout the improved areas will decrease by approximately 2,400 square feet, which will result in a reduction of evaporation losses of about 400 gallons of irrigation water per day.

Preliminary assessment of water meter sizing data indicates that the three (3) existing 3-inch meters have adequate capacity to serve the proposed project. Therefore, no additional domestic water meters are required for the proposed project.

3. Wastewater

The redeveloped primary project site is estimated to generate approximately 78,000 gpd of wastewater. This represents

approximately 52 percent of current wastewater generation. This reduction results from multi-family residential uses as compared to hotel uses, as well as the overall reduction in the number of units. Sewage from the project will be treated and processed at the County of Maui's Kihei Wastewater Reclamation Facility, whose capacity should be sufficient. Refer to Appendix "D".

Based on projected wastewater flow calculations, the proposed project is not anticipated to adversely impact County wastewater collection and treatment systems.

4. <u>Drainage</u>

The proposed redevelopment of the hotel site is anticipated to generate an increase of 13.4 cubic feet per second of runoff. A detention/retention basin, located outside of the shoreline setback, is proposed to mitigate this minimal increase in runoff due to development. Other drainage improvements include drain inlets, manholes, and drain pipes to collect and convey surface runoff to the basin. Refer to Appendix "D".

Much of the runoff from off-site (mauka) properties is currently routed through an existing 84-inch corrugated metal pipe drain to an outlet structure at the southern property line. This drain will be replaced with a new 84-inch reinforced concrete pipe. All mauka runoff will be routed through this drain. A dry, riverbed will be landscaped at the makai extent to transition flows to the existing grassed channel within the shoreline area.

Off-site runoff from the upslope areas will continue to be conveyed through the site and discharge at the shoreline area. Drainage

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improvements that involve transmission of storm flows will conform to the "Rules for the Design of Storm Drainage Facilities in the County of Maui". Due to development, off-site (mauka) runoff will be rerouted to the new 84-inch pipe, which will, in turn, be realigned and extended to accommodate the proposed underground parking structure and condominiums along the southerly property. The drainage improvements will be designed to produce no adverse effects on the adjacent or downstream properties due to the proposed project.

The proposed drainage improvements to the hotel site will implement measures to improve the quality of storm water runoff. The storm drainage system will be equipped with storm water filtration units which will remove and retain suspended solids and debris from runoff due to small storm events. These units will aid in improving the quality of storm water entering the ocean.

5. Power, Telephone and CATV Services

The proposed electrical, telephone and cable TV distribution systems in the proposed project will be served by new underground utilities that connect to existing facilities along Wailea Alanui Drive or extension of existing on-site lines. Adverse impacts to the utility systems capacity are not anticipated with the proposed project.

D. KEY IMPACTS ASSOCIATED WITH CONSTRUCTION

The construction phase of the project will involve demolition and site work to accommodate new building construction. In this regard, important impact considerations associated with construction include construction traffic, demolition and blasting-related impacts. As noted, the scope of the project involves the demolition of all buildings on the property and new

construction for the 193 condominium units and related amenities and support facilities. In this connection, the construction will require new building pads to be provided, involving the regrading of the entire site. The grading phase of the project will involve blasting as subsurface material is characterized by rock conditions. The following sections describe construction planning and implementation elements which are intended to minimize the potential short-term effects of construction traffic, demolition and blasting.

Construction Traffic

The contractor estimates that the number of peak construction workers onsite will be on the order of 300 to 400. Construction workers will be directed to park at a designated offsite location and shuttled in to the work site. This measure will be used to avoid parking and trip generation concerns throughout the construction period.

Demolition

A detailed demolition program has been developed for the property. Refer to Appendix "F". The demolition program involves abatement of hazardous wastes (e.g., asbestos containing materials, and refrigerants). Waste removal will be managed as follows:

- 1. Metals will be separated and transported to a recycling center on Oahu. Approximately 30 truck loads of metals are anticipated to be hauled to Kahului Harbor.
- 2. Concrete is proposed to be crushed onsite and used for fill material. A mobile crushing plant will be used for this purpose.
- 3. General debris will be segregated onsite and trucked to a construction waste landfill (e.g., Maalaea Landfill). A total of 240 truck loads are estimated for the haul-away of the general debris. The duration of this phase of work is estimated to be four (4) to six (6) weeks.

As detailed in Appendix "F", demolition program components will also involve air monitoring and traffic/pedestrian control to ensure that the entire sequencing and conduct of the demolition phase of construction meet applicable regulatory and safety criteria.

<u>Blasting</u>

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The applicant will utilize services of a highly experienced blasting contractor to perform required work for site construction. The blasting protocol has been developed over time and has been successfully used by the contractor. The protocol is particularly sensitive to properties located adjacent to sites subject to blasting. This protocol will involve the following minimum elements of coordination and sequencing.

1. Pre-Blasting Operation Surveys

- Two (2) independent pre-blasting surveys are conducted. The surveyors will visit the site and adjacent properties. These visits will help the technicians determine properties that are located close to the blasting area and help the surveyor modify the blasting to eliminate any risks. These surveys will also determine the following:
 - i. Size of shot
 - ii. Amount of explosive
 - iii. Locations of monitors
 - iv. Locations of shots

2. Pre-Blasting Informative Meeting

a. The blasting company, in conjunction with the general contractor, will hold a pre-blasting information meeting two (2) weeks before blasting occurs. A detailed schedule will be presented and the entire blasting procedure reviewed in detail. Representatives will be available for a question and answer period to alleviate any concerns. At this meeting, work hours are discussed and adjustments are made to the blast schedule to compensate for any special events or daily activities that might conflict with the blast schedule.

3. Pre-Blasting Notices

a. One (1) week before blasting begins, notices will be hand delivered by the blasting company to all neighbors of the blast site. The notices will contain the blast schedule, important phone numbers and other information regarding the blasting.

4. Blast Sequencing

- a. Blasting work hours: 8:00 a.m. to 4:00 p.m.
- b. 5 to 10 Seismic Monitors will be placed onsite and on adjacent properties to monitor vibration
- c. Blasting will occur 3 to 4 times a day. Typically at 9:00 a.m., 11:00 a.m., 1:00 p.m. and 3:00 p.m.
- d. Drill 30 to 40 holes in rock per shot, holes are typically 12 feet deep
- e. Blast area cleared
- f. Mix explosive onsite ANFO (Ammonium Nitrate, Fuel Oil)
- g. Place explosive in holes typically 2 feet of explosive
- h. Cover holes with 8 feet of dirt cover
- i. Cover holes with blasting mats
- j. Non-electric blastic caps are used alleviates radio interference
- k. Alarm sounds 5 minutes, 1 minute, 30 seconds
- I. Blast occurs each hole if fired independently to reduce vibration usually noise is under 100 decibles
- m. Mats removed
- n. Rock excavated

5. Schedule/Blasting Sequencing

- a. Until exploratory work can be done, an accurate schedule of blasting duration cannot be established. However, a duration of six (6) weeks for a project of this size is not deemed unreasonable.
- b. Most of the blasting required is going to occur on the Mauka side of the site. Work will start on the Makena side moving to the Kihei side.

6. Miscellaneous Information

a. Blast locations use GPS Positioning for boundaries and

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grade.

b. After each blast a seismic and blast report is prepared.

It is noted that blasting may be required to install the new sewerline connection at the makai extent of the property (to connect to the existing sewerline within the shoreline setback). Prior to selecting an excavation method for sewerline installation, subsurface conditions will need to be verified. If rock conditions exist, blasting may be deemed an appropriate method for excavation. An alternate method for trench excavation in rock conditions involves segmental "chipping" of the rock material. A critical variable to be considered in selecting the construction method is the condition of the existing sewerline (to which the new sewerline will be connected). Vibration impacts of blasting, for example, would be assessed relative to the chipping method to ensure that the structural and functional condition of the sewerline is not affected. The existing condition of the sewerline will be verified via video inspection of the line prior to construction.

Tradeoff considerations between blasting and chipping are time and noise. Blasting is a more time efficient construction method, while chipping is a more time consuming method involving the use of ramming devices. The latter option, therefore, would result in construction noise of a more continuous nature and a longer duration. The contractor will work with the applicant to select the most appropriate method of construction for the new sewerline.

Chapter IV

Relationship to Land Use Plans, Policies and Controls

IV. RELATIONSHIP TO LAND USE PLANS, POLICIES AND CONTROLS

A. STATE LAND USE DISTRICTS

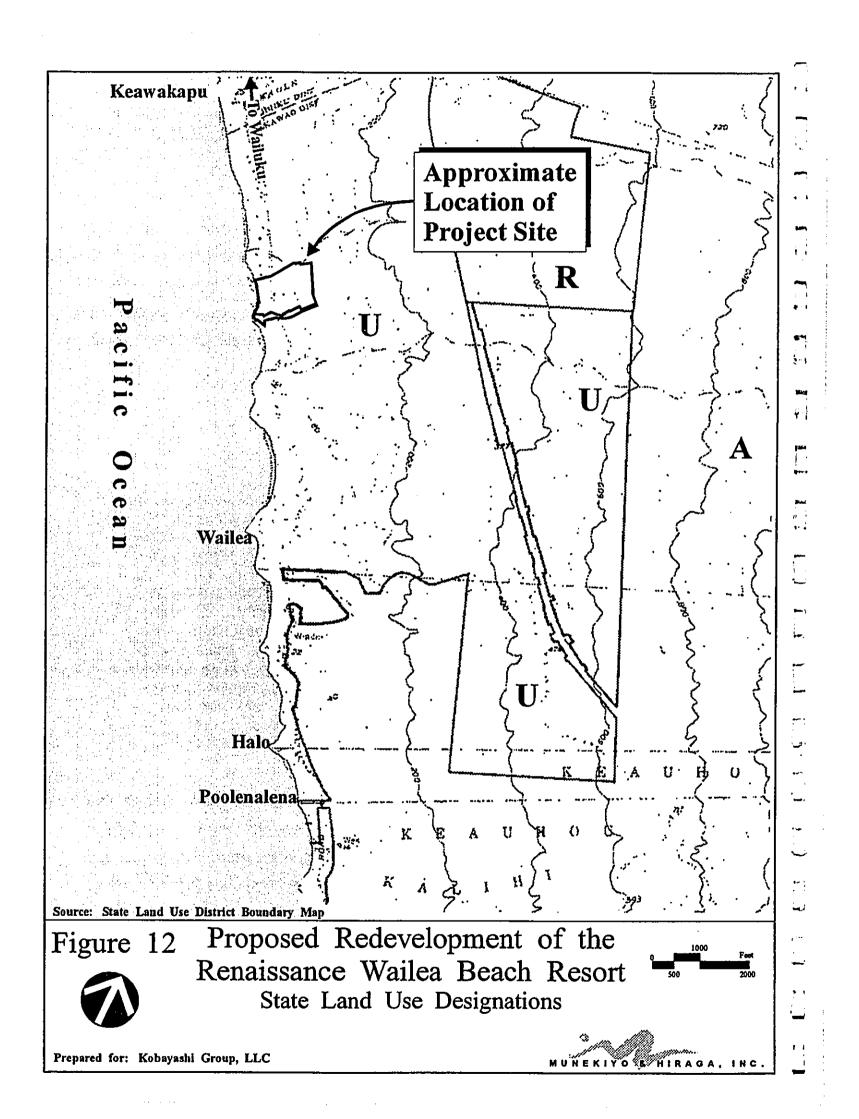
Chapter 205, Hawaii Revised Statutes, relating to the State Land Use Commission, establishes the four (4) major land use districts in which all lands in the State are placed. These districts are classified "Urban", "Rural", "Agricultural", and "Conservation". The proposed development is located within the "Urban" district and is compatible with the "Urban" classification. See Figure 12.

B. MAUI COUNTY GENERAL PLAN

The purpose of the General Plan shall be to:

... indicate desired population and physical development patterns for each island within the county; shall address the unique problems and needs of each island and region within the county; shall explain the opportunities and the social, economic, and environmental consequences related to potential developments; and shall set forth the desired sequence, patterns, and characteristics of future developments. The general plan shall identify objectives to be achieved, and priorities, policies and implementing actions to be pursued with respect to population density, land use maps, land use regulations, transportation systems, public and community facility locations, water and sewage systems, visitor destinations, urban design, and other matters related to development.

The Maui County General Plan developed five (5) major themes that focus on the overall goals of the plan. These themes were devised to reflect the "big picture" outlook the Maui County General Plan proscribes to. Of the five (5) themes, the proposed project responds to the following:



Theme Number 2

Prepare a directed and managed growth plan

Amendments to the General Plan will preserve a desired quality of life where areas of urban settlement must be managed and directed within a framework that consistently and concurrently balances growth demands against human service needs and physical infrastructure supply.

The proposed action is in keeping with the following General Plan objectives relating to the visitor industry.

VISITOR INDUSTRY

Objective:

- To encourage exceptional and continuing quality in the development of visitor industry facilities.
- To control the development of visitor facilities so that it does not infringe upon the traditional social, economic, and environmental values of our community.

Policy:

- a. Limit visitor industry development to those areas identified in the appropriate community plans, and to the development of the projects within those areas which are in conformance with the goals and objectives of those plans.
- e. Encourage enhancement of existing visitor facilities without substantial increases in room count.

Objective:

To ensure the visitor facilities shall not disrupt agricultural and social pursuits and will not be allowed to negatively impact the County's natural and cultural resources.

Policy:

d. Encourage the preservation of open beach space by maximizing the use of lands presently designated by community plans for visitor facility use and discourage rezoning of other lands for such use.

RECREATION

Objective:

To provide high-quality recreational facilities to meet the present and future needs of our residents of all ages and physical ability.

Policies:

- a. Maintain and upgrade existing recreational facilities to meet the community needs.
- g. Expand, improve and create new beach rights-of-way, parks, campsites, and other facilities designated for family use.

C. KIHEI-MAKENA COMMUNITY PLAN

1. Land Use Designations

The project site is located in the Kihei-Makena Community Plan region, one (1) of 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.

Land use guidelines are established by the Kihei-Makena Community Plan land use map. The primary project site is designated for "Hotel" use by the Community Plan's land use map,

while the shoreline area is designated as "Open Space" and the secondary project site is designated as "Public/Quasi-Public". See Figure 13. The proposed project is in keeping with the uses designated for the site by the Kihei-Makena Community Plan.

2. Goals, Objectives and Policies

The Kihei-Makena Community Plan sets forth goals which are statements identifying preferred conditions. Examples of goals, objectives, policies, and planning standards applicable to the proposed project include the following:

GOALS, OBJECTIVES AND POLICIES

LAND USE

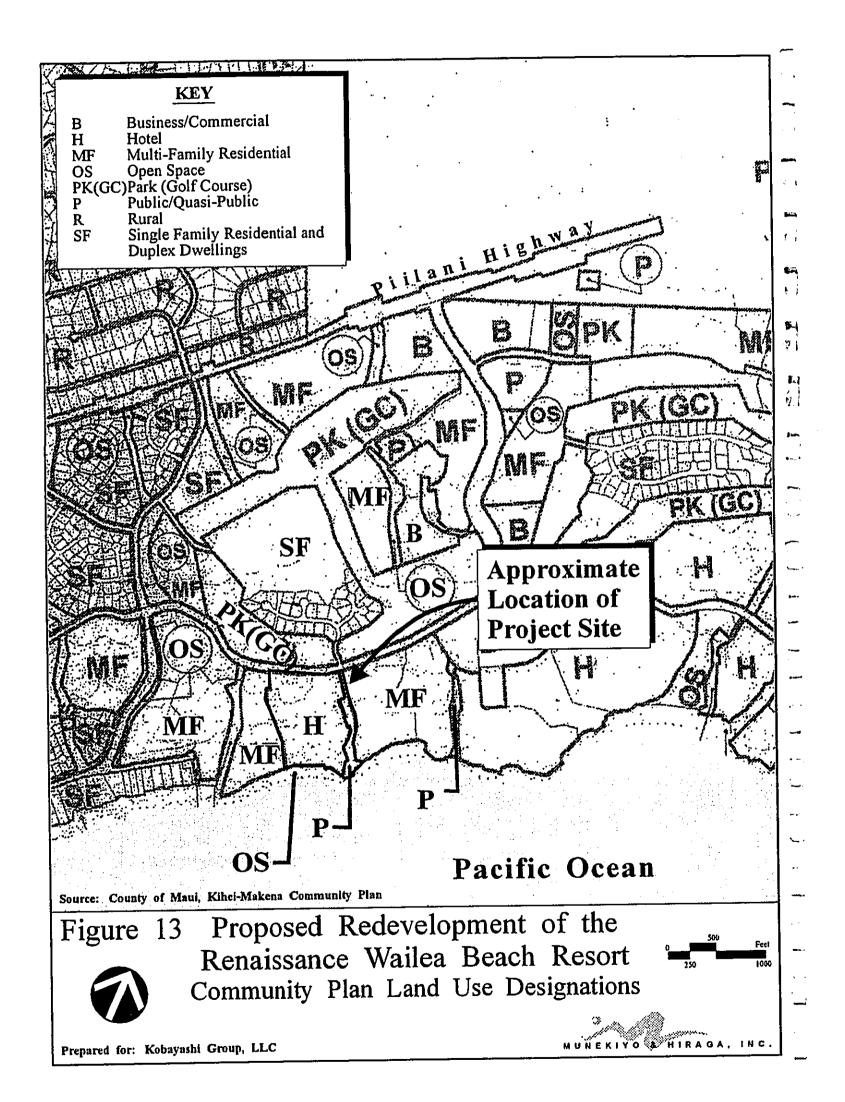
Goal:

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A well-planned community with land use and development patterns designed to achieve the efficient and timely provision of infrastructural and community needs while preserving and enhancing the unique character of Ma'alaea, Kihei, Wailea and Makena as well as the region's natural environment, marine resources and traditional shoreline uses.

Objective and Policies:

- d. Limit hotel uses to those areas presently planned for hotel use, and limit hotel development until adequate public facilities and services are established to meet existing needs.
- j. Locate resort-related retail commercial facilities at strategic points in the Wailea and Makena destination areas.



ENVIRONMENT

Goal:

Preservation, protection, and enhancement of Kihei-Makena's unique and fragile environmental resources.

Objective and Policy:

a. Maintain and enhance the long-term availability of shoreline resources for public enjoyment through adequate access, space, and facility provisions, and through on-going resource management programs.

ECONOMIC ACTIVITY

Goal:

A diversified and stable economic base which serves resident and visitor needs while providing long-term resident employment.

Objectives and Policy:

 Establish a sustainable rate of economic development consistent with concurrent provision of needed transportation, utilities, and public facilities improvements.

PLANNING STANDARDS

Land Use Standards:

a. All zoning applications and/or proposed land uses and developments shall be consistent with the Land Use Map and Objectives and Policies of the Kihei-Makena Community Plan.

URBAN DESIGN STANDARDS

a. **Building Form:**

3) Limit resort development throughout the region to thirty-five (35) feet in building height for sites near the

shoreline. Building height limits may gradually be increased up to seventy-five (75) feet for inland resort development provided that important mauka/makai vistas are maintained, and impacts to coastal resources are minimized. Resort community planning and design shall integrate recreational amenities with adequate shoreline setback and public shoreline access provisions.

RECREATION

Objectives and Policies:

- Provide high-quality recreational facilities to meet the present and future needs of residents of all ages and physical ability.
- e. Improve recreation facilities and services through the integration of public parking, vehicular drop-offs and turnarounds, and sanitation facilities with facility planning and design.
- f. Improve public access to shoreline and nearshore resources through the following measures:
 - 2) Provide adequate landscaped public access to shoreline areas with significant recreational and scenic value. Provide adequate lateral public access along the shoreline to connect significant shoreline areas and to establish continuity of the public shoreline areas. Particular attention shall be directed toward southern shoreline resources from Polo Beach southwards, and between Kama'ole Parks II and III.
- h. Provide for adequate parking at all park facilities. Many existing parks lack sufficient parking and require substantial increases in parking spaces.

D. ZONING

The hotel property is zoned "H-2, Hotel" and "OS, Open Space" by the County of Maui. Pursuant to Chapter 19.10 of the Maui County Code

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pertaining to Hotel Districts, uses permitted in this district include hotels, as well as any use permitted in residential and apartment districts. As such, the proposed project is in compliance with the permitted uses in the H-2, Hotel District. With respect to the Open Space District, the principal permitted uses include passive land use and passive recreation use. The designated Open Space areas of the proposed development plan are in compliance with the Open Space District.

The secondary project was zoned "BRW, Beach Right of Way" in the County of Maui's Land Zoning Maps. With the deletion of that zoning designation, the Ulua/Mokapu Beach Park is currently zoned "Interim".

E. PLANNED DEVELOPMENT APPROVAL

The Wailea Resort has been approved as a Planned Development pursuant to Chapter 19.32 of the Maui County. Code. The proposed action is therefore subject to Planned Development Step I and Step II approvals. The Maui Planning Commission shall approve the Step I and Step II requests which will include review of design concepts, as well as preliminary proposals for drainage, grading, landscaping, open spaces, land uses and community and recreational facilities.

This document serves as the applicant's request for Step I and Step II approvals. The preliminary plans of development are provided in Section 10 of this application document. The plans have been prepared to meet the Planned Development standards of development as set forth in Section 19.32.030 of the Maui County Code, as follows:

Standards of Development

 The development shall meet all the construction standards and requirements of the various governmental agencies

Response

The proposed project will be developed in accordance with applicable governmental standards.

2. Not less than twenty percent of the total area of the tract shall be common protected open space, integrated with the lot layout and street system in order to maximize its park-like effect. Common protected open space shall mean open space to be owned in common by the individual owners within the development and maintained in open space for their common use and enjoyment.

Response

The open space, common area includes a 150-foot setback of landscaped open space between the shoreline and condominium buildings. Twenty percent (20%) of the proposed development will be designated open space and maintained in open space for the use and enjoyment of the project's guests and residents.

3. Each building and structure shall be individually designed by a registered architect to conform with the intent of the planned development.

Response

Each building and structure of the proposed development will be designed by a registered architect. The preliminary plans have been approved by the Wailea Community Association's Design Review Committee for conformity with the intent of the Wailea Resort planned development.

4. Landscaping of the entire development, including along streets, within lots and in the open spaces shall be provided.

Response

The landscape plan for the proposed development provides landscaping in the open spaces and throughout the project site.

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5. Adequate recreational and community facilities shall be provided.

Response

The proposed project will include a new 10,000 s.f. spa facility. Additional recreational amenities include four (4) swimming pools, an event lawn with amphitheater benches, a gym, and a yoga lawn, in addition to access to the shoreline.

6. Provision shall be made for adequate and continuing management of all open spaces and community facilities to insure proper maintenance and policing. Documents to said effect shall be required.

Response

Upon completion of the proposed improvements, the new facility will be operated as a St. Regis property. This upscale brand property will ensure adequate and continued management of all open spaces and hotel facilities.

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

1. Recreational Resources

<u>Objective:</u> Provide coastal recreational opportunities accessible to the public.

Policies:

(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:

 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 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 project site is adjacent to the shoreline and

includes public recreational areas and beach access. A lateral shoreline walkway exists within the 150-foot shoreline setback area. No major improvements are proposed within the shoreline setback area. Proposed improvements within this area include the development of an EVA lane, installation of utility lines, and backfill with sand in the area created by the demolition of the Mokapu Wing. The demolition of the Mokapu Wing, and the conversion of this vacated area to open space use, will provide guests with passive recreational opportunities. All proposed work in the shoreline area will be implemented in accordance with applicable regulatory requirements.

The proposed project is not anticipated to affect existing coastal recreational resources adversely. Access to the shoreline areas will remain unaffected by the proposed action. The proposed buildings will be set back more than 150 feet from the certified shoreline. A large open space area will be designated between the shoreline and condominium units to maintain lateral views along the shoreline. The improvements to the beach park will enhance public enjoyment of coastal recreational opportunities.

2. <u>Historic Resources</u>

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: An archaeological assessment survey was conducted for the primary project site. Due to prior disturbances over much of the project site, no historic or cultural properties were identified during the assessment inspection.

The archaeological assessment noted that archaeological monitoring during construction activities appear to be warranted. A monitoring plan has been prepared and submitted to the State Historic Preservation Division (SHPD) for review and approval prior to the commencement of construction. Refer to Appendix "B-1". If any archaeological discoveries are made during construction, however, work in the area will be halted and consultation with the SHPD will be carried out to determine appropriate mitigation measures.

3. Scenic and Open Space Resources

<u>Objective:</u> 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: Topography, drainage, views and open space, and site layout and design were examined in detail during the project's design phase. In conjunction with this process, the applicant held

a number of group design charettes to refine the design parameters of the proposed project. As a result of this evaluative process, the proposed project has been developed with consideration for site and drainage conditions, view corridors, open space, and aesthetics. The project will be designed to assure view corridors from public vantage points and neighboring properties. In addition, the demolition of the Mokapu Wing will enhance public views to and along the shoreline and complement the shoreline and open space character of the surrounding area.

4. <u>Coastal Ecosystems</u>

<u>Objective:</u> 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: Improvements to the subject property are not expected to adversely impact coastal ecosystems. Drainage improvements shall be engineered to ensure that coastal water

impacts are mitigated. Mitigative measures for soil erosion control will be implemented during and after construction.

5. Economic Uses

<u>Objective:</u> 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: In the short term, the project will provide construction-related employment, and, from a long-term perspective, is expected to provide approximately 300 full- and part-time jobs. In addition, the redevelopment of the existing 27-year old hotel will continue to support the visitor industry and allow it to successfully compete with newer and renovated hotel properties, as well as other resort destinations. The proposed project does not affect coastal development necessary to the State's economy. The project is in keeping with the land use patterns established by the Kihei-Makena Community Plan.

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6. <u>Coastal Hazards</u>

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

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 major portion of the project site falls within Zone C, an area of minimal flooding. A narrow strip of land paralleling the shoreline of the project site is located in Zone A4, an area subject to a 100-year flooding with base flood elevation of 7 feet above mean sea level. No buildings are proposed in the A4 zone. A drainage and erosion control plan has been developed for the property. The proposed drainage measures which will be implemented with the project will ensure that downstream and adjacent properties will not be adversely impacted. Measures to improve the quality of storm runoff discharging into the ocean will be implemented in the design of the onsite drainage system.

7. <u>Managing Development</u>

<u>Objective:</u> 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: In compliance with the Rules of Practice and Procedures for the Maui Planning Commission and the Special Management Area Rules for the Maui Planning Commission, requested documentation for the project will be filed with the County Planning Department and will undergo public hearing and decision by the Maui Planning Commission. Opportunity for public review and consideration of the proposed action is provided through the Special Management Area and Shoreline Setback Variance permitting processes, as well as the Environmental Assessment process.

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

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.

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Response: A public hearing is required as part of the County's SMA and SSV processes. Additional public participation opportunities are afforded by the Environmental Assessment process. The proposed project complies with the objective of public awareness, education and participation. It is noted that a number of meetings with the Wailea Community Association (WCA) Design Review Committee have been held to present project design parameters and to receive comments regarding the proposed action. Additionally, meetings were held with Wailea Elua Village (neighbor to the south) and Maluhia at Wailea (neighbor to the north) to address their concerns.

9. Beach Protection

Objective: Protect beaches for public use and recreation.

<u>Policies:</u>

- (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
- (C) Minimize the construction of public erosion-protection structures seaward of the shoreline.

Response: The subject property is located adjacent to the Ulua and Mokapu Beaches. The new buildings proposed on the hotel site will be set back more than 150 feet from the certified shoreline.

As previously noted, work within the 150-foot shoreline setback area will be limited to developing an EVA lane, installation of utility

lines, and backfill in the vacant area created by the demolition of the Mokapu Wing. (An application for a Shoreline Setback Variance will be submitted for these actions.) No impacts to beach processes or public access are anticipated from the development of the project. All work in the shoreline area will be implemented in accordance with applicable regulatory standards.

10. Marine Resources

Objectives: 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.

Response: Improvements to the subject property will not adversely impact ocean resources. Best Management Practices (BMPs) will be incorporated during construction to support the policies of effective management of marine resources. The proposed projects are not anticipated to affect marine and coastal resources.

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In addition to the foregoing objectives and policies, SMA permit review criteria pursuant to Act 244 (2005) provides that:

No special management area use permit or special management area minor permit shall be granted for structures that allow artificial light from floodlights, uplights, or spotlights used for decorative or aesthetic purposes when the light:

- (1) Directly illuminates the shoreline and ocean waters; or
- (2) Is directed to travel across property boundaries toward the shoreline and ocean waters.

<u>Response:</u> The redeveloped resort will not use artificial lights to directly illuminate the shoreline or ocean waters, nor to travel across property boundaries toward the shoreline or ocean waters.

G. SHORELINE SETBACK CONSIDERATIONS

The following improvements are proposed within the shoreline setback:

- Demolition of Mokapu Wing, minor structures and walkways;
- Installation of a 12-ft. wide grasscrete emergency vehicle access (EVA) lane to accommodate fire access along the makai buildings;
- 3. Installation of new landscape planting material;
- 4. Installation of a new 4-inch irrigation line to support landscaping within the shoreline setback;
- 5. Installation of approximately 170 lineal feet of 8-inch sewerline to convey wastewater from the project to an existing 8-inch sewerline within the shoreline setback.

These improvements are detailed in Appendix "H".

Additionally, two (2) existing pedestrian ramps providing access to the beach were installed in the past without shoreline setback review.

The existing shoreline walkway and boardwalk will not be affected by the proposed improvements, and lateral public access through the property will be maintained. As previously noted, the walkway is a permitted structure. See Appendix "I".

Application and approval criteria required for a SSV are set forth in the "Shoreline Rules for the Maui Planning Commission", Chapter 203, Sections 14 and 15. The proposed actions within the shoreline setback have been analyzed with respect to these criteria, as discussed below.

a. A shoreline area variance may be granted for a structure or activity, if the commission finds that the proposed structure or activity is necessary for or ancillary to certain uses.

Response: The demolition of existing structures are deemed to be in the public interest. The installation of landscaping and the supporting irrigation system will not adversely affect beach processes nor will it artificially fix the shoreline. The EVA and sewerline are deemed essential elements for public health and safety. Both of these elements do not adversely affect beach processes nor do they artificially fix the shoreline. The repaired beach access ramps bridge a significant drop-off to the beach and create ADA-compliant routes to the shoreline.

- b. A structure or activity may be granted a variance upon grounds of hardship if:
 - 1. The applicant would be deprived of reasonable use of land if required to fully comply with the shoreline setback rules.

Response: Existing improvements within shoreline setback are needed to enable the functional operations of the existing hotel. These include existing landscaping,

sewerline, and irrigation lines. The proposed action will involve removal of landscape materials and replacement with new plant materials, provision of a new sewerline to connect to the existing line which currently lies within the setback area, installation of a new irrigation line to support landscaping within the setback area. The provision of these improvements are deemed necessary for the continued viable operation of the redeveloped property. The new EVA is required by the Department of Fire and Public Safety to ensure fire equipment access to the makai buildings. The grasscrete construction of the EVA ensures a smooth visual integration with the grassing which adjoins this pathway. Given the existing infrastructure and landscaped conditions within the shoreline setback, the applicant would be deprived of reasonable use of the land if these actions could not be implemented.

2. The applicant's proposal is due to unique circumstances and does not draw into question the reasonableness of the shoreline setback rules.

Response: The unique circumstances pertaining to the proposed action is the existing developed condition of the property. The removal from the setback area of the Mokapu Wing and related structures is considered beneficial in terms of meeting the purposes of the shoreline setback rules. The provision of the replacement and new infrastructure is intended to maintain the functional viability of redeveloped facility. Overall, there will be a lessening of intensification of use within the shoreline area with the proposal. The grasscrete EVA and landscaping improvements will ensure that the visual and scenic integrity of the shoreline setback

area are maintained. In summary, the unique circumstances affecting the subject property do not draw into question the reasonableness of the shoreline setback rules.

3. The proposal is the practical alternative which best conforms to the purpose of the shoreline setback rules.

Response: Given the unique circumstances affecting the property, the proposed action represents a practical alternative which best conforms to the purpose of the shoreline setback rules. In particular, the proposed improvements ensure the continued enjoyment of the shoreline area for the public; the proposed work will not adversely impact shoreline processes; the proposed improvements are compatible with the shoreline area; the proposed improvements will enhance the quality of scenic and open space resources fronting the subject property; and adequate public access will continue to be maintained.

c. Before granting a hardship variance, the commission must determine that the applicant's proposal is a reasonable use of the land.

Response: The proposed actions are designed to improve the overall function of the shoreline area, through removal of structures, replacement of landscaping and irrigation lines, reconnection to an existing sewerline, and the provision of a grasscrete EVA. The actions do not intensify the use of the shoreline with respect to the current developed conditions, nor do the improvements pose a risk to individuals or to the public health and safety. The proposed improvements are essential elements in allowing the redeveloped property to be functionally viable, while maintaining a context of reasonableness, as prescribe by the

shoreline rules.

d. For purposes of the shoreline rules, hardship shall not include economic hardship to the applicant; county zoning changes, planned development permits, cluster permits or subdivision approvals after June 16, 1989; any other permit or approval which may have been issued by the commission.

Response: The proposed actions are not being sought as relief to economic hardship to the applicant. The actions are intended to improve conditions within the shoreline while enabling certain non-impact infrastructure improvements to occur.

e. No variance shall be granted unless appropriate conditions are imposed.

Response: The proposed actions comply with conditions relating to the provision of safe lateral access; minimization of risk to beach processes; minimization of risk relating to structural failure and loose rock and rubble; and minimization of impacts on public views to, from, and along the shoreline.

In summary, the proposed actions within the shoreline setback are considered both reasonable and necessary for the viable operation of the redeveloped property. The actions are in keeping with the purpose and criteria set forth in the shoreline rules.

Chapter V

Summary of Environmental Effects Which Cannot Be Avoided

V. SUMMARY OF ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

The proposed project will result in unavoidable construction-related impacts which include noise-generated impacts occurring from the proposed improvements. In addition, there may be temporary air quality impacts associated with dust generated from exhaust emissions discharged by construction equipment. Appropriate mitigation measures will be implemented to minimize these construction-related impacts.

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

Chapter VI

Alternatives Analysis

VI. ALTERNATIVES ANALYSIS

A. GENERAL ALTERNATIVES

1. No Action Alternative

The existing Renaissance Wailea Beach Resort was constructed in 1978 and had its last major renovation around 1990. Periodic renovations to hotels occur to rejuvenate an aging property and/or to reposition the hotel and enable it to successfully compete with other hotels and resort destinations. The viability of a hotel is directly linked to its ability to adjust to and accommodate change in market conditions in the hospitality and visitor industries. As such, the "no action" alternative was not deemed a viable alternative as the physical condition and amenities of the existing hotel would be maintained and limit its ability to adapt to and successfully compete with other hotel properties in the highly competitive guest accommodations and resort condominium segment of the visitor industry.

2. <u>Deferred Action Alternative</u>

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.

B. <u>SITE DEVELOPMENT ALTERNATIVES</u>

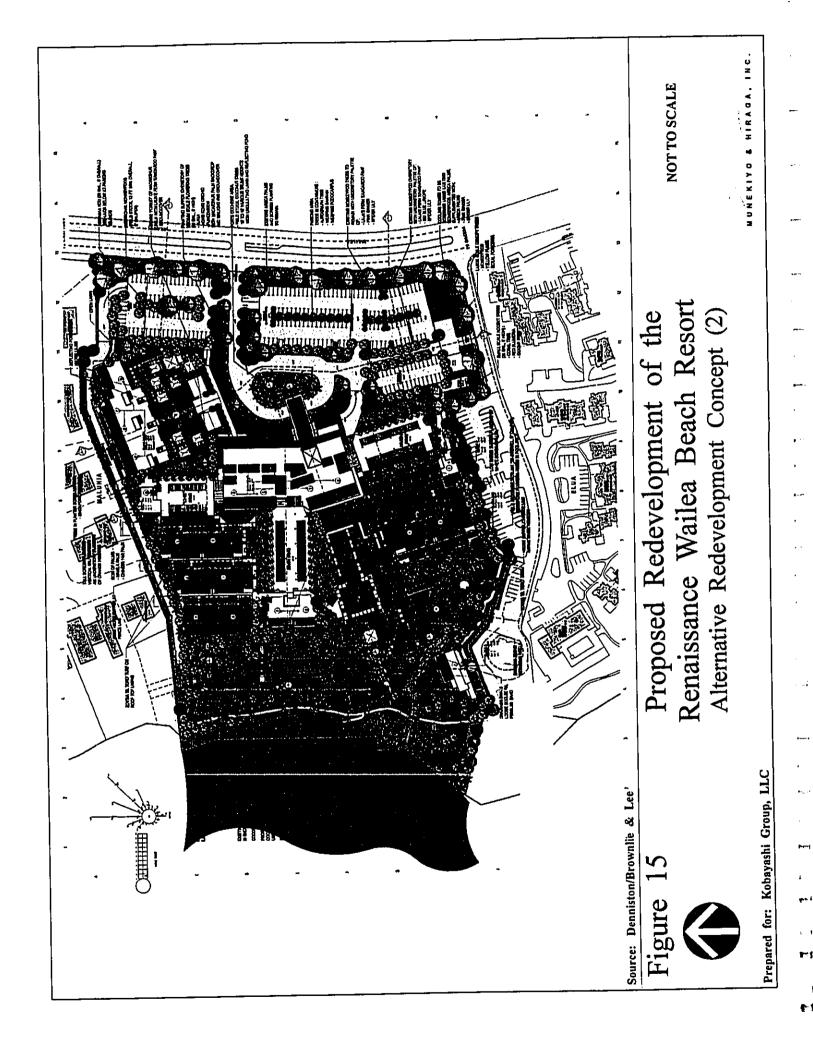
A number of site and design alternatives were evaluated during the project's preliminary planning and design phase to ensure that site development constraints were adequately addressed. In particular, building type and placement considered topographic and drainage conditions, as well as view opportunities and constraints. In conducting alternatives, constraints imposed by the single access location were also considered. Redevelopment concepts were also considered, such as maintaining the existing, traditional hotel use. See Figure 14 and Figure 15 for alternative site plans considered.

Design and marketing alternatives were formulated to provide flexibility to prospective purchasers. In this context, a condominium multi-family residential option was also incorporated as an alternate "for sale" package.

The evaluation of site development alternatives generally encompassed a wide range of criteria such as densities, facilities, amenities, and infrastructure, as well as various physical, socio-economic, and environmental considerations. The following factors were considered in evaluating site development alternatives for the proposed project:

- Building design and placement;
- 2. Topographic and drainage conditions;
- 3. View opportunities and constraints;
- Density (number of units per acre);
- 5. Development costs (amenities, facilities, utilities);
- 6. Quality of the visitor experience;

HUNEKIYO A HIRAGA, INC. NOT TO SCALE Renaissance Wailea Beach Resort Proposed Redevelopment of the Alternative Redevelopment Concept (1) HALVHIA' 35" VHEYT UHIT UNG Prepared for: Kobayashi Group, LLC Source: Design Partners Incorporated Figure 14



- 7. Total occupancy;
- Total expenditures;
- 9. Sales and marketability;
- Economic benefits to the community (direct and indirect employment);
- 11. Potential impacts to the physical and socio-economic environment; and
- 12. Applicable regulatory plans, policies and controls.

With regard to the foregoing, the proposed action has been selected as the preferred alternative on the basis of the following:

- The appropriate mix and sizing of visitor accommodations and amenities to be provided;
- The high quality visitor experience that would be provided by the project's accommodations and amenities;
- The appropriate density and uses (i.e., number of units, recreational amenities, commercial and support facilities) on the available land; and
- 4. The consideration of potential impacts and benefits to the physical and socio-economic environment, and infrastructure (refer to the sections in Chapter III, relating to Potential Impacts and Mitigation Measures).

It is noted that a specific consideration was the reduction in building heights and the elimination of structures in the shoreline setback. This resulted in a Preferred Alternative which clustered more structures of lower elevation onto the portion of the primary project site mauka of the setback, with the landscaped, grasscrete EVA located makai. The connecting "loop" of the EVA in the setback allows for an overall decrease in the amount of paving required for the accessway, so that the proposed

12-foot wide facility, with both concrete and grasscrete can be utilized, rather than a 20 foot wide, all-paved facility limited to the northern and southern boundaries of the hotel site. The grasscrete section meets the County of Maui's criteria for a movable/portable development. This EVA loop was also deemed inappropriate for use as a pedestrian amenity as such use would require creating additional paved surface within the shoreline setback, as well as result in conflicts with emergency vehicle use.

It is also noted that the installation of approximately 170 feet of sewerline in the setback was deemed preferable to building on top of the existing section of sewerline due to maintenance concerns. This sewerline segment is required to service the redeveloped property as it does connect to the existing 12-inch sewerline, which is currently aligned within the shoreline setback.

While various configurations, layouts, and combinations of facilities and amenities have been examined for the project, the proposed alternative addresses the foregoing site development criteria while considering the potential short- and long-term adverse impacts related to the development of the project as described in the sections of Chapter III regarding Potential Impacts and Mitigation Measures.

C. SEWERLINE ALTERNATIVES

A supplement to the <u>Preliminary Engineering Report</u> was prepared by Ronald M. Fukumoto Engineering, Inc. to assess alternatives for wastewater collection and transmission to the County pump station. See Appendix "D-1". Currently, a 12-inch interceptor sewer which lies within the 150-ft. shoreline setback area, carries wastewater from the Renaissance Wailea Beach Resort and the Maluhia at Wailea project to

an existing pump station located within the County's Ulua/Mokapu Beach Park.

Proposed Sewerline Alternative

The proposed system separates the flows from the Maluhia at Wailea and the proposed St. Regis project by creating a new onsite sewer system (for the St. Regis project) which discharges project flows directly into a manhole (SMH 1-F) located near the County pump station. For the Maluhia at Wailea project, a major segment of the 12-inch interceptor line in its current alignment will be retained. However, a short segment of the 12-inch interceptor will need to be realigned within the 150-ft. setback to avoid conflict with a proposed St. Regis building. In selecting this alternative, engineering design, shoreline erosion, construction, and site design criteria were considered. The realignment of a segment of the 12inch interceptor for the Maluhia at Wailea is proposed in lieu of constructing a building atop the existing sewerline alignment for maintenance access reasons. Refer to Figure 3 in Appendix "D-1". It is noted that the siting of buildings immediately mauka of the 150-ft. shoreline setback (and thus the need to relocate a segment of the 12-inch interceptor) was dictated by condominium unit programming requirements and the need to respect height limits within the property (i.e., although there is a reduction in total unit count with the new project, height limits set forth by the Kihei-Makena Community Plan requires a greater use of available land area to meet facility program needs).

In addition, the 50-year shoreline erosion setback was analyzed for the proposed alternative. Refer to Figure 3 in Appendix "D-1". This analysis indicates that the alignment of the existing interceptor and the realigned segment of the interceptor, as proposed, lies mauka of the 50-year erosion line. From a life cycle assessment standpoint, the alignment is

considered viable in terms of potential effects from long-term erosion.

Alternatives Evaluated

Three (3) alternative alignments for the 12-inch interceptor sewerline were assessed. Alternative "A" consists of abandoning the existing sewerline in place and construction of a new line mauka of the 150-ft. shoreline setback. This alternative would take wastewater from the Maluhia at Wailea and routing it through the new St. Regis system. This option will require a trench depth of 14 to 18 feet. Such a condition would make maintenance of the sewerline problematic. In addition, joint maintenance responsibilities would need to be addressed.

It is noted that maintenance responsibility for the 12-inch interceptor line after the St. Regis project is constructed will rest with the applicant.

Alternative "B" involves abandoning the existing 12-inch interceptor and relocating it further inland, though still within the 150-ft. shoreline setback. This alternative does not offer distinct benefits over the proposed alternative of retaining the line in its current alignment. The major disadvantage of this option is the need for more invasive construction within the setback area to create a trench of 9 to 15 feet in depth for the relocated interceptor.

Alternative "C" consists of keeping the existing interceptor line within the shoreline area and allowing it to run under the proposed St. Regis building structure. This option was deemed infeasible due to maintenance access limitations.

In light of the evaluation advanced in the supplemental Preliminary Engineering Report, the proposed sewering system was selected.

Chapter VII

Irreversible and Irretrievable Commitments of Resources

VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The construction of the proposed project will involve the commitment of land and financial resources for the proposed action. However, this commitment is consistent with the existing use of the property and land use policies and plans for the region. There are no other significant irreversible and irretrievable commitment of resources associated with the proposed actions.

Chapter VIII

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. <u>No Irrevocable Commitment to Loss or Destruction of Any Natural or Cultural Resources Would Occur as a Result of the Proposed Project</u>

The proposed project, including work within the Ulua/Mokapu Beach Park, is in conformance with the existing, developed uses of the subject property. Therefore, there is no commitment to a loss of any natural or cultural resources.

2. <u>The Proposed Action Would Not Curtail the Range of Beneficial Uses of the Environment</u>

The subject properties contain an existing hotel and park. The proposed action continues those uses. There would be no consequent curtailment of uses of the environment.

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 (HRS). The proposed action is in consonance with the policies and guidelines of Chapter 344, HRS, which seeks to safeguard the State's natural resources and enhance the quality of life.

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

In the short term, there will be minimal impacts from the closing of the hotel, although there will also be employment opportunities for construction activities. In the long term, the project will have no notable impacts to economic or social welfare.

5. The Proposed Action Does Not Affect Public Health

No impacts to public health are anticipated to result from the proposed redevelopment. Demolition and construction activities will comply with all applicable regulations, such as asbestos control.

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

The proposed action is in conformance with existing land uses. Although there is the potential for condominium owners to become full-time residents, it is anticipated that the majority will return the units to the rental pool. The total unit count will also decrease. Therefore, it is anticipated that there are no secondary impacts to population. There are also no anticipated effects upon public services, such as police, fire, medical, educational, or waste collection services.

7. No Substantial Degradation of Environmental Quality is Anticipated

The proposed action will occur on developed lands and Best Management Practices (BMPs) will be implemented to reduce construction-related impacts. The proposed project will have no substantial impact to environmental quality.

8. <u>The Proposed Project Does Not Involve a Commitment to Larger Actions, Nor Would Cumulative Impacts Result in Considerable Effects on the Environment</u>

The proposed redevelopment is not part of a larger action, nor is it anticipated to result in considerable impact to the environment.

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

There are no rare, endangered, or threatened species within the project vicinity and none are anticipated to be impacted by the action.

10. <u>Air Quality, Water Quality, or Ambient Noise Levels Would Not Be</u> <u>Detrimentally Affected by the Proposed Project</u>

During the demolition and construction phase of the project, there may be short-term impacts to air and noise quality. BMP's can reduce these short-term impacts, which will not extend into the long term.

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.

By implementing a BMP plan, the project is not anticipated to impact the coastal waters. There are no wetlands in proximity and the property is an area of minimal flooding.

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

The proposed action would have no impact on vistas or viewplanes. The redeveloped site will have lower building heights than currently exist and will create more open space along the shoreline for lateral views.

13. <u>The Proposed Action Would Not Require Substantial Energy</u> <u>Consumption</u>

Demolition and construction activities will involve the short-term commitment of fuel for equipment, vehicles, and machinery. However, this is not anticipated to result in any substantial consumption of energy.

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

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Chapter IX

List of Permits and Approvals

IX. LIST OF PERMITS AND APPROVALS

The following permits and approvals will be required for project implementation:

- County of Maui 1.
 - Special Management Area Permit Planned Development Approval

 - Shoreline Setback Variance
 - Construction Permits
- State of Hawaii 2.
 - National Pollutant Discharge Elimination System Permit

Chapter X

Agencies Contacted During the Preparation of the Draft Environmental Assessment, Letters Received and Responses to Substantive Comments

X. AGENCIES CONTACTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT, LETTERS RECEIVED, AND RESPONSES TO SUBSTANTIVE COMMENTS

The following agencies and organizations were consulted during the preparation of the Draft Environmental Assessment. Comments received, as well as responses to substantive comments, are also included in this section.

- 1. Ranae Ganske-Cerizo, Soil 7.
 Conservationist
 Natural Resources Conservation Service
 U.S. Department of Agriculture
 210 Imi Kala Street, Suite 209
 Wailuku, Hawaii 96793-2100
- 2. George Young
 Chief, Regulatory Branch
 U.S. Department of the Army
 U.S. Army Engineer District, Honolulu
 Regulatory Branch
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 Fort Shafter, Hawaii 96858-5440
- 3. Robert P. Smith
 Field Supervisor
 U. S. Fish and Wildlife Service
 300 Ala Moana Blvd., Rm. 3-122, Box
 50088
 Honolulu, Hawaii 96813
- 4. Ted Liu, Director
 State of Hawaii
 Department of Business, Economic
 Development & Tourism
 P.O. Box 2359
 Honolulu, Hawaii 96804
- Laura Thielen, Director
 State of Hawaii
 Office of Planning
 P.O. Box 2359
 Honolulu, Hawaii 96804
- Patricia Hamamoto, Superintendent State of Hawaii
 Department of Education
 P.O. Box 2360
 Honolulu, Hawaii 96804

- Ken Nomura
 Complex Area Superintendent
 (Central/Upcountry Maui)
 Department of Education
 54 High Street, 4th Floor
 Wailuku, Hawaii 96793
- 8. Chiyome Fukino, M.D., Director State of Hawaii Department of Health 919 Ala Moana Blvd., Room 300 Honolulu, Hawaii 96814
- Denis Lau, Chief
 Clean Water Branch
 State of Hawaii
 Department of Health
 919 Ala Moana Blvd., Room 300
 Honolulu, Hawaii 96814
 - Herbert Matsubayashi
 District Environmental Health
 Program Chief
 State of Hawaii
 Department of Health
 54 High Street
 Wailuku, Hawaii 96793
- 11. Peter Young, Chairperson
 State of Hawaii
 Department of Land and Natural
 Resources
 P. O. Box 621
 Honolulu, Hawaii 96809

12.	Melanie Chinen, Administrator State of Hawaii Department of Land and Natural Resources State Historic Preservation Division 601 Kamokila Blvd., Room 555 Kapolei, Hawaii 96707	20.	Milton Arakawa, Director County of Maui Department of Public Works and Environmental Management 200 South High Street Wailuku, Hawaii 96793
13.	Rodney Haraga, Director State of Hawaii Department of Transportation 869 Punchbowl Street Honolulu, Hawaii 96813	21.	Kyle Ginoza, Director County of Maui Department of Transportation 200 South High Street Wailuku, Hawaii 96793
	cc: Fred Cajigal	22.	George Tengan, Director County of Maui
14.	Clyde Namu'o, Administrator Office of Hawaiian Affairs 711 Kapiolani Boulevard, Suite 500 Honolulu, Hawaii 96813		Department of Water Supply 200 South High Street Wailuku, Hawaii 96793
		23.	Neal Shinyama, Manager – Engineering
15.	Carl Kaupololo, Chief		Maui Electric Company, Ltd.
	County of Maui		P.O. Box 398
	Department of Fire and Public Safety		Kahului, Hawaii 96733
	200 Dairy Road	24.	Hawaiian Telcom
	Kahului, Hawaii 96732		60 South Church Street Wailuku, Hawaii 96793
16.	Alice Lee, Director		
	County of Maui	25.	Bud Pikrone, General Manager
	Department of Housing and		Wailea Community Association
	Human Concerns		555 Kaukahi Street, Suite 214
	200 S. High Street		Wailea, Hawaii 96753-8333
	Wailuku, Hawaii 96793		
17.	Michael W. Foley, Director		
	County of Maui		
	Department of Planning		
	250 South High Street		
	Wailuku, Hawaii 96793		
18.	Glenn Correa, Director		
	County of Maui Department of Parks and Recreation		
	700 Halia Nakoa Street, Unit 2		
	Wailuku, Hawaii 96793		
19.	Thomas Phillips, Chief		
10.	County of Maui		
	Police Department		
	55 Mahalani Street		
	Wailuku. Hawaii 96793		

United States Department of Agriculture





Our People...Our Islands...In Harmony

210 lmi Kala Street, Suite #209, Wailuku, HI 96793-2100

October 14, 2005

Mr. Matthew M. Slepin Munekiyo & Hiraga 305 High Street, Suite 104 Wailuku, Hawaii 96793

Subject: Early Consultation Request for Proposed Demolition at the Renaissance Wailea, Maui, TMK (2) 2-1-008:067

Dear Mr. Slepin,

Maintenance of temporary erosion control measures should be maintained and grubbing materials needs to be discarded correctly to reduce the impact of run off to the ocean

Native plants and groundcovers are highly recommended for this area to reduce water usage. Landscaping should be incorporated and coordinated with construction activities so that vegetated areas will be planted and irrigated as soon as possible.

The minor drainage improvements should be designed to reduce the impact of runoff by directing it to landscape areas.

Thank you for the opportunity to comment.

Sincerely,

Ranae Ganske-Cerizo
District Conservationist



MICHAEL T. MUNEKIYO GWEN OHASHI HIRAGA MITSURU "MICH" HIRAND

November 4, 2005

Ranae Ganske-Cerizo, District Conservationist U.S. Department of Agriculture Natural Resources Conservation Service 210 Imi Kala Street, Suite 209 Wailuku, Hawaii 96793

SUBJECT: Proposed Demolition of the Renaissance Wailea, Maui (TMK

(2)2-1-008:067

Dear Ms. Ganske-Cerizo:

Thank you for your letter of October 14, 2005, responding to our request for comments on the proposed demolition at the Renaissance Beach Resort in Wailea, Maui. In response to your comments, we note the following:

- Temporary erosion control measures will be maintained and grubbing materials so disposed of to reduce runoff into the ocean during demolition-related activities. 1.
- A landscaping plan is being developed for the property which would minimize water usage. Landscaping will be coordinated with demolition-related activities. 2.
- Drainage improvements will reduce the impact of runoff by directing it toward 3. landscaping areas and other onsite retention basins.

Thank you again for providing your input to the proposed action. A copy of the Draft Environmental Assessment will be provided to your office for review and comment.

Very truly yours,

Matthew Slepin, Planner

MS:Ifm

cc: Elton Wong, Kobayashi Group F:\DATA\Kobayash\Renaissa\NRCS.res2.wpd



DEPARTMENT OF THE ARMY

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

REPLY TO ATTENTION OF

October 21, 2005

Regulatory Branch

File No. POH-2004-1007

Munekiyo & Hiraga, Inc. Attn: Matthew M. Slepin 305 High Street, Suite 104 Wailuku, Hawaii 96793

Subject: Early consultation request for proposed demolition at the Renaissance Wailea Beach Resort, Wailea, Maui (TMK: (2) 2-1-008:067)

Dear Mr. Slepin:

The Corps has reviewed the information you submitted in request of an early consultation for an Environmental Assessment of the above-referenced project. The Corps Regulatory Branch previously provided a determination in October, 2004 regarding potential waters of the U.S. at this site. Comments were solicited as part of a Special Management Area (SMA) use permit application.

The Corps has reviewed the project pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act and has determined that the proposed work will not require authorization in the form of a Department of the Army (DA) permit for work in waters of the United States.

Please note that based on the materials submitted in support of your most recent request, work will be performed within the shoreline setback but not waterward of the mean higher high water (MHHW) line. Please be advised that work waterward of the MHHW line will require a DA permit pursuant to Section 10 of the Rivers and Harbors Act. If any work is proposed waterward of this line on the shore, a DA permit may be required.

If you need further assistance, please contact Ms. Connie Ramsey by phone at 808-438-2039, by facsimile at 808-438-4060, or by electronic mail at Connie.L.Ramsey@usace.army.mil. Please refer to file number above for further inquiries regarding this project. Thank you for your cooperation with our regulatory program.

Sincerely

Young, P.E.

Chief, Regulatory Branch



MICHAEL T. MUNEKIYO GWEN OHASHI HIRAGA MITSURU "MICH" HIRANO

November 3, 2005

George Young, Chief Department of the Army Regulatory Branch U.S. Army Engineer District, Honolulu Ft. Shafter, Hawaii 96858

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort, Wailea, Maui TMK (2)2-1-008:067

Dear Mr. Young:

Thank you for your letter of October 21, 2005, responding to our request for comments on the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note the following:

- We acknowledge your determination that a Department of the Army permit will not be required for the proposed project.
- 2. The proposed action will not be performed waterward of the mean higher high water line.

Thank you again for providing your input to the proposed action. A copy of the Draft Environmental Assessment will be sent to you for review and comment.

Very truly yours,

Matthew M. Slepin, Planner

MMS:lh

CC: Elton Wong, Kobayashi Group

LINDA LINGLE GOVERNOR OF HAWAII



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

CHIYOME L. FUKINO, M.D. DIRECTOR OF HEALTH

n reply, please refer to END / CWR

10086PKP.05

October 24, 2005

Mr. Matthew M. Slepin Planner Munekiyo & Hiraga, Inc. 305 High Street, Suite 104 Wailuku, Hawaii 96793

Dear Mr. Slepin:

Subject: Early Consultation Request for Proposed Demolition at the

Renaissance Wailea Beach Resort

Wailea, Maui, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of the subject document, dated October 3, 2005. The CWB has reviewed the limited information contained in the subject document and offers the following comments:

- 1. The Army Corps of Engineers should be contacted at (808) 438-9258 for this project. Pursuant to Federal Water Pollution Control Act (commonly known as the "Clean Water Act" (CWA) Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40, Code of Federal Regulations (CFR), Section 122.2; and Hawaii Administrative Rules (HAR), Chapter 11-54.
- 2. In accordance with HAR, Sections 11-55-04 and 11-55-34.05, the Director of Health may require the submittal of an individual permit application or a Notice of Intent (NOI) for general permit coverage authorized under the National Pollutant Discharge Elimination System (NPDES).
 - a. An application for an NPDES individual permit is to be submitted at least 180 days before the commencement of the respective activities. The NPDES application forms may also be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.

- b. An NOI to be covered by an NPDES general permit is to be submitted at least 30 days before the commencement of the respective activity. A separate NOI is needed for coverage under each NPDES general permit. The NOI forms may be picked up at our office or downloaded from our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.
 - i. Storm water associated with industrial activities, as defined in Title 40, CFR, Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi). [HAR, Chapter 11-55, Appendix B]
 - ii. Construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the commencement of the construction activities.

 [HAR, Chapter 11-55, Appendix C]
 - iii. Discharges of treated effluent from leaking underground storage tank remedial activities. [HAR, Chapter 11-55, Appendix D]
 - iv. Discharges of once through cooling water less than one (1) million gallons per day. [HAR, Chapter 11-55, Appendix E]
 - v. Discharges of hydrotesting water. [HAR, Chapter 11-55, Appendix F]
 - vi. Discharges of construction dewatering effluent. [HAR, Chapter 11-55, Appendix G]
 - vii. Discharges of treated effluent from petroleum bulk stations and terminals. [HAR, Chapter 11-55, Appendix H]
 - viii. Discharges of treated effluent from well drilling activities. [HAR, Chapter 11-55, Appendix I]
 - ix. Discharges of treated effluent from recycled water distribution systems. [HAR, Chapter 11-55, Appendix J]
 - x. Discharges of storm water from a small municipal separate storm sewer system. [HAR, Chapter 11-55, Appendix K]
 - xi. Discharges of circulation water from decorative ponds or tanks. [HAR, Chapter 11-55, Appendix L]

Mr. Matthew M. Slepin October 24, 2005 Page 3

- 3. In accordance with HAR, Section 11-55-38, the applicant for an NPDES permit is required to either submit a copy of the new NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the DOH that the project, activity, or site covered by the NOI or application has been or is being reviewed by SHPD. If applicable, please submit a copy of the request for review by SHPD or SHPD's determination letter for the project.
- 4. Any discharges related to project construction or operation activities, with or without a Section 401 WQC or NPDES permit coverage, shall comply with the applicable State Water Quality Standards as specified in HAR, Chapter 11-54.

The Hawaii Revised Statutes, Subsection 342D-50(a), requires that "[n]o person, including any public body, shall discharge any water pollutants into state waters, or cause or allow any water pollutant to enter state waters except in compliance with this chapter, rules adopted pursuant to this Chapter, or a permit or variance issued by the director."

If you have any questions, please contact Mr. Alec Wong, Supervisor of the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

DENIS R. LAU, P.E., CHIEF

Clean Water Branch

KP:np



MICHAEL T. MUNEKIYO GWEN DHASHI HIRAGA MITSURU "MICH" HIRANO

November 3, 2005

Dennis Lau, Chief State of Hawaii Department of Health-Clean Water Branch P.O. Box 3378 Honolulu, Hawaii 96801

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui TMK (2)2-1-008:067

Dear Mr. Lau:

Thank you for your letter of October 24, 2005, responding to our request for comments on the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note that the following:

- The Department of the Army has been contacted in regard to the proposed project 1. and no permit is required from them.
- All applicable permitting will be obtained in the proper manner for the proposed 2. project.
- See No. 2 above. 3.
- The project will comply with applicable requirements of Chapter 11-54, Hawaii 4. Administrative Rules.

Thank you again for providing your input to the proposed action. A copy of the Draft Environmental Assessment will be sent to you for review and comment.

Very truly yours,

m Slepin

Matthew M. Slepin, Planner

MMS:Ih

CC: Elton Wong, Kobayashi Group F:\DATA\Kobayash\Renaissa\doh1response.ttr.wpd

LINDA LINGLE



CHIYOME L. FUKINO, M. D. DIRECTOR OF HEALTH

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

STATE OF HAWAII DEPARTMENT OF HEALTH MAUI DISTRICT HEALTH OFFICE 54 HIGH STREET WAILUKU, MAUI, HAWAII 96793-2102 October 24, 2005

Mr. Matthew M. Slepin, Planner Munekiyo & Hiraga, Inc. 305 High Street, Suite 104 Wailuku, Hawai'i 96793

Dear Mr. Slepin:

Subject:

Demolition at the Renaissance Wailea Beach Resort

TMK: (2) 2-1-008:067

Thank you for the opportunity to participate in the early review of the proposed demolition of the Renaissance Wailea Beach Resort. The following comments are

- 1. National Pollutant Discharge Elimination System (NPDES) permit coverage is required for this project. The Clean Water Branch should be contacted at
- 2. Hawaii Administrative Rules, Chapter 501, "Asbestos Requirements" requires owners or operators of a demolition or renovation activity to thoroughly inspect the affected facility for the presence of asbestos using a certified inspector pursuant to HAR, Chapter 504. The applicant is required to file with the Noise, Radiation and Indoor Air Quality Branch, Asbestos Demolition/Renovation Notification at least ten (10) working days prior to the demolition of each building (regardless of the presence of asbestos) or the disturbance of regulated asbestos containing materials during renovation activities.

All regulated quantities and types of asbestos containing materials would be subject to emission control, proper collection, containerizing, and disposal at a permitted landfill by a licensed asbestos contractor using certified persons. Questions concerning asbestos requirements should be directed to Mr. Thomas

Should you have any questions, please call me at 808 984-8230.

Sincerely,

Herbert S. Matsubayashi

District Environmental Health Program Chief

c: NRIAQ **CWB**



MICHAEL T. MUNEKIYO GWEN DHASHI HIRAGA MITSURU "MICH" HIRANO

November 3, 2005

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

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort, Wailea, Maui TMK (2)2-1-008:067

Dear Mr. Matsubayashi:

Thank you for your letter of October 24, 2005, responding to our request for comments on the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note the following:

- 1. The applicant will obtain all necessary permitting for the proposed project.
- 2. The proposed action will comply with the applicable requirements of Chapter 501, Hawaii Administrative Rules, including notification and disposal requirements.

Thank you again for providing your input to the proposed action. A copy of the Draft Environmental Assessment will be sent to you for review and comment.

Very truly yours,

me gem

Matthew M. Slepin, Planner

MMS:lh

CC: Elton Wong, Kobayashi Group F:DATAIKobayashiRenaissaldohresponse.ltr.wpd

305 High Street, Suite 104 Wailuku, Hawaii 96793 ph: (808)244-2015 fax: (808)244-8729 planning@mhinconline.com

FAX (808) 594-1865

PHONE (808) 594-1888



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

HRD05/1583B

October 20, 2005

Matt Slepin Munekiyo and Haraga, Inc. 305 High Street, Suite 104 Wailuku, Hawaii, 96793

RE: Early Consultation for Proposed Demolition at the Renaissance Wailea Beach Resort, Wailea, Maui, TMK (2) 2-1-008: 067.

Dear Mr. Slepin,

The Office of Hawaiian Affairs (OHA) is in receipt of your October 12, 2005 request for comment on the above listed proposed project, TMK (2) 2-1-008: 067. OHA offers the following comments:

OHA recommends that you contact John Lu'uwai and Ed Lindsey as part of your consultation effort. Mr. Lu'uwai is from the Makena/Wailea area and knows the region intimately as he spent a good portion his life residing, fishing and gathering in the area. Mr. Lindsey continues to be involved in the Maui Native Hawaiian community and will also be of great value to your research.

Our staff recommends that, in conjunction with the Cultural Impact Assessment, an Archaeological Inventory Survey be completed in support of this project. The inventory would include a substantial subsurface testing program to locate any remaining cultural deposits and/or human remains.

Our office recommends that, based upon the results of the inventory, an Archaeological Monitoring Plan be drafted to mitigate potential adverse effects to encountered historic properties and/or iwi. The plan would address the need for on-site and on-call monitoring by a professional archaeologist and would establish boundaries for culturally sensitive areas within the property. OHA also recommends that a Cultural Monitor, in conjunction with the Archaeological Monitor, be contracted to observe all ground altering activities, particularly in areas deemed culturally sensitive.

OHA further requests your assurances that if the project goes forward, should iwi or Native Hawaiian cultural or traditional deposits be found during ground disturbance, work will cease, and the appropriate agencies will be contacted pursuant to applicable law.

Matt Slepin October 20, 2005 Page 2

Thank you for the opportunity to comment. If you have further questions or concerns, please contact Jesse Yorck at (808) 594-0239 or jessey@oha.org.

'O wau iho nõ,

Olypew. 100 Clyde W. Nāmu'o Administrator

CC: Thelma Shimaoka

OHA Community Affairs Coordinator (Maui) 140 Hoohana St., Ste. 206

Kahului, HI 96732



MICHAEL T. MUNEKIYO GWEN OHASHI HIRAGA MITSURU "MICH" HIRAND

November 3, 2005

Clyde Namu'o, Administrator State of Hawaii Office of Hawaiian Affairs 711 Kapiolani Boulevard, Suite 500 Honolulu, Hawaii 96813

SUBJECT:

Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui TMK (2)2-1-008:067

Dear Mr. Namu'o:

Thank you for your letter of October 20, 2005, responding to our request for comments on the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note the following:

- 1. A Cultural Impact Statement has been prepared and will be included in the Draft Environmental Assessment. We appreciate your recommendations concerning potential interviewees.
- 2. An archaeological assessment survey was carried out for the subject property and is also included in the Draft Environmental Assessment. Due to the project site's character as an extensively-altered, developed site, the assessment report concludes that there is little likelihood of encountering any traditional or cultural deposits during project implementation. However, an archaeological monitoring plan has been prepared and submitted to the State Historic Preservation Division for review and approval.
- 3. Should any traditional or cultural deposits be uncovered during ground-altering activities, all work will cease and the proper authorities contacted.

Clyde Namu'o, Administrator November 3, 2005 Page 2

Thank you again for providing your input to the proposed action. A copy of the Draft Environmental Assessment will be sent to you for review and comment.

Very truly yours,

Matthew M. Slepin, Planner

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MMS:Ih

CC: Elton Wong, Kobayashi Group F:\DATA\Kobayash\Renaissa\oharesponse.ltr.wpd

ALAN M. ARAKAWA Mayor



GLENN T. CORREA Director

JOHN L. BUCK III Deputy Director

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

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2 , Wailuku, Hawaii 96793

October 25, 2005

Munekiyo & Hiraga, Inc. Attention: Matthew M. Slepin, Planner 305 High Street, Suite 104 Wailuku, Hawaii 96793

Dear Mr. Slepin:

SUBJECT:

Early Consultation Request for Proposed Demolition at the Renaissance

Wailea Beach Resort, Wailea, Maui

TMK (2) 2-1-008:067

Thank you for the opportunity to review and comment on the above- referenced subject.

After review of the proposed action, we have no comments to offer at this time. Should you have any questions or concerns, please feel free to contact me or Mr. Patrick Matsui, Chief of Planning and Development at 270-7387.

Sincerely,

GLENN T. CORREA

Director

Patrick Matsui, Chief of Planning and Development c:

ALAN M. ARAKAWA MAYOR



KYLE K. GINOZA
Director
DON A. MEDEIROS
Deputy Director
Telephone (808) 270-7511
Facsimile (808) 270-7505

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI 200 South High Street Wailuku, Hawaii, USA 96793-2155

October 27, 2005

Munekiyo & Hiraga, Inc. Attention: Matthew M. Slepin 305 High Street, Suite 104 Wailuku, HI 96793

Subject: Early Consultation Request for Proposed Demolition at the Renaissance Wailea Beach Resort, Wailea, Maui, TMK (2) 2-1-008:067

Dear Mr. Munekiyo:

Thank you for the opportunity to comment on this project during this early consultation period. The Maui County Department of Transportation has no comment at this time with regards to the proposed actions as outlined in your letter to me dated October 12, 2005.

Please feel free to contact me if you have any questions.

Sincerely,

Kyle K. Ginoza Director



October 25, 2005

Mr. Matthew M. Slepin Munekiyo & Hiraga, Inc. 305 S. High Street, Suite 104 Wailuku, HI 96793

Dear Mr. Slepin:

Subject: Early Consultation Request for Proposed Demolition at the Renaissance

Wailea Beach Resort, Wailea, Maui

TMK (2) 2-1-008:067

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 new electrical requirements for the redevelopment so that service can be provided on a timely basis.

In addition, we suggest that the developer and/or their consultant make contact with our Demand Side Management (DSM) group to review potential energy conservation and efficiency opportunities for their project. Walter Enomoto of our DSM group can be contacted at 872-3283.

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

Sincerely,

Neal Shinyama

Manager, Engineering

NS/dt:lh

Cc: Walter Enomoto, MECO



MICHAEL T. MUNCKIYO GWEN DHASHI HIRAGA MITSURU "MICH" HIRAND

November 3, 2005

Neal Shinyama, Manager - Engineering Maui Electric Company, Ltd. P.O. Box 398 Kahului, Hawaii 96733

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui TMK (2)2-1-008:067

Dear Mr. Shinyama:

Thank you for your letter of October 25, 2005, responding to our request for comments on the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note that the project's electrical requirements, as well as with your Demand Side Management group to discuss potential energy conservation measures.

Thank you again for providing your input to the proposed action. A copy of the Draft Environmental Assessment will be sent to you for review and comment.

Very truly yours,

m Slepin

Matthew M. Slepin, Planner

MMS:Ih

CC: Elton Wong, Kobayashi Group

Chapter XI

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

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

A Draft Environmental Assessment for the subject project was filed and published in the Office of Environmental Quality Control's The Environmental Notice on November 23, 2005. During the 30-day public comment period, agencies were provided the opportunity to comment on the proposed action. This section incorporates the comments received during the 30-day comment period between November 23, 2005 and December 23, 2005, as well as replies to our request for early consultation comments which did not arrive in time for inclusion in the Draft Environmental Assessment. Responses to the substantive comments are also incorporated herein.

United States Department of Agriculture

Natural Resources Conservation Service 210 lmi Kala Street, Suite 209 Walluku, HI 96793-2100 (808) 244-3100

705 DEC -7 P12:30

Our People...Our IslandsElf Harmony LARRING COUNTY OF MAUL RECEIVED

December 6, 2005

Ms. Kivette Caigoy, Staff Planner Department of Planning County of Maui, Hawaii 250 South High Street Wailuku, Hawaii 96793

Regarding:

Wailea Renaissance Redevelopment, Wailea, Maui, HI

TMK: (2) 2-1-008: 067 and 088

Dear Ms. Caigoy,

I have received a copy of the Application for Special Management Area Use Permit, Shoreline Variance, and Planned Development Step I and Step II Approvals for the Wailea Renaissance Redevelopment in Wailea. I appreciate the opportunity to review the project. However, I have no comments concerning the permitting and applications at this time.

Sincerely,

Diana L. Perry Civil Engineer

Ranae Ganske-Cerizo, NRCS Cc:

LINDA LINGLE GOVERNOR



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

November 4, 2005

RODNEY K. HARAGA

DIRECTOR

Deputy Directors BRUCE Y. MATSUI BARRY FUKUNAGA BRENNON T. MORIOKA BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.1936

Mr. Matthew M. Slepin Munekiyo & Hiraga, Inc. 305 High Street, Suite 104 Wailuku, Hawaii 96793

Dear Mr. Slepin:

Subject: Early Consultation

Renaissance Wailea Beach Resort, Demolition

TMK: (2) 2-1-008: 067

Thank you for your early notification of the project for the redevelopment of the subject Renaissance hotel.

About a year ago, we reviewed and commented on a proposed renovation project for the subject Renaissance hotel. Based on your recent notification, we assume that the project will now be a more extensive redevelopment of the hotel complex. We would appreciate a clarification of the differences between the two proposed projects.

Of particular interest is how the redevelopment or the hotel complex affects or changes the expected traffic impacts. We would also be interested in the traffic activity that occurred in the past compared to the projected amount accompanying the redevelopment of the hotel. As you know, A & B Wailea recently completed an updated and revised traffic master plan for the Wailea Resort area. Therefore, we would like to review your evaluation of your project's traffic assessment compared to the revised traffic master plan prepared by A&B Wailea and verify, among other things, that your redevelopment project has been accounted for in the overall traffic activity for the Wailea Resort area.

We look forward to receiving copies of your project's applications to the Maui County Planning Department.

STP 8.1936

Mr. Matthew M. Slepin Page 2 November 4, 2005

We appreciate the opportunity to provide our comments.

Very truly yours,

RODNEY R. HARAGA Director of Transportation



MICHAEL T. MUNEKIYO GWEN DHASHI HIRAGA MITSURU "MICH" HIRANO

KARLYNN KAWAHARA

January 27, 2006

Rodney Haraga, Director State of Hawaii Department of Transportation 869 Punchbowl Street Honolulu, Hawaii 96813

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui; TMK (2) 2-1-008:067

Dear Mr. Haraga:

Thank you for your letter of November 4, 2005, responding to our request for early consultation comments for the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note the following:

- 1. The project to which you previously provided comment in 2004 was a renovation of the existing Renaissance Wailea Beach Resort. This plan involved the development of 34 condominium units to stand alongside 315 hotel rooms, which would have involved no change in the total unit count of the existing facility (349 units). Upon further consideration, the applicant deemed this plan impracticable and the currently proposed project was initiated. The proposed project involves a complete demolition of the existing facility and a redevelopment into a condominium hotel with substantially fewer units (193 units). A copy of the Draft Environmental Assessment has been provided to your office which details the currently proposed project.
- 2. As mentioned in No. 1 above, the proposed project will see a substantial reduction in the unit count of the resort, leading to lesser traffic flows to and from the facility. A Traffic Impact Report was included in the Draft Environmental Assessment which was provided to your office.

environmen olan riin q

305 High Street, Suite 104 · Wailuku, Hawaii 96793 · ph: (808)244-2015 · fax: (808)244-8729 planning@mhinconline.com

Rodney Haraga, Director January 27, 2006 Page 2

Thank you again for providing your input to the proposed action.

Very truly yours,

m Slepin Matthew M. Slepin, Planner

MMS:tn

cc: Elton Wong, Kobayashi Group
Kathy Leong, Wilson Okamoto Corporation
F:IDATAIKobayashiRenalissaldotfea.res.wpd

FAX (808) 594-1865

PHONE (808) 594-1888



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

HRD05/1582D

December 27, 2005

Kivette Caigoy, Staff Planner Planning Department 250 South High Street Wailuku, HI 96793

RE: Applications for Special Management Area Permit and Shoreline Setback Variance for the Proposed Redevelopment of the Renaissance Wailea Beach Resort, Wailea, Maui, TMK (2) 2-1-008: 067 and 088.

Dear Kivette Caigoy,

The Office of Hawaiian Affairs (OHA) is in receipt of your November 23, 2005 request for comment on the above listed proposed project, TMK (2) 2-1-008: 067 and 088. OHA offers the following comments:

It appears that the majority of concerns raised in OHA's October 20, 2005 response letter have been addressed in the above reference document. A Cultural Impact Assessment, an Archaeological Monitoring Plan and an Archaeological Assessment have been completed. However, our staff recommends that three additional issues be addressed in support of the proposed project. These are:

- 1) It is appropriate for a subsurface testing effort to be conducted prior to ground altering activities. The Archaeological Assessment (Rosendahl, 2003) was limited to a surface inspection and does not preclude subsurface testing. Areas that will be impacted by the proposed should be tested; this is particularly apt for areas that are not currently built upon.
- 2) Our office recommends that individuals originally listed in our October 20, 2005 response letter be contacted as part of a good faith consultation process (chiefly John
- 3) Areas that are grubbed or stripped of vegetation during the course of development should be replanted with native flora whenever possible.

Kivette Caigoy December 27, 2005 Page 2

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Our staff feels that all of the above stated recommendations are appropriate for a redevelopment project of this scale. We would also like to take the time to remind the applicant that by conducting a subsurface testing survey, much time can be saved during future mitigation should iwi or historic properties be encountered during monitoring.

808-242819

OHA further requests your assurances that if the project goes forward, should iwi or Native Hawaiian cultural or traditional deposits be found during ground disturbance, work will cease, and the appropriate agencies will be contacted pursuant to applicable law.

Thank you for the opportunity to comment. If you have further questions or concerns, please contact Jesse Yorck at (808) 594-0239 or jessey@oha.org.

'O wau iho no,

rald A Mun-Clyde W. Nāmu'o Administrator



MICHAEL T. MUNEKIYO GWEN CHASHI HIRAGA MITSURU "MICH" HIRANO

KARLYNN KAWAHARA

January 27, 2006

Clyde Namu'o, Administrator State of Hawaii Office of Hawaiian Affairs 711 Kapiolani Boulevard, Suite 500 Honolulu, Hawaii 96813

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui; TMK (2) 2-1-008:067

Dear Mr. Namu'o:

Thank you for your letter of December 27, 2005, providing comment on the Draft Environmental Assessment for the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note the following:

- The project archaeologist has recommended archaeological monitoring during 1. project implementation. See Attachment "A". Consequently, a monitoring plan was prepared and was accepted by the State Historic Preservation Division on February 3, 2005.
- The cultural impact consultants did make a good faith effort to contact John 2. Lu'uwai.
- The applicant acknowledges your recommendation regarding the use of native flora. 3. Preliminary landscaping plans call for the use of a high proportion of native and indigenous species for the redeveloped property.

305 High Street, Suite 104 · Wailuku, Hawaii 96793 · ph: (808)244-2015 · fax: (808)244-8729 · planning@mhinconline.com

Clyde Namu'o, Administrator January 27, 2006 Page 2

Thank you again for providing your input to the proposed action.

Very truly yours,

Matthew M. Slepin, Planner

MMS:tn

Elton Wong, Kobayashi Group

Mike Degas, Scientific Consulting Services F-IDATAIKobayashiRenaissalohafea.res.wpd

Dr. Melissa Kirkendall SHPD-Maui 130 Mahalani Street Wailuku, HI 96793 April 22, 2004

Re: Historic Properties Determination and Request on Due Diligence, Renaissance Hotel, Wailea Beach Resort, Land of Paeahu, Makawao District, Island of Maui (TMK:2-1-08:67; Land Court Application No. 1804, Map 11, Lot 31-B (dated 4/5/76)

Dear Dr. Kirkendall:

This letter is being written to obtain a formal determination of "no historic properties affected" thus far for the above mentioned TMK property and to discuss further mitigation requirements during proposed construction work. In essence, we propose Archaeological Monitoring in lieu of testing in existing infrastructure areas, a recommendation also forwarded to you by PHRI during their Archaeological Assessment of the property in July 2003 (see below).

The subject property has been zoned H-2 and consists of a total area of 15.578 acres (687,577 square feet). An Archaeological Assessment Survey for Due Diligence of the property was conducted by Paul H. Rosendahl, Ph.D. on July 9, 2003. The Assessment survey report is attached to this letter. Scientific Consultant Services, Inc. (SCS) was very recently hired to obtain a determination on the parcel and to work with SHPD in terms of any further mitigation requirements during future construction, demolition, or land altering activities.

The contractor (Kobayashi Group) is currently in the process of designing the renovation of the hotel and possibly adding condominiums. This letter contains a plan view map (attached) illustrating the location of existing buildings on the property. Future work will occur throughout the property and would be demarcated in a mitigation plan (i.e., Archaeological Monitoring Plan), as warranted. SHPD has not previously commented on the proposed actions or the Archaeological Assessment.

Background

At the request of Marc Perrin, Managing Director of the Starwood Capital Group, LLC, Paul H. Rosendahl, Ph.D. conducted an Archaeological Assessment survey of the Renaissance Hotel property on July 9, 2003. It is noted in the Assessment that the entire subject property was fully developed several decades ago and was recently known as the Stouffer Wailea Beach Resort. As seen in the attached Assessment document, much construction work has been completed on the subject parcel and adjacent parcels. The PHRI Assessment further discusses other archaeological projects occurring within and near the subject property, as well as previous SHPD determinations on these projects (Page 3).

Assessment and Recommendations

The Assessment fieldwork on this subject property by PHRI failed to yield any evidence for the presence of significant cultural remains (Page 3). No testing was accomplished in support of this interpretation. Inventory Survey was (and still is) not recommended for any further construction activities on the parcel. We concur with PHRI that Archaeological Monitoring appears the most "practical" and "less disruptive" course of mitigation preferred at this juncture (Page 3). This recommendation is based on the negative results of the Archaeological Assessment and the presence of existing infrastructure and buildings in proposed construction areas.

Prudently, Archaeological Monitoring during construction work, particularly in sandy areas, is recommended due to the potential for encountering human remains and/or subterranean cultural deposits. Prior to any work, a formal Archaeological Monitoring Plan would be prepared by SCS for SHPD review. The Archaeological Monitoring Plan would incorporate soil surveys completed on the subject parcel to aid in more precisely demarcating potential areas for monitoring (e.g., bedrock and deep fill layers are common on the parcel, sand is present only nearer the shoreline).

Thank you for the opportunity to provide you with this determination letter request and a copy of the PHRI Assessment report. We look forward to receiving a determination from you soon and working with you further on appropriate mitigation strategies for this land parcel.

Best Regards,

Michael Dega, Ph.D. Senior Archaeologist Scientific Consultant Services, Inc. (808) 597-1182 mike@scshawaii.com

cc: Dr. Sara Collins, Branch Chief of Archaeology, SHPD

LINDA LINGLE GOVERNOR



808-242819

RUSS X. SAITO Conjugator

EATEURINE H. THOMASON Deputy Computables

STATE OF HAWAII DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

SURVEY DIVISION F.O. BOX 119 HONOLULU, HAWAII 96810-0119

December 13, 2005

MEMORANDUM

TO:

Michael W. Foley, Planning Director

Maui County Planning Department

ATTN.:

Kivette A. Caigoy, Staff Planner

FROM:

Reid K. Siarot, State Land Surveyor 24

DAGS, Survey Division

SUBJECT:

I.D.: EA 2005/0016 and SM1 2005/0035

TMK: 2-1-08: 67 and 88

Project Name: Wailea Renaissance Redevelopment

Applicant: Kobayashi Group, LLC

We have reviewed the Application for Special Management Area Permit for the above subject.

Please be advised that our records indicate that a Survey Benchmark (T 22) is possibly located within the improvement area on the proposed Wailea Renaissance Redevelopment Site (see attached Exhibits "A", "B", and "C").

Please be further advised that if there is a possibility the Benchmark will be disturbed or destroyed, the Benchmark must be referenced and eventually replaced. Copies of field notes, descriptions and new values of the replaced Benchmark should be sent to our office.

Should you have any questions, please call me at 586-0390.

Enclosures

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

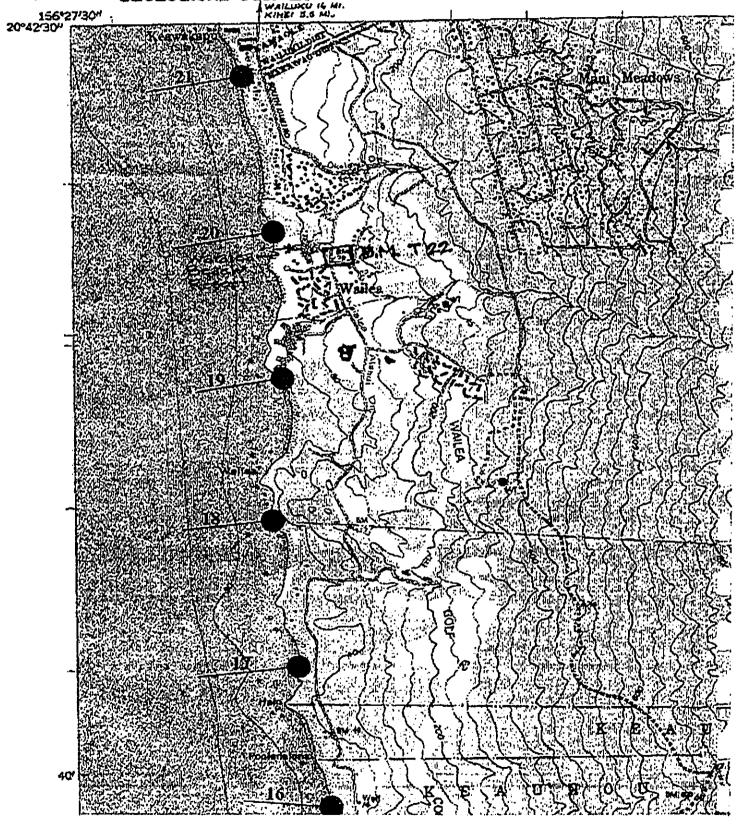


Exhibit "A"

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PAGE 18

Exhibit "C"



MICHAEL T. MUNEKIYO GWEN DHASHI HIRAGA MITSURU "MICH" HIRANG

KARLYNN KAWAHARA

January 27, 2006

Reid Siarot, State Land Surveyor State of Hawaii Department of Accounting and General Services Survey Division P.O. Box 119 Honolulu, Hawaii 96810

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui; TMK (2) 2-1-008:067

Dear Mr. Siarot:

Thank you for your letter of December 27, 2005, providing comment on the Draft Environmental Assessment for the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. The project engineers have been alerted to the presence of the Survey Benchmark and have indicated that it is not located on the subject property and should not be disturbed by the proposed action. Should it be disturbed during project implementation, the Benchmark will be properly referenced and coordination will be undertaken with your office to replace it.

Thank you again for providing your input to the proposed action.

Very truly yours,

Matthew M. Slepin, Planner

m Slerin

MMS:tn

Elton Wong, Kobayashi Group

Ronald Fukumoto, Ronald M. Fukumoto Engineering

, environment

305 High Street, Suite 104 · Wailuku, Hawaii 96793 · ph: (808)244-2015 · fax: (808)244-8729 · planning@mhinconline.com

LINDA LINGLE GOVERNOR OF HAWAII



GENEVIEVE SALMONSON DIRECTOR

OFFICE OF ENVIRONMENTAL QUALITY CONTROL

295 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186
E-mail: oeqc@health.state.hi.us

December 22, 2005

Mr. Michael W. Foley, Director Ms. Kivette A. Caigoy Department of Planning – County of Maui 250 South High Street Wailuku, Hawai'i 96793

Mr. Matthew Slepin Munekiyo & Hiraga, Inc. 305 High Street, Suite 104 Wailuku, Hawai'i 96793

Dear Messrs. Foley and Slepin and Ms. Caigoy:

The Office of Environmental Quality Control has reviewed the draft environmental assessment for the Proposed Redevelopment of the Renaissance Wailea Beach Resort, Tax Map Key (2nd) 2-1-008, parcels 67 and 88, situated in the judicial district of Makawao. We offer the following comments for your consideration and response.

Privacy Wall: Page 13 of the draft environmental assessment noted that "[o]ther park improvements include general landscaping, as well as landscaping of the pump station building site, and a new 6-foot, blue stone privacy wall between the property area and the park." Please elaborate as to the length of and terminus of such a privacy wall, and whether such a wall will allow access to the public along the shoreline terming the applicant's property. Please also discuss the impacts (if any) of the wall on any view planes or corridors.

Landscaping with Xerophagic Native and Indigenous Plants: Please consider landscaping with native and indigineous xerophagic (drought-tolerant) plants. Please refer to our Internet website at http://www.state.hi.us/health/oeqc/index.html for more information.

Thank you for the opportunity to comment. If there are any questions, or if you would like to discuss this matter further, please call Mr. Leslie Segundo, Environmental Health Specialist, at (808) 586-4185.

Geneview Salon

GENEVIEVE SALMONSON

Director



MICHAEL T. MUNEKIYO GWEN DHASHI HIRAGA MITSURU "MICH" HIRAND

KARLYNN KAWAHARA

January 27, 2006

Genevieve Salmonson, Director State of Hawaii Office Of Environmental Quality Control 235 South Beretania Street, Suite 702 Honolulu, Hawaii 96813

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort, Wailea, Maui TMK (2)2-1-008:067

Dear Ms. Salmonson:

Thank you for your letter of December 22, 2005, providing comment on the Draft Environmental Assessment for the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note the following:

- 1. The new six-foot high privacy wall is approximately 365 feet in length and ends 163 feet from the shoreline. A chain-link fence screened with vegetation currently serves as the division between the park and the hotel property. The applicant was requested by the Wailea Community Association to replace this rusted chain-linked fence along the boundary of the property. The wall ends in-line with the beach park restroom and the hotel property, which is where the view planes open up. There are no impacts to view planes or public access to or from the park.
- 2. The applicant is planning to use a significant proportion of native and indigenous plants in the design of the project landscaping.

Thank you again for providing your input to the proposed action.

Very truly yours,

Matthew M. Slepin, Planner

MMS:Ih

CC: Elton Wong, Kobayashi Group

environment

305 High Street, Suite 104 · Wailuku, Hawaii 96793 · ph: (808)244-2015 · fax: (808)244-8729 planning@mhinconline.com



DEPARTMENT OF HOUSING AND HUMAN CONCERNS COUNTY OF MAUL

ALAN M. ARAKAWA Mayor

ALICE L. LEE Director

HERMAN T. ANDAYA
Deputy Director

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

January 17, 2006

TO:

KIVETTE A. CAIGOY, Staff Planner

Department of Planning

FROM:

ALICE L. LET Director Department of Housing and Human Concerns

SUBJECT: I.D.: EA 2005/0016 AND SM1 2005/0035

TMK: (2)2-1-008:067 AND 088

PROJECT NAME: WAILEA RENAISSANCE REDEVELOPMENT

APPLICANT: KOBAYASHI GROUP, LLC

We have reviewed the Renaissance Wailea Beach Resort Redevelopment Project's application for Special Management Area Use Permit, Shoreline Setback Variance and Planned Development Steps I & II Approvals, and would like to inform you that contrary to the statements contained in paragraph III.B.7 (page 45) of the application, we have determined that pursuant to Section 2.94.050A, Maui County Code, the project is excluded from the provisions of Chapter 2.94, Maui County Code. However, please be advised that the applicant has agreed to contribute \$1,960,000 (\$40,000 x 49 units) to a local nonprofit organization to assist in the development of an unspecified number of affordable housing units. Therefore, we are hereby requesting that the above specified monetary contribution be made a condition of approval.

Thank you for the opportunity to comment.

ELO: pa

Housing Administrator



MICHAEL T. MUNEKIYO GWEN DHASHI HIRAGA MITSURU "MICH" HIRAND

KARLYNN KAWAHARA

January 27, 2006

Alice Lee, Director County of Maui Department of Housing and Human Concerns 200 South High Street Wailuku, Hawaii 96793

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui TMK (2)2-1-008:067

Dear Ms. Lee:

Thank you for your letter of January 17, 2006, providing comment on the Draft Environmental Assessment for the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. We note that the applicant is coordinating with your office in the preparation of the affordable housing agreement which they are prepared to execute.

Thank you again for providing your input to the proposed action.

Very truly yours,

Matthew M. Slepin, Planner

MMS:lh

CC: Elton Wong, Kobayashi Group

Martin Luna, Carismith Ball

305 High Street, Suite 104 Wailuku, Hawaii 96793 · ph: (808)244-2015 · fax: (808)244-8729 · planning@mhinconline.com

ALAN M. ARAKAWA Mayor

MICHAEL W. FOLEY Director

WAYNE A. BOTEILHO Deputy Director



DEC 2 3 7005

COUNTY OF MAUI DEPARTMENT OF PLANNING

December 22, 2005

Mr. Matt Slepin Munekiyo & Hiraga 305 High Street, Suite 104 Wailuku, Hawaii 96793

Dear Mr. Slepin:

RE: Maui Planning Commission Comments on the Draft Environmental Assessment Prepared for the Proposed Redevelopment of the Wailea Beach Resort located at TMK: 2-1-008: 067 and 088, Wailea, Island of Maui, Hawaii (EA 2005/0016) (SM1 2005/0035) (PD1 2005/0006) (PD2 2005/0007)

At the regular meeting of December 13, 2005, the Maui Planning Commission (Commission) reviewed the above-referenced document and provided the following comments:

- 1. Demolition and Recycling Plan
 - a. Provide a detailed discussion of the proposed demolition and recycling plan.
 - b. Discuss anticipated timeframe, including total length of time, to complete demolition.
 - c. Identify the end destination of demolished and recycled materials for both soft and hard demolition activities.
 - d. Clarify whether recycling activities will require transport to the Kahului Harbor. Provide additional information regarding the estimated tonnage per truck and trucks per day anticipated with demolition. Discuss potential impacts to traffic. (See also Comment No. 8 below)
- 2. Provide further discussion regarding the number of displaced employees and rehiring of employees. Discuss specifics of a rehiring program. Clarify whether any rehiring preferences will be given to former employees.

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3. Employee Housing

- Provide the unit number, or amount of cash in lieu, as agreed upon with the County of Maui, Department of Housing and Human Concerns.
- b. If employee housing is opted, discuss how the applicant proposes to ensure the employee housing will be constructed within a reasonable timeframe. Clarify whether the housing will be located on- or off-site.
- 4. Provide further discussion as to the driving mechanism for initiating the park improvements on the neighboring property. Is this a voluntary action or a means to meet County park requirements?
- 5. Provide a detailed parking analysis and provide the following information:
 - a. Clarify the existing and proposed number of employees. Based on the total number of parking stalls proposed, identify the number of stalls reserved exclusively for employees.
 - Further provide a breakdown of stalls dedicated for guests, valet, and conference usage.
- 6. Provide further discussion of the concept of a hybrid condominium hotel use. Condominiums typically include kitchens. Clarify whether the proposed development will provide similar amenities.

7. Drainage

- a. Clarify the pre-existing, post-development, and net increases in runoff.
- b. The Commission recognizes the County's code regarding drainage improvements. However, provide further discussion as to the feasability of designing the on-site drainage system to manage more than the net increase of flow.
- Clarify the types of materials/contaminants that the proposed filtration system will manage, specifically petroleumcontaminated substances.

Mr. Matt Slepin December 22, 2005 Page 3

> d. Discuss whether the applicants, as property owners, have any recourse against upstream property owners regarding litter entering surface water flows. Identify potential contaminant sources from upstream properties.

8. Traffic

- a. Discuss whether the analysis included potential impacts during the demolition and construction phases of the proposed action. Further, clarify whether the analysis recognized the resort demolitions in West Maui occurring within the same timeframe of the proposed action. The Commission is concerned that these concurrent demolitions may create secondary impacts in Kahului and Wailuku should materials be transported for offisland disposal or recycling.
- b. Review the Traffic Master Plan for Wailea and provide further discussion as to how the proposed action conforms with the plan.

9. View Analysis

The Commission recognizes that the number of stories per building increases from the ocean to the roadway with the intent of protecting the views from each respective building unit. Demolishing all structures provides the opportunity of creating a new viewplane through the proposed project to the ocean. As such, provide further discussion of the potential impacts to coastal vistas from Wailea Alanui and how the proposed action mitigates these impacts.

Should you require further clarification, please contact Ms. Kivette Caigoy, Environmental Planner, at 270-7735.

Sincerely.

MICHAEL W. FOLEY Planning Director

Mr. Matt Slepin December 22, 2005 Page 4

MWF:KAC:lar

Wayne A. Boteilho, Deputy Planning Director
Kivette A. Caigoy, Environmental Planner
Ann Cua, Staff Planner
Maui Planning Commissioners
EA Project File
General File
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MICHAEL T. MUNEKIYO GWEN DHASHI HIRAGA MITSURU "MICH" HIRANO

KARLYNN KAWAHARA

January 27, 2006

Michael W. Foley, Director Department of Planning, County of Maui 250 South High Street Wailuku, Hawaii 96793

> SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort, Wailea, Maui; TMK (2) 2-1-008:067

Dear Mr. Foley:

Thank you for your letter of December 22, 2005, providing the Maui Planning Commission's comments on the Draft Environmental Assessment for the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. We have numbered our responses to correspond with those in your letter.

- A preliminary demolition plan has been prepared and is included in the Final EA as Appendix "F".
- Demolition is scheduled to take approximately 4 to 5 months.
- Furnishing will be removed and resold by a liquidator. Other furnishing that cannot be resold, like carpet, will be disposed of at the landfill. See No. 1.d. below for further information.
- Metals will be separated and sent to a recycle center on Oahu. At present, there 1.d. is no metal recycling facility in operation on Maui. As a consequence, all metals would have to be barged to Honolulu. This would result in approximately 30 truck loads with an average weight of 15 tons, traveling to Kahului Harbor. The metal load out would be consolidated to minimize the overall duration of trucking and maximize the use of barge space in shipping. The 30 truck loads would be taken to Kahului over the course of two (2) days.

Concrete will be crushed and used for on-site fill. A mobile crushing plant will be placed on-site to process concrete/masonry for fill material. This process would eliminate approximately 2,200 truck trips from the site in removal efforts alone. If the concrete material is not recycled on-site, the material would be sent to a commercial concrete recycler or the Maalaea Landfill for disposal.

E. [

Landscaping will be replanted along the boundaries, transplanted off-site for future use or chipped for compost.

General debris will be segregated on-site and trucked by a pre-approved route to Maui Maalaea Landfill, the island's only approved construction debris disposal site at present. It is currently estimated that 2,240 loads of debris, weighing approximately fifteen (15) tons per load, would be transported to the landfill. Depending on scheduling, production and trucking availability, typically around ten (10) loads of debris would be loaded out each day for an overall duration of four (4) to six (6) weeks.

The anticipated traffic impact of demolition and construction-related activities is discussed in No.8 below.

- 2. There are approximately 370 current full and part-time employees of the Renaissance Wailea Beach Resort Hotel. Employees will get a severance package based on the years of service. Both Marriott, the Renaissance operator, and Starwood Hotels, the future operator, are looking for qualified employees on both Maui and the other islands and will hold career days for severed employees. The applicant has further stated that they will make all reasonable attempts, within the limits of United States and Hawaii labor laws, to rehire former employees; it is expected, however, that many of the current employees will have found other employment by the time that the redeveloped property is ready to open. Former employees will be contacted at their last known address to apply for the new positions. Former employees will also be given preference where applicants are otherwise equal.
- 3.a. In discussion with the Department of Housing and Human Concerns (DHHC), that Department has indicated that they will request the Planning Commission to condition the project pursuant to the Maui Affordable Housing policy. Since the property is hotel zoned, the higher hotel rate of 25% of the units applies equals to 49 units (193 total units x 25% and roundup). The applicant is electing cash in lieu currently at \$40,000 per unit, the total amount results in \$1,960,000. Details are being worked out with the DHHC.
- 3.b. Not applicable; see No. 3.a. above.
- 4. The Ulua/Mokapu Beach Park improvements are a voluntary action, proposed after consultation with and in conjunction with, the Wailea Community Association (WCA). The WCA maintains the parks within Wailea. During the planning process, the WCA and the applicant recognized that the County Park

was frequently over-capacity with its parking spaces and that visitors often parked illegally or on the hotel grounds, thus the need for additional public spaces. The applicant has volunteered to provide the master plan, request the necessary approvals, and construct twenty-two (22) new parking stalls for the park, in conjunction with the WCA and the County Department of Parks and Recreation.

5.a. As discussed above, the current property employees approximately 370 people. It is anticipated that approximately 300 employees will be required for the redeveloped property.

The proposed parking consists of 424 regulation stalls plus 18 tandem stalls for a total of 442 stalls. An additional 50 stalls can be provided by valet (double parking) for a total of 492 stalls. Parking is critical for the proposed project because most of it will be located underground. Likewise, inadequate parking would hurt the St. Regis Brand and the project. To ensure adequate parking, the project had a parking analysis performed by a national parking consultant. Based on the uses (and 206 condos), TJKM Traffic Consultants' report indicated a mid-day peak of 352 parking stalls and evening peak of 392 parking stalls. Their analysis considered parking for the employees. See Exhibit "A".

The total proposed 442 parking stalls is13% over TJKM's calculated peak and is sufficient for this project. We understand that the Renaissance Hotel currently has 389 parking stalls and occasionally does not have enough parking; however, the proposed facilities will have less keys/condo units, a substantially smaller conference facility, and smaller-sized amenities, except for the spa as shown below:

	Existing Renaissance	Proposed	Change
Hotel Keys/Condos (ea)	345	193	56%
Restaurants and Bar Area (sf)	10,426	5,600	54%
Meeting Space/Ball Rooms (sf)	7,661	1,500	20%
Retail (sf)	4,565	2,900	64%
Fitness & Spa (sf)	2,870	12,062	420%
Parking (Current)	389	442	114%
Total Full and Part-Time Employees	370	300	81%
Peak Employee Parking Stalls	100-130	75-98	76%
Evening Employee Parking Stalls	50	38	76%

The additional 22 spaces at the next door County Park will provide some relief from the public parking at the hotel. Parking is at it a maximum during daytime hours for functions or meetings and when peak employee staffing is required. The proposed project has a small meeting room which cannot accommodate large functions that will exceed the proposed parking. With the reduction in hotel key/condos and meeting space, the increased parking is more than sufficient. The Department of Planning has approved a total of 406 parking spaces (based on a previously proposed 205 condos); see Exhibit "A".

- 5.b. There are no parking stalls reserved exclusively for employees or dedicated for guests, valet and conference usage. Each condo will have one (1) parking stall dedicated for its owner's or renter's use. The other stalls will be available to all others although certain areas are used for valet and employees, but not exclusively.
- 6. Condominium-hotels have condominiums that are sold to individual buyers. The individual owners will have the opportunity to rent the units through the St. Regis hotel operator, another management company, or live in them. On the same property, the facility will have the full range of expected hotel amenities, including a lobby, pools, two (2) restaurants and bars, a fitness center and spa. All condominiums in this project will have their own kitchens.
- 7.a. The preliminary engineering report (PER) included a drainage analysis of the 12.7-acre developed portion of the 15.578-acre site. The following summarizes the results in the PER. The peak flow rates, based on a 50-year, 1-hour storm, for pre-existing and post-development conditions are 25.3 cubic feet per second

(cfs) and 38.7 cfs, respectively, resulting in a net increase in peak flow rate of 13.4 cfs. The runoff volumes, based on the same design storm, for pre-existing and post-development conditions are 15,700 cubic feet and 19,100 cubic feet, respectively, resulting in a net increase in volume of 3,400 cubic feet. However, it is important to note that the pre-existing condition assumes a vacant site in contrast to the current condition with the Renaissance Hotel. Currently all on-site and off-site runoff drains into the ocean. The proposed drainage plan involves mitigating the net increases of on-site flow rates and runoff volumes with an on-site detention/retention drainage basin. The drainage basin consists of buried large-diameter perforated pipes or concrete chambers. The off-site runoff will continue through the property to the ocean.

- 7.b. Redesign of the drainage system to provide additional retention capacity is not deemed feasible in the context of the site's current limited area versus project programming and design needs. In particular, the creation of subsurface retention areas requires open and accessible areas at the lowest topographical elevations. The proposed site plan does not provide this opportunity unless unit reduction measures are implemented or greater building heights are considered. The overall site plan was developed with sensitivity to height parameters set forth in the Kihei-Makena Community Plan, while the programmed unit counts were established to meet financial viability criteria. It is noted that the historic drainage characteristics, which will be maintained, are not anticipated to create adverse water quality impacts, as noted in the Final Environmental Assessment's water quality report.
- 7.c. The proposed CDS Technologies storm water filtration units remove suspended solids, screens out floatable materials, and captures petroleum residues.
- 7.d. A preliminary legal opinion states that the downstream property owners may have recourse against upstream property owners if they deliberately dump litter into the surface water flows that enter the downstream property. However, there is minimal recourse if the litter enters the surface water flows due to natural causes.

The immediate upstream property is the Wailea Blue Golf Course which maintains their fairways in pristine condition. Any litter is picked up. Potential contaminates are pesticides and nitrogen from fertilizer applied to the golf course fairways; however, The Golf Course Monitoring Program (MER Report) states, "Comparison of the mean values of the survey from the fifteen years of monitoring beginning in 1989 to the most recent survey in February 2003 reveals

that there is no consistent increase in the concentrations of nutrients in the near shore zone that could result from the golf courses."

8.a. PCL Construction services provided an "Anticipated Traffic Flow Vehicle Count" by month which shows a range of 16 to 59 vehicle trips per day (42 trips average) made to and from the project site. The vehicles include trucks, as well as vehicles for workers and management. It is anticipated that workers will be parking off-site and bussed to the project site. Wilson Okamoto Corporation, project traffic engineers', have stated that the provided estimate of construction related traffic to and from the site during the morning and afternoon peak periods is significantly less than the estimate of current trips to and from the existing Renaissance Wailea Beach Hotel.

Although, Kapalua Bay Hotel's demolition period of June-October 2006 is almost concurrent with the proposed project's demolition planned for July-November 2006, the traffic impact to Wailuku and Kahului Harbor is minimal with 30 truckloads over two (2) days per project making that route. As far as disposal to Maalaea Landfill, the projects are coming from opposite directions.

- 8.b. The Traffic Master Plan for Wailea was reviewed to verify the annual traffic growth rate utilized in the Traffic Impact Report along Wailea Alanui Drive that was based upon historical traffic count data in the vicinity. The average annual growth rate detailed in the Traffic Master Plan was found to be in the same range as the historical rate utilized in the report. In addition, it should be noted that the traffic impact report is intended to address project-related traffic impacts rather than regional traffic issues and that the reduction in density at the project site is anticipated to result in a net decrease in site-generated traffic.
- 9. The elevation of Wailea Alanui is approximately 80 feet above mean sea level (amsl). The existing main hotel is approximately 100 feet amsl with elevator stacks extending further up. There are currently no coastal views from the roadway. The proposed project, with proposed structures at elevation 105 feet, will not impact coastal views. Viewplanes to the coast will be achieved as one enters the lobby.

The lateral shoreline views are dramatically improved by removing the two-story Mokapu Building within the 150-foot shoreline setback and replacing the 98-foot elevation Makai Wing at the shoreline setback with more moderate 49-foot elevation condo.

Thank you again for providing your input to the proposed action.

Very truly yours,

m Slijn

Matthew M. Slepin, Planner

MMS:tn Enclosures

CC: Elton Wong, Kobayashi Group (w/enclosures)
F:DATA/Kobayashi/Renaissa/planning/ea.res.wpd



May 2, 2005

Mr. Khoi Le Hill Glazier Architects 925 Alma Street Palo Alto, CA 94301

Re: Wailea Hotel & Residential Parking Analysis (Project No. 282-001)

Dear Mr. Le:

TJKM Transportation Consultants has prepared a parking analysis of the proposed Wailea Beach Resort and Residential in the County of Maui. Hawaii. TJKM was requested to analyze the parking requirements for the development based on County parking requirements and compare them with realistic requirements based on actual expected usage of the development.

Project Description

The proposed project includes the following components:

- A full-service condominium hotel with 206 rooms
 - 101 one-bedroom
 - 75 two-bedroom
 - 26 three-bedroom
 - 4 four-bedroom
- Food and beverage totaling 5,600 square feet with 218 seats
 - One all-day restaurant
 - One specialty restaurant
 - Pool bar and restaurant bar
- One 1,500 square foot ballroom with 100-seat capacity
- 1,450 square feet for sundries/market/deli
- One fitness center and spa with a total area of 12,062 square feet
- An estimated 200 employees

Maui County Parking Requirements

Maui County has parking requirements for the individual components of a major destination resort, such as the proposed Wailea Beach Resort & Residential but not requirements that

 5960 Inglewood Drive, Suite 100
 Pleasanton, CA 94588-8535

 925-463-0611 phone
 925-463-3890 fax
 www.tikm.com

PLEASANTON SANTA ROSA

"We create transportation solutions... with the right people"



May 2, 2005

Mr. Khoi Le Hill Glazier Architects 925 Alma Street Palo Alto, CA 94301

Re: Wailea Hotel & Residential Parking Analysis (Project No. 282-001)

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EXHIBIT A_

completely take into account the overlapping uses in the facility. The County's ordinance specifies five applicable areas: apartments (in this case, condominiums), restaurant/bars, places of public assembly, business areas (in this case guest hotel-type shops) and business. (in this case fitness center and spa). The apartment/condominium requirement is two stalls per room. The restaurant, bar and dining room requirement is one stall for each 100 square feet. For places of public assembly such as meeting rooms and ballrooms, the ordinance requires one stall per six seats. For retail areas, the parking requirement is one stall per 500 square feet with a minimum of three stalls. For the fitness center/spa uses, the requirement is one stall per 500 square feet.

Table 1 summarizes the application of the Maui County parking ordinance requirements. Using this procedure, a total of 513 parking stalls are required for the complex. This includes 412 stalls for the condominium units, 56 stalls for food and beverage service, 17 stalls for the ballroom, 3 stalls for the internal shops and 25 stalls for the fitness center and spa.

TJKM was asked to make a separate analysis of parking requirements, which is outlined below:

Assumptions in TJKM Analysis

- The condominium complex will operate as a hotel facility, but with the units individually owned. The facility will experience its peak occupancies in the winter months, with an assumed occupancy of 100 percent. One half of the units are expected to be owner-occupied and hotel guests will occupy the remaining half. Owner occupancies are most likely to be the larger 2+ bedroom units with most hotel guests staying in one-bedroom units.
- Hotel guests are expected to arrive via rental car, airport shuttle and taxis. The expected
 parking demand is 0.9 stalls per unit. Many of the permanent residents will only occupy the
 facility a portion of the year, but may keep a vehicle in the garage even when they are away.
 Based on condominium studies elsewhere, it is expected that the owner-occupied units will
 have a maximum evening parking demand of 1.7 stalls per unit. This will reduce to 1.3 stalls
 during the day when some guests are away.
- One all-day restaurant and the pool bar will cater to facility occupants and are not likely to attract outside guests. The specialty restaurant and its bar will only operate in the evenings and will attract diners from outside the facility. It is estimated that 60 percent of the guests will come from the outside. They will arrive in private cars with 3 occupants in each vehicle and will occupy 120 of the available 200 seats (inside and outside). They will require 40 parking stalls. An additional 40 guests will wait in the bar, for an outside users parking demand of 8 parking stalls.
- No users of the sundries, deli and market shops will drive to the facility from outside the complex.
- One-half of the ballroom guests will be staying at the condominium hotel and the remainder will drive from the outside, arriving 3 guests per car. This will require 17 parking stalls.
- The spa is expected to attract one-half of its guests from outside the condominium hotel. During both day and evening periods, it is expected that the facility will accommodate about 30 users at a time. The 15 users from outside the complex will arrive two persons per car, creating a demand of 8 parking stalls. The fitness center will only be used by hotel occupants and will not create any additional parking demand.

This analysis does not account for employees of the facility. It is estimated that a maximum
of 200 employees will be on site during the day and 100 during the evening. Some
employees will arrive by shuttle or be dropped off and some will share rides. The maximum
employee parking demand is expected to be 0.5 stalls per employee.

TABLE I: W. WAILEA HOTEL & RESIDENTIAL MAUI COUNTY PARKING REQUIREMENTS

nerators) one all-day restaurant, one specialty restaurant and the near the pool and the specialty restaurant rements per unit				
per unit				
er six seats or 500 square feet or 500 square feet				
i County Requirements				
206 condominium hotel rooms = 412 stalls 5,600 square feet of restaurants and bar space = 56 stalls 100 seat ballroom = 17 stalls 1,450 square feet of internal shops = 3 stalls 12,062 square feet of fitness center and spa = 25 stalls Based on 1 stall per unit Based on 1 stall per 100 square feet Based on 1 stall per 500 square feet Based on 1 stall per 500 square feet Based on 1 stall per 500 square feet				
1 1 1 1 1 1				

TABLE II: TJKM ANALYSIS OF REALISTIC PARKING REQUIREMENTS

TABLE II: IJKIVI AIVALISIS OF TENTE	
Owner Occupied Units Mid-day peak: Assume the hotel is fully occupied	Demand is 103 x 1.3 or 134 stalls
with owner occupancy of 103 units Maximum parking demand is 1.3 with owner occupancy of 103 units Maximum parking demand is 1.3 wehicles per unit during the mid-day period, as many people leave the hotel	
or sightseeing and related activities.	Demand is 103 x 1.7 or 176 stalls
vening peak: Maximum parking demand is 1.7 vehicles per unit.	
B. Hotel Guest Units Mid-day peak: Assume 103 additional units are	Parking demand is 103 x 0.9 or 93 stalls
B. Hotel Guest Units Mid-day peak. Assume 100 data- occupied by guests. 90 percent drive rental cars, remaining use taxis or shuttles. Mid-day peak demand conservatively estimated at 0.9 veh/unit.	
Evening peak: Maximum parking demand is 0.9 vehicles per unit.	Parking demand is 103 x 0.9 or 93 stalls
C. Restaurant and Bar Areas Mid-day peak: Breakfast and lunch will only	Total parking demand is 0 stalls
serve occurants, not outsiders. No parking demand.	for the enclaurant
Evening peak: Specialty restaurant attracts 60 percent of patrons from outside hotel. Assume 200 seats will be available, 120 seats from outside outside hotel, Assume 200 seats will be available, 120 seats from outside outside hotel, Assume 200 seats will require 40 parking stalls. Another 40 patrons wait in the bar area	Total parking demand for the restaurant and bar during peak evening hours is 48 stalls.
and need 8 more stalls for outside users. This area holds 100 people. One-half of	11 00 410 47
ballroom users are not note; guesis and arrive o guesis	1
mid-day event. Evening Peak: This area holds 100 people. One-half of ballroom users are	e Total parking demand is 50 x 1/3 or 17
not hotel guests and arrive 3 guests per car. Assume of the same o	
quests or owners and already are parked.	Total parking demand is 0 stalls
Evening peak: It can be assumed that all patrons are hotel guests or	Total parking demand to
owners and already are parked. F. Fitness Center and Spa Mid-day peak: Assume that during daytime	Total parking demand is 8 stalls.
F. Fitness Center and Spa Mid-day peak. Assume outside and peak, facility serves 30 users at a time. One half are from outside and peak, facility serves 30 users at a time. One half are from outside and	
peak, facility serves 30 users at a time. One half are from outside Evening peak: Facility serves 30 users at a time. One half are from outside Evening peak: Facility serves 30 users at a time. One half are from outside Evening peak: Facility serves 30 users at a time. One half are from outside Evening peak.	de Total parking demand is 8 stalls
and arrive two persons per car. No odused instant	11 000 - 0 C = 100
G. Employees Mid-day peak: Assume a maximum of 200 employees will serve the facility. Some arrive together; some are dropped off, some use serve the facility.	stalls
bus. Employee parking demand is 0.5 stalls per company	ning Total parking demand is 100 x 0.5 = 50 stalls
neriods. Employee parking demand is 0.5 stans per employee	134 + 93 + 17 + 8 + 100 = 352 stalls
Total Parking Requirement For Facility – Mid Day Peak Total Parking Requirement for Facility – Evening Peak	176 + 93 + 48 + 17 + 8 + 50 = 392 stall

Summary: Parking Requirements

Based on the assumptions described in the previous sections, maximum parking requirements for the components of the condominium hotel complex are as follows:

TABLE III: SUMMARY PARKING DEMAND REQUIREMENTS

Function	Mid-day peak, stalls	Evening peak, stalls		
Owner occupied units parking	134	176		
2. Guest occupied units parking	93	93		
3. Restaurant and bar parking	0	48		
4. Ballroom parking	17	17		
5. Shops parking	0	0		
6. Fitness center and spa parking	8	8		
7. Employee parking	100	50		
Total Parking Requirement	352	392		

TJKM estimates that the maximum parking demand for the hotel complex is approximately 392 stalls. This demand occurs under the circumstances in which the hotel is 100 percent occupied, a 100-person ballroom event is being held, and the dining facilities are operating at nearly 100 percent of their capacity. This scenario would only occur in the evening dining hours. During this period a work force of 100 employees is anticipated.

We hope this information is useful to you. If there are questions, please contact this office.

Very truly yours,

Chris D. Kinzel, P.E.

President

J. Uurisdiction M. Maui County 282-001 L050205 Wailea Parking.doc

ALAN M. ARAKAWA Mayor MICHAEL W. FOLEY Director WAYNE A. BOTEILHO Deputy Director



COUNTY OF MAUI DEPARTMENT OF PLANNING

August 25, 2005

Mr. Elton Wong, Project Manager Kobayashi Group, LLC 1001 Bishop Street, Pauahi Tower, Suite 1570 Honolulu, Hawaii 96813

Dear Mr. Wong:

RE: RENAISSANCE WAILEA HOTEL & RESIDENTIAL OFF-STREET PARKING REQUIREMENTS FOR PROPERTY LOCATED AT 3550 WAILEA ALANUI DRIVE, KIHEI, HAWAII; TMK: (2)2-1-008:067

Thank you for your letter and attached parking analysis dated August 2, 2005. We have reviewed your request and offer the following:

- 1. Parking is determined on component uses. Hotel and apartment uses have required parking, as well as all accessory uses, i.e., offices, restaurants, shops, bars, classrooms, banquet rooms, etc. However in the above, certain onsite facilities, i.e. spas, recreation rooms, swimming pools, fitness centers, libraries, pool pavilion, pool towel buildings, handball courts, tennis courts, etc are used by the same occupants or guest staying at the hotel. These facilities are typically for the condo occupants and hotel guest only. As such, we will not require additional parking for such facilities;
- A total of 406 parking spaces and 2 loading space are required for the proposed development (see attached analysis); and
- Additional parking spaces may be required upon review of actual development plans submitted for building permit.

If you have any questions regarding this letter, please call Mr. Mac Aquinde, Land Use and Building Plans Examiner, at 270-7253.

Sincerely,

MICHAEL W. FOLEY Planning Director

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

Mr. Elton Wong August 25,2005 page 2

MWF:AHS:MAA:gan Enclosure:

Mac Aquinde, Land Use and Building Plans Examiner Matthew Slepin, Planner, Munekiyo & Hiraga, Inc., 305 High Street, Wailuku, Hi. 96793 05/ZAED TMK File General File K:\WP_DOCS\PLANNING\correspondence\2005\RenaissanceWaileaHotel

ZAED PLAN CHECK

	LOG NO.	2005/0069				
į	APPLICATION NO.	Comprehensive parking analysis/ redevelopment				

		i			allarysts redevelopment
NAME OF PLACE:	Renalssance Wailea Hot	el (FKA Stouffers Walle)a)		
	2-1-008:067		ADDRESS:		3550 Wailea Alanui Drive, Kihei, Hi
TAX MAP KEY: OWNER:	John Brown, Wallea Bead Ahmsbrack,	th Hotel Co. Ltd, Gary	ADDRESS:		P.O. Box 1019, Kihei, Hi; 25 Lumahai Place, Makawao, Hi
APPLICANT:	Elton Wong, Kobayashi G	ADDRESS:		1001 Bishop St., Pauahi Tower,Ste 1570, Honolulu, Hi.96813	
					8/22/2005
REVIEWED BY:	MAC AQUINDE		DATE:		205 units, (92 units will be rental pool)
NUMBER OF BUILDINGS	development plans to be at later date	submitted for review	NUMBER C		203 (1715) (42
	H-2 Hotel district		COMMUNI	TY PLAN	Hotel
ZONING			OSP/REDL	NA	
ZONING PERMITS	NA	LPA APPROVAL		required	
SMA PERMIT	Required		CONFORMING Yes No		REMARKS
STANDARDS	REQUIRED	ON PLAN			- ALMANIA
USE	Hotel	Condo - Hotel	×		
LOT AREA	20,000 sq. ft.	13 + acres	×	<u> </u>	
BUILDING HEIGHT		future plan review			
STORIES	12	future plan review			
FLOOR AREA	future submittal	future plan review	v		
LOT COVERAGE	35%	future plan review		 	
FAR	150%	future plan review		 	a a till and packing engage may be
PARKING	406 parking spaces & 2 loading space	438 parking spaces w/ 30 extra tandem spaces	×		Additional parking spaces may be required when development plan are submitted for permit.

PARKING CALCULATIONS

Condo (not in rental pool) Condo (in rental pool) Restaurants & Bar (include Ouldoor Pool Bar) Meeting Room (1500 sq. ft.) Retail Shops Offices Back of House Hotel Storage Kitchens Spa / Fitness Center)	Quantity 113 92 8485 1500 2900 2785 3455 5820 2 9190 8800	units units units sq. ft.	Ratio 2 .5 1 1 1 1 1 1 1 1 1 1	stalt per stall per stall per stalt per stalt per stall per stall per stall per stall per stall per	1 1 100 500 500 500 500 700 per 200 600	unit unit sq. ft.	Total Stalls 226 48 85 15 6 6 7 9 0 (condo occupants / hotel guest only) 0 (condo occupants / hotel guest only)
Swimming Pool	_				· · · · • • - · · • · · ·		406 parking spaces

Total Parking Required For Development......406 parking spaces

Plus Loading Space

2

ALAN M. ARAKAWA Mayor



GLENN T. CORREA Director

JOHN L. BUCK III Deputy Director

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

TE DEC 23 P2:03 DEPARTMENT OF PARKS & RECREATION

DEPT OF PLANKING Street, Unit 2, Wailuku, Hawaii 96793
COUNTY OF MAUI
RECEIVED

MEMORANDUM

December 22, 2005

TO:

Michael W. Foley, Planning Director

FROM:

Glenn T. Correa, Director

SUBJECT:

Redevelopment of The Renaissance Wailea Beach Resort

TMK (2) 2-1-008:067 and 088 EA 2005/0016 and SM1 2005/0035

Thank you for the opportunity to review and comment on the Application for Special Management Area Use Permit, Shoreline Setback Variance, and Planned Development Step I and II Approvals for the proposed Wailea Renaissance Redevelopment project.

It is the understanding of this department that as described the redevelopment will be subject to park dedication requirements stipulated in Section 18.16.320 of the Maui County Code. The applicant is advised to schedule a time to meet with the department to discuss this issue. Also, additional detail on the planned improvements to Mokapu Beach Park is requested.

Should you have any questions or other concerns, please call me, or Patrick Matsui, Chief of Parks Planning & Development, at 270-7387.

c: Patrick Matsui, Chief of Parks Planning & Development



MICHAEL T. MUNEKIYO GWEN CHASHI HIRAGA MITSURU "MICH" HIRAND

KARLYNN KAWAHARA

January 27, 2006

Glenn Correa, Director County of Maui Department of Parks and Recreation 700 Hali'a Nakoa Street, Unit 2 Wailuku, Hawaii 96793

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort, Wailea, Maui; TMK (2) 2-1-008:067

Dear Mr. Correa:

Thank you for your letter of December 22, 2005, providing comment on the Draft Environmental Assessment for the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note that the applicant will continue to coordinate with your Department regarding park dedication requirements. During that coordination, additional detail regarding the planned improvements to the Mokapu Beach Park will be provided to you.

Thank you again for providing your input to the proposed action.

Very truly yours,

Matthew M. Slepin, Planner

MMS:tn

cc: Elton Wong, Kobayashi Group F:\DATA\Kobayash\Renaissa\dpriea.res.wpd

Danning @mhinconline.com

305 High Street, Suite 104 Wailuku, Hawaii 96793 · ph: (808)244-2015 · fax: (808)244-8729 · planning@mhinconline.com



ALAN M. ARAKAWA

MAYOR

YOUR REFERENCE

COUR REFERENCE

POLICE DEPARTMENT

COUNTY OF MAUI

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



DEPT OFKEKUHANNER F. AKANA COUNTDENSTYCK OF POLICE RECEIVED

December 27, 2005

MEMORANDUM

TO

MICHAEL W. FOLEY, PLANNING DIRECTOR

FROM

THOMAS M. PHILLIPS, CHIEF OF POLICE

SUBJECT

I.D.

EA 2005/0016 & SM1 2005/0035

TMK

(2) 2-1-008:067 & 088

Project

Name

Wailea Renaissance Redevelopment

Applicant

Kobayashi Group, LLC

No recommendation or comment to offer.

Refer to enclosed comments and/or recommendations.

As always, thank you for giving us the opportunity to comment on this project.

Assistant Chief Sydney Kikuchi THOMAS M. PHILLIPS

Chief of Police

Enclosure

TO

: THOMAS PHILLIPS, CHIEF OF POLICE, COUNTY OF MAUI

VIA

: CHANNELS 1- 3 ... 12/27/05

FROM

: BRAD HICKLE, POLICE OFFICER III, DISTRICT VI KIHEI

SUBJECT

: SPECIAL MANAGEMENT AREA USE PERMIT APPLICATION FOR THE WAILEA RENAISSANCE REDEVELOPMENT @

TMK: (2) 2-1-008: 067 AND 088

Sirs, on 12/06/05 this Officer received a copy of the above application for the Special Management Area use Permit for the Wailea Renaissance Redevelopment.

APPLICANT INFORMATION:

The application was prepared by Munekiyo & Hiraga, Inc. for the Kobayashi Group, LLC.

The project involves the demolition of all existing structures, currently known as the Wailea Renaissance Resort, and the redevelopment of 193 condominium units on the property with related infrastructure and landscape improvements. The project also includes various improvements, including the resurfacing and landscaping to the Mokapu/Ulua Beach Park parking lot.

The proposed redevelopment of the 15.578 acres will be for a St. Regis Wailea property. Related improvements to the Mokapu/Ulua Beach parking lot on approximately 2.16 acres will bring the total area redeveloped to approximately 17.738 acres.

IMPACT ON POLICE:

With the development of any new property there will also be an increased opportunity for crime and criminal activities to occur. Newly developed properties are statistically more prone to crime and criminal activities as opposed to well established communities with an active Neighborhood Crime Watch group.

Although the redevelopment of this property will result in a reduction of available units from 349 to 193 the redevelopment of this property will still have an impact on Police services and the following must be considered.

Per the Kihei Police District Supervisory Staff, there is an "anticipated caseload increase" associated with any property or any new housing development. The development of a property of this size may contribute to a very large increased workload for patrol officers assigned to the Kihei, Wailea, Makena areas.

Jan-05-06 10:21am

IMPACT ON POLICE:

Page 2

Theoretically 193 new housing or rental units may contribute to as many as 193 Burglary reports, or 193 Motor Vehicle Accident reports or 193 Unauthorized Entry into Motor Vehicle reports, etc. This will have a significant impact on Police services.

808-242819

IMPACT ON TRAFFIC:

The impact on traffic is always of concern to local area residents.

During the demolition and construction phases of this redevelopment project potentially hazardous conditions may be created by heavy truck and construction equipment moving into or out of the area.

Trained traffic control personnel should be used at entry/exit points of the property to minimize impacts to local residential or commercial traffic during the construction phase of this project.

The Traffic Impact Analysis Report (TIAR) which was prepared by Wilson Okamoto Corporation appears to imply that the volume of vehicles traveling in this area will not be affected by this redevelopment project. It further appears as though the redevelopment will not have an adverse affect on the projected volume of area traffic to the year 2008.

The TIAR concludes, due to the change in land use and the reductions of available units, the proposed project is expected to generate less vehicular traffic than the existing resort hotel during the AM and PM peak periods.

PUBLIC SAFETY CONCERNS:

Disaster Preparedness and Public Safety are also primary concerns to our communities. With these in mind we are suggesting the applicant or developer include in this permit a Community Evacuation Plan (CEP).

The CEP submitted would be a preliminary evacuation plan unique to this development. The evacuation plan will help the future residents as well as the Police and other government agencies who may become involved in assisting with an emergency community evacuation of south Maui in the future.

This CEP will then be added to the police district and county emergency evacuation plans for future reference.

CRIME PREVENTION RECOMMENDATIONS:

In an attempt to take a more proactive approach to preventing crime and criminal activities in the south Maui areas we are recommending the following.

CRIME PREVENTION RECOMMENDATIONS:

Page 3

We are recommending the applicant consider "Best Practices" in Crime Prevention Through Environmental Design "CPTED" when developing this property.

CPTED is the framework whereby the design of buildings, placement of lighting and growth of foliage are interwoven and utilized to discourage crime and criminal activities on a property.

Studies have shown that a criminal's activities are greatly impacted by the criminal's perception of the entire environmental design of his/her target. In other words, "if the perspective target appears to be an easy target, a crime is likely to occur here as opposed to a harder target".

The use of CPTED will help to prevent crime and criminal activities on this property and will help to minimize the impact on police services in this area.

To find out more about CPTED you can refer to the National Criminal Justice Reference Service on the World Wide Web at, http://www.ncjrs.org.

Respectfully Submitted,

Officer Brad Hickle

12/15/05

11:50 hours

Across of the control of the commindations.

That crue prevention measure be taken into

Gradicato during development, as to again in

Minimizing the impact on police services. It appears

Must withe the re-dissipment in its Construction show,

There is potential of traffic being affected,

Increase the controllers.

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Controllers.

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MICHAEL T. MUNCKIYO GWEN DHASHI HIRAGA MITSURU "MICH" HIRANO

KARLYNN KAWAHARA

January 27, 2006

Thomas Philips, Chief County of Maui Police Department 55 Mahalani Street Wailuku, Hawaii 96793

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui; TMK (2) 2-1-008:067

Dear Chief Philips:

Thank you for your letter of December 27, 2005, providing comment on the Draft Environmental Assessment for the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note the following:

IMPACT ON POLICE

- 1. The existing facility is a hotel and there is no Neighborhood Crime Watch Group. The redeveloped property will be a condominium-hotel with, essentially, the same hotel functions. Therefore, the project will produce a facility with the similar land use characteristics, but a reduced clientele size. In this context, appropriate on-site security will be provided by the resort operator.
- 2. The 193 units which result from the proposed project represent a reduction of 153 units from the current 345-unit hotel, rather than 193 new units.

IMPACT ON TRAFFIC

The Final Environmental Assessment will address traffic operations resulting from 3. demolition and construction activities. These are not anticipated to result in substantial impacts to traffic flows as these operations are estimated to be less than existing traffic for the Renaissance Wailea Beach Resort. Appropriate traffic control measures will be implanted to minimize any potential disturbances to traffic.

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environment

environment and Chill G
305 High Street, Suite 104 Wailuku, Hawaii 96793 · ph: (808)244-2015 fax: (808)244-8729 planning@mhinconline.com

Thomas Philips, Chief January 27, 2006 Page 2

PUBLIC SAFETY CONCERNS

A Community Evacuation Plan will be prepared during the design phase of the project and will be submitted to your office to assist in emergency evacuation 4. services.

CRIME PREVENTION RECOMMENDATIONS

We acknowledge your recommendations regarding the relationship between design and crime prevention. Such measures will be considered by the project designers. 5. We note, in this regard, that we believe the underground parking facilities fall into this area and will help discourage crime directed at parked automobiles. We also note that the Wailea Community Association provides roaming security for the existing resort property and will do so for the redeveloped property.

Thank you again for providing your input to the proposed action.

Very truly yours,

m Hem Matthew M. Slepin, Planner

MMS:tn

CC: Elton Wong, Kobayashi Group F:\text{DATA/Kobayash\Rensissa\mpdfea2.res.wpd}

ALAN M. ARAKAWA Mayor

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

MICHAEL M. MIYAMOTO Deputy Director

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



COUNTY OF MAUI DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL MANAGEMENT 200 SOUTH HIGH STREET, ROOM 322 WAILUKU, MAUI, HAWAII 96793

December 28, 2005

RALPH NAGAMINE, L.S., P.E. Development Services Administration

Wastewater Reclamation Division

CARY YAMASHITA, P.E. Engineering Division

BRIAN HASHIRO, P.E. Highways Division

TRACY TAKAMINE, P.E. Solid Waste Division

Mr. Matthew M. Slepin MUNEKIYO & HIRAGA, INC. 305 High Street, Suite 104 Wailuku, Hawaii 96793

Dear Mr. Slepin:

Subject:

EARLY CONSULTATION REQUEST FOR PROPOSED DEMOLITION - RENAISSANCE WAILEA BEACH RESORT

TMK: (2) 2-1-008:067

We reviewed the subject application and have the following comment:

Include solid waste plan for demolition and construction waste.

Please call Michael Miyamoto at 270-7845 if you have any questions regarding this letter.

Sincerely,

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

Director

MMA:MMM:da S:\LUCA\CZM\Prop_demo_Renaissance_Wallea_Bch_Rst_early_cons_21008067_da.wpd



MICHAEL T. MUNEKIYD GWEN CHASHI HIRAGA MITSURU "MICH" HIRAND

KARLYNN KAWAHARA

January 27, 2006

Milton Arakawa, Director County of Maui Department of Public Works and **Environmental Management** 200 South High Street Wailuku, Hawaii 96793

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui; TMK (2) 2-1-008:067

Dear Mr. Arakawa:

Thank you for your letter of December 28, 2005, responding to our request for early consultation for the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comment, we note that a solid waste management plan will be included in the Final Environmental Assessment.

Thank you again for providing your input to the proposed action.

Very truly yours,

Matthew M. Slepin, Planner

MS:tn

CC: Elton Wong, Kobayashi Group F:\(\text{DATA\(Kobayash\\Renaissa\\dpwemfea.res.wpd}\)

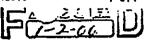
305 High Street, Suite 104 Wailuku, Hawaii 96793 ph: (808) 244-2015 fax: (808) 244-8729 planning@mhineonline.com

808-242819

T-514 P.02/04 F-889

ALAN M. ARAKAWA Mayor





GEORGE Y. TENGAN Director

ERIC H. YAMASHIGE, P.E., L.S. Deputy Director

DEPARTMENT OF WATER SUPPLY COUNTY OF MAUI

200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

DEPT OF PLANNING COUNTY OF MAUI

December 14, 2005

Mr. Michael W. Foley, Planning Director Department of Planning County of Maui 250 South High Street Wailuku HI 96793

Re:

LD.: LD.: EA 2005/0016, 2-1-08:067 & 088

Project Name: Wailea Renaissance Redevelopment

Dear Mr. Foley:

Thank you for the opportunity to comment on this application. Please find attached our comment letter to this project of November 18, 2005 and October 18, 2004.

Source Availability and Consumption

The project area is served by the Central Maui System. The Department will not issue reservations for future meters or temporary construction meters for Central Maui projects. Reclaimed water is readily available at the Kihei Wastewater Treatment Plant from the Department of Public Works and Environmental Management Wastewater Division. The property is currently served by two 3-inch meters and one 2-inch meter. Domestic and irrigation calculations to determine meter size adequacy will be required in the building permit process. Additional source, if needed, is not guaranteed until new sources are brought on-line. The applicant estimates domestic demand to decrease from 149,000 gpd average consumption to 139,600 gpd and projected irrigation water use would decrease from 62,000 gpd average consumption to 47,600 gpd.

System Infrastructure

The subject property is served by a 12-inch on-site waterline and fire hydrant connected to the 20-inch line along Wailea Alanui Road. The applicant will be required to provide for water service and fire protection in accordance with system standards. Fire flow calculations will be required in the building permit process.

"By Water All Things Find Life"

Printed on recycled paper



Michael W. Foley Wailea Renaissance Redevelopment Page 2

Conservation

Resort landscaping irrigation can me minimized using climate-adapted native plants and reduction in turf areas. Where non-climate adapted plants are proposed for buffer and screen planting areas, we recommend substituting those with less water intensive native plants. Our planting brochure is enclosed for your reference. The following additional water conservation measures should be considered:

Use Non-potable Water: Use brackish or reclaimed water for landscaping and other non-potable purposes when available. Reclaimed water, readily available at the Kihei Sewage Treatment Plant, or brackish water should be used for dust control during 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. The applicant should establish a regular maintenance program.

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 evapo-transpiration rates at the site. As an alternative, provide the more automated, soil-moisture

sensors on controllers.

Pollution Prevention

The project overlies the Kamaole aquifer. In order to protect ground and surface water sources in the area, we encourage the applicant to utilize Best Management Practices (BMPs) designed to minimize infiltration and runoff from construction. Mitigation measures are enumerated below and should be implemented during construction.

- Prevent cement products, oil, fuel and other toxic substances from falling or leaching into the water
- Properly and promptly dispose of all loosened and excavated soil and debris material from drainage structure work
- Retain ground cover until the last possible date
- Stabilize denuded areas by sodding or planting as soon as possible. Replanting should include soil I amendments, fertilizers and temporary irrigation. Use high seeding rates to ensure rapid stand establishment
- · Avoid fertilizers and biocides, or apply only during periods of low rainfall to minimize

808-242819

Michael W. Foley Waitea Renaissance Redevelopment Page 3

chemical run-off.

- · Keep run-off on site
- Construct drainage control features, such as berms
- · Maintain drainage structures, detention, silting and debris basins
- Control dust by proper stockpiling and use non-potable water for dust control
- Cover open vehicles carrying soils, gravel or other particulate matter.

Should you have any questions, please contact our Water Resources and Planning Division at 244-8550.

Sincerely,

George Y. Tengan, Director

emb

Engineering Division Applicant/with attachments: (Kobayashi Group, LLC)

DWS letter 10/18 2004

DWS letter 11/18 2005 Ordinance No. 2108 - A Bill for an Ordinance Amending Chapter 16.20 of the Maui County Code, Pertaining to the

Plumbing Code

Saving Water in the Yard-What and How to Plant in your Area

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ALAN M. ARAKAWA Mayor



GEORGE Y. TENGAN Director

ERIC H. YAMASHIGE, P.E., L.S. **Deputy Director**

DEPARTMENT OF WATER SUPPLY

COUNTY OF MAUI

200 SOUTH HIGH STREET WAILUKU, MAUI, HAWAII 96793-2155 www.mauiwater.org

November 18, 2005

Mr. Matthew Slepin Munekiyo & Hiraga, Inc. 305 High Street Suite 104 Wailuku HI 96793

Subject:

Early Consultation Request for Proposed Demolition at the Renaissance

Wailea Beach Resort, Wailea, Maui

TMK: 2-1-08:067

Dear Mr. Slepin:

Thank you for the opportunity to comment on this application. Please find attached our comment letter of October 18, 2004 to the Special Management Area and Project District applications for this project. We provide the following supplemental information:

The project area is served by the Central Maui System. The property is currently served by two 3-inch meters and one 2-inch meter. The Department will not issue reservations for future meters until new sources are brought on-line. The Department will not issue temporary construction meters for Central Maui projects. Reclaimed water is readily available from the Department of Public Works and Environmental Management Wastewater Division. Demand for the new proposed development totaling 205 condominium units will depend on amenities and landscaping. Based on system per unit standards for condominium development, demand would be about 114,800 gallons per day. Resort landscaping in Wailea represents among the highest consumption on our system. We strongly recommend using appropriate native and climateadapted plants throughout landscaping in redevelopment of the resort and incorporate other water conservation measures listed in our October 18, 2004 comment letter.

Should you have any questions, please contact our Water Resources and Planning Division at

Sincerely,

George Y. emb

"By Water All Things Find Life"

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ALAN M. ARAKAWA Mayor



GEORGE Y. TENGAN Director

JEFFREY T. PEARSON, P.E. **Deputy Director**

DEPARTMENT OF WATER SUPPLY

COUNTY OF MAUI

200 SOUTH HIGH STREET WAILUKU, MAUI, HAWAII 96793-2155 www.mauiwater.org

October 18, 2004

Ms. Ann Cua Department of Planning County of Maui 250 South High Street Wailuku HI 96793

Re:

SM1 2004/0028.PD1 2004/0007 PD2 2004/0011

TMK: 2-1-08:067

Project Name: Renaissance Wailea Beach Resort Renovation which will be operated as a

Starwood W. Hotel

Dear Ms. Cua:

Thank you for the opportunity to comment on this application. We provide the following information:

Source Availability and Consumption

The project area is served by the Central Maui System. The main sources of water for this system are the designated lao aquifer, the Waihee aquifer, the lao tunnel and the lao-Waikapu Ditch. The Department will not issue reservations for future meters until new sources are brought on-line. There is currently no moratorium on issuance of meters in Central Maui. However, from now on the Department will not issue temporary construction meters for Central Maui projects. Reclaimed water is readily available from the Department of Public Works and Environmental Management Wastewater Division. The Department does not guarantee that additional source, if needed, will be available for this project.

The applicant estimates changes in domestic water demand based on system per unit standards of 350 gpd for hotel units and 560 gpd for multi-family units. Accounting for evaporation losses for increased swimming pool areas and savings from toilet replacements, the applicant correctly estimates a net increase of 4,060 gpd. Water use for the condominium units with pools and interior areas of up to 5,940 square feet could have potentially much higher use than the standard for multi-family units, depending on water features and intensity of use. The property is currently served by two 3-inch meters and one 2-inch meter. The applicant estimates a net reduction in irrigation demand of 4,500 gpd. Department standards prohibit irrigation meters assigned to use within Wailea Alanui Drive to be used for on-site irrigation of parcel 2-1-08:067 through a submeter. The applicant should contact our engineering division with regards to this issue at: 270-7835. Domestic and irrigation calculations to determine meter size adequacy will be required in the building permit process.

System Infrastructure

The subject property is served by a 12-inch on-site waterline and fire hydrant connected to the 20-inch line along Wallea Alanui Road. The applicant will be required to provide for water service and fire protection in accordance with system standards. Fire flow calculations will be required in the building permit process.

Conservation

We note that a toilet replacement program is proposed. We recommend that the following additional water conservation measures be included in project design and implementation to alleviate demand from the Central

Use Non-potable Water: We encourage the applicant to pursue using brackish irrigation well water for all landscaping purposes. Reclaimed water, readily available at the Kihei Sewage Treatment Plant, or brackish

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Renaissance Wailea Beach Resort Renovation Ann Cua Page 2

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. Refer to the attached handout, "The Costly Drip". The applicant

Use Climate-adapted Plants: The project is located in the "Maui County Planting Plan" - Plant Zone 5. Native plants adapted to the area conserve water and protect the watershed from degradation due to invasive alien species. We encourage the applicant to substitute water intensive plants for natives. 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 in

common areas. 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 Kamaole aquifer. In order to protect ground and surface water sources in the area, we encourage the applicant to utilize Best Management Practices (BMPs) designed to minimize infiltration and runoff from construction. We have attached sample BMPs for reference. Additional mitigation measures are enumerated below and should be implemented during construction.

• Prevent cement products, oil, fuel and other toxic substances from falling or leaching into the water

 Properly and promptly dispose of all loosened and excavated soil and debris material from drainage structure work

Retain ground cover until the last possible date

- Stabilize denuded areas by sodding or planting as soon as possible. Replanting should include soil ! amendments, fertilizers and temporary irrigation. Use high seeding rates to ensure rapid stand
- Avoid fertilizers and biocides, or apply only during periods of low rainfall to minimize chemical run-off.

Keep run-off on site

- Construct drainage control features, such as berms
- Maintain drainage structures, detention, silting and debris basins
- Control dust by proper stockpilling and use non-potable water for dust control
- Cover open vehicles carrying soils, gravel or other particulate matter.

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

Sincerely. George Y. Tengar Director emb

c: engineering division applicant, with attachments:

Ordinance No. 2108 - A Bill for an Ordinance Amending Chapter 16.20 of the Maui County Code, Pertaining to the Plumbing Code

Saving Water in the Yard-What and How to Plant in your Area
A Checklist of Water Conservation Ideas for the Hotels Selected BMP's from "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters"-EPA

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MICHAEL T. MUNEKIYO GWEN ÜHASHI HIRAGA MITSURU "MICH" HIRANO

CARLYNN KAWAHARA

January 27, 2006

George Tengan, Director County of Maui Department of Water Supply 200 South High Street Wailuku, Hawaii 96793

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui; TMK (2) 2-1-008:067

Dear Mr. Tengan,

Thank you for your letters of November 18, 2005 and December 14, 2005, providing comments on the Draft Environmental Assessment for the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note the following:

- 1. We acknowledge that additional source is not guaranteed at this time. Because the water demand is expected to decrease from the proposed redevelopment, the project engineers do not anticipate a need for additional source.
- 2. Fire flow calculations will be provided during the building permit process.
- We acknowledge your comments regarding conservation and pollution prevention measures. Native and climate-adapted plants will be utilized in significant amounts for the redevelopment landscaping. Best Management Practices will also be utilized to minimize water contamination.
- 4. The project as proposed in the Special Management Area Use Permit application dated August 2005, to which you provided comments in your letter of October 18, 2005, has been withdrawn in favor of the project as described in the current Environmental Assessment.
- 5. The existing meters for the hotel are anticipated to be adequate for the redeveloped property. No new meters will be requested.

environmen planning George Tengan, Director January 27, 2006 Page 2

6. The Preliminary Engineering Report included in the Environmental Assessment estimates a total domestic water demand roughly equivalent with yours, at 139,600 gallons per day.

Thank you again for providing your input to the proposed action.

Very truly yours,

Matthew M. Slepin, Planner

MMS:tn

cc: Elton Wong, Kobayashi Group

DEC -1 P12:36

DEPT OF PLANNING. COUNTY OF MAUI RECEIVED



November 29, 2005

Ms. Kivette A. Caigoy Staff Planner County of Maui Department of Planning 250 S. High Street Walluku, HI 96793

Dear Ms. Caigoy:

Subject: Wailea Renaissance Redevelopment

TMK: (2) 2-1-008:068 and 088

I.D.: EA 2005/0016 and SM1 2005/0035

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.

In addition, we suggest that the developer and/or their consultant make contact with our Demand Side Management (DSM) group to review potential energy conservation and efficiency opportunities for their project. Walter Enomoto of our DSM group can be contacted at 872-3283.

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

Sincerely,

Neal Shinyama

Manager, Engineering

NS/dt

Cc: Walter Enomoto, MECO



MICHAEL T. MUNEKIYO GWEN OHASHI HIRAGA MITSURU "MICH" HIRANO

KARLYNN KAWAHARA

January 27, 2006

Neal Shinyama Manager, Engineering P.O. Box 398 Kahului, Hawaii 96733

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui TMK (2)2-1-008:067

Dear Mr. Shinyama:

Thank you for your letter of November 29, 2005, providing comment on the Draft Environmental Assessment for the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. In response to your comments, we note that the project's electrical consultant will coordinate with your office to determine the project's electrical requirements, as well as with your Demand Side Management group to discuss potential energy conservation measures.

Thank you again for providing your input to the proposed action.

Very truly yours,

Matthew M. Slepin, Planner

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MMS:lh

cc: Elton Wong, Kobayashi Group

environmen languna

305 High Street, Suite 104 Wailuku, Hawaii 96793 · ph: (808)244-2015 · fax: (808)244-8729 planning@mhinconline.com

BART R. VAN ECK 895 SAN MARINO AVENUE SAN MARINO, CALIFORNIA 91108

TELEPHONE 626-449-2259 FAX 626-793-7773 15 DEC 15 P1:18

DEPT OF PLANNING COUNTY OF MAUI RECEIVED

December 11, 2005

Mr. Mike Foley
Director of Planning and Planning Commission
Maui Department of Planning
250 S. High Street
Wailuku, Maui
HI 96791

Dear Mr. Foley,

٠...

We have just returned from a week's visit to Maui, staying as in many years' past, at the Renaissance Wailea Beach Resort. We so regret the sale of the Renaissance and the buyer's proposal to remove the hotel and substitute privately owned condominiums that we felt prompted to write you and state our concerns. We have been told that the Planning Commission will hold an open meeting sometime in the next several months before the resort is scheduled to close in June, 2006.

We have patronized the Renaissance because of its family-friendly atmosphere, its exceptional long-standing staff, and the many benefits it offers to the Maui community. It hosts so many public affairs, weddings, business and social gatherings as well as providing its many guests with a beautiful, environmentally sensitive, safe and comfortable atmosphere. What possible benefit could come to the entire Kihei/Wailea/Makenna area from its removal?

Surely, home owners adjacent to the Renaissance property would be terribly disadvantaged by a 2-3 year process of destruction and re-construction. In fact, the additional traffic, road damage, noise and other environmental problems generated by the project would be detrimental to the entire area. Planning Commissions have an obligation to protect present property owners, businesses and their employees, as well as the larger public good beyond mere monetary benefit to buyers and developers.

Therefore, it is our hope that permission will be withheld from the project as presently envisioned. In fact, we hope the Renaissance will continue to operate as the exceptional resort it always has been far into the foreseeable future.

Very truly yours,

Bart and Jamae ran Eck



MICHAEL T. MUNCKIYO GWEN DHASHI HIRAGA MITSURU "MICH" HIRANO

KARLYNN KAWAHARA

January 27, 2006

Bart and Jamae Van Eck 895 San Marino Avenue San Marino, California 91108

SUBJECT: Proposed Demolition at the Renaissance Wailea Beach Resort,

Wailea, Maui TMK (2)2-1-008:067

Dear Bart and Jamae Van Eck:

Thank you for your letter of December 11, 2005, providing comment on the proposed demolition at the Renaissance Wailea Beach Resort Hotel in Wailea, Maui. The Renaissance Wailea Beach Resort was opened in 1978 as one of the first two hotels in the Wailea Resort. It was considered a premier resort facility in those days. As with all aging hotels, however, renovations or redevelopment of the facilities are necessary to be competitive in the visitor market. The applicant had originally considered a renovation of the existing hotel; however, the low 8-foot ceiling heights, the comparatively small hotel rooms, and existing structural limitations were ultimately deemed inadequate to meet the changing demands of the visitor market. Additionally, the applicant felt that the existing, free-standing Mokapu Wing occupied too much space within the shoreline area, diminishing shoreline views for hotel patrons and the general public.

We note that the proposed plan calls for the removal of the Mokapu Wing which will substantially open up shoreline views. The proposed redevelopment will be a St. Regis condo hotel, which will maintain full hotel facilities, including two (2) restaurants, swimming pools, fitness center and spa. The applicant also intends to rehire as many of the existing hotel's long-standing staff as possible. All the qualities you value of the Renaissance will continue with the St. Regis Wailea.

Thank you again for providing your input to the proposed action.

Very truly yours,

Matthew M. Slepin, Planner

MMS:lh

cc: Elton Wong, Kobayashi Group

- environm ih G

305 High Street, Suite 104 Wailuku, Hawaii 96793 ph: (808)244-2015 fax: (808)244-8729 planning@mhinconline.com

References

References

Chinen, Jon, <u>The Great Mahele: Hawaii's Land Division of 1848</u>, Honolulu: University of Hawaii P, 1958.

Department of Geography, University of Hawaii, Atlas of Hawaii, Third Edition, University of Hawaii Press, 1998.

Federal Emergency Management Agency, <u>Flood Insurance Rate Map Community</u> - <u>Panel Number 150003/0265C</u>, September 1989.

Mackenzie, Melody Kapiliaoloha, ed., Native Hawaiian Rights Handbook, Honolulu: Native Hawaiian Legal Corporation, 1991.

Minerbi, Luciano et. al., Native Hawaiian and Local Cultural Assessment Project, Honolulu: University of Hawaii at Manoa, 1993.

Munekiyo, Arakawa & Hiraga, Inc., <u>Application for Special Management Area Permit - Worldmark, The Club</u>, August 1998.

Munekiyo & Hiraga, Inc., <u>Application for Special Management Area Use Permit - Landry Apartments</u>, June 2001.

Munekiyo & Hiraga, Inc., <u>Application for Special Management Area Use Permit - Proposed Ke Ali'i Villas Condominium</u>, October 2002.

Munekiyo & Hiraga, Inc., Final Environmental Assessment - Interim Pillani Highway Improvements (Mokulele Highway to Kilohana Drive), April 2002.

Munekiyo & Hiraga, Inc., <u>Final Environmental Assessment - Proposed Wailea Fire Station</u>, August 2001.

SMS, <u>Maui County Community Plan Update Program: Socio-Economic Forecast-Phase I Report</u>, Final Version (June 14, 2002).

University of Hawaii, Land Study Bureau, <u>Detailed Land Classification - Island of Maui,</u> L.S.B. Bulletin No. 7, May 1967.

U.S. Soil Conservation Service, Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii, U.S. Government Printing Office, 1972.

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Appendices

Appendix A

Water Quality Report, January 2006 (AECOS)

WATER QUALTY

Maalaea Bay is classified as a Class A coastal water and subject to the water quality standards and criteria of Hawaii Administrative Rules Title 11, Department of Health Chapter 54, Water Quality Standards. Water quality samples have been routinely collected by the Hawaii Department of Health (HDOH) at a number of nearshore sites in Maalaea Bay. Described here are water quality conditions at four locations along the Kihei-Makena shoreluine of the Bay on either side of the Renaissance Wailea Resort (Table 1).

Average salinity tends to increase from Kihei Beach to Keawekapu Beach and this is probably related to increased mixing with open ocean waters in the southern, more open section of the Bay.

There is little variation in mean temperatures between sites, except at the Kihei Beach Park site where the mean temperature was about 2 C° lower than at the other stations. This likely results from groundwater seepage into these nearshore waters as also evidenced by the lower salinities.

Dissolved Oxygen saturation levels were somewhat variable between the sampling sites, but were generally within the criteria limits specified by the State dissolved oxygen saturation criterion of 75 percent saturation. Only one reading below 70 percent saturation was recorded (45 percent dissolved oxygen saturation value) and this was probably due to groundwater inputs that typically are low in dissolved oxygen.

pH levels were relatively constant and were consistently within the range specified by the State's water quality criteria (pH 7.0-8.6)

Geometric means for turbidity were in excess of both "wet" and "dry" season criteria (0.20 and 0.50 ntu respectively) and this is probably due to nearshore waves stirring up bottom sediments at the shallow sampling sites.

Inorganic nitrogen geometric means were in excess of both "wet" and "dry" season criteria (3.5 and 5.0 ug/l respectively for nitrate + nitrite and 2.0 and 3.5 ug/l respectively for ammonia). The geometric means for nitrate + nitrite at all four sampling sites are also greater than the State's "not to exceed the given value more than 2% of the time". Total nitrogen means exceed the State's "dry" season geometric mean criterion of 110 ug/l at all sites except Kihei Beach Park, but not the "dry" season criterion geometric mean of

150 ug/l. The relatively high mean at the Kihei State Park site probably results from significant inputs from groundwater seepage in the nearshore waters.

Table 1. Historic water quality from selected nearshore areas along the Kihei-Makena

Site Collection Period Ulua Beach 09/90 - 12/98 me ran Keawekapu Beach 09/90 - 12/98 me	Salinity (ppt) an 34.44 ge 32.73 - 35.20 n 110	Temp. (C°) 24.99 19.20 - 29.3 61	DO sat. (ppt) 108 89 - 134 49	pH 8.2 7.2 - 8.9	Turbidity (ntu)	NO3+NO2 (ug/l) 45	NH3 (ug/l)	Total N (ug/l)	Total P _i (ug/l)
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09/90 - 12/98									<u>-</u>
mea	ал 34.08	24.7	72	8.2	0.66	44	9.9	147	10.2
rang	ge 32.00 - 35.00	19.0 - 28.6	72 - 86	7.2 - 8.9	0.05 - 4.2	2.7 - 232	3.8 - 37	71 - 316	5.0 - 24
	n 113	62	51	53	38	41	41	41	25
Kihei Beach Park									:
09/89 - 08/90									-
mea	an 28.63	22.3	80	8.1	2.3	82	52	402	55
rang	ge 21.90 - 31.50	19.0 - 26.8	45 - 130	8.0 - 8.1	0.48 - 5.09	10 - 560	50 - 60	100 - 860	31 - 96
	n 12	12	12	10	10	12	12	9.0	12

Total phosphorus means are in compliance with State geometric mean criteria ("dry" mean = 16 ug/l) and "wet" mean = 20 ug/l) except at the Kihei Beach Park site where the geometric mean exceeds both "wet" and "dry" geometric mean criteria.

The geometric means for chlorophyll a exceed both State "wet" season (0.30 ug/l) and "dry" season (0.15 ug/l) criteria at all four sampling sites. This is not surprising given the high levels of nitrate + nitrite recorded at all four sampling sites.

SUMMARY

The water quality at the southern sampling sites (Ulua Beach and Keawekapu Beach) is, of more pristine quality than that off Kihei Beach Park in the upper (north) part of Maalaea Bay. It should be noted that water quality samples at all four sites are collected very near the shore. Because of breaking waves and the mixing of bottom sediments that results from this action, and because there is often groundwater seepage at and near the shore, water quality tends to be degraded in these very nearshore waters.

Appendix B

Archaeological Assessment Survey Letter Report, July 15, 2003 PHRI

Paul H. Rosendahl, Ph.D., Inc.

Archaeological • Historical • Cultural Resource Management Studies & Services

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Letter Report 2334-071303

July 15, 2003

Marc Perrin, Managing Director Starwood Capital Group, LLC One Embarcadero Center, 33rd Floor San Francisco, CA 94111-3722

Via Email perrinm@starwood.com (four pages)

Subject: Archaeological Assessment Survey for Due Diligence Renaissance Hotel – Wailea Beach Resort Land of Paeahu, Makawao District Island of Maui (TMK:2-2-1-08:67)

Dear Mr. Perrin:

At your request, Paul H. Rosendahl, Ph.D., Inc. (PHRI) carried out an archaeological assessment survey of the Renaissance Hotel property, which is located at the Wailea Beach Resort in the Land of Paeahu, Makawao District, on the Island of Maui and is identified as Tax Map Key (TMK) Parcel 67 of State Tax Map.2-2-1-08. The subject property was fully developed several decades ago and, prior to its purchase by the current owner, was known and operated as the Stouffer Wailea Beach Resort. This assessment survey was conducted in connection with the pending purchase of the subject property by Starwood Capital, LLC, and in anticipated preparation of future renovation and redevelopment planning and permit applications.

Survey Objectives and Scope of Work

The basic objectives of the assessment survey were to determine the following: (a) the general nature, extent, and potential significance of any archaeological-historical remains that might be present, (b) the historic preservation implications of any such remains for the feasibility of any proposed future development; and (c) the general scope of work and level of effort for any subsequent archaeological-historic preservation work that might be appropriate and/or required. The ultimate objective of any such subsequent work would be to comply with all current historic preservation requirements of the Hawaii State Historic Preservation Division (SHPD) and the Maui County Planning Department.

Based on a prior discussions with you and your attorney, Mr. Raymond S. Iwamoto, a preliminary review of prior archaeological work done by PHRI within the immediate vicinity subject property and in the general Wailea Beach Resort area, and our familiarity with both the general project area and the current regulatory review requirements of the SHPD and the Maui County Planning Department, the following scope of work was determined to be appropriate for the assessment survey:

Conduct appropriate background review and research;

- 2. Mobilization-including all field work preparations, field crew travel time, and demobilization:
- 3. Conduct variable intensity, 100% coverage, pedestrian surface reconnaissance inspection fieldwork of the subject parcel;
- 4. Conduct post-field analysis of field and other data;
- 5. Prepare a written assessment survey report—including description and evaluation of assessment survey findings, and a scope of work for any additional archaeological work that might be required by various regulatory agencies in connection with any development; and
- 6. Coordinate and consult with client, client representatives, agency staff, etc. (as appropriate and/or required).

PHRI Principal Archaeologist Dr. Paul H. Rosendahl, accompanied by you, carried out the assessment survey inspection fieldwork on July 9, 2003. Survey fieldwork was conducted by means of irregular pedestrian walks through the property. You were able to provide preliminary information regarding possible renovation and new development conceptual layouts.

Project Area Description

The subject property situated in the northern seaward portion of the Wailea Beach Resort, and is bound by Wailea Alanui Drive (the main resort access road) on the inland (eastern) side, the existing Wailea Elua residential units property on the south, Mokapu Beach and the Pacific Ocean on the seaward (western) side, and the Maluhia at Wailea residential housing development property (formerly known as the Grand Champions Beach Resort property) currently under construction on the north.

So far as could be determined, the subject property had never been investigated in the course of any previous archaeological surveys; it was fully developed several decades ago and, prior to its purchase by the current owner, was known and operated as the Stouffer Wailea Beach Resort. Existing development elements include the main hotel structure, swimming pool and adjacent restaurant complex, an artificial pond and waterway system ("lagoon"), beachfront guest units, several open lawn areas used for *luau* and other hotel events and activities, a well developed system of paved walkways and paths, and extensive landscaping.

Relevant Prior Archaeological Studies

Since the 1970s there have been many archaeological investigations conducted in connection with a variety of development projects within the Wailea Beach Resort area and adjacent lands. (For a recent summary listing of archaeological projects, see Table 1 in Corbin 2002.) Of particular relevance to the subject property are two projects conducted by PHRI on the Maluhia at Wailea residential housing development property (formerly known as the Grand Champions Beach Resort property), which is situated immediately adjacent to the north of the subject property.

In 1987, PHRI conducted a surface reconnaissance and limited subsurface testing survey of the Grand Champions Beach Resort property (Walker and Haun 1987) during which the only cultural remains identified a was a small remnant of an exposed surface cultural deposit; subsurface testing of the sand beach deposit by means of auger coring did not encounter any indication of buried cultural deposits or human remains. Based on these negative findings and in consideration of prior projects at Wailea that had encountered human remains in sand beach areas, PHRI recommended limited future work in the form of archaeological monitoring of construction activities (grubbing and excavations) in the sand beach areas of the project site.

SHPD subsequently reviewed the PHRI report (Walker and Haun 1987), and concurred with both PHRI's determination of "no effect" with regard to negative impacts upon any historic properties, and PHRI's recommendation for monitoring of any future construction activities in the

Subsequent development of the property was deferred until 2000, when a new owner sand beach area. reactivated development of the property under the project name "Maluhia at Wailea." In accordance with the earlier SHPD approval, PHRI prepared an archaeological monitoring plan (PHRI 2000a) for the project, and subsequently carried out monitoring of construction work during the period July 2000 through July 2001 (Corbin 2002). During the monitoring fieldwork, remnants of three small cultural deposits were encountered; all three had small amounts of shell midden, and one had a small number of basalt flakes. Appropriate documentation of these three finds was conducted and none of the three was determined to be of such significance as to required subsequent mitigation in the form of either data recovery excavations or preservation. Also encountered during monitoring fieldwork were the remains of two WW II-era concrete pillboxes. With the concurrence of SHPD, these two features were recorded and no further work or preservation required (PHRI 2000a, 2000b)

Assessment Field Inspection Findings

In the course of the assessment survey inspection fieldwork carried out on July 9, 2003, no evidence of any kind indicating the possible presence of any type of potentially significant cultural remains was observed. The entire property has been fully developed and utilized for hotel and associated resort activities. Furthermore, even the limited open grass areas which presently lack either structural elements or developed landscaping appear to have been extensively modified and shaped as part of the general grading and landscaping done during the original hotel and resort development.

Concluding Assessment and Recommendations

Based on the negative fieldwork findings of our archaeological assessment survey inspection fieldwork on July 9, 2003 and the extremely limited and insignificant findings of prior archaeological work done on the Grand Champions Beach Resort/Maluia at Wailea development property immediately adjacent to the north-including both the survey and testing done in 1987 and the more recent archaeological monitoring done in 2000-as well as the fully developed condition of the subject property, I believe the likelihood of encountering potentially significant archaeological-historical resources within the subject property to be minimal. Therefore, I recommend that we request of SHPD a formal determination of "no historic properties affected" in accordance with the general guidance provided by Chapter 284: Section 5(b) of the SHPD Draft Rules and Regulations (HAR Title 13, DLNR; Subtitle 13, SHPD) (5/31/01). Such a determination should satisfy the immediate historic preservation review requirements of the SHPD and the Maui County Planning Department.

While the subject property appears to be fully developed, it is always possible-no matter how unlikely-that potentially significant buried cultural remains-such as habitation deposits and features, and/or human burials-may have survived earlier development construction work, and might be present beneath existing structures and facilities. As extensive subsurface testing of the project site at this time would be both impractical and disruptive, I believe that SHPD would most likely concur with our assessment and recommendation that we could forego any subsurface testing at present, with the understanding that (a) the eventual demolition of existing structures and facilities and (b) any new construction activities involving substantial subsurface excavations would require archaeological monitoring to identify and evaluate any cultural remains that might be revealed. Implementation of this recommendation would require the preparation, and SHPD review and approval, of a formal archaeological monitoring plan. Such a plan would be prepared in accordance with Chapter 279, Rules Governing Standards for Archaeological Monitoring Standards and Reports, of the draft Hawai'i Administrative Rules (DLNR 2001).

Thank you for the opportunity to provide you with archaeological and historic preservation services. Should you have any questions, or need any further information, please contact me at my Hilo office (808-969-1763). Furthermore, please inform me if you wish me to prepare and submit to SHPD a request for a formal determination of "no historic properties affected."

Sincerely yours,

Your Hillmuld

Paul H. Rosendahl, Ph.D. President and Principal Archaeologist

References Cited

Corbin, A.B.

Archaeological Monitoring, Maluhia at Wailea Project Area; Land of Paeahu, Makawao District, Island of Maui (TMK:2-1-08:62). PHRI Report 2107-121201. Prepared for M-35 LLC. (February)

DLNR (Department of Land and Natural Resources, State of Hawai'i)

2001 Chapter 279: Rules Governing Minimal Standards for Archaeological Monitoring Studies and Reports. Hawai'i Administrative Rules; Title 13, Department of Land and Natural Resources; Subtitle 13, State Historic Preservation Division. (May; draft rules)

PHRI (Paul H. Rosendahl, Ph.D., Inc.)

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2000b Inadvertent Discovery Report: Archaeological Monitoring, Maluhia at Wailea; Land of Paeahu, Makawao District, Island of Maui (TMK:2-1-08:62). PHRI Report 2107-103000. Prepared for SHPD. (October)

Walker, A.T., and A.E. Haun

Archaeological Reconnaissance and Limited Subsurface Testing, Grand Champions Beach Resort; Land of Paeahu, Makawao District, Island of Maui. PHRI Report 343-073187. Prepared for GCR/VSM Wailea. (August)

Appendix B-1

An Archaeological Monitoring
Plan for the Renaissance HotelWailea Beach Resort in Wailea,
Paeahu Ahupua`a, Makawao
District, Island of Maui, Hawaii

SCS Project Number 451-AMP-1

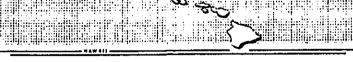
ARCHAEOLOGICAL MONITORING PLAN FOR THE RENAISSANCE HOTEL – WAILEA BEACH RESORT IN WAILEA, PAEAHU AHUPUA`A, MAKAWAO DISTRICT, ISLAND OF MAUI, HAWAI`I [TMK: 2-1-8:67]

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Prepared by:
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June 2004

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INTRODUCTION

Scientific Consultant Services, Inc. (SCS) has prepared this Archaeological Monitoring Plan (AMP) in advance of construction work at the Renaissance Hotel at Wailea Beach Resort in Paeahu Ahupua'a, Makawao District, Island of Maui, Hawai'i [TMK 2-1-08:67] (Figures 1 and 2). This renovation project at the Renaissance Hotel will involve subterranean disturbance in order to implement a conceptual drainage plan (Figure 3). This land parcel was fully developed several decades ago and was operated as the Stouffer Wailea Beach Resort. The parcel is composed of 15.578 acres (687,577 ft²). Archaeological Monitoring is being conducted on the parcel due to the potential for the inadvertant discovery of human remains and/or traditional or historic cultural deposits. Previous archaeological work conducted in the vicinity of the parcel has documented human settlement along the entire southwest Maui coast from at least as early as A.D. 1100.

This Monitoring program will ensure that if human remains are identified during subsurface work, appropriate and lawful protocol concerning the Inadvertant Discovery of Human Remains (pursuent to 13-300-40a, b, c, HAR) is followed. Archaeological Monitoring will also ensure that identified significant cultural resources are sampled, documented, and evaluated for their historical significance, per State Historic Preservation Division (SHPD) recommendations.

This AMP is being prepared for the Kobayashi Group, LLC, and will require the approval of the SHPD (Dr. Melissa Kirkendall, SHPD-Maui) prior to the commencement of any excavation activities on the parcel. The following text provides more detailed information on the reasons for monitoring, potential site types to be encountered during excavation, monitoring conventions and methodology for both field and laboratory work, and curation and reporting.

ENVIRONMENTAL SETTING

The subject parcel is bounded by Wailea Alanui Drive on the inland (easern) side, the existing Wailea Elua residential units on the south, Mokapu Beach and the sea on the seaward (western) side and the Maluhia at Wailea residential development on the north. This land parcel is situated on the southwestern slope of Haleakala volcano between sea level and approximately 50 meters above mean sea level (amsl). The combined synopsis of sediment research completed in the area by Foote *et al.* (1972), indicate that soil in the area is predominantly composed of the Makena and Keawakapu Series stony loam type. These soils developed in volcanic ash. No sandy sediment regimes were observed within or bordering the subject parcel.

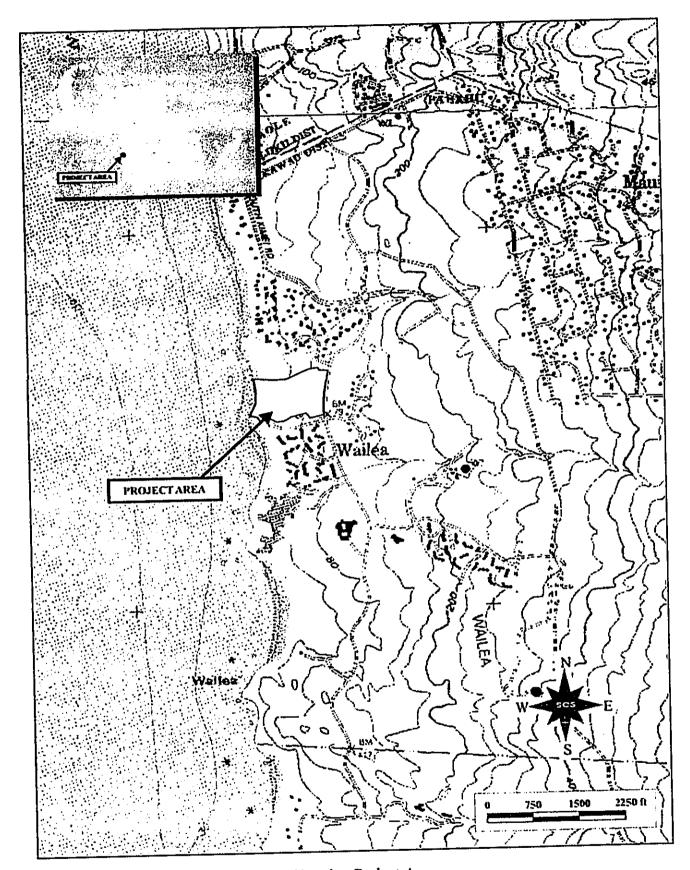


Figure 1: USGS Makena Quadrangle Showing Project Area.

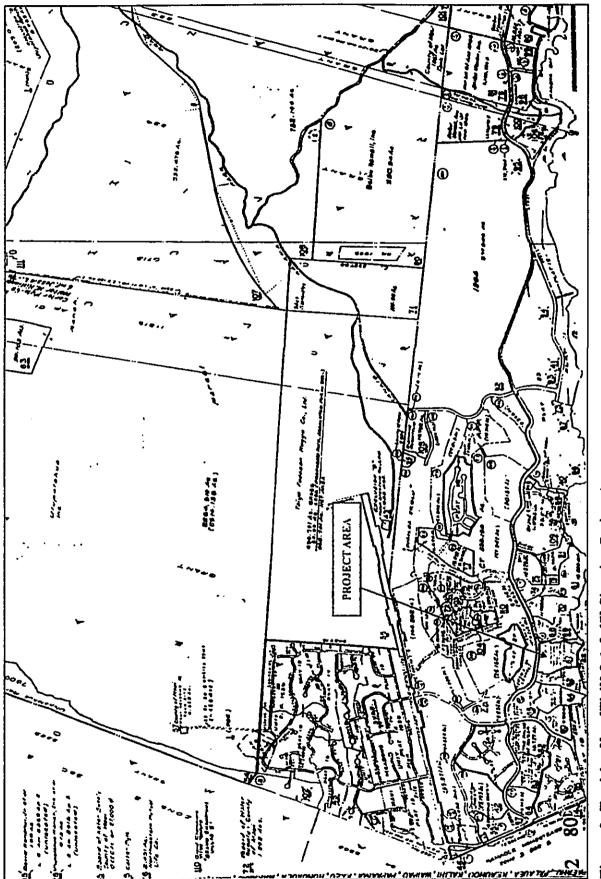
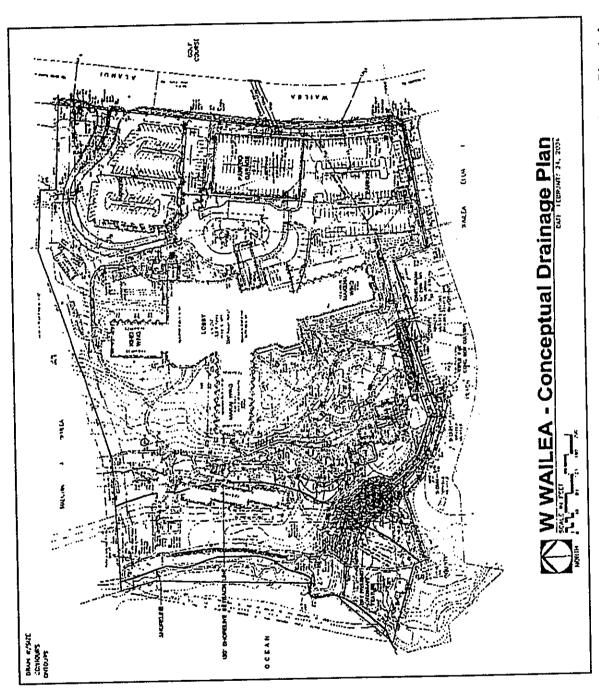


Figure 2: Tax Map Key [TMK 2-1-8:67] Showing Project Area.



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Figure 3: Planview Map of the Developed Subject Property Showing Conceptual Drainage Plan (adapted from General Services, Inc.2004).

The entire project area is a built landscape. As mentioned earlier, the subject parcel was developed decades ago as a resort, with landscaping of native and introduced vegetation. Other existing development elements include the main hotel structure, swimming pool, restaurant complex, an artificial pond and waterway system, beachfront guest units, and several open lawn areas used for *luau* and other hotel events and activities, as well as a well-developed system of paved walkways and paths

BACKGROUND

No formal archaeological research has previously been conducted on the subject parcel other than an Archaeological Assessment Survey for Due Diligence conducted in July 2003 (Rosendahl 2003)

A historic wall was identified on a nearby property on TMK: 2-1-8:115 by Sinoto *et al.* (1999). Another archaeological study on a nearby property located south of the current project area on TMK: 2-1-08:83 by Kennedy and Biglow (1989), resulted in negative findings.

Although archaeological investigation on adjacent land parcels revealed only a modest concentration of archaeological sites, other archaeological studies performed within the greater Wailea area shed some light on the perceived settlement pattern on the area. For instance, Cordy (1977) divided Maui's southwest coast into three separate environmental zones: coastal, barren, and inland. These environmental zones were created almost exclusive to the environs of the Kihei area located north of Wailea. Nevertheless, the model accounts for the entire stretch from Makena/Wailea through Kihei.

All three environmental zones in the greater Wailea area (inclusive of Kihei) have yielded evidence for traditional and historic-period utilization. The current project area, through comparisons below, is located in the "barren zone," a term coined by Cordy (1977) to describe the intermediate dry zone between population centers along the coast and the uplands. All three zones are briefly discussed below.

First, archaeological sites situated in the coastal region have often been interpreted as *kauhale* (cluster of domestic features) and *heiau* (religious structures). The sites yielded artifacts associated with permanent habitation, small-scale agriculture, and marine acquisition, among others (Barrere 1975; Spear 2000). A second class of sites commonly found in the coastal zone is burial loci. These are common near the coastline in sandy matrices and lava tubes/overhangs.

Second, sites of a more temporary nature such as C-shaped structures and rockshelters have often been found in the secondary barren zone. Other sites commonly found within the barren zone include features associated with horticultural activities; these types of features include small enclosures, C-shaped structures, hillside terracing, and rock mounds (Kirch 1970; Dobyns 1988; Roe and Cleghorn 1990; and Spear 2000). Trails run through the barren zone connecting coastal reaches with the uplands, with some locations along the trails yielding evidence for single use events (*i.e.*, shell midden indicating food consumption or waste flakes indicating lithic manufacturing). This barren intermediate zone is well characterized by the Kolb et al. (1997) statement that "the aridity of these districts coupled with a lack of perennial streams necessitated the use of extensive upland dryland field systems and limited cultivation along the coast."

Third, the situation again changes for upland zones. Generally, dryland taro, sweet potato, and banana crops were cultivated within upper elevations (Barrera 1974; Cordy and Athens 1988; and Spear 2000). The upland zone contains a suite of archaeological sites, such as enclosures, platforms, rock mounds, and agricultural terraces showing the intensive use of the upland landscape for habitation, agriculture, and ceremonial pursuits, among others. In contrast to general barren zone archaeological sites, upland sites were observed to be more formal by displaying structures with bi-faced walls and well-made angular corners. In addition to structure formalization, sites in the upland zone were viewed as permanent habitation loci, as based partially on larger structural sizes (Kolb *et al.* 1997) versus the smaller, temporary sites that are frequently found in the barren zone.

PROJECT AREA EXPECTATIONS

There have only been a modest number of archaeological sites found on in the vicinity of the current area on barren zone land parcels in Wailea. However, of the sites identified, there is a pattern. Based on the presence of *kauhale*, *heiau*, and artifacts associated with fishing subsistence, coastal sites were interpreted as permanent habitation (Barrere 1975; Spear 2000). Barren Zone sites that might be encountered during survey may include ground surface midden and lithic scatters and surface structures, which may take the form of enclosures, platforms, clearing mounds, terraces, property boundaries/markers, and human burials. Given the location of the project area within the barren zone of the Wailea area, these surface structures may appear to have a shoddy appearance and may indicate utilization as temporary habitation/utilization.

Structures with this appearance in the barren zone were less complex and more random than sites found on the coast (Gosser et al. 1993; Spear 2000). The less complex appearance of surface structures within the Wailea barren zone were not only traditional period conventions. Ranchers and World War II participants also made simple structures either for their cattle or as a defensive strategy (Kirch 1970; Clark 1974; and Haun 1978). In contrast, upland sites were found to be architecturally more formalized and thereby thought to be associated with permanent habitation and activities (Cordy and Athens 1988).

REASON FOR MONITORING

Monitoring is being conducted on this parcel because of the chance that subterranean excavation could impact burials or significant cultural features. Coastal areas of Honua'ula, in general, were historically and traditionally known as excellent fishing spots, especially for offshore (deep water) resources. Upland areas, starting from near the coast and heading mauka, were historically and traditionally known for their limited, small-scale cultivation potential (Sterling 1998). Several heiau have been documented in the general area, and Native Hawaiians were known for burying their dead in beach sand near the coast (Kirch 1985). Because the subject parcel is slightly elevated topographically, it will most likely not contain sandy beach deposits, but rather more rocky, upland soils (see below). These soils are not ideal for human burials, but they may contain other subsurface evidence of traditional activities. Monitoring was deemed necessary in order to mitigate any such archaeological finds or burials.

POTENTIAL SITE TYPES TO BE ENCOUNTERED

Several archaeological projects conducted in the vicinity of the current area of study provide a framework for anticipating the types of sites likely to be encountered. A sampling of relevant studies and key findings, including oral history accounts, is presented here.

Thrum (1909), Stokes (1909-1916), and Walker (1931) conducted the earliest archaeological surveys of leeward Maui and inventoried both coastal and upland sites of the traditional district of Honua'ula, including habitation sites, fishponds, and heiau. Koula heiau is located just south of the subject parcel, in the adjoining ahupua'a of Kanahena, approximately 1/4 mile from the shore. Another heiau was said to be located approximately one mile north of the subject parcel on top of Pu'u Ola'i. These are the two closest heiau to the subject parcel.

A large complex of coastal sites (Makena Complex, State Site No. 50-50-14-1266) was documented in the area between Makena Landing and Pu'u Ola'i, north of the subject parcel. A

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ko'a, or fish shrine, has been documented at Pu'u Ola'i. Another ko'a (State Site No. 50-50-14-253) has been documented at Paako, less than ½ mile up the coast from the subject parcel.

Archaeological Reconnaissance (Donham 1992) and Archaeological Inventory Survey (Sinoto and Pantaleo 2000), including subsurface testing, on a one-acre coastal parcel near Paako found no evidence of pre-Contact cultural resources, but did recover historic period artifacts consistent with a late-19th century to early-20th century age.

Archaeological Inventory Survey (Rotunno-Hazuka et al. 2002), including subsurface excavation, was conducted in two coastal parcels of land near Pu'u Ola'i. Surface features included stone walls and enclosures, portions of a fishpond, scatters of historic and traditional artifacts, and a small cemetery. Subsurface excavation revealed a total of eight individual human burials, representing both pre-Contact and historic Native Hawaiians.

Down the coast (south) from the subject property at La Perouse Bay are the well-known remains of several small, late prehistoric villages at Keone'o'io (bonefish bay, in Hawaiian). No excavation has taken place here, but more than 75 archaeological features have been documented including: house terraces and platforms, stone-walled canoe sheds (halau), heiau, and fishing shrines (ko'a) with upright stones.

Archival research (Waihona Aina Corporation 2003) sheds little light on the history of land use in this area. However, Handy (1940) provides the following two passages relevant to traditional and historic land use in the area of the subject parcel:

Makena is today [i.e., in 1930s] a small community of native fishermen who from time to time cultivate small patches of potatoes when rain favors them. Formerly, before deforestation of the uplands, it is said that there was ample rain in favorable seasons for planting the sweet potato, which was the staple here (brackets added)

Between Makena and the lava-covered terrain of Keoneoio (another famous fishing locality) the coastal region includes the small ahupua 'a of Onau, Moomuku, Mooloa, Mooiki, Maluaka, Kaeo. According to an old Kamaaina, these ahupua 'a had in former times a continuous population of fisher folk who cultivated potatoes and exchanged their fish for taro, bananas, and sweet potatoes grown by the upland residents of the Ulupalakua section [Handy 1940:159].

Work by Cordy (1977) in the Kihei area to the north—which is broadly applicable to the area around the subject parcel—resulted in a pre-Contact settlement model that divides the landscape into three environmental zones: coastal, transitional/barren, and inland. The current project area falls into the transitional/barren zone, which refers to "the sloped back of the coast with less than 30 inches of rainfall" (Cordy 1977:4). This zone is viewed as relatively marginal for permanent habitation because of its dryness and rocky soils, and numerous studies have tended to bear this out, as least for the Kihei region, finding only temporary habitation or use sites.

In summary, there is ample evidence of pre- and post-Contact Native Hawaiian habitation of the entire coastal area north and south of the subject parcel. Any traditional sites and/or archaeological features in the subject parcel are expected to be temporary camps or work stations, perhaps related to small-scale cultivation, maintenance of fishing equipment, and so on. Traditional burials are less likely to occur. Features related to historic ranching activities may also be encountered.

SOIL REPORTING VERSUS MONITORING AREAS

In the Hawaiian Islands, there is almost always a positive correlation between sediment types and cultural resources. One good example is that sandy areas almost always contain human burials. In the present project area, no archaeological testing has yet been accomplished. However, an in depth soil testing report of the subject parcel has been produced (Dames and Moore 1974). This report sheds light on those areas which may be perceived as being the most versus least sensitive in terms of the presence/absence of significant historic sites.

The following presents a more in-depth background to the geology of the subject parcel, assesses subsurface conditions, and provides the results of soil testing. This information was wholly gleaned from the Dames and Moore (1974) soil report.

GEOLOGY

The project area site is underlain by partly weathered Kula Volcanic Series as lava flows with clinkers. The flows had a viscuous core of lava surrounded by a less viscous clinker layer. The overall deposition forms a clinker-massive basalt-clinker vertical sequence in section. On the site, the a'a basalt cores range in thickness from approximately two feet (61 centimeters; cm) to eight feet (243 cm) and appear to average about six (183 cm) to eight (243 cm) feet thick. Late Pleistocene and recent weathering and erosion have cut stream channels into the basalt, and

produced a thin, one (30 cm) to two (61 cm) feet thick layer of residual brown silt soil on the surface. Recent beach and dune sand, blown inland from the shoreline, overlie the lava flows and residual soils on the topographically lower portions of the old Pleistocene-recent erosion surface.

SUBSURFACE CONDITIONS

The project area is underlain by erratic deposits of sand over a'a basalt with clinkers. There is a general increase in overall sand cover (as of 1974) from approximately one foot (30 cm) at elevation +50 feet to about five feet (152 cm) at elevation +20 feet. The general thickness of sand increases toward the shoreline. Soil testing disclosed generally variable subsurface conditions across the site; however, competent soil and rock were encountered at shallow depths in all the borings and test pits.

RESULTS OF BORING/TEST PITS

Borings ranged in depth from 11 to 34 feet (335 cm-10.3 meters) and test pits ranged from 0.5 to 9 feet (15-274 cm) below ground surface. The general pattern of this testing revealed, in many cases, gray vesicular basalt at the surface underlain by massive basalt, highly vesicular grades to a a clinkers, and massive basalt again. The water table was not encountered even at depths reaching 34+ feet below the surface. In other profiles, of more interest for this study, was the presence of tan-white fine sand occurring from the surface to c. 2 feet (61 cm) below surface. Pockets of brown, silty fine sand and red-brown sandy silt occurred with some frequency from the surface to c. 8 feet (243 cm) below surface. The tan-white fine grained beach sand extended from the surface to a maximum of c. 7.5 feet (228 cm) below surface nearer the coastline. In most portions of the project area, the sand was present to an average of 3.05 feet (93 cm) below surface. The presence of sand was much less significant or non-existent further from the coastline.

Maps of the sediment borings and results will be crucial to Monitoring during this project. These maps are in hand and should aid in better determining the presence/absence of cultural resources across the project area. Other methods to be utilized during this monitoring work are presented below.

MONITORING CONVENTIONS AND METHODOLOGY

This AMP has been prepared in accordance with DLNR-SHPD rules governing standards for Archaeological Monitoring (DLNR-SHPD Draft Rules 1996). SCS monitors will adhere to the following guidelines during monitoring:

- 1. A qualified archaeologist from SCS intimately familiar with the project area and the results of previous archaeological work conducted in the Honua'ula area in general will monitor subsurface construction activities on the parcel. If significant deposits or features are identified and additional field personnel are required, SCS will notify the contractor or representatives before additional personnel are brought to the site.
- 2. Monitoring will be conducted during all backhoe excavations on the subject parcel.
- 3. If features or cultural deposits are identified during Monitoring, the on-site archaeologist will have the authority to temporarily suspend construction activities at the significant location so that the cultural feature(s) or deposit(s) may be fully evaluated and appropriate treatment of the cultural deposit(s) is conducted. SHPD (Dr. M. Kirkendall) will be contacted to establish feature significance and potential mitigation procedures. Treatment activities primarily include documenting the feature/deposit by plotting its location on an overall site map, illustrating a plan view map of the feature/deposit, profiling the deposit in three dimensions, photographing the finds—with the exception of human burials, collecting any artifacts and/or significant soil samples, and triangulating the finds. Construction work and/or back-filling of excavation pits or trenches will only continue in the sample location when all documentation has been completed.
- 4. Control stratigraphy in association with subsurface cultural deposits will be noted and photographed, particularly those containing significant quantities or qualities of cultural materials. If deemed significant by SHPD and SCS, these deposits will be sampled.
- 5. In the event that human remains are encountered, all work in the immediate area of the find will cease; the area will be secured from further activity until burial protocol has been completed. The SHPD island archaeologist (Dr. M. Kirkendall) and SHPD-Burial Sites Program (located in Kapolei, O'ahu) will both be immediately contacted about the inadvertent discovery of human remains on the property. Notification of the inadvertent discovery will also be made to the Maui/Lanai Islands Burial Council by either SHPD (Dr. M. Kirkendall) or by SCS (Dr. Michael Dega). A determination of the minimum number of individuals (MNI), age(s), and ethnicity of the burial(s) will be ascertained in the field by SCS. Rules outlined in Chapter 6e, Section 43 shall be followed. Profiles, plan view maps, and illustrative documentation of skeletal parts will be recorded to document the burial(s). The burial location will be identified and marked. If a burial is disturbed during trench excavations, materials excavated from the vicinity of the burial(s) will be manually screened through 1/8-inch wire mesh screens to recover any displaced skeletal material. If the remains are to be removed, the work will be in compliance with HRS 6.E-43.6, Procedures Relating to the Inadvertent Discovery of Human Remains after approval from all parties (SHPD, Burial Council).
- 6. To ensure that contractors and the construction crew are aware of this Archaeological Monitoring Plan and possible site types to be encountered on the parcel, a brief coordination meeting will be held between the construction team and monitoring

archaeologist prior to initiation of the project. The construction crew will also be informed as to the possibility that human burials could be encountered and how they should proceed if they observe such remains.

- 7. SCS will provide all coordination with the contractor, SHPD, and any other group involved in the project. SCS will coordinate all monitoring and sampling activities with the safety officers to ensure that proper safety regulations and protective measures meet compliance. Close coordination will also be maintained with construction representatives in order to adequately inform personnel of the possibility that open archaeological units or trenches may occur in the project area.
- 8. As necessary, verbal reports will be made to SHPD and any other agencies as requested.

LABORATORY ANALYSIS

All samples collected during the project, except human remains, will undergo analysis at the SCS laboratory in Honolulu. In the event that human remains are identified and the SHPD and Maui/Lanai Islands Burial Council authorize their removal, they will be curated on Maui.

Photographs, illustrations, and all notes accumulated during the project will be curated at the Honolulu laboratory. All retrieved artifact and midden samples will be thoroughly cleaned, sorted, and analyzed. Significant artifacts will be photographed, sketched, and classified (qualitative analysis). All metric measurements and weights will be recorded (quantitative analysis). These data will be presented in tabular form within the final monitoring report. Midden samples will be minimally identified to major class (e.g., bivalve, gastropod mollusk, echinoderm, fish, bird, mammal). All data will be clearly recorded on standard laboratory forms, which also include number and weight (as appropriate) of each constituent category. These counts will also be included in the final report.

Should any samples amenable to dating be collected from a significant cultural deposit, they will be prepared in the SCS laboratory and submitted for specialized radiocarbon analysis. While primary emphasis for dating is placed on charcoal samples, we do not preclude the use of other material such as marine shell or nonhuman bone materials. SCS will consult with SHPD and the client if radiocarbon dates are deemed necessary.

All stratigraphic profiles will be drafted for presentation in the final report. Representative plan view sketches showing the location and morphology of identified sites/features/deposits will be compiled and illustrated.

CURATION

If requested by the land owner, SCS will curate all recovered materials in Honolulu (except human remains, which would remain on-island) until a permanent, more suitable curation center is identified. The land owner may request to curate all recovered cultural materials once analysis has been completed.

REPORTING

An Archaeological Monitoring report documenting the project findings and interpretation, following SHPD guidelines for Archaeological Monitoring reports, will be prepared and submitted 45 days after the completion of fieldwork. This time line is requested to account for any radiocarbon age determinations (typically 30–45 days), if necessary.

If cultural features or deposits are identified during fieldwork, the sites will be evaluated for historical significance and assessed under State and Federal Significance Criteria. The Archaeological Monitoring report will be drafted until accepted by SHPD and will be submitted to both SHPD and to the client.

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Appendix C

Cultural Impact Assessment

A CULTURAL IMPACT ASSESSMENT FOR THE PROPOSED REDEVELOPMENT OF15.578 ACRES IN THE WAILEA RESORT, PAEAHU AHUPUA'A, MAKAWAO DISTRICT ISLAND OF MAUI, HAWAI'I [TMK 2-01-08:67]

Prepared by:
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and
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October 2005

Prepared for:
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1001 Bishop Street, Suite 1570
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Honolulu, Hawaii 96813

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INTRODUCTION

Scientific Consultant Services (SCS), Inc. has been contracted by Munekiyo & Hiraga, Inc. to conduct a Cultural Impact Assessment (CIA) on the proposed development of 15.578 acres in the Wailea Resort, Paeahu Ahupua'a, Makawao District, Maui [TMK: 2-01-08:67 (Figure 1). Based on documents supplied by the planner, a complete redevelopment of the existing Renaissance Wailea Beach Resort is proposed.

. 2

A Cultural Impact Assessment involves evaluating the probability of negative impact on cultural values and rights within the project area and its vicinity. According to the Guidelines for Assessing Cultural Impacts established by the Hawaii State Office of Environmental Quality Control (OEQC 1997):

The types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religions and spiritual customs. The types of cultural resources subject to assessment may include traditional cultural properties or other types of historic sites, both man made and natural which support such cultural beliefs.

Act 50, enacted by the Legislature of the State of Hawaii (2000) with House Bill 2895, relating to Environmental Impact Statements, proposes that:

...there is a need to clarify that the preparation of environmental assessments or environmental impact statements should identify and address effects on Hawaii's culture, and traditional and customary rights...[H.B. NO. 2895].

The purpose of Act 50 is to require that Environmental Impact Statements include an assessment of any impact on the cultural practices of the community and state. It also amends the definition of 'significant effect' to include adverse effects on cultural practices. Thus, Act 50 requires an assessment of cultural practices to be included in the Environmental Impact Statement and to be taken into consideration during the planning process. The concept of geographical expansion is recognized by using, as an example, "the broad geographical area, e.g. district or ahupua'a" (OEQC 1997). It was decided that the process should identify 'anthropological' cultural practices, rather than 'social' cultural practices.

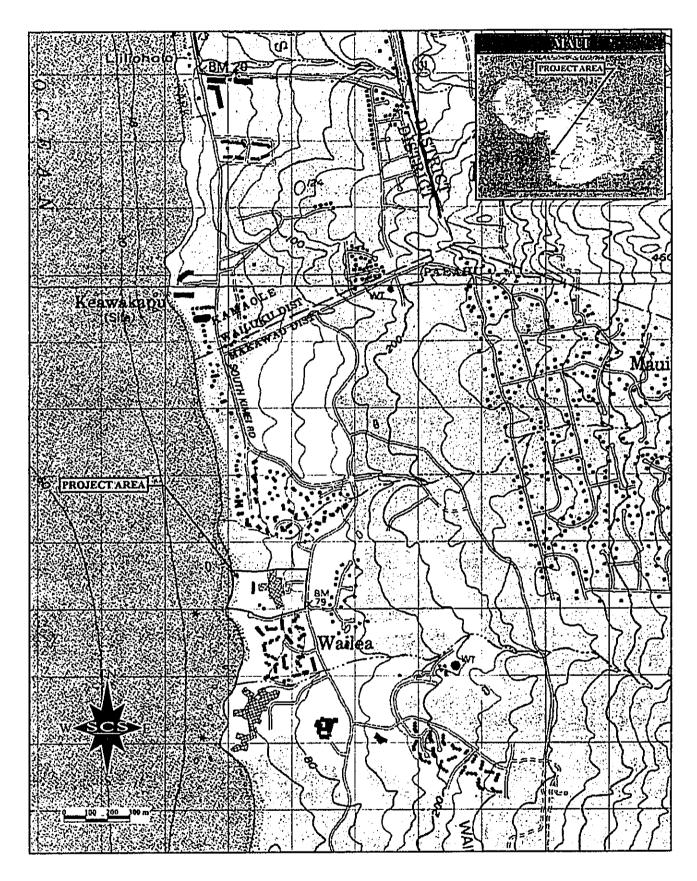


Figure 1: USGS Makena Quad Showing Project Area Location.

For example, limu (edible seaweed) gathering would be considered an anthropological cultural practice, while a modern-day marathon would be considered a social cultural practice. The discussion resulted in the following workable definition for cultural practices:

- 1.) A traditional cultural practice that is being conducted [at present].
- 2.) Traditional, beliefs, practices, life ways, societal, history of a community and its traditions, arts, crafts, music, and related social institutions [Act 50, Cultural Impact Assessment 2001].

METHODOLOGY

This Cultural Impact Assessment was prepared in accordance with the methodology and content protocol provided in the Guidelines for Assessing Cultural Impacts (OEQC 1997). This report contains archival and documentary research, as well as consultation with individuals or organizations with knowledge of the project area, its cultural resources, and its practices and beliefs. Based on this research, an assessment of the potential effects on cultural resources in the project area and recommendations for mitigation of these effects are proposed.

ARCHIVAL RESEARCH

Archival research focused on a historic document study involving both published and unpublished sources. These included legendary accounts of native and early foreign writers; early historical journals and narratives; historic maps and land records such as Land Commission Awards, Royal Patent Grants, and Boundary Commission records; historic accounts; and previous archaeological project reports.

CONSULTATION Individuals and/or groups who have knowledge of traditional practices and beliefs associated with a project area or who know of historical properties within a project area were sought for consultation. Individuals who had particular knowledge of traditions passed down from preceding generations and a personal familiarity with the project area were invited to share their relevant information. Initial contact was made with the Office of Hawaiian Affairs (OHA) on O'ahu, the OHA Community Resource Coordinator on Maui, Central Maui Hawaiian Civic Club, a Cultural Resource Planner in the Maui Planning Department, and the Wailea Community Association. In addition, a telephone interview was held with a long-time employee of the Renaissance Hotel who is a local resident.

PROJECT AREA AND VICINITY

The project area consists of a parcel of land totaling 15.578 acres situated within the Wailea Resort on the southern end of the Kīhei-Mākena region of Maui (Figure 2 and 3). The site has been used as a hotel since 1978. Specifically, the site is bounded by Wailea Alanui Drive on the east, and the Pacific Ocean to the west. The north and south contain commercial developments, as well as Ulua County Beach Park.

PAST POLITICAL BOUNDARIES

Traditionally, the division of Maui's lands into districts (moku) and sub-districts was performed by a kahuna (priest, expert) named Kalaiha'ōhia, during the time of the ali'i Kaka'alaneo (Beckwith 1940:383; Fornander places Kaka'alaneo at the end of the 15th century or the beginning of the 16th century [Fornander 1919–20, Vol. 6:248]). Land was considered the property of the king or ali'i 'ai moku (the ali'i who controls the island/district), which he held in trust for the gods. The title of ali'i 'ai moku ensured rights and responsibilities to the land, but did not confer absolute ownership. The king kept the parcels he wanted, his higher chiefs received large parcels from him and, in turn, distributed smaller parcels to lesser chiefs. The maka'āinana (commoners) worked the individual plots of land.

In general, several terms, such as moku, ahupua'a, 'ili or 'ili'ā ina were used to delineate various land sections. A district (moku) contained smaller land divisions (ahupua'a) which customarily continued inland from the ocean and upland into the mountains. Extended household groups living within the ahupua'a were therefore able to harvest from both the land and the sea. Ideally, this situation allowed each ahupua'a to be self-sufficient by supplying needed resources from different environmental zones (Lyons 1875:111). The 'ili 'āina or 'ili were smaller land divisions next to importance to the ahupua'a and were administered by the chief who controlled the ahupua'a in which it was located (ibid:33; Lucas 1995:40). The mo'o'āina were narrow strips of land within an 'ili. The land holding of a tenant or hoa 'āina residing in a ahupua'a was called a kuleana (Lucas 1995:61). The project area is located within the old district of Honoua'ula (presently known as the Makawao District) in the ahupua'a of Paeahu, which literally translated means "row [of] heaps," and was traditionally part of the "Wailea lands", consisting of the ahupua'a of Paeahu, Palauea, Keauhou, Kalihi, Waipao, and Papaanui (Pukui et al. 1974:173; Barrère 1975:30).

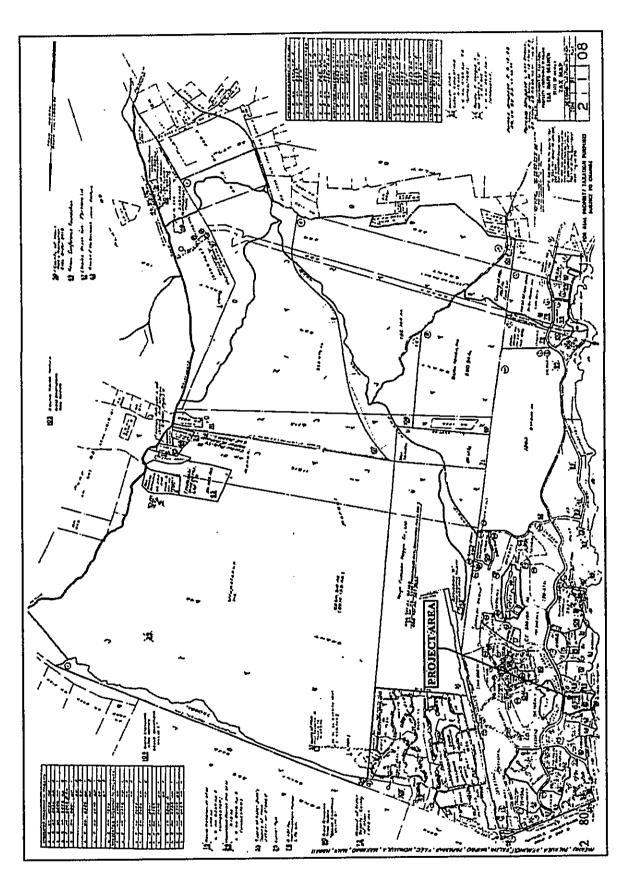


Figure 2: Tax Map Key [TMK] Showing Project Area.

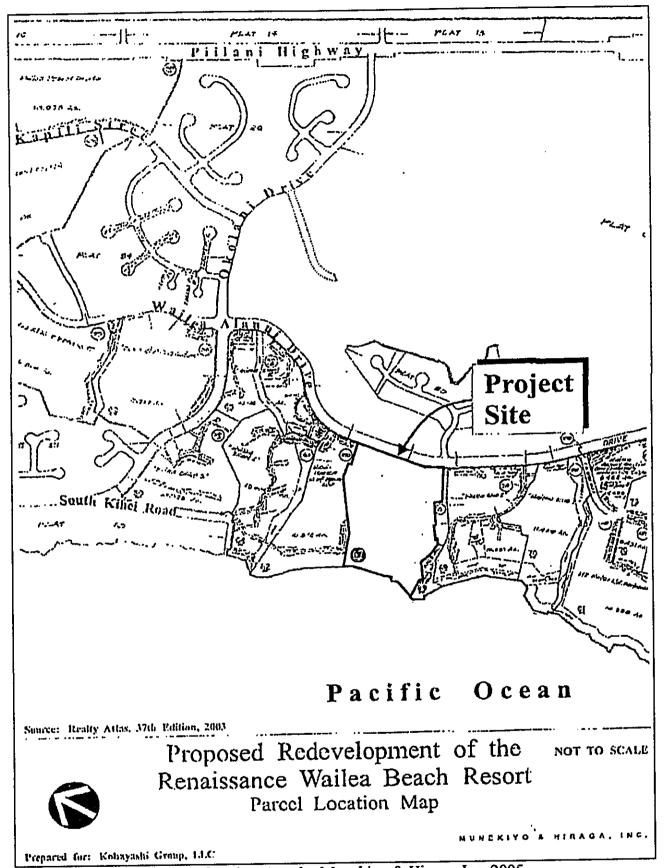


Figure 3: Plan View Map of Project Area by Munekiyo & Hiraga, Inc. 2005.

TRADITIONAL SETTLEMENT PATTERNS

The Hawaiian economy was based on agricultural production and marine exploitation, as well as raising livestock and collecting wild plants and birds. Extended household groups settled in various ahupua 'a. During pre-Contact times, there were primarily two types of agriculture, wetland and dry land, both of which were dependent upon geography and physiography. River valleys provided ideal conditions for wetland kalo (Colocasia esculenta) agriculture that incorporated pond fields and irrigation canals. Other cultigens, such as $k\bar{o}$ (sugar cane, Saccharum officinaruma) and mai 'a (banana, Musa sp.), were also grown and, where appropriate, such crops as 'uala (sweet potato, Ipomoea batatas) were produced. This was the typical agricultural pattern seen during traditional times on all the Hawaiian Islands (Kirch and Sahlins 1992, Vol. 1:5, 119; Kirch 1985). Agricultural development on the leeward side of Maui was likely to have begun early in what is known as the Expansion Period (A.D. 1200–1400 [Kirch 1985]). According to Handy, there was "a small community of native fishermen who from time to time cultivate small patches of potatoes when rain favors them" who lived in Makena—just south of the project area in the 1940s. He writes:

For fishing, this coast is the most favorable on Maui...I think it is reasonable to suppose that the large fishing population which presumably inhabited this leeward coast ate more sweet potatoes than taro with their fish... Formerly, before deforestation of the uplands, it is said that there was ample rain in favorable seasons for planting the sweet potato, which was the staple here. A large population must have lived at Makena in ancient times for it is an excellent fishing locality, flanked by an extensive area along shore and inland that was formerly very good for sweet potato planting and even now is fairly good, despite frequent droughts... [1940:159].

North of the project area in the vicinity of Kīhei, some of the most important royal fishponds had been constructed. Their origin is lost in antiquity, but rebuilding and repairing occurred as early as the reign of Pi'ilani in the 1500s and continued to the reign of Kekaulike (A.D. 1700s [Cordy 2000]). These ponds provided fish for Kamehameha I and were still functioning in historic times. Wilcox (1921) noted that prisoners were sent from Kaho'olawe to repair its walls in the 1800s.

WESTERN CONTACT

Early records, such as journals kept by explorers, travelers and missionaries, Hawaiian traditions that survived long enough to be written down, and archaeological investigations have assisted in the

understanding of past cultural activities. Unfortunately, early descriptions of this portion of the Maui coast are brief and infrequent. Captain King, Second Lieutenant on the *Revolution* during Cook's third voyage briefly described what he saw from a vantage point of "eight or ten leagues" (approximately 24 miles) out to sea as his ship departed the islands in 1779 (Beaglehole 1967). He mentions Pu'u Öla'i and enumerates the observed animals, thriving groves of breadfruit, the excellence of the taro, and almost prophetically, says the sugar cane is of an unusual height. Seen from this distance the uplands of Kīpahulu-Kaupo and 'Ulupalakua were apparently his focus.

In the ensuing years, LaPérouse (1786), Nathaniel Portlock and George Dixon, (also in 1786), sailed along the western coast. LaPérouse was the first recorded European to set foot on Maui south of the project area at Keoni'ō'io. His impressions of the leeward coast left no doubt as to its inhospitable environment:

The Indians of the villages of this part of the island hastened alongside in their canoes, bringing, as articles of commerce, hogs, potatoes, bananas, roots of arum, which the Indians call taro, with cloth and some other curiosities making part of their dress...I had no idea of a people so mild and so attentive...It was so late before out sails were handed, that I was obliged to postpone going on shore at this place till the next day...but we had already observed, that this part of the coast was altogether destitute of running water, the slope of the mountains having directed the fall of all the rains towards the weather side...

The soil of this island is entirely formed of decomposed lava, and other volcanic substances. The inhabitants have no other drink but a brackish water, obtained from shallow wells, which afford scarcely more than half a barrel a day. During our excursion we observe four small villages of about ten or twenty houses each, built and covered with straw in the same manner as those of out poorest peasants [Barrère 1975:13–18].

Archibald Menzies, a naturalist accompanying Vancouver stated, "...we had some canoes off from the latter island [Maui], but they brought no refreshments. Indeed, this part of the island appeared to be very barren and thinly inhabited" (Menzies 1920:102). According to Kahekili, then chief of Maui, the extreme poverty in the area was the result of the continuous wars between Maui and Hawai'i Island, which caused the land to be neglected and human resources wasted (Vancouver 1984:856).

In the 1840s, a drastic change in the traditional land tenure resulted in a division of island THE *MĀHELE* lands and a system of private ownership based on Western law. While it is a complex issue, many scholars believe that in order to protect Hawaiian sovereignty from foreign powers, Kauikeaouli (Kamehameha III) was forced to establish laws changing the traditional Hawaiian society to that of a market economy (Daws 1968:111; Kuykendall Vol. I, 1938:145 et passim; Kame'eleihiwa 1992:169-70, 176).

Among other things, the foreigners demanded private ownership of land to insure their investments (Kuykendall Vol. I, 1938:138 et passim; Kame'eleihiwa 1992:178; Kelly 1998:4). Once lands were made available and private ownership was instituted, native Hawaiiansincluding the maka 'āinana (commoners)—were able to claim the plots they were cultivating and living on, if they had been made aware of the foreign procedures (kuleana lands, LCAs). This land division, or Māhele, occurred in 1848. The awarded parcels were called Land Commission Awards (LCA). If occupation could be established through the testimony of witnesses, the petitioners were issued a Royal Patent number and could then take possession of the property (Chinen 1961:16). Fifteen LCAs were claimed in the ahupua 'a of Paeahu (twelve were awarded); however, none of these were located on or near the present project area (Waihona `Aina 2005).

Paeahu Ahupua'a was originally given to Moses Kekuaiwa who returned it to the King, Kauikeaouli (Kamehameha III), who assigned it to the government. As government land, it could be sold, but was still subject to the rights of the native tenants. Land use in Paeahu based on the Māhele records is discussed at length in (Barrère 1975). Briefly, in 1836, the konohiki (land agent) for Paeahu was Pikanele. He managed the lands for his chief, Hoapilikane. In turn, Pikanele appointed Ainua, who resided on the Paeahu lands, to be his agent (luna), and, who in turn, allowed others to receive lands, through the grace of Pikanele. All these lands were primarily mauka, above the old road to Kula and were used to grow Irish potatoes. In 1850, the governor of Maui, James Young Känehoa, (the son of John Young, adviser to Kamehameha I), stopped the further planting on unoccupied lands. Governor James Young Kānehoa purchased four 879-acre parcels of Paeahu in 1851. The same year, Kānehoa sold the land to Warren Goodale, resulting the loss of many kuleana plots. Goodale retained the title until 1862 when he sold 4,445 acres to James Austin. In 1864, Austin sold the land to James Makee of 'Ulupalakua Ranch. Makee used his land for cattle and sugar cane cultivation for many years. In 1883, the last sugar crop was milled at the 'Ulupalakua Mill and the fields were used for cattle pasturage. Wailea remained within the ranch until a shift in economic strategy began in the 1970s, when its coastal region underwent rapid and prolonged development for residential and commercial projects, as well as a large complex of hotels, recreational facilities, shops, and restaurants. An important part of the Wailea development was the assurance that they would allow and provide public access to the beaches along the coast for visitors and Maui residents (Clark 1980).

CULTURAL ASSESSMENT

Letters have been sent to the Office of Hawaiian Affairs (OHA) on O'ahu, the OHA Community Resource Coordinator on Maui, Central Maui Hawaiian Civic Club, the Maui Planning Department, and the Wailea Community Association, to invite consultation and information concerning cultural activities occurring at or in the vicinity of Parcel 67. In addition to this study SCS plans further research in the project area.

Based on community response so far received and archival research it is reasonable to conclude that, pursuant to Act 50, the exercise of native Hawaiian rights, or any ethnic group, related to gathering, access or other customary activities will not be affected by renovations on Parcel 67. There have been no activities identified thus far. At this time it is believed that renovation of the hotel would cause no adverse effects.

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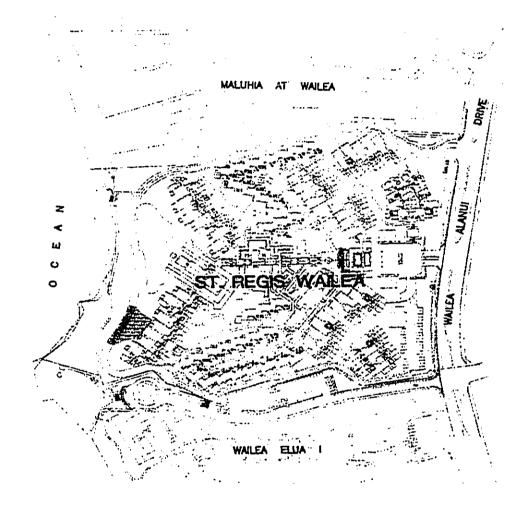
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Appendix D

Preliminary Engineering Report for St. Regis Wailea, October 24, 2005

PRELIMINARY ENGINEERING REPORT For St. Regis Wailea

Wailea, Maui, Hawaii Tax Map Key (2) 2-1-008:067



Project:

St. Regis Wailea Wailea, Maui, Hawaii Date:

October 24, 2005

Client:

Kobayashi Group 1001 Bishop Street Pauahi Tower, Suite 1570 Honolului, Hawaii 96813 Phone: (808) 524-1508 Fax: (808) 524-0766 Consultant:

RFB

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		C-1

I. PURPOSE

The purpose of this report is to evaluate the effects of the project on existing infrastructure. This report will review the water system, wastewater system, and electrical, telephone, and cable television systems serving the project. This report will also provide an analysis of existing and proposed drainage systems to comply with the requirements for submittal of a preliminary drainage plan for a County of Maui Special Management Area Permit. The drainage analysis will describe existing drainage conditions, provide preliminary grading and drainage plans, and provide drainage design information for incorporation into the final designs.

II. PROJECT DESCRIPTION

A. General Location

The project involves redevelopment of the 349-room Renaissance Wailea Beach Resort in Wailea, Maui. The 15.578-acre site adjoins the Maluhia at Wailea single-family residences to the north, Wailea Alanui Drive to the east, the County public beach access and Wailea Elua condominiums to the south, and the ocean to the west. The rectangular-shaped parcel lies between Wailea Alanui Drive and the ocean. Its frontage along Wailea Alanui Drive, a County-owned street, is about 700 feet and its depth between the street and the ocean is about 950 feet. The County public beach access adjoins the site's southerly boundary and includes a driveway, parking stalls, and a restroom building.

There are many other developed properties in the vicinity of the site. The Wailea Ekahi condominiums are on the northerly side of the Maluhia site and the Wailea Marriott Resort is on the southerly side of the Wailea Elua site. A portion of the Wailea Blue Golf Course and the Fairway Estates single-family residences lie to the east of Wailea Alanui Drive.

The tax map designates this parcel as Tax Map Key (2) 2-1-008:067. (See Figure 1 - Location Map (USGS Map), page 11 and Figure 2 - Vicinity Map (Tax Map), page 12.)

B. Project Components

The project involves demolishing the existing hotel and constructing a condominium-hotel or "condotel" on the site. Architectural components include 193 condominium units, an entry pavilion, a spa, two restaurants, an underground parking garage, swimming pools, and reflecting ponds.

Related site improvements consist of building pad grading, site grading, paving, and site utilities. Site utilities include water, wastewater, drainage, and electrical, telephone, and cable television system improvements. Major drainage system improvements include rerouting an existing 84-inch storm drain along the south side of the site and installing detention/retention drainage basins and storm water filtration units. The project also includes street improvements along Wailea Alanui Drive. These improvements involve re-

configuring the median to allow for a new driveways into the site and closing off the existing driveway. In addition, the project includes improvements to the existing County public beach access.

III. WATER SYSTEM

The County of Maui, Department of Water Supply provides water service for the Wailea Resort area. Separate systems serve the upper elevations, middle elevations, and lower elevations of the resort. The low-level system serves this project and other properties in the lower elevations of the resort. This system consists of various reservoirs and a network of distribution lines. The distribution lines near the site include a 20-inch main along Wailea Alanui Drive, and a 12-inch on-site branch and fire hydrant at the front of the hotel.

Two groups of domestic and fire protection laterals and meters connect to the 12-inch onsite branch. The first group, located near the porte cochere, includes two 3-inch meters for domestic use and one 8-inch detector check meter for fire protection. The domestic and fire protection lines from these meters connect to the building water systems near the front of the hotel. In addition, the fire protection line branches off to a fire hydrant at the porte cochere. The second group, located along the entry driveway, includes one 3-inch meter for domestic use and one 6-inch detector check meter for fire protection. The domestic line from the 3-inch meter runs along the northerly and westerly sides of the site, branches off, and connects to the Mokapu Wing, the pool area, and other areas on the westerly side of the site. The fire protection line follows the alignment of the domestic line and ends at a fire hydrant at the Mokapu Wing.

Irrigation water for the site is provided through a separate irrigation system and two 2-inch water meters along Wailea Alanui Drive. The meters are located on the mauka side of the street, approximately 800 feet south of the Okolani Drive intersection. The Wailea Community Association maintains this system and the landscape plantings within the streets in the Wailea Resort. The association also meters and bills the hotel for irrigation water used on the site. The source of the irrigation water is the Department of Water Supply system.

Actual domestic water consumption averaged 149,000 gallons per day based on records from a 34-month period from December 2000 through September 2003. During this period, domestic consumption ranged from about 121,000 gallons per day to about 188,000 gallons per day. Actual irrigation water usage during this same period averaged 62,000 gallons per day. During this period, irrigation use ranged from about 42,000 gallons per day to about 81,000 gallons per day.

Projected domestic water demands will be based on the number of condominium units, restaurant and bar seats, and employees. In addition, losses due to evaporation of swimming pool water will be considered. The project involves constructing 193 condominium units. According to the Department of Water Supply consumption guidelines, the average daily demand for a multi-family residential unit is 560 gallons per

unit per day. The new condominium units will therefore require 108,080 gallons per day.

Projected domestic water demands for restaurant and bar seats, and employees will be based on wastewater flows. Water demands for such uses are assumed to be equal to wastewater flows. As noted on Appendix B, restaurant and bar seats, and employees will require about 29,100 gallons per day.

According to the United States Geological Survey, annual pan evaporation rates for the State of Hawaii vary according to topography and location. The annual pan evaporation over the open ocean is about 65 inches. At higher elevations, between 2,000 and 4,000 feet, the rate can be as low as 25 percent of the open-ocean rate. On the leeward coastal areas, the rate can be as high as 100 inches. For this analysis, the annual rate of 100 inches will be used. This amount is equal to a daily evaporation rate of 0.0228 feet or 0.171 gallons per square foot. An estimated swimming pool area of 14,100 square feet results in evaporation losses of 2,400 gallons per day.

The total projected domestic water demand is therefore about 139,600 gallons per day. This amount is about 9,400 gallons per day or about 6 percent less than the current daily usage.

Projected irrigation water usage will be based on comparing the planted areas before and after development. Because irrigation water will be used to fill reflecting ponds, losses due to evaporation will also be considered. The planted areas will be reduced from 10.0 acres to 7.7 acres, resulting in a reduction of about 14,400 gallons per day. Similarly, the area of reflecting ponds will decrease by 2,400 square feet, resulting in a reduction in evaporation losses of about 400 gallons per day. The net reduction in irrigation water usage is 14,800 gallons per day or about 24 percent of the current daily usage.

Preliminary water meter sizing data indicates that the three existing 3-inch meters have adequate capacity to serve the new project. The preliminary computations indicate a peak flow demand of 510 gallons per minute for domestic uses. An assumed peak flow demand for irrigation uses of 100 gallons per minute results in a total peak flow of 610 gallons per minute. With a combined capacity of 960 gallons per minute, the three existing 3-inch meters have sufficient capacity to deliver the peak flow demand. Therefore, no additional domestic water meters are required for this project. (See preliminary water meter sizing data in Appendix A.)

Water system improvements for this project include relocation of the existing domestic water meters; installation of a new double check detector assembly for fire protection; installation of 8-inch fire protection water lines and fire hydrants; and installation of 4-inch potable water lines. As required by the Department of Water Supply, the existing submetered irrigation line from Wailea Alanui Drive will be cut off and all new lines will be connected to the three existing domestic water meters.

IV. WASTEWATER SYSTEM

The County of Maui provides a wastewater collection system for the area. The collection system carries wastewater to the Kihei Wastewater Reclamation Facility for treatment, reuse, and disposal. The wastewater collection system includes gravity sewers, force mains, and pump stations along Wailea Alanui Drive and South Kihei Road.

Existing gravity sewer lines and manholes convey wastewater through the site. An interceptor line, consisting of 12-inch and 15-inch pipe, runs along the westerly side of the site and receives wastewater from various branch lines. These branch lines, consisting of 4-inch and 8-inch pipe, collect wastewater from the buildings and convey it to the interceptor line. The interceptor line also receives wastewater from the adjoining Maluhia at Wailea site to the North. The interceptor line carries wastewater to the County's wastewater pump station located in the adjoining public beach access parcel to the South. The wastewater is then pumped through a 10-inch force main to a 24-inch gravity sewer main along Wailea Alanui Drive.

Preliminary data indicates a substantial reduction in wastewater flow due to the proposed development. The estimated wastewater flow for existing conditions is 150,000 gallons per day. This amount is based on 349 hotel rooms, and various restaurant and employee components. The computed wastewater flow is approximately equal to actual average domestic water use of 149,000 gallons per day. The estimated wastewater flow for the proposed development is 78,000 gallons per day. This amount is based on 193 condominium units, and various restaurant and employee components. The reduction in flow from existing conditions are due to the reduction of wastewater from a condominium unit compared to a resort hotel with in-house laundry facilities, the substantial reduction in number of units, and the corresponding reduction in number of employees. (See preliminary wastewater computations in Appendix B.)

The Wastewater Reclamation Division (WRD) of the County Department of Public Works and Environmental Management provided the following information about the wastewater reclamation facility and the collection system. According to the WRD, the Kihei Wastewater Reclamation Facility has a design capacity of 8.0 million gallons per day (MGD). As of the last quarter of 2003, 6.4 MGD were allocated to various projects. However, actual flows were about 5.5 MGD. The WRD also stated that the collection system should be able to handle increases in wastewater flows.

Based on the preliminary computations and the information provided by WRD, the existing treatment facility and collection system can handle wastewater produced by this project.

V. ELECTRICAL, TELEPHONE & CABLE TELEVISION SYSTEMS

Maui Electric Company, Hawaiian Telcom, and Oceanic Time Warner Cable provide electrical, telephone, and cable television service for the area. These utility companies currently provide services for the existing facilities. The project will be served by new

underground lines that connect to existing facilities along Wailea Alanui Drive or extensions of existing on-site lines.

VI. DRAINAGE SYSTEM

A. Topography

The topographic map shows existing ground contours and improvements of the on-site areas. (See Figure 5 - Topographic Map, page 15.) The site is fully developed with buildings, parking lots, a parking structure, driveways, swimming pools, ponds, and landscaped areas. Buildings include the main hotel with three guestroom wings, the 26-room Mokapu Wing, a poolside restaurant building, and other small structures. Ground elevations of the site range from mean sea level to 80 feet above mean sea level. The average ground slope of the property in the mauka-makai direction is 8.4 percent.

B. Soil

According to the Soil Conservation Service, the on-site soils include Makena Series (MXC), Dune Land (DL), and Beaches (BS). The Makena Series covers about 2 acres at the northeasterly corner of the site or about 12 percent of the total area. Dune Land covers about 13 acres within the central portion of the site or about 83 percent of the total area. Beaches covers slightly less than one acre along the westerly, seaward perimeter or about 5 percent of the total area. (See Figure 3 - Soil Map, page 13.)

The Makena Series consists of well-drained soils on the uplands of Maui developed from volcanic ash. The survey characterizes the soils as having a 4-inch thick surface layer of very dark brown loam, a 19-inch thick subsoil layer of very dark grayish-brown and dark yellowish-brown silt loam, and a substratum of dark yellowish-brown cobbly silt loam. Other characteristics include moderately rapid permeability, slow to medium runoff, and slight to moderate erosion hazard.

Dune land consists of hills and ridges of sand-sized particles drifted and piled by wind. This land type occurs in coastal areas where elevations range from nearly sea level to 150 feet above mean sea level.

Beaches consist of light-colored sands derived from coral and seashells, or dark-colored sands derived from basalt and andesite, and are subject to the wash of ocean waves.

C. Flood and Tsunami Hazard

According to the flood insurance rate map, the seaward boundaries of the property are within special flood hazard areas. These areas run along the property's 620-foot shoreline boundary and extend into the property from the shoreline. The widths of these areas range from about 10 feet to 150 feet. The average width is about 75 feet. These special flood hazard areas encompass about one acre or 6 percent of the site.

The map identifies two flood hazard zones on the site: Zone V10, an area subject to tsunami or coastal floods with high velocity wave action, and Zone A4, an area subject to inundation due to storm water from upland areas. Both areas have a base flood elevation of 7 feet above mean sea level. The remaining area of 14.6 acres or 94 percent of the site is within Zone C, an area subject to minimal flooding. (See Figure 4 - Flood Insurance Rate Map, page 14.)

D. Existing Drainage Improvements

Existing on-site drainage improvements include curb inlet catch basins, grated drain inlets, drain pipes, storm drain manholes, outlet structures, rock-lined channels, and grassed swales. Catch basins and drain inlets collect storm runoff from the parking lots and driveways on the mauka side of the site, and drain pipes carry the collected runoff to the makai side of the site. The runoff is then discharged from the pipes and allowed to flow over the site and to the ocean. There are limited drainage improvements on the makai side of the site. On the makai side of the site, storm drainage is generally directed away from buildings and dispersed by surface flows. (See Figure 6 - Existing Drainage Plan, page 16.)

Besides routing on-site flows from the mauka side to the makai side of the site, the on-site drain pipes carry off-site flows through the site. At the northeasterly corner of the site, an 18-inch drain collects runoff from the golf course and discharges it along the northerly property line. At the easterly side of the site, three 60-inch culverts carry off-site runoff into the site. An 84-inch drain pipe connects to the 60-inch culverts, carries the runoff under the southeasterly parking lot, and discharges the runoff through an outlet structure at the southerly property line. This runoff continues downstream through a rock-lined channel at the outlet structure and a grassed channel that leads to the ocean. At the southeasterly corner of the site, a 24-inch drain collects runoff from the golf course and ties in to the 84-inch drain pipe at the southeasterly parking lot.

The off-site areas that drain into the site are identified on the off-site drainage map. The 18-inch drain receives runoff from 4.8 acres of golf course area designated as Area 1. The triple 60-inch culverts receive runoff from 67.2 acres of Wailea Resort land, designated as Area 2, and 125.6 acres of land on the mauka side of Piilani Highway, designated as Area 32. Area 32 was defined in the hydrology report for the design of the culverts along Piilani Highway. The hydrology report recommended a 50-year storm with a peak flow of 430 cubic feet per second for design of the culverts at the highway. A supplement to the drainage report for the hotel recommended a 100-year storm with a peak flow of 520 cfs for design of the 84-inch drain pipe through the hotel site. The 24-inch drain receives runoff from 4.1 acres of golf course and residential areas designated as Area 3. The site also receives surface runoff from 3.7 acres of beach access parking, golf course, and residential areas designated as Area 4. (See Figure 7 - Off-Site Drainage Map, page 17.)

E. Proposed Drainage Improvements

Off-site runoff from the upslope areas will continue to be conveyed through the site and

discharged at the shoreline area. Currently runoff from Area 2, Area 32, and Area 3 are collected and routed through the existing 84-inch corrugated metal pipe drain to the outlet structure at the southerly property line. The existing drain will be replaced with a new 84-inch reinforced concrete pipe. Because of the proposed development along the northerly property line, runoff from Area 1 will also be carried to the new 84-inch drain. Runoff from Area 4, which currently sheet flows into the site, will be collected and directed to the new 84-inch drain. The new drain will be realigned to accommodate the proposed underground parking structure, and extended and re-routed around the proposed condominiums along the southerly property. Due to limited depth, concrete arches will be used to convey runoff at the lower end of the site to the shoreline setback line. A grassed channel will be constructed at the end of the new concrete arches to transition flows to the existing grassed channel within the shoreline area.

The proposed drainage plan identifies four on-site drainage sub-areas. Drainage improvements within Area A consist of minor grading within the shoreline area and installation of a detention/retention drainage basin outside of the shoreline area to mitigate increases in runoff rates and volumes. The drainage basin consists of subsurface large-diameter perforated pipes or concrete chambers. Drainage improvements within the other sub-areas include drain inlets, manholes, and drain pipes that collect surface runoff and convey the runoff to the drainage basin. (See Figure 8 - Preliminary Grading & Drainage Plan, page 18.)

Due to concerns of the quality of storm water released from a developed site, measures to improve the quality of storm water will be implemented. As shown on the Preliminary Grading and Drainage Plan, on-site runoff from Area B, Area C, and Area D will be directed to a storm water filtration unit. In addition, off-site runoff from Area 4 will be directed to a storm water filtration unit within the County Beach Access. These units will remove and retain suspended solids and debris from runoff due to small storm events, and will aid in improving the quality of storm water entering the ocean. These units will filter storm water before discharging it into the on-site drainage basin or the new drain which carries off-site runoff. The drainage basin will be designed to release pre-development flows into Area A. Area A will be graded to create flat or gently sloped grassed areas. Whenever feasible, storm water from Area A will be directed to these areas to allow it to infiltrate into the soil instead of flowing off the site.

The County drainage standards require the use of a 50-year, 1-hour rainfall for computing volumes and rates of flow. Drainage design will be based on the Rational Method.

Drainage improvements that involve transmission of storm flows will conform to the "Rules for the Design of Storm Drainage Facilities in the County of Maui." The rules will be applied to the sizing and spacing of inlets and manholes, and sizing of drain lines, channels, and culverts. Based on the County rules, the on-site drainage system will be designed to handle a storm with a recurrence interval of 50 years since the on-site drainage area is less than 100 acres. The off-site drain, however, will be designed to handle a storm with a recurrence interval of 100 years since the off-site drainage area is greater than 100 acres.

F. Conclusion

There will be no adverse effects on the adjacent or downstream properties due to this project. This conclusion is based on maintaining peak storm drainage discharge rates and storm drainage volumes at current levels.

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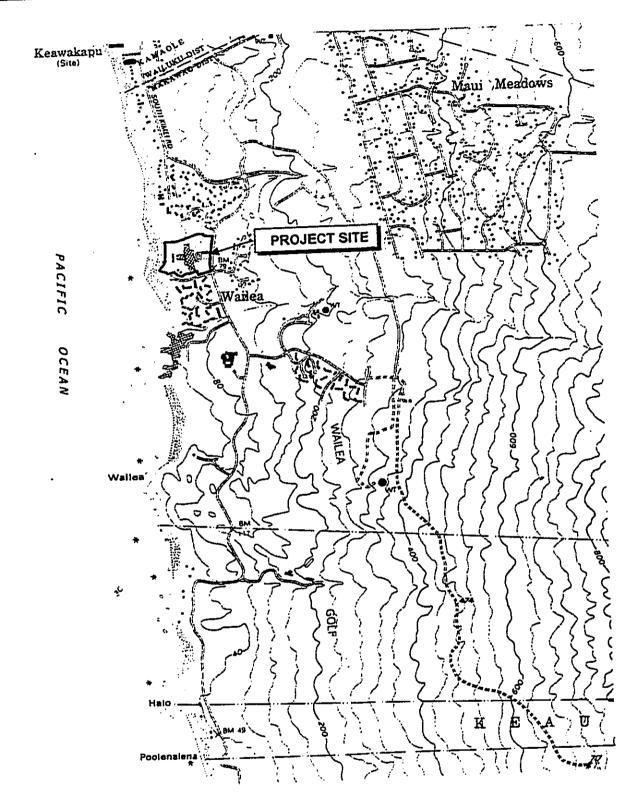
"C" (Wailea Alanui Drive), July 6, 1973.

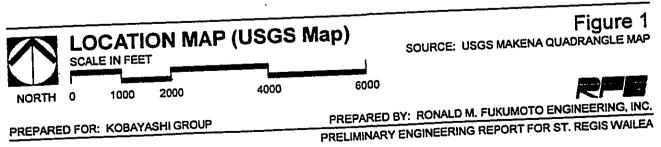
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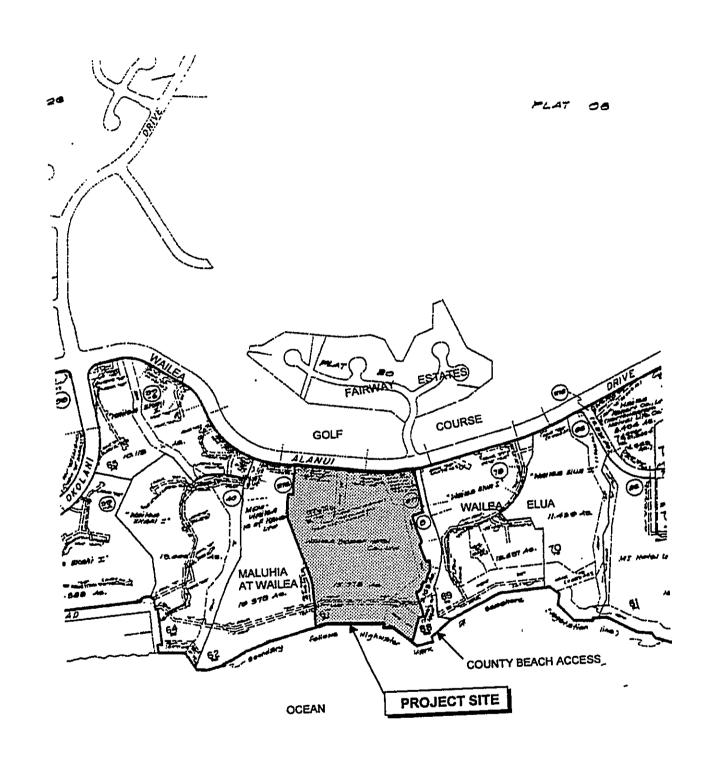


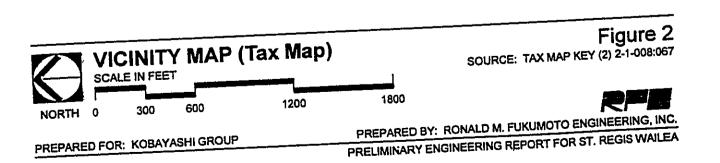
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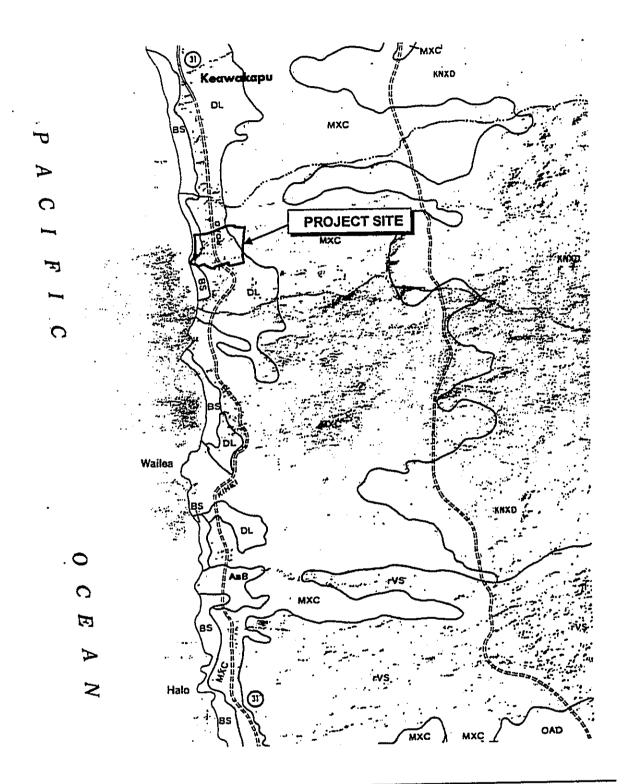
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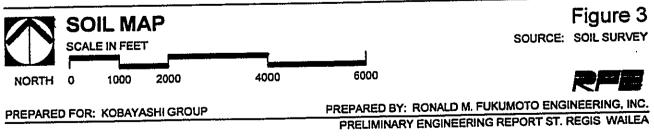


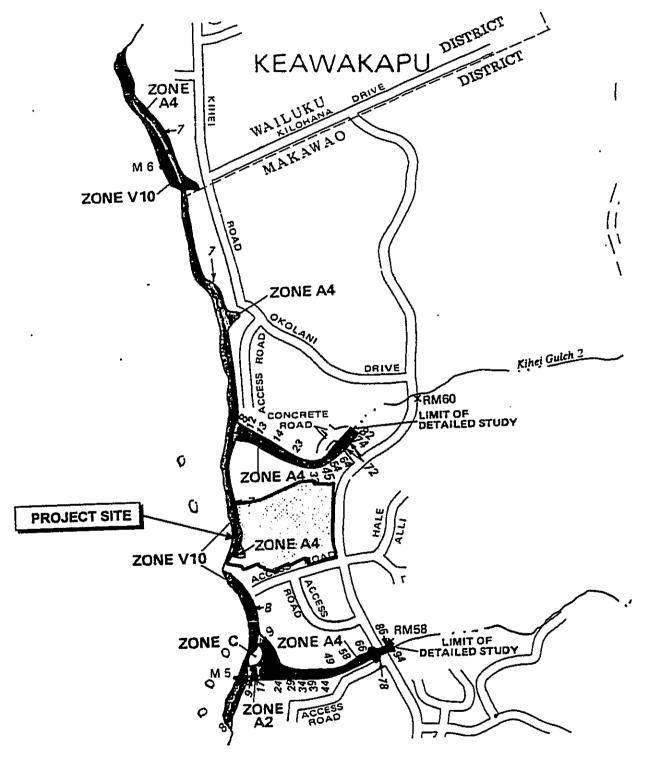


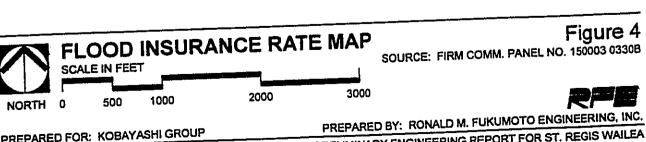


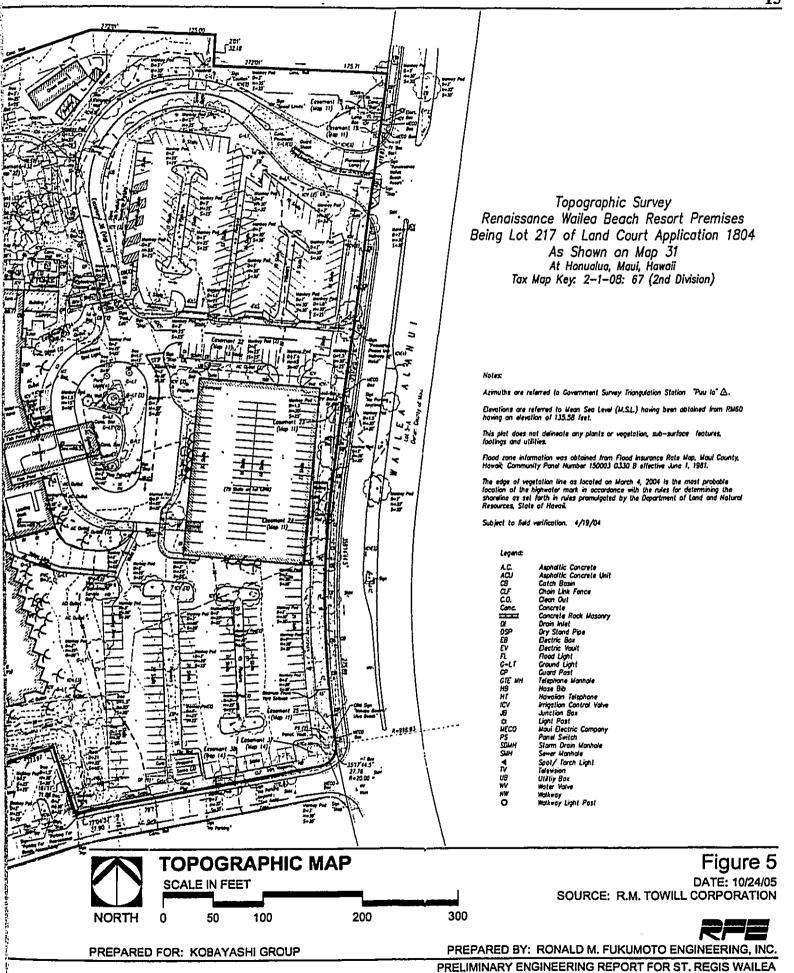


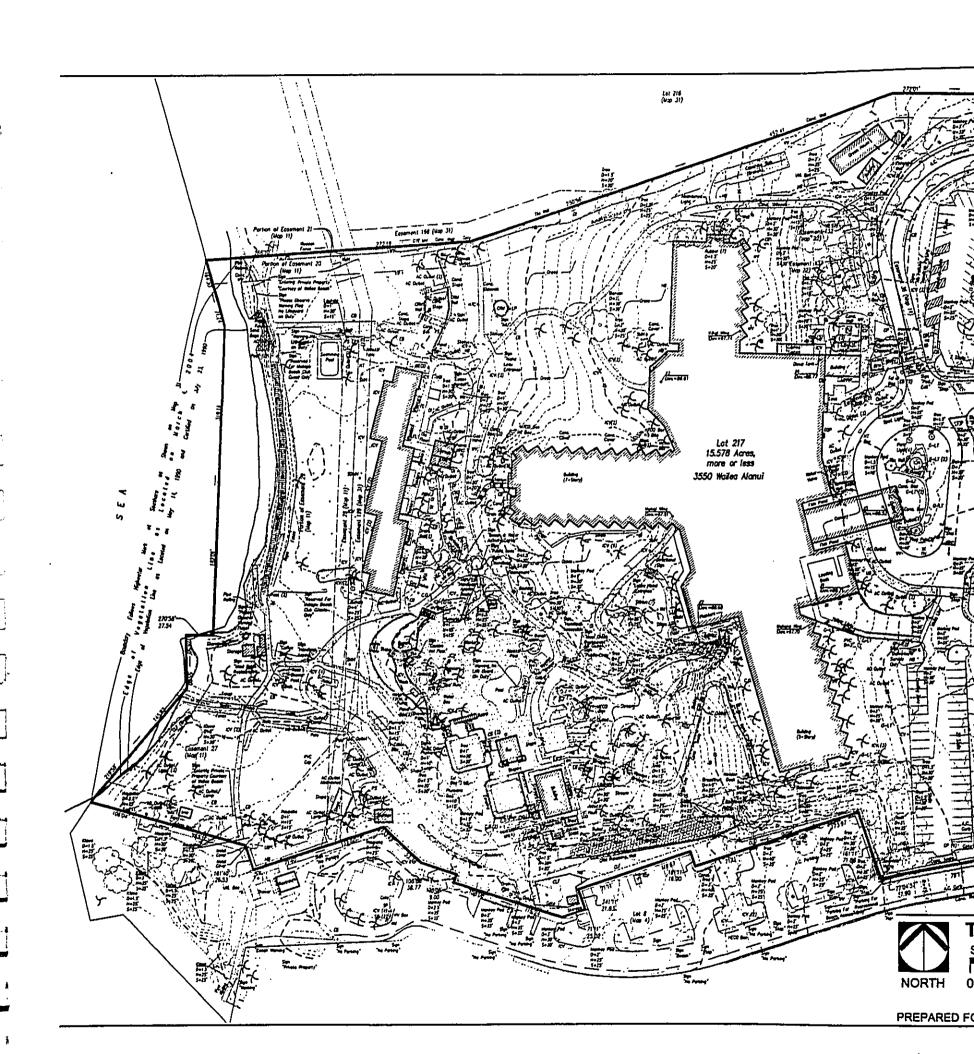


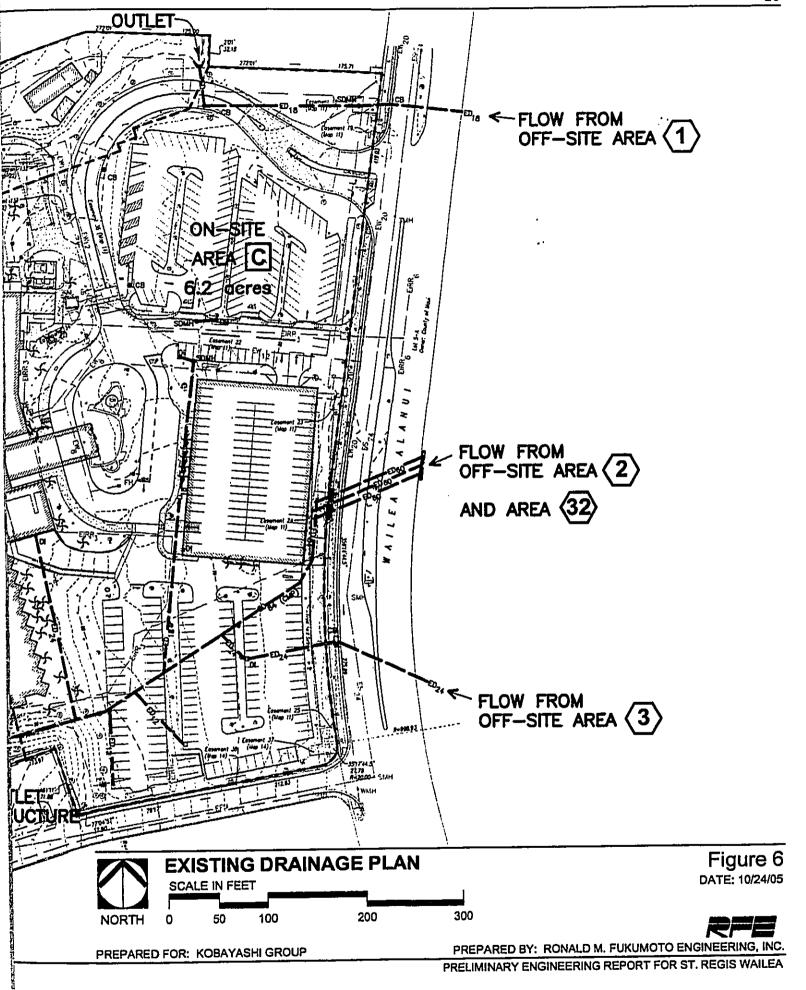


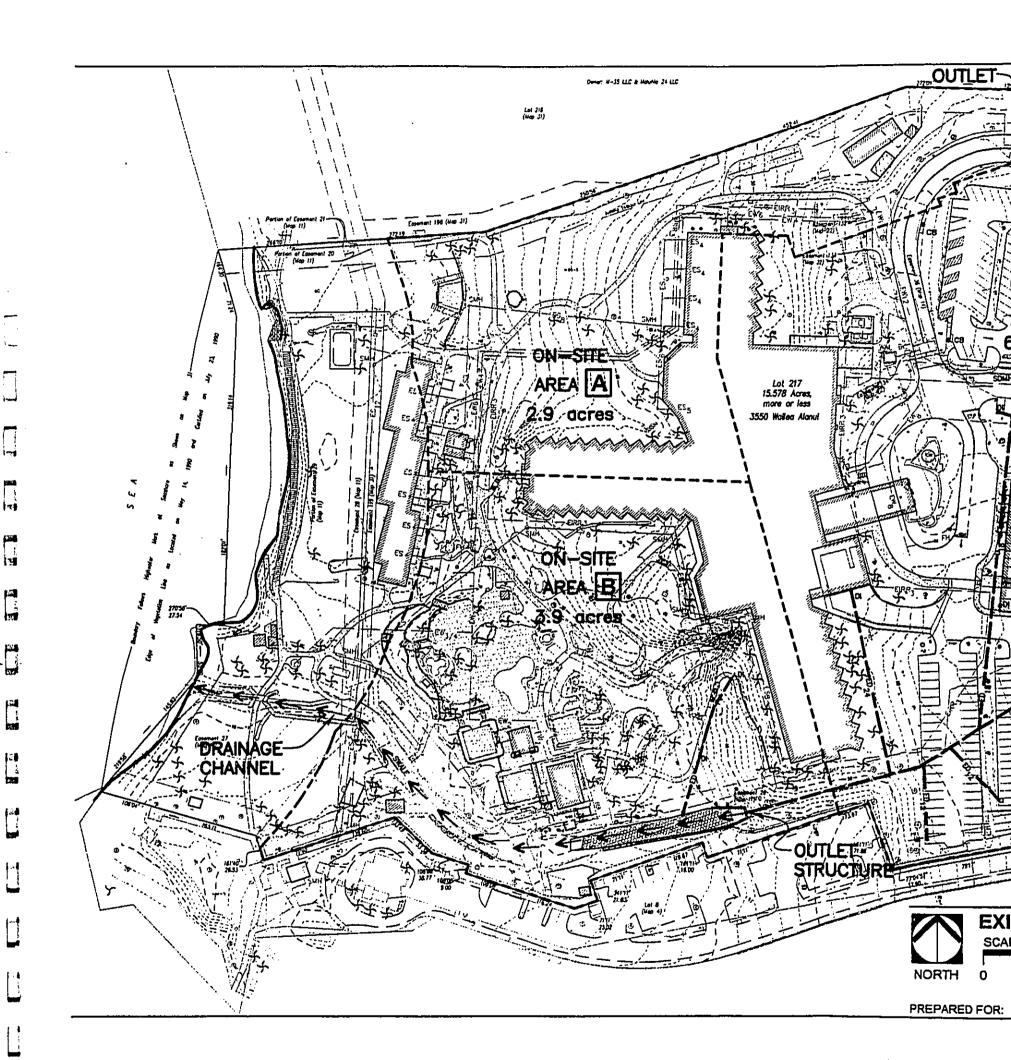


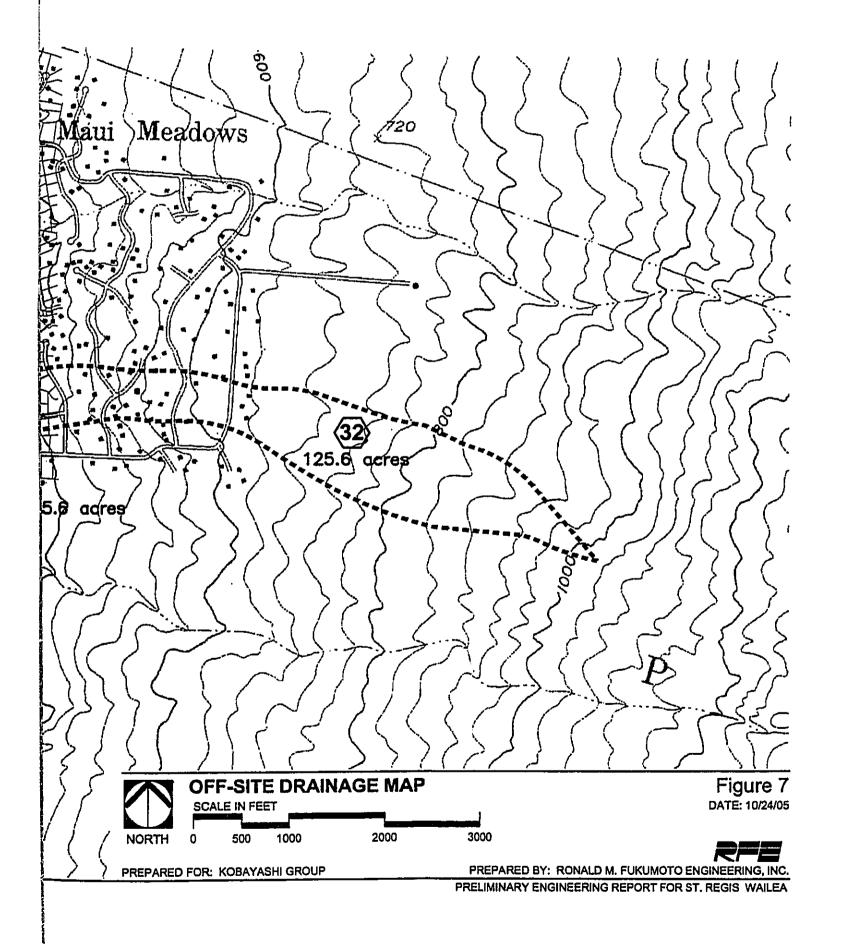


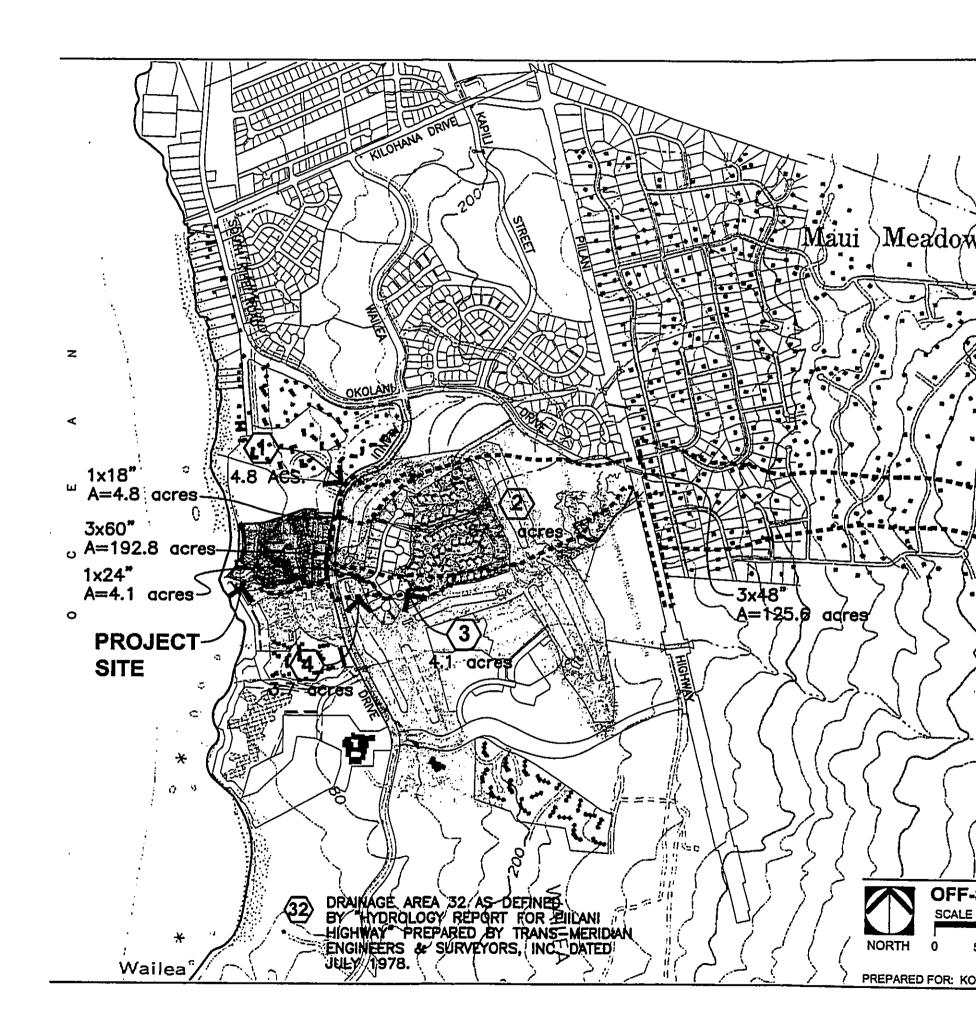


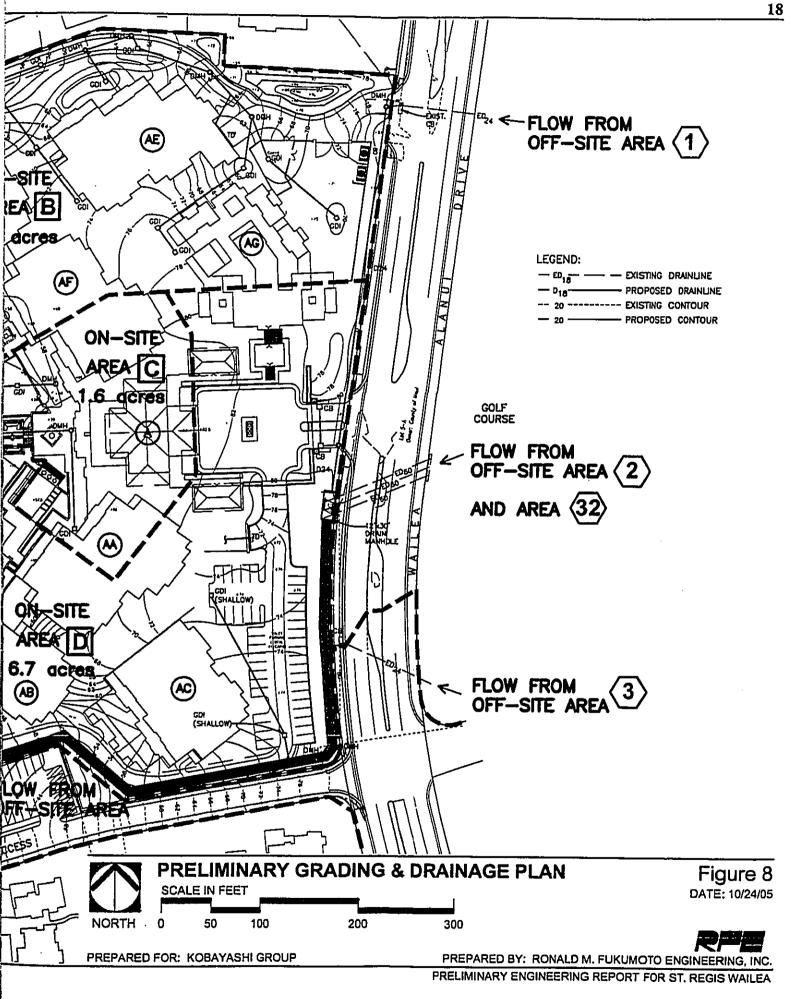


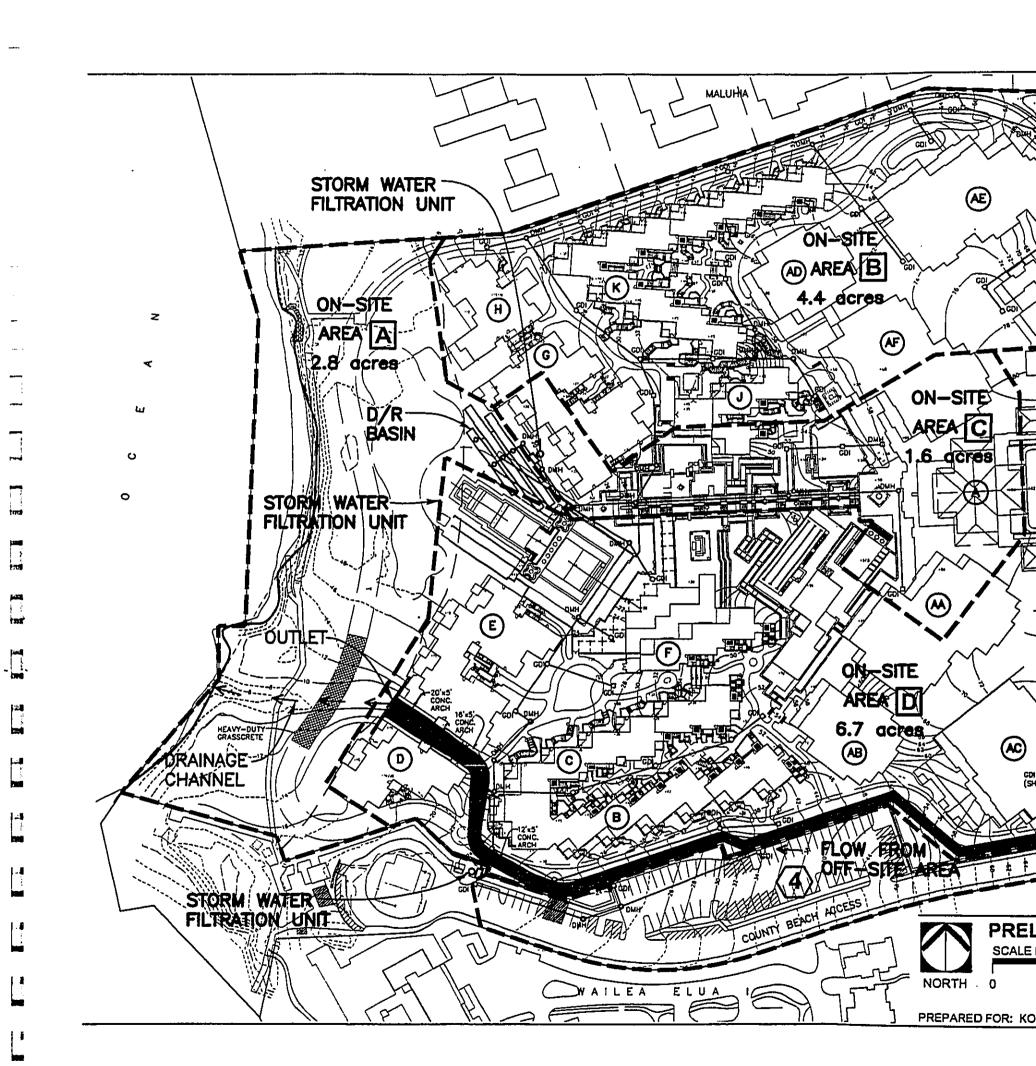












PRELIMINARY WATER INFORMATION

EXISTING WATER METER SIZING DATA

								· · · · · · · · · · · · · · · · · · ·
Fixture	Fixture Units per Fixture	Typical Guest Room	Commercial Kitchens	Commercial Laundry	Public Restrooms	Public Restaurants	Employee Lockers	Scullery Dishwash
Tub	1.6	1	*	-			-	-
Shower	1.6	•	-	-	-		4	-
Toilet	3	1	2	-	9		5	-
Urinal	3	-			5		2	
Lavatory	0.6	1	3	2	8	11	5	-
Kitchen Service Sink	4	-	16	-	-		-	3
Bar Service Sink	2		3			2	ļ 	
Fill Faucet	2		11	-		2		3
Commercial Dish Washer	5	-	3		-		-	11
Commercial Washing Machine	4	•	-	4	<u> </u>		<u> </u>	-
Laundry Service Sink	4	-	-	2	<u>-</u>		<u>-</u>	<u>-</u>
FU per Room		5.2	114.8	25.2	46.8	8.6	30.4	23.0
No. of Rooms (based on old dwgs.)		361	1	1	1	4	1	11
Total FU		1,877.2	114.8	25.2	46.8	34.4	30.4	23.0_
Fixture Unit Demand							<u></u>	
Peak Flow Rate (gpm)								
Meter Selection								
Meter Capacity (gpm)			<u> </u>		<u> </u>		<u> </u>	<u> </u>

R INFORMATION

<u></u>	·				
nts	Employee Lockers	Scullery/ Dishwasher	Employee's Restrooms	Total No. of Fixtures	Total FU
	-		-	361	577.6
	4	-	1	4	6.4
	5		6	383	1,149.0
	2		1	8	24.0
	5	_	4	387	232.2
1	-	3		19	76.0
				11	22.0
		3		22	44.0
	-	1		4	20.0
	-	-	•	4	16.0
<u> </u>	-	-	·	2	8.0
	30.4	23.0	23.4		
	11	1	11		
	30.4	23.0	23.4		2,175.2
					2,175
					345
					2 x 3-inch
					640

ST. REGIS WAILEA – New Facilities
Tax Map Key (2) 2-1-08:67
PRELIMINARY WATER METER SIZING DATA

Prepared for: Prepared by:

Kobayashi Group LLC Ronald M. Fukumoto Engineering, Inc.

Fixture	Fixture Units per Fixture	1 Bdrm Type A Condo	1 Bdrm Type B	2 Bdrm Type A Condo	2 Bdrm Type B Condo	3 Bdrm Type A Condo	3 Bdrm Type B Condo	3 Bdrm Type C Condo	4 Bdrm Type A Condo	Spa	Commercial Kitchens	Public . Restrooms	Dublio
	1.6	1	1	2	2	3	3	2	3	'			4-
Tub	1.6	. 1	1	2	2	3	3	3	4	10	<u> </u>		
Shower	1.7	1	2	3	3	4	4	3	5	10	2		
Toilet (Low Flow)	1.7	-	-	-		_	_			3			_
Urinal (Low Flow)	0.6	2	3	5	5	7	7	5	8	20	3	6	╨
Lavatory		1	1	1		1	1	1	1			-	\perp
Kitchen Sink	1.6		1	1	1	1	1	1	1	-		_	\perp
Dish Washer	2	1	1	1	1	1	1	1	1	_	_	_	
Washing Machine	2	1	·	1	 	-	 			8	6	_	
Kitchen Service Sink	4	-	•		 		 			1	-		
Bar Service Sink	2	1	-		· · · · · · ·		-			3	4	_	\Box
Fill Faucet	2		<u> </u>	-			 				2		
Commercial Dishwasher	5		-		<u> </u>	-	 -	-					上
FU per Building/Room	 	11.7	14.0	20.1	20.1	26.2	26.2			90.1	47.2		\perp
	+	90			21	12	42	6	4		2		+
No. of Buildings/Rooms	+	1,053.0			422.1	314.4	1,100.4	130.2	120.4	90.1	94.4	22.3	+
Total FU		1,000.5	1							<u> </u>			+
								<u> </u>	<u> </u>			-	+
Fixture Unit Demand				Ī			 			 	+	+	+
Peak Flow Rate (gpm)		<u> </u>		 				+	 	 	+	+	†
Meter Selection				 					-	+	 	+	+
Meter Capacity (gpm)		<u> </u>		<u> </u>		<u> </u>							_

10/24/2005

3drm pe A ondo	Spa	Commercial Kitchens	Public . Restrooms	Public Restaurants	Bar	Employee Lockers	Employee Restrooms	Scullery/ Dishwasher	Total No. of Fixtures	Total FU
3	-	-		_			•		344	550.4
4	10	-	-	_		3	•		367	587.2
5	10	2	7		3	4	4	_	486	826.2
-	3	-	4	-	2	2	1	•	14	23.8
8	20	3	6	1	3	4	3		843	505.8
1	_			_	-	-	-	-	193	308.8
1		_	_	-	-	-	-	-	193	386.0
1			1	-	-	-	-	•	193	386.0
-	8	6	_	-	ı	_	_	2	22	88.0
_	1	-	-	2.	1	-		-	9	18.0
-	3	4	-	2	1	_	-	2	21	42.0
-	-	2	_	-	-	-	_	1	5	25.0
30.1	90.1	47.2	22.3	8.6	14.3	17.4	10.3	17.0		
4	1	2	1	3	2	1	1	1		
20.4	90.1	94.4	22.3	25.8	28.6	17.4	10.3	17.0		3,747.2
										3,747
									<u></u>	510
	<u> </u>									2 x 3-inch
					1					640

PRELIMINARY WASTEWATER INFORMATION

EXISTING & PROPOSED WASTEWATER FLOWS

Type of Use	Unit	Number of Units	Contribution (Gal/Unit/Day)	Total Flow (Gal/Day)
EXISTING CONDITIONS				
Hotel, resort with laundry	Room	349	350	122,150
Restaurant	Seat	250	80	20,000
Bar	Seat	50	15	750
Office	Employee	30	20	600_
Hotel Employees	Employee	349	20	6,980
Total Estimated Flow - Existing				150,480
PROPOSED CONDITIONS				
Condo	Unit	193	255	49,215
Restaurants	Seat Total	262	80	20,960
Bars	Seat Total	151	15	2,265
Office	Employee	30	20	600
Condo Employees	Employee	250	20	5,000
Spa	Employee	16	15	240
Total Estimated Flow - Proposed				78,280

A. RUNOFF COEFFICIENTS 1. Existing Conditions	Area (acres)	<u>Coefficient</u>
•		COCITICICIA
Assume Pre-Hotel Condition	ons 15.50	0.45
2. Developed Conditions a.) Subarea "B" Buildings Roadways/Walkways Landscaped Pools/Water Features	1.90 0.81 1.68 <u>0.01</u> Total = 4.40	0.90 0.90 0.30
$C_{\text{composite}} = 2.94 / 4.40 = 0.6$	7	
b.) Subarea "C" Buildings Roadways/Walkways Landscaped Pools/Water Features	$0.64 \\ 0.37 \\ 0.49 \\ \underline{0.10} \\ \text{Total} = 1.60$	0.90 0.90 0.30
$C_{\text{composite}} = 1.06 / 1.60 = 0.66$	5	
c.) Subarea "D" Buildings Roadways/Walkways/Pa Landscaped Pools/Water Features	2.13 rking 0.90 3.61 0.06 Total = 6.70	0.90 0.90 0.30
$C_{\text{composite}} = 3.81 / 6.70 = 0.57$	•	
 B. RECURRENCE INTERVAL & RA 1. Recurrence interval T_m = 50 year 2. One-hour rainfall I₅₀ = 2.4 inches 	rs	
 C. TIME OF CONCENTRATION (S 1. Existing Conditions T_c = 15 min 2. Developed Conditions T_c = 10 m 	nutes	'D")
D. EXISTING RUNOFF (Rational Met)	hod) (Subarea "B'	")

1. C = 0.45

```
2. i = 2.4 \times 1.84 = 4.42
```

- 3. a = 4.40 acres
- 4. $Q = Cia = 0.45 \times 4.42 \times 4.40 = 8.8 \text{ cfs}$

E. EXISTING RUNOFF (Rational Method) (Subarea "C")

- 1. C = 0.45
- 2. $i = 2.4 \times 1.84 = 4.42$
- 3. a = 1.60 acres
- 4. $Q = Cia = 0.45 \times 4.42 \times 1.60 = 3.2 \text{ cfs}$

F. EXISTING RUNOFF (Rational Method) (Subarea "D")

- 1. C = 0.45
- 2. $i = 2.4 \times 1.84 = 4.42$
- 3. a = 6.70 acres
- 4. $Q = Cia = 0.45 \times 4.42 \times 6.70 = 13.3 \text{ cfs}$

G. DEVELOPED RUNOFF (Rational Method) (Subarea "B")

- 1. C = 0.67
- 2. $i = 2.4 \times 2.06 = 4.94$
- 3. a = 4.40 acres
- 4. $Q = Cia = 0.67 \times 4.94 \times 4.40 = 14.6 \text{ cfs}$

H. DEVELOPED RUNOFF (Rational Method) (Subarea "C")

- 1. C = 0.66
- 2. $i = 2.4 \times 2.06 = 4.94$
- 3. a = 1.60 acres
- 4. $Q = Cia = 0.66 \times 4.94 \times 1.60 = 5.2 \text{ cfs}$

I. DEVELOPED RUNOFF (Rational Method) (Subarea "D")

- 1. C = 0.57
- 2. $i = 2.4 \times 2.06 = 4.94$
- 3. a = 6.70 acres
- 4. $Q = Cia = 0.57 \times 4.94 \times 6.70 = 18.9 \text{ cfs}$

J. INCREASE DUE TO DEVELOPMENT (Rational Method) (Subarea "B") $\Delta Q = 14.6 - 8.8 = 5.8$ cfs (for 50-year, 1-hour storm)

K. INCREASE DUE TO DEVELOPMENT (Rational Method) (Subarea "C")
$$\Delta Q = 5.2 - 3.2 = 2.0$$
 cfs (for 50-year, 1-hour storm)

L. INCREASE DUE TO DEVELOPMENT (Rational Method) (Subarea "D")
$$\Delta Q = 18.9 - 13.3 = 5.6$$
 cfs (for 50-year, 1-hour storm)

```
M. CURVE NUMBER (CN) COMPUTATION (Subarea "B")
```

1. Existing

Pre-Hotel/Undeveloped CN = 68 Area = 4.40 acre Semiarid, Desert Shrub

2. Developed

Building, parking CN = 98 Area = 2.71 acres Landscaped CN = 39 Area = 1.68 acres Pools/Water Features ----- Area = 0.01 acres CN = [(98x2.71)+(39x1.68)]/(4.40) = 75

N. CURVE NUMBER (CN) COMPUTATION (Subarea "C")

1. Existing

Pre-Hotel/Undeveloped CN = 68 Area = 1.60 acre Semiarid, Desert Shrub

2. Developed

Building, parking CN = 98 Area = 1.01 acres Landscaped CN = 39 Area = 0.49 acres Pools/Water Features ----- Area = 0.10 acres $CN = [(98 \times 1.01) + (39 \times 0.49)]/(1.60) = 74$

O. CURVE NUMBER (CN) COMPUTATION (Subarea "D")

1. Existing

Pre-Hotel/Undeveloped CN = 68 Area = 6.70 acre Semiarid, Desert Shrub

2. Developed

Building, parking CN = 98 Area = 3.03 acres Landscaped CN = 39 Area = 3.61 acres Pools/Water Features ----- Area = 0.06 acres $CN = [(98\times3.03)+(39\times3.61)]/(6.70) = 65$

P. RAINFALL DATA

1. 50-year, 1-hour

P = 2.4 inches

Q. RUNOFF VOLUME

1. 50-year, 1-hour

a. Existing -4.40 acres to Subarea "B" S = (1000/CN) - 10 = (1000/68) - 10 = 4.71 $Q = (P-0.2S)^2/(P+0.8S) = (2.4-0.2x4.71)^2/(2.4+0.8x4.71) = 0.34$ inch Volume = (0.34/12)x4.40x43560 = 5,430 cu. ft.

b. Developed - 4.40 acres to Subarea "B" S = (1000/CN) - 10 = (1000/75) - 10 = 3.33 $Q = (P-0.2S)^2/(P+0.8S) = (2.4-0.2x3.33)^2/(2.4+0.8x3.33) = 0.59$ inch Volume = (0.59/12)x4.40x43560 = 9,423 cu. ft.

- c. Increase due to development $\Delta V = 9,423 5,430 = 3,993$ cu. ft.
- 2. 50-year, 1-hour
 - a. Existing 1.60 acres to Subarea "C" S = (1000/CN) 10 = (1000/68) 10 = 4.71 $Q = (P-0.2S)^2/(P+0.8S) = (2.4-0.2x4.71)^2/(2.4+0.8x4.71) = 0.34$ inch Volume = (0.34/12)x1.60x43560 = 1,975 cu. ft.
 - b. Developed 1.60 acres to Subarea "C" S = (1000/CN) 10 = (1000/74) 10 = 3.51 $Q = (P-0.2S)^2/(P+0.8S) = (2.4-0.2x3.51)^2/(2.4+0.8x3.51) = 0.58 \text{ inch}$ Volume = (0.58/12)x1.60x43560 = 3,369 cu. ft.
 - c. Increase due to development $\Delta V= 3,369-1,975=1,394$ cu. ft.
- 3. 50-year, 1-hour
 - a. Existing -6.70 acres to Subarea "D" S = (1000/CN) 10 = (1000/68) 10 = 4.71 $Q = (P-0.2S)^{2}/(P+0.8S) = (2.4-0.2x4.71)^{2}/(2.4+0.8x4.71) = 0.34 \text{ inch}$ Volume = (0.34/12)x6.70x43560 = 8,269 cu. ft.
 - b. Developed 6.70 acres to Subarea "D" S = (1000/CN) 10 = (1000/65) 10 = 5.38 $Q = (P-0.2S)^2/(P+0.8S) = (2.4-0.2x5.38)^2/(2.4+0.8x5.38) = 0.26 \text{ inch Volume} = (0.26/12)x6.70x43560 = 6,323 \text{ cu. ft.}$
 - c. Decrease due to development $\Delta V = 8,269 6,323 = 1,946$ cu. ft.

R. DETENTION VOLUME

The required detention volume will be computed using the following tabular method similar to a hydrograph method.

S. DETENTION/RETENTION BASIN PRELIMINARY DESIGN

The drainage basin will consist of large-diameter corrugated aluminum pipe in a gravel bed of filter rock. The basin will be designed to keep peak flow rates due to a 50-year, 1-hour storm at pre-development levels and to keep runoff volumes due to a 50-year, 1-hour storm at pre-development levels. The following are preliminary sizing computations.

Drainage Area "B" = 4.40 acres Developed Runoff Coefficient = C = 0.67Design Storm = 50-year One Hour Rainfall = I = 2.4 inches Present Peak Discharge = 8.8 cfs = Q_{OUT} Developed Peak Discharge 14.6 cfs = Q_{IN} $Q_{OUT}/Q_{IN} = 8.8/14.6 = 0.60$ Outflow Adjustment Coefficient = k = 0.83

			-			
Storm Duration, minutes	Correction Factor	Rainfall Intensity, in./hr.	Runoff Volume, cu. ft.	Outflow Volume, cu. ft.	Storage Volume, cu. ft.	Storage Volume, ac. ft.
7	f	l = fi	CIAT	kQ _{out} T	(4) - (5)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
5	2.56	6.138	5,474	2,191	3,283	0.0754
10	2.06	4.938	8,808	4,382	4,426	0.1016
15	1.84	4.411	11,802	6,574	5,228	0.1200
19	1.69	4.045	13,708	8,327	5,381	0.1235
20	1.65	3.967	14,150	8,765	5,385	0.1236
22	1.59	3.827	15,016	9,641	5,375	0.1234
25	1.52	3.649	16,272	10,956	5,316	0.1220
30	1.42	3.404	18,214	13,147	5,067	0.1163
35	1.33	3.189	19,906	15,338	4,568	0.1049
40	1.25	2.995	21,367	17,530	3,837	0.0881
45	1.18	2.821	22,641	19,721	2,920	0.0670
50	1.11	2.665	23,763	21,912	1,851	0.0425
55	1.05	2.525	24,769	24,103	666	0.0153
60	1.00	2.400	25.683	26.294	-611	-0.0140

Peak

Drainage Area "C" = 1.60 acres
Developed Runoff Coefficient = C = 0.66 Design Storm = 50-year One Hour Rainfall = I = 2.4 inches Present Peak Discharge = 3.2 cfs = Q_{OUT} Developed Peak Discharge 5.2 cfs = Q_{IN} $Q_{OUT}/Q_{IN} = 3.2/.2 = 0.62$ Outflow Adjustment Coefficient = k = 0.83

Storm Duration, minutes	Correction Factor	Rainfall Intensity, in./hr.	Runoff Volume, cu. ft.	Outflow Volume, cu. ft.	Storage Volume, cu. ft.	Storage Volume, ac. ft.
7	f	I = fi	CIAT	kQ _{our} T	(4) - (5)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
5	2.56	6.138	1,961	797	1,164	0.0267
10	2.06	4.938	3,155	1,594	1,561	0.0358
15	1.84	4.411	4,228	2,390	1,838	0.0422
19	1.69	4.045	4,910	3,028	1,882	0.0432
20	1.65	3.967	5,069	3,187	1,882	0.0432
22	1.59	3.827	5,379	3,506	1,873	0.0430
25	1.52	3.649	5,829	3,984	1,845	0.0424
30	1.42	3.404	6,525	4,781	1,744	0.0400
35	1.33	3.189	7,131	5,578	1,553	0.0357
40	1.25	2.995	7,654	6,374	1,280	0.0294
45	1.18	2.821	8,110	7,171	939	0.0216
50	1.11	2.665	8,512	7,968	544	0.0125
55	1.05	2.525	8,873	8,765	108	0.0025
60	1.00	2.400	9,200	9,562	-362	-0.0083

Peak

Drainage Area "D" = 6.70 acres Developed Runoff Coefficient = C = 0.57Design Storm = 50-year One Hour Rainfall = I = 2.4 inches Present Peak Discharge = 13.3 cfs = Q_{OUT} Developed Peak Discharge 18.9 cfs = Q_{IN} $Q_{OUT}/Q_{IN} = 13.3/18.9 = 0.70$ Outflow Adjustment Coefficient = k = 0.81

		,	,	· · · · · · · · · · · · · · · · · · ·		
Storm	Correction	Rainfall	Runoff	Outflow	Storage	Storage
Duration,	Factor	Intensity,	Volume,	Volume,	Volume,	Volume,
minutes		in./hr.	cu. ft.	cu. ft.	cu. ft.	ac. ft.
<i>T</i>	f	l = fi	CIAT	kQ _{out} T	(4) ~ (5)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
5	2.56	6.138	7,091	3,232	3,859	0.0886
10	2.06	4.938	11,410	6,464	4,946	0.1135
14	1.88	4.514	14,600	9,049	5,551	0.1274
15	1.84	4.411	15,289	9,696	5,593	0.1284
16	1.80	4.313	15,944	10,342	5,602	0.1286
17	1.76	4.219	16,570	10,988	5,582	0.1281
19	1.69	4.045	17,758	12,281	5,477	0.1257
20	1.65	3.967	18,331	12,928	5,403	0.1240
25	1.52	3.649	21,080	16,160	4,920	0.1129
30	1.42	3.404	23,596	19,391	4,205	0.0965
40	1.25	2.995	27,679	25,855	1,824	0.0419
50	1.11	2.665	30,784	32,319	-1,535	-0.0352
60	1.00	2.400	33,271	38,783	-5,512	-0.1265

Peak

- 1. Required detention volume = V = 5,385+1,882+5,602 = 12,869 cubic feet
- 2. Required retention volume = V = 3,993+1,394-1,946 = 3,441 cubic feet
- 3. Use 8-foot diameter perforated corrugated aluminum pipe in 12-foot deep by 12-foot wide gravel bed consisting of "4-C" filter rock.
- 4. Pipe Area = $\Pi r^2 = \Pi \times 2.5^2 = 50.27$ square feet
- 5. Gravel Area = (12x12) 50.27 = 93.73 square feet
- 6. Gravel Void Area = $93.73 \times 0.45 = 42.18$ square feet
- 7. Allowable Gravel Void Area = $42.18 \times 0.50 = 21.09$ square feet
- 8. Pipe Area + Allowable Gravel Void Area = 50.27 + 21.09 = 71.36 square feet
- 9. Estimated Required Length = 16,310 / 71.36 = 229 feet
- 10. Preliminary Design Length Provided = 100 + 130 = 230 feet
- 11. Bed Dimensions: (Trapezoid) (134'+104')/2 long x 24' wide x 12' deep

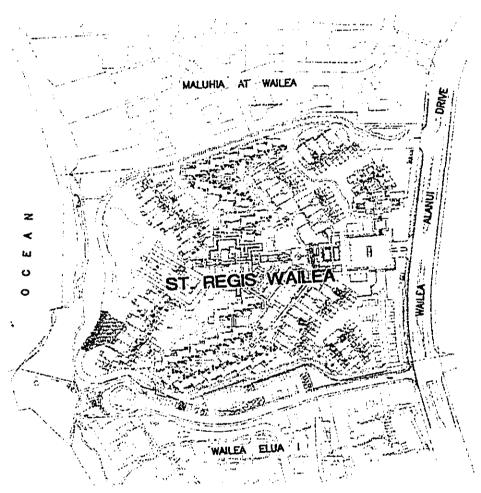
- T. EXISTING RUNOFF (Rational Method) FOR BEACH ACCESS TO 84" CULVERT
 - 1. $T_c = 10$ minutes
 - 2. $C = (0.90 \times 2.03) + (0.30 \times 1.67) / 3.70 = 0.63$
 - 3. $i = 2.4 \times 2.06 = 4.94$
 - 4. a = 3.70 acres
 - 5. $Q = Cia = 0.63 \times 4.94 \times 3.70 = 11.5 cfs$

Appendix D-1

Supplement to Preliminary Engineering Report for St. Regis Wailea, February 16, 2006

SUPPLEMENT TO PRELIMINARY ENGINEERING REPORT For St. Regis Wailea

Wailea, Maui, Hawaii Tax Map Key (2) 2-1-008:067



Project:

St. Regis Wailea Wailea, Maui, Hawaii Date:

February 16, 2006

Client:

Kobayashi Group 1001 Bishop Street Pauahi Tower, Suite 1570 Honolului, Hawaii 96813 Phone: (808) 524-1508 Fax: (808) 524-0766 Consultant:

RFE

Ronald M. Fukumoto Engineering, Inc. 1721 Wili Pa Loop, Suite 203 Wailuku, Hawaii 96793 Phone: (808) 242-8611 Fax: (808) 244-7510 E-Mail: rfe@mauigateway.com

I. PURPOSE

The purpose of this supplement is to provide additional information for the proposed wastewater system for the St. Regis Wailea project.

II. WASTEWATER SYSTEM

A. Existing System

The County of Maui provides a wastewater collection system for the area. The collection system carries wastewater to the Kihei Wastewater Reclamation Facility for treatment, reuse, and disposal. The wastewater collection system includes gravity sewers, force mains, and pump stations along Wailea Alanui Drive and South Kihei Road.

Existing gravity sewer lines and manholes convey wastewater through the site. These lines and manholes were constructed about 30 years ago with the initial construction of the hotel. A 12-inch interceptor line runs along the westerly side of the site and receives wastewater from various branch lines. These branch lines, consisting of 4-inch and 8-inch pipe, collect wastewater from the buildings and convey it to the interceptor line. The interceptor line carries wastewater to the County's wastewater pump station located in the adjoining public beach access parcel to the South. The wastewater is then pumped through a 10-inch force main to a 24-inch gravity sewer main along Wailea Alanui Drive. (See Figure 1 - St. Regis Wailea - Existing Sewer Plan, page 4.)

The 12-inch interceptor line also receives wastewater from the adjoining Maluhia at Wailea site to the North. Wastewater system improvements for the Maluhia project within the St. Regis site include a short segment of 3-inch force main, an 8-inch wet well overflow pipe, a transition sewer manhole, and about 125 feet of 8-inch gravity sewer line which connects to the existing sewer manhole at the northwesterly corner of the site. These improvements were constructed about five years ago. (See Figure 2 - Maluhia - Existing Sewer Connection, page 5.)

The sewer lines within the subject property are owned by the applicant and any maintenance is the applicant's responsibility.

B. Preferred Alternative

The preferred alternative consists of separating the wastewater systems serving the existing Maluhia at Wailea project and the proposed St. Regis Wailea project.

The Maluhia system consists of keeping portions of the existing interceptor line along the westerly side of the site in service and constructing a new section at the southwesterly corner of the site where the existing line goes under proposed Building D. The new section has been routed around proposed Building D within the shoreline area to make it accessible for maintenance. Because this new section is lower than the separate St. Regis system described

below, it was not possible to connect this section to the St. Regis system. This system therefore exclusively serves the Maluhia project. The Maluhia system connects to an existing sewer manhole (SMH #1F) at the south property line in the vicinity of the County's wastewater pump station. (See Figure 3 - St. Regis Wailea - Proposed Sewer Plan, page 6.)

Pre-construction and post-construction inspections will be conducted to evaluate the condition of the sewer lines and manholes. Pre-construction closed circuit television (CCTV) inspection of the existing sewer lines will be conducted and, if required, mitigation measures such as cured-in-place lining or line replacement will be implemented. Post-construction CCTV inspection of the existing sewer lines will also be conducted to evaluate the effects of construction activities on the lines and to implement corrective measures, if necessary. In addition, visual inspections of the manholes will be conducted and, if required, measures such as manhole liners, epoxy coating, and rung replacements will be implemented.

The St. Regis system consists of new gravity sewer lines and manholes located inland of the shoreline setback line. All wastewater will be conveyed to a main line running along the mauka or upland side of the proposed buildings along the shoreline setback line. Wastewater from the proposed buildings along the shoreline setback line will also drain into this main line. This system therefore exclusively serves the St. Regis project. The St. Regis system also connects to the existing sewer manhole (SMH #1F) at the south property line. (See Figure 3 - St. Regis Wailea - Proposed Sewer Plan, page 6.)

Conventional trenching and backfilling methods would be used to install the new sewer lines and manholes. Excavation in rock is anticipated in deeper excavations and can be done by blasting or chipping. Blasting is quick. On the other hand, chipping requires significantly more time and can get annoying for neighboring residents. Blasting can be done safely without damaging the surrounding infrastructure. However, post-construction inspections of existing lines will be conducted and repairs made, if necessary.

To evaluate concerns of utility systems within the shoreline area, an analysis of anticipated shoreline erosion was performed. The analysis, based on the Maui Shoreline Atlas, indicates that shoreline erosion will not have short-term impacts on the existing and proposed sewer lines within the shoreline area. The Maui Shoreline Atlas provides a diagram of annual erosion rates at specific transects or sections at 20-meter intervals along the shoreline. A "50-year erosion line" based on the annual erosion rate in feet per year at various transects through the site multiplied by 50 years has been determined and shown on the existing and proposed sewer plans. As shown, the existing sewer lines and manholes within the shoreline area are inland of the "50-year erosion line". Additionally, exposed rock under the existing boardwalk at the shoreline indicates the presence of hard, stable material which would significantly slow any erosion.

C. Other Alternatives

To further evaluate concerns of utility systems within the shoreline area, other alternatives to the preferred alternative were considered. (See Figure 4 - St. Regis Wailea - Sewer Plan Alternatives, page 7.)

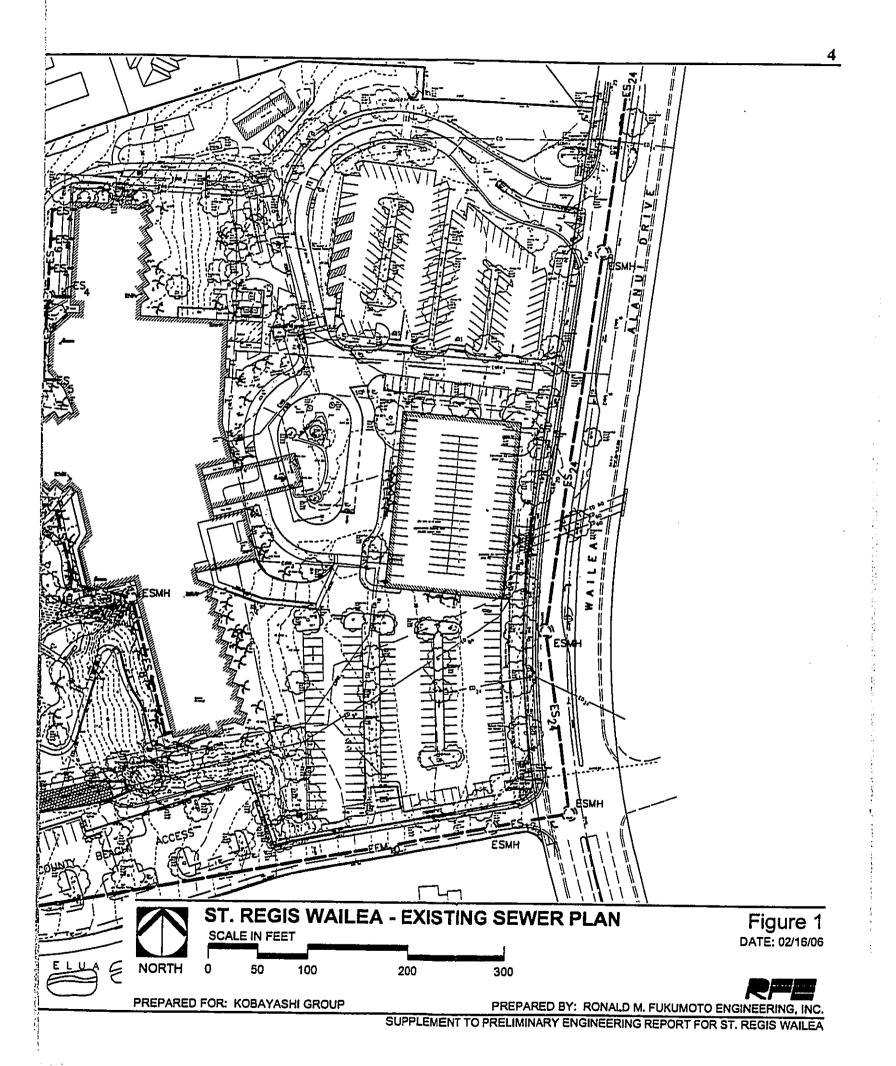
Alternative "A" consists of abandoning the existing sewer line within the shoreline area and constructing a single line outside the shoreline area. This alternative would take wastewater from Maluhia and route it through the St. Regis system. Although this is physically possible, there are many disadvantages to this alternative. The major disadvantage is the required depth of the line. Instead of the line and manholes being at an approximate depth of 9 to 13 feet, this alternative will require an approximate depth of 14 to 18 feet. This results in construction difficulty and a substantial increase in construction costs. Other disadvantages include maintenance issues related to a combined line. Because the alternative system receives wastewater from the Maluhia project and the St. Regis project, it will be difficult to assess maintenance responsibilities. Separate systems for Maluhia and St. Regis allow for clear maintenance responsibilities. In addition, the separate line for Maluhia within the shoreline area allows for easy access and maintenance of the line.

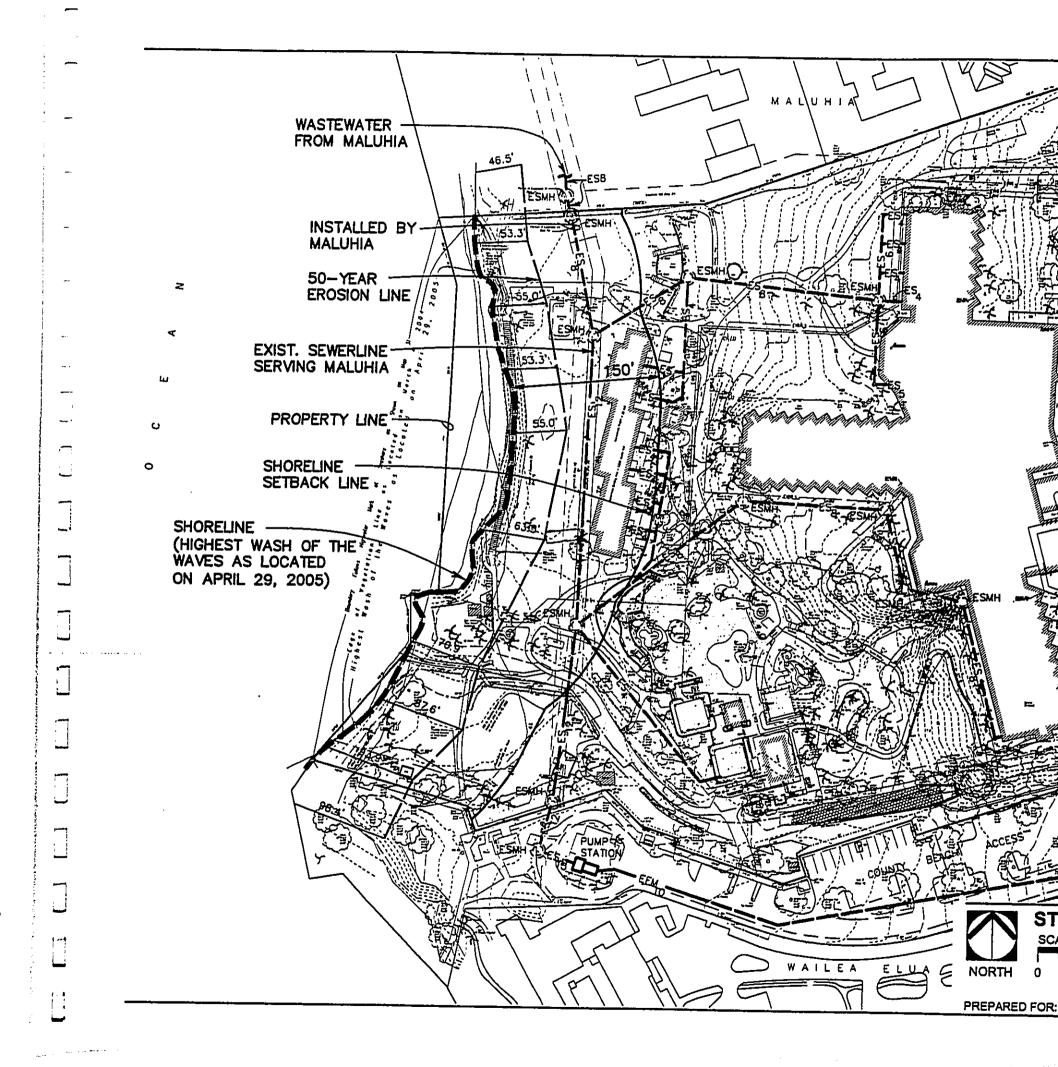
Alternative "B" consists of abandoning the existing sewer line within the shoreline area and constructing a new sewer line further inland. Due to site constraints, it is not feasible to relocate the proposed buildings further inland to provide a location for the sewer line inland of the shoreline setback line. The primary drawback of this alternative is that it requires major construction work within the shoreline area with trench depths that range from 9 to 15 feet. Another disadvantage is the high construction cost of this alternative.

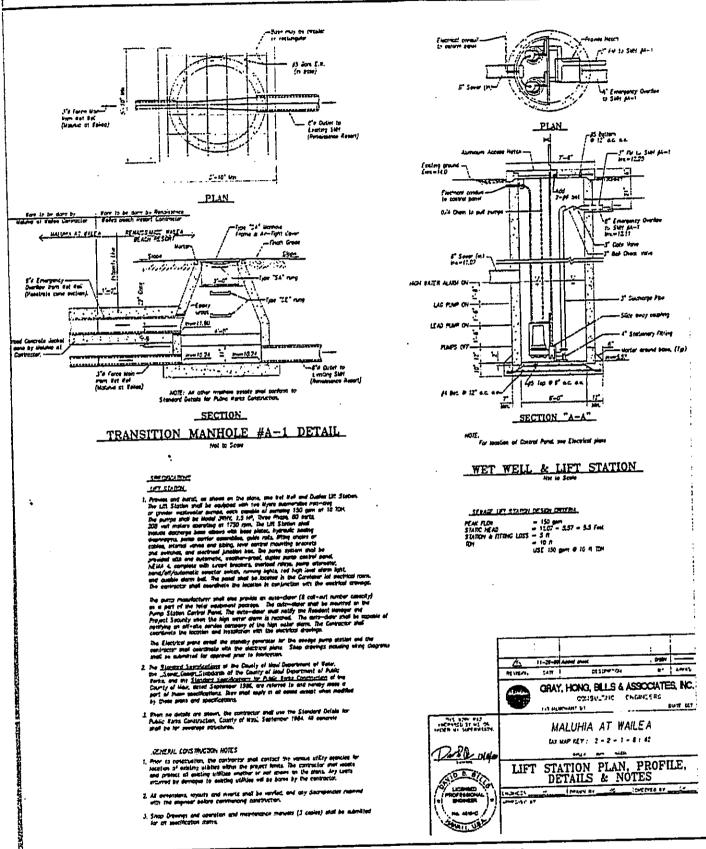
Alternative "C" consists of keeping the existing interceptor line within the shoreline area to serve Maluhia and allowing it to run under proposed Building D. This alternative will have the lowest construction cost, but may result in maintenance problems due to a portion of the line being inaccessible.

D. Analysis

The preferred alternative as shown on Figure 3 - St. Regis Wailea - Proposed Sewer Plan is the optimum solution for routing of the wastewater system through the site. Although located in the shoreline area, the system serving the Maluhia at Wailea project would have minimal impact since it will not be affected by anticipated shoreline erosion for more than 50 years. Its location also provides excellent access for maintenance purposes. The separate system serving the St. Regis Wailea project avoids excessive sewer line and manhole depths, and the related construction difficulty and added costs. The separate systems also improve operation and maintenance by clearly defining maintenance responsibilities.







MALUHIA - EXISTING SEWER CONNECTION

SCALE AS NOTED

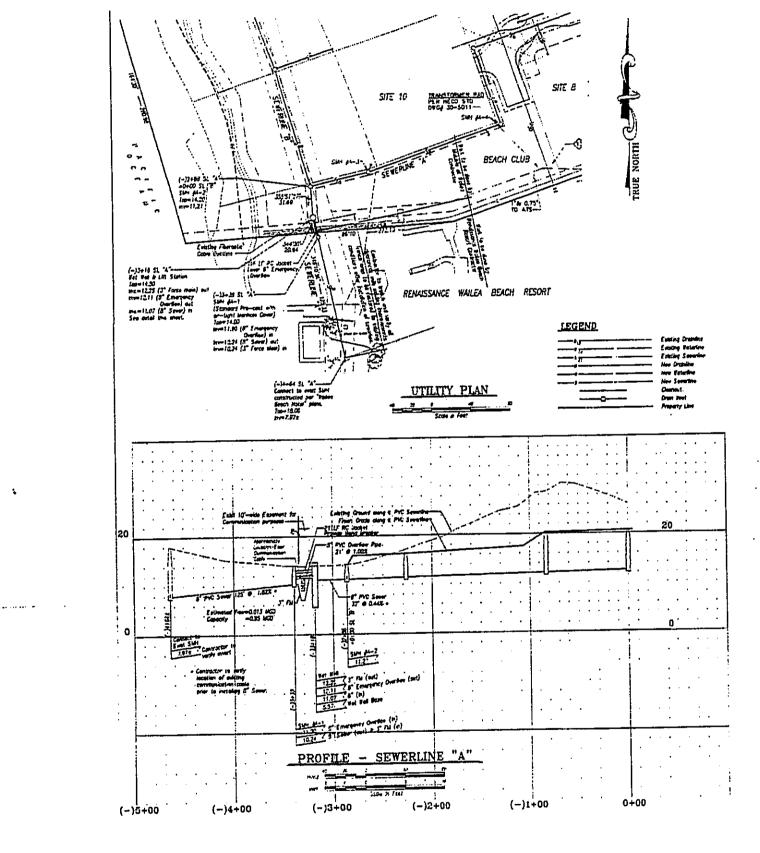
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Figure 2 DATE: 02/16/06



PREPARED FOR: KOBAYASHI GROUP

PREPARED BY: RONALD M. FUKUMOTO ENGINEERING, INC.



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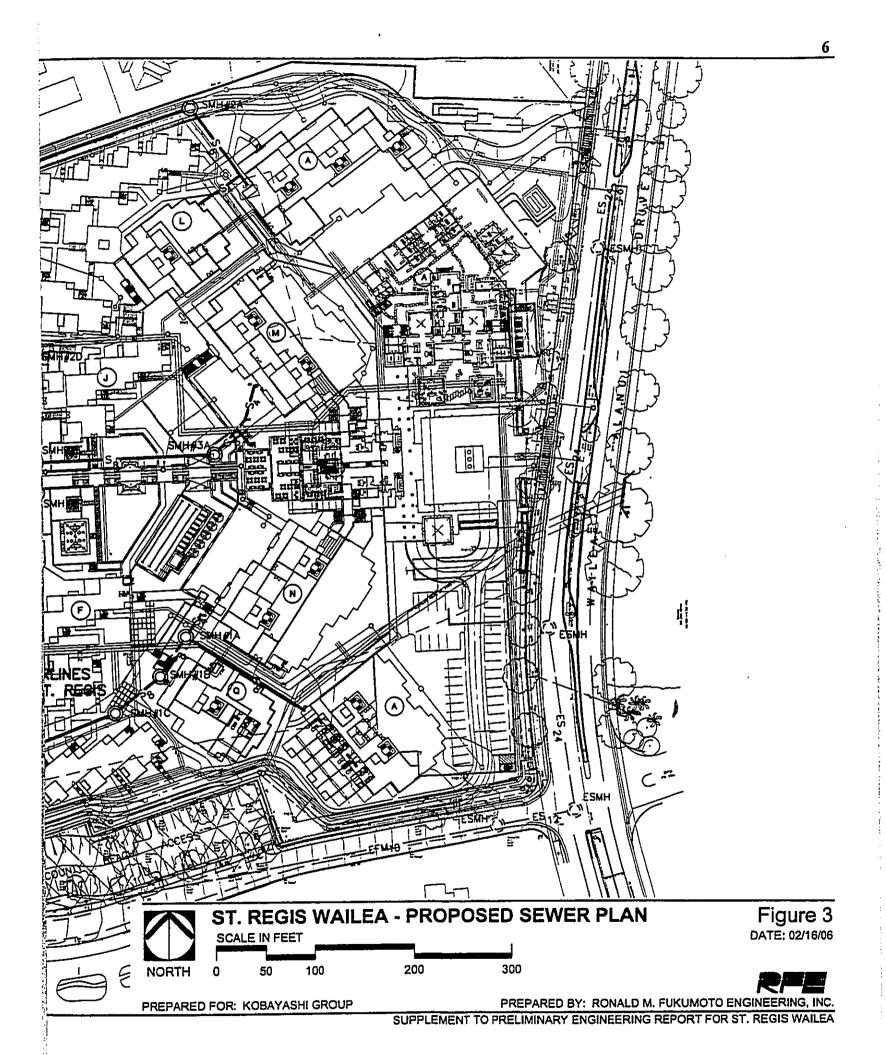
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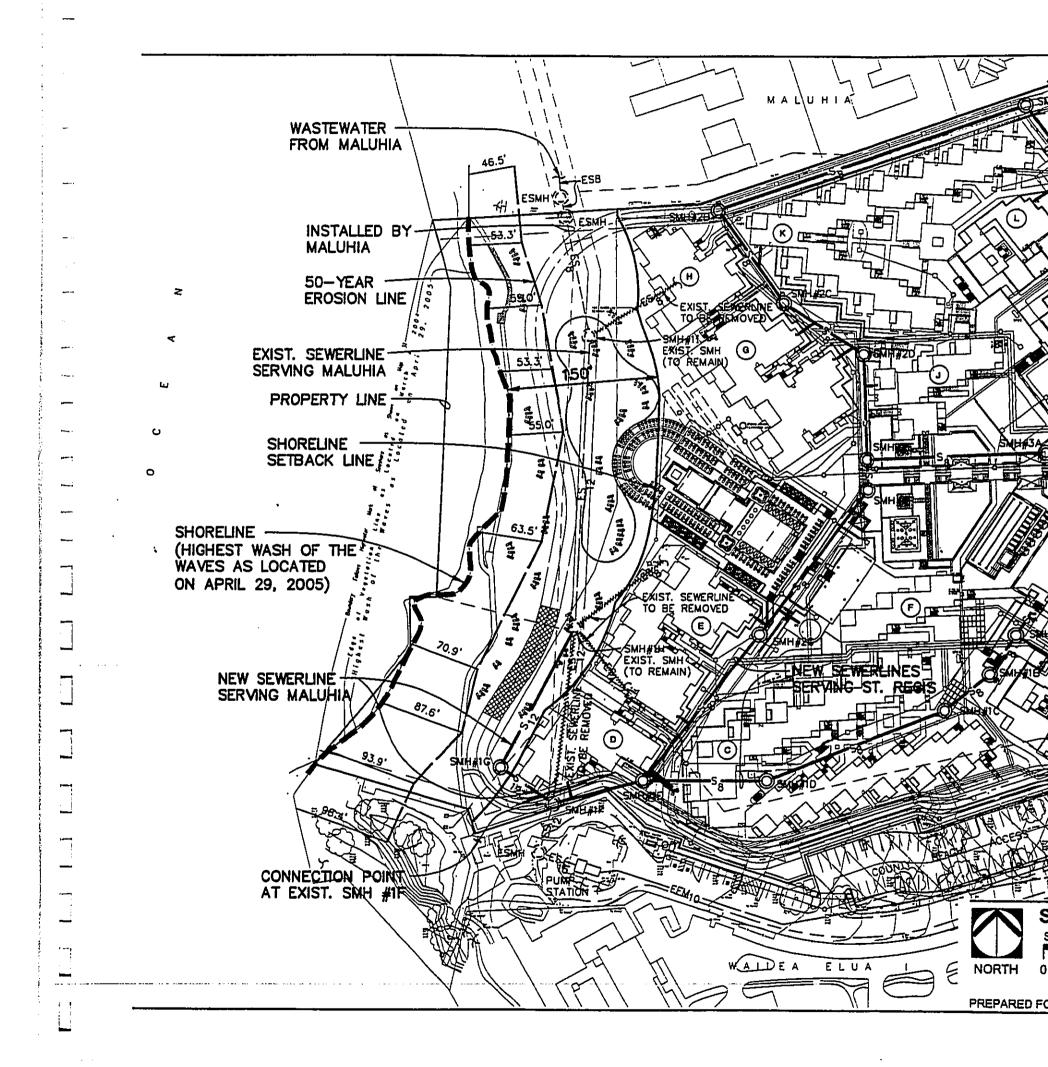
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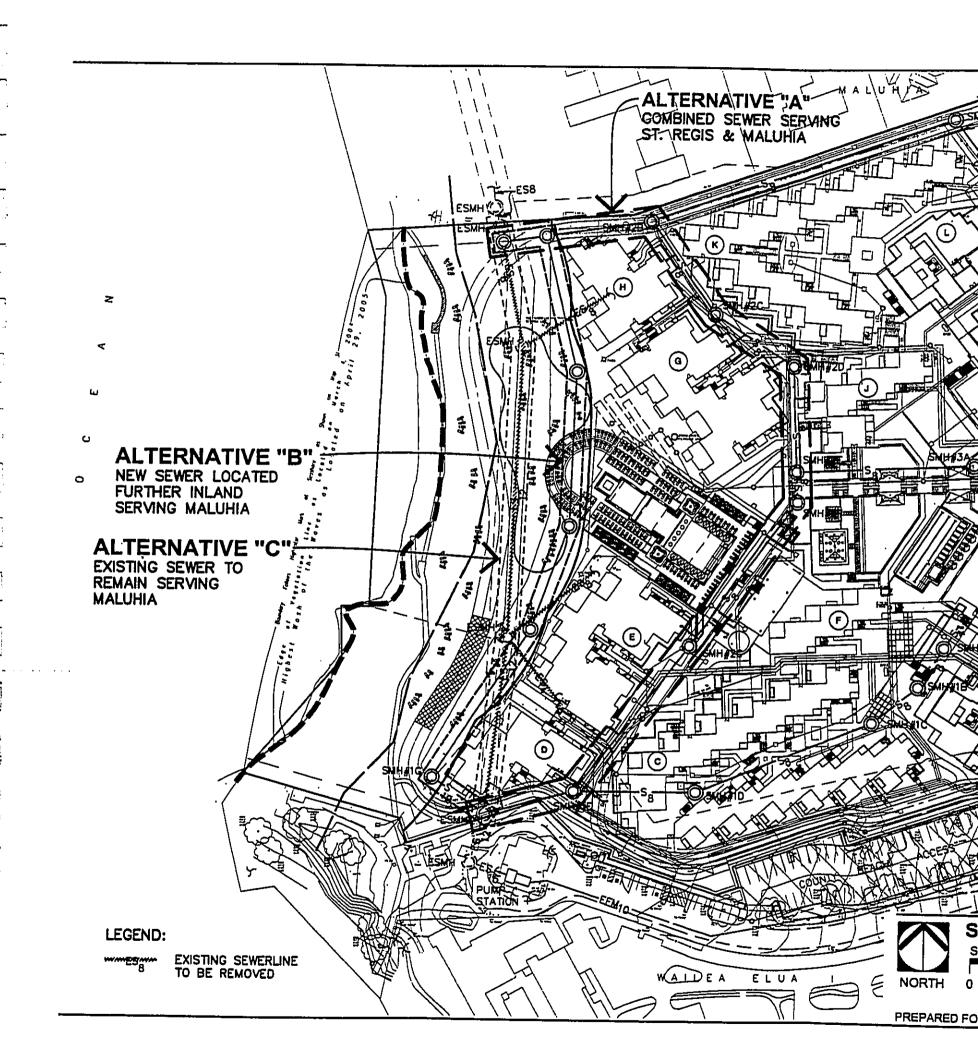
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Appendix E

Wailea Community Association Approval Letter, Dated August 12, 2005



Ann Howerton

VIA EMAIL

August 12, 2005 Elton Wong, Project Manager Kobayashi Group St. Regis Wailea - Revised Preliminary Plans - Approval Granted Re: Dear Elton, The Design Review Committee appreciates the effort and collaboration of the developer and believes this is an excellent project and great improvement to this property. The Committee at its meeting August 11 was pleased to grant preliminary approval and notes the following items have been addressed: Parking: Developer needs to provide a letter of understanding with Maui County regarding their vehicle stall requirement being 429. WCA will approve the existing plan provided the developer provides WCA with a written commitment of tandem valet parking to provide a total of 520 stalls. Engineering report is accepted. Building separation of minimum 20 feet or buildings have been joined together. Condo units will have individual hot water heat pumps. Mansard roofs have been added to mitigate visual impact of buildings with flat roof sections. Developer is to continue to work with neighboring properties to address any concerns. The following items need to be addressed: Provide section through concrete arch of drainage channel on final submittal. Clarify location of "amphitheatre seating." The Committee suggests renaming this area. Provide thorough design development for buildings proposed with thatched roofs before final submittal to ensure a Polynesian/Hawaiian look rather than African. Provide a perspective on entry elevation additional design development and for entry structures as soon as possible (before final plans). Please extend our thanks to Ann Howerton for her professional and timely work on the Ulua Beach Park. We will be meeting with County Parks and Elua Villages AOAO with this plan. A formal approval letter for the County of Maui will be mailed and emailed to you early next week. Please call if you have any questions. For the Committee, Phil Johnson Design and Covenants Manager

Appendix F

St. Regis Wailea
Demolition Plan

St Regis Wailea Demolition Plan

Preliminary

January 6, 2006

Approved by:



Nuprecon, Inc. 841 Bishop Street, Suite 1220 Honolulu, Hawaii







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1.0 INTRODUCTION

Nuprecon is providing this Demolition / Safety Work Plan to detail the means and methods planned for the total demolition of multiple existing structures associated with the St Regis Wailea Beach Hotel, Maui, Hawaii. This plan encompasses general site procedures and specific operations based upon probable demolition techniques. The plan and procedures are subject to change during the removal process due to safety and efficiency concerns.

Nuprecon, Inc employs a behavior-based management system approach in conjunction with corporate policies, implementing procedures, and site-specific work controls, to drive safety from the top, and to drive accidents and injuries to zero. Every member of the team understands and is committed to safety as a core value held by both companies, and supports the goal of zero accidents. Nuprecon is committed to ZERO INJURIES as the only acceptable goal for workplace and health.

The ZERO INJURIES philosophy begins with Mr. John Hennessey, President of Nuprecon, and is consistent throughout the entire organization. At the project level, the Site Supervisor assumes responsibility and is held accountable for the safety and quality control performance at his or her site. The Site Supervisor leads by example, clearly communicating his or her expectations and empowers his or her field personnel to function proactively. The Site Supervisor establishes accountability of his or her subordinates consistent with the guidelines of the work plan and company procedures and polices.

Accountability for safety is the responsibility of every employee. A specific process used to measure performance is event reporting and accident investigations. Results are communicated to every employee and feedback is sought to continuously improve performance. Safety performance is specifically factored into all administrative actions relating to total compensation, including but not limited to raises, bonuses, and promotions. Tracking occurs at the corporate level and the resulting information is passed through to the Corporate Officers in real time.

Personal involvement of every employee is critical for the success of both the process and the employee. The individual employee must understand what is expected of him or her and the consequences if performance standards are not met. Each employee is provided with an orientation at hire and performance expectations are clearly communicated. The process is continued at the jobsites through site specific performance briefings, safety committees, and work review processes involving employee review and input.

In every decision that takes place concerning a project, from the initial bid preparation through the final project close out, consideration for safety is included. Safety is a core value factored into every action taken by Nuprecon.

2.0 SITE INFORMATION

The site is accessed by Honopu Street on the mauka side and consists primarily of a three winged, star pattern, hotel averaging six stories in height with a central lobby, dining and facilities center. The site also contains an independent two story parking structure, a two story

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residential building at the makai side and pool area with ancillary structures. Residential properties adjoin the site's north and south boundaries.

EXISTING HAZARDS 3.0

In general, abatement of universal wastes (PCBs, fluorescent tubes, etc.), asbestos containing materials, reclamation of refrigerants (Freon) and the removal of all other hazardous materials will be completed prior to demolition.

The hazard most inherent in demolishing large-scale structures is from performing "overhead" work. In demolition it is frequently noted that "gravity is our friend", gravity can also be our worst adversary. It is essential from a Life / Safety standpoint that all activities and associated techniques be thoroughly thought out and implemented with extreme care and precision. All potential hazards will be mitigated by site control measures and demolition techniques designed specifically for this project and the minimization of risk to the community.

Control of dust and other fugitive emissions is critical to protect project personnel, the general populace, and the environment. Potential lead contamination is of paramount concern relative to this project. Initial tests of lead containing material will be performed and analyzed. TCLPs will be performed and the results thoroughly reviewed. Air monitoring will take place during the performance of demolition activities to establish a Negative Exposure Assessment (NEA) for both workers and the public. Proactive water engineering controls will be in place during all demolition activities.

ACTIVITY HAZARD ANAYLSIS 4.0

The engineering survey will be the prevailing document. The activity hazard analysis (AHA) is supplemental to the engineering survey, detailing the activities, hazards and controls planned to execute specific tasks relative to the current scope of work.

The site supervisor has the duty and the authority to execute field modifications as necessary based on laboratory results, work practices and controls to comply with this work plan and regulatory agencies. The site supervisor may reduce PPE based on results from negative exposure assessments. The site supervisor is responsible for means and methods used to raze the structures, access control of the structure subject to demolition activities and load out activities.

The site supervisor has the authority to stop work at any time.

PRE-DEMOLITION ACTIVITIES 5.0

Prior to demolition a series of activities must be completed and verified by the site supervisor.

Site Supervisor Verification Checks, inspections and training

The site supervisor will have the responsibility to verify and inspect the following

Equipment

All equipment will be inspected upon mobilization. A general pre-start inspection per the manufactures operator's manual, safety equipment inspection and operator

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qualifications will be checked prior to starting the equipment. A total functions test will be completed prior to initiating demolition activities. Operator competency will complete the pre-demolition equipment inspection. Ongoing maintenance and service records will be kept for each piece of equipment.

Site Security

The project site must be completely fenced and secured against unauthorized access of the general public. The perimeter fencing will be located on or inside the property line.

All internal work areas will be demarcated with danger tape to restrict unauthorized personnel from entering an active demolition zone. Access to an active work area can only be granted by the area foreman or equipment tender. Structures scheduled for demolition activities will be walked at the start of work each day to verify indigents or tourists have not taken up residence. All required site signage will be posted prior to demolition activities.

Abatement of universal wastes (UW) and hazardous materials (HM)

During the walk through the Site Supervisor will visually verify that universal wastes and hazardous materials have been removed. Clearance letters from the abatement contractor will be reviewed to confirm that identified asbestos-containing material has been removed from the planned demolition area.

When suspect materials, UW or HM are discovered, the Site Supervisor will halt demolition activities until such materials are removed or proven to be non-hazardous containing by the asbestos survey, subsequent lab results from sampling efforts or otherwise non-hazardous by documentation.

Crew training and experience

The Site Supervisor will review the crew matrix to determine additional training needs per member, tailor assignments based on skill level and experience and assign task leaders as necessary. The crew will attend and participate in a pre-demolition task safety meeting to discuss roles and responsibilities, site orientation, project orientation, existing known hazardous conditions and planned mitigation activities.

The Site Supervisor will conduct additional training as necessary and hold daily meetings with the entire crew prior to the start of work each day. The applicable AHA will be reviewed with all personnel prior to the start of each activity.

Personal Protective Equipment

The Site Supervisor will verify workers are properly using full body coveralls, respirators and general safety gear and that the PPE is in functional condition. The CAS will modify the PPE requirements based on the results of air monitoring.

6.0 DEMOLITION ACTIVITIES

Sequencing

It is currently anticipated that Abatement, Universal Waste Removal, Strip & Gut and Demolition activities will be performed in each structure sequentially according to the following pattern; the Parking Garage, Makena wing, Makai wing, Kihei wing and then the Core Structure. The Pool

Area and associated structures will be inserted into the schedule as appropriate. The Mokapu structure will be maintained as long as feasible and utilized as on site offices for contractors.

Demolition of each structure will be approached in the following manor;

- Abatement and hazmat clearance.
- · Removal of elements for ReUse.
- Removal of Universal Waste.
- Strip & gut of all soft building materials including remaining FF&E.
- Controlled demolition of structure from top down.
- Final processing of materials for recycling and disposal.
- Trucking of demolition debris from site.

An overall duration for the entire demolition process would be in the four to six month range.

Strip and Gut

Prior to structural demolition activities each building will have the majority of existing "soft" construction materials removed. For the three residential wings, Buildings A, B & C, crews will first prep the structure by hand, creating landing areas on each floor level for Bobcats equipped with grapple buckets and dropping the elevators. The cleared elevator shafts will be utilized as debris chutes for materials from the upper floors in order to minimize wind born dust and debris. Bobcats will be placed on each level to strip the building back to a basic concrete "shell and core" structure. Lobbies, public areas and retail spaces will have strip and gut operations performed by a combination of Bobcats, Mini-Maxes, and track hoes. Materials will be dumped into demarcated landing zones and loaded out from there. Wet methods will be utilized to control dust emissions during the strip and gut phase.

Structural Demolition

Structural demolition will be performed primarily by track mounted hydraulic excavators equipped with; a DemoPro hydraulic grapple / shear, hydraulic bucket and thumb, hydraulic breaker, and secret special laser guided stuff that is too technical for the layman to comprehend. The upper floors of each structure will be demolished utilizing a custom built LongReach track hoe with an effective working height of eighty feet. A Brock 250 series Mini-Max will be utilized to demolish superstructures that are beyond the effective working range of the "LongReach" track hoe or are deemed to be effectively inaccessible to the LongReach. Bobcats equipped with hydraulic grapple buckets will assist in the separation and handling of material and area cleanup / maintenance.

The lobbies, public areas and retail spaces will have structural demolition performed by a combination of track hoes based upon scale and resource availability.

Wet methods, utilizing fire hose water application from an appropriate sized manlift, will be employed to control dust emissions during the structural demolition phase. Structures will be doused prior to starting removal as well as actively wetted during the demolition process. Line pumps will be utilized as necessary to increase water pressure to acceptable dust control levels.

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The employment of the DemoPro shear will minimize noise impacts from the demolition process to the greatest degree possible. The proposed water engineering techniques have proven to be highly effective in controlling dust generation and migration.

7.0 MATERIAL HANDELING

Initially, all construction systems suitable for ReUse will be salvaged in such a manor as to protect their viability for reinstallation on this or future projects. ReUse is the highest and most efficient level of the recycling effort that is so essential to the protection of our environment.

All reasonable efforts will be made to recycle as much material as possible. Segregation of demolition debris and recyclables (concrete, rebar and metals) will be an on-going process throughout the demolition and debris handling process. At present there is no metal recycling facility in operation on Maui. As a consequence, all metals would have to be barged to Honolulu. This would result in approximately thirty truck loads, average weight of fifteen tons, traveling to Kahului Harbor. The metal load out would be consolidated to minimize the overall duration of trucking and maximize the use of barge space in shipping.

General debris will be segregated on site and trucked by a pre-approved route to Maui Maalaea Landfill, the island's only approved construction debris disposal site at present. It is currently estimated that two-hundred and forty loads of debris, weighing approximately fifteen tons per load, would be transported to the landfill. Depending on scheduling, production and trucking availability, typically around ten loads of debris would be loaded out each day for an overall duration of four to six weeks.

Placing a mobile crushing plant on site to process concrete / masonry for fill material is under consideration. It is estimated that the project could achieve a near balance in fill material usage. This process would eliminate approximately twenty-two hundred truck trips from the site in removal efforts alone. If the concrete material is not recycled on site, at present there is no recycling plant on Maui and the material would be sent to the Maalaea Landfill for disposal.

8.0 AIR MONITORING

Both personal air monitoring of Nuprecon employees and perimeter monitoring of the work area will be conducted to ensure compliance with all applicable OSHA, EPA, State and local regulations.

Perimeter air monitoring will be conducted in order to substantiate a negative exposure assessment during demolition activities. Air monitoring procedures will follow 29 CFR 1926.1101 (f). Due to the close proximity of other populated structures and pedestrian traffic, baseline samples and perimeter samples will be collected, analyzed and archived in order to demonstrate migratory dust levels, if any, and to limit liability.

Silica air monitoring will be conducted per 29 CFR 1926.55(d) and State and local regulations.

9.0 TRAFFIC / PEDESTRIAN CONTROL AND STREET CLOSURES

General traffic and pedestrian control will be accomplished via fencing around the perimeter of the entire site. Flaggers and traffic control personnel will be utilized as appropriate. It is not anticipated that any street closures will be required during the demolition process.

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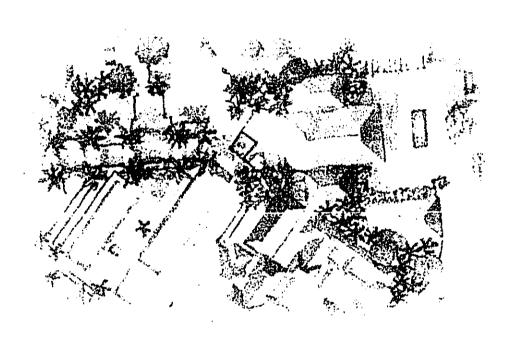
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Appendix G

Traffic Impact Report - Wailea Hotel and Residences, May 2005

Traffic Impact Report

Wailea Hotel and Residences



Prepared for: Kobayashi Group, LLC

Prepared by: Wilson Okamoto Corporation

May 2005

TRAFFIC IMPACT REPORT FOR THE PROPOSED WAILEA HOTEL AND RESIDENCES

Prepared for:

Kobayashi Group, LLC 1001 Bishop Street, Suite 1570 Honolulu, HI 96813

Prepared by:

Wilson Okamoto Corporation 1907 S. Beretania Street, Suite 400 Honolulu, Hawaii 96826 WOC Ref #7201-02

May 2005

Traffic Impact Report for the Proposed Wailea Hotel and Residences

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I. INTRODUCTION

A. Purpose of Study

The purpose of this study is to identify and assess the traffic impacts resulting from the proposed Wailea Hotels and Residences development in Wailea on the island of Maui. The project site is located adjacent to Wailea Alanui Drive between Wailea Ike Drive and Okolani Drive.

B. Scope of Study

This report presents the findings and conclusions of the traffic study, the scope of which includes:

- 1. Description of the proposed project.
- Evaluation of existing roadway and traffic operations in the vicinity.
- 3. Analysis of future roadway and traffic conditions without the proposed project.
- Analysis and development of trip generation characteristics for the proposed project.
- 5. Superimposing site-generated traffic over future traffic conditions.
- 6. The identification and analysis of traffic impacts resulting from the proposed project.
- 7. Recommendations of improvements, if appropriate, that would mitigate the traffic impacts resulting from the proposed project.

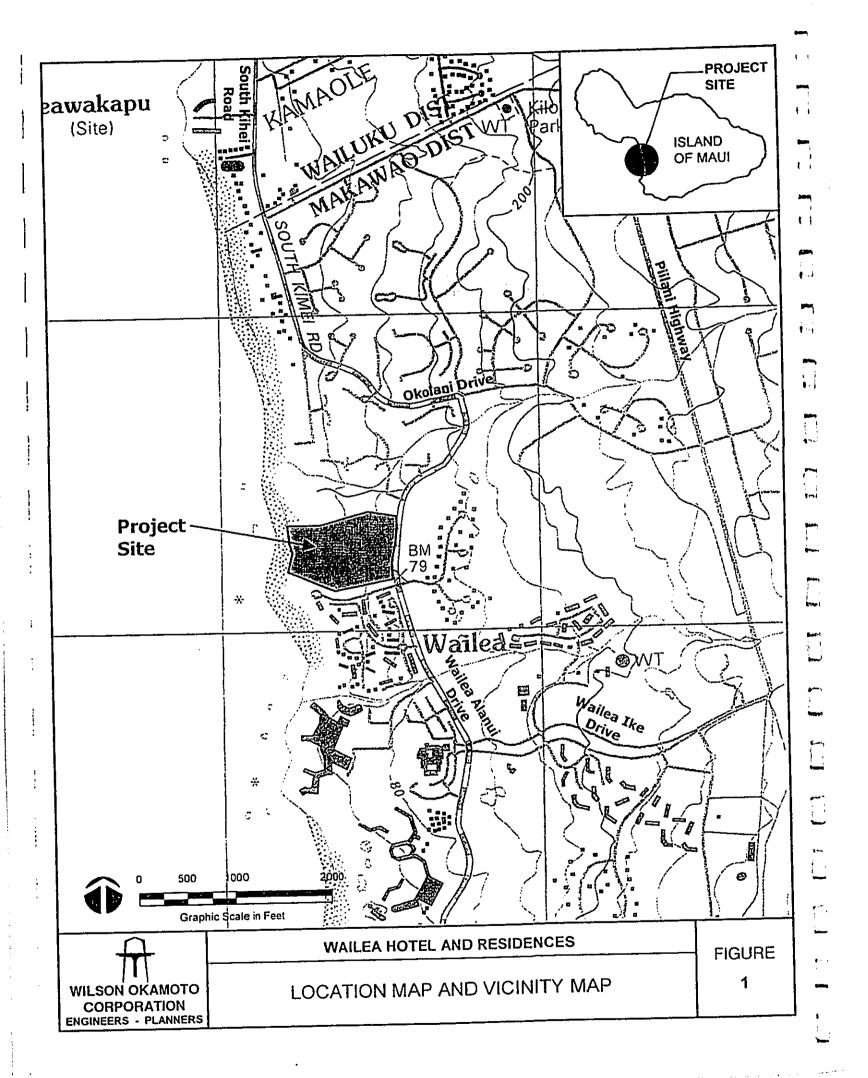
II. PROJECT DESCRIPTION

A. Location

The project site for the proposed Wailea Hotel and Residences development is located adjacent to Wailea Alanui Drive approximately 0.3 miles south of Okolani Drive in Wailea on the island of Maui. The project site is further identified as Tax Map Key: (2) 2-1-08:67 (see Figure 1). Access to the proposed development would be provided via driveways off of Wailea Alanui Drive.

B. Project Characteristics

The project site for the proposed Wailea Hotel and Residences encompasses approximately 15.6 acres and currently houses the Renaissance Wailea Beach Hotel.



The proposed development, which is expected to be completed by the Year 2008, would replace the existing 345-unit resort hotel with a 206-unit condominium development with amenities such as restaurants, pools, and a spa. In addition, the project would entail the realignment of the existing hotel driveway off of Wailea Alanui Drive and, if possible, the provision of an additional driveway along that roadway. Figure 2 shows the proposed project site plan.

III. EXISTING TRAFFIC CONDITIONS

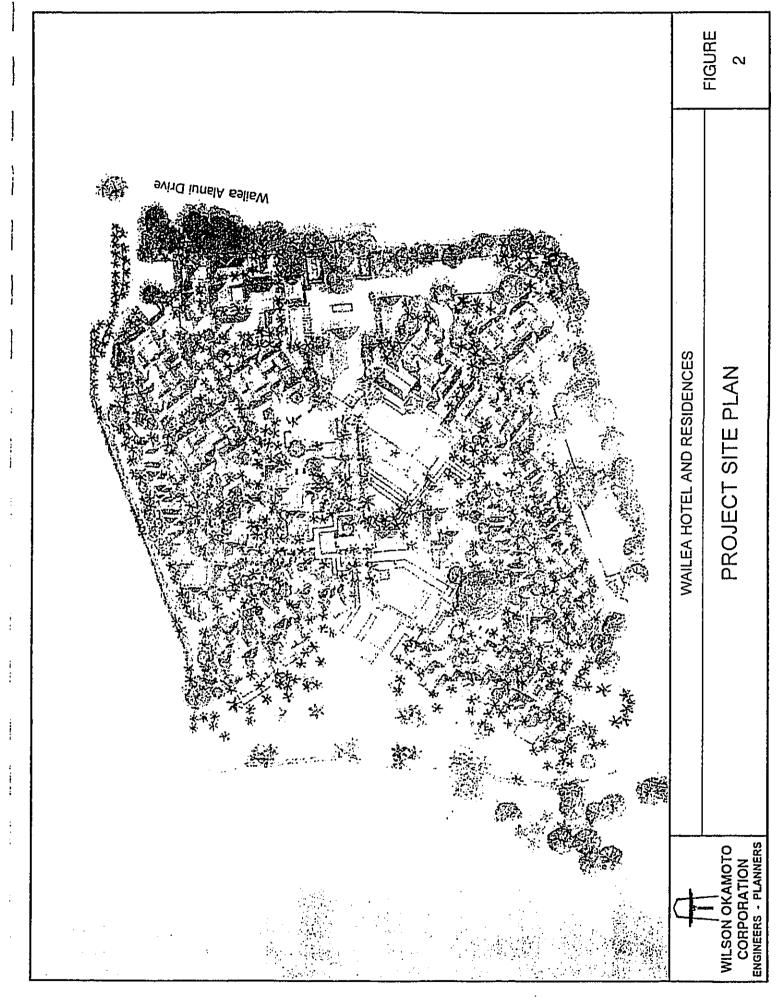
A. General

The project site is located along Wailea Alanui Drive approximately 0.3 miles southwest of Okolani Drive and approximately 0.6 miles west of Piilani Highway. Wailea Alanui Drive and Piilani Highway serve as the main roadways through Wailea, providing access to the southwestern coast of Maui. In recent years, Wailea has become the center of rapid and substantial development. The increasing density of residential and commercial projects has led to significant increases in visitor, employee, and residential traffic in the vicinity. As a result, traffic volumes in the project vicinity have experienced significant growth in recent years.

B. Area Roadway System

In the vicinity of the project site, Wailea Alanui Drive is a predominantly four-lane, two-way County of Maui roadway that serves as one of the main access roads through Wailea. Approximately 0.3 miles northeast of the project site, Wailea Alanui Drive intersects Okolani Drive. At this unsignalized intersection, the northbound approach of Wailea Alanui Drive has three lanes that serve left-turn, through, and right-turn traffic movements while the southbound approach has two lanes that serve all traffic movements. Okolani Drive is a two-lane, two-way County of Maui roadway that serves as a connector road between South Kihei Road, Wailea Alanui Drive, and Piilani Highway. At this intersection, the westbound approach of Okolani Drive has two lanes that serve all traffic movements while the eastbound approach has three lanes that serve all traffic movements.

Approximately 0.4 miles southeast of the project site, Wailea Alanui Drive intersects Wailea Ike Drive. At this signalized T-intersection, the northbound



approach of Wailea Alanui Drive has one lane that serves through and right-turn traffic movements while the southbound approach has three lanes that serve left-turn and through traffic movements. Wailea Ike Drive is a predominantly two-lane, two-way County of Maui roadway that serves as a connector road between Wailea Alanui Drive and Piilani Highway. The Wailea Ike Drive approach of the intersection has two lanes that serve left-turn and right-turn traffic movements.

C. Traffic Volumes and Conditions

1. General

a. Field Investigation

A field investigation was conducted on May 11-12, 2005 and consisted of manual turning movement counts along Wailea Alanui Drive. The manual turning movement count surveys were conducted between the morning peak hours of 6:30 AM and 8:30 AM, and the afternoon peak hours of 3:00 PM and 5:00 PM at the following intersections:

- Wailea Alanui Drive and Okolani Drive
- Wailea Alanui Drive and Wailea Ike Drive

Appendix A includes the existing traffic count data.

b. Capacity Analysis Methodology

The highway capacity analysis performed in this study is based upon procedures presented in the "Highway Capacity Manual", Transportation Research Board, 2000, and the "Highway Capacity Software", developed by the Federal Highway Administration. The analysis is based on the concept of Level of Service (LOS).

LOS is a quantitative and qualitative assessment of traffic operations. Levels of Service are defined by LOS "A" through "F"; LOS "A" representing ideal or free-flow traffic operating conditions and LOS "F" unacceptable or potentially congested traffic operating conditions.

"Volume-to-Capacity" (v/c) ratio is another measure indicating the relative traffic demand to the road carrying capacity. A v/c ratio of one (1.00) indicates that the roadway is operating at or near capacity. A v/c ratio of greater than 1.00 indicates that the traffic demand exceeds the road's carrying capacity. The LOS definitions are included in Appendix B.

2. Existing Peak Hour Traffic

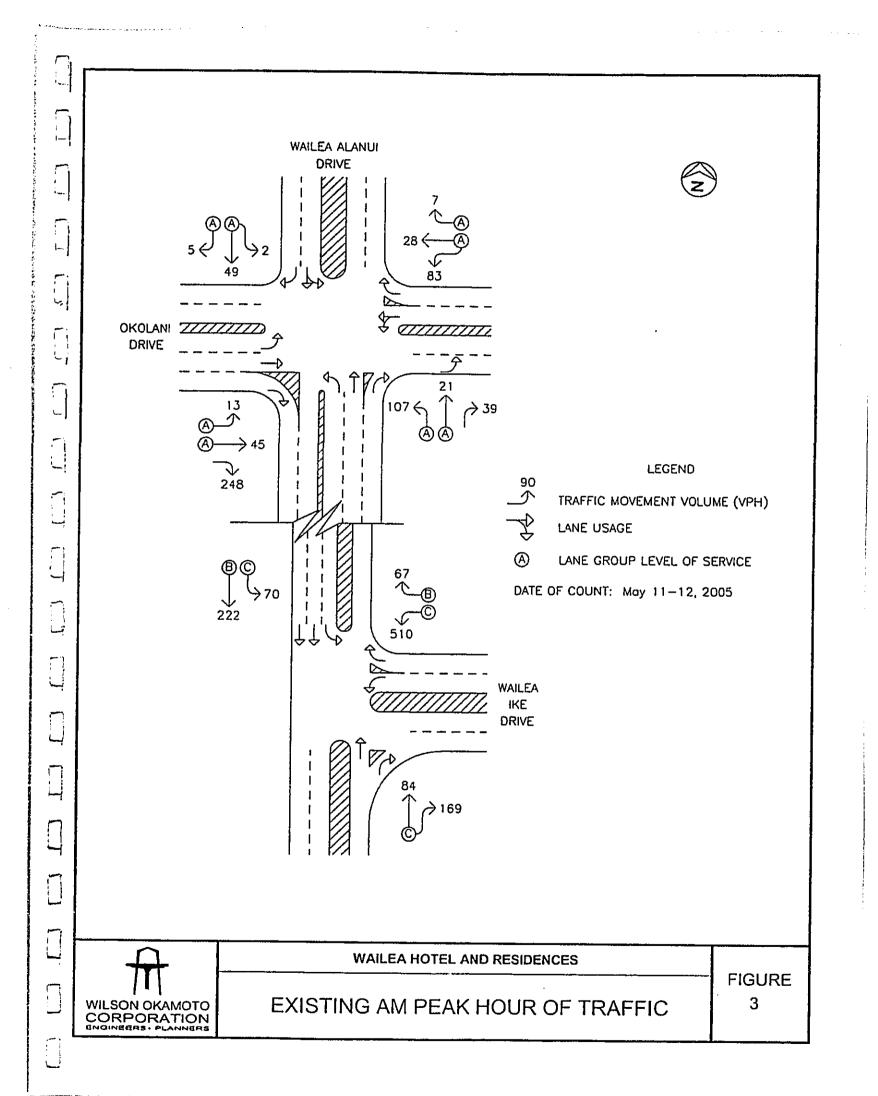
a. General

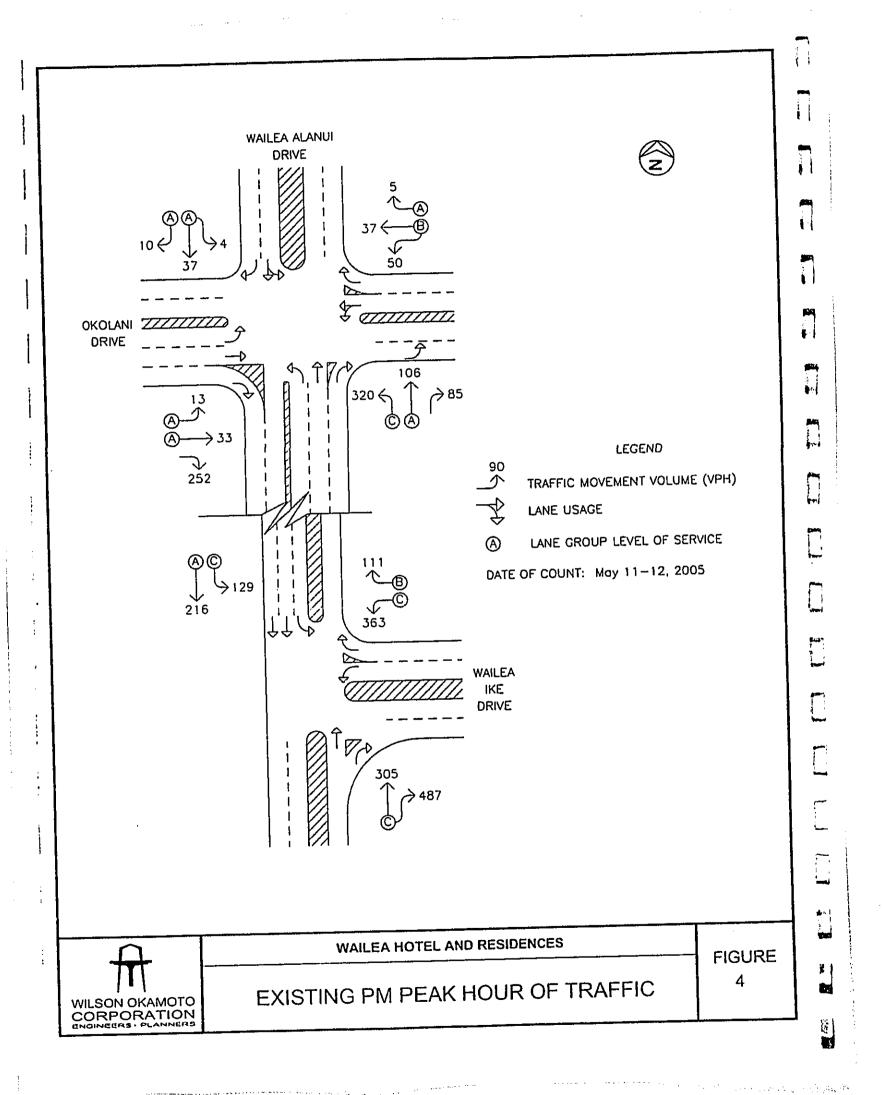
Figures 3 and 4 show the existing AM and PM peak hour traffic volumes and operating traffic conditions. The AM peak hour of traffic generally occurs between 7:00 AM and 8:00 AM in the vicinity of the proposed project. In the afternoon, the PM peak hour of traffic generally occurs between the hours of 3:15 PM and 4:15 PM. The analysis is based on these peak hour time periods to identify the traffic impacts resulting from the proposed project. LOS calculations are included in Appendix C.

b. Wailea Alanui Drive and Okolani Drive

At the intersection Okolani Drive, Wailea Alanui Drive carries 167 vehicles northbound and 56 vehicles southbound during the AM peak hour of traffic. During the PM peak hour, the overall traffic volume is heavier with 511 vehicles traveling northbound and 51 vehicles traveling southbound. The critical traffic movements of the Wailea Alanui Drive approaches is the northbound left-turn traffic movement which operates at LOS "A" and LOS "C" during the AM and PM peak hours of traffic, respectively.

The Okolani Drive approaches of this intersection carry 118 vehicles westbound and 306 vehicles eastbound during the AM peak hour of traffic. During the PM peak hour, the traffic volume is slightly less with 92 vehicles traveling westbound and 298 vehicles traveling eastbound. The critical movement of the Okolani Drive approaches is





the westbound left-turn and through traffic movement which operates at LOS "A" and LOS "B" during the AM and PM peak hours of traffic, respectively.

c. Wailea Alanui Drive and Wailea Ike Drive

At the intersection with Wailea Ike Drive, Wailea Alanui Drive carries 255 vehicles northbound and 292 vehicles southbound during the AM peak hour of traffic. During the PM peak hour, the traffic volumes are heavier with 792 vehicles traveling northbound and 345 vehicles traveling southbound. The critical movements of the Wailea Alanui Drive approaches are the northbound through and right-turn traffic movement and the southbound left-turn traffic movement. Both traffic movements operate at LOS "C" during both peak hours of traffic.

The Wailea Ike Drive approach of this intersection carries 577 vehicles westbound during the AM peak hour of traffic. During the PM peak hour of traffic, the traffic volume is less with 474 vehicles traveling westbound. The critical movement of the Wailea Ike Drive approach is the westbound left-turn traffic movement which operates at LOS "C" during both peak hours of traffic.

Overall, the intersection of Wailea Alanui Drive with Wailea Ike Drive operates at LOS "C" and LOS "B" during the AM and PM peak periods of traffic, respectively. These levels of service are consistent with field observations at the intersection which indicate that traffic operates smoothly during both peak hours of traffic. Traffic queues would periodically form on the approaches to the intersection, but these queues would usually clear the intersection after each traffic signal cycle change.

IV. PROJECTED TRAFFIC CONDITIONS

A. Site-Generated Traffic

1. Trip Generation Methodology

The trip generation methodology used in this study is based upon generally accepted techniques developed by the Institute of Transportation Engineers (ITE) and published in "Trip Generation, 7th Edition," 2003. The ITE trip generation rates are developed empirically by correlating the vehicle trip generation data with various land use characteristics such as the number of vehicle trips generated per hotel room or condominium unit. Table 1 summarizes the project site trip generation characteristics applied to the AM and PM peak hours of traffic to measure the impact resulting from the proposed Wailea Hotel and Residences development.

Table 1: Peak Hour Trip Generation

RESORT HOTEL					
INDEPENDENT VARIABLE: Existing # of Rooms = 345					
		PROJECTED TRIP ENDS			
AM PEAK	ENTER	-92			
	EXIT	-36			
	TOTAL	-128			
PM PEAK	ENTER	-69			
<u> </u>	EXIT	-92			
	TOTAL	-161			
RESIDENTIAL	RESIDENTIAL CONDOMINIUM/TOWNHOUSE				
INDEPENDENT	VARIABLE:	of Dwelling Units = 206			
		PROJECTED TRIP ENDS			
AM PEAK	ENTER	16			
	EXIT	76			
	TOTAL	92			
PM PEAK	ENTER	73			
	EXIT	36			
	TOTAL	109			

Table 1: Peak Hour Trip Generation (Cont'd)

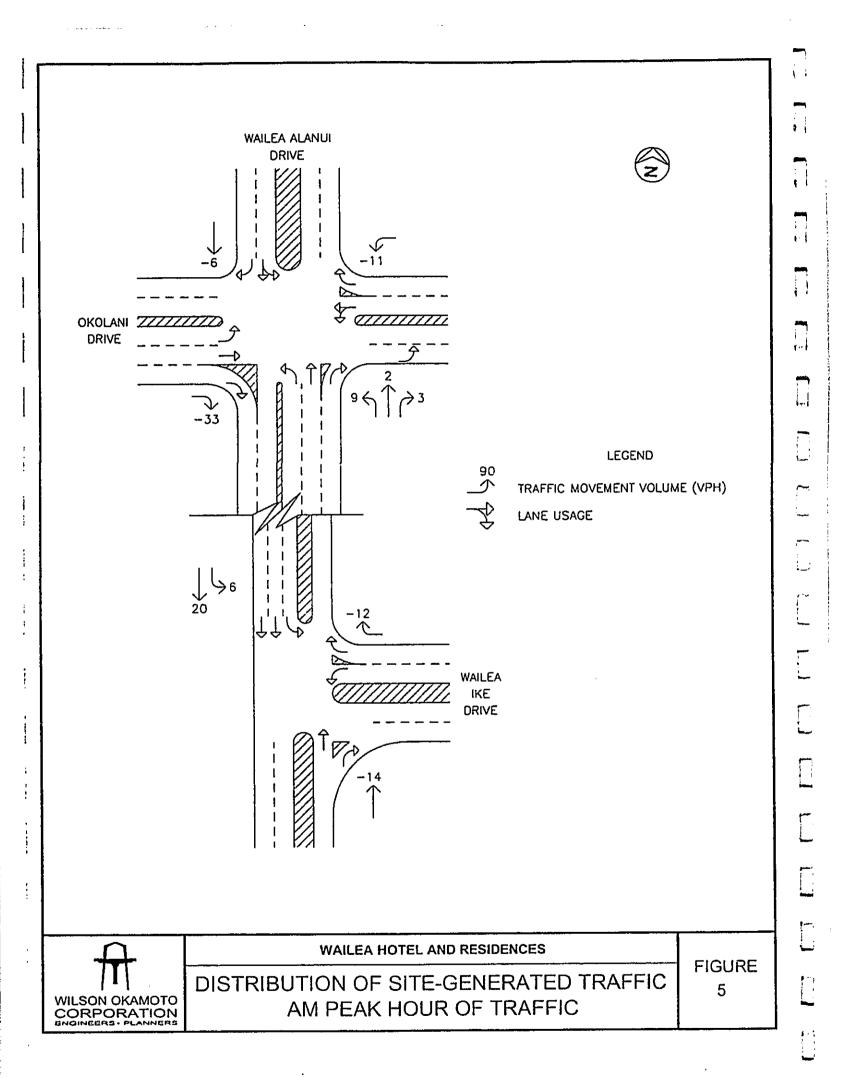
TOTALS		
		PROJECTED TRIP ENDS
AM PEAK	ENTER	-76
ļ	EXIT	40
	TOTAL	-36
PM PEAK	ENTER	4
	EXIT	-56
	TOTAL	-52

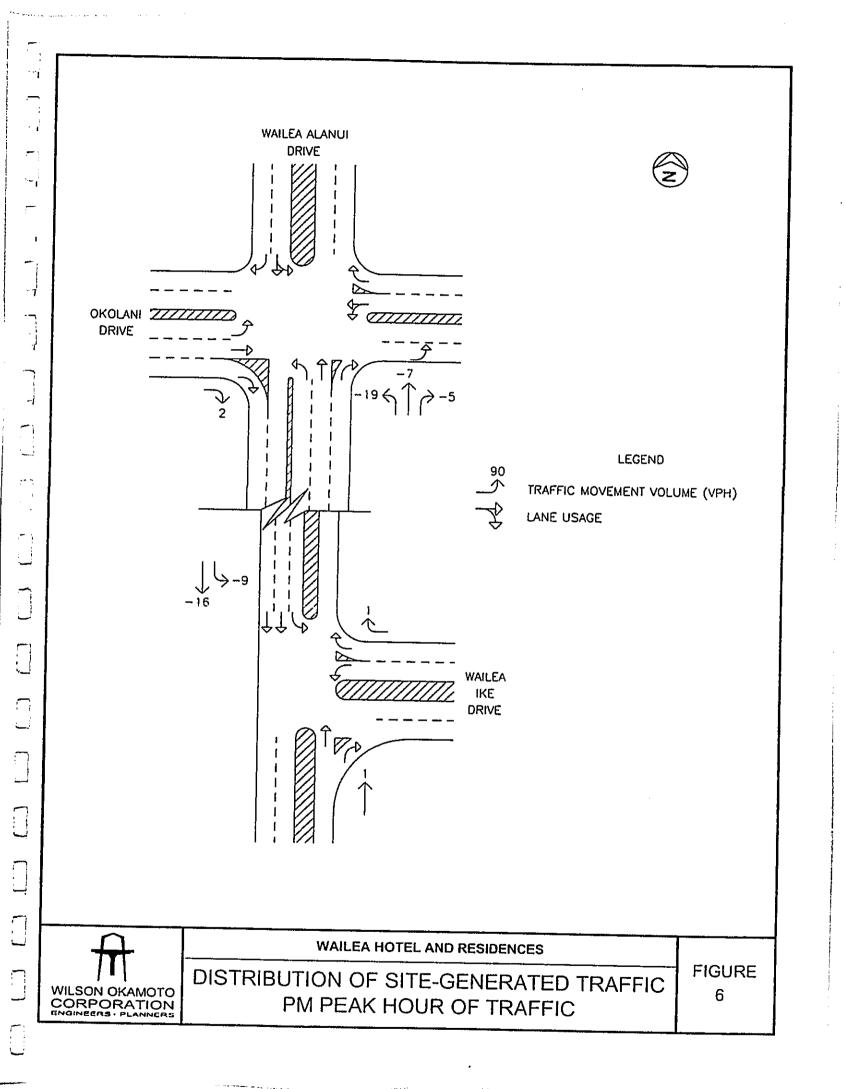
2. Trip Distribution

Figures 5 and 6 show the distribution of site-generated vehicular trips at the study intersections during the AM and PM peak hours. Access to the proposed Wailea Hotel and Residences development would be via driveways off of Wailea Alanui Drive. The directional distribution of site-generated vehicles at the project driveways was based upon the prevailing directional distribution of traffic along Wailea Alanui Drive. As such, 34.1% of the vehicles were assumed to be traveling northbound during the AM peak period while 65.9% were assumed to be traveling southbound. During the PM peak period, 54.7% were assumed to be traveling northbound while 45.3% were assumed to be traveling southbound. The distribution of traffic at the study intersections was assumed to remain similar to the existing distribution at those intersections.

B. Through Traffic Forecasting Methodology

The travel forecast is based upon historical traffic count data obtained from the State DOT, Highways Division at a survey station located at the intersection of Wailea Ike Drive with Piilani Highway. The historical data were analyzed by linear regression techniques to obtain an annual traffic growth rate of approximately 4.9% in the project vicinity, using 2005 as the Base Year. A growth rate factor of 1.154 was applied to the existing traffic demands at the intersections of Wailea Alanui Drive with Okolani Drive and Wailea Ike Drive to achieve the projected Year 2008 traffic demands at those intersections.





C. Total Traffic Volumes Without Project

The projected Year 2008 AM and PM peak hour traffic volumes and operating conditions along Wailea Alanui Drive without the development of the proposed Wailea Hotel and Residences are shown on Figures 7 and 8, and summarized in Table 2. The existing levels of service are provided for comparison purposes. LOS calculations are included in Appendix D.

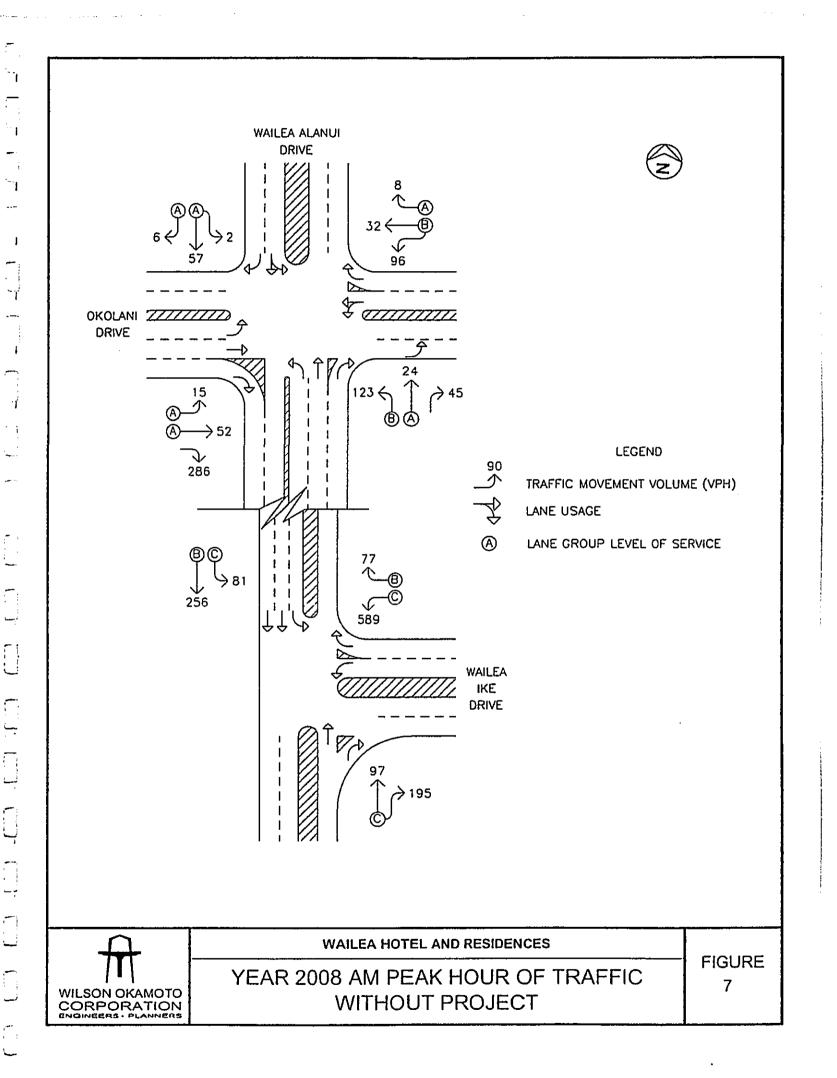
Table 2: Existing and Projected (Without Project) LOS
Traffic Operating Conditions

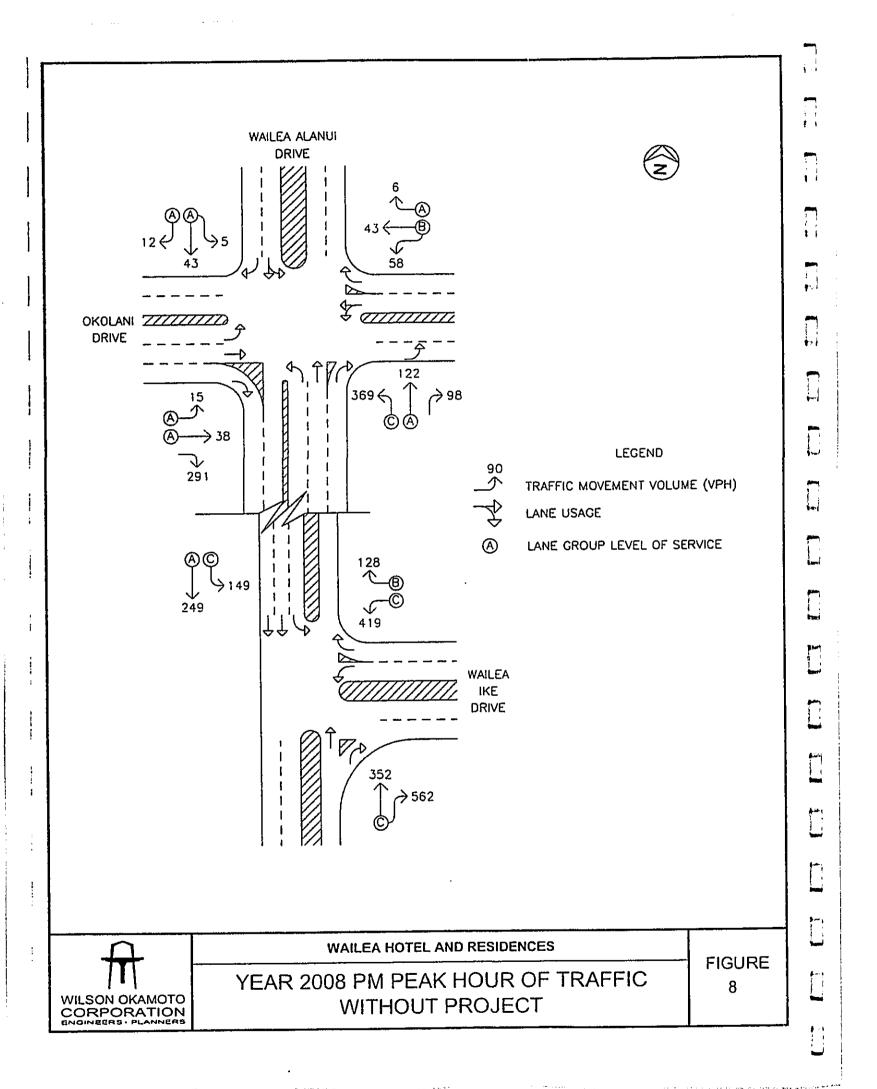
Intersection	Critical Movement	A	M	P	M
		Exist	Year 2008 w/out Proj	Exist	Year 2008 w/out Proj
Wailea Alanui	Westbound (LT-TH)	Α .	В	В	В
Dr/Okolani Dr	Northbound (LT)	A	В	С	С
Wailea Alanui	Westbound (LT)	С	С	С	С
Or/Wailea Ike Dr	Northbound (TH-RT)	С	С	С	С
	Southbound (LT)	С	С	С	С

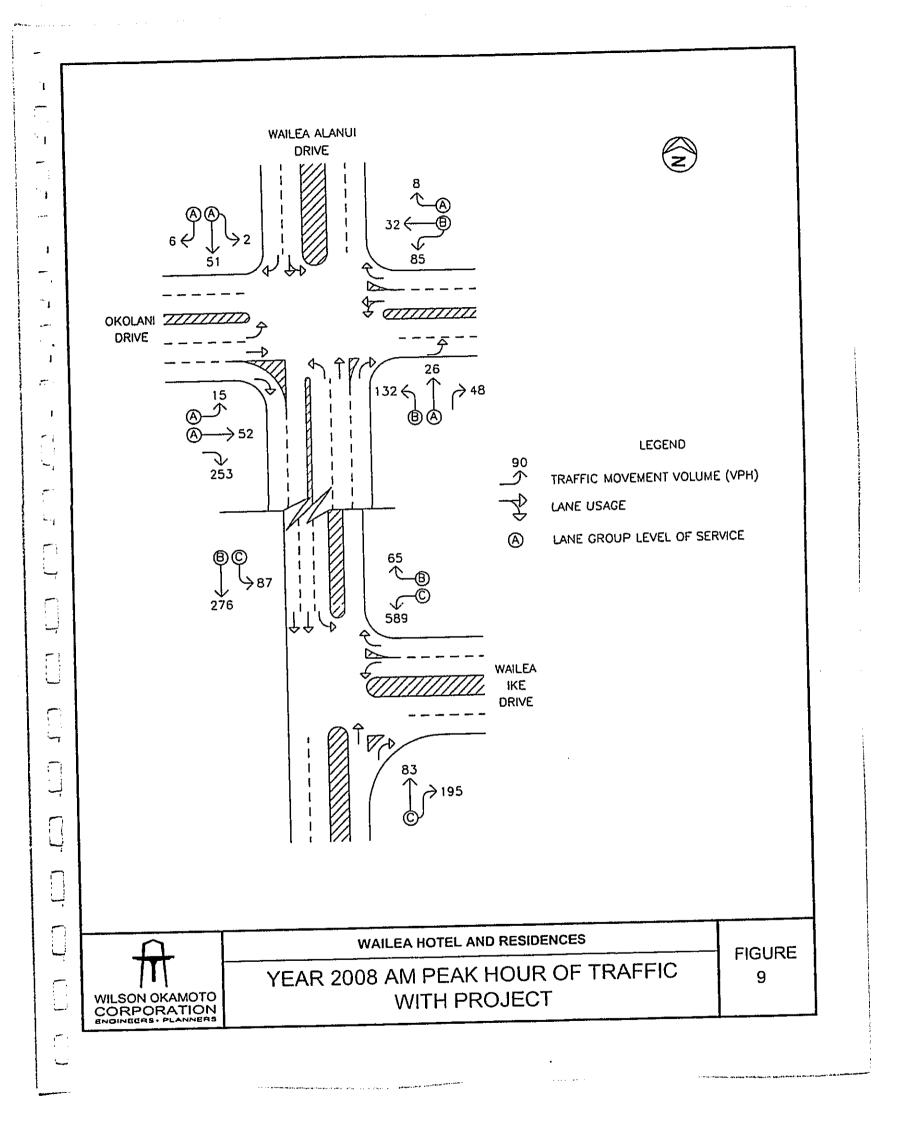
Traffic operations along Wailea Alanui Drive are expected, in general, to remain similar to existing conditions during both peak hours of traffic. At the intersection of Wailea Alanui Drive with Okolani Drive, the westbound left-turn and through traffic movement and the northbound left-turn traffic movement are expected to deteriorate from LOS "A" to LOS "B" during the AM peak period due to the anticipated increases in traffic along both roadways. At the intersection of Wailea Alanui Drive with Wailea Ike Drive, the critical movements are expected to operate at levels of service similar to existing traffic conditions during both peak hours of traffic.

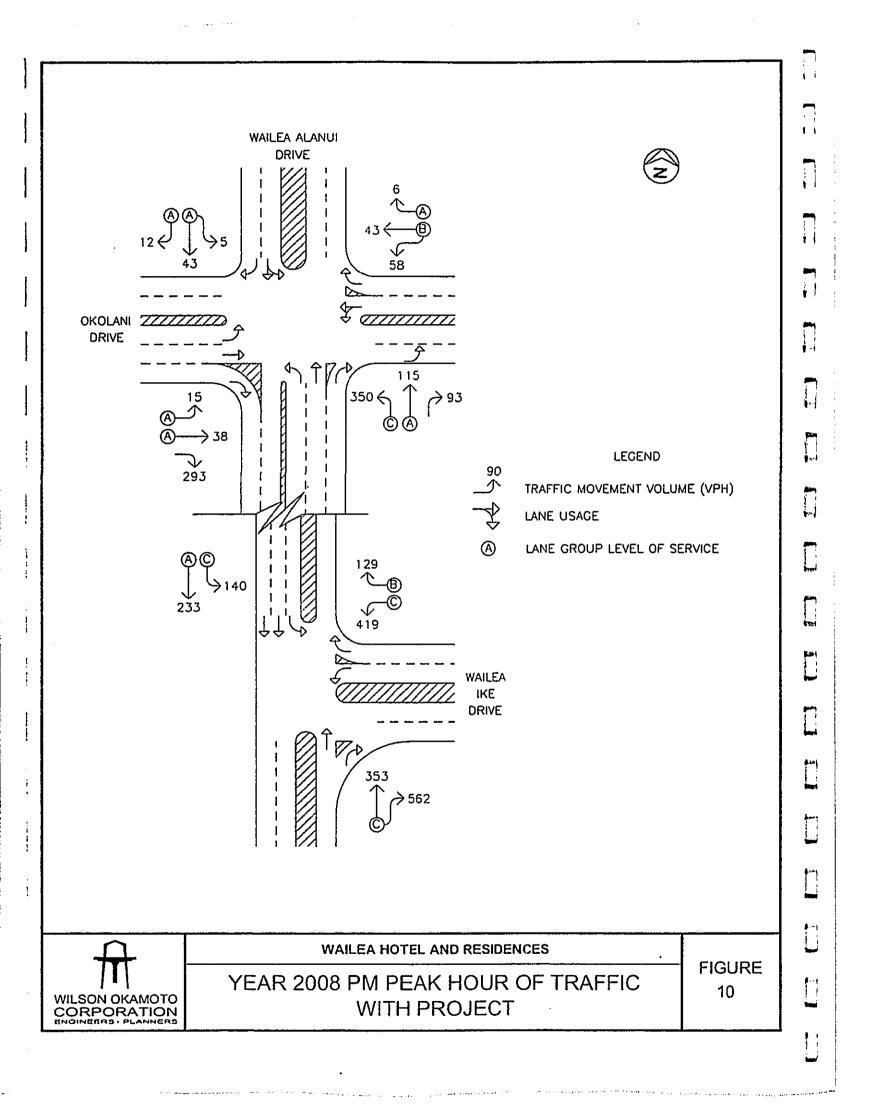
D. Total Traffic Volumes With Project

Figures 9 and 10 show the Year 2008 cumulative AM and PM peak hour traffic conditions resulting from the projected external traffic and development of the proposed Wailea Hotel and Residences. The cumulative volumes consist of site-









generated traffic superimposed over Year 2008 projected traffic demands. The traffic impacts resulting from the proposed project are addressed in the following section.

V. TRAFFIC IMPACT ANALYSIS

The Year 2008 cumulative AM and PM peak hour traffic conditions with the development of the Wailea Hotel and Residences are summarized in Table 3. The existing and projected Year 2008 (Without Project) operating conditions are provided for comparison purposes. LOS calculations are included in Appendix E.

Table 3: Existing and Projected (Without and With Project) LOS

Traffic Operating Conditions

Intersection	Critical Movement		AM		1	PM	
		Exist	Year	2008	Exist	Year	2008
		}	w/out Proj	w/ Proj		w/out Proj	vv/ Proj
Wailea Alanui	Westbound (LT-TH)	A	В	В	В	В	В
Dr/Okolani Dr	Northbound (LT)	A	В	В	С	C	С
Wailea Alanui	Westbound (LT)	С	С	С	С	С	С
Dr/Wailea Ike Dr	Northbound (TH-RT)	C	С	С	С	C	C
	Southbound (LT)	С	С	С	C	С	С

Traffic operations along Wailea Alanui Drive are expected to remain similar to Year 2008 (Without Project) conditions. At the intersection of Wailea Alanui Drive with Okolani Drive, the critical movements on the westbound and northbound approaches to the intersection are expected to remain at LOS "B" during the AM peak period and LOS "B" and LOS "C," respectively, during the PM peak period. Similarly, the critical movements on the westbound, northbound, and southbound approaches of the intersection of Wailea Alanui Drive with Wailea Ike Drive are expected to remain at LOS "C" during both peak hours of traffic.

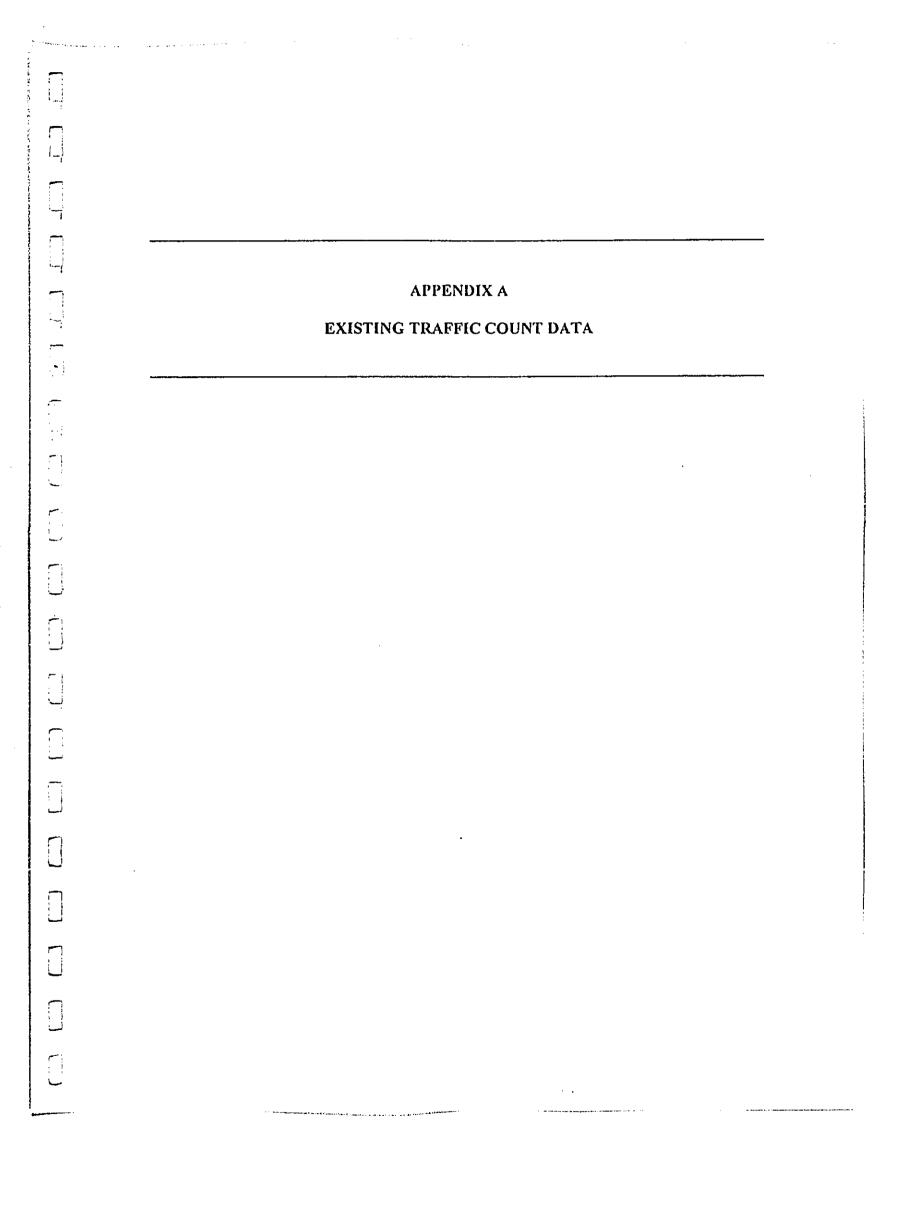
VI. RECOMMENDATIONS

Based on the analysis of the traffic data, the following are the recommendations of this study:

- 1. Provide sufficient driveway width to accommodate safe vehicle ingress and egress.
- 2. Provide adequate turning radii at all project driveways to avoid or minimize vehicle encroachments to oncoming traffic lanes.
- Maintain adequate sight distances for motorists to safely enter and exit all project driveways.
- 4. Provide adequate on-site loading and off-loading areas to prevent off-site loading operations.

VII. CONCLUSION

The proposed Wailea Hotel and Residences development is not expected to have a significant impact on traffic operations in the project vicinity. Due to the change in land use and the reduction in the number of units, the proposed project is expected to generate less vehicular traffic than the existing resort hotel during the AM and PM peak periods. As such, the critical traffic movements at both study intersections along Wailea Alanui Drive are expected to continue operating at acceptable levels of service during both peak hours of traffic.



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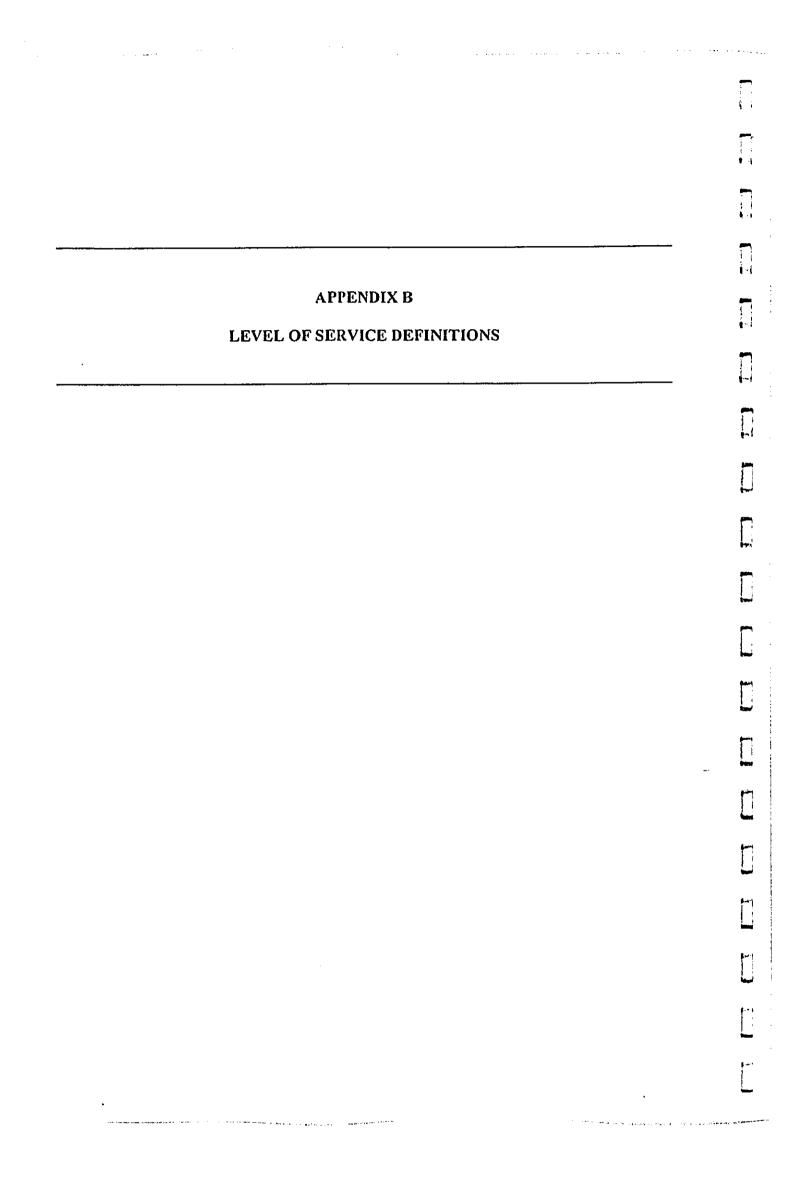
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LEVEL OF SERVICE DEFINITIONS

LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Level of Service (LOS) criteria are given in Table 1. As used here, control delay is defined as the total elapsed time from the time a vehicle stops at the end of the queue to the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position, including deceleration of vehicles from free-flow speed to the speed of vehicles in the queue.

The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. If the degree of saturation is greater than about 0.9, average control delay is significantly affected by the length of the analysis period.

Table 1: Level-of-Service Criteria for Unsignalized Intersections

Level of Service	Average Control Delay (Sec/Vch)
	≤10.0
n D	>10.0 and ≤ 15.0
В	>15.0 and ≤25.0
C	$>25.0 \text{ and } \le 35.0$
D	>35.0 and ≤ 50.0
E	>50.0
F	>30.0

LEVEL OF SERVICE DEFINITIONS

LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Level of Service (LOS) for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. Specifically, level-of-service (LOS) criteria are stated in terms of the average control delay per vehicle, typically a 15-min analysis period. The criteria are given in the following table.

Table 1: Level-of-Service Criteria for Signalized Intersections

Level of Service	Control Delay per Vehicle (sec/veh)	
A	≤10.0	
В	>10.0 and ≤20.0	
C	>20.0 and ≤35.0	
D	>35.0 and ≤55.0	
E	>55.0 and ≤80.0	
_ F	>80.0	

Delay is a complex measure and depends on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group.

Level of Service A describes operations with low control delay, up to 10 sec per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.

Level of Service B describes operations with control delay greater than 10 and up to 20 sec per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.

Level of Service C describes operations with control delay greater than 20 and up to 35 sec per vehicle. These higher delays may result from only fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

Level of Service D describes operations with control delay greater than 35 and up to 55 sec per vehicle. At level of service D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

[&]quot;Highway Capacity Manual," Transportation Research Board, 2000

Level of Service E describes operation with control delay greater than 55 and up to 80 sec per vehicle. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent.

Level of Service F describes operations with control delay in excess of 80 sec per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

APPENDIX C CAPACITY ANALYSIS CALCULATIONS EXISTING PEAK HOUR TRAFFIC ANALYSIS

HCS2000: Unsignalized Intersections Release 4.1d

Wilson Okamoto

Phone: E-Mail: Fax:

ALL-WAY STOP CONTROL(AWSC) ANALYSIS_____

CLAnalyst:

Agency/Co.:

05/13/05 Date Performed: Analysis Time Period: AM Peak

Intersection: Jurisdiction:

Units: U. S. Customary

Project ID:

Analysis Year: Existing

East/West Street: Okolani Dr
North/South Street: Wailea Alanui Dr
Worksheet 2 - Volume Adjustments and Site Characteristics____

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	1			I						!			_'
Volume	 113	45	O	183	28	7	1107	21	0	12	49	5	ı

% Thrus Left Lane

	East	pound	Westi	oound	North	bound	South	bound
	Ll	L2	Ll	L2	L1	L2	L.1	r5
Configuration	L	т	LT	R	L	т	LT	R
PHE	0.90	0.90	0.89	0.89	0.76	0.76	0.64	0.64
Flow Rate	14	50	124	7	140	27	79	7
% Heavy Veh	2	2	2	2	2	2	2	2
No. Lanes		2		2		2		2
Opposing-Lanes		2		2		2		2
Conflicting-lanes		2		2		2		2
Geometry group		5		5		5		5
Duration, T 1.00	hrs.							

Worksheet 3 - Saturation Headway Adjustment Worksheet____

	Eastbound		West	bound	North	bound	Southbound		
	Ll	L2	L1	L2	Ll	L2	Ll	L2	
Flow Rates:									
Total in Lane	14	50	124	7	140	27	79	7	
Left-Turn	14	0	93	0	140	0	3	0	
Right-Turn	0	0	0	7	0	0	0	7	
Prop. Left-Turns	1.0	0.0	0.8	0.0	1.0	0.0	0.0	0.0	
Prop. Right-Turns	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	

0.0 0.0 0.0 0.0 0.0 Prop. Heavy Vehicle0.0 0.0 5 Geometry Group Adjustments Exhibit 17-33: 0.5 0.5 0.5 0.5 -0.7 hLT-adj -0.7 -0.7 -0.7 1.7 hRT-adj 1.7 1.7 -0.7 1.7 0.1 hHV-adj 0.0 0.5 -0.7 0.4 0.5 0.0 hadj, computed _Worksheet 4 - Departure Headway and Service Time_ Southbound Northbound Westbound Eastbound L2 Ll L1 L2 Ll L2 Ll L2 7 79 27 140 124 50 3.20 3.20 14 3.20 3.20 Flow rate 3.20 3.20 3.20 3.20 0.07 0.01 hd, initial value 0.12 0.02 0.01 4.58 0.11 5.26 4.55 0.01 0.04. x, initial 5.65 5.15 0.22 0.04 5.85 5.35 0.02 0.07 5.65 0.12 0.01 hd, final value 0.19 0.01 2.3 x, final value 2.3 2.3 Move-up time, m Service Time 2.3 2.2 3.0 2.9 2.3 3.4 3.4 3.1 3.6 _Worksheet 5 - Capacity and Level of Service__ Southbound Northbound Westbound Eastbound L1 L2 Li L2 L2 Ll L2 Ll 7 79 27 140 7 124 3.0 50 2.2 14 Fiow Rate 2.9 3.4 2.3 3.4 3.1 0.01 3.ნ 0.04 Service Time 0.12 0.01 0.22 0.07 0.19 0.02 4.55 5.26 Utilization, x 5.65 5.15 5.65 4.58 5.85 5.35 257 329 Dep. headway, hd 277 257 390 374 300 7.29 264 8.06 8.65 Capacity 9.94 7.32 9.71 8.48 8.69 A. P. A Delay A A. A A. A LOS 8.54 Approach: 9.64 9.59 A 8.53 Α Delay A

Intersection LOS A

A

Intersection Delay 9.25

LOS

Wilson Okamoto

Phone: E-Mail:

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Fax:

ALL-WAY STOP CONTROL (AWSC) ANALYSIS_

Analyst:

Agency/Co.: Date Performed:

05/13/05 Analysis Time Period: PM Peak

Intersection: Jurisdiction:

Units: U. S. Customary

Analysis Year: Project ID:

Existing

East/West Street:

Okolani Dr

North/South Street: Wailea Alanui Dr

Worksheet 2 - Volume Adjustments and Site Characteristics___

	! Ea	stbou	ınd	, We	estbo	und	ı No	rthbo	und	So	outhbo	ound	ļ
	1 L	Ŧ	P.	J Ł	T	R	L	T	R	! L	T	R	!
Volume	113	33	0	-i <u></u>	37	5	-¦	106	0	4	37	10	一¦
† Thrus	•			•									

	East	oound	Westi	bnucc	North	oound	Southbound	
	Ll	L2	L1	L2	L1	L2	Ll	L2
Configuration	L	T	LT	R	L	Т	LT	R
PHF	0.86	0.86	0.88	0.98	0.84	0.84	0.75	0.75
Flow Rate	15	38	98	5	380	126	54	13
% Heavy Veh	2	2	2	2	2	2	2	2
No. Lanes		2		2	:	2		2
Opposing-Lanes		2		2	:	2	;	2
Conflicting-lanes		2		2	:	2		2
Geometry group	!	5	1	5	!	5	!	5
Duration, T 1.00	hrs.							

Workshe	et 3 -	Saturat	ion Hea	idway Adj	justment	Workshe	et		
	East	bound	West	bound	North	bound	Southbound		
	Ll	L2	Ll	L2	L1	L2	Ll	Ľ2	
Flow Rates:									
Total in Lane	15	38	98	5	380	126	54	13	
Left-Turn	15	0	56	0	380	0	5	0	

0

0

0

13

Right-Turn 0.0 1.0 0.0 0.1 0.0 Prop. Left-Turns 1.0 0.0 0.6 0.0 0.0 0.0 0.0 1.0 Prop. Right-Turns 0.0 0.0

Prop. Heavy Vehicle Geometry Group Adjustments Exhibit hLT-adj hRT-adj hHV-adj hadj, computed	- ξ		5		5		J	
			arture H					
Flow rate hd, initial value x, initial hd, final value x, final value Move-up time, m Service Time	L1 15 3.20 0.01 6.63 0.03	L2 38 3.20 0.03 6.13 0.06 2.3 3.8	Westbe L1 98 3.20 0.09 6.34 0.17 2 4.0	12 5 3.20 0.00 5.35 0.01 .3 3.1	L1 380 3.20 0.34 5.59 0.59		L1 54 3.20 0.05 5.60 0.08	L2 13 3.20 0.01 4.85 0.02 2.3 2.6
	Easth	oound	Westb L1	ound	Northb	ound	South	oound
Flow Rate Service Time Utilization, x Dep. headway, hd Capacity Delay LOS Approach: Delay LOS Intersection Delay	15 4.3 0.03 6.63 265 9.52 A	38 3.8 0.06 6.13 288 9.26 A	98 4.0 0.17 6.34 348 10.36 B	5 3.1 0.01 5.35 255 8.09 A	380 3.3 0.59 5.59 630 16.23 C	126 2.8 0.18 5.09 376 8.89 A	54 3.3 0.08 5.60 304 8.81 A	13 2.6 0.02 4.85 263 7.64 A

HCS2000: Signalized Intersections Release 4.1e

Analyst: CL

Inter.:
Area Type: All other areas Jurisd:

Agency: Date: 05/13/05 Period: AM Peak

Year : Existing

Project ID: E/W St: Wailea Ike Dr

N/S St: Wailea Alanui Dr

		tbound			bound	i	i Nor	rthboi	and	Soi	ithbou	ind
	! L	T R	. I L	,	T	R	1 L	T	R	L	T	R
No. Lanes	¦	0 0	{	<u> </u>	Ó	 -	-! -	·				
LGConfig	1	0 0	, I.		U	1	1 0	1	0	1	2	0
Volume	1		151		_	R	!	TR		L	T	
Lane Width	 					7	1	84		70	222	
RTOR Vol	1		12	.0		2.0		12.0		12.0	12.0	
KIOK VOI	1		1		1	7	1		169	1		
Duration	1.00	Ar	еа Тур									
Phase Combi	nation	i	2	ardu 3	ar op	erac	ions_		6	7	8	···-
EB Left					- 1	NB	Left	_	U	,		
Thru					i		Thru		A			
Right					1		Right		A			
Peds					1		Peds		~			
WB Left		Α			1	SB	Left	A				
Thru		. •			1	0.0	Thru	A A	A			
Right		A			1		Right		A			
Peds					1		Peds					
NB Right					;	EB						
SB Right					1		Right					
Green	7	37.0			1	WB	Right	21.0	20.0			
Yellow		1.0										
All Red		0						0.0	4.0			
	•							0.0	1.0 le Len	ath.	90.0	
		Inter	section	n Pe	riorn	nanc	e Summ	ary	re ben	yen.	,0.0	sec
Appr/ Lane		Adj Sa	t t	Rati	os		Lane (App	roach		
iane Grou		Flow Ra	ite					-				
	city	(s)	V	'C	g/C		Delay	LOS	Dela	y LOS		
Grp Capa												
Grp Capa Eastbound												
					 .			· · · · · · · · · · · · · · · · · · ·				
Castbound								,.				
Eastbound Westbound		1770			,							
Castbound		1770	0.	75	0.41		26.8	C	25.0			
Eastbound Nestbound 728		1770 1583			0.41		-	СВ	25.9	С		
Eastbound Westbound 728									25.9	С		1.41
Eastbound Testbound 728 651 Torthbound			0.				-	В	25.9			
Testbound 728 651 Torthbound		1583	0.	08	0.41		16.2	В				
Castbound 728 R 651 Corthbound R 455		1583 1863	0.	08 26	0.41		16.2 27.8	В				
Castbound 728 R 651 Corthbound R 455 Couthbound 413		1583 1863 1770	0. 0.	08 26 19	0.41		16.2 27.8 27.9	B C	27.8	С		
Castbound 728 R 651 Corthbound R 455		1583 1863	0. 0.	08 26	0.41		16.2 27.8	B C		С		

HCS2000: Signalized Intersections Release 4.1e

Analyst: CL

Inter.:

Area Type: All other areas Jurisd:

Year : Existing

Adailyst: CE Agency: Date: 05/13/05 Period: PM Peak Project ID: E/W St: Wailea Ike Dr

N/S St: Wailea Alanui Dr

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LGConfi	ig I			l L		R	1	TR		L		T		1
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Lane Wi	idth			12.0		12.0	i	12.0				12.0		i.
RTOR Vo	1			l		28	Ī		487	1				1
Durati.c	on 1.00		Area 1	Type:										
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The							Thru		A					
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All Red	Lane	1.0 In	itersed Sat		Perfo tios	rmanc		0.0 Cyc ary_	4.0 1.0 le Le	ngth		60.O		secs
All Red		1.0 In Adj				rmanc	e Summ Lane	0.0 Cyc ary_	4.0 1.0 le Le			60.0		5 9 05
All Red	Lane	1.0 In Adj Flow	Sat					0.0 Cyc ary_ Group	4.0 1.0 ele Le	ngth	ch	60.0 —		secs
All Red	Lane Group Capacity	1.0 In Adj Flow	Sat Rate	Rai	tios		Lane	0.0 Cyc ary_ Group	4.0 1.0 ele Le	ngth proa	ch	60.0 —		50CS
All Red Appr/ Jane Grp	Lane Group Capacity	1.0 In Adj Flow	Sat Rate	Rai	tios		Lane	0.0 Cyc ary_ Group	4.0 1.0 ele Le	ngth proa	ch	60.0 —		59C5
All Red Appr/ Lane Grp Castbou	Lane Group Capacity and	I.O In Adj Flow (Sat Rate (s)	v/c	g/	c	Lane Delay	0.0 Cyc ary Group LOS	4.0 1.0 ele Le	ngth proa	ch	50.0		5905
Yellow All Red Appr/ Lane Grp Eastbou	Lane Group Capacity	1.0 In Adj Flow	Sat Rate (s)	0.69	g/ 0.	<u>c</u>	Lane	0.0 Cyc ary_ Group	4.0 1.0 ele Le Del	ngth proa	ch OS	50.0 —		5 9 C5
All Red	Lane Group Capacity and 575 514	I.O Adj Flow (Sat Rate (s)	v/c	g/ 0.	c	Lane Delay	0.0 Cyc ary Group LOS	4.0 1.0 ele Le Del	ngth proa ay L	ch OS	50.0		5 9 C5
All Red	Lane Group Capacity and 575 514	I.O Adj Flow (Sat Rate s)	0.69	g/ 0.	<u>c</u>	Lane Delay	O.O Cyc ary Group LOS	4.0 1.0 ele Le Del	ngth proa ay L	ch OS	50.0		5 9 C5
ppr/ ane astbou	Lane Group Capacity and 575 514	I.O Adj Flow (Sat (Rate s)	0.69	g/ 0.	<u>c</u>	Lane Delay	O.O Cyc ary Group LOS	4.0 1.0 ele Le Del	ngth proa ay L	ch OS	50.0		5905
estbou	Lane Group Capacity and 575 514 and 574	1.0 Adj Flow (Sat (Rate s)	0.69	g/ 0.	32 32	Delay 21.3 14.7	O.O Cyc ary Group LOS	4.0 1.0 ele Le Del	ngth proa ay L	ch OS	50.0		5005
All Red Appr/ Lane Grp Castbou Westbou	Lane Group Capacity and 575 514 and 574	1.0 Adj Flow (Sat Rate s)	0.69 0.69	0. 0.	32 32 31	21.3 14.7 21.8	O.O Cyc ary Group LOS C	4.0 1.0 ele Le Del	ngth proa ay L	ch OS	50.0		5605
All Red Appr/ Lane Grp Castbou Westbou	Lane Group Capacity and 575 514 and 574	1.0 Adj Flow (177 158 186	Sat Rate s)	0.69 0.69 0.18	0. 0.	32 32 31	21.3 14.7 21.8	O.O Cyc ary Group LOS C B	4.0 1.0 ele Le Del Del	ngth proa ay L	ch Os C	60.C		56CE
All Red	Lane Group Capacity and 575 514 and 574	1.0 Adj Flow (Sat Rate s)	0.69 0.69	0. 0.	32 32 31	21.3 14.7 21.8	O.O Cyc ary Group LOS C B	4.0 1.0 ele Le Del	ngth proa ay L	ch OS	50.0		56CE

APPENDIX D

CAPACITY ANALYSIS CALCULATIONS PROJECTED YEAR 2008 PEAK HOUR TRAFFIC ANALYSIS WITHOUT PROJECT

HCS2000: Unsignalized Intersections Release 4.1d

Wilson Okamoto

Phone: E-Mail: Fax:

ALL-WAY STOP CONTROL (AWSC) ANALYSIS

CL

Analyst:

Agency/Co.:

Date Performed: 05/13/05 Analysis Time Period: AM Peak

Intersection: Jurisdiction:

Units: U. S. Customary

Analysis Year: Year 2008 w/out project

Project ID:

East/West Street:

Okolani Dr

North/South Street: Wailea Alanui Dr

Worksheet 2 - Volume Adjustments and Site Characteristics

	Ea	stbo	und	We	stbou	und	l No	rthbo	und	ı s	outhbo	ound	1
	(L	T	R	L	T	R	! L	т	P.	1 L	Т	R	1
	11			1			!			i			1
Volume	115	52	0	196	32	8	1123	24	0	_ <u> 2</u>	57	6	
} Thrus	Left Lan	e											

	Eastbound		West	pound	Northbound		Southbound	
	Ll	r5	L1	L2	Ll	L2	Ll	L2
Configuration	L	Т	LT	R	L	Т	LT	R
PHF	0.90	0.90	0.89	0.89	0.76	0.76	0.64	0.64
Flow Rate	16	57	142	8	161	31	92	9
t Heavy Veh	2	2	2	2	2	2	2	2
No. Lanes	2	2		2	2	2	2	2
Opposing-Lanes	2	2		2		2	2	2
Conflicting-lanes	2	2	:	2	2	2	2	2
Geometry group	9	5	9	5	9	5	9	5
Duration, T 1.00	hrs.							

Worksheet	3 -	Saturation	Headway	Adjustment	Worksheet	
	East	bound	Westbound	d Northi	oound	Southbound

	L1	L2	L1	L2	Ll	L2	Ll	L2
Flow Rates:								
Total in Lane	16	57	142	8	161	31	92	9
Left-Turn	16	0	107	0	161	0	3	0
Right-Turn	0	0	0	8	0	0	0	9
Prop. Left-Turns	1.0	0.0	0.8	0.0	1.0	0.0	0.0	0.0
Prop. Right-Turns	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0

0.0 0.0 0.0 Prop. Heavy Vehicle0.0 0.0 0.0 Geometry Group Adjustments Exhibit 17-33: 0.5 0.5 0.5 hLT-adj -0.7 -0.7 -0.7 -0.7 hRT-adj 1.7 1.7 1.7 1.7 hHV-adj -0.7 0.1 0.0 -0.7 0.0 0.5 hadj, computed _Worksheet 4 - Departure Headway and Service Time_ Southbound Northbound Westbound Eastbound L2 Ll L2 Ll L2 L2 Ll L1 9 92 31 161 142 8 57 16 3.20 Flow rate 3.20 3.20 3.20 3.20 3.20 3.20 3.20 hd, initial value 0.08 0.01 0.14 0.03 0.05 0.13 0.01 x, initial 4.67 5.39 5.76 5.26 5.78 4.71 0.01 5.50 6.00 hd, final value 0.26 0.05 0.14 0.01 0.09 0.23 0.03 x, final value 2.3 2.3 2.3 Move-up time, m Service Time 2.3 2.4 3.0 3.1 3.5 3.5 2.4 3.2 3.7 _Worksheet 5 - Capacity and Level of Service_ Southbound Northbound Westbound Eastbound Ll Ll L1 L2L2 Ll 9 92 31 161 8 57 142 16 Flow Rate 2.4 3.0 3.1 3.5 2.4 3.5 3.7 3.2 Service Time 0.01 0.05 0.14 0.26 0.01 0.23 0.09 0.03 Utilization, X 4.67 5.39 5.26 5.76 4.71 5.78 5.50 6.00 Dep. headway, hd 259 342 281 411 392 258 307 266 Capacity 7.43 10.46 8.21 8.95 10.19 7.46 8.72 8.86 Delay A Α 7 A В LOS Approacht 8.81 10.10 10.04 8.76 Delay Α В В

Intersection LOS A

LOS

Intersection Delay 9.64

HCS2000: Unsignalized Intersections Release 4.1d

Wilson Okamoto

Fax: Phone: E-Mail: ALL-WAY STOP CONTROL(AWSC) ANALYSIS Analyst: Agency/Co.: Date Performed: 05/13/05 Analysis Time Period: PM Peak Intersection: Jurisdiction: Units: U. S. Customary Analysis Year: Year 2008 w/out project Project ID: East/West Street: Okolani Dr
North/South Street: Wailea Alanui Dr
Worksheet 2 - Volume Adjustments and Site Characteristics_____ ! Southbound | Westbound | Northbound | L T R | L T R 1 Eastbound IL T R L T R

	1		1		1		ī		1
Volume	115	38 0	ı <u>58</u>	43 6	1369	122	0 15	43	12
% Thrus [eft Lane	2							
		Eas	tbound	West	bound	North	bnucd	South	bound
		Ll	L2	Ll	L2	Ll	L2	L1	L2
Configura	tion	L	т	LT	R	L	т	LT	R
PHF		0.86	0.86	0.88	0.88	0.84	0.84	0.75	0.75

Flow Rate 17 113 439 145 63 16 % Heavy Veh 2 2 2 2 2 2 No. Lanes 2 2 Opposing-Lanes Conflicting-lanes 2 2 2 5 Geometry group 5 5

Duration, T 1.00 hrs.

Worksheet 3 - Saturation Headway Adjustment Worksheet	Worksheet	3	- !	Saturation	Headway	Adjustment	Worksheet
---	-----------	---	-----	------------	---------	------------	-----------

	East	bound	West	bound	North	bound	South	bound
	L1	L2	Ll	L2	Ll	L2	Ll	L2
Flow Rates:								
Total in Lane	17	44	113	6	439	145	63	16
Left-Turn	17	0	65	0	439	0	6	0
Right-Turn	0	0	0	6	0	0	0	16
Prop. Left-Turns	1.0	0.0	0.6	0.0	1.0	0.0	0.1	0.0
Prop. Right-Turns	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0

Prop. Heavy Vehicl Geometry Group		5		0.0		0.0		0.0 5
Adjustments Exhibi	.t 17-3	ኃ: በ 5	(۱	,	n E
hRT-adi	_	0.3) 7	_().3 1 7		0.5
hHV-adi		1 7) . 7	-(7.7		1 7
hLT-adj hRT-adj hHV-adj hadj, computed	0.5	0.0	0.3	-0.7	0.5	0.0	0.1	-0.7
Wor	ksheet	4 - Dep	arture H	leadway d	and Serv	vice Tim	ne	
	Eastl	bound	Westb	ound	Northb	ound	South	oound
	Ll	L2	Ll	Ľ2	L1	L2	Ll	L2
Flow rate	17	44	113	6	439	145	63	16
hd, initial value	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
x, initial	0.02	0.04	0.10	0.01	0.39	0.13	0.06	0.01
hd, final value	6.90	6.40	6.59	5.60	5.70	5.20	5.81	5.07
x, final value	0.03	0.08	0.21	0.01	0.70	0.21	0.10	0.02
Move-up time, m	:	2.3	2	2.3	2	2.3	:	2.3
Flow rate hd, initial value x, initial hd, final value x, final value Move-up time, m Service Time	4.6	4.1	4.3	3.3	3.4	2.9	3.5	2.8
		5 - Cap						
	East	oound	Westt	ound	Northb	ound	Southi	oound
	L1	L2						L2
Flow Rate	17	4 4		6			63	16
Service Time				3.3				2.8
Utilization, x	0.03	0.08	0.21	0.01	0.70	0.21		0.02
Dep. headway, hd	6.90		6.59		5.70			5.07
Capacity	267	294	363		627	395	313	266
Delay	9.83	9.64	11.00	8.35	21.10	9.28	9.17	7.88
LOS Approach:	A	A	В	A	С	A	A	A
Approach:								
Delay	9	70	1	0.87	1	8.16	8	.91
LOS	Į	/	В		С		P	1
Intersection Delay	15.65		Inte	rsection	LOS C			

HCS2000: Signalized Intersections Release 4.1e

Analyst: CL

Agency:

Date: 05/13/05 Period: AM Peak Project ID:

Inter.:
Area Type: All other areas

Jurisd: Year : Year 2008 w/out project

E/W St: Wailea Ike Dr

N/S St: Wailea Alanui Dr

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LGConfig			ţ	L		R	1	TR		L	T		ĺ
Volume			1	589		77	1	97	195	81	256		i
Lane Width			1	12.0		12.0	1	12.0		12.0	12.0		ĺ
RTOR Vol	İ		I			19	l		195	l			1
Duration	1.00		Area 1			other							
Phase Combin			2			Operat	ions_	5					
rnase Combir EB Left	iation	1	2	3	4	•		5	6	7	,	8	
Thru						I NB	Left						
Right						1	Thru		A				
Right Peds						1	Right Peds		A				
reas B Left		Ž.				I SB	Left	А					
Thru		۲.				1 35	Thru	A	A				
Right		A.				1	Right	n	~				
Peds	1	.				1	Peds						
B Right						EB	Right						
B Right						WB	Right						
reen	3	9.0				(#6	Right						
,								21 N	20 (1			
'ellow	_							21.0)			
	4	. 0						0.0	4.0)			
	4							0.0	4.0 1.0		90.0		secs
	4	.0	tersec	tion	Perf	ormanc	e Summ	0.0 0.0 Cyc	4.0		90.0		secs
all Red	4	.0 .0 Int	tersec Sat		Perf tios		e Summ Lane	0.0 0.0 Cyc ary	4.0 1.0 le Ler				secs
all Red	1	.0 .0 Int Adj			tios			0.0 0.0 Cyc ary	4.0 1.0 le Ler	ngth:			secs
ADDRESS Lane	1	.0 .0 Int Adj Flow	Sat		tios			0.0 0.0 Cyc ary Group	4.0 1.0 le Ler	ngth:	:h		secs
all Red appr/ Lane ane Grou arp Capa	4 1	.0 .0 Int Adj Flow	Sat Rate	Ra	tios		Lane	0.0 0.0 Cyc ary Group	4.0 1.0 le Ler	oroac	:h		secs
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Appr/ Lane Lane Grou Exp Capa Castbound Castbo	1 IP ICITY	.0 .0 Int Adj Flow (s	Sat Rate s)	0.82 0.09	9 0 0	.43 .43	Delay 29.7 15.1 29.9	0.0 0.0 Cyc ary_ Group LOS	4.0 1.0 le Ler App Dela	oroac	s s		secs
opr/ Lane ane Grou rp Capa astbound estbound forthbound R 414 outhbound 413	1 poity	.0 .0 Int Adj Flow (s 1770 1583	Sat Rate s)	0.82 0.09 0.34	9 0 0	.43 .43 .22	Delay 29.7 15.1 29.9	O.O O.O Cyc ary_ Group LOS C B	4.0 1.0 1e Ler App Dela	oroac	s S		secs
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HCS2000: Signalized Intersections Release 4.1e

Analyst: CL

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Agency: Date: 05/13/05

Period: PM Peak

Project ID: E/W St: Wailea Ike Dr

Inter.:

Area Type: All other areas

Jurisd: Year : Year 2008 w/out project

N/S St: Wailea Alanui Dr

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Peds				EB	Right						
NB Right				WB	Right						
SB Right		20.0		, ,,,,,,		10.5	19.5	5			
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Lane G Grp C Eastbound Westbound L	roup apacity 590 528	(s)	v/c		25.0	С					•
Lane G Grp C Eastbound Westbound L	roup apacity 590 528	(s) 1770	v/c 0.78	0.33	25.0	С					,
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Lane G Grp C Eastbound Westbound L R Northboun	590 528 d	1770 1583 1863	0.78 0.20 0.76	0.33 0.33 0.32	25.0 14.5 23.7	C B C	23.	0 0	:		
Lane G Grp C Eastbound Westbound L R Northboun TR Southboun	590 528 d	1770 1583 1863	0.78 0.20 0.76	0.33 0.33 0.32	25.0 14.5 23.7	C B C	23.	0 (:		
Lane G Grp C Eastbound Westbound L R Northboun TR Southboun	590 528 d 605	1770 1583 1863	0.78 0.20 0.76 0.55 0.16	0.33 0.33 0.32 0.17 0.50	25.0 14.5 23.7 24.6 8.2	C B C	23. 23.	0 0	3		

APPENDIX E

CAPACITY ANALYSIS CALCULATIONS PROJECTED YEAR 2008 PEAK HOUR TRAFFIC ANALYSIS WITH PROJECT

HCS2000: Unsignalized Intersections Release 4.1d

Wilson Okamoto

Phone: E-Mail:

Eax:

ALL-WAY STOP CONTROL(AWSC) ANALYSIS_____

Analyst:

Agency/Co.: Date Performed:

05/13/05

CL

Analysis Time Period: AM Peak

Intersection: Jurisdiction:

Units: U. S. Customary Analysis Year:

Year 2008 w/ project

Project ID:

East/West Street:

East/West Street: Okolani Dr North/South Street: Wailea Alanui Dr

Worksheet 2 - Volume Adjustments and Site Characteristics

	•		und				1 No						
	1 L	T	R	1 L	T	R	L	T	R	į L	T	R	i
	1			1			1			_1			i
Volume	15	52	0	185	32	8	132	26	0	<u>2</u>	51	6	-
% Thrus	Left Lan	e											•

	Eastl	potind	Westi	oound	North	oound	South	oound
	L1	L2	Ll	L2	L1	L2	L1	L2
Configuration PHF Flow Rate	L 0.90	T 0.90	LT 0.89	R 0.89	L 0.76	т 0.76	LT 0.64	R 0.64
% Heavy Veh No. Lanes	16 2	57 2	130 2	8 2	173 2	34 2 2	82 2	9 2
Opposing-Lanes Conflicting-lanes	2 2 2		2	2	2	2	2 2 2	
Geometry group Duration, T 1.00	hrs.	•	ţ	5		5	Ç	5

Worksheet 3 - Saturation Headway Adjustment Worksheet

	East Ll	bound L2	West Ll	bound L2	North Ll	bound L2	South Ll	bound L2
Flow Rates: Total in Lane Left-Turn Right-Turn	16 16 0	57 0 0	130 95 0	8 0 8	173 173 0	34 0 0	82 3 0	9 0 9
Prop. Left-Turns Prop. Right-Turns	1.0	0.0	0.7 0.0	0.0	1.0	0.0 0.0	0.0	0.0

Prop. Heavy Vehicle0.0 0.0 0.0 0.0 0.0 0.0 Geometry Group 5 Adjustments Exhibit 17-33: hLT-adj 0.5 0.5 0.5 0.5 hRT-adj -0.7 -0.7 -0.7 -0.7 hHV-adj 1.7 1.7 1.7 hadj, computed 0.5 0.0 -0.7 0.5 0.0 -0.7 _Worksheet 4 - Departure Headway and Service Time_ Eastbound Westbound Northbound Southbound Ll L2 Ll L2 Ll L2 Ll L2 Flow rate 16 57 130 8 173 34 82 hd, initial value 3.20 3.20 3.20 3.20 3.20 3.20 3.20 3.20 ×, initial 0.01 0.05 0.12 0.01 0.07 0.01 5.37 4.65 0.15 0.03 hd, final value 6.00 5.50 5.78 4.72 5.72 5.22 x, final value 0.03 0.09 0.21 0.01 0.05 0.27 0.12 0.01 Move-up time, m 2.3 2.3 2.3 2.3 Service Time 3.7 3.2 3.5 2.4 2.3 _Worksheet 5 - Capacity and Level of Service_ Eastbound Westbound Northbound Southbound LI L2 L1 L2 Ll L.1 L2 Flow Rate 16 57 130 8 173 34 82 9 Service Time 3.7 3.2 3.5 2.4 3.4 2.9 3.1 2.3 Utilization, x 0.03 0.09 0.21 0.01 0.27 0.05 0.12 0.01 Dep. headway, hd 6.00 5.50 5.78 4.72 5.72 5.22 5.37 4.65 Capacity 266 307 380 258 423 284 332 259 Delay 8.86 8.72 10.00+ 7.47 10.58 8.19 8.82 7.40 LOS A, A B Α Α Approach: Delay 8.75 9.86 10.19 8.68

Δ

Intersection LOS A

1

Intersection Delay 9.62

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مستولي الرازان والرازان والمعالمة

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HCS2000: Unsignalized Intersections Release 4.1d

Wilson Okamoto

Fax: Phone: E-Mail: ALL-WAY STOP CONTROL (AWSC) ANALYSIS____ CLAnalyst: Agency/Co.: 05/13/05 Date Performed: Analysis Time Period: PM Peak Intersection: Jurisdiction: Units: U. S. Customary Year 2008 w/ project Analysis Year: Project ID: North/South Street: Wailea Alanui Dr
Worksheet 2 - Volume Adjustments and Site Characteristics____ | Southbound 1 Northbound | Westbound Eastbound Т 1 L i L T R L T R R IL T 43 15 1350 115 0 158 43 6 15 38 0 Volume % Thrus Left Lane

% Thrus Left Lane								
	East Ll	oound L2	West Ll	oound L2	Northb Ll	L2	South:	oound 1,2
Configuration PHF Flow Rate % Heavy Veh No. Lanes Opposing-Lanes Conflicting-lanes Geometry group Duration, T 1.00	L 0.86 17 2	T 0.86 44 2 2 2 2 2	LT 0.88 113 2	R 0.88 6 2 2 2 2 5	i. 0.84 416 2	T 0.84 136 2 2 2 2 5 5		R 0.75 16 2 2 2 2 2 5
						. Washesh	eet	

Worksheet 3 - Saturation Headway Adjustment Worksheet Southbound Northbound Westbound Eastbound 1.2 Ll L2 Ll L2 Ll L1 L2 16 63 Flow Rates: 136 416 6 113 0 44 17 6 Total in Lane 0 416 0 65 16 0 17 0 Left-Turn 0 0 6 0 0 0.00.1 Right-Turn 0 0.0 1.0 0.0 0.6 1.0 0.0 1.0 0.0 Prop. Left-Turns 0.0 0.0 1.0 0.0 Prop. Right-Turns 0.0 0.0

and the state of t

and the second second

Prop. Heavy VehicleO.C Geometry Group	5	0.0	0.0 5	0.0	0.0 5	0.0	0.0 5
Adjustments Exhibit 17 hLT-adj hRT-adj hHV-adj hadj, computed 0.5	0.5 -0.7 1.7		0.5 0.7 1.7 -0.7	-	0.5 0.7 1.7 0.0		0.5 0.7 1.7 -0.7

Worksheet	4	_	Departure	Headway	and	Service	Time_	
-----------	---	---	-----------	---------	-----	---------	-------	--

	Easthound	Westbound	Northbound	Southbound	
Flow rate hd, initial value x, initial hd, final value x, final value	Eastbound L1 L2 17 44 3.20 3.20 0.02 0.04 6.82 6.32 0.03 0.08	Westbound L1 L2 113 6 3.20 3.20 0.10 0.01 6.51 5.52 0.20 0.01 2.3	Northbound L1 L2 416 136 3.20 3.20 0.37 0.12 5.69 5.19 0.66 0.20 2.3	Southbound L1 L2 63 16 3.20 3.20 0.06 0.01 5.77 5.02 0.10 0.02 2.3	
Move-up time, m Service Time	2.3 4.5 4.0	4.2 3.2	3.4 2.9	3.5 2.7	

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	Ll	r5	Гī	L2	Ll	L2
Flow Rate Service Time Utilization, x Dep. headway, hd Capacity Delay LOS	17 4.5 0.03 6.82 267 9.75	44 4.0 0.08 6.32 294 9.55 A	113 4.2 0.20 6.51 363 10.88 B	6 3.2 0.01 5.52 256 8.28 A	416 3.4 0.66 5.69 627 19.15	136 2.9 0.20 5.19 386 9.16 A	63 3.5 0.10 5.77 313 9.11 A	16 2.7 0.02 5.02 266 7.83
Approach: Delay LOS Intersection Dela		9.61 A	E	-	on LOS B	.6.69 :		8.86 A

HCS2000: Signalized Intersections Release 4.1e

Analyst: CL

1

Agency: Date: 05/13/05 Period: AM Peak

Project ID: E/W St: Wailea Ike Dr

Inter.:

Area Type: All other areas

Jurisd:

Year : Year 2008 w/ project

N/S St: Wailea Alanui Dr

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	114	1863	0.29	0.22	23.3	_					
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Northbound TR 4 Southbound	i		0.24	0.23	28.3	С					
TR 4 Southbound		1863 1770 3547	0.24		28.3	С	18.	o 1	В		

HCS2000: Signalized Intersections Release 4.1e

Analyst: CL

Inter.:

Area Type: All other areas

Agency: Date: 05/13/05 Period: PM Peak

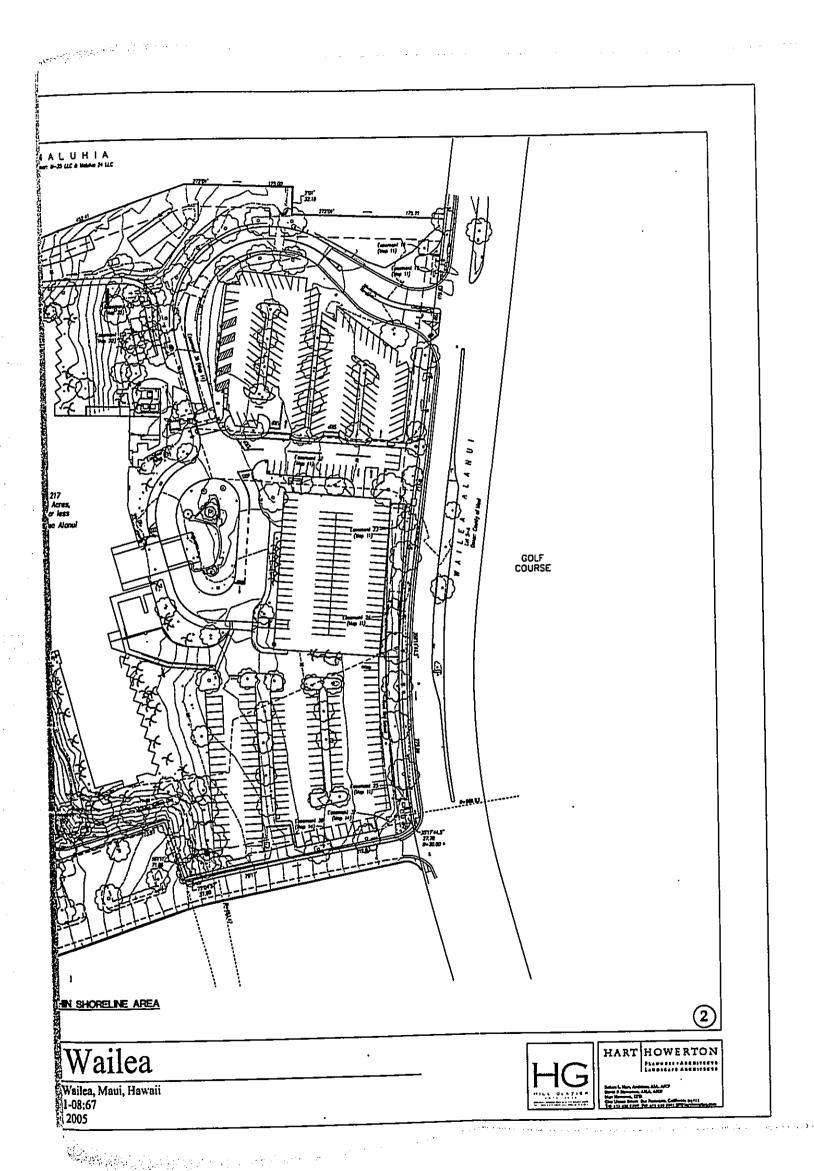
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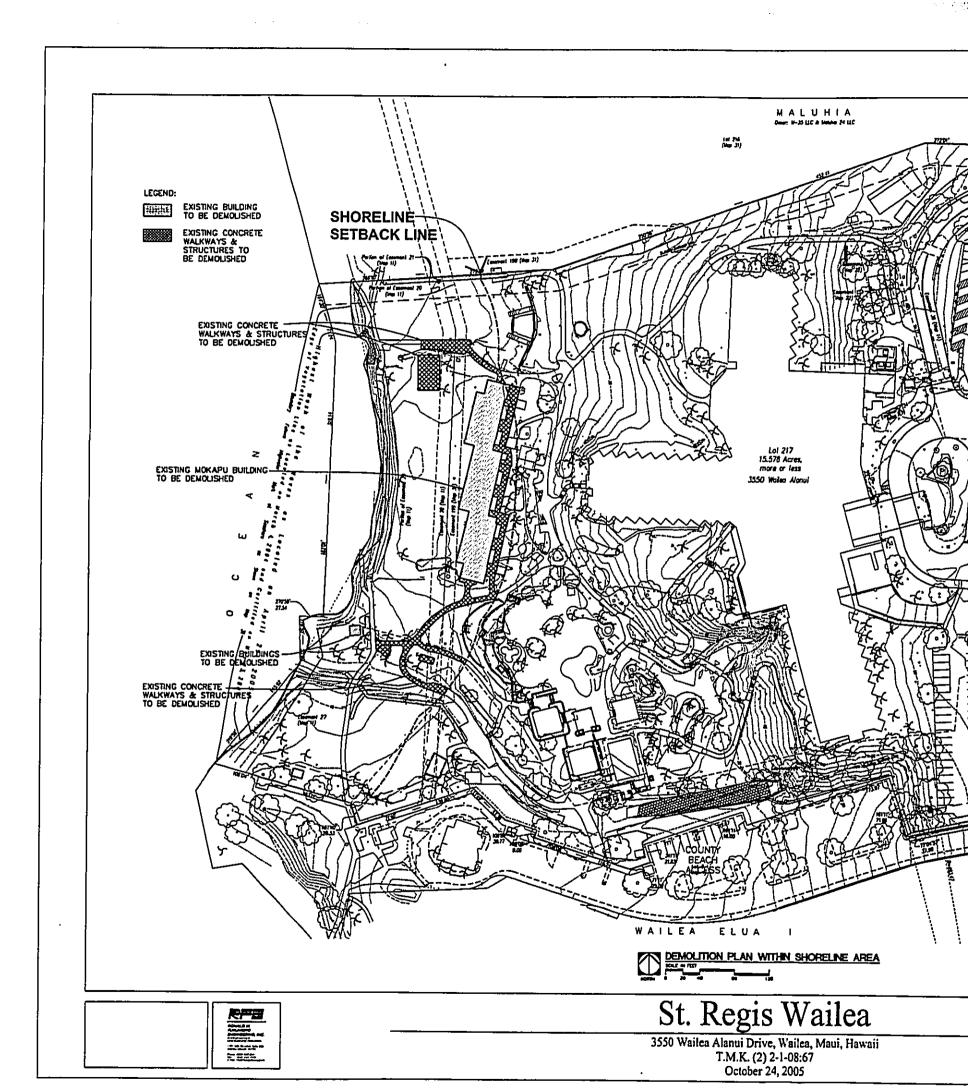
Year : Year 2008 w/ project

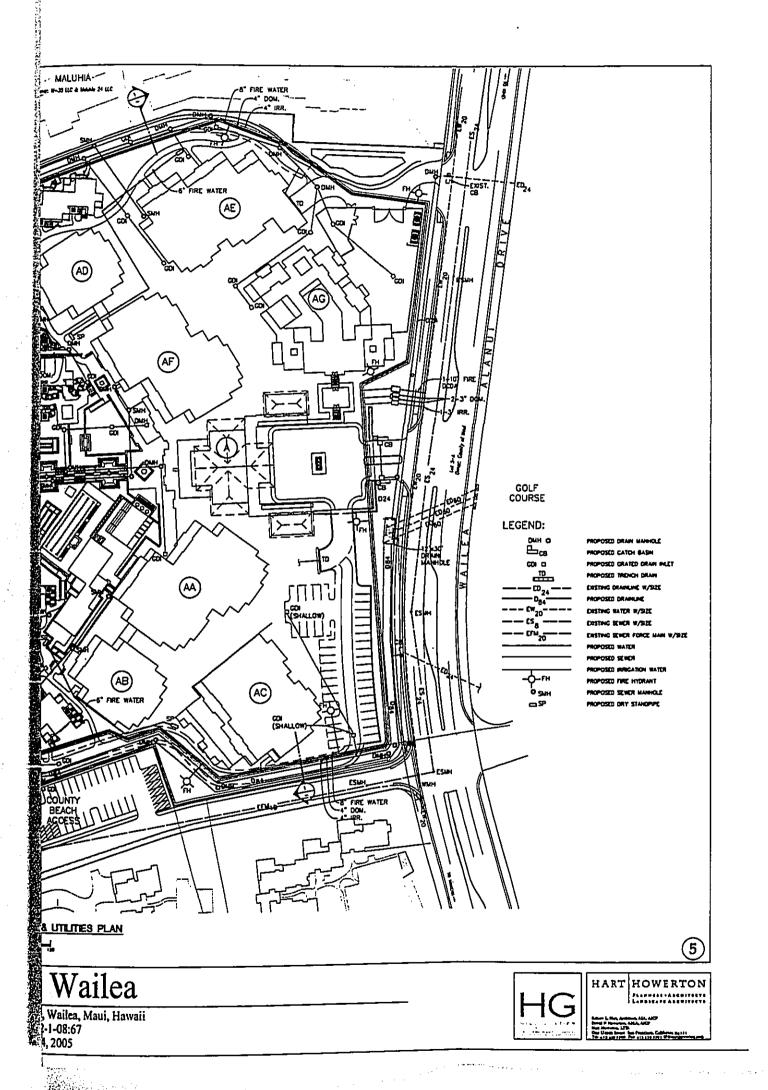
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ppr/ Lane ane Group crp Capacit	Intersection Adj Sat Flow Rate (s)	Rati v/c	g/C	Delay	O.O Cycl ary Group LOS	e Lengt	ach	86	ecs
ll Red ppr/ Lane ane Group rp Capacit	Intersect Adj Sat Flow Rate	P.ati	os 	Lane	0.0 Cycl ary Group	e Lengt	ach	8.6	ecs
ll Red ppr/ Lane ane Group rp Capacit Castbound Vestbound L 590	Intersect Adj Sat Flow Rate (s)	P.ati v/c 0.78	os g/C 0.33	Delay 25.0	O.O Cycl ary Group LOS	Appro	LOS	8.6	ecs
ll Red ppr/ Lane Ane Group prp Capacit Castbound Vestbound L 590 R 528	Intersection Adj Sat Flow Rate (s)	Rati v/c	g/C	Delay	C C	Appro	LOS	se	ecs
ll Red ppr/ Lane Ane Group Trp Capacit Castbound Vestbound L 590	Intersect Adj Sat Flow Rate (s)	P.ati v/c 0.78	os g/C 0.33	Delay 25.0	C C	Appro Delay	LOS	se	ecs
ppr/ Lane ppr/ Lane cane Group crp Capacit Castbound Vestbound L 590 R 528 Northbound	Intersect Adj Sat Flow Rate (s) 1770 1583	0.78 0.20	0.33 0.33	Delay 25.0 14.5	C B	Appro	LOS	86	ecs
ll Red ppr/ Lane Ane Group prp Capacit Castbound Vestbound L 590 R 528	Intersect Adj Sat Flow Rate (s)	P.ati v/c 0.78	os g/C 0.33	Delay 25.0	C B	Appro Delay	LOS	8.6	ecs
ppr/ Lane ppr/ Lane cane Group crp Capacit Castbound Vestbound L 590 R 528 Northbound TR 605	Intersect Adj Sat Flow Rate (s) 1770 1583	0.78 0.20	0.33 0.33	Delay 25.0 14.5	C B	Appro Delay	LOS	8.6	ecs
ppr/Lane Lane Group Trp Capacit Castbound L 590 R 528 Northbound TR 605 Southbound	1.0 Intersect Adj Sat Flow Rate y (s) 1770 1583 1863	0.78 0.20	0.33 0.33	Delay 25.0 14.5	C C C	Approper Delay	LOS C	8.6	ecs
ppr/Lane Lane Group Erp Capacit Castbound L 590 R 528 Northbound TR 605 Southbound L 310	1.0 Intersect Adj Sat Flow Rate y (s) 1770 1583 1863	0.78 0.20 0.76	0.33 0.33 0.32	25.0 14.5 23.8	C B	Appro Delay	LOS C	8.6	ecs
npr/ Lane Lane Group Capacit Castbound Vestbound L 590 R 528 Northbound TR 605 Southbound L 310 T 1774	1.0 Intersect Adj Sat Flow Rate y (s) 1770 1583 1863	0.78 0.20 0.76	0.33 0.33 0.32 0.17 0.50	25.0 14.5 23.8 23.9 8.1	C C A	Approper Delay	LOS C C		ecs .

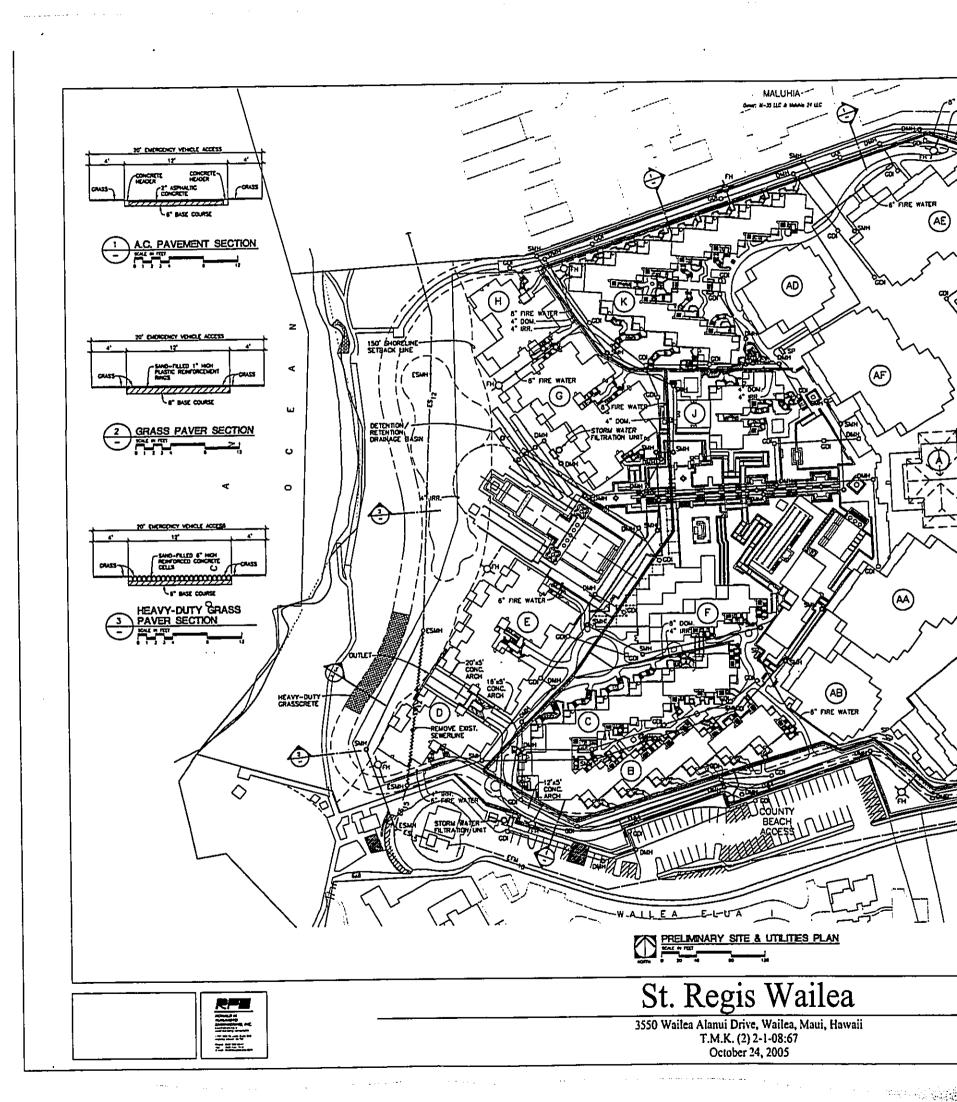
Appendix H

Shoreline Setback Improvements









Appendix I

SMA Approval Letter and Planning Department Memorandum, November 19, 1990

BAL TAVARES



CHRISTOPHER L HART

JOHN E. MIN Deouty Planning Director

COUNTY OF MAUI

PLANNING DEPARTMENT

250 S. HIGH STREET WAILUKU. MAUI. HAWAII 96793

November 19, 1990 26 Paris

Mr. B. Martin Luna Carlsmith Ball Wichman Murray Case Mukai & Ichiki 2145 Wells Street Suite 201 Wailuku, Hawaii 96793

Dear Mr. Luna:

Re: Review and approval of the proposed beach walkway at Stouffer's Wailea Beach Resort, TMK: 2-1-08: 67, Wailea Maui.

At its regular meeting of November 19, 1990, the Maui Planning Commission reviewed the proposed beach walkway at Stouffer's Wailea Beach Resort. After due deliberation, the Commission granted approval for construction of the walkway, subject to the following conditions:

- That in the event that human burials are found during construction work, the contractor shall immediately stop work in the vicinity of the find and contact the Historic Sites Section, Department of Land & Natural Resources, State of Hawaii, at 548-6408 and the Maui Planning State of Hawaii, at 548-6408 and the Maui Planning Department. No further distrubance shall occur until the Historic Sites Section has assessed the situation. Mitigation will be recommended, if needed.
- 2. That the Petitioner shall provide a description of measures proposed to prevent future damage from storm waves and shoreline erosion to the replaced walkway to the Maui Planning Department and State of Hawaii, the Maui Planning Department and State of Hawaii, Department of Land & Natural Resources, Aquatic Resources Division.
- That precautions be taken to prevent construction debris, eroded material, petroleum products and other potential contaminants from entering coastal waters.

- 4. That no structures or improvements shall be constructed or beach equipment stored makai of the beach walkway at any time.
- 5. That the ten (10) conditions established with the original Special Management Area Use Permit and Shoreline Setback Variance on November 15, 1988, shall be rendered.
- 6. That the existing landscaping and vegetation located along the proposed beach walkway shall be preserved. However, in the event that the vegetation and/or landscaping is removed for construction purposes, it shall be restored to its original state immediately after the construction period.
- 7. That the beach walkway shall remain open for public use twenty-four (24) hours a day.
- 8. That the architectural design of the walkway shall be in accordance with revised plans dated June 21, 1990, and subject to modifications of the railing by the Department of Public Works relative to height and installation.

A copy of the Memorandum, dated November 19, 1990, is enclosed for your information. If you may have any questions, please contact this department. Thank you for your cooperation,

CHRISTOPHER L. HART Planning Director

encl.

cc: LUCA P. Ohta

BEFORE THE MAUI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In the matter of the request of

MR. B. MARTIN LUNA, on behalf of WAILEA BEACH HOTEL PARTNERS,

requesting review and approval of the proposed beach walkway at Stouffer's Wailea Beach Resort, TMK: 2-1-08: 67, Wailea, Maui.

MR. B. MARTIN LUNA, on behalf of WAILEA BEACH HOTEL PARTNERS

MEMORANDUM

November 19, 1990

Planning Department County of Maui 250 South High Street Walluku, Maui, Hawaii 96793

BEFORE THE MAUI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In the matter of the request of)

MR. B. MARTIN LUNA, on behalf of)
WAILEA BEACH HOTEL PARTNERS,

MR. B. MARTIN LUNA, on behalf of WAILEA BEACH HOTEL PARTNERS

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requesting review and approval of) the proposed beach walkway at the) Stouffer's Wailea Beach Resort,) TMK: 2-1-08: 67, Wailea, Maui.

HEMORANDUM

At the Planning Commission's regular meeting of December 5, 1989, a request for a Special Management Area Use Permit modification and transfer of Special Management Area Use Permit and Shorline Setback Variance was reviewed. The Commission approved the request with reservations to review and approve the proposed beach walkway since it was originally part of the Special Management Area Use Permit and Shoreline Setback Variance and no construction had been initiated at that time. The beach walkway plans and construction schedule were to be submitted to the Commission no later than six (6) months of the transferral and modification approval date. This date was set at May 5, 1990.

These plans were timely filed but an extension on this matter was requested by Mr. Luna and approved by this department to allow the permit holder time to submit additional information (site plan and updated certified shoreline survey map). These letters are attached to this report and identified as Exhibit A.

The proposed beach walkway would extend throughout the entire hotel grounds. Approximately 170 feet of the walkway will be constructed of wood. The remaining extension of walkway would be constructed of concrete (Exhibit B). The wooden walkway construction is featured in Exhibit C of this report.

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The walkway will be located between 16 to 20 feet from the certified shoreline. Construction will be initiated after commission approval has been obtained and should be completed approximately two (2) months from commencement.

RECOMMENDATION

The Planning Department recommends that the Maui Planning Commission approve the beach walkway subject to the following conditions:

- 1. That in the event that human burials are found during construction work, the contractor shall immediately stop work in the vicinity of the find and contact the Historic sites Section, Department of Land & Natural Resources, State of Hawaii, at 548-6408 and the Maui Planning Department. No further disturbance shall occur until the Historic Sites Section has assessed the situation. Mitigation will be recommended, if needed.
- 2. That the Petitioner shall provide a description of measures proposed to prevent future damage from storm waves and shoreline erosion to the replaced walkway to the Maui Planning Department and State of Hawaii, Department of Land & Natural Resources, Aquatic Resources Division.
- 3. That precautions be taken to prevent construction debris, eroded material, petroleum products and other potential contaminants from entering coastal waters.
- 4. That no structures, improvements, and/or beach equipment shall be situated makai of the beach walkway at any time.
- 5. That the ten (10) conditions established with the original Special Management Area Use Permit and Shoreline Satback Variance on November 15, 1988, shall be rendered.
- 6. That the existing landscaping and vegetation located along the proposed beach walkway shall be preserved. However, in the event that the vegetation and/or landscaping is removed for construction purposes, it shall be restored to its original state immediately after the construction period.

Dated this 19th day of November, 1990, Mailuku, Maui, Hawaii.

CHRISTOPHER L. HART Planning Director

CARLSMITH, WICHMAN, CASE, MUKAI AND ICHIKI ATTORNEYS AT LAW

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May 4, 1990

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R O. BOX 241 CHRS SAIFAN, MP SEBEO (670) 322-2465 TELEX 783-656 CWCHI SPH

Mr. Christopher L. Hart Director Planning Department County of Maui 200 S. High Street Wailuku, Maui, Hawaii 96793

Beach Walkway to be located at Stouffer's Wailea Beach Resort; TMK 2-1-08:67; Wailea, Maui, Hawali

Dear Mr. Hart:

As you know, the Maui Planning Commission approved the request of Wailea Beach Hotel Partners for a Special Management Area Use Permit and a transfer of its Special Management Area Use Permit and its Shoreline Setback Variance on December 5, 1989. The approval was subject to the condition that revised detailed beach walkway plans be submitted to the Planning Department for review and appropriate processing by May 5, 1990.

In accordance with said requirement, please find enclosed elevation and section drawings of the proposed walkway. A site plan for the walkway will be submitted as soon as an updated shoreline survey has been prepared and certified by the Department of Land and Natural Resources.

Should you have any questions or further requirements, please do not hesitate to call. Thank you very much for your kind consideration in this matter.

Sincerely yours,

B. Muf. La

B. MARTIN LUNA

BML:mea

cc: Mr. Donn Takahashi

Mr. Richard Miyabara, AIA

EXHIBIT



COUNTY OF MAU! . PLANNING DEPARTMENT

200 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96792
May 11, 1990

Mr. B. Martin Luna Attorney at Law 2145 Wells Street Wailuku, Hi 96793

Dear Mr. Luna:

RE: Beach Walkway Stouffers Wailea Beach Resort TMK: 2-1-08: 67, Wailea, Mauí

This acknowledges receipt of your letter dated May 4, 1990, transmitting plans for the above proposed beach walkway. Please be advised that said plans were timely filed per condition of the approved Special Management Area Use Permit and Shoreline Setback Variance issued on December 5, 1990.

Upon receipt of the site plan and updated shoreline survey map, welwill indertake a more indepth review of your proposal.

Since this additional information is necessary for our review, final approval of the above plans is contingent upon receipt of the revised detailed site plan and updated shorline survey map no later than three (3) months from the date of this letter.

Your cooperation on this matter is respectfully requested.

Should further clarification be necessary, please contact John MIn of our office at 243-7735.

CHRISTOPHER L. HART Planning Director

JM/vc cc: Phil Ohta, Planner

