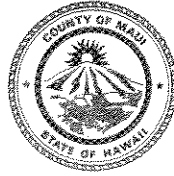


ALAN M. ARAKAWA
Mayor

MICHAEL W. FOLEY
Director

WAYNE A. BOTEILHO
Deputy Director



FEA

COUNTY OF MAUI
DEPARTMENT OF PLANNING RECEIVED

October 6, 2004

04 OCT 12 P2:40

OFF. OF ENVIRONMENTAL
QUALITY CONTROL

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 Maui Lu Redevelopment
Project Located at TMK 3-9-001: 083, 086 & 120, Kihei, Island of Maui,
Hawaii (EA 2003/0008)

The Maui Planning Commission at its regular meeting on September 28, 2004, 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 October 13, 2004, Office of Environmental Quality Control (OEQC) Environmental Notice.

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

Sincerely,

A handwritten signature in black ink, appearing to read "M. W. Foley".

MICHAEL W. FOLEY
Planning Director

MWF:KAC:dm
Enclosures

c: Wayne A. Boteilho, Deputy Planning Director
Clayton I. Yoshida, AICP, Planning Program Administrator
Kivette A. Caigoy, Environmental Planner
Joseph Alueta, Staff Planner
Applicant
Project File
General File
K:\WP_DOCS\PLANNING\EA\2003\0008_MauiLuRedevelop\OEQCTransmitFEA.wpd

2004-10-23 FONSI
MAUI LU RESORT REDEVELOPMENT

FINAL
HRS CHAPTER 343
ENVIRONMENTAL ASSESSMENT
**MAUI LU
REDEVELOPMENT**

*575 · South Kihei · Road
Kihei · Maui · Hawaii
TMK: (2) 3-9-001:083, 086, & 120*



Prepared for:
Genesee Capital
4037 Porte de Palmas, Suite 90
San Diego, CA 92122

Prepared by:
Chris Hart and Partners, Inc.
Landscape Architecture and Planning
1955 Main Street, Suite 200
Wailuku, Hawaii 96793
Phone: 242-1955
Fax: 242-1956



SEPTEMBER 2004

FINAL
HRS CHAPTER 343
ENVIRONMENTAL ASSESSMENT
**MAUI LU
REDEVELOPMENT**

*575 · South Kihei · Road
Kihei · Maui · Hawaii
TMK: (2) 3-9-001:083, 086, & 120*



Prepared for:
Genesee Capital
4037 Porte de Palmas, Suite 90
San Diego, CA 92122

Prepared by:
Chris Hart and Partners, Inc.
Landscape Architecture and Planning
1955 Main Street, Suite 200
Wailuku, Hawaii 96793
Phone: 242-1955
Fax: 242-1956



SEPTEMBER 2004

TABLE OF CONTENTS

| Section | Page |
|--|-----------|
| I. INTRODUCTION..... | 1 |
| A. OVERVIEW OF THE REQUEST..... | 1 |
| B. PROJECT OVERVIEW | 2 |
| C. MAJOR LAND USE, DEVELOPMENT AND CONSTRUCTION APPROVALS..... | 4 |
| II. CONSULTATION..... | 4 |
| A. PRE-CONSULTATION | 4 |
| B. CONSULTED PUBLIC AGENCIES AND PRIVATE INTERESTS..... | 5 |
| III. DESCRIPTION OF THE PROPERTY..... | 6 |
| A. PROPERTY LOCATION..... | 6 |
| B. PROPERTY DESCRIPTION | 7 |
| C. EXISTING LAND USE DESIGNATIONS | 7 |
| IV. DESCRIPTION OF THE PROPOSED REQUEST..... | 8 |
| A. ALTERNATIVES..... | 11 |
| V. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES | 16 |
| A. PHYSICAL ENVIRONMENT..... | 16 |
| 1. <i>Land Use</i> | 16 |
| 2. <i>Climate</i> | 17 |
| 3. <i>Topography and Soils</i> | 18 |
| 4. <i>Flood and Tsunami Hazard</i> | 19 |
| 5. <i>Flora and Fauna</i> | 20 |
| 6. <i>Air Quality</i> | 21 |
| 7. <i>Noise Characteristics</i> | 23 |
| 8. <i>Visual Resources/Urban Design</i> | 24 |
| 9. <i>Archaeological/Historical Resources</i> | 25 |
| 10. <i>Shoreline Resources</i> | 26 |
| B. SOCIO-ECONOMIC ENVIRONMENT..... | 30 |
| 1. <i>Population and Housing</i> | 30 |
| 2. <i>Economy</i> | 31 |
| C. PUBLIC SERVICES | 32 |
| 1. <i>Recreational Facilities</i> | 32 |
| 2. <i>Police and Fire Protection</i> | 33 |
| 3. <i>Solid Waste</i> | 33 |
| 4. <i>Schools</i> | 34 |
| D. INFRASTRUCTURE..... | 34 |
| 1. <i>Roadways and Traffic</i> | 34 |
| 2. <i>Wastewater</i> | 40 |
| 3. <i>Water</i> | 41 |



| | | |
|--------------|---|-----------|
| 4. | <i>Drainage and Erosion Control</i> | 43 |
| 5. | <i>Electrical, Telephone, Cable, and Data Systems</i> | 47 |
| VI. | RELATIONSHIP TO GOVERNMENT PLANS, POLICIES, AND CONTROLS | 48 |
| A. | HAWAII LAND USE LAW | 48 |
| B. | GENERAL PLAN OF THE COUNTY OF MAUI | 48 |
| C. | KIHEI-MAKENA COMMUNITY PLAN..... | 49 |
| D. | MAUI COUNTY ZONING | 50 |
| E. | SPECIAL MANAGEMENT AREA OBJECTIVES AND POLICIES | 50 |
| 1. | <i>RECREATIONAL RESOURCES</i> | 50 |
| 2. | <i>HISTORICAL/CULTURAL RESOURCE</i> | 52 |
| 3. | <i>SCENIC AND OPEN SPACE RESOURCES</i> | 53 |
| 4. | <i>COASTAL ECOSYSTEMS</i> | 54 |
| 5. | <i>ECONOMIC USES</i> | 55 |
| 6. | <i>COASTAL HAZARDS</i> | 56 |
| 7. | <i>MANAGING DEVELOPMENT</i> | 57 |
| 8. | <i>PUBLIC PARTICIPATION</i> | 58 |
| 9. | <i>BEACH PROTECTION</i> | 59 |
| 10. | <i>MARINE RESOURCES</i> | 60 |
| VII. | HRS CHAPTER 343 SIGNIFICANCE CRITERIA | 61 |
| VIII. | FINDINGS AND CONCLUSIONS | 64 |
| VIII. | REFERENCES | 66 |



FIGURES & APPENDICES

| | |
|-----------------------|---|
| Figure No. 1 | Regional Location Map |
| Figure No. 2 | TMK Parcel Map |
| Figure No. 3 | Aerial Location Map |
| Figure Nos. 4.1-4.3 | Photographs |
| Figure No. 5 | Flood Insurance Rate Map (FIRM) |
| Figure No. 5.1 | Tsunami Evacuation Map |
| Figure No. 5.2 | Wetlands Inventory Map |
| Figure No. 6 | Soils Map |
| Figure No. 7 | Land Use Designations |
| Figure No. 8 | Survey Map/Existing Development |
| Figure Nos. 9.0-9.8 | Concept Design |
| Figure No. 10 | Phasing Plan |
| Figure No. 11 | Landscape Plan |
| Figure No. 12 | South Kihei Road Plan |
| Figure No. 13 | Erosion Rate Map |
| Figure Nos. 14.1-14.4 | Alternative Plans |
| Figure Nos. 15.1-15.6 | Site Sections |
| Figure Nos. 16.1-16.4 | Density Analysis |
| | |
| Appendix A | Ownership Documents |
| Appendix B | Zoning and Flood Confirmation |
| Appendix C | Cultural Impact Assessment |
| Appendix D | Preliminary Engineering Report with Drainage and Soil Erosion Control Report |
| Appendix E | Traffic Impact Assessment Study |
| Appendix F | List of Owners Within 500 Feet |
| Appendix G | Pre-Consultation Letter |



| | |
|------------|---|
| Appendix H | Shoreline Encroachment Information Sheet |
| Appendix I | Certified Shoreline Map |
| Appendix J | Coastal Engineering Assessment |
| Appendix K | Pre-Consultation Documents |
| Appendix L | Comment Letters and Responses |
| Appendix M | Department of Planning Letters & Response |
| Appendix N | Well Pump Test Results and Analysis |



I. INTRODUCTION

A. Overview of the Request

The purpose of this environmental assessment is to analyze the potential impacts related to the redevelopment of the Maui Lu Resort in a phased construction of 400 timeshare units, along with related service and recreational amenities, and landscape planting, parking, infrastructure and utility improvements. Preparation of an Environmental Assessment is in compliance with the provisions of HRS Chapter 343, since the proposed action involves improvements to Kenolio, Alulike, Kaonoulu, and South Kihei Roads, which are owned and maintained by the County of Maui. A Special Management Area (SMA) application was submitted to the Maui County Planning Department on October 27, 2003 for redevelopment of a portion of the project, 388 units on parcel 86, mauka of South Kihei Road. The SMA application was resubmitted on March 5, 2004 to include the entire project (parcels 83, 86, and 120).

The subject property is situated at the north end of Kihei and is divided into two sections by South Kihei Road. The site is presently zoned *H-1 Hotel* for the makai parcel (83) and the first 200 feet mauka of South Kihei Road (Parcel 86). The remainder of Parcel 86 is zoned *H-M Hotel*. Parcel 120 is zoned *Park*. The Kihei-Makena Community Plan's designations are *Hotel* and *Park*. The site is located within the *Special Management Area (SMA) District*.

The proposed project will increase the range of utilization of the subject property and expand the service and recreational amenities offered by the Maui Lu Resort. The project will involve short-term construction-related impacts, which will be mitigated through standard protection measures. The proposed use is consistent with the Kihei/Makena Community Plan and the established pattern of residential, commercial, hotel, open space, and condominium projects in the immediate vicinity. With the phased incorporation of appropriate infrastructure improvements and mitigation measures, the proposed action is not expected to result in significant impacts to local traffic, flood hazard potential, infrastructure, public services, historic/cultural resources or environmental resources.



B. Project Overview

District: Ka'ono'ulu, Kihei, Maui
Tax Map Keys: II 3-9-01: 083, 086 & 120
Location: 575 South Kihei Road at Ka'ono'ulu Road

| | | |
|------------|-------------|----------------------|
| Land Area: | 3-9-01: 083 | 1.018 Acres |
| | 3-9-01: 086 | 26.004 Acres |
| | 3-9-01: 120 | 0.260 Acres |
| | | 27.282 Acres - Total |

Land Owner: 575 South Kihei Road LLC
5371 Wilshire Blvd., Suite 210
Los Angeles, CA 90036

Applicant: Genesee Capital
4037 Porte de Palmas, Suite 90
San Diego, CA 92122
Phone: (858) 452-9950
Fax: (858) 550-0770
Contact: Gregory W. Schneider

Approving Agency: Maui Planning Commission
c/o Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793
Phone: (808) 270-7735



Planning Consultant:

Chris Hart & Partners, Inc.
Landscape Architecture and Planning
1955 Main Street, Suite 200
Wailuku, Maui, Hawai'i 96793
Phone: (808) 242-1955
Fax: (808) 242-1956

Land Use Designations

State Land Use Classification: *Urban*

Kihei-Makena Community Plan: Parcels 83 & 86 *Hotel*
Parcel 120 *Park*

County Zoning: Parcel 83 *Ocean Parcel H-1 Hotel*
District

Parcel 86 - Split-Zoning

First 200 feet mauka (east) from South

Kihei Road: *H-1 Hotel*

Remainder of parcel: *HM Hotel*.

Parcel 120 *Park*

Other Designations: *Special Management Area*

Existing Land Use: The present Maui Lu Resort is underutilized with 125 rental rooms out of a total of 163 rooms and a vacant Longhouse restaurant building, as well as service and recreation amenities, landscape planting and on-site parking.

Proposed Land Use: Phased demolition of existing structures on Parcel 86 (mauka) and one structure on Parcel 83 (makai). Redevelopment of the site and construction of the Maui Lu Timeshare Resort with 400 units. 388 of the units will have lock-off units. Associated service and recreation amenities and site and utility improvements, including landscape



planting, parking and an on-grade pedestrian crosswalk across South Kihei Road.

C. Major Land Use, Development and Construction Approvals

1. Special Management Area Use (SMA) Permit that includes a Public Hearing and Recommendation by the Maui Planning Commission.
2. Grading/Grubbing Permit approval from the Department of Public Works and Environmental Management (DPWEM), County of Maui.
3. National Pollution Discharge Elimination System (NPDES) General Permit from the Department of Health (DOH), State of Hawaii.
4. Building, Electrical and Plumbing Permits for the structures from the DPWEM.
5. Special Flood Hazard Area Development Permit from Department of Planning.
6. Well Development/Installation Permit from DOH.

II. CONSULTATION

A. PRE-CONSULTATION

See Appendix K for correspondence with agencies and other documents pertaining to pre-consultation meetings. The applicant or one of its representatives has consulted with the following agencies:

A. COUNTY OF MAUI

1. Department of Planning
2. Department of Public Works and Waste Management
 - Engineering Division
 - Wastewater Reclamation Division
3. Department of Water Supply
4. Department of Housing and Human Concerns
5. Department of Parks and Recreation



B. STATE OF HAWAII

1. Department of Land and Natural Resources
State Historic Preservation Division

C. OTHER

1. Maui Electric Company, Inc.
2. Verizon Hawaii
3. Oceanic Time Warner Cable of Hawaii

D. COMMUNITY GROUPS

1. Kihei Community Association (KCA) General Meeting (7/15/2003)
KCA Planning Committee Meeting (6/9/2003)
2. Neighbors Within 500 Feet (435 letters dated 6/13/2003 [See: Appendix G] mailed out; 6/24/2003 meeting: 14 neighbors in attendance)

B. CONSULTED PUBLIC AGENCIES AND PRIVATE INTERESTS

The Draft Environmental Assessment for the Maui Lu Redevelopment was published on April 8, 2004. Publication initiated a 30-day public review period ending on May 10, 2004. The Draft EA was mailed to agencies below and meetings were held with homeowners in the vicinity. All comment letters and responses are found in Appendix L.

PUBLIC AGENCIES:

Federal

1. Natural Resource Conservation Services
2. U.S. Army Corp of Engineers
3. U.S. Fish & Wildlife

State

1. Department of Health
2. Department of Transportation
3. Department of Land and Natural Resources
4. Historic Preservation Division



5. Department of Accounting and General Services
6. Department of Education
7. Land Use Commission
8. Office of Hawaiian Affairs
9. Department of Business, Economic Development & Tourism
10. Sea Grant Extension Service, University of Hawaii

County

1. Department of Public Works and Environmental Management
2. Department of Water Supply
3. Department of Parks and Recreation
4. Fire Department
5. Police Department
6. Department of Housing and Human Concerns
7. Department of Planning (See: Appendix M)

PRIVATE INTERESTS:

1. Maui Electric Company
 2. Kaonoulu Subdivision Homeowners Association
- Meeting was held on 7/17/04 at the Kihei Community Center with 35 to 40 homeowners in attendance. (See: Section VI.E.8)

III. DESCRIPTION OF THE PROPERTY

A. Property Location

The subject property is located on both sides of South Kihei Road at the intersection of Ka`ono`ulu Road, Kihei, Island of Maui (TMK 3-9-01: 083, 086 & 120) (See: Figures Nos. 1, 2, and 3). The project site is approximately 27.282 acres total and partially abuts the ocean. It is adjacent to a group of small boutique vacation rental properties and the 2-story 346 unit Southpointe condominium project to the north. East of the subject property are Kenolio Road, Alulike Street and the Ka`ono`ulu Estates Subdivision. Ka`ono`ulu Road, the 2-story 140 unit Ka'ono'ulu Villas

residential condominium project and an open/park area are to the south, and a beach reserve area is to the west.

B. Property Description

The resort site is divided by South Kihei Road, which separates the main resort complex from the beachfront units (See: Figure No. 2).

The large mauka section of the property, parcel 86 (26.004 acres), is a predominantly park-like setting, with mature specimen large crown shade trees, palms and open lawns. The center portion of the site rises, with opportunities for views and a sense of proximity to the ocean. The rear and sides of the site are remote with minimal sense of proximity to the ocean.

The makai section consists of two parcels, 83 (1.018 acres) and 120 (0.260 acres). Both of these parcels are partially fronted by a government beach reserve owned by the State of Hawaii.

The Maui Lu Resort was built in the early 1960s and it is currently in poor condition. There is a total of 173 units with 163 transient hotel rooms and 10 long term cottages available for rental on the property, of which 125 units are on the *mauka* portion. On the *makai* portion, there are 48 units in 3 two-story masonry buildings, with parking. It appears that the resort has been in a decline since 1982, when the total unit count was 218 (See: Figure Nos. 3, 4.1, 4.2 & 8).

The large wood framed Maui Lu Longhouse Restaurant has long been a traditional Maui and Kihei landmark. This building, reconstructed around 1974 to replace the original structure destroyed by fire, is currently vacant and dilapidated. The centrally located Longhouse is the present architectural focal point of the Maui Lu Resort.

The property generally slopes from *mauka* (east) to *makai* (west). The low point of the property is at the western side at an elevation of 6 feet AMSL (Above Mean Sea Level), which fronts the Pacific Ocean. The highest point is along Kenolio Road at an approximate elevation of 22 feet AMSL.

C. Existing Land Use Designations

| | |
|------------------------------|--|
| State Land Use Commission: | <i>U Urban (See: Figure No. 7)</i> |
| Kihei-Makena Community Plan: | <i>H Hotel and P Park</i> |
| County Zoning: | <i>H-1 Hotel, H-M Hotel and P Park Districts</i> |
| Other Designations: | <i>Special Management Area (SMA); Area of jurisdiction of the Maui County Coastal Zone Management (CZM) Program.</i> |

IV. DESCRIPTION OF THE PROPOSED REQUEST

The purpose of this environmental assessment is to analyze the potential impacts related to the redevelopment of the Maui Lu Resort into a timeshare resort complex with 400 units, along with related service and recreational amenities and landscape planting, parking, infrastructure and utility improvements (See: Figures No. 9.1-9.8). An SMA application was submitted on October 27, 2003 for redevelopment of a portion of the project, 388 units on parcel 86, mauka of South Kihei Road. The SMA application was resubmitted on March 5, 2004 to include the entire project (parcels 83, 96 and 120).

The redeveloped facility is expected to be accomplished in five phases (See: Figure No. 10). The proposed action involves phased demolition and removal of the existing Maui Lu Resort complex and the adjoining parking area. The demolition and construction of phase No. 1 are expected to commence in February, 2005.

The redeveloped Maui Lu Resort will maintain the existing park-like open space appearance, as viewed from public streets and within the resort project. The proposed complex at 400 units is 182 units larger than the Maui Lu Resort in its



prime - resulting in a density of approximately 15 units per acre. This is a substantially lower density than that of the surrounding multi-family projects which are approximately 23 to 25 units per acre. The 388 two-bedroom units on parcel 86 will be "lock-off" units which allow one of the bedrooms to be used as a separate studio unit or together with the main unit. The "lock-off" functions as a second or third bedroom and will be sold as such, with each of the 388 units. When a family buys a two or three bedroom unit, they have the flexibility to rent out the "lock-off" independently or occupy it completely with family or friends as a 2- or 3- bedroom condominium unit. Regardless, the same number of guests would use the unit whether the unit is used wholly or individually. Family and friends would use the entire unit when it could fill all bedrooms. However, if it is a smaller guest party, the "lock-off" would be available for use by another small party.

The proposed architectural and landscape project plans are illustrated in Figure Nos. 9.1 through 9.7 and 11. The complex will be comprised of a mixture of one, two, three, and four story buildings sited on great lawns with significant setbacks in a resort community atmosphere. The smaller one- and two-story buildings will be located closest to South Kihei Road with three- and four-story buildings at the rear of the property along Kenolio Road/Alulike Street, and four-story buildings at the center of the site. The architectural plans portray a distinctly traditional Hawaiian architectural vernacular with double pitch roofs and wide overhangs, detail motifs, and natural materials and colors selected to blend with and not compete with the surroundings. Natural well water will be used for irrigation and water features in a series of thematic tropical gardens featuring Hawaiian medicinal plants, local fruit trees, taro patches and flower plants providing a strong historical and cultural reference within a botanical garden setting.

On parcel 83, one of the *makai* parcels, the elimination of the two story oceanfront structure parallel with South Kihei Road will enhance and maximize the opportunity for visual and physical ocean access. It will be replaced with a single-story beach club and a small swimming pool. The other two existing buildings will be reduced in size and renovated. The intent is also to provide a public access walkway along a portion of parcel 83 which would also connect to




parcel 120 and provide a lateral access all the way to the Vancouver monument to the north. The Kihei-Makena Community Plan proposes that parcel 120 to the north be zoned *Park*.

The main full service resort driveway entry and a second minor public entry will be located along Ka`ono`ulu Road, the main *mauka/makai* access from Piilani Highway. An additional minor full service entrance will be provided along South Kihei Road with a service access fronting Kenolio Road. The existing driveway to the makai parcels will remain. The perimeter parking lots, with large crown shade trees, will provide more than sufficient stalls to satisfy the Maui County parking requirement (See: Figure No. 9.8). 687 parking stalls will be provided as follows:

| | Parking Stalls |
|---|----------------|
| 388 <i>mauka</i> units x 1.33 (factor for convertible units): | 517 |
| 12 <i>makai</i> units & beach club: | 13 |
| Employee parking: | 50 |
| Restaurant parking: | 15 |
| Public beach parking: | 12 |
| Additional parking: | 80 |
| TOTAL STALLS: | 687 |

Major infrastructure improvements include:

- The improvement and road widening of South Kihei Road. Improvements will include sidewalks, curbs and gutters on both sides, as well as a landscaped median and crosswalk designed to calm traffic and provide a safe pedestrian linkage between the mauka and makai parcels.
- Installation of a traffic signal at the intersection of South Kihei Road and Ka'ono'ulu Street intersection.
- Road improvement along Kenolio Road, Alulike Street and Ka`ono`ulu Road with sidewalks, curbs and gutters.

-
- 
- Installation of an on-site drainage collection system including surface detention facilities within the Great Lawns.
 - Wastewater collection system improvements on-site and off-site for a tie-in to the existing South Maui collection system.
 - Other utility and service connections as needed to accommodate the proposed project.

A. **ALTERNATIVES**

The following alternative actions were considered:

No Action:

This alternative would forego improvements to the project site.

Positive Impacts: By leaving the resort in its present dilapidated and underdeveloped condition, the impacts associated with construction would be avoided.

Negative Impacts: The resort is presently in poor condition and severely underutilized. Four multi-unit structures at the northwest corner of parcel 86 would remain in disrepair and vacant. The parking lot at the northeast corner of the same parcel would remain unused and overgrown with grasses and weeds. The Longhouse, the centrally located architectural focal point of the resort, would remain vacant and dilapidated. The applicant would forego the increased public revenue benefits associated with improving the property, including improvements to public beach access and to the adjoining roadways.

Repair Existing Structures:

This alternative would consist of repairing existing structures on the property.



Positive Impacts: The site would remain in its present lower density configuration. Impacts on economic, social and environmental characteristics, including viewplanes and traffic, would not be significant.

Negative Impacts: The applicant would forego the opportunity to increase the value and profitability of the property. The improvements to public beach access and to adjoining roadways would not likely be required.

Redevelopment Scenarios:

1. With Lower Density

The applicant would demolish existing structures and construct units in numbers similar to existing density.

Positive Impacts: The site would remain in its present low density configuration. Traffic and other impacts related to increased density would be avoided.

Negative Impacts: The project would not be economically viable because of the lesser density.

The proposed project is at a lesser density and the park-like open space with reduced building mass is already apparent. The density on the makai parcels has been reduced from 48 units down to 12 units. Also, approximately 75% of the mauka parcel is zoned H-M (6-story) Hotel and the proposed project, with park-like open space, consists of 2-, 3-, & 4-story building masses. The maximum build-out scenario (See "Full Buildout" alternative) would result in approximately 730 units.

In 1982, the Maui Lu Resort reached its prime at 218-units and the applicant is proposing an additional 182 units for a project total of 400 units. The resulting density is approximately 15 units per acre which is substantially less than the surrounding multi-family projects at 23 units per acre.



2. Mauka Site Only

The applicant would redevelop the *mauka* site (parcel 86) only and the *makai* parcels would remain as is. Parcel 86 would have 388 units and parcel 83 would remain as developed with the existing 48 transient rental units.

Positive Impacts: The potential short-term impacts from construction activities along the shoreline would be avoided.

Negative Impacts: The density of *makai* parcel 83 would remain the same and there would not be a decrease in the current number of units and structures. Viewplanes along South Kihei Road would not be improved as the 2-story 16-unit building parallel to South Kihei Road would not be replaced with a 1-story beach club.

3. Mauka Site Only & Makai Structures Demolished

The applicant would redevelop the *mauka* site (parcel 86) only and structures on the *makai* parcels would be demolished.

Positive Impacts: Demolition of the *makai* structures would improve viewplanes along South Kihei Road. Any impacts related to resort operations near the shoreline would be avoided.

Negative Impacts: This scenario will not be economically feasible because the existing 48 shoreline units represent the highest land and revenue values, and because the Maui Lu Resort must be marketed as an oceanfront project with oceanfront units. The 2-story building parallel with South Kihei Road and the ocean is being demolished, thereby enhancing the public view. The total shoreline unit count is reduced by 75% from 48-units to 12-units and public ocean and lateral access will be enhanced.

Also, regarding the *mauka* parcel: this scenario would result in a redesign of an already well designed project in order to increase density. This scenario may alleviate some shoreline impact, but it will also intensify

impacts resulting from increased building heights, increased paved parking, and decreased open space.

4. Full Buildout (Alternate 1):

The applicant would build out the site to its full potential within limits of Maui County zoning and the Kihei-Makena Community Plan (See: Figure Nos. 14.1 & 14.2, "Alternate 1"). H-1 zoned areas (approximately 6 acres) would allow 2-story structures and a floor area/lot area ratio of 50%. H-M zoned areas (approximately 21 acres) would allow up to 6-story structures and a floor area/lot area ratio of 100%. The Kihei-Makena Community Plan limits resort building heights to 35 feet near the shoreline and gradual increases to 75 feet for inland development.

The resultant total allowable square footage would be approximately 1,045,440 square feet. Assuming about 38,000 square feet for service buildings and 1,375 square foot units, approximately 730 units would be allowed.

Positive Impacts: The applicant would benefit from the full economic potential of the property. Maui County would realize the maximum public revenues from the property.

Negative Impacts: 730 units would be 83 percent more units than the 400 units planned for the redevelopment of the Maui Lu Resort. Density would be approximately 27 units per acre which would be greater than surrounding multi-unit properties (approximately 23 units per acre). Lot coverage would be approximately 313,000 square feet (27%), approximately 27,000 less than the collective maximum of approximately 340,000 square feet (29%). With 6-story structures, the prominent building mass would negatively affect viewplanes from the adjoining roadways and surrounding properties. The additional units would increase the burden on infrastructure resources.

5. Intermediate Buildout (Alternate 2):

The applicant would build out the site with 600 units and amenities (See: Figure Nos. 14.3 & 14.4, "Alternate 2"). This configuration would require 800 parking stalls and includes a central two-story parking structure.

Positive Impacts: The applicant would realize a greater economic benefit from the proposed project. Enhancement to shoreline resources would improve public access and recreation opportunities.

Negative Impacts: This configuration would result in a density of approximately 22 units per acre. Impacts to roadways, viewplanes, and other resources resulting from increased building mass and additional parking requirements would be magnified.

6. Mauka and Makai Sites (Alternate 3):

This alternative is described in Section IV, "Description of the Proposed Request", and the positive and negative impacts are discussed in the context of this assessment.

Figure No. 16.1 graphically shows the difference in density between Alternate 1, Alternate 2, and Alternate 3. The graph also shows that "lock-off" units do not affect the Floor/Lot Area Ratio (FAR) or the Lot Coverage (LC). Figure Nos. 16.2 through 16.4 visually show the open space for each alternative, clearly illustrating that the 81% open space provided by Alternate 3 is the most desirable.



V. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

A. PHYSICAL ENVIRONMENT

1. Land Use

Existing Conditions:

The Maui Lu Resort Redevelopment project is located in the community of Kihei, on the south coast of the island of Maui. Kihei is one of the major communities of Maui and provides a mix of resort and residential condominiums, along with single-family housing units and commercial shopping centers with resort and retail businesses (See: Figure 3). The area has grown substantially over the past fifteen years.

Specific uses and land designations surrounding the subject site include the following (See: Figure No. 3 and No. 7):

- North: Abutting the subject property's northern boundary is the Southpointe condominium and group of small vacation rental properties. Present County Zoning: *H-1 and H-M Hotel District*; Kihei-Makena Community Plan: *Multi-Family and Hotel*; and State Land Use Commission: *Urban*.
- South: Abutting the subject property's southern boundary is Ka'ono'ulu Road, the Ka'ono'ulu Villas condominium project and an open space/park area which includes Kulanihakoi Gulch. Present County Zoning: *A-1 Apartment District*; Kihei-Makena Community Plan: *Multi-Family, Open Space and Park*; and State Land Use Commission: *Urban*.
- East: Across Kenolio Road and Alulike Street is the Ka'ono'ulu Estate Subdivision. Present County Zoning: *R-2 -Residential*; Kihei-Makena Community Plan: *Single Family*; and State Land Use Commission: *Urban*.



- West: Abutting the subject property is the Pacific Ocean.

Potential Impacts and Mitigating Measures:

The Maui Lu Resort has been in hotel use since the early 1960s. The proposed project represents a continuation and respectful expansion of the existing hotel use and does not introduce a new use to the area. By addressing current and emerging trends in the visitor industry, the Maui Lu Resort will complement the existing uses within South Maui and will strengthen the resort's position as a leading visitor center.

Short-term impacts could arise during the construction period. Construction-related activities during site work, such as grading and building construction could generate airborne particulate. Dust control measures such as regular watering, sprinkling and the installation of dust screens will be implemented to minimize the potential impact from wind-blown emissions. In addition, to minimize noise from construction activities and equipment, the developer will limit construction to normal daylight working hours and adhere to the State Department of Health's noise regulations related to noise attenuation devices.

2. Climate

Existing Conditions:

The climate in the South Maui region is influenced by persistent north-northeasterly trade winds. Kihei is located on the dry leeward side of South Maui. Average annual temperature in South Maui is 80°F. Average monthly temperatures vary by about 20 degrees between the coolest and warmest months. Rainfall at the subject property averages 15 inches per year with the highest average monthly rainfall, less than three inches, occurring between November and March.



3. Topography and Soils

Existing Conditions:

The subject property slopes to the west from its highest point along the eastern boundary and Kenolio Road. Elevations on the site range from 6 feet AMSL at South Kihei Road to 80 feet AMSL at Kenolio Road.

The three soil types specific to the subject property are Beaches (BS), Dune Land (DL) and Waiakoa extremely stony silty clay loam, eroded, 3 to 25 percent slopes (WID2) (See: Figure No. 6).

Dune Land customarily occurs in coastal areas of Maui and consists of windblown sand particles that accumulate and form hills and ridges.

In WID2 areas, about 50 percent of the surface layer has been removed by erosion, runoff is medium, and the erosion hazard is severe. (See Section V.D.4, Drainage and Erosion Control, for a discussion of soil erosion control.)

There are two existing rock revetment fronting parcel 83, the southern revetment approximately 351 feet in length and the northern revetment approximately 325 feet in length. Fronting parcel 120 is a rock revetment approximately 98 feet in length.

There are no wetlands designated on the project site (See: Figure No. 5.2).

Potential Impacts and Mitigating Measures:

The existing rock revetments fronting parcels 83 and 120 may encroach into the beach reserve and this issue is being resolved with the State Department of Land and Natural Resources (DLNR) and the Maui County Planning Department. A Shoreline Encroachment Information Sheet was prepared for submittal to Coastal Land Programs, DLNR, describing the rock revetments in more detail and identifies its effects on the shoreline (See: Appendix H). It is the intention of the applicant to leave the rock revetments in place to prevent loss of the existing resort structures and the undermining of South Kihei Road. A shoreline survey done by Control



Point Surveying, Inc. on May 9, 2003 and re-verified on August 13, 2003 along parcels 15, 83 was certified by DLNR on October 27, 2003 (See: Appendix I).

The majority of the proposed resort structures will be set near existing surrounding grades to minimize earthwork. As a result, the proposed project should have no adverse impact upon the topography and soils of the subject property.

4. Flood and Tsunami Hazard

Existing Conditions:

According to the Flood Insurance Rate Map No. 150003-0265C for this region, the majority of the project site is situated within Flood Zone C, which is subjected to minimal flooding (See: Figure No. 5). A small portion of the project site, located near the southerly and westerly boundaries of the site lies within an area designated as Zone A4, which is prone to 100-year shallow flooding. Another small portion along the northwesterly side of the project site lies within Flood Zone AO, which is also subjected to 100-year shallow flooding. Parcels 83 & 120 are in Zones V18 & V10 which are subject to 100-year coastal flooding with velocity (wave action) indicated.

A Letter of Map Revision (LOMR), which became effective on May 8, 2003, affected the southern portion of the project site. The limits of the 100-year flood zone is changed slightly.

It has been reported by the manager of the Southpointe condominium that during periods of heavy rainfall, water sheetflows across the Maui Lu's north boundary onto the Southpointe's property.

The entire project site is within the tsunami evacuation zone (See: Figure No. 5.1)

Potential Impacts and Mitigating Measures:

The Southpointe problem is mitigated in Section V.D.4. The proposed project should have no adverse impact upon the subject property or its



neighbor properties with regards to flood hazard potential. (See: Section V.D.4. Drainage, for a discussion of stormwater runoff.)

5. Flora and Fauna

Existing Conditions:

Existing vegetation consists of landscaped gardens, lawns and mature trees on the existing Maui Lu Resort grounds. Introduced and exotic species of plant material include bougainvillea, ironwood, mango, oleander, bamboo, coconut palm, kiawe, African tulip, banana, papaya, Norfolk pine, Chinese fan palm, plumeria, monkeypod, banyan, lemon, and shower trees. Native species include kou, lau hala, hibiscus, and kamani. There are no known rare, endangered or threatened species of plant at the site.

Animal life in the project vicinity reflects the urban character of the region. Avifauna typically found in South Maui include the common myna, several species of dove, cardinal, house finch, and house sparrow. Mammals common to this area include cats, dogs, rodents, and mongoose.

Potential Impact and Mitigating Measures:

There are mango, monkeypod and banyan trees on the project site that will be saved in place (See: Preliminary Tree Survey table & Figure No. 11). Of the 441 coconut palms, approximately 200 will be relocated. Of the 45 plumerias, 10 will be relocated. Other trees will be saved in place or relocated where practical after building layouts are finalized.

| PRELIMINARY TREE SURVEY | | |
|-------------------------|----------|-------------------|
| Common Name | Quantity | Quantity Salvaged |
| | Total | Total |
| TREES | | |
| BANYAN | 24 | 6 - In Place |
| BREADFRUIT | 2 | |
| CHRISTMAS BERRY | 2 | |
| KAMANI | 1 | |
| KIAWE | 71 | |
| KUKUI | 4 | |
| MANGO | 5 | 1 - In Place |

| | | |
|----------------|-----|-----------------|
| MONKEY POD | 43 | 15 - In Place |
| PALM - COCONUT | 441 | 200 - Relocated |
| PALM - OTHER | 28 | |
| PAPAYA | 2 | |
| PINE | 17 | |
| PLUMERIA | 45 | 10 - Relocated |
| SHOWER TREE | 1 | |
| TREE - OTHER | 35 | |
| TULIP | 7 | |
| UMBRELLA | 16 | |

None of the trees on the project site are identified as "exceptional" by the Maui County Arborist Committee. There are no known significant habitats of rare, endangered, or threatened species of flora or fauna located on the subject property. Therefore, the proposed project will have no adverse impact upon the flora and fauna on the subject property or in the surrounding area.

When landscaping plans are finalized, three sets of the street tree planting and irrigation plan, along with the Maui County Arborist Committee Plans Review form, will be submitted.

6. Air Quality

Existing Conditions:

Air quality in the South Maui region is considered relatively good. There are no point sources in the immediate vicinity and non-point sources of emissions (automobiles) do not generate high concentration of pollutants. The relatively high quality of air can also be attributed to the region's constant exposure to the prevailing winds, which quickly disperse concentrations of emissions. Maui is currently in attainment of all criteria pollutants established by the Clean Air Act, as well as the State of Hawai'i Air Quality Standards. The ambient air in Maui is in compliance with State and Federal air quality standards (DOH pers. com.).



Potential Impacts and Mitigating Measures:

Air quality impacts attributed to the proposed project could include dust generated by the short-term, construction-related activities. Site work such as grading and building construction could generate airborne particulate. Adequate dust control measures that comply with the provisions of Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust, will be implemented during all phases of construction. Mitigation measures will include but not be limited to:

- Providing an adequate water source prior to start-up of construction for use in dust control.
- Landscaping and rapid covering of bare areas, including slopes, beginning with the initial grubbing and grading phase.
- Controlling of dust from shoulders, project entrances and other access roads.
- Providing adequate dust control measures during weekends, after hours and prior to daily start-up of construction activities.
- Controlling of dust from debris hauled away from the project site.
- Erecting a dust fence to shield the adjacent projects and residences.

Prior to and during demolition and renovation of existing structures the following measures will be taken to prevent hazardous substances from becoming airborne:

1. Conduct an inspection of structures by a certified inspector for presence of asbestos, lead and arsenic containing materials.
2. Prepare a waste disposal management plan.
3. Clearly mark waste material storage areas and post storage recommendations.
4. Store hazardous waste separately to avoid contamination.
5. Promptly dispose of hazardous items and waste materials through permitted facilities.



Handling and disposal of materials shall be done in accordance with all applicable county, state and federal codes.

In the long-term, the increase in the number of customers and employees will result in a slight increase in the volume of traffic in the project's vicinity, which in turn could affect the air quality. However, this increase is not considered significant when compared to the overall amount of vehicles in this area and the current ambient air quality. As such, the proposed project is not anticipated to be detrimental to the local air quality.

7. Noise Characteristics

Existing Conditions:

Kihei's existing ambient noise levels are considered low in this area. The most significant source of noise comes from traffic on South Kihei Road and Ka'ono'ulu Road.

Potential Impacts and Mitigating Measures:

In the short-term, the proposed project could generate some adverse impacts during construction. Heavy construction equipment, such as bulldozers, front-end loaders, and material-carrying trucks and trailers, will be the dominant source of noise during the construction period. To minimize construction related impact to the surrounding property owners, the developer proposes to limit construction activities to normal daylight working hours, and to adhere to the State Department of Health's noise regulations for construction equipment. In addition, the proposed site plan has been designed to follow existing topography to the greatest extent practical. This lessens the need for extensive cut-and-fill activities, which in turn lessens the potential for negative noise impacts.

In the long-term, the project, once completed, is not expected to have any adverse impact upon the existing noise conditions in the Kihei region.



8. Visual Resources/Urban Design

Existing Conditions:

The subject property is divided by South Kihei Road. Views to the ocean and Haleakala from South Kihei Road are for the most part obscured by existing structures and landscaping. The Maui Lu Resort is considered part of a unique scenic resource.

Potential Impacts and Mitigating Measures:

Impacts to views from South Kihei Road and other mauka properties will be minimized by the proposed project design. The massing of the proposed condominium complex generally situates the building clusters in a *mauka* to *makai* (east to west) direction. This has the effect of minimizing the building mass as viewed from South Kihei Road. The parking areas located between clusters will provide open space relief throughout the complex. On the beach front property, open space will be created by the removal of the two-story building parallel to South Kihei Road.

The project's design objectives are to create an attractive resort complex with distinctive traditional architectural design and landscape features. In order to be sensitive to the surrounding residential neighborhood, the smaller one and two-story buildings will be located closest to South Kihei Road with three- and four-story buildings at the rear of the property along Kenolio Road/Alulike Street, and four-story buildings at the center of the site. The distance between residences along Alulike Street and the three-story structures is approximately 155 feet (See: Figure Nos. 15.1 through 15.6). The distance to the four-story structures is approximately 180 feet. The architectural plans portray a distinctly traditional Hawaiian architectural vernacular with double pitch roofs and wide overhangs, detail motifs, and natural materials and colors selected to blend with and not compete with the surrounding park-like setting. Attractive landscape planting and site planning will ensure a quality project that complements the existing urban design character of the Kihei area.

Thus, in terms of urban design and scenic resources, the project is considered to have a positive effect upon the visual character of the site and its immediate environs.

9. Archaeological/Historical Resources

Existing Conditions:

An archaeological inventory survey of the subject parcel was conducted by Scientific Consultant Services, Inc. (SCS) of Honolulu, in August 1998. The survey was deemed acceptable for the proposed project by the State Historic Preservation Division (SHPD) on April 23, 2004 (See: Appendix L). The survey was performed on a portion of the 27.282 acres of TMKs 3-9-01: 083, 086 & 120 encompassing approximately 26 acres located *mauka* (east) of the South Kihei Road. Since the *mauka* parcel 086, the majority of the acreage, has been extensively developed and improved, including the paved parking lots, landscaping and lawn areas, it was determined that it would be very unlikely that any surface cultural remains would have survived the construction period of the 1950s and further improvements and land alterations over the past 40 years.

The inventory survey reported that no significant archaeological remains were discovered in the 16 mechanical backhoe stratigraphy trenches. Furthermore, due to ground surface modifications over the past 40 years, the potential for locating any subsurface remains is minimal.

A cultural impact assessment was conducted by SCS in July, 2003 (See: Appendix C). This report acknowledges that the previous archaeological study "revealed layers of fill on original marshy land with no cultural deposits". Based on their research, the report further concludes that no cultural activities of native Hawaiians or any other ethnic group were identified.



Potential Impacts and Mitigating Measures:

Based on the results of the archaeological survey, it is recommended that no additional archaeological work be required for the project site and no historic properties will be affected. Although unlikely, should *iwi* or Native Hawaiian cultural or traditional deposits be found during future activities at the resort, work will cease in the area and the appropriate agencies will be contacted pursuant to applicable law. No cultural activities were identified, therefore there are no cultural impacts.

10. Shoreline Resources

Existing Conditions:

There are two existing and nonconforming rock revetments fronting parcel 83, the southern revetment approximately 210 feet in length and the northern revetment approximately 220 feet in length. Fronting parcel 120 is the third existing and nonconforming rock revetment approximately 50 feet in length. Parts of these existing and nonconforming revetments, constructed in 1964 or 1965, encroach into the beach reserve and easements are currently being requested from the State Department of Land and Natural Resources (DLNR). A Shoreline Encroachment Information Sheet was prepared on August 6, 2003, and transmitted to Coastal Land Programs, of the State DLNR, describing the rock revetments in more detail and identifying their effects on the shoreline (See: Appendix H). A shoreline survey done by Control Point Surveying, Inc. on May 9, 2003 and re-verified on August 13, 2003 along parcels 15, 83 and 120, and was certified by DLNR on October 27, 2003 (See: Appendix I).

A Coastal Engineering Assessment (CEA) for the Maui Lu Hotel was prepared by Sea Engineering, Inc. in February, 2004 (See: Appendix J). This report describes the shoreline setting, process and history in the vicinity of the subject property. The CEA cites the erosion history in the area, as analyzed by the U.H. Coastal Geology Group (2003) using aerial photos between 1947 and 1997. This study shows that the beach in the North Kihei area has a steady, moderate erosion rate of -0.9 feet per year.

The CEA concludes, "Although the revetments protrude substantially seaward, there is no evidence of sand impoundment on either side of the revetments." It goes on to say that it is unlikely that the existing revetments "are substantially impacting the neighboring shorelines." Analysis of historical aerial photos and field investigation reveals no evidence that the revetments have resulted in impacts other than in the immediate local vicinity.

Discussions with the State DLNR regarding the encroachment easements include shoreline processes, and participation in shoreline enhancement options which include, but are not limited to beach nourishment, dune stabilization, and enhanced public access. See correspondence with DLNR in Appendix L.

Potential Impacts and Mitigating Measures:

The CEA suggests possible alternatives that include no action, removal of the revetments, beach nourishment and beach nourishment with structures. In addition, dune stabilization and public access are also discussed.

1. No Action

Flank erosion at the south ends of the northernmost and southernmost revetments "may continue and could result eventually result in property loss or damage." Stabilizing loose rocks and removal of unnecessary rocks near and around the toe would, at the least, improve public safety.

2. Removal of Revetments

It appears that the removal of the existing revetments would allow natural beach processes to be unimpeded over time. However, the CEA determines that their removal would have immediate negative impacts to both the property owner and the coastal environment. Removal of the existing revetments "would result in erosion of the land behind the rocks, release of this material into the water and nearshore reef, and could result in undermining and damage to the Maui Lu buildings."

3. Beach Nourishment



Beach nourishment, the addition of large quantities of compatible beach sand to rebuild beaches seaward, is the most acceptable approach to beach stabilization. Nourishment improves beach quality and provides some storm protection. However, these benefits usually exist over only relatively short periods of time and the costs of beach nourishment are relatively high. This option is most viable economically in areas of dense development, large available sand supplies, relatively low wave energy, and reconcilable environmental issues.

Beach nourishment at the pocket beach between the middle and southern revetments would require at least 900 cubic yards to widen the beach by 20 feet. To the south of the southernmost revetment, at least 1500 cubic yards of sand would be required to build out 40 feet at the revetment, tapering off approximately 200 feet to the south. The erosive process would continue, however and the added sand would erode, and the shoreline would eventually return to its existing condition. And as stated previously, a beach nourishment effort of this type would require planning for periodic re-nourishment and would tax a limited resource.

4. Beach Nourishment With Structures

Beach nourishment in conjunction with the design and construction of T-head groins would reduce wave energy impacting the beach and alter wave diffraction patterns to produce stable nourished beaches. Such structures would require detailed engineering design and the permit process could be lengthy and complex as well as expensive.

5. Dune Stabilization

Dune stabilization is the use of adapted vegetation and mechanical means to catch and hold sand, and build or repair dunes. The purpose is to maintain a barrier dune that protects backshore areas during storms; and to protect roads, buildings, and valued areas from encroachment by blowing sand.

The northern beach between the Vancouver monument and the middle revetment is an area where dune stabilization may be appropriate. Enhancement may include sand importation and establishment of a palette of plant species that are tolerant of the wind and salt beach environment.



Vegetation may also help to mitigate the continued occurrence of sand accumulation on South Kihei Road. Providing above grade irrigation to this area, in addition to the public areas to the north and south of the project site, would encourage the establishment of vegetation.

6. Enhanced and Improved Public Access

Currently, beachgoers in the area park their cars along South Kihei Road. At present there is no public access fronting parcel 83. Removal of the revetments would not appear to improve coastal access, in fact, if the shoreline continues to erode, the likely formation of an unstable vertical scarp and the potential for loss of structures could present a safety risk to persons trying to access this portion of shoreline.

As part of the Maui Lu Redevelopment, beach parking will be provided on the *mauka* side of South Kihei Road on parcel 86. A pedestrian crossing will be provided with raised crosswalks near the existing crosswalk and at the new traffic signal lights at the South Kihei Road and Ka`ono`ulu Road intersection (See: Figure No. 12). Also, a landscaped median strip between the lanes of traffic on South Kihei Road will provide refuge for pedestrians in addition to calming traffic. South Kihei Road will be very pedestrian friendly with sidewalks and bikeways on both sides.

The overall effect of the redevelopment project will be a 75% decrease in the number of units and structures which currently exist on shoreline parcel 83. The intent is also to provide a lateral public access walkway along a portion of parcel 83 and over the revetments which would also connect to parcel 120, and provide access all the way to the Vancouver monument. Overall enhancement of the monument area would help to mitigate sand accumulation at the roadway and loss of the dune environment, and improve public safety. Thus, issuance of an easement for the revetments would allow for the redevelopment plans to proceed and would result in the establishment of new lateral public access walkway where there is currently none.

Final settlement with the State DLNR on the easement request will likely include some or all of the discussed options for shoreline protection and enhancing opportunities for public use and recreation.



B. SOCIO-ECONOMIC ENVIRONMENT

1. Population and Housing

Existing Conditions:

The population of the County of Maui has exhibited relatively strong growth over the past decade with a 2000 population of 128,241, a 27.6% increase over 1990 population of 100,504. The 2000 population of Maui Island was 117,644. The 2000 population of South Maui District was 22,870, 19.4% of Maui Island's population. (*Maui County Community Plan Update Program: Socio-Economic Forecast*, SMS Research, June 14, 2002).

Potential Impacts and Mitigating Measures:

The proposed condominium project will not lead to a direct impact on population levels since there is no residential component. Secondary impacts to population levels could arise due to increased employment opportunities; however, these potential increases are considered minimal due to the dynamic nature of the visitor industry in this district. Therefore, the proposed project should have minimal impact upon local population levels.

The applicant will comply with Chapter 2.94 Affordable Housing Policies For Hotel-Related Developments, Maui County Code. For the purposes of calculating the number of affordable units, the total number of units will be 788 units (i.e. 400 units plus 388 lock-off units). After subtracting the 174 existing units at the Maui Lu Resort, the number of new units will be 614 units for calculation of the affordable housing requirement. Based on the 1:4 affordable housing ratio, the applicant will be providing an in-lieu cash contribution for 154 affordable units.



2. Economy

Existing Conditions:

The South Maui economy is based primarily upon the visitor industry. Visitor accommodations are located near the shoreline along with support facilities and residential communities. South Maui has developed into an important visitor destination, adding to the region's service, commercial and residential. The existing Maui Lu Resort employs approximately 32 persons.

Potential Impacts and Mitigating Measures:

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

On a long-term basis, the project will result in increased employment and business opportunities. The proposed project will add 227 new units to the resort. These additional units will require additional staff, including housekeeping, administration, maintenance, sales, marketing and management. During the phased redevelopment, the owners intend to keep a large majority of the existing hotel rooms in service, keeping most of the staff employed. The additional staff will be added as timeshare sales commence. It is anticipated that the proposed expansion will create an 63 new jobs. In addition, tax revenues will increase due to increased land values, employment and business transactions.

In addition, the economic success of South Maui is based upon the region's ability to provide a visitor experience of the highest quality. In an increasingly competitive visitor destination market, it is imperative that South Maui maintain its position as a leading visitor center by providing a wide range of services, amenities and accommodations. Such services, amenities and accommodations must address current and emerging trends in the visitor industry. The proposed Maui Lu project is consistent with this strategy and as such should have a positive impact on South Maui.



C. PUBLIC SERVICES


1. Recreational Facilities

Existing Conditions:

The South Maui area has a wide reputation as a recreational destination, particularly for ocean related activities. Ocean sports and recreation available in the South Maui District include swimming, fishing, surfing, scuba diving, snorkeling, sailing, and para-sailing. State and County beach parks in the South Maui District include the Maipoina Oe Iau Beach Park, Kalama Beach Park, Kamaole Beach Park, Ulua Beach, Wailea Beach, Polo Beach, Makena Beach Park, and Ahihi-Kinahu Marine Reserve, including the northern portion of La Perouse Bay.

Potential Impacts and Mitigating Measures:

The subject property is located on the shoreline, and the resort site is bisected by South Kihei Road, separating the main resort complex from the beach units. The redevelopment of the *mauka* portion of the proposed project will have no impact on the public's use of the shoreline area, however beach parking will be provided there for access to ocean activities at the beaches in the vicinity. On the *makai* property, a building will be demolished and the number of units will be reduced, creating more space around a beach that is accessible to the public. In addition to beach parking, the project will include lateral beach access, and improved pedestrian road crossings to beaches. The proposed timeshare resort is not anticipated to have any significant negative impact upon existing recreation facilities and services in the region, since the Maui Lu Resort is located on the Pacific Ocean.



2. Police and Fire Protection

Existing Conditions:

The Maui County Police Department has a local sub-station in Kihei located in the Kihei Town Center, across from Kalama Park, approximately three miles from the subject property.

Fire prevention, suppression, and protection in the Kihei District is provided by Maui County Fire Department's Kalama Park Station, located approximately three miles from the subject property. The recently opened Wailea Fire Station is located at the intersection of Kilohana Drive and Piilani Highway, six miles from the subject property.

Potential Impacts and Mitigating Measures:

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

The project architect agreed to review and incorporate, when possible, best practices in Crime Prevention Through Environmental Design (CPTED). The primary strategies of CPTED include natural surveillance, territorial reinforcement, natural access control, and target hardening.

3. Solid Waste

Existing Conditions:

Only two landfills are currently operating on Maui, the Central Maui Landfill in Pulehu, and the Hana landfill. Single-family residential solid waste collection for South Maui is provided by the County and taken to the Central Maui Landfill, which also accepts waste from private refuse collection companies.

Potential Impacts and Mitigating Measures:

In the short term, construction and demolition debris will be reused or recycled when practical, or disposed at a construction and demolition waste landfill. Prior to demolition and renovation of existing structures, an

inspection of structures will be conducted by a certified inspector for presence of asbestos, lead and arsenic containing materials. Such materials will be removed and disposed of in accordance with all county, state and federal codes and guidelines.

In order to reduce solid waste generation over the long term, the project will incorporate a green waste composting program. Solid waste collection for the subject property will be provided by a private refuse collection firm and taken to the Central Maui Landfill in Pulehu.

4. Schools

Existing Conditions:

The Kihei District is serviced by both private and public schools, which provide education for preschool through high school age children. Kihei Charter High School provides a high school opportunity in Kihei, however traditional high schools are located in Wailuku and Kahului. The private schools in the Kihei District include grades kindergarten through eight along with several preschools.

Potential Impacts and Mitigating Measures:

The proposed timeshare complex does not have a residential component and is not anticipated to significantly affect school enrollment.

D. INFRASTRUCTURE

1. Roadways and Traffic

Existing Conditions:

The automobile is the primary source of transportation in South Maui. An extensive roadway system exists in the South Maui area. Right-of-way widths vary with each roadway. Some roads are paved with curbing and sidewalks while others are comprised of asphaltic concrete pavement and have limited curbs.



Within the study area are the two main roads, South Kihei Road and Ka`ono`ulu Road. South Kihei Road, a two-lane roadway, is a County collector roadway that is the primary north/south roadway servicing Kihei and providing the connection to Wailea and Makena. Access to South Kihei Road is not limited. There is a posted speed limit of 30 mph. The current main entrance to Maui Lu is accessed from South Kihei Road.

Ka`ono`ulu Road runs in a east-west direction from Piilani Highway to South Kihei Road and has two lanes with a posted speed of 20 mph. Ka`ono`ulu Road has residential development along both sides. When the Upcountry Highway is completed and traffic signals are constructed at Piilani Highway, traffic along Ka`ono`ulu Road is expected to increase. Traffic calming measures, such as four-way stops, roundabouts or speed humps, may be indicated at that time.

On September 16, 2003 (revised October 10, 2003 and August 6, 2004), a Traffic Impact Analysis Report (TIAR) was completed for the Maui Lu Resort by Mr. Phillip J. Rowell, P.E. of Phillip Rowell and Associates (See: Appendix E). The report includes a description of the project, an assessment of existing traffic conditions on Piilani Highway, South Kihei Road and Ka`ono`ulu Street, trip generation characteristics of the proposed project, an analysis of project impacts, and recommended mitigative measures. The report uses traffic projections for the year 2008 and includes estimated trips generated by seven projects in the vicinity.

Level of Service (LOS) is defined as a "qualitative measure describing operational conditions within a traffic stream". Levels "A", "B" and "C" are considered satisfactory, "D" a desirable minimum, "E" undesirable, and "F" unacceptable.

Potential Impacts and Mitigating Measures:

The TIAR prepared results for two scenarios. Both scenarios assumed 100% occupancy of all 400 units. Scenario 1 assumes 50% occupancy of all lock off units and Scenario 2 assumes 100% occupancy of all lock off units. Trip generation characteristics, determined according to accepted methodology of the Institute of Transportation Engineers, resulted in an



estimated net increase of 222 peak hourly trips in the AM hours, and 245 peak hourly trips in the PM hours in the 2008 design year for Scenario 1. For Scenario 2, the result estimated net increase of 316 peak hourly trips in the AM hours, and 363 peak hourly trips in the PM hours. It should be noted that visitors at a time-share resort generally stay for longer periods of time, are provided with in-room dining facilities, and are expected to spend less active vacations since they are often returning rather than first time visitors. These characteristics, combined with the "all-suites hotel" nature of the proposed project - offering suite, small meeting rooms, lounges and a restaurant - were calculated into the projected traffic increase.

The projected impact analysis is based on the traffic forecasts for the year 2008 prepared in October 1996 as part of the Kihei Traffic Master Plan (KTMP). Since the intersections are unsignalized, only Delay (in seconds per vehicle) and Level-of-Service is shown. The projected cumulative peak hour traffic conditions in 2008 without the project are as follows:

| | Ka`ono`ulu left turn onto Piilani | Ka`ono`ulu left turn onto South Kihei Road | South Kihei Road left turn onto Ka`ono`ulu |
|------------------|-----------------------------------|--|--|
| AM Peak Hour | 8:45-9:45 | 7:00-8:00 | |
| | 50% 100% | | |
| Level of Service | D | F | B |
| Delay | 26.1 | 236.3 | 11.6 |
| PM Peak Hour | 3:30-4:30 | 3:45-4:45 | |
| Level of Service | C | F | B |
| Delay | 23.9 | 164.4 | 12.3 |

Traffic improvements proposed in the KTMP in the vicinity of the Maui Lu Resort included signalization of the Piilani/Ka`ono`ulu intersection, widening of Piilani to four lanes for 200-300 feet on both sides of this

intersection (already completed), and signalization of the South Kihei Road/Ka`ono`ulu intersection. Additionally, an exclusive left turn lane on southbound South Kihei Road at Ka`ono`ulu Street is recommended, without the proposed project.

With the proposed project in place plus projected cumulative background traffic, the projected traffic impact of the Maui Lu Resort in the year 2008 is as follows:

| | Ka`ono`ulu left turn onto Piilani | | Ka`ono`ulu left turn onto South Kihei Road | | South Kihei Road left turn onto Ka`ono`ulu | |
|------------------|-----------------------------------|------|--|-------|--|------|
| AM Peak Hour | 8:45-9:45 | | 7:00-8:00 | | | |
| Scenario | 50% | 100% | 50% | 100% | 50% | 100% |
| Level of Service | E | E | F | F | B | B |
| Delay | 36.9 | 49.0 | 354.4 | 385.2 | 12.1 | 12.2 |
| PM Peak Hour | 3:30-4:30 | | 3:45-4:45 | | | |
| Level of Service | D | E | F | F | B | B |
| Delay | 31.0 | 35.8 | 259.9 | 300.8 | 12.7 | 12.9 |

Left turn from Ka`ono`ulu Road to southbound South Kihei Road operates at Level-of-Service "F" (unacceptable) with and without the project. The TIAR concludes that the full buildout of the proposed project is expected to significantly increase delay by 49% during morning peak hour and by 58% during afternoon peak for the 50% scenario. Delays will increase by 63% during morning peak hour and by 83% during afternoon peak for the 100% scenario.

The signalization at Ka`ono`ulu at South Kihei Road and left-turn lanes in the vicinity of the project proposed by KTMP will mitigate traffic impacts resulting from the increase in traffic on Ka`ono`ulu Road. Note that the intersection will operate at an unacceptable level without the proposed



project. The resort's main access will be relocated from South Kihei Road to Ka'ono'ulu Road, reducing the volume at the access point on the secondary arterial highway. A roundabout is not recommended at the South Kihei and Ka'ono'ulu Roads because basic criteria for approach volumes at roundabouts is not met. In addition, roundabouts are not compatible with pedestrian crossing activity.

Left turn from Kaonoulu Road to northbound Piilani Highway will degrade from Level-of-Service from "D" to "E" during the AM and "C" to "D" during the PM for the 50% scenario, however the maximum delay is 36.9 seconds per vehicle and total delay increase is 36%. For the 100% scenario, left turn at the same intersection will degrade from Level-of-Service from "D" to "E" during the AM and "C" to "E" during the PM, and the maximum delay is 49.0 seconds per vehicle and total delay increase is 70%.

This intersection is also the currently designated Kihei terminus for the proposed highway to Upcountry Maui for which a schedule was not available. Traffic signals will be installed at that intersection as part of that project. It is assumed that this project would not be completed before the 2008 horizon year. Traffic is expected to increase upon completion of the Upcountry highway and that will probably result in requests for some kind of traffic calming along Ka'ono'ulu Road. Measures, such as four-way stops, roundabouts or speed humps, along Ka'ono'ulu Road at other intersections are not recommended at this time because they are not required as mitigation measures for this project.

Although there are projected to be 252 (50% scenario) and 370 (100% scenario) more peak hourly inbound trips generated by the proposed project, the level of service (using delay times) for turning left into the project from Kaonoulu Street and South Kihei Road are "A" and "B", respectively (See: Appendix E, Table 13). Exit at the Kaonoulu Road Driveway A is projected to operate at "B" during both the AM and PM peak and Driveway C will be "C" during the both peak periods. The exit at the South Kihei Road driveway is projected to operate at "C" during the AM peak and "D" during the PM peak. Although LOS at the driveways



remain satisfactory, separate left turn storage lanes are recommended to enhance traffic flow.

Heaviest pedestrian activity was observed in the vicinity of the Kaonoulu Road and South Kihei Road intersection during the AM peak period. During this period, a total of 29 pedestrians crossed one of the legs of the intersection. Only four crossed South Kihei Road and the remaining crossed Kaonoulu.

With approximately 126 existing units on the mauka side, including management and maintenance personnel, there are approximately thirty (30) pedestrian crossings per hour. Therefore, with a build-out with 388 mauka two and three bedroom condominiums including lock-off units, it is estimated that there will be approximately 92 pedestrian crossings per hour. Of these, 13 would cross South Kihei Road. The number of South Kihei Road crossings does not satisfy the pedestrian volume warrant for a pedestrian crossing signal. Also, the pedestrian volume warrant do not apply to locations where a traffic control signal is less than 300 feet away. Nevertheless, in order to mitigate the increased pedestrian crossings, a landscaped median strip between lanes will be constructed, extending from the South Kihei Road entrance to the intersection at South Kihei and Ka`ono`ulu Roads. This improvement will provide pedestrian crossing refuge as well as calm traffic (See: Figure No. 12). Both crosswalks will be raised to further calm traffic. Pedestrian crossing is further discussed in an August 2, 2004 letter to the Department of Planning (See: Appendix M). The letter also discusses the possibility of a pedestrian overpass and reasons for its rejection. These improvements, together with new pedestrian sidewalks on all project road frontages, will mitigate the impact of increased pedestrian crossings and make a significant contribution to the urban design and the health, safety and welfare of the Kihei Community.

Traffic improvements proposed to mitigate the impacts of the project are: (1) signal at the intersection of South Kihei Road at Ka`ono`ulu Road, (2) landscaped median along South Kihei Road to provide refuge for pedestrian crossing (3) sidewalks on both sides of South Kihei Road and

along Ka`ono`ulu Road adjacent to project, and (4) widen Ka`ono`ulu road and provide left turn storage lanes into the project.

Roadway widening lots to allow for a minimum 56-foot wide right-of-way for South Kihei Road, Kaonoulu Road, and Alulike Street will be provided where required. Kenolio Road, where it is adjacent to the propose project, already has a 56-foot right-of-way. Roadway improvements, which will include pavement widening, curbs, gutters and sidewalks, will be constructed on the project sides of the roads.

2. Wastewater

Existing Conditions:

The Kihei Wastewater Reclamation Facility (KWRF), located to the south of the project site, serves the Kihei and Wailea areas. Separate 6-inch laterals provide sewer service to both the *mauka* and *makai* project area. Both laterals connect to the County's 24-inch sewer collection main located within the South Kihei Road right-of-way. The County's 24-inch sewer main transports sewage flows in the vicinity of the project site to the County's Kihei Sewage Pump Station No. 3 located to the south of the project site along South Kihei Road. Sewage from the County's Kihei Pump Station No. 3 continues to KWRF via a series of pump stations, force mains, and gravity lines.

Wastewater from Maui Lu Resort is presently being conveyed to a 24-inch force main running along South Kihei Road. Flows are conveyed to the wastewater treatment plant at Kihei Wastewater Reclamation Facility (KWRF) located south of and adjacent to the Silversword Golf Course.

Potential Impacts and Mitigating Measures:

The Maui Lu project is expected to generate 110,500 gallons of wastewater per day and 3,000 gallons per day, from the *mauka* and *makai* parcels, respectively (See: Appendix D). A new onsite gravity system will consist of two major gravity sewer collection systems. The first system would serve the proposed timeshare and support facilities located on the northern half of the *mauka* parcel, utilizing the existing 6-inch sewer lateral located in the northwest corner of the *mauka* parcel. The second system will require a



new sewer lateral connection to the County's existing 24-inch transmission main located at South Kihei Road.

The sewer demand will be reduced for the makai parcel due to the downsizing of the existing buildings and no improvements will be required.

Based on consultation with the Wastewater Reclamation Division, the existing collection and transmission system in Kihei has the capacity to handle the additional wastewater. KWRF has a capacity of 8.0 MGD. Therefore, the KWRF will have the capacity to handle the expected additional wastewater flow generated by the proposed expansion of the Maui Lu Resort. The applicant recognizes that wastewater capacity for the subject project cannot be ensured until issuance of the building permits.

Final wastewater contribution calculations, which will include existing/past property usage, will be submitted with the building permit applications.

3. Water

Existing Conditions:

The Maui Lu Resort is serviced by Department of Water Supply's (DWS) Central Maui system. The Iao Aquifer is the primary source for this system. Majority of the water is withdrawn from this aquifer in the vicinity of Iao Stream and Waiehu Stream with the balance withdrawn from the adjacent Waihee aquifer. The Central Maui Water System currently has 800,000 gallons per day available for new water services of which approximately 200,000 gallons have been allocated to other projects.

There is a 12-inch and 6-inch water main located along South Kihei Road fronting the project site. An 8-inch water main also runs along Kenolio Road/Alulike Street at the *mauka* boundary which connects to a 12-inch main at Kaonoulu Road to the south. This main in turn connects to the 12-inch main at South Kihei Road. Presently, the subject property has three

water meters, two 2-inch meters (*mauka*) and one 1 1/2-inch meter (*makai*). An existing non-potable well located in the southeastern corner of the *mauka* parcel 86 supplies landscape irrigation for the same parcel. The two *makai* parcels use County water for their landscaping needs. There are also two fire hydrants on the *makai* side of South Kihei Road, with two standpipes of the *mauka* side of the street. There are four fire hydrants along Alulike Street. Six fire hydrants are located in the center of Parcel 86.

Potential Impacts and Mitigating Measures:

Average daily potable water demands of 139,600 gallons per day (gpd) and 4,600 gpd are projected for the *mauka* and *makai* parcels, respectively. Based on discussions with DWS, the system in the vicinity has adequate capacity available for the additional demand, however any additional meter requirements will be subject to availability of water from the existing Central Maui Water System or at such time that additional sources are developed. Minus the current average consumption of 53,300 gpd, an additional capacity of 86,300 gpd will be required. Building specifications will adhere to the minimum water conservation requirements.

Conservation measures that the applicant will implement, but is not limited to:

1. On-site non-potable water will be used for irrigation.
2. Low-flow fixtures will be utilized throughout the proposed project.
3. Much of the existing landscaping, which includes climate-adapted and native plants, will be retained.
4. Automated irrigation controllers will be utilized to prevent over-watering.

Pollution prevention measures that the applicant will implement, but is not limited to:

1. All loosened and excavated soil and debris material from drainage structure work will be properly and promptly disposed of.
2. Ground cover will be retained until the last possible date.
3. Denuded areas will be stabilized by prompt sodding or planting.

-
-
4. Drainage control features, such as berms, will be constructed.
 5. Drainage structures, detention, silting and debris basins will be regularly maintained.
 6. Non-potable water will be used for dust control.
 7. Open vehicles carrying soils, gravel or other particulate matter will be covered.

Landscape requirements of the entire project is estimated to average approximately 100,000 gallons per day (GPD) with summer peaks at 136,000 GPD. The test of the on-site non-potable well indicate an optimum flow rate of 285 gallons per minute (gpm) which would be adequate for peak requirements (See: Appendix N).

To meet the DWS standards for a fire flow of 1,500 gpm with hydrant spacing at 250 feet, hydrants will be installed along Ka`ono`ulu Road.

4. Drainage and Erosion Control

Existing Conditions:

Runoff from lands mauka of the project site is intercepted by a storm drain system on Kenolio Road and does not flow onto the project site. Onsite runoff sheet flows toward South Kihei Road and then into Kulanihakoi Gulch, to the southwest. Under current conditions, runoff for a 50 year - 1 hour rainfall is estimated to total around 37.17 cfs.

Potential Impacts and Mitigating Measures:

Based on conceptual plan, total runoff is estimated to be 45.41 cfs for a 50-year, 1-hour storm, an increase of 8.24 cfs over current peak flow (See: Appendix D). For a 100-year, 1-hour storm, peak storm water discharge for the on-site existing and proposed conditions are estimated at 44.21 cfs and 54.81 cfs, respectively, for a 10.6 cfs increase.

Mitigating measures include constructing a system of underground drainlines and drain inlets located at low spots throughout the project site. Also, since portions of the site located within the flood plain will be filled



above the flood limits, equivalent storage capacities will be created on site to handle the displaced flood water storage displaced by the fill.

Runoff from South Kihei Road and Ka`ono`ulu Street will be directed into catch basins on these streets and conveyed by a storm drain system to Kulanihakoi Gulch. The existing storm drainage culvert crossing for Kulanihakoi Gulch at South Kihei Road is inadequate to accommodate larger storm flows. By discharging the proposed roadway drainage system on the *makai* side of the existing storm drainage culvert, increased storm water flows to the inadequate culvert system are mitigated. Discharge on the *makai* versus the *mauka* side does not impact the environment except to prevent additional stress to the existing drainage culvert and mitigation of pre-development ponding at the Kaonoulu Road and South Kihei Road intersection.

Since the County is requiring the project to improve the adjoining County roads (South Kihei Road and Kaonoulu Road) including installation of an underground storm drainage system, the localized drainage condition near the project should improve. Instead of storm water sheet flowing along South Kihei Road and Kaonoulu Road, the storm water will be conveyed underground via the new storm drainage system.

In accordance with the Preliminary Drainage and Soil Erosion Control Report, the following measures will be required to control erosion during the site development period (See: Appendix D):

1. Minimize time of construction.
2. Retain existing ground cover until latest date to complete construction.
3. Early construction of drainage features.
4. Use temporary area sprinkles in non-active construction areas when ground cover is removed.



5. Station water truck on site during construction period to provide for immediate sprinkling, as needed, in active construction zones (weekends and holidays included).
6. Use temporary berms and cut-off ditches, where needed, for control of erosion.
7. Thoroughly water graded areas after construction activity has ceased for the day and on weekends.
8. Sod or plant all cut and fill slopes immediately after grading work has been completed.
9. Install silt screens wherever appropriate.

Additionally, the following is a list of mitigative measures proposed to reduce non-point source pollution both during and after construction:

(a) Construction Management Techniques

- (1) Clearing and grubbing shall be held to the minimum necessary for grading and equipment operation.
- (2) Construction shall be sequenced to minimize the exposure time of the cleared surface area.
- (3) Clearing, grubbing, and major grading operations will be scheduled in the dry season, as practical.
- (4) Areas of one phase shall be stabilized before another phase is initiated. Stabilization shall be accomplished by temporarily or permanently protecting the disturbed soil surface from rainfall impacts and runoff.
- (5) Erosion and sediment control measures shall be in place and functional before earth moving operations begin. These measures shall be properly constructed and maintained throughout the construction period.
- (6) All control measures shall be checked and repaired as necessary, for example, weekly in dry periods and within twenty-four hours



after any rainfall of 0.5 inches or greater within a 24-hour period. During prolonged rainfall, daily checking is necessary. The contractor shall maintain records of checks and repairs.

- (7) The contractor shall maintain records of the duration and any unusual conditions related to storm water discharge(s).
- (8) The contractor's foreman shall be designated to be responsible for erosion and sediment controls on the project site.

(b) Vegetation Controls

- (1) Pre-construction vegetative ground cover shall not be destroyed, removed, or disturbed more than twenty calendar days prior to land disturbance.
- (2) Temporary soil stabilization with appropriate vegetation shall be applied on areas that will remain unfinished for more than thirty calendar days.
- (3) Install permanent landscaping ground cover and irrigation system as soon as final grades have been established.

(c) Structural Controls

- (1) Storm water flowing toward the construction area shall be diverted by using appropriate control measures, as practical.
- (2) Erosion control measures shall be designed according to the size of disturbed or drainage areas to detain runoff and trap sediment.
- (3) Water must be discharged in a manner that the discharge shall not cause or contribute to a violation of the basic water quality criteria as specified in section 11-54-04.
- (4) Install permanent storm drainage system including drain inlets, underground storm drain lines, and above grade and below grade storm water detention basins.

The development project is provided with adequate facilities for drainage control and storm water disposal. The drainage system will conform to the requirements of the Department of Public Work and Environmental



Management. This, together with ultimate ground cover and extensive landscaping (See: Figure No. 11, "Landscape Plan"), shall preclude any appreciable onsite erosion.

With the incorporation of the proposed drainage system improvements as well as the erosion control measures, the proposed development will not have a significant impact on the ocean and its beaches. Since all increases of storm runoff generated by the proposed project are retained on-site, there should be no adverse impact to Kulanihakoi Gulch. Improvements on Kaonoulu Road will prevent runoff from crossing onto parcels to the south which contain wetland areas. Wetland areas will not be impacted since storm runoff will be conveyed through an underground system and discharged into Kulanihakoi Gulch *makai* of South Kihei Road. The Army Corps of Engineers has reviewed the project and did not offer any comments pertinent to wetlands. Additionally, there are no properties downstream of the project site that may be impacted by storm water flows.

5. Electrical, Telephone, Cable, and Data Systems

Existing Conditions:

Electrical service to the subject property is presently provided by Maui Electric Company, Ltd. (MECO) powerlines. Any additional electrical power needs for the subject property will be supplied by MECO.

Verizon Hawaii maintains overhead telephone lines that provide data and voice communications to the subject property.

Cable TV and data service will be provided by Oceanic Time Warner Cable of Hawaii.

Potential Impacts and Mitigating Measures:

Electrical loads and distribution line sizes will be determined during the design phase of the proposed project. Existing overhead poles and lines on South Kihei Road and Ka`ono`ulu Street will be relocated when these streets are widened.



Electrical, telephone and cable system trunk lines will be extended underground into the project site. The distribution system for these facilities within the development will be placed underground in accordance with the provisions of the Maui County Code.

According to MECO, Verizon Hawaii, and Oceanic Time Warner Cable of Hawaii, there is sufficient capacity to adequately meet the needs of the proposed project.

Construction of proposed structures will comply with Chapter 16.26.1300, "Energy Conservation", Maui County Code. Where practical and economically feasible, the proposed structures will exceed the building efficiency standard for the State of Hawaii.

VI. RELATIONSHIP TO GOVERNMENT PLANS, POLICIES, AND CONTROLS

A. HAWAII LAND USE LAW

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission, establishes the four major land use districts in which all lands in the State are placed. These districts are designated *Urban*, *Rural*, *Agricultural*, and *Conservation*. The subject property is within the *Urban* District. The proposed improvements are considered permissible uses within the *Urban* District, and, therefore, are consistent with the State Land Use Law.

B. GENERAL PLAN OF THE COUNTY OF MAUI

The General Plan of the County of Maui (1990 update), provides long term goals, objectives, and policies directed toward the betterment of living conditions in the County. Addressed are social, environmental, and economic issues that influence future growth in Maui County. The subject property's use is consistent with the following General Plan objectives and policies:

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



Policies:

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

Objectives: To encourage development which reflects the character and culture of Maui county's people.

C. KIHEI-MAKENA COMMUNITY PLAN

Nine community plan regions have been established in Maui County. Each region's growth and development is guided by a Community Plan, which contains objectives and policies in accordance with the County General Plan. The purpose of the Community Plan is to outline a relatively detailed agenda for carrying out General Plan's objectives (See: Figure No. 7). The Kihei-Makena Community Plan was updated in March 1998.

Goal: 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 (Pg. 17).

Goal: A diversified and stable economic base which serves resident and visitor needs while providing long-term resident employment (Pg. 27).

Goal: Provision of facility systems, public services and capital improvement projects in an efficient, reliable, cost effective, and environmentally sensitive manner which accommodates the needs of the Kihei-Makena community, and fully supports present and planned land uses, especially in the case of project district implementation (Pg. 30).

Response:

Parcels 83 and 86 are designated as Hotel in the Community Plan's land use map. Parcel 120 is designated as Park. Thus, the proposed project is consistent with the 1998 Kihei-Makena Community Plan Land Use Map and recommended goals, objectives and policies.

D. MAUI COUNTY ZONING

The Maui County zoning for the subject parcels is *H-1 Hotel* for 3-9-01: 083, with a split zoning for 3-9-01: 086 -*H-1 Hotel* for the first 200 feet from South Kihei Road, and the remainder, *H-M Hotel* District. Parcel 3-9-01: 120 is designated as *Park*. The proposed improvements are consistent with the County zoning.

E. SPECIAL MANAGEMENT AREA OBJECTIVES AND POLICIES

1. RECREATIONAL RESOURCES

Objectives: Provide coastal recreational resources accessible to the public.

Policies:

a. Improve coordination and funding of coastal recreation planning and management; and

b. Provide adequate, accessible and diverse recreational opportunities in the coastal zone management area by:

1. Protecting coastal resources uniquely suited for recreation activities that cannot be provided in other areas;
2. Requiring replacement of coastal resources having significant recreational value, including, but not limited to, surfing sites and sandy beaches, when such resources will be unavoidably



damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;

3. Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
4. Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
5. Encouraging expanding public recreational use of county, state and federally owned or controlled shoreline lands and waters having recreational value;

Adopting water quality standards and regulating point and non-point sources of pollution to protect and, where feasible, restore the recreational value of coastal waters; and

6. Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits, and crediting such dedication against the requirements of Section 46-6 of the Hawaii Revised Statutes.

Response:

The subject property is located on the shoreline, and the resort site is bisected by South Kihei Road, separating the main resort complex from the beach units. The redevelopment of the mauka portion of the proposed project will have no impact on the public's use of the shoreline area. On the beach front property, a building will be demolished and the number of units will be reduced, creating more space around a beach that is accessible to the public. The project will include lateral beach access, beach parking and improved pedestrian road crossing to the county beach park south of the resort's shoreline properties.



2. HISTORICAL/CULTURAL RESOURCE

Objectives: Protect, preserve and where desirable, restore those natural and man-made historic and prehistoric resources in the coastal zone management areas that are significant in Hawaiian and American history and culture.

Policies:

- a. Identify and analyze significant archaeological 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:

1. The applicant plans to contribute toward improving the County-owned shoreline land south of Ka'ono'ulu Street, and toward enhancing the monument to Captain George Vancouver north of Parcels 83 and 120.
2. Based on the results of the archaeological survey done by Scientific Consultant Services, Inc. in August 1998, it is recommended that no additional archaeological work be required for the project site. Although unlikely, if human remains are identified during future activities at the resort, the State Historic Preservation Department will be notified immediately. A cultural impact assessment was conducted by SCS in July, 2003 (See: Appendix C). Based on their research, the report did not identify cultural activities of native Hawaiians or of any other ethnic group in the area. The project is not expected to have an adverse impact upon archaeological or historical resources.



3. SCENIC AND OPEN SPACE RESOURCES

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

Policies:

- a. Identify valued scenic resources in the coastal zone management area;
- b. Insure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of the natural land forms 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 which are not coastal dependent to locate in inland areas.

Response:

The large mauka section of the site features a park-like setting with open space, mature landscape trees, and elevated viewpoints. Impacts to views from South Kihei Road and other mauka properties will be minimized by the proposed project design (See: Figure Nos. 15.1 through 15.6). The massing of the proposed building clusters generally runs in a *mauka* to *makai* (east to west) direction. This has the effect of minimizing the building mass as viewed from South Kihei Road. The parking areas located between clusters will provide open space relief throughout the complex.

On the beach front property, open space will be created by the removal of the two-story building parallel to South Kihei Road. The project's design objectives include creating an attractive resort complex with distinctive architectural design and landscape features. Attractive landscape planting



and site planning will ensure a quality project that complements the existing urban design character of the Kihei area.

Thus, in terms of urban design and scenic resources, the project is considered to have a positive effect upon the visual character of the site and its immediate environs.

4. COASTAL ECOSYSTEMS

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

Policies:

- a. Improve the technical basis for mature resource management;
- b. Preserve valuable coastal ecosystems of significant biological or economic importance;
- c. Minimize disruption and degradation of coastal water ecosystems by effective regulation of stream diversions, channelization and similar land and water uses, recognizing competing water needs; and
- d. Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land water uses which violate state water quality standards.

Response:

Although, a small portion of the subject property is located on the shoreline, the proposed project will have minimal impact on the coastal ecosystem. With the majority of project and most of the parking located on the mauka side of South Kihei Road, the distance from the ocean, as well as the drainage design, will minimize the possibility of non-point source pollution entering the marine environment. Nearby wetland areas will not



be impacted since storm runoff will be conveyed through an underground system and discharged into Kulanihakoi Gulch *makai* of South Kihei Road.

Furthermore, the incorporation of mitigation measures during construction as identified in Section V.D.4 of this report will minimize the potential for short term adverse impacts.

5. ECONOMIC USES

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

Policies:

- a. Concentration in appropriate areas the location of coastal dependent development necessary to the State's economy;
- b. Insure that coastal dependent development such as harbors and ports, visitor facilities, and energy-generating facilities are located, designed, and constructed to minimize adverse social, visual and environmental impacts in the coastal zone management areas; 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:
 1. Utilization of presently designated locations is not feasible,
 2. Adverse environmental effects are minimized, and
 3. The development is important to the State's economy.



Response:

South Maui has been designated as a concentrated visitor destination area for over 40 years. The redevelopment of the Maui Lu Resort has been designed to minimize adverse visual and environmental impacts in the coastal zone. The grounds, restaurant and lounge, and lodging units will add a significant contribution to the visitor facilities available in the South Maui area.

6. COASTAL HAZARDS

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

Policies:

- a. Develop and communicate adequate information on storm wave, tsunami, flood, erosion and subsidence hazard;
- b. Control development in areas subject to storm wave, tsunami, flood, erosion and subsidence hazard;
- c. Ensure that development comply with requirements of the Federal Flood Insurance Program; and
- d. Prevent coastal flooding from inland projects.

Response:

According to the Flood Insurance Rate Map No. 150003-0265C (See: Figure No. 5) for this region, the majority of the project site is situated within Flood Zone C, which is subjected to minimal flooding. A small portion of the project site, located near the southerly and westerly boundaries of the site lies within an area designated as Zone A4, which is prone to 100-year shallow flooding. Another small portion along the northwesterly side of the project site lies within Flood Zone AO, which is also subjected to 100-year shallow flooding.

Concrete catch basins and drain inlets will be utilized to collect storm runoff from the redeveloped complex. The increased surface runoff will be retained in surface and underground detention ponds and gradually released at a rate not to exceed current flows.

Therefore, the subject property should not have an adverse impact on neighboring properties with regards to flood hazard potential. Erosion along the shoreline is discussed in Section V.A.10, "Shoreline Resources".

7. MANAGING DEVELOPMENT

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

Policies:

- a. Effectively utilize and implement existing law to the maximum extent possible in managing present and future coastal zone development;
- b. Facilitate timely processing of the application 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 general public to facilitate public participation in the planning and review process.

Response:

The development of the subject property is being conducted in accordance with applicable State and County requirements. Opportunity for review of the proposed action is provided through the County's Special Management Area (SMA) permitting process.



8. PUBLIC PARTICIPATION

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

Policies:

- a. Maintain a public advisory body to identify coastal management problems and to provide policy advice and assistance to the coastal zone management program;
- 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 related issues, development, and government activities; and
- c. Organize workshops, policy dialogues, and site specific mediations to respond to coastal issues and conflict.

Response:

The public will have ample opportunity to review and comment on the proposed project. The project was presented to the Kihei Community Association (KCA) Planning and Development committee on June 9, 2003. Land owners within 500 feet of the project were notified of a presentation on June 23, 2003. A presentation was made to the KCA general membership on July 15, 2003.

On Saturday, July 17, 2004, the owner, architect, project manager, traffic engineer and landscape architect/planner presented the Maui Lu Redevelopment project to approximately forty (40) members of the *mauka* Kaonoulu Estates Homeowners Association. This additional pre-consultation effort covered a wide range of issues with primary emphasis on the issues of density, height and scenic and open space resources (Section V.A.8). In general, the meeting was positive, however one owner is opposed to making any improvements to the county owned shoreline parcel.



As required, a "Notice of Public Hearing" will be sent to surrounding landowners and lessees within 500 feet of the subject property at least 30 days prior to the SMA permit's public hearing (See: Appendix F). In addition, a Notice of Application and public hearing dates along with location maps will be published in The Maui News. The public will be allowed to participate in the public hearing portion of the Maui Planning Commission and County Council's review process.

9. BEACH PROTECTION

Objectives: Protect beaches for public use and recreation.

Policies:

- a. Locate new structures inland from the shoreline setback to conserve open space and to 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:

A portion of the subject property is located on the shoreline and the project proposes a 75% reduction in density and includes the renovation of structures within the shoreline area. There are no plans to construct erosion-protection structures.

Section V.A.10, "Shoreline Resources", discusses existing shoreline and possible protection and enhancement options.



10. MARINE RESOURCES

Objective: Implement the State's ocean resource management plan.

Policies:

- a. Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
- b. Assure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;
- c. Coordinate the management of marine and coastal resources and activities management to improve effectiveness and efficiency;
- d. Assert and articulate the interest of the state as a partner with federal agencies in the sound management of the ocean resources within the United States exclusive economic zone;
- e. 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 the ocean and coastal resources; and
- f. Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.

Response:

As noted earlier, a small portion of the subject property is located on the shoreline, separated from the main resort complex by South Kihei Road. With the majority of project and most of the parking located on the mauka side of South Kihei Road, the distance from the ocean, as well as surface and sub-surface detention ponds, will minimize the possibility of non-point



source pollution entering the marine environment. Incorporation of mitigation measures as identified in Section V.D.4 of this report will minimize the potential for adverse impacts during and after construction.

The project will be economically beneficial, and will not have a significant negative impact upon any coastal or marine resources.

VII. HRS CHAPTER 343 SIGNIFICANCE CRITERIA

A finding of no significant impact (FONSI) is anticipated and therefore an environmental impact statement will not be required for the proposed action. This determination has been made in accordance with the following significance criteria specified in Section 11-200-12 of the Department of Health rules relating to Environmental Impact Statements:

- A. *Involves an irrevocable commitment to loss or destruction of any natural or cultural resource.*

As documented in this report, the proposed project will not result in the loss or destruction of any natural or cultural resource.

- B. *Curtails the range of beneficial uses of the environment.*

The proposed project represents a continuation and expansion of the existing hotel use and does not introduce a new use to the area. By addressing current and emerging trends in the visitor industry, the Maui Lu Resort will complement the existing uses within South Maui and will strengthen the resort's position as a leading visitor center. The project will not curtail the range of beneficial uses of the environment in the project vicinity.

- C. *Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.*



The project is being developed in compliance with the state's long term environmental goals. As documented in this report, adequate mitigation measures will be implemented to minimize the potential for negative impacts to the environment.

D. *Substantially affects the economic or social welfare of the community or state.*

The project will result in increased employment and business opportunities. It is anticipated that the proposed expansion will create approximately 63 new jobs. Improvements to the grounds, restaurant and lounge, and lodging units will add a significant contribution to the visitor facilities available in the South Maui area. In addition, tax revenues will increase due to increased land values, employment and business transactions. As documented in this report, there will be no significant negative long term impacts to the socio-economic environment.

E. *Substantially affects public health.*

There are no special or unique aspects of the project which will have an impact on public health.

F. *Involves substantial secondary impacts, such as population changes or effects on public facilities.*

The proposed time-share project will not lead to a direct impact on population levels since there is no residential component. Secondary impacts to population levels could arise due to increased employment opportunities; however, these potential increases are considered minimal due to the dynamic nature of the visitor industry in this district. As documented in this report, the project will not result in a significant negative impact on public facilities.

G. *Involves a substantial degradation of environmental quality.*

Mitigation measures will be implemented during construction to minimize negative short term impacts such as soil erosion and sedimentation. The project



design will incorporate a drainage system that will minimize degradation of the environmental quality.

- H. *Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.*

The project does not involve a commitment for larger actions on behalf of the applicant or any public agency. In terms of cumulative impacts, the project site is situated within the State Urban District and in proximity to developed residential and resort areas. Infrastructure and utilities are adequate to service the proposed project. The Traffic Impact Assessment Report concludes that the negative impacts to the roadways in the area will be mitigated with the construction of recommended roadway improvements. Therefore, the project will not result in cumulative negative impacts on the environment.

- I. *Substantially affects a rare, threatened, or endangered species, or its habitat.*

There are no known rare, threatened, or endangered species or habitat at the project site.

- J. *Detrimentially affects air or water quality or ambient noise levels.*

As documented, there will be short term impacts on air and water quality and ambient noise levels during construction; however, mitigation measures will be employed to minimize these impacts. Adverse long-term impacts are not anticipated.

- K. *Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion prone area, geologically hazardous land, estuary, fresh water, or coastal waters.*

The *mauka* project site is not an environmentally sensitive area. Compliance with County grading requirements will be met. The *makai* project site is along the shoreline and protected by rock revetments. Encroachment issues will be



resolved with the State Department of Land and Natural Resources and the Maui County Planning Department.

- L. *Substantially affects scenic vistas and view planes identified in county or state plans or studies.*

The proposed project will not negatively affect ocean views along South Kihei Road nor obstruct major view corridors. As noted previously, improvements to the *makai* project site would improve viewplanes from the *mauka* parcel and South Kihei Road.

- M. *Requires substantial energy consumption.*

Construction of proposed structures will comply with Chapter 16.26.1300, "Energy Conservation", Maui County Code. Where practical and economically feasible, the proposed structures will exceed the building efficiency standard for the State of Hawaii. Upon complete build out of the project, energy consumption will be increased; however given existing levels of usage in the area, increased building efficiency, and newer, more efficient equipment and appliances, the increase is considered insignificant.

VIII. FINDINGS AND CONCLUSIONS

This Final Environmental Assessment examines the environmental and socio-economic impacts associated with the proposal to build a new Maui Lu Resort, with 388 timeshare units with lock-offs on the *mauka* parcel and 12 units on the *makai* parcel, related landscaping, parking, infrastructure and utility improvements. This will increase the range of utilization of the current property and expand the amenities currently offered.

The proposed project will involve site and building activities. In the short term, these activities may create temporary nuisances normally associated with construction activities. However, dust control measures, such as regular watering and sprinkling, will be implemented to minimize wind-blown



emissions. All construction activities will be limited to normal daylight working hours. A solid waste management plan will be formulated for the disposal of clearing and grubbing material from the site during construction. Impacts generated from construction activities are not considered adverse.

In the long term, the proposed Maui Lu project will not result in significant adverse impacts to surrounding areas, archaeological or historic resources, employment opportunities, or local population levels. Public service needs such as police, medical facilities and schools will not be significantly impacted by the project.

Impacts to roadways, water, wastewater, drainage and other infrastructure systems are either not considered significant or will be mitigated through system improvements.

This Final Environmental Assessment is consistent with applicable decision making criteria as identified in the Maui Planning Commission's rules and regulations relating to the Special Management Area HRS (Chapter 202) and with the criteria outlined in section §11-200-12 of the Department of Health's rules and regulations relating to environmental impact statements. The document is also consistent with the objectives and policies of the Kihei-Makena Community Plan. The authority has considered all agency and public comments on the Draft Environmental Assessment.

Based on the foregoing analysis and conclusion, the proposed project will not result in significant impacts to the environment and is consistent with the requirements of HRS Chapter 343, and a Finding of No Significant Impact (FONSI) is warranted.



VIII. REFERENCES

Community Resources, Inc., Maui County Community Plan Update Program Socio-Economic Forecast Report, June 2002.

County of Maui, Maui Planning Department, Kihei-Makena Community Plan. May 1998 Update.

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

County of Maui, Office of Economic Development, Maui Economic Development Board, Inc., and Business Research Library, Maui County Data Book 2002, September 2002.

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

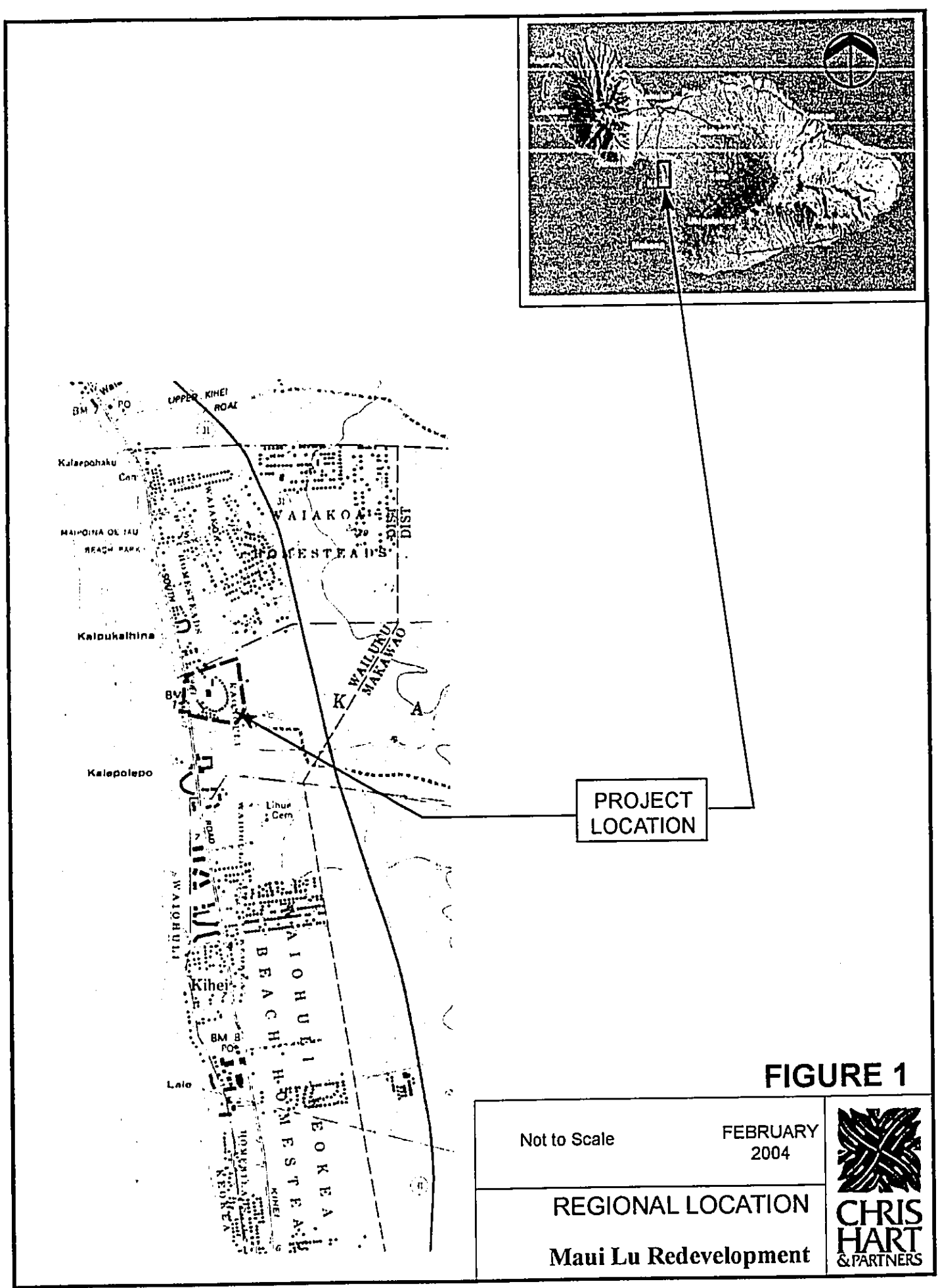
University of Hawaii, Land Study Bureau, Detailed Land Classification - Island of Maui, L.S.B. Bulletin no. 7. May 1967.

US Department of Agriculture, Soil Conservation Service in Cooperation with the University of Hawaii, Agricultural Experiment Station. Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. 1972.

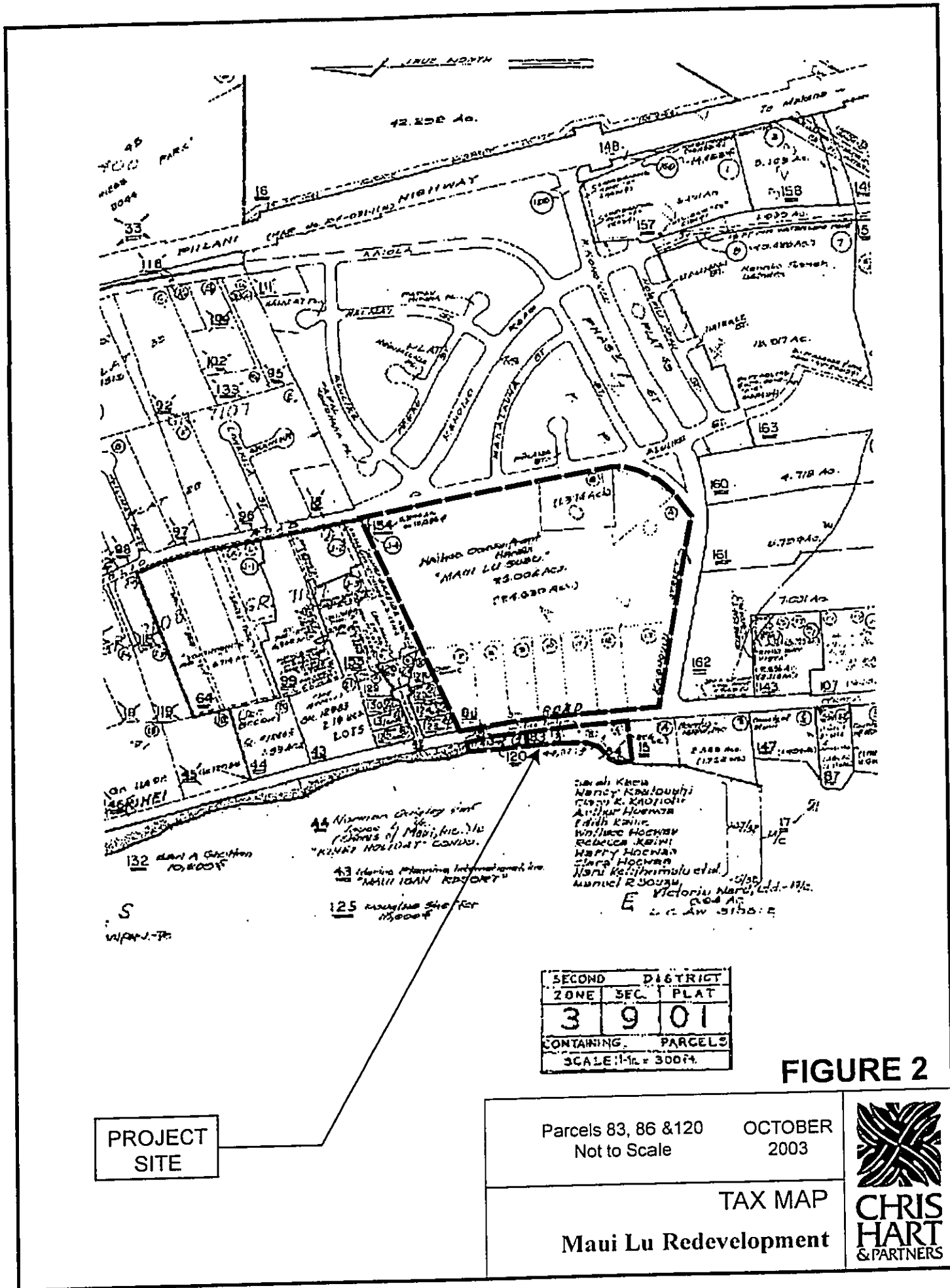
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

FIGURES

RECEIVED AS FOLLOWS



RECEIVED AS FOLLOWS



RECEIVED AS FOLLOWS



PROPOSED PROJECT SITE

RECEIVED AS FOLLOWS

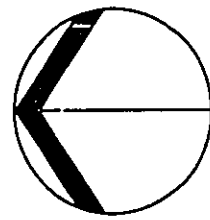
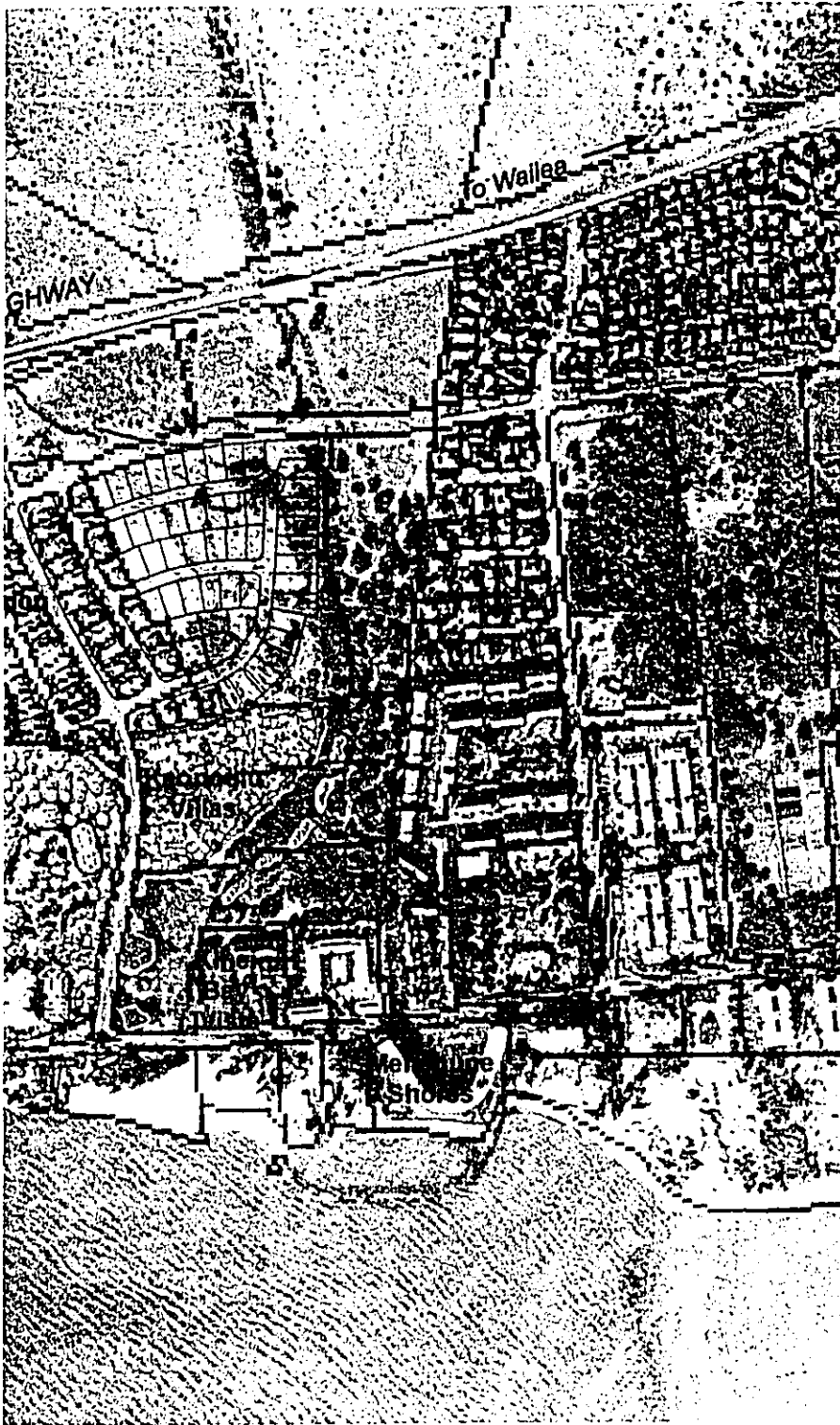



FIGURE 3

| | | |
|--|------------------|---|
| Not to scale | FEBRUARY 2004 |  |
| AERIAL/LOCATION MAP Maui Lu Redevelopment | | CHRIS HART & PARTNERS |

RECEIVED AS FOLLOWS



Photo 1: View from northwest corner of project site (parcel 120), looking along shoreline at right. Crosswalk across South Kihei Road.

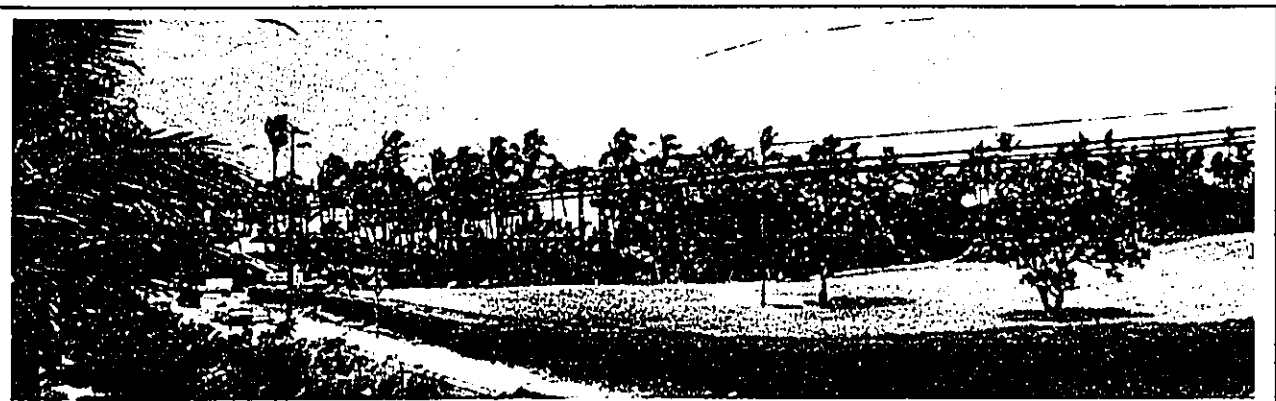
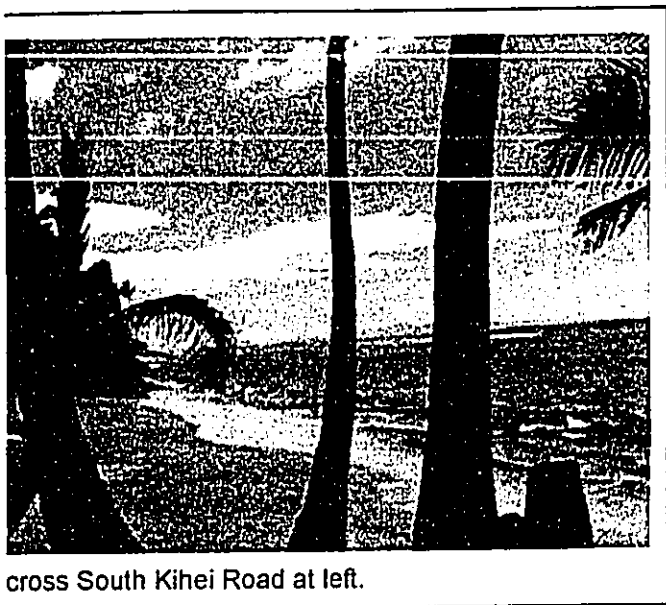


Photo 2: View from maikai parcels looking northeast across South Kihei Road.



Photo 4: View along shoreline looking north. West Maui mountains in background and existing hotel structure at right.

RECEIVED AS FOLLOWS



cross South Kihei Road at left.

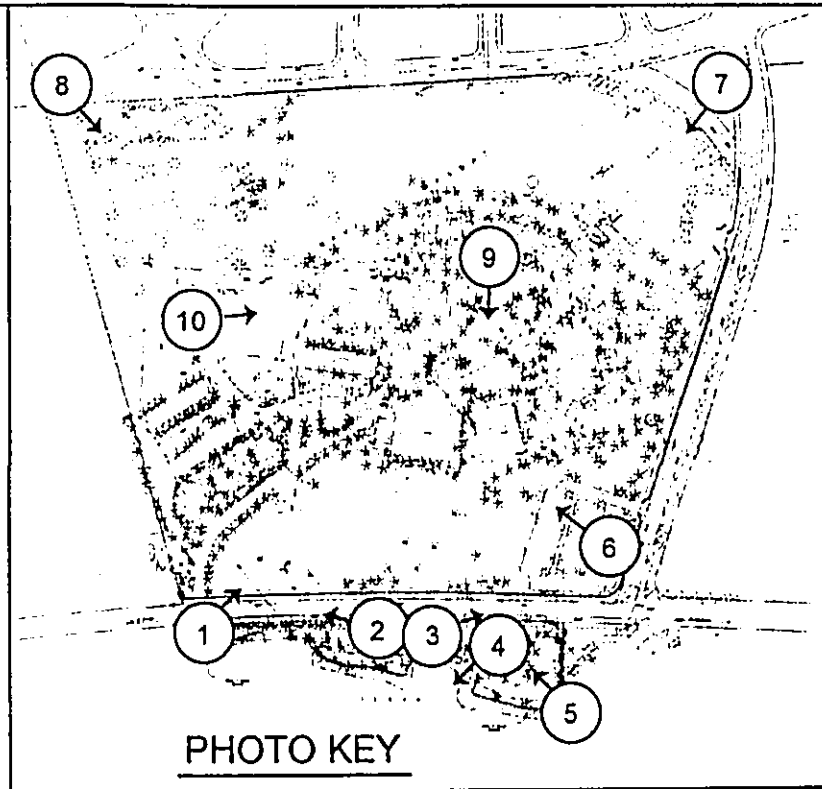


Photo 3: View from *maikai* parcels looking southeast across South Kihei Road.



re at right.

FIGURE 4.1

Taken 6/6/2003

OCTOBER
2003



PHOTOGRAPHS
Maui Lu Redevelopment

CHRIS
HART
& PARTNERS

RECEIVED AS FOLLOWS

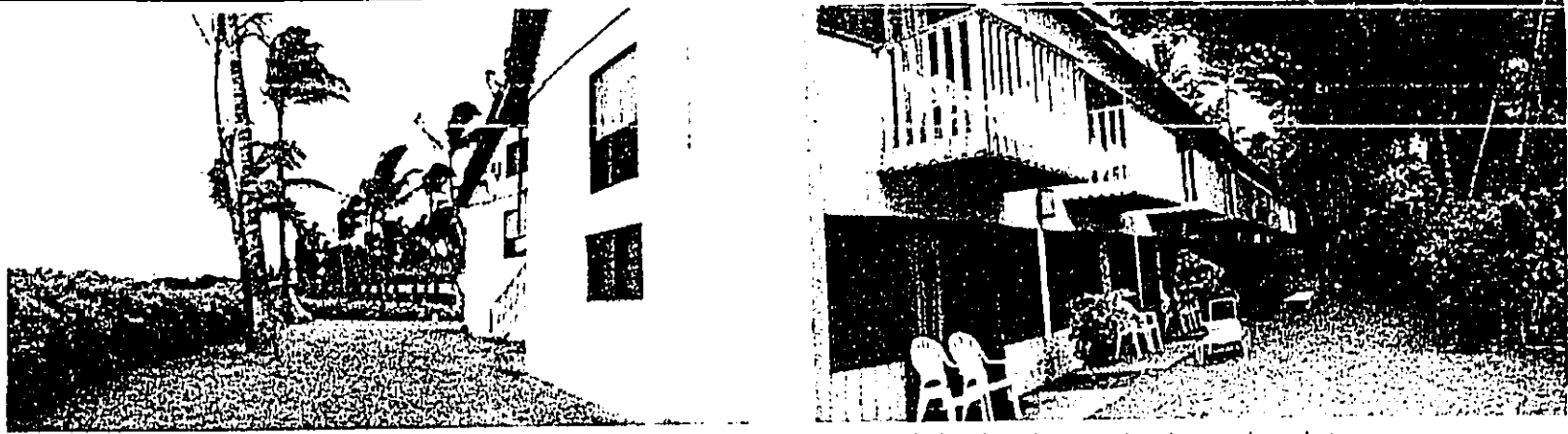


Photo 5: View from southwest corner of project site (parcel 83). Two existing hotel room structures at center.

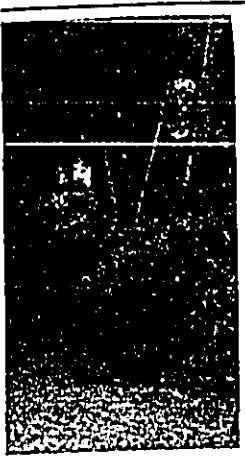


Photo 6: View from existing parking lot at southwest corner of parcel 86. "Longhouse" visible through trees at center.



Photo 7: View from southeast corner of project site.

RECEIVED AS FOLLOWS



nter.



FIGURE 4.2

Taken 6/6/2003

OCTOBER
2003

PHOTOGRAPHS
Maui Lu Redevelopment



RECEIVED AS FOLLOWS



Photo 8: View from northeast corner. Unused parking lot a



Photo 9: View from near the center of parcel 86. From left, existing cottages, pool building, swimming pool, longhouse and

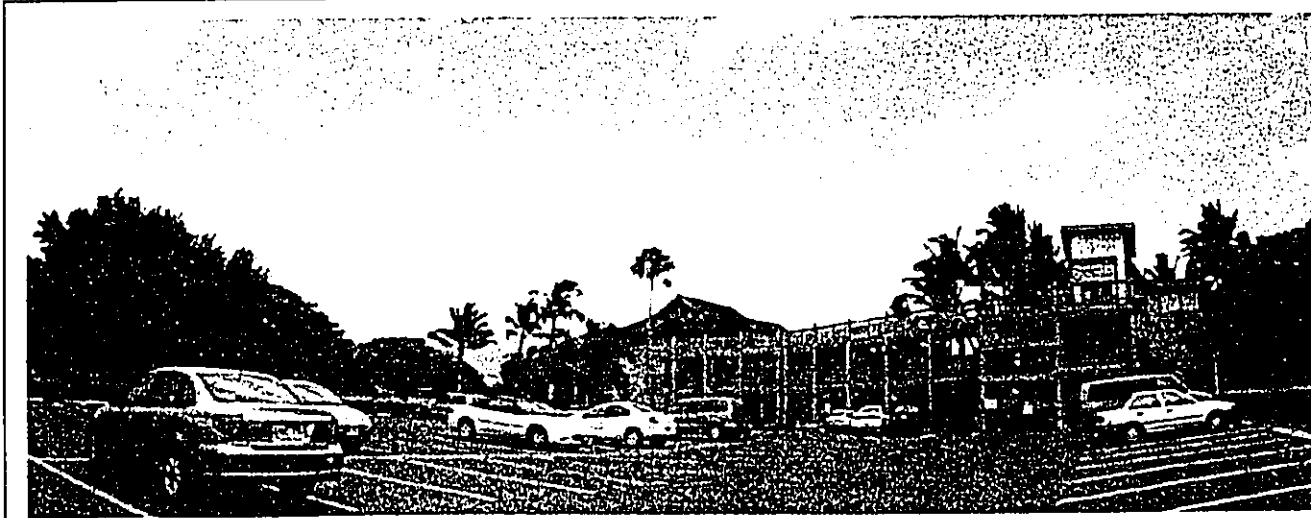
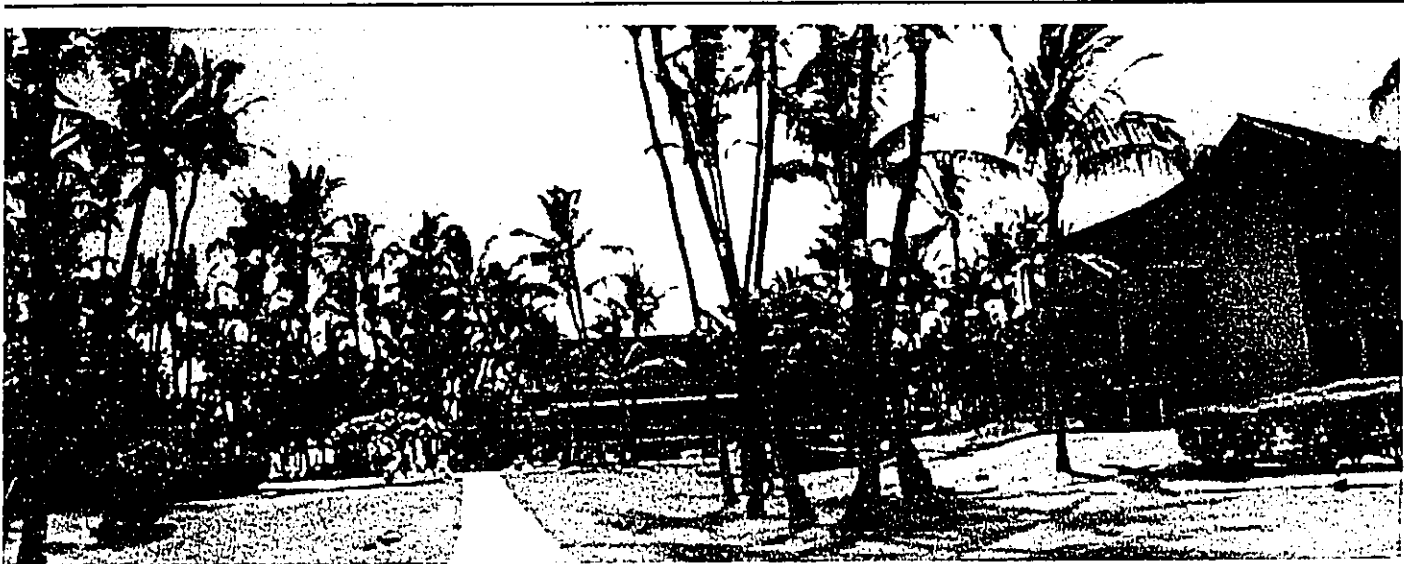


Photo 10: View from parking lot near northern boundary. Existing hotel room structures at center.

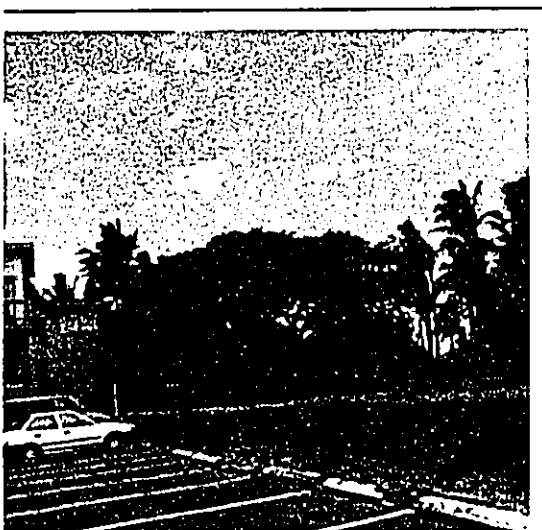
RECEIVED AS FOLLOWS



used parking lot and tennis courts visible at center.



l, longhouse and hotel rooms.



ctures at center.

FIGURE 4.3

Taken 6/6/2003

OCTOBER
2003



PHOTOGRAPHS
Maui Lu Redevelopment

CHRIS
HART
& PARTNERS

RECEIVED AS FOLLOWS

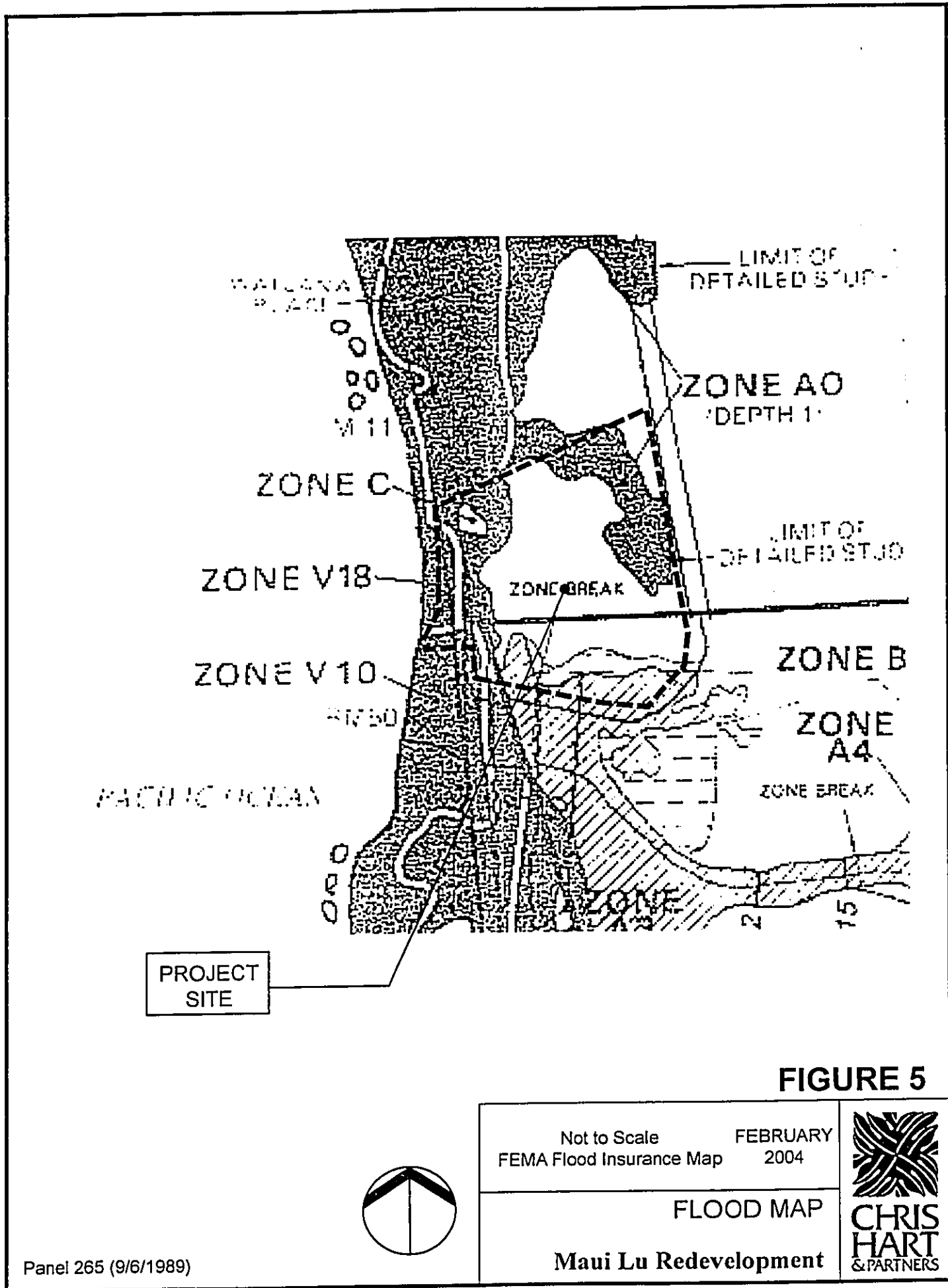


FIGURE 5

Not to Scale FEBRUARY
FEMA Flood Insurance Map 2004

FLOOD MAP

Maui Lu Redevelopment



Panel 265 (9/6/1989)

RECEIVED AS FOLLOWS

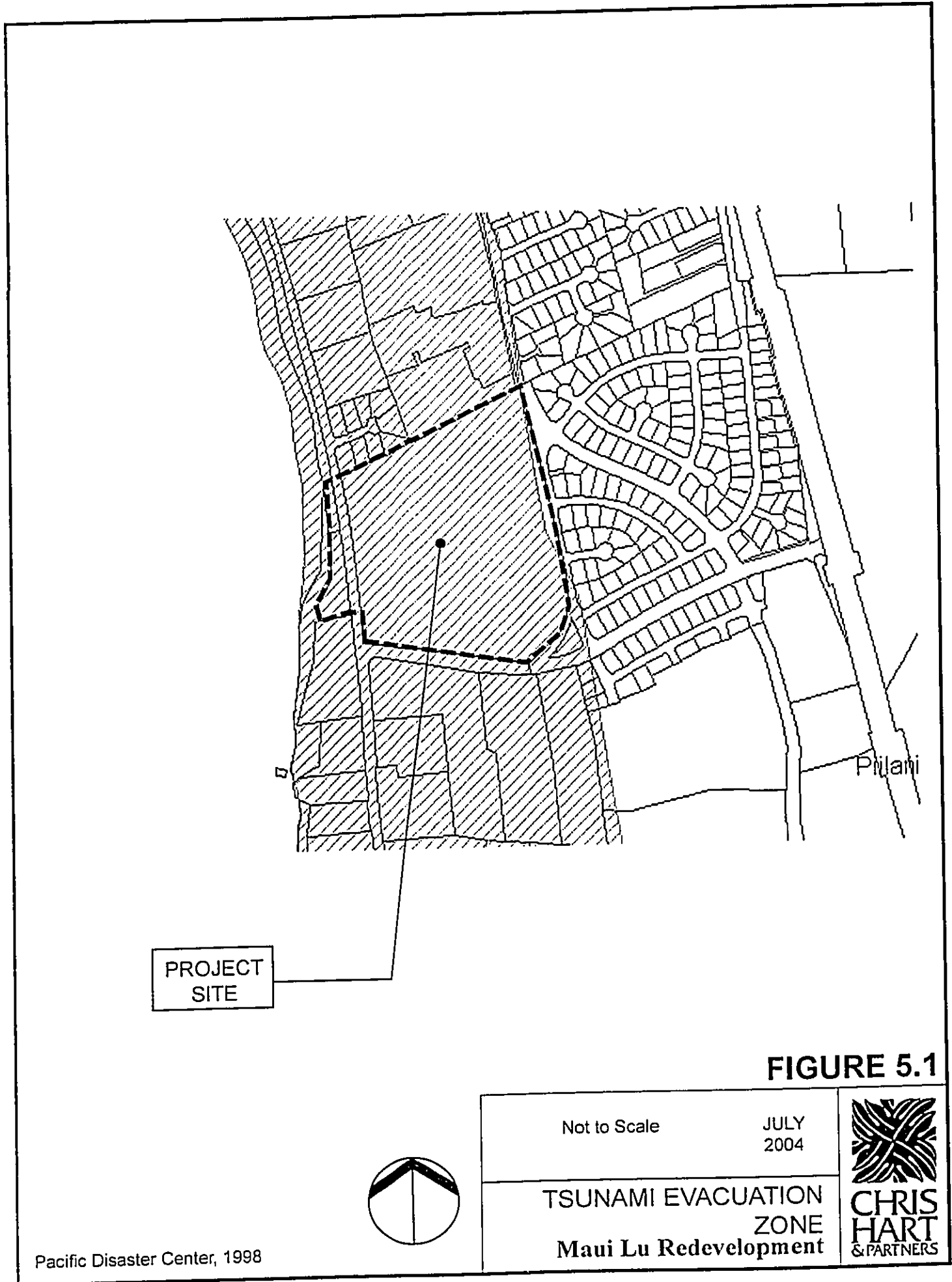


FIGURE 5.1

Not to Scale

JULY
2004

TSUNAMI EVACUATION
ZONE
Maui Lu Redevelopment



Pacific Disaster Center, 1998

RECEIVED AS FOLLOWS

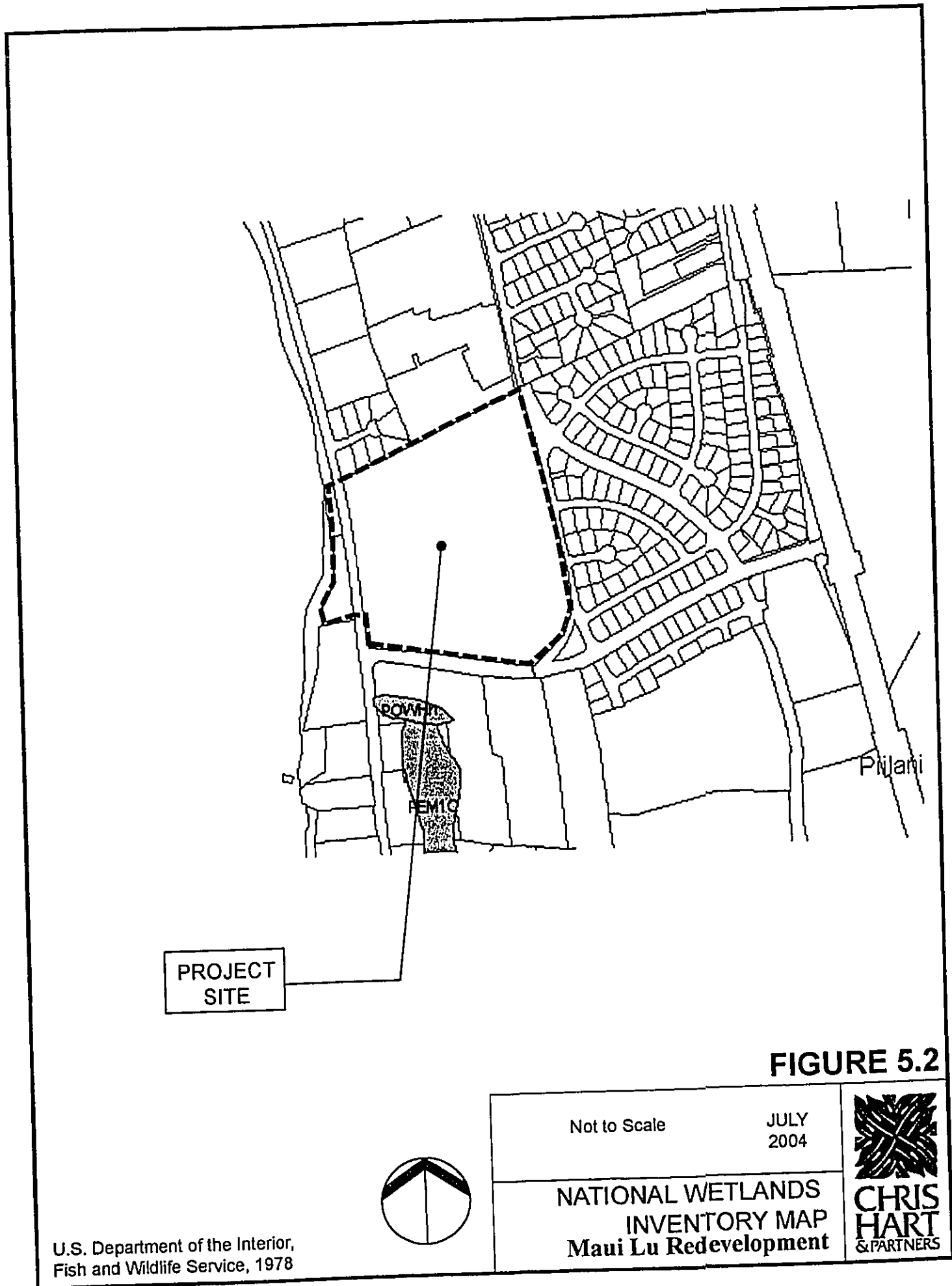


FIGURE 5.2

Not to Scale

JULY
2004

NATIONAL WETLANDS
INVENTORY MAP
Maui Lu Redevelopment



CHRIS
HART
& PARTNERS

U.S. Department of the Interior,
Fish and Wildlife Service, 1978

RECEIVED AS FOLLOWS

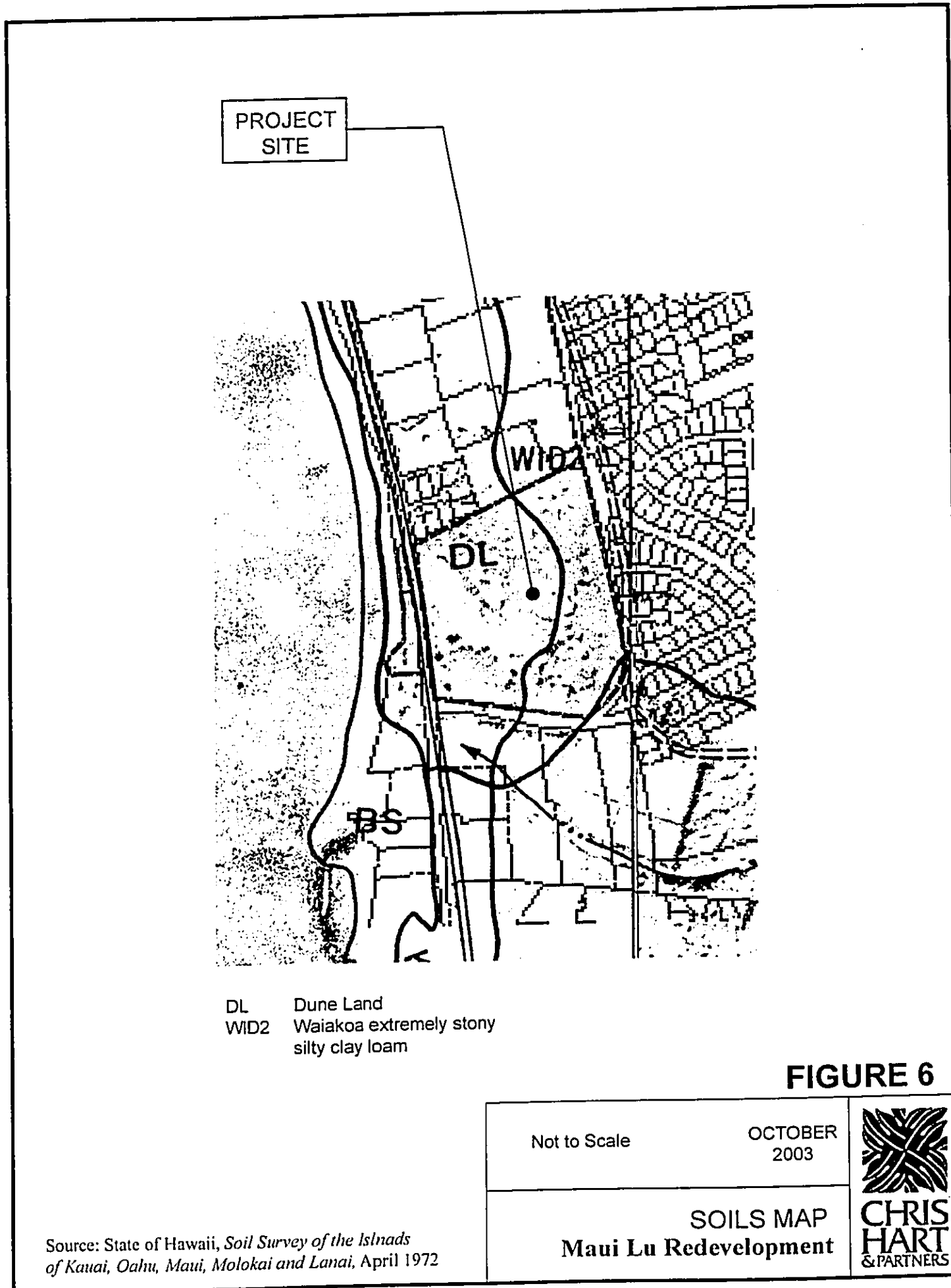
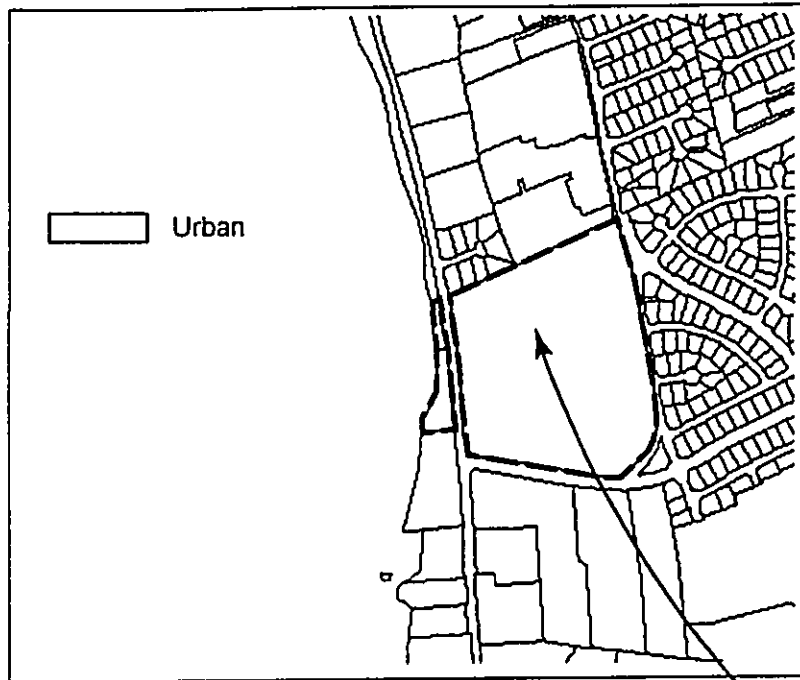


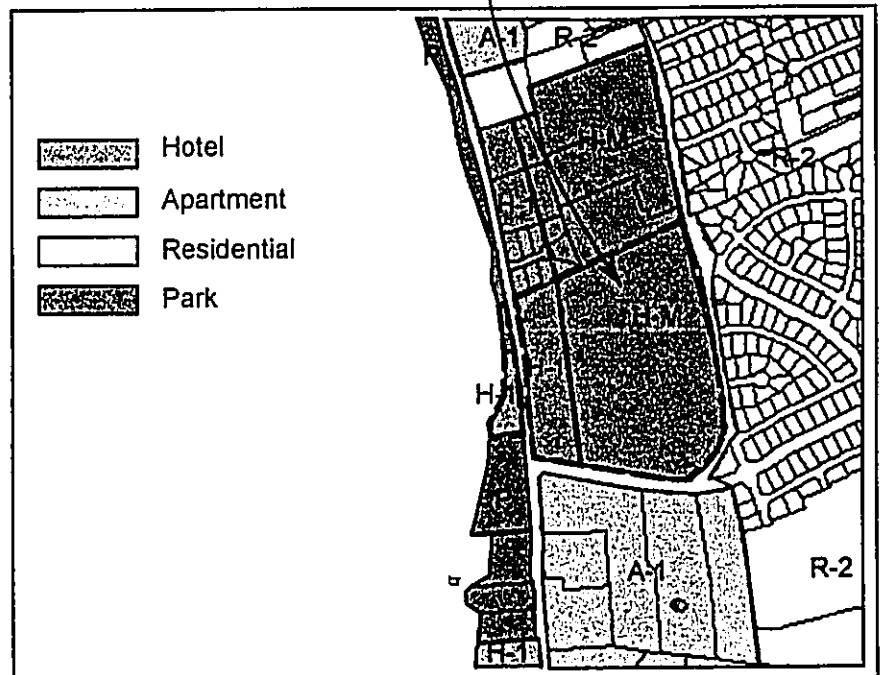
FIGURE 6

RECEIVED AS FOLLOWS



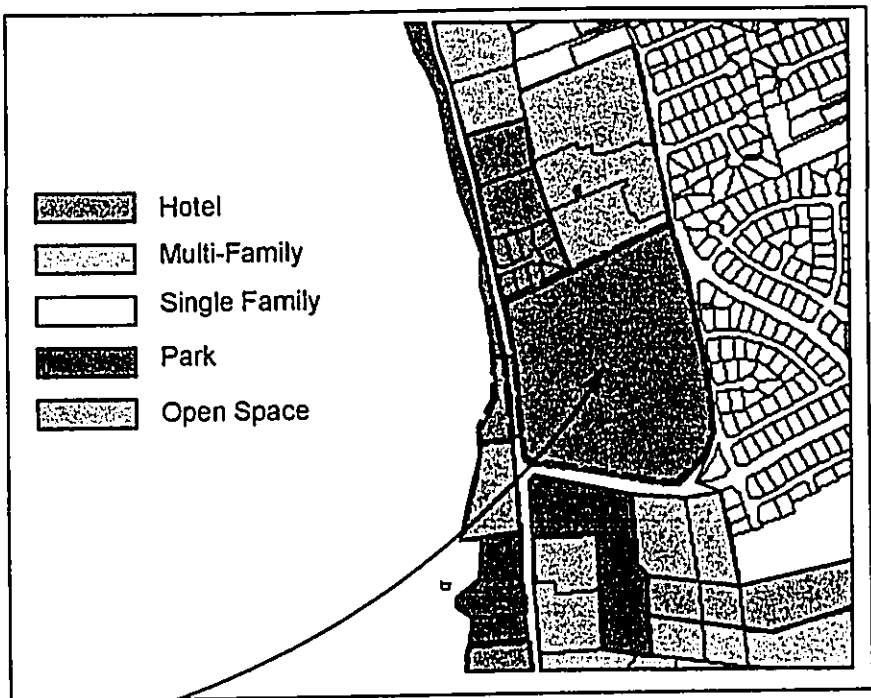
STATE LAND USE

PROJECT SITE



MAUI COUNTY ZONING

RECEIVED AS FOLLOWS



ECT
E

KIHEI-MAKENA COMMUNITY PLAN

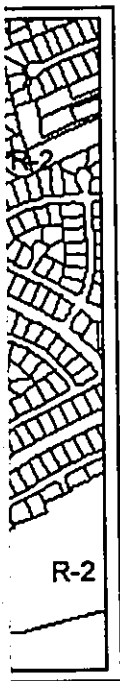



FIGURE 7

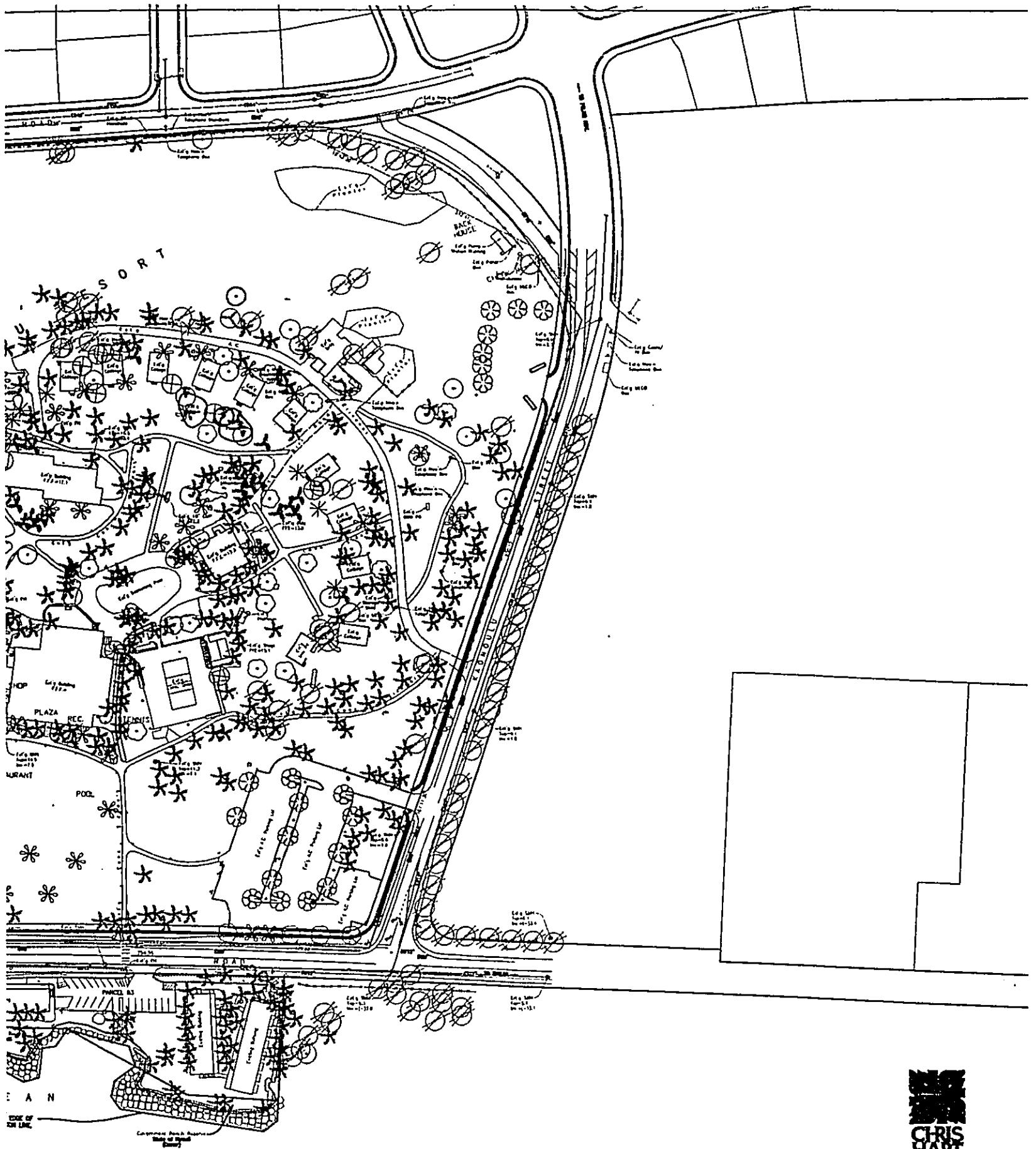
| | | |
|--|-----------------|---|
| State Land Use Kihei-Makena Community Plan Maui Conty Zoning | OCTOBER 2003 |  CHRIS HART & PARTNERS |
| LAND USE DESIGNATIONS Maui Lu Redevelopment | | |

RECEIVED AS FOLLOWS



MAUI LU
EXISTING CONDIT

RECEIVED AS FOLLOWS

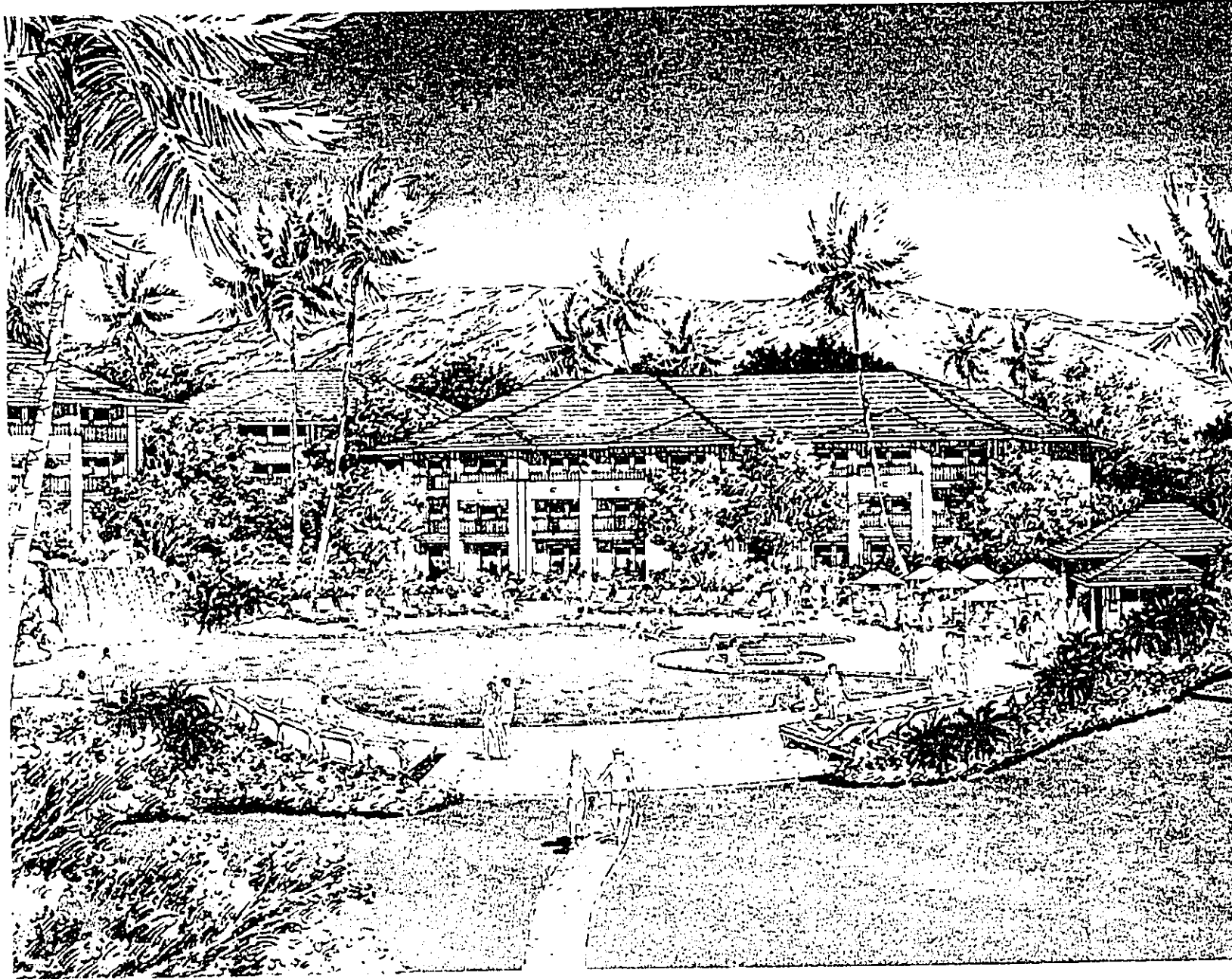


LU
CONDITIONS



FIGURE NO. 8

RECEIVED AS FOLLOWS



WA ANABE CHUJI IOPA TAKAKI
ARCHITECTS

11-1, Higashi-Nagasaki, Nagasaki
Japan
Tel. 095-222-1111

RECEIVED AS FOLLOWS

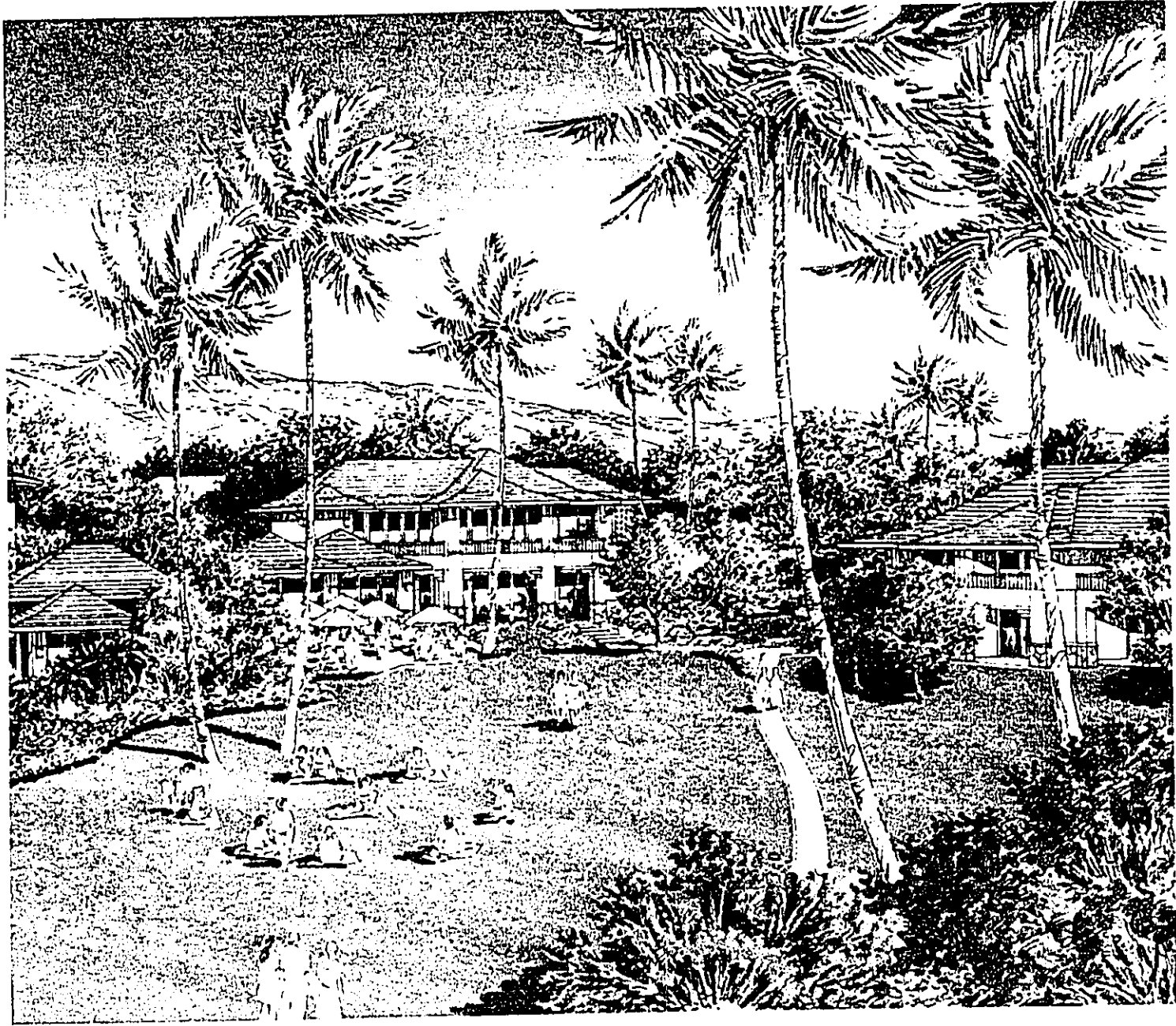

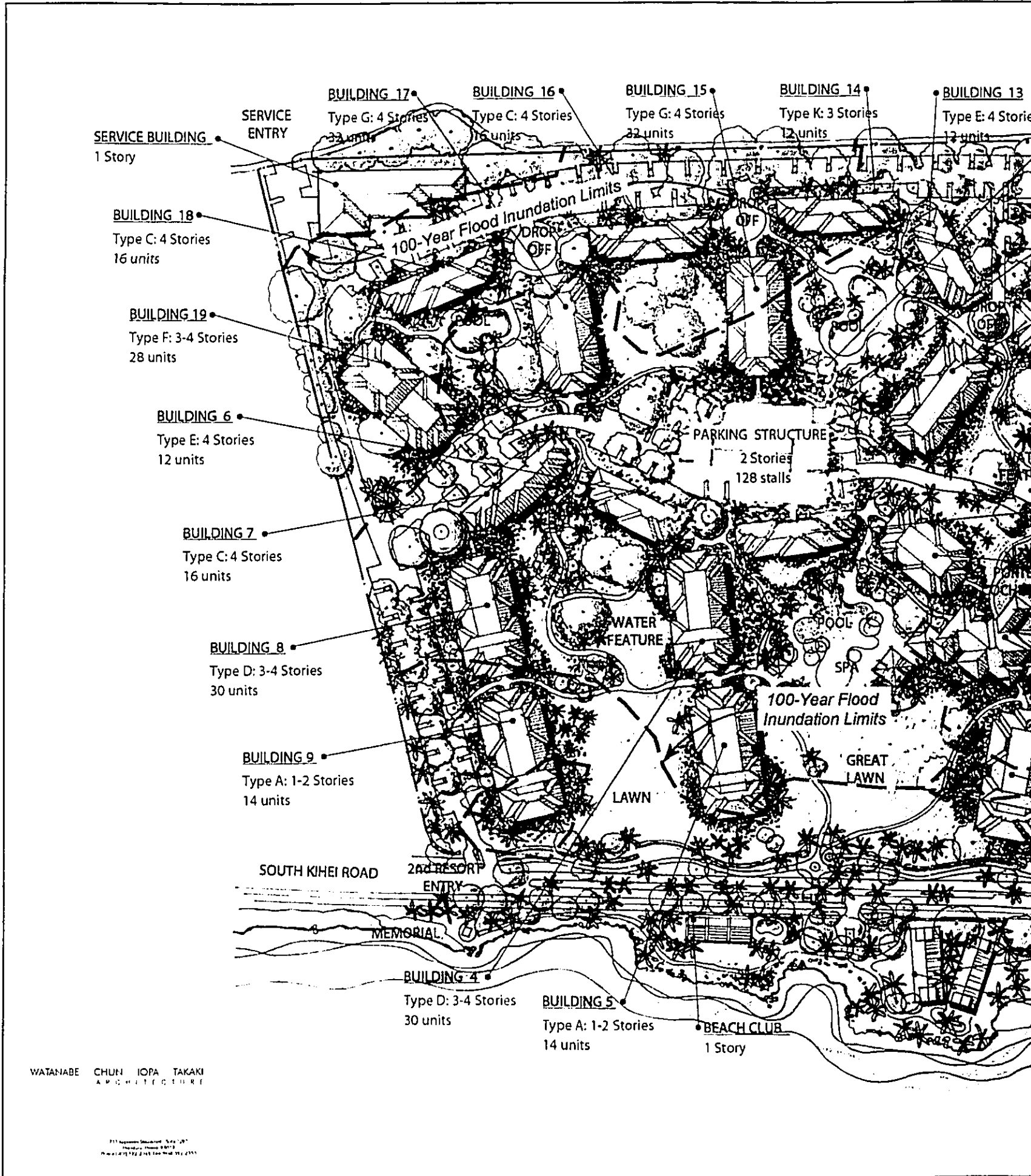


FIGURE 9.0

| | | |
|---|-----------------|---|
| PERSPECTIVE | OCTOBER 2003 |  |
| CONCEPT DESIGN Maui Lu Redevelopment | | CHRIS HART & PARTNERS |

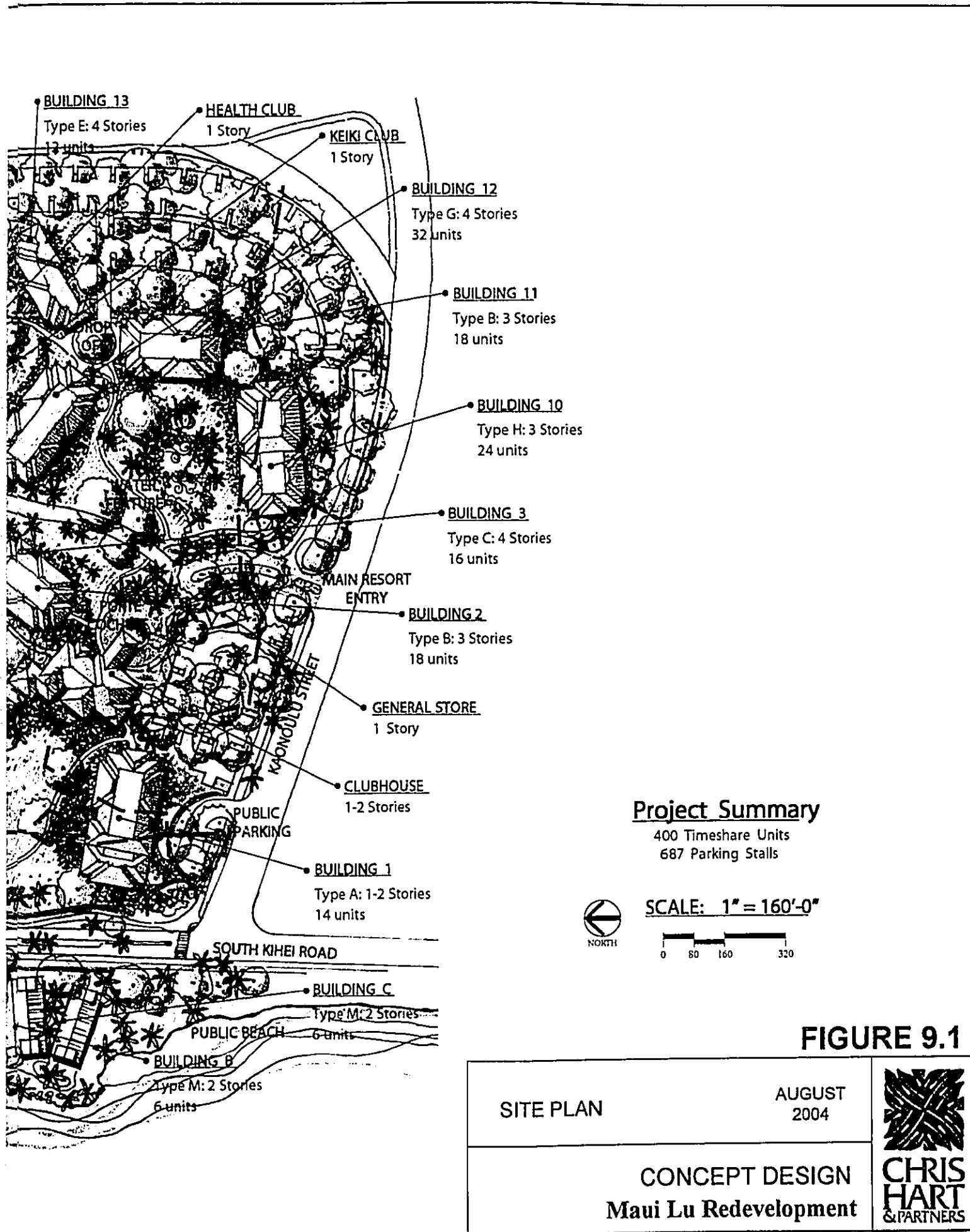
RECEIVED AS FOLLOWS



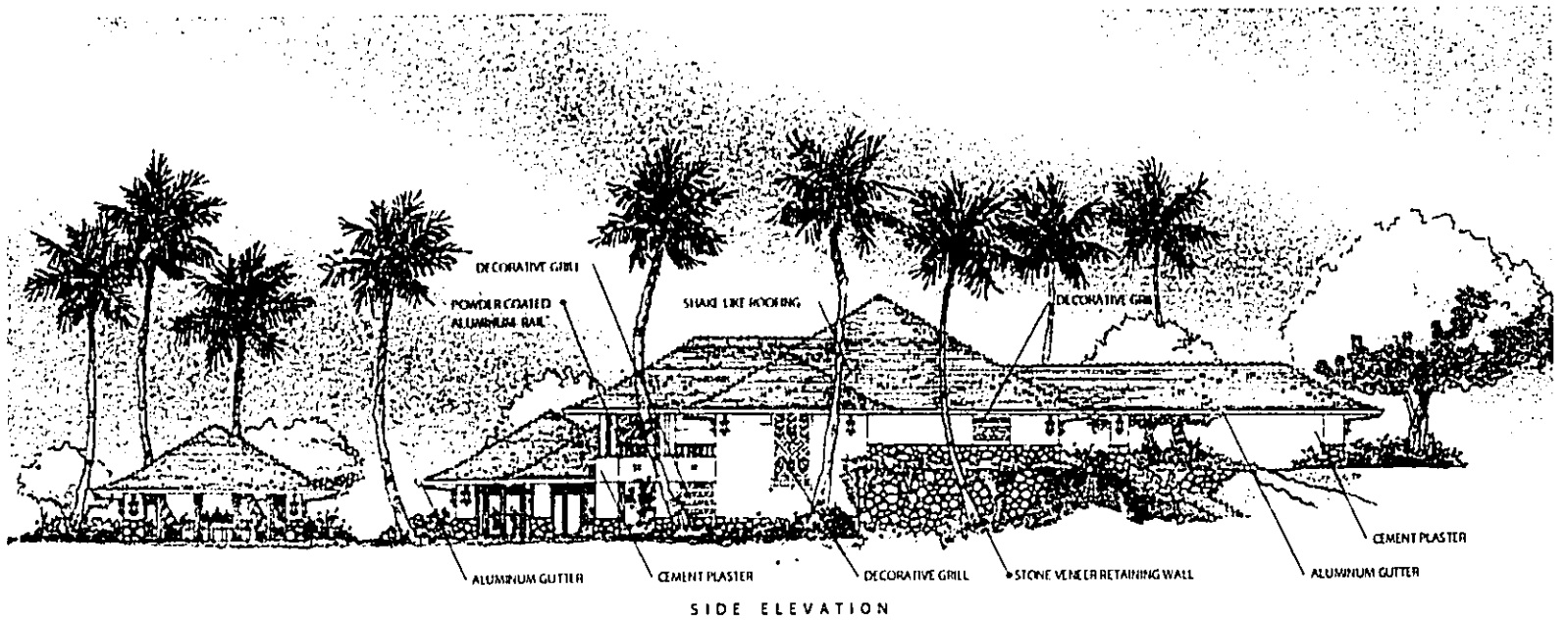
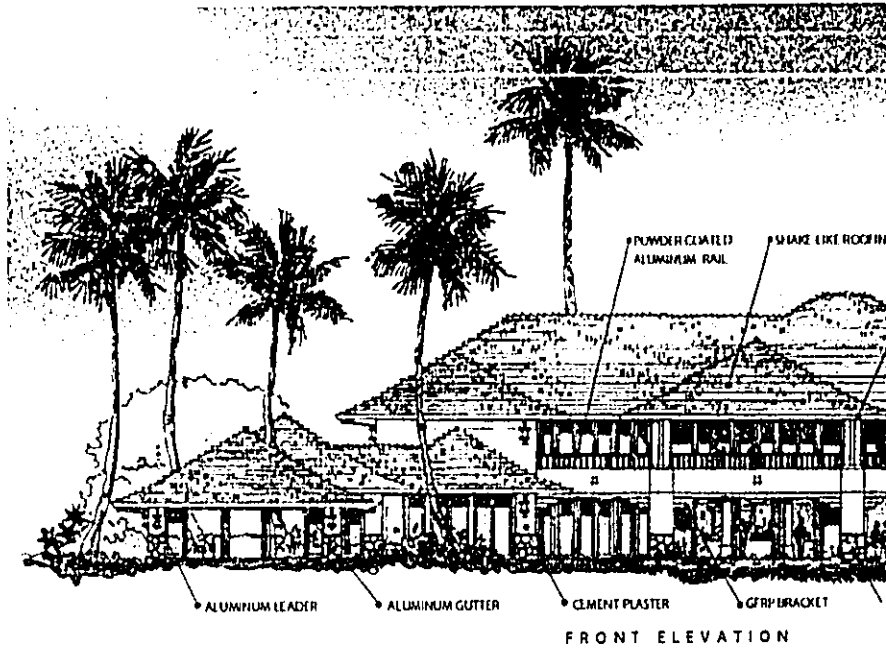
WATANABE CHUN IOPA TAKAKI
ARCHITECTURE

111 Kapiolani Boulevard, Suite 207
Honolulu, Hawaii 96813
Phone: (808) 943-2111 Fax: (808) 943-2111

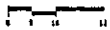
RECEIVED AS FOLLOWS



RECEIVED AS FOLLOWS



SCALE: 1/32" = 1'-0"

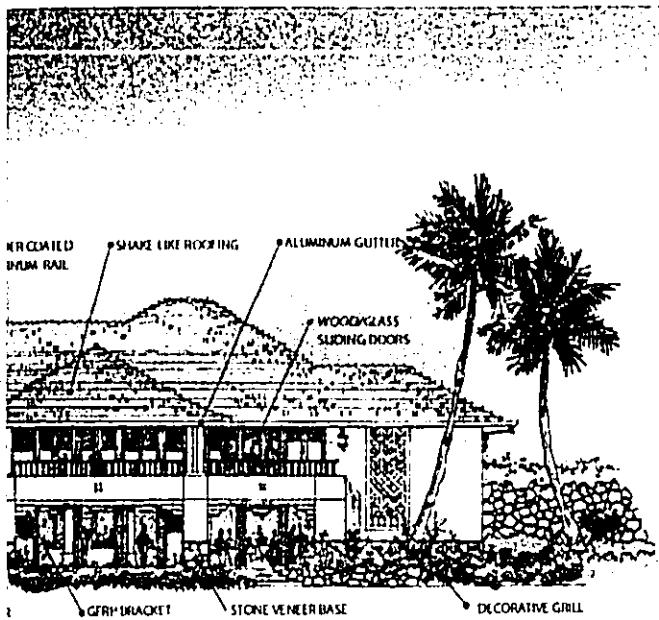


WA ANABE CHUN IOPA TAKAKI
ARCHITECTURE

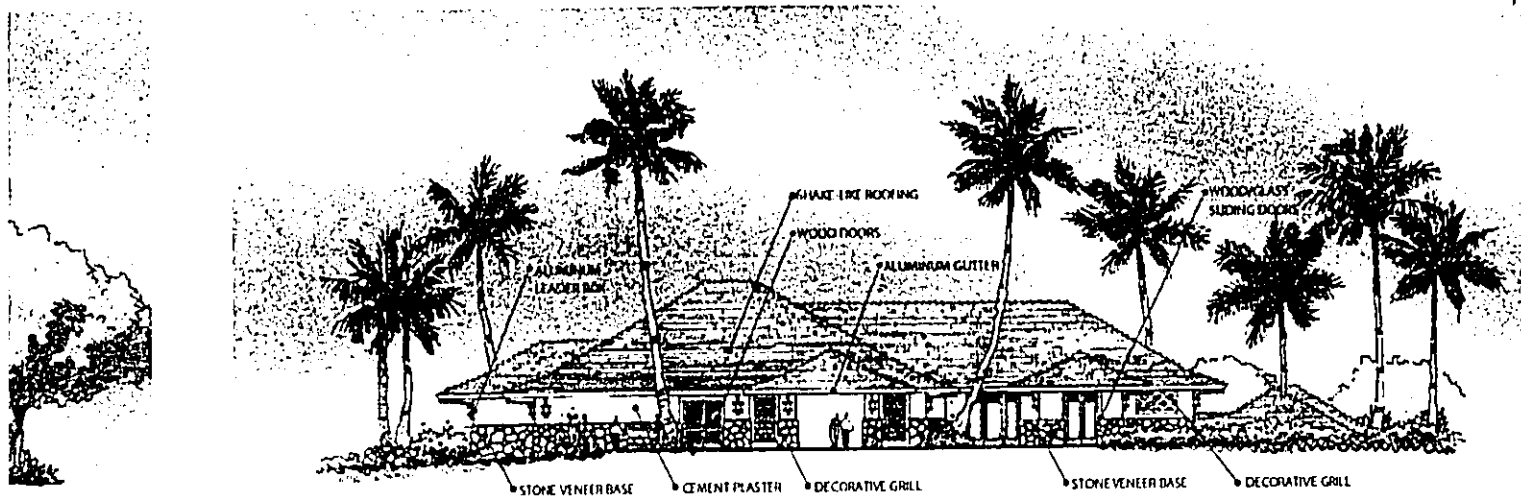
1000 W. HAWAIIAN BLVD.
SUITE 200
HONOLULU, HI 96813
PHONE: (808) 943-1111
FAX: (808) 943-1112

711 Kalia Road, Suite 100
Honolulu, Hawaii 96812
Phone: (808) 943-1111 Fax: (808) 943-1112

RECEIVED AS FOLLOWS




ELEVATION

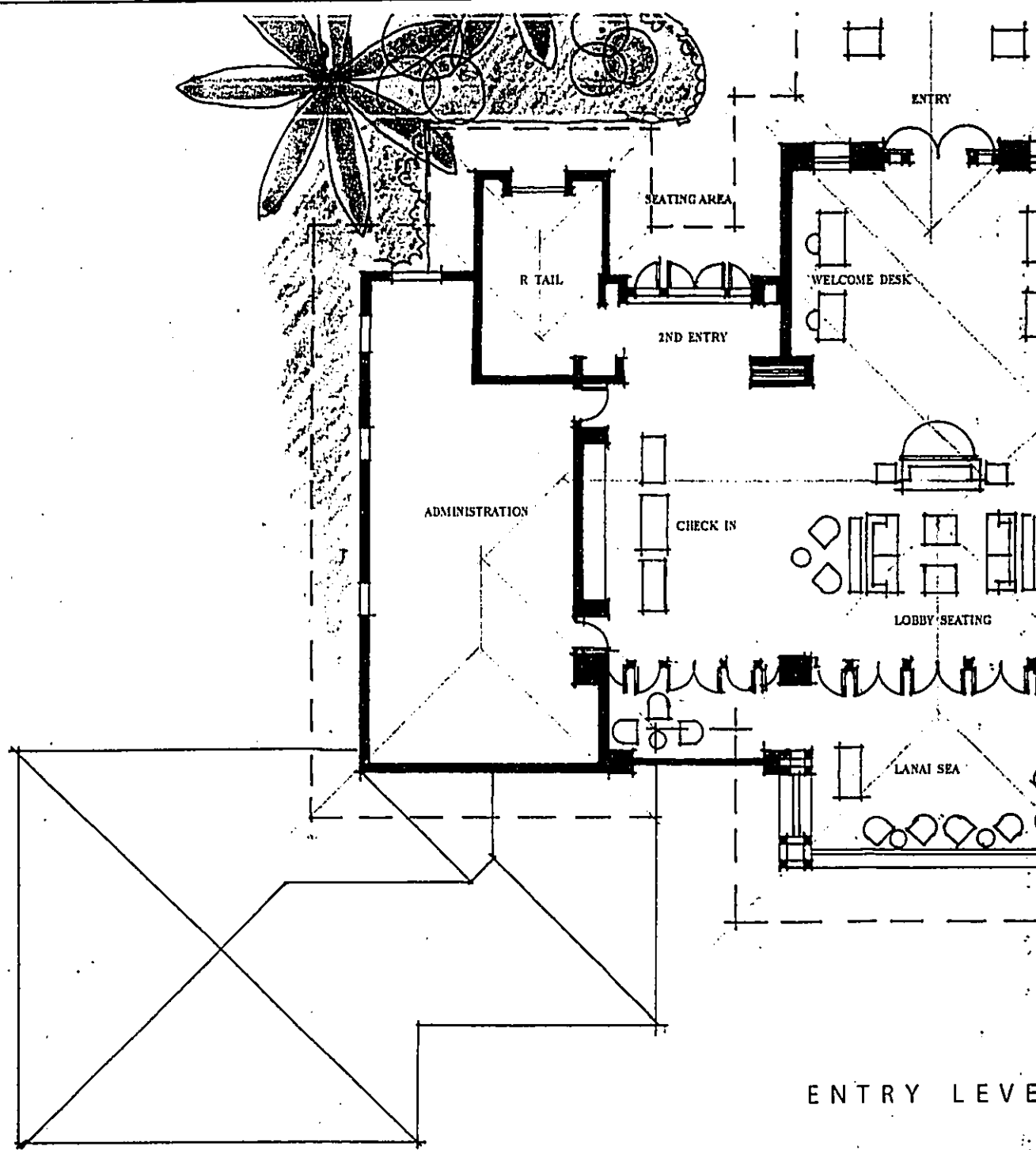


ENTRY ELEVATION

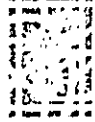
FIGURE 9.2

| | | |
|---|-----------------|---|
| CLUBHOUSE ELEVATIONS | OCTOBER 2003 |  CHRIS HART & PARTNERS |
| CONCEPT DESIGN Maui Lu Redevelopment | | |

RECEIVED AS FOLLOWS



WA ANABE CHUN IOPA TAKAKI
ARCHITECTURE



311 Kapiolani Boulevard, Suite 1200
Honolulu, Hawaii 96813
Phone: (808) 552-2141 Fax: (808) 552-2410

RECEIVED AS FOLLOWS

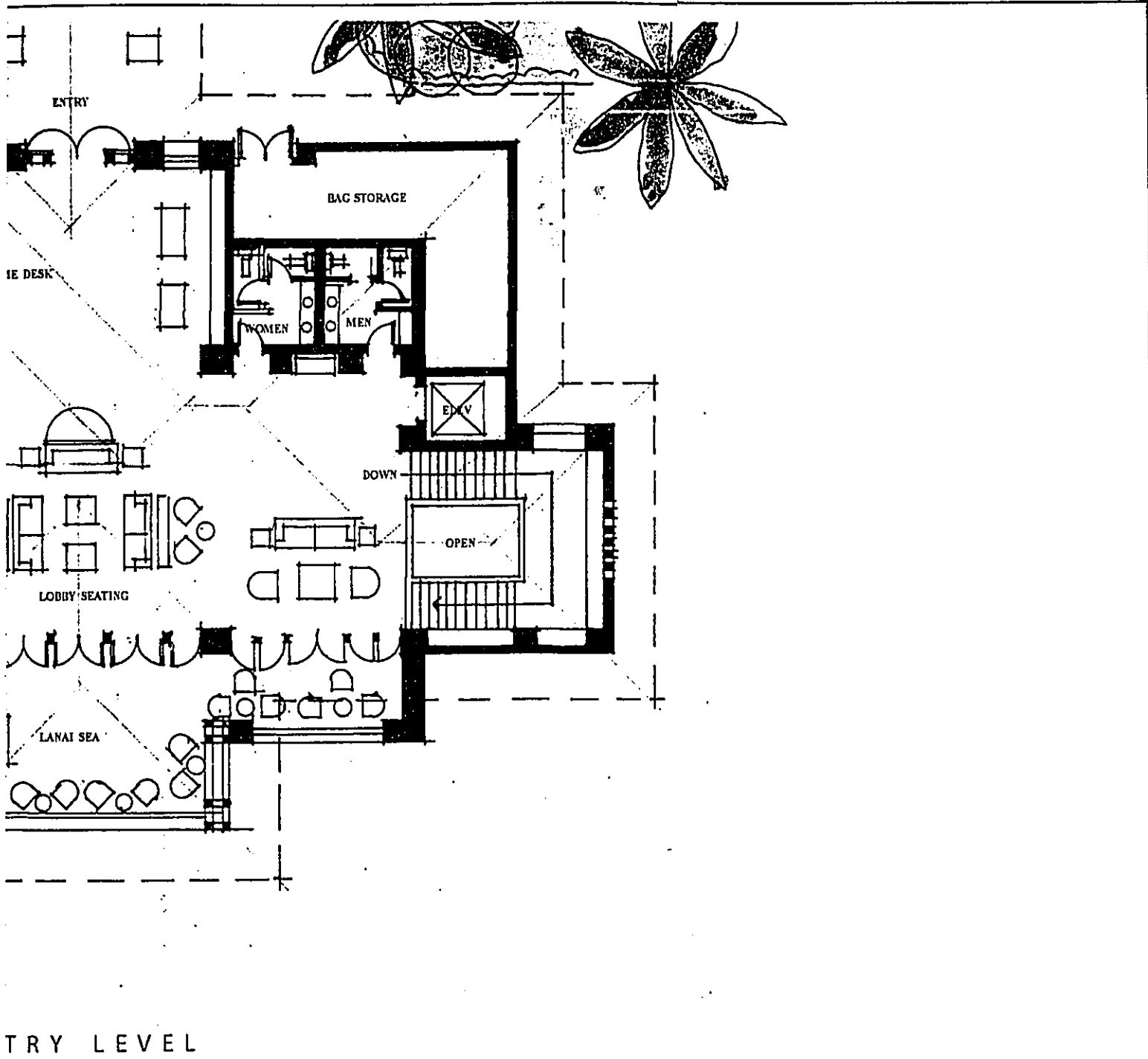


FIGURE 9.3

CLUBHOUSE ENTRY
LEVEL PLAN

OCTOBER
2003



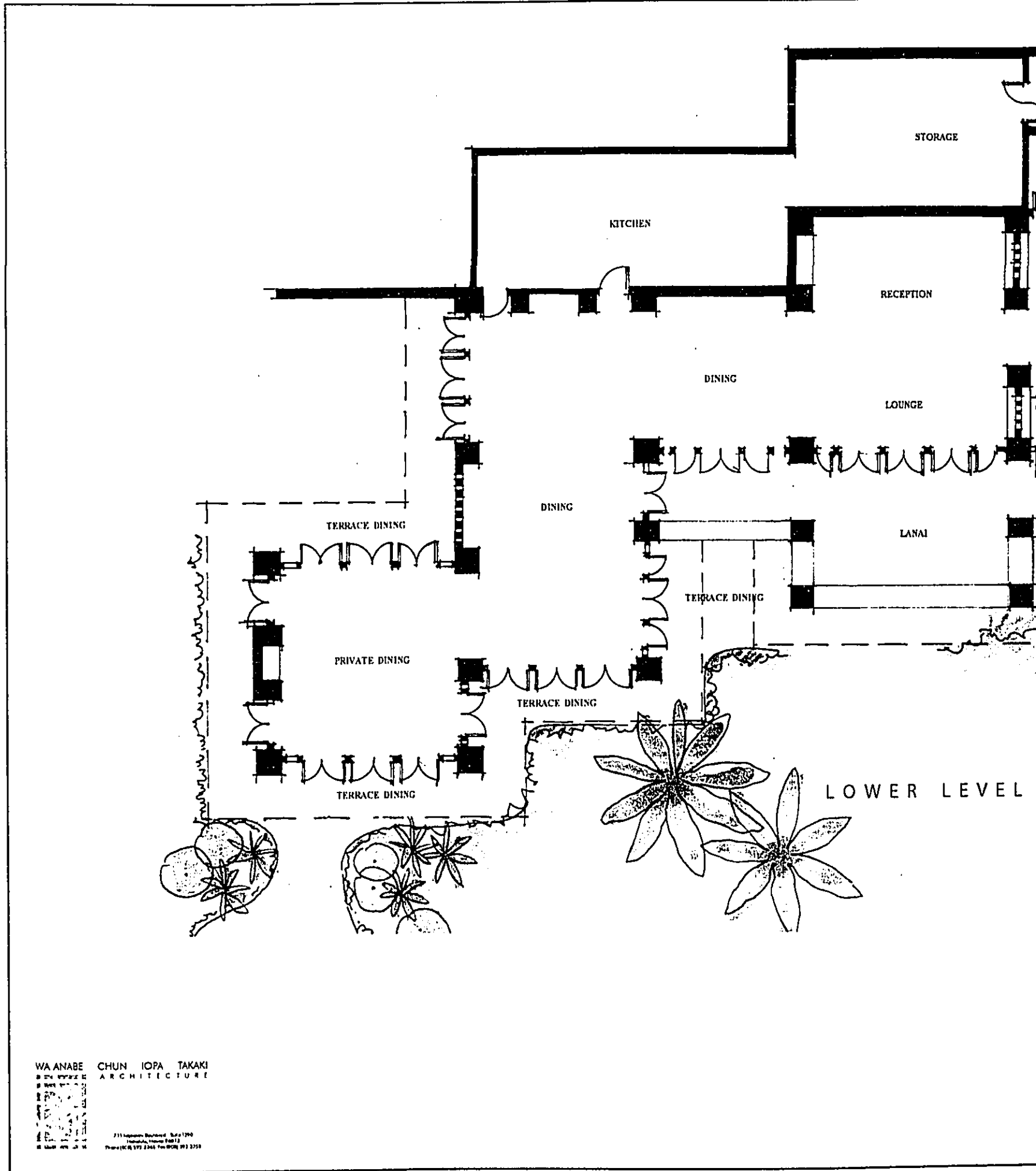
CONCEPT DESIGN
Maui Lu Redevelopment

**CHRIS
HART**
& PARTNERS

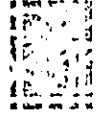
SCALE: 1/16" = 1'-0"



RECEIVED AS FOLLOWS



WA ANABE CHUN IOPA TAKAKI
ARCHITECTURE



711 Kapiolani Boulevard, Suite 1704
Honolulu, Hawaii 96813
Phone (808) 537-2344 Fax (808) 537-2350

RECEIVED AS FOLLOWS

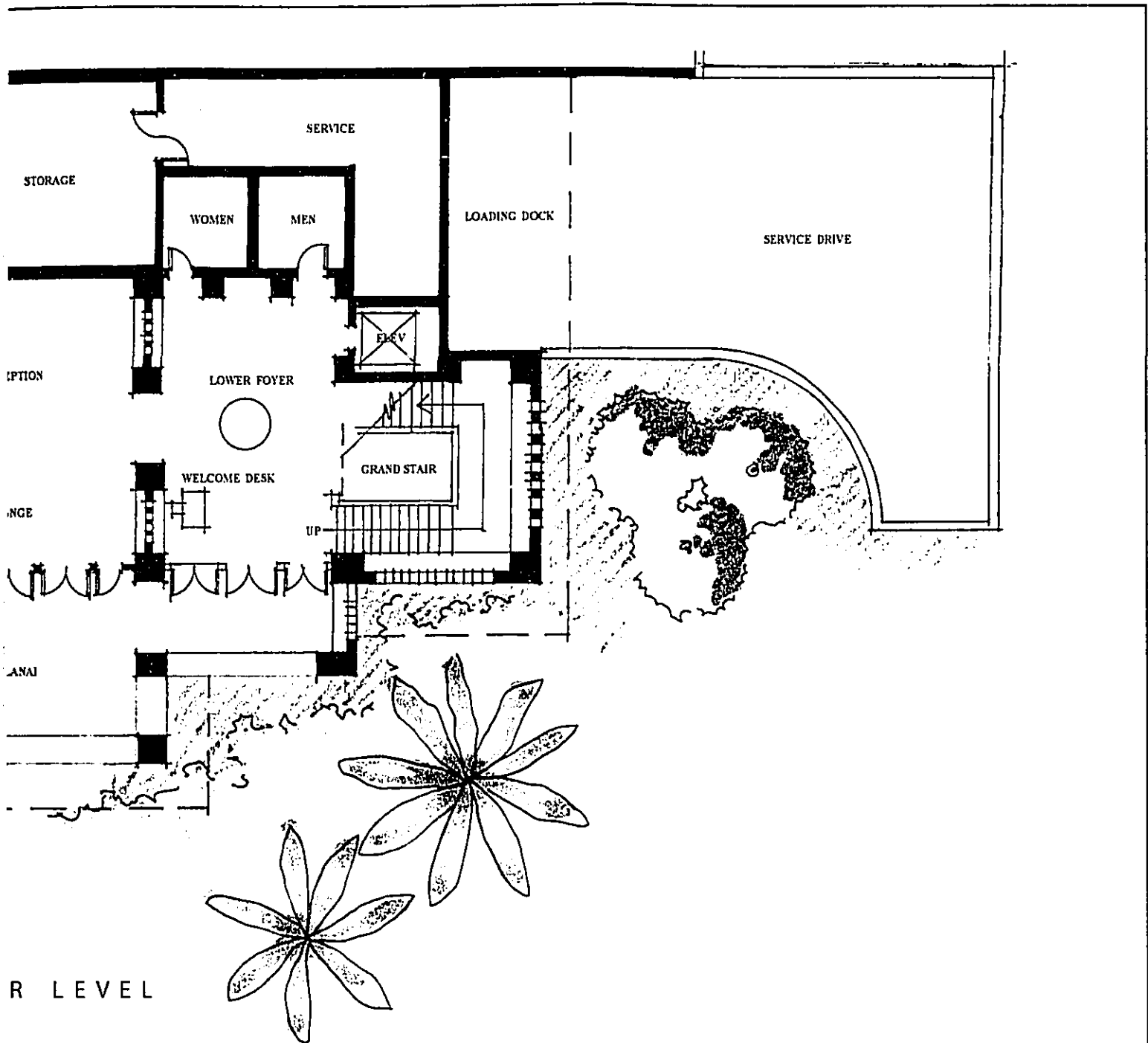


FIGURE 9.4

CLUBHOUSE LOWER
LEVEL PLAN

OCTOBER
2003



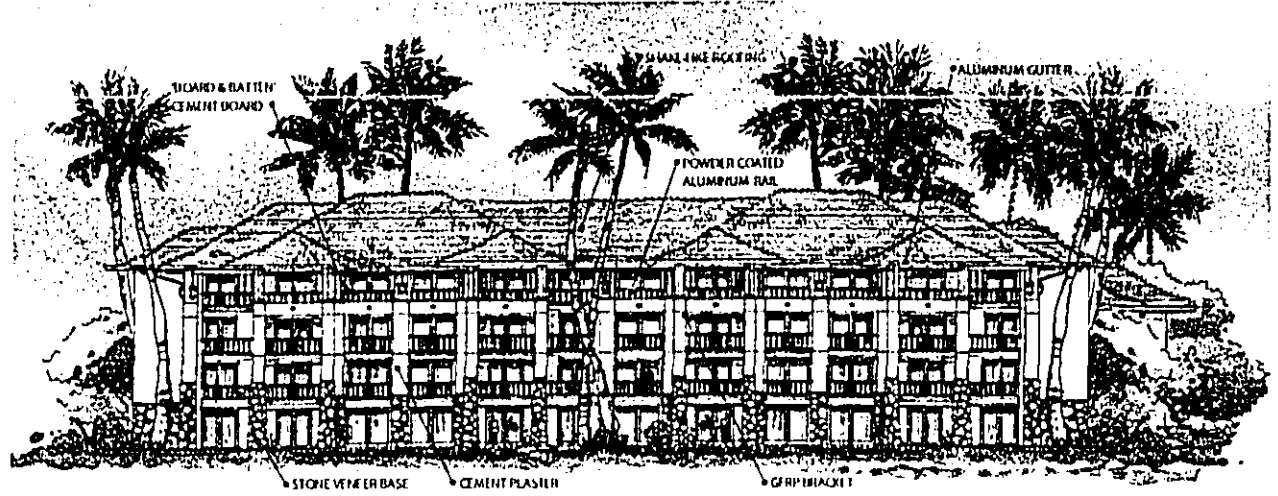
CONCEPT DESIGN
Maui Lu Redevelopment

**CHRIS
HART
& PARTNERS**

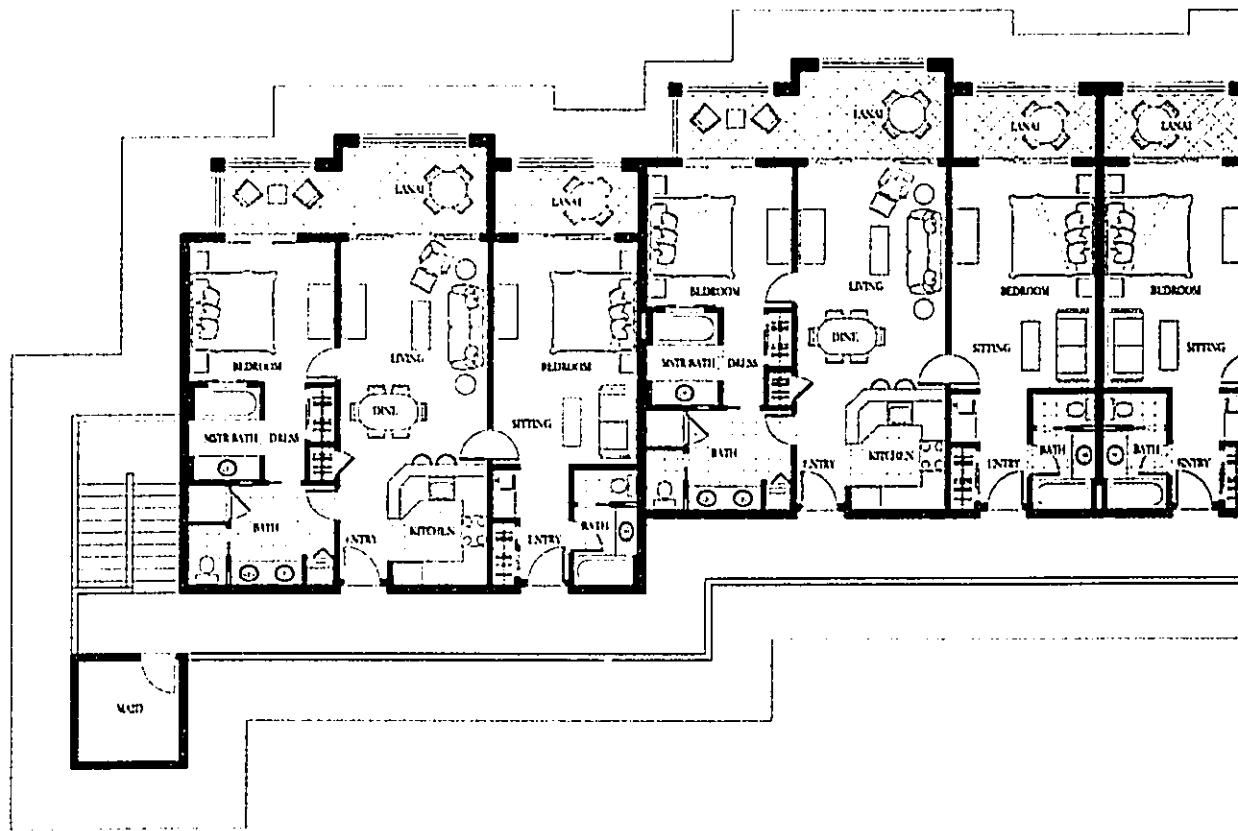
SCALE: 1/16" = 1'-0"



RECEIVED AS FOLLOWS



TYPE 'C' FRONT ELEVATION
TYPE 'G' SIMILAR

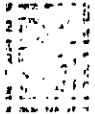


TYPE 'C' TYPICAL L
TYPE 'J' & 'K' SIM

SCALE: 1/16" =

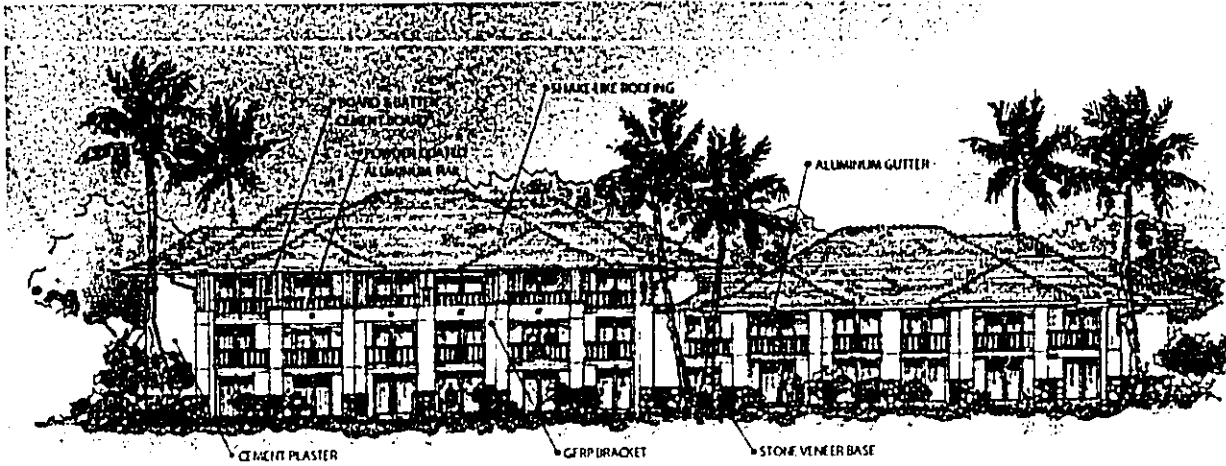


WA ANABE CHUN IOPA TAKAKI
ARCHITECTURE



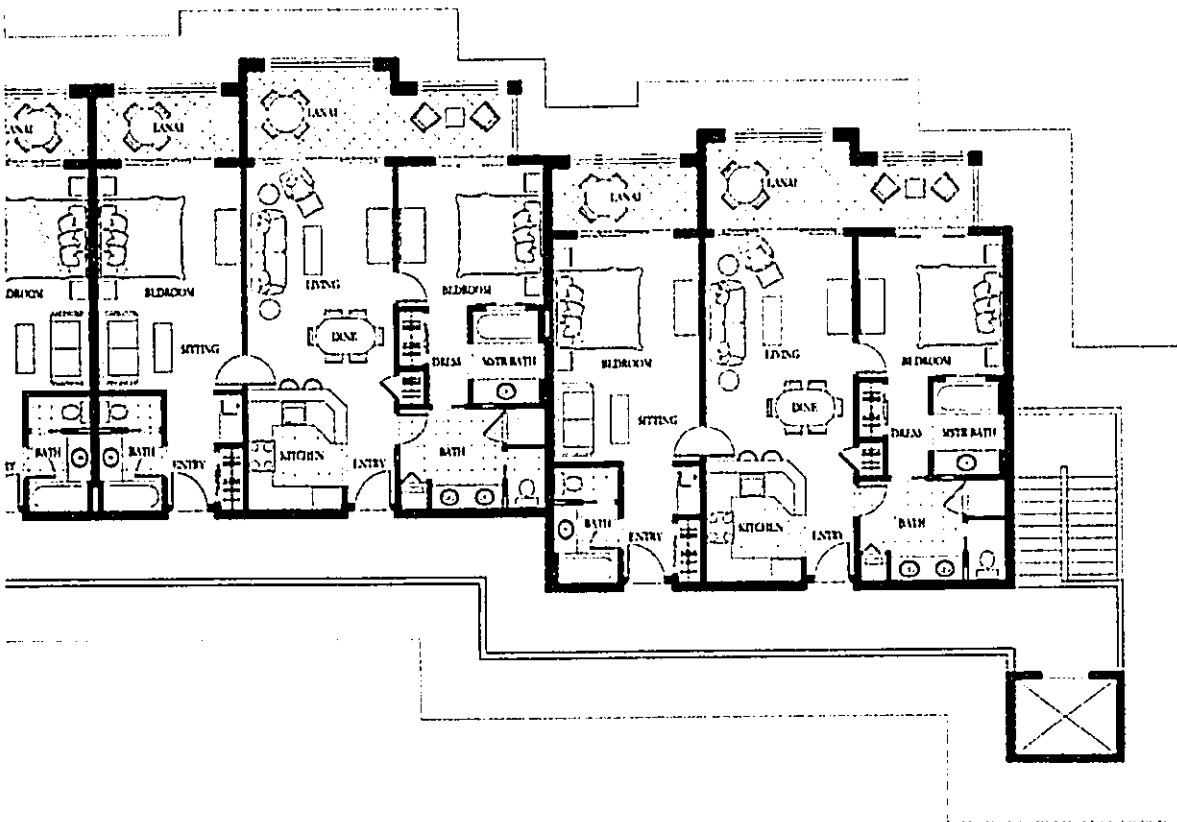
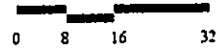
311 Singapore Boulevard, Suite 1205
Singapore, Singapore 117613
Phone: 6742 5111 / 6742 5112 Fax: 6742 5113

RECEIVED AS FOLLOWS



TYPE 'F' FRONT ELEVATION

SCALE: 1/32" = 1'-0"



TYPICAL LEVEL PLAN
PE 'J' & 'K' SIMILAR

SCALE: 1/16" = 1'-0"

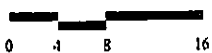


FIGURE 9.5

TYPICAL PLAN &
ELEVATIONS

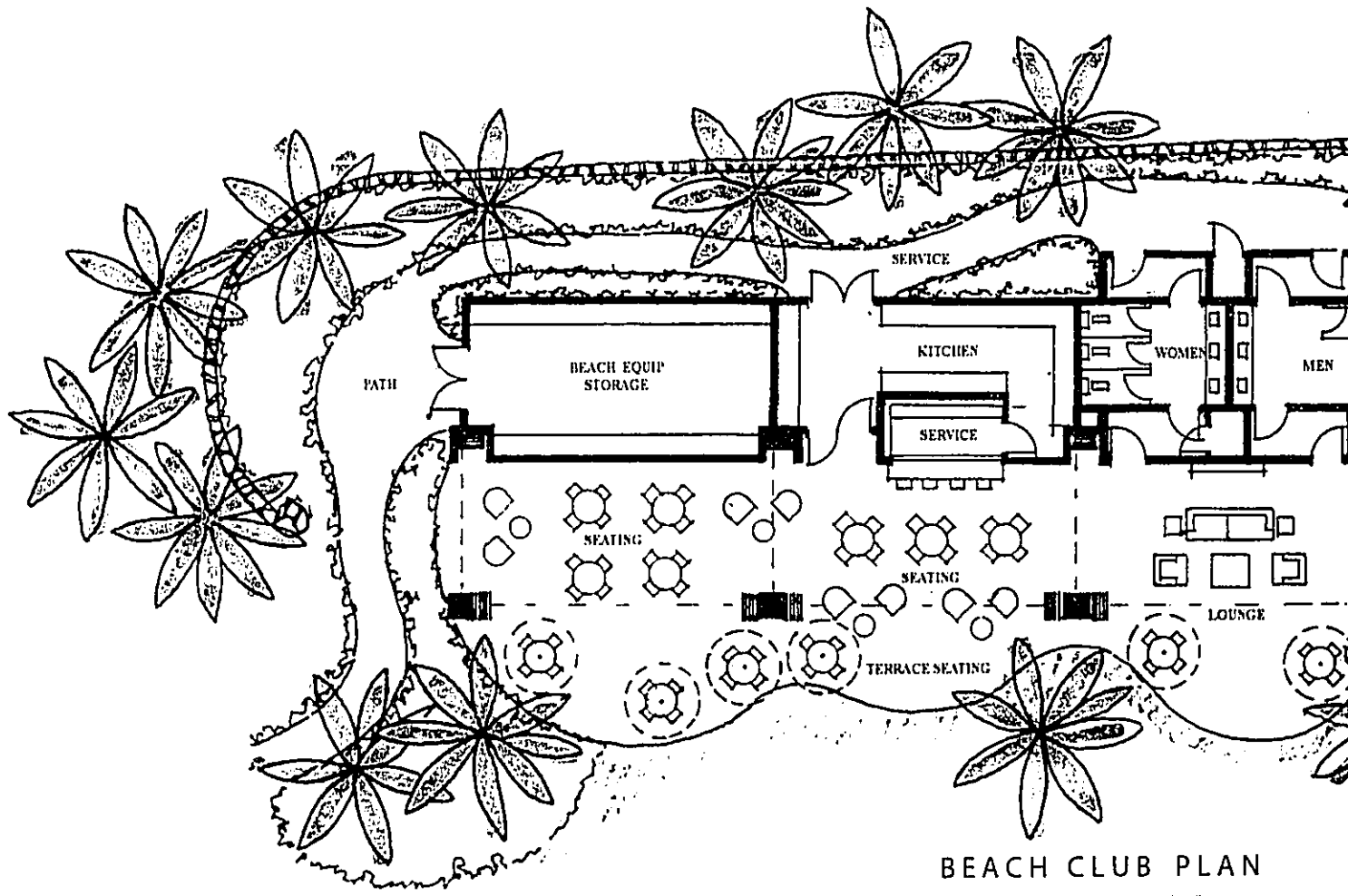
OCTOBER
2003

CONCEPT DESIGN
Maui Lu Redevelopment



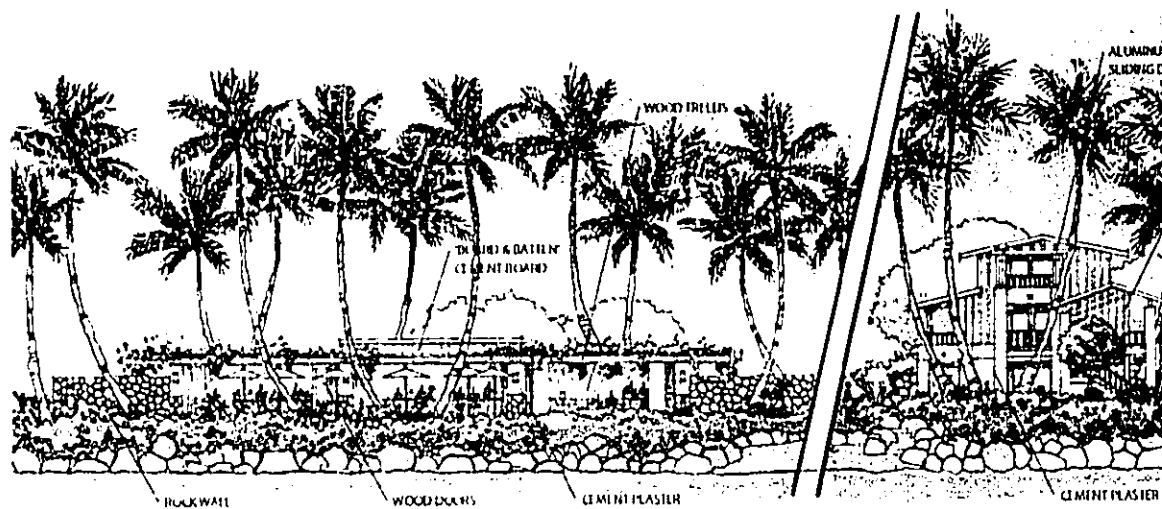
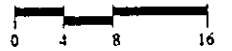
CHRIS
HART
& PARTNERS

RECEIVED AS FOLLOWS



BEACH CLUB PLAN

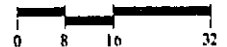
SCALE: 1/16" = 1'-0"



BEACH CLUB ELEVATION

TYPE

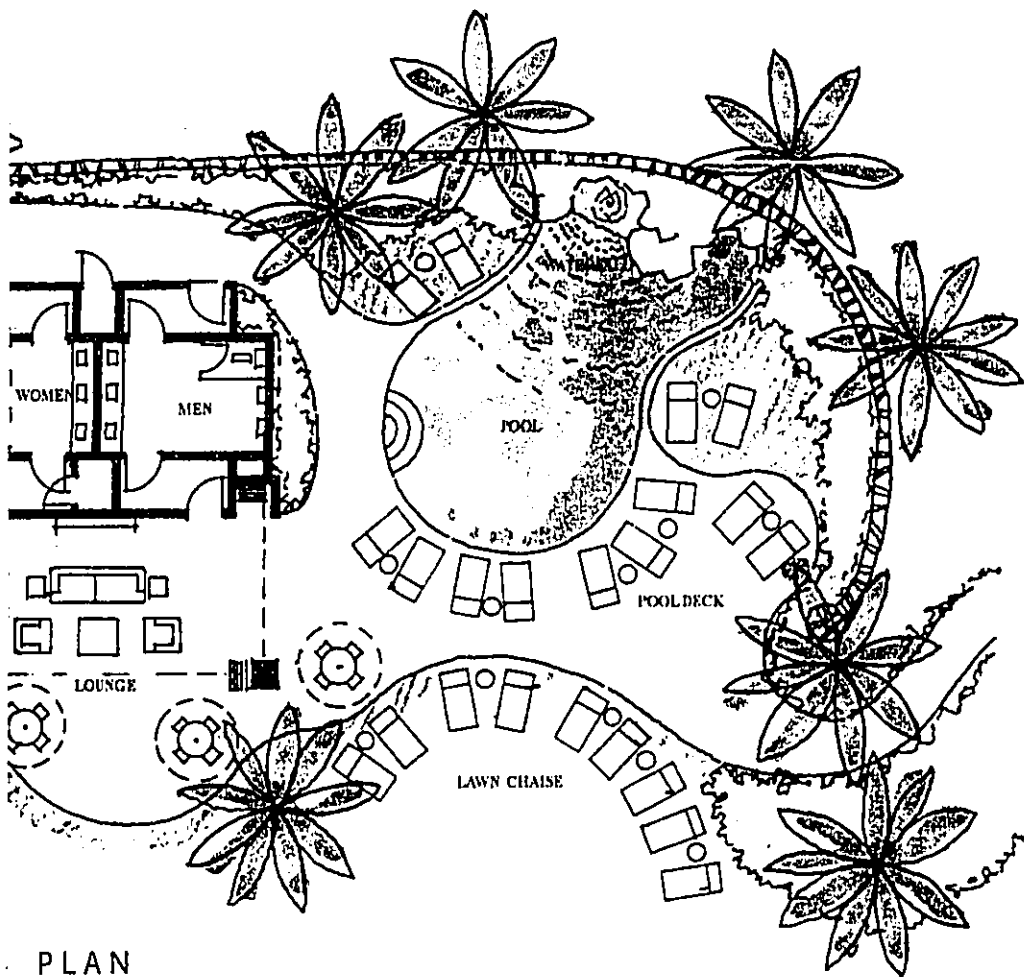
SCALE: 1/32" = 1'-0"



WA ANABE CHUN IOPA TAKAKI
ARCHITECTURE

311 Kapiolani Boulevard, Suite 1201
Honolulu, Hawaii 96813
Phone: (808) 521-2240 Fax: (808) 521-2242

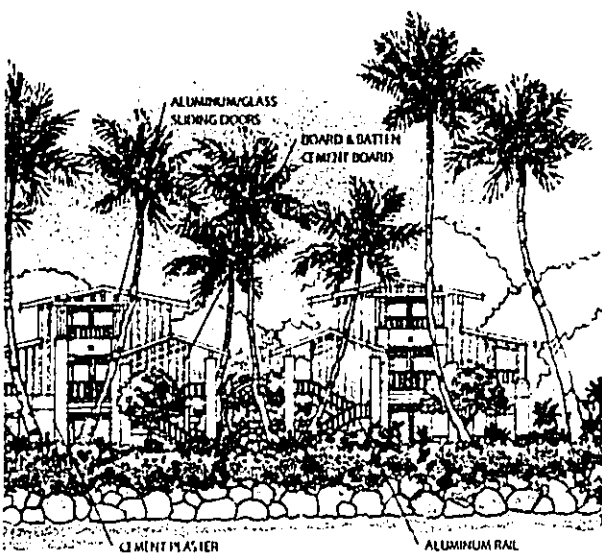
RECEIVED AS FOLLOWS



PLAN

1'-0"

16



TYPE 'M' SIDE ELEVATION

FIGURE 9.6

BEACH CLUB PLAN &
MAKAI ELEVATIONS

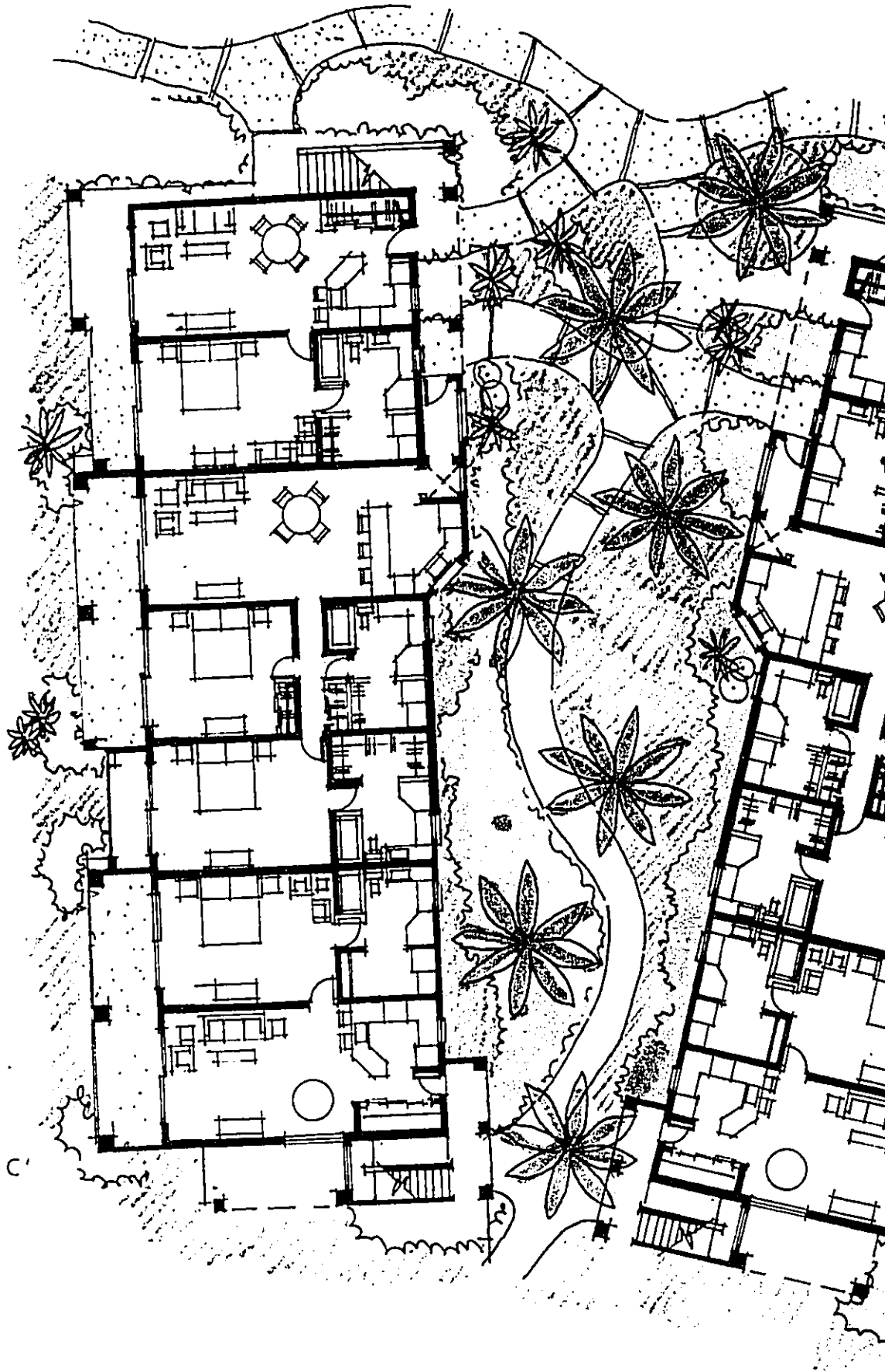
OCTOBER
2003

CONCEPT DESIGN
Maui Lu Redevelopment



CHRIS
HART
& PARTNERS

RECEIVED AS FOLLOWS

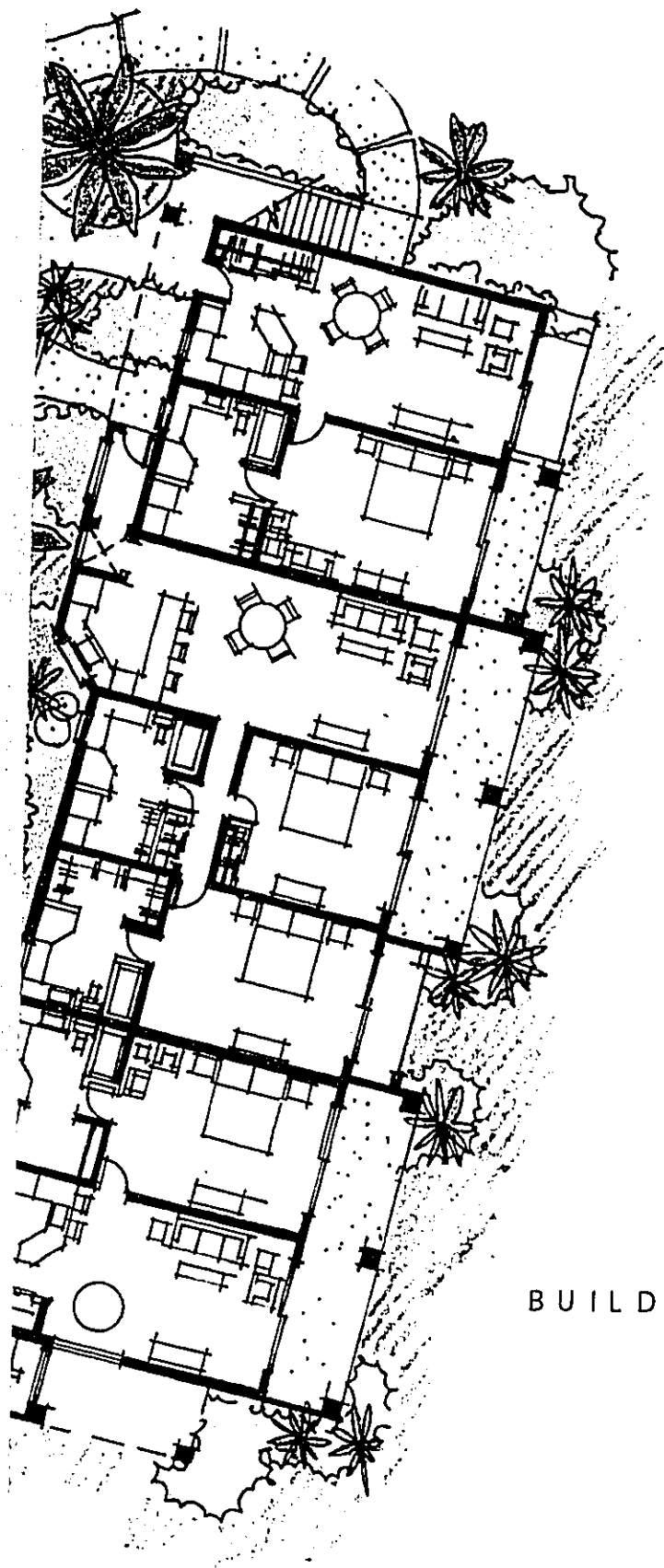


BUILDING 'C'

WA ANABE CHUN IOPA TAKAKI
ARCHITECTURE

1111 Kapiolani Boulevard, Suite 1100
Honolulu, Hawaii 96813
Phone: (808) 937-2341 Fax: (808) 937-2342

RECEIVED AS FOLLOWS



BUILDING 'B'

SCALE: 1/16" = 1'-0"



FIGURE 9.7

MAKAI BUILDINGS 'B' & 'C'
PLAN

OCTOBER
2003

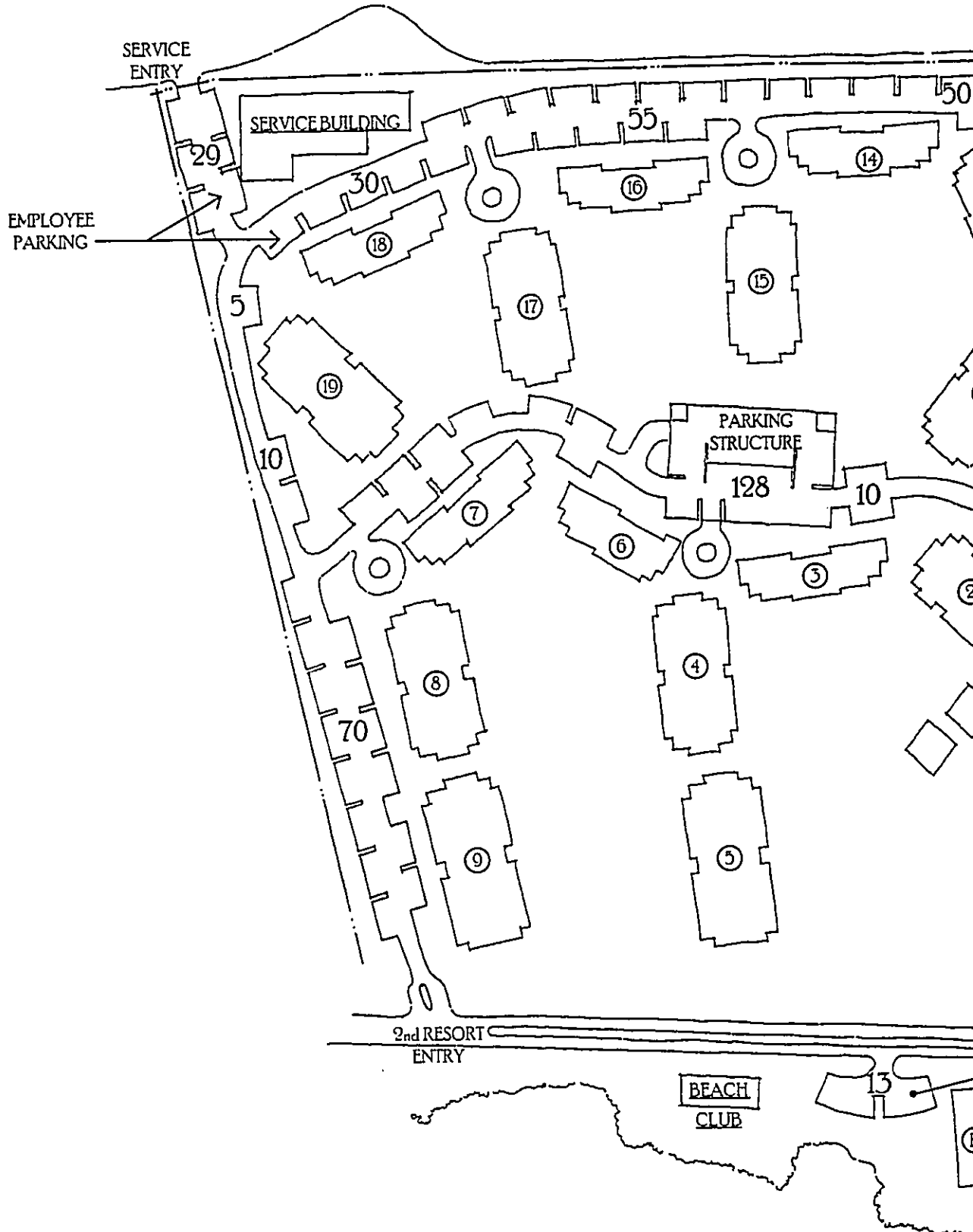
CONCEPT DESIGN
Maui Lu Redevelopment



CHRIS
HART
& PARTNERS

RECEIVED AS FOLLOWS

THE MAUI LU REDEVELOP



WATANABE • CHUN • IOPA • TAKAKI
ARCHITECTURE



111 Kapapa Boulevard, Suite 1200
Honolulu, Hawaii 96813
Phone: (808) 977-2247 Fax: (808) 977-7248

RESORT SITE
KIHEI • MAUI • HAWAII

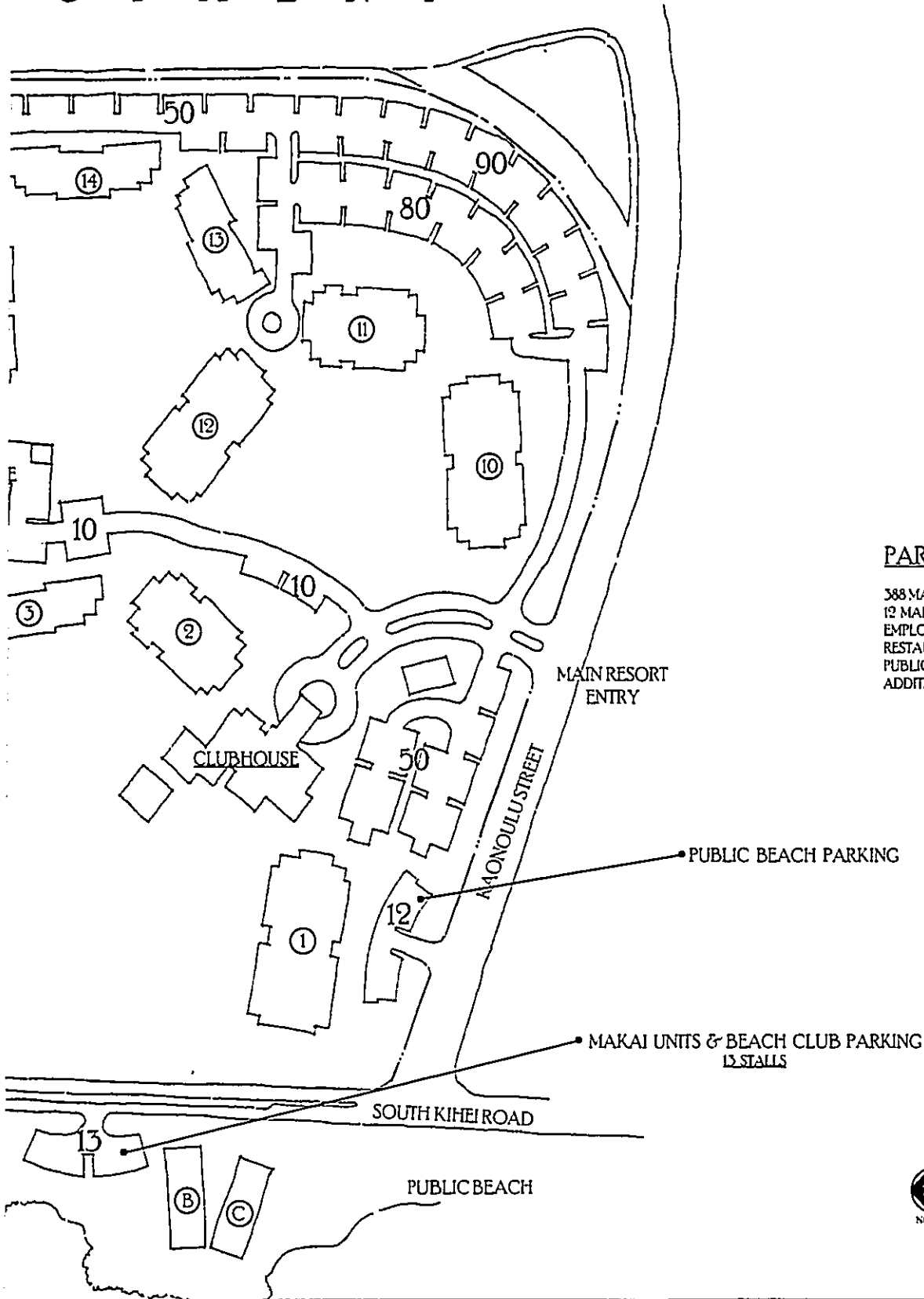
RECEIVED AS FOLLOWS

LU RESORT

OPMENT

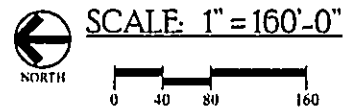


FIGURE 9.8



PARKING SUMMARY

| | |
|-----------------------------|-------------------|
| 388 MAUKA UNIT X 1.33 | = 517 STALLS |
| 13 MAKAI UNITS & BEACH CLUB | = 13 STALLS |
| EMPLOYEE PARKING | = 50 STALLS |
| RESTAURANT PARKING | = 15 STALLS |
| PUBLIC BEACH PARKING | = 12 STALLS |
| ADDITIONAL PARKING | = 80 STALLS |
| TOTAL | 687 STALLS |

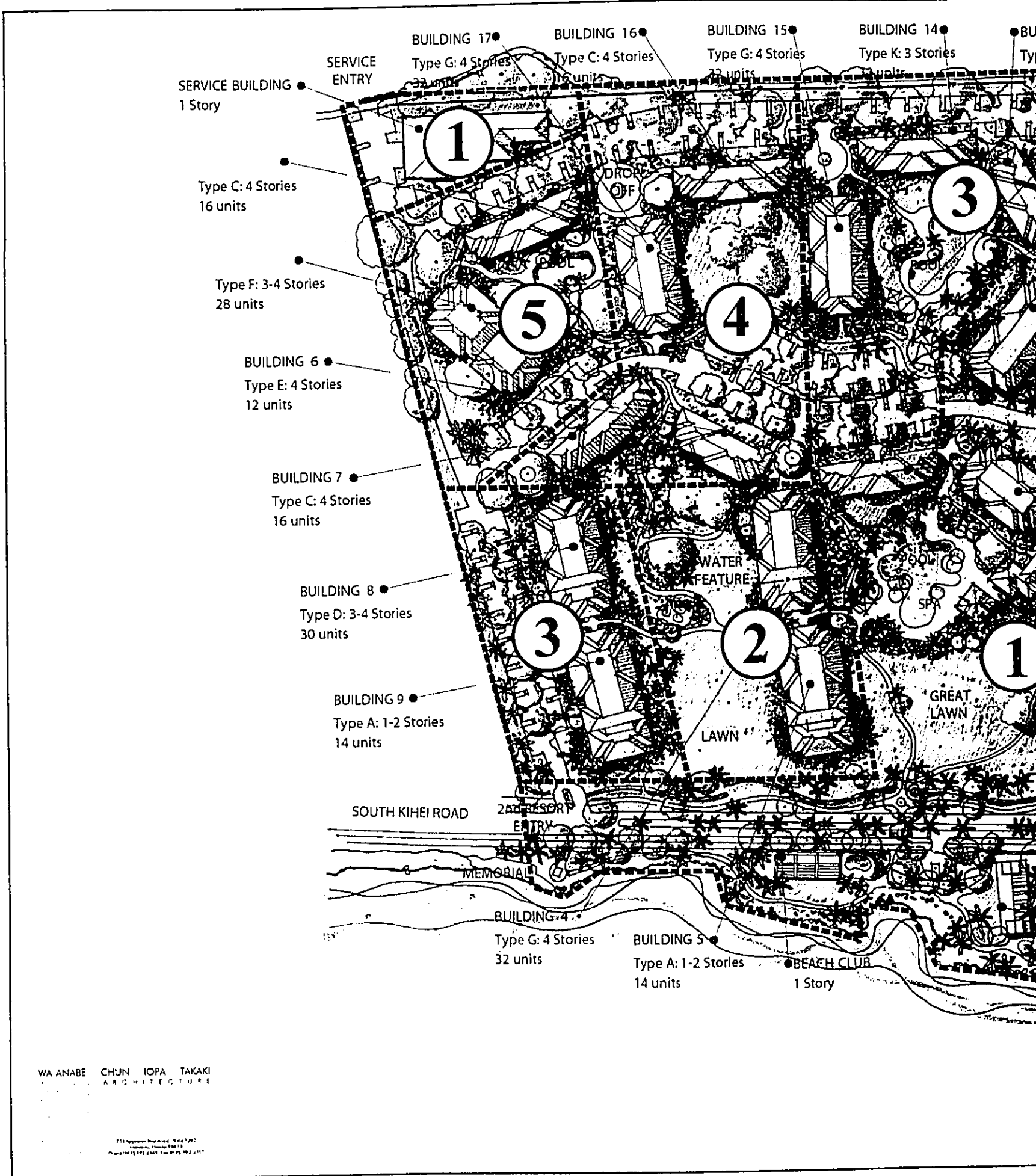


I T E P L A N
I • H A W A I I

575 SOUTH KIHAI ROAD LLC

CONCEPT DESIGN
July 15, 2003

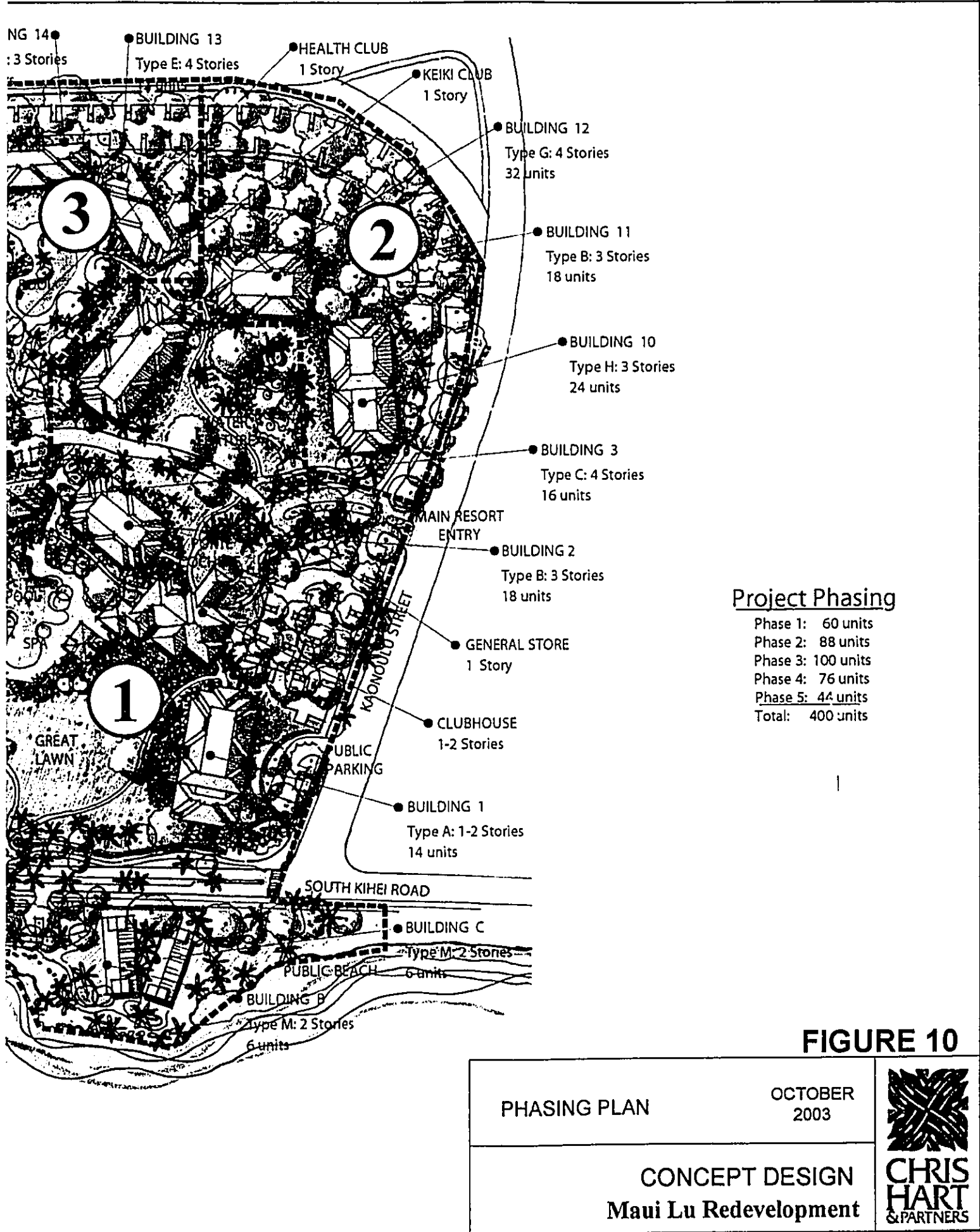
RECEIVED AS FOLLOWS



WA ANABE CHUN IOPA TAKAKI
ARCHITECTURE

711 Kapiolani Blvd. Ste. 102
Honolulu, Hawaii 96813
Phone: (808) 943-2101 Fax: (808) 943-2111


RECEIVED AS FOLLOWS



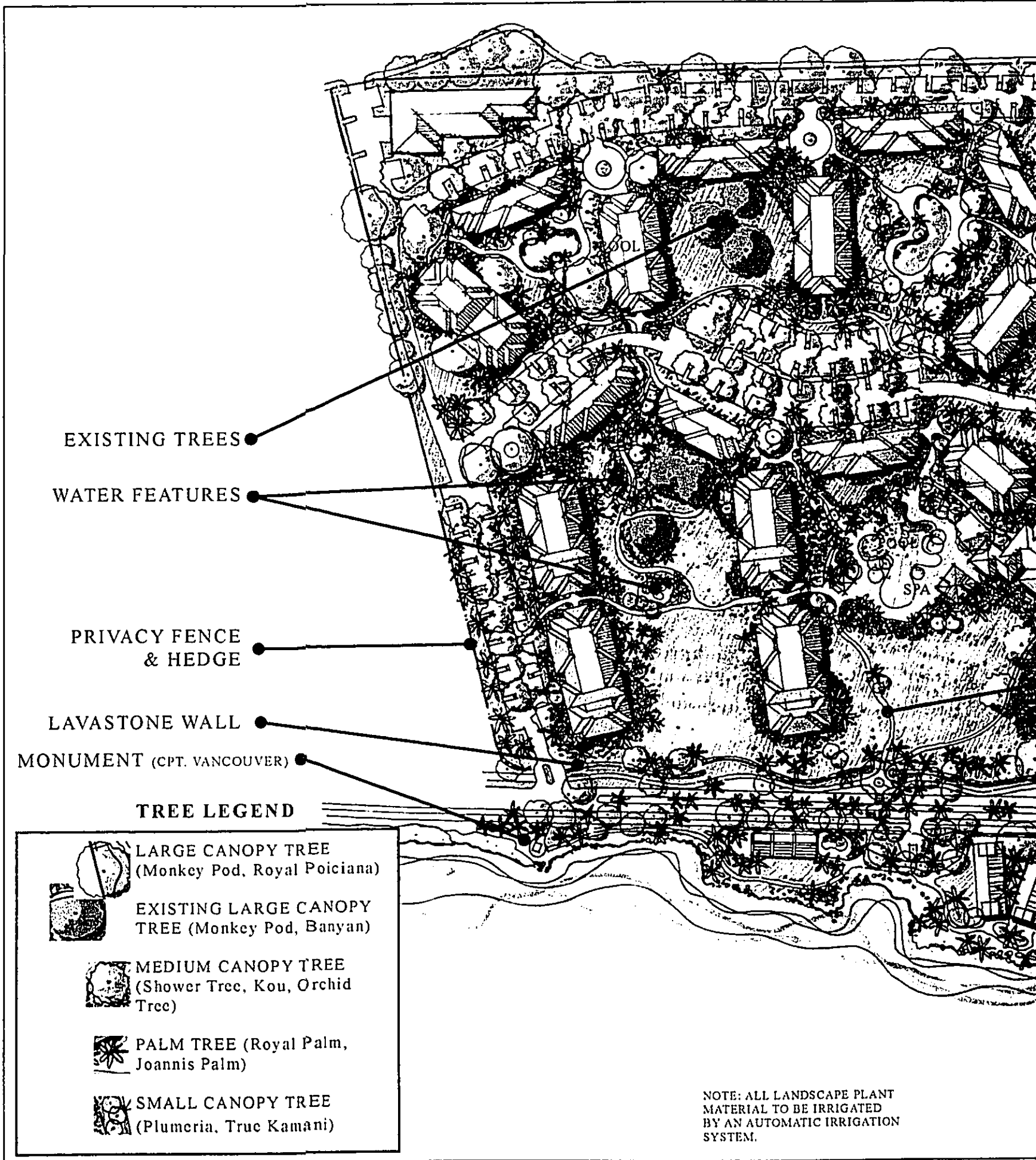
Project Phasing

Phase 1: 60 units
 Phase 2: 88 units
 Phase 3: 100 units
 Phase 4: 76 units
 Phase 5: 44 units
 Total: 400 units

FIGURE 10

| | | |
|---|--------------|---|
| PHASING PLAN | OCTOBER 2003 |  CHRIS HART & PARTNERS |
| CONCEPT DESIGN Maui Lu Redevelopment | | |

RECEIVED AS FOLLOWS



RECEIVED AS FOLLOWS

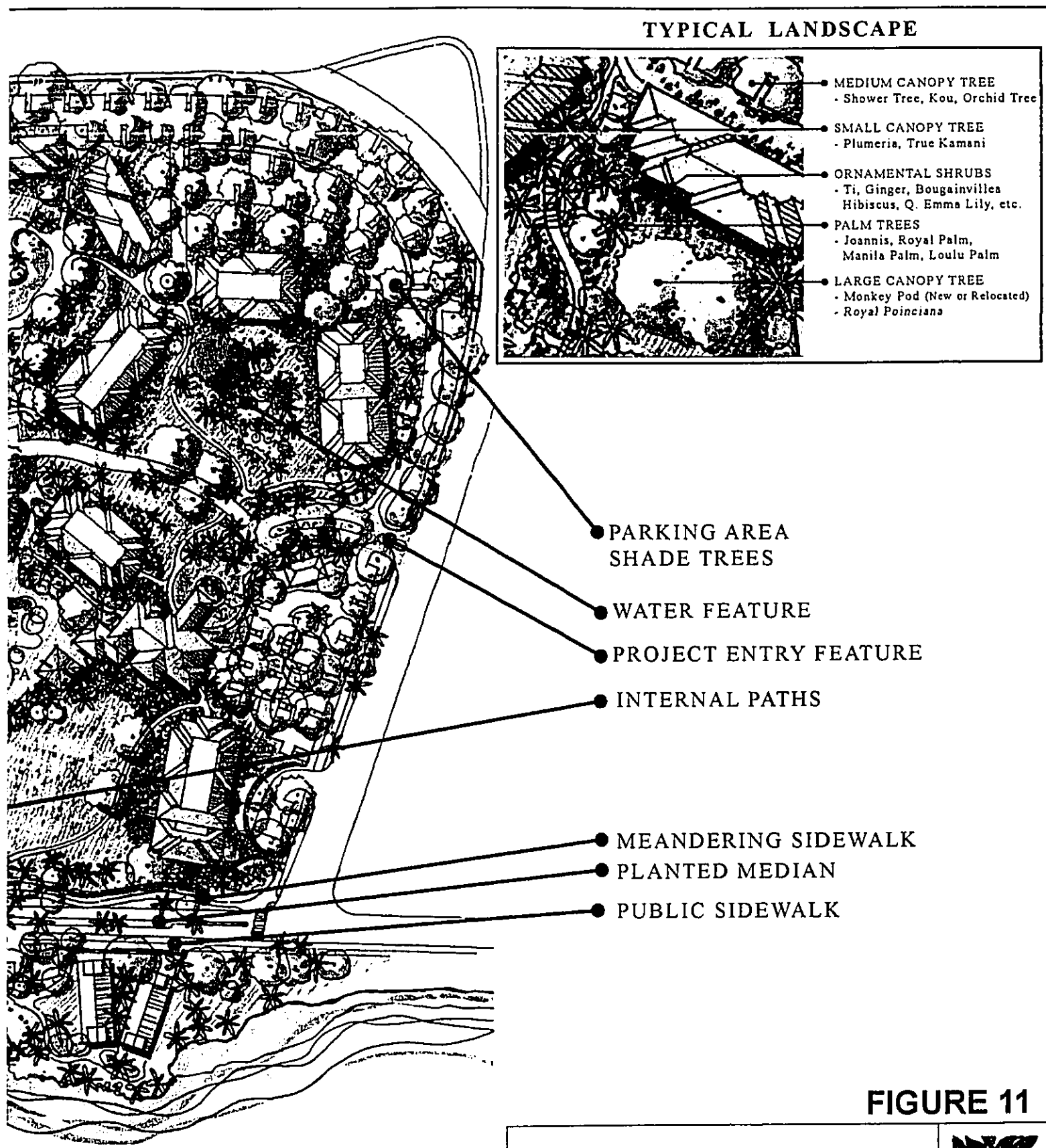

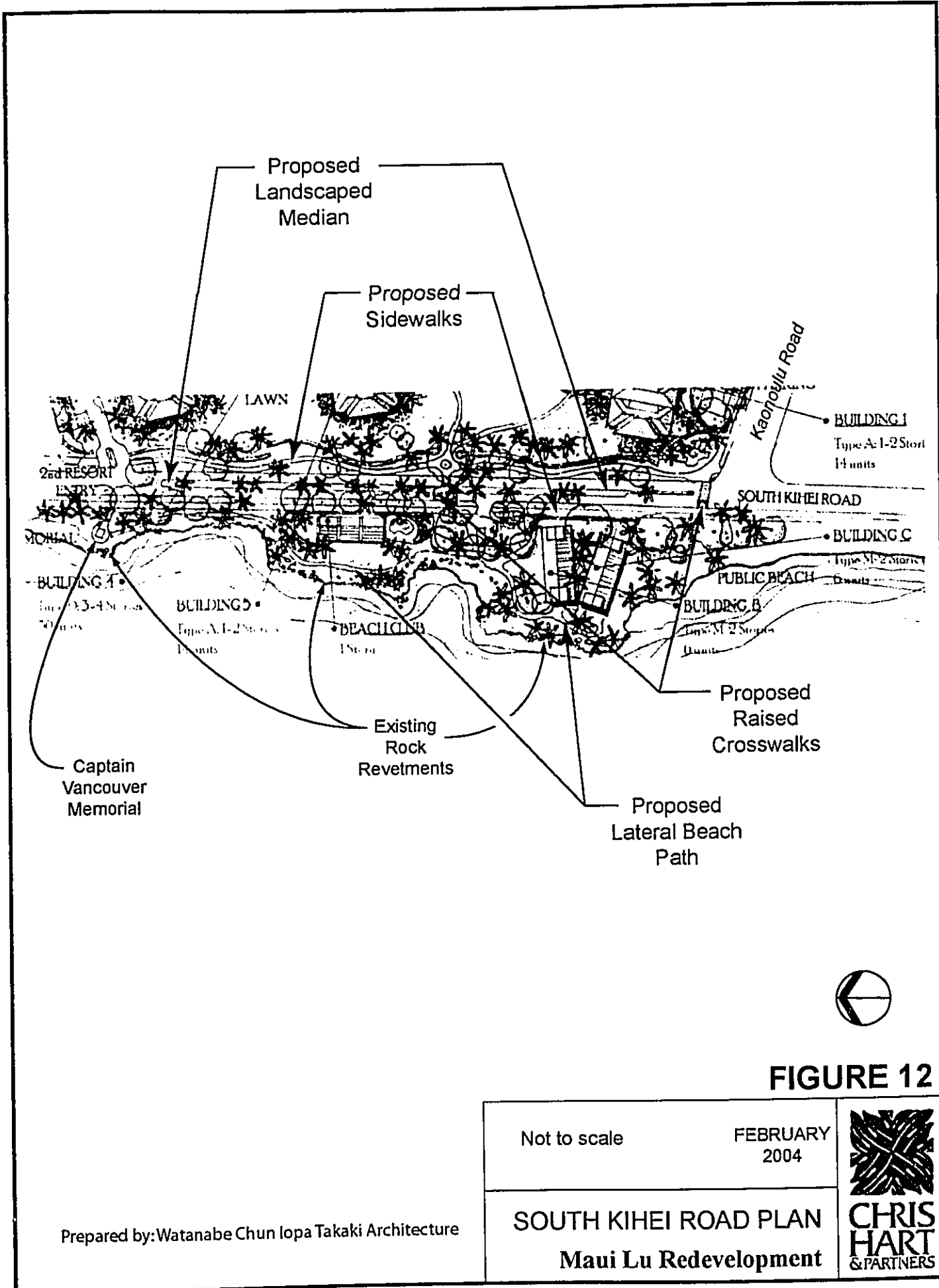


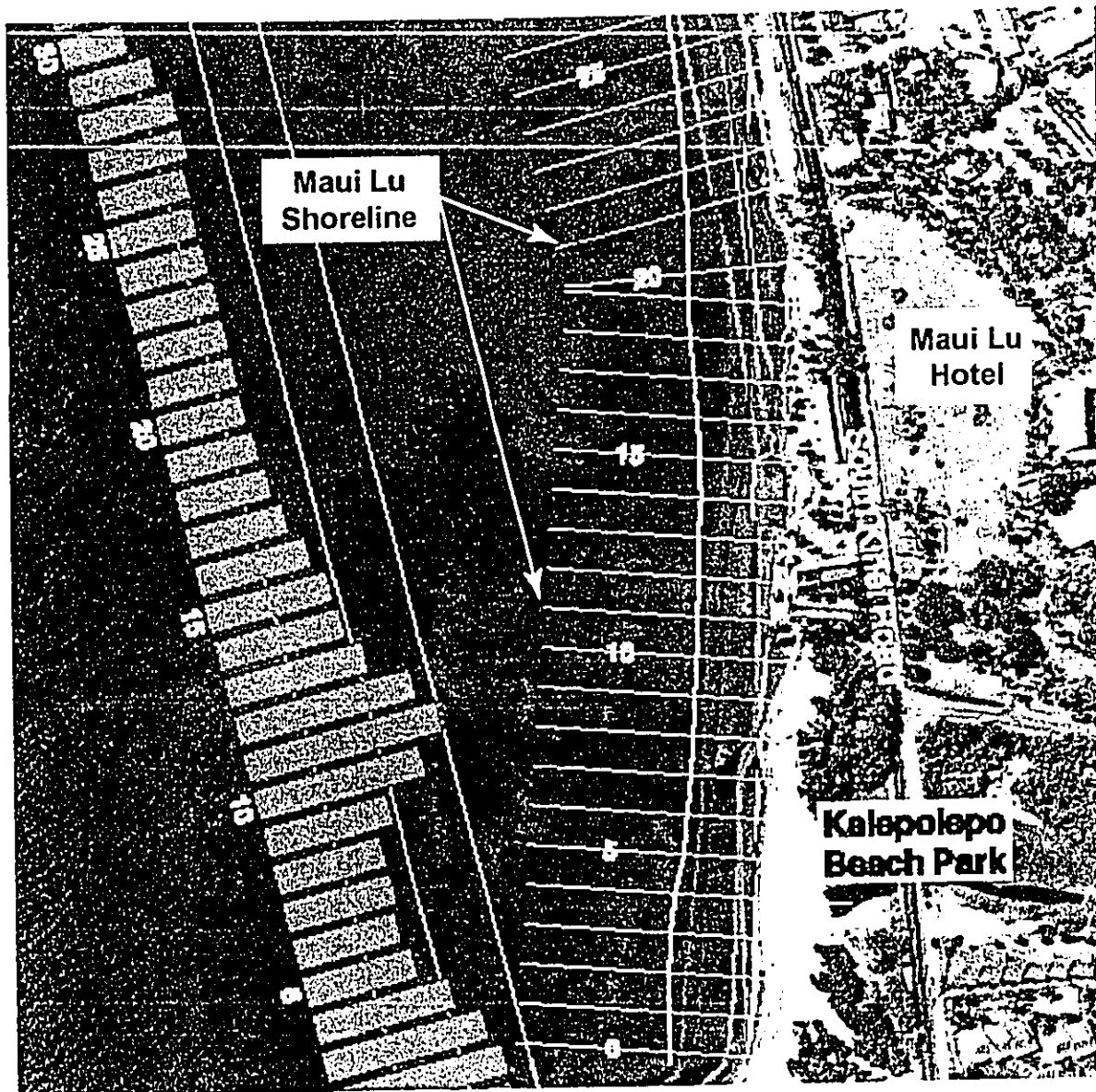
FIGURE 11

| | |
|---|---|
| OCTOBER 2003 |  |
| LANDSCAPE PLAN Maui Lu Redevelopment | CHRIS HART & PARTNERS |

RECEIVED AS FOLLOWS



RECEIVED AS FOLLOWS



The North Kihai study area extends from Kalapolepo Beach Park in the south to the midpoint of Kealia Pond and Maalaea Bay Beach in the north. Kihai Pier (between transects B3 and B6) is located in the approximate center of the study area and provides a convenient feature to bisect the area for description purposes.

As a whole, the North Kihai area has moderate erosion overtime with an average AEHR of -0.9 ft/yr. North of Kihai Pier, Maalaea Bay Beach extends through the end of the study area. The average AEHR for this portion of the area (transects 95 - 199) reflects the trend of the area (-0.9 ft/yr). The southern portion of this shoreline (transects 0 - 93) has experienced an average AEHR of -1.0 ft/yr. Malpolna Oe Iau Beach Park extends south from Kihai Pier to Kalpukahina. Hard shoreline south of Kalpukahina (transect 32) protects South Kihai Road and several structures constructed seaward of it from erosion damage. Further south, Kalapolepo Beach Park (transects 0 - 10) has a vegetated dune several meters high. Rates calculated here generally agree with those indicated by Sea Engineering*. Differences in numbers reflect their use of the vegetation line as the proxy for shoreline change in addition to this study's extended temporal span of data.

Average beach width, the average horizontal distance from the vegetation line to the low water mark, in the North Kihai study area have decreased significantly between 1949 and 1997. The area as a whole has experienced a 28% decrease in average beach width. The northern and southern portions of the area have decreased 33% and 21% respectively for the same time period.

* Makai Ocean Engineering and Sea Engineering, 1991 Aerial Photograph Analysis of Coastal Erosion on the Islands of Kauai, Molokai, Lanai, Maui and Hawaii. State of Hawaii Office of Planning Coastal Zone Management Program.

HISTORICAL SHORELINES

- 1900
- Nov 1949
- Oct 1960
- Aug 1963
- Mar 1975
- Aug 1987
- Mar 1993
- May 1997
- Erosion rate measurement locations (shore normal transects)

FIGURE 13

Maui Shoreline Atlas FEBRUARY
University of Hawaii 2004

EROSION RATE MAP
Maui Lu Redevelopment



RECEIVED AS FOLLOWS



THE MAUI LULU REDEVELOPMENT

SERVICE ENTRY
SERVICE BUILDING
1 Story

BUILDING 6
Type C: 4 Stories
48 units

BUILDING 7
Type B: 6 Stories
96 units

BUILDING 8
Type B: 6 Stories
96 units

HEALTH CLUB
1 Story

KEIKI CLUB
1 Story

BUILDING 9
Type D: 5 Stories
38 units

BUILDING 10
Type E: 2 Stories
24 units

SOUTH KIEI ROAD 2nd RESORT ENTRY

BEACH CLUB
1 Story

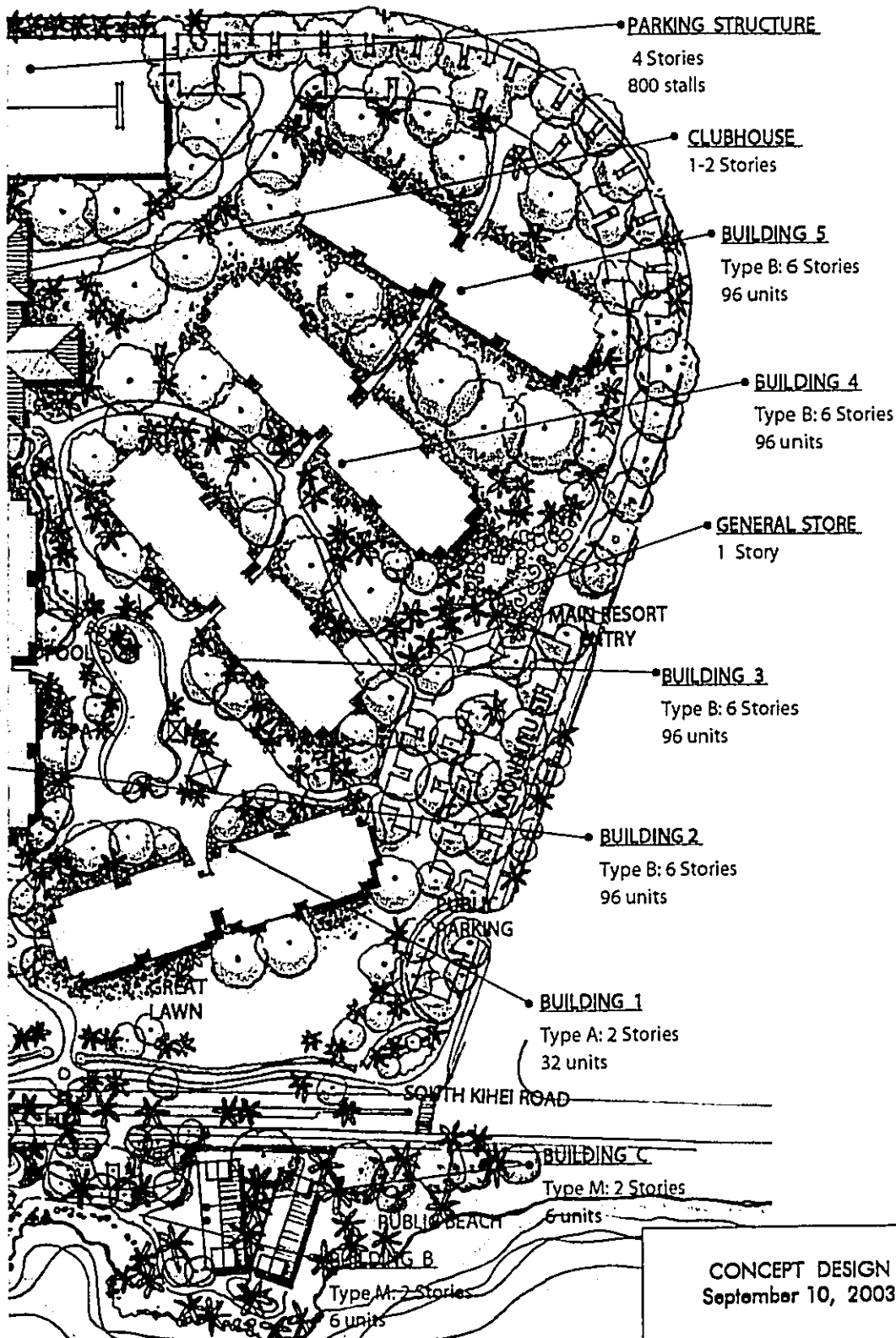
WATANABE • CHUN • IOPA • TAKAKI
ARCHITECTURE

211 Kapiolani Boulevard, Suite 1200
Honolulu, HI 96813
Phone: (808) 527-3345 Fax: (808) 527-2346

RESORT SITE PLAN - ALL FULL BUILDOUT

RECEIVED AS FOLLOWS

MAI LU RESORT DEVELOPMENT



Project Summary

730 Timeshare Units
975 Parking Stalls



SCALE: 1" = 160'-0"

0 80 160 320

FIGURE 14.1

N - ALTERNATE 1
LAYOUT

CONCEPT DESIGN
September 10, 2003

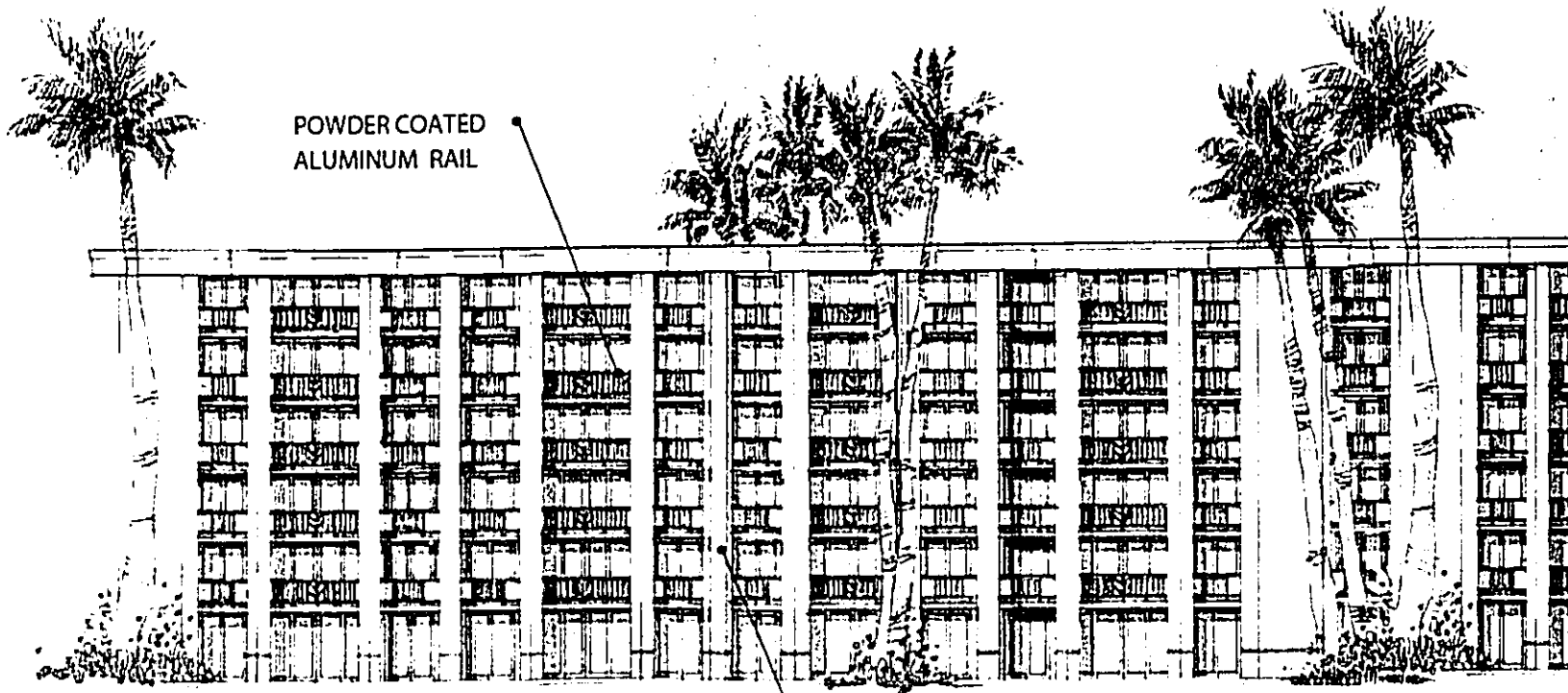
FEBRUARY
2004

ALTERNATIVE PLANS
Maui Lu Redevelopment



RECEIVED AS FOLLOWS

THE MAUI LU
REDEVELO



FRONT & REAR ELEVATION

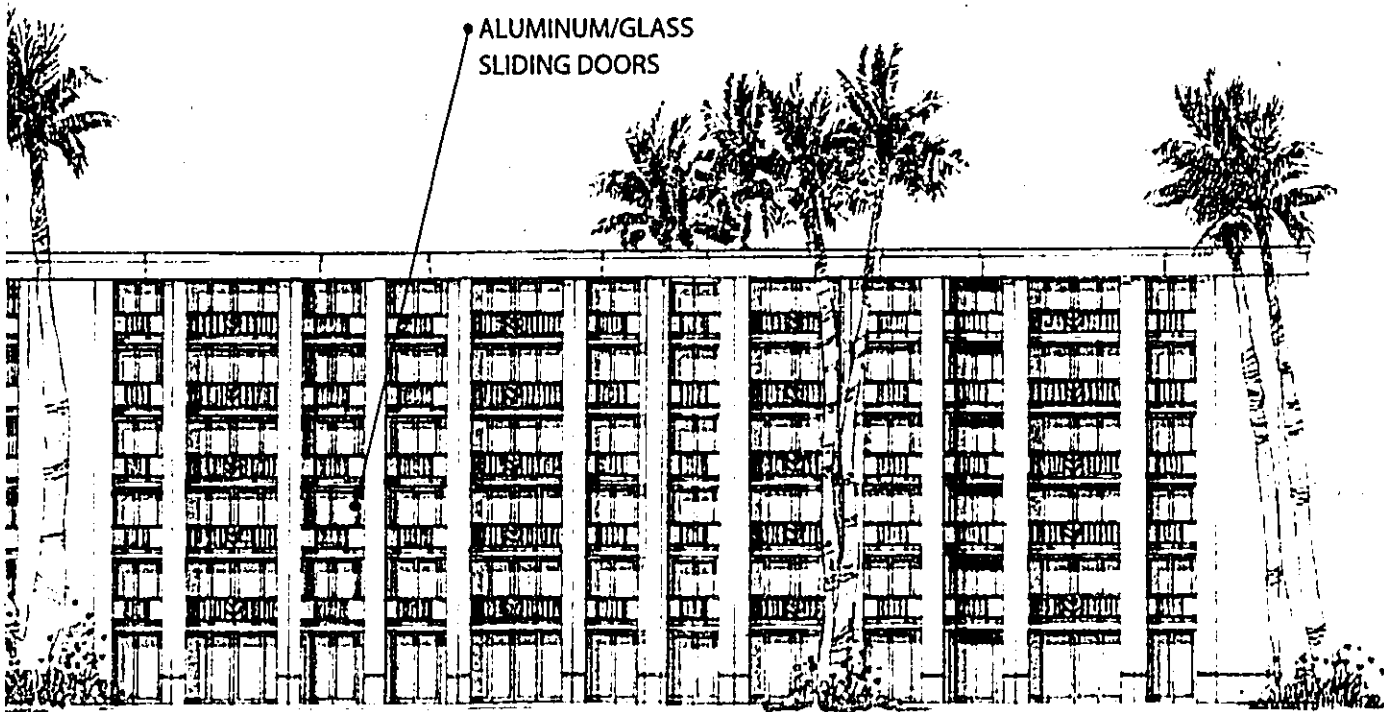
WATANABE • CHUN • IOPA • TAKAKI
ARCHITECTURE

1111 Kapiolani Boulevard, Suite 1200
Honolulu, Hawaii 96813
Phone: (808) 923-2244 Fax: (808) 923-2240

ELEVATION STUDY - A
FULL BUILDOUT

RECEIVED AS FOLLOWS

MAUI LU RESORT DEVELOPMENT



R ELEVATION

SCALE: 1/32" = 1'-0"

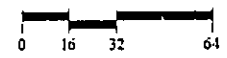

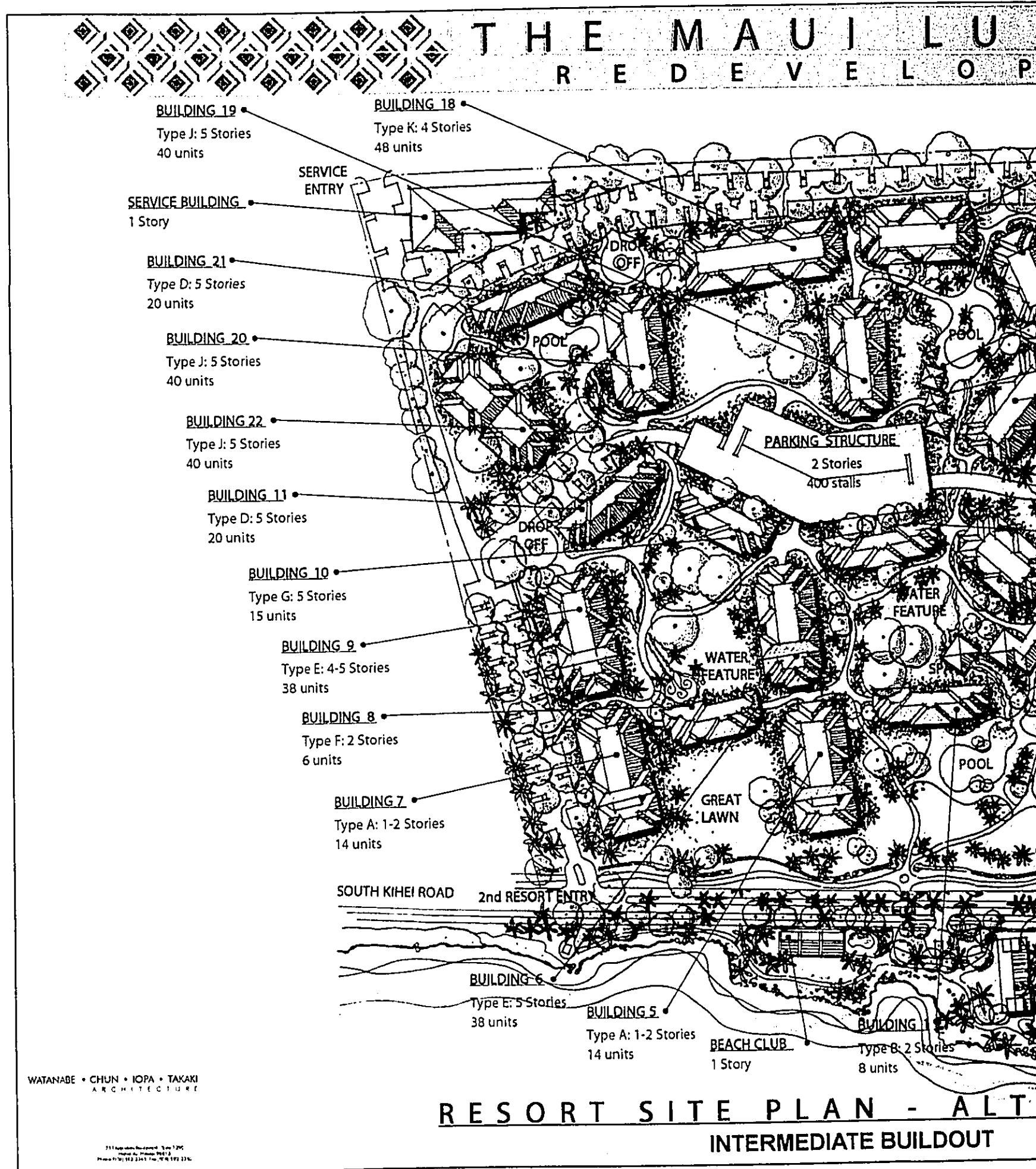


FIGURE 14.2

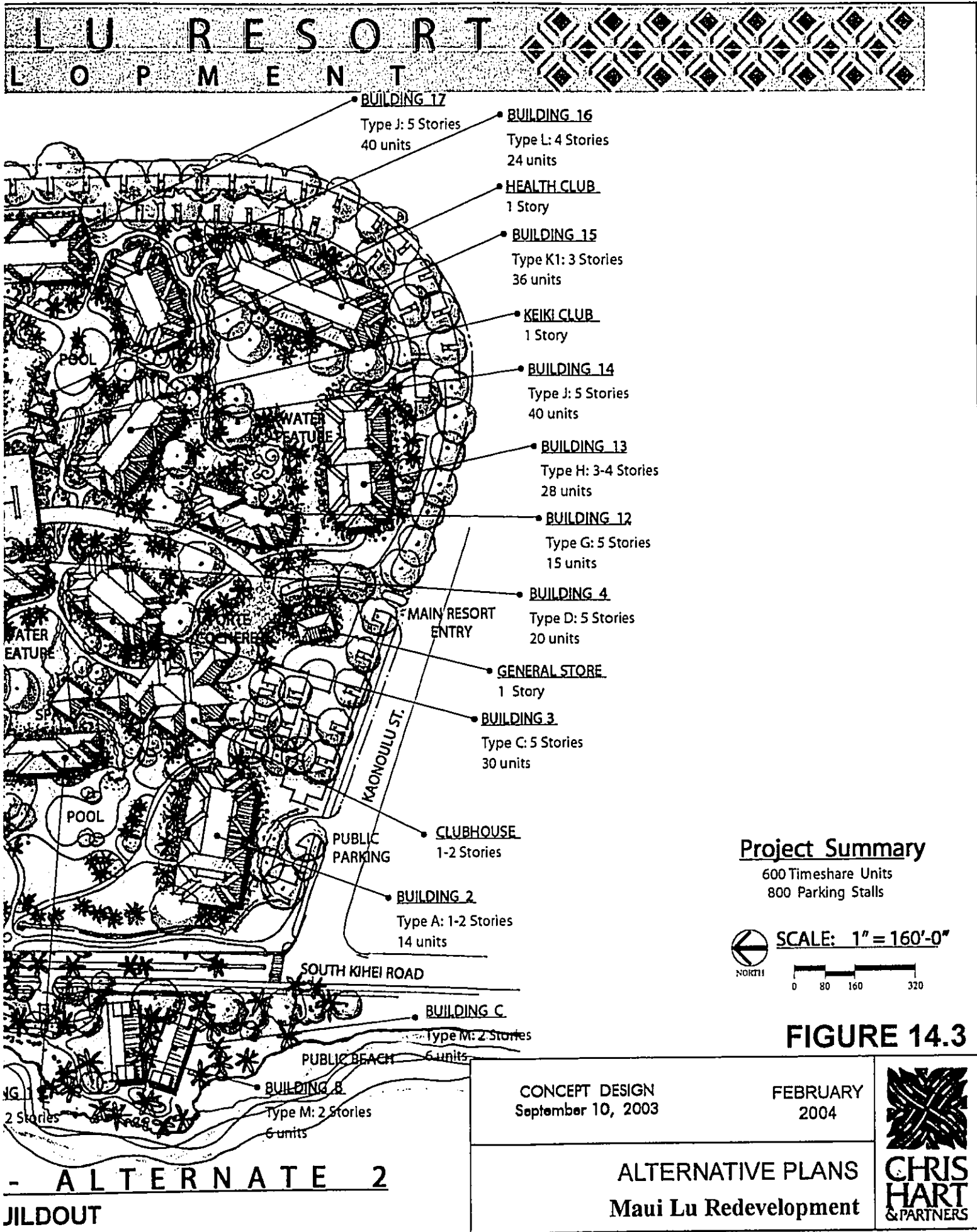
Y - ALTERNATE 1
LDOUT

| | | |
|--|------------------|---|
| CONCEPT DESIGN September 10, 2003 | FEBRUARY 2004 |  CHRIS HART & PARTNERS |
| ALTERNATIVE PLANS Maui Lu Redevelopment | | |

RECEIVED AS FOLLOWS

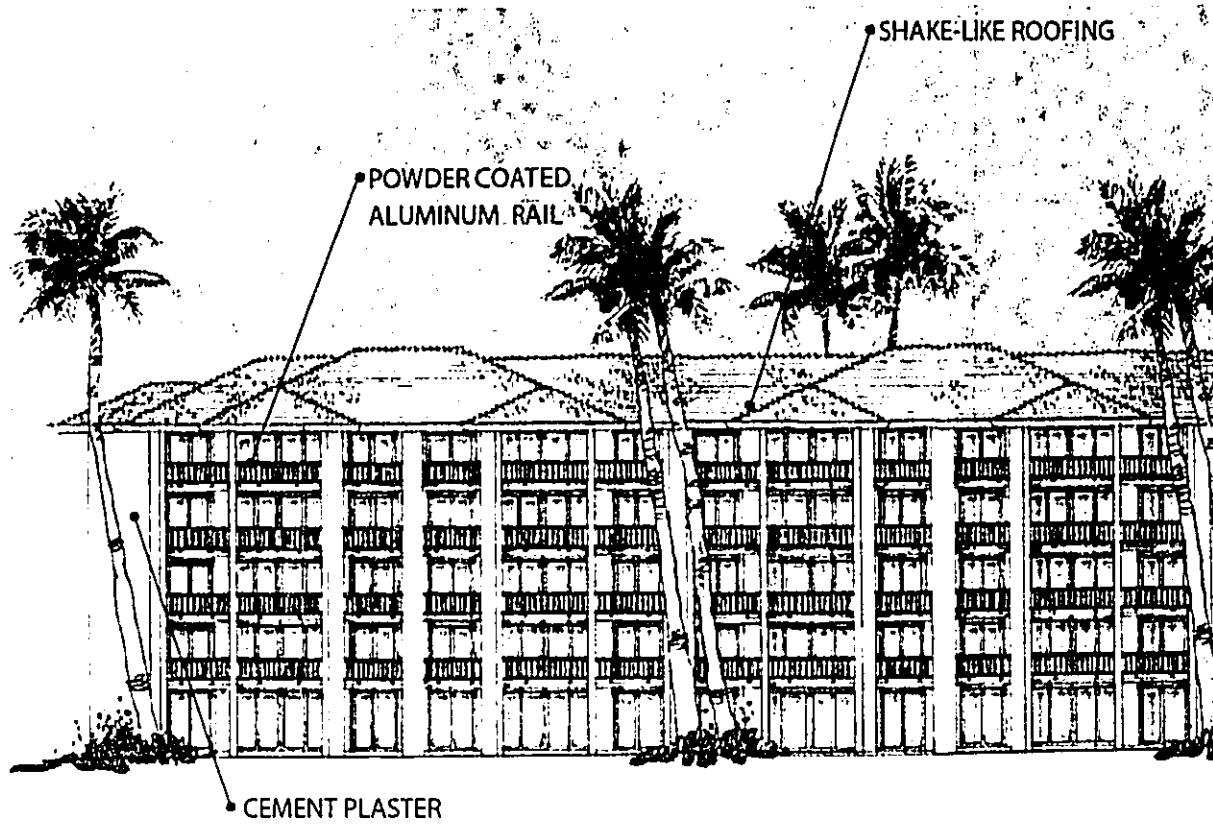


RECEIVED AS FOLLOWS



RECEIVED AS FOLLOWS

THE MAUI LULU
REDEVELOPMENT



FRONT & REAR ELEVATION

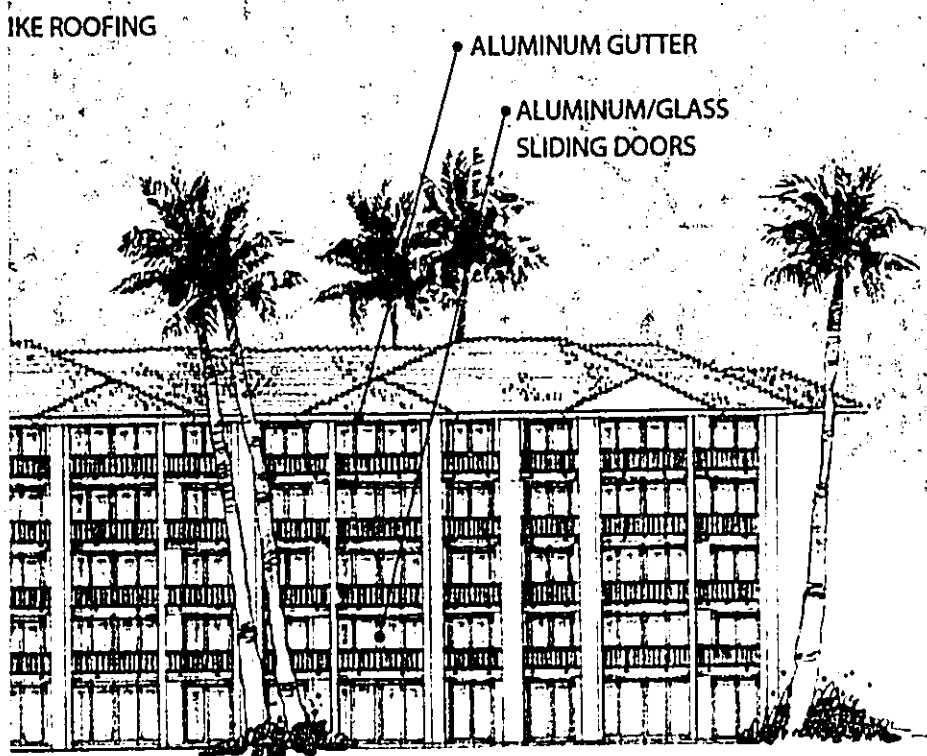
WATANABE • CHUN • IOPA • TAKAKI
ARCHITECTURE

111 Kapiolani Boulevard, Suite 1200
Honolulu, Hawaii 96813
Phone (808) 943-2443 Fax (808) 933-3290

ELEVATION STUDY - AL
INTERMEDIATE BUILDOUT

RECEIVED AS FOLLOWS

MAUI LU RESORT
DEVELOPMENT



FRONT ELEVATION

SCALE: 1/32" = 1'-0"

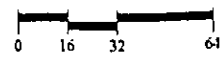


FIGURE 14.4

ALTERNATE 2
CONCEPT BUILDOUT

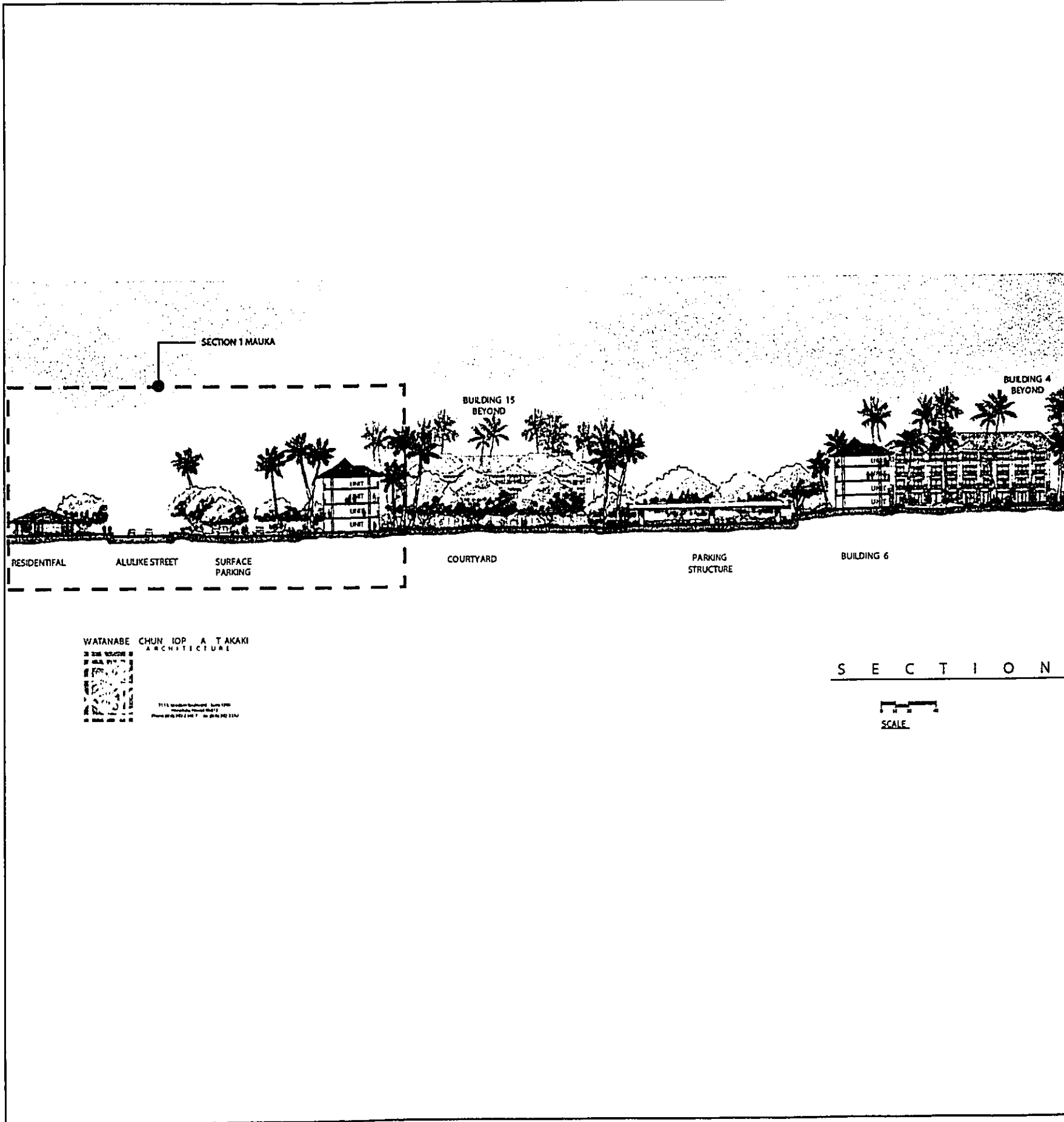
CONCEPT DESIGN
September 10, 2003

FEBRUARY
2004

ALTERNATIVE PLANS
Maui Lu Redevelopment

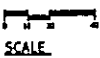


RECEIVED AS FOLLOWS



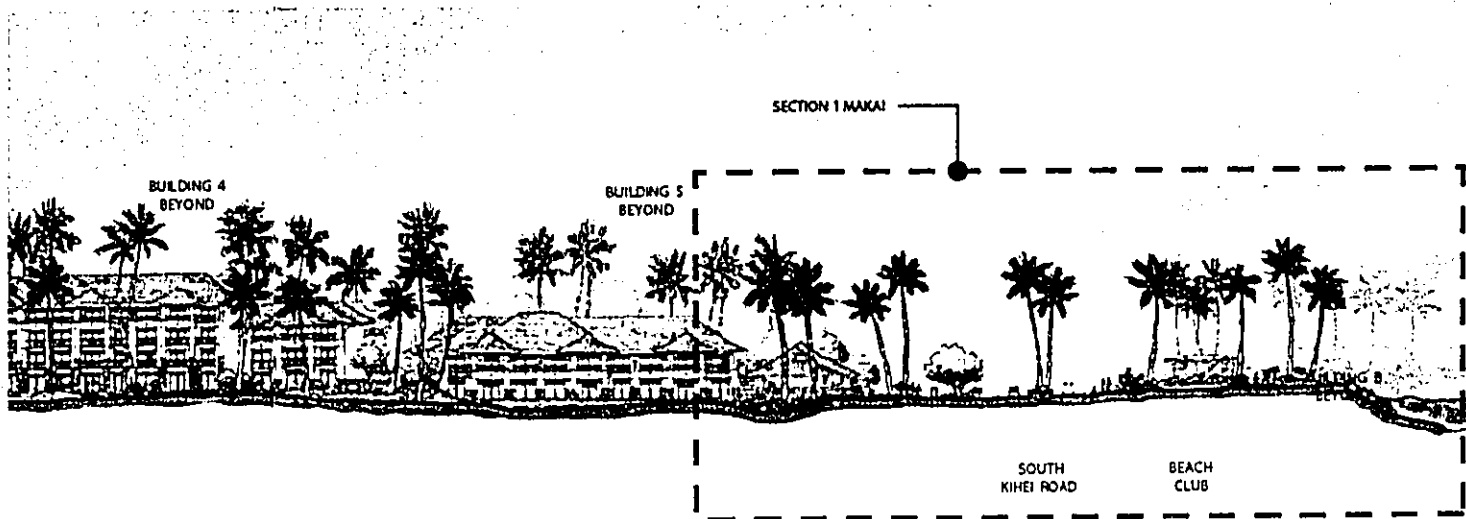
WATANABE CHUN IOP A TAKAKI
ARCHITECTURE
7111 Koolaloa Road, Suite 100
Honolulu, Hawaii 96817
Phone: (808) 251-1111 Fax: (808) 251-1111

S E C T I O N



SCALE

RECEIVED AS FOLLOWS



T I O N 1

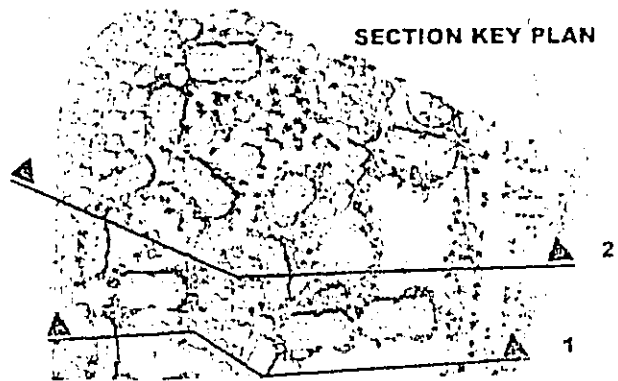

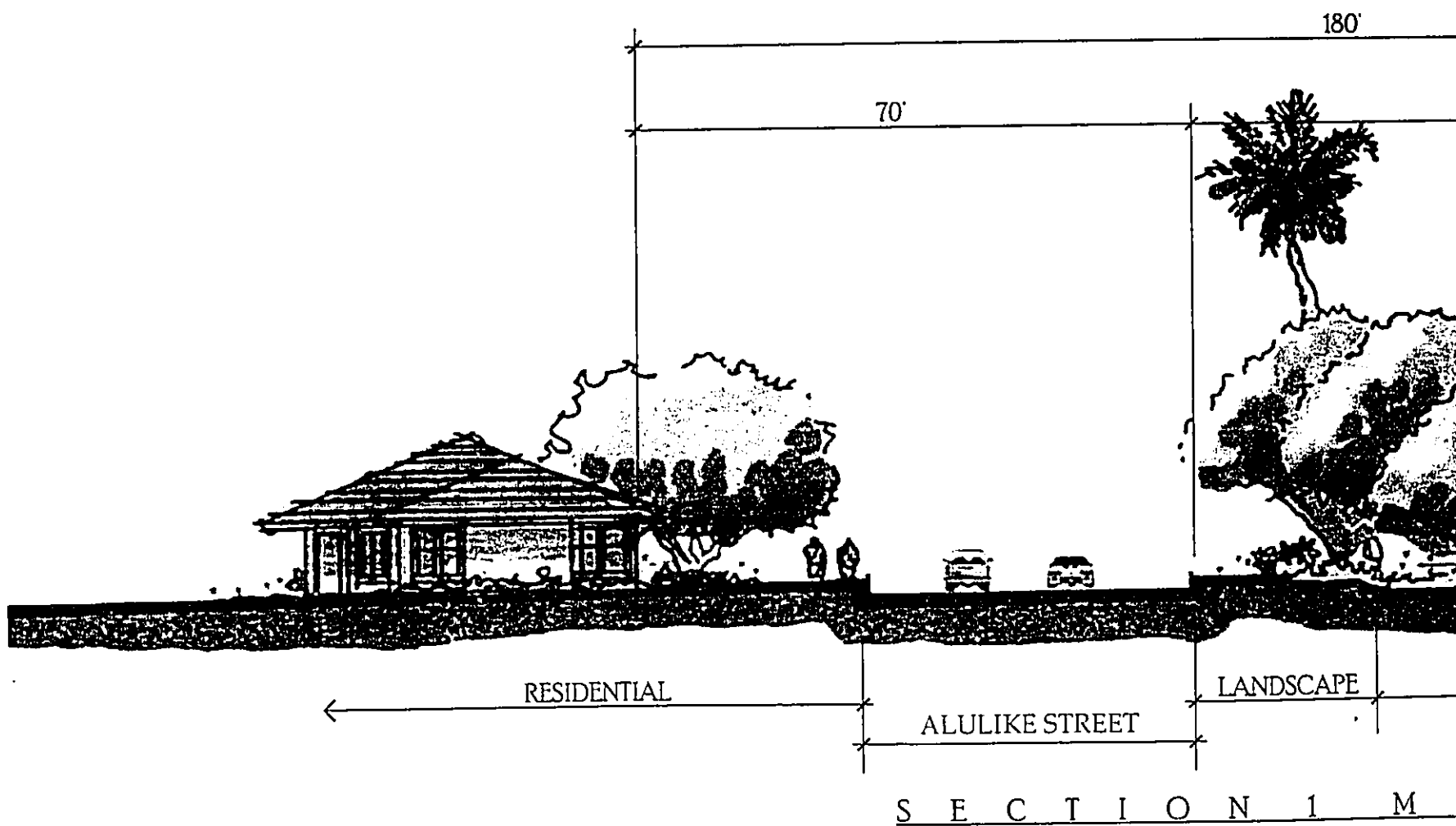


FIGURE 15.1

| | |
|--|---|
| SEPTEMBER 2004 |  |
| RESORT SITE SECTION Maui Lu Redevelopment | CHRIS HART & PARTNERS |

RECEIVED AS FOLLOWS

THE MAUI LU
REDEVELOP



WATANABE • CHUN • IOPA • TAKAKI
ARCHITECTURE



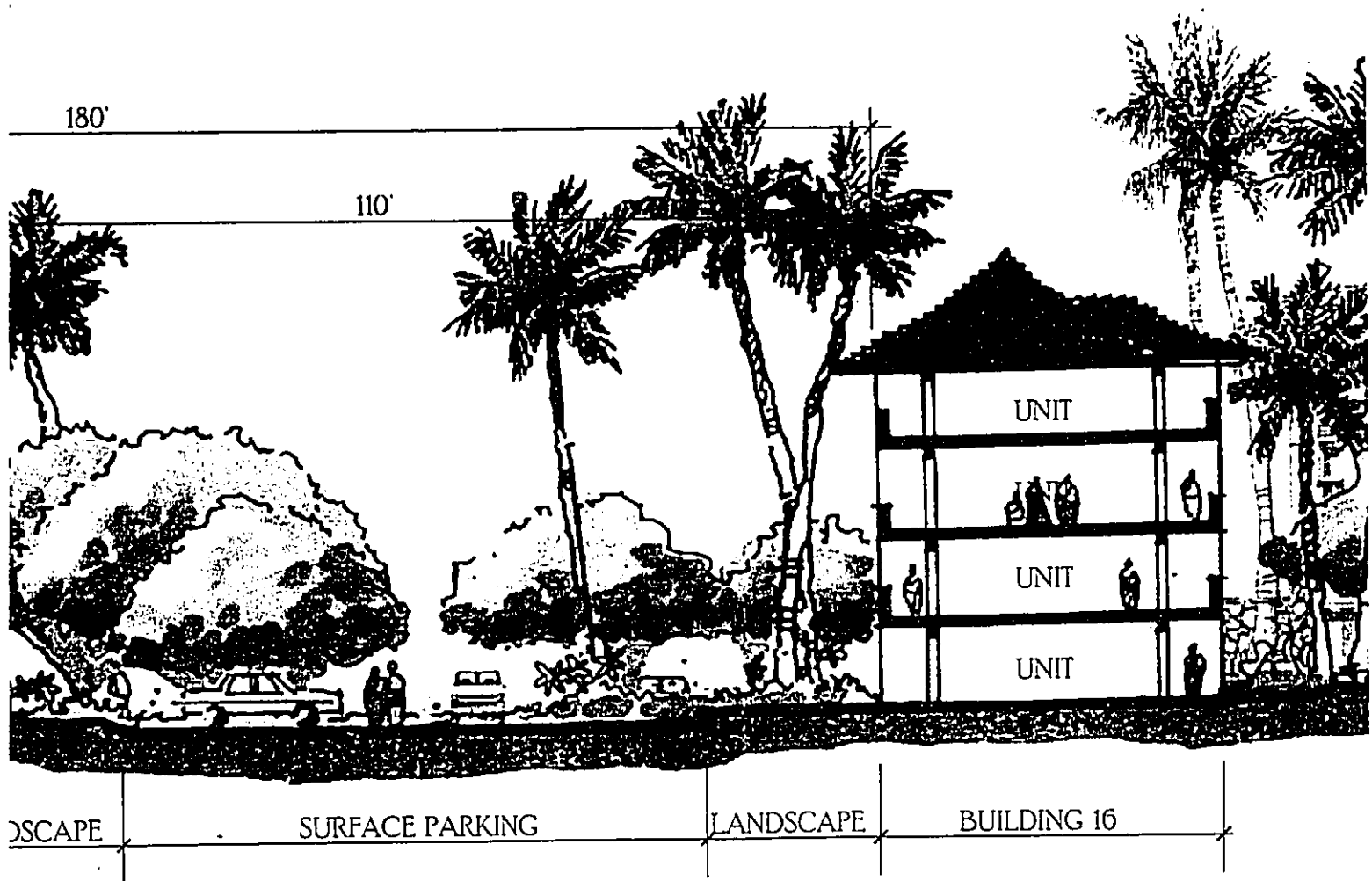
711 Kaula Street, Suite 1204
Honolulu, Hawaii 96813
Phone: 808-955-2311 Fax: 808-955-2310

RESORT SITE S
KIHEI • MAUI • HA

RECEIVED AS FOLLOWS

LU RESORT

OPMENT



1 M A U K A

FIGURE 15.2



SCALE: 1" = 20'-0"



T E S E C T I O N

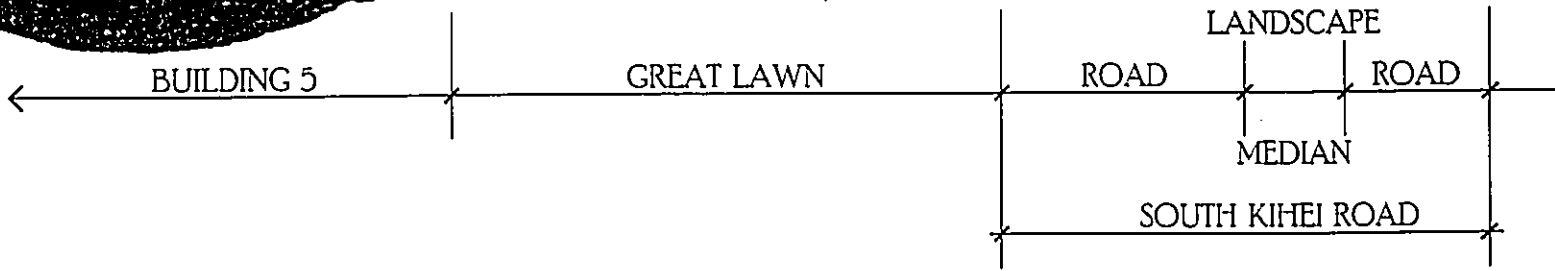
I I • H A W A I I

575 SOUTH KIHEI ROAD LLC

CONCEPT DESIGN
July 15, 2003

RECEIVED AS FOLLOWS

THE MAUI LU
REDEVELOP



SECTION 1 M

WATANABE • CHUN • IOPA • TAKAKI
ARCHITECTURE



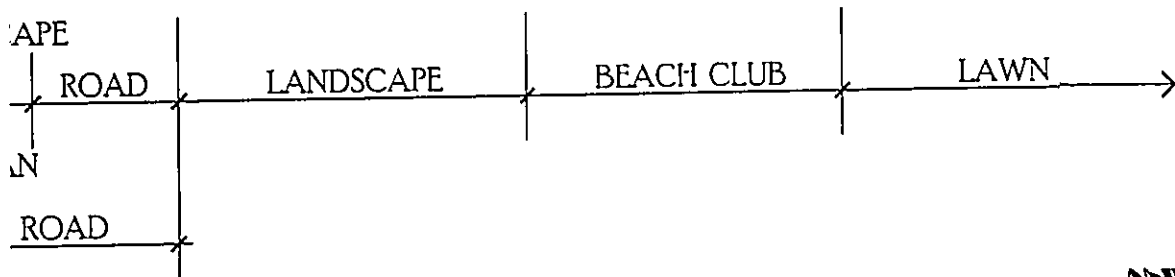
111 Kapiolani Avenue, Suite 1179
Honolulu, Hawaii 96813
Phone: 935-1712 (111) Fax: 935-1713 (111)

RESORT SITE S
KIHEI • MAUI • HA

RECEIVED AS FOLLOWS

L U R E S O R T

O P M E N T



CHRIS
HART
& PARTNERS

SCALE: 1" = 20'-0"

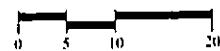


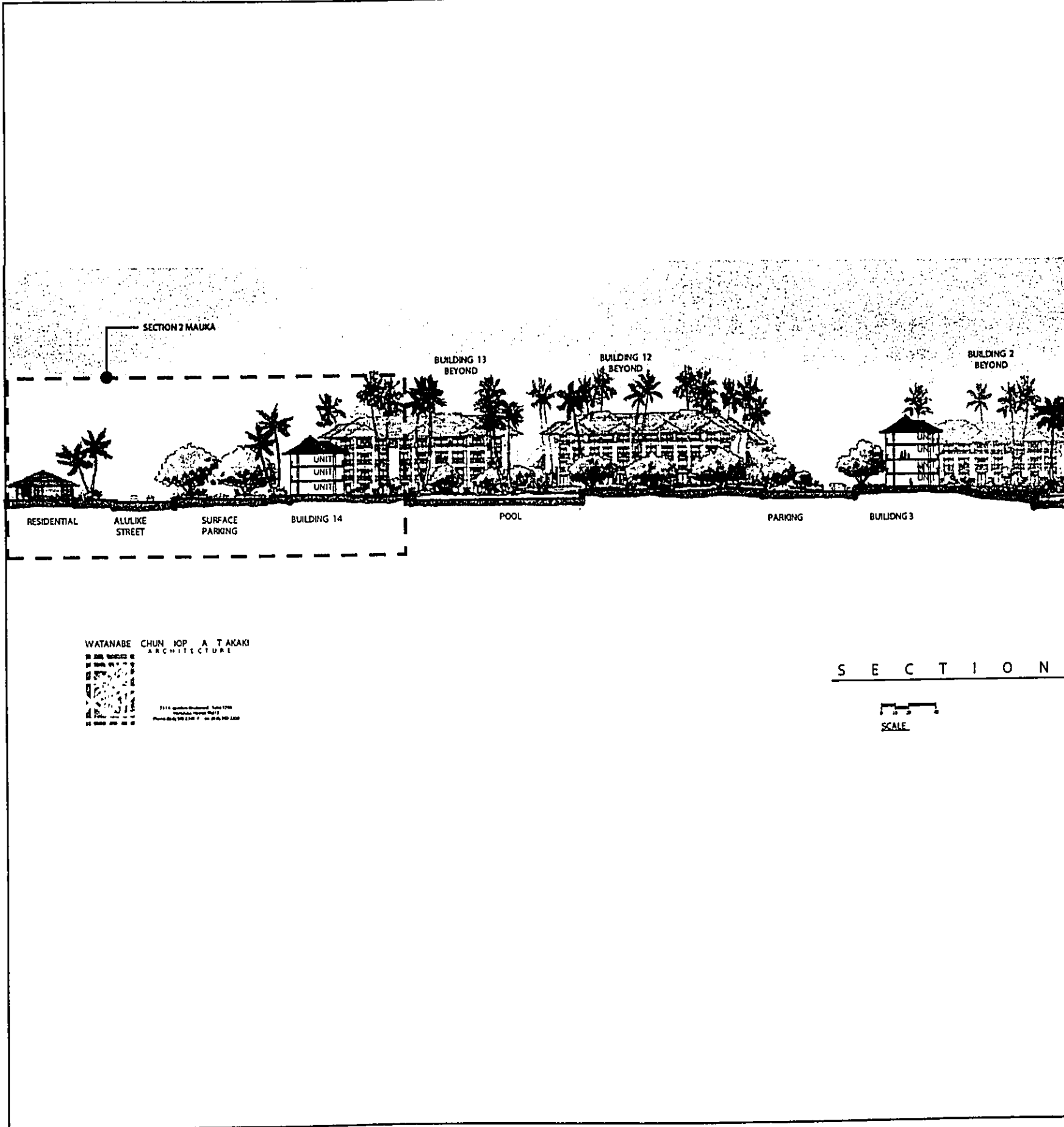
FIGURE 15.3

T E S E C T I O N
I • H A W A I I

575 SOUTH KIHEI ROAD LLC

CONCEPT DESIGN
July 15, 2003

RECEIVED AS FOLLOWS



SECTION 2 MAUKA

BUILDING 13
BEYOND

BUILDING 12
BEYOND

BUILDING 2
BEYOND

RESIDENTIAL

ALULIKE
STREET

SURFACE
PARKING

BUILDING 14

POOL

PARKING

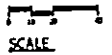
BUILDING 3

WATANABE CHUN IOP A TAKAKI
ARCHITECTURE



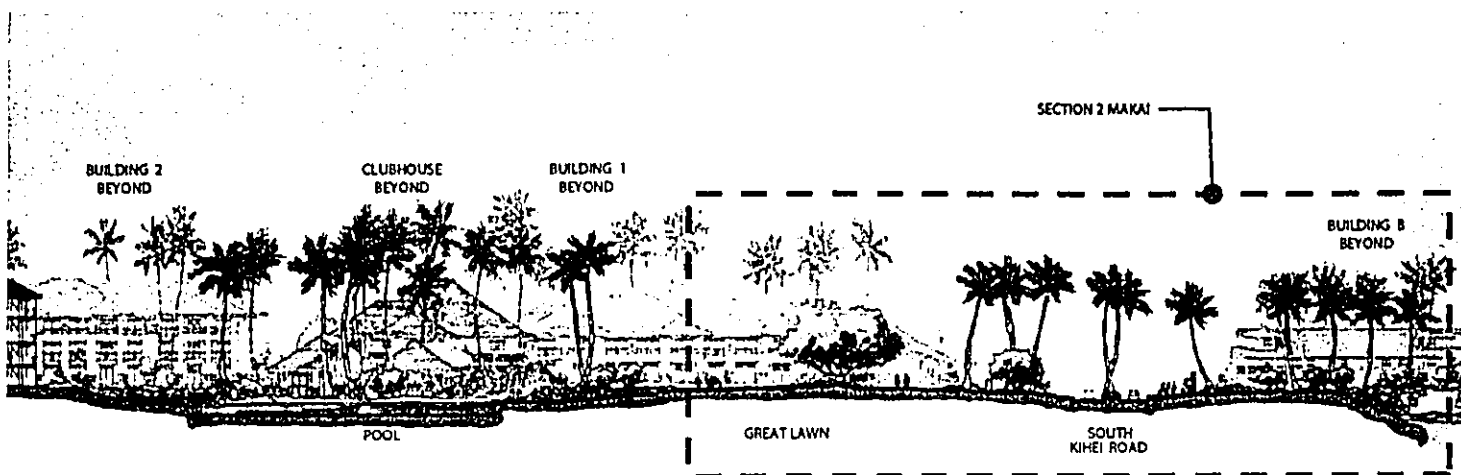
2111 Kapiolani Boulevard, Suite 1700
Honolulu, Hawaii 96815
Phone: (808) 588-2111 Fax: (808) 588-2112

S E C T I O N



SCALE

RECEIVED AS FOLLOWS



T I O N 2

1

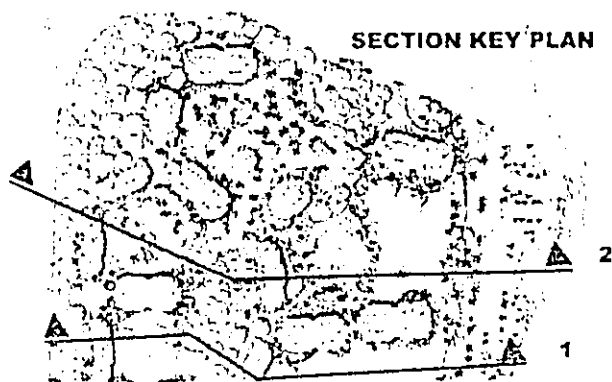

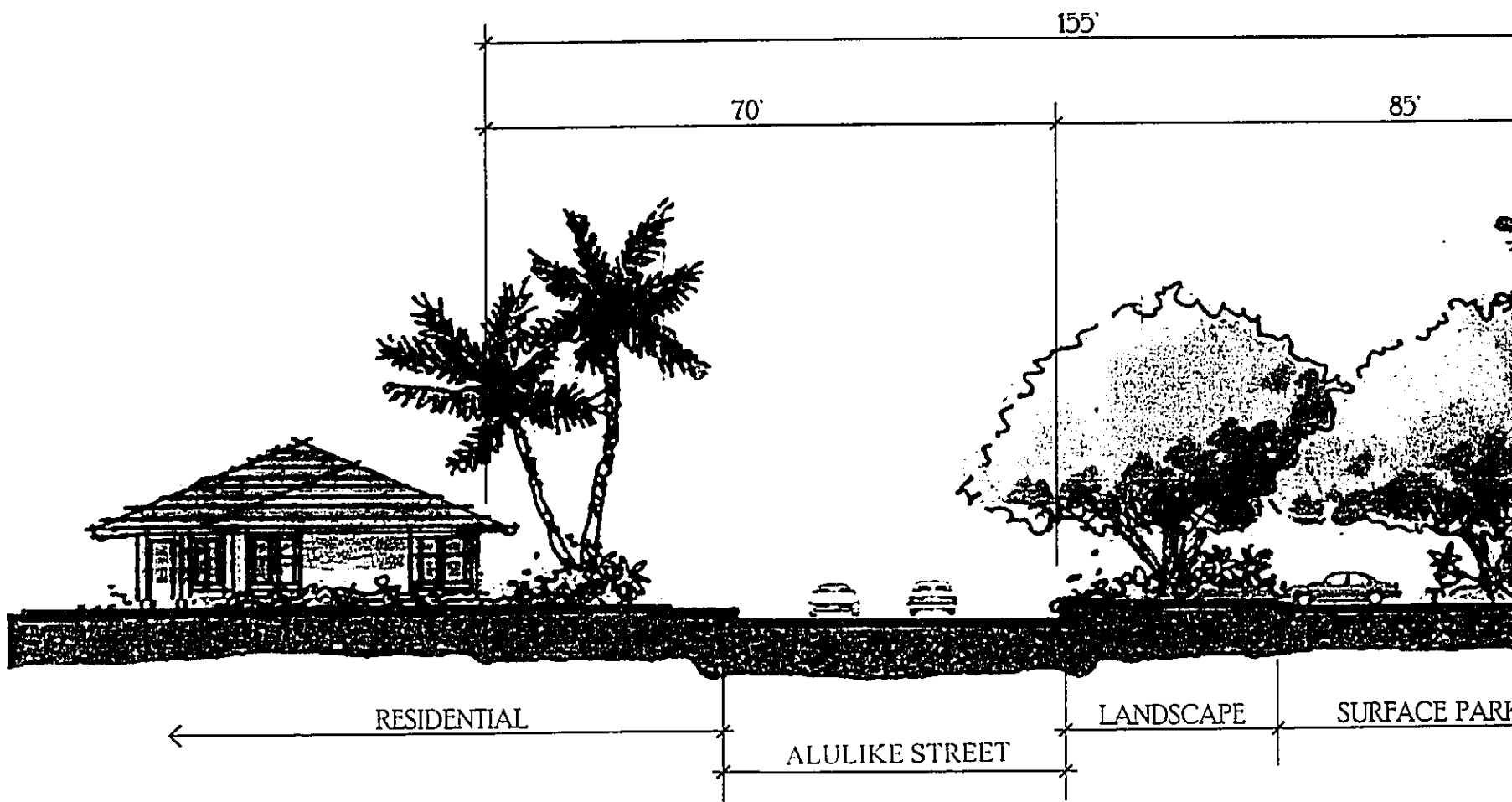


FIGURE 15.4

| | |
|--|---|
| SEPTEMBER 2004 |  |
| RESORT SITE SECTION Maui Lu Redevelopment | CHRIS HART & PARTNERS |

RECEIVED AS FOLLOWS

THE MAUI LU
REDEVELOP



SECTION 2 MA

WATANABE • CHUN • IOFA • TAKAKI
ARCHITECTURE



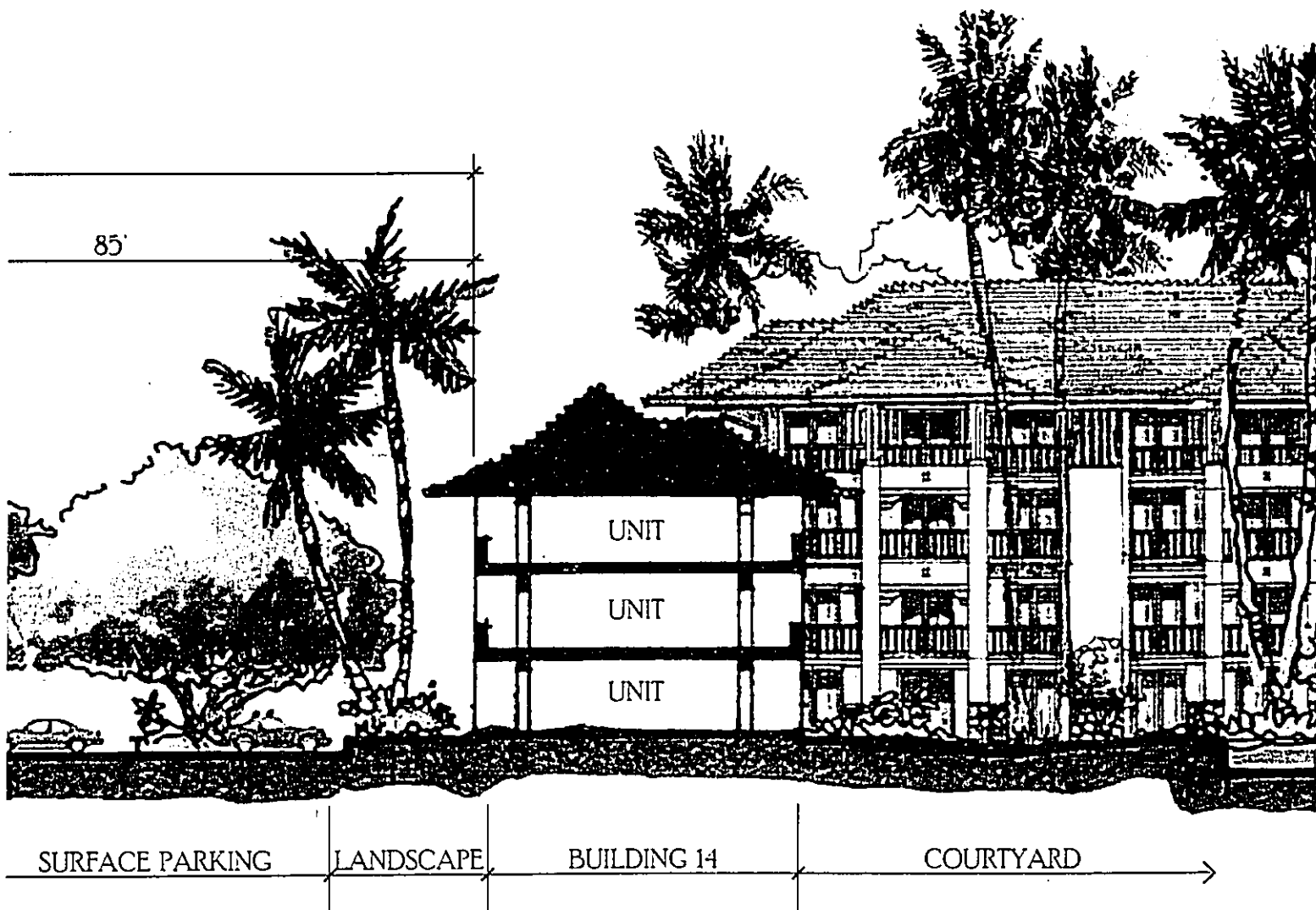
711 Kapiolani Boulevard, Suite 1200
Honolulu, Hawaii 96813
Phone: 808-955-2343 Fax: 808-955-2350

RESORT SITE S
KIHEI • MAUI • HA

RECEIVED AS FOLLOWS

LU RESORT

OPMENT



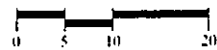
2 MAUKA



CHRIS
HART
& PARTNERS

SCALE: 1" = 20'-0"

FIGURE 15.5



T E S E C T I O N
I I • H A W A I I

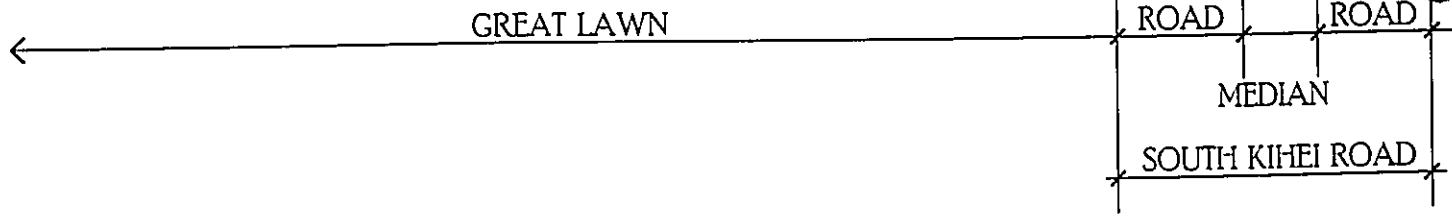
575 SOUTH KIHEI ROAD LLC

CONCEPT DESIGN
July 15, 2003

RECEIVED AS FOLLOWS

THE MAUI LU

R E D E V E L O P



S E C T I O N 2 M

WATANABE • CHUN • IOPA • TAKAKI
ARCHITECTURE



811 Westwood Boulevard, Suite 1200
Westwood, California 90024
Phone: 310 992 2251 Fax: 310 992 2250

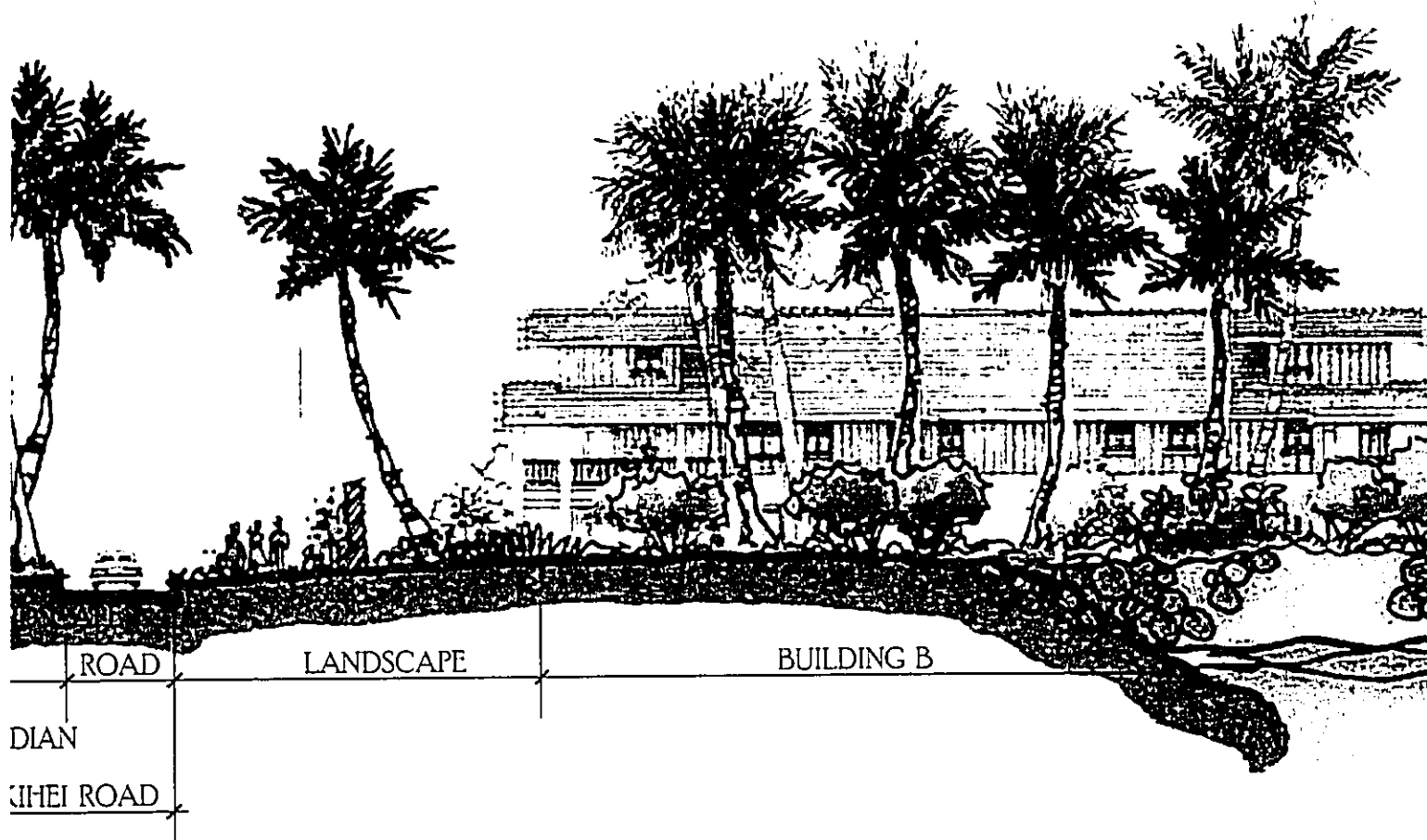
R E S O R T S I T E S

K I H E I • M A U I • H A

RECEIVED AS FOLLOWS

LURESORT

DEVELOPMENT



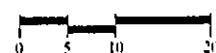
2 M A K A I



CHRIS
HART
& PARTNERS

SCALE: 1" = 20'-0"

FIGURE 15.6



T E S E C T I O N
I I • H A W A I I

575 SOUTH KIHEI ROAD LLC

CONCEPT DESIGN
July 15, 2003

RECEIVED AS FOLLOWS

MAUI LU REDEVELOPMENT

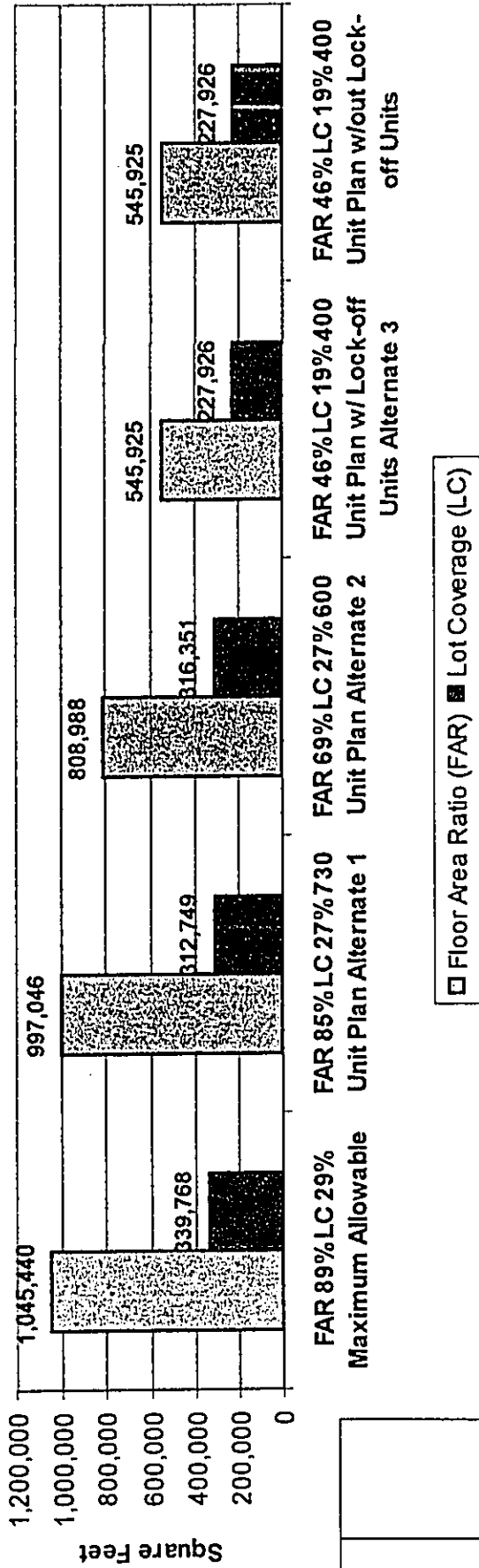


FIGURE 16.1

JULY
2004

DENSITY ANALYSIS
Maui Lu Redevelopment

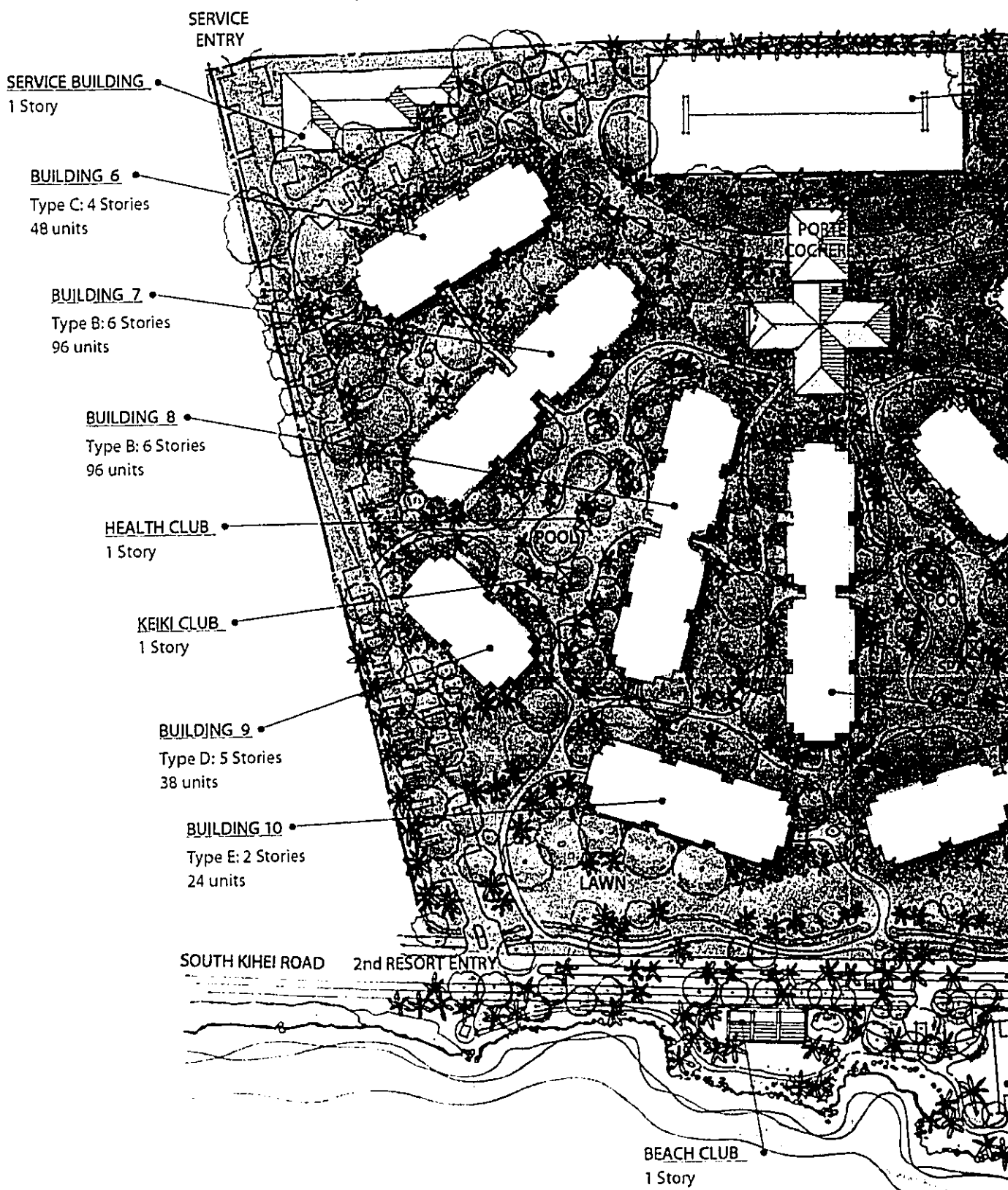


CHRIS
HART
& PARTNERS

RECEIVED AS FOLLOWS



THE MAUI LU REDEVELOP



WATANABE • CHUN • IOPA • TAKAKI
ARCHITECTURE

RESORT SITE PLAN - AL K I H E I M A U I

11/15/2000, Revised, 2/16/2001
11/15/2000, 11/15/2001, 11/15/2002

RECEIVED AS FOLLOWS

LU RESORT DEVELOPMENT

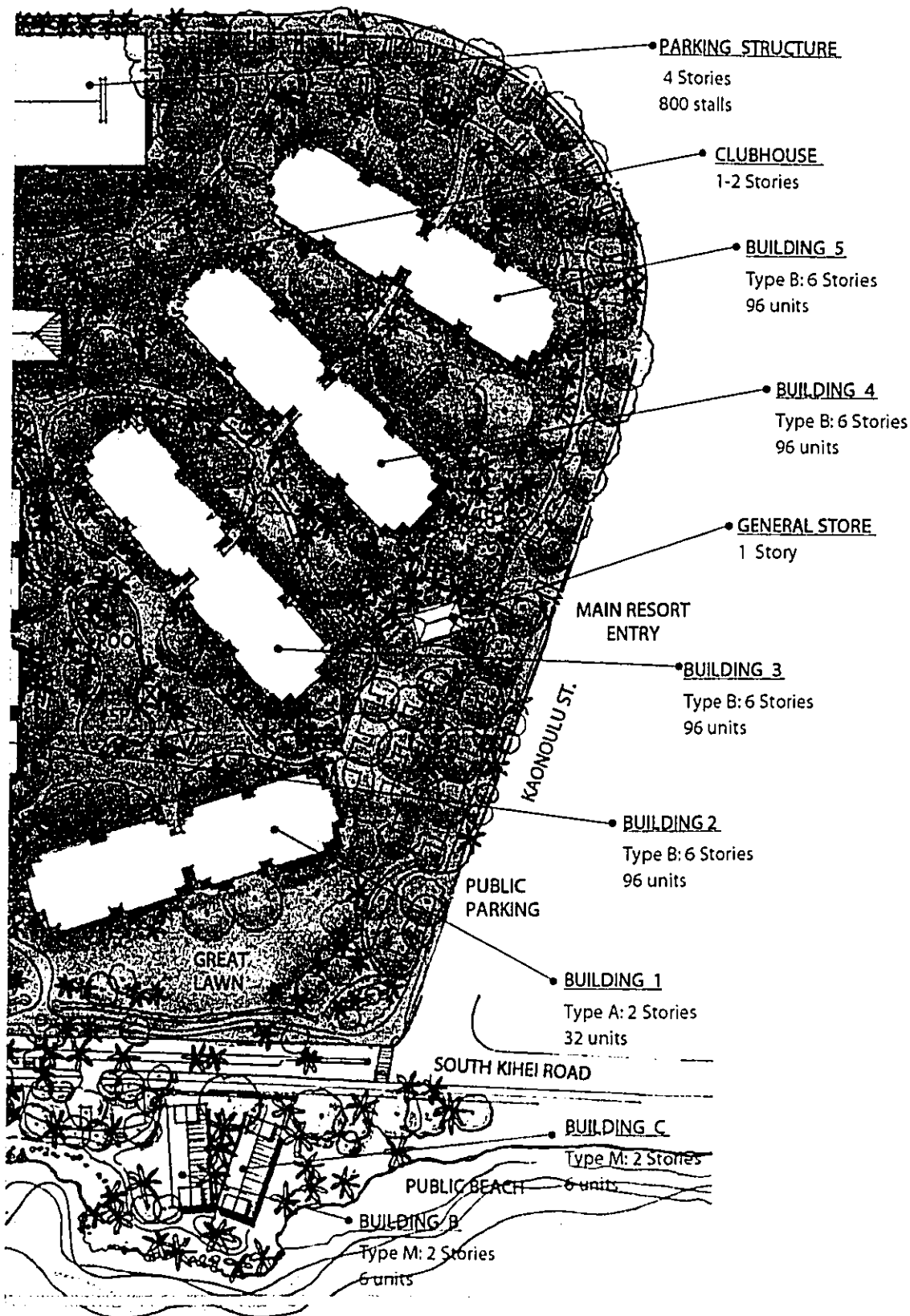


FIGURE 16.2
ALTERNATE 1

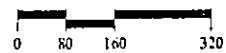


Project Summary

730 Timeshare Units
975 Parking Stalls



SCALE: 1" = 160'-0"



1 - ALTERNATE 1
UIHAWAII

575 SOUTH KIHEI ROAD LLC

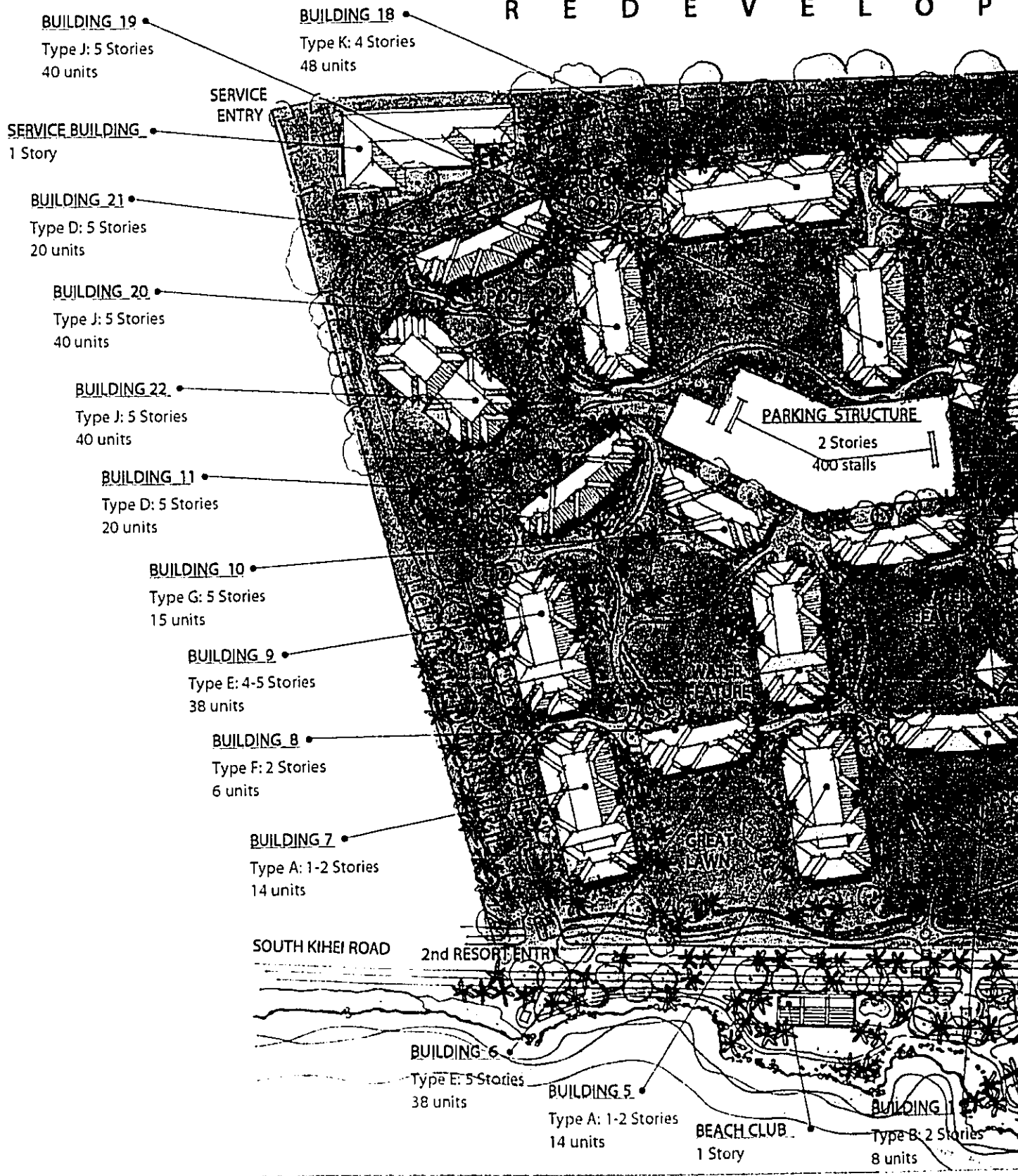
CONCEPT DESIGN
September 10, 2003

RECEIVED AS FOLLOWS



THE MAUI LU

R E D E V E L O P



WATANABE • CHUN • IOPA • TAKAKI
ARCHITECTS

RESORT SITE PLAN - ALL

K I H E I M A U I

RECEIVED AS FOLLOWS

U RESORT

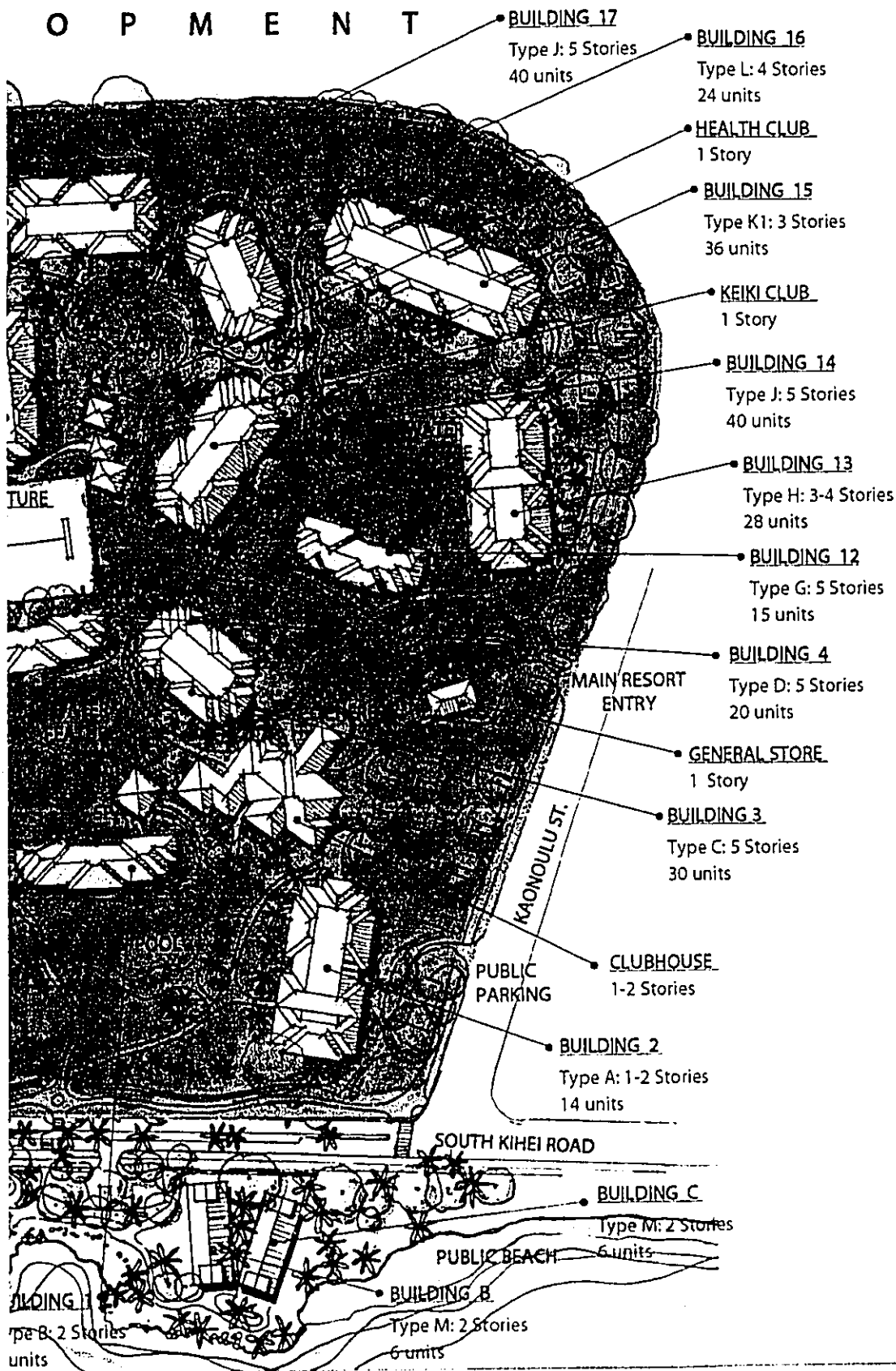


FIGURE 16.3
ALTERNATE 2

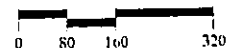


Project Summary

600 Timeshare Units
800 Parking Stalls



SCALE: 1" = 160'-0"



- ALTERNATE 2

U I H A W A I I

575 SOUTH KIHEI ROAD LLC

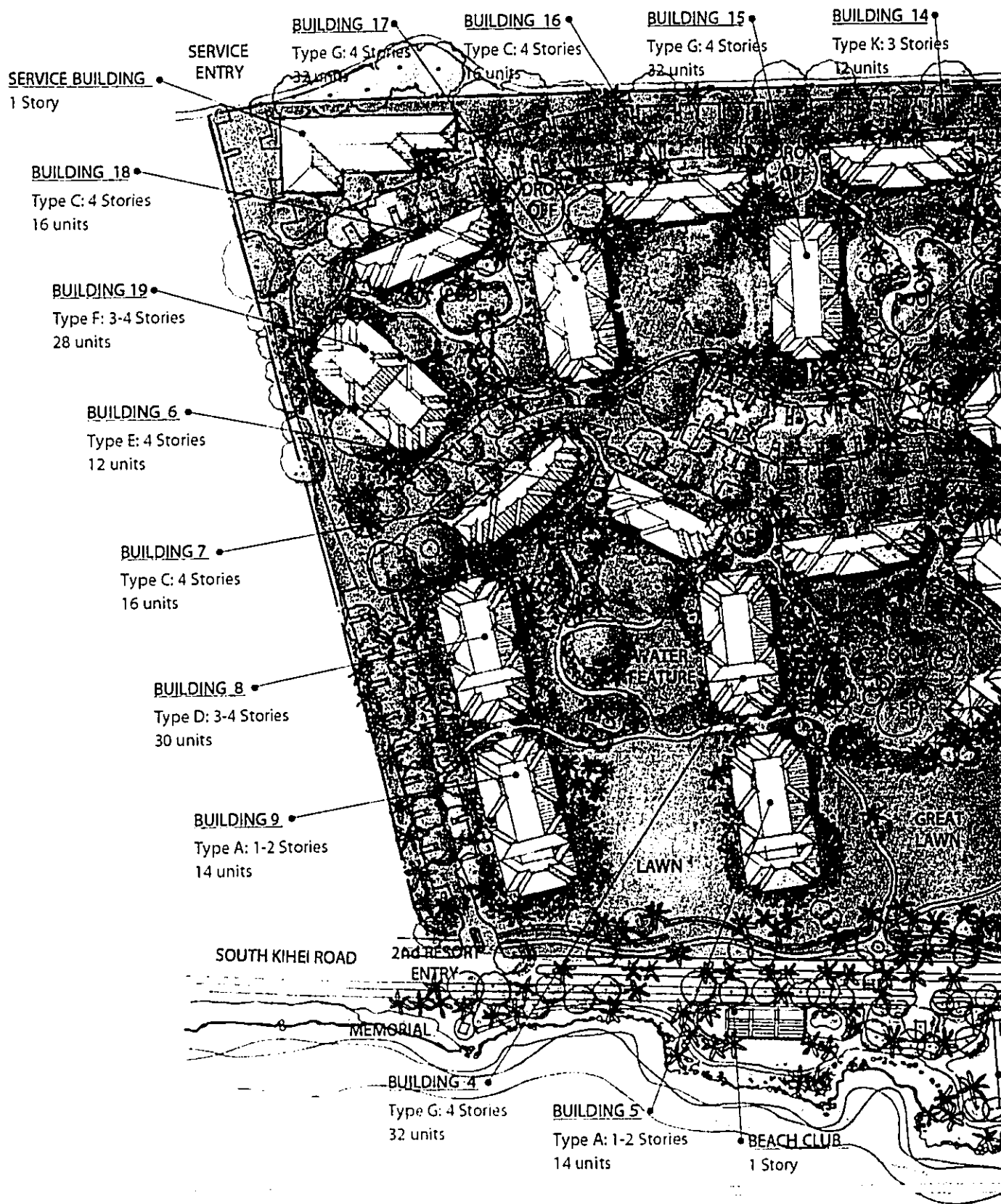
CONCEPT DESIGN
September 10, 2003

RECEIVED AS FOLLOWS



T H E M A U I L U

R E D E V E L O P M



WATANABE • CHUN • IOPA • TAKAKI
ARCHITECTURE

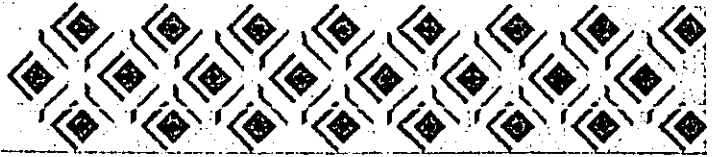
R E S O R T S I

K I H E I • M A U I •

1111 Kalia Road, Suite 1111
Honolulu, HI 96813
Phone: (808) 943-1111

RECEIVED AS FOLLOWS

U R E S O R T



O P M E N T

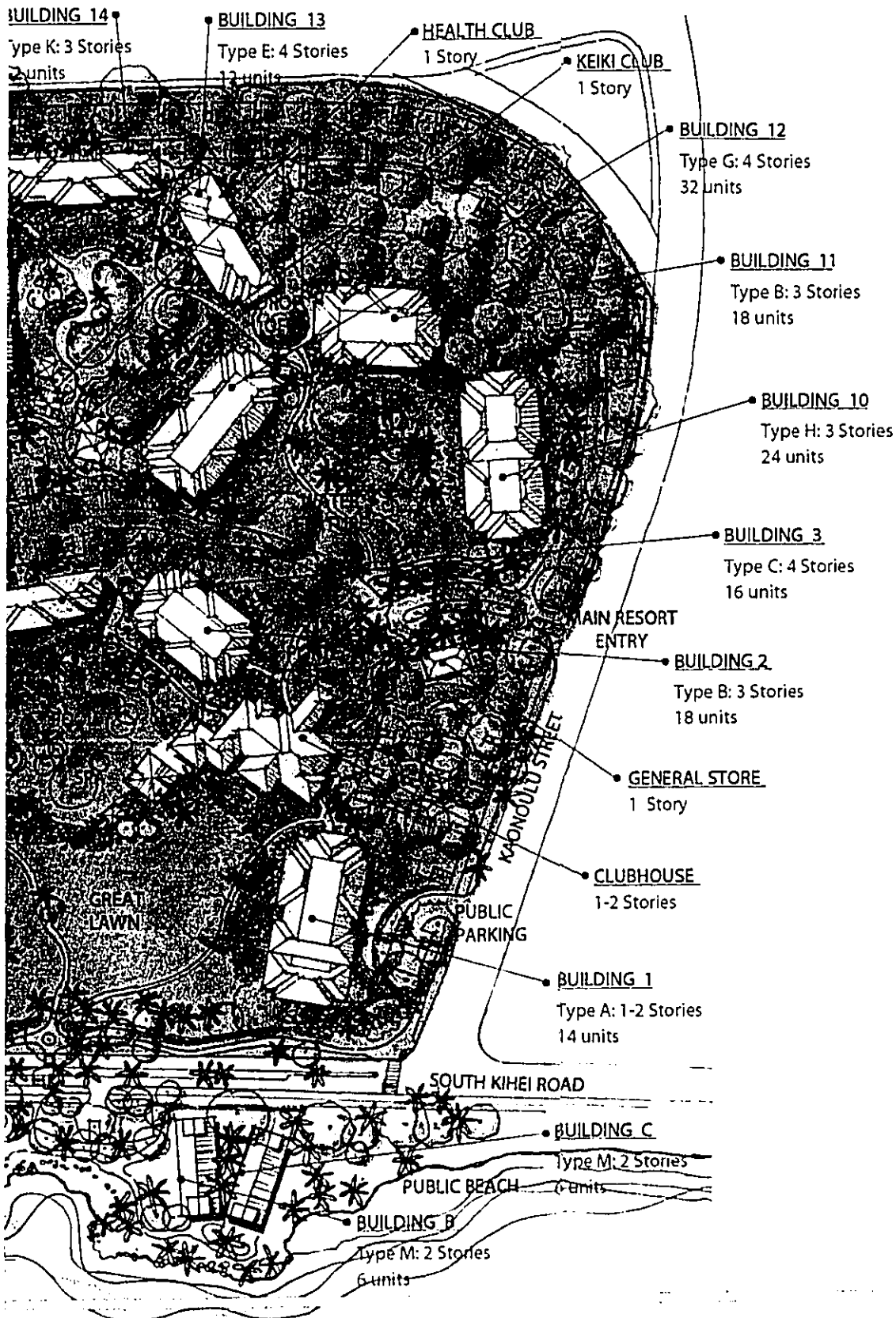


FIGURE 16.4
ALTERNATE 3

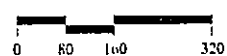


Project Summary

400 Timeshare Units
582 Parking Stalls



SCALE: 1" = 160'-0"



S I T E P L A N

U I • H A W A I I

575 SOUTH KIHEI ROAD LLC

CONCEPT DESIGN
September 10, 2003

APPENDICES

APPENDIX A
Ownership Documents



| | |
|--------------------|---|
| TMK: 2390010860000 | Alt. TMK: |
| Domain: | Type: PAR |
| Status: EXST | Display Legal Go to GIS Map |

| Parcel Master Address | | | | | | |
|-----------------------|-------|--------|-------------|------|----|-------|
| Address | Frac. | Prefix | Street Name | Type | PD | Suite |
| 575 | | S | KIHEI | RD | 5B | |

| Other Addresses | | |
|-------------------|--------|---------------|
| Address | Alias | Origin |
| 575 S KIHEI RD 5B | MASTER | STRUCTURE |
| 575 S KIHEI RD 5B | MASTER | STRUCTURE |
| 575 S KIHEI RD 5B | MASTER | STRUCTURE |
| 575 S KIHEI RD 5B | MASTER | STRUCTURE |
| 575 S KIHEI RD 5B | MASTER | STRUCTURE |
| 575 S KIHEI RD 5B | MASTER | STRUCTURE |
| 575 S KIHEI RD 5B | MASTER | STRUCTURE |
| 575 S KIHEI RD 5B | MASTER | STRUCTURE |
| 575 S KIHEI RD 5B | MASTER | STRUCTURE |
| 575 S KIHEI RD 5B | MASTER | STRUCTURE |
| 575 S KIHEI RD 5B | MASTER | ESTABLISHMENT |

| | | |
|---------------|-----------|----------------|
| Tract: | Block: | Lot: |
| Subdivision: | | |
| Section: | Township: | Range: |
| Recorded No.: | | Recorded Date: |

Owner(s)
 Name: 575 SOUTH KIHEI ROAD LLC
 Address: 5371 WILSHIRE BLVD STE 210
 LOS ANGELES, CA, 90036
 Phone:
 E-Mail:

| Zone Code | Zone Description | Ordinance No. |
|-----------|----------------------------|---------------|
| URBAN | | |
| H-1 | HOTEL DISTRICT (2 STORIES) | 8-1.7 |
| H-M | HOTEL DISTRICT (6 STORIES) | 8-1.7 |

APPENDIX B
Zoning and Flood Confirmation

JAMES "KIMO" APANA
Mayor

JOHN E. MIN
Director

CLAYTON I. YOSHIDA
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

ZONING AND FLOOD INFORMATION REQUEST FORM

APPLICANT _____

PROJECT NAME _____

ADDRESS _____

TMK: 3-9-001:083

FOR COUNTY USE ONLY

ZONING INFORMATION

STATE LAND USE URBAN COMMUNITY PLAN HOTEL, PARK

COUNTY ZONING H-1 (HOTEL DISTRICT), PARK DISTRICT

FLOOD INFORMATION

FLOOD HAZARD AREA * ZONE V10, V18

BASE FLOOD ELEVATION 10'-11" mean sea level, 1929 National Geodetic Vertical Datum or for Flood Zone A0, FLOOD DEPTH N/A feet.

FLOODWAY [] Yes or [X] No

FLOOD DEVELOPMENT PERMIT IS REQUIRED [X] Yes or [] No

* For flood hazard area zones B or C; a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

[Signature]
Zoning Administration and Enforcement Division

7/10/03
Date

AS AARON SHINMOTO
Planning Program Administrator

S:\ZONING\ZONE_CHK\DCS\FLDZNING.REG 3/00

JAMES "KIMO" APANA
Mayor

JOHN E. MIN
Director

CLAYTON I. YOSHIDA
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

ZONING AND FLOOD INFORMATION REQUEST FORM

APPLICANT _____

PROJECT NAME _____

ADDRESS _____

TMK: 3-9-001:086

FOR COUNTY USE ONLY

ZONING INFORMATION

STATE LAND USE URBAN COMMUNITY PLAN HOTEL

COUNTY ZONING H-1, H-M (HOTEL DISTRICTS)

FLOOD INFORMATION

FLOOD HAZARD AREA * ZONE C, A4, V10, A0, B

BASE FLOOD ELEVATION 9'-10' mean sea level, 1929 National Geodetic Vertical Datum or for Flood Zone A0, FLOOD DEPTH 1 feet.

FLOODWAY [] Yes or [X] No

FLOOD DEVELOPMENT PERMIT IS REQUIRED [X] Yes or [] No

* For flood hazard area zones B or C; a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

[Signature]
Zoning Administration and Enforcement Division

7/15/03
Date

For: AARON SHINMOTO
Planning Program Administrator

S:\ZONING\ZONE_CHK\DOCS\FLDZINING.REQ 3/00

JAMES "KIMO" APANA
Mayor

JOHN E. MIN
Director

CLAYTON I. YOSHIDA
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

ZONING AND FLOOD INFORMATION REQUEST FORM

APPLICANT _____

PROJECT NAME _____

ADDRESS _____

TMK: 3-9-001:120

FOR COUNTY USE ONLY

ZONING INFORMATION

STATE LAND USE URBAN COMMUNITY PLAN LOTEL, PARK

COUNTY ZONING PARK DISTRICT

FLOOD INFORMATION

FLOOD HAZARD AREA * ZONE V18

BASE FLOOD ELEVATION 11' mean sea level, 1929 National Geodetic
Vertical Datum or for Flood Zone A0, FLOOD DEPTH NA feet.

FLOODWAY [] Yes or [X] No

FLOOD DEVELOPMENT PERMIT IS REQUIRED [X] Yes or [] No

* For flood hazard area zones B or C; a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

[Signature]
Zoning Administration and Enforcement Division
AARON SHINMOTO
Planning Program Administrator

7/15/03
Date

S:\ZONING\ZONE_CHK\DCCS\FLDZNING.REQ 3/00

APPENDIX C
Cultural Impact Assessment

SCS PROJECT 375-1

**A CULTURAL IMPACT ASSESSMENT,
OF A PROPERTY PARCEL LOCATED IN KĪHEI,
KA'ONO'ULU AHUPUA'A, WAILUKU DISTRICT,
MAUI ISLAND, HAWAII
[TMK: 3-9-1: 83, 86, AND 120]**

Prepared by:
Leann McGerty, B.A.
And
Robert L. Spear, Ph.D.
July 2003

Prepared for:
Michael Wright & Associates, Inc

TABLE OF CONTENTS

TABLE OF CONTENTS..... II

LIST OF FIGURES II

ABSTRACT..... 1

INTRODUCTION 2

METHODOLOGY 5

 ARCHIVAL RESEARCH..... 5

 CONSULTATION..... 5

PROJECT AREA AND VICINITY 6

CULTURAL HISTORICAL CONTEXT 6

 PAST POLITICAL BOUNDARIES 6

 TRADITIONAL SETTLEMENT PATTERNS 8

 WESTERN CONTACT..... 11

 MĀHELE..... 13

CULTURAL ASSESSMEMNT 15

REFERENCES CITED..... 19

LIST OF FIGURES

Figure 1: USGS Maalaea Quadrangle Showing Project Area. 3

Figure 2: Proposed Redevelopment of the Project Area..... 4

Figure 3: Tax Map Key [TMK] 3-9-01 Showing Project Area. 7

Figure 4: Fishponds in the Vicinity of the Project Area. 10

Figure 5: Trails from Coastal Regions to Upcountry Areas. 12

Figure 6: Land in the Project Area Vicinity in Sugar Cane Production in the 1960s..... 16

Figure 7: 1929 Map Showing the Kīhei Landing. 17

ABSTRACT

At the request Michael Wright & Associates, Inc., Scientific Consultant Services, Inc. (SCS) conducted a Cultural Impact Assessment, of a property parcel (TMK: 3-9-1: 83, 86, and 120) located in Kihei, Ka'ono'ulu Ahupua'a, Wailuku District, Maui Island. The project area consisted of the grounds of the Maui Lu Hotel where a town-house development is proposed.

The objective of this Cultural Impact Assessment is to satisfy current requirements for a Special Management Area permit. Previous archaeological studies on the property revealed layers of fill on original marshy land with no cultural deposits. Document and informant information established that the project area was previously marshland that had been converted to a piggery until it was sold and developed in the 1960s. SCS consulted with community members and groups, including the Office of Hawaiian Affairs, Kihei Community Association, Kihei Canoe Club, Maui/Lāna'i Islands Burial Council, Central Maui Hawaiian Civic Club concerning any traditional activities that may have been associated with this land parcel. None were identified.

Based on community response, archival research, and the results of previous archaeological investigations within the project area, it is reasonable to conclude that, (pursuant to Act 50), the exercise of native Hawaiian rights related to gathering, access, or other customary activities will not be affected and that there will be no adverse effect upon any ethnic practices or beliefs due to construction on the Maui Lu land parcel.

INTRODUCTION

At the request of Michael Wright & Associates, Inc, Scientific Consultant Services, Inc. (SCS) conducted a Cultural Impact Assessment, on a piece of property (TMK: 3-9-1: 83, 86, and 120) located in Kihei, Ka'ono'ulu Ahupua'a, Wailuku District, Maui Island (Figure 1). The current proposal is to raze the present Maui Lu Hotel and construct townhouses on the property in phases over a five-year period (Figure 2). The objective of this Cultural Assessment is to satisfy current requirements for a Special Management Area permit.

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. It was decided that the process should identify 'anthropological' cultural practices, rather than 'social' cultural practices. 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:

RECEIVED AS FOLLOWS

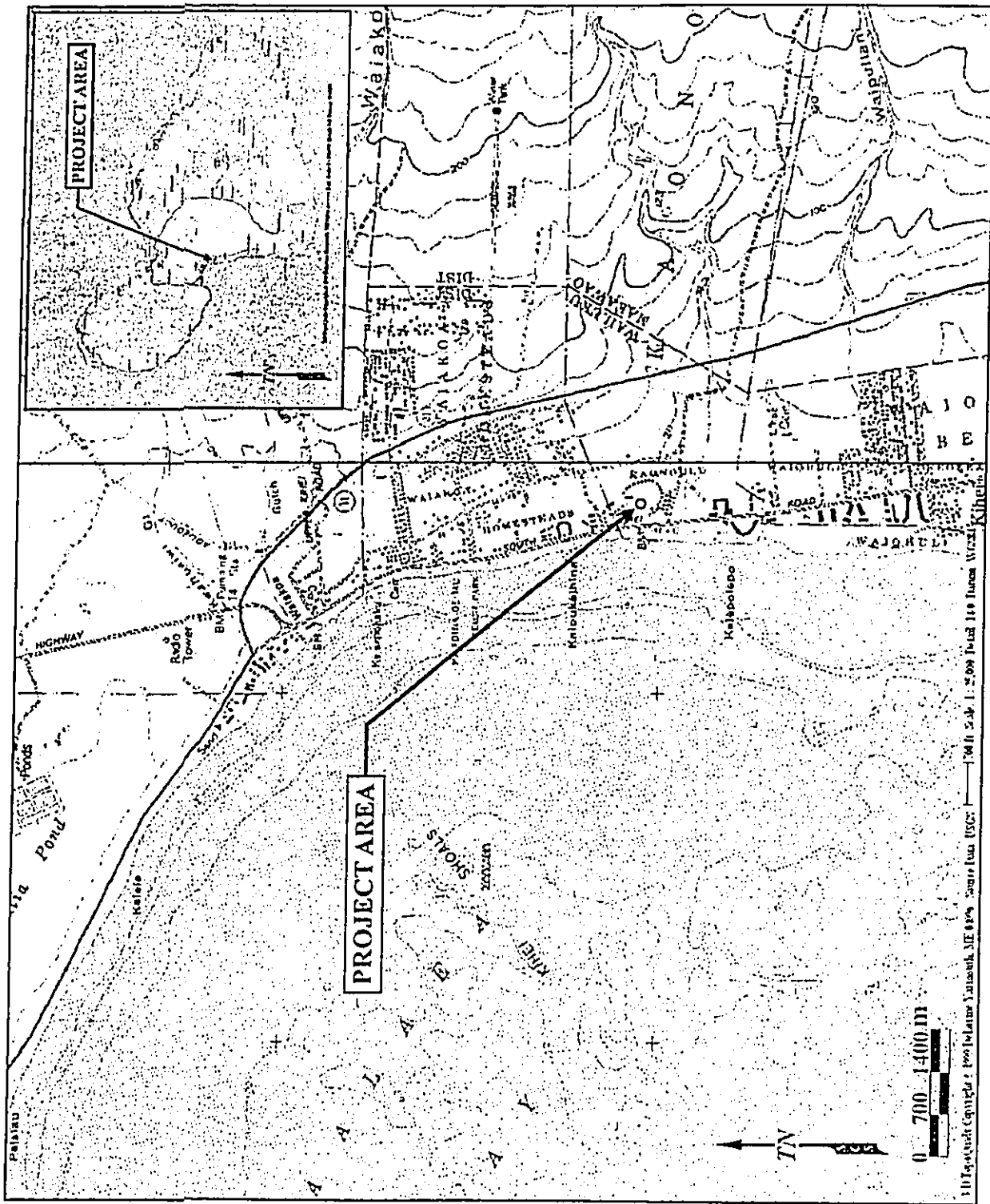


Figure 1: USGS Maalaea Quadrangle Showing Project Area.

RECEIVED AS FOLLOWS

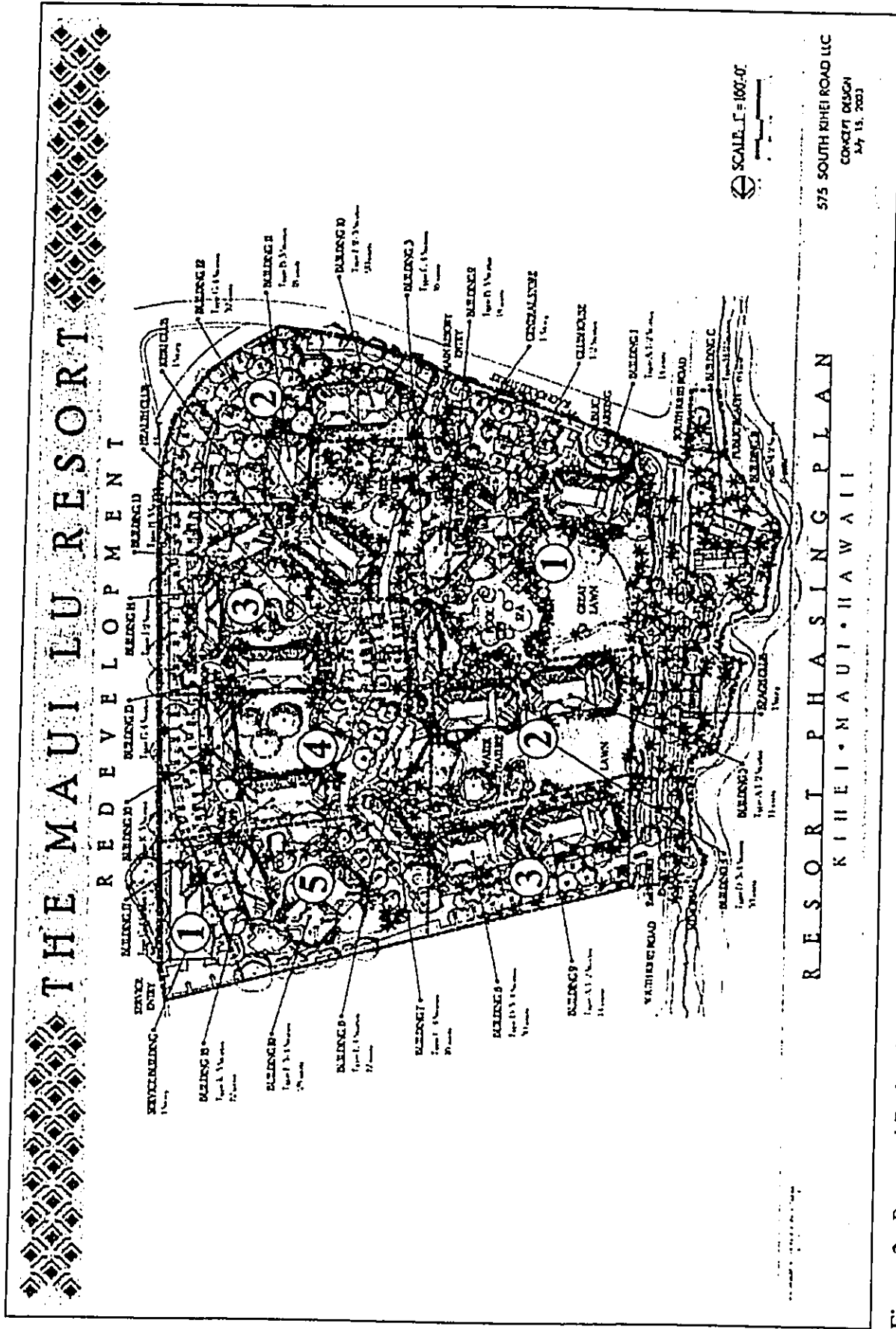


Figure 2: Proposed Redevelopment of the Project Area.

- (1) A traditional cultural practice that is being conducted [at present]...and
- (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].

It was also concluded that a proposed action that may not physically alter gathering practices, but affect access to gathering areas would be included in the investigation (State of Hawaii 1997).

METHODOLOGY

This Cultural Impact Assessment was prepared in accordance with the methodology and content protocol provided in the *Guidelines for Assessing Cultural Impacts*. It included examining cultural practices and beliefs within the broad geographical area of *ahupua`a* (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 can be proposed.

ARCHIVAL RESEARCH

Archival research focused on an historical documentary 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 having knowledge of traditional practices and beliefs associated with a project area or knowing of historical properties within a project area were sought for consultation. Individuals who had particular knowledge of traditions passed down from preceding generations and personal familiarities with the project area were invited to share their important information. Initial contact was made with OHA, the Kīhei Community Association, the Kīhei Canoe Club, Maui/Lāna'i Islands Burial Council, Central Maui Hawaiian Civic Club, and Dana Naone Hall of the Maui Burial Council. Other agencies and individuals contacted by phone or letter included cultural practitioners and knowledgeable residents on Maui.

PROJECT AREA AND VICINITY

The project area encompasses 26 acres in Kīhei on the west coast of Haleakalā, Maui Island. It is bounded by occupied houses and condominiums in the north, by Kenoulio Road in the east, and by Ka'ono'ulu Road in the south. Kīhei Road from the western boundary separates the resort and beach area lots (83 and 120). The land parcel rises in elevation from approximately 6 feet above mean sea level (amsl) at the western boundary, to 80 feet amsl on the eastern boundary (Figure 3).

CULTURAL HISTORICAL CONTEXT

The island of Maui ranks second in size of the eight main islands in the Hawaiian Archipelago. The Island was formed by two volcanoes, Mount Kukui in the west and Haleakalā in the east. The younger of the two volcanoes, Haleakalā, soars 2,727 m (10,023 feet) above sea level and embodies the largest section of the island. Unlike the amphitheater valleys of West Maui, the flanks of Haleakalā are distinguished by gentle slopes. Although Haleakalā receives more rain than its counterpart in the east, the permeable lavas of the Honomanū and Kula Volcanic Series prevent the formation of rain-fed perennial streams. The few perennial streams found on the windward side of Haleakalā originate from springs located at low elevations. Valleys and gulches were formed by intermittent water run-off. The environment factors and resource availability heavily influenced pre-Contact settlement patterns. Although an extensive population was found occupying the uplands above the 30-inch (annual) rainfall line where crops could easily be grown, coastal settlement was also common (Kolb *et al.* 1997). The existence of three fishponds at Kalepolepo, south of the project area, and at least two *heiau* identified near the shore confirm the presence of a stable population relying mainly on coastal and marine resources. Agriculture may have been practiced behind the dune berms in low-lying marshland, such as the *mauka* portion of the project area, or in the vicinity of Kealia Pond north of Maui Lu. It is suggested that permanent habitations and their associated activities occurred from A.D 1200 through the present in both the uplands and coastal regions (*ibid*).

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 eats the island/district), which he held in trust

RECEIVED AS FOLLOWS

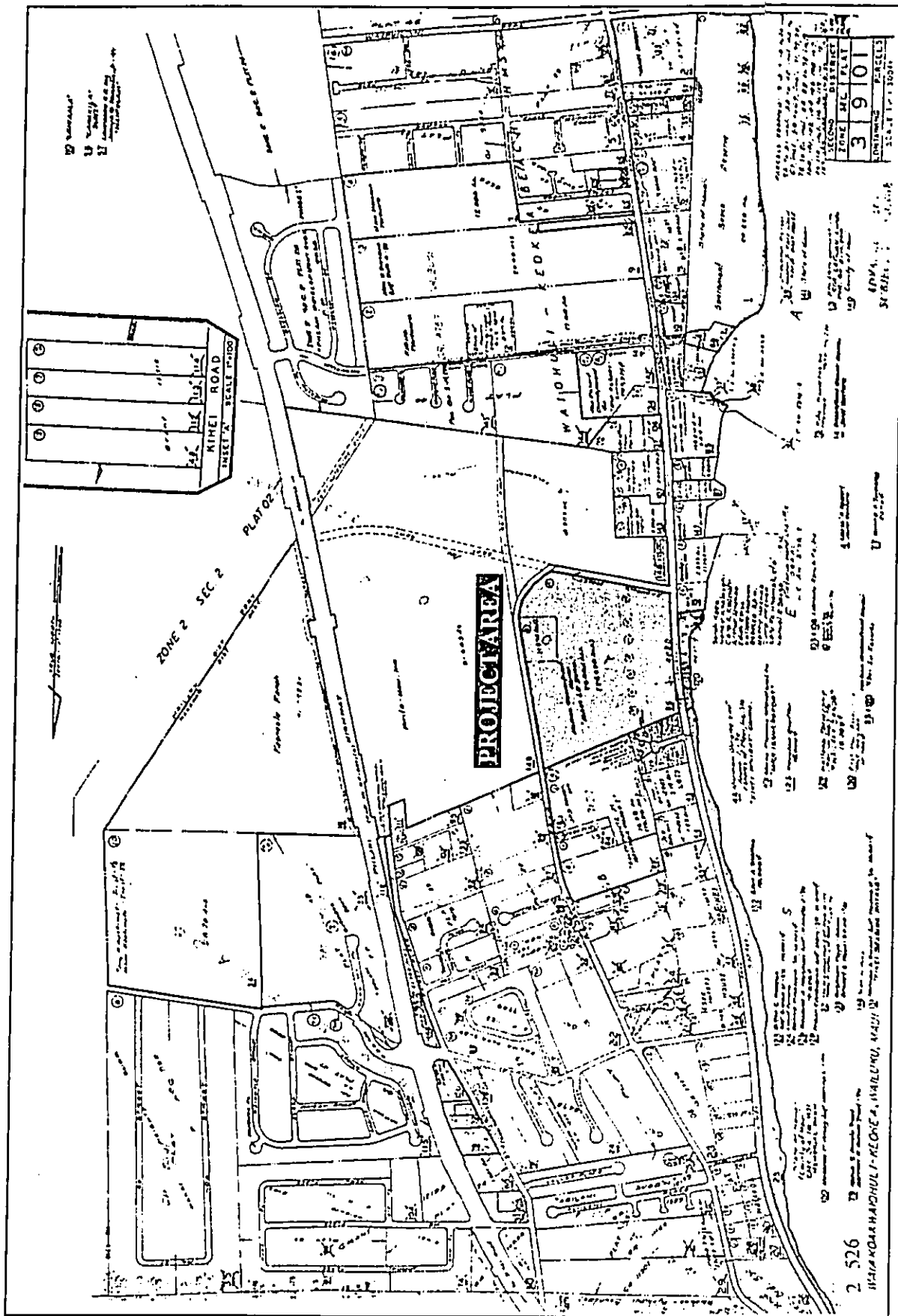


Figure 3: Tax Map Key [TMK] 3-9-01 Showing Project Area.

for the gods. The title of *ali`i`ai moku* ensured rights and responsibilities regarding 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 on individual plots of land.

In general, several terms, such as *moku*, *ahupua`a*, *ili* or *ili`āina* 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 in 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 in the *ahupua`a* of Ka`ono`ulu, which translated means literally "the desire for breadfruit" and perhaps refers to a crop not easily grown in this *ahupua`a* (Pukui *et al.*:86).

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*. Within the *ahupua`a*, residents were able to harvest from both the land and the sea.

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 *kō* (sugar cane, *Saccharum officinarum*) 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 (AD 1200-1400, Kirch 1985). According to Handy, there was "continuous cultivation on the coastal region along the northwest coast" of Maui. He writes:

On the south side of western Maui the flat coastal plain all the way from Kihei and Ma'alaea to Honokahua, in old Hawaiian times, must have supported many fishing settlements and isolated fishermen's houses, where sweet potatoes were grown in the sandy soil or red lepo [soil] near the shore. For fishing, this coast is the most favorable on Maui, and, although a considerable amount of taro was grown, 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...[1940:159].

There is little specific information pertaining directly to Kīhei, which was originally a small area adjacent to a landing built in the 1890s (Clark 1980). Presently, Kīhei refers a six-mile section along the coast from the town of Kīhei to Keawakapu. Scattered amongst the agricultural and habitation sites were places of cultural significance to the *kama`āina* of the district including at least two *heiau*. In ancient times, there was a small village at Kalepolepo based primarily on marine resources. Occasionally, it is recorded, the blustery Kaumuku Winds would arrive with amazing intensity along the coast (Wilcox 1921).

There were several fishponds in the vicinity of Kīhei. Included were Waiohuli, Kēōkea-kai, and Kalepolepo Pond (also known by the ancient name of Kō`ie`ie Pond; Kolb *et al.* 1997) (Figure 4). Constructed on the boundary between Ka`ono`ulu and Waiohū Ahupua`a, these three ponds were some of the most important royal fishponds on Maui. The builder of Kalepolepo and two other ponds (Waiohuli and Kēōkea-kai) has been lost in antiquity, but they were reportedly rebuilt at least three times through history, beginning during the reign of Pi`ilani (1500s; *ibid*; Cordy 2000).

Oral tradition recounts the repairing of the fishponds during the reign of Kiha-Pi`ilani, the son of the great chief Pi`ilani, who had bequeathed the ponds to Umi, ruler of Hawai`i Island. Umi's *konohiki* (land manager) ordered all the people from Maui to help repair the walls of Kalepolepo's fishponds. A man named Kikau protested that the repairs couldn't be done without the assistance of the *menehune* who were master builders (Wilcox 1921:66-67). The *konohiki* was furious and Kikau was told he would die once the repairs had been made. Kēōkea-kai was the first to be repaired. When the capstone was carried on a litter to the site, the *konohiki* rode proudly on top of the rock as it was being placed in the northeast corner of the pond. When it was time for repairs on Waiohuli-kai, the *konohiki* did the same. As the last pond, then known as Ka`ono`ulu-kai, was completed, the *konohiki* once again rode the capstone to its resting place. Before it could be put into position, the capstone broke throwing both the rock and *konohiki* into the dirt. The workers reportedly said "*Ua konohiki Kalepolepo, ua eku i ka lepo,*" or, "the manager of Kalepolepo, one who roots in the dirt" (*ibid*:66). That night a tremendous storm threw down the walls of the fishponds. The *konohiki* implored Kikau to help him repair the

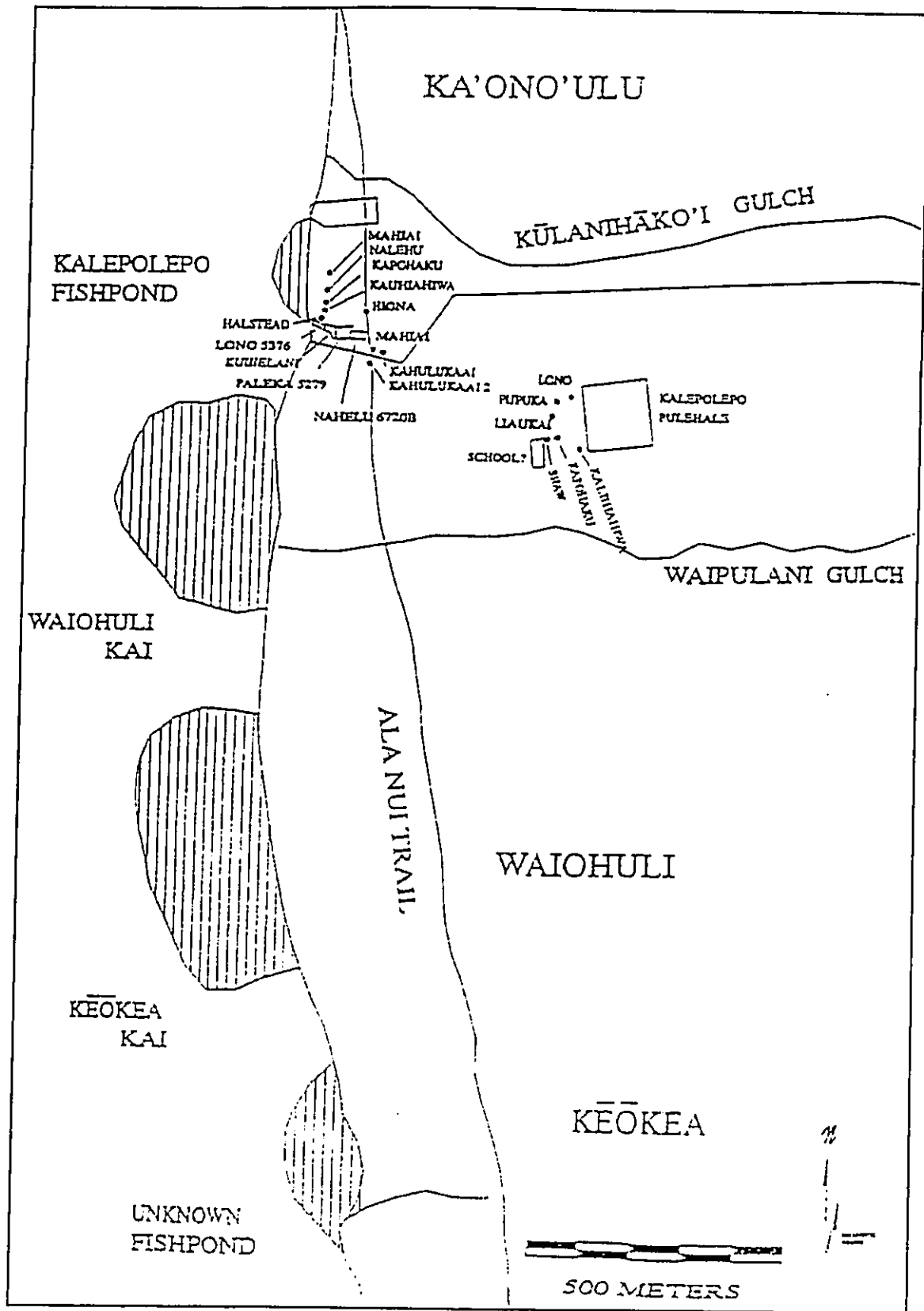


Figure 4: Fishponds and LCAs in the Vicinity of the Project Area. (Adapted from Kolb 1997).

damage. Kikau called the *menehune* who rebuilt the walls in one night. Umi sent for Kikau who lived in the court of Waipi'o valley from then on. The region o Kēōkea-kai and Ka'ono'ulu-kai fishpond became known as Kalepolepo fishpond (*ibid*).

The Kalepolepo fishponds were rebuilt by Kekaulike, chief of Maui in the 1700s, at which time it supplied *'ama'ama* (mullet) to Kahekili II. Again, it was restored by Kamehameha I when he ruled as governing chief over Maui and for the last time in the 1840s when prisoners from Kaho'olawe penal colony were sent to do repairs (Kamakau 1961; Wilcox 1921). At this time, stones were taken from Waiohuli-kai pond for the reconstruction of Kalepolepo. It was here at Kalepolepo that Kamehameha I reportedly beached his victorious canoes after subduing the Maui chiefs. The stream draining into Kealia pond (north of the project area) became sacred to royalty and *kapu* to commoners (Stoddard 1894).

Trails extended from the coast to the mountains, linking the two for both economic and social reasons. A trail known as the *alanui* or "King's trail" built by Kihapi'ilani, extended along the coast passing through all the major communities between Lāhainā and Mākena, including Kīhei (Figure 5). One trail, named "*Kekuawaha'ula'ula*" or the "red-mouthed god", extended from Kīhei inland to Kēōkea. Another, the Kalepolepo trail, began at the Kalepolepo fishpond and continued to upland Waiohuli. These trails were not only used in the pre-Contact era, but were expanded to accommodate wagons bringing produce to the coast in the 1850s (Kolb *et al.* 1997:61).

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 Ōla'i south of Kīhei 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 and the mention of breadfruit suggest the uplands of Kīpahulu-Kaupo and 'Ulupalakua were his focus.

In the ensuing years, LaPérouse (1786), Nathaniel Portlock and George Dixon, (also in 1786), sailed along the western coast, but added little to our direct knowledge of Kīhei. During

the second visit of Vancouver in 1793, his expedition was becalmed in the Ma`alaea Bay close to the project area. (A marker commemorating this visit is located across from the Maui Lu Hotel). He reported:

The appearance of this side of Mowee was scarcely less forbidding than that of its southern parts, which we had passed the preceding day. The shores, however, were not so steep and rocky, and were mostly composed of a sandy beach; the land did not rise so very abruptly from the sea towards the mountains, nor was its surface so much broken with hills and deep chasms; yet the soil had little appearance of fertility, and no cultivation was to be seen. A few habitations were promiscuously scattered near the waterside, and the inhabitants who came off to us, like those seen the day before, had little to dispose of [Vancouver 1984:852].

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 causing the land to be neglected and human resources wasted (Vancouver 1984:856).

MĀHELE

In the late 1840s a drastic change in traditional land tenure resulted in a division of island lands. This system of private ownership was based on western law. While a complex issue, many scholars believe that in order to protect Hawaiian sovereignty from foreign powers, Kamehameha III was forced to establish laws changing the traditional Hawaiian economy to that of a market economy (Kuykendall Vol. I, 1938:145 footnote 47, 152, 165-6, 170; Daws 1968:111; Kelly 1983:45; Kame`eleihiwa 1992:169-70, 176).

Among other thing, foreigners demanded private ownership of land to insure their investments (Kuykendall Vol. I, 1938:138, 145, 178, 184, 202, 206, 271; Kame`eleihiwa 1992:178; Kelly 1998:4). Once lands were made available and private ownership was instituted the *maka`āinana* (commoners) were able to claim the plots on which they had been cultivating and living, if they had been made aware of the foreign procedures (*kuleana* lands, Land Commission Awards, LCA). These claims could not include any previously cultivated or presently fallow land, *ʻokipū* (on O`ahu), stream fisheries or many other resources necessary for traditional survival (Kelly 1983; Kame`eleihiwa 1992:295; Kirch and Sahlins 1992). This land division, or Māhele, occurred in 1848. The awarded parcels were called Land Commission Awards. If occupation could be established through the testimony of two witnesses, the

petitioners were awarded the claimed LCA, issued a Royal Patent number, and could then take possession of the property (Chinen 1961:16).

Hewahewa, *Kahuna nui* for Kamehameha I, was awarded Ka'ono'ulu Ahupua'a (5,715 acres, LCA 8109) and Kalepolepo 'ili (LCA 3108) during the Māhele. He remained in residence at Kalepolepo from 1837 until his death in 1848 (Kolb *et al.* 1997). Other awarded lands in Ka'ono'ulu included two house lots, 22 Irish potato patches or potato land, 46 *kula* and "winter *kula*", one generic potato land, 67 *moku mau'u* or "claims", 18 taro patches, a stream bank and a *kuapa* (pond) (Folk *et al.* 1999:22). Several house lots were claimed on the coast at Kalepolepo above the "Kuapa o Kalepolepo," or the fishpond wall, and one house lot was claimed upcountry (Kolb *et al.* 1997; see Figure 4). The majority of these house claims included land upcountry for gardens as well. None of these LCAs are in the project area.

As western influence grew, Kalepolepo in Kīhei became an important provisioning area. Europeans were now living or frequently visiting the coast and several churches and missionary stations were established. A Mr. Halstead left medical school on the East coast of the mainland continent to become a whaler and after marrying the granddaughter of Issac Davis, settled in Kalepolepo on land given him by Kamehameha III (Kolb *et al.* 1997). His residence and store situated at Kalepolepo landing was known as the Koa House having been constructed of *koa* logs brought from the uplands of Kula. The store flourished due to the whaling and potato industry and provided an accessible port for exported produce. Several of Hawai'i's ruling monarchs stayed at the Koa House, including Kauikeaouli (Kamehameha III), Kamehameha the IV, Lot Kamehameha (V), and Lunalilo. Wilcox, giving a glimpse of the surroundings before abandonment stated, "...Kalepolepo was not so barren looking a place. Coconut trees grew beside pools of clear warm water along the banks of which grew taro and ape..." (1921:67). However, by 1887 this had changed. Wilcox continues:

...the Kula mountains had become denuded of their forests, torrential winter rains were washing down earth from the uplands, filling with silt the ponds at Kalepolepo...ruins of grass huts [were] partly covered by drifting sand, and a few weather-beaten houses perched on the broad top of the old fish pond wall at the edge of the sea, with the Halstead house looming over them dim and shadowy in the daily swirl of dust and flying sand..." [1921]

As early as 1828, sugar cane was being grown on Maui (Speakman 1981:114). Sugar was established in the Makawao area in the late 1800s and by 1899, the Kihei Plantation Company (KPC) was growing cane in the plains above Kīhei. The Kihei Plantation was

absorbed by the Hawaiian Commercial and Sugar Company (HC&SC) in 1908, and they continued cultivating what had been the KPC fields into the 1960s (Figure 6). A 200-foot-long wharf was constructed in Kīhei at the request of Maui plantation owners and farmers and served inter-island boats for landing freight and shipping produce to Honolulu (Clark 1980). In 1927, Alexander and Baldwin became the agents for the plantation (Condé and Best 1973). A landing was built at Kīhei (meaning “cape” or “cloak”; Pukui *et al.* 1974) around 1890. A 1929 map of Maui shows the vicinity of Kīhei landing as a destination for the HC&SC railroad, extending through an underdeveloped terrain (Figure 7).

Lands abutting the sugar cane fields were purchased for ranching by the Ka'ono'ulu Ranch Co. Ltd. that is still in operation. The ranch consists of approximately 9,000 acres that has been held by the Rice family since 1916 (pers. Comm. Mr. Rice). Mr. Rice, owner of the Ka'ono'ulu Ranch, reported that in the late 1800s, people from Kula were obtaining fish from the still viable fishponds in Kīhei (McGerty and Spear 2000). In the 1950s, most of the breeding herds were kept on the *makai* lands of the ranch. It should also be noted that during WW II, there was a significant military presence along the beach of Ma'alaea Bay.

In May of 1951, beach land was set aside for a memorial park to be named “*Mai Poina 'Oe Ia 'u*” (Forget me not) in memory of those lost in the Korean and Vietnam Wars (Clark 1980). With the introduction of a dependable water supply in 1952 came overseas investment and development, which has continued up to, and including, the present time.

CULTURAL ASSESSMENT

Individuals and organizations, including OHA, the Kīhei Community Association, the Kīhei Canoe Club, Maui/Lāna'i Islands Burial Council, Central Maui Hawaiian Civic Club, and Dana Naone Hall of the Maui Burial Council as well as a Maui Island Cultural Practitioner were contacted by SCS in order to obtain information concerning cultural activities occurring at or in the vicinity of the Maui Lu Hotel. None of the individuals and/or groups who responded had any cultural information pertaining to the project area.

An Archeological Inventory survey conducted on the property in 1998 did not identify any evidence of prehistoric or historic activities within the project area other than fill dirt imported in the 1950s-1960s for original hotel construction (Burgett *et al.* 1998). According to Clifford Pu, a twenty five-year employee at Maui Lu in 1998, the project area was marshland, sand, and kiawe trees in the 1950s (*ibid*). He reported that he had accompanied his mother and

RECEIVED AS FOLLOWS

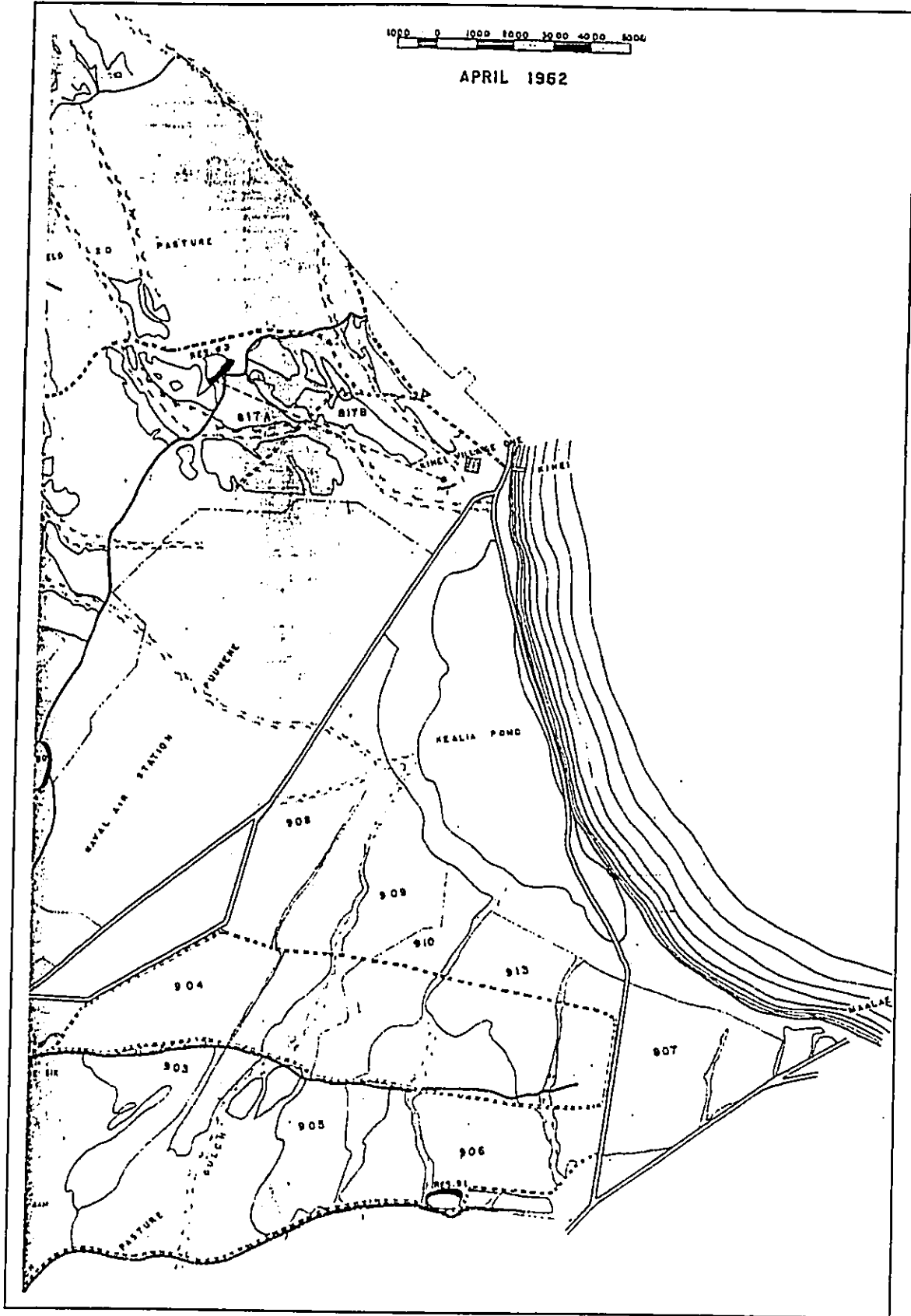


Figure 6: Land in the Project Area Vicinity in Sugar Cane Production in the 1960s.

RECEIVED AS FOLLOWS

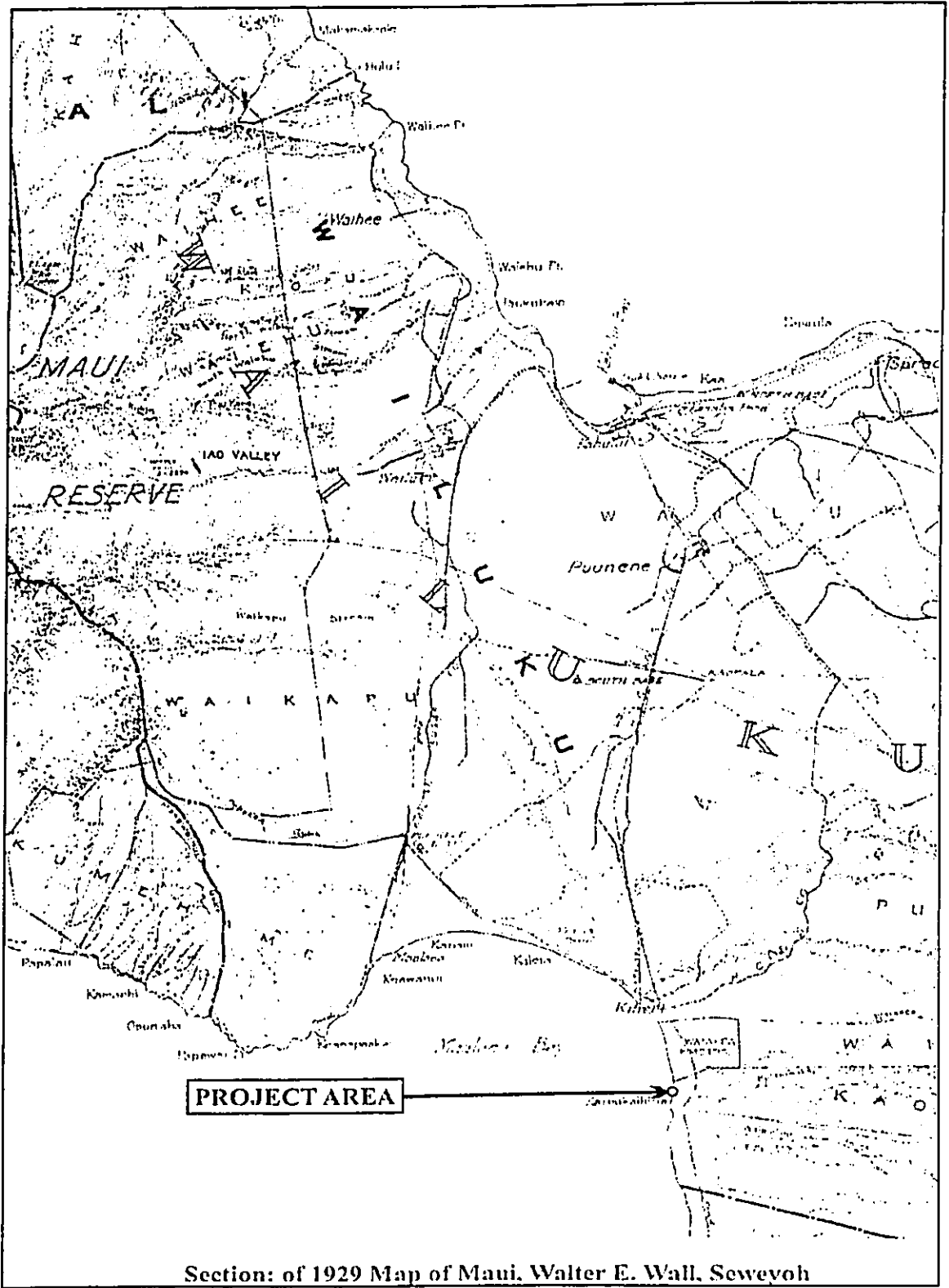


Figure 7: 1929 Map Showing the Kīhei Landing.

grandmother when they tended cultivations there in the late 1950s. Their small garden was abandoned when the area was converted to a golf course in the early 1960s (*ibid*). An earlier report on Ka'ono'ulu Ranch land stated that the Maui Lu Resort had been the base for an extensive piggery that occupied most of the area prior to its purchase and development by Gordon Gibson (Fredericksen *et al.* 1994). Archival research suggests historic land use was focused on sugar cane and ranching activities *mauka* of the project area.

Based on community response, archival research, recent archaeological testing, previous construction, and modern development in Kihei, 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. Because there were no activities identified, there are no adverse effects.

REFERENCES CITED

- Beaglehole, John, ed.
1967 *The journals of Captain James Cook on his voyages of discovery. Vol 3. The Voyage of the Resolution and Discovery, 1776-1780.* Cambridge: Hakluyt Society, Cambridge University Press: London.
- Beckwith, Martha
1940 *Hawaiian Mythology.* University of Hawai'i Press: Honolulu.
- Burgett, Berdena, Lisa Humphrey, Robert Spear
1998 *An Archaeological Inventory Survey of Lots A and B of the Maui Lu Resort in Kihei, Kaonoulu Ahupua`a, Wailuku District, Maui, Hawai'i (TMK 3-9-1: 83, 86, and 120).* Prepared for Maui Lu Hotel Corp.
- Chinen, Jon
1961 *Original Land Titles in Hawaii.* Copyright 1961 Jon Jitsuzo Chinen. Library of Congress Catalogue Card No. 61-17314.
- Clark, John
1980 *The Beaches of Maui County.* A Kolowalu Book, University Press of Hawaii: Honolulu.
- Condé, Jesse, and Gerald Best
1973 *Sugar Trains, Narrow Gauge Rails of Hawaii.* Glenwood Publishers: Felton, California.
- Cordy, Ross
2000 *Exalted Sits the Chief.* Mutual Publishing: Honolulu.
- Daws, G.
1968 *Shoal of Time: History of the Hawaiian Islands.* University of Hawai'i Press. Honolulu.
- Folk, William, Melody Heidel, Victoria Creed, Thomas, Devereux, Ian Masterson, Kenneth Hillyard, and Hallett Hammatt
1999 *Archaeological Reconnaissance Survey of the Proposed Kihei to Kula Road Corridors, Kailua to Kama`ole Ahupua`a, Makawao and Wailuku Districts, Island of Maui (TMK 2-2 and 2-3).* Prepared for Parsons, Brinkerhoff, Quade, and Douglas, Inc.
- Fornander, Abraham
1969 *An Account of the Polynesian Race, Its Origins and Migrations.* Vol. 1 to 3. Charles E. Tuttle Co. Inc.: Jutland.

1919 *Hawaiian Antiquities and Folklore.* Bishop Museum Press: Honolulu.

- Handy, Craighill
1940 *The Hawaiian Planter, Vol 1*. Bishop Museum Press: Honolulu.
- Kamakau, Samuel
1961 *Ruling Chiefs of Hawaii*. The Kamehameha Schools Press: Honolulu.
- Kame'eleihiwa, Lilikalā
1992 *Native Land and Foreign Desires: Pehea La E Pono Ai?* Bishop Museum Press. Honolulu.
- Kelly, Marion
1983 *Nā Māla o Kona: Gardens of Kona*. Dept. of Anthropology Report Series 83-2. Bishop Museum. Honolulu.

1998 "Gunboat Diplomacy, Sandalwood Lust and National Debt" In *Ka Wai Ola o OHA*, Vol. 15, No. 4, April 1998.
- Kirch, Patrick
1985 *Feathered Gods and Fishhooks: An Introduction to Hawaiian Archaeology and Prehistory*. University of Hawaii Press, Honolulu.
- Kirch, Patrick V. and Marshall Sahlins
1992 *Anahulu*. Vol. 1 and 2. University of Chicago Press. Chicago.
- Kolb, Michael, Patty Conte, Ross Cordy (eds.)
1997 *Kula: The Archaeology of Upcountry Maui in Waiohului and Keokea*. Prepared for Dept. of Hawaiian Home Lands.
- Kuykendall, R.S.
1938 *The Hawaiian Kingdom*. Vol. 1. University of Hawai'i Press. Honolulu.
- Lucas, Paul F. Nahoā
1995 *A Dictionary of Hawaiian Legal Land-terms*. Native Hawaiian Legal Corporation. University of Hawai'i Committee for the Preservation and Study of Hawaiian Language, Art and Culture.. University of Hawai'i Press.
- Lyons, C.J.
1875 "Land Matters in Hawaii". *The Islander*, Vol. I. Honolulu.
- McGerty, Leann and Robert L. Spear
2000 *Identification and Assessment of Potential Traditional Cultural Impacts within the Kīhei-Upcountry Maui Highway Project Area, Maui, Hawai'i [TMK: 2-2 and 2-3]*. Prepared for Parsons Brinckerhoff, Inc.

Menzies, Archibald

1928 *Hawaii New, 128 Years ago*. W.F. Wilson, ed. New Freedom Publishers: Honolulu.

Moffat, Riley M. and Gary L. Fitzpatrick

1995 *Surveying the Mahele*. An Editions Limited Book. Honolulu.

OEQC (Hawaii State Office of Environmental Quality Control)

1997 "Guidelines for Assessing Cultural Impacts." Adopted by the Environmental Council, November 1997

Pukui, Mary Kawena, Samuel Elbert, Esther Mookini

1974 *Place Names of Hawaii*. University of Hawai'i Press: Honolulu.

Speakman, Cummins

1978 *Mowee, An Informal History of the Hawaiian Island*. Cal Central Press: San Francisco.

Stoddard, Charles Warren

1894 *Hawaiian Life: Being Lazy Letters from Low Latitudes*. F.T. Neely, 1894: Chicago.

Wilcox, Charles

1920 Kalepolepo. *Paradise of the Pacific*. 34 (12):65-67.

Vancouver, George

1984 *A Voyage of Discovery to the North Pacific Ocea and Round the World 1791-1795*. Kaye Lamb, ed. The Hakluyt Society. Cambridge University Press: London.

APPENDIX D
Preliminary Engineering Report &
Drainage and Soil Erosion Control Report

Preliminary Engineering Report

Maui Lu Resort

Kihei, Maui, Hawaii

TMK: (2) 3-9-01: Parcels 83, 86, and 120

Prepared For:

**Genesee Capital
4037 Porte de Palmas, Suite 90
San Diego, CA 92122**

Prepared By:

**Wilson Okamoto Corporation
Engineers and Planners
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826
WOA Job No. 7056-01**

October 2003

TABLE OF CONTENTS

| | <u>Page</u> |
|--|-------------|
| EXECUTIVE SUMMARY | iii |
| 1. INTRODUCTION | 1-1 |
| 2. SANITARY SEWER SYSTEM | 2-1 |
| 2.1 Background..... | 2-1 |
| 2.2 Existing Conditions..... | 2-1 |
| 2.3 Projected Demands..... | 2-1 |
| 2.4 Proposed Improvements | 2-2 |
| 3. POTABLE WATER SYSTEM | 3-1 |
| 3.1 Background..... | 3-1 |
| 3.2 Existing Conditions..... | 3-1 |
| 3.3 Projected Demands..... | 3-2 |
| 3.4 Proposed Improvements | 3-2 |
| 4. SITE GRADING, FLOODING, AND STORM DRAIN SYSTEM | 4-1 |
| 4.1 Background..... | 4-1 |
| 4.2 Existing Conditions..... | 4-1 |
| 4.3 Projected Demands..... | 4-2 |
| 4.4 Proposed Improvements | 4-2 |
| 5. PARKING AND ROADWAY SYSTEM | 5-1 |
| 5.1 Background..... | 5-1 |
| 5.2 Existing Conditions..... | 5-1 |
| 5.3 Project Demands..... | 5-1 |
| 5.4 Proposed Improvements | 5-1 |
| 6. ELECTRICAL SYSTEMS | 6-1 |
| 6.1 Background..... | 6-1 |
| 6.2 Existing Conditions..... | 6-1 |
| 6.3 Projected Demands..... | 6-1 |
| 6.4 Proposed Improvements | 6-1 |
| 7. TELEPHONE, CABLE, AND DATA SYSTEM | 7-1 |
| 7.1 Background | 7-1 |
| 7.2 Existing Conditions..... | 7-1 |
| 7.3 Projected Demands..... | 7-1 |
| 7.4 Proposed Improvements | 7-1 |

8. OTHER UTILITIES..... 8-1
8.1 Fuel Systems 8-1

FIGURES

Figure 1 Vicinity Map..... 1-2
Figure 2 Location Map 1-3
Figure 3 Conceptual Sanitary Sewer Plan 2-3
Figure 4 Conceptual Water System Plan..... 3-3
Figure 5 Flood Zone Map..... 4-3
Figure 6 Conceptual Grading and Erosion Control Plan 4-4
Figure 7 Conceptual Storm Drainage System Plan..... 4-6

APPENDICES

- Appendix A Sewage Design Flow Calculations
- Appendix B Potable Water Demands Calculations
- Appendix C Preliminary Drainage Study

EXECUTIVE SUMMARY

A preliminary engineering assessment of the proposed Maui Lu Resort development was conducted to review the site infrastructure and utilities systems, identify possible constraints, and describe proposed improvements to sanitary sewer, potable water, storm drainage, parking, roadway, electrical, telephone, cable, and data communications systems.

Sewer: Sanitary sewer service is available for the proposed resort timeshare development. Based on the expected sewage flows of approximately 113,500 gallons per day, the County of Maui's collection system in the vicinity of the project site and the Kihei Wastewater Treatment Facility both have adequate capacity to serve the development. Anticipated improvements include a new sewer lateral connection for the mauka parcel and new gravity collection systems within the project site. The existing sewer lateral connections servicing both the mauka and makai parcels will remain.

Water: Potable water service is available from the County of Maui's Department of Water Supply. An existing 12-inch water main extends along the west and south boundary of the project site on South Kihei Road and Kaonoulu Street. Based on the existing two 2-inch water meters, there is a maximum of 320 gpm available for the project from these two meters. Any additional potable water demand requirements will require a new water meter that will be subject to availability of water. Out of the remaining 800,000 gallons available from the Central Maui Water System, approximately 200,000 gallons have been committed to other projects. Based on current program information, the water demand for the resort timeshare development is approximately 144,200 gallons per day. Both the mauka and makai parcels will continue to utilize the existing potable water service and fire protection connections. On-site non-potable water well will provide irrigation.

Site Grading, Flooding, and Storm Drainage System: In general, the project site slopes in the mauka to makai direction with elevations ranging from 22.0 above Mean Sea Level (MSL) in the northeast corner to 6.0 above MSL along South Kihei Road. Areas along the coast are designated as flood hazard areas, with required elevations of 8 to 11 feet above mean sea level. The proposed finished floor elevations will be above the highest flood elevation requirements. Filling and building will require compliance with County of Maui and Federal Flood Insurance Program requirements. Surface flows can be accommodated through underground

drainlines, catch basins, drywells, above and underground detention basins. Any increase in storm water generated from the project site will be retained on-site. Off-site drainage improvements along South Kihei Road and Kaonoulu Street may also be required.

Parking and Roadway System: The main access to the mauka resort area will be located approximately midway along the Kaonoulu Street side of the project site. Secondary driveway connections to the mauka resort area for service and emergency access will be provided by two driveway connections; one located along South Kihei Road near the existing driveway in the northwest corner of the mauka parcel; and the other located along Kenolio Road near the northeast corner of the mauka parcel. The access to the makai resort area will continue to utilize the existing driveway connection along South Kihei Road. On-grade parking lots will provide parking for approximately 575 parking stalls and are located around the north, east, and south perimeter and interior areas of the mauka parcel. A small parking lot will also be provided on the makai parcel.

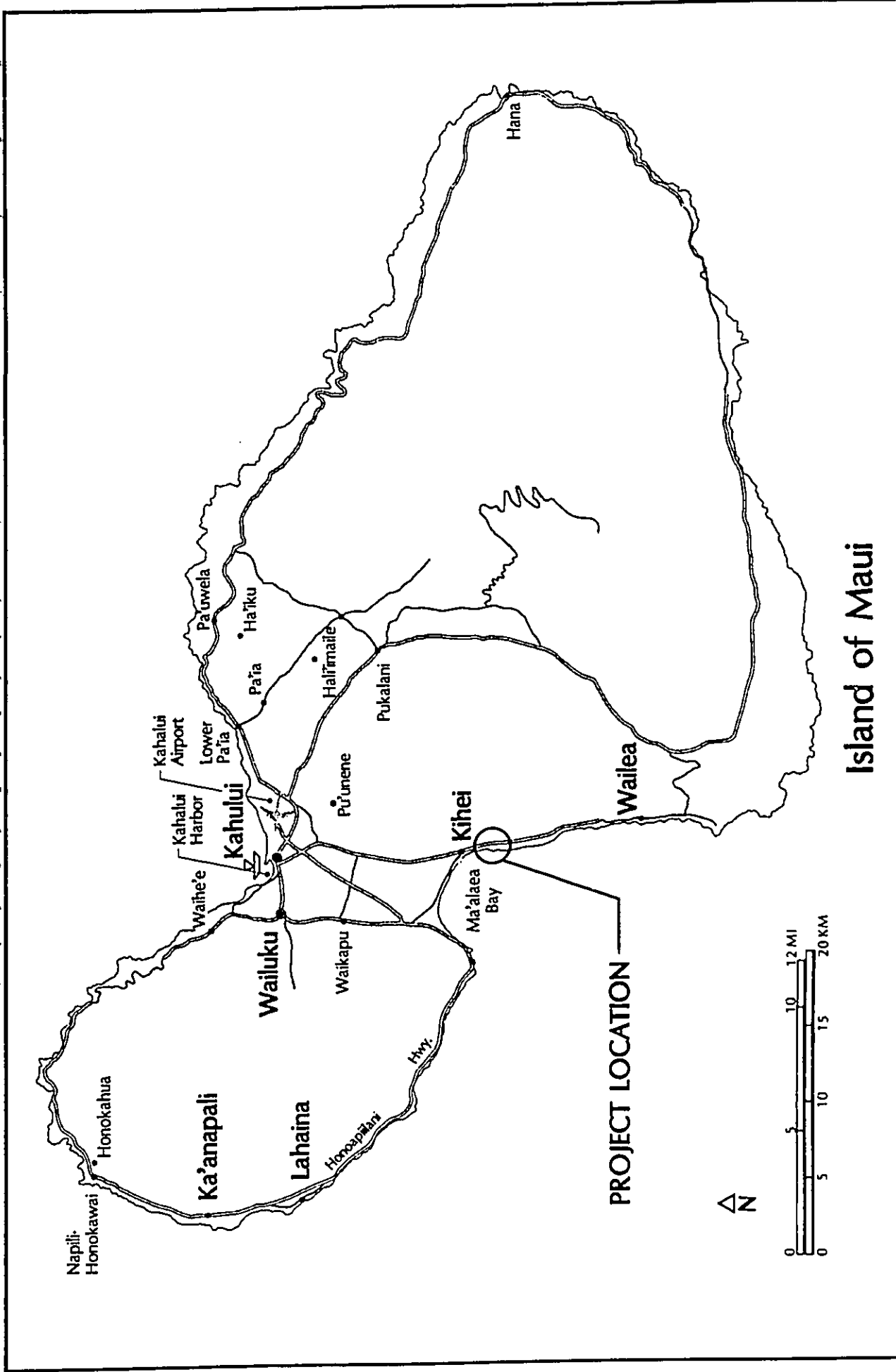
Electrical Systems: Electrical service is available through the Maui Electric Company. New underground ductlines will be extended from existing overhead lines in South Kihei Road or Kaonoulu Street.

Telephone, Cable and Data Systems: Telephone, data line access to the Internet, and cable TV service for the project has available capacity and will be provided through Verizon Hawaii and Oceanic Time Warner Cable of Hawaii. New underground ductlines will be extended from existing overhead lines in South Kihei Road or Kaonoulu Street.

1. INTRODUCTION

Based on the Concept Design plans prepared by Watanabe, Chun, Iopa, and Takaki Architecture (WCIT), this preliminary engineering report presents the preliminary engineering assessment of the project's infrastructure and utility systems. The objective of the report is to review existing infrastructure systems, determine project demands, identify possible constraints based on the projected demands, and describe proposed improvements relative to sanitary sewer, potable water, storm drainage, parking, roadway, electrical, telephone, cable, and data communication systems. The proposed improvements are subject to change based on refinement of plans and availability of more detailed information.

The project site consists of three parcels totaling 27.285 acres. The main mauka parcel, which consists of 26.004 acres, is bounded by the existing vacation rental developments to the north, South Kihei Road to the west, Alulike Street to the east, and Kaonoulu Street to the south. The other two parcels consisting of 1.281 acres are beachfront parcels located makai of South Kihei Road fronting the main mauka parcel. The three parcels are identified by Tax Map Key: 3-9-01: parcels 83, 86, and 120 (see Figure 1 and Figure 2). The proposed project consists of the phased demolition of the existing resort buildings on the mauka parcel and the construction of new 1 to 4-story buildings totaling 388, 2-bedroom resort timeshare units and related amenities and support facilities. The existing buildings on the makai property will be reduced from 48 units to 12 units and renovated.



Island of Maui

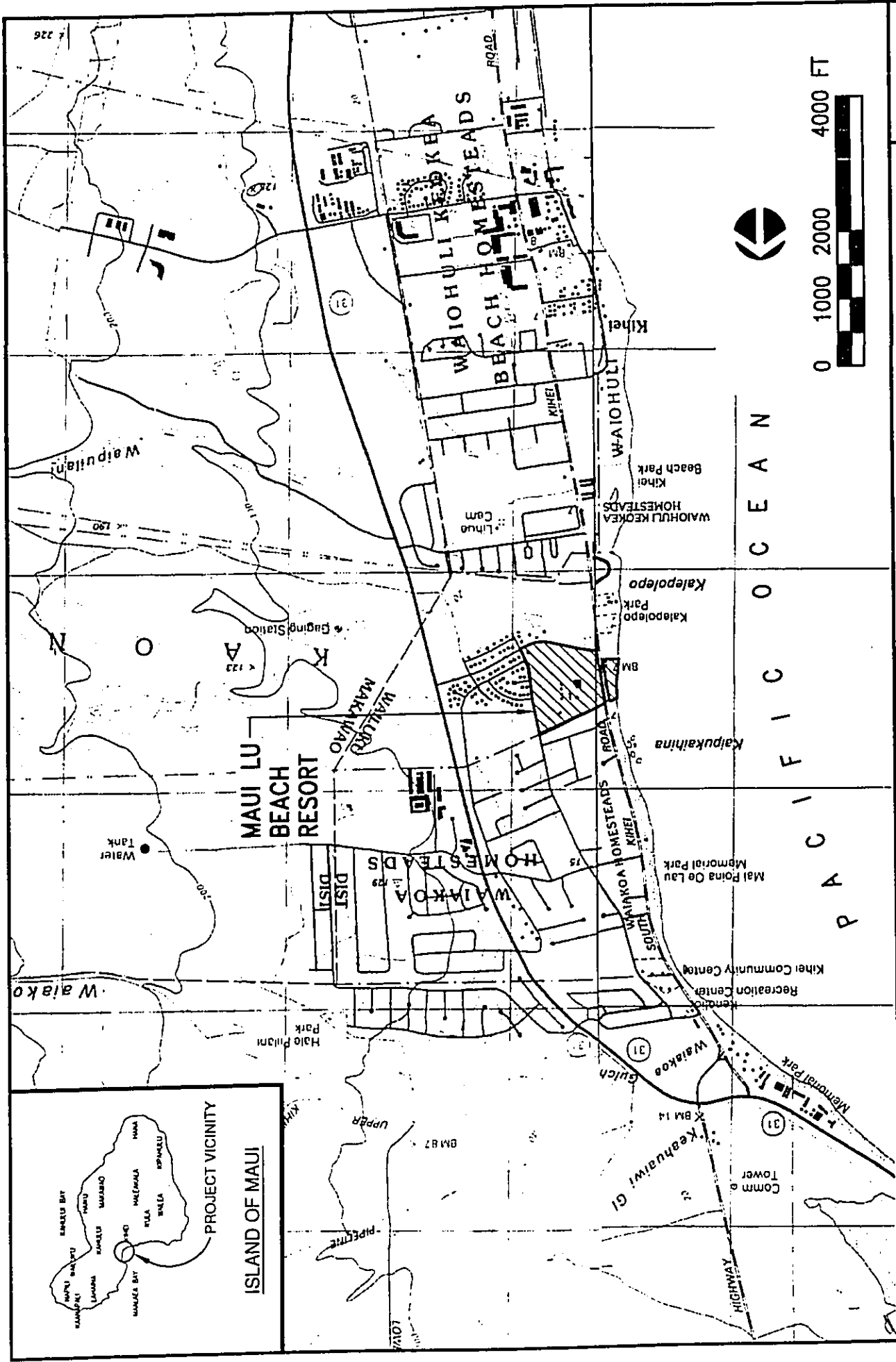
MAUI LU RESORT

VICINITY MAP

FIGURE

1

WILSON OKAMOTO CORPORATION
ENGINEERS PLANNERS



MAUI LU RESORT

LOCATION MAP

FIGURE 2

WILSON OKAMOTO CORPORATION
ENGINEERS PLANNERS

2. SANITARY SEWER SYSTEM

2.1 Background

The County of Maui's Wastewater Reclamation Division provides sanitary sewer service for the area of the project. The Wastewater Reclamation Division was consulted in June 2003 to determine appropriate connections based on existing facility capacities and preliminary development plans.

2.2 Existing Conditions

Existing separate 6-inch laterals provide sewer service to both the mauka and makai project area. Both laterals connect to the County's 24-inch sewer collection main located within the South Kihei Road right-of-way. The County's 24-inch sewer main transports sewage flows in the vicinity of the project site to the County's Kihei Sewage Pump Station No. 3 located to the south of the project site along South Kihei Road. Sewage from the County's Kihei Pump Station No. 3 continues to the Kihei Wastewater Reclamation Facility (KWRF) located to the south of the project site via a series of pump stations, force mains, and gravity lines.

The KWRF was constructed in 1975 with a design capacity of 4.0 million gallon per day (mgd). In 1989 and 1998, the KWRF's design capacity was expanded to 6.0 and 8.0 mgd, respectively. The KWRF provides secondary treatment of sewage and features ultraviolet disinfection system that treats approximately 1.7 mgd of the final effluent as reclaimed water for irrigation. Currently, the reclaimed water distribution system does not extend to the project site.

2.3 Projected Demands

Sanitary sewer volumes for the project were derived using the project's program requirements provided by WCIT and generalized simulation of projected demands for similar developments. Line sizes will be determined during the design phase of the project.

The average sanitary sewer volume is expected to be 113,500 gallons per day based on County of Maui Guidelines for Standard of Wastewater Contribution. The

mauka parcel will generate 110,500 gallons per day while the makai parcel generates 3,000 gallons per day. (See Appendix A)

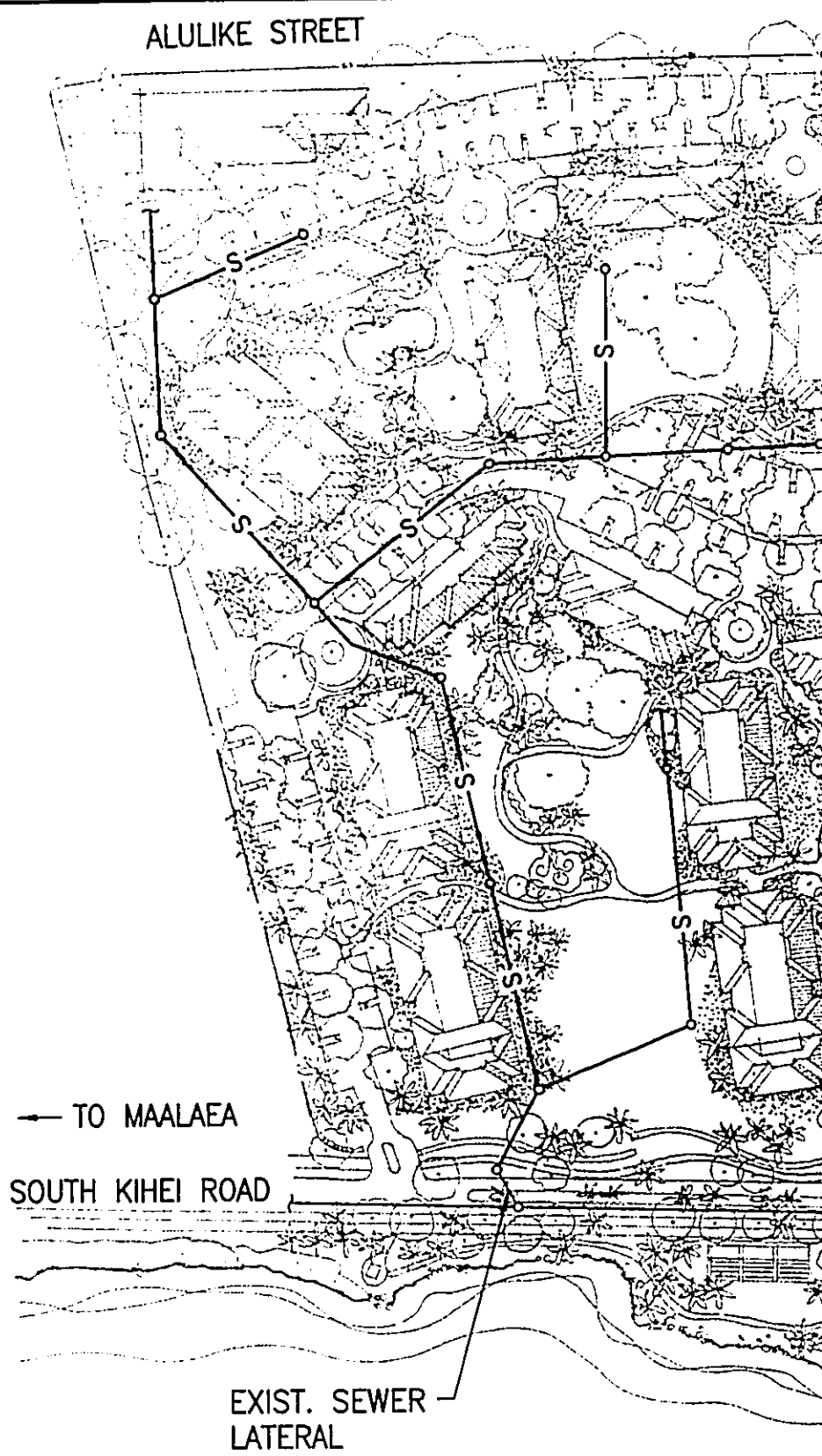
2.4 Proposed Improvements

The proposed sanitary sewer system for the timeshare parcel would likely consist of two major gravity sewer collection systems. The first system would extend to the proposed timeshare and support facilities located on the northern half of the mauka parcel. Sewage flows from this system would connect to the existing 6-inch sewer lateral located in the northwest corner of the mauka parcel. The second system would extend to the proposed timeshare and support facilities located on the southern half of the mauka parcel. This system would require a new sewer lateral connection to the County's existing 24-inch transmission main located in South Kihei Road. Connection to the County's 24-inch transmission main will likely be made at an existing sewer manhole near the intersection of South Kihei Road and Kaonoulu Street. The on-site sewer system would provide sewer manholes located at each sewer lateral connection point at the timeshare building or support facility. (see Figure 3)

The existing buildings on the makai parcel will be reduced in size and renovated. It is anticipated that no new sewer improvements will be required. The existing buildings will continue to utilize the existing sewer lateral connection.

Based on discussions with Wastewater Reclamation Division, sanitary sewer service is available for the resort timeshare development. Based on expected sanitary sewage volumes generated by the resort timeshare development, the County's collection system in the vicinity of the project site and the KWRF both has adequate capacity.

TRUE NORTH
SCALE: 1"=150'

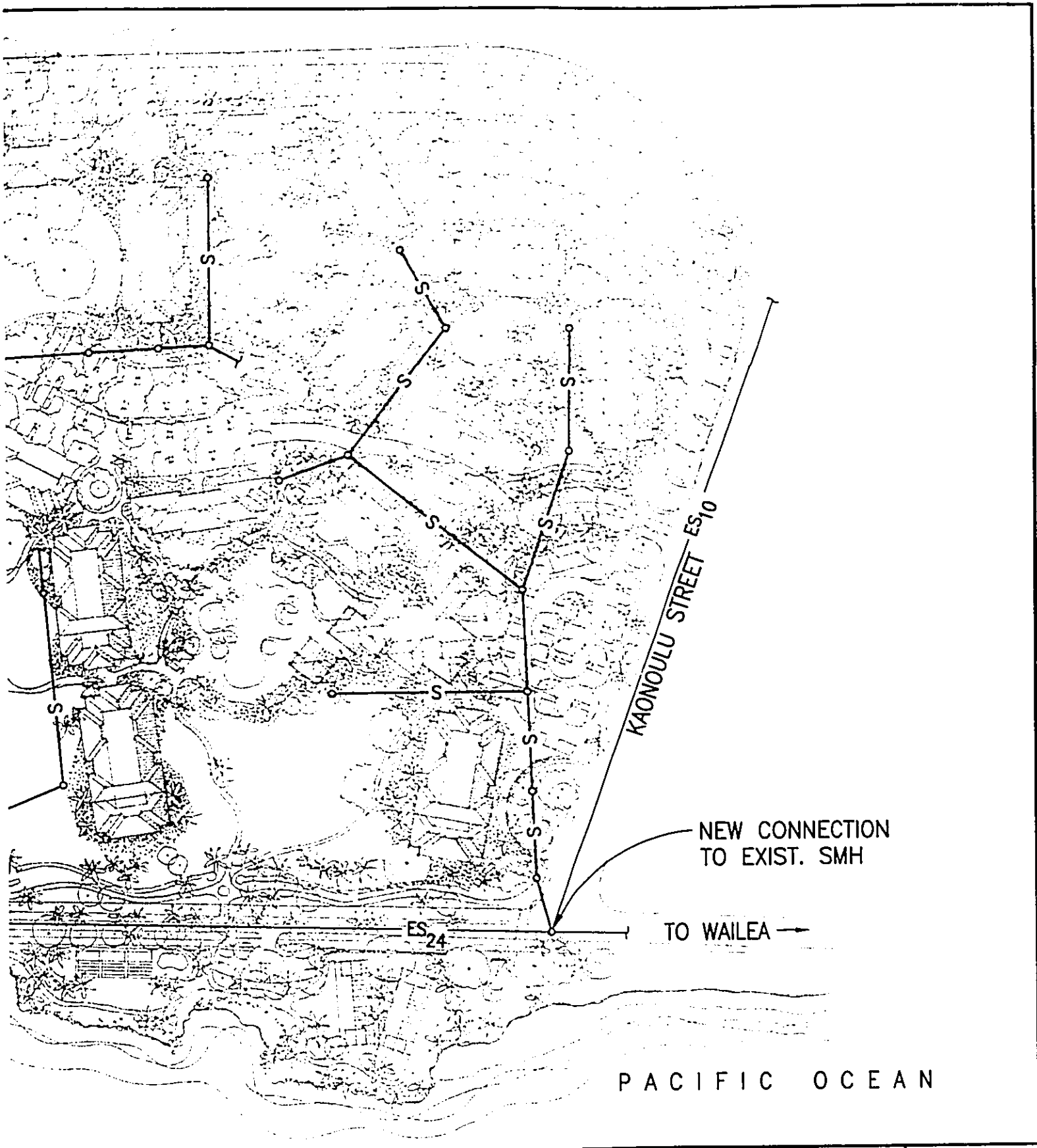


LEGEND

- ES — EXIST. SEWERLINE
- S — PROPOSED SEWERLINE
- SEWER MANHOLE



MAUI LU RESORT
CONCEPTUAL SANITARY S
SYSTEM PLAN



RESORT

SANITARY SEWER
 SYSTEM PLAN

FIGURE
 3

3. POTABLE WATER SYSTEM

3.1 Background

Potable water service for the project will be provided by the County of Maui's Department of Water Supply. The Department of Water Supply was consulted in June 2003 to determine appropriate connections based on existing facility capacities and development plans.

3.2 Existing Conditions

The Kihei area is served by the County's Central Maui Water System, which services the communities of Waihee and Waiehu to the north, Wailuku, Kahului, Paia to the east, and Maalaea-Kihei-Makena to the south.

The Central Maui System water sources are located on the windward slope of the West Maui Mountains. The majority of the water supplied to the Central Maui System is withdrawn from the Iao Aquifer in the vicinity of Iao Stream and Waiehu Stream with the balance withdrawn from the adjacent Waihee Aquifer.

A 2.0 million gallon tank located at the elevation 220.00 above MSL along Ohukai Road provides storage for the water system servicing the Maui Lu project area. The Department of Water Supply's system in the area consists of a looped system of distribution mains and pressure reducing valve systems. According to Department of Water Supply's Fire Protection System maps dated 2000, there is a 12- and 6-inch water main located in South Kihei Road fronting the project site. The 12-inch main continues along Kaonoulu Street to the south of the project where it connects to an 8-inch main in Alulike Street.

The existing mauka parcel has two existing 2-inch potable water meters (Service Numbers 1028741-1037968 and 1028742-1037968 and Meter Numbers 96998344 and 96998342) while the two makai parcels have an existing 1 1/2-inch potable water meter (Service Number 1014617-1037968 and Meter Number 96000089). The mauka parcel also has a 6-inch detector check meter servicing the existing on-site fire protection system.

3.3 Projected Demands

Potable water demands for the project were derived using the project's program requirements provided by WCIT and generalized simulation of projected demands for similar developments. Line sizes will be determined during the design phase of the project.

Average daily potable water demand will be 144,200 gallons per day based on Department of Water Supply's "Water System Standards". The average daily potable water demand for the mauka and makai parcels is anticipated to be 139,600 and 4,600 gallons per day respectively. (See Appendix B)

3.4 Proposed Improvements

Based on discussions with Department of Water, potable water service is available for the resort timeshare development via the two existing two-inch water meters currently supplying water to the project site. Any additional meter requirements will be subject to availability of water from the existing Maui Central Water System or at such time that additional sources are developed. Based on the projected water demand for the resort timeshare development, the Department of Water Supply's storage and distribution systems in the vicinity of the project site appear to have adequate capacity.

Both the mauka and makai parcels will continue to utilize the existing domestic water service laterals servicing the respective parcels. The proposed on-site water system for the mauka parcel would consist of a looped water system following along the proposed perimeter road along the north, east, and south sides of the mauka parcel. To complete the loop, the water system will extend across the proposed landscaped area fronting South Kihei Road along the west side of the mauka parcel. A proposed waterline following along the interior road will bisect the perimeter waterline and provide water service connection to the interior buildings. (see Figure 4)

TRUE NORTH
SCALE: 1"=150'

EXIST. FH #803 ALULIKE STREET

LEGEND

- EW — EXIST. POTABLE WATERLINE
- W — WATERLINE
- F — FIRE WATERLINE
- ⊙ FIRE HYDRANT

EXIST. DETECTOR CHECK METER TO REMAIN

EXIST. WATER METER TO REMAIN

ADDITIONAL WATER METER AS REQ'D.

← TO MAALAEA

SOUTH KIHAI ROAD

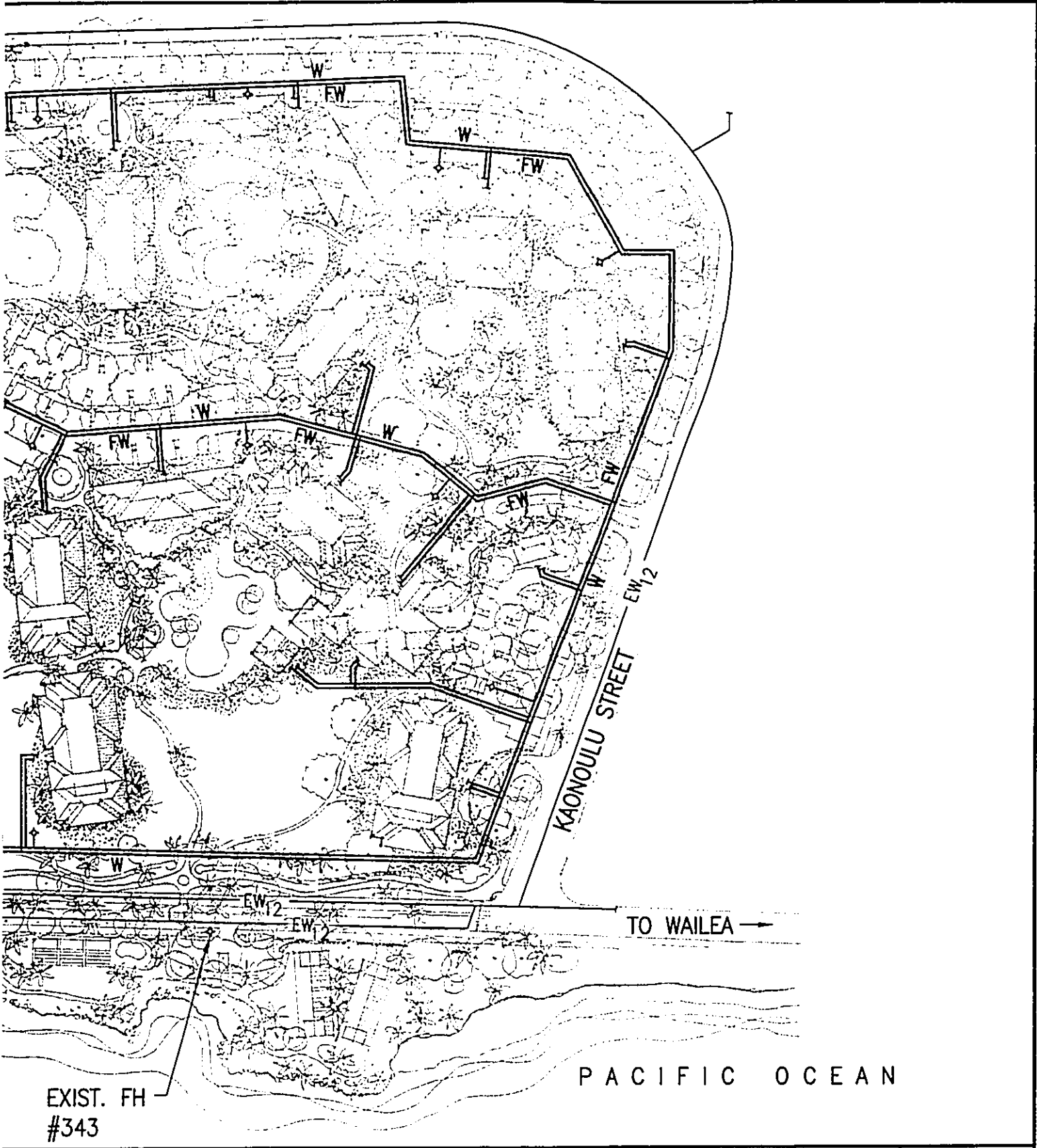
EXIST. FH #342

EXIST. #343



MAUI LU RESORT

CONCEPTUAL WATER SYSTEM PLAN



RESORT
UAL WATER
M PLAN

FIGURE
4

The fire protection water service laterals for both properties will consist of a detector check meter and a looped waterline system paralleling the potable waterline system. The mechanical engineer will verify the need for a fire pump for the timeshare buildings during the design phase of the project. The site fire protection system will provide waterlines connections to the timeshare buildings for the fire sprinkler system with site fire hydrants spaced at 250-foot intervals.

An existing non-potable well is anticipated to supply irrigation water for the project. Testing is currently being done to analyze of the existing well's sustainable yield rate and water quality. Since the Department of Water Supply does not have a non-potable irrigation water system in the vicinity of the property, additional irrigation water, if required, will be supplied from the potable water system. Separate water metering of the irrigation water from the potable system could be utilized to monitor domestic versus irrigation water usage thereby reducing monthly sewer fees.

4. SITE GRADING, FLOODING, AND STORM DRAINAGE SYSTEM

4.1 Background

The site grading, flooding, and storm drainage system is based on the review of the topographic survey map prepared by Warren S. Unemori Engineering, Inc., site investigation, and discussions with the County of Maui Division of Engineering personnel.

4.2 Existing Conditions

In general, the project site slopes in the mauka to makai direction from elevation 22.0 MSL near the northeast corner of the project site to elevation 6.0 MSL along South Kihei Road. The majority of the makai parcels are elevated above South Kihei Road with elevations ranging from 6.0 to 10.0.

The northeast corner of the mauka parcel, which is approximately a quarter of the parcel, currently drains toward to a low spot located along the northern boundary of the project site. Storm drainage flows generated by this area eventually overflow toward South Kihei Road and the Pacific Ocean. The remaining area of the mauka parcel sheet flows toward South Kihei Road and Kaonoulu Street eventually flowing into the Pacific Ocean. The makai parcel sheet flows directly into the Pacific Ocean.

Based on the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA), Community Panel 150003 0265 C dated September 6, 1989, a portion of the mauka parcel adjacent to South Kihei Road is within the "A4" and "C" zones. The FIRM map defines the "A4" zone that occurs directly behind the "VE" zone extending along South Kihei Road, as "Areas of 100-year flood; base flood elevations and flood hazard factors determined." The base flood elevations for the "A4" zone varies from 10 to 9 feet. The "C" zone, which is located in the northwest corner of the mauka parcel, is defined by the FIRM map as "Areas of minimal flooding." The northeast corner of the mauka parcel is within the "AO" zone. The "AO" zone in the northeast portion of the mauka parcel is defined by the FIRM map as "Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined."

makai parcel is located in the "V18" zone while The "V18" zone for the makai parcel is defined by the FIRM map as "Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined." The base flood elevations for the "V18" zone is 10 feet above mean sea level (msl). See Figure 5.

4.3 Projected Demands

Storm Drainage volumes for the project were derived using the Conceptual Layout Plans provided by WCIT and generalized simulation of projected demands for similar developments. Line sizes, inlet locations, drywell requirements and detention/retention requirements will be determined during the design phase of the project.

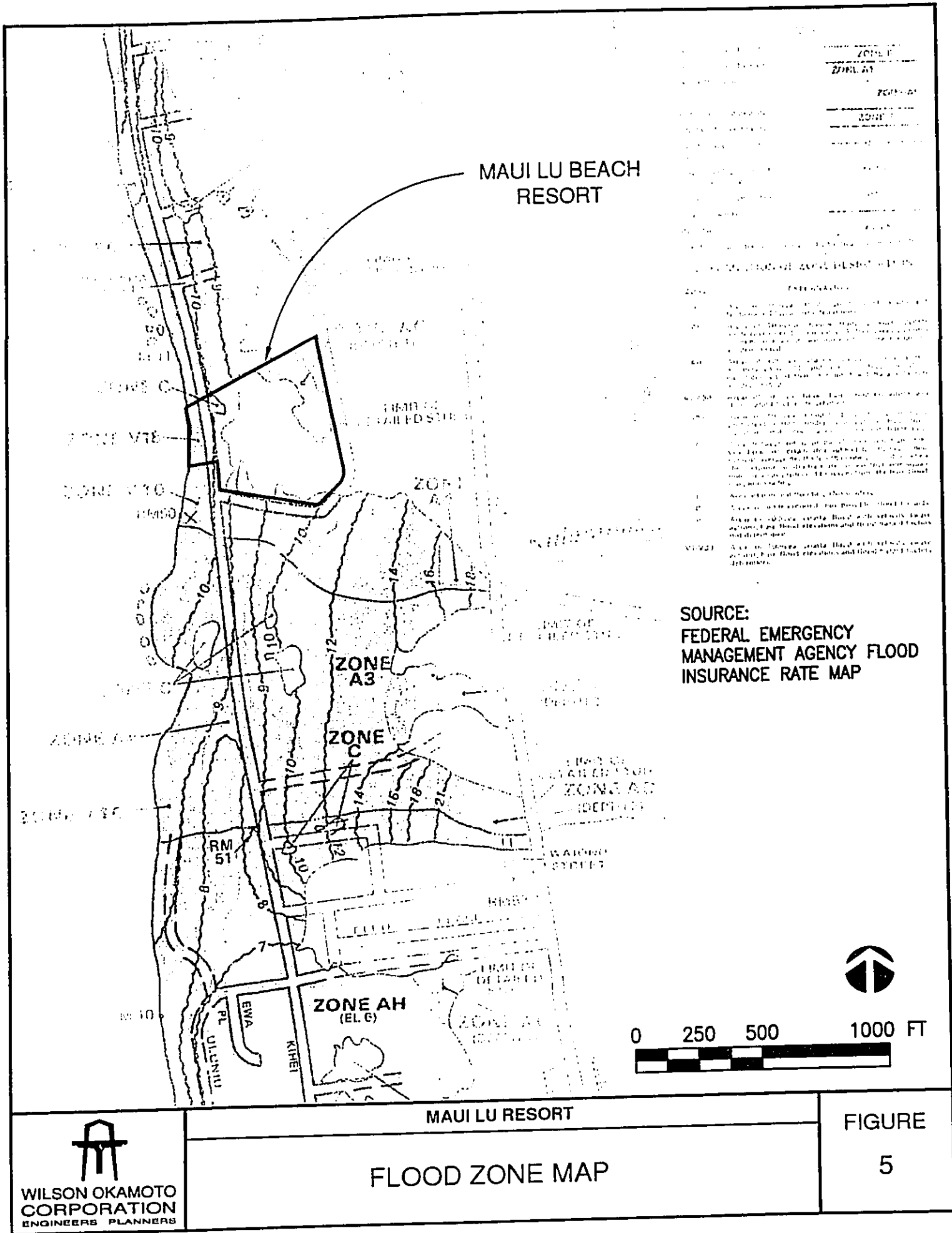
Estimated storm drainage volumes for a 50-year storm for the project based on the Conceptual Layout Plan are 37.17 cubic feet per second (cfs) and 45.41 cfs for existing and proposed conditions respectively. (See Appendix C)

4.4 Proposed Improvements

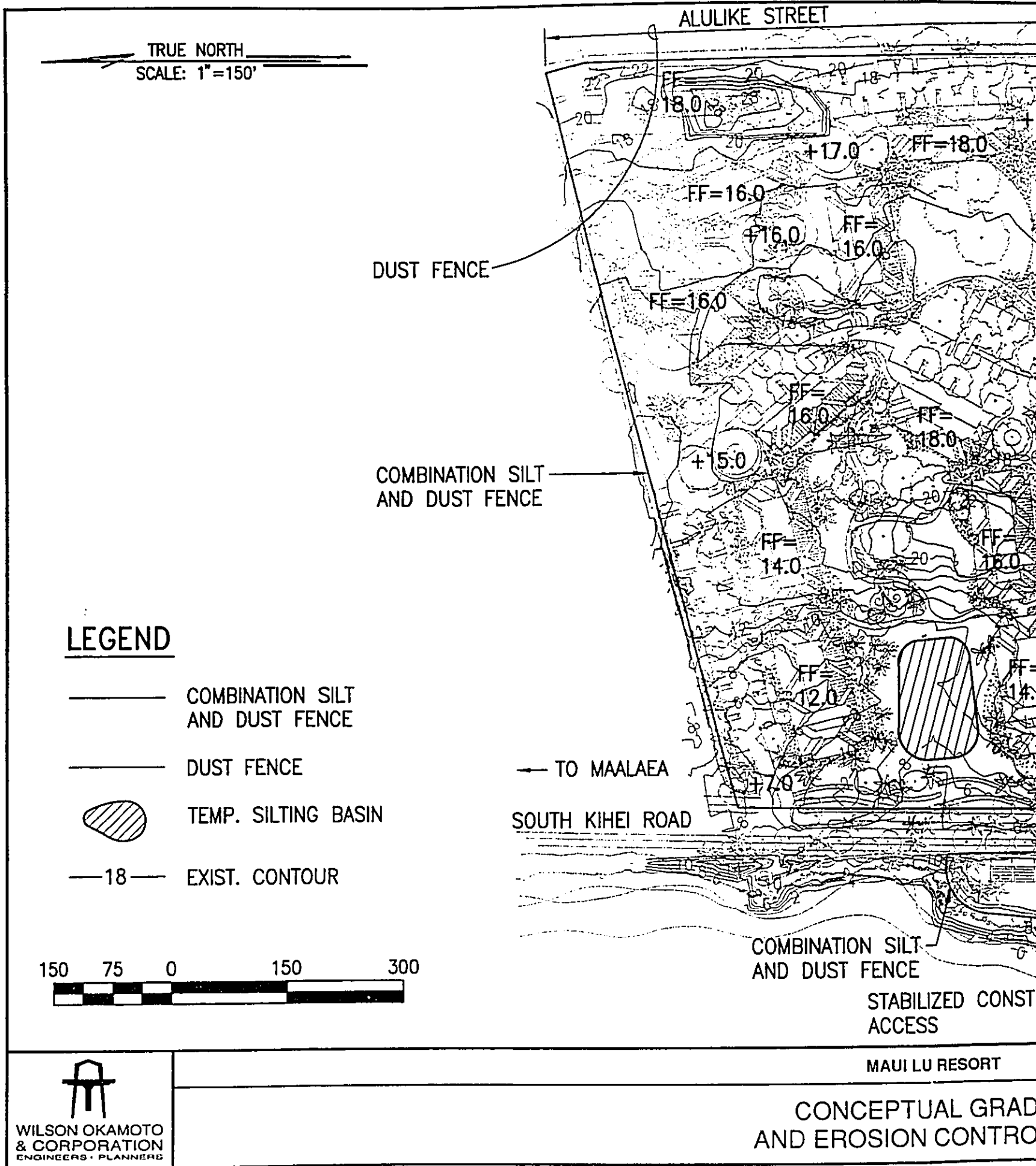
Based on discussions with WCIT, the finished floor elevations for the majority of the timeshare and support facilities will be set near the existing surrounding grades to minimize the earthwork and the potential for erosion hazards during construction. The only exception is the porte cochere drop-off area at the lobby which would be elevated to approximately 14 feet above existing grade to elevation 26.0. New retaining walls and fill for the entry driveway will be required to connect the porte cochere to Kaonoulu Street. The new timeshare buildings located within flood hazard areas along South Kihei Road will be elevated above the various flood elevations. See Figure 6

Minimal grading work for the new driveway and parking area is anticipated for the makai parcel.

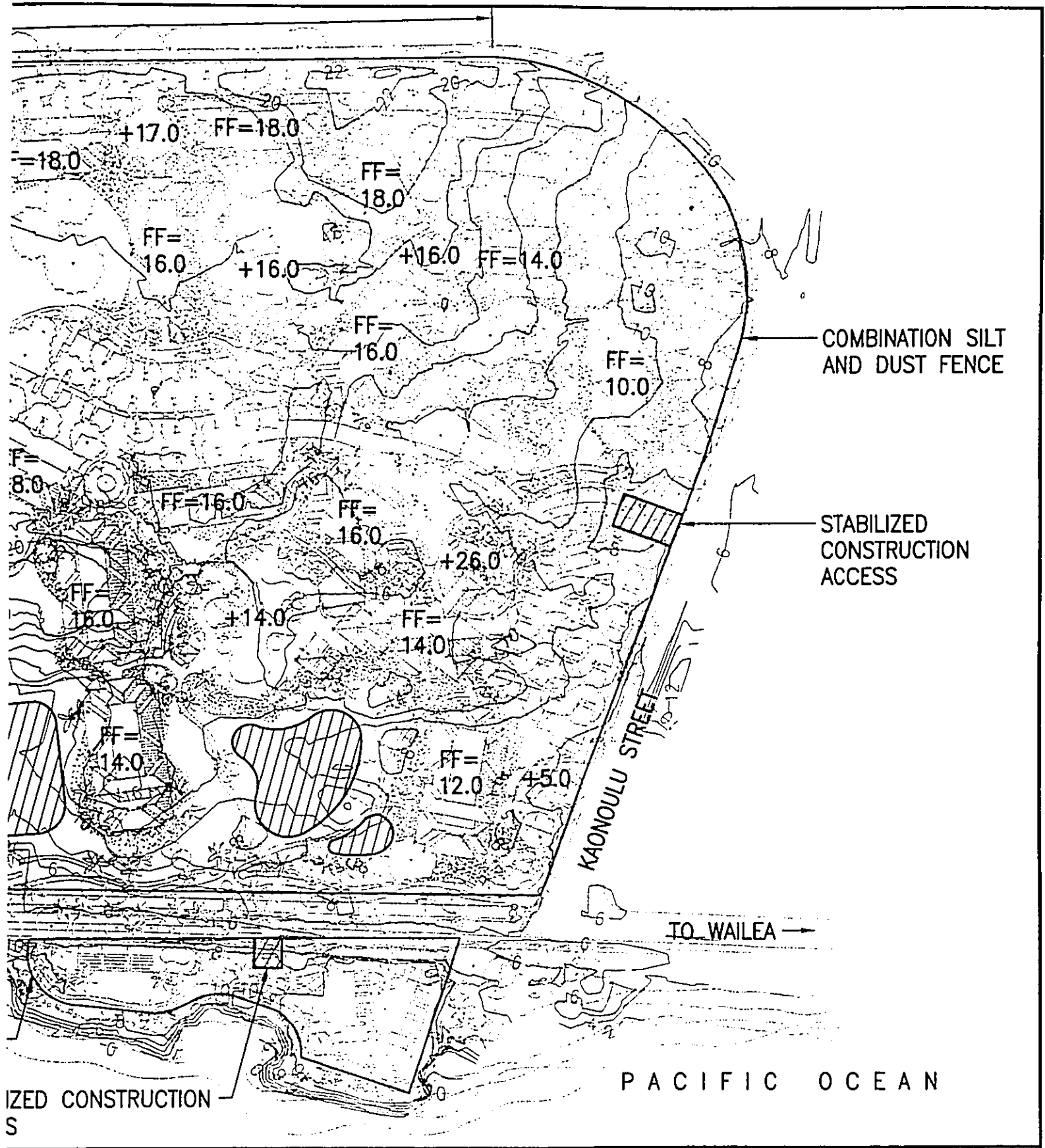
RECEIVED AS FOLLOWS



RECEIVED AS FOLLOWS



RECEIVED AS FOLLOWS



RESORT

IAL GRADING
CONTROL PLAN

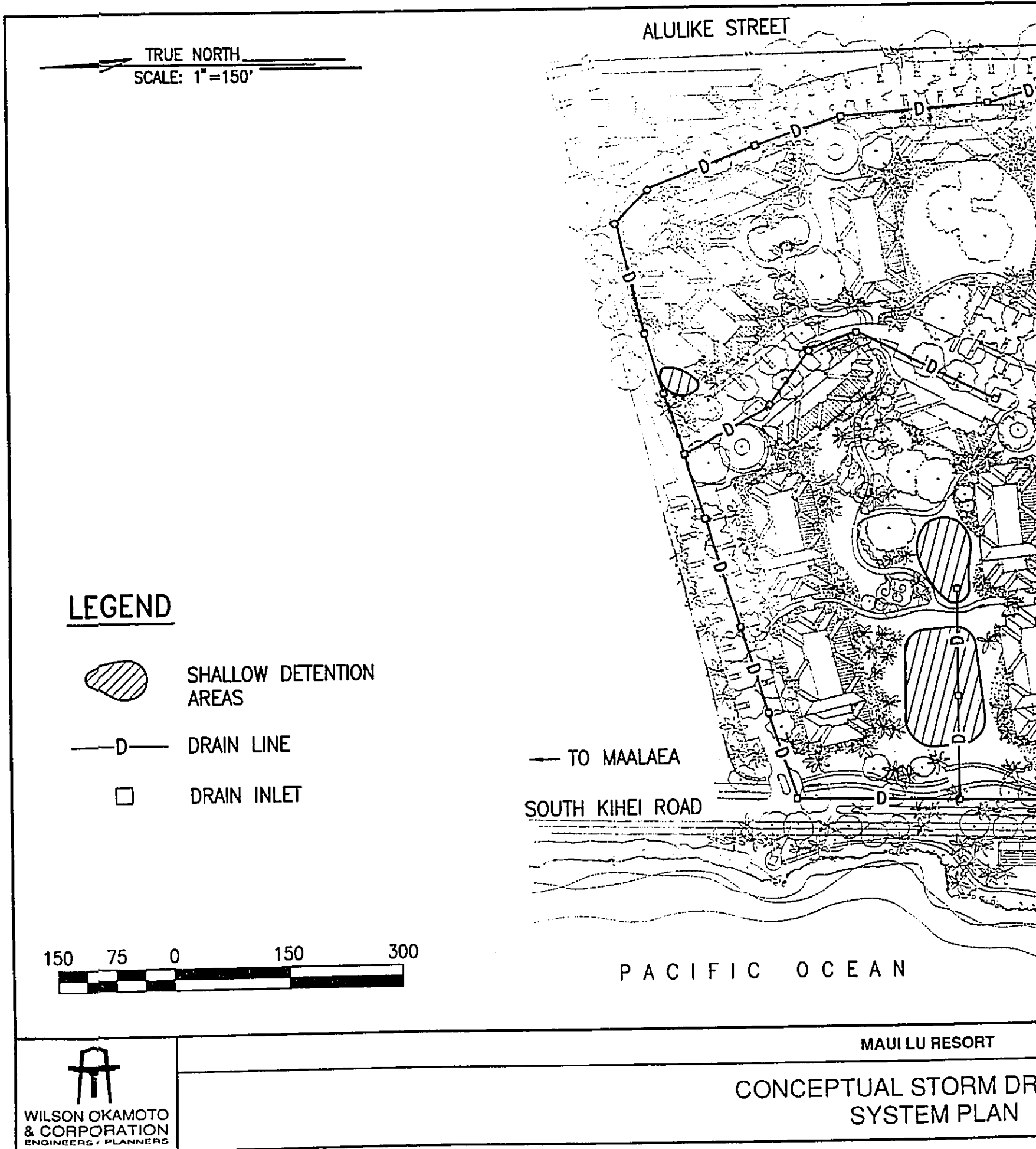
FIGURE
6

The drainage system for the mauka parcel would likely consist of a system of underground drainlines and drain inlets located at low spots throughout the project site. The main drainline system will likely be located within the project's interior roadway system with smaller branch lines servicing the landscaped areas and building downspouts. To attenuate the peak storm runoff rate, underground and above ground detention basins will be located within the landscape areas throughout the project site.

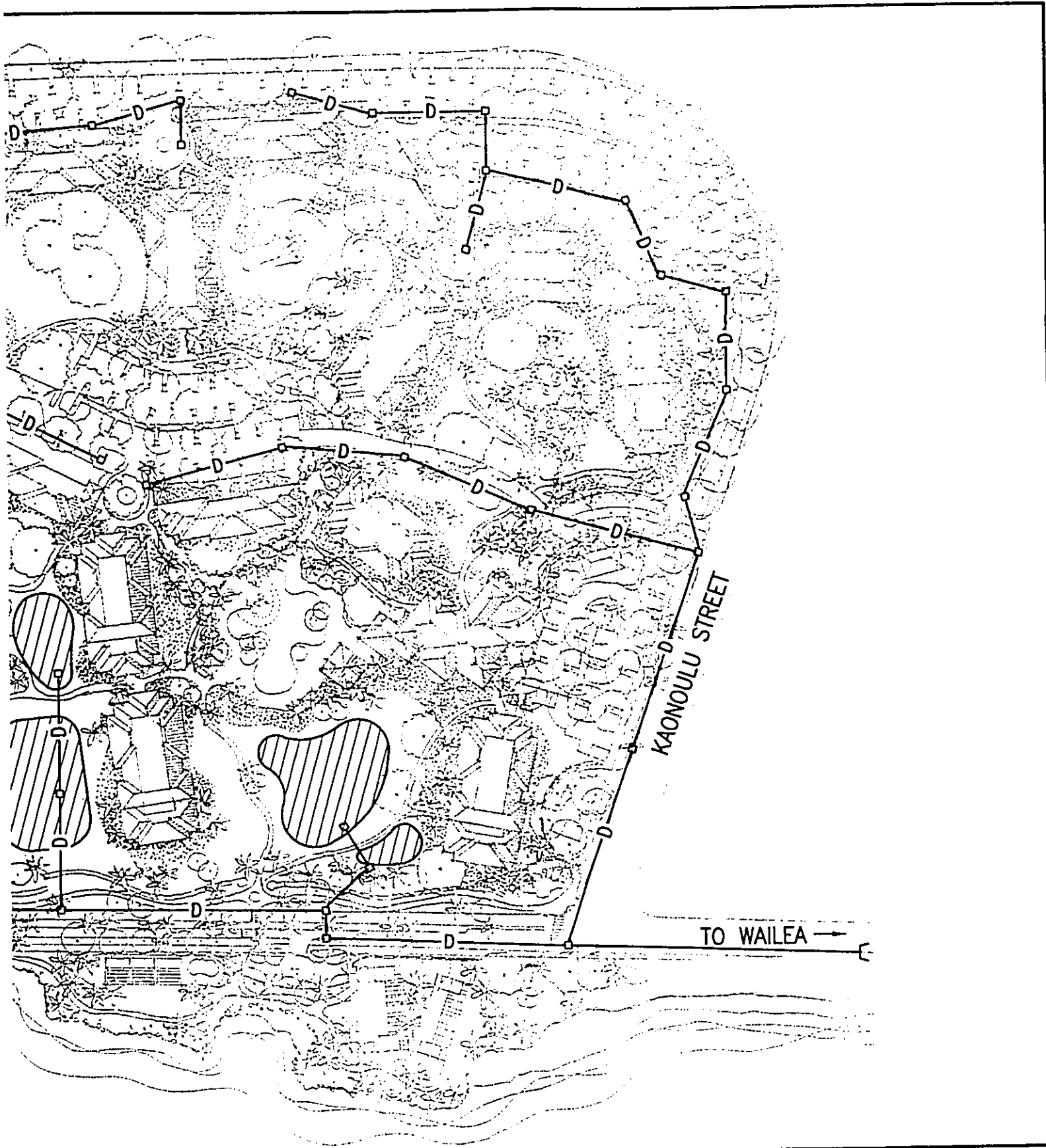
Since the storm runoff generated by the makai parcel is anticipated to decrease due to the reduction in impervious surfaces and improvements to the landscaping, no new drainage improvements are planned at this time. The storm runoff generated by the makai parcel will be allowed to sheet flow toward the ocean similar to existing conditions.

Offsite road improvements to South Kihei Road and Kaonoulu Street, if required, would likely require installation of an underground drainage system with catch basins located along the roadway curb and gutter. Currently, no drainage system exists in the respective roadways. The project's site drainage system will connect to the new drainage systems in both South Kihei Road and Kaonoulu Street and outlet into Kulanihakoi Gulch to the south of the project site on the makai side of South Kihei Road. See Figure 7

RECEIVED AS FOLLOWS



RECEIVED AS FOLLOWS



J RESORT

STORM DRAINAGE
EM PLAN

FIGURE

7

5. PARKING AND ROADWAY SYSTEM

5.1 Background

The review of the parking and roadway system is based on the review of the Conceptual Plan prepared by WCIT. A separate Traffic Impact Report (TIR) is being prepared by others. The TIR will address impacts and proposed improvements as related to the project's connection to South Kihei Road and Kaonoulu Street. This section will concentrate on on-site related parking and roadway system issues.

5.2 Existing Conditions

Currently, access to the project site is provided by the County's South Kihei Road and the State Department of Transportation's (SDOT) Piilani Highway via Kaonoulu Street. The topographic survey map prepared by Warren S. Unemori Engineering, Inc. indicates three existing driveway connections for the mauka parcel, the first driveway is located along South Kihei Road near the northwest corner of the project site while the other two driveways are located on the south end of the project site on Kaonoulu Street. An existing driveway access along South Kihei Road provides vehicle access to the makai parcels.

5.3 Project Demands

Vehicular parking requirements for the project are based on program information provided by WCIT. Approximately 550 parking stalls are required for the proposed project according to County of Maui. Approximately 575 parking stalls are provided on the Conceptual Plan site plan.

5.4 Proposed Improvements

The proposed access to the project's main lobby will be located along Kaonoulu Street while secondary access driveways are proposed along South Kihei Road and Kenolio Road. A fourth driveway access along Kaonoulu Street will provide access to the proposed public parking located at the corner of South Kihei Road and Kaonoulu Street. Vehicle access to the makai parcel will be provided by the existing driveway along South Kihei Road.

The interior roadway system within the mauka parcel will consist of a main entry driveway to the main lobby porte cochere arrival area. A branch perimeter road and parking lot will loop around the south, east and north sides of the project site terminating at a new driveway connection to South Kihei Road near an existing driveway located in the northwest corner of the mauka parcel. A second interior road and parking lot extending from the main lobby driveway will bisect the mauka parcel in the north-south direction. This road will intersect the perimeter road on the north side of the mauka parcel.

Offsite roadway improvements include the installation of a landscaped median separating the mauka and makai parcels of the Maui Lu Resort. The landscaped median will include a pedestrian crossing located approximately midway along the South Kihei Road side of the project site near the existing crossing. Also proposed will be a left turn storage lane for the southbound traffic along South Kihei Road turning left onto Kaonoulu Street.

6. ELECTRICAL SYSTEMS

6.1 Background

Electrical service for the project is available from the Maui Electric Company (MECO). MECO was consulted in July 2003 to determine electrical service availability and capacities for proposed development plans.

6.2 Existing Conditions

The project site is currently served by MECO's overhead transmission lines located along South Kihei Road and Kaonoulu Street.

6.3 Projected Demands

Electrical loads and distribution line sizes will be determined during the design phase of the project.

6.4 Proposed Improvements

The on-site electrical system will likely consist of new underground feeders extending from the MECO's existing overhead distribution line located along South Kihei or Kaonoulu Road. The makai parcel will likely continue to use the existing service connection currently servicing the existing buildings.

7. TELEPHONE, CABLE, AND DATA SYSTEMS

7.1 Background

Telephone, data line access to the Internet, and cable TV service for the project will be provided by Verizon Maui and Oceanic Time Warner Cable of Hawaii. These companies were consulted in July 2003 to determine service availability based on existing facility capacities and development plans.

7.2 Existing Conditions

The Kihei area is served by Verizon Hawaii for telephone and Oceanic Time Warner Cable of Hawaii for cable TV and internet access. Both the telephone and cable systems are located on the overhead MECO power poles located along South Kihei Road and Kaonoulu Street.

7.3 Projected Demands

Currently, there is sufficient capacity and infrastructure in the existing systems to provide telephone, cable TV and internet access for the proposed project.

7.4 Proposed Improvements

New underground ductlines for telephone, data line access to internet and cable TV will be extended from existing overhead lines and distributed throughout the project site.

8. OTHER UTILITIES

8.1 Fuel Systems

If propane or diesel fuel service is required, an on-site tank system would be required since no gas or fuel lines exist near the project site. Sizing and locations of the various gas tanks will be determined during the design phase of the project.

APPENDICES

Appendix A

Proposed Sewage Design Flow Calculations

Assumptions:

- Average Daily Wastewater Flow Rate (ADWFR)¹.
- 250 gallon per timeshare unit per day
- 80 gallon per restaurant seat per day
- 15 gallon per resort employee per day.

$$\begin{aligned} \text{Average Daily Wastewater Flow (ADWF) (mauka)} &= \\ & (\text{ADWFR per timeshare unit}) * (\text{no. of timeshare units}) \\ & + (\text{ADWFR per restaurant seat}) * (\text{no. of restaurant seats}) \\ & + (\text{ADWFR per resort employees}) * (\text{no. of resort employees}) \end{aligned}$$

$$\begin{aligned} \text{No. of timeshare units} &= 388 \text{ units} \\ \text{No. of restaurant seats} &= 150 \text{ seats} \\ \text{No. of resort employees} &= 95 \text{ employees} \end{aligned}$$

$$\begin{aligned} \text{ADWF (mauka)} &= 250 * 388 + 80 * 150 + 15 * 95 \\ &= 110,425 \text{ gallons per day} \end{aligned}$$

$$\text{ADWF (makai)} = (\text{ADWFR per timeshare unit}) * (\text{no. of timeshare units})$$

$$\text{No. of timeshare units} = 12 \text{ units}$$

$$\begin{aligned} \text{ADWF (makai)} &= 250 * 12 \\ &= 3,000 \text{ gallons per day} \end{aligned}$$

| | |
|--------------|-------------|
| ADWF (mauka) | 110,425 gpd |
| ADWF (makai) | 3,000 gpd |
| Total ADWF | 113,425 gpd |

The total Average Daily Wastewater Flow for the Maui Lu Resort will be approximately 113,500 gallons per day.

¹ County of Maui Department of Public Works. *Wastewater Reclamation Division Policy / Guideline for Standards of Wastewater Contribution* memo dated Feb 4, 1991.

Appendix B

Proposed Potable Water Demands Calculations

Assumptions:

Average Daily Demand (ADD) rates are as follows²:

350 gallons per day per timeshare unit

140 gallons per 1,000 square feet for restaurant and support facilities

$$\begin{aligned} \text{ADD (mauka)} &= (\text{ADD rate per timeshare unit}) * (\text{no. of timeshare units}) \\ &+ (\text{ADD rate per restaurant area}) * (\text{restaurant area}) \\ &+ (\text{ADD rate per support facilities area}) * (\text{support facilities area}) \end{aligned}$$

$$\begin{aligned} \text{No. of timeshare units} &= 388 \text{ units} \\ \text{Restaurant area} &= 5,800 \text{ square feet} \\ \text{Support facilities area} &= 21,185 \text{ square feet} \end{aligned}$$

$$\begin{aligned} \text{ADD (mauka)} &= 350 * 388 + (140/1000) * 5,800 + (140/1000) * 21,185 \\ &= 139,578 \text{ gallons per day} \end{aligned}$$

$$\begin{aligned} \text{ADD (makai)} &= (\text{ADD rate per timeshare unit}) * (\text{no. of timeshare units}) \\ &+ (\text{ADD rate per support facilities area}) * (\text{support facilities area}) \end{aligned}$$

$$\begin{aligned} \text{No. of timeshare units} &= 12 \text{ units} \\ \text{Support facilities area (Beach Club)} &= 2,500 \text{ square feet} \end{aligned}$$

$$\begin{aligned} \text{ADD (makai)} &= 350 * 12 + (140/1000) * 2,500 \\ &= 4,550 \text{ gallons per day} \end{aligned}$$

| | |
|-------------|-------------|
| ADD (mauka) | 139,578 gpd |
| ADD (makai) | 4,550 gpd |
| Total | 144,128 gpd |

The total average daily demand for potable water for the Maui Lu Timeshare Resort will be approximately 144,200 gallons per day.

² County of Maui Department of Water Supply. *Water System Standards*. 2002.

Appendix C
Preliminary Drainage Report

PRELIMINARY DRAINAGE STUDY
FOR THE
MAUI LU RESORT

TAX MAP KEY: (2) 3-9-01: 83, 86, & 120

Prepared for:

GENESEE CAPITAL
4037 Porte de Palmas, Suite 90
San Diego, CA 92122

Prepared by:

Wilson Okamoto Corporation

October 2003

TABLE OF CONTENTS

| | <u>Page</u> |
|--|-------------|
| I. INTRODUCTION..... | 1 |
| A. Purpose..... | 1 |
| B. Proposed Project Location | 1 |
| C. Existing Topography..... | 1 |
| D. Soils..... | 4 |
| E. Vegetation | 4 |
| II. EXISTING DRAINAGE CONDITIONS | 6 |
| A. Drainage..... | 6 |
| B. Flood Hazard..... | 6 |
| III. PROPOSED DRAINAGE CONDITIONS | 8 |
| IV. HYDROLOGY ANALYSIS..... | 8 |
| A. Rational Method..... | 8 |
| V. RESULTS | 10 |
| VI. CONCLUSION | 10 |
| VII. REFERENCES..... | 11 |
| VIII. APPENDIX A..... | 1 |

I. INTRODUCTION

A. Purpose

This preliminary drainage study was conducted to:

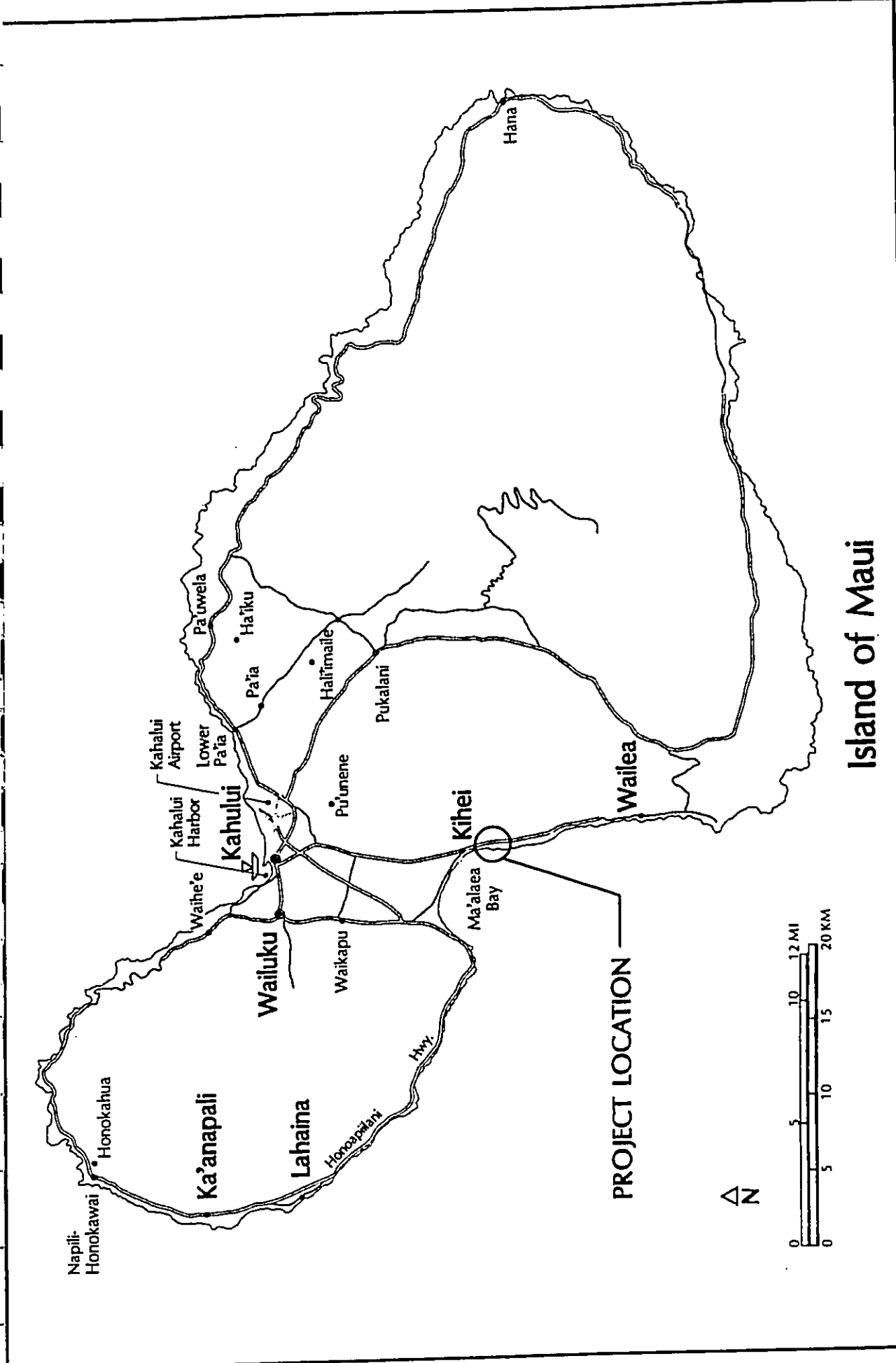
1. Calculate storm runoff quantities occurring on-site for both the existing and proposed conditions.
2. Determine any drainage impacts to adjacent properties and to recommend any drainage improvements such as detention basins, inlets, culverts, and drywells.

B. Proposed Project Location

The project site consists of three parcels totaling 27.285 acres. The main mauka parcel, which consists of 26.004 acres, is bounded by existing developments to the north, South Kihei Road to the west, Alulike Street to the east, and Kaonoulu Street to the south. The other two parcels consisting of 1.281 acres are beachfront parcels located on the makai side of South Kihei Road fronting the main mauka parcel. The three parcels are identified by Tax Map Key: 3-9-01: parcels 83, 86, and 120 (see Exhibit A & B). The proposed project consists of the phased demolition of the existing resort buildings and the construction of new 1 to 4-story buildings totaling 379, 2-bedroom resort timeshare units and related amenities and support facilities. The existing buildings on the makai property will be reduced in size and renovated.

C. Existing Topography

The existing topography of the project site is generally characterized by mild slopes and flat areas. Site elevations range from 28 feet above Mean Sea Level near the eastern most portion of the property to 0 feet above Mean Sea Level at the shoreline. The mauka parcel is relatively flat with some mounds and depressions scattered throughout the area.



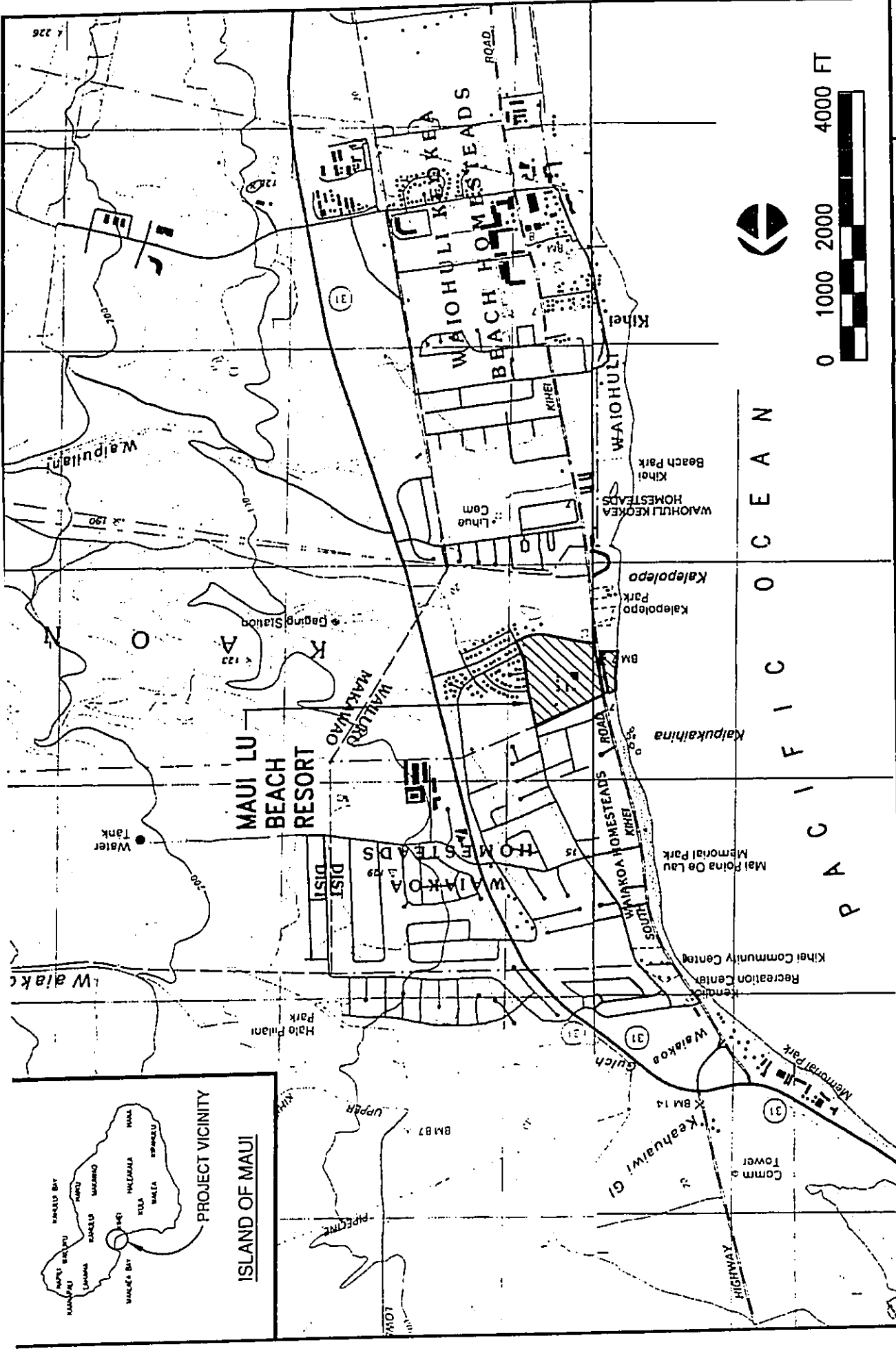
Island of Maui

MAUI LU RESORT
KIHEI, MAUI, HAWAII

VICINITY MAP



A
EXHIBIT



MAUI LU RESORT

LOCATION MAP

EXHIBIT B


WILSON OKAMOTO CORPORATION
 ENGINEERS PLANNERS

D. Soils

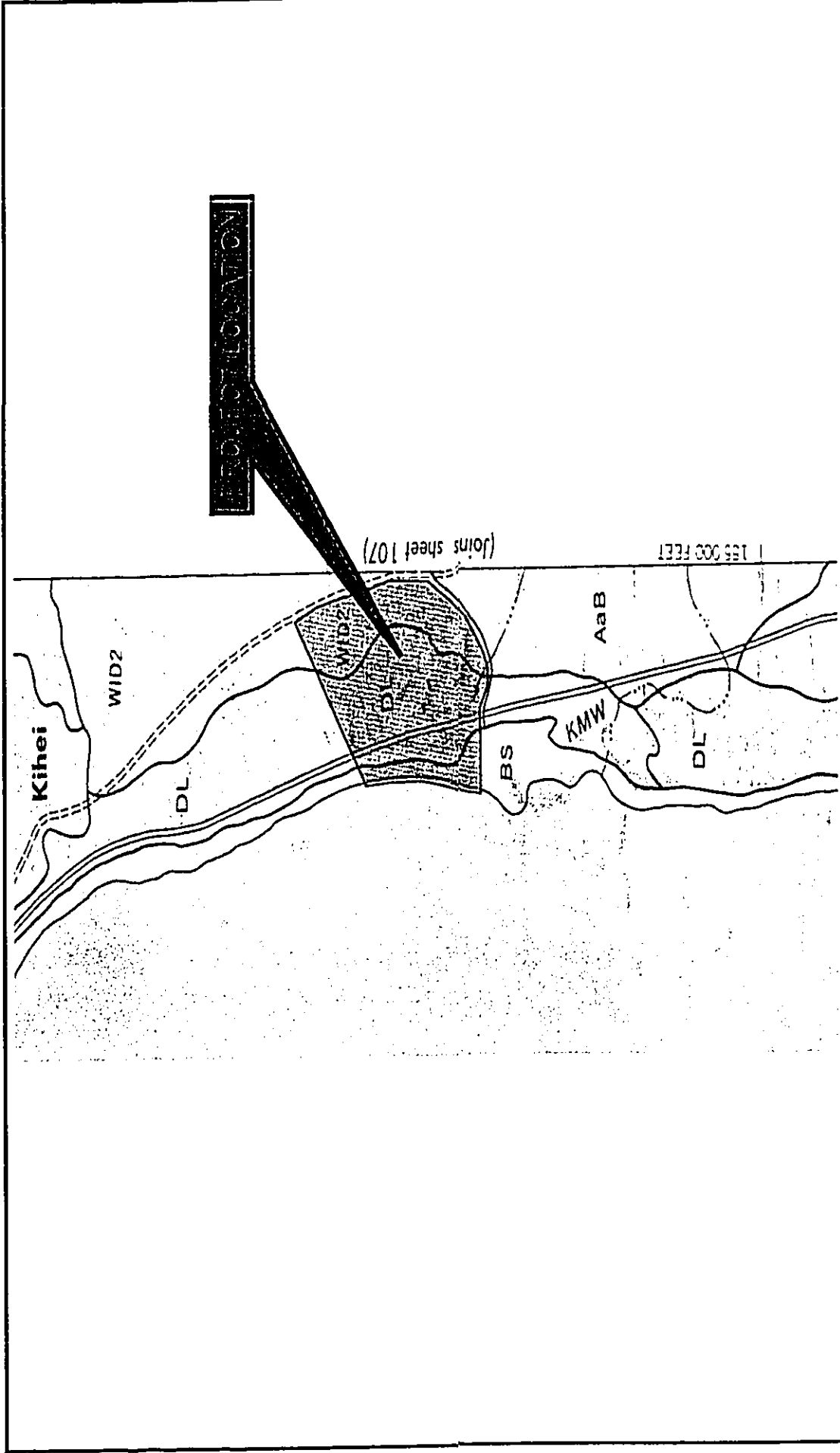
Soil series and mapping units for the island of Maui are found in maps in the U.S. Department of Agriculture Soil Conservation Service. "Soil Survey of Island of Maui, State of Hawaii," August 1972, classifies the soil within the project site as (DL) and (WID2). The soil along the coast is classified (BS). The soil series are defined as follows:

- (DL): Dune Land consists of hills and ridges of sand-size particles drifted and piled by the wind.
- (WID2): Waiakoa extremely stony silty clay loam, 3 to 25 percent slopes. In most areas about 50% of the surface layer has been removed by erosion. Runoff is medium, and the erosion hazard is severe.
- (BS): Beaches occur as sandy, gravelly, or cobbly areas that are washed and reworked by ocean waves.

(See Exhibit C).

E. Vegetation

Most of the existing project site is covered with grass, plants, and trees, except for the existing building structures, driveways, and other various paved areas.



| | |
|---------------------------|--|
| <p>The Maui Lu Resort</p> | <p>Source: "Soil Survey of The Island of Maui, State of Hawaii", United States Department of Agriculture, Soil Conservation Service, August 1972</p> |
| <p>Exhibit C</p> | <p>Soil Classification Map</p> <p>Prepared for: Genesee Capital</p> <p>Prepared by: Wilson Okamoto Corporation</p> |

II. EXISTING DRAINAGE CONDITIONS

A. Drainage

The project site is divided into 2 sub-areas based upon the existing drainage conditions. The area mauka of South Kihei Road drains mainly onto South Kihei Road and Kaonoulu Road, while the smaller area makai of South Kihei Road drains directly into the ocean.

B. Flood Hazard

Based on the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA), Community Panel 150003 0265 C dated September 6, 1989, the makai parcel is located in the "V18" zone while a portion of the mauka parcel adjacent to South Kihei Road is within the "A4" and "C" zones. A portion of the northeast corner of the mauka parcel is within the "AO" zone.

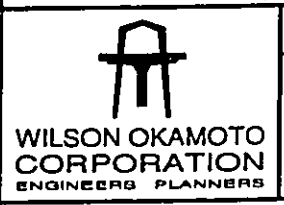
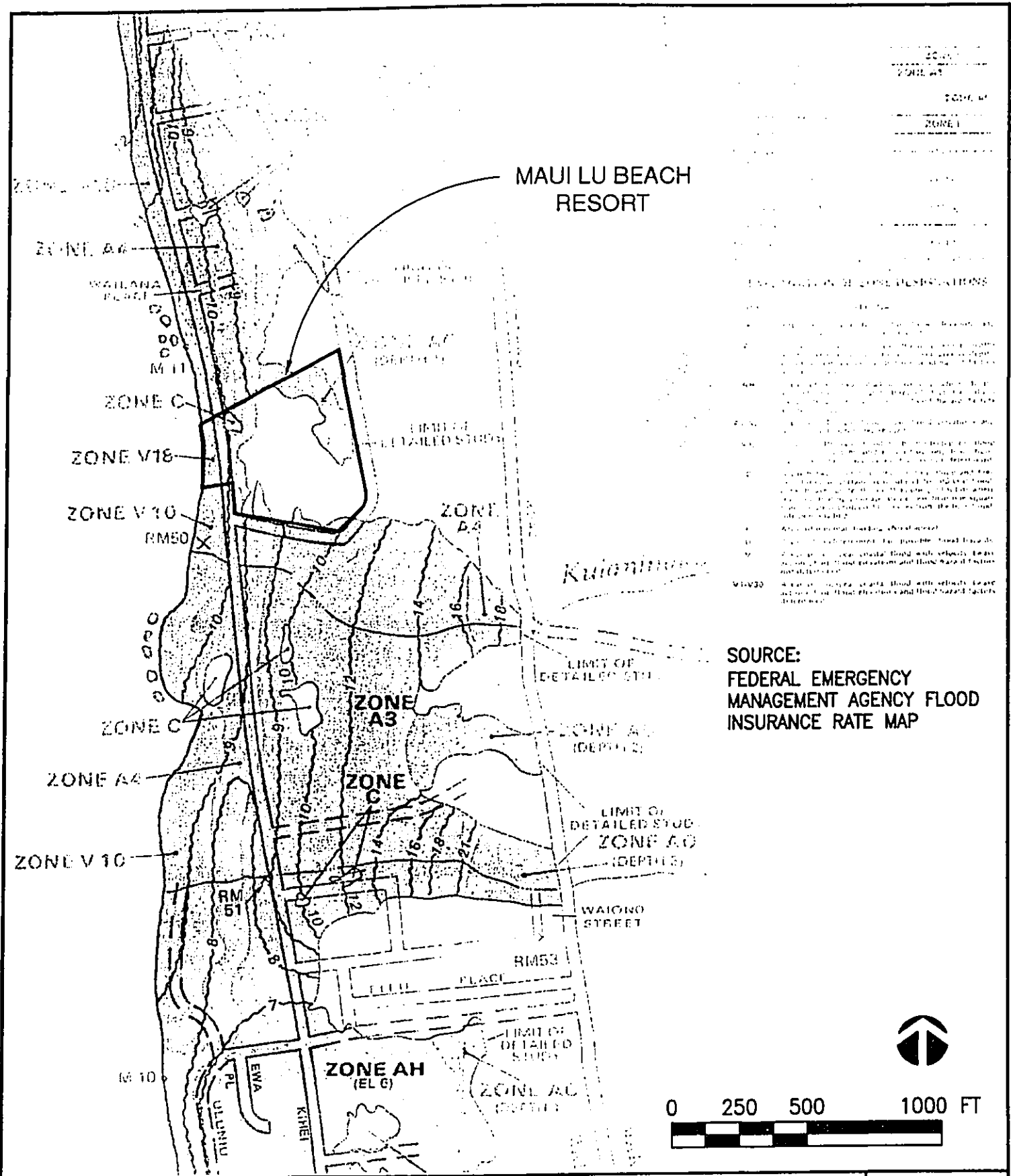
The "V18" zone for the makai parcel is defined by the FIRM map as "Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined." The base flood elevations for the "V18" zone is 10 feet above mean sea level (msl).

The FIRM map defines the "A4" zone that occurs directly behind the "VE" zone extending along South Kihei Road, as "Areas of 100-year flood; base flood elevations and flood hazard factors determined." The base flood elevations for the "A4" zone varies from 10 to 9 feet.

The northwest corner of the mauka parcel is within the "C" zone. The FIRM map defines the "C" zone as "Areas of minimal flooding."

The "AO" zone in the northeast portion of the mauka parcel is defined by the FIRM map as "Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined. (See Exhibit D)

RECEIVED AS FOLLOWS



MAUI LU RESORT
FLOOD ZONE MAP

EXHIBIT
D

III. PROPOSED DRAINAGE CONDITIONS

The project consists of the phased demolition of the existing buildings on the mauka parcel and the construction of new building timeshare support facilities including paved parking lots, walkways, and pools. The existing buildings on the makai property will be reduced in size and renovated. Minor grading work will be done to accommodate the proposed buildings and support facilities.

The project site is divided into two sub-areas. Runoff in Area-1 will sheet flow towards the surrounding roads and to sump areas located throughout the site. Runoff in Area-2 will sheet flow to the ocean.

(See Figure 2 in Appendix A –Proposed Condition Drainage Plan).

HYDROLOGIC CRITERIA

The hydrologic analysis is based on a 50-year storm runoff with 1-hour rainfall intensity. The Rational Method was used to determine peak discharge for the existing and proposed conditions.

IV. HYDROLOGY ANALYSIS

A. Rational Method

Design runoff flows were determined by the Rational Method expressed as:

$$Q = C * I * A$$

where:

Q = Flowrate in cubic feet per second (cfs)

C = Runoff coefficient

I = Rainfall intensity in inches per hour for a duration equal to the time of concentration.

A = Drainage area, in acres

See Appendix for hydrologic and hydraulic calculations.

Drainage Area

Limits of the drainage basins were delineated based on topographic features. The total area was determined to be 27.285 acres. (See Figure 1 - Existing Condition Drainage Plan and Figure 2 - Proposed Condition Drainage Plan).

Rainfall Intensity

The runoff time of concentration and design rainfall intensity was determined in accordance with plates 1 and 2 of the Department of Public Works, County of Maui, "Storm Drain Standards," respectively. A 1-hour rainfall value of 2 inches/hour was used based on a 50-year 1-hour rainfall.

Runoff Coefficient

A weighted average was used to determine the runoff coefficients for each drainage basin. The runoff coefficients as referenced from the Department of Public Works, County of Maui, "Storm Drainage Standards," Table 1, are as follows:

| | |
|-------------------------------------|--------------------|
| Impervious surfaces, fairly flat... | 0.90 |
| Grass or vegetation, fairly flat... | 0.15 / 0.20 / 0.30 |

The runoff coefficients for both the existing and proposed drainage basins are as follows (see Appendix A).

| | |
|------------------|--------|
| Existing Mauka C | = 0.43 |
| Proposed Mauka C | = 0.53 |

| | |
|------------------|--------|
| Existing Makai C | = 0.44 |
| Proposed Makai C | = 0.38 |

V. RESULTS

Peak discharge as calculated by the Rational Method for both the existing and proposed conditions are shown in Table 2 in Appendix A. A total discharge of 35.37 and 43.85 cfs was determined for the existing and proposed on-site runoff respectively for the mauka parcel. Because the makai parcel is much smaller, a total discharge of only 1.80 and 1.56 cfs was determined for the existing and proposed on-site runoff respectively.

VI. CONCLUSION

In comparing the existing and proposed drainage conditions for the project site, it was determined that the proposed improvements on the mauka parcel generated an 8.24 cfs increase in storm runoff while the makai parcel experienced a 0.24 cfs decrease. The increase in storm runoff generated by the mauka parcel can be attributed to the increase in the amount of buildings, walkways, driveways, and other impervious surfaces. On the other hand, the reduced building and increase in landscaping for the makai parcel has resulted in a decrease of storm runoff generated by the area. The proposed drainage system for the project site will be designed to contain the increase in storm runoff generated by the mauka parcel.

VII. REFERENCES

1. "Storm Drainage Standards," Department of Public Works, County of Maui, July 1995.
2. "Soil Survey of Island of Maui, State of Hawaii," U.S. Department of Agriculture, Soil Conservation Service, August 1972.
3. "Flood Insurance Rate Map, Maui County, Hawaii," Federal Emergency Management Agency, Maui County, Hawaii, Community-Panel Number 150003 0265C.

VIII. APPENDIX A

TABLE 1 RUNOFF COEFFICIENT CALCULATIONS

TABLE 2 HYDROLOGIC CALCULATIONS

FIGURE 1 EXISTING CONDITION DRAINAGE PLAN

FIGURE 2 PROPOSED CONDITION DRAINAGE PLAN

Table 1: Runoff Coefficient Calculations

| | | |
|-----------------|---|--------|
| Area-1 | $C = \frac{(0.9 * \text{Impervious Area}) + (0.3 * \text{Vegetation Area})}{\text{Total Area-1}}$ | |
| Area-2 | $C = \frac{(0.9 * \text{Impervious Area}) + (0.3 * \text{Vegetation Area})}{\text{Total Area-2}}$ | |
| Area-1 (exist.) | $C = \frac{(0.9 * 0.34 \text{ acres}) + (0.3 * 0.24 \text{ acres})}{0.58 \text{ acres}}$ | = 0.65 |
| Area-2 (exist.) | $C = \frac{(0.9 * 0.04 \text{ acres}) + (0.3 * 0.24 \text{ acres})}{0.28 \text{ acres}}$ | = 0.38 |
| Area-1 (finish) | $C = \frac{(0.9 * 0.50 \text{ acres}) + (0.3 * 0.08 \text{ acres})}{0.58 \text{ acres}}$ | = 0.82 |
| Area-2 (finish) | $C = \frac{(0.9 * 0.28 \text{ acres}) + (0.2 * 0.0 \text{ acres})}{0.28 \text{ acres}}$ | = 0.90 |

TABLE 2

**Maui Lu Resort
Hydrologic Calculations for Existing Condition (Table 2-A)**

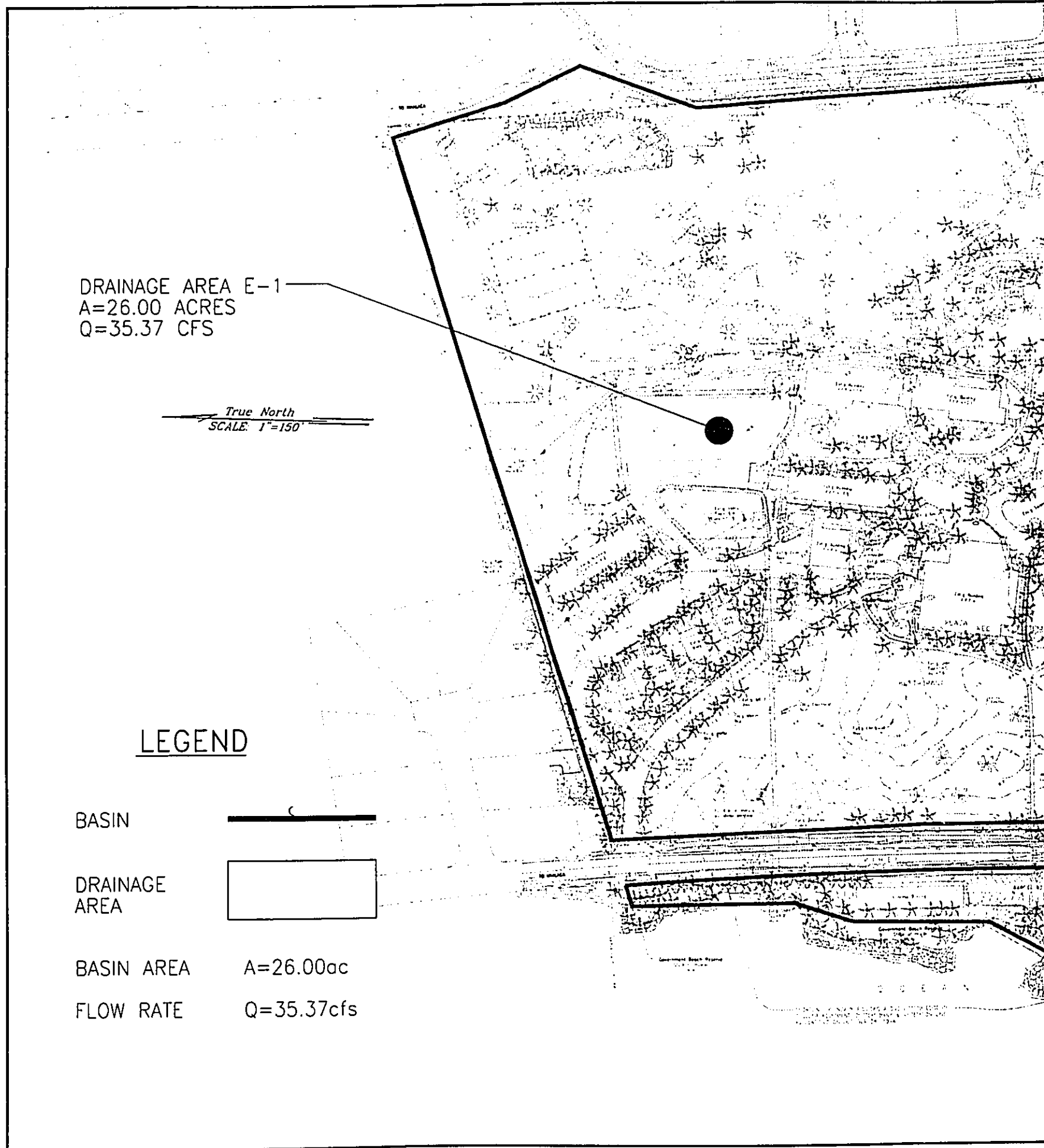
| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) | LENGTH (ft) | SLOPE % | Tc (min) | Tm | 1-hr Rain | I | C | Q (cfs) |
|----------------|----------------|------------------------|-------------|---------|----------|-------|-----------|-----|------|--------------|
| E1 | 20.58 | 5.42 | 1000 | 2 | 20.0 | 50 yr | 2.0 | 3.2 | 0.43 | 35.37 |
| E2 | 0.84 | 0.44 | 200 | 1 | 20.0 | 50 yr | 2.0 | 3.2 | 0.44 | 1.80 |
| TOTAL | 21.42 | 5.86 | | | | | | | | 37.17 |

**Maui Lu Resort
Hydrologic Calculations for Proposed Condition (Table 2-B)**

| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) | LENGTH (ft) | SLOPE % | Tc (min) | Tm | 1-hr Rain | I | C | Q (cfs) |
|----------------|----------------|------------------------|-------------|---------|----------|-------|-----------|-----|------|--------------|
| P1 | 12.93 | 13.07 | 1000 | 2 | 20.0 | 50 yr | 2.0 | 3.2 | 0.53 | 43.85 |
| P2 | 0.95 | 0.33 | 200 | 1 | 20.0 | 50 yr | 2.0 | 3.2 | 0.38 | 1.56 |
| TOTAL | 13.88 | 13.40 | | | | | | | | 45.41 |

| | lawn | Impervious |
|----|------|------------|
| E1 | 0.3 | 0.9 |
| E2 | 0.2 | 0.9 |
| P1 | 0.15 | 0.9 |
| P2 | 0.2 | 0.9 |

RECEIVED AS FOLLOWS



DRAINAGE AREA E-1
A=26.00 ACRES
Q=35.37 CFS

True North
SCALE: 1"=150'

LEGEND

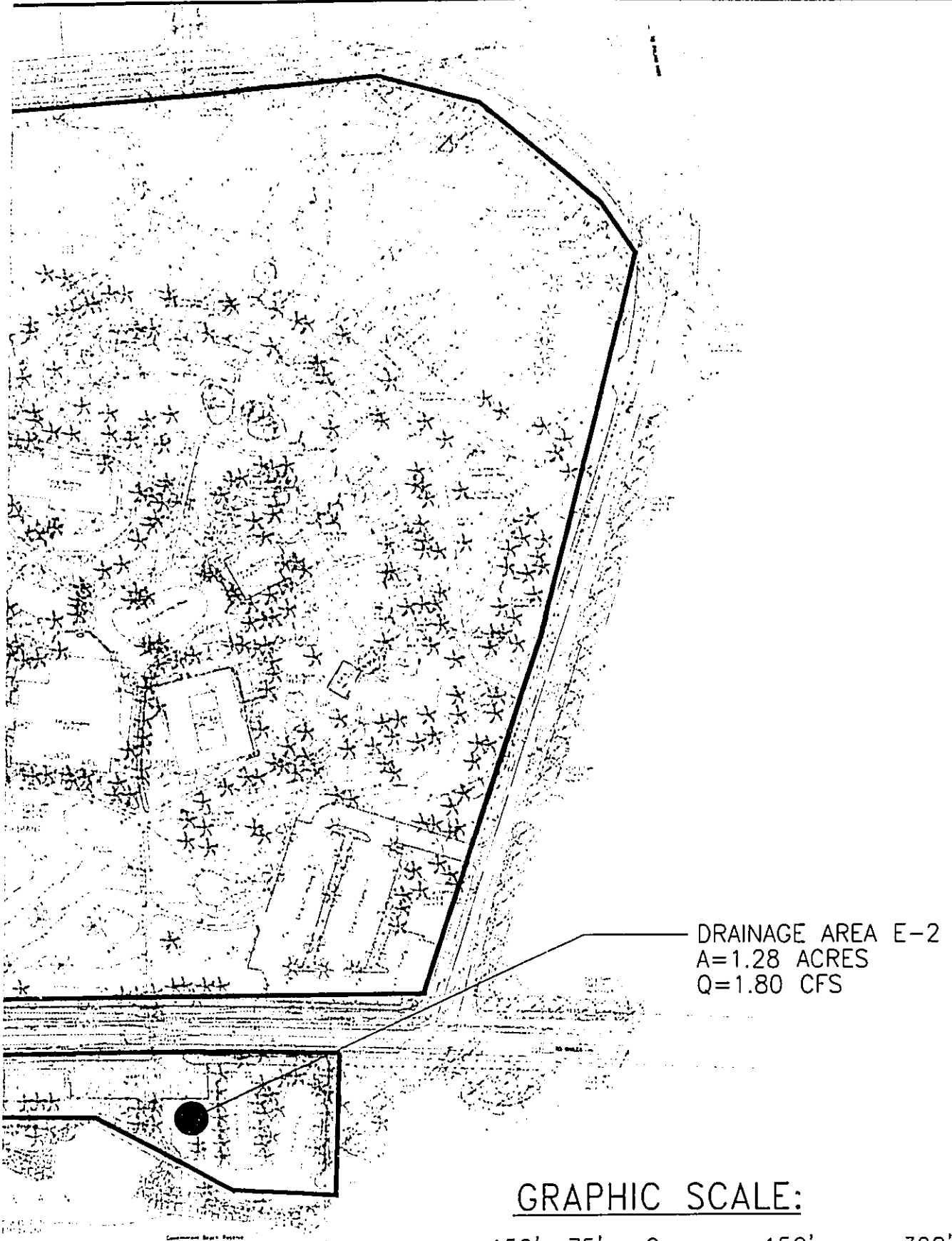
BASIN 

DRAINAGE AREA 

BASIN AREA A=26.00ac

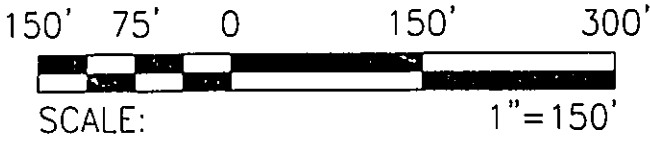
FLOW RATE Q=35.37cfs


RECEIVED AS FOLLOWS



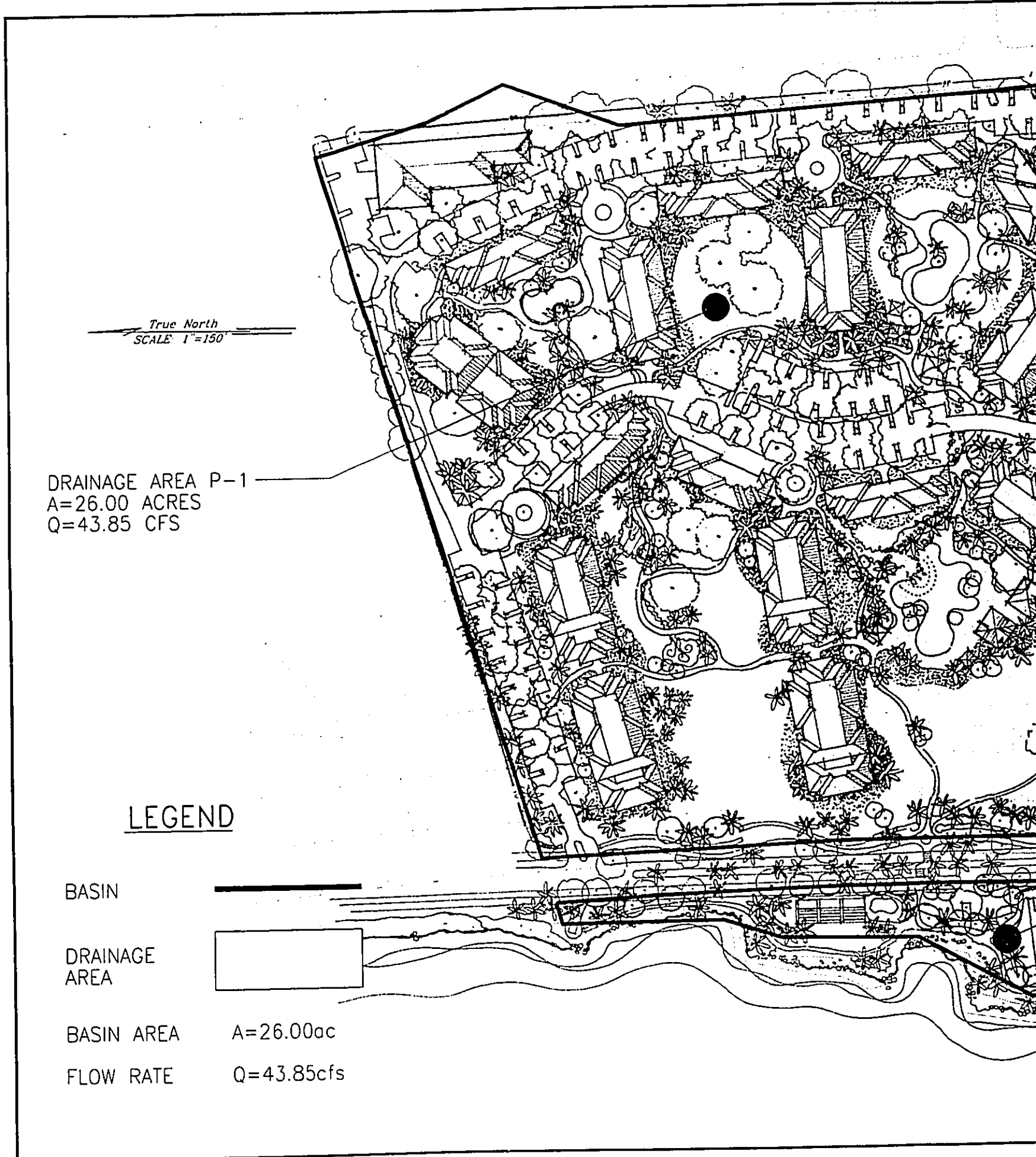
DRAINAGE AREA E-2
A=1.28 ACRES
Q=1.80 CFS

GRAPHIC SCALE:

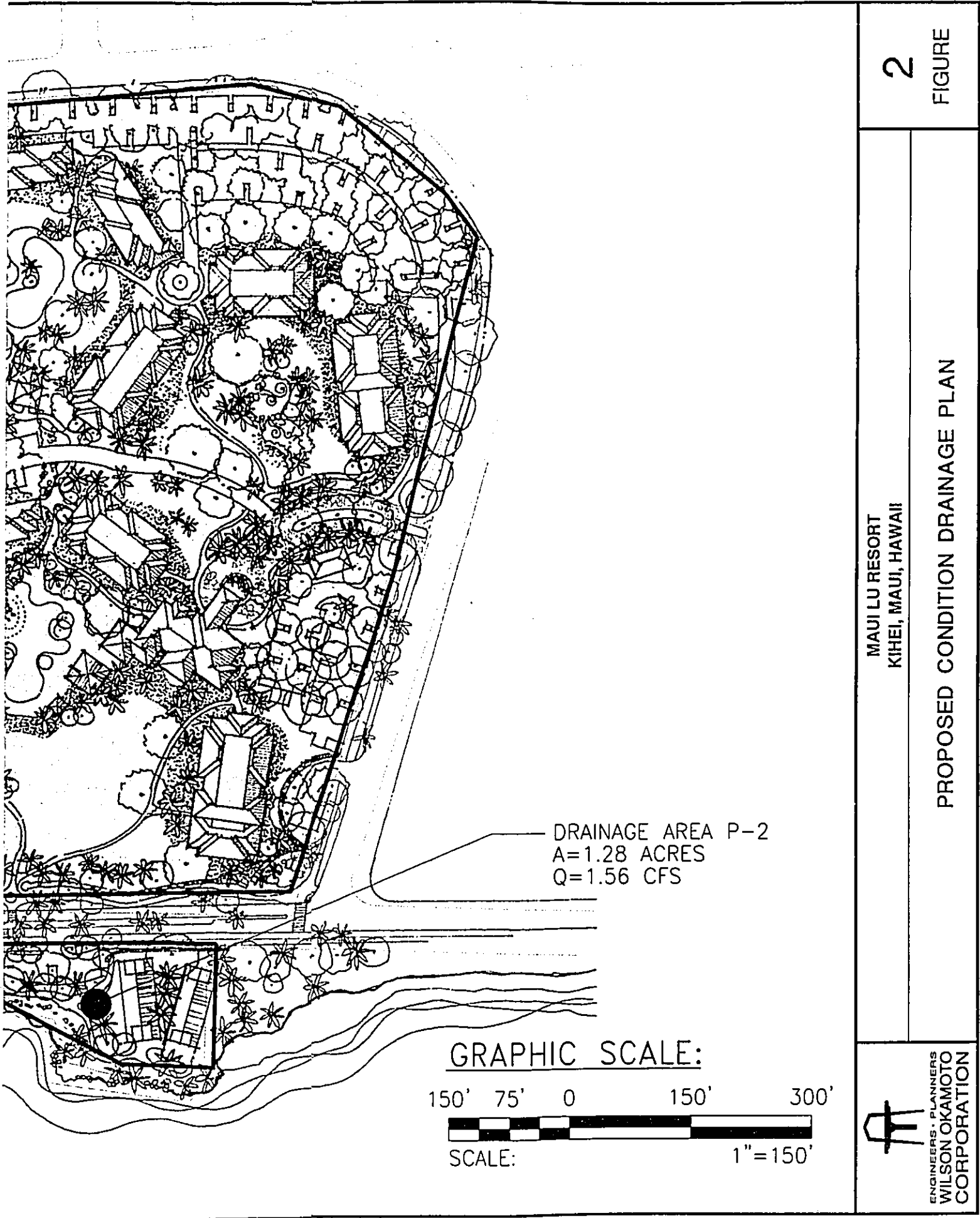


| | | |
|--------|---------------------------------------|---|
| 1 | MAUI LU RESORT KIHEI, MAUI, HAWAII |  |
| FIGURE | EXISTING CONDITION DRAINAGE PLAN | ENGINEERS • PLANNERS WILSON OKAMOTO CORPORATION |

RECEIVED AS FOLLOWS



RECEIVED AS FOLLOWS



APPENDIX E
Traffic Impact Assessment Study

TRAFFIC IMPACT ANALYSIS REPORT FOR

MAUI LU RESORT

IN KIHEI, MAUI, HAWAII

DRAFT REPORT

Prepared For

575 SOUTH KIHEI ROAD, LLC

5371 Wilshire Boulevard, Suite 210
Los Angeles, CA 90036

Phillip Rowell and Associates

47-273 'D' Hui Iwa Street
Kaneohe, Hawai'i 96744
Tel: 808-239-8206 Fax: 808-239-4175
Email: prowell@gte.net

September 16, 2003
Revised October 10, 2003
Revised August 6, 2004

TABLE OF CONTENTS

| | |
|---|---------|
| 1. INTRODUCTION | Page 1 |
| Project Location and Description | Page 1 |
| Study Methodology and Order of Presentation | Page 6 |
| 2. ANALYSIS OF EXISTING CONDITIONS | Page 7 |
| Description of Existing Streets and Intersection Controls | Page 7 |
| Existing Peak Hour Traffic Volumes | Page 8 |
| Level-of-Service Concept | Page 11 |
| Level-of-Service Analysis of Existing Conditions | Page 13 |
| 3. PROJECTED CUMULATIVE TRAFFIC CONDITIONS | Page 14 |
| Background Traffic Growth | Page 14 |
| Related Projects | Page 15 |
| 2008 Cumulative Traffic Projections | Page 15 |
| 4. PROJECT-RELATED TRAFFIC CONDITIONS | Page 19 |
| Methodology | Page 19 |
| Equivalent Trip Generation Rates | Page 20 |
| Existing Site Trip Generation Analysis | Page 20 |
| Trip Generation of Proposed Development | Page 23 |
| Net Trip Generation Calculations | Page 25 |
| Trip Distribution and Assignments | Page 25 |
| 2008 Cumulative Plus Project Projections | Page 26 |
| 5. TRAFFIC IMPACT ANALYSIS | Page 35 |
| Definition of Significant Impacts | Page 35 |
| Project Related Traffic Impacts | Page 36 |
| Traffic Signal Warrants | Page 39 |
| Police Department Input | Page 39 |
| Traffic Calming | Page 40 |
| Mitigation Measures | Page 40 |

APPENDICES

| | |
|------------|--|
| Appendix A | Schematic Diagrams of Study Intersections |
| Appendix B | Peak Hour Traffic Signal Warrant Analysis Worksheets |
| Appendix C | Correspondence With Maui Police Department |

LIST OF FIGURES

| | | |
|-----------|---|---------|
| Figure 1 | Project Location on Maui | Page 2 |
| Figure 2 | Project Location in Kihei | Page 3 |
| Figure 3 | Preliminary Site and Landscape Plan | Page 5 |
| Figure 4 | Existing (2003) AM Peak Hour Traffic Volumes | Page 9 |
| Figure 5 | Existing (2003) PM peak Hour Traffic Volumes | Page 10 |
| Figure 6 | Locations of Related Projects | Page 16 |
| Figure 7 | Cumulative (2008) AM Peak Hour Traffic Projections | Page 17 |
| Figure 8 | Cumulative (2008) PM Peak Hour Traffic Projections | Page 18 |
| Figure 9 | Trip Assignments for Existing On-Site Development - AM Peak Hour | Page 21 |
| Figure 10 | Trip Assignments for Existing On-Site Development - PM Peak Hour | Page 22 |
| Figure 11 | AM Peak Hour Trip Assignments for 50% Scenario | Page 27 |
| Figure 12 | PM Peak Hour Trip Assignments for 50% Scenario | Page 28 |
| Figure 13 | AM Peak Hour Trip Assignments for 100% Scenario | Page 29 |
| Figure 14 | PM Peak Hour Trip Assignments for 100% Scenario | Page 30 |
| Figure 15 | 2008 Cumulative Plus Project AM Peak Hour Traffic Projections - 50% Scenario | Page 31 |
| Figure 16 | 2008 Cumulative Plus Project PM Peak Hour Traffic Projections - 50% Scenario | Page 32 |
| Figure 17 | 2008 Cumulative Plus Project AM Peak Hour Traffic Projections - 100% Scenario | Page 33 |
| Figure 18 | 2008 Cumulative Plus Project PM Peak Hour Traffic Projections - 100% Scenario | Page 34 |

LIST OF TABLES

| | | |
|----------|---|---------|
| Table 1 | Manual Traffic Count Schedule | Page 8 |
| Table 2 | Level-of-Service Definitions for Signalized Intersections | Page 11 |
| Table 3 | Level-of-Service Definitions for Unsignalized Intersections | Page 12 |
| Table 4 | Existing Levels-of-Service for Unsignalized Intersections | Page 13 |
| Table 5 | Trip Generation Summary of Related Projects | Page 15 |
| Table 7 | Trip Generation Analysis of Existing On-Site Development | Page 23 |
| Table 8 | Trip Generation Analysis - 50% Scenario | Page 24 |
| Table 9 | Trip Generation Analysis - 100% Scenario | Page 25 |
| Table 10 | Trips Generated | Page 25 |
| Table 11 | Definition of a Significant Traffic Impact | Page 35 |
| Table 12 | 2008 Levels-of-Service | Page 37 |
| Table 13 | Level-of-Service Analysis - Project Driveways (100% Scenario) | Page 38 |

1. INTRODUCTION

Phillip Rowell and Associates has been retained to prepare a Traffic Impact Analysis Report for the proposed conversion of the Maui Lu Resort in Kihei, Maui, Hawaii to a timeshare development. The purpose of this study is to identify the traffic impacts of the proposed project. The report will be incorporated into the Special Management Area (SMA) permit application and Environmental Assessment.

This introductory chapter discusses the location of the project, the proposed development, and the study methodology.

Project Location and Description

The following is a summary of the project:

1. The project is 575 South Kihei Road, which is located along the east side of South Kihei Road and north of Kaonoulu Street in the Kihei area of Maui. The project will replace the existing Maui Lu resort. Figure 1 indicates the approximate location on the Island of Maui and Figure 2 indicates the approximate location in the Kihei area.
2. The project consists of two phases. The first phase is the portion of the project located mauka of South Kihei Road and is referred to as the "mauka phase" in this report. The second phase is the portion of the project located makai of South Kihei Road and is referred to as the "makai phase."

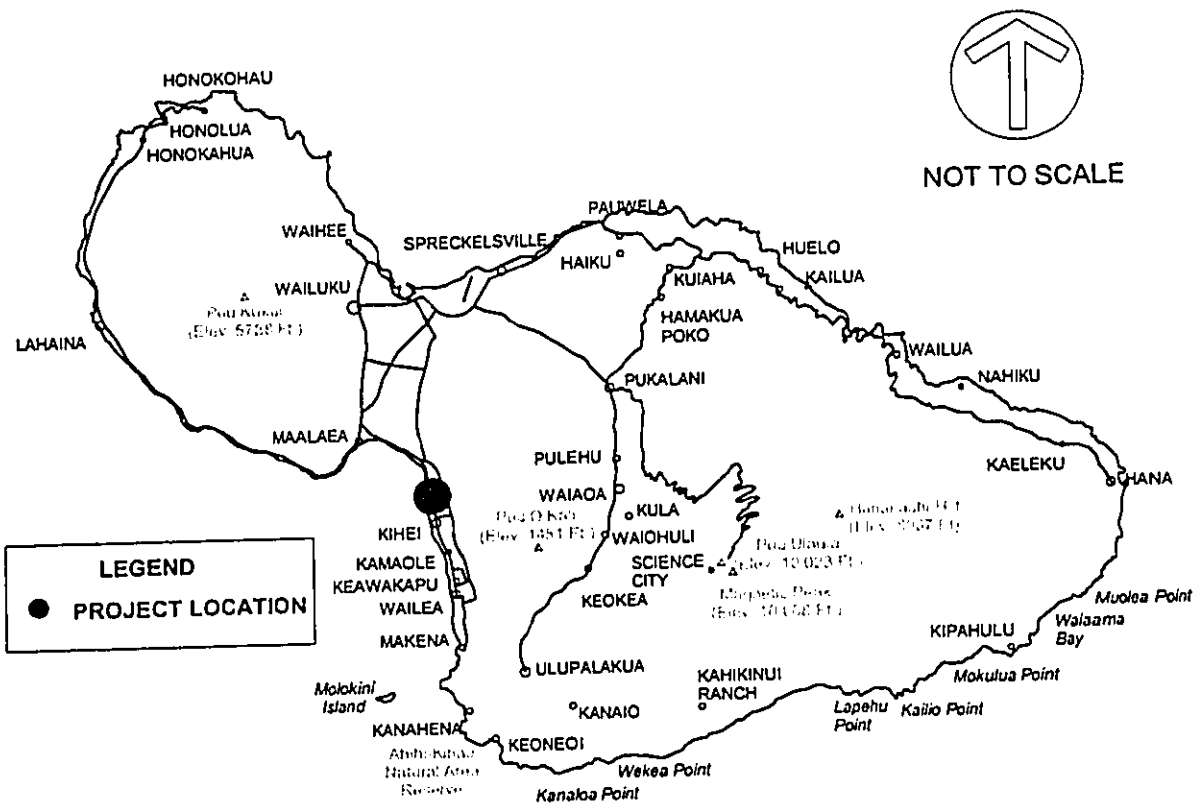


Figure 1
PROJECT LOCATION ON MAUI

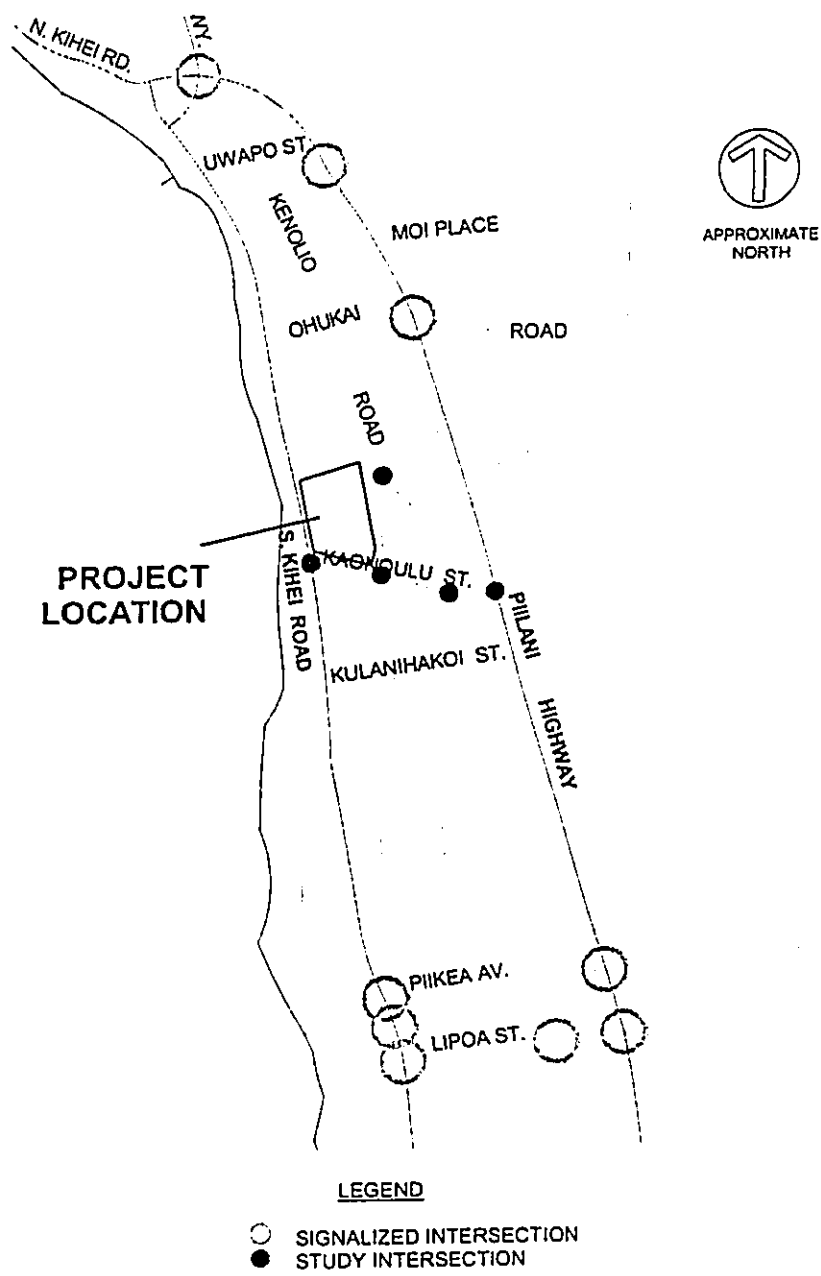


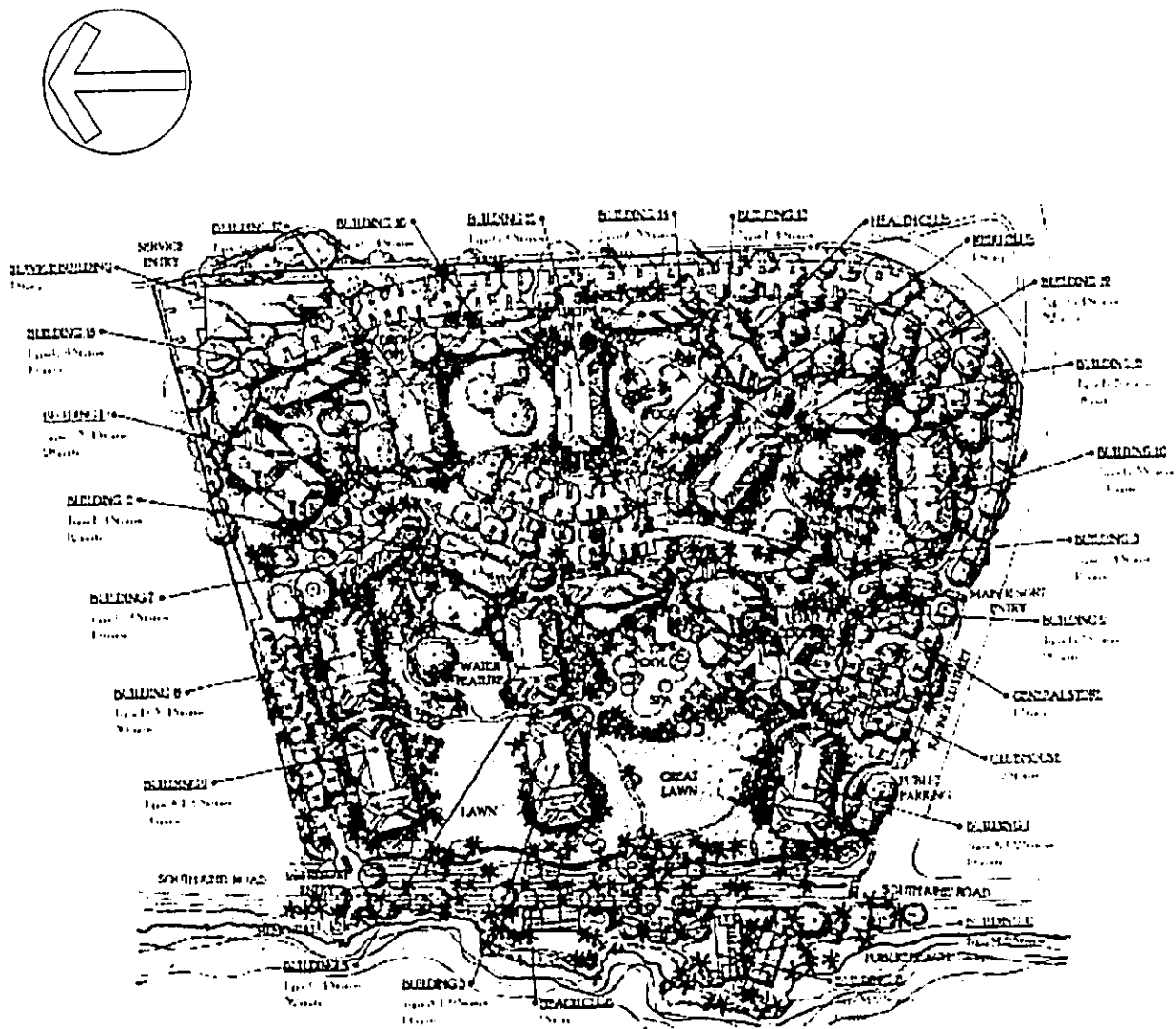
Figure 2
PROJECT LOCATION IN KIHAI

3. The mauka phase consists of 388 two bedroom units. All units will have "lock-off" units. Lock-off units are rooms that may be rented out separately, comparable to an individual hotel room, or retained as part of the two bedroom resort unit.
4. Access to the mauka phase will be via three driveways. The main driveway will be along the north side of Kaonoulu Street approximately midway along the property. The second driveway will be along the east side of South Kihei Road at the northern end of the property. The third driveway will be a service entrance located along the west side of Kenolio Road along the backside of the property. For this traffic impact analysis, it was assumed that all traffic movements will be allowed and that there will be no separate left turn storage lanes in order to assess the need for separate left turn storage lane or turn restrictions.
5. The makai phase will consists of 12 two-bedroom units. All units will have lock-off units comparable to the mauka phase.
6. Access to the makai phase will be via a driveway along the west side of South Kihei Road. Use of this driveway will be restricted to right turns in and right turns out only.
7. The number of employees will increase from 32 to 95. Employees will enter and exit the property via the service driveway located along Kenolio Road.
8. As the project is expected to increase the pedestrian crossings of South Kihei Road, a landscaped median is proposed in order to provided a refuge for pedestrians. If this traffic impact study determines that a traffic signal is warranted at the intersection of South Kihei Road at Kaonoulu Street, pedestrian crossing signals would also be provided.

A preliminary site and landscape plan indicating the locations of these driveways is shown as Figure 3.

RECEIVED AS FOLLOWS

Traffic Impact Analysis Report for Maui Lu Resort, Kihei, Maui



SOURCE: WATABE, CHUN, IOPA & TAKAKI - ARCHITECTS

Figure 3
PRELIMINARY SITE PLAN AND LANDSCAPING PLAN

Study Methodology and Order of Presentation

1. Analysis of Existing Traffic Conditions

Existing traffic volumes at the study intersections were determined from traffic counts. Intersection configurations and traffic control information were also collected in the field at the time of the traffic counts. Other data collected included speed limits and right-of-way controls.

Using the data collected, existing traffic operating conditions in the vicinity of the project were determined. The methodology for signalized and unsignalized intersections described in the 2000 *Highway Capacity Manual* (HCM) ¹ was used to determine the level-of-service (LOS) at the study intersections.

Existing traffic conditions, the LOS concept and the results of the LOS analysis for existing conditions are presented in Chapter 2.

2. Determination of Cumulative Traffic Projections

The year 2008 was used as the design year. This does not necessarily represent the project completion date. It is a date for which background traffic conditions are estimated. Cumulative traffic conditions are defined as future traffic conditions without the proposed project. Traffic projections of 2008 conditions without the proposed project were estimated using background traffic growth data and traffic generated by proposed development projects in the vicinity. A description of the process used to estimate 2008 cumulative traffic volumes and the resulting cumulative traffic projections is presented in Chapter 3.

3. Estimate Traffic Characteristics of the Proposed Project

The next step in the traffic analysis was to estimate the peak-hour traffic that would be generated by the proposed project. This was done using standard trip generation procedures outlined in the *Trip Generation Handbook*². These trips were distributed based on the available approach and departure routes. The project-related traffic was then superimposed on 2008 cumulative traffic volumes at the study intersections. The procedure is described in Chapter 4.

4. Analysis of Project-Related Traffic Impacts

The HCM methodology was used to conduct a Level-of-Service analysis for cumulative plus project conditions. The results of this analysis were compared to 2008 cumulative conditions to determine the incremental impacts of this project. The analysis of the project-related impacts and the conclusions are presented in Chapter 5.

¹ *Highway Capacity Manual*, Institute of Transportation Engineers, Washington, D.C., 2000

² *Trip Generation Handbook*, Institute of Transportation Engineers, Washington, D.C., 1998

2. ANALYSIS OF EXISTING CONDITIONS

This chapter presents the existing traffic conditions on the roadways adjacent to the proposed project. The level-of-service (LOS) concept and the results of the LOS analysis for existing conditions are also presented. The purpose of this analysis is to establish the base conditions for the determination of the impacts of the project which are described in a subsequent chapter.

Description of Existing Streets and Intersection Controls

The following is summary of the major roadways in the study area:

Piilani Highway

Piilani Highway is a major State highway with a north-south orientation connecting Kihei and Wailea. In the vicinity of the proposed project, the highway is a four-lane, two-way facility with separate left turn lanes. There is a refuge lane for left turns from eastbound Kaonoulu Street to northbound Piilani Highway. The posted speed limit is 40 miles per hour (mph). The intersection of Piilani Highway at Kaonoulu Street is unsignalized.

South Kihei Road

South Kihei Road is a two-lane, two-way, north-south County road connecting Kihei with Wailea. The posted speed limit adjacent to Kaonoulu Street is 30 mph. There are no separate turn lanes along South Kihei Road at the intersection with Kaonoulu Street. The intersection of South Kihei Road at Kaonoulu Street is unsignalized.

Kaonoulu Street

Kaonoulu Street is a two-lane, two-way County roadway between Piilani Highway and South Kihei Road. Except for the section adjacent to the Maui Lu project, adjacent development is residential.

Schematic diagrams of the study intersections is presented as Appendix A.

Existing Peak Hour Traffic Volumes

Twelve-hour traffic counts (6:00 AM to 6:00 PM) were performed at the intersections of South Kihei Road at Kaonoulu Street and Piilani Highway at Kaonoulu Street. These twelve-hour counts were performed to (1) determine the morning and afternoon peak hours of the intersections and (2) to provide the data for the traffic signal warrant analysis that was required for the traffic impact study. The conclusions of the counts are:

1. At the intersection of Kaonoulu Street at South Kihei Road, the morning peak hour is from 7:00 AM to 8:00 AM. The afternoon peak hour is from 3:45 PM to 4:45 PM.
2. At the intersection of Kaonoulu Street at Piilani Highway, the morning peak hour is from 8:45 AM and 9:45 AM. The afternoon peak hour is between 3:30 PM and 4:30 PM. The counts were performed after completion of the widening of Piilani Highway from two to four lanes.

Based on the results of the twelve-hour traffic counts, the traffic counts for the remaining intersections at were scheduled. The schedule of traffic counts is shown in Table 1. All traffic counts along Kaonoulu Street were performed during 2003. The traffic count at the intersection of Kenolio Road at Alulike Street was performed in early 2004.

Table 1 Manual Traffic Count Schedule

| Intersection | AM Count | PM Count |
|-------------------------------------|--------------------|--------------------|
| Kaonoulu Street at South Kihei Road | 6:00 AM to 6:00 PM | |
| Kaonoulu Street at Piilani Highway | 6:00 AM to 6:00 PM | |
| Kaonoulu Street at Alulike Street | 6:30 AM to 8:30 AM | 4:00 PM to 6:00 PM |
| Kaonoulu Street at Kenolio Road | 7:00 AM to 8:30 AM | 4:15 PM to 6:00 PM |
| Kenolio Road at Alulike Street | 6:30 AM to 8:30 AM | 4:00 PM to 6:00 PM |

The existing morning and afternoon peak hour traffic volumes are shown in Figures 4 and 5. The counts were performed after the widening of Piilani Highway from two to four lanes was completed.

The counts shown include buses, large vehicles and motorcycles. They do not include bicycles and mopeds. No pedestrians were observed to cross Piilani Highway during the twelve hour count. Less than 10 pedestrians crossed Kaonoulu Street at Piilani Highway. There were several pedestrians crossing South Kihei Road but the number was not significant.

Also, the total approach and departure volumes may not match those of adjacent intersections because the peak hour of one intersection may be different from that of the adjacent intersection and because there are driveways between intersections.

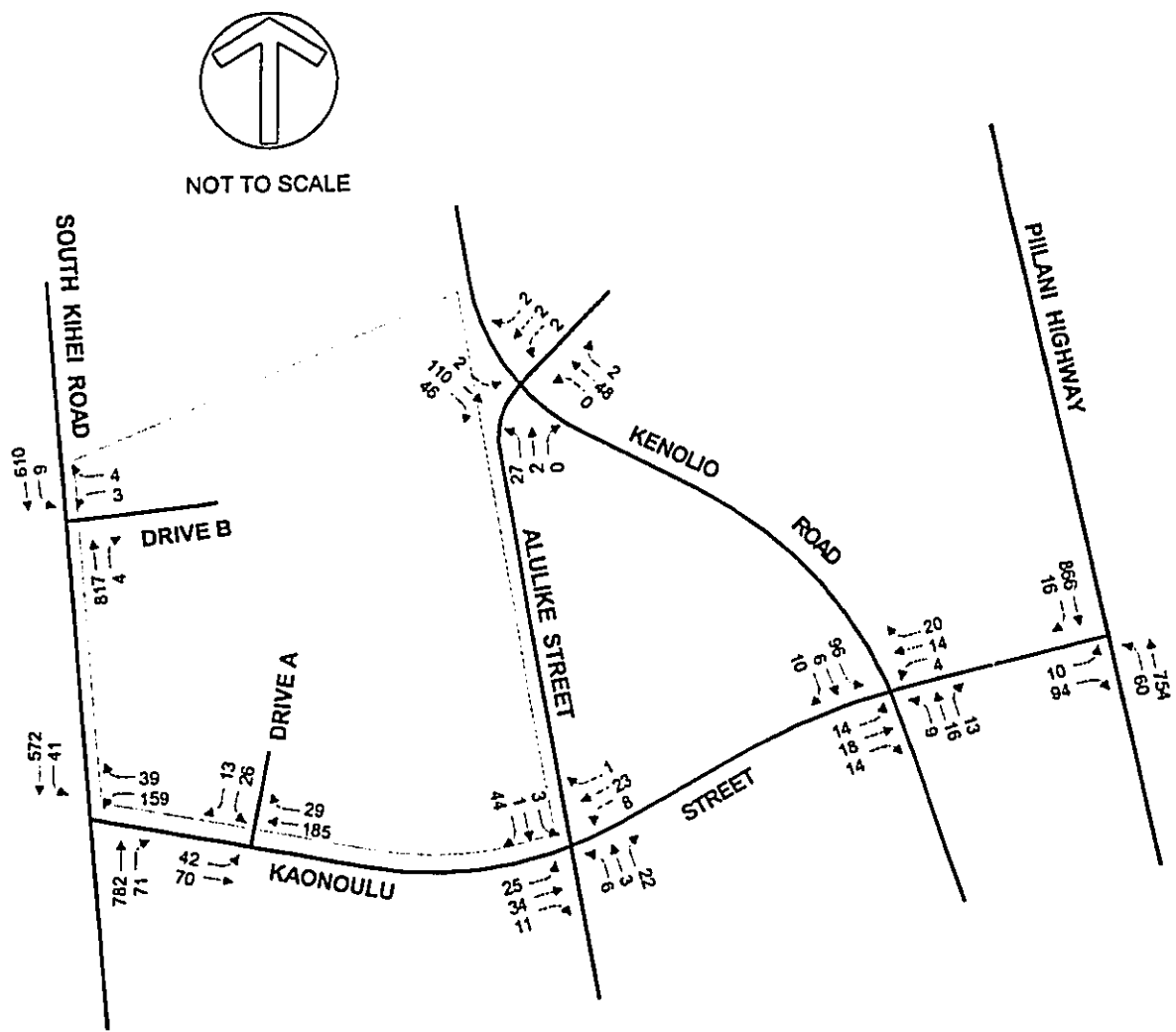


Figure 4
EXISTING (2003) AM PEAK HOUR TRAFFIC VOLUMES

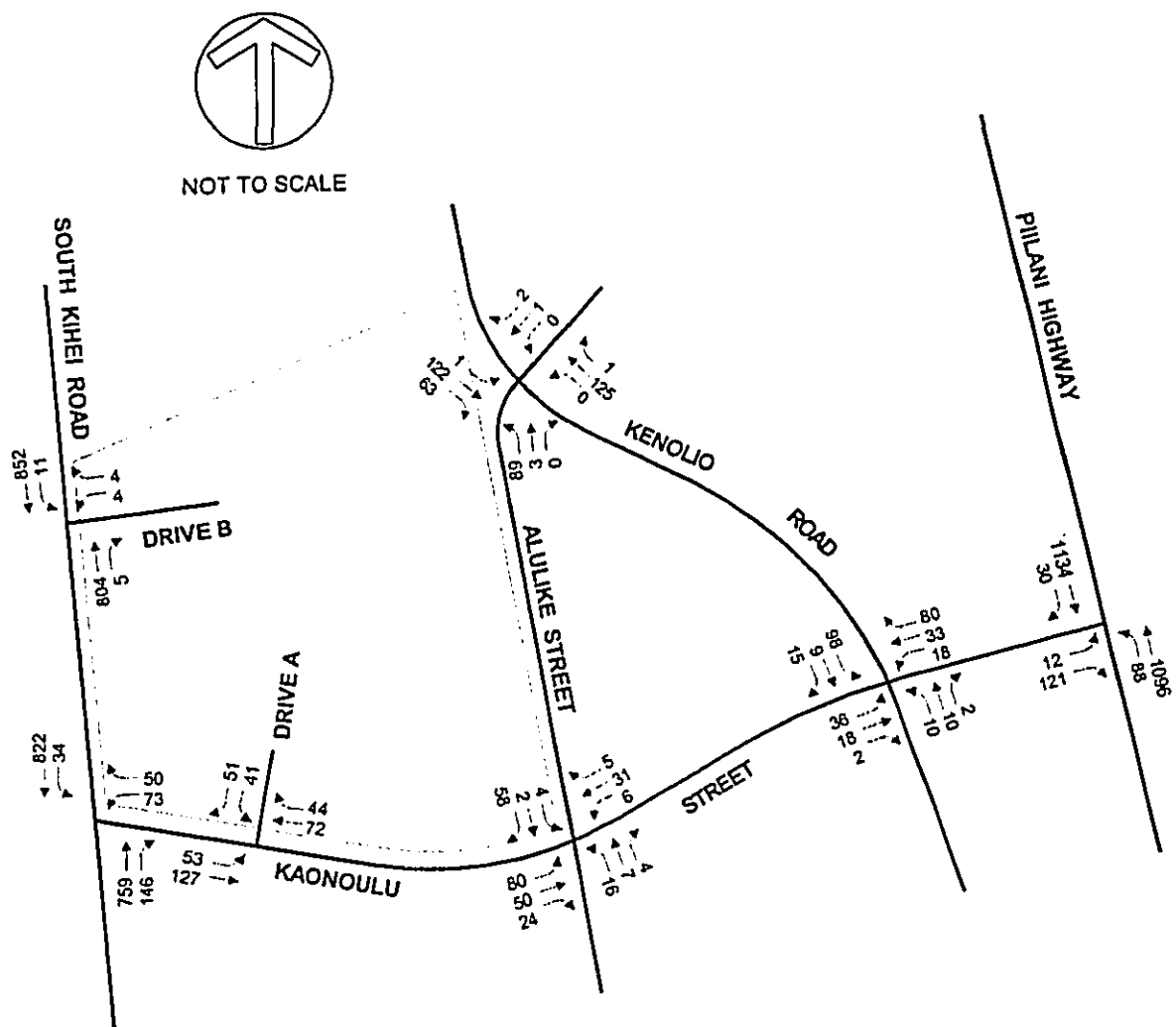


Figure 5
EXISTING (2003) PM PEAK HOUR TRAFFIC VOLUMES

Level-of-Service Concept

Signalized Intersections

"Level-of-Service" is a term which denotes any of an infinite number of combinations of traffic operating conditions that may occur on a given lane or roadway when it is subjected to various traffic volumes. Level-of-service (LOS) is a qualitative measure of the effect of a number of factors which include space, speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience.

There are six levels-of-service, A through F, which relate to the driving conditions from best to worst, respectively. The characteristics of traffic operations for each level-of-service are summarized in Table 2. In general, LOS A represents free-flow conditions with no congestion. LOS F, on the other hand, represents severe congestion with stop-and-go conditions. Level-of-service D is typically considered acceptable for peak hour conditions in urban areas.

Corresponding to each level-of-service shown in the table is a volume/capacity ratio. 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 specified period of time. The capacity of a particular roadway is dependent upon its physical characteristics such as the number of lanes, the operational characteristics of the roadway (one-way, two-way, turn prohibitions, bus stops, etc.), the type of traffic using the roadway (trucks, buses, etc.) and turning movements.

Table 2 Level-of-Service Definitions for Signalized Intersections⁽¹⁾

| Level of Service | Interpretation | Volume-to-Capacity Ratio ⁽²⁾ | Stopped Delay (Seconds) |
|------------------|--|---|-------------------------|
| A, B | Uncongested operations; all vehicles clear in a single cycle. | 0.000-0.700 | <20.0 |
| C | Light congestion; occasional backups on critical approaches | 0.701-0.800 | 20.1-35.0 |
| D | Congestion on critical approaches but intersection functional. Vehicles must wait through more than one cycle during short periods. No long standing lines formed. | 0.801-0.900 | 35.1-55.0 |
| E | Severe congestion with some standing lines on critical approaches. Blockage of intersection may occur if signal does not provide protected turning movements. | 0.901-1.000 | 55.1-80.0 |
| F | Total breakdown with stop-and-go operation | >1.001 | >80.0 |

Notes:

- (1) Source: *Highway Capacity Manual*, 2000.
 (2) This is the ratio of the calculated critical volume to Level-of-Service E Capacity.

Unsignalized Intersections

Like signalized intersections, the operating conditions of intersections controlled by stop signs can be classified by a level-of-service from A to F. However, the method for determining level-of-service for unsignalized intersections is based on the use of gaps in traffic on the major street by vehicles crossing or turning through that stream. Specifically, the capacity of the controlled legs of an intersection is based on two factors: 1) the distribution of gaps in the major street traffic stream, and 2) driver judgement in selecting gaps through which to execute a desired maneuver. The criteria for level-of-service at an unsignalized intersection is therefore based on delay of each turning movement. Table 3 summarizes the definitions for level-of-service and the corresponding delay.

Table 3 Level-of-Service Definitions for Unsignalized Intersections⁽¹⁾

| Level-of-Service | Expected Delay to Minor Street Traffic | Delay (Seconds) |
|------------------|--|-----------------|
| A | Little or no delay | <10.0 |
| B | Short traffic delays | 10.1 to 15.0 |
| C | Average traffic delays | 15.1 to 25.0 |
| D | Long traffic delays | 25.1 to 35.0 |
| E | Very long traffic delays | 35.1 to 50.0 |
| F | See note (2) below | >50.1 |

Notes:

(1) Source: *Highway Capacity Manual, 2000.*

(2) When demand volume exceeds the capacity of the lane, extreme delays will be encountered with queuing which may cause severe congestion affecting other traffic movements in the intersection. This condition usually warrants improvement of the intersection.

Level-of-Service Analysis of Existing Conditions

The results of the Level-of-Service analysis of the study intersections are summarized in Table 4. Since all the study intersections are unsignalized, only delays and Levels-of-Service of the controlled movements are shown. Volume-to-capacity ratios are not calculated for unsignalized intersections.

As shown in the table, left turns from Kaonoulu Street to southbound South Kihei Road operate at Level-of-Service F during the morning and afternoon peak hours. All remaining traffic movements operate at Level-of-Service C or better.

Table 4 Existing Levels-of-Service for Unsignalized Intersections

| Intersection and Movement | AM Peak Hour | | PM Peak Hour | |
|--|--------------------|------------------|--------------|-----|
| | Delay ¹ | LOS ² | Delay | LOS |
| Kaonoulu Street at South Kihei Road | | | | |
| Southbound Left | 10.8 | B | 11.2 | B |
| Westbound Left | 120.6 | F | 61.2 | F |
| Westbound Right | 17.2 | C | 18.3 | C |
| Kaonoulu Street at Pihani Highway | | | | |
| Northbound Left | 11.0 | B | 12.2 | B |
| Eastbound Left | 17.0 | C | 19.0 | C |
| Eastbound Right | 13.3 | B | 17.1 | C |
| Kaonoulu Street at Alulike Street | | | | |
| Eastbound Left | 7.3 | A | 7.4 | A |
| Westbound Left | 7.4 | A | 7.4 | A |
| Northbound Left, Thru & Right | 9.9 | A | 11.7 | B |
| Southbound Left, Thru & Right | 8.9 | A | 9.1 | A |
| Kaonoulu Street at Kenolio Road | | | | |
| Eastbound Left | 7.4 | A | 7.6 | A |
| Westbound Left | 7.3 | A | 7.3 | A |
| Northbound Left | 10.1 | B | 10.9 | B |
| Northbound Thru & Right | 9.8 | A | 10.1 | B |
| Southbound Left | 11.4 | B | 12.6 | B |
| Southbound Thru & Right | 9.2 | A | 9.8 | A |
| Kenolio Road at Alulike Street | | | | |
| Eastbound Left | 7.3 | A | 7.6 | A |
| Westbound Left | 7.6 | A | 7.7 | A |
| Northbound Left, Thru & Right | 10.6 | B | 13.3 | B |
| Southbound Left, Thru & Right | 9.9 | A | 10.1 | B |

NOTES:

- (1) Delay is in seconds per vehicle.
- (2) LOS denotes Level-of-Service calculated using the operations method described in *Highway Capacity Manual*. Level-of-Service is based on delay. The Level-of-Service Calculation Worksheets are provided as Appendix D.

3. PROJECTED CUMULATIVE TRAFFIC CONDITIONS

The purpose of this chapter is to discuss the assumptions and data used to estimate 2008 cumulative traffic conditions. Cumulative traffic conditions are defined as future traffic volumes without the proposed project.

Future traffic growth consists of two components. The first is ambient background growth that is a result of regional growth and cannot be attributed to a specific project. The second component is estimated traffic that will be generated by other development projects in the vicinity of the proposed project.

Background Traffic Growth

The *Maui Long Range Transportation Plan*³ concluded that traffic in Maui would increase an average of 1.6% per year from 1990 to 2020. This growth rate was used to estimate the background growth between 2003 and 2008, which is the design year for this project. The growth factor was calculated to be 1.083 using the following formula:

$$F = (1 + i)^n$$

where F = Growth Factor
I = Average annual growth rate, or 0.016
n = Growth period, or 5 years

This growth factor was applied to all traffic movements at the study intersections.

³ Kaku Associates, October 1996

Related Projects

The second component in estimating background traffic volumes is traffic resulting from other proposed projects in the vicinity. Related projects are defined as those projects that are under construction or have been approved for construction and would significantly impact traffic in the study area. Related projects may be development projects or roadway improvements.

The projects that were identified as related projects and the estimated number of peak hour trips generated by each are summarized in Table 5. The approximate locations of these projects is shown in Figure 6.

Table 5 Trip Generation Summary of Related Projects

| Related Project | Description | AM Peak Hour | | | PM Peak Hour | | |
|----------------------|--|--------------|------------|------------|--------------|------------|------------|
| | | In | Out | Total | In | Out | Total |
| A Maui Nui Park | Theme Park | 16 | 0 | 16 | 190 | 144 | 334 |
| B 711 Kenolio Place | 12 Single-Family Units | 2 | 9 | 11 | 8 | 4 | 12 |
| C Alii Village | 30 Single-Family Units | 6 | 17 | 23 | 20 | 11 | 31 |
| D Waipuilani Estates | 96 Single-Family Units | 19 | 55 | 74 | 63 | 35 | 98 |
| E Villas at Kenolio | 140 Multi-Family Units | 11 | 56 | 67 | 54 | 28 | 82 |
| F Kal Makani | 116 Multi-Family Units | 10 | 49 | 59 | 63 | 33 | 96 |
| G Park Improvements | Additional Parking and Misc Improvements | 58 | 42 | 100 | 47 | 53 | 100 |
| TOTALS | | 122 | 228 | 350 | 445 | 308 | 753 |

Related projects include roadway improvements as well as development projects. The *Maui Long Range Transportation Plan* also indicates that the Upcountry Highway will connect with Piilani Highway at Kaonoulu Street, at which time the intersection will be signalized. A schedule for this project was not available. It was assumed that this project would not be completed before the horizon year for this traffic study of 2008.

2008 Cumulative Traffic Projections

2008 cumulative traffic projections were calculated by expanding existing traffic volumes by the appropriate growth rates and then superimposing traffic generated by related projects. The resulting 2008 cumulative peak hour traffic projections are shown in Figures 7 and 8.

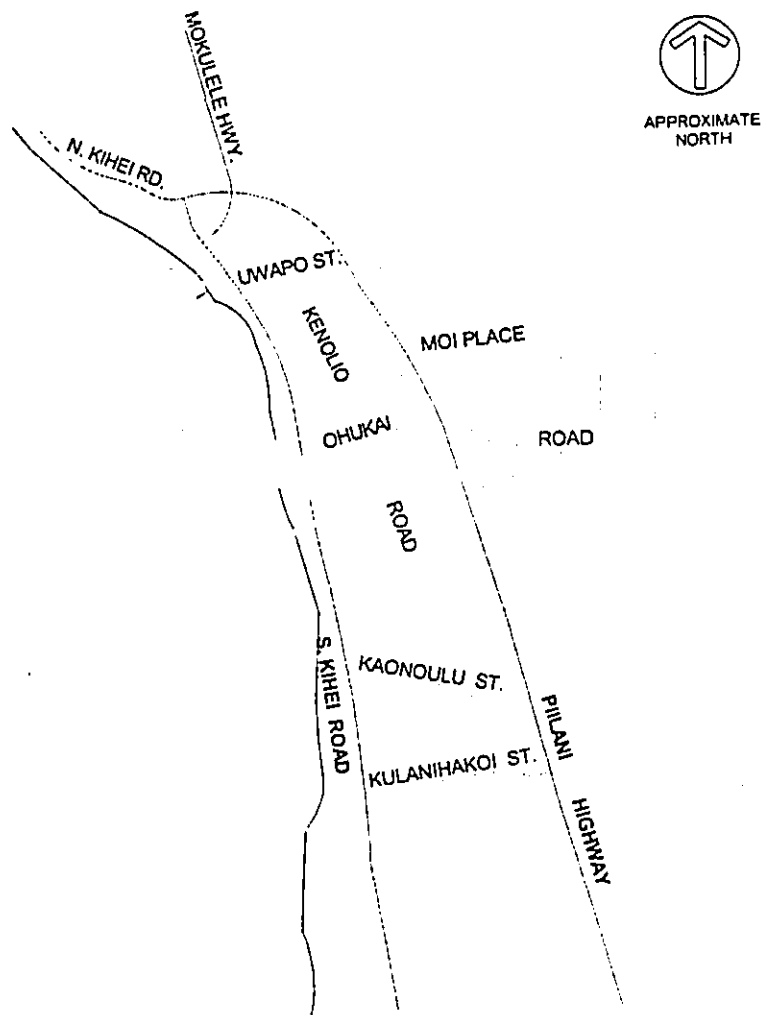


Figure 6
LOCATIONS OF RELATED PROJECTS

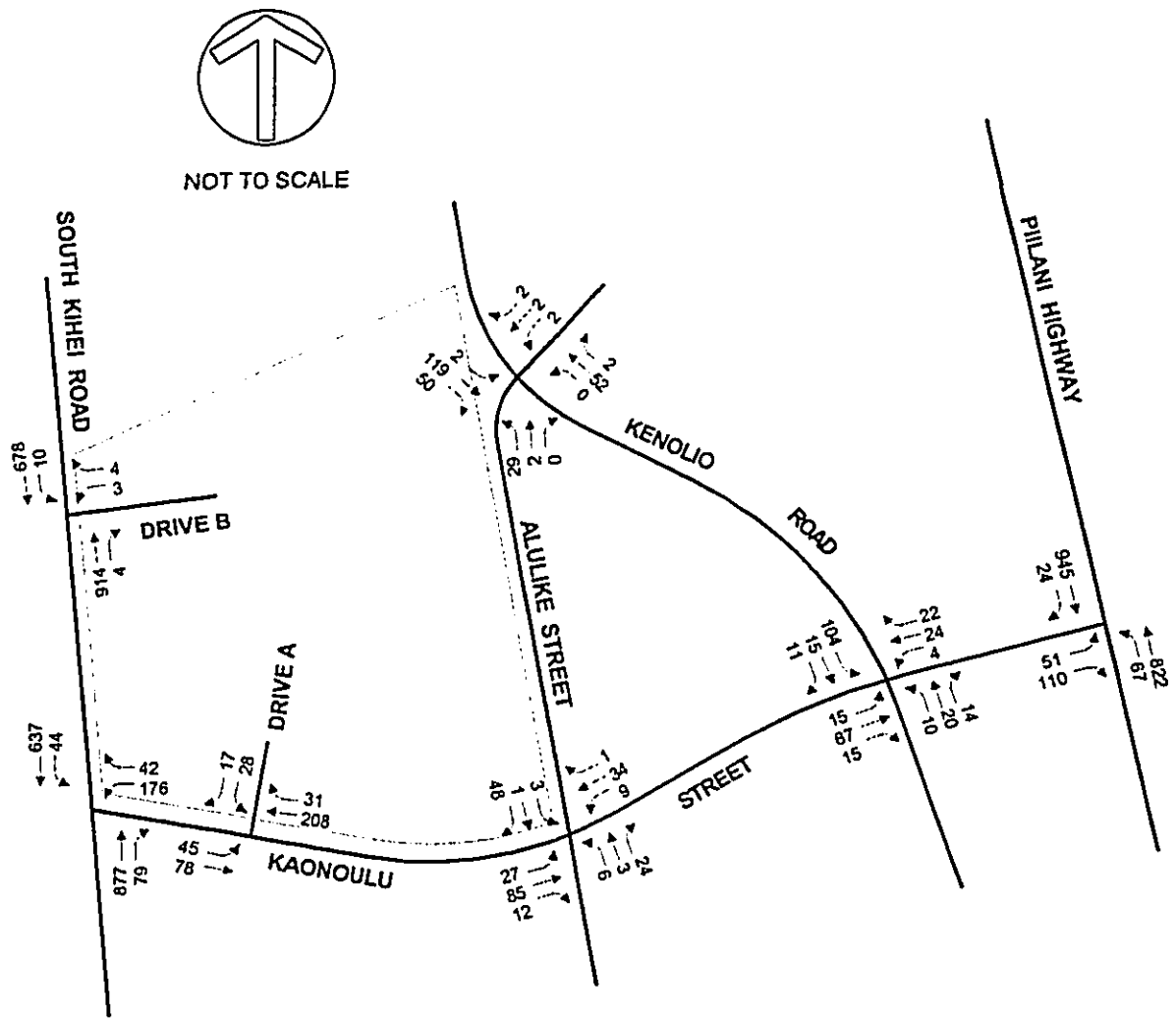


Figure 7
 CUMULATIVE (2008) AM PEAK HOUR TRAFFIC PROJECTIONS

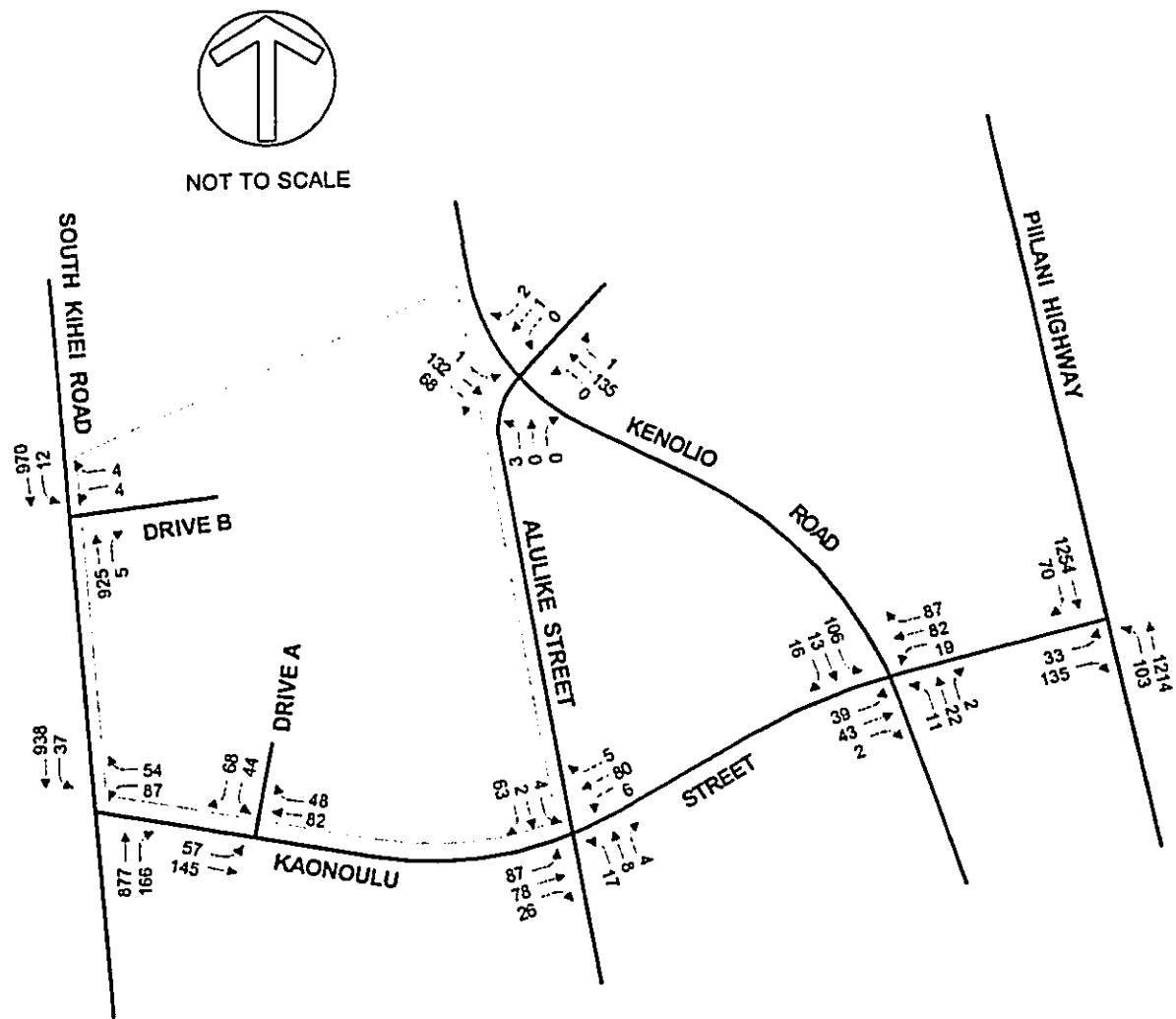


Figure 8
CUMULATIVE (2008) PM PEAK HOUR TRAFFIC PROJECTIONS

4. PROJECT-RELATED TRAFFIC CONDITIONS

This chapter discusses the methodology used to identify the traffic-related impacts of the proposed project. This chapter presents the generation, distribution and assignment of project generated traffic and the cumulative plus project traffic projections. The result of the level-of-service analysis of cumulative plus project conditions is presented in the following chapter.

Methodology

Generally, the process involves the determination of weekday peak-hour trips that would be generated by the proposed project, distribution and assignment of these trips on the approach and departure routes, and finally, determination of the levels-of-service at affected intersections and driveways subsequent to implementation of the project. In addition to the trip generation calculations for the proposed project, the trips generated by the existing development of the site were also estimated and used to estimate the net increase in traffic as a result of the project.

In summary, estimation of project related traffic conditions was accomplished using the following steps:

1. Land uses comparable to the existing and proposed land uses for which Institute of Transportation Engineers trip generation data were available were identified.
2. The peak hour traffic generated by the existing development was estimated.
3. Future background traffic volumes without the existing development or the proposed project were estimated by subtracting the trips generated by the existing development from the 2008 cumulative traffic projections presented in the previous chapter.

4. Future traffic generated by the proposed development was estimated.
5. Finally, 2008 cumulative plus project traffic projections were estimated by superimposing the traffic generated by the proposed project to the traffic projections calculated in Step 3 above.

Equivalent Trip Generation Rates

The Institute of Transportation Engineers trip generation data does not provide trip generation data for land uses described exactly as the proposed uses. There are no trip generation rates provided for timeshares as proposed.

It was determined that the existing Maui Lu development is most comparable to the trip characteristics described for hotels (Land Use Code 310) based on the descriptions provided in *Trip Generation*.

For the proposed uses, it was determined that the proposed timeshare units are comparable to the characteristics described for an all-suites hotel (Land Use Code 311). The common characteristics are separate sitting and sleeping areas and a small kitchen.

The lock-off units were considered to be comparable to resort hotel units (Land Use Code 330). The proposed lock-off units have all the amenities of a resort, but do not have the separate sitting and sleeping areas or kitchenette.

The comparable land uses used for the trip generation analysis are summarized in Table 6.

Table 6 Equivalent Land Uses

| <u>Proposed User</u> | <u>Comparable Land Use</u> | <u>ITE Land Use Code</u> | <u>Trip Generation Parameter</u> |
|----------------------|----------------------------|--------------------------|----------------------------------|
| Existing Development | Hotel | 310 | Occupied Room |
| Timeshare | All-Suites Hotel | 311 | Occupied Room |
| Lock-Off Unit | Resort Hotel | 330 | Occupied Room |

Existing Site Trip Generation Analysis

The peak hour traffic generated by the existing development on the site was estimated using the following assumptions:

1. There are 125 existing units on the site.
2. The traffic characteristics of the existing development are comparable to a hotel unit as described by the Institute of Transportation Engineers.
3. 100% of the units are occupied.

The resulting estimate of traffic generated by the existing development is summarized in Table 7. These trips were distributed and assigned to the adjacent street network. The assignments of traffic generated by the existing on-site development are shown in Figures 9 and 10. The net traffic at the study intersections was estimated by subtracting these trip assignments from the 2008 background traffic projections. The result is 2008 traffic projections without existing or proposed development on the site.

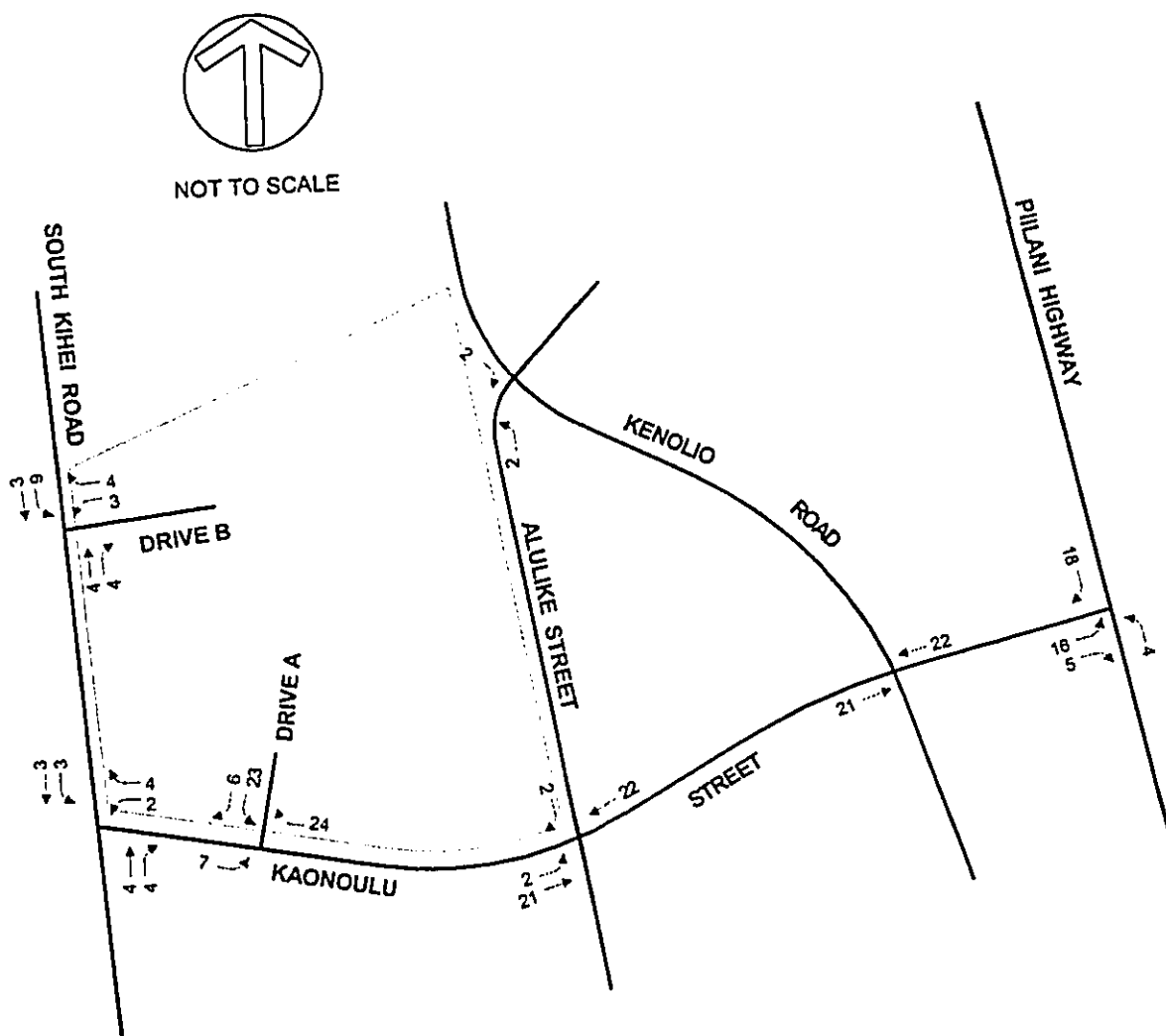


Figure 9
TRIP ASSIGNMENTS FOR EXISTING ON-SITE DEVELOPMENT
AM PEAK HOUR

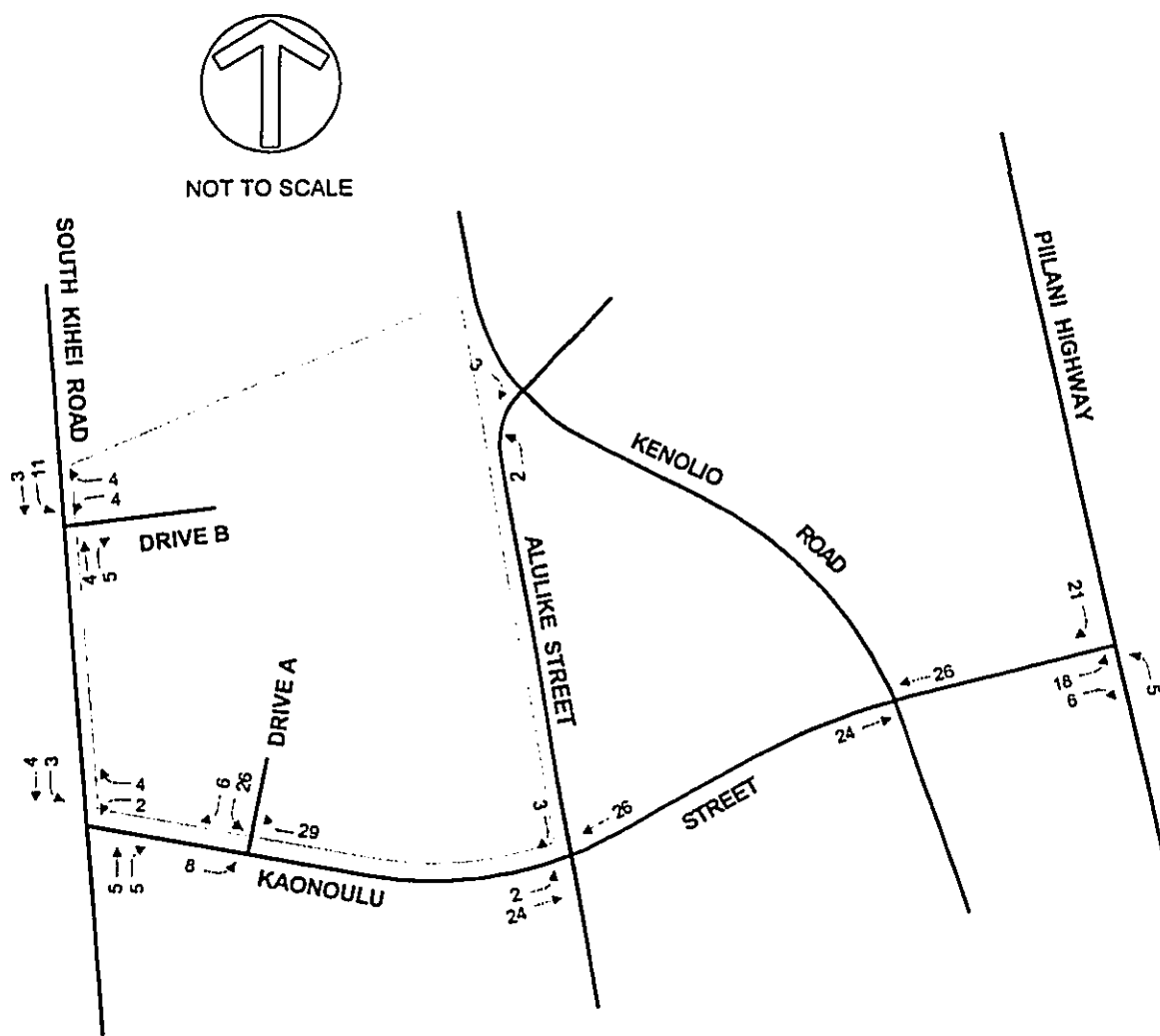


Figure 10
TRIP ASSIGNMENTS FOR EXISTING ON-SITE DEVELOPMENT
PM PEAK HOUR

Table 7 Trip Generation Analysis of Existing On-Site Development

| Period & Direction | | Trips per Unit or Percent | Units | Trips |
|--------------------|----------|---------------------------|-------|-------|
| AM Peak Hour | Total | 0.64 | 125 | 80 |
| | Inbound | 55% | | 44 |
| | Outbound | 45% | | 36 |
| PM Peak Hour | Total | 0.74 | | 93 |
| | Inbound | 57% | | 53 |
| | Outbound | 43% | | 40 |

Trip Generation of Proposed Development

The traffic impact analysis for the project was performed for two scenarios. The first scenario assumed that 50% of the lock-off units are used as hotel rooms. This is a conservative analysis as the typical factor is only 25%.

The second scenario assumes that all of the lock-off units are used as hotel rooms. This represents the worse possible scenario.

Trip Generation Analysis - 50% Scenario

The peak hour traffic generated by the 50% scenario was estimated using the following assumptions:

1. There will be 400 timeshare units.
2. The proposed timeshare units will have traffic characteristics comparable to an all-suites hotel as described by the Institute of Transportation Engineers.
3. 100% of the rooms will be occupied.
4. The lock-off units will have traffic characteristics comparable to resort hotel rooms as described by the Institute of Transportation Engineers.
5. 50% of the lock-off units, or 200 units, will be used as a resort hotel.

The trip generation analysis calculations for the proposed project are summarized in Table 8. The trips shown are the peak hourly trips generated by the project, which typically coincide with the peak hour of the adjacent street. As shown, the project will generate 302 trips during the morning peak hour, 198 inbound and 104 outbound. During the afternoon peak hour, the project will generate 151 inbound and 187 outbound trips for a total of 338 trips.

Table 8 Trip Generation Analysis - 50% Scenario

| Period & Direction | | Timeshare Units | | | Lock-Off Units | | | Total Trips |
|--------------------|----------|---------------------------|-------|-------|---------------------------|-------|-------|-------------|
| | | Trips per Unit or Percent | Units | Trips | Trips per Unit or Percent | Units | Trips | |
| AM Peak Hour | Total | 0.52 | 400 | 208 | 0.47 | 200 | 94 | 302 |
| | Inbound | 67% | | 139 | 63% | | 59 | 198 |
| | Outbound | 33% | | 69 | 37% | | 35 | 104 |
| PM Peak Hour | Total | 0.55 | | 220 | 0.59 | | 118 | 338 |
| | Inbound | 42% | | 92 | 50% | | 59 | 151 |
| | Outbound | 58% | | 128 | 50% | | 59 | 187 |

Trip Generation Analysis - 100% Scenario

The peak hour traffic generated by the 100% scenario was estimated using the following assumptions:

1. There will be 400 timeshare units.
2. The proposed timeshare units will have traffic characteristics comparable to an all-suites hotel as described by the Institute of Transportation Engineers.
3. 100% of the rooms will be occupied.
4. The lock-off units will have traffic characteristics comparable to resort hotel rooms as described by the Institute of Transportation Engineers.
5. 100% of the lock-off units, or 400 units, will be used as a resort hotel.

The trip generation analysis calculations for the proposed project are summarized in Table 9. The trips shown are the peak hourly trips generated by the project, which typically coincide with the peak hour of the adjacent street. As shown, the project will generate 396 trips during the morning peak hour, 257 inbound and 139 outbound. During the afternoon peak hour, the project will generate 210 inbound and 246 outbound trips for a total of 456 trips.

Table 9 Trip Generation Analysis - 100% Scenario

| Period & Direction | Timeshare Units | | | Lock-Off Units | | | Total Trips |
|--------------------|---------------------------|-------|-------|---------------------------|-------|-------|-------------|
| | Trips per Unit or Percent | Units | Trips | Trips per Unit or Percent | Units | Trips | |
| AM Peak Hour | Total | 0.52 | 400 | 208 | 0.47 | 400 | 396 |
| | Inbound | 67% | | 139 | 63% | | 257 |
| | Outbound | 33% | | 69 | 37% | | 139 |
| PM Peak Hour | Total | 0.55 | | 220 | 0.59 | | 456 |
| | Inbound | 42% | | 92 | 50% | | 210 |
| | Outbound | 58% | | 128 | 50% | | 246 |

Net Trip Generation Calculations

The net trips generated by the proposed redevelopment is summarized in Table 10.

Table 10 Trips Generated

| Period & Direction | Existing Development | 50% Scenario | | 100% Scenario | | |
|--------------------|----------------------|---------------|-----------|---------------|-----------|-----|
| | | Project Total | New Trips | Project Total | New Trips | |
| AM Peak Hour | Total | 80 | 302 | 222 | 396 | 316 |
| | Inbound | 44 | 198 | 154 | 257 | 213 |
| | Outbound | 36 | 104 | 68 | 139 | 103 |
| PM Peak Hour | Total | 93 | 338 | 245 | 456 | 363 |
| | Inbound | 53 | 151 | 98 | 210 | 157 |
| | Outbound | 40 | 187 | 147 | 246 | 206 |

Trip Distribution and Assignments

The project-related trips were distributed along the anticipated approach routes to the project site based on the directional distribution of existing peak hour traffic along the streets within the study area.

Trips were assigned based on the following assumptions:

1. All traffic movements are allowed at the project driveways along Kaonoulu Street.
2. All traffic movements are allowed at the project driveway along South Kihei Road.
3. Only right turns in and right turns out are allowed at the project driveway along South Kihei Road serving the makai phase.
4. All traffic movements are allowed at the service driveway along Kenolio Road.
5. The peak hours of traffic generated by the project coincides with the peak hour of the adjacent streets.

The project morning and afternoon peak hour trip assignments for the 50% Scenario are shown in Figures 11 and 12, respectively. The assignments for the 100% Scenario are shown in Figure 13 and 14.

2008 Cumulative Plus Project Projections

Cumulative plus project traffic conditions are defined as 2008 background traffic conditions plus project related traffic. The incremental difference between cumulative and cumulative plus project is the traffic impact of the project under study.

2008 cumulative plus project traffic projections were estimated by superimposing the peak hourly traffic generated by the proposed project on the 2008 cumulative peak hour traffic volumes presented in Chapter 3. The 2008 cumulative plus the project traffic projections are shown on Figures 15 through 18.

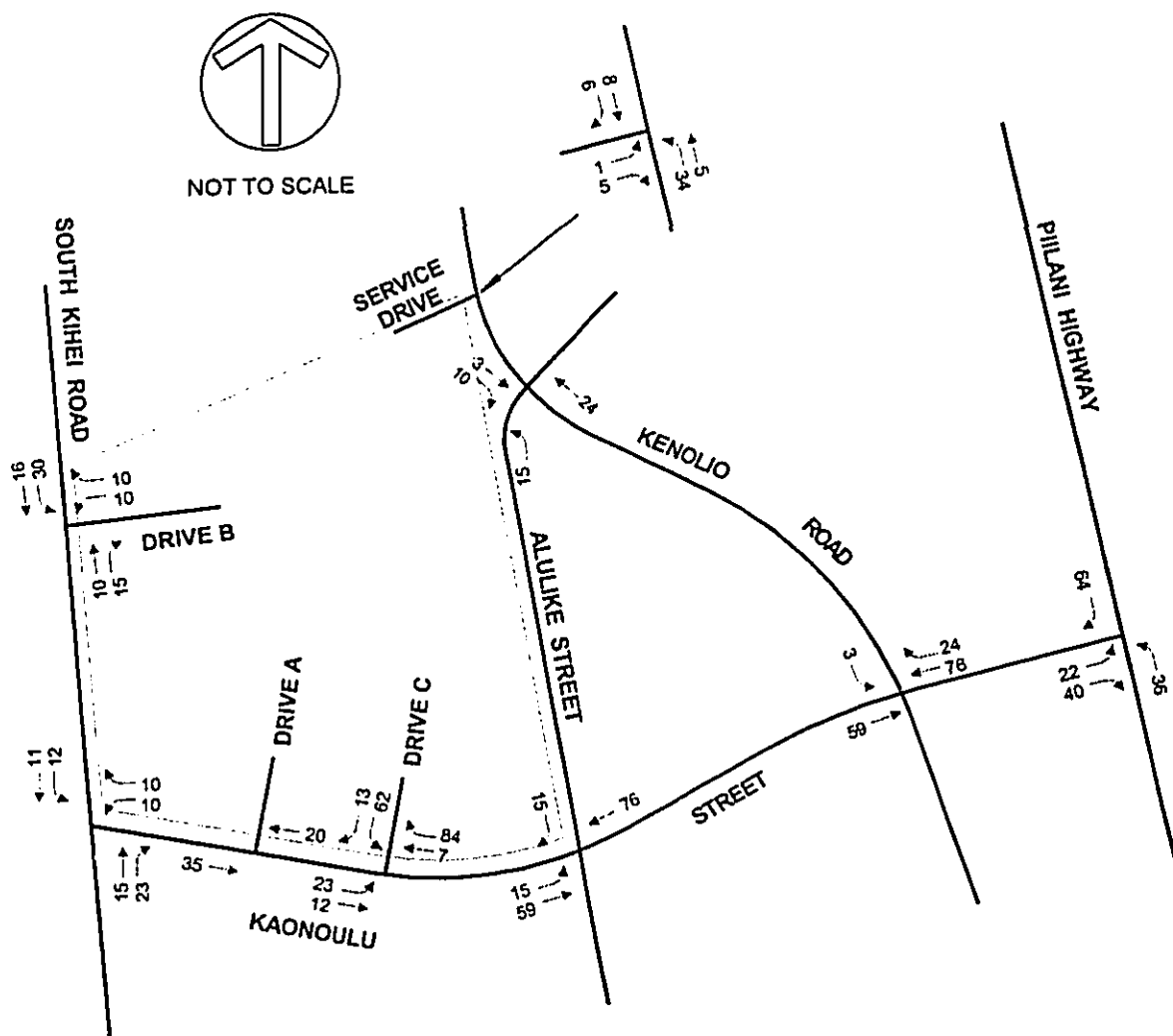


Figure 11
AM PEAK HOUR TRIP ASSIGNMENTS FOR 50% SCENARIO

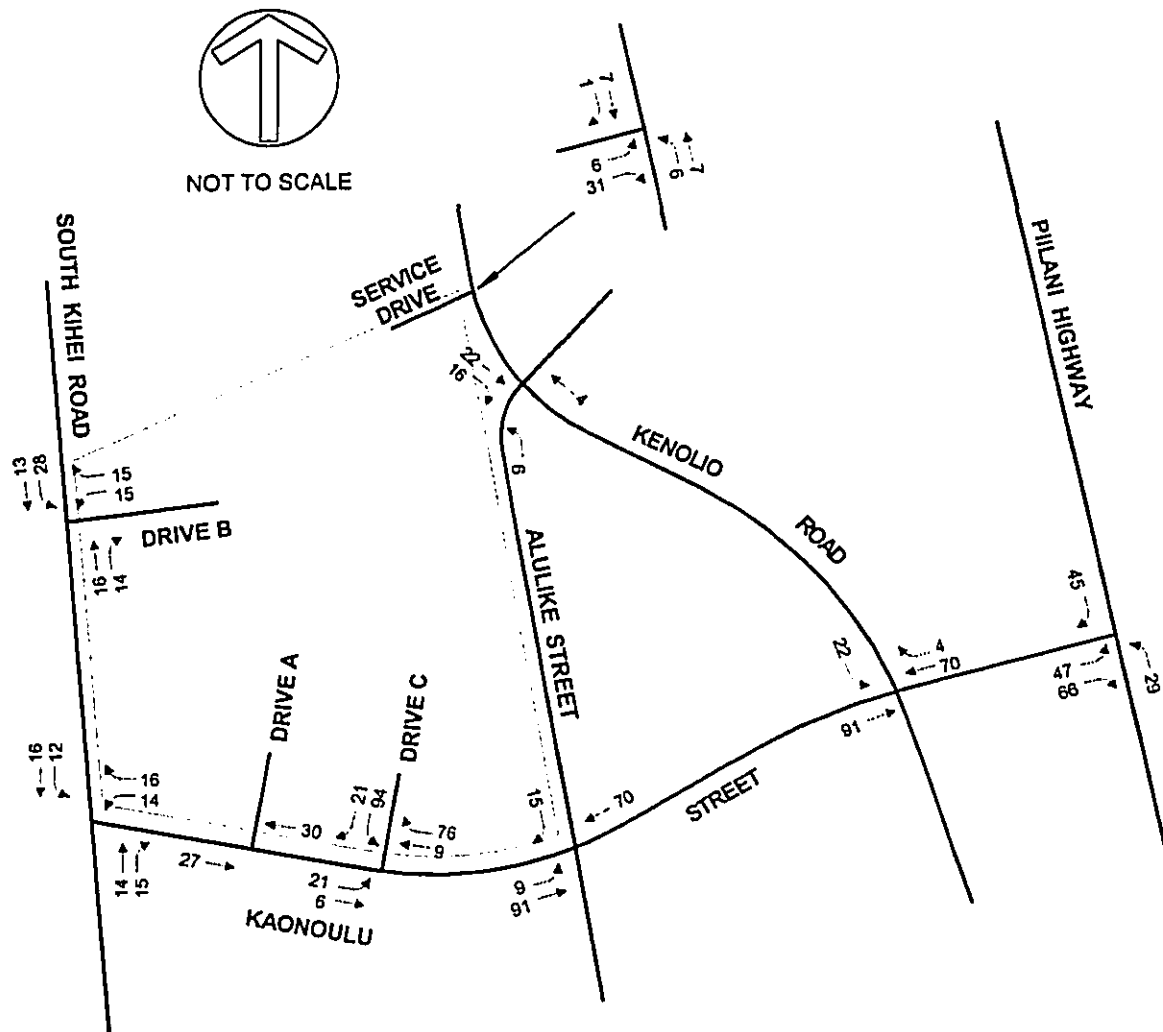


Figure 12
PM PEAK HOUR TRIP ASSIGNMENTS FOR 50% SCENARIO

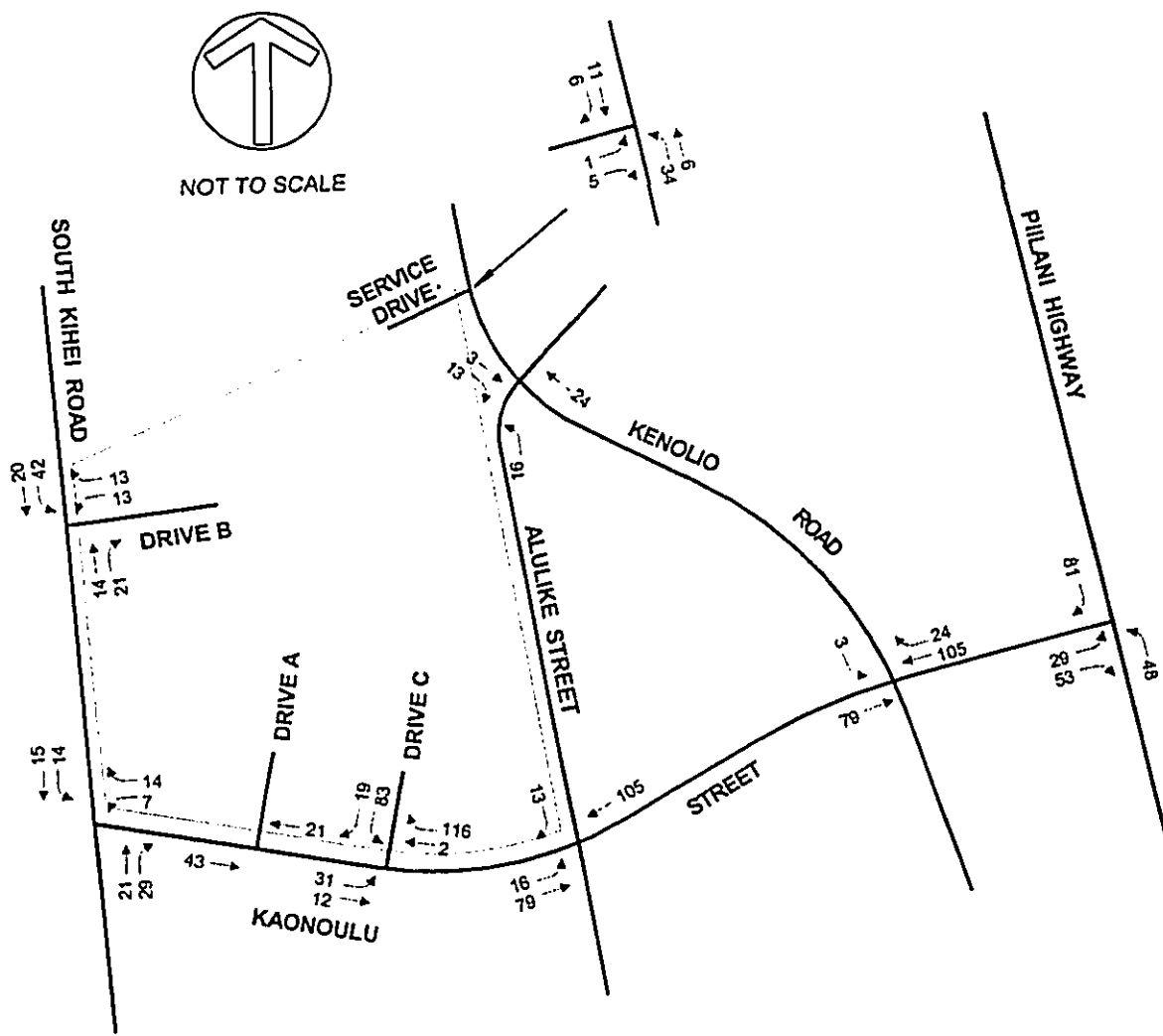


Figure 13
AM PEAK HOUR TRIP ASSIGNMENTS FOR 100% SCENARIO

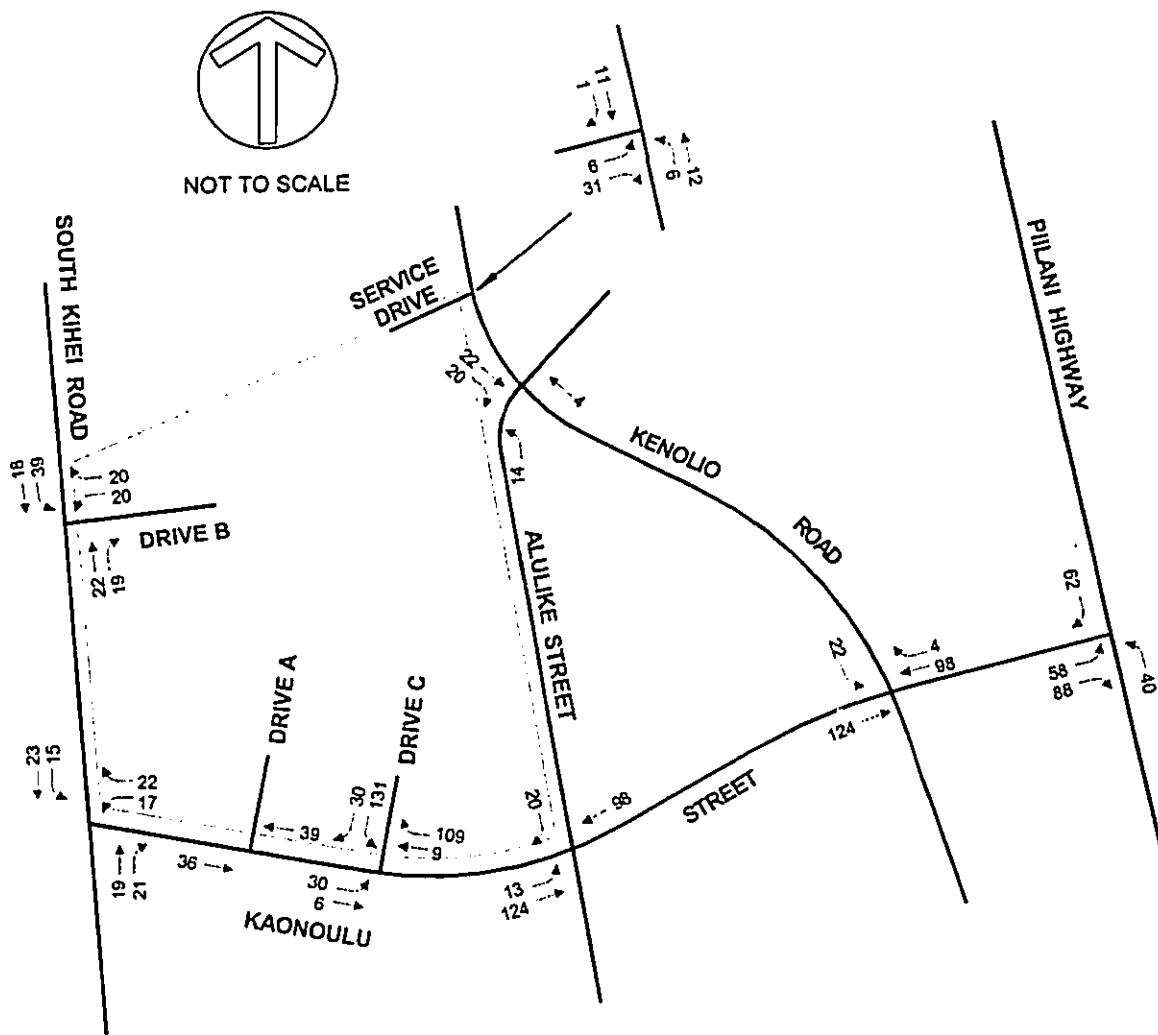


Figure 14
PM PEAK HOUR TRIP ASSIGNMENTS FOR 100% SCENARIO

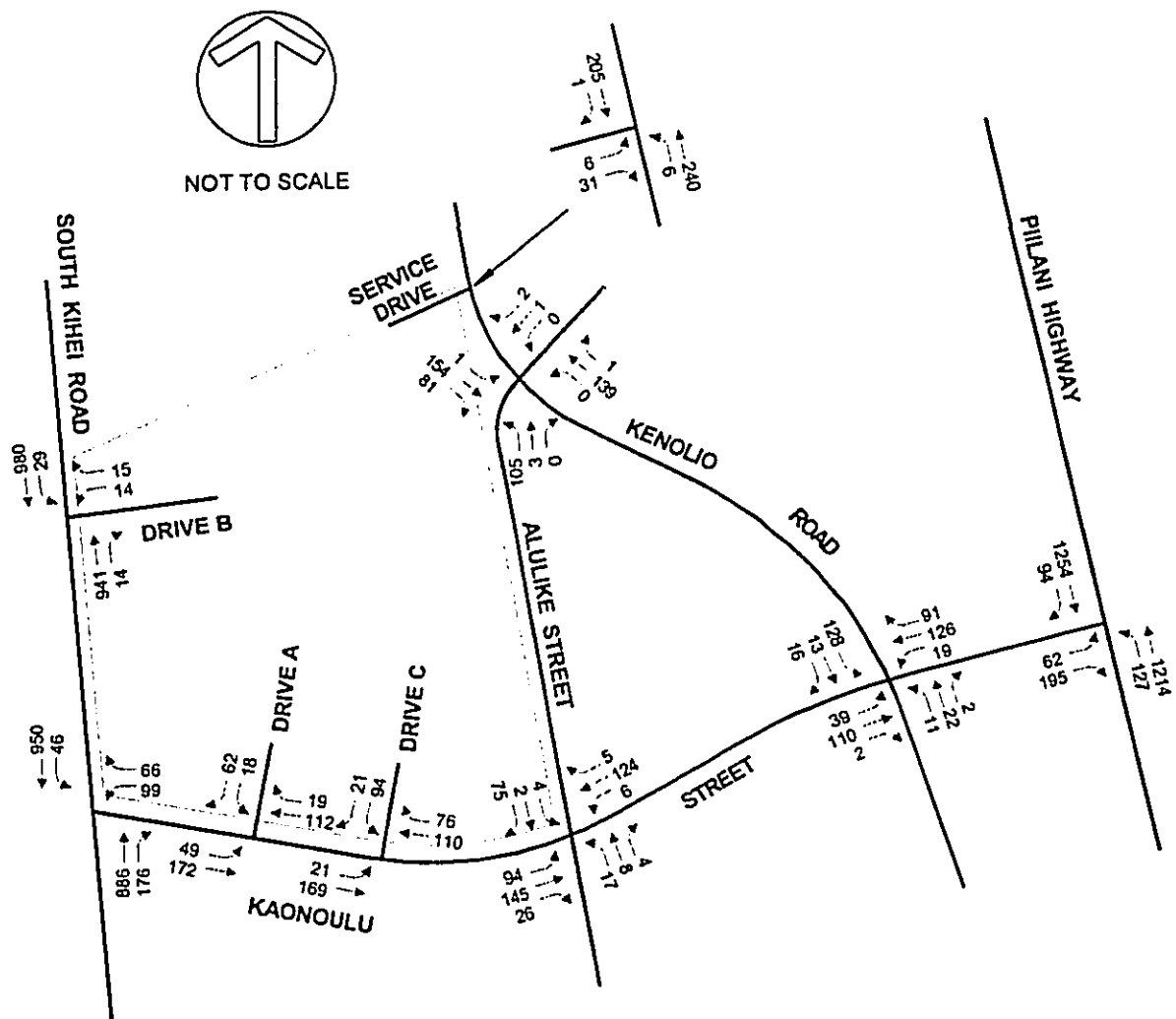


Figure 16
 CUMULATIVE (2008) PLUS PROJECT
 PM PEAK HOUR TRAFFIC PROJECTIONS - 50% SCENARIO

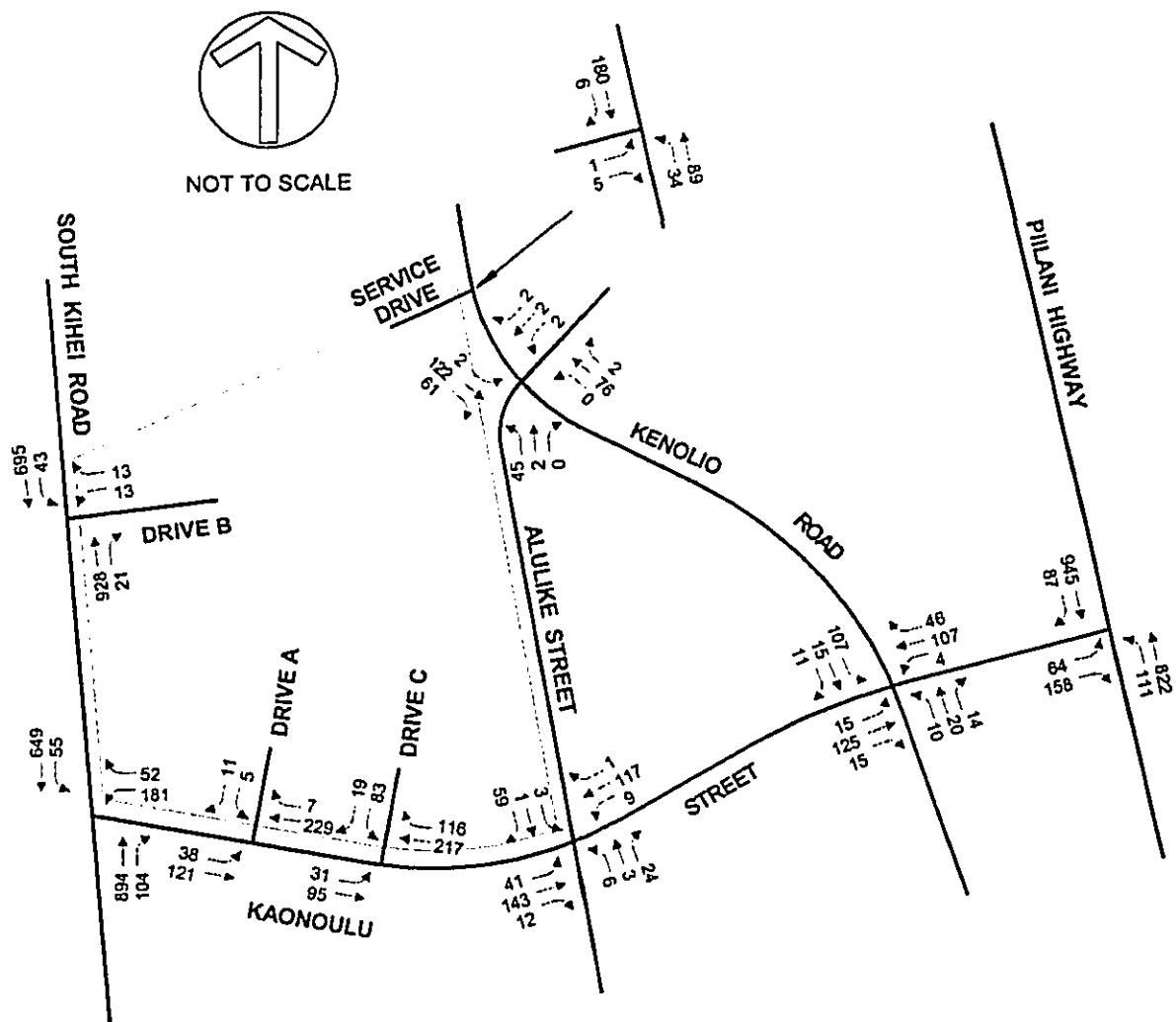


Figure 17
CUMULATIVE (2008) PLUS PROJECT
AM PEAK HOUR TRAFFIC PROJECTIONS - 100% SCENARIO

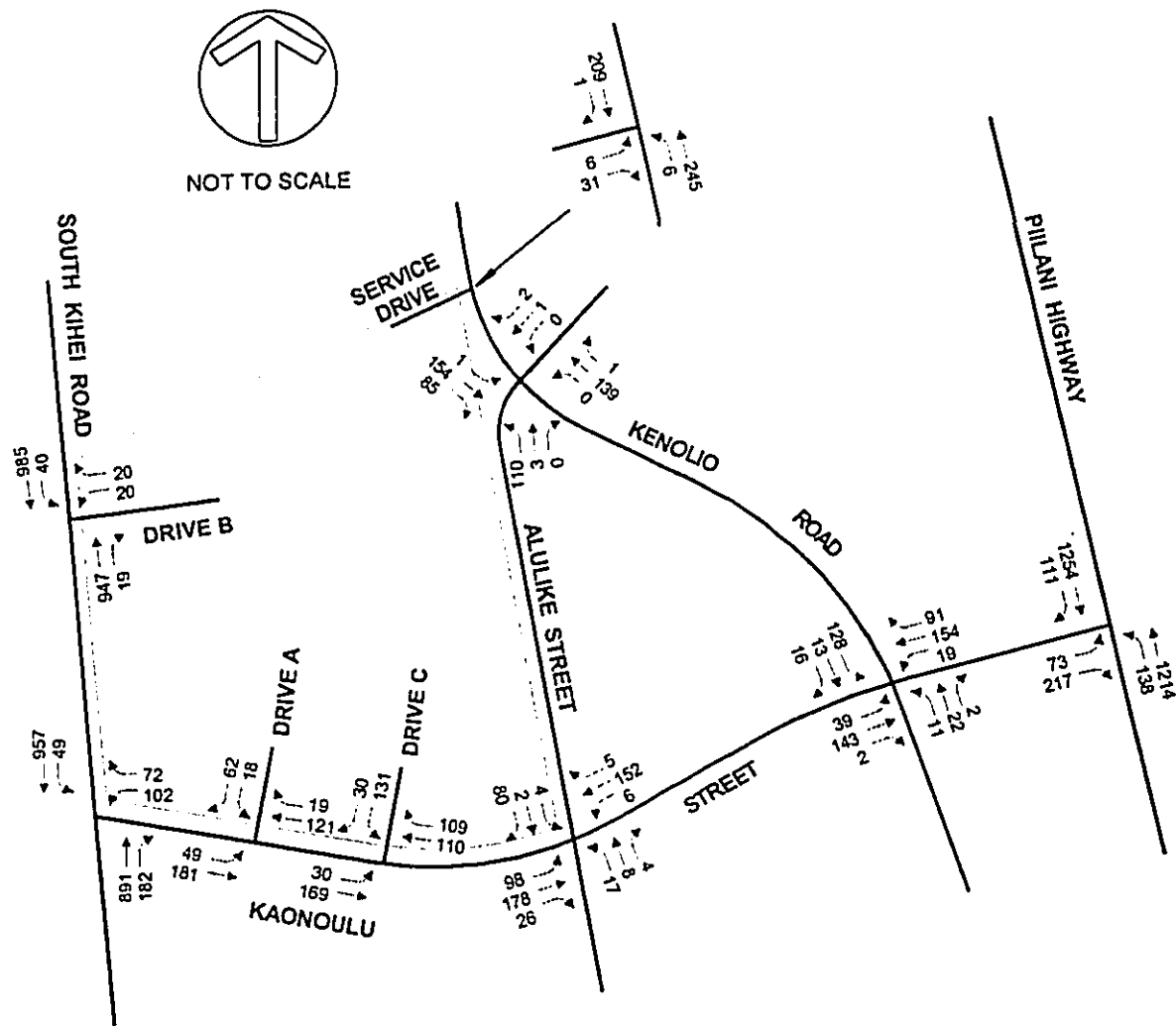


Figure 18
 CUMULATIVE (2008) PLUS PROJECT
 PM PEAK HOUR TRAFFIC PROJECTIONS - 100% SCENARIO

5. TRAFFIC IMPACT ANALYSIS

The purpose of this chapter is to summarize the results of the level-of-service analysis, which identifies the project-related impacts. In addition, any mitigation measures necessary and feasible are identified and other access, egress and circulation issues are discussed.

Definition of Significant Impacts

Since there is no local criteria defining a significant traffic impact, criteria used by Los Angeles Department of Transportation was used for this study. The criteria shown in Table 11 are used to define a significant impact for a signalized intersection:

| Final V/C Ratio | Project Related Increase in V/C |
|-----------------|---------------------------------|
| 0.700-0.800 | equal to or greater than 0.040 |
| 0.800 - 0.900 | equal to or greater than 0.020 |
| > 0.900 | equal to or greater than 0.010 |

NOTES:

- (1) Los Angeles Department of Transportation, *Traffic Study Policies and Procedures*, 1993, page 10

There are no similar criteria for unsignalized intersections. The *Traffic Study Policies and Procedures* suggest that (1) unsignalized intersections be analyzed assuming signalized conditions so that intersections are evaluated using comparable criteria and (2) the volume-to-capacity ratio for the overall intersection, rather than each traffic movement, be used to evaluate the intersection.

In calculating the volume-to-capacity ratio for the overall intersection, deficient traffic movements may be overlooked because poor and good levels-of-service may balance, resulting in an acceptable level-of-service. Therefore, the criteria shown in Table 11 is used to define a significant impact for each traffic movement as well as the overall intersection.

Project Related Traffic Impacts

The level-of-service analysis was performed for cumulative and cumulative plus project conditions. The incremental difference between the two conditions is the impact of the project. The assumptions used for the level-of-service analysis are:

1. Piilani Highway is two lanes northbound and two lanes southbound.
2. The intersection of South Kihei Road at Kaonoulu Street is unsignalized.
3. The intersection of Piilani Highway at Kaonoulu Street is unsignalized.
4. Kaonoulu Street remains a two-lane, two-way roadway.

The results of the Level-of-Service analysis of the intersection of the study intersections are summarized in Table 12. Since all the intersections are unsignalized, only the delay and Level-of-Service is shown.

Table 12 2008 Levels-of-Service

| Intersection and Movement | AM Peak Hour | | | | | | PM Peak Hour | | | | | |
|--|--------------------|------------------|--------------|-----|---------------|-----|-----------------|-----|--------------|-----|---------------|-----|
| | Without Project | | 50% Scenario | | 100% Scenario | | Without Project | | 50% Scenario | | 100% Scenario | |
| | Delay ¹ | LOS ² | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS |
| Kaonoulu Street at South Kihei Road | | | | | | | | | | | | |
| Southbound Left | 11.6 | B | 12.1 | B | 12.2 | B | 12.3 | B | 12.7 | B | 12.9 | B |
| Westbound Left | 236.3 | F | 354.4 | F | 385.2 | F | 164.4 | F | 259.9 | F | 300.8 | F |
| Westbound Right | 19.9 | C | 21.0 | C | 21.7 | C | 22.5 | C | 24.6 | C | 25.7 | C |
| Kaonoulu Street at Piihoni Highway | | | | | | | | | | | | |
| Northbound Left | 11.8 | B | 12.8 | B | 13.3 | B | 13.5 | B | 14.1 | B | 14.4 | B |
| Eastbound Left | 26.1 | D | 36.9 | E | 49.0 | E | 23.9 | C | 31.0 | D | 35.8 | E |
| Eastbound Right | 14.4 | B | 15.5 | C | 16.0 | C | 20.1 | C | 27.4 | D | 31.9 | D |
| Kaonoulu Street at Alulihi Street | | | | | | | | | | | | |
| Eastbound Left | 7.3 | A | 7.5 | A | 7.6 | A | 7.6 | A | 7.8 | A | 7.9 | A |
| Westbound Left | 7.6 | A | 7.7 | A | 7.8 | A | 7.5 | A | 7.7 | A | 7.8 | A |
| Northbound Left, Thru & Right | 11.0 | B | 10.4 | B | 10.8 | B | 13.4 | B | 16.4 | C | 18.7 | C |
| Southbound Left, Thru & Right | 9.1 | A | 9.8 | A | 10.2 | B | 9.6 | A | 10.2 | B | 10.7 | B |
| Kaonoulu Street at Keneloa Road | | | | | | | | | | | | |
| Eastbound Left | 7.4 | A | 7.7 | A | 7.8 | A | 7.7 | A | 8.0 | A | 8.1 | A |
| Westbound Left | 7.4 | A | 7.5 | A | 7.6 | A | 7.3 | A | 7.6 | A | 7.7 | A |
| Northbound Left | 10.5 | B | 12.8 | B | 13.7 | B | 11.7 | B | 14.9 | B | 16.0 | C |
| Northbound Thru & Right | 10.2 | B | 11.7 | B | 12.2 | B | 11.5 | B | 15.1 | B | 14.7 | B |
| Southbound Left | 12.2 | B | 16.5 | C | 18.5 | C | 14.6 | B | 22.8 | C | 29.9 | D |
| Southbound Thru & Right | 9.9 | A | 11.3 | B | 11.9 | B | 10.5 | B | 11.9 | B | 12.7 | B |
| Keneloa Road at Alulihi Street | | | | | | | | | | | | |
| Eastbound Left | 7.3 | A | 7.4 | A | 7.4 | A | 7.6 | A | 7.6 | A | 7.6 | A |
| Westbound Right | 7.7 | A | 7.7 | A | 7.7 | A | 7.8 | A | 7.9 | A | 7.9 | A |
| Northbound Left, Thru & Right | 10.8 | B | 11.5 | B | 11.5 | B | 11.8 | B | 15.4 | C | 15.7 | C |
| Southbound Left, Thru & Right | 10.0 | B | 10.4 | B | 10.4 | B | 10.3 | B | 10.5 | B | 10.5 | B |

NOTES:

(1) Delay is in seconds per vehicle.

(2) LOS denotes Level-of-Service calculated using the operations method described in *Highway Capacity Manual*. Level-of-Service is based on delay.

As shown in the table, the left turn from westbound Kaonoulu Street to southbound South Kihei Road will operate at Level-of-Service F without and with the proposed project. There is no criteria for traffic significance of unsignalized intersections. However, the increase in delay is over 50% during the morning peak hour and over 58% during the afternoon peak hour, which indicates that mitigation of traffic conditions at this intersection should be considered. The peak hour warrants for a traffic signal are satisfied. Therefore, it is recommended that traffic signalization be considered. The traffic signal warrant analysis is discussed in the following section of this report.

The left turn from eastbound Kaonoulu Street to northbound Piihoni Highway will operate at Level-of-Service D during the morning peak hour without the project and Level-of-Service E with the proposed project. During the afternoon peak hour, the Level-of-Service will decrease from C to D for the 50% scenario and from C to E for the 100% scenario. However, the final delays are less than 40 seconds per vehicle.

The eastbound right turn from Kaonoulu Street to southbound Piihoni Highway will operate at Level-of-Service C without the project and Level-of-Service D with the project.

All remaining traffic movements will operate at Level-of-Service A or B.

Project Driveways

The results of the Level-of-Service analysis of the project driveways are summarized in Table 13.

Traffic turning left into the project from Kaonoulu Street at Drive A and Drive C will operate at Level-of-Service A during both peak periods. This implies that project generated traffic will have a minimal impact on traffic operations along Kaonoulu Street adjacent to the project. A left turn storage lane is not warranted nor will it improve the level-of-service but is recommended to enhance traffic flow. This is consistent with other intersections along Kaonoulu Street.

Traffic turning left into the project from South Kihei Road at Drive B will operate at Level-of-Service B during both peak periods. A separate left turn storage lane is warranted and is therefore recommended. Installation of a separate left turn storage lane at the intersection of South Kihei Road at Drive B will not improve the Level-of-Service of traffic turning into the project but will minimize delay to southbound through traffic.

No improvements are recommended for the intersection of South Kihei Road at the driveway to the makai phase nor the service driveway.

Table 13 Level-of-Service Analysis - Project Driveways (100% Scenario)

| Intersection and Movement | Mauka and Makai Phases | | | |
|--|------------------------|--------------------|------------------|-----|
| | AM Peak Hour | | PM Peak Hour LOS | |
| | Delay | LOS ⁽¹⁾ | Delay | LOS |
| <i>Kaonoulu Street at Project Driveway A</i> | | | | |
| Eastbound Left | 8.1 | A | 7.7 | A |
| Southbound Left & Right | 11.3 | B | 10.9 | B |
| <i>South Kihei Road at Project Driveway B</i> | | | | |
| Southbound Left & Thru | 10.8 | B | 10.9 | B |
| Westbound Left & Right | 23.6 | C | 27.4 | D |
| <i>Kaonoulu Street at Project Driveway C</i> | | | | |
| Eastbound Left | 8.4 | A | 8.0 | A |
| Southbound Left & Right | 16.1 | C | 17.4 | C |
| <i>Kanolio Road at Service Entrance</i> | | | | |
| Northbound Left & Thru | 7.7 | A | 7.7 | A |
| Eastbound Left & Right | 9.9 | A | 10.4 | B |

NOTES:
 1. Peak hour conditions analyzed are "worst-case" conditions, which is the sum of the peak hour of the adjacent street plus the peak hour of the generator.
 2. LOS denotes Level-of-Service calculated using the operations method described in *Highway Capacity Manual*. LOS is based on delay.

Traffic Signal Warrants

A traffic signal warrant analysis was performed for the intersection of South Kihei Road at Kaonoulu Street. The analysis is for the morning and afternoon peak hour as only peak hour traffic data was available. The Peak Hour Warrant Analysis Worksheets are provided as Attachment B. There are two conditions of the warrant. Satisfaction of either condition satisfies the Peak Hour Warrant.

Condition A relates to the total delay of the intersection and was referred to as the Peak Hour Delay Warrant prior to updating the traffic signal warrants in 2000. Condition B relates to the peak hourly volume and was previously referred to as the Peak Hour Volume Warrant.

For existing conditions, Conditions A and B are satisfied for AM peak hour conditions only. Neither condition is satisfied for PM peak hour conditions.

For 2008 cumulative conditions, Conditions A and B are satisfied for AM peak hour conditions only. Neither condition is satisfied for PM peak hour conditions.

For 2008 cumulative plus project conditions, both Conditions A and B are satisfied for both AM and PM peak hour conditions. The analysis was performed for the 50% Scenario only. Since the 50% Scenario satisfies the warrant, the 100% Scenario would also satisfy the warrant as traffic volumes higher and delays are longer.

The Pedestrian Volume Warrant was reviewed relative to the need for a pedestrian crossing signal to accommodate the increased pedestrian volume crossing South Kihei Road. The Pedestrian Warrant is satisfied if (a) "the pedestrian volume crossing the major street is 100 or more for each of any four hours or 190 or more during any one hour", and (b) "there are fewer than 60 gaps per hour in the traffic stream of adequate length to allow pedestrian to cross during the same period when the pedestrian volume is satisfied."⁴ The AM peak period is the time during which the heaviest pedestrian activity was noted at the subject intersection. During this period a total of 29 pedestrians crossed one of the three legs of the intersection. Only four crossed South Kihei Road. The remaining pedestrians crossed Kaonoulu Street. It should also be noted that there is no way to determine the origin or destination of these pedestrians. For example, we do not know if these pedestrians are guests of the Maui Lu resort or residents of the adjacent community. To satisfy this warrant, the number of pedestrians crossing South Kihei Road would have to increase significantly.

Lastly, the Pedestrian Volume Warrant shall not be applied at locations where the distance to the nearest traffic control signal is less than 300 feet.

Police Department Input

The Maui County Department of Public Works and Environmental Management recently advised traffic consultants to contact the Maui Police Department (MPD) for their input on the traffic impact report. As the previous draft of this report had already been circulated to the various agencies, written comments have been received and responded to. A copy of the correspondence received from MPD and the response is provided as Appendix C.

⁴ US Department of Transportation, Federal Highway Administration, *Manual of Uniform Traffic Control Devices*, Washington, D.C., 2001, page 4C-10

Traffic Calming

Kaonoulu Street between South Kihei Road and Piilani Highway has residential development along both sides of the roadway. When the Upcountry Highway is completed and traffic signals are constructed at Piilani Highway, traffic along Kaonoulu Street is expected to increase. This will probably result in a request for some form of traffic calming along Kaonoulu Street. Traffic calming measures that appear to be feasible for Kaonoulu Street include four-way STOP's at the intersections, roundabouts or speed humps.

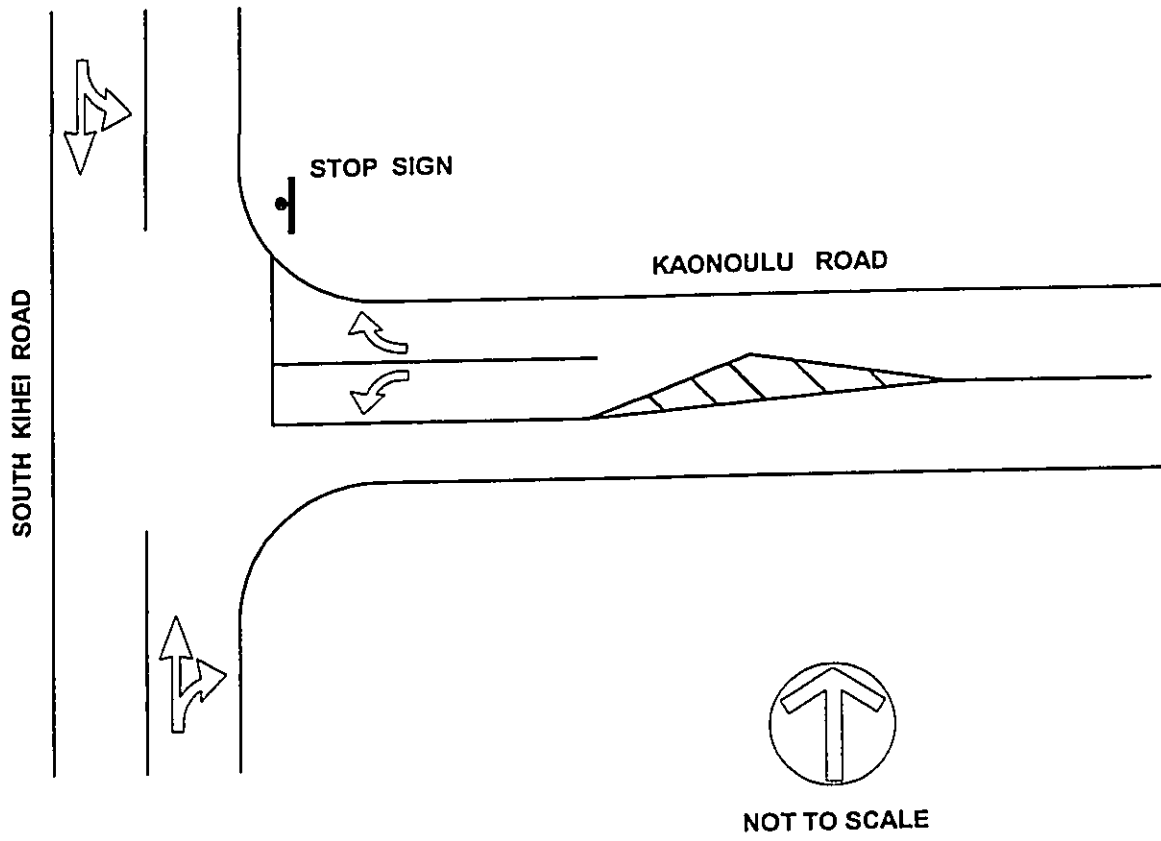
These measures have not been recommended at this time because these traffic calming measures are not required as mitigation measures for the study project. These measures should be installed only after the County's petition requirements have been satisfied. Upon receipt of a valid petition from the affected residents, these traffic calming measures should be assessed relative to their application to this specific area.

Mitigation Measures

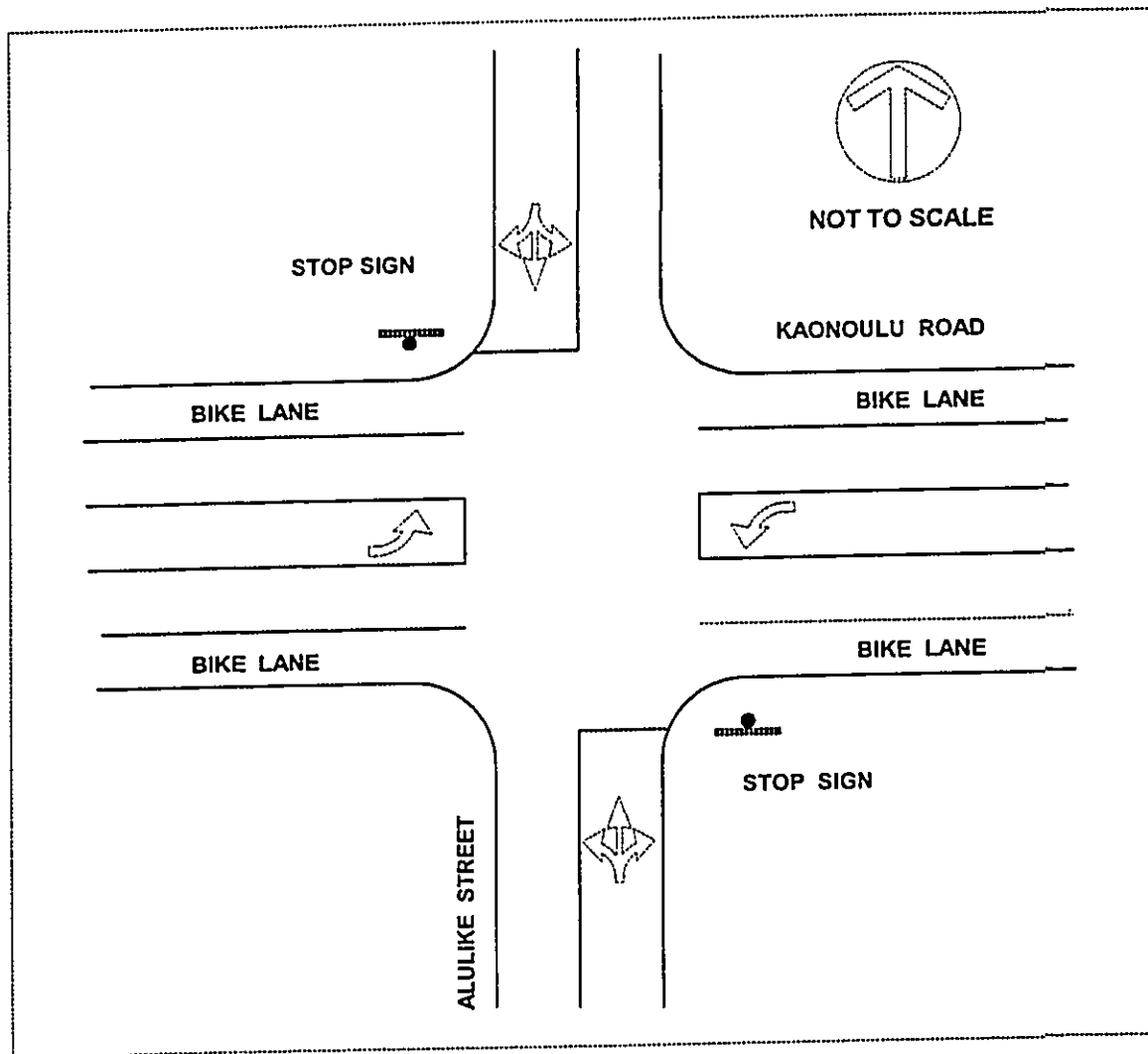
The following mitigation measures are recommended:

1. The intersection of South Kihei Road at Kaonoulu Street should be signalized as both the volume and delay conditions of the Peak Hour Warrant are satisfied. Since the approach volumes to the intersection are not comparable, the basic criteria for a roundabout is not satisfied. Also, the roundabout will not be as compatible with pedestrian crossing activity as a traffic signal. Pedestrian crossing signals should be included as part of the signal design. Separate left turn lanes should be provided along the southbound approach.
2. A landscaped median along South Kihei Road should be provided as proposed in the plan. This median will provide a refuge for pedestrians crossing South Kihei Road and should be designed to provide a refuge for vehicles turning left from the project at Drive B..
3. Sidewalks should be provided along both sides of South Kihei Road and along Kaonoulu Street adjacent to the project.
4. Kaonoulu Street should be widened to provide a left turn storage lane into the project from Kaonoulu Street.
5. A separate left turn storage lane should be provided along southbound South Kihei Road for left turns into the mauka phase of the project at Drive B.

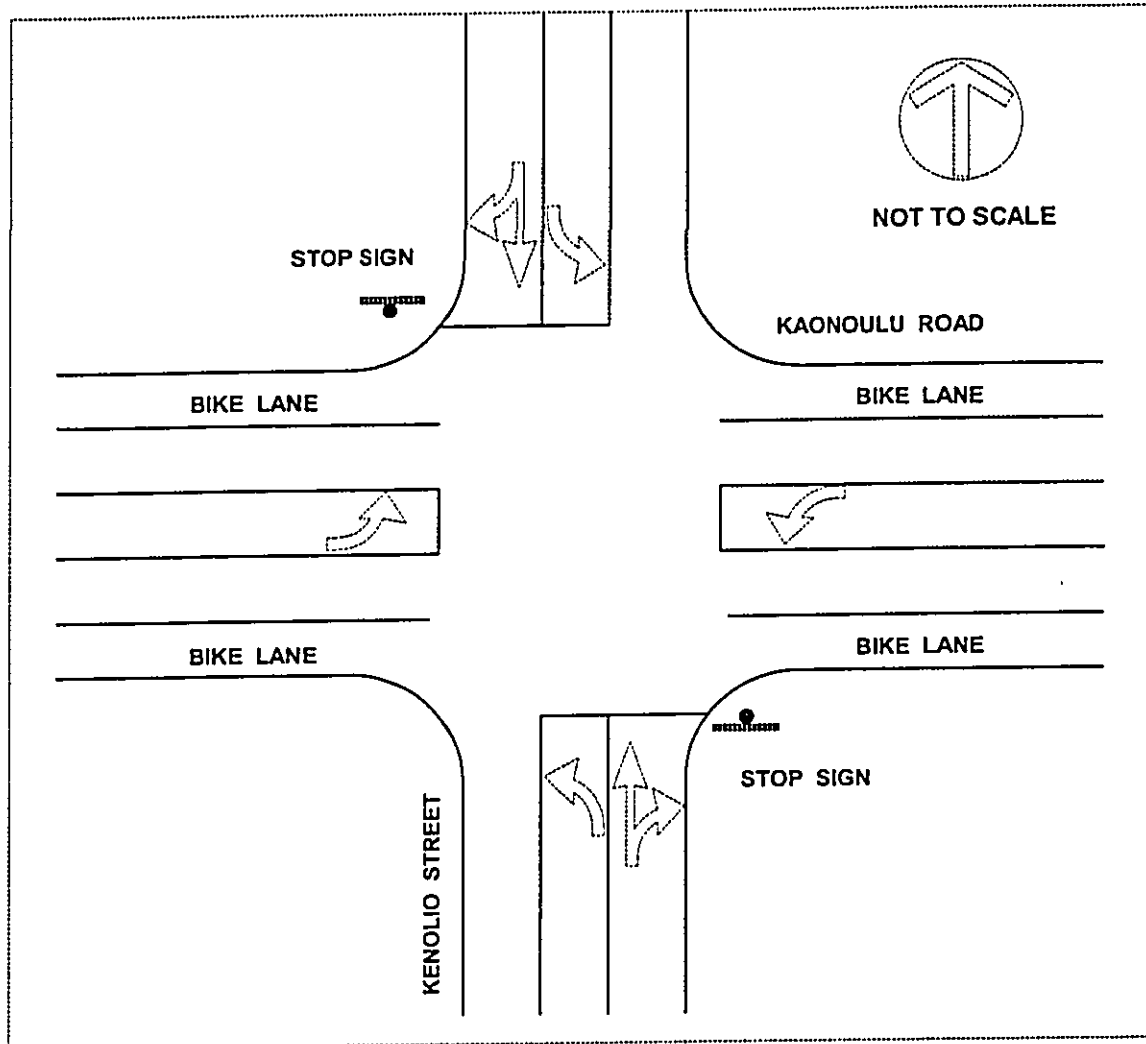
APPENDIX A
SCHEMATIC DIAGRAMS OF STUDY INTERSECTIONS



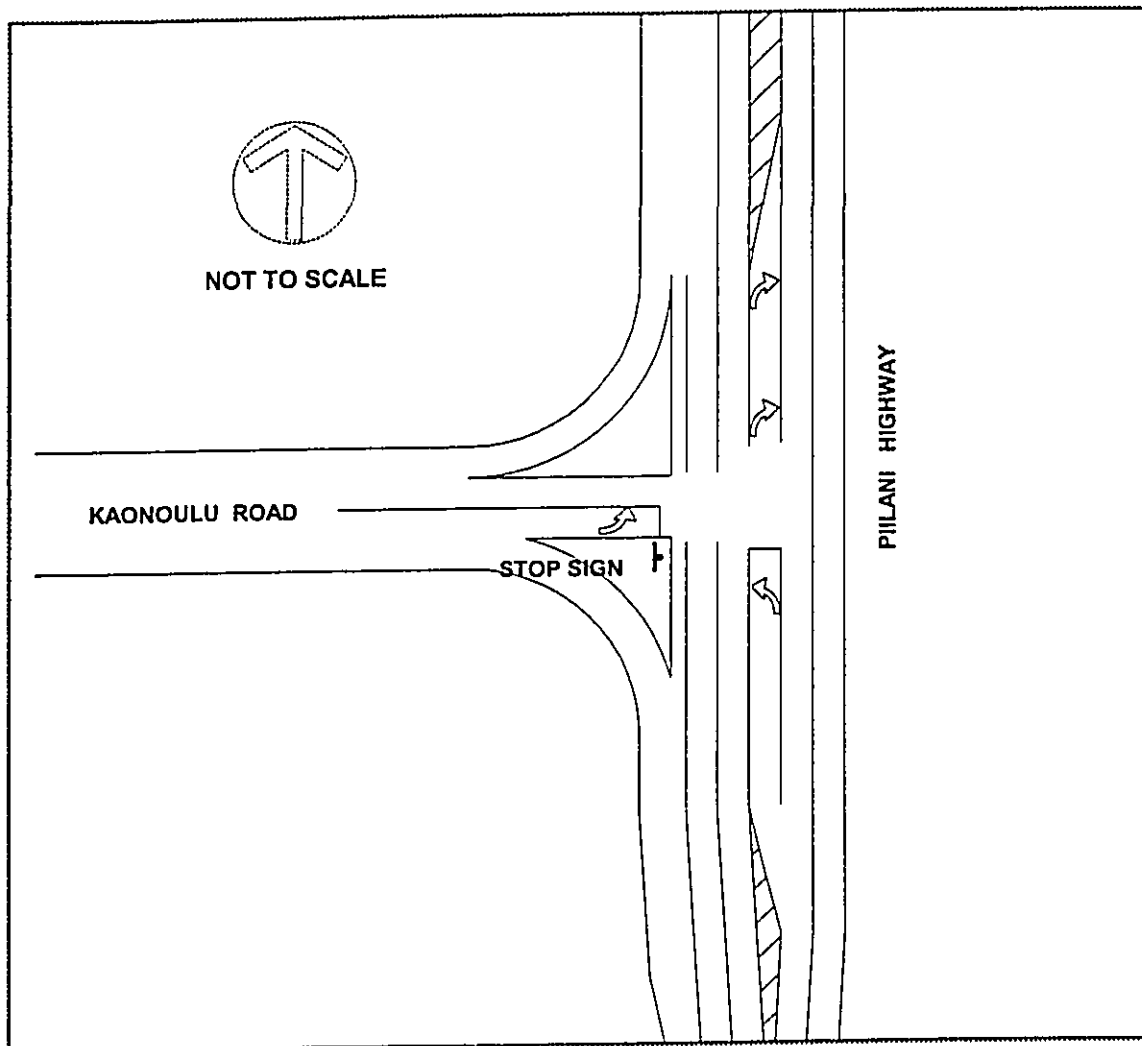
Appendix A-1
SCHEMATIC DIAGRAM OF
INTERSECTION OF SOUTH KIHAI ROAD AT KAONOULU ROAD



Appendix A-2
SCHEMATIC DIAGRAM OF
INTERSECTION OF KAONOULU ROAD AT ALULIKE STREET



Appendix A-3
SCHEMATIC DIAGRAM OF
INTERSECTION OF KAONOULU ROAD AT KENOLIO ROAD



Appendix A-4
SCHEMATIC DIAGRAM OF
INTERSECTION OF KAONOULU ROAD AT PIILANI HIGHWAY

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

APPENDIX B

**PEAK HOUR TRAFFIC SIGNAL WARRANT ANALYSIS
WORKSHEETS**

TRAFFIC SIGNAL WARRANT WORKSHEET¹ WARRANT 3 - PEAK HOUR

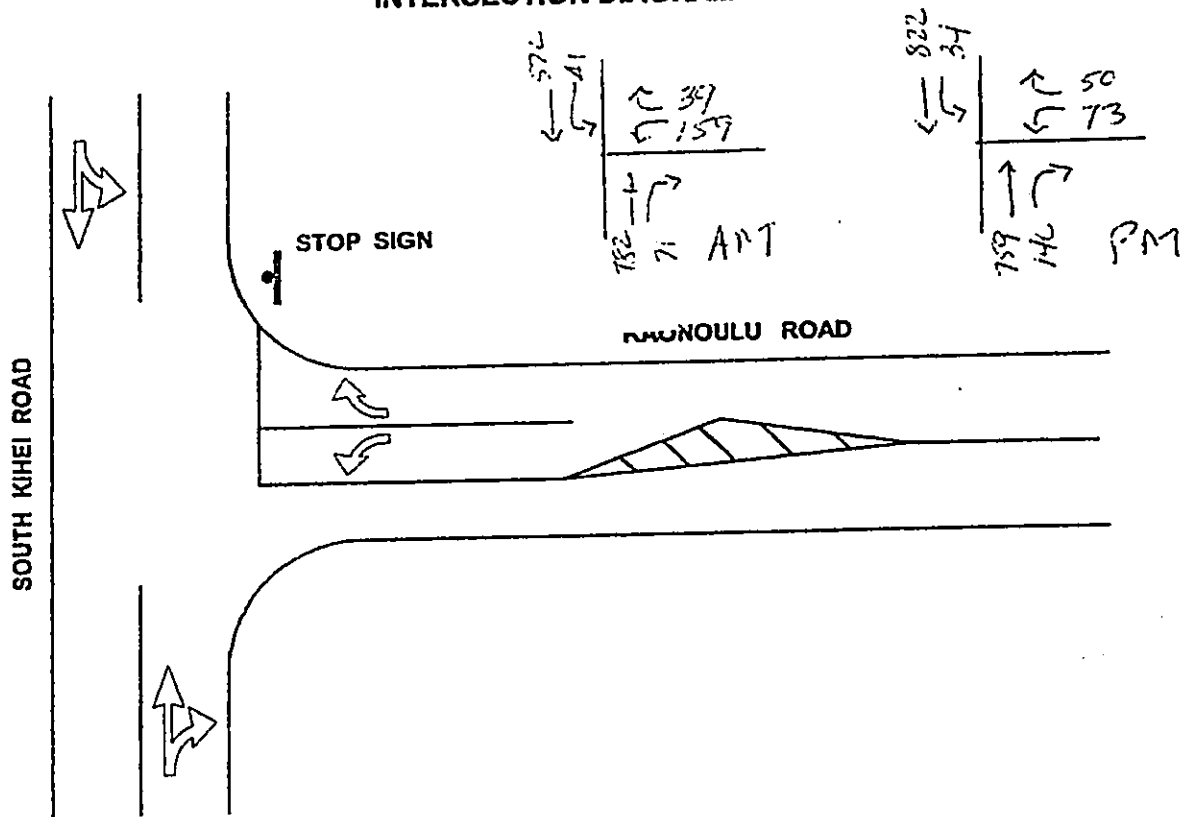
Major Street: S. Kihei Road Critical Approach Speed: 25 mph
 Minor Street: Kaunaloa Road Critical Approach Speed: 25 mph

Critical speed of major street traffic \geq 40 mph
 OR
 In built up area of isolated community of < 10,000 population 70% CONDITIONS

100% CONDITIONS

Conditions Analyzed: Existing Date: _____
 Calculated By: _____

INTERSECTION DIAGRAM



NOTE: The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right-of-way assignment must be shown.

¹ Federal Highway Administration, Manual of Uniform Traffic Control Devices, 2000, Section 4C Warrants.

CONDITION A

Satisfied YES NO

| REQUIREMENT | FULFILLED |
|---|--|
| The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours (vph) for a one-lane approach and five vehicle-hours for a two-lane approach; and | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> A.M. |
| The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic and 150 vph for two moving lanes; and | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> A.M. |
| The total entering volumes serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches and 650 vph for intersections with three approaches. | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> A.M. & P.M. |

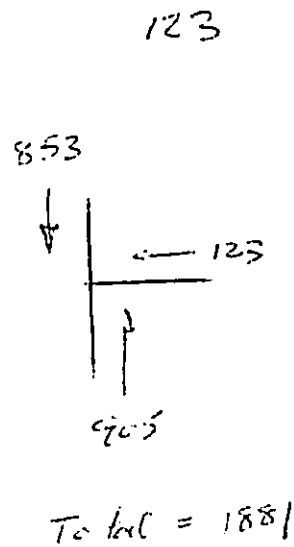
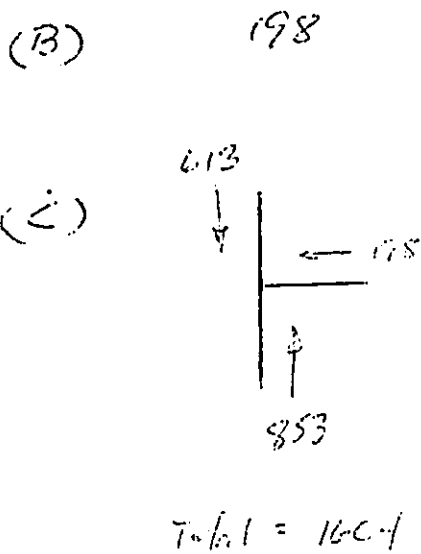
CALCULATIONS

(A) A.M.

$$\begin{array}{r} \curvearrowleft 39 \times 17.2 = 670.8 \\ \curvearrowright 159 \times 120.6 = 19175.4 \\ \hline 19846.2 \\ \div 3600 \\ \hline 5.5 \text{ hrs} \end{array}$$

P.M.

$$\begin{array}{r} \curvearrowleft 50 \times 18.3 = 915.0 \\ \curvearrowright 73 \times 61.2 = 4467.6 \\ \hline 5382.6 \\ \div 3600 \\ \hline 1.5 \text{ hrs} \end{array}$$



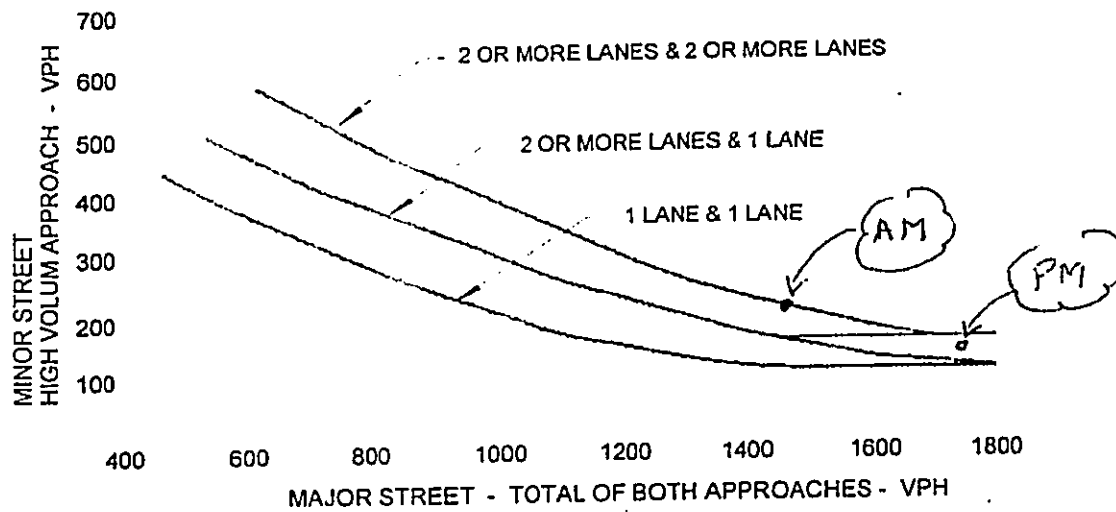
CONDITION B

| | APPROACH LANES | AM Peak Hour Volume | PM Peak Hour Volumes |
|----------------------------------|----------------|---------------------|----------------------|
| Both approaches, Major Street | 1 | 1466 | 1758 |
| Highest approaches, Minor Street | 2 | 198 | 123 |

Satisfied

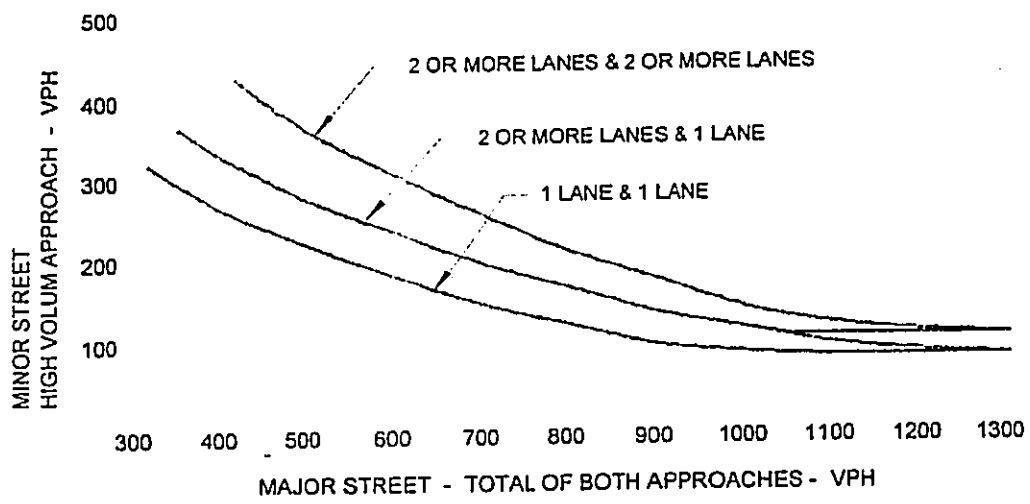
YES NO

100% CONDITIONS



NOTE: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approaching with one lane.

70% CONDITIONS
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 KM/H (40 MPH) ON MAJOR STREET)



NOTE: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

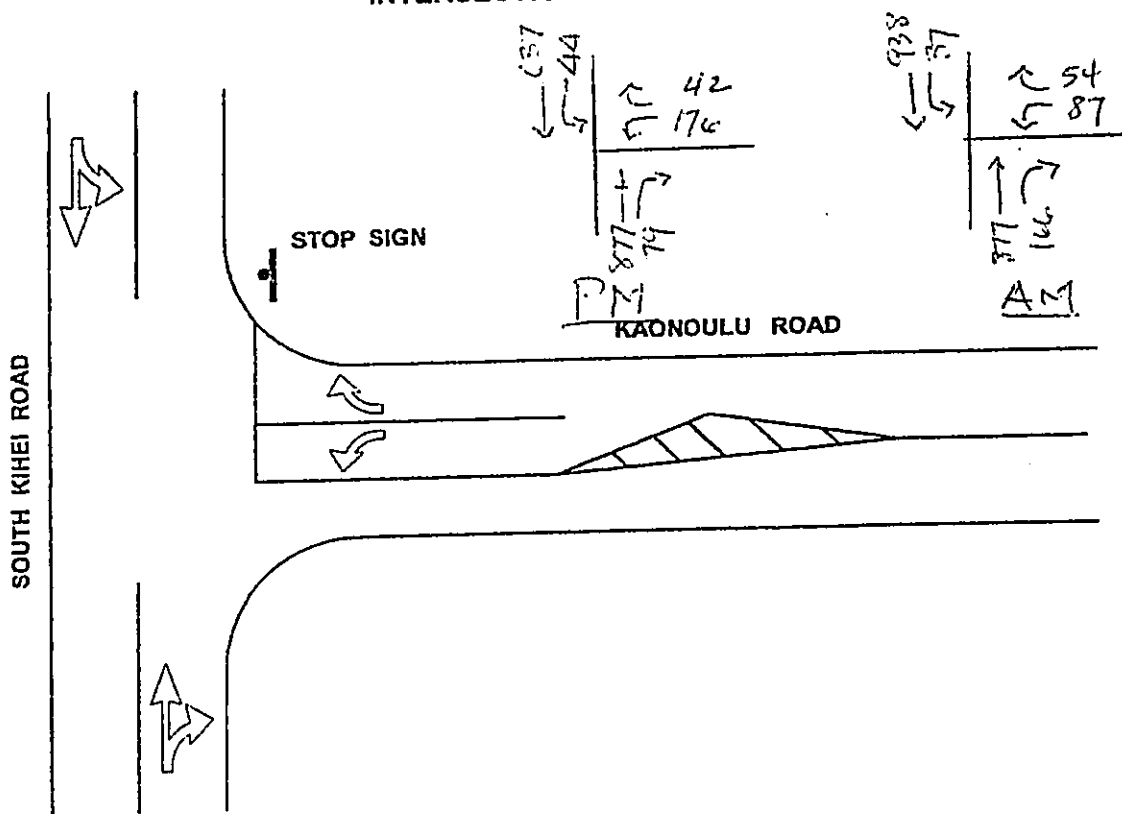
TRAFFIC SIGNAL WARRANT WORKSHEET¹ WARRANT 3 - PEAK HOUR

Major Street: S Kihei Road Critical Approach Speed: 26 mph
 Minor Street: Kaonoulu Street Critical Approach Speed: 25 mph

Critical speed of major street traffic \geq 40 mph 70% CONDITIONS
 OR
 In built up area of isolated community of < 10,000 population

Conditions Analyzed: 2008 Cumulative (w/o Project) 100% CONDITIONS
 Calculated By: _____ Date: _____

INTERSECTION DIAGRAM



NOTE: *The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right-of-way assignment must be shown.*

¹ Federal Highway Administration, *Manual of Uniform Traffic Control Devices*, 2000, Section 4C Warrants.

CONDITION A

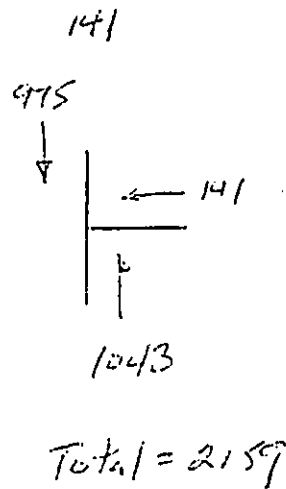
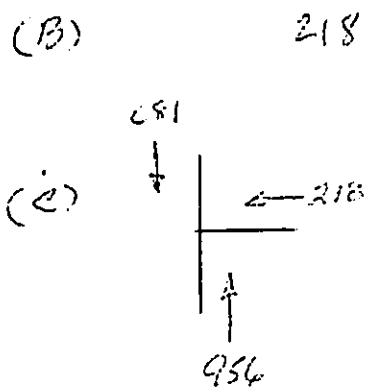
Satisfied YES NO

| REQUIREMENT | FULFILLED |
|---|--|
| The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours (vph) for a one-lane approach and five vehicle-hours for a two-lane approach; and | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> AM |
| The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic and 150 vph for two moving lanes; and | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> AM |
| The total entering volumes serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches and <u>650</u> vph for intersections with three approaches. | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> AM & PM |

CALCULATIONS

(A)

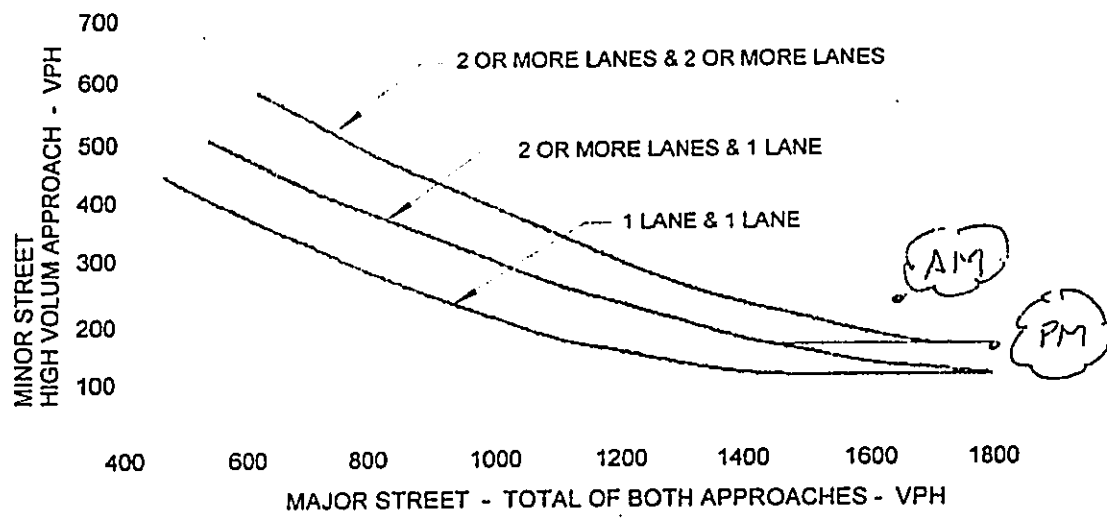
| | |
|---|--|
| <p>AM</p> $\begin{array}{r} 42 \times 19.9 = 835.8 \\ 176 \times 236.3 = 41588.8 \\ \hline 42424.6 \\ \div 3600 \\ \hline 11.8 \end{array}$ | <p>PM</p> $\begin{array}{r} 54 \times 22.5 = 1215.0 \\ 87 \times 124.4 = 14302.8 \\ \hline 15517.8 \\ \div 3600 \\ \hline 4.3 \end{array}$ |
|---|--|



CONDITION B

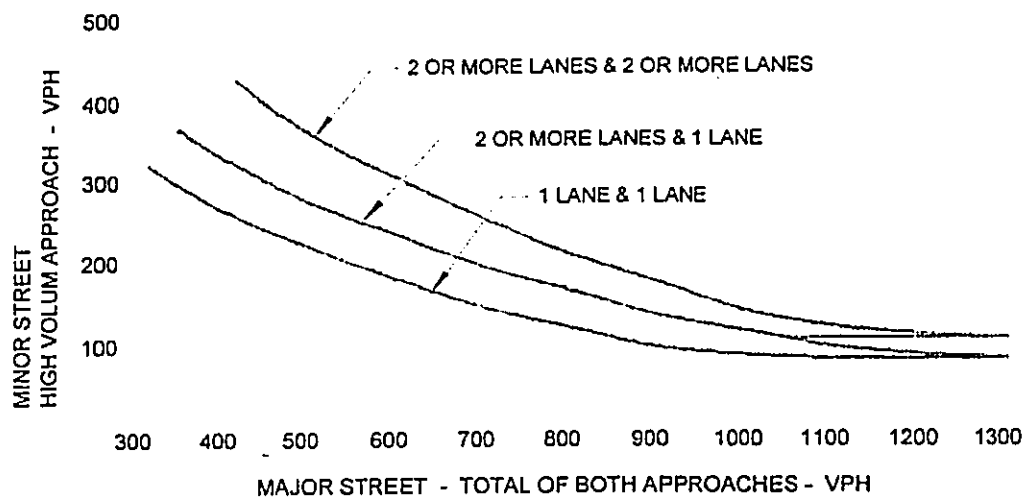
| | APPROACH LANES | Satisfied | |
|----------------------------------|----------------|---------------------|----------------------|
| | | AM Peak Hour Volume | PM Peak Hour Volumes |
| Both approaches, Major Street | 1 | 1637 | 218 |
| Highest approaches, Minor Street | 2 | 2018 | 141 |

100% CONDITIONS



NOTE: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approaching with one lane.

**70% CONDITIONS
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 KM/H (40 MPH) ON MAJOR STREET)**



NOTE: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

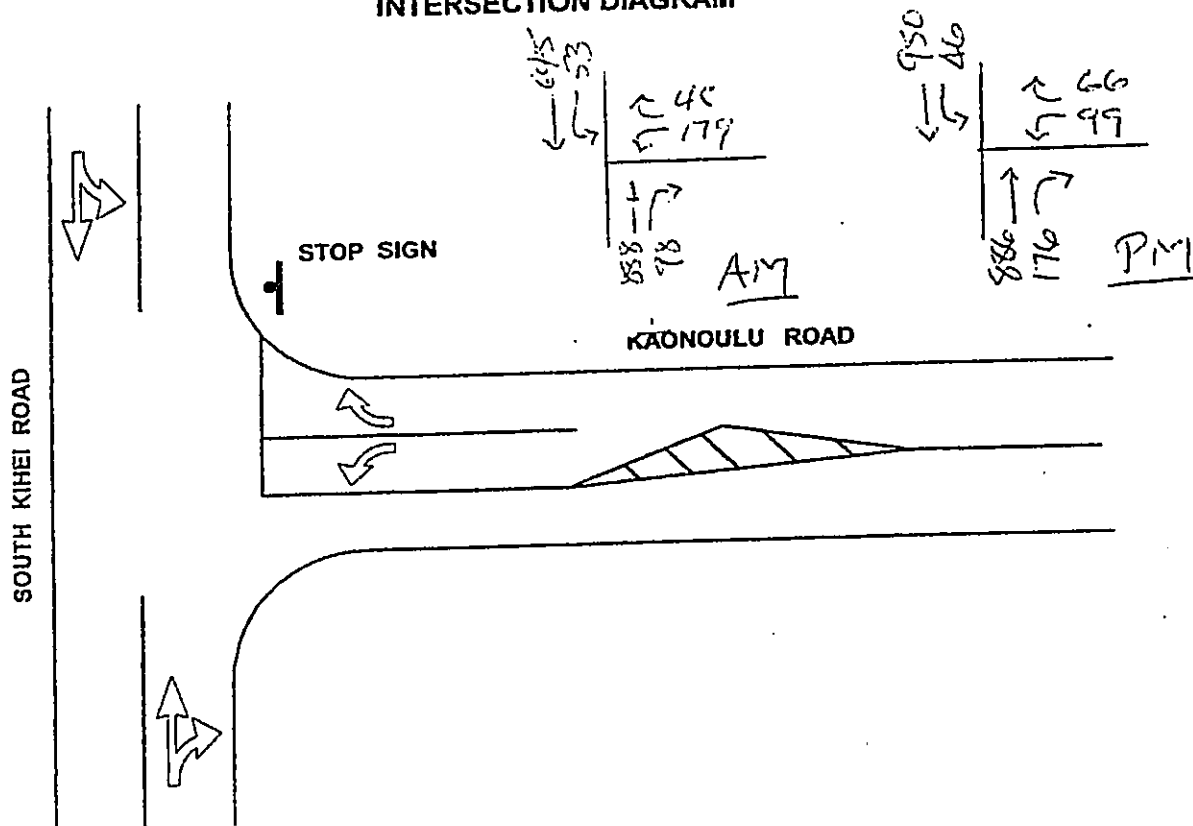
TRAFFIC SIGNAL WARRANT WORKSHEET¹ WARRANT 3 - PEAK HOUR

Major Street: S. Kihei Road Critical Approach Speed: 25 mph
 Minor Street: Kaonoulu Road Critical Approach Speed: 25 mph

Critical speed of major street traffic \geq 40 mph 70% CONDITIONS
 OR
 In built up area of isolated community of < 10,000 population

Conditions Analyzed: Cumulative + Project (50% Scenario) 100% CONDITIONS
 Calculated By: _____ Date: _____

INTERSECTION DIAGRAM



NOTE: *The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right-of-way assignment must be shown.*

¹ Federal Highway Administration, *Manual of Uniform Traffic Control Devices*, 2000, Section 4C Warrants.

CONDITION A

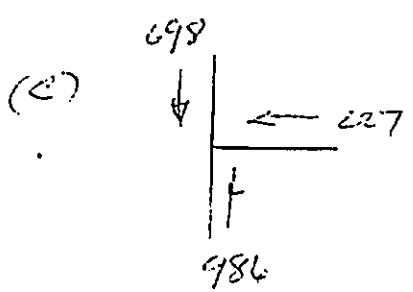
Satisfied YES NO

| REQUIREMENT | FULFILLED |
|---|--|
| The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours (vph) for a one-lane approach and five vehicle-hours for a two-lane approach; and | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> AM & PM |
| The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic and 150 vph for two moving lanes; and | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> AM & PM |
| The total entering volumes serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches and 650 vph for intersections with three approaches. | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> AM & PM |

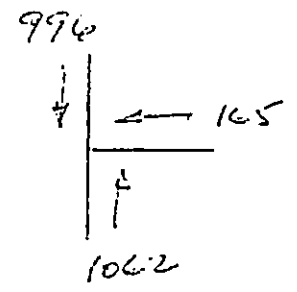
CALCULATIONS

| | |
|---|---|
| <p>(A) AM</p> $\begin{array}{r} \curvearrowright 48 \times 21.0 = 1008.0 \\ \curvearrowleft 179 \times 354.4 = 63437.6 \\ \hline 64445.6 \\ \div 3600 \\ \hline 17.9 \end{array}$ | <p>PM</p> $\begin{array}{r} \curvearrowright 66 \times 24.6 = 1623.6 \\ \curvearrowleft 79 \times 259.9 = 25730.1 \\ \hline 27353.7 \\ \div 3600 \\ \hline 7.6 \end{array}$ |
|---|---|

(B) 227 17.9 165 7.6



Total = 1911

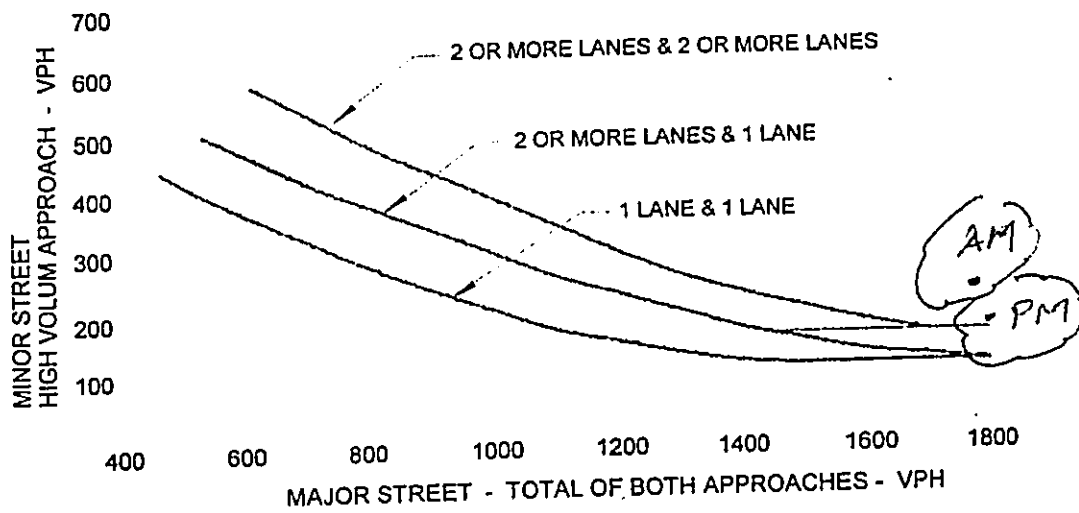


Total = 2223

CONDITION B

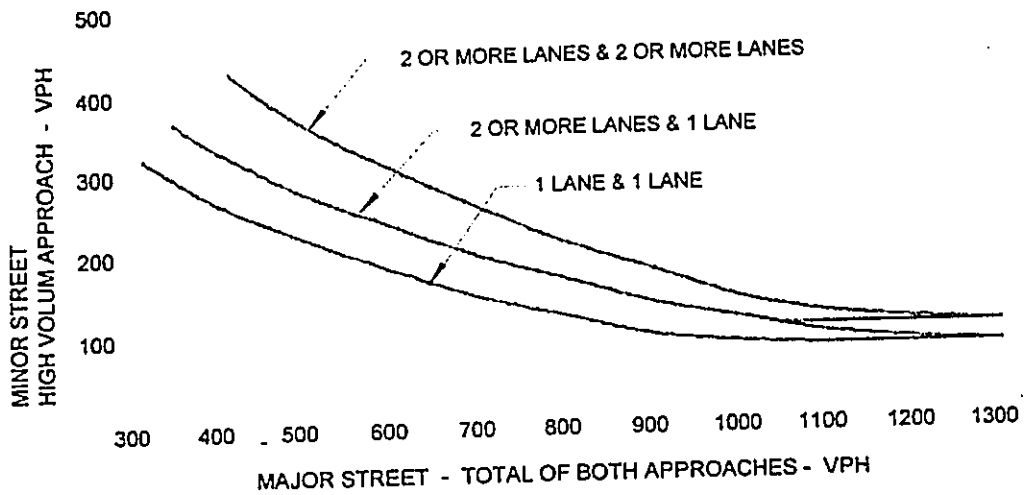
| | APPROACH LANES | Satisfied | |
|----------------------------------|----------------|---------------------|----------------------|
| | | AM Peak Hour Volume | PM Peak Hour Volumes |
| Both approaches, Major Street | 1 | 227 | 165 |
| Highest approaches, Minor Street | 2 | 1684 | 2058 |

100% CONDITIONS



NOTE: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approaching with one lane.

70% CONDITIONS
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 KM/H (40 MPH) ON MAJOR STREET)



NOTE: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

APPENDIX C

**CORRESPONDENCE WITH MAUI POLICE
DEPARTMENT**



ALAN M. ARAKAWA
MAYOR

OUR REFERENCE
↓
YOUR REFERENCE

POLICE DEPARTMENT

'04 APR 15 A9:43 COUNTY OF MAUI

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

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



THOMAS M. PHILLIPS
CHIEF OF POLICE

KEKUAPIO R. AKANA
DEPUTY CHIEF OF POLICE

April 12, 2004

MEMORANDUM

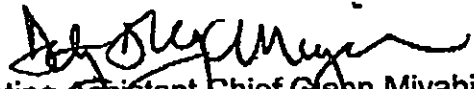
TO : MICHAEL W. FOLEY, PLANNING DIRECTOR

FROM : THOMAS M. PHILLIPS, CHIEF OF POLICE

SUBJECT : I.D. : EA 2003/0008 and SM1 2003/0021
 TMK : (2) 3-9-001:083, 086, & 120
 Project
 Name : Maui Lu Redevelopment
 Applicant : Genesee Capital c/o Chris Hart & Partners

- No recommendation or comment to offer.
- Refer to enclosed comments and/or recommendations.

Thank you for giving us the opportunity to comment on this project.


 Acting Assistant Chief Glenn Miyahira
 For: THOMAS M. PHILLIPS
 Chief of Police

Enclosure

COPY

TO : THOMAS PHILLIPS, CHIEF OF POLICE, COUNTY OF MAUI
VIA : CHANNELS
FROM : BRAD HICKLE, POLICE OFFICER III, DISTRICT VI KIHEI
SUBJECT : SPECIAL MANAGEMENT AREA USE PERMIT FOR THE
MAUI LU REDEVELOPMENT TMK: (2) 3-9-001:086

Comments and
recommendation
made by Off. Hi
Forward to Dept
of Planning
Ady. Legal
J. Alai

Sirs, on 04/01/04 this Office received a copy of the Special Management Area use Permit (SMA) for the Maui Lu Resort Redevelopment @ TMK: (2) 3-9-001:086.

The applicant, Genesee CAPITAL, is requesting redevelopment of the current 163 unit Maui Lu Resort which includes phased demolition of some existing structures and redevelopment of a 400 unit Maui Lu Timeshare Resort. The redevelopment will also include the installation of a traffic light at the South Kihei road/ Ka'ono'ulu Street intersection as well as other roadway improvements which are needed in that area.

REVIEW/COMMENTS:

After reviewing the application my only concern is the impact the additional vehicle traffic will have on the growing community following the completion of the proposed redevelopment project and the eventual completion of the up-country roadway which will pass through that area. There is a great deal more other housing developments and SMA permits that have already been approved for the Kihei, Wailea and Makena areas which will undoubtedly add to the infrastructure problem as well and all should be considered.

I reviewed the traffic projections worksheet and I am not an analyst but I do not believe the traffic study provided truly considers the additional vehicle traffic created by these other developments which are pending or under construction and not yet completed. I further do not believe it can predict the future vehicle traffic which the up-country roadway will undoubtedly bring to the area when eventually connected to Ka'ono'ulu street and as an emergency services employee I am very troubled by this.

The traffic infrastructure is a primary concern in this area as Maui County does not yet have a reliable, full-time mass transit system. The Kihei community is currently experiencing the effects of continuing development of hotels and timeshares that subsequently cater to a large number of transient guests who will likely be traveling by rental vehicle thus continually contributing to the problem.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED) Page 2

The practices of CPTED across the United States have proven to reduce crime and criminal activities in the cities where it has been implemented.

CPTED is a framework whereby the design of builds, landscaping and the placement of lighting and interwoven to increase surveillance, limit accessibility to criminals and the likelihood of criminal activities upon a property.

RECOMMENDATIONS:

It is my recommendation that the applicant contribute along with other developers to the implementation of a mass transit system which will undoubtedly benefit the applicant, guests and the community.

It is further my recommendation that the applicant use "best practices" in CPTED when developing this project. This Officer is available to assist the applicant in this matter as I have received training in CPTED and Advanced CPTED techniques.

Respectfully Submitted,

Officer Brad Hickle
04/08/04

BH

E-9966

1230 hours

REQUEST CONSIDERATION
OF OFFICER HICKLE'S
RECOMMENDATIONS.

fc. [Signature]
4-9-4. 1940 7462



July 23, 2004

Mr. Thomas M. Phillips, Chief of Police
Police Department
55 Mahalani Street
Wailuku, Hawaii 96793
Attention: Officer Brad Hickle

Dear Chief Phillips:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your April 12, 2004 letter in response to the Draft Environmental Assessment (EA) and Special Management Area application for the subject project.

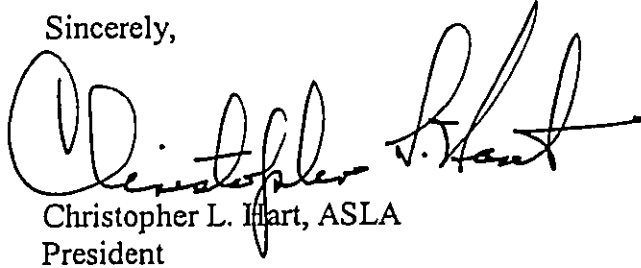
The Traffic Impact Analysis Report, prepared by Phillip Rowell and Associates, takes into consideration seven other projects in the general vicinity of the subject project in addition to the projected growth rate in Kihei. The report also acknowledges that the future upcountry highway is expected to increase traffic on Kaonoulu Road. While it is difficult to foresee actual roadway usage, the report uses an accepted methodology that attempts to predict future conditions with and without the proposed project. The report recommends traffic lights at the Kaonoulu/South Kihei Road intersection to control traffic flow in the area. It also recommends a landscaped median along South Kihei Road, sidewalks on both sides of South Kihei Road and the project side of Kaonoulu Road, and the widening of Kaonoulu Road with left turn storage lanes into the project.

Building plans for the proposed project are very conceptual at this stage, so the project architect has been asked to consider "best practices" in Crime Prevention Through Environmental Design (CPTED). Design considerations will include CPTED strategies that include natural surveillance, territorial reinforcement, natural access control, and target hardening. The Final EA will contain these considerations.

Mr. Thomas M. Phillips, Chief of Police
Re: Maui Lu Redevelopment
July 23, 2004
Page 2

If you have any further questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher L. Hart". The signature is written in a cursive style with a large initial "C" and a long horizontal stroke at the end.

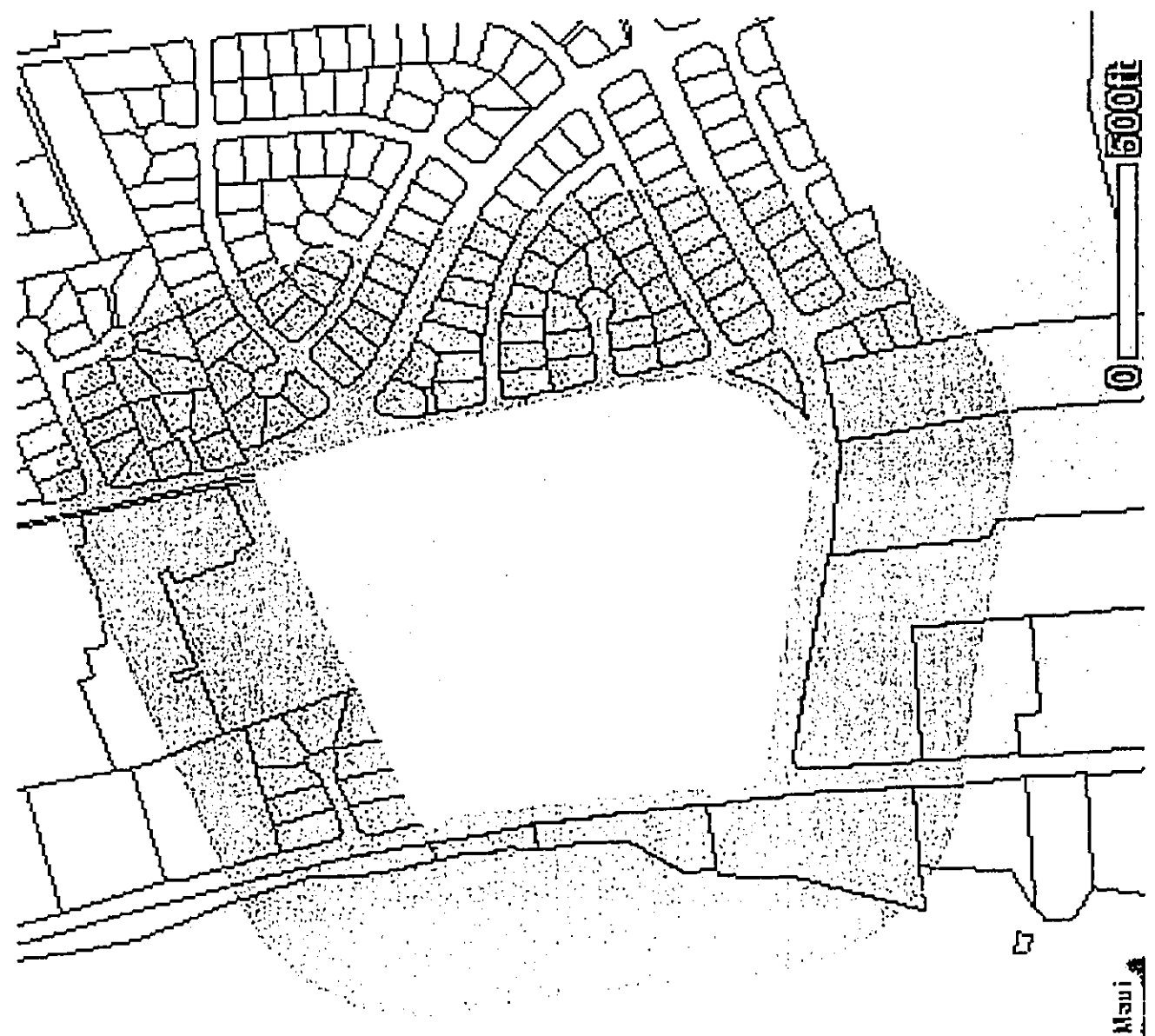
Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

APPENDIX F
List of Owners Within 500 Feet



MAUI LU REDEVELOPMENT
SEPTEMBER 2003



County of Maui

MAP SHOWING PARCELS WITHIN 500 FEET
OF PARCELS 3-9-001:086

| | | |
|---|---|--|
| <p>TMK: 39001015 0000 COUNTY OF MAUI < < 0 <</p> | <p>TMK: 39001043 0000 MAUI BEACH RESORT CONDO MASTER 0</p> | <p>TMK: 39001043 0001 MAUI BEACH VACATION CLUB CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0002 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0003 CHUN'S RESTAURANT INC CHUN, JUNG HO/CHI SON CINDY P. O. BOX 1423 KIHEI HI 96753</p> | <p>TMK: 39001043 0004 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0005 HASS, KATHLEEN ANN 515 S KIHEI RD, A202 KIHEI HI 96753</p> | <p>TMK: 39001043 0006 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0007 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0008 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0009 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0010 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0011 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0012 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0013 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0014 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0015 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0016 DACANAY, KENNETH T CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0017 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0018 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0019 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0020 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0021 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0022 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0023 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0024 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0025 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |

| | | |
|---|---|---|
| <p>TMK: 39001043 0026 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0027 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0028 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0029 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0030 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0031 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0032 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0033 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0034 TRACHET, RONALD LEE 4480 WATERS RD ANN ARBOR MI 48103</p> |
| <p>TMK: 39001043 0035 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0036 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0037 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0038 STALLARD, VERONICA ANNE TR P O BOX 1510 KAHULUI HI 96732</p> | <p>TMK: 39001043 0039 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0040 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0041 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0042 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0043 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0044 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0045 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0046 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0047 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0048 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0049 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |
| <p>TMK: 39001043 0050 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0051 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001043 0052 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> |

| | | |
|---|---|--|
| <p>TMK: 39001043 0053 CONSOLIDATED MAUI INC CONSOLIDATED RESORTS MGT LLC 801 S RAMPART BLVD #160 LAS VEGAS NV 89145</p> | <p>TMK: 39001064 0000 JPS HAWAII INC 828 FORT ST MALL, 4TH FLR HONOLULU HI 96813</p> | <p>TMK: 39001064 0001 BRADLEY, ROY A P/CHARLA K 1109 W 25TH TER S INDEPENDENCE MO 64052</p> |
| <p>TMK: 39001064 0002 OKAMURA, GLENNA SADA E 480 KENOLIO RD #1-102 KIHEI HI 96753</p> | <p>TMK: 39001064 0003 CHUNG, PAUL MICHAEL 592 KAIOLA ST KIHEI HI 96753</p> | <p>TMK: 39001064 0004 CUARESMA, SEGUNDA O ETAL 480 KENOLIO RD 1-104 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0005 KAHILA, CRAIG M P O BOX 2078 KIHEI HI 96753</p> | <p>TMK: 39001064 0006 KILIAN, STEVEN C/O KEVIN MAHONEY P O BOX 737 POCASSET MA 2559</p> | <p>TMK: 39001064 0007 KRAML, ROBERT P KRAML, ROBERT P 1912 253RD ST LOMITA CA 90717</p> |
| <p>TMK: 39001064 0008 ZINTGRAFF, ROBERT J/JERI E 4330 UNE PL HAIKU HI 96708</p> | <p>TMK: 39001064 0009 SINGH, RAJ CEZAR, NORMA 639 CENTER AVE MARTINEZ CA 94553</p> | <p>TMK: 39001064 0010 HEIDGER, ROBERT C JR 1223 AMETHYST ST REDONDO BEACH CA 90277</p> |
| <p>TMK: 39001064 0011 MIDTTUN, SVEIN J MIDTTIM, SVEIN J ETAL P O BOX 1715 MERCER ISLAND WA 98040</p> | <p>TMK: 39001064 0012 HALGREN, ANITA MARIE C/O ANITA HALGREN 480 KENOLIO RD #1-206 KIHEI HI 96753</p> | <p>TMK: 39001064 0013 TORRES, STEPHEN WAYNE 220 WEST KAUAI ST KAHULUI HI 96732</p> |
| <p>TMK: 39001064 0014 SMITH, DANIEL K SMITH, DANIEL K 2148 D VINEYARD ST WAILUKU HI 96793</p> | <p>TMK: 39001064 0015 BEAVER, TERRY JAY 2370 PUUMALA PL KIHEI HI 96753</p> | <p>TMK: 39001064 0016 WEBER, CHRISTIAN G TR WEBER, CHRISTIAN G/MELINDA M TRS 4892 PAYTON ST SANTA BARBARA CA 93111</p> |
| <p>TMK: 39001064 0017 FUNKHOUSER, JULENE C/O MORIMOTO, ROBERT M 480 KENOLIO RD #2-105 KIHEI HI 96753</p> | <p>TMK: 39001064 0018 REECE, JAMES R ETAL 480 KENOLIO RD 2-106 KIHEI HI 96753</p> | <p>TMK: 39001064 0019 COY, CHRISTOPHER PATRICK 480 KENOLIO RD APT 2-201 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0020 WHITE, PATSY I 480 KENOLIO RD #2-202 KIHEI HI 96753</p> | <p>TMK: 39001064 0021 BARTOLOMEU, MARIA S 480 KENOLIO RD 2-203 KIHEI HI 96753</p> | <p>TMK: 39001064 0022 MAEDA, NEAL K TRUST NEAL K MAEDA TRS P O BOX 562 KAHULUI HI 96732</p> |
| <p>TMK: 39001064 0023 KIM, EDEAN V Y L 75-233 NANI KAILUA DR #125 KAILUA KONA HI 96740</p> | <p>TMK: 39001064 0024 GROSS, SCOTT R/DIANA G PO BOX 383402 WAIKOLOA HI 96738</p> | <p>TMK: 39001064 0025 KAAIHUE-BRAUN, KANOE KAAIHUE-BRAUN, KANOE ETAL 480 KENOLIO RD #3101 KIHEI HI 96753</p> |

| | | |
|---|--|---|
| <p>TMK: 39001064 0026 CABOTAGE, EFREN C/CELIA P 125 KUUALOHA ST KAHULUI HI 96732</p> | <p>TMK: 39001064 0027 MATSUNO,BRIAN K 480 KENOLIO RD #3-103 KIHEI HI 96753</p> | <p>TMK: 39001064 0028 YAP,PATRICK ROLAND YAP,PATRICK R ETAL 411 MALUNIU AVE KAILUA HI 96734</p> |
| <p>TMK: 39001064 0029 ZAK,JOSEPH A P O BOX 343 MANZANITA OR 97130</p> | <p>TMK: 39001064 0030 RODGERS,ELI BRENT & CHRISTINE A 480 KENOLIO RD 3-106 KIHEI HI 96753</p> | <p>TMK: 39001064 0031 BALBOA, LORELEI ETAL 112 HIKI PL LAHAINA HI 96761</p> |
| <p>TMK: 39001064 0032 NUNES,NATHAN ALAN 480 KENOLIO RD 3-202 KIHEI HI 96753</p> | <p>TMK: 39001064 0033 BRAVO,DANILO BRIONES 480 KENOLIO RD #3-203 KIHEI HI 96753</p> | <p>TMK: 39001064 0034 LEGEL,MARGARET 18310 W OUTER DR DEARBORN MI 48128</p> |
| <p>TMK: 39001064 0035 HUGHEY,NICHOLAS B C/O DANIEL/KATHLEEN MUCKLIN 5731 CUNEO CT SANTA ROSA CA 95401</p> | <p>TMK: 39001064 0036 LOPEZ,GAUDENCIO PALAGANAS LOPEZ,GAUDENCIO/CARMELITA 1238 PUU KIPA ST PEARL CITY HI 96782</p> | <p>TMK: 39001064 0037 SHERWOOD,BRIAN M 12 APAA PL KAHULUI HI 96732</p> |
| <p>TMK: 39001064 0038 FUNAI, CYNTHIA J ETAL 29 IHEA PL MAKAWAO HI 96768</p> | <p>TMK: 39001064 0039 O'CONNOR,FRANK JAMES 480 KENOLIO RD 4-103 KIHEI HI 96753</p> | <p>TMK: 39001064 0040 NORCOM,JOHN FREDERICK 480 KENOLIO RD 4-104 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0041 CHAPLICK, NANCY ANN 480 KENOLIO RD 4-105 KIHEI HI 96753</p> | <p>TMK: 39001064 0042 CYMBALUK,ALFRED M 480 KENOLIO RD APT 4-106 KIHEI HI 96753</p> | <p>TMK: 39001064 0043 DAVIDSON,DEBORAH ANNE DAVIDSON,DEBORAH ANNE 140 UWAPO RD #30-101 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0044 CHASTAIN, CHARLES KEITH 1107 GATEHOUSE RD HIGH POINT NC 27262</p> | <p>TMK: 39001064 0045 KUNZ,LUCAS 480 KENOLIO RD #4-203 KIHEI HI 96753</p> | <p>TMK: 39001064 0046 BROCKWAY,JIMMY J 480 KENOLIO RD 4-204 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0047 MPJR LLC 812K N KALAHEO AVE KAILUA HI 96734</p> | <p>TMK: 39001064 0048 STRAUSS,MICHAEL HOWARD 6550 N LONGFELLOW TUCSON AZ 85718</p> | <p>TMK: 39001064 0049 SCHULER, JAMES K 828 FORT ST MALL 4TH FLR HONOLULU HI 96813</p> |
| <p>TMK: 39001064 0050 TISCH,T SHANNON 480 KENOLIO RD 5-102 KIHEI HI 96753</p> | <p>TMK: 39001064 0051 APEL,KURT ADRIAN III C/O ENVIR SOLUTIONS 99/26-27 CHALOEMPHRA KIATROR 9 ROAD RATSADA MUANG PHUKET 83000 THAILAND</p> | <p>TMK: 39001064 0052 AYLSWORTH,JOSHUA J 480 KENOLIO RD #5-104 KIHEI HI 96753</p> |

| | | |
|---|---|---|
| <p>TMK: 39001064 0053 NAKAMURA, LAUREL ANN P O BOX 6322 KAHULUI HI 96732</p> | <p>TMK: 39001064 0054 YU,CHI-JANE/YUH-CHUNG KU TR 809 INVERNESS WAY SUNNYVALE CA 94087</p> | <p>TMK: 39001064 0055 SCHULER, JAMES K 828 FORT ST MALL 4TH FLR HONOLULU HI 96813</p> |
| <p>TMK: 39001064 0056 MATSUMURA, CHERYL CHIEMI TAKAMIYA, CHERYL 270 MAKUA ST WAILUKU HI 96793</p> | <p>TMK: 39001064 0057 FAJARDO,STEPHEN D V P O BOX 330861 KAHULUI HI 96733</p> | <p>TMK: 39001064 0058 MADRIAGA, BERNARDO P/CARMEN 480 KENOLIO RD 5-204 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0059 TAKAMIYA,LANCE YUKIO 270 MAKUA ST WAILUKU HI 96793</p> | <p>TMK: 39001064 0060 MATSUNAGA, GERALD MITSUO 426 S PALAMA DR KAHULUI HI 96732</p> | <p>TMK: 39001064 0061 LEE,LINDA J LEE,LINDA J ETAL 480 KENOLIO RD #6-101 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0062 TITLEY,SETH A 480 KENOLIO RD 6-102 KIHEI HI 96753</p> | <p>TMK: 39001064 0063 CASTROMAN,GABRIEL ADRIAN CASTROMAN,GABRIEL/ANDREA P O BOX 331031 KAHULUI HI 96732</p> | <p>TMK: 39001064 0064 TAGUCHI,LESTER SHIGEO C/O GIVNER,DALE/PATRICIA 309 SOUTH A STREET OXNARD CA 93030</p> |
| <p>TMK: 39001064 0065 KENNER,BEVERLY JEAN 480 KENOLIO RD #6-105 KIHEI HI 96753</p> | <p>TMK: 39001064 0066 TETLEY,JOHN A 480 KENOLIO RD #6-106 KIHEI HI 96753</p> | <p>TMK: 39001064 0067 MAU,RANDALL DAVID P O BOX 17385 HONOLULU HI 96817</p> |
| <p>TMK: 39001064 0068 DICKMAN,THOMAS P O BOX 6342 KAHULUI HI 96732</p> | <p>TMK: 39001064 0069 TAM,CATHY ASAKO C/O YOKOYAMA,HISAKO 1222 ARLINGTON LN SAN JOSE CA 95129</p> | <p>TMK: 39001064 0070 SIMMONS,MARK A 480 KENOLIO RD 6-204 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0071 GRASS,DENNIS L 549 GLENWOOD RD GRASS VALLEY CA 95945</p> | <p>TMK: 39001064 0072 HEALEY,MICHAEL REV LIV TRUST 480 KENOLIO RD #6-206 KIHEI HI 96753</p> | <p>TMK: 39001064 0073 NEIZMAN,JESSE MICHAEL NEIZMAN,JESSE/ANN 480 KENOLIO RD 7-101 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0074 LEIGH, WAYNE A/KATHY T 480 KENOLIO RD 7-102 KIHEI HI 96753</p> | <p>TMK: 39001064 0075 MCGOVERN,MARIANNE ELIZABETH P O BOX 959 KIHEI HI 96753</p> | <p>TMK: 39001064 0076 HARMAN,MATTHEW M 480 KENOLIO RD 7-104 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0077 BLACKBURN, MARY K P O BOX 1263 WAILUKU HI 96793</p> | <p>TMK: 39001064 0078 ALENSONORIN, ALFRED/HARRIET 480 KENOLIO RD APT 7-106 KIHEI HI 96753</p> | <p>TMK: 39001064 0079 WATANABE, KERRY L A/DONNA Y 480 KENOLIO RD 7-201 KIHEI HI 96753</p> |

| | | |
|--|--|--|
| TMK: 39001064 0080 KONG, LINDA JANE 298 KAILOHIA ST KIHEI HI 96753 | TMK: 39001064 0081 LIZADA, GEORGE L SR/MARIA A 5155 D KIPULU PL LAHAINA HI 96761 | TMK: 39001064 0082 CABANIA, MAXIMO/TERESITA TRS 964 MAILE ST MAKAWAO HI 96768 |
| TMK: 39001064 0083 ROBISON, JOHN M 2929 ANDROS ST COSTA MESA CA 92626 | TMK: 39001064 0084 CABRERA, JASON W ETAL 1311 KAHOMA ST LAHAINA HI 96761 | TMK: 39001064 0085 ST PIERRE, TERRY 480 KENOLIO RD 8-101 KIHEI HI 96753 |
| TMK: 39001064 0086 INOUE, WENDY LEIKO 480 KENOLIO RD #8-102 KIHEI HI 96753 | TMK: 39001064 0087 BOSQUE, BRANDY P O BOX 558 KIHEI HI 96753 | TMK: 39001064 0088 SUGAI, PATRICK SUNAO 480 KENOLIO RD #8-104 KIHEI HI 96753 |
| TMK: 39001064 0089 GREENWOOD, JULIA A 480 KENOLIO RD #8-105 KIHEI HI 96753 | TMK: 39001064 0090 ANGEL, CARLA 480 KENOLIO RD ATP 8-106 KIHEI HI 96753 | TMK: 39001064 0091 COLLINS, STANLEY W 480 KENOLIO RD 8-201 KIHEI HI 96753 |
| TMK: 39001064 0092 REID, SUSAN CLARE C/O RABOY, WADE/MAVELIN P O BOX 2201 WAILUKU HI 96793 | TMK: 39001064 0093 MCLAUGHLIN, MICHAEL ROBERT MCLAUGHLIN, MICHAEL R ETAL 15455 GLEN OAKS BLVD #148 SYLMAR CA 91342 | TMK: 39001064 0094 DEYOUNG, BRUCE 480 KENOLIO RD APT 8-204 KIHEI HI 96753 |
| TMK: 39001064 0095 DAVENPORT, GORDON DAVENPORT, GORDON/DARLENE P O BOX 27 KIHEI HI 96753 | TMK: 39001064 0096 YAZAKI, ANSELM TAKESHI JR 480 KENOLIO RD 8/206 KIHEI HI 96753 | TMK: 39001064 0097 ELECCION, DEREK ALFREN 480 KENOLIO RD 9-101 KIHEI HI 96753 |
| TMK: 39001064 0098 MORIYAMA, JANE KIMIE 480 KENOLIO RD APT 9-102 KIHEI HI 96753 | TMK: 39001064 0099 TORRES, KENNETH ANTHONY JR 480 KENOLIO RD 9-103 KIHEI HI 96753 | TMK: 39001064 0100 HO, DARREN DEAN KAZUO 480 KENOLIO RD 9-104 KIHEI HI 96753 |
| TMK: 39001064 0101 FUJIKAWA, ANDREW M 650 CALIFORNIA ST 26TH FL SAN FRANCISCO CA 94108 | TMK: 39001064 0102 MIYANO, JUN/MARLENE M 480 KENOLIO RD 9-202 KIHEI HI 96753 | TMK: 39001064 0103 GROSS, MICHAEL OTIS 480 KENOLIO RD #2-202 KIHEI HI 96753 |
| TMK: 39001064 0104 FLYNN, KEVIN GENE 480 KENOLIO #9-204 KIHEI HI 96753 | TMK: 39001064 0105 PASCUA, LYNETTE MACADANGDANG 480 KENOLIO RD 11-101 KIHEI HI 96753 | TMK: 39001064 0106 CORDEN, JEANETTE P O BOX 1207 KIHEI HI 96753 |

| | | |
|--|--|---|
| <p>TMK: 39001064 0107 SUDA, SANDRA N ETAL 480 KENOLIO RD 11-103 KIHEI HI 96753</p> | <p>TMK: 39001064 0108 ALLEN, WILLIAM T ALLEN, WILLIAM/AURORA 480 KENOLIO RD #11-10411 KIHEI HI 96753</p> | <p>TMK: 39001064 0109 KIRBY, DOLORES P 480 KENOLIO RD #11-105 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0110 BERUBE, PAULA M 480 KENOLIO RD #11-106 KIHEI HI 96753</p> | <p>TMK: 39001064 0111 LAG, MICHAEL N 480 KENOLIO RD 11-201 KIHEI HI 96753</p> | <p>TMK: 39001064 0112 CHAI, DERRICK G H ETAL 682 HOPENA PL KAHULUI HI 96732</p> |
| <p>TMK: 39001064 0113 TAN, SUYLI 480 KENOLIO RD 11-203 KIHEI HI 96753</p> | <p>TMK: 39001064 0114 MARSHALL, KYRA HALL 311 KALUA RD WAILUKU HI 96793</p> | <p>TMK: 39001064 0115 BARUT, WESLEY J DBA MAUI TROPICA 1325 S KIHEI RD #221 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0115 RIVERA, ROBERT DEAN MAUI TROPICAL RLTY-W BARUT 1325 S KIHEI RD #221 KIHEI HI 96753</p> | <p>TMK: 39001064 0116 HAYASHI, MICHAEL TAKEO 480 KENOLIO RD 11-206 KIHEI HI 96753</p> | <p>TMK: 39001064 0117 WIETECH, ALEXANDER J/MIRAN 480 KENOLIO RD 13-101 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0118 GALVIN, TIMOTHY J GALVIN, TIMOTHY/EVANGELINE 480 KENOLIO RD 13-102 KIHEI HI 96753</p> | <p>TMK: 39001064 0119 TORRES, OLIVIER DENIS 480 KENOLIO RD 13-103 KIHEI HI 96753</p> | <p>TMK: 39001064 0120 THOMPSON, ALICE 480 KENOLIO RD 13-104 KIHEI HI 96753</p> |
| <p>TMK: 39001064 0121 TANG, SHIH TUO 171 CHERRY BROOK LN IRVINE CA 92618</p> | <p>TMK: 39001064 0122 KLAWIN, TIFFANY P O BOX 791813 PAIA HI 96779</p> | <p>TMK: 39001064 0123 BRADY, KATHLEEN ADELE P O BOX 172 WEST SWANZEY NH 3469</p> |
| <p>TMK: 39001064 0124 GUERRERO, AMY HARUE 480 KENOLIO RD 13-204 KIHEI HI 96753</p> | <p>TMK: 39001064 0125 CURTIS, KIMBERLY 480-A KENOLIO RD KIHEI HI 96753</p> | <p>TMK: 39001064 0126 CLARK, MARIE FRANCE 480-B KENOLIO RD KIHEI HI 96753</p> |
| <p>TMK: 39001064 0127 WEATHERHOLT, LINDA J 480 KENOLIO RD #C KIHEI HI 96753</p> | <p>TMK: 39001064 0128 CONLU, LAWRENCE S 85 WAIPAHE ST KIHEI HI 96753</p> | <p>TMK: 39001064 0129 KIYOTA, GALEN HIROTOSHI KIYOTA, GALEN/RIE 480 KENOLIO RD #E KIHEI HI 96753</p> |
| <p>TMK: 39001064 0130 CALLISON, THOMAS D 480 KENOLIO RD #F KIHEI HI 96753</p> | <p>TMK: 39001064 0131 SHOOK, DEREK P O BOX 12635 LAHAINA HI 96761</p> | <p>TMK: 39001064 0132 480 HOLDING COMPANY LLC C/O DOUG KENDRICK 480 KENOLIO RD HOUSE H KIHEI HI 96753</p> |

| | | |
|--|--|--|
| <p>TMK: 39001064 0133 SOLOMON, LOUISE GLADIOLA P O BOX 701 KIHEI HI 96753</p> | <p>TMK: 39001064 0134 LANG, BILL J ETAL PO BOX 959 KIHEI HI 96753</p> | <p>TMK: 39001064 0134 RYAN-LANG, PATRICIA JO C/O KENNETH E SMITH P O BOX 1292 MAKAWAO HI 96768</p> |
| <p>TMK: 39001083 0000 575 SOUTH KIHEI ROAD LLC 5371 WILSHIRE BLVD STE 210 LOS ANGELES CA 90036</p> | <p>TMK: 39001099 0000 JPS HAWAII INC 828 FORT ST MALL, 4TH FLR HONOLULU HI 96813</p> | <p>TMK: 39001099 0001 AMARAL, TESSIE M 92-574 AKAAWA ST KAPOLEI HI 96707</p> |
| <p>TMK: 39001099 0002 DARHAM, JACQUELYN LOU DARHAM, JACQUELYN P O BOX 1074 PUUNENE HI 96784</p> | <p>TMK: 39001099 0003 ANDRE, ROSS B 480 KENOLIO RD #10-103 KIHEI HI 96753</p> | <p>TMK: 39001099 0004 SMITH, BENJAMIN K/HELEN M 857 19TH AVE HONOLULU HI 96816</p> |
| <p>TMK: 39001099 0005 WILSON, MARCIA D 2211 ALA WAI BLVD APT #2606 HONOLULU HI 96815</p> | <p>TMK: 39001099 0006 NARUSAWA, GORDON M/SUSAN S 94-305 WAIMAKA ST MILILANI HI 96789</p> | <p>TMK: 39001099 0007 BARUT, WESLEY 1325 S KIHEI RD #221 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0008 BRANDIGER, RICHARD F BRANDIGER, RICHARD F/KATHERINE 13090 MISSION HILLS LP RAPID CITY SD 57702</p> | <p>TMK: 39001099 0009 HEWITT, KIMBERLY A K 480 KENOLIO RD #12-101 KIHEI HI 96753</p> | <p>TMK: 39001099 0010 MURAKAMI, KEVIN M ETAL 3226 MAKINI ST HONOLULU HI 96815</p> |
| <p>TMK: 39001099 0011 HATCHER, STEVEN C/O STEVEN HATCHER 480 KENOLIO RD #12-103 KIHEI HI 96753</p> | <p>TMK: 39001099 0012 WYCOFF, JERRY L WYCOFF, JERRY L/LOUISE M 480 KENOLIO RD #12-104 KIHEI HI 96753</p> | <p>TMK: 39001099 0013 MEISLER, KATHY S 480 KENOLIO RD #12-105 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0014 BIGA, VERNA LEE KUULEIALOHA P O BOX 10851 LAHAINA HI 96761</p> | <p>TMK: 39001099 0015 LINDELEAF/HALL, TRUST C/O EDWARD E HALL, ETAL 1103 33RD ST SACRAMENTO CA 95816</p> | <p>TMK: 39001099 0016 VAN DYKE, GORDON WAYNE SR VAN DYKE, GORDON W SR/JANICE M 480 KENOLIO RD #12-202 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0017 ASATO, GARY KAZU 27905 VIA MIRADA LAGUNA BEACH CA 92677</p> | <p>TMK: 39001099 0018 BELTRAN, RAMON R 597 POHAI ST KAHULUI HI 96732</p> | <p>TMK: 39001099 0019 BAUTISTA, BELDEN C ETAL P O BOX 6167 KAHULUI HI 96733</p> |
| <p>TMK: 39001099 0020 DECAMP, ROBERT JAMES 480 KENOLIO RD APT 12-206 KIHEI HI 96753</p> | <p>TMK: 39001099 0021 GORDON, SUSAN JOY 480 KENOLIO RD APT 14-101 KIHEI HI 96753</p> | <p>TMK: 39001099 0022 MARTIN, WILLIAM L/ELEANOR R 480 KENOLIO RD 14-102 KIHEI HI 96753</p> |

| | | |
|---|---|--|
| <p>TMK: 39001099 0023 YAYOSHI, GLENN SHIGEO 479 KAULANA ST KAHULUI HI 96732</p> | <p>TMK: 39001099 0024 ABILAY, CHAD K 480 KENOLIO RD 14-104 KIHEI HI 96753</p> | <p>TMK: 39001099 0025 DELEON, EMILY PAET ETAL 480 KENOLIO RD, APT 14-201 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0026 MORETON, STEPHEN M MORETON, STEPHEN ETAL 480 KENOLIO RD #14-202 KIHEI HI 96753</p> | <p>TMK: 39001099 0027 ALVIAR, RUFINO SONNY 480 KENOLIO RD, #14-203 KIHEI HI 96753</p> | <p>TMK: 39001099 0028 BAILADO, MAURICE R 5971 S ROCK CREEK DR CASTLE ROCK CO 80104</p> |
| <p>TMK: 39001099 0029 ST JOHN, RON 310 KAAHUMANU AVE KAHULUI HI 96732</p> | <p>TMK: 39001099 0030 MORRISON, MICHAEL RINARD 480 KENOLIO RD 15-102 KIHEI HI 96753</p> | <p>TMK: 39001099 0031 JACKSON, EDWARD WAYNE 480 KENOLIO RD 15-103 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0032 STOHLER, WILLIAM E 480 KENOLIO RD APT #15-104 KIHEI HI 96753</p> | <p>TMK: 39001099 0033 ORTEGON, GENEVIEVE 29434 ELBA DR LAGUNA BEACH CA 92677</p> | <p>TMK: 39001099 0034 ELLIOTT, MARIE 480 KENOLIO RD #15-106 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0035 VILLON, EFREN DUMADAG VILLON, EFREN D/MARILYN P 188 KUUALOHA ST KAHULUI HI 96732</p> | <p>TMK: 39001099 0036 SCHULER HOMES INC 828 FORT ST MALL, 4TH FLR HONOLULU HI 96813</p> | <p>TMK: 39001099 0037 CHAIKIN, DONALD C 480 KENOLIO RD #15-203 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0038 OLER, CURTIS G/CHARLENE M 480 KENOLIO RD 15-204 KIHEI HI 96753</p> | <p>TMK: 39001099 0039 TAKASE, FRANCINE RENEE P O BOX 1744 KAHULUI HI 96733</p> | <p>TMK: 39001099 0040 BOGUNOVICH, LESTER/CHRISTINA 480 KENOLI RD 15-206 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0041 SECRETARY OF HOUSING & URBAN D SEVEN WATERFRONT PLAZA #500 500 ALA MOANA BLVD HONOLULU HI 96813</p> | <p>TMK: 39001099 0042 USRY, DEBORAH I JOHN JOHN USRY, DEBORAH I 480 KENOLIO RD #16-102 KIHEI HI 96753</p> | <p>TMK: 39001099 0043 FUJII, HIROSHI 1807 APEX AVE LOS ANGELES CA 90026</p> |
| <p>TMK: 39001099 0044 SHISHIDO, NELSON TSUNEO 38 KONO PL KAHULUI HI 96732</p> | <p>TMK: 39001099 0045 DELA CRUZ, MARK A 480 KENOLIO RD 16-105 KIHEI HI 96753</p> | <p>TMK: 39001099 0046 TAKUSHI, CRAIG NORIO C/O MAGBUAL, GLENDA 65 W KAAHUMANU AVE #21 KAHULUI HI 96732</p> |
| <p>TMK: 39001099 0047 LOPES, ROBERT C/DEANNA 480 KENOLIO RD APT #16-201 KIHEI HI 96753</p> | <p>TMK: 39001099 0048 SHORTZ, MARY CATHERINE 480 KENOLIO RD 16-202 KIHEI HI 96753</p> | <p>TMK: 39001099 0049 RATTE, JAN YAEMI P O BOX 534 KIHEI HI 96753</p> |

| | | |
|--|---|---|
| <p>TMK: 39001099 0050 FRANCIS, LISA N ETAL P O BOX 1126 LAHAINA HI 96761</p> | <p>TMK: 39001099 0051 NEWTON,WILLIAM F C/O RAY EARL JONES 480 KENOLIO RD 16-205 KIHEI HI 96753</p> | <p>TMK: 39001099 0052 DUMO, ANTHONY G/MARY ANN M 480 KENOLIO RD 16-206 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0053 AKIMA, ABIGAIL K TRS 480 KENOLIO RD 17-101 KIHEI HI 96753</p> | <p>TMK: 39001099 0054 AKIONA, RENEE CLAUDIA L 2345 EAST MANOA RD HONOLULU HI 96822</p> | <p>TMK: 39001099 0055 FUJII, ANNE SUMIE 480 KENOLIO RD KIHEI HI 96753</p> |
| <p>TMK: 39001099 0056 BOCKEMUEHL, ROBERT WILLIAM 1038 CASHEW LN CEDAR PARK TX 78613</p> | <p>TMK: 39001099 0057 KINZLE, CHRISTIAN SAMUEL P O BOX 2826 WAILUKU HI 96793</p> | <p>TMK: 39001099 0058 BARUT, WESLEY J MAUI TROPICAL REALTY 1325 S KIHEI RD STE 221 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0059 MAHLE, ADELE G 545 JACK PINE BOULDER CO 80304</p> | <p>TMK: 39001099 0060 LYONS, RAYMOND JOSEPH JR LYONS, RAYMOND J JR ETAL 480 KENOLIO RD #17-202 KIHEI HI 96753</p> | <p>TMK: 39001099 0061 BAUGHMAN, BRETT E 480 KENOLIO RD 17-203 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0061 BAUGHMAN, DOUGLAS E 61 KONALE PL KIHEI HI 96753</p> | <p>TMK: 39001099 0062 BARBER, RACHAEL JACQUELYN 480 KENOLIO RD 17-204 KIHEI HI 96753</p> | <p>TMK: 39001099 0063 MARCUM, STEVEN DALE MARCUM, STEVEN DALE/LORI ANN 5019 MARATHON LANDING CT CASTLE HAYNE NC 28429</p> |
| <p>TMK: 39001099 0064 PONCE, GLENN SHIGERU 480 KENOLIO RD 17-206 KIHEI HI 96753</p> | <p>TMK: 39001099 0065 KIDDER, ELIZABETH ANN 480 KENOLIO RD #18-101 KIHEI HI 96753</p> | <p>TMK: 39001099 0066 FULLMER, ROBERT E C/O WILLIAMS, ANGELA J P O BOX 1001 PUUNENE HI 96784</p> |
| <p>TMK: 39001099 0067 YAMASHITA, DEAN M/MICHELLE E 480 KENOLIO RD 18-103 KIHEI HI 96753</p> | <p>TMK: 39001099 0068 HEINER, KEITH ELLIOT 480 KENOLIO RD #18-104 KIHEI HI 96753</p> | <p>TMK: 39001099 0069 TANOUE, NANCY NAOMI 480 KENOLIO RD 18-201 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0070 VILAR, EDWARD LAWRENCE C/O SABET, ROSALIND D ET AL P O BOX 1041 CHINO CA 91708</p> | <p>TMK: 39001099 0071 REPOLLO, STEVEN D P O BOX 1845 KIHEI HI 96753</p> | <p>TMK: 39001099 0072 METZ, PETER MICHAEL 480 KENOLIO RD #18-204 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0073 GRECO, ANTHONY L GRECO, ANTHONY L 616 MILILANI PL. KIHEI HI 96753</p> | <p>TMK: 39001099 0074 ILAR, ALFREDO R JR 480 KENOLI RD 19-102 KIHEI HI 96753</p> | <p>TMK: 39001099 0075 KRAU, ANTHONY AUKAHI KRAU, ANTHONY AUKAHI ETAL P O BOX 330837 KAHULUI HI 96733</p> |

| | | |
|--|---|--|
| <p>TMK: 39001099 0076 LEAL, MARCO ANTONIO LEAL, MARCO/MARIE 6675 W 88TH ST LOS ANGELES CA 90045</p> | <p>TMK: 39001099 0077 MULLINS, JANET 480 KENOLIO 19-105 KIHEI HI 96753</p> | <p>TMK: 39001099 0078 SOUZA, MICHAEL DAVID C/O YI, WOOKJIN/MIYOP 480 KENOLIO RD #22-202 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0079 HAMPTON, JAMES GRANVILLE C/O JAMES HAMPTON 480 KENOLIO RD #19-201 KIHEI HI 96753</p> | <p>TMK: 39001099 0080 KING, RYAN SCOTT KING, RYAN S 480 KENOLIO RD #19-202 KIHEI HI 96753</p> | <p>TMK: 39001099 0081 FAULSTICH, MARK 480 KENOLIO RD APT 19-203 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0082 GANNON, MICHAEL WALSH C/O THELMA SERPIERI 372-A KAILOHIA ST KIHEI HI 96753</p> | <p>TMK: 39001099 0083 ALEXANDER, RONALD LEE K 480 KENOLIO RD #19-205 KIHEI HI 96753</p> | <p>TMK: 39001099 0084 GOUVEIA, IRIS ANN P O BOX 517 KAILUA KONA HI 96745</p> |
| <p>TMK: 39001099 0085 BERSAMIN, PHILLIP I M/LYLIS 480 KENOLIO RD 20-101 KIHEI HI 96753</p> | <p>TMK: 39001099 0086 PARSCAL, BRIAN K/LYNN M H 45-1143 HALELOKE PL KANEHOE HI 96744</p> | <p>TMK: 39001099 0087 MOODY, DOUGLAS R C/O STEPHEN W MOODY 18220 TUMALO RESERVOIR RD BEND OR 97701</p> |
| <p>TMK: 39001099 0088 SABAS, RAUL Q/MARIVIC B 480 KENOLIO RD 20-104 KIHEI HI 96753</p> | <p>TMK: 39001099 0089 LUSK, EDWARD H/SUPAPORN S 632 MAALAHU ST WAILUKU HI 96793</p> | <p>TMK: 39001099 0090 COCHRAN, JEFFERY LYNN C/O SCHAEFFER, MICHAEL A/JAIME L 480 KENOLIO RD #20-106 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0091 MURALT, DAVID C 3101 JEANNE MARIE CT AUSTIN TX 78745</p> | <p>TMK: 39001099 0092 TOMITA, GORDON TAKAO TRUST GORDON/BABY TOMITA 46-412 HULUPALA PL KANEHOE HI 96744</p> | <p>TMK: 39001099 0093 THONGTRAKUL, WATANA THONGTRAKUL, WATANA 480 KENOLIO RD #20-203 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0094 YAMADA, ROY I/CORLISS M 480 KENOLIO RD 20-204 KIHEI HI 96753</p> | <p>TMK: 39001099 0095 BALDWIN, CARRIE M ETAL 1821 YELLOW ROSE ST LAS VEGAS NV 89108</p> | <p>TMK: 39001099 0096 LOGAN, PHILLIP R 480 KENOLIO RD #20-206 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0097 GUY, JOHN/YOLANDA 480 KENOLIO RD 21-101 KIHEI HI 96753</p> | <p>TMK: 39001099 0098 DUNSTON, JOHN C IV DUNSTON, JOHN C IV/LORILEI H 480 KENOLIO RD #21-102 KIHEI HI 96753</p> | <p>TMK: 39001099 0099 UKIDA, DEREK A ETAL 480 KENOLIO RD 21-103 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0100 SHOEMAKER, ROBERT L 480 KENOLIO RD APT 21-104 KIHEI HI 96753</p> | <p>TMK: 39001099 0101 TOBEY, ROBIN A 715 KILIHU ST WAILUKU HI 96793</p> | <p>TMK: 39001099 0102 LOUGH, KRISTY MARIE 480 KENOLIO RD UNIT 21-106 KIHEI HI 96753</p> |

| | | |
|--|--|---|
| <p>TMK: 39001099 0103 GALINDO, ROMULO I ETAL 480 KENOLIO RD 21-201 KIHEI HI 96753</p> | <p>TMK: 39001099 0104 LARSON, CHARLES E 1577 SKYLINE DR LAGUNA BEACH CA 92651</p> | <p>TMK: 39001099 0105 ARREOLA, DANIELLE K 480 KENOLIO RD 21-203 KIHEI HI 96753</p> |
| <p>TMK: 39001099 0106 CERVANTES, KEVIN I ETAL 115 KOEHANA PL MAKAWAO HI 96768</p> | <p>TMK: 39001099 0107 MCLAUGHLIN, MICHAEL R C/O MICHAEL R MCLAUGHLIN 15455 GLEN OAKS BLVD #148 SYLMAR CA 91342</p> | <p>TMK: 39001099 0108 GOUEYTES, ELIZABETH 480 KENOLIO RD #21-206 KIHEI HI 96753</p> |
| <p>TMK: 39001120 0000 575 SOUTH KIHEI ROAD LLC 5371 WILSHIRE BLVD STE 210 LOS ANGELES CA 90036</p> | <p>TMK: 39001123 0000 HENDERSON, FARINA FAMILY TRUST 551 S KIHEI RD KIHEI HI 96753</p> | <p>TMK: 39001124 0000 SELLECK, VASIS X C/O SELLECK, VASIS X 14 WAILANA PL KIHEI HI 96753</p> |
| <p>TMK: 39001125 0000 CARLTON HAWAII LLC *CARLTON HAWAII LLC 7743 E ADAMS ST PARAMOUNT CA 90723</p> | <p>TMK: 39001126 0000 NEIZMAN, JENNIFER J 26 WAILANA PL KIHEI HI 96753</p> | <p>TMK: 39001128 0000 M2K2 LLC M2K2 LLC P O BOX 837 MAKAWAO HI 96768</p> |
| <p>TMK: 39001129 0000 WAILANA SANDS CONDO MASTER 0</p> | <p>TMK: 39001129 0001 LAMBERT PATRICK A/BARBARA M 9551 GILBERT CRESCENT RICHMOND BC V7E1H7 CANADA</p> | <p>TMK: 39001129 0002 SEKITA, ATSUSHI/SAYURI 1558-3 ZUSHI-MACHI MACHIDA TOKYO 194-02 JAPAN</p> |
| <p>TMK: 39001129 0003 GRAY, WAYNE A GRAY, WAYNE A/ANITA C 163 CRESCENT ST CASTLEGAR BC V1N 1B3 CANADA</p> | <p>TMK: 39001129 0004 LOUDOUN, DAVID 2761 CASA LOMA RD KELOWNA, B C V1Z 1T6 CANADA</p> | <p>TMK: 39001129 0005 MORGAN JOHN 6271 GENOA BAY RD DUNCAN BC V9L5T8 CANADA</p> |
| <p>TMK: 39001129 0006 YOUNG, REISAE B P O BOX 2909 WAILUKU HI 96793</p> | <p>TMK: 39001129 0007 HOWARD, JAMES DAVID HOWARD, JAMES D 25 WAILANA PL APT #207 KIHEI HI 96753</p> | <p>TMK: 39001129 0008 HAGGERTY, JEFFERY JOHN WILLIAM WAILANA SANDS #208 KIHEI HI 96753</p> |
| <p>TMK: 39001129 0008 HAGGERTY, TERRY ROBERT RUSSELL HAGGERTY, TERRY/JULIA 63 BROMLEY AVE HANWELL NB E3C 1M8 CANADA</p> | <p>TMK: 39001129 0009 SCHNARR, STEVE 3140K S PEORIA ST, PMB 164 AURORA CO 80014</p> | <p>TMK: 39001129 0010 STRANE, TODD CHRISTOPHER TODD/GINA STRANE 226 WOODCREST LANE ALISO VIEJO CA 92656</p> |
| <p>TMK: 39001130 0000 HALE WAILANA CONDO MASTER 0</p> | <p>TMK: 39001130 0001 SMF TRUST C/O SUZANNE M MCGRATH-FUNES TR P O BOX 1239 WAILUKU HI 96793</p> | <p>TMK: 39001130 0002 LOBO LAND COMPANY LLC *LOBO LAND CO LLC P.O. BOX 8898 DILLON CO 80435</p> |

| | | |
|--|--|--|
| <p>TMK: 39001130 0003 KILLICK RESOURCES LTD 1831 BAYSHORE RD SW CALGARY ALBERTA T2V 3M2 CANADA</p> | <p>TMK: 39001130 0004 GANTT, BARBARA L 21 WAILANA PL UNIT 1B KIHEI HI 96753</p> | <p>TMK: 39001130 0005 HUGHES, ROBERT JOHN HUGHES, ROBERT/DONA 1500 14TH ST SW MARSHFIELD WI 54404</p> |
| <p>TMK: 39001130 0006 203 JOINT VENTURE JANA/DAN STOCKTON 5552 BOBBY JONES BILLINGS MT 59106</p> | <p>TMK: 39001131 0000 ALOHA PUALANI PROPERTIES LLC C/O SHERRY WITHERS 15 WAILANA PL KIHEI HI 96753</p> | <p>TMK: 39001132 0000 SHELTON, EARL A TR 531 KIHEI RD KIHEI HI 96753</p> |
| <p>TMK: 39001143 0000 KIHEI BAY VISTA (CONDO MASTER) CONDO MASTER 0</p> | <p>TMK: 39001143 0001 FARRELL, CHARLES W/CAROL J 733 LEO DR SANTA ROSA CA 95403</p> | <p>TMK: 39001143 0002 FARRELL, CHARLES W 733 LEO DR SANTA ROSA CA 95407</p> |
| <p>TMK: 39001143 0003 NORTON, BRENDA L ET AL 1745 NE 90TH STREET SEATTLE WA 98115</p> | <p>TMK: 39001143 0004 MAPLES, RUSSELL VAUGHN RUSSELL/CHERYL MAPLES 506 MARY KNOB COURT GREENVILLE SC 29607</p> | <p>TMK: 39001143 0005 KELLEY, ANNE M C/O ANNE M KELLEY 877 GUERRERO ST SAN FRANCISCO CA 94110</p> |
| <p>TMK: 39001143 0006 NICHOLS, ROBERT E C/O ROBERT & SANDRA NICHOLS 157 SE WILDWOOD WY MYRTLE CREEK OR 97457</p> | <p>TMK: 39001143 0007 FITZ, KATHI MONICA TRUST KATHI M FITZ 2463 S KIHEI RD A-22 KIHEI HI 96753</p> | <p>TMK: 39001143 0008 MARING, CAROLYN J C/O CAROLYN J MARING 1585 MCCLELLAND ST SW GRANDVILLE MI 49418</p> |
| <p>TMK: 39001143 0009 CHARLEBOIS, GARY C/O SOMER, ROBIN A P O BOX 42 TAHOMA CA 96142</p> | <p>TMK: 39001143 0010 SCHUBACH, GARY HERMAN 679 S KIHEI RD A-204 KIHEI HI 96753</p> | <p>TMK: 39001143 0011 LEVY 2000 CHILDREN'S TRUST LEVY, CINDY 2260-B S KIHEI RD KIHEI HI 96753</p> |
| <p>TMK: 39001143 0012 HARDWICK VACATION SERVICES LLC 6222 WEST DIAMOND BLVD ANCHORAGE AK 99502</p> | <p>TMK: 39001143 0013 HARDWICK VACATION SERVICES LLC 6222 WEST DIAMOND BLVD ANCHORAGE AK 99502</p> | <p>TMK: 39001143 0014 HARDWICK VACATION SERVICES LLC 6222 WEST DIAMOND BLVD ANCHORAGE AK 99502</p> |
| <p>TMK: 39001143 0015 HARDWICK VACATION SERVICES LLC 6222 WEST DIAMOND BLVD ANCHORAGE AK 99502</p> | <p>TMK: 39001143 0016 HARDWICK VACATION SERVICES LLC 6222 WEST DIAMOND BLVD ANCHORAGE AK 99502</p> | <p>TMK: 39001143 0017 HARDWICK VACATION SERVICES LLC 6222 WEST DIAMOND BLVD ANCHORAGE AK 99502</p> |
| <p>TMK: 39001143 0018 STARBUCK, SANDRA C/O LAWRENCE, GAIL L 364-A NALANI ST PUKALANI HI 96768</p> | <p>TMK: 39001143 0019 SEKITA, TORU SEKITA, TORU/YUMIKO 679 S KIHEI RD APT 203B KIHEI HI 96753</p> | <p>TMK: 39001143 0020 HARDWICK VACATION SERVICES LLC 6222 WEST DIAMOND BLVD ANCHORAGE AK 99502</p> |

| | | |
|--|--|--|
| TMK: 39001143 0021 SMITH,JAY H SMITH,JAY H ETAL 151 N HANOVER ST POTTSTOWN PA 19464 | TMK: 39001143 0022 HOPKINS,THOMAS W C/O HOSKEY,JUANITA M/PAUL D 7099 TIMBERWOOD DAVISON MI 48423 | TMK: 39001143 0023 CRAVEN,WESLEY R C/O WESLEY & ALICE CRAVEN 679 S KIHEI RD APT C-103 KIHEI HI 96753 |
| TMK: 39001143 0024 HARDWICK VACATION SERVICES LLC 6222 WEST DIAMOND BLVD ANCHORAGE AK 99502 | TMK: 39001143 0025 VAN HATTEN,ROGER & TONI TRUST 233 HONEYGOLD LN BRENTWOOD CA 94513 | TMK: 39001143 0026 MCMILLEN,PATRICK S TRUST 46-158 YACHT CLUB ST KANEOME HI 96744 |
| TMK: 39001143 0027 COWHERD, CHARLES W MARLENE MCCLEERY, EXEC P. O. BOX 811 GRAYLAND WA 98547 | TMK: 39001143 0028 HARDWICK VACATION SERVICES LLC C/O TAYLOR,HARRY J/NANCY M 3020 PALMDALE DR WASILLA AK 99654 | TMK: 39001143 0029 KIHUNE,HOWARD SEIGO KIHUNE,HOWARD/BARBARA 635 LUAKINI ST LAHAINA HI 96761 |
| TMK: 39001143 0030 THARP, SYLVIA A 679 S KIHEI RD C-202 KIHEI HI 96753 | TMK: 39001143 0031 RIVERA,GERALDINE G C/O LEWIS,GERALDINE G R P O BOX 1261 KIHEI HI 96753 | TMK: 39001143 0032 DUFFY, DEAN T SR/JESSIE C L P O BOX 73 HALL NY 14463 |
| TMK: 39001143 0033 SMITH,JEFFREY L P O BOX 193 CORBETT OR 97019 | TMK: 39001143 0034 LOX,SANFORD M LOX,SANFORD/MARY 4184 PEPPER AVE YORBA LINDA CA 92886 | TMK: 39001143 0035 KIHEI BAY VISTA AOA INC CAROL FARRELL 679 S KIHEI RD C207 KIHEI HI 96753 |
| TMK: 39001143 0036 HARDWICK VACATION SERVICES LLC 6222 W DIAMOND BLVD ANCHORAGE AK 99502 | TMK: 39001143 0037 HARDWICK VACATION SERVICES LLC 6222 W DIAMOND BLVD ANCHORAGE AK 99502 | TMK: 39001143 0038 HARDWICK VACATION SERVICES LLC 6222 WEST DIAMOND BLVD ANCHORAGE AK 99502 |
| TMK: 39001143 0039 HARDWICK VACATION SERVICES LLC 6222 W DIAMOND BLVD ANCHORAGE AK 99502 | TMK: 39001143 0040 HARDWICK VACATION SERVICES LLC 6222 W DIAMOND BLVD ANCHORAGE AK 99502 | TMK: 39001143 0041 HARDWICK VACATION SERVICES LLC 6222 W DIAMOND BLVD ANCHORAGE AK 99502 |
| TMK: 39001143 0042 HARDWICK VACATION SERVICES LLC 6222 W DIAMOND BLVD ANCHORAGE AK 99502 | TMK: 39001143 0043 HARDWICK VACATION SERVICES LLC 6222 W DIAMOND BLVD ANCHORAGE AK 99502 | TMK: 39001143 0044 HARDWICK VACATION SERVICES LLC 6222 WEST DIAMOND BLVD ANCHORAGE AK 99502 |
| TMK: 39001143 0045 HOTTINGER,CHRISTOPHER F III 120 PERALTA MILL VALLEY CA 94941 | TMK: 39001143 0046 DUTHIE,DAVID ALEXANDER 679 S KIHEI RD D-110 KIHEI HI 96753 | TMK: 39001143 0047 ISHII, MASAO 2-18-6 KAIRAKU URAYASU-SHI CHIBA 279 JAPAN |

| | | |
|---|--|---|
| <p>TMK: 39001143 0048 FARMER, JAMES D FARMER, JAMES/HEIDI 8440 ROCKLIN WAY REDDING CA 96001</p> | <p>TMK: 39001143 0049 KERN, SHIRLEY PREHN 7542 SW CLEAR HILLS TERRACE PORTLAND OR 97225</p> | <p>TMK: 39001143 0050 BOWLER, WILLIAM F 679 S KIHEI RD #D202 KIHEI HI 96753</p> |
| <p>TMK: 39001143 0051 HARDWICK VACATION SERVICES LLO 6222 WEST DIAMOND ANCHORAGE AK 99502</p> | <p>TMK: 39001143 0052 WONG, HOK-TUNG WONG, HOK-TUNG/XIN-MAY 3625 RUE MIRASSOU SAN JOSE CA 95148</p> | <p>TMK: 39001143 0053 CARTER, SETH ARNOLD CARTER, SETH/DARLENE 699 IMIHALE ST KIHEI HI 96753</p> |
| <p>TMK: 39001143 0054 HEINER, PAUL HEINER, PAUL/MARIANNE 459 S MORGAN VALLEY DR MORGAN UT 84050</p> | <p>TMK: 39001143 0055 SKEELS, LISA C 679 S KIHEI RD #D-207 KIHEI HI 96753</p> | <p>TMK: 39001143 0056 HARDWICK VACATION SERVICES LLO 6222 W DIAMOND BLVD ANCHORAGE AK 99502</p> |
| <p>TMK: 39001143 0057 GOODWIN, JACK WILLIAM 352 EL MOLINO WAY SAN JOSE CA 95119</p> | <p>TMK: 39001143 0058 TAGGART, ROBERT J 4011 VITAE SPRINGS RD S SALEM OR 97306</p> | <p>TMK: 39001143 0059 BYRNE, JOHN B JOHN B BYRNE 679 S KIHEI RD #D-211 KIHEI HI 96753</p> |
| <p>TMK: 39001143 0060 D'ADAMO, CATHERINE RESTIVO C/O D'ADAMO, CATHERINE R/ROBERT 174 OAK CREEK SCOTTS VALLEY CA 95066</p> | <p>TMK: 39001147 0000 COUNTY OF MAUI < < 0 <</p> | <p>TMK: 39001153 0000 SOUTHPOINTE WAIAKOA PHS III CONDO MASTER 0</p> |
| <p>TMK: 39001153 0001 SKY, BONG JA SKY, DAISY 480 KENOLIO RD #22-101 KIHEI HI 96753</p> | <p>TMK: 39001153 0002 VAN EVERY, BARANT JAMES 2140 CHARNWOOD TROY MI 48098</p> | <p>TMK: 39001153 0003 RICHTER, TODD A/SUSAN C 262 ILIKAI ST KIHEI HI 96753</p> |
| <p>TMK: 39001153 0003 RICHTER, TODD A/SUSAN C 480 KENOLIO RD 22-103 KIHEI HI 96753</p> | <p>TMK: 39001153 0004 SCHNEIDER, KAREN LENORE 480 KENOLIO RD 22-104 KIHEI HI 96753</p> | <p>TMK: 39001153 0005 GALANG, CUILLERMO C III C/O GUILLERMO III & SALLY GALANG 11849 MT EVERETT CT ALTA LOMA CA 91737</p> |
| <p>TMK: 39001153 0006 WYATT, STEVEN KENNETH 480 KENOLIO RD 22-106 KIHEI HI 96753</p> | <p>TMK: 39001153 0007 SMITH, WILLIAM LANCE C/O WILLIAM SMITH 480 KENOLIO RD 22-201 KIHEI HI 96753</p> | <p>TMK: 39001153 0008 YI, WOOK JIN 247 PIIKEA AVE KIHEI HI 96753</p> |
| <p>TMK: 39001153 0009 LAM, ALBERT D S TRUST 7529 MUOLEA PL HONOLULU HI 96825</p> | <p>TMK: 39001153 0010 NUNES, GERALD ANTHONY NUNES, GERALD/VICTORIA 709 ZUMWALT LN FOSTER CITY CA 94404</p> | <p>TMK: 39001153 0011 ROBINSON, RICHARD D/SHANNON 480 KENOLIO RD 22-205 KIHEI HI 96753</p> |

| | | |
|---|--|--|
| <p>TMK: 39001153 0012 SINDELAR, PAUL MATTHEW SINDELAR, PAUL/MARILYN 1844 EASTGATE AVE UPLAND CA 91784</p> | <p>TMK: 39001153 0013 SHERO AMBA, SCOTT/DOLORES P O BOX 754 CAPTAIN COOK HI 96704</p> | <p>TMK: 39001153 0014 NAKAMURA, BLAKE KEN 480 KENOLIO RD 23-102 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0015 BALDWIN, CARRIE MIRIAM 480 KENOLIO RD 23-103 KIHEI HI 96753</p> | <p>TMK: 39001153 0016 LEWIS, GARY R 480 KENOLIO RD 23-104 KIHEI HI 96753</p> | <p>TMK: 39001153 0017 ENGEL, EDMUND L II/JODEE K 480 KENOLIO RD 23-105 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0018 AFRICANO, JOHN L AFRICANO, JOHN/LINDA 8830 EDGEFIELD DR COLORADO SPRINGS CO 80920</p> | <p>TMK: 39001153 0019 MASTER, CHRIS S MASTER, CHRIS S/ANTONIA S 480 KENOLIO RD 23-201 KIHEI HI 96753</p> | <p>TMK: 39001153 0020 PIMENTEL, MOSES K PIMENTEL, MOSES/JENNIFER 480 KENOLIO RD 23-202 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0021 CHENG, KAM Y/PO H 1088 LOWER MAIN ST WAILUKU HI 96793</p> | <p>TMK: 39001153 0022 QUACH, MICHAEL M C/BETTY A 825-A NORTH SCHOOL ST HONOLULU HI 96817</p> | <p>TMK: 39001153 0023 BELLUOMINI, KIMBERLY KAY BELLUOMINI, KIMBERLY KAY 168 KUUALOHA ST KAHULUI HI 96732</p> |
| <p>TMK: 39001153 0024 GRECO, ANTHONY L C/O KILIAN, STEVEN T 7356 LINDLEY AVE RESEDA CA 91335</p> | <p>TMK: 39001153 0025 ALCAIN, ELIEZER H/ELVIRA G 480 KENOLIO RD 24-101 KIHEI HI 96753</p> | <p>TMK: 39001153 0026 FERGUSON, BURTON GEORGE 480 KENOLIO RD UNIT 24-102 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0027 SERRATO, KARLIN R 480 KENOLIO RD #24-103 KIHEI HI 96753</p> | <p>TMK: 39001153 0028 VALENCIA, EDWARD PORTELA P O BOX 3236 WAILUKU HI 96793</p> | <p>TMK: 39001153 0029 SHARER, JOHN H III P O BOX 1041 CHINO CA 91708</p> |
| <p>TMK: 39001153 0030 BERGEMANN, JEFFREY K/KARIN R 251 HOOHANA ST KAHULUI HI 96732</p> | <p>TMK: 39001153 0031 KAHAWAII, JOHN F C/O TEICHNER, LISA I 480 KENOLIO RD #24-203 KIHEI HI 96753</p> | <p>TMK: 39001153 0032 MARTIN, SUSAN MARIE 480 KENOLIO RD #24-204 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0033 SAKUGAWA-SOUZA, LEI A 480 KENOLIO RD 25-101 KIHEI HI 96753</p> | <p>TMK: 39001153 0034 SINCLAIR, ROBERT J/JOSEPHINE 480 KENOLIO RD 25-102 KIHEI HI 96753</p> | <p>TMK: 39001153 0035 ACOHIDO, MICHELLE DENISE LAU, DONALD/TERESA P O BOX 973 HONOLULU HI 96807</p> |
| <p>TMK: 39001153 0036 HART, CLARENCE CHARLES III 480 KENOLIO RD #25-104 KIHEI HI 96753</p> | <p>TMK: 39001153 0037 POWELL, ISABELLA K 480 KENOLIO RD 25-201 KIHEI HI 96753</p> | <p>TMK: 39001153 0038 OLSON, DEBORAH TOMOE 480 KENOLIO RD #25-202 KIHEI HI 96753</p> |

| | | |
|---|--|---|
| <p>TMK: 39001153 0039 BERGEMANN, HOLLY ANN C/O KERN, JEFFREY L/CINDY N 8456 E HIGHLAND RD HOWELL MI 48843</p> | <p>TMK: 39001153 0040 LEN, ELMER L/FRANCES ATTN: KATHY KANESHIRO P O BOX 3650 HONOLULU HI 96811</p> | <p>TMK: 39001153 0041 TAIT, THOMAS E & MARTHA JEAN REV 1016 W PICCADILLY RD PHOENIX AZ 85013</p> |
| <p>TMK: 39001153 0042 O'HAYER, ALMA PENA LEYVA 480 KENOLIO RD 26-102 KIHEI HI 96753</p> | <p>TMK: 39001153 0043 KINOSHITA, CHARLENE P 480 KENOLIO RD #26-103 KIHEI HI 96753</p> | <p>TMK: 39001153 0044 MOHLER, JULIE A P O BOX 959 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0045 STEVENS, CURT LAWFORD 480 KENOLIO RD 26-105 KIHEI HI 96753</p> | <p>TMK: 39001153 0046 DE REGO, DONNA M ETAL 480 KENOLIO RD 26-106 KIHEI HI 96753</p> | <p>TMK: 39001153 0047 HUMMEL, EDWARD A EDWARD A HUMMEL 1993 S KIHEI RD 21-255 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0048 ESTES, GERALD A/DANA D 480 KENOLIO RD 26-202 KIHEI HI 96753</p> | <p>TMK: 39001153 0049 PERREIRA, KAREN MARIE 480 KENOLIO RD 26-203 KIHEI HI 96753</p> | <p>TMK: 39001153 0050 TSIGARAS, CHRISTOS 480 KENOLIO RD #26-204 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0051 CALAUSTRO, JOANNE ETAL P O BOX 982 PUUNENE HI 96784</p> | <p>TMK: 39001153 0052 PORTMANN, GILBERT J/MARY M 21933 CARSTENS LAKE RD KIEL WI 53042</p> | <p>TMK: 39001153 0053 MIGUEL, WARREN NATHAN JR MIGUEL, WARREN NATHAN JR 480 KENOLIO RD #27-101 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0054 FRANCO, GERMAN CORTEZ C/O ANTIADO, CARLO R 480 KENOLIO RD #31-205 KIHEI HI 96753</p> | <p>TMK: 39001153 0055 VAKAAHI, SVELIO P O BOX 623 KIHEI HI 96753</p> | <p>TMK: 39001153 0056 VALINT-COLLIAS, DENISE C 480 KENOLIO RD 27-104 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0057 BALDONADO, GREG VISTA JR 480 KENOLIO RD #27-201 KIHEI HI 96753</p> | <p>TMK: 39001153 0058 SMITH, DANIEL K SMITH, DANIEL K ETAL C/O 33 LONO AVE #310 KAHULUI HI 96732</p> | <p>TMK: 39001153 0059 CONNOLLY, BRIAN P/PATRICIA S 480 KENOLIO RD 27-203 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0060 LEWIS, MARK E 1015 IRMA LN GARDNERVILLE NV 89460</p> | <p>TMK: 39001153 0061 MATTHEI, DONALD J 480 KENOLIO RD 28-101 KIHEI HI 96753</p> | <p>TMK: 39001153 0062 FLAHERTY, MICHAEL C/O LOUISE RUSSELL 480 KENOLIO RD 28-102 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0063 RAMISCAL, GIL GALAPON ACADEMIA, PAULINE B 298 UALA PL KIHEI HI 96753</p> | <p>TMK: 39001153 0064 KAIAMA, SALLY N 480 KENOLIO RD APT 28-104 KIHEI HI 96753</p> | <p>TMK: 39001153 0065 FOREMAN, CYNTHIA LOUISE P O BOX 1833 WAILUKU HI 96793</p> |

| | | |
|--|---|--|
| <p>TMK: 39001153 0066 PARRELL, HARRY 229 LA VERNE AVE LONG BEACH CA 90803</p> | <p>TMK: 39001153 0067 VEGAS, JOSEPH THOMAS TRS P O BOX 2441 WAILUKU HI 96793</p> | <p>TMK: 39001153 0068 SERA, STEPHANIE T 480 KENOLIO RD 28-202 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0069 TAKAMORI, ALAN SAICHI P O BOX 10326 HONOLULU HI 96816</p> | <p>TMK: 39001153 0070 KIMBROUGH, CHRISTOPHER KEITH 480 KENOLIO RD 28-204 KIHEI HI 96753</p> | <p>TMK: 39001153 0071 JIO, TILDEN SUETO CMR 420 BOX 1424 APO NY 9063</p> |
| <p>TMK: 39001153 0072 MORRIS, DEAN M/KATHLEEN A 480 KENOLIO RD KIHEI HI 96753</p> | <p>TMK: 39001153 0073 SIMPSON, KENNETH ALBERT 480 KENOLIO RD #29-101 KIHEI HI 96753</p> | <p>TMK: 39001153 0074 AURELLANO, JEFFREY/JUANITA 480 KENOLIO RD #29-102 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0075 SZYMANSKI, SANDRA MARIE 480 KENOLIO RD 29-103 KIHEI HI 96753</p> | <p>TMK: 39001153 0076 FOGARTY, THERESE SHIZUE SUDA TR 61 S KIHEI RD KIHEI HI 96753</p> | <p>TMK: 39001153 0077 EVANS, RICHARD G JR 480 KENOLIO RD #29-201 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0078 FONTANILLA, EUGENE CIRILO C/O GRAHAM, WILLIAM/KIMBERLEY 474 JOSE RAMON AVE SANTA ROSA CA 95401</p> | <p>TMK: 39001153 0079 KITO, KAREN T 480 KENOLIO RD 29-203 KIHEI HI 96753</p> | <p>TMK: 39001153 0080 SEKI, TOM TAKESHI C/O PINCOMBE, RAYMOND C/JODI 26272 MONTAREZ CIR MISSION VIEJO CA 92691</p> |
| <p>TMK: 39001153 0081 OGATA, MICHELLE J Y ETAL 480 KENOLIO RD 30-101 KIHEI HI 96753</p> | <p>TMK: 39001153 0082 AWEAU, NORMAN T ETAL 480 KENOLIO RD #30-102 KIHEI HI 96753</p> | <p>TMK: 39001153 0083 SUZUKI, DON H ETAL 480 KENOLIO #30-103 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0084 MAU, RALPH C K 2249 MAKANANI DR HONOLULU HI 96817</p> | <p>TMK: 39001153 0085 SHIELDS, BEVERLY L 120 HANA HWY 9-171 PAIA HI 96779</p> | <p>TMK: 39001153 0086 SUSON, KAREN ANNE C/O FLOYD, DAVID A/TRACIE L 480 KENOLIO RD #20-202 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0087 LARITA, JETHRO M/DOLORES S 480 KENOLIO RD 30-201 KIHEI HI 96753</p> | <p>TMK: 39001153 0088 FAIRBANKS, SHELLY KALEILEHUA C/O GILL H BOYNTON 309 E 1500 S BOUNTIFUL UT 84010</p> | <p>TMK: 39001153 0089 RICE, KELLY JO C/O HISEY, MICHAEL G 480 KENOLIO RD #30-203 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0090 WILSON, CHARLENE LOUISE 480 KENOLIO RD 30-204 KIHEI HI 96753</p> | <p>TMK: 39001153 0091 JENNINGS, ROBERT RUSSELL JENNINGS, ROBERT R/JANET 87 ALENA PL KIHEI HI 96753</p> | <p>TMK: 39001153 0092 LINDSAY, JAMES MICHAEL 480 KENOLIO RD APT 30-206 KIHEI HI 96753</p> |

| | | |
|---|---|---|
| <p>TMK: 39001153 0093 HOKE, RAYNARD L P O BOX 62231 HONOLULU HI 96839</p> | <p>TMK: 39001153 0094 YUEN, MICHAEL KOK 480 KENOLIO RD 31-102 KIHEI HI 96753</p> | <p>TMK: 39001153 0095 GASCOIGNE, KATHERINE 480 KENOLIO RD 31-103 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0096 TORRES, FREDERICK V/MISTY L 480 KENOLIO RD 31-104 KIHEI HI 96753</p> | <p>TMK: 39001153 0097 DUMBLETON, ANNA B DUMBLETON, ANNA B 480 KENOLIO RD #31-105 KIHEI HI 96753</p> | <p>TMK: 39001153 0098 MASSEY, JAMES GREGORY 2600 PIIHOLO RD MAKAWAO HI 96768</p> |
| <p>TMK: 39001153 0099 FARINAS-KRUSHENSKY, KEVIN BRUCE FARINAS-KRUSHENSKY, KEVIN B/CHR P O BOX 672210 CHUGIAK AK 99567</p> | <p>TMK: 39001153 0100 PULLEN, EARNESTINE PULLEN, EARNESTINE 480 KENOLIO RD #31-202 KIHEI HI 96753</p> | <p>TMK: 39001153 0101 LABEAUX, DAMIAN ARMAND 480 KENOLIO RD #31-203 KIHEI HI 96753</p> |
| <p>TMK: 39001153 0102 HACKBARTH, TIMOTHY SCOTT C/O ST GERMAIN, LORRE 421 E AVE CORONADO CA 92118</p> | <p>TMK: 39001153 0103 MORGAN, JAMES P ETAL 480 KENOLIO RD 31-205 KIHEI HI 96753</p> | <p>TMK: 39001153 0104 ALEXANDER, FRANK RICHARD 480 KENOLIO RD APT 31-206 KIHEI HI 96753</p> |
| <p>TMK: 39001154 0000 ROADWAY < < 0 <</p> | <p>TMK: 39001160 0000 KENRANES LTD 635 KENOLIO RD KIHEI HI 96753</p> | <p>TMK: 39001161 0000 KENRANES LTD 635 KENOLIO RD KIHEI HI 96753</p> |
| <p>TMK: 39001162 0000 KENRANES LTD 635 KENOLIO RD KIHEI HI 96753</p> | <p>TMK: 39028001 0000 ROADWAY < < 0 <</p> | <p>TMK: 39028040 0000 MILLER, JODI MAE 105 LANAKILA PL KIHEI HI 96753</p> |
| <p>TMK: 39028041 0000 RICARDOS, RUBEN Q 113 LANAKILA PL KIHEI HI 96753</p> | <p>TMK: 39028042 0000 MATHIS, KEN M/HILDA D 121 LANAKILA KIHEI HI 96753</p> | <p>TMK: 39028052 0000 BERGANTINO, RUSSELL ALLEN 504 EKAHI WAY KIHEI HI 96753</p> |
| <p>TMK: 39028053 0000 LINSTROM, STEPHEN KIRK 122 LANAKILA ST KIHEI HI 96753</p> | <p>TMK: 39028054 0000 BROADSTONE, LARRY STAN 114 LANAKILA PL KIHEI HI 96753</p> | <p>TMK: 39028055 0000 DELLA, FLORO G TR P O BOX 330328 KAHULUI HI 96733</p> |
| <p>TMK: 39028056 0000 DICKSON, JAMES E P O BOX 275 KIHEI HI 96753</p> | <p>TMK: 39028057 0000 WUTHRICH, ROBERT D 512 EKAHI WAY KIHEI HI 96753</p> | <p>TMK: 39028058 0000 ALEXANDER, WALTER D TRUST 516 EKAHI WY KIHEI HI 96753</p> |

| | | |
|--|--|--|
| <p>TMK: 39028059 0000 WARREN,JAMES TRUST 522 EKAHI ST KIHEI HI 96753</p> | <p>TMK: 39028060 0000 BEYERSDORF, MICHAEL L/SHERRY 529 EKAHI WAY KIHEI HI 96753</p> | <p>TMK: 39028061 0000 PHILLIPS,JOHN R 523 EKAHI WAY KIHEI HI 96753</p> |
| <p>TMK: 39028064 0000 BOLIBOL,SEVERO & VIOLETA TR 519 KENOLIO ROAD KIHEI HI 96753</p> | <p>TMK: 39028065 0000 FRANCO, DENNIS C 400 WAI'AMA WY HAIKU HI 96708</p> | <p>TMK: 39028066 0000 EDER, AMANCIO Y/GENNIE L 531A KENOLIO ROAD KIHEI HI 96753</p> |
| <p>TMK: 39028067 0000 ELADNANI,OSMAN A 535 KENOLIO RD KIHEI HI 96753</p> | <p>TMK: 39028068 0000 KAMOKU, ELVIN K/PAMELA C B 541 KENOLIO RD KIHEI HI 96753</p> | <p>TMK: 39048001 0000 LITTLETON,PAUL H 45 ALILANI PL KIHEI HI 96753</p> |
| <p>TMK: 39048002 0000 KAKIUCHI,CRAIG S/JAN Y TR P O BOX 1606 KIHEI HI 96753</p> | <p>TMK: 39048003 0000 VELASQUEZ,HOWARD 542 PAPAU KOMOHANA PL KIHEI HI 96753</p> | <p>TMK: 39048004 0000 OTT,BRIAN M 543 PAPAU KOMOHANA PLACE KIHEI HI 96753</p> |
| <p>TMK: 39048005 0000 RUIZ,ADOLPHE J 547 PAPAU KOMOHANA PL KIHEI HI 96753</p> | <p>TMK: 39048006 0000 RODBY,MICHAEL KEVIN 131 E ALULIKE ST KIHEI HI 96753</p> | <p>TMK: 39048007 0000 ROYER,JANET L 137 ALULIKE STREET KIHEI HI 96753</p> |
| <p>TMK: 39048008 0000 O'GARA,JANET KATHRYN 147 ALULIKE PL KIHEI HI 96753</p> | <p>TMK: 39048049 0000 TABIOLO,STEVEN TABIOLO,STEVEN/TERI 138 E ALULIKE ST KIHEI HI 96753</p> | <p>TMK: 39048050 0000 LORGE,RICHARD T 130 ALULIKE ST KIHEI HI 96753</p> |
| <p>TMK: 39048051 0000 ANCHETA,FLORENDO J 871 NIHEU ST LAHAINA HI 96761</p> | <p>TMK: 39048052 0000 EVANGELISTA,EDWARD P 555 PAPAU ST. KIHEI HI 96753</p> | <p>TMK: 39048053 0000 D'ARCO, ROBERT ALLEN 559 PAPAU STREET KIHEI HI 96753</p> |
| <p>TMK: 39048054 0000 COLTON,DEANN E 565 HOOMALUHIA PL KIHEI HI 96753</p> | <p>TMK: 39048066 0000 IBANEZ,MARCELINO I 484 MOLOKAI HEMA KAHULUI HI 96732</p> | <p>TMK: 39048067 0000 BISE,KENNETH ROBERT 562 PAPAU ST KIHEI HI 96753</p> |
| <p>TMK: 39048068 0000 SMITH,ROBBY D SMITH,ROBBY D/SHARON 558 PAPAU ST KIHEI HI 96753</p> | <p>TMK: 39048069 0000 CORDERO,JESUS C 556 PAPAU ST KIHEI HI 96753</p> | <p>TMK: 39048070 0000 DIONESE,LOUIS C JR 554 PAPAU STREET KIHEI HI 96753</p> |

| | | |
|---|---|---|
| TMK: 39048071 0000 TONG,HAROLD IN LAM 552 PAPAU STREET KIHEI HI 96753 | TMK: 39048072 0000 LEE,GARY ARTHUR 3200 WAILEA ALANUI KIHEI HI 96753 | TMK: 39048073 0000 TEJERO,CIPRIANO VALDEZ 561 ALULIKE ST KIHEI HI 96753 |
| TMK: 39048074 0000 WARDLEY,GAVIN K 103 MAKALAUNA ST KIHEI HI 96753 | TMK: 39048075 0000 KIM,WALTER TONY 109 MAKALAUNA ST KIHEI HI 96753 | TMK: 39048076 0000 QUILOS,BERNARDO MANUEL 571 ALULIKE ST KIHEI HI 96753 |
| TMK: 39048077 0000 ORDONEZ,MARIO L 115 MAKALUNA ST KIHEI HI 96753 | TMK: 39048078 0000 MOLINA,HENRY STEVEN 121 MAKALAUNA ST KIHEI HI 96753 | TMK: 39048079 0000 SAYNO,ANTONIO AGARANO 127 MAKALAUNA ST KIHEI HI 96753 |
| TMK: 39048080 0000 BITNIAS,GERALD JAMES 133 MAKALAUNA ST KIHEI HI 96753 | TMK: 39048081 0000 AGDINAOAY,RUDY SULQUIANO 141 MAKALAUNA ST KIHEI HI 96753 | TMK: 39048082 0000 MONAHAN,DONNA JEAN 147 MAKALAUNA ST KIHEI HI 96753 |
| TMK: 39048083 0000 LINDELL,LINDA L 153 MAKALAUNA ST KIHEI HI 96753 | TMK: 39048087 0000 OKUDA,ALAN MICHIO 65 KONO PLACE KAHULUI HI 96732 | TMK: 39048088 0000 YATSUNOFF,EUGENE JEROME EUGENE & JUNE YATSUNOFF PO BOX 1192 KIHEI HI 96753 |
| TMK: 39048089 0000 TAKAHAMA,MARK TSUNEO P O BOX 5074 KAHULUI HI 96733 | TMK: 39048090 0000 BACONGCO,JOSEFINO JOMORABON 146 MAKALAUNA ST KIHEI HI 96753 | TMK: 39048091 0000 MURPHY,DARRELL L 140 MAKALAUNA ST KIHEI HI 96753 |
| TMK: 39048092 0000 JUNGERS,NICHOLAS JUNGERS,NICHOLAS/CHERYL 128 MAKALAUNA STREET KIHEI HI 96753 | TMK: 39048093 0000 FOWLER,MARSHALL KEITH 120 MAKALAUNA ST KIHEI HI 96753 | TMK: 39048094 0000 KERVIN,PAUL P O BOX 956 KIHEI HI 96753 |
| TMK: 39048095 0000 TUNDAYAG,LILIA P 108 MAKALAUNA ST KIHEI HI 96753 | TMK: 39048096 0000 SUDA,FRANCIS YOSHITO & SALLY YU 105 PULAMA PLACE KIHEI HI 96753 | TMK: 39048097 0000 TSUBAKI,DALE M 111 PULAMA PL KIHEI HI 96753 |
| TMK: 39048098 0000 MARTIN,SCOTT 117 PULAMA PL KIHEI HI 96753 | TMK: 39048099 0000 GOMES,DAVID C JR 119 PULAMA ST KIHEI HI 96753 | TMK: 39048100 0000 CHASE,ERIC TOBEY 120 PULAMA PL KIHEI HI 96753 |

| | | |
|--|--|---|
| <p>TMK: 39048101 0000 SAGISI,MIKE SAGAYSAY 614 KAIOLA STREET KIHEI HI 96753</p> | <p>TMK: 39048102 0000 REID,CYNTHIA TOWNLEY 618 KAIOLA ST KIHEI HI 96753</p> | <p>TMK: 39048103 0000 LEE,JOSEPH M 419 12TH AVE SAN FRANCISCO CA 94118</p> |
| <p>TMK: 39048104 0000 GOSE,FAMILY 1995 LIV TRUST 622 KAIOLA ST KIHEI HI 96753</p> | <p>TMK: 39048105 0000 HEDRICH VON WIEDERHOLD,E P O BOX 9743 BAKERSFIELD CA 93389</p> | <p>TMK: 39048105 0000 SCHUSSLER,SHERRYL A P O BOX 580 KIHEI HI 96753</p> |
| <p>TMK: 39048106 0000 MANNOIA,VICTOR P SR P O BOX 2241 KIHEI HI 96753</p> | <p>TMK: 39048107 0000 OKA,JOHN N P O BOX 1533 WAILUKU HI 96793</p> | <p>TMK: 39048108 0000 CASTILLO,RICHARD V 628 KAIOLA STREET KIHEI HI 96753</p> |
| <p>TMK: 39048109 0000 JEWISH CONGREGATION OF MAUI 634 ALULIKE ST KIHEI HI 96753</p> | <p>TMK: 39048110 0000 MAZZACANO,GERARD F 629 KAIOLA ST KIHEI HI 96753</p> | <p>TMK: 39048111 0000 SOUZA,MICHAEL I 627 KAIOLA ST KIHEI HI 96753</p> |
| <p>TMK: 39048112 0000 VALENTIN,FREDERICK L 625 KAIOLA ST KIHEI HI 96753</p> | <p>TMK: 39048113 0000 JULIAN,LORETO JULIAN RANDOLPH,ROBERT K/CAROL A P O BOX 873 FREELAND WA 98249</p> | <p>TMK: 39048114 0000 CZERWINSKI,ROMAN 621 KAIOLA STREET KIHEI HI 96753</p> |
| <p>TMK: 39048115 0000 DODSON,SHIRLEE R 617 KAIOLA ST KIHEI HI 96753</p> | <p>TMK: 39048116 0000 GARCIA,ROBERTO 17 KAHELE ST KIHEI HI 96753</p> | <p>TMK: 39048121 0000 ROADWAY < < 0 <</p> |
| <p>TMK: 39049006 0000 HEILMAN,JAMES W ZEUTENHORST,DENNIS W/T T 157 HOOPILI AKU ST KIHEI HI 96753</p> | <p>TMK: 39049007 0000 SPENCER,JOHN HARRY 151 HOOPILI AKAU ST KIHEI HI 96753</p> | <p>TMK: 39049008 0000 BULAND,KURT A 143 HO'OPILI AKAU ST KIHEI HI 96753</p> |
| <p>TMK: 39049009 0000 MARTYN,QUE 137 HO'OPILI AKAU ST KIHEI HI 96753</p> | <p>TMK: 39049010 0000 STROTHER,EUGENE REX 131 HO'OPILI AKAU ST KIHEI HI 96753</p> | <p>TMK: 39049011 0000 LIN KEE,SEAN M P O BOX 1426 KIHEI HI 96753</p> |
| <p>TMK: 39049012 0000 MADAMBA,BENFLOR A 265 PUE PL KIHEI HI 96753</p> | <p>TMK: 39049013 0000 KINSEY,HEATHER 1325 S KIHEI RD #221 KIHEI HI 96753</p> | <p>TMK: 39049014 0000 TADDA,FREDERICK CHOCK,DONALD D/MARY A D 686 ALULIKE ST KIHEI HI 96753</p> |

| | | |
|---|--|--|
| <p>TMK: 39049015 0000 TOLENTINO, JOSEPH DIZOR P O BOX 781 TUSTIN CA 92781</p> | <p>TMK: 39049016 0000 INIBA, CESAR I 136 HO'OPILI AKAU ST KIHEI HI 96753</p> | <p>TMK: 39049017 0000 MECUM, FREDERICK W 142 HO'OPILI AKAU ST KIHEI HI 96753</p> |
|---|--|--|

APPENDIX G
Pre-Consultation Letter



June 13, 2003

Dear Neighboring Property Owner:

RE: Pre-Consultation for an Environmental Assessment in support of the redevelopment of The Maui Lu Resort, Kihei, Maui, Hawaii; TMK Parcel Nos: (2) 3-9-001:083, 086, & 120.

This is to inform you that Chris Hart & Partners, Inc., on behalf of Genesee Capital, will soon be filing an application with Maui County's Department of Planning for a Special Management Area (SMA) Permit for the phased redevelopment of the Maui Lu Resort, as a proposed 379-unit timeshare resort, along with related service and recreational amenities, and landscape planting, parking, infrastructure and utility improvements, on approximately 27.282 acres.

The Maui Lu Resort parcels are located at the north end of Kihei and are divided into mauka and makai sites by South Kihei Road. The makai site, Parcel 83, is presently zoned H-1 Hotel, as is the first 200 feet of the mauka site Parcel 86. The remainder of Parcel 86 is zoned H-M Hotel. Parcel 120, also makai of South Kihei Road, is zoned Park. The Kihei-Makena Community Plan designations are Hotel and Park.

The Maui Lu Resort, as we know it, was begun in 1958 by Canadian lumberman Mr. Gordon Gibson and reached its apex in 1982 with 218 units. In recent years the resort has been in decline and the proposed redevelopment project will increase the original number of units by 161 and expand the service and recreational amenities offered by the Maui Lu Resort. The project is expected to be constructed in five phases over a period of five years. The resort will maintain the existing park-like open space appearance, as viewed from the public streets. The proposed action involves phased demolition and removal of the existing Maui Lu Resort complex and the adjoining parking area. The Phase I demolition and renovation of existing ocean and mauka units is expected to commence by January 2004.

The proposed project plans are attached. The Maui Lu Resort will consist of a mixture of one, two, three, and four-story buildings. The smaller one-story buildings will be located closest to South Kihei Road with two-story buildings at the rear of the property, along Kenolio Road, and three- and four-story buildings in the center of the site. The architectural plans call for a distinctly traditional architectural vernacular with double-pitched roofs and wide overhangs, Hawaiian motifs, and natural materials and colors selected to blend with and not compete with the surroundings. Natural well

LANDSCAPE ARCHITECTURE AND PLANNING

1955 MAIN STREET, SUITE 200 • WAILUKU, MAUI, HAWAII 96793-1706 • PHONE: 808-242-1955 • FAX: 808-242-1956

Neighboring Property Owner
June 13, 2003
Page 2

water will course through the property feeding a series of tropical gardens featuring Hawaiian medicinal plants, local fruit trees, taro patches and flower plants providing a strong historical and cultural reference within a botanical garden setting.

The main driveway entry and second minor entry will be from Ka'ono'ulu Street and one additional minor entrance will be provided along South Kihei Road and another along Kenolio Road. The parking lots will incorporate large crown shade trees and more than the required stalls necessary to satisfy County parking requirements.

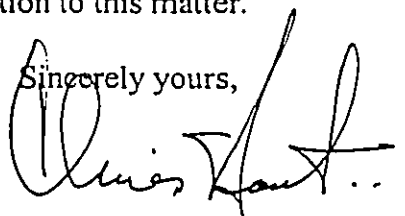
Major infrastructure improvements include:

- The improvement and road widening of South Kihei Road. Improvements will include sidewalks, curbs and gutters on both sides, as well as, a landscaped median and crosswalk designed to calm traffic and provide a safe pedestrian linkage between the mauka and makai parcels.
- Installation of a traffic signal at the intersection of South Kihei Road and Ka'ono'ulu Street.
- Road widening along Kenolio Road and Ka'ono'ulu Street with sidewalks, curbs, and gutters.
- Installation of an on-site drainage collection system including sub-surface detention facilities.
- Wastewater collection system improvements on-site and off-site for a tie-in to the existing South Maui Collection system.
- Other utility and service connections as needed to accommodate the proposed project.

Construction is anticipated to begin after all of the required State and County permits have been issued. It is anticipated that phased build-out of the site will require approximately 5 years to complete. During the construction phase, standard mitigation measures, as required by State and County law, will be employed to control noise, dust, run-off, and other construction phase impacts.

Please note that we will be available at the **Kihei Community Center (Small Meeting Room)** on **Tuesday, June 24, from 7:00 p.m. until 9:00 p.m.** to provide an overview of the project. If you are not able to attend this meeting, and have comments or concerns about the project, please contact myself, or Mr. Michael Summers, at 242-1955.

Thank you very much for your attention to this matter.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Neighboring Property Owner
June 13, 2003
Page 3

Enclosure: Regional Location Map, Tax Map, and Concept Landscape Master Plan

cc: Greg Schneider
Michael Wright
Mark Taylor
Rob Iopa
Barry Toyota
Michael Kosmin
Project File

RECEIVED AS FOLLOWS

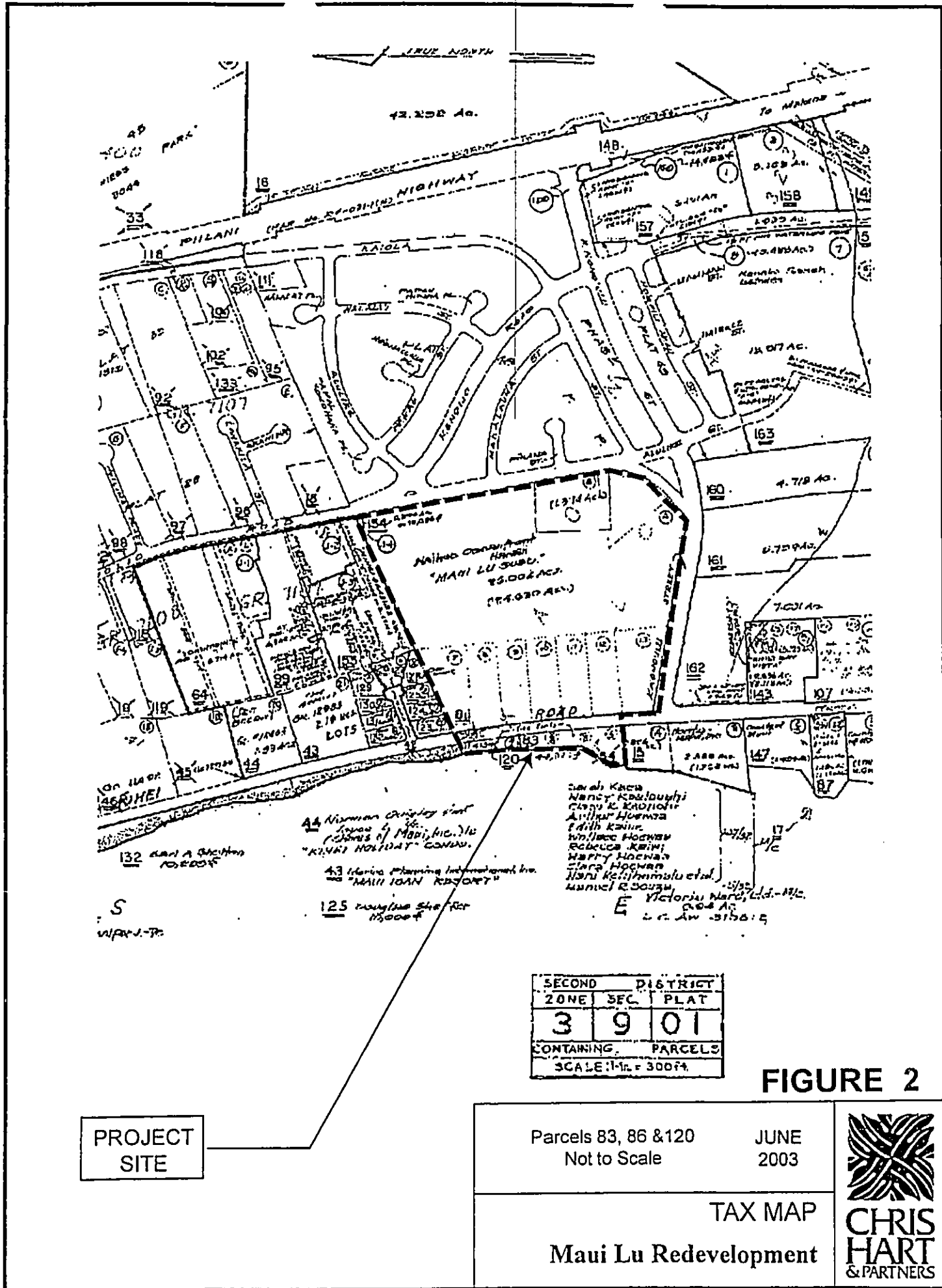


FIGURE 2

| | | | |
|-----------------------|--|--------------|--|
| Parcels 83, 86 & 120 | | JUNE 2003 | |
| Not to Scale | | | |
| TAX MAP | | | |
| Maui Lu Redevelopment | | | |

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

APPENDIX H
Shoreline Encroachment Information Sheet



August 6, 2003

Mr. Sam Lemmo
Land Division
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

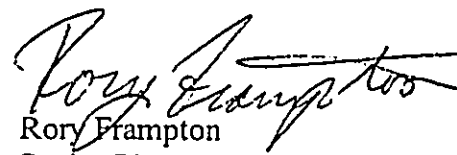
Dear Mr. Lemmo:

Subject: Shoreline Encroachment Information Sheet
Maui Lu property in Kihei, Maui; TMK 3-9-01: 83 & 120

Transmitted herewith is a completed Shoreline Encroachment Information Sheet for the Maui Lu shorefront parcels in Kihei, Maui. We understand that the next step would be for you to conduct a site visit. Please let us know when you will be able to make it over.

Please call me if you have any questions or need additional information.

Respectfully submitted,


Rory Frampton
Senior Planner

Encls.

MAUI LU REDEVELOPMENT
August 2003

Shoreline Encroachment Information Sheet

1. Location

TMK: 3-9-001:83 & 120, Kihei, Maui, Hawaii. See Figures 1, "Location Map" & 2, "Tax Map")

2. Approximate Square Feet of Encroachment

Three areas totaling 20,145 sq. ft. (See Figure 4, "Assumed Encroachment") Note: Research is still being done to determine the actual shoreline at the time boulders were placed.

3. Approximate Date of Encroachment (Establishment) (Please submit documentation)

1964 through 1969. Review of correspondence from State agencies indicate the revetments were present in 1969 (See Attachment A). A historical account of the life of J. Gordon Gibson, the original founder and builder of the Maui Lu resort indicates that the revetments were constructed in 1964 or 1965 after a significant erosion event (See Attachment B). Historical records show that there was a tsunami in March, 1964.

4. Date of Previous Shoreline Certifications

October 28, 1998 & November 19, 1975.

5. Identification of Surrounding Land Uses Including Encroachments

North: Abutting the subject property's northern boundary is the Mai Poina Oe I'au beach park. The Captain George Vancouver monument is at the southern end of this park.

South: Abutting the subject property's southern boundary an undeveloped county beach park area, also known as Horita's beach, which includes the outlet where Kulanihakoi Gulch meets the sea.

East: South Kihei Road bounds the property on the east. Across South Kihei Road are the main grounds of Maui Lu Hotel.

West: Government beach reserve which appears to have been created by the three rock revetments, two of which front parcel 83 and one which fronts parcel 120 encompassing the Captain George Vancouver monument. The southern rock revetment fronting parcel 83 is approximately 351 feet in length and encompasses an area approximately 7,335 sq. ft. in size. The northern revetment fronting parcel 83 is approximately 325 feet in length and encompasses an area approximately 11,290 sq. ft. in size. The revetment fronting parcel 120 is approximately 98 feet in length and encompasses an area approximately 1,520 sq. ft. in size.

6. Identification of Surrounding (artificial) Coastal Structures

There are 3 hotel room structures on parcel 83 containing a total of 50 visitor units. The footprint coverages are as follows:

Bldg. A: 3812 sq. ft.

Bldg. B: 2690 sq. ft.

Bldg. C: 3062 sq. ft.

The Captain George Vancouver monument is situated on the beach reserve fronting the northern portion of parcel 120 and consists of a lava rock/masonry structure as well as two authentic totem poles from Vancouver, B.C.

(See Figure 3, "Photographs")

MAUI LU REDEVELOPMENT

August 2003

7. Assessment of Beach Resources (Excellent/Good/Fair/Poor)

There is no beach immediately fronting each of the three rock revetments. The beach fronting parcel 120 is in Excellent to Good condition. See Figure 3, Photo 3. The beach fronting parcel 83 is in Fair condition. See Figure 3, Photos 4 & 5. Beaches to the north and south of the project area are in Excellent to Good condition.

8. Assessment of Available Public Access (Excellent/Good/Fair/Poor)

Public Access is available along the northern two thirds of parcel 120 and is considered Excellent. Public access is not currently available along the frontage of parcel 83 since the property has been developed with private resort amenities. Public access is available to the south and north of the parcels and is considered Excellent as these adjacent properties are government owned.

9. Identification of Adjacent (Upland) Development

As noted in item 6 above, there currently are three structures situated parcel 83, immediately upland of the two larger revetments. A parking lot is located between the structures, roughly between the two larger revetments. The structures have footprints of 3812 sq. ft., 2690 sq. ft. & 3062 sq. ft. and contain a total of 50 guest rooms. Building C is located approximately 22 feet from the top of the revetment. Building B is located approximately 32 feet from the top of the revetment. Building A is located between 25 and 33 feet from the top of the revetment.

10. Effect of Removing Encroachment on Upland Development and on Surrounding Uses

Removal of the rock revetments will likely result in erosion of the shoreline fronting the structures and could eventually lead to loss of the structures. (See item 11 below.)

11. Would Removal of Encroachment Improve Beach Processes and Public Access?

Removal of the encroachments would allow beach processes to be un-impeded by the rock revetments. The effect this would have on beach processes is uncertain, although a preliminary review of the County's historical analysis of aerial photographs indicate that there has been a trend of shoreline erosion on this as well as adjacent shorelines over the last fifty years. (Note: the County's maps have not been finalized and would need to be verified by a Coastal Engineer for accuracy as well as to determine the applicability of the methodology for determining erosion rates along this section of shoreline.) If there is a historical erosion trend and it were to continue after removal of the structures, the result would be a loss of the existing resort structures and possibly undermining of South Kihei Road.

At present there is no public access fronting parcel 83. Removal of the structures would not immediately improve coastal access, in fact, if the shoreline erodes the likely formation of an unstable vertical scarp and the potential for loss of structures could present a safety risk to persons trying to access this portion of shoreline.

The new owner of the property is planning on redeveloping the structures on parcel 83. The overall effect of the redevelopment will be a decrease in the amount of units and structures which currently exist on parcel 83. The intent is also to provide a public access walkway along a portion of parcel 83 which would also connect to parcel 120 and provide a lateral access all the way to the Vancouver monument. Thus, issuance of an easement for the revetments would allow for the redevelopment plans to proceed and would result in the establishment of new lateral public access walkway where there is currently none.

MAUI LU REDEVELOPMENT

August 2003

Please provide answers to the eleven items to the best of your ability. Each item should include a full narrative with maps if available. Once the Coastal Lands Program receives this information, a site inspection will be conducted to validate and/or augment the information. This information will be used to determine the appropriate case disposition, which could be (a) issuance of an easement or (b) removal of the encroachment. (Note: If the Department determines that the encroachment was established in violation of Conservation District laws – i.e., the unlawful use of Conservation District Lands – an easement request may not be processed until the violation is resolved.)

**Please call Sam Lemmo of the Department of Land and Natural Resources, Coastal Lands Program, at 587-0381 (fax: 587-0455), should you have any questions on this matter.
Attach additional sheets as necessary**

ATTACHMENT A

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING
AND GENERAL SERVICES
SUPPLY DIVISION
P. O. BOX 10
HONOLULU, HAWAII 96810

Ma-57(80)

March 10, 1980

Shoreline Determination
TK: 3-9-01:83 and 120
Kihei, Maui

R. T. Tanaka Engineers, Inc.
250-D Waiehu Beach Road
Wailuku, Maui 96793

ATTENTION: Mr. Albert Saiki

Dear Sir:

I'm sorry for the month's delay in writing to you about this matter. I did not realize that Mr. James Lam, Land Management Division sent this request over on February 13, 1980.

Before I process your request, let me give you a brief background on what happened when the initial shoreline was filed in October 1975. A very bad storm had eroded this seaward boundary sometime in 1964 or 1965. To protect the property from further erosion, the boulders were placed in position and portions of the areas backfilled.

At the time of the initial certification, the State contended that portions of the rock formation encroached on State land. We insisted that unless they admitted that the State is the owner of these strips of land, the State would not certify the shoreline map. The enclosed xerox copy represents the map that was finally approved. The courses with the azimuths and distances shown is not the property line, they represent direct ties. The line shown in red on the 1975 copy and in green on your map represents the seaward boundary. The heavy line on the 1975 map which is the red line on your map represents the shoreline. Please revise your map as noted on the enclosed print and return the new prints directly to me.

There may be a further delay in the approval of these maps. It is my understanding that in 1975 a verbal commitment was made by Mr. Gibson, the owner of Maui Lu Hotel, to lease or purchase the filled lands. No action was ever taken. Therefore, they are utilizing the land at no cost and the question of liability remains unresolved.

Very truly yours,

Kazutaka Saiki
KAZUTAKA SAIKI

State Land Surveyor

Attachment

ATTACHMENT B

The Gordon Gibson Story



*Gordon Gibson
with Carol Renison*

and staff to operate just ten guest houses. That year, in a semicircle outside the ten Maui Lu cottages, forty "Round-houses" were added. A few near the gate were built on higher land and nicknamed "Nob Hill" by our staff. Now we had fifty rental units, and although each of them had cooking facilities, I opened a small restaurant at the end of the Maui Lu pool.

Louise and I could see that we needed a place to ourselves so we built a new home. Luika's, three miles along the shore. This was to be our last home together.

When a small lump developed on Louise's breast, we both took the matter casually. Even our doctor seemed to believe that it was nothing to worry about, but a year later Louise announced that she was going into the hospital to have it removed and expected to be home the same night.

A few minutes after seven o'clock in the evening the doctor told us that the lump had been malignant and that it would be necessary to perform a mastectomy. That was the beginning of the end.

By this time our family was grown and Louise and I were spending a great deal of time in Victoria. We decided to sell Spuraway, our big home in West Vancouver, because Louise wanted to have the pleasure of running the Maui Lu Hotel. She told me that she wished to live in Maui until she died because it was as close to heaven on earth as anyone could find. She died in 1967.

After Louise's death I threw myself into work and started to drink too much. I have always found that hard work helps to get my mind off my troubles.

I started to improve the recreational facilities at the hotel and built a small golf course, though I knew nothing about the game or how a course should be designed. One putt was the maximum anyone took and many played the course with five holes-in-one, because I had unwittingly sloped the greens towards the cups, which were 8-inch-wide jam cans. Almost every ball landing on the green rolled into the hole. My golfing guests soon persuaded me to rebuild the greens more conventionally.

When the first restaurant became inadequate for the number of guests, I built an elevated dining room and bar.

called the Longhouse, above the west end of the Maui Lu pool.

In 1964 a tidal wave hit Kihei. The beach across the road from the Maui Lu was badly eroded by the torrential waters. At one place, a 100-foot-wide cliff was reduced to 16 feet by the pounding seas. The beach homes on the top of the cliff seemed to be about to fall into the sea. The owners figured they were a total loss. I bought these houses and the beachfront, and brought in rocks from my acreage across the road, thereby adding seven units and a beach to the hotel's assets.

The Maui Lu Hotel was becoming very popular and in 1967 I built four four-plexes by myself, naming them the Quadras as a reminder of Capt. George Vancouver's meeting on Vancouver Island with Señor Quadra who had given the island of Maui a gift of highly bred cattle.

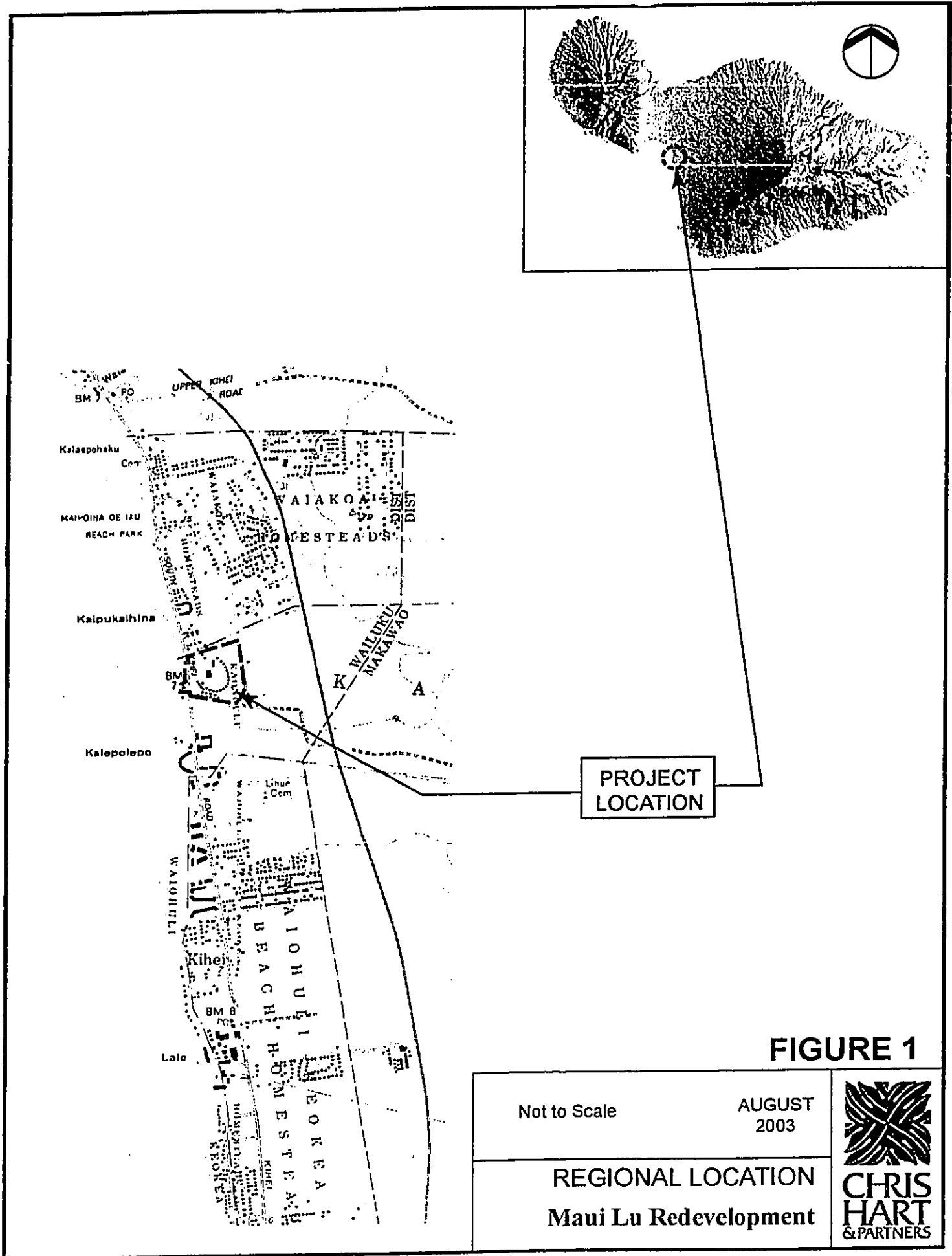
In the fall of 1968, I found that we had sold twenty-four more rooms than we had available for the Christmas season. Most of these guests were friends, and I decided that rather than disappoint them I would build a comfortable apartment building and have it ready a week before Christmas. Each room would be 36 feet by 24 feet. My staff and neighbours said it was a crazy undertaking. The contractor told me the building couldn't be ready until February.

The first day of November arrived and I still hadn't reached any agreement with the contractor. Finally we made a deal. I said, "Give me ten good men from your crew and I'll pay you ten per cent of the costs." We started work on 6 November and finished the apartment in thirty-three working days. The only time missed aside from sleeping was a couple of Sundays and an hour or two during torrential downpours. The carpets were still being laid as the first guests arrived. I believe we set a record for building that type of structure on the island of Maui.

By this time the restaurant had grown so that it could seat 400 people. We had a very popular native entertainer, Jesse Nakooka, who is now a great star in the Hawaiian Islands. When I first met Jesse he was driving a tour bus, and playing piano and singing for his guests while they

FIGURES

RECEIVED AS FOLLOWS



RECEIVED AS FOLLOWS



Photo 1: Looking south from Captain Vancouver Memorial. Maui Lu Hotel room structures visible at left and center.



Photo 2: Looking north from beach along parcel 120 toward Captain Vancouver Memorial (center).

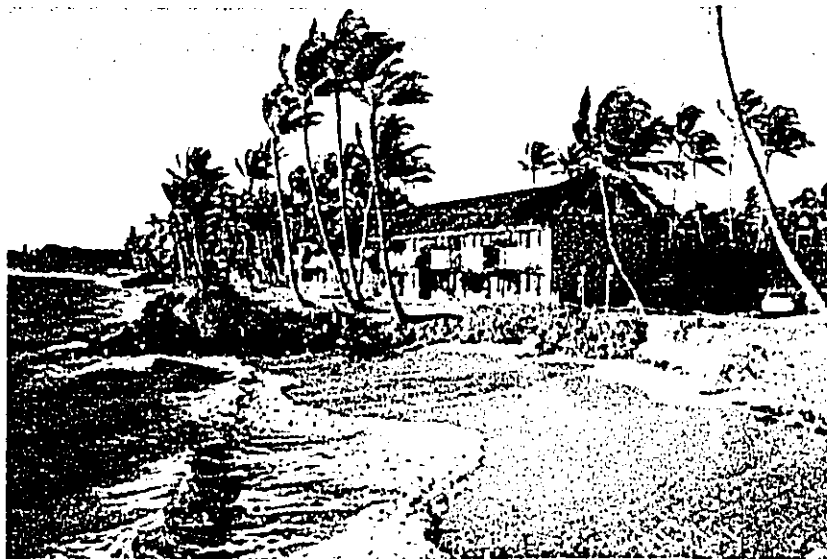


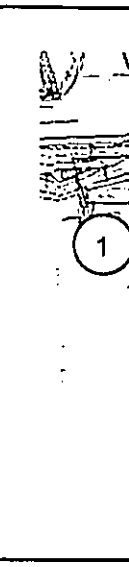
Photo 5: Looking north toward Building A from top of rock revetment.



Photo 3: Looking north from top of rock revetment 83 & 120, toward Captain Vancouver Memorial.



Photo 6: Looking north from County beach p...



RECEIVED AS FOLLOWS

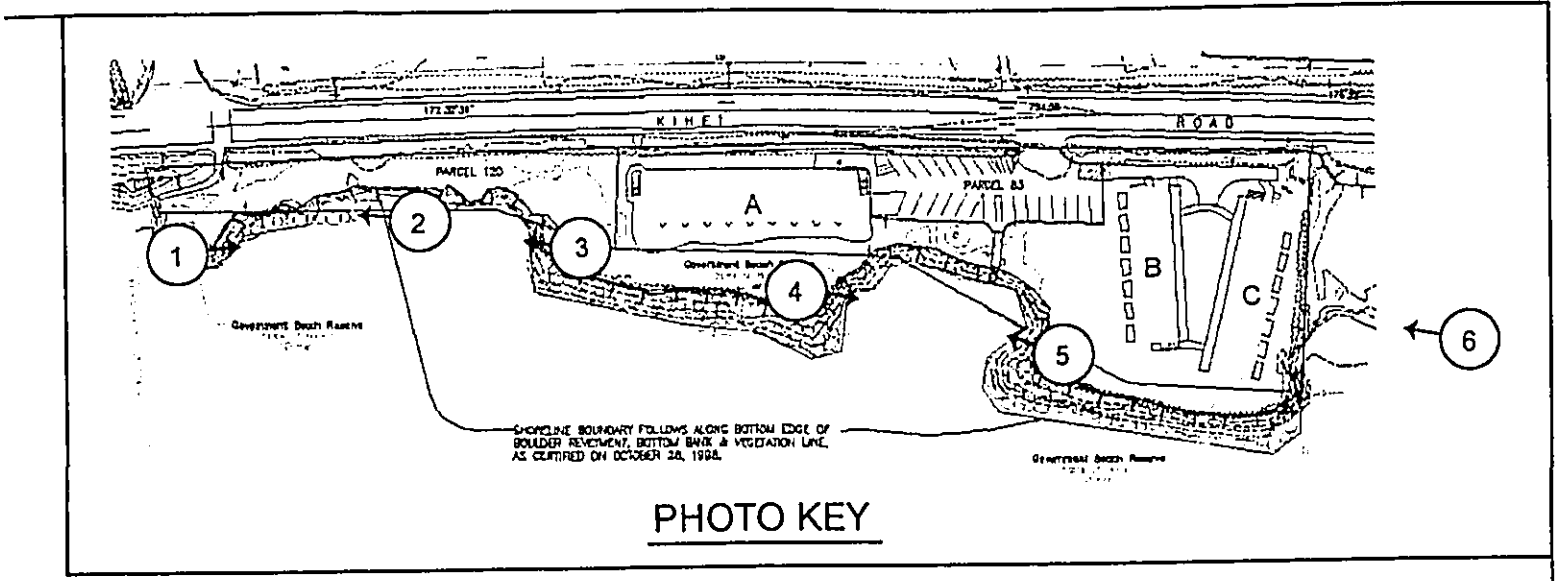


Photo 1: Looking north from top of rock revetment, corner of parcel 120 and Vancouver Memorial.

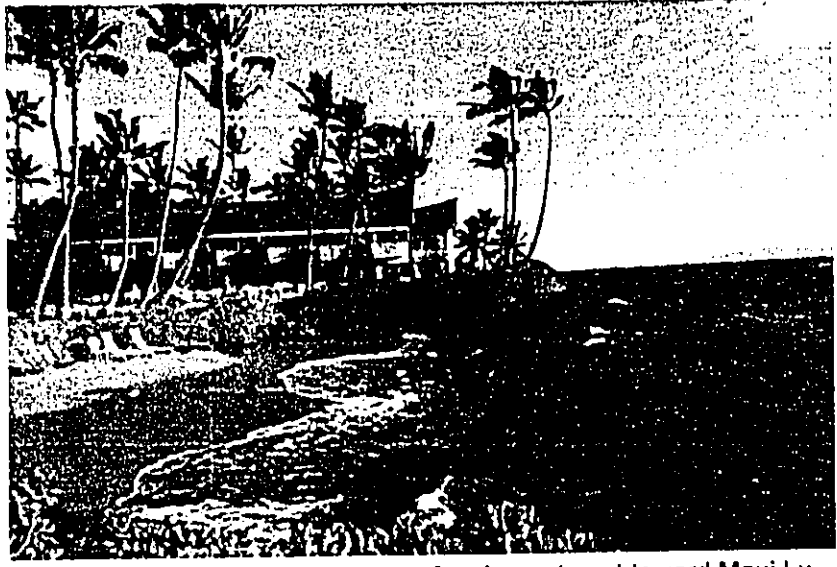


Photo 4: Looking south from top of rock revetment toward Maui Lu Hotel, Buildings B & C.



Photo 5: Looking east from county beach park toward Building C.

FIGURE 3

| | | |
|--|------------------------|--|
| <p>Taken 7/31/2003 approx. 5:00 p.m.</p> | <p>AUGUST 2003</p> | |
| <p>PHOTOGRAPHS Maui Lu Redevelopment</p> | | |

RECEIVED AS FOLLOWS

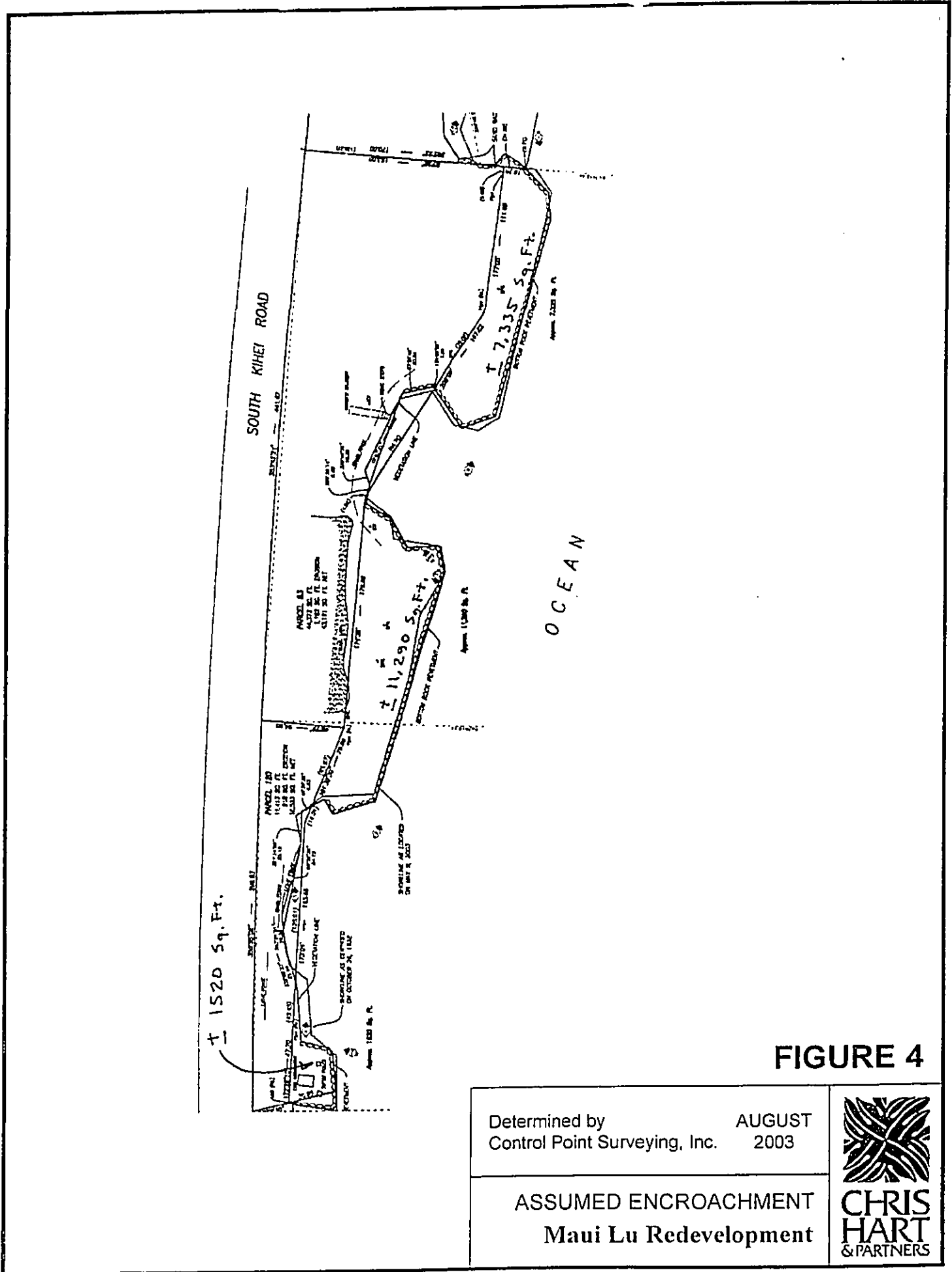



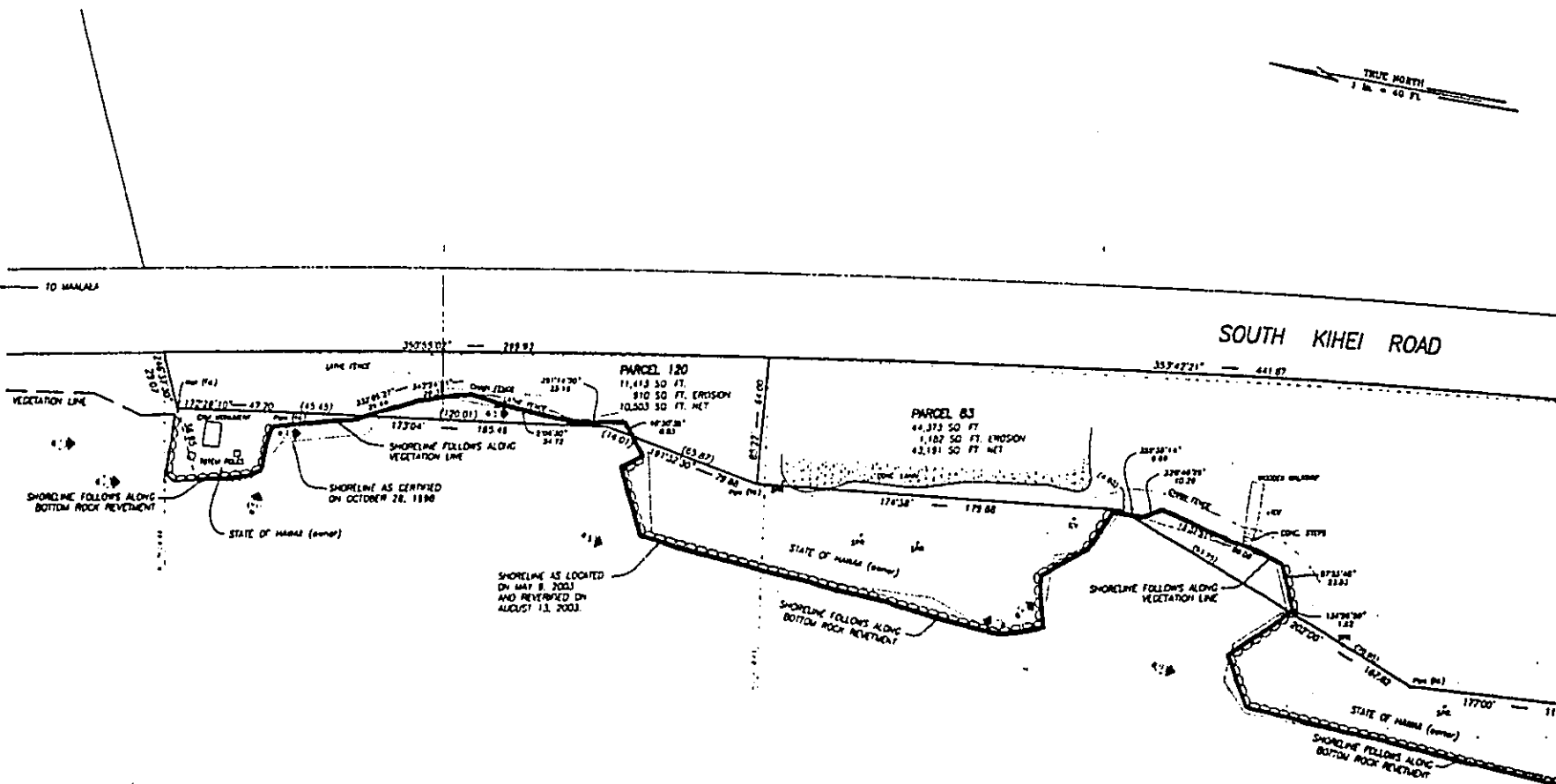
FIGURE 4

| | | |
|--|----------------|---|
| Determined by Control Point Surveying, Inc. | AUGUST 2003 |  CHRIS HART & PARTNERS |
| ASSUMED ENCROACHMENT Maui Lu Redevelopment | | |



APPENDIX I
Certified Shoreline Map

RECEIVED AS FOLLOWS



SHORELINE SURVEY
PARCELS 120, 83, AND 15
 OF TAX MAP KEY (2) 3-9-01
 BEING A PORTION OF R.P. 7447, L.C.A.W. 3237 TO H. HEWAHEWA
 KAONOULU, KIHAI, MAUI, HAWAII

Scale: 1 Inch = 40 Feet

May 20, 2003
 Rev. August 14, 2003
 Rev. October 21, 2003

Notes:

• indicates number and direction of photograph

Property owners:

PARCEL 120 AND PARCEL 83
 575 SOUTH KIHAI ROAD LLC
 5371 WILSHIRE BLVD., STE. 210
 LOS ANGELES, CA 90036

PARCEL 15
 COUNTY OF MAUI

Property Address:

PARCEL 120
 588 South Kihei Road
 Kihei, Maui, Hawaii 96753

PARCEL 83
 575 South Kihei Road
 Kihei, Maui, Hawaii 96753

PARCEL 15
 640 South Kihei Road
 Kihei, Maui, Hawaii 96753



ControlPoint Surveying, Inc.
 1128 Lower Main Street, Suite 102
 Honolulu, HI 97933

This work was prepared by me or under my supervision:
Norman K. Munsbach
 Norman K. Munsbach
 Licensed Professional Land Surveyor
 Certificate No. 13-5874, Exp. 4/04

APPENDIX J
Coastal Engineering Assessment

**Coastal Engineering Assessment for the
Maui Lu Hotel
Kihei, Maui**

February 2004

Prepared for:

Michael Wright and Associates, Inc.
P. O. Box 330784
Kahului, Hawaii 96732

Submitted by:

Sea Engineering, Inc.
Makai Research Pier
Waimanalo, Hawaii 96795

#3-33

Table of Contents

| | |
|---|----|
| 1.0 INTRODUCTION | 1 |
| 2.0 GENERAL OCEANOGRAPHIC ENVIRONMENT | 3 |
| 2.1 COASTAL SETTING | 3 |
| 2.2 WINDS | 3 |
| 2.2 WAVE CLIMATE | 5 |
| 2.4 TIDES | 5 |
| 2.5 TSUNAMIS | 6 |
| 2.6 CURRENTS AND CIRCULATION | 6 |
| 3.0 SHORELINE DESCRIPTION | 11 |
| 4.0 SHORELINE HISTORY AND PROCESSES | 17 |
| 5.0 SHORELINE ALTERNATIVES | 25 |
| 5.1 NO ACTION | 25 |
| 5.2 REMOVE STRUCTURE | 25 |
| 5.3 BEACH NOURISHMENT | 25 |
| 5.4 BEACH NOURISHMENT WITH STRUCTURES | 26 |
| 6.0 REFERENCES | 27 |

List of Figures

| | |
|--|----|
| FIGURE 1. PROJECT LOCATION, KIHAI, MAUI | 2 |
| FIGURE 2. AERIAL PHOTOGRAPH OF THE SHORELINE IN THE PROJECT VICINITY, JUNE 2000 ... | 7 |
| FIGURE 3. REGIONAL BATHYMETRY AND SEAFLOOR TYPES (FROM MAUI COASTAL ZONE ATLAS, 1979) | 8 |
| FIGURE 4. TRADEWIND PATTERN IN KIHAI (ROONEY, 2002) | 9 |
| FIGURE 5. WAVE TYPES IN HAWAII | 10 |
| FIGURE 6. PROJECT SHORELINE | 13 |
| FIGURE 7. SHORELINE PROFILES | 14 |
| FIGURE 8. SAND SAMPLES | 16 |
| FIGURE 9. VEGETATION LINE | 19 |
| FIGURE 10. SHORELINE CHANGE ANALYSIS, NORTH KIHAI, MAUI (COASTAL GEOLOGY GROUP, U.H.) ... | 20 |
| FIGURE 11. SHORELINE CHANGE ANALYSIS, KOIEIE FISHPOND TO THE HALAMA STREET GROIN (ROONEY, 2002) | 21 |
| FIGURE 12. HISTORICAL SHORELINE CHANGE ALONG THE PROJECT SHORELINE | 22 |
| FIGURE 13. HISTORICAL AERIAL PHOTOGRAPHS OF PROJECT SHORELINE, 1949 - 1997 | 22 |
| FIGURE 13. HISTORICAL AERIAL PHOTOGRAPHS OF PROJECT SHORELINE, 1949 - 1997 | 23 |

List of Tables

| | |
|--|---|
| TABLE 1. PERCENT FREQUENCY OF DEEPWATER SIGNIFICANT WAVE HEIGHT (H) VS. MEAN WAVE DIRECTION FOR KIHAI | 5 |
|--|---|

Coastal Engineering Assessment for the Maui Lu Hotel Kihei, Maui

1.0 INTRODUCTION

Renovation plans are proceeding for the Maui Lu Hotel located in Kihei, Maui. The hotel is located along South Kihei Road between Wailana Place and Kaonoulu Street (Figure 1). The majority of the hotel facilities are located on the landward (east) side of South Kihei Road. However, three buildings with guest rooms are located on a narrow strip of land on the seaward side of the road. The renovation plans include improvements and modifications to these seaside units. A Special Management Area (SMA) Development Permit is being prepared for the renovation project.

In support of the SMA permit, Sea Engineering, Inc. was contracted to complete a coastal engineering evaluation of the shoreline fronting the Maui Lu seaside buildings. Specific work tasks included the following:

- A site investigation to evaluate existing shoreline conditions and characteristics, measure beach profiles and take photographs;
- A coastal engineering assessment to characterize beach processes, assess beach erosion and accretion, evaluate shoreline impacts from existing structures, and discuss alternative actions.

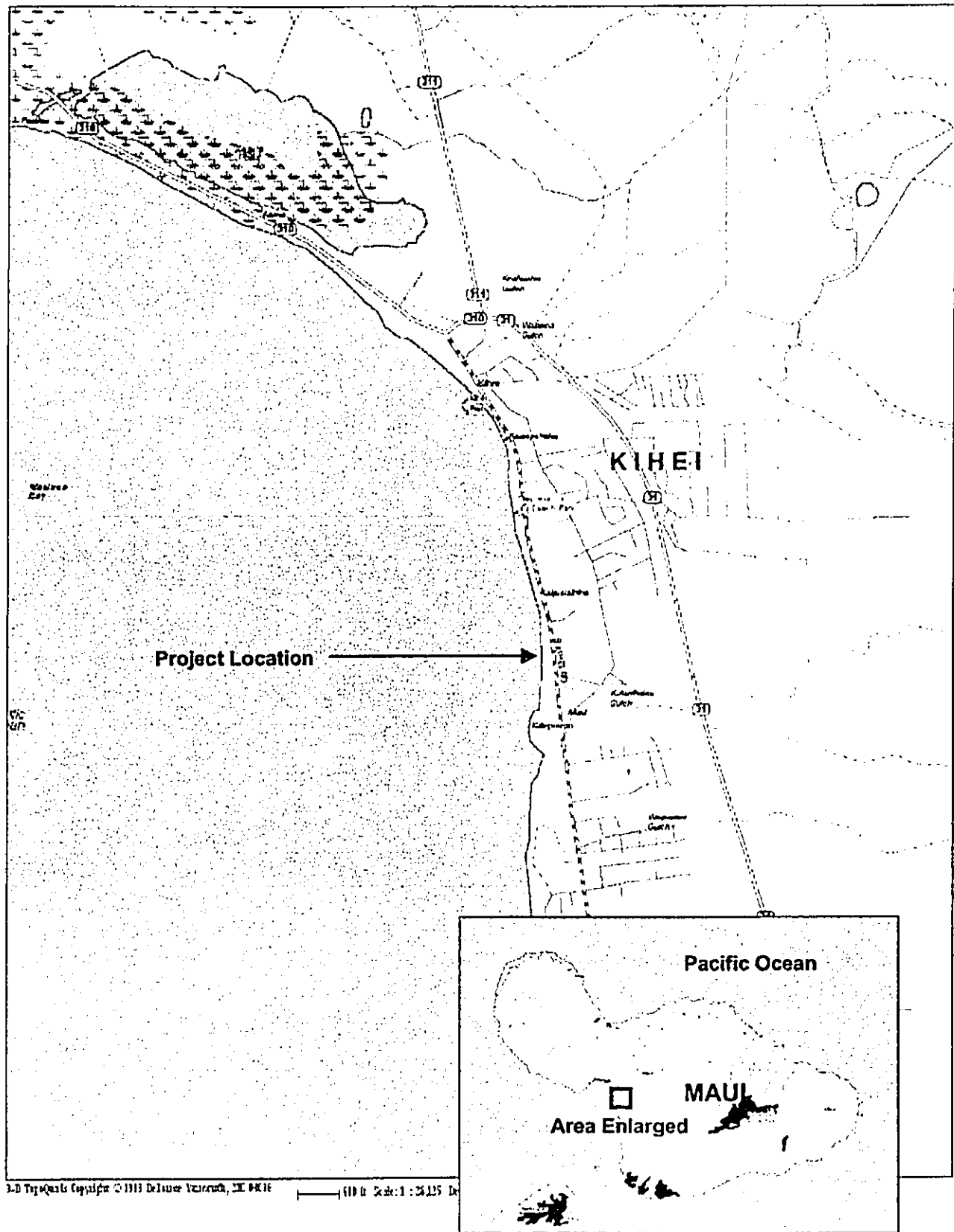


Figure 1. Project Location, Kihai, Maui

2.0 GENERAL OCEANOGRAPHIC ENVIRONMENT

2.1 Coastal Setting

The project shoreline is located at the south end of Maalaea Bay, which is formed by the neck of land connecting the volcanoes of east and west Maui. The shoreline consists of a nearly uninterrupted, curving, narrow sand beach that extends over two miles from the north end of Kealia Pond to Koieie Fishpond (Figure 2). A fringing reef about 1000 feet wide protects the shoreline in front of the Maui Lu (Figure 3). About 4000 feet to the north of the Maui Lu, in the vicinity of the old Kihei Pier, the reef tapers into the shoreline, and is not present along the shore to the north towards Maalaea Harbor. About 1000 feet to the south of the Maui Lu, the beach is segmented by the remnants of Koieie Fishpond, and the fringing reef greatly widens.

2.2 Winds

The prevailing winds in Hawaii are the northeast trade winds, which are present 80% percent of the time during the summer season from April to November, with typical wind speeds of 10 to 20 mph. During the winter months, there is a general weakening of the trade wind system and the occurrence of southerly and westerly winds (kona winds) due to frontal systems passing through the islands and local low-pressure systems. Along the Kihei coast, the typical tradewind pattern is modified by the local effects of Haleakala. As illustrated in Figure 4, the tradewinds accelerate between Haleakala and the mountains of West Maui, and upon entering Maalaea Bay, the winds bend to the south and are sucked up the slopes of Haleakala in a process known as the Maui Vortex (Rooney, 2002). Thus, the project coastline experiences tradewinds from the north to northwest that tend to develop in the late morning, peak in the mid-afternoon, and then die off in the evening.

2.2 Wave Climate

The general Hawaiian wave climate can be described by four primary wave types; northeast tradewind waves, south swell, North Pacific swell, and Kona waves. These wave types and their general approach directions are shown on Figure 5.

The study area is very well protected from the northeast tradewind waves by the island of Maui itself. The local north to northwest tradewinds have only a limited fetch, and result in only small wind chop. The project area is also well sheltered from large northwest swell by West Maui and the islands of Oahu, Lanai and Molokai.

The project area is, however, exposed to waves from the south to west directions (directional sector 165 to 310 degrees). These can be generated by Kona storms, south swell or Hurricanes. Kona waves are generated by strong winds associated with local fronts or low-pressure systems and typically have periods ranging from 6 to 13 seconds; heights can exceed 10 feet. These waves approach from the south to west, with the largest waves usually from the southwest. Deepwater wave heights during a severe Kona storm in January 1980 were about 17 feet with a period of 9 seconds.

South swell is generated by southern hemisphere storms and is most prevalent during the months of April through October. These long, low waves approach from the southeast through southwest, with periods of 12 to 20 seconds and deepwater heights of 1 to 6 feet.

Tropical cyclones originate over the warm ocean, and when the wind speed exceeds 64 knots they are considered hurricane strength. Hurricanes form near the equator, and in the central North Pacific usually move toward the west or northwest. During the primary hurricane season of July through September, hurricanes generally form off the west coast of Mexico and move westward across the Central Pacific. These storms typically pass south of the Hawaiian Islands, and sometimes have a northward curvature near the islands. Late season hurricanes follow a somewhat different track, forming south of Hawaii and moving north toward the islands. Two hurricanes have actually passed through the Hawaiian islands in the past 20 years, hurricane Iwa in 1982 and Iniki in 1992, both passing near or over the island of Kauai. These storms caused high surf and wave damage on the south and west shores of all the islands.

An analysis of deepwater wave heights (Sea Engineering, 2003) for the Kihei coast is summarized in Table 1 below. The table shows that waves from directions between 165 and 315 degrees occur only 14 percent of the time. The dominant directions within this exposure window are 290-310 degrees (5.54% frequency of occurrence) and 260-280 degrees (4.57% frequency of occurrence). The most commonly occurring deepwater wave heights are 2-2.5 m (3.49%), 1.5-2 m (2.84%) and 2.5-3 m (2.65%).

Table 1. Percent Frequency of Deepwater Significant Wave Height (H) vs. Mean Wave Direction for Kihei

| Height (Mtrs) | Mean Wave Direction (Tens of Degrees) | | | | | Total % |
|------------------|---------------------------------------|-------|-------|-------|-------|---------|
| | 17-19 | 20-22 | 23-25 | 26-28 | 29-31 | |
| 0-0.5 | 0.01 | 0.01 | 0 | 0 | 0.00 | 0.02 |
| 0.5-1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-1.5 | 0.14 | 0.14 | 0.1 | 0.11 | 0.12 | 0.61 |
| 1.5-2 | 0.72 | 0.67 | 0.31 | 0.66 | 0.48 | 2.84 |
| 2-2.5 | 0.66 | 0.56 | 0.19 | 1.19 | 0.89 | 3.49 |
| 2.5-3 | 0.17 | 0.15 | 0.07 | 1.17 | 1.09 | 2.65 |
| 3-3.5 | 0.04 | 0.03 | 0.02 | 0.72 | 1.06 | 1.87 |
| 3.5-4 | 0.01 | 0 | 0 | 0.41 | 0.71 | 1.13 |
| 4-4.5 | 0.01 | 0 | 0 | 0.17 | 0.47 | 0.65 |
| 4.5-5 | 0 | 0 | 0 | 0.08 | 0.30 | 0.38 |
| 5-5.5 | 0 | 0 | 0 | 0.03 | 0.19 | 0.22 |
| 5.5-6 | 0 | 0 | 0 | 0.01 | 0.10 | 0.11 |
| 6-6.5 | 0 | 0 | 0 | 0 | 0.06 | 0.06 |
| 6.5-7 | 0 | 0 | 0 | 0 | 0.03 | 0.03 |
| 7-7.5 | 0 | 0 | 0 | 0 | 0.02 | 0.02 |
| 7.5-8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-8.5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8.5-9 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total % | 1.75 | 1.56 | 0.7 | 4.57 | 5.54 | 14.12 |
| Average H | 2.0 | 2.0 | 1.9 | 2.7 | 3.2 | n/a |
| Maximum H | 5.8 | 4.9 | 4.0 | 6.4 | 10.1 | 10.1 |
| Std Dev H | 0.5 | 0.4 | 0.5 | 0.8 | 1.1 | n/a |

2.4 Tides

The tides in Hawaii are semi-diurnal with pronounced diurnal inequalities; i.e. two tidal cycles per day with unequal water level ranges. The mean tidal range is 1.6 feet and the diurnal range is 2.3 feet in Kihei. General tide data for the site, based on a mean lower low water (mllw) datum, is:

| | |
|------------------------|----------|
| mean higher high water | 2.3 feet |
| mean high water | 1.8 feet |
| mean sea level | 1.0 feet |
| mean low water | 0.2 feet |
| mean lower low water | 0.0 feet |

2.5 Tsunamis

The Hawaiian Islands have a history of destructive tsunami occurrences. Four significant tsunamis have occurred in recent history – 1946, 1957, 1960 and 1964. The 1946 tsunami was

generated in the Aleutian islands, and was one of the most destructive tsunamis to strike Hawaii. The water level rise at the shoreline in the project area was 9 feet (Loomis, 1976). The water level rise in Kihei during the 1957 and 1960 tsunamis was 7 and 8 feet, respectively.

2.6 Currents and Circulation

Sea Engineering (1999) conducted a long-term current measurement program at three locations in Maalaea Bay between November 26, 1996 and December 8, 1998. One station was located about 8400 feet northwest of the project site at a water depth of 60 feet (Station 2), and a second station was located about 8400 feet north-northwest of the project site at a depth of 44 feet (Station 1). Stations 1 and 2 were located about 2400 feet and 4400 feet directly offshore of the shoreline at the south end of Kealia Pond. The study results showed that the upper portion of the water column is strongly influenced by the prevailing winds, resulting in unidirectional flow and high net transport speeds. The upper 10 to 15 feet of the water column appear to be directly influenced by the wind.

By contrast, the mid-depth and near bottom currents are relatively weak. The maximum near-bottom speed measured at the two stations near the project site was 1.0 ft/sec. The average current speed at Station 2, the offshore station, was approximately 0.2 ft/sec; the average speed at Station 1, the inshore station, was 0.1 ft/sec. Currents at both Stations 1 and 2 illustrated bi-directional flow, typically associated with flow reversals due to the semidiurnal tide. Although previous research found currents in Maalaea Bay to be dominated by the wind, this study indicates that some tidal forcing is present in the near bottom layer. Current direction at these two stations was highly variable but had the highest frequency of occurrence in the northwest quadrant.

RECEIVED AS FOLLOWS

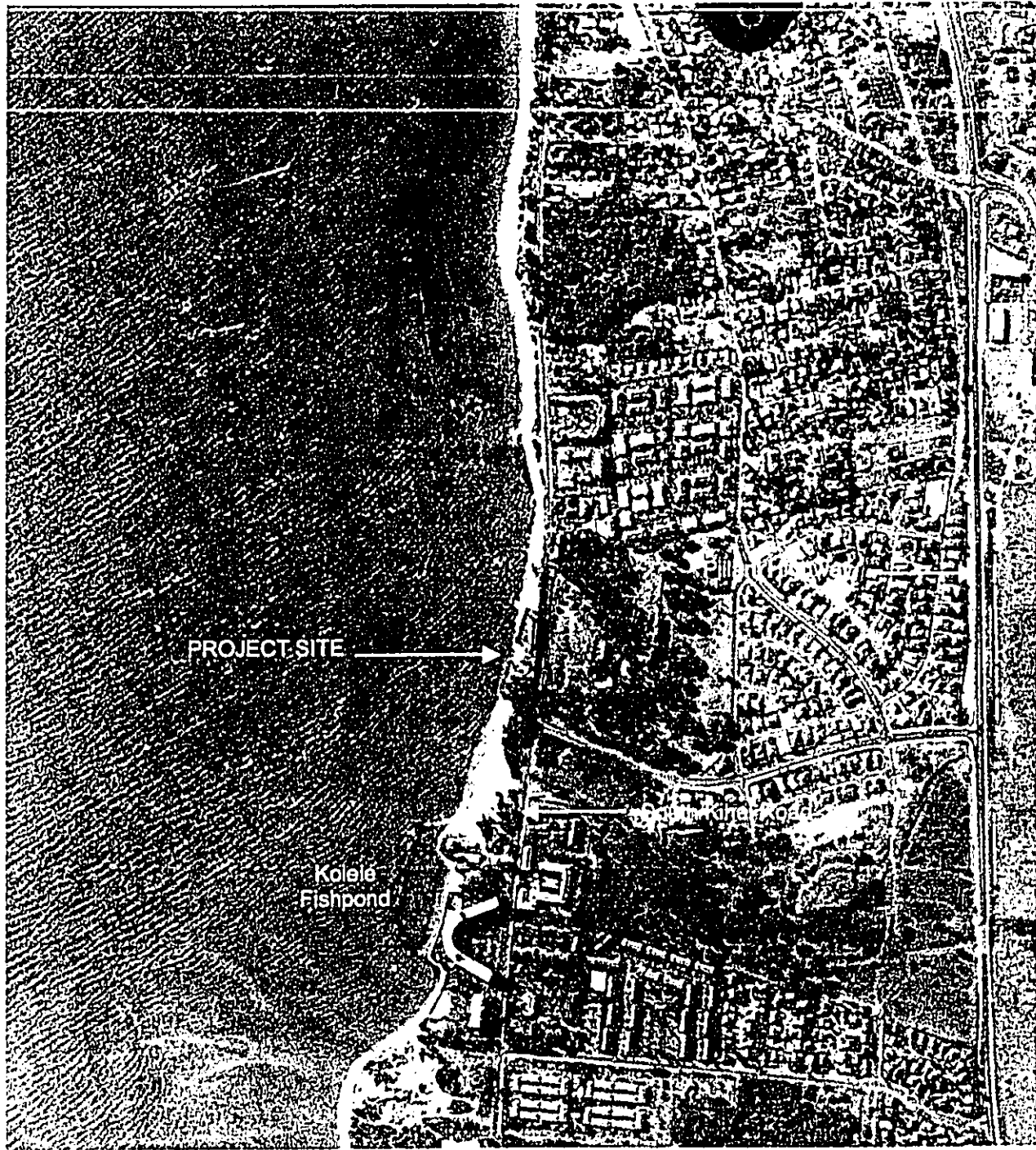


Figure 2. Aerial Photograph of the Shoreline in the Project Vicinity, June 2000

RECEIVED AS FOLLOWS

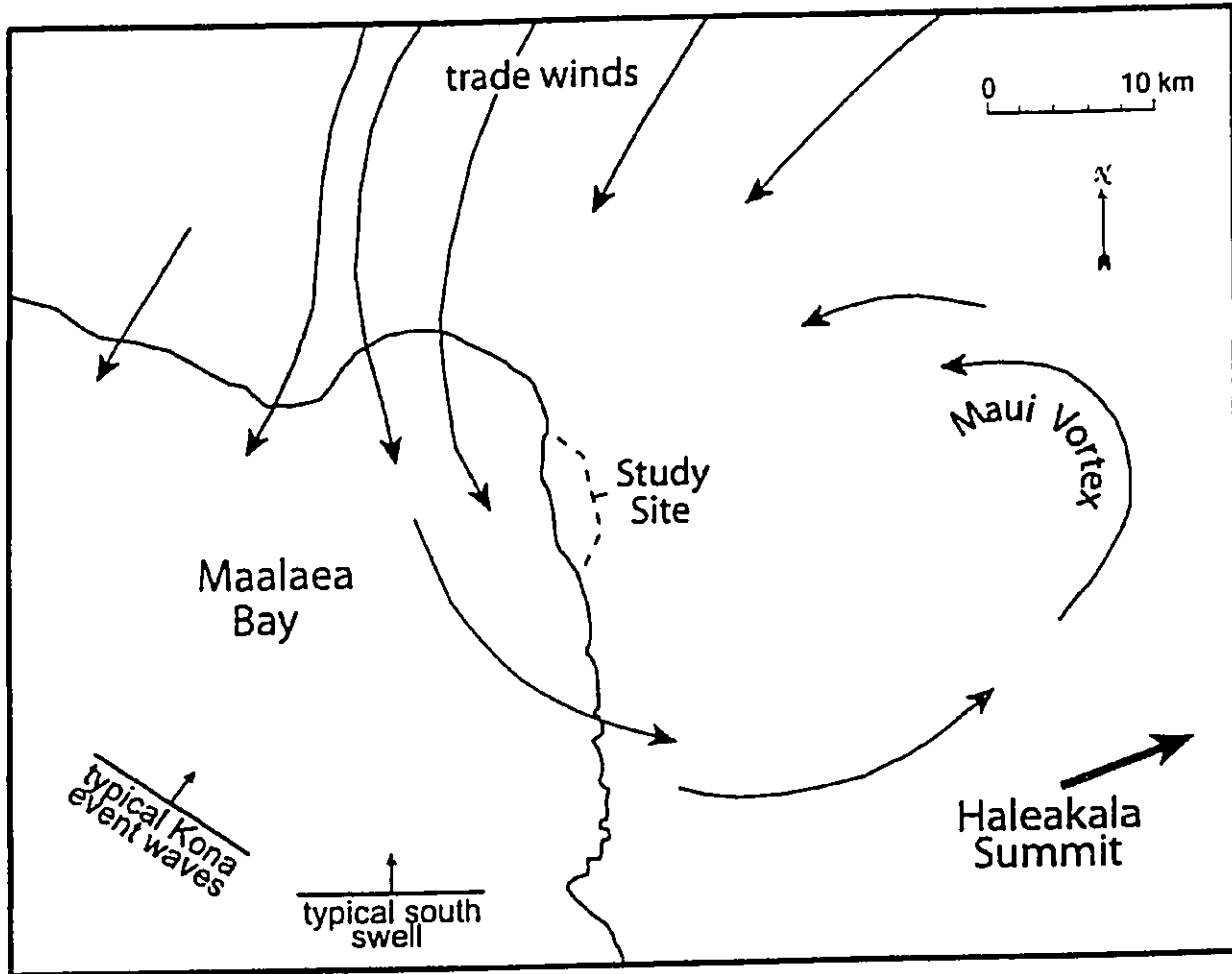


Figure 4. Tradewind Pattern in Kihei (Rooney, 2002)

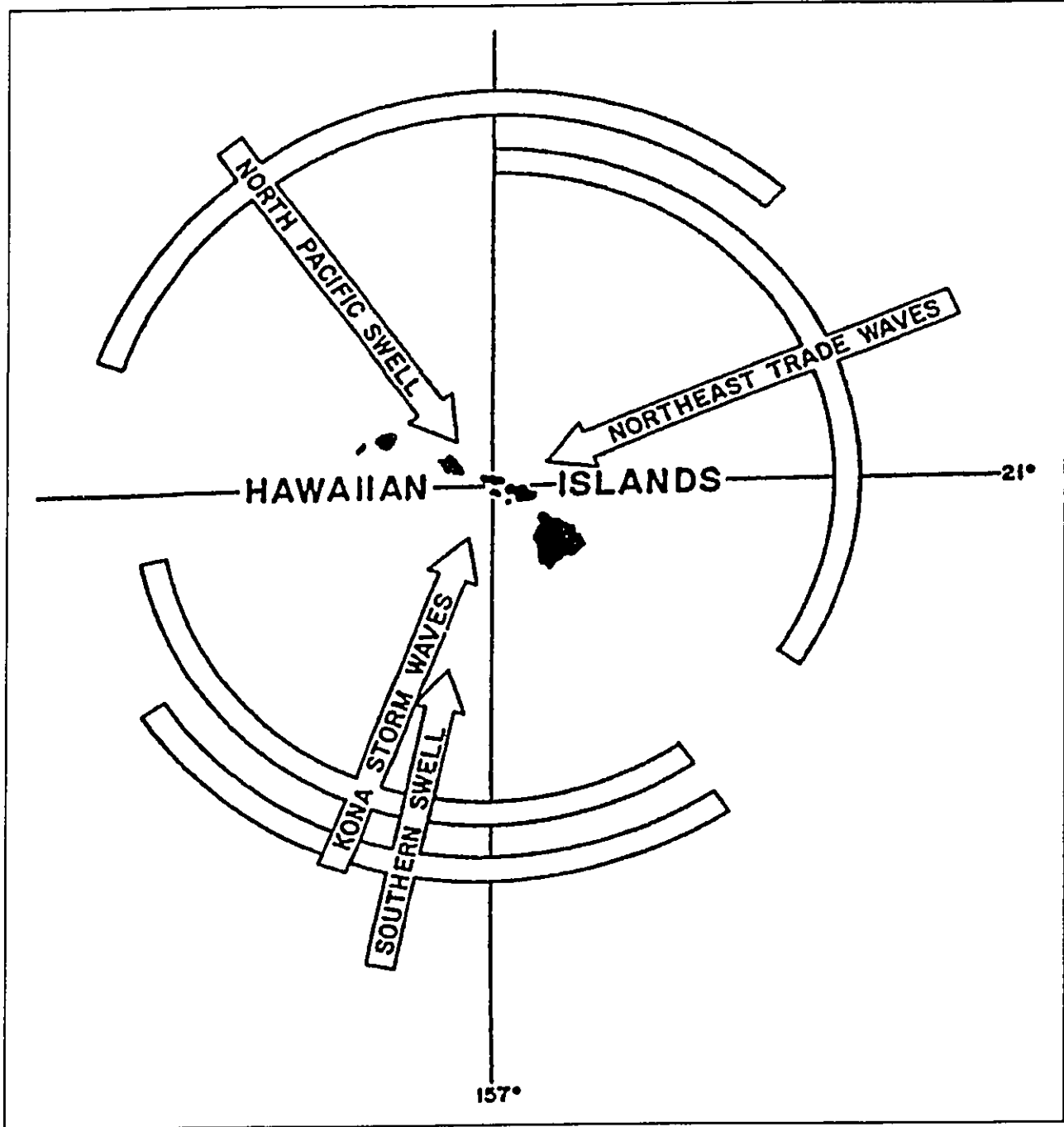


Figure 5. Wave Types in Hawaii

3.0 SHORELINE DESCRIPTION

A site investigation was conducted on August 15, 2003 to evaluate shoreline conditions, measure shoreline profiles, collect sand samples, and take representative photographs. A site plan showing the main features of the project shoreline, and profile and photo locations, is presented in Figure 6. Shoreline profiles are presented in Figure 7, and the sand samples are shown in Figure 8.

The project shoreline is 1,000 feet long and extends from the north end of the Vancouver monument to the south end of the rock revetment protecting Buildings B and C. From north to south, the shoreline consists of the following:

- Narrow sand beach north of the project area (Photo 1, Profile 5) – This beach extends nearly 2 miles north and west around Maalaea Bay. Just north of the project site, South Kihei Road is located in the immediate backshore, only 20 feet landward of the vegetation line (Profile 5). A steep, narrow, vegetated dune, rising to an elevation of about 9.5 feet, is located between the beach and road. The dune is enhanced in places by sand fences, deployed to trap wind blown sand.
- Vancouver Monument – A U-shaped, randomly-placed, boulder rock revetment about 50 feet long, with sides about 30-feet long at the north and south ends, protects the Vancouver Monument (Photo 2). The revetment is constructed from loosely piled boulders ranging in size from 0.7 to 5 feet in diameter. The ground elevation behind the revetment is 9 to 10 feet.
- Pocket beach between Vancouver Monument and Building A – A 180-foot long pocket beach is sandwiched between the revetments protecting the Vancouver Monument and Building A (Profile 4, Photos 3, 4 and 5). The vegetation line is recessed back about 40 to 50 feet relative to the seaward face of the revetments. The beach is relatively flat, sloping about 1V:14H between the elevations of +6 to -4. At the -4 elevation, the sand bottom transitions into hard, rock substrate. A sand dune about 35 feet wide, rising to an elevation of about 10 feet, separates the beach from the road. Sand fences have been installed along the backshore to trap wind blown sand (Photo 4). At the north end of the beach, adjacent to the Vancouver Monument revetment, there was evidence of some backshore erosion; there was a small scarp and coconut tree roots were exposed (Photo 3). Three sand samples were collected from this beach along Profile 4 (Figure 8). Sample 1 was collected from the mid-beach face, at an elevation of 2.5 feet, and consists of brownish-tan fine to medium grained (0.3mm) well-sorted sand. Sample 2 was collected from the water line (0 ft. elevation), and consists of poorly sorted, tan, fine to medium grained (0.4mm) sand, with a significant portion of coarse fragments. Sample 3 was collected from the -3-foot elevation, and was brown colored, well sorted and fine grained (0.2mm).
- Revetment protecting Building A – A roughly 220-foot long revetment protects Building A of the Maui Lu (Profile 3, Photo 5 and 6). The revetment is composed of loosely piled boulders ranging in size from 0.5 to 4 feet in diameter. Building A is located about 40

feet behind the revetment; a grassy lawn and concrete path lies between the revetment and the building. A sandy bottom rises to the base of the revetment, at an elevation of 1.4 feet. This sand bottom extends a further 50 feet offshore to an elevation of about -5 feet, where it transitions into hard bottom. It appears that there has been a loss or slumping of rock mass at a location along the middle of the revetment.

- Pocket beach between Buildings A and B – There is a pocket beach approximately 100 feet wide between the revetments protecting Buildings A and B (Profile 2, Photos 7 and 8). The vegetation line is recessed 70 to 80 feet from the seaward face of the revetments. As profile 2 shows, the beach slopes 1V:12H from an elevation of approximately +6 feet to -4 feet, where the sand bottom changes to rocky bottom. A grassy lawn with a 2 to 3-foot high erosion scarp cut into it separates the beach from the parking lot.
- Revetment protecting Buildings B and C – An approximately 210-foot long revetment protects Buildings B and C of the Maui Lu (Photo 6). The revetment is composed of loosely piled boulders ranging in size from 0.5 to 4 feet in diameter. Building B is located about 35 feet behind the revetment. Building C is located about 25 feet behind the revetment.
- Sand beach – A sand beach about 600 feet long extends from Building C of the Maui Lu to Koieie Fishpond (Profile 1, Photos 10 and 11). The area is known as Kalepolepo Beach and is a public park. As Profile 1 shows, the beach slopes 1V:12H from a berm crest of approximately +6 feet to -4 feet. At -4 feet, the bottom transitions from sand to mixed coral, rubble and rocks. Landward of the berm crest is a relatively flat vegetated backshore area that extends 110 feet to the road. Kulanihakai Gulch drains into the middle of the beach. There is evidence of flank erosion adjacent to the south end revetment fronting Building C. There is a 5 to 6-foot high scarp that has been protected with sand bags (Photo 10) and further inshore, tree roots are exposed and erosion scarps are visible. About 200 feet south of the revetment, there is a collection of boulders strewn across the beach face.

RECEIVED AS FOLLOWS

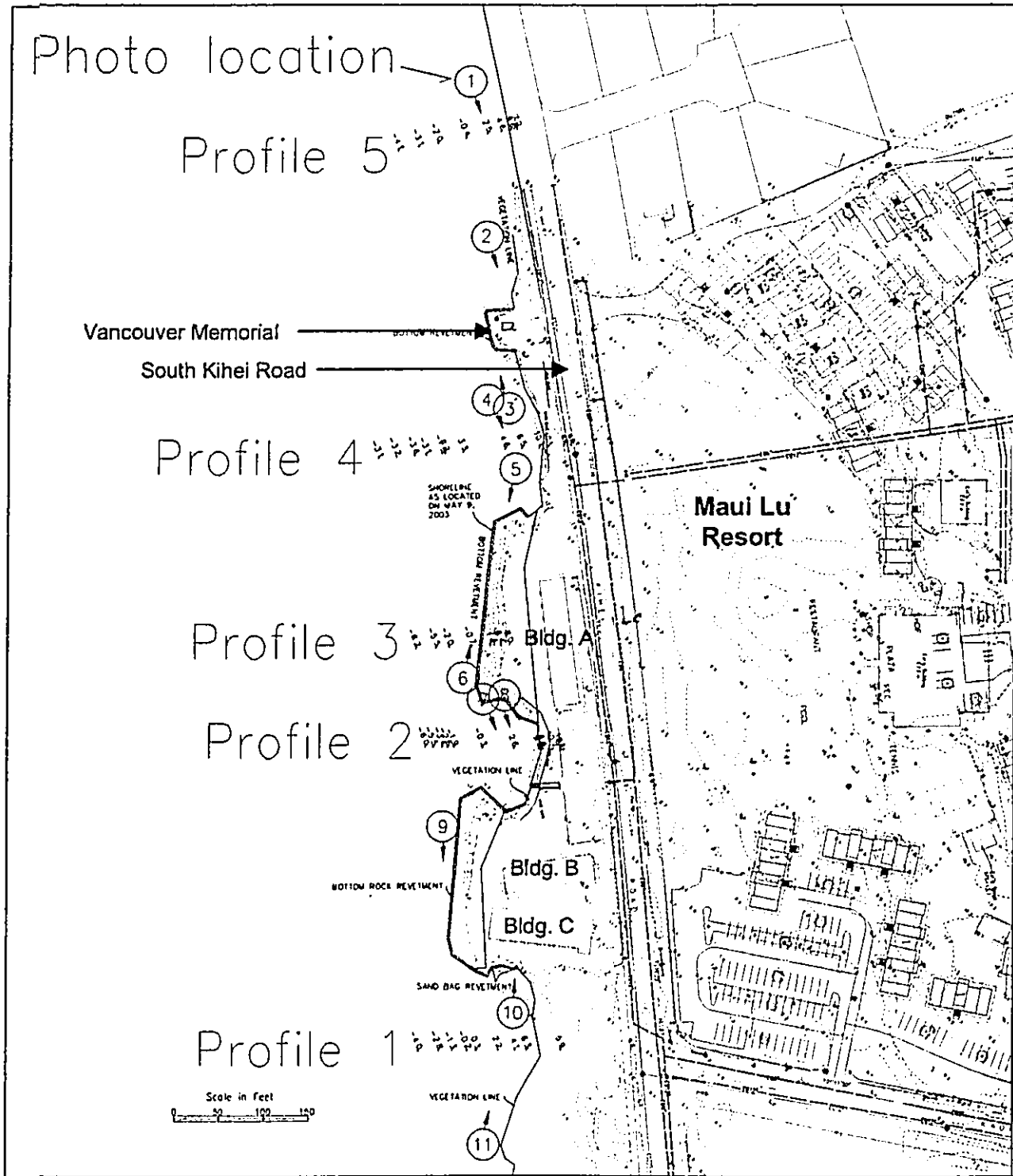
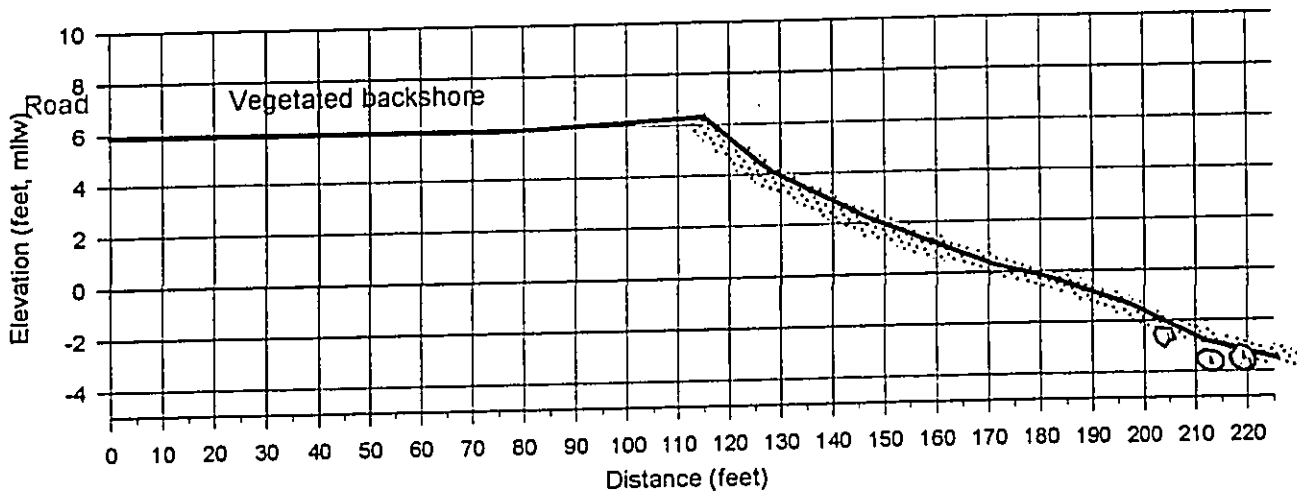


Figure 6. Project Shoreline

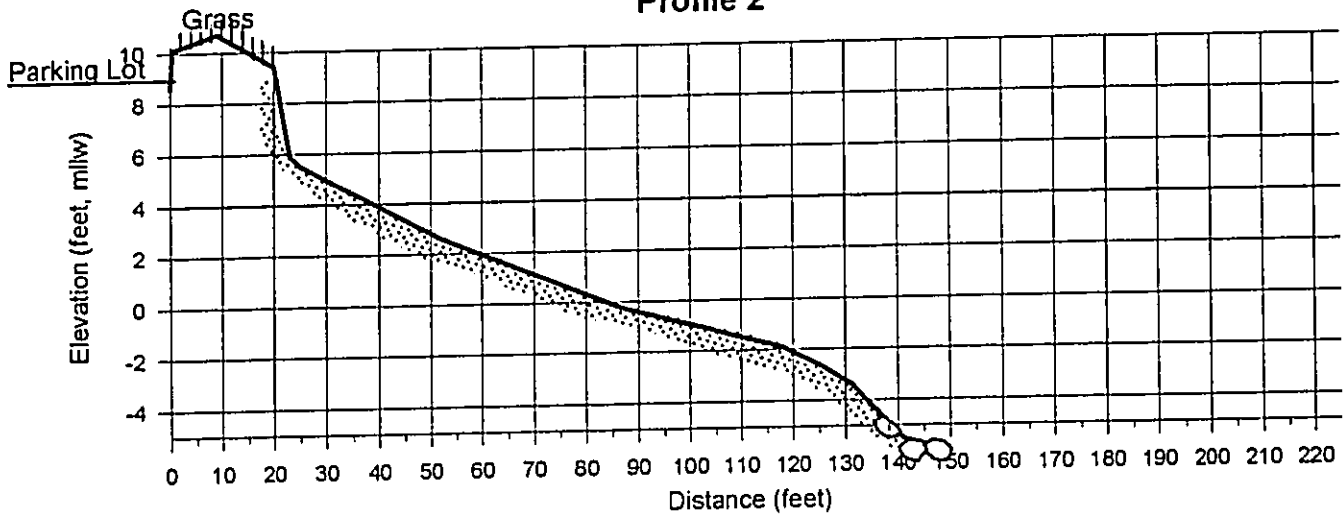
RECEIVED AS FOLLOWS

Figure 7. Shoreline Profiles

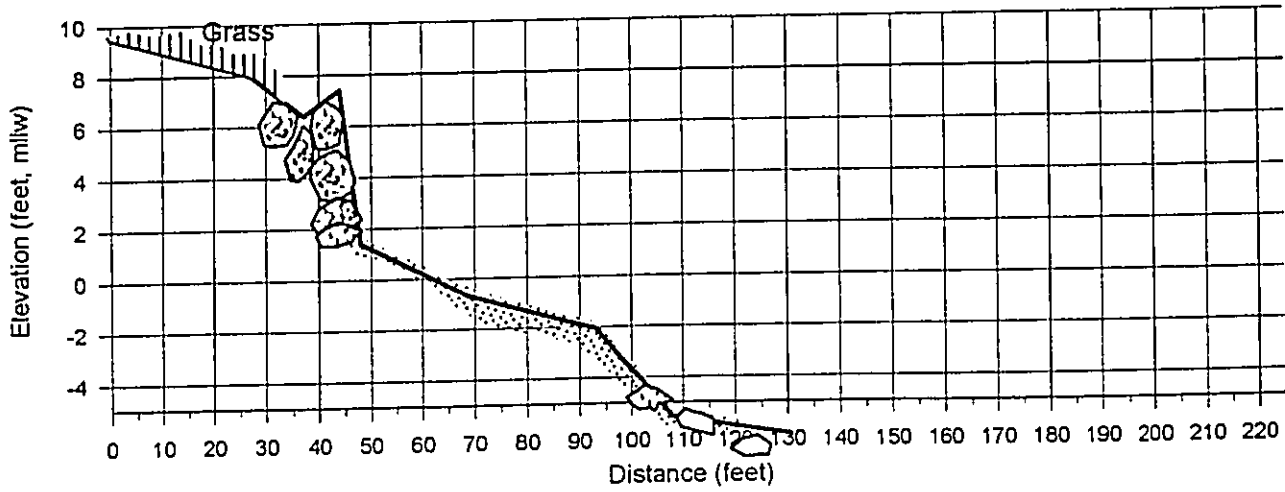
Profile 1



Profile 2

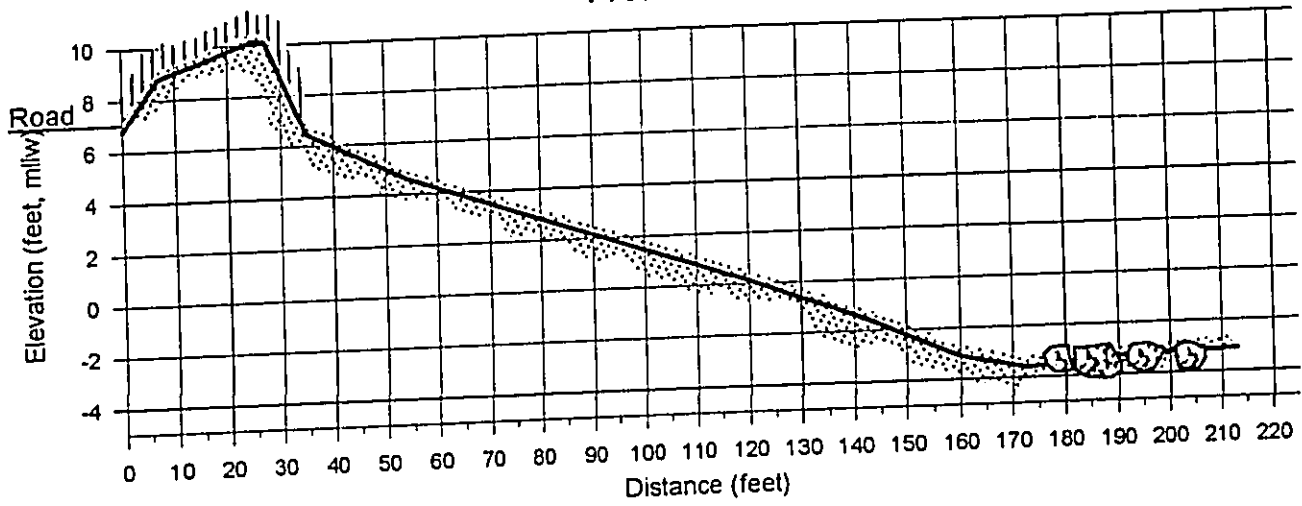


Profile 3

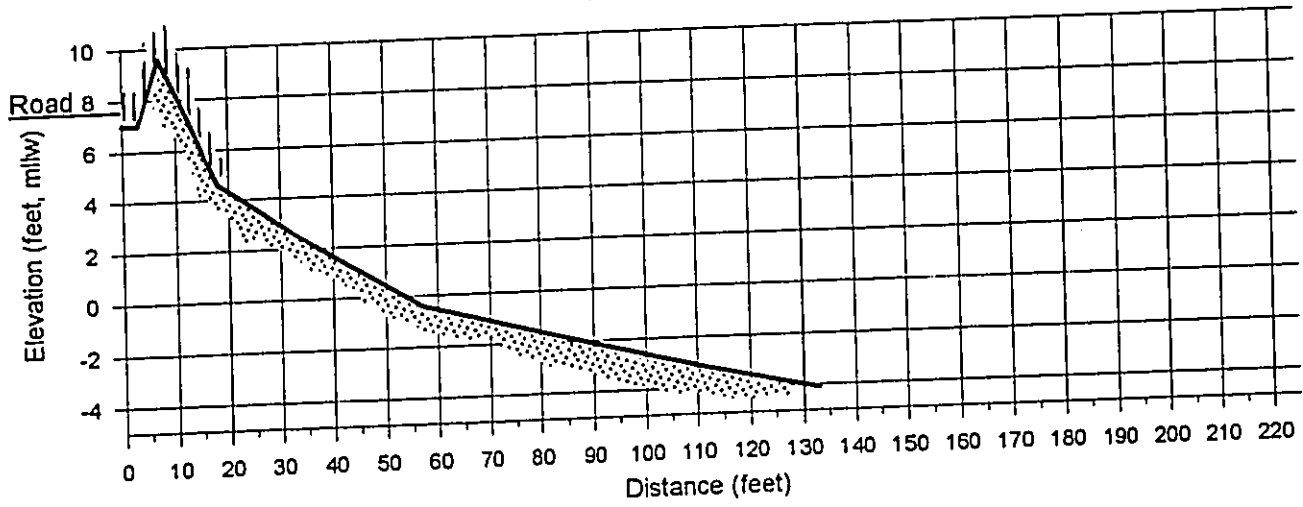


RECEIVED AS FOLLOWS

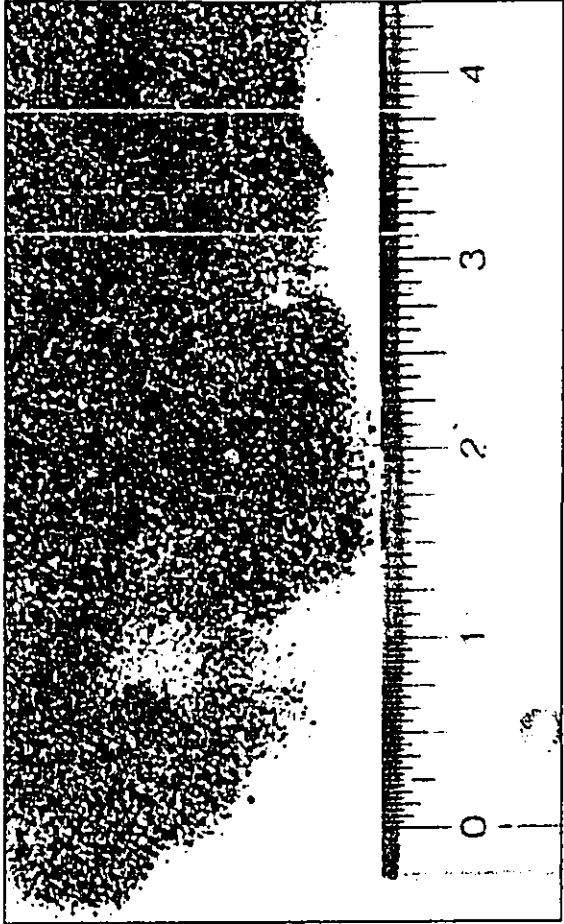
Profile 4



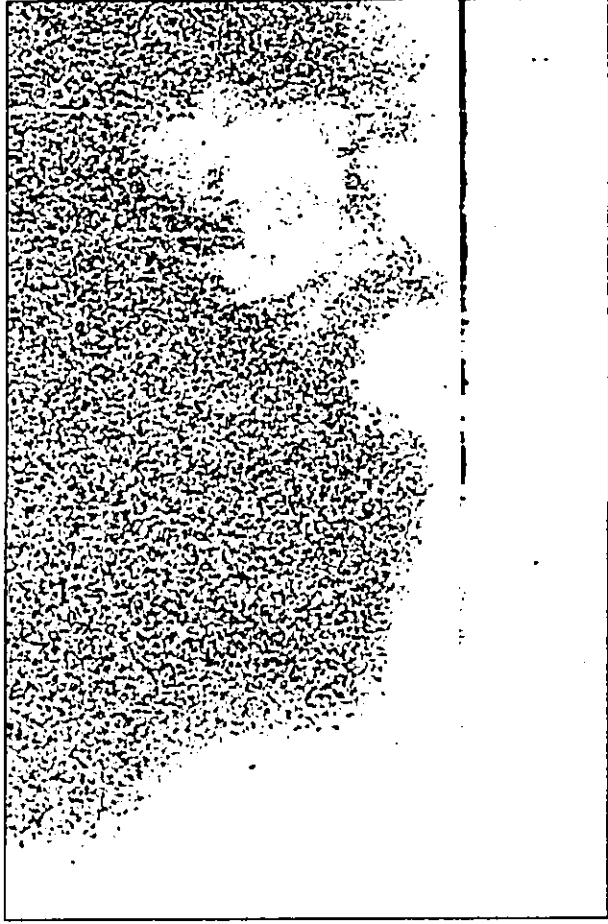
Profile 5



RECEIVED AS FOLLOWS



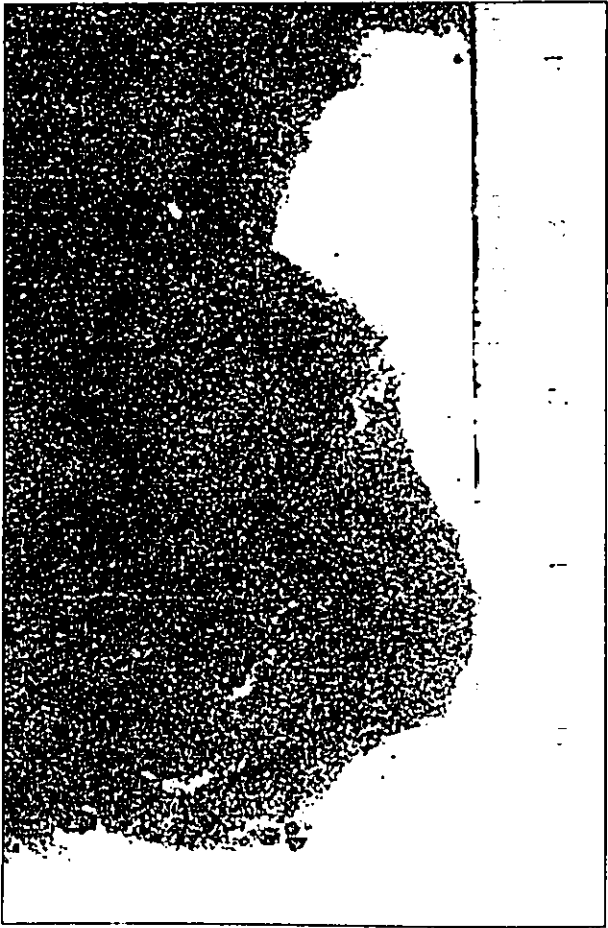
Sample 2



Sample 4



Sample 1



Sample 3

Figure 8. Sand Samples

4.0 SHORELINE HISTORY AND PROCESSES

The erosion history of the Kihei area has been analyzed with aerial photographs by Sea Engineering (1991) and by the U.H. Coastal Geology Group (2003). Both studies have shown chronic and substantial erosion along most of the shoreline between Koieie Fishpond and Maalaea Harbor. Sea Engineering digitized the vegetation line of the Kihei shoreline in aerial photographs taken in 1949, 1964, 1975, 1987 and 1988, and measured shoreline movements at discrete transects along the shoreline. The results are presented in Figure 9. At Transect 14, located about 600 feet north of the Maui Lu property, the vegetation line eroded 30 feet between 1949 and 1988. Transects 12 and 13 similarly showed 25 feet and 28 feet of erosion, respectively.

The U.H. Coastal Geology Group compared the low water mark digitized from 7 aerial photos between 1949 and 1997, and National Ocean Survey topographic survey charts from 1900. The results of this study are presented in Figures 10, 11 and 12. The project site corresponds to the area between transects 10 to 21 in Figures 10 and 12. This study also shows that the beach in the North Kihei area has had steady, moderate erosion. The average erosion rate for the shoreline in Figure 10 is -0.9 feet per year. Beach width, defined as the distance from the vegetation line to the low water mark, has also significantly decreased, an average of 28% for the sector. Figure 11, on the other hand, shows that the shoreline south of Koieie Fishpond has accreted dramatically.

Figure 13 presents the 1949, 1960, 1963, 1975, 1988, and 1997 aerial photographs used by the Coastal Geology Group study, and an additional photograph from 1967. This time series of photographs shows that in 1949, there were no structures seaward of the road in the project area. By 1960, buildings had been constructed at the location of Buildings A and C, and by 1963 rocks had been emplaced seaward of the structure at the Building C location. By 1967, rocks had been placed at the locations of all 3 revetments in the project site. By 1987, the buildings in their present form had been constructed, and an approximately 200-foot long revetment is clearly visible protecting the road about 200 feet north of the Vancouver Monument. Also visible in the 1963 photograph is a rock formation about 200 feet south of Building C that angles obliquely seaward from the shoreline. Subsequent photos show these rocks being dispersed in the local area. What remains today is a small area with boulders strewn across the beach face (Photo 11).

Figure 12 shows a large-scale view of the Coastal Geology Group analysis at the project shoreline. This figure shows that between 1900 and 1960, prior to the construction of any shoreline structures, there was significant recession of the low water mark. In the project area, between 1949 and 1960, the low water mark receded 20 to 35 feet. From 1975 to 1997, following construction of the revetments, there has been continued erosion both to the south and north of the project site. The Coastal Geology Group analysis has also shown an increasing rate of erosion to the south of Kihei Pier (Figure 10). The reasons for this are not known, but may be related to the effects of Koieie Fishpond. The shoreline immediately to the south of Koieie Fishpond has accreted significantly, while the shoreline to the north has eroded. This suggests that the fishpond may be blocking sand transport to the north.

There is little evidence of significant sand transport in Maui Lu project area. Although the revetments protrude substantially seaward, there is no evidence of sand impoundment on either side of the revetments (Figure 13). Thus, it is unlikely that these structures are substantially impacting the neighboring shorelines. Very localized, small-scale impacts are possible, and include the flank erosion occurring on the south side of Building C and the Vancouver Monument.

RECEIVED AS FOLLOWS

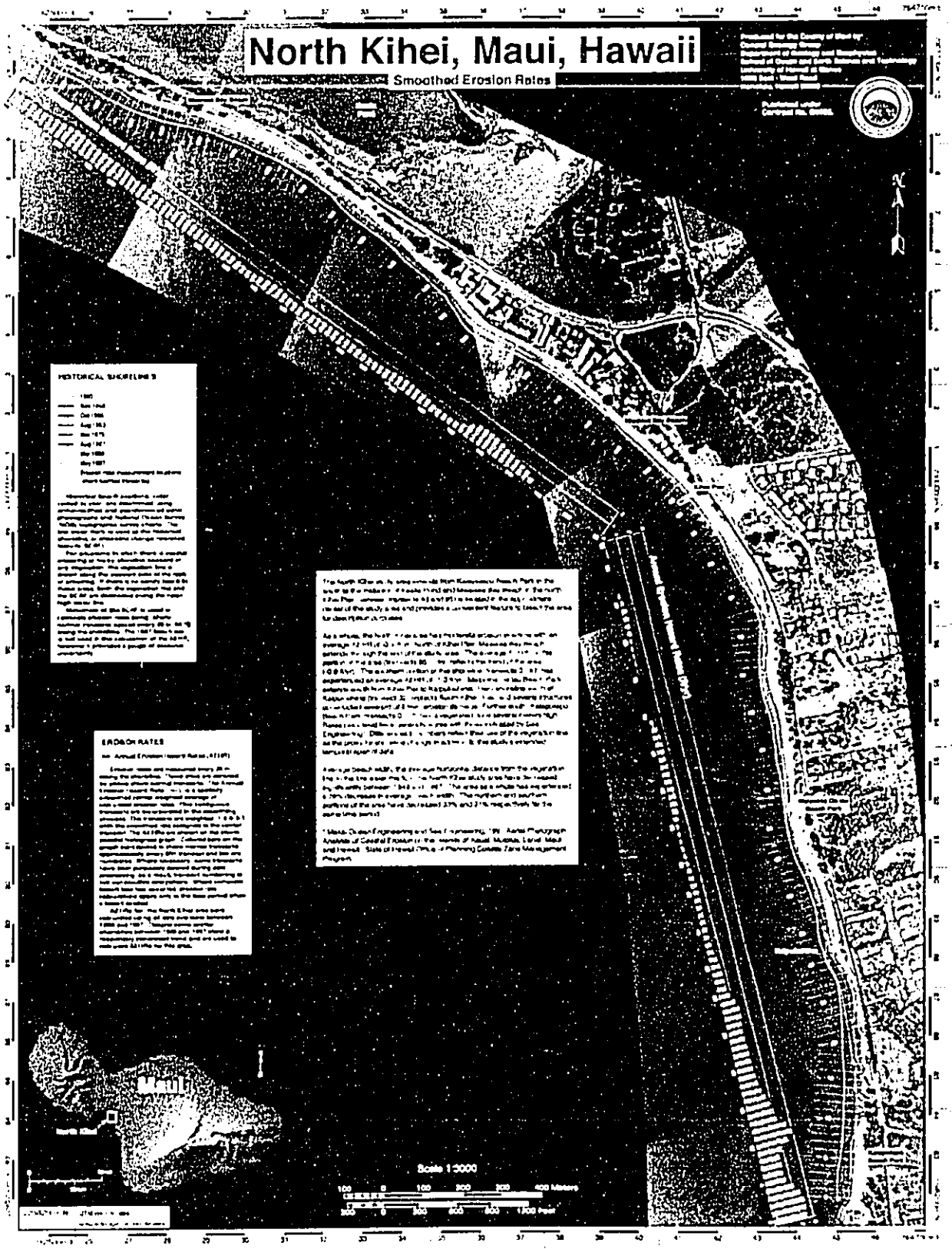


Figure 10. Shoreline Change Analysis, North Kihei, Maui (Coastal Geology Group, U.H.)

RECEIVED AS FOLLOWS

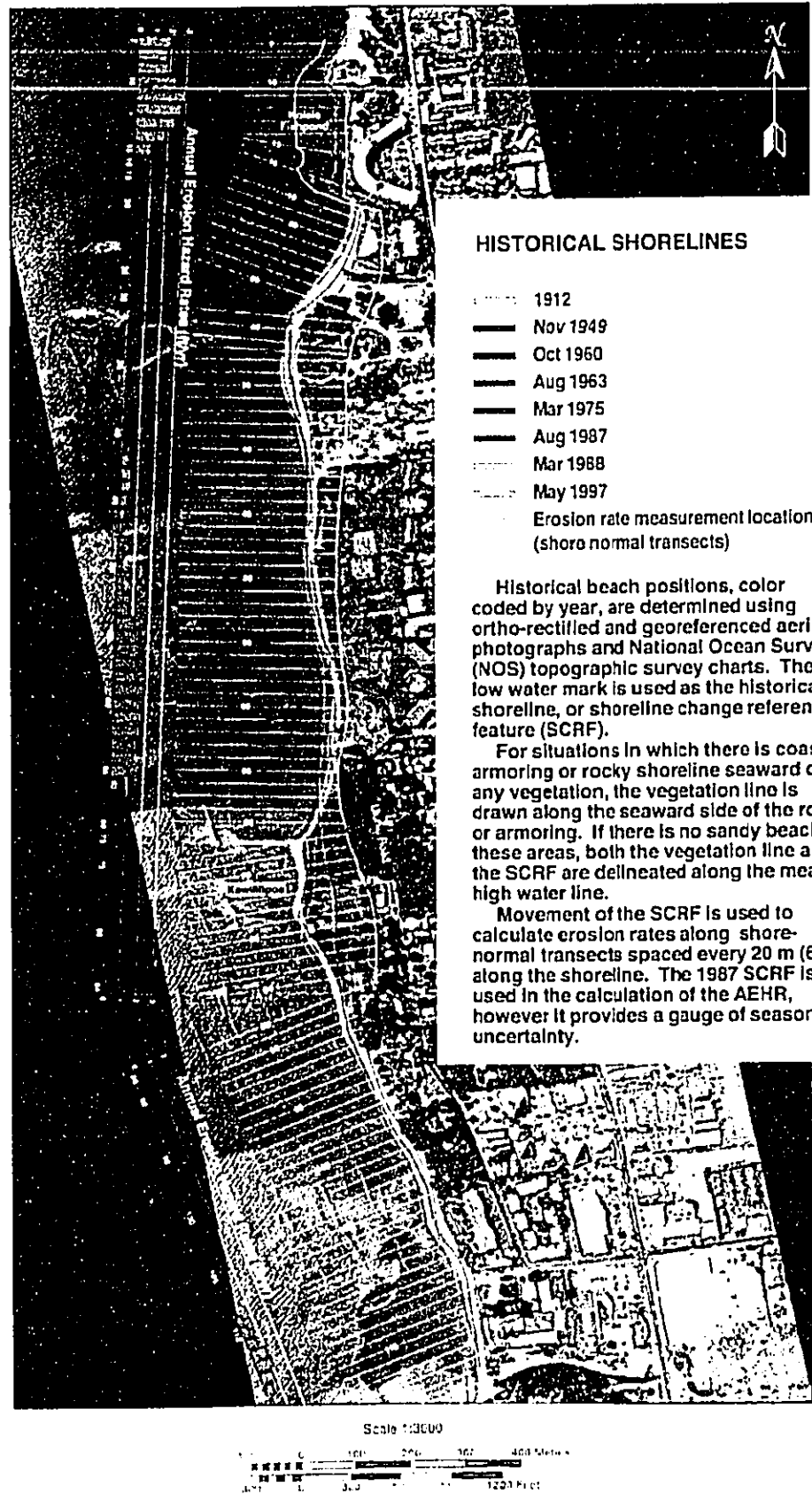


Figure 11. Shoreline Change Analysis, Koiie Fishpond to the Halama Street Groin (Rooney, 2002)

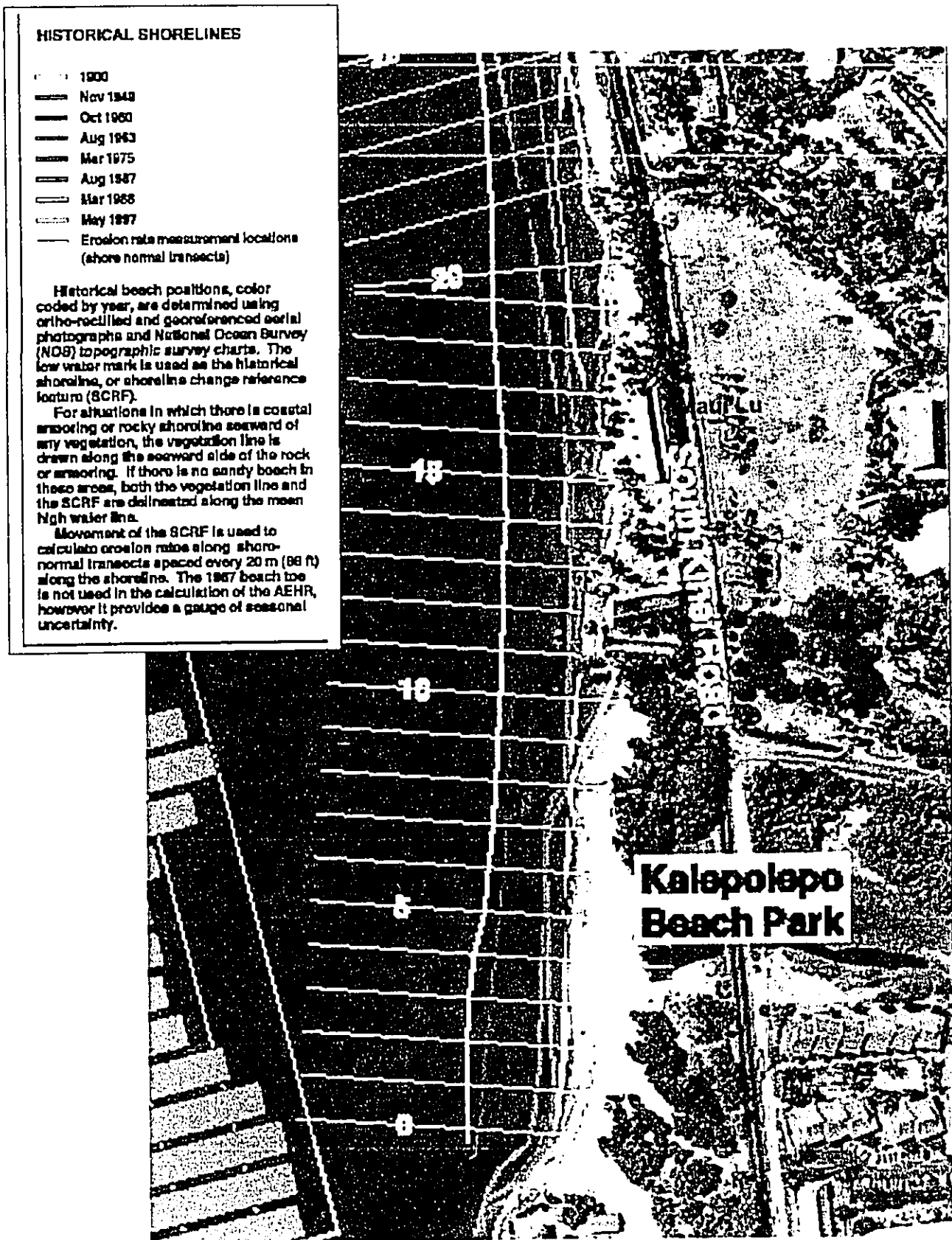
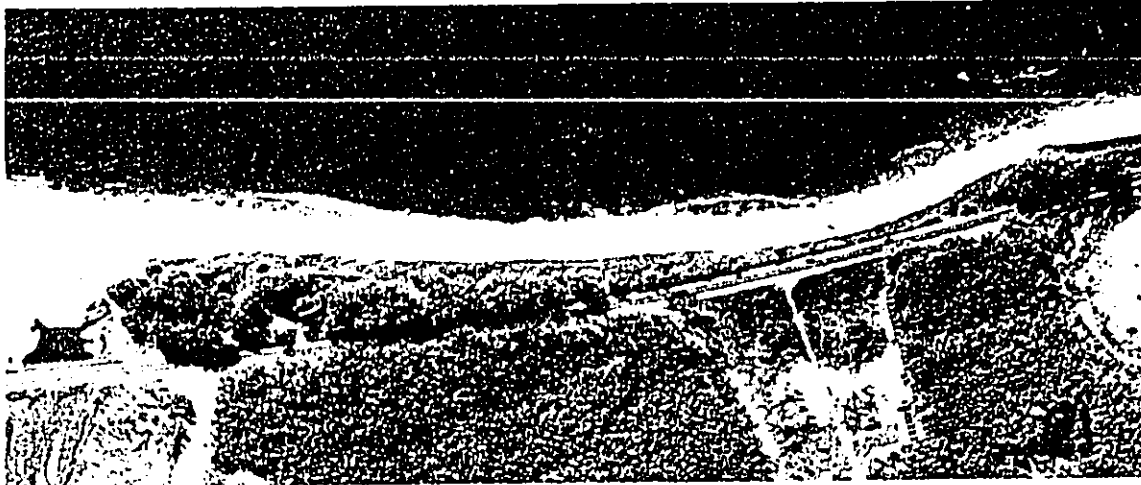


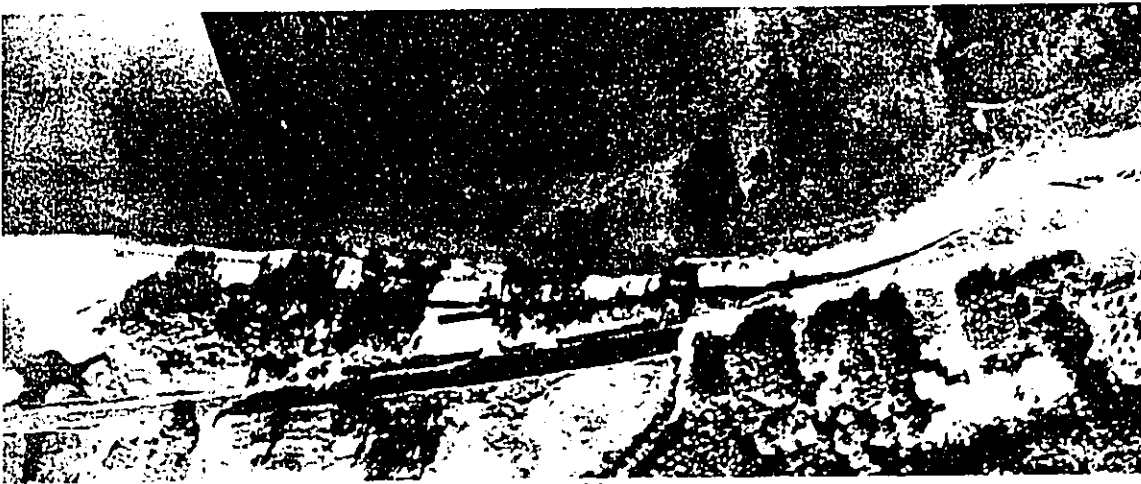
Figure 12. Historical Shoreline Change Along the Project Shoreline

RECEIVED AS FOLLOWS

Figure 13. Historical Aerial Photographs of Project Shoreline, 1949 - 1997



1949



1960



1963

RECEIVED AS FOLLOWS



1967

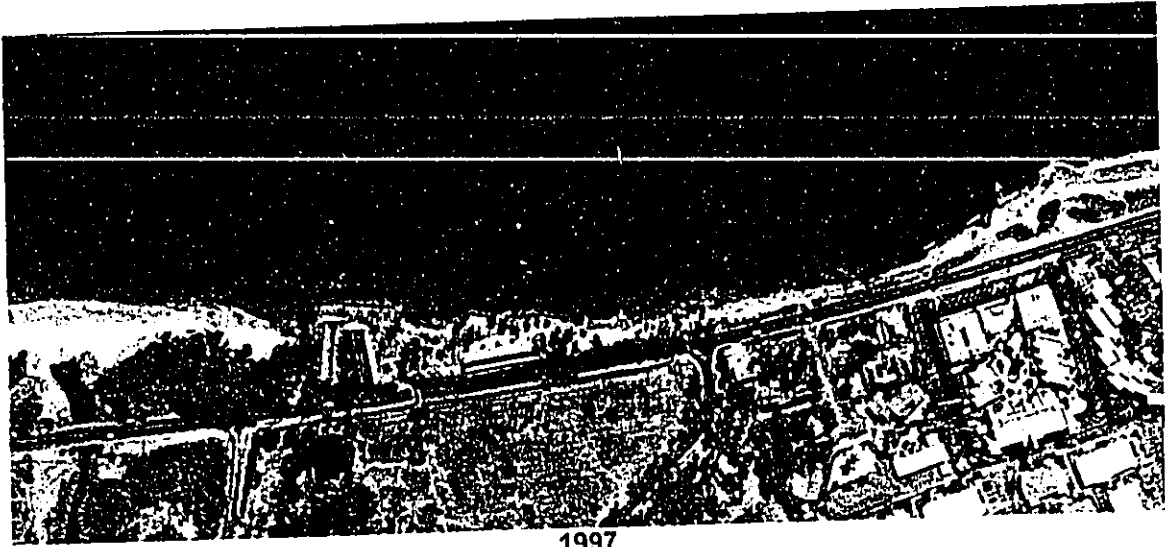


1975



1988

RECEIVED AS FOLLOWS



1997

5.0 SHORELINE ALTERNATIVES

Possible alternatives for the Maui Lu shoreline area include no action, removal of the revetments, beach nourishment and beach nourishment with structures.

5.1 No Action

The existing rock revetments have existed at the project site since before 1975. The structures appear in fair condition, and during the site investigations, there was no evidence of large-scale failure, or of rocks dispersed in the nearshore zone. In the middle of the revetment fronting Building A, there were indications of some loss of rock mass or slumping. The aerial photographic analyses and field investigation revealed no evidence that the structures have resulted in any impacts other than in the immediate local vicinity. There is evidence of flank erosion at the south end of the Building C revetment and the Vancouver Monument revetment. This flank erosion may continue, and could eventually result in property loss or damage.

5.2 Remove Structure

Removing the rock structures is an alternative that would have immediate negative impacts both to the property owner and the coastal environment. If the protective rocks were removed, the remaining land would be subject to steady erosion that would continue until the shoreline was relatively straight. The final position of this shoreline can be estimated by connecting the water line or vegetation line positions north and south of the structures. This shoreline would likely be underneath the seaward ends of Buildings B and C and at the seaward edge of Building A. Several thousand cubic yards of fill material of unknown composition lying landward of the rocks would be eroded and released into the water and nearshore reef, and could result in a long term turbidity and siltation problem. In summary, removal of the structures would result in erosion of the land behind the rocks, release of this material into the water and nearshore reef, and could result in undermining and damage to the Maui Lu buildings.

5.3 Beach Nourishment

Beach nourishment without retaining structures was evaluated as a possible improvement alternative for this shoreline. Beach nourishment entails placing quantities of sand on a beach to widen the beach and extend the beach profile seaward. If properly designed and constructed, beach nourishment can be an effective means of beach improvement and shore protection. Small scale nourishment of the pocket beach between Buildings A and B would require at least 900 cubic yards to widen the beach by 20 feet. Nourishment of the portion the beach experiencing erosion immediately south of Building C would entail at least 1500 cubic yards of sand to build the beach out 40 feet at the revetment, tapering to 0 feet approximately 200 feet to the south. However, without retaining structures that change the ongoing erosive process, the added sand will erode, and the shoreline will eventually return to the existing condition. The rate of erosion is not certain. A beach nourishment effort of this type would require planning for frequent renourishment to maintain the desired beach profile.

5.4 Beach Nourishment with Structures

The beach nourishment described above could be designed to be stable with the use of retaining structures. These structures would most likely be groin-type structures extending out from the existing revetments. T-head groin type structures have been used with proven success in Florida, the Gulf Coast and the Caribbean to construct stable beach nourishment projects. At the pocket beach between Buildings A and B, for example, two short groins extending obliquely seaward from the revetments on either side could effectively narrow the opening to the pocket beach, reduce wave energy impacting the beach, alter wave diffraction patterns, and thereby result in a stable nourished beach. Similarly, a groin extending to the southwest off the south end of the revetment in front of Building C could be designed to alter wave diffraction patterns and produce a stable nourished beach. The orientation, shape, height and length of such structures would require more detailed engineering design. The permit process for this type of project could be lengthy and complex.

6.0 REFERENCES

- AECOS, Inc., 1979; *Maui Coastal Zone Atlas representing the Hawaii Coral Reef Inventory, Island of Maui (MICRI), Part C*; produced for the U.S. Army Corps of Engineers, Pacific Ocean Division, Fort Shafter, Hawaii.
- Makai Ocean Engineering, Inc. and Sea Engineering, Inc., 1991; *Aerial Photograph Analysis of Coastal Erosion on the Islands of Kauai, Molokai, Lanai, Maui and Hawaii*; prepared for the State of Hawaii, Office of State Planning, Coastal Zone Management Program.
- Marine Advisors, Inc., 1964; *Characteristics of Deep-Water Waves in the Oahu Area for a Typical Year*; prepared for the Board of Harbor Commissioners, State of Hawaii.
- Rooney, John J. B., 2002; *A Century of Shoreline Change Along the Kihei Coast of Maui, Hawaii*, dissertation for the degree of doctor of philosophy in geology and geophysics at the University of Hawaii.
- Sea Engineering, Inc., 1986; *Coastal Engineering Evaluation and Marine Biological Assessment for Kaanapali North Beach, Maui, Hawaii*; prepared for Dames & Moore, Honolulu, Hawaii.
- U. H. Coastal Geology Group, 2003; *Maui Shoreline Atlas*; prepared for County of Maui, Contract No. G0605.

RECEIVED AS FOLLOWS

PHOTOGRAPHS

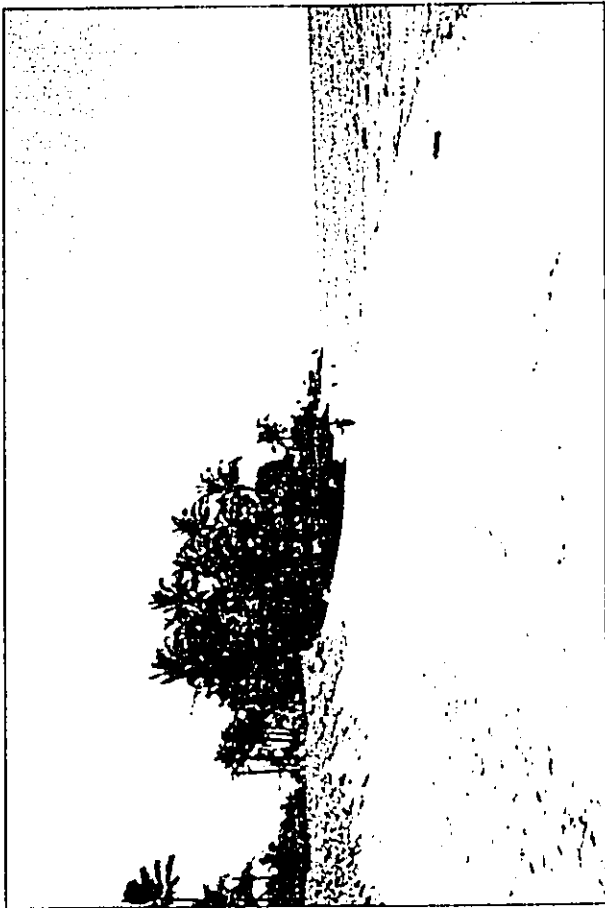


Photo 1



Photo 2



Photo 3



Photo 4

RECEIVED AS FOLLOWS

PHOTOGRAPHS

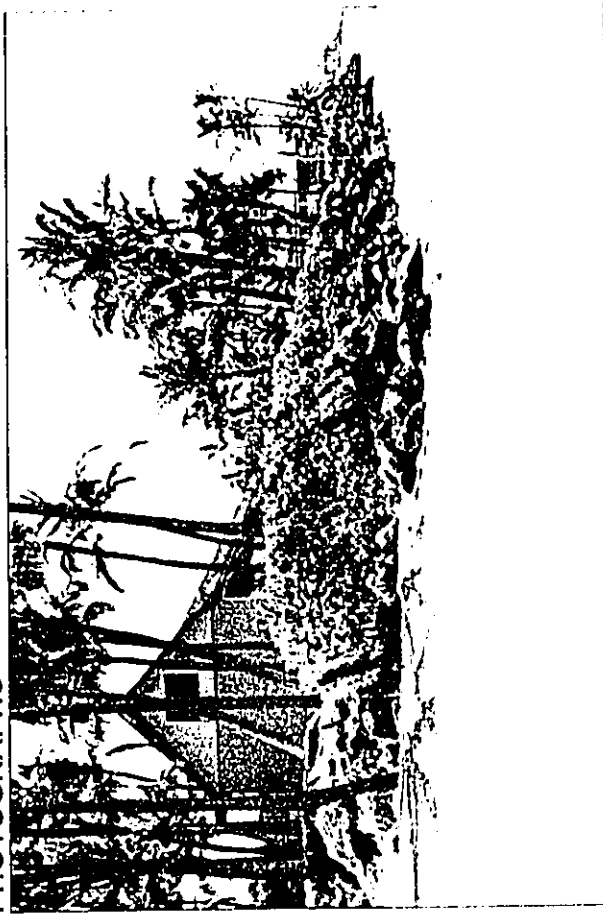


Photo 5



Photo 6



Photo 7

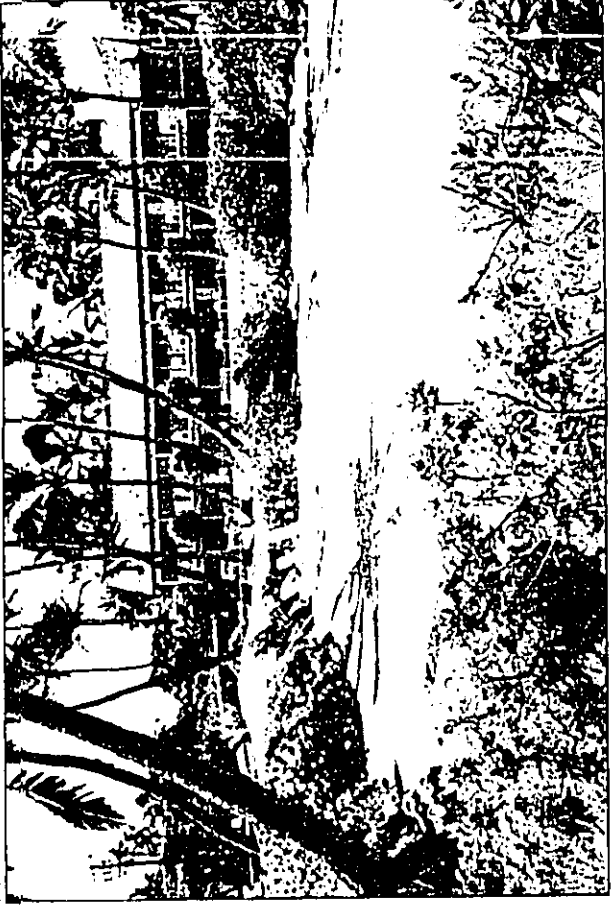


Photo 8

RECEIVED AS FOLLOWS

PHOTOGRAPHS



Photo 9



Photo 10



Photo 11

APPENDIX K
Pre-Consultation Documents

Jan-26-2004 09:50am From-MANCINI WELCH & GEIGER LLP

8082700259

T-771 P.002/003 F-227

PAUL R. MANCINI
THOMAS D. WELCH, JR.
JAMES W. GEIGER

MANCINI, WELCH & GEIGER LLP
A LIMITED LIABILITY LAW PARTNERSHIP

THE KAHULUI BUILDING
33 LONO AVE., SUITE 470
KAHULUI, HAWAII
96732-1681

COUNSEL
ROSALYN LOOMIS
PETER A. HOROVITZ

TELEPHONE
(808) 871-4351

ALAW CORPORATION

FACSIMILE
(808) 871-0732

January 7, 2004

VIA FACSIMILE—(808) 587-0433

Mr. Sam Lemmo
State of Hawaii
Department of Land and Natural Resources
Planning Section
P.O. Box 621
Honolulu, Hawaii 96809

RE: Encroachments Maui Lu Property TMK: (2) 3-9-01, Parcels 120 and 83

Dear Sam:

This is a follow up to our telephone conference of December 22, 2003 concerning the above referenced encroachment.

I've attached to this letter a report previously issued referencing a chronology of the encroachment and also a copy of the current shoreline certification approved on October 27, 2003 by the chairman of the Board of Land & Natural Resources.

The history of the property reflects that majority of the current encroachments were initially on private property. An agreed shoreline certification in the 70's then located the encroachments on public property. Currently the encroachments are mauka of the certified shoreline.

As discussed, the owner wishes to pursue an easement before the Board of Land & Natural Resources concerning the encroachments. We are in the process of expanding the attached report to provide a series of options to address the shoreline processes, enhanced and improved public access, as well as a potential beach nourishment program. We expect to have the revised report completed within 90 days. At that time we wish to meet with you to discuss the options and to identify procedures to obtain a hearing before the Board to present the options.

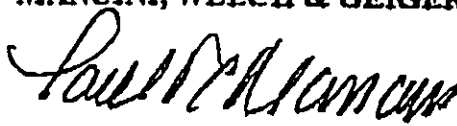
80325 prn

Mr. Sam Lemmo
January 7, 2004
Page 2

If you have any questions, please contact me at your convenience.

Very truly yours,

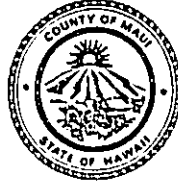
MANCINI, WELCH & GEIGER, LLP



Paul R. Mancini

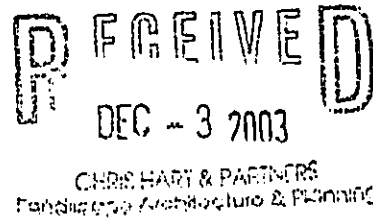
PRM:ta
Enclosure
cc: Greg Schneider

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



COUNTY OF MAUI
DEPARTMENT OF PLANNING

December 1, 2003



Mr. Raymond Cabebe
Chris Hart and Partners
1955 Main Street, Suite 201
Wailuku, Hawaii 96793

Dear Mr. Cabebe:

RE: Draft Environmental Assessment for Maui Lu Redevelopment Project
Located at TMK 3-9-001: 083, 086, and 120, 575 South Kihei Road,
Kihei, Hawaii (EA 2003/0008)

The Maui Planning Department (Department) received the above referenced document on October 17, 2003, and requires the following revisions and/or additions to the report prior to transmittal:

1. Introduction, Section I

a. Project Overview, Section I.B

Identify the approving agency.

b. Major Land Use, Development, and Construction Approvals, Section I.C

Additional permit approvals include a Flood Development Permit, and a Well Development/Installation Permit, if previously not obtained.

In addition, the unauthorized revetments discussed in Section VI.E.10 of the report require the following permits and approvals (refer to Item #5 below):

- i. Compliance with Chapter 343, HRS, Environmental Impact Statements;
- ii. State Conservation District Use Permit and Perpetual Non-Exclusive Easement; and

Mr. Raymond Cabebe
December 1, 2003
Page 2

- iii. County Shoreline Setback Variance and Special Management Area Use Permit.

2. **Pre-consultation, Section II**

Include hard copies of the comments received by agencies and community groups obtained during the pre-consultation phase.

3. **Description of the Proposed Request, Section IV**

a. Alternatives, Section IV.A

Include a discussion of the following alternatives:

- i. Lesser densities on both the mauka and makai parcels.
- ii. Redeveloping the mauka parcel only and leaving the makai parcel vacant and absent of structures.
- iii. Alternative traffic calming measures.
- iv. Alternatives to the existing boulder revetments (refer to Item #5a below), such as a beach nourishment project.

4. **Environmental Setting, Impacts, and Mitigation Measures, Section V**

a. Flora and Fauna, Section V.A.5

Section III of the report describes the mauka property as "...a predominantly park-like setting with mature specimen large crown shade trees, palms and open lawns..."

The objectives and policies of the Kihei-Makena Community Plan states the following:

"Recommend to the Maui County Arborist Committee for consideration as 'Exceptional Trees' all trees, or groves of trees, that have historic or cultural value, represent an important community resource, or are exceptional by reason of age, rarity, location, size, aesthetic quality, or endemic qualities. Healthy mature trees shall be saved and incorporated in the landscape plans of subdivisions, roads, or any other construction or development."

Identify any "exceptional trees" on the properties. Discuss the impacts from the proposed redevelopment. Identify and characterize trees proposed for removal.

b. Air Quality, Section V.A.6

Section III of the report states that the resort was originally constructed in the early 1960s. Based on this date, asbestos, lead-based paint, and arsenic-containing building materials may be present in the structures. Discuss potential impacts and proposed mitigative measures relating to air quality and waste management.

c. Infrastructure - Water, Section V.D.3

The report indicates an existing non-potable well is located on the property and used for irrigation. Previous testing has been conducted indicating adequate capacity for the proposed landscape irrigation, and additional testing is currently being conducted to verify the well's sustainable yield. Include and discuss the test results for both sampling periods.

Discuss the status of permits and/or approvals for the construction and installation of the existing well.

c. Infrastructure - Roadways and Traffic, Section V.D.1

Provide the projected Level of Service (LOS) for project entrances without and with the project.

d. Infrastructure - Electrical, Telephone, Cable, and Data Systems, Section V.D.5

Identify and discuss energy efficient measures incorporated into the project.

5. **Relationship to Government Plans, Policies, and Controls, Section VI**

a. Special Management Area Objectives and Policies, Beach Protection, Section VI.E.10

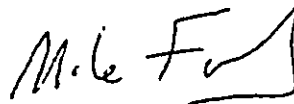
The existing boulder revetments require the permits and approvals listed in Item #1b above, including compliance with Chapter 343, HRS, relating to Environmental Impact

Mr. Raymond Cabebe
December 1, 2003
Page 4

Statements. As such and in accordance with Section 11-200-7, HAR, the scope of this Draft EA should be revised to include the existing boulder revetments, impacts to beach processes, and alternatives (refer to Item #3a above).

If additional clarification is required, please contact Ms. Kivette A. Caigoy, Staff Planner, of the Maui Planning Department at 270-7735.

Sincerely,



MICHAEL W. FOLEY
Planning Director

MWF:KAC:lar

c: Wayne A. Boteilho, Deputy Planning Director
Clayton I. Yoshida, AICP, Planning Program Administrator
Kivette A. Caigoy, Staff Planner
Joe Alueña, Staff Planner
Matt Niles, Staff Planner
Project File
General File
K:\WP_DOCS\PLANNING\EA\2003\0008_MauiLuRedevelop\DraftEAComments_1.wpd



December 4, 2003

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

Attention: Mr. Edwin Okubo, Housing Coordinator

Re: Affordable Housing Requirement for Re-Development of the Existing Maui Lu Resort at TMK 3-9-01: 83, 86 & 120 Kihei, Maui, Hawaii.

Dear Ms. Lee:

Thank you for the opportunity to meet with yourself and Mr. Edwin Okubo, Housing Administrator on October 14, 2003. I appreciated the opportunity to discuss the details of your letter dated September 23, 2003 concerning the disposition of "lock-off" units and the calculation of existing and "new" short-term rental units.

As you know, our firm has been retained to prepare and file the Environmental Assessment (EA) and Special Management Area (SMA) Permit Application for re-development of the existing Maui Lu as a 400 unit timeshare resort. In consideration of the fact that this is truly the re-development of a project begun in the 1960's, we appreciate your willingness to discuss and consider a more equitable affordable housing requirement based on the 218 unit 1982 peak number of short-term rental units. As agreed, the 218 units shall be the existing number of short-term rental units to be subtracted from the total number of proposed units. Also, it is my understanding that we can fulfill our affordable housing requirement for the Maui Lu Resort outside of the Kihei-Makena Community Plan region in the form of infrastructure participation in a larger Central Maui affordable housing project.

In reality, our 400 unit timeshare resort is a true re-development project which results in the actual addition of 182 "new" short-term rental units.

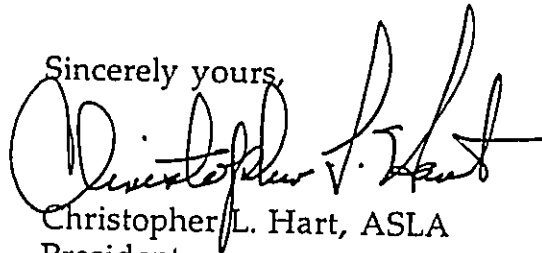
... Lee, Director
Department of Housing
and Human Concerns
Re: Affordable Housing Requirement for
Re-Development of the Maui Lu Resort
December 4, 2003
Page No. 2

The re-developed Maui Lu Resort has been designed as a low density/low rise residential project in a park setting which has been well received by the Kihei Community Association, surrounding neighbors and the Planning & Public Works Departments, and in November our firm submitted the DRAFT EA & SMA Permit Application to the Planning Department for appropriate processing.

The proposed 400 unit timeshare resort project consists of 388 timeshare units with "lock-off" units, and twelve (12) remodeled existing short-term rental units without "lock-off" units. Although the total number of short-term rental units has increased by 21, we continue to support the position defined in our enclosed letter dated August 21, 2003 that the calculation of our affordable housing requirement should be based on the established frequency of actual usage of each "lock-off" unit as an independent unit and that twenty five per cent (25%) of the total number of lock-out units is a more equitable calculation of our affordable housing requirement.

Thank you for your cooperation. If further clarification is necessary, please call.

Sincerely yours,



Christopher L. Hart, ASLA
President
Landscape Architect - Planner

Enclosure

cc: Edwin Okubo
G. Schneider



DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
COUNTY OF MAUI

ALAN M. ARAKAWA
Mayor

ALICE L. LEE
Director

HERMANT T. ANDAYA
Deputy Director

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

September 23, 2003

RECEIVED
SEP 30 2003
CHRIS HART & PARTNERS
Landscape Architecture & Planning

Mr. Christopher L. Hart, ASLA
President, Chris Hart & Partners, Inc.
1955 Main Street, Suite 200
Wailuku, Hawaii 96793-1706

Dear Mr. Hart:

**SUBJECT: MAUI LU RESORT
TMK: 3-9-01:83, 86 & 120**

This is in response to your May 22, 2003 and August 21, 2003 letters regarding the subject project.

After carefully considering the information you presented during our June 10th meeting and in your two letters, we have reached the following conclusions:

1. Each "lock-off" unit shall be considered a separate short-term rental unit.
2. The number of "new" short-term rental units shall be the difference between the total number of units proposed (744*) and the number of existing short-term rental units (130). Therefore, the number of "new" short-term rental units is 614.

*Each "lock-off" unit has been counted as a separate short-term rental unit.

Mr. Christopher L. Hart, ASLA
Page 2
September 23, 2003

Under the provisions of Chapter 2.94, Maui County Code, a total of one hundred fifty-four (154) affordable housing units will be required if the project is developed as currently proposed.

Please call me if you have any questions.

Very truly yours,



ALICE L. LEE
Director

ETO:hs

c: Director of Planning
Housing Administrator



CHRIS
HART
& PARTNERS, INC.

August 21, 2003

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

Attention: Mr. Edwin Okubo, Housing Coordinator

Re: Lock-Out or Convertible Units -Affordable Housing Requirement for Re-Development of the Existing Maui Lu Resort at TMK 3-9-01: 83, 86 & 120 Kihei, Maui, Hawaii.

Dear Ms. Lee:

Thank you for our meeting on June 10, 2003.

As per our May 22 letter, our firm has been retained to prepare the Environmental Assessment (EA) and Special Management Area (SMA) Permit Application for re-development of the existing Maui Lu as a 379-unit timeshare resort. We appreciate your willingness to discuss an equitable affordable housing requirement based on the exclusion of the 218-unit 1982 peak, and our further clarification of lock-off or convertible units.

Our re-development plans which propose the addition of 161 units in a low density park setting have been well received by the Kihei Community Association, surrounding neighbors and the Planning & Public Works Departments, and we are anticipating submission of our SMA Permit Application in mid to late August. Therefore, we are anxious to equitably clarify your department's consideration of lock-off or convertible units.

We believe it is very fair to calculate our affordable housing requirement as 25 percent of the 161 additional units. However, because 367 of the total 379 units will be designed as convertible units with the lock-off feature, we do not believe that it is equitable to equally count each lock-off separate from its master unit and calculate affordable housing based on the resultant total number of keys, for the following reasons:

- Convertible timeshare units are marketed and sold to buyers with one deed as an **individual unit**. The lock-off portion has become a marketing feature, which provides buyer flexibility.

- Although no statistical data is apparently available from the Hawaii Timeshare Industry and the American Resort Development Association (ARDA) it is the opinion of Hawaii industry operators that lock-off units are individually occupied separate from the master unit only 15% to 20% of the time; therefore, counting the lock-off unit as an independent stand-alone unit seems very extreme.

In order to validate the true lock-off/studio use percentage, Mr. Michael Kosmin, President, Ko'o Consultants, Ltd., with over 20 years of industry experience, has conducted a phone survey of ten (10) Hawaii timeshare projects representing 919 two-bedroom lock-off units, to provide a representative sample of occupancy rates over three years. There are 4,728 timeshare units presently certified for occupancy in the State of Hawaii. Of this number, 36% represent a two-bedroom product or 1,702 units. Of the 1,702 units 54% represent the two-bedroom lock-off unit. The survey covered all 919 two-bedroom lock-off units presently certified for occupancy within the state. Of these units, the average occupancy is 89% or 895,611 occupied room nights. Of the 895,611 occupied room nights there was an additional 125,385 room nights spent in the lock-off studio portion of the unit or 14% of the total.

The total potential room nights if the two-bedroom unit is used separately is 1,791,222 room nights. The total room nights occupied in the survey was 1,020,996 or 56.9% of the total available if they were always used separately. Of this total only 6.9% of the time was the studio room night inventory used. This survey statistically demonstrates that the lock-off portion of the unit is only used separately 14% of the time from the entire two-bedroom unit.

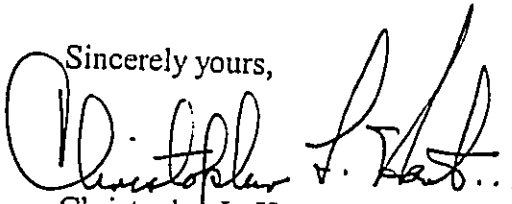
- As previously discussed, this rationale is consistent with accepted automobile parking standards and has been reflected in our Maui County Offstreet Parking and Loading Ordinance Chapter 19.36; Maui County Code Section 19.36.010 Designated number of spaces:

(33) "Convertible apartment, hotel and apartment/hotel units, i.e. single units capable of being utilized as two or more units: an additional one parking space for every three convertible units. (emphasis added)

Therefore in consideration of the foregoing, I am respectfully requesting, based on the actual usage of the lock-off unit as an independent unit, that fifteen per cent (15%) of the total number of lock-off units be considered in the calculation of our affordable housing requirement. Please confirm that this position equitably clarifies your department's consideration of lock-off or convertible units.

Thank you for your cooperation. If further clarification or a meeting is necessary to further discuss the foregoing, please call.

Department of Housing
and Human Concerns
Re: Affordable Housing Requirement for
Re-Development of the Maui Lu Resort
August 21, 2003
Page No.3

Sincerely yours,

Christopher L. Hart, ASLA
President
Landscape Architect - Planner

cc: Edwin Okubo

MAUI LOCAL PUBLIC MEETING...

JUNE 24, 2008

| NAME | ADDRESS | TELEPHONE |
|----------------------|---|--------------|
| 1. Michael Summers | 1955 Main St., Wailuku, HI 96793 | 242-1955 |
| 2. CILUIS HART | 1955 MAIN ST., WAILUKU, HI. 96793 | 242-1955 |
| 3. Annis Dumbleton | *480 KENOLIO RD 31-105 | 879 7182 |
| 4. KAT GASCOIGNE | *480 KENOLIO Rd 31-103 | 879-1444 |
| 5. ROB LOPE | 711 KAPIOLANI BLVD SUITE 1290 HNL, HI 96813 | 592-2345 |
| 6. MIKE WRIGHT | PO BOX 1010 HAIKU, HI. 96708 | 575-9175 |
| 7. Donal Domingo | 2824 Kauhale St Kihei HI 96753 | 815-0139 |
| 8. Cindy Kuylenka | PO BOX 1971 Kihei HI 96753 | 879-2818 (W) |
| 9. CLARE CAPPALLE | 726 S. KIHEI RD #96753 | 879-2818 |
| 10. Howard Pietsch | 515 S. Kihei Rd #501 | 875-7150 |
| 1. Marcus Baricuatro | CRI 10 Hochuli Rd #201 Lahaina | 469-7444 |
| 2. Joseph Vegas | P.O. Box 2441, Wailuku, HI 96793 | 879-0070 |
| 3. Honica Williams | *480 Kenolio Rd. #31-105 | 879-1349 |
| 4. Damian LaBeaux | *480 Kenolio Rd # 31-203 | 875-2694 |
| 5. | | |
| 6. | | |
| 7. | | |
| 8. | | |
| 9. | | |
| 10. | | |
| 11. | | |
| 12. | | |
| 13. | | |
| 14. | | |
| 15. | | |
| 16. | | |



June 11, 2003

MEMO TO: Mr. Greg Schneider, Genesee Capital
Mr. Michael Wright, Michael Wright and Associates
Mr. Mark Taylor, The Taylor Group Intl.
Mr. Rob Iopa, Watanabe, Chun, Iopa, Takaki
Mr. Barry Toyota, Wilson Okamoto & Associates
Mr. Mike Fujita, Wilson Okamoto & Associates
Mr. Michael Kosmin, Ko'o Consultants
Mr. Christopher L. Hart, Chris Hart & Partners
Mr. Bill Mitchell, Chris Hart & Partners, Inc.

FROM: Michael Summers, Chris Hart & Partners, Inc.

SUBJECT: June 10, 2003, Pre-Consultation Meeting with Ms. Alice Lee, Director,
Department of Housing and Human Concerns

The following is a brief summary of our meeting with the Director of the Department of Housing and Human Concerns on June 10, 2003. Please note that the following persons attended the meeting:

Planning Department:

Alice Lee, Director, Department of Housing and Human Concerns
Edwin Okubo, Administrator, Housing Division

Project Team:

Chris Hart
Mark Taylor
Mike Summers

Overall, the meeting went very well and the Department of Housing and Human Concerns is supportive of the project. However, the following three issues still need to be resolved:

1. Is it possible to receive credit for the 218 units that existed at the height of the Maui Lu build-out in 1982?

Discussion. Preliminarily, Ms. Lee indicated that the previous units could be credited.

2. What is the applicable housing requirement for lock-off units?

Discussion. The Department is inclined to treat lock-off units in a similar manner to full-size units. Thus, one affordable housing unit would be required per four lock-off units.

It appears at this time that 132 affordable housing units will be required for the project, as follows:

| | |
|--|---|
| Project Total Units: | 378 units |
| Total No. Lock-offs | <u>366 units</u> (No. lock-offs is $378-12=366$) |
| Total No. Keys/Units | 744 units |
| Maximum Existing Units in 1982 | <u>-218 units</u> |
| Total Housing Units Subject to Affordable Housing Requirement: | 526 units |
| Housing Requirement (1 unit/4 timeshare units) | $526 \text{ units}/4 = \underline{132 \text{ Units}}$ |

However, Ms. Lee will consider reducing the lock-off requirement in response to a position paper submitted by our office.

3. How can the housing credits be satisfied?

Discussion. Ms. Lee indicated that the Department could be flexible regarding this matter. Her major points were as follows:

- The Department does not expect the developer to "lose" money on an affordable housing project. The Department expects that the housing would be sold at a "break-even" point.
- The affordable housing requirements could be implemented in a phased manner. However, an executed housing agreement must be in place prior to issuance of Phase I building permits.
- Pricing of affordable housing units will be subject to Maui County's median income requirements, i.e. (from 80% to 120% of median income for a family of four).
- Affordable rentals may also receive credits. As an example with the existing Piilani Gardens rental project, the developer could subsidize the rents, and according to Ms. Lee, an acceptable rental rate for Piilani Gardens would be \$950.00/month including utilities for a two-bedroom two-bathroom unit.

Maui Lu Project Te
June 11, 2003
Page 3

Ms. Lee concluded the meeting by explaining that she will meet with the Directors of the Departments of Planning and Public Works and Environmental Management, along with the Mayor, to discuss the above-referenced issues and arrive at an affordable housing policy for the project.

Should you have any questions, please contact me at (808) 242-1955.



CHRIS
HART
& PARTNERS, INC.

June 5, 2003

MEMO TO: Mr. Greg Schneider, Genesee Capital
Mr. Michael Wright, Michael Wright and Associates
Mr. Mark Taylor, The Taylor Group Intl.
Mr. Rob Iopa, Watanabe, Chun, Iopa, Takaki
Mr. Barry Toyota, Wilson Okamoto & Associates
Mr. Mike Fujita, Wilson Okamoto & Associates
Mr. Michael Kosmin, Ko'o Consultants
Mr. Christopher L. Hart, Chris Hart & Partners
Mr. Bill Mitchell, Chris Hart & Partners, Inc.

FROM: Michael Summers, Chris Hart & Partners, Inc.

SUBJECT: June 3, 2003, Pre-Consultation Meeting with Mr. Michael Foley, Planning Director

The following is a brief summary of our meeting with the Planning Director on June 3, 2003. Please note that the following persons attended the meeting:

Planning Department:

Michael Foley, Director, Department of Planning
Clayton Yoshida, Planning Program Manager, Department of Planning
Joe Alueta, Senior Planner

Project Team:

Barry Toyota
Bill Mitchell
Chris Hart
Mike Summers
Mike Wright
Rob Iopa

We met with Mr. Foley and his staff for approximately 1.5 hours to discuss the project. Chris initiated the meeting and along with Rob provided an overview of the project, which included:

- Project history;
- Project team;
- Project description including number of units to be constructed, desired character of project, proposed mauka and makai improvements, site plan, landscape architecture, and architecture;
- Project phasing;
- Infrastructure improvements including signalization of South Kihei Road at Kulanihakoi Road and the treatment of South Kihei Road, i.e. landscaped median, crosswalk, and curbs, gutter and sidewalk improvements;
- Affordable housing requirements; and
- Permitting requirements and pre-consultation schedule.

In general, the Planning Department staff was very receptive of the project. They appeared to be impressed by our goal to preserve the open space character and garden like setting distinctive of the Maui Lu. However, the Department made the following specific comments regarding the project:

1. Beach Nourishment. Joe Alueta suggested that due to shoreline erosion occurring north of the project, and the narrowness of the existing sandy shoreline fronting the Maui Lu, that a beach nourishment project may be warranted.
2. Public Access along Shoreline. Mike Foley noted the importance of allowing for public access along the shoreline. He requested that unhindered lateral access be provided if possible. However, it was acknowledged that due to shoreline erosion along the southern end of the project, it was unlikely that continuous access could be achieved without constructing a hardened structure within the shoreline setback area.
3. Open Space. Mike Foley noted that the intrusion of the center bay into the existing grassed open space area fronting South Kihei Road might be an issue with the Kihei Community Association.
4. Affordable Housing Requirements. This subject was discussed and Chris explained that a meeting was scheduled with the Department of Housing and Human Concerns.
5. Traffic Impact Fees. Mike Foley noted that the County Council is currently reviewing a recently completed traffic impact fee study that was prepared to address development in South Maui. The study recommends an approximate \$15,000 fee/unit for transient vacation rental projects. Mike noted that it was very unlikely that the subject ordinance would be adopted prior to the public hearing. However, he stated that it was likely that the Planning Commission might try to attach an impact fee of some amount to the project as a condition of approval. Mike stated that it might be possible to receive credit for off-site roadway

Maui Lu Project T
June 5, 2003
Page 3

improvements within the right-of-way, such as signalization of the Kulanihako
Road/South Kihei Road intersection.

6. Economic Impacts Associated with Timeshare Conversions. Mike expressed concerns regarding the economic impacts associated with timeshare conversions, i.e. loss of employment, tax revenues, etc., and requested that these impacts be documented in the Environmental Assessment.
7. Long-term Residents on Property. Joe Alueta stated that approximately 50 families are currently living on the Maui Lu property. He noted that the impact of dislocating these families is likely to be an issue that needs to be addressed.

I suggest that we discuss these issues prior to our June 9 meeting with the KCA. Should you have any questions, please contact me at (808) 242-1955.



May 28, 2003

Amended Memorandum

TO: Chris Hart
Bill Mitchell
Michael Summers

FROM: Charmaine Molina

SUBJECT: Maui Lu Re-Development -- Pre-Consultation Meetings for the month of June

Pursuant to your request received on May 22, 2003, the following meetings have been scheduled and confirmed.

| <u>Agency</u> | <u>Date</u> | <u>Time</u> | <u>Place</u> |
|---|-------------|---------------------|---------------------|
| • <u>Dept. of Public Works Environmental Management</u> with Gilbert Coloma-Agaran | 6/3/03 | 9:30 - 11:00 am | DPW Conference Room |
| • <u>Planning Department</u> with Michael Foley, Clayton Yoshida, Joseph Alueta | 6/3/03 | 2:30 - 4:00 pm | Planning Library |
| • <u>Dept. of Parks & Recreation</u> with Glenn Correa, Patrick Matsui, Diane Ariyoshi | 6/9/03 | 9:30 - 11:00 am | Director's Office |
| • <u>Housing and Human Concerns</u> with Alice Lee & Ed Okubo | 6/10/03 | 11:30 am - 12:30 pm | Director's Office |

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

APPENDIX L
Comment Letters and Responses



DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
COUNTY OF MAUI

ALAN M. ARAKAWA
Mayor

ALICE L. LEE
Director

HERMAN T. ANDAYA
Deputy Director

200 SOUTH HIGH STREET • WAILUKU, HAWAII 96793 • PHONE (808) 270-7605 • FAX (808) 270-7165

March 22, 2004

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED
04 MAR 23 P2:09

TO: KIVETTE A. CAIGOY, Staff Planner
Department of Planning

FROM: ALICE L. LEE, Director
Department of Housing and Human Concerns

SUBJECT: I.D.: EA 2003/0008 AND SMI 2003/0021
TMK: (2) 3-09-001:083, 086 & 120
PROJECT NAME: MAUI LU REDEVELOPMENT
APPLICANT: GENESEE CAPITAL C/O CHRIS HART & PARTNERS

We have reviewed the draft Environmental Assessment (EA) and Special Management Area Use Permit (SMA) application for the subject project and would like to offer the following comments:

1. The draft EA and SMA application states that the project will consist of 400 timeshare units. However, both of these documents show that under Alternate 1 of the design concept the project will consist of 730 timeshare units, and under Alternate 2 of the design concept the project will consist of 600 timeshare units.

Are we correct in assuming that the Maui Planning Commission's actions on the draft EA and SMA application will be specifically for the 400 timeshare unit design concept?

2. As indicated in my September 23, 2003 letter to Mr. Christopher L. Hart (See Appendix K of draft EA and SMA application), we have determined that each lock-off unit should be counted as a separate short-term rental unit since they can be operated and rented as a separate unit. In addition, we had informed Mr. Hart

TO SUPPORT AND ENHANCE THE SOCIAL WELL-BEING OF THE CITIZENS OF MAUI COUNTY

Kivette A. Caigoy
Page 2
March 22, 2004

that for the purpose of complying with the affordable housing requirements of Chapter 2.94, Maui County Code (MCC), we had determined that the number of "new" short-term rental units would be the difference between the total number of proposed short-term rental units and the number of existing short-term rental units. Therefore, if all 400 timeshare units will be provided with a lock-off unit, the total number of short-term rental units would be 800 units. If the 130 existing short-term rental units is subtracted from the 800 short-term rental units that is proposed, the number of "new" short-term rental units would be 670 units.

Based on the provisions of Chapter 2.94, MCC, the applicable affordable housing units to new short-term rental units ratio is 1:4. Therefore, the number of affordable housing units that the applicant is required to provide is 167.5 units ($670 \div 4$) or 168 units.

3. We would like to know how the applicant proposes to satisfy the affordable housing requirement of Chapter 2.94, MCC.

Thank you for the opportunity to comment.

c: Housing Administrator



July 29, 2004

Ms. Alice L. Lee, Director
Department of Housing and Human Concerns
200 South High Street
Wailuku, Hawaii 96793

Dear Ms. Lee:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086, & 120 Kihei, Maui, Hawaii.

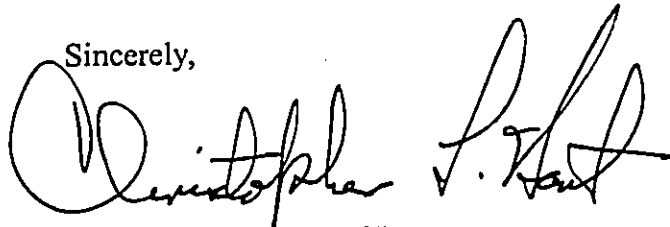
Thank you for your March 22, 2004 letter in response to the Draft Environmental Assessment (EA) and Special Management Area application for the subject project. We offer the following responses to your comments:

1. The proposed subject project will consist of 400 timeshare units of which 388 will have "lock-off" units. This configuration will be identified as the preferred alternative in the Final EA.
2. The total number of short-term rental units will be 788 units. Minus the agreed upon 174 existing units, the number of "new" short-term rental units will be 614 units. Based on the 1:4 affordable housing ratio, the applicant is required to provide an in-lieu cash contribution for 154 affordable units.
3. Thank you for meeting with Mr. Martin Luna, Esq. and myself on April 26, 2004. As a result, we have completed the draft Agreement Regarding Affordable Housing for your review.

Ms. Alice L. Lee, Director
Department of Housing and Human Concerns
Re: Maui Lu Redevelopment
July 29, 2004
Page 2

Thank you for your cooperation. If you have any further questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher L. Hart". The signature is written in a cursive style with a large initial "C".

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department



March 22, 2004

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

Dear Ms. Caigoy:

Subject: Maui Lu Redevelopment
TMK: (2) 3-9-001:083, 086 & 120
I.D.: EA 2003/0008 and SM1 2003/0021

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

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

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

Sincerely,

Neal Shinyama
Manager, Engineering

NS/dt:ikh

'04 MAR 25 AM 11:58

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED



July 23, 2004

Mr. Neal Shinyama, Manager
Engineering
Maui Electric Company
P.O. Box
Kahului, Hawaii 96732

Dear Mr. Shinyama:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your March 22, 2004 "no objection" letter in response to the Draft Environmental Assessment and Special Management Area application for the subject project.

The developer's electrical consultant will meet with you as soon as plans are finalized for the subject project.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

Christopher B. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department



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

JWA

REPLY TO
ATTENTION OF: CEPOH-EC-T

04 MAR 24 12:55

March 23, 2004

DEPT OF PLANNING
COUNTY OF MAUI

Civil Works Technical Branch

RECEIVED

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

Dear Ms. LouCaigoydemilk:

Thank you for the opportunity to review and comment on the Environmental Assessment (EA) for the Maui Lu Redevelopment Project, Maui (TMK 3-9-1: 83, 86, 120). The following comments are provided in accordance with Corps of Engineers authorities to provide flood hazard information and to issue Department of the Army (DA) permits.

- a. Provided there is no construction seaward of the high tide line, a DA permit will not required for the project.
- b. The flood hazard information provided on page 17 of the EA is correct.

Should you require additional information, please contact Ms. Jessie Dobinchick of my staff at (808) 438-8876.

Sincerely,

for Thomas D. Smith, P.E.
James Pennaz, P.E.
Chief, Civil Works
Technical Branch



July 23, 2004

Mr. James Pennaz, Chief
Civil Works Branch
Department of the Army
U.S. Army Engineer District, Honolulu
Fort Shafter, Hawaii 96858-5440
Attention: Jessie Dobinchick

Dear Mr. Pennaz:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086, & 120 Kihei, Maui, Hawaii.

Thank you for your March 23, 2004 letter in response to the Draft Environmental Assessment and Special Management Area application for the subject project.

No construction will occur seaward of the high tide so a Department of Army (DA) permit is not required. In the event that a beach nourishment plan is implemented and involves work seaward of the high tide line, the applicant will apply for the appropriate DA permit. We also acknowledge your confirmation of the flood hazard information.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

United States Department of Agriculture

USDA

 Natural Resources
Conservation Service

Our People...Our Islands...In Harmony
210 Imi Kala Street, Suite #209, Wailuku, HI 96793-2100

~~04 MAR 24 11:55~~
DEPT OF PLANNING
COUNTY OF MAUI
Date: March 23, 2004

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

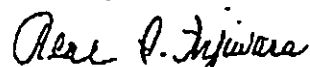
Dear Ms. Caigoy,

SUBJECT: Maui Lu Redevelopment; TMK: 3-9-001: 083, 086, 120
I.D.: EA 2003/0008, SM1 2003/0021

We have no comment on the subject application.

Thank you for the opportunity to comment.

Sincerely,


Neal S. Fujiwara
District Conservationist



July 23, 2004

Mr. Neal S. Fujiwara, District Conservationist
Natural Resources Conservation Service
US Department of Agriculture
210 Ima Kala Street, Suite #209
Wailuku, Hawaii 96793-2100

Dear Mr. Fujiwara:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your March 23, 2004 "no comment" letter in response to the Draft Environmental Assessment and Special Management Area application for the subject project.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

LINDA LINDLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

ERNEST Y.W. LAU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

MEMORANDUM:

APR 1 2004

TO: Dierdre S. Mamiya, Administrator
Land Division

FROM: Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

SUBJECT: Maui Lu Redevelopment, Kihei, Maui

Our comments are limited to the project's shoreline area and the applicant's shoreline analysis and recommendations.

The makai portions of the project are encroaching on state lands. The area of the encroachment is approximately 20,000 square feet and includes landscaped areas and two boulder revetments. The agents for the landowner have sought to resolve the encroachments and have filed requests to do so with the Office of Conservation and Coastal Lands (OCCL). We recommend that the County of Maui should withhold any entitlements for any improvements makai of Kihei road until such time the applicant resolves the encroachments with the State of Hawaii. The Department of Land and Natural Resources, County of Maui, and project applicants should meet to discuss a plan and schedule to resolve these matters.

Resolution of Encroachment:

The Board of Land and Natural Resource (BLNR) recently established a policy to allow the disposition of shoreline encroachments by either removal or issuance of an easement. In carrying-out this policy, the Department established criteria to guide decision-making over specific cases. The criteria are as follows:

1. Protect/preserve/enhance public shoreline access;
 2. Protect/preserve/enhance public beach areas;
 3. Protect adjacent properties;
 4. Protect property and important facilities/structures from erosion damages;
- and

5. Apply "no tolerance" policy for recent or new unauthorized shoreline structures

In the process of implementing this policy, the OCCL considers a number of factors, including the surrounding land uses, beach resources, public access, structures or facilities being protected, effects of removing the encroachment on access, beach processes and neighboring properties.

These matters will be more fully investigated once the landowner files a formal request with this office to seek resolution of the encroachments.

Sea Engineering Study Appended to SMA

In evaluating coastal processes along this stretch of coastline, Sea Engineering concludes, "There is little evidence of significant sand transport in Maui Lu project areas. Although the revetments protrude significantly seaward, there is no evidence of sand impoundment on either side of the revetments. Thus, it is unlikely that these structures are substantially impacting the neighboring shorelines."

Based on several site visits and upon inspection of aerial photographs included in the Sea Engineering report, OCCL concurs with these findings. However, one significant omission in the report is that while the revetment structures themselves may not be the cause of shoreline recession on neighboring properties, the structures have caused the significant loss of a dry sandy beach immediately seaward of their location. Erosion rates are significantly higher fronting the Maui Lu structures (+ 3 ft/yr) compared to rates of approximately 1-2 ft/yr elsewhere.

The coastal engineering assessment should address the localized littoral processes, including the net direction of sediment transport, if any. This information would be useful for assessing future beach nourishment projects. Discussion of seasonal or storm induced shoreline behavior would be useful as well.

The report recommends four alternatives including "no action", "remove structures", "beach nourishment", and "beach nourishment with structures". It was noted that removal of the structures could result in substantial environmental impacts, from turbidity as well as the potential loss of the existing structures, suggesting that this would not be a viable alternative. Since the existing hotel structures in the shoreline area may be demolished, OCCL believes that removal of the encroaching revetment structures along with any fill material could actually be considered as a viable alternative. This may provide an ideal opportunity to assess whether the siting of any permanent hotel structures in the coastal hazard area is an appropriate decision.

Removal of the boulder revetments and fill material would result in the restoration of the sandy beach that was largely destroyed as a result of the placement of the structures in the shoreline area. This could be perceived as a substantial benefit. Plans to add major improvements (buildings, walkways, pools, etc.) should accommodate the coastal hazards and be subject to a coastal hazard assessment that includes an erosion analysis.

In addition, the non-armored shoreline areas of parcel 120 & 83 are vulnerable to coastal erosion and may present a risk to the redevelopment plans. The risk of flanking of the existing structures is also present as illustrated by the need for a temporary sand bag revetment to the south of building C.

The OCCL would like to discuss long-term erosion measures in conjunction with the redevelopment plans. The beach nourishment alternative offers temporary protection from the structural flanking and will provide a recreational beach again. But structural measures may be necessary in conjunction with beach nourishment to make the benefit cost ratio attractive when planning for long-term redevelopment.

OCCL confirms that we are working with the landowner to resolve the encroachments. If the County of Maui issues a Finding of No Significant Impact to the Environment (FONSI) on the project, we believe that the applicant will have an opportunity to propose a final course of action on the disposition of the subject encroachments. However, we reiterate that the County of Maui should withhold any entitlements for any improvements makai of Kihel road until such time the applicant resolves the encroachments with the State of Hawaii.

We hope this letter helps resolve some of the outstanding issues regarding the subject property. Please feel free to contact me at 587-0381, or Dolan Eversole at 5870439, should you have any questions.

Mahalo



July 28, 2004

Ms. Dierdre S. Mamiya, Administrator
Land Division
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809
Attention: Samuel J. Lemmo

Dear Ms. Mamiya:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Use Permit Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your memorandum in response to the Draft Environmental Assessment (EA) and Special Management Area Use Permit application for the subject project. Following are responses to your comments.

The applicant, through our office, welcomes the opportunity to continue discussions on a plan and schedule to resolve these matters. Our office will contact you directly following transmittal of this response letter. The established criteria to guide decision-making on disposition of shoreline encroachments is addressed as follows:

1. Protect/preserve/enhance public shoreline access;

In Section V.10.6, page 26, there is a discussion on enhanced and improved public access. These improvements include beach parking, pedestrian crossings, and a lateral public access walkway. Implementation of these amenities will enhance the ability of the public to access the shoreline fronting the project site as well as the surrounding vicinity

2. Protect/preserve/enhance public beach areas;

The applicant is committed to enhancing public beach areas through a combination of beach nourishment and dune stabilization. Sections V.10.3 and V.10.5 discuss beach nourishment and dune stabilization, respectively. While permitting issues and the long term cost of beach nourishment will not make this option viable, dune restoration/stabilization is a practical option. Dune restoration activities are planned along the northern portion of the backshore between the Vancouver Memorial and Building "A". Dune restoration is also being proposed along the backshore of the County

Ms. Dierdre S. Mamiya
Department of Land and Natural Resources
Re: Maui Lu Redevelopment
July 28, 2004
Page 2

owned property to the immediate south of the property. With properly vegetated dunes, the sand should accumulate on the makai side of the dune, building up the dune and beach in a seaward direction and preventing wind blown sand losses onto the road. Stabilizing loose rocks and removal of unnecessary rocks near and around the toe of the revetment structures would also improve public safety.

3. *Protect adjacent properties;*

The "Coastal Engineering Assessment for the Maui Lu Hotel", Sea Engineering, Inc., February 2004, concludes that the revetment structures are not substantially impacting neighboring shorelines. The lack of impoundment of sand in the vicinity indicates that the transport of sand is minimal and removal of the revetment structures would not substantially improve adjoining beaches.

4. *Protect property and important facilities/structures from erosion damages;*

As discussed in the EA, removal of the revetment structures would have a negative effect on existing structures on the subject property and cause significant property loss to the owner.

5. *Apply "no tolerance" policy for recent or new unauthorized shoreline structures.*

The structures were constructed in the early 1960s, and thus, would not qualify as "recent or new". Also, according to our research, at the time the structures were constructed there were no specific permitting requirements by the Department of the Army, State of Hawaii or County of Maui..

Attached is a memo from Sea Engineering, Inc. addressing comments on its Coastal Engineering Assessment for the Maui Lu Hotel (February 2004). The memo indicates that when 1900 data points are included in the AEHR, the erosion rate is smoother in the vicinity of the Maui Lu property. The range is from 1.1 to 1.7 feet per year as opposed to the approximate 3 feet per year as presented by the Coastal Geology Group. Using this set of data would lead to a conclusion that the erosion rate fronting the Maui Lu Resort is consistent with rates in the North Kihei area and not significantly higher at the revetment structures.

Sea Engineering's analysis illustrates the need for a close examination of the rates produced by UH's Coastal Geology Group. In this instance, the UH study produces an erosion rate fronting the revetments which is double the rate at the neighboring shorelines, despite the fact that the revetments have fixed the abutting shoreline for forty years while the neighboring shorelines have continued to experience long term net erosion.

Sea Engineering's memorandum discusses the littoral processes and concludes that the primary process for sand transport are the "storm and swell waves from the south to west, and the prevailing, low energy tradewind chop." The memo goes on to say that there is a "net northward longshore transport on the Kihei coast." The discussion indicates that transport direction coincides with the cyclical Pacific Ocean phases and is also affected by the wind. It also suggests that the Koiieie Fishpond to the south may have a greater effect on the North Kihei coast erosion rate than the Maui Lu revetment structures.


Ms. Dierdre S. Mamiya
Department of Land and Natural Resources
Re: Maui Lu Redevelopment
July 28, 2004
Page 3

As discussed in the draft EA, the demolition of the existing structures is not considered an economically viable alternative, particularly because the existing shoreline units represent the highest land and revenue values. The proposed plans involve renovating these structures consistent with the overall renovation themes for the Maui Lu Resort. It is generally agreed that removal of the revetment structures would threaten the resort structures in addition to possibly undermining South Kihei Road. Given the erosion rate in the area, the loss of land area would result in rendering the *makai* parcels useless.

The applicants will file a formal request for easements and continue discussions on equitable long term erosion measures.

Thank you again for your insightful comments. If you have any further questions, please do not hesitate to contact me.

Sincerely,



Rory Frampton
Principal Planner

attachment

c: Mr. Greg Schneider, Genesee Capital
Mr. Mike Wright
Ms. Kivette Caigoy, Planning Department



Sea Engineering, Inc.

Makai Research Pier • 41-202 Kalanianaʻole Hwy. • Waimanalo, Hawaii 96795-1820
Phone: (808) 259-7966 / FAX (808) 259-8143 • E-mail: sel@seaengineering.com

Thank you for your comments on the Sea Engineering report *Coastal Engineering Assessment for the Maui Lu Hotel* (February 2004). To address comments outlined in the "Sea Engineering Study Appended to SMA" section of the letter, we offer the following responses. Paragraph numbers refer to this section of the letter only.

1. Paragraph 2, Sentence 2 – "the structures have caused the significant loss of a dry sandy beach immediately seaward of their location." Sea Engineering concurs with this statement. Shoreline hardening without sand nourishment or sand retention structures on any coast that is experiencing chronic long term erosion and shoreline recession will eventually lead to the loss of a beach in front of the structures which fix the shoreline position. Most of the North Kihei shoreline has been experiencing long-term erosion.
2. Paragraph 2, Sentence 3 – "Erosion rates are significantly higher fronting the Maui Lu structures (+3 ft/yr) compared to rates of approximately 1-2 ft/yr elsewhere." The erosion rates calculated by the U.H. Coastal Geology Group, and presented in Figures 10 and 12 of the Sea Engineering report are the Annual Erosion Hazard Rate (AEHR) that is generally based on the most recent trend (Rooney, 2003). The AEHR can be misleading in certain areas because the statistical analysis involves identifying outlier points that are excluded from the erosion rate computation. The attached figure presents both the End Point Erosion Rate (EPR) and the AEHR computed by the Coastal Geology Group for transects 0 to 30 in the Maui Lu vicinity. The figure shows that AEHR for the Maui Lu vicinity between transects 0 and 17 is always much greater than the EPR (occasionally more than double), and is highly variable. The much greater magnitude and the variability of the AEHR is primarily due to whether or not the 1900 data point is included in the erosion rate computation. Because this data point reflects a shoreline position that is significantly seaward (accreted) of all other shorelines, and the next data is not until 1949, its inclusion or exclusion dramatically affects the resulting erosion rate. For example, at transects 11 and 12 in front of the southern Maui Lu revetment, the AEHR, which does not include the 1900 data, is 2.7 to 3 feet/year, while the EPR is 1.3 feet/year – less than half. The 1900 data is excluded from the AEHR at transects 0,1,2,3,4,7,10,11,12,14,15,27,28 and 29. In general, the EPR shows a relatively even trend in erosion rates. The range of erosion rates in the Maui Lu vicinity is 1.1 to 1.7. The largest erosion rates occur at transects 10, 15, 19 and 20 – immediately adjacent to the revetments where local flanking effects have occurred.
3. Paragraph 3 – The project site in North Kihei is well sheltered from northeast tradewind waves and large north-northwest swell. The project area is, however, exposed to waves from the south to west directions, which can be generated by Kona storms, south swell or hurricanes. The project area is also exposed to local tradewinds from the north to northwest that can generate small wind chop waves. Thus, the primary littoral processes for transporting sand are the storm and swell waves from the south to west, and the prevailing, low energy tradewind chop. Rooney (2002) concludes that since 1900, there



Sea Engineering, Inc.

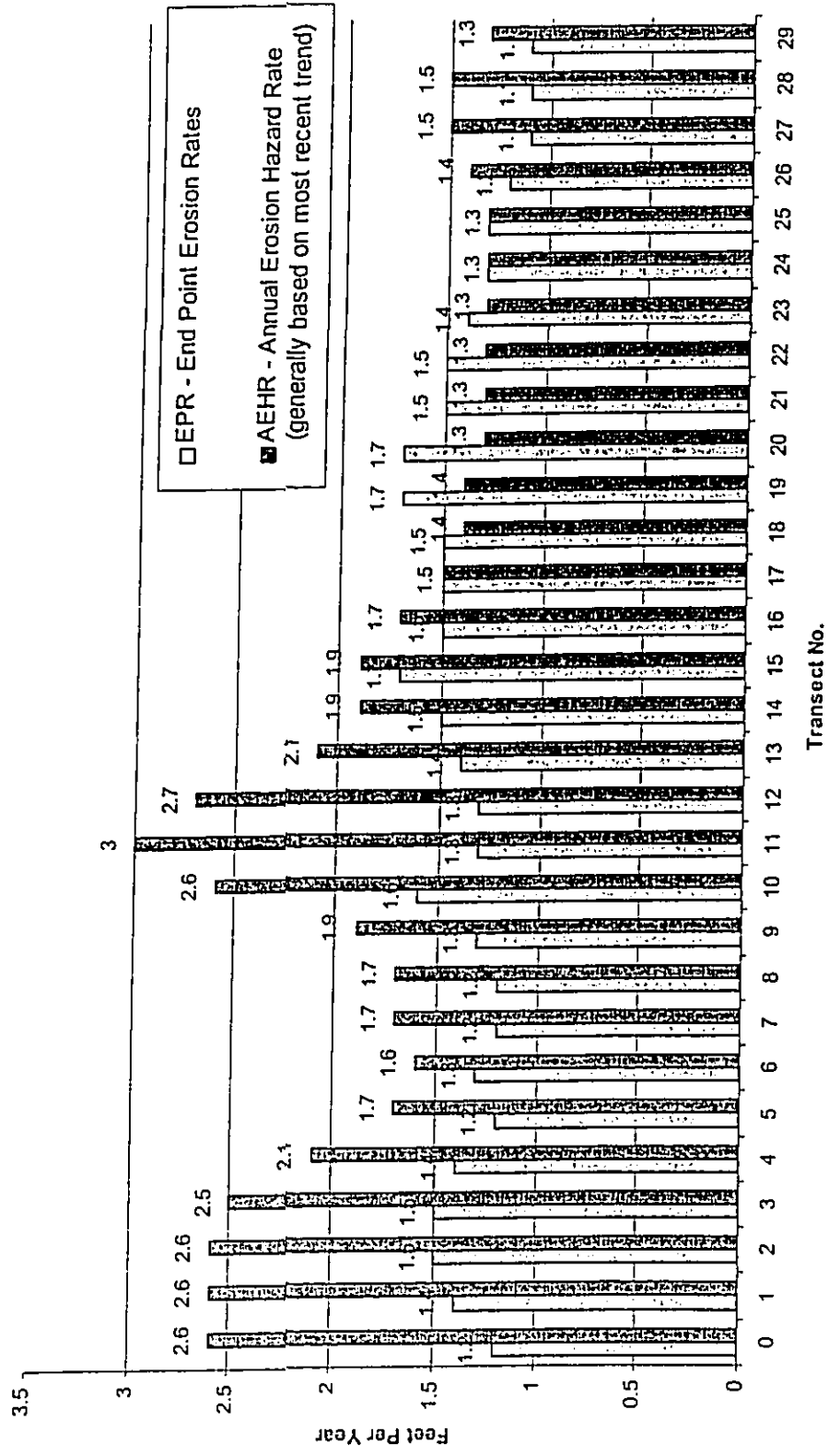
Makai Research Pier • 41-202 Kalanianaʻole Hwy. • Waimanalo, Hawaii 96795-1820
Phone: (808) 259-7966 / FAX (808) 259-8143 • E-mail: sei@seaengineering.com

has been a net northward longshore transport on the Kihei coast. This is theorized to be due to above average Kona storm activity over this period. Rooney theorizes that Kona storm activity increases during occurrences of the Pacific Decadal Oscillation (PDO), resulting in dominant transport to the north, and decreases during negative PDO phases, resulting in dominant tradewind driven transport to the south. During the PDO, a large wedge of abnormally warm water is situated in the eastern equatorial Pacific, and influences climate and storm activity across the entire Pacific.

During the field investigation for the Maui Lu project, there was little evidence of active sand transport. A standard method for determining net transport is to note if there is impoundment of sand by structures or objects protruding seaward from the beach. There was no evidence of sand impoundment on any side of the Maui Lu revetments, indicating little net transport in either direction. The aerial photographic analysis completed by the U.H. Coastal Geology Group shows that the shoreline to the south of Koieie Fishpond has accreted significantly, while the shoreline to the north has eroded. This suggests that the fishpond may be blocking the net sand transport to the north. Aeolian transport is also evident at the site. Wind blown dunes were located in the backshore, migrating onto the road in spots.

A more detailed assessment of littoral processes showing seasonal influences would require at least a year-long comprehensive field investigation to include frequent measurement of shoreline profiles located at tight intervals along the shoreline in the area.

North Kihei - Erosion Rates
1900 - 2000



LINDA LINGLE
GOVERNOR OF HAWAII



GENEVIEVE SALMONSON
DIRECTOR

5/1/2004

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL '04 APR -8 08:06
225 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 538-4188
FACSIMILE (808) 538-4188
E-MAIL: OEQC@HONOLIULU.HI.US

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

April 8, 2004

Michael Foley
Maui Planning Department
250 South High St.
Wailuku, HI 96793

Attn: Kivette Caigoy

Dear Mr. Foley:

Subject: Draft environmental assessment (EA), Maui Lu Redevelopment

We have the following comments:

Occupancy: The redevelopment proposes 400 units versus 162 rooms of the current Maui Lu resort complex. What is the population at full occupancy? How will you mitigate the impacts of the additional population?

Archeological resources: Scientific Consultant Services conducted an archeological inventory survey for the property, reaching the conclusion that there were no significant resources. In the final EA reproduce your correspondence with the Historic Preservation Division of DLNR which shows its concurrence with this conclusion.

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

Sincerely,

Genevieve Salmonson
GENEVIEVE SALMONSON
Director

c: Chris Hart
Gregory Schneider, Genesee Capital



July 23, 2004

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

Dear Ms. Salmonson:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your April 8, 2004 letter in response to the Draft Environmental Assessment (EA) and Special Management Area application for the subject project.

Timeshare resorts are considered "vacation ownership" developments which provide transient lodging. As such, it is not considered "residential" or having a permanent population. The Draft EA addresses the impacts of the additional density of the development.

Attached is a letter from the State Historic Preservation Division concluding that "no historic properties will be affected" by construction of the subject project. This letter will be incorporated into the final EA.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

Christopher L. Hirt, ASLA
President

attachment

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

LINDA LINGLE
GOVERNOR OF HAWAII



PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
DAN DAVIDSON
DEPUTY DIRECTOR - LAND
ERNEST Y.W. LAU
DEPUTY DIRECTOR - WATER



04 APR 28 P 1:14

DEPT OF LAND AND NATURAL RESOURCES
COUNTY OF MAUI
RECEIVED
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

HAWAII HISTORIC PRESERVATION
DIVISION REVIEW

Log #: 2004.1304
Doc #: 0404CD58

Received: 17 March 2004

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

SUBJECT: Chapter 6E-42 Historic Preservation Review - Application for Special
Management Area Use Permit and Environmental Assessment for the Proposed
Maui Lu Redevelopment (Subject I.D.: EA 2003/0008 and SM1 2003/021)
[County/Planning]
Ahupua'a: Ka'ono'ulu
District, Island: Wailuku, Maui
TMK: (2) 3-9-001:083, 086, & 120

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

- a) intensive cultivation has altered the land
- b) residential development/urbanization has altered the land
- c) previous grubbing/grading has altered the land
- d) an acceptable archaeological assessment or inventory survey found no historic properties (Burgett, et al. 1998) SHP DOC NO. 9908RC61)
- e) other:

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

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

In the event that historic sites (human skeletal remains, etc.) are identified during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be

protected from additional disturbance, and the State Historic Preservation Office needs to be contacted immediately at 243-5169, on Maui, or at (808) 692-8023, on O'ahu.

Staff: Cathleen A. Dagher Date: 23 April 2011
Cathleen A. Dagher, Assistant Maui/Lana'i Island Archaeologist, (808) 692-8023



ALAN M. ARAKAWA
MAYOR

OUR REFERENCE
YOUR REFERENCE

'04 APR 15 A9:43 COUNTY OF MAUI

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

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



THOMAS M. PHILLIPS
CHIEF OF POLICE

KEKUAPIO R. AKANA
DEPUTY CHIEF OF POLICE


April 12, 2004

MEMORANDUM

TO : MICHAEL W. FOLEY, PLANNING DIRECTOR
FROM : THOMAS M. PHILLIPS, CHIEF OF POLICE
SUBJECT : I.D. : EA 2003/0008 and SM1 2003/0021
TMK : (2) 3-9-001:083, 086, & 120
Project Name : Maui Lu Redevelopment
Applicant : Genesee Capital c/o Chris Hart & Partners

- No recommendation or comment to offer.
 Refer to enclosed comments and/or recommendations.

Thank you for giving us the opportunity to comment on this project.


Acting Assistant Chief Glenn Miyahira
For: THOMAS M. PHILLIPS
Chief of Police

Enclosure

COPY

TO : THOMAS PHILLIPS, CHIEF OF POLICE, COUNTY OF MAUI
VIA : CHANNELS
FROM : BRAD HICKLE, POLICE OFFICER III, DISTRICT VI KIHEI
SUBJECT : SPECIAL MANAGEMENT AREA USE PERMIT FOR THE
MAUI LU REDEVELOPMENT TMK: (2) 3-9-001:086

Comments, special
recommendation
made by Off. Hi
Forward to Dept
of Planning
Ady Blagich
4/1/04

Sirs, on 04/01/04 this Office received a copy of the Special Management Area use Permit (SMA) for the Maui Lu Resort Redevelopment @ TMK: (2) 3-9-001:086.

The applicant, Genesee CAPITAL, is requesting redevelopment of the current 163 unit Maui Lu Resort which includes phased demolition of some existing structures and redevelopment of a 400 unit Maui Lu Timeshare Resort. The redevelopment will also include the installation of a traffic light at the South Kihei road/ Ka'ono'ulu Street intersection as well as other roadway improvements which are needed in that area.

REVIEW/COMMENTS:

After reviewing the application my only concern is the impact the additional vehicle traffic will have on the growing community following the completion of the proposed redevelopment project and the eventual completion of the up-country roadway which will pass through that area. There is a great deal more other housing developments and SMA permits that have already been approved for the Kihei, Wailea and Makena areas which will undoubtedly add to the infrastructure problem as well and all should be considered.

I reviewed the traffic projections worksheet and I am not an analyst but I do not believe the traffic study provided truly considers the additional vehicle traffic created by these other developments which are pending or under construction and not yet completed. I further do not believe it can predict the future vehicle traffic which the up-country roadway will undoubtedly bring to the area when eventually connected to Ka'ono'ulu street and as an emergency services employee I am very troubled by this.

The traffic infrastructure is a primary concern in this area as Maui County does not yet have a reliable, full-time mass transit system. The Kihei community is currently experiencing the effects of continuing development of hotels and timeshares that subsequently cater to a large number of transient guests who will likely be traveling by rental vehicle thus continually contributing to the problem.

The practices of CPTED across the United States have proven to reduce crime and criminal activities in the cities where it has been implemented.

CPTED is a framework whereby the design of builds, landscaping and the placement of lighting and interwoven to increase surveillance, limit accessibility to criminals and the likelihood of criminal activities upon a property.

RECOMMENDATIONS:

It is my recommendation that the applicant contribute along with other developers to the implementation of a mass transit system which will undoubtedly benefit the applicant, guests and the community.

It is further my recommendation that the applicant use "best practices" in CPTED when developing this project. This Officer is available to assist the applicant in this matter as I have received training in CPTED and Advanced CPTED techniques.

Respectfully Submitted,

Officer Brad Hickle

04/08/04

BH

E-9966

1230 hours

REQUEST CONSIDERATION
OF OFFICER HICKLE'S
RECOMMENDATIONS.

[Signature]
4-9-4, 1940 7462



July 23, 2004

Mr. Thomas M. Phillips, Chief of Police
Police Department
55 Mahalani Street
Wailuku, Hawaii 96793
Attention: Officer Brad Hickle

Dear Chief Phillips:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your April 12, 2004 letter in response to the Draft Environmental Assessment (EA) and Special Management Area application for the subject project.

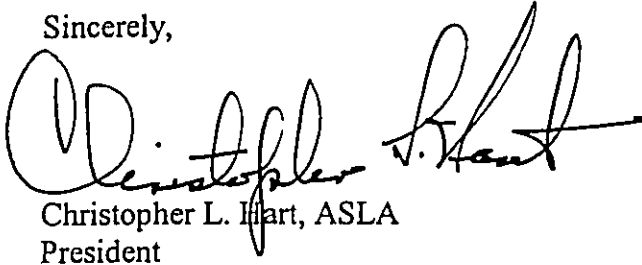
The Traffic Impact Analysis Report, prepared by Phillip Rowell and Associates, takes into consideration seven other projects in the general vicinity of the subject project in addition to the projected growth rate in Kihei. The report also acknowledges that the future upcountry highway is expected to increase traffic on Kaonoulu Road. While it is difficult to foresee actual roadway usage, the report uses an accepted methodology that attempts to predict future conditions with and without the proposed project. The report recommends traffic lights at the Kaonoulu/South Kihei Road intersection to control traffic flow in the area. It also recommends a landscaped median along South Kihei Road, sidewalks on both sides of South Kihei Road and the project side of Kaonoulu Road, and the widening of Kaonoulu Road with left turn storage lanes into the project.

Building plans for the proposed project are very conceptual at this stage, so the project architect has been asked to consider "best practices" in Crime Prevention Through Environmental Design (CPTED). Design considerations will include CPTED strategies that include natural surveillance, territorial reinforcement, natural access control, and target hardening. The Final EA will contain these considerations.

Mr. Thomas M. Phillips, Chief of Police
Re: Maui Lu Redevelopment
July 23, 2004
Page 2

If you have any further questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher L. Hart". The signature is written in a cursive style with a large initial "C" and a long horizontal stroke at the end.

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

LINDA LINGLE
GOVERNOR



ANTHONY J.H. CHING
EXECUTIVE OFFICER

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
LAND USE COMMISSION
P.O. Box 2359
Honolulu, Hawaii 96804-2359
Telephone: 808-587-3822
Fax: 808-587-3827

'04 APR 14 AM 11:53

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

April 12, 2004

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

Dear Mr. Foley:

Subject: EA 2003/0008 and SM1 2003/0021
TMK: (2) 3-9-001:083, 086 & 120
Project Name: Maui Lu Redevelopment
Applicant: Genesee Capital c/o Chris Hart & Partners

We acknowledge receipt of your transmittal dated March 12, 2004, regarding the above subject application.

Given the location, scope, and nature of the proposed activity, the State Land Use Commission defers to the judgment of the County of Maui in this matter. We have no comments to offer at this time.

Thank you for the opportunity to comment on the subject project. Please feel free to contact me at 587-3822, should you require clarification or any further assistance.

Sincerely,

A handwritten signature in black ink that reads "Anthony J.H. Ching".

ANTHONY J. H. CHING
Executive Officer



July 23, 2004

Mr. Anthony J. H. Ching
Department of Business, Economic Development & Tourism
P.O. Box 2359
Honolulu, Hawaii 96804-2359

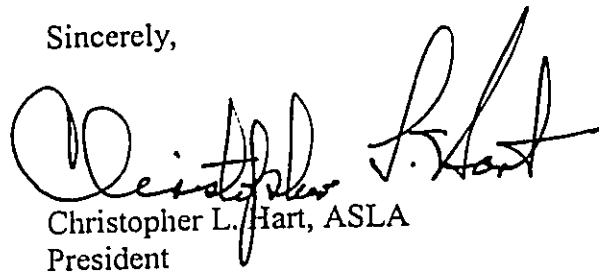
Dear Mr. Ching:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your April 12, 2004 no comments letter in response to the Draft Environmental Assessment and Special Management Area application for the subject project.

If you have any further questions, please do not hesitate to contact me.

Sincerely,



Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

RECEIVED AS FOLLOWS

LINDA LINGLE
GOVERNOR

KC
PATRICIA HAMAMOTO
SUPERINTENDENT



STATE OF HAWAII '04 APR 26 P1:43
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

OFFICE OF BUSINESS SERVICES

April 22, 2004

Mr. Michael W. Foley, Director
County of Maui
250 South High Street
Wailuku, Hawai'i 96793

Attention: Ms. Kivette A. Caigoy, Staff Planner

Dear Mr. Foley:

SUBJECT: Application for Special Management Area (SMA)
Permit for Maui Lu Redevelopment,
Kihei, Maui, Hawai'i, TMK: 3-9-1: 83, 86 & 120 (SM1 2003/0021)

The Department of Education (DOE) has reviewed the application for a Special Management Area (SMA) permit for the redevelopment of the Maui Lu Resort into a 400-unit timeshare project.

As of December 2003, the DOE is not requesting a school fair-share contribution condition on applications for SMA permits only.

The DOE has no further comment on the application but appreciates the opportunity to review the plans. Should you have any questions, please call me at 586-3444, or Heidi Meeker of the Facilities and Support Services Branch at 733-4862.

Sincerely,

Rae M. Loui
Assistant Superintendent

RML:jmb

RECEIVED AS FOLLOWS



July 23, 2004

Ms. Rae M. Loui, Assistant Superintendent
Department of Education
P.O. Box 2350
Honolulu, Hawaii 96804
Attention: Heidi Meeker

Dear Ms. Loui:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086, & 120 Kihei, Maui, Hawaii.

Thank you for your April 22, 2004 letter in response to the Draft Environmental Assessment and Special Management Area application for the subject project acknowledging that no fair share contribution is required.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

RECEIVED AS FOLLOWS

LINDA LINGLE
GOVERNOR OF HAWAII



04 APR 28 P1:14

DEPT OF LAND AND NATURAL RESOURCES
COUNTY OF MAUI
RECEIVED

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

ERNEST Y.W. LAU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERS
FISH AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

HAWAII HISTORIC PRESERVATION
DIVISION REVIEW

Log #: 2004.1304
Doc #: 0404CD58

Received: 17 March 2004

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

SUBJECT: Chapter 6E-42 Historic Preservation Review - Application for Special
Management Area Use Permit and Environmental Assessment for the Proposed
Maui Lu Redevelopment (Subject I.D.: EA 2003/0008 and SM1 2003/021)
[County/Planning]

Ahupua'a: Ka'ono'ulu
District, Island: Wailuku, Maui
TMK: (2) 3-9-001:083, 086, & 120

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

- a) intensive cultivation has altered the land
- b) residential development/urbanization has altered the land
- c) previous grubbing/grading has altered the land
- d) an acceptable archaeological assessment or inventory survey found no historic properties (Burgett, et al. 1998) SHP DOC NO. 9908RC61)
- e) other:

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

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

In the event that historic sites (human skeletal remains, etc.) are identified during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be

RECEIVED AS FOLLOWS

protected from additional disturbance, and the State Historic Preservation Office needs to be contacted immediately at 243-5169, on Maui, or at (808) 692-8023, on O'ahu.

Staff: Cathleen A. Dagher Date: 23 April 2004
Cathleen A. Dagher, Assistant Maui/Lana'i Island Archaeologist. (808) 692-8023



July 23, 2004

Ms. Cathleen A. Dagher, Assistant Maui/Lanai Island Archaeologist
Department of Land and Natural Resources
Historic Preservation Division
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

Dear Ms. Dagher:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your April 23, 2004 letter in response to the Draft Environmental Assessment (EA) and Special Management Area application for the subject project in which you state that "no historic properties will be affected". This conclusion is based on an acceptable archaeological inventory survey that found no historic properties.

As stated in your letter and in the Draft EA, in the event that any historic sites or remains are discovered during construction activities, all work will cease in the area. The area will be protected and your office will be contacted immediately.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

RECEIVED AS FOLLOWS

04.27.04

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
Telephone (808) 270-7816 • Fax (808) 270-7833
www.mauiwater.org

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED
04 APR 27 P2:03

April 26, 2004

Ms. Kivette Caigoy
Department of Planning
County of Maui
250 South High Street
Wailuku HI 96793

Re: I.D.: EA 2003/0008, SM1 2003/0021
TMK: 3-9-001:083, 086, 120
Project Name: Maui Lu Redevelopment

Dear Ms. Caigoy:

Thank you for the opportunity to comment on this application. Please find attached a copy of our comment letter for all Central Maui Projects dated September 8, 2003.

Source Availability and Consumption

The project area is served by the Central Maui System. The main sources of water for this system are the Iao and Waihee aquifers, the Iao tunnel and the Iao-Waikapu Ditch. As of July 21, 2003, the Commission on Water Resource Management has designated Iao aquifer as Groundwater Management Area. DWS will not issue reservations for future meters until new sources are brought on-line. The County will issue meters up to 800,000 gallons per day (GPD) from July 1, 2003 to those ready to receive service. After that, no new meters will be issued until new sources have been brought on-line. Additional and/or larger meters for this project, may not be available until new sources are on-line. The Department has issued meters equivalent to 60% of the 800,000 gallons per day as of March 31, 2004.

The Maui Lu Resort is currently served by two 2-inch meters and one 1-inch meter. Current average consumption is about 53,300 gallons per day (gpd). Based on system per-unit standards, water use for the 400 unit timeshare development would be about 140,000 gpd.

System Infrastructure

The subject property is served by a 12-inch water line along South Kihel Road, a 8-inch water line along the North boundary, and a 12-inch water line along Kaonoulu Street. Fire hydrants are spaced at about 300 ft along South Kihel Road and about 350 ft along the North boundary. Domestic, irrigation and fire flow calculations will be required during the building permit process. Actual fire demand for structures is determined by fire flow calculations prepared, signed and stamped by a certified engineer or architect. The approved fire flow calculation methods for use include Guidance for Determination of Fire Flow- Insurance Service Office, 1974 and Fire Flow- Hawaii Insurance Bureau, 1991. Installation of a reduced pressure back-flow preventer approved by the Department is also required. The applicant should contact our engineering division with regards to system improvements at: 270-7835.

Conservation

We encourage the applicant to incorporate the following water conservation measures in project design and operation:

RECEIVED AS FOLLOWS

Kvette Caigoy
Maui LU Redevelopment
Page 2

Use Non-potable Water: Where possible, use on-site irrigation water 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.

Use Climate-adapted Plants: Increase the use of appropriate native and non invasive species in resort landscaping. Native plants adapted to the area, conserve water and protect the watershed from degradation due to invasive alien species. The project is located in the Maui County Planting Plan - Plant Zone 3 and 5. See attached plant lists.

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".

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

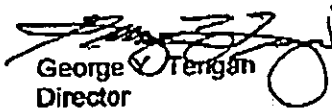
Pollution Prevention

The project overlies the Kamaole aquifer. In order to protect ground and surface water resources, 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 establishment
- 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, silling 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 270-7199.

Sincerely,


George Terigan
Director
emb

c: engineering division
applicant, with attachments:

The Costly Drip

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

Ordinance No. 2106 - A Bill for an Ordinance Amending Chapter 16.20 of the Maui County Code, Pertaining to the Plumbing Code

A Checklist of Water Conservation Ideas For Hotels and Motels

Selected BMP's from "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters"-EPA

C:\WPdocs\Permcomm\Maui LU Redevelop EA SM1.wpd

By Water All Things Find Life



July 23, 2004

Mr. George Y. Tengan, Director
Department of Water Supply
200 South High Street
Wailuku, Hawaii 96793
Attention: Eva Blumenstein

Dear Mr. Tengan:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your April 26, 2004 letter in response to the Draft Environmental Assessment (EA) and Special Management Area application for the subject project and providing information relative to water availability and consumption, system infrastructure, pollution prevention, and conservation.

Conservation measures that the applicant will implement, but is not limited to:

1. On-site non-potable water will be used for irrigation.
2. Low-flow fixtures will be utilized throughout the proposed project.
3. Much of the existing landscaping, which includes climate-adapted and native plants, will be retained.
4. Automated irrigation controllers will be utilized to prevent over-watering.

Pollution prevention measures that the applicant will implement, but is not limited to:

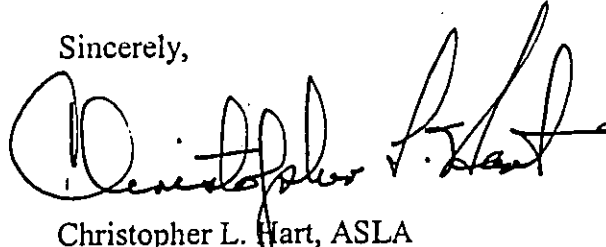
1. All loosened and excavated soil and debris material from drainage structure work will be properly and promptly disposed of.
2. Ground cover will be retained until the last possible date.
3. Denuded areas will be stabilized by prompt sodding or planting.
4. Drainage control features, such as berms, will be constructed.
5. Drainage structures, detention, silting and debris basins will be regularly maintained.
6. Non-potable water will be used for dust control.
7. Open vehicles carrying soils, gravel or other particulate matter will be covered.

These measures will be included in the Final EA. The applicant acknowledges that there is a limited amount of water availability in this area. During the building permit process, domestic, irrigation and fire flow calculations will be provided.

Mr. George Y. Tengan, Director
Department of Water Supply
Re: Maui Lu Redevelopment
July 23, 2004
Page 2

If you have any further questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher L. Hart". The signature is fluid and cursive, with a large initial "C" and a long horizontal stroke at the end.

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

Sep-03-04 12:55pm

From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

T-750 P.02/04 F-052

LINDA LINGLE
GOVERNOR OF HAWAII



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

April 27, 2004

CHRYSTLE L. FUGINO, M. D.
DIRECTOR OF HEALTH

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

'04 APR 28 A9:11

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

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

Attention: Kivette A. Caigoy

Dear Mr. Foley:

Subject: **Maui Lu Redevelopment**
TMK: (2) 3-9-001:083, 086, & 120
EA 2003/0008 and SM1 2003/0021

Thank you for the opportunity to comment on the proposed Maui Lu Redevelopment project. The following comments are offered:

1. National Pollutant Discharge Elimination System (NPDES) permit coverage is required for this project. The Clean Water Branch should be contacted at 808 586-4309.
2. The property may be harboring rodents that will be dispersed to the surrounding areas when any buildings are demolished or the site is cleared. The applicant is required by Hawaii Administrative Rules (HAR), Chapter 11-26, "Vector Control" to eradicate any rodents prior to demolition or site clearing activities and to notify the Department of Health by submitting Form VC-12 to the Maui Vector Control program when such action is taken. Rodent traps and/or rodenticides should be set out on the project site for at least a week or until the rodent activity ceases. The Maui Vector Control program phone number is 873-3560.
3. Due to the nature and location of the project, there is a significant potential for fugitive dust emissions during site work preparations. It is recommended that a dust control management plan be developed. Implementation of adequate dust control measures during all phases of the project is warranted. Construction activities must comply with the provisions of HAR, Chapter 11-60.

Mr. Michael W. Foley
April 27, 2004
Page 2

4. The noise created during the construction phase of the project may exceed the maximum allowable levels as set forth in HAR, Chapter 11-46, "Community Noise Control". A noise permit may be required and should be obtained before the commencement of work.
5. HAR, Chapter 11-46, sets maximum allowable sound levels from stationary equipment such as compressors and HVAC equipment. The attenuation of noise from these sources may depend on the location and placement of these types of equipment. This should be taken into consideration during the planning, design, and construction of the building and installation of these types of equipment.
6. HAR, Chapter, 501, "Asbestos Requirements" requires owners or operators of a demolition or renovation activity to thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur 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 Lileikis of the Noise, Radiation and Indoor Air Quality Branch at (808) 586-5800.

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

Sincerely,



Herbert S. Matsubayashi
District Environmental Health Program Chief



September 3, 2004

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

Dear Mr. Matsubayashi:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your April 27, 2004 letter in response to the Draft Environmental Assessment and Special Management Area application for the subject project. We offer the following responses to your comments:

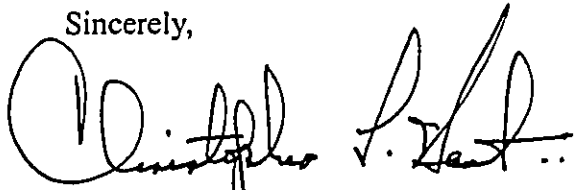
1. The applicant will apply for a NPDES permit from the Clean Water Branch.
2. At least a week prior to any demolition or site clearing activities, rodent traps and/or rodenticide will be set out on the project site and Form VC-12 will be submitted to the Maui Vector Control program.
3. Adequate dust control measures that comply with the provisions of Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust, will be implemented during all phases of construction. Mitigation measures will include but not be limited to:
 - Providing an adequate water source prior to start-up of construction for use in dust control.
 - Landscaping and rapid covering of bare areas, including slopes, beginning with the initial grubbing and grading phase.
 - Controlling of dust from shoulders, project entrances and other access roads.
 - Providing adequate dust control measures during weekends, after hours and prior to daily start-up of construction activities.
 - Controlling of dust from debris hauled away from the project site.
 - Erecting a dust fence to shield the adjacent projects and residences.

Mr. Herbert S. Matsubayashi
Department of Health
Re: Maui Lu Redevelopment
September 3, 2004
Page 2

4. If it is expected that maximum allowable noise levels will be exceeded, a noise permit will be obtained.
5. Prior to finalizing planning and design of the proposed project, sound levels will be taken into consideration when determining placement of stationary equipment such as compressors and HVAC equipment in order to attenuate noise to acceptable levels.
6. Prior to demolition of existing structures, an inspection of the structures will be conducted by a certified inspector for presence of asbestos, lead and arsenic containing materials. Such materials will be removed and disposed of in accordance with all county, state and federal codes and guidelines.

If you have any further questions, please do not hesitate to contact me.

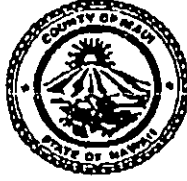
Sincerely,



Christopher I. Hart, ASLA
Landscape Architect - Planner

c: Mr. Greg Schneider, Genesee Capital
Mr. Michael Wright, Wright & Associates
Ms. Kivette Caigoy, Planning Department

ALAN M. ARAKAWA
Mayor



DEPARTMENT OF PARKS & RECREATION
700 Hali'a Nakoia Street, Unit 2, Wailuku, Hawaii 96793

RC
GLENN T. CORREA
Director

JOHN L. BUCK III
Deputy Director

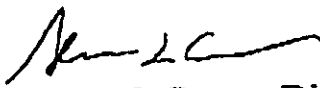
(808) 270-7230
Fax (808) 270-7934

MEMORANDUM

April 27, 2004

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

04 APR 29 AM 10:09

TO: Michael W. Foley, Planning Director
FROM: 
Glenn T. Correa, Director
SUBJECT: Maui Lu Redevelopment
TMK (2) 3-9-001:083, 086, & 120
Special Management Area Permit Application
SM1 2003/021 & EA 2003/0008

Thank you for the opportunity to review and comment on the Maui Lu Redevelopment Special Management Area Permit Application.

Upon review of the submitted application, we have no comment to offer at this time.

Should you have any questions or need of additional information, please call me, or Patrick Matsui, Chief of Parks Planning & Development, at extension 7931.

c: Patrick Matsui, Chief of Parks Planning & Development
Bob Straub, South Maui Parks District Supervisor



July 23, 2004

Mr. Glenn T. Correa, Director
Department of Parks & Recreation
700 Hali'a Nakoa Street, Unit 2
Wailuku, Hawaii 96793

Dear Mr. Correa:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your April 27, 2004 "no comment" letter in response to the Draft Environmental Assessment (EA) and Special Management Area application for the subject project.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

RECEIVED AS FOLLOWS

KC

LINDA LINGLE
GOVERNOR OF HAWAII



'04 APR 30 P12:18



DEPT OF PLANNING COUNTY OF MAUI
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

April 29, 2004

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

ERNEST Y.W. LAU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING

FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAOIULAI ISLAND RESERVE COMMISSION
LAND
STATE PARKS

SM12003-0021.RCM2
EA2003-0008

LD-NAV

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

Dear Mr. Foley:

Subject: I.D. Nos.: SM1 2003/0021 and EA 2003-0008
Applicant: Genesee Capital c/o Chris Hart & Partners
Authority: County of Maui Department of Planning
Project: Maui Lu Redevelopment
TMK: (2) 3-9-001: 083, 086 and 120

This is a follow-up to our letter to you dated April 6, 2004 (Ref: SM1 2003/0021.RCM), pertaining to the subject matter.

Enclosed please find a copy of the Division of Aquatic Resources and Maui District Land Office comment.

The Department of Land and Natural Resources has no other comment to offer on the subject matter at this time.

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

Very truly yours,

DIERDRE S. MAMIYA
Administrator

C: MDLO/OCCL

RECEIVED AS FOLLOWS

Suspense Date: April 2, 2004

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii

MEMORANDUM

To: William Devick, Administrator *WPD*
From: Richard Sixberry, Aquatic Biologist
Subject: Comments on Application for a SMA

Comments Requested By: Dierdre Mamiya, Land Division

Date of Request: 3/19/04

Date Received: 3/23/04

Summary of Project

Title: Maui Lu Redevelopment
Proj. By: Genesee Capital
Location: Kihei, Maui

Brief Description:

The applicant plans to construct a Timeshare Resort with 400 units, service and recreation amenities and site and utility improvements on the existing Maui Lu Resort which currently is being underutilized.

Comments:
Significant impacts adverse to aquatic resource values are not expected from the activities proposed. Precautions shall be taken during construction to prevent debris, eroded soil, petroleum products, landscaping chemicals, (herbicides, pesticides, etc.) and other potential contaminants from flowing, blowing or leaching into coastal waters. Algae blooms in the ocean from excess fertilizer runoff during landscaping or erosion is neither desired nor becoming and remains a problem on Maui.

We note that there may be some encroachment by revetments on State land fronting the property. We understand that this situation is currently under review by Sam Lemmo of DLNR's Coastal Lands Program.

Richard Sixberry
Aquatic Biologist

RECEIVED AS FOLLOWS

LINDA LINGLE
GOVERNOR OF HAWAII

RECEIVED
LAND DIVISION



2004 MAR 23 11:03



2004 APR -8 A 10:13

DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

ERNEST Y. LAU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

March 19, 2004:
LD/NAV
EA2003-0008

SM12003-0021.CMT
Suspense Date: 4/2/04

MEMORANDUM:

TO: XXX Division of Aquatic Resources (DD)
*XXX Division of Forestry & Wildlife
*XXX Na Ala Hele Trails
XXX Engineering Division (DD)
*XXX Division of State Parks
Division of Boating and Ocean Recreation
XXX Commission on Water Resource Management (DD)
*XXX Office of Conservation and Coastal Lands
XXX Land-Maui District Land Office (DD)
*XXX Land-Planning and Development

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: I. D. No.: SM1 2003/0021 (February 2004)
Applicant: Genesee Capital c/o Chris Hart & Partners
Project: Maui Lu Redevelopment
TMK: 2nd/ 3-9-001: 083, 086 and 120
Authority: County of Maui Department of Planning

Please review the document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

*Note: One copy of the document is available for your review in the Land Office, Room 220.

Should you have any questions, please contact Nicholas A. Vaccaro at ext.: 7-0384. If this office does not receive your comments by the suspense date, we will assume there are no comments.

() We have no comments.

(✓) Comments attached.

Division: MDLO

Signed: Jason K. Koga

Date: 4/7/04

Print Name: Jason K. Koga

RECEIVED AS FOLLOWS

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

54 High Street, Room 101
Wailuku, Hawaii 96793
PHONE: (808) 984-8103
FAX: (808) 984-8111

April 7, 2004

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

ERNEST Y.W. LAU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCE
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

Ref: SM12003-0021.CMT

MEMORANDUM

TO: Dierdre S. Mamiya, Administrator
Land Division

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

SUBJECT: Maui Lu Redevelopment, TMK: (2) 3-9-001, 083, 086 and 120

The Land Division issued a letter dated January 29, 2004 to 575 South Kihei Road, LLC pertaining to the shoreline encroachments seaward of Parcels 83 and 120.

We understand that 575 South Kihei Road, LLC continues to work with the Office of Conservation and Coastal Lands on the issue and we are awaiting a finding and recommendation from OCCL.

We have no further comments on the SMA Permit Application.

c: N. Vaccaro
District Files
OCCL



July 23, 2004

Ms. Dierdre S. Mamiya, Administrator
Land Division
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Mamiya:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Use Permit Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your letter dated April 29, 2004 in response to the Draft Environmental Assessment and Special Management Area Use Permit application for the subject project. Following are responses to your comments.

Care will be taken during construction to prevent potential contaminants to flow, blow or leach into coastal waters using best management practices and measures to contain potential sources. Precautions will also be taken to prevent excess fertilizer runoff.

Discussions are continuing over resolving the revetment encroachment on State land fronting the subject property.

Thank you again for your comments. If you have any further questions, please do not hesitate to contact me.

Sincerely,

Christopher L. Hart
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

Sep-03-04 12:56pm

From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

T-750 P.04/04 F-052

ALAN M. ARAKAWA
Mayor

MICHAEL W. FOLEY
Director

WAYNE A. BOTEILHO
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

PHONE LOG

Call From: Kevin Foster
USFW
792-9420

Received by: K. Caigoy

Date: 4/30/04

RE: Maui Lu Redevelopment (EA 2003/0008) (SM1 2003/0021)

USFW will not be submitting any comments.

May-11-04 08:01 AM FROM UNIT OF TERRITORY SURVEY DIVISION

LINDA LINCLE
GOVERNOR



KUHU K. BAYTO
Comptroller

KATHERINE H. THOMASON
Deputy Comptroller

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

04 MAY -5 P1:11

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

May 3, 2004

MEMORANDUM

TO: Michael W. Foley, Planning Director
Maui County Planning Department

ATTN: Kivette A. Caigoy, Staff Planner

FROM: Melvin M. Masuda, Assistant Land Survey Administrator
DAGS, Survey Division *mm*

SUBJECT: I.D.: EA 2003/0008 and SM1 2003/0021
TMK: 3-9-01:83, 86 & 120
Project Name: Maui Lu Redevelopment
Applicant: Genesee Capital c/o Chris Hart & Partners

We have reviewed the State Special Permit and County Special Use Permit Assessment for the above subject. Located within the project area is a survey Benchmark Station called "M 22".

Please be advised that if there is a possibility that the Benchmark Station will be disturbed or destroyed during construction, the survey monument must be referenced and replaced by a Licensed Professional Land Surveyor. Copies of the field notes, descriptions and new values (if applicable) of replaced monuments should be sent to our office for review and filing.

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



July 23, 2004

Mr. Melvin M. Masuda
Survey Division
Department of Accounting and General Services
P.O. Box 119
Honolulu, Hawaii 96810-0119

Dear Mr. Masuda:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your May 3, 2004 letter in response to the Draft Environmental Assessment (EA) and Special Management Area application for the subject project.

If benchmark "M 22" is destroyed or disturbed, the survey monument will be referenced and replaced by a licensed professional land surveyor. If replacement is necessary, copies of field notes, descriptions, and new values (if applicable) of the replaced monument will be sent to your office for review and filing.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department
Mr. Mike Fujita, Wilson Okamoto Corp.
Mr. Norman Murakami, ControlPoint Surveying, Inc.



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

'04 MAY 10 P1:09
DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED
HRD04/1023B

May 6, 2004

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

RE: Maui Lu Redevelopment, Application for Special Management Area Permit, Kihel, Maui, TMKs 3-9-001: 083, 086 & 120

Dear Kivette A. Caigoy,

The Office of Hawaiian Affairs is in receipt of your March 12, 2004, request for comments on the above project, which would redevelop and construct a 400-unit timeshare resort complex. We apologize for the delay in responding, but offer the following comments.

In reference to coastal engineering suggestions and alternatives offered in the Draft Environmental Assessment, OHA generally does not support any form of shoreline hardening. Revetments, like any structure built in or too close to beach sand sources, have been shown to occasionally protect the structures behind them, but also to regularly cause erosion of the beaches in front of those structures by interrupting natural coastal processes of the ocean seasonally taking and returning sand. All of the above limits coastal and cultural access rights to public trust beaches – ceded lands – by shrinking the coast itself. Not only is the coast shrunk by property owners moving their control makai, but by the ocean moving its control mauka.

OHA recommends that Maui County condition the project on requirements to implement water conservation measures wherever possible. Such measures should include the use of brackish and/or reclaimed water for irrigation and non-potable water uses, and the use of native plantings whenever possible, instead of water-hungry introduced and exotic landscaping plants.

OHA will further rely on assurances that should iwi or Native Hawaiian cultural or traditional deposits be found during ground excavation or 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, please contact Heidi Guth at 594-1962 or e-mail her at heidig@oha.org.

Sincerely,



Clyde W. Namu'o
Administrator

CC: Office of Environmental Quality Control
235 S. Beretania Street
Suite 702
Honolulu, HI 96813

Christopher L. Hart
Chris Hart & Partners, Inc.
1955 Main Street
Suite 200
Wailuku, HI 96793

Gregory W. Schneider
Genesee Capital
4037 Porte de Palmas, Suite 90
San Diego, CA 92122



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

July 23, 2004

Mr. Clyde W. Namu'o
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813
Attention: Heidi Guth

Dear Mr. Namu'o:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your May 3, 2004 letter in response to the Draft Environmental Assessment (EA) and Special Management Area application for the subject project. We offer the following responses to your comments:

The applicant is continuing discussions with the Office of Conservation and Coastal Lands regarding the existing rock revetments. Beach nourishment and dune stabilization, which are discussed extensively in the draft EA, are options that will improve shoreline conditions.

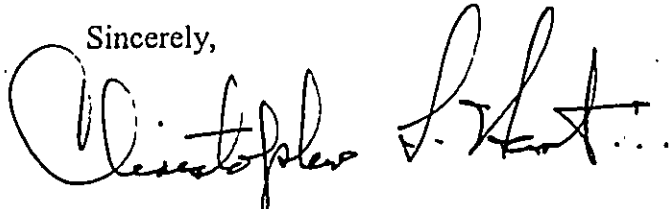
As discussed in the Draft EA, landscaping will be irrigated with an existing on-site non-potable well. In the past, this well has consistently provided water to the property at a flow rate of 250 gallons per minute, well above the projected requirements. Most of the existing mature landscaping will be retained. The applicant will also take into consideration suggestions from the Department of Water Supply regarding water conservation measures.

The State Historic Preservation Division recommends that no additional archaeological work be required for the project site. However, if *iwi* or Native Hawaiian cultural or traditional deposits are identified during ground excavation or disturbance, work will cease in the area and the State Historic Preservation Department will be notified immediately.

Mr. Clyde W. Namu'o
Office of Hawaiian Affairs
Re: Maui Lu Redevelopment
July 23, 2004
Page 2

If you have any further questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher L. Hart". The signature is written in a cursive style with a large initial "C".

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

07/1633

UNIVERSITY OF HAWAII

Sea Grant Extension Service
Maui Community College '04 MAY 10 AID:56

5/7/04

Kivette Caigoy, Planner
Maui County Department of Planning
250 South High Street
Wailuku, HI, 96793

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

Dear Ms. Caigoy,

RE: Draft Environmental Assessment, Maui Lu Resort Redevelopment

Thank you for providing me with the opportunity to review the Draft Environmental Assessment (EA) for the Maui Lu Resort Redevelopment. My focus in reviewing the EA was the matter of shoreline resources, and I have several comments to make regarding this topic.

Having participated in a site visit to this location, it is apparent that the encroaching revetments are hazardous, and need to be either repaired or removed. Removal of the two southernmost revetments would clearly result in erosional losses that would threaten existing buildings. While the best situation for the shoreline environment would be to remove the revetments as a continuous beach would likely be reestablished along this shoreline, it is clear that this would come at a considerable cost to the land owner as it is likely that no buildings could exist on the makai parcel in the absence of the revetments. However, it should be pointed out that the northernmost revetment does not protect any buildings. It protects the Vancouver Monument; perhaps this monument could be moved to another location and the revetment could be removed.

As indicated in the EA, sand transport along this shoreline switches directions regularly, with south swells and Kona Storms carrying sand northward, and trade wind waves carrying sand back to the south. The amount of sand being carried in each direction appears to be fairly equal, as we do not consistently see one end with a large buildup of sand and a notable deficiency on the opposite end, which would have indicated a more unidirectional transport pattern. However, the revetments have broken up a long beach segment into several smaller beach cells, which means that less sand is available to feed a given cell under a period of either heavy trade wind or south swell driven transport. The result is that we are more likely to see erosion hotspots occurring in each of the cells. While these hotspots may only last several months until the transport direction changes, they may result in damage to coastal lands to the north and south of the Maui Lu, and may threaten the building at the south end of the property, and possibly South Kihei Road at the north end of the property, in the near future.

As such, I would recommend that beach replenishment be attempted, particularly at the south end of the property, but perhaps also at the north end. While it was explained in the EA that beach replenishment requires periodic re-nourishment and can be expensive, it may be that this is a necessary cost for maintenance of this coastal property. From the

310 Kaahumanu Avenue Kahului, Maui, HI 96732 Telephone: (808) 984-3335 Facsimile (808) 243-4623
E-Mail: norcross@hawaii.edu

An Equal Opportunity/Affirmative Action Institution

photographs, it can be seen that there once was a sandy beach stretching continuously along this shoreline. Since that time, the shoreline has retreated considerably leaving no beach in front of the revetments, and it can be presumed that the shoreline is continuing to retreat. If the owner does not wish to retreat along with the shoreline, it will become necessary to slow the shoreline retreat by adding sand to the beach system – otherwise, erosion will eventually flank (erode behind the ends of) the revetments, which it may already have begun to do. It should be pointed out that, while the average erosion rate as indicated in the EA for all of North Kihei is -0.9 feet per year, the average erosion rate at the Maui Lu property is double this rate, at approximately -1.8 feet per year.

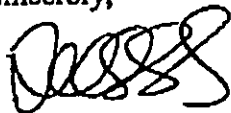
The plans for dune stabilization sound very promising. This is long overdue for the north end of the property. With properly vegetated dunes, the sand should accumulate on the makai side of the dune, building up the dune and beach in a seaward direction and preventing windblown sand losses onto the road. It may be necessary to remove the ironwood hedge as ironwood needles are acidic and often prevent groundcover from being established. However, adequate sand fencing and irrigation should be in place prior to removing any existing trees or vegetation.

Regarding public access; it would be ideal for the public access to traverse the entire property, however I understand that this may not be easily done at the south end of the property due to limited space and erosion concerns. I would encourage the Maui Lu to establish complete lateral access as a long-term goal; perhaps with beach replenishment at the south end, safe lateral access onto the beach may be a possibility. As a final comment on access, please try to create an access entry onto the property that the public will feel welcome to use without worrying that perhaps they might be trespassing.

My last concern is regarding the increase in impervious surfaces which leads to a 22% increase in storm water runoff. This is a significant increase, particularly in this area where flooding does seem to be a problem every winter. I would highly recommend the consideration of options to reduce impervious surfaces and reduce runoff, such as the use of brick paving stones or other permeable options for parking and walkway areas. Perhaps runoff that is retained in basins could be used for irrigation purposes. These are just a few of many innovative options available to reduce runoff that I would strongly recommend incorporating. Additionally, while the above-ground retention areas and underground pipe lines for runoff control were shown in a diagram, I was not able to determine from anywhere in the EA where the underground runoff containment areas that were discussed are to be located. If this has been omitted, please have this information included.

Thank you very much for your time.

Sincerely,



Zoe Norcross
Sea Grant Coastal Processes Extension Agent



July 29, 2004

Ms. Zoe Norcross
Sea Grant Extension Service
310 Kaahumanu Avenue
Kahului, Hawaii 96732

Dear Ms. Norcross:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your May 3, 2004 letter in response to the Draft Environmental Assessment (EA) and Special Management Area application for the subject project. We offer the following responses to your comments:

The applicant is continuing discussions with the Office of Conservation and Coastal Lands regarding the existing rock revetments. We agree with your conclusion that removal of the structures would result in considerable cost to the landowner due to the eventual erosion of these parcels. Repair of the revetments is one of the likely options considered by the applicant. Stabilizing loose rocks and removal of unnecessary rocks near and around the toe of the revetment structures would improve public safety.

Beach nourishment is an option also being considered to improve shoreline conditions and to mitigate local erosional episodes. Permitting issues, sand source problems and long term costs present significant obstacles for beach nourishment, however, while dune restoration/stabilization is a more practical option (see discussion below.)

Regarding the UH produced erosion rates, according to Sea Engineering, when 1900 data points are included in the AEHR, the erosion rate is smoother in the vicinity of the Maui Lu property (see attachment). The range is from 1.1 to 1.7 feet per year as opposed to the approximate 1.3 to 3 feet per year as presented by the Coastal Geology Group. This set of data leads to a conclusion that the erosion rate fronting the Maui Lu Resort is consistent with rates in the North Kihei area (0.9 feet per year) and not significantly higher at the revetment structures. Sea Engineering's analysis illustrates the need for a close examination of the rates produced by UH's Coastal Geology Group. In this instance, the UH study produces an erosion rate fronting the revetments which is double

Ms. Zoe Norcross
Re: Maui Lu Redevelopment
July 29, 2004
Page 2

the rate at the neighboring shorelines, despite the fact that the revetments have fixed the abutting shoreline for forty years while the neighboring shorelines have continued to experience long term net erosion.

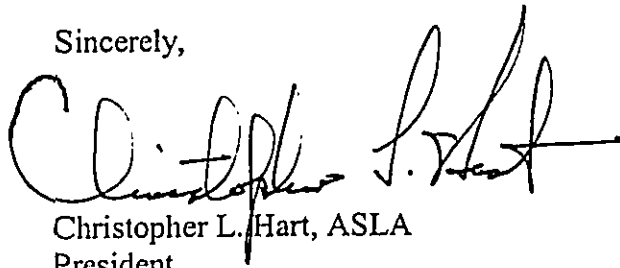
Thank you for your positive comments regarding dune stabilization. The preliminary landscape plan indicates removal of the existing ironwood hedge. The replacement landscape material will be determined when plans are finalized. The removal and replacement will be planned and staged to minimize any erosion. We would appreciate an opportunity for you to provide comments on a draft dune stabilization plan prior to implementation.

The proposed sidewalks along South Kihei Road, beach parking and lateral beach path with adequate signage should encourage public use. As stated previously, repair of the existing rock revetments also would improve public safety.

County regulations require that any additional runoff generated by the proposed project be contained on site. The existing excess runoff will be directed to Kulahinakoi gulch to the south on the *makai* side of South Kihei Road. In addition, downspouts will be directed toward vegetated areas. Underground basins could be located both within the landscaped area or under paved areas such as the at-grade parking lots. The final locations will need to be worked out during the design process as there are many factors which affect the final locations of the various retention basins. Approval of the project is subject to providing a Final Drainage Report which will be reviewed and approved by Public Works to ensure compliance with County standards.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher L. Hart". The signature is fluid and cursive, with a long horizontal stroke at the end.

Christopher L. Hart, ASLA
President

attachment

c: Mr. Greg Schneider, Genesee Capital
Mr. Michael Wright, Michael Wright & Associates
Ms. Kivette Caigoy, Planning Department



Sea Engineering, Inc.

Makai Research Pier • 41-202 Kalanianaʻole Hwy. • Waimanalo, Hawaii 96795-1820
Phone: (808) 259-7966 / FAX (808) 259-8143 • E-mail: sei@seaengineering.com

Thank you for your comments on the Sea Engineering report *Coastal Engineering Assessment for the Maui Lu Hotel* (February 2004). To address comments outlined in the "Sea Engineering Study Appended to SMA" section of the letter, we offer the following responses. Paragraph numbers refer to this section of the letter only.

1. Paragraph 2, Sentence 2 – "the structures have caused the significant loss of a dry sandy beach immediately seaward of their location." Sea Engineering concurs with this statement. Shoreline hardening without sand nourishment or sand retention structures on any coast that is experiencing chronic long term erosion and shoreline recession will eventually lead to the loss of a beach in front of the structures which fix the shoreline position. Most of the North Kihei shoreline has been experiencing long-term erosion.
2. Paragraph 2, Sentence 3 – "Erosion rates are significantly higher fronting the Maui Lu structures (+3 ft/yr) compared to rates of approximately 1-2 ft/yr elsewhere." The erosion rates calculated by the U.H. Coastal Geology Group, and presented in Figures 10 and 12 of the Sea Engineering report are the Annual Erosion Hazard Rate (AEHR) that is generally based on the most recent trend (Rooney, 2003). The AEHR can be misleading in certain areas because the statistical analysis involves identifying outlier points that are excluded from the erosion rate computation. The attached figure presents both the End Point Erosion Rate (EPR) and the AEHR computed by the Coastal Geology Group for transects 0 to 30 in the Maui Lu vicinity. The figure shows that AEHR for the Maui Lu vicinity between transects 0 and 17 is always much greater than the EPR (occasionally more than double), and is highly variable. The much greater magnitude and the variability of the AEHR is primarily due to whether or not the 1900 data point is included in the erosion rate computation. Because this data point reflects a shoreline position that is significantly seaward (accreted) of all other shorelines, and the next data is not until 1949, its inclusion or exclusion dramatically affects the resulting erosion rate. For example, at transects 11 and 12 in front of the southern Maui Lu revetment, the AEHR, which does not include the 1900 data, is 2.7 to 3 feet/year, while the EPR is 1.3 feet/year – less than half. The 1900 data is excluded from the AEHR at transects 0,1,2,3,4,7,10,11,12,14,15,27,28 and 29. In general, the EPR shows a relatively even trend in erosion rates. The range of erosion rates in the Maui Lu vicinity is 1.1 to 1.7. The largest erosion rates occur at transects 10, 15, 19 and 20 – immediately adjacent to the revetments where local flanking effects have occurred.
3. Paragraph 3 – The project site in North Kihei is well sheltered from northeast tradewind waves and large north-northwest swell. The project area is, however, exposed to waves from the south to west directions, which can be generated by Kona storms, south swell or hurricanes. The project area is also exposed to local tradewinds from the north to northwest that can generate small wind chop waves. Thus, the primary littoral processes for transporting sand are the storm and swell waves from the south to west, and the prevailing, low energy tradewind chop. Rooney (2002) concludes that since 1900, there



Sea Engineering, Inc.

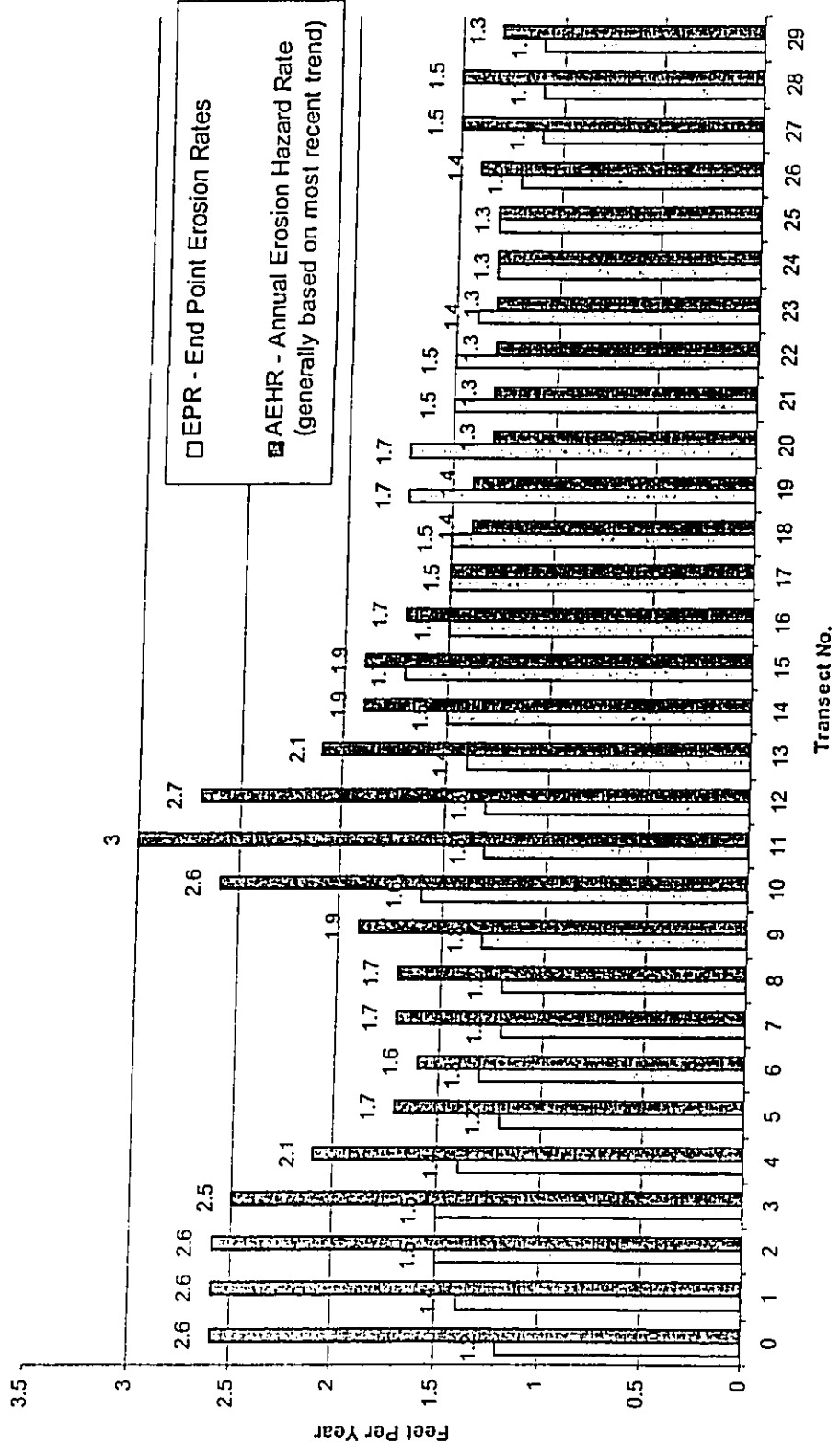
Makai Research Pier • 41-202 Kalanianaʻole Hwy. • Waimanalo, Hawaii 96795-1820
Phone: (808) 259-7966 / FAX (808) 259-8143 • E-mail: sei@seaengineering.com

has been a net northward longshore transport on the Kihei coast. This is theorized to be due to above average Kona storm activity over this period. Rooney theorizes that Kona storm activity increases during occurrences of the Pacific Decadal Oscillation (PDO), resulting in dominant transport to the north, and decreases during negative PDO phases, resulting in dominant tradewind driven transport to the south. During the PDO, a large wedge of abnormally warm water is situated in the eastern equatorial Pacific, and influences climate and storm activity across the entire Pacific.

During the field investigation for the Maui Lu project, there was little evidence of active sand transport. A standard method for determining net transport is to note if there is impoundment of sand by structures or objects protruding seaward from the beach. There was no evidence of sand impoundment on any side of the Maui Lu revetments, indicating little net transport in either direction. The aerial photographic analysis completed by the U.H. Coastal Geology Group shows that the shoreline to the south of Koieie Fishpond has accreted significantly, while the shoreline to the north has eroded. This suggests that the fishpond may be blocking the net sand transport to the north. Aeolian transport is also evident at the site. Wind blown dunes were located in the backshore, migrating onto the road in spots.

A more detailed assessment of littoral processes showing seasonal influences would require at least a year-long comprehensive field investigation to include frequent measurement of shoreline profiles located at tight intervals along the shoreline in the area.

North Kihei - Erosion Rates
1900 - 2000



LINDA LINGLE
GOVERNOR



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

04 MAY 18 P1:15

May 7, 2004

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

RODNEY K. HARAGA
DIRECTOR

Deputy Director
BRUCE Y. MATSUI
LINDEN H. JOESTING
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.1141

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

Dear Mr. Foley:

Subject: Maui Lu Redevelopment
Environmental Assessment (EA 2003/0008) and
Special Management Area Use Permit Application (SM1 2003/0021)
TMK: (2) 3-9-001: 083, 086, & 120

Thank you for requesting our review of the subject project. We have the following comments:

1. The subject project will have an adverse impact on our State highways, particularly at the intersection of Kaonoulu Street and Piilani Highway.
2. The applicant should be responsible for implementing the recommended traffic mitigation measures. In this regard, the applicant should be encouraged to coordinate and seek cost arrangements with the neighboring developers, especially those with similar conditions of land use.
3. The applicant should be required to participate and contribute to its fair share of regional roadway improvements.

We appreciate the opportunity to provide our comments.

Very truly yours,

RODNEY K. HARAGA
Director of Transportation



July 23, 2004

Mr. Rodney K. Haraga, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Haraga:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086, & 120 Kihei, Maui, Hawaii.

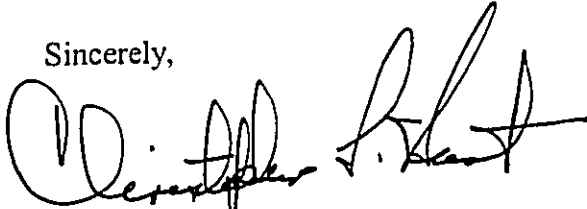
Thank you for your May 7, 2004 letter in response to the Draft Environmental Assessment and Special Management Area application for the subject project. We offer the following responses to your comments:

1. The Traffic Impact Analysis Report acknowledges that there will be impacts to the roadways in the vicinity of the subject project. However, as the report notes, the projected levels of service would not be unacceptable. Left turns from Kaonoulu Road onto Piilani Highway at morning peak hour would have an increase in delay from 26.1 to 37.5 seconds with the proposed project (projected for the year 2008). At the same intersection, the afternoon peak hour would have an increase in delay from 23.9 to 26.6 seconds. While these increases degrade the level of service, the delay is still less than 40 seconds and, in total, is only a 28% increase.
2. The applicant intends to implement the recommended traffic mitigation measures. The applicant has investigated ways for collaborative participation in roadway improvements in the vicinity and will continue in this effort.
3. The applicant will contribute its fair share of any required traffic impact fees.

Mr. Rodney K. Haraga
Re: Maui Lu Redevelopment
July 23, 2004
Page 2

If you have any further questions, please do not hesitate to contact me.

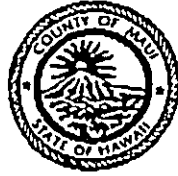
Sincerely,

A handwritten signature in black ink, appearing to read "Christopher L. Hart". The signature is fluid and cursive, with a large initial "C" and a long horizontal stroke at the end.

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

ALAN M. ARAKAWA
Mayor
GILBERT S. COLOMA-AGARAN
Director
MILTON M. ARAKAWA, A.I.C.P.
Deputy Director
Telephone: (808) 270-7845
Fax: (808) 270-7955



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

RALPH NAGAMINE, L.S., P.E.
Development Services Administration
TRACY TAKAMINE, P.E.
Wastewater Reclamation Division
LLOYD P.C.W. LEE, P.E.
Engineering Division
BRIAN HASHIRO, P.E.
Highways Division
JOHN D. HARDER
Solid Waste Division

May 24, 2004

FILE COPY

MEMO TO: MICHAEL W. FOLEY, PLANNING DIRECTOR
FROM: *for* GILBERT S. COLOMA-AGARAN, DIRECTOR OF PUBLIC WORKS
AND ENVIRONMENTAL MANAGEMENT *Milton Coloma*
SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT & SPECIAL MANAGEMENT
AREA PERMIT APPLICATION
MAUI LU REDEVELOPMENT
TMK: (2) 3-9-001:083, 086 & 120
EA 2003/0008
SM1 2003/0021

We reviewed the subject application and have the following comments:

1. Submit plan for demolition waste disposal/recycling and construction waste disposal/recycling.
2. The architect and owner are advised that the project is subject to possible tsunami and flood inundation. As such, said project must conform to Ordinance No. 1145, pertaining to flood hazard districts.
3. The applicant's traffic Study should take into consideration the North-South collector Road segment, from Kaonoulu to Waipuilani. Traffic projection numbers in the traffic analysis do not appear to have included this segment.
4. Road-widening lots shall be provided for the adjoining halves of Kenolio Road, Kaonoulu Street and South Kihei Road to provide for

future 56 foot wide rights-of-way and improved to County standards, to include, but not be limited to, pavement widening, construction curb, gutter and sidewalk, street lights and relocation of utilities underground. Said lot shall be dedicated to the County upon completion of the improvements.

5. All structures, such as walls, trees, etc., shall be removed or relocated from the road-widening strips. The rear boundaries to the road-widening strips shall be clearly marked to determine if said structures have been properly removed and relocated.
6. A 30 foot radius shall be provided at all intersections of existing roads.
7. The existing Kenolio Road, Kaonoulu Street and South Kihei Road do not meet County standards based on roads located in "urban" zoning. Therefore, these roadways shall be improved to County standards.
8. A detailed and final drainage report and a Best Management Practices Plan (BMP) shall be submitted with the grading plans for review and approval prior to issuance of grading permits. The drainage report shall include hydrologic and hydraulic calculations and the schemes for disposal of runoff waters. It must comply with the provisions of the "Rules and Design of Storm Drainage Facilities in the County of Maui" and must provide verification that the grading and runoff water generated by the project will not have an adverse effect on adjacent and downstream properties. The BMP plan shall show the location and details of structural and non-structural measures to control erosion and sedimentation to the maximum extent practicable.
9. The applicant shall contribute his pro-rata share to traffic improvements to be determined by the County and traffic master plans. A detailed Traffic Master Plan for the entire subdivision shall be submitted for our review and approval. An agreement to the above prepared for filing with the State's Bureau of Conveyances shall be submitted by the developer.
10. The developer shall install a new traffic signal system at the intersection of Kaonoulu Street and South Kihei Road, at no cost to the County.

11. A site plan and a sight distance report to determine required sight distance and available sight distance at existing and proposed street intersections shall be provided for our review and approval.
12. The 100-year flood inundation limits shall be shown on the project site plans.
13. In accordance with Section 12.24A.0707 of the Maui County Code, the applicant shall submit three (3) sets of the street tree planting and irrigation plan and a completed "Maui County Arborist Committee Plans Review Form".
14. It is noted that Kaonoulu Road's collector road classification does not allow the use of speed humps. Other traffic-calming measures may be considered, as appropriate.
15. Although wastewater system capacity is currently available as of April 16, 2004, the developer should be informed that wastewater system capacity cannot be ensured until the issuance of the building permit.
16. Wastewater contribution calculations are required before building permit is issued. Calculations to include a comparison with existing/past property usage.
17. Developer shall pay assessment fees for treatment plant expansion costs in accordance with ordinance setting forth such fees. (Kihei Area No. 3)
18. Developer is required to fund any necessary off-site improvements to collection system and wastewater pump stations.
19. Plans should show the installation of a single service manhole on the property prior to any connection to the County Sewer. Existing connections shall be used where possible.
20. Indicate on the plans the ownership of each easement (in favor of which party). Note: County will not accept sewer easements that traverse private property.
21. Kitchen facilities within the proposed project shall comply with pre-treatment requirements (including grease interceptors, sample boxes, screens, etc.).

22. Non-contact cooling water and condensate should not drain to the wastewater system.
23. Kihei Pump Station No. 4 is nearing capacity and impact needs to be evaluated prior to approval.
24. It is noted that a separate irrigation system will be utilized, facilitating a change over to reclaimed water if/when it becomes available at this location.
25. There is a continuing problem of wind-blown sand coming from the beach and through the property makai of South Kihei Road. This sand piles up along the shoulders of South Kihei Road causing a hazard that must be periodically removed. The applicant's site plan should discuss how this problem will be addressed.
26. The intersection of South Kihei Road and Kaonoulu Road ponds with water during storms. With the installation of a traffic signal system at this intersection, drainage improvements should be made to prevent the ponding that would otherwise jeopardize the functioning of the traffic signal system.
27. Because of limited County maintenance resources, the proposed landscape median shall be maintained in perpetuity and paid for by the developer or other appropriate non-County entity.
28. Large canopy trees along County roads have experienced problems with tree roots. Even with the use of root barriers, there have been numerous problems from uplifted curbs, gutters, sidewalks, and pavement. Also, certain types of trees drop seed pods that when crushed by passing vehicles causes a slippery road condition. This is evident in the Wailea area where signs are posted as "Slippery When Wet". Some seed pods also diminish or "blacken" traffic markings, making these marking difficult to see, especially at night. We recommend review of proposed tree species by the County Arborist Committee.
29. Due to the proximity of the ocean breezes, all traffic signal fixtures shall be of corrosion resistant materials and/or coated with such material to prevent corrosion. The traffic-control box should be designed to prevent interior corrosion or interference with the internal workings of the traffic signal controller.

Memo to Michael W. Foley, Planning Director
May 24, 2004
Page 5

30. The traffic signal shall provide for remote monitoring of the operation of the traffic signal. The monitoring location will be at the Wailuku Highways Baseyard's traffic signal maintenance office at 1827 Kaohu Street, Wailuku,
31. The plans submitted for this project do not adequately show sufficient detail to determine whether the project is compliant with the building and housing codes. We will review the project for building and housing code requirements during the building permit application process.
32. The grading for the project shall comply with the provisions of the grading ordinance. Best Management Practices shall be implemented to the maximum extent practicable to prevent pollutants including dust and sediment from discharging off the project site.
33. The drainage system design shall comply with the provisions of the drainage rules and shall create no additional adverse effects to adjacent and downstream properties.
34. The subject project shall comply with Section 16.26.3304 (Improvements to Public Streets) of the Maui County Code.

If you have any questions regarding this memorandum, please call Milton Arakawa at 270-7845.

GSCA:MA:sw
S:\LUCA\GZM\Draft Comments\Maui_Lu_Rodevelopment_ea_cm1_sw.wpd



July 23, 2004

Mr. Gilbert S. Coloma-Agaran, Director
Department of Public Works and Environmental Management
200 South High Street
Wailuku, Hawaii 96793
Attention: Milton Arakawa

Dear Mr. Coloma-Agaran:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Use Permit Application
TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

Thank you for your May 24, 2004 letter in response to the Draft Environmental Assessment and Special Management Area Use Permit application for the subject project.

1. A demolition/construction waste disposal/recycling plan will be submitted under separate cover.
2. Final construction plans will conform to Ordinance No. 1145, pertaining to flood hazard districts.
3. The traffic impact analysis report will be revised to include the proposed North-South collector road segment from Kaonoulu Road to Waipuilani Street.
4. Roadway widening lots to allow for a minimum 56-foot wide right-of-way for South Kihei Road, Kaonoulu Road, and Alulike Street will be provided where required. Kenolio Road, where it is adjacent to the propose project, already has a 56-foot right-of-way. Roadway improvements, which will include pavement widening, curbs, gutters and sidewalks, will be constructed on the project sides of the roads. In addition, the applicant will construct a landscaped median strip between the lanes along South Kihei Road.
5. Structures, walls and trees shall be removed from any dedicated right-of-way lots.
6. Radii at road intersections affected by the development will be maintained as required.
7. As stated in item no. 4, Alulike Street, Kaonoulu Road and South Kihei Road will be improved to meet county standards.
8. Final drainage report and best management practices (BMP) plan shall be submitted with grading plans.

Mr. Gilbert S. Coloma-Agaran
Department of Public Works and Environmental Management
Re: Maui Lu Redevelopment
July 23, 2004
Page 2

9. The applicant will contribute its pro-rata share of the applicable traffic impact fee in accordance with county ordinances, however the subject property is not being subdivided.
10. The Traffic Impact Analysis Report (TIAR) indicates that a traffic signal at Kaonoulu and South Kihei Roads is warranted. The applicant planned to install the traffic signal, however the Maui Planning Commission has indicated that it may not be desirable.
11. Site distance plan will be prepared and submitted to your department.
12. 100-year flood inundation limits will be shown on the project site plans.
13. When landscaping plans are finalized, three sets of the street tree planting and irrigation plan, along with the Maui County Arborist Committee Plans Review form, will be submitted.
14. The TIAR concludes that traffic calming measures on Kaonoulu Road are not required mitigation for the subject project and should be installed only after the county's petition requirements are satisfied.
15. The applicant recognizes that wastewater capacity for the subject project cannot be ensured until issuance of the building permits.
16. Average sanitary sewer volume is expected to be 113,500 gallons per day (GPD) based on County of Maui Guidelines for Standard Wastewater Contribution (110,500 GPD for *mauka* parcel and 3,000 GPD for *makai* parcel). Final wastewater contribution calculations, which will include existing/past property usage, will be submitted with the building permit applications.
17. The applicant will pay assessment fees for treatment plant expansion in accordance with county ordinances.
18. The applicant will fund off-site improvements to the collection system and wastewater pump stations, if necessary, to accommodate the subject project.
19. The applicant is proposing a new sewer lateral for the *mauka* parcel. The existing 6-inch service laterals, one each for the *mauka* and *makai* parcels, will continue to be utilized. Finalized construction plans will show the location of the two single service sewer manholes on the *mauka* parcel.
20. When construction plans are finalized, easement information will be submitted to your department..
21. Kitchen facilities will comply with pre-treatment requirement as determined by Maui County Codes.
22. Any non-contact cooling water and condensate produced by the proposed project will not drain into wastewater system.
23. The applicant will evaluate Kihei Pump Station No. 4 with your department prior to approval of the sewer system plans.

Mr. Gilbert S. Coloma-Agaran
Department of Public Works and Environmental Management
Re: Maui Lu Redevelopment
July 23, 2004
Page 3

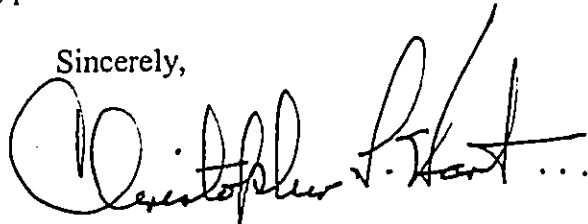
24. The irrigation system will utilize the existing on-site well. Preliminary tests indicate that the well capacity is adequate for existing and proposed landscaping.
25. In section V.A.10 of the Draft EA, there is a discussion on dune stabilization which suggests replanting these areas with adapted vegetation. Zoe Norcross, of the Sea Grant Extension Service, Maui Community College, has stated in a letter, "With properly vegetated dunes, the sand should accumulate on the makai side of the dune, building up the dune and beach in a seaward direction and preventing windblown sand losses onto the road."
26. Since the County will likely require the project to improve the adjoining County roads (South Kihei Road and Kaonoulu Road) including installation of an underground storm drainage system, the localized drainage condition near the project should improve. Instead of storm water sheet flowing along South Kihei Road and Kaonoulu Road, the storm water will be conveyed underground via the new storm drainage system.
27. The landscaped median to be constructed between lanes on South Kihei Road will be maintained by the Maui Lu Resort.
28. The County Arborist Committee will review the tree species selection along county roads.
29. Corrosive resistant traffic signal equipment will be utilized at the Kaonoulu/South Kihei Road intersection.
30. The plans for the proposed traffic signal will include provisions for remote monitoring.
31. When construction plans are finalized, they will be submitted to your department for review for conformance with building and housing codes.
32. During grading, in addition to measures described in section V.D.4, these Best Management Practices (BMP) are to be implemented, but not limited to:
 - Providing an adequate water source prior to start-up of construction for use in dust control.
 - Landscaping and rapid covering of bare areas, including slopes, beginning with the initial grubbing and grading phase.
 - Controlling of dust from shoulders, project entrances and other access roads.
 - Providing adequate dust control measures during weekends, after hours and prior to daily start-up of construction activities.
 - Controlling of dust from debris hauled away from the project site.
 - Erecting a dust fence to shield nearby properties.
33. The final drainage system design will comply with provisions of the federal, state and county rules and guidelines. All additional runoff will be contained on-site and will not have adverse effects on adjacent and downstream properties.

Mr. Gilbert S. Coloma-Agaran
Department of Public Works and Environmental Management
Re: Maui Lu Redevelopment
July 23, 2004
Page 4

34. Work on public roadways will comply with section 16.26.3304 (Improvements to Public Streets) of the Maui County Code.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher L. Hart ...". The signature is written in a cursive style with a large initial "C" and "H".

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

Jun-14-04 10:48am FROM=DEPT OF PLANNING COUNTY OF MAUI

ALAN M. ARAKAWA
MAYOR



CARL M. KAUPALOLO
CHIEF

NEAL A. BAL
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE AND PUBLIC SAFETY

200 DAIRY ROAD
KAHULUI, MAUI, HAWAII 96732
(808) 270-7561
FAX (808) 270-7919

June 1, 2004

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

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED
04 JUN -1 P1:57

Subject: EA 2003/0008 and SM1 2003/0021, Maui Lu Redevelopment

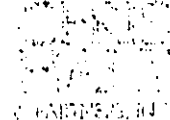
Dear Kivette A. Caigoy,

I would like to thank you for the opportunity to comment on the above subject. At this time, we have no specific requests. We do anticipate working with the developer on the infrastructure when plans are submitted during the permit process.

Please feel free to contact Lt. Scott English at 270-7122 if you have any questions.

Sincerely,

Valeriano F. Martin
Captain
Fire Prevention Bureau



July 23, 2004

Capt. Valeriano F. Martin
Department of Fire and Public Safety
200 Dairy Road
Kahului, Hawaii 96732

Dear Captain Martin:

RE: Maui Lu Redevelopment
Draft Environmental Assessment and Special Management Area Application
TMK: (2) 3-9-001:083, 086, & 120 Kihei, Maui, Hawaii.

Thank you for your June 1, 2004 letter in response to the Draft Environmental Assessment and Special Management Area application for the subject project.

The project designers will consult with your department during the building permit process to address infrastructure requirements.

If you have any further questions, please do not hesitate to contact me.

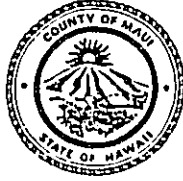
Sincerely,

Christopher L. Hart, ASLA
President

c: Mr. Greg Schneider, Genesee Capital
Ms. Kivette Caigoy, Planning Department

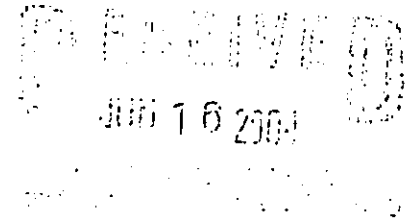
APPENDIX M
Department of Planning Letters and Responses

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



COUNTY OF MAUI
DEPARTMENT OF PLANNING

June 14, 2004



Mr. Chris Hart
Chris Hart & Partners, Inc.
1955 Main Street, Suite 200
Wailuku, Hawaii 96793

Dear Mr. Hart:

RE: Maui Planning Commission Comments on the Draft Environmental Assessment for the Maui Lu Redevelopment Project Located at TMK 3-9-001: 083, 086, and 120, 575 South Kihei Road, Kihei, Hawaii (EA 2003/0008) (SM1 2003/0021)

At its regular meeting on May 25, 2004, the Maui Planning Commission (Commission) reviewed the above-referenced project and had the following comments on the Draft Environmental Assessment (DEA):

1. Discuss any historical significance of the existing buildings.
2. As stated in the DEA, the project proposes 400 units, which is 182 more than the existing resort. This calculates at a density of approximately 15 units per acre.
 - a. Provide justification and an analysis as to the proposed density as compared to surrounding projects.

As indicated in the meeting, 388 of the proposed 400 units will have lockout units. Lockout units have a separate entrance from the main unit and can be locked off from the interior. These units are often used as vacation rentals and can significantly increase the density of the project area. The project has the potential capacity of providing 788 units by counting lockouts as a separate unit.

- b. Revise the project description to include a discussion of the lockout units.
 - c. Revise the analysis of impacts to include the potential increase in density with the lockout units.

Mr. Chris Hart
June 14, 2004
Page 2

3. Provide an on-site parking plan with the proposed landscaping improvements removed and provide the following:
 - a. Label the proposed employee parking and public beach parking areas.
 - b. How many stalls will be provided for public beach parking?
 - c. Will parking for construction workers be provided on the project site? If parking is provided along Kenolio Road or Alulike Street, provide a discussion of potential impacts on traffic and on the surrounding neighborhoods.
4. Discuss the safety measures incorporated into the project for pedestrian crossings across South Kihei Road.
5. Public lateral access will be provided along the makai parcels.
 - a. As such, will the project include public recreational amenities, such as restroom facilities?
 - b. Is the lateral access located on government beach reserve?
6. Traffic Impact Analysis Report (TIAR)
 - a. Provide traffic counts and an impact analysis for Alulike Street and Kenolio Road.
 - b. Discuss the conditions which warranted the traffic signal at the South Kihei Road and Ka Ono Ulu Road intersection.
7. Irrigation System
 - a. A non-potable irrigation well is located on the property. Discuss the capacity of the well. Will this well provide irrigation water for both the mauka and makai parcels? Will potable water be required to irrigate the project area?
 - b. Is reclaimed water available for the project? Will the irrigation system be capable of connecting to reclaimed water lines should the County extend such services to the area?

Mr. Chris Hart
June 14, 2004
Page 3

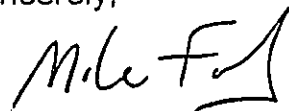
8. Delineate the tsunami inundation line on Figure 5 of the DEA.
9. Drainage Analysis
 - a. Provide a drainage analysis using the 100-year storm calculations.
 - b. Identify the wetlands in the regional area.
 - c. As indicated in the meeting, stormwater runoff will be directed makai of the culvert at South Kihei Road and Ka Ono Ulu Road. As such, revise the drainage plan and analysis.
 - i. Discuss the impacts of discharging on the makai versus mauka side of the culvert.
 - ii. How much runoff will flow into the gulch?
 - iii. Is this revised plan acceptable with DPWEM?
 - d. Discuss, in detail, the mitigative measures proposed to reduce non-point source pollution.
 - e. Will the proposed drainage improvements reduce the flooding impacts to the Ka Ono Ulu Road and South Kihei Road intersection?
 - f. Provide a cumulative and regional analysis of the drainage impact on Kulanihakoi Gulch.
10. Sea Engineering Report
 - a. Include the date of the photos.
 - b. Discuss impacts to the existing revetments during a tsunami or storm surge event.
 - c. Characterize the fill located mauka of the revetments on Parcel 83 and 120.

Mr. Chris Hart
June 14, 2004
Page 4

- d. Figure 3, Photo 6 depicts sand bags placed along the shoreline. Is this an indication that more improvements will be required in order to keep the revetment in place? Provide a discussion as to the potential improvements.
 - e. Will beach nourishment be required along the southern portion of the property?
11. Discuss the following alternatives within Section IV of the DEA:
- a. Reduce the density of the project by decreasing the number of lockout units. At a minimum, provide an analysis of the potential impacts on potable water demand and traffic.
 - b. Reduce the density of the project by decreasing the number of main and lockout units. At a minimum, provide an analysis of the potential impacts on potable water demand and traffic.
 - c. Provide more stalls for public beach parking on the Property.
 - d. Provide a discussion of alternative traffic calming measures along South Kihei Road in lieu of a signalized intersection at the South Kihei Road and Ka Ono Ulu Road intersection.
 - i. Provide an analysis as to the number of units (main and/or lockouts) that would need to be reduced to not warrant the traffic signal at the South Kihei and Ka Ono Ulu Road intersection.

Thank you for your cooperation. If additional clarification is required, please contact Ms. Kivette A. Caigoy, Environmental Planner, of my office at 270-7735.

Sincerely,



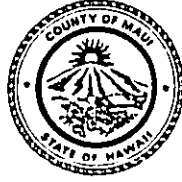
MICHAEL W. FOLEY
Planning Director

Mr. Chris Hart
June 14, 2004
Page 5

MWF:KAC:lar

c: Wayne A. Boteilho, Deputy Planning Director
Clayton I. Yoshida, AICP, Planning Program Administrator
Kivette A. Caigoy, Staff Planner
Joseph Alueta, Staff Planner
Project File (EA 2003/0008)
Project File (SM1 2003/0021)
General File
K:\WP_DOCS\PLANNING\EA\2003\0008_MauiLuRedevelop\MPC_DEAComments.wpd

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



COUNTY OF MAUI
DEPARTMENT OF PLANNING

July 19, 2004

RECEIVED
JUL 22 2004

CHRIS HART & PARTNERS
Landscape Architecture & Planning

Mr. Chris Hart, ASLA
Chris Hart & Partners, Inc.
1955 Main Street, Suite 200
Wailuku, Hawaii 96793

Dear Mr. Hart:

RE: Additional Comments from the Maui Planning Commission on the Draft Environmental Assessment for the Maui Lu Redevelopment Project located at TMK 3-9-001: 083, 086, and 120, 575 South Kihei Road, Kihei, Hawaii (EA 2003/0008) (SM1 2003/0021)

At the regular meeting on July 13, 2004, the Maui Planning Commission (Commission) requested the following additional items be addressed in the Final Environmental Assessment:

1. The proposed drainage plan involves discharging pre-development levels into Kulanihakoi Gulch. Wetlands have been identified in this area and may have historically been filled to allow for development. Provide a discussion of the wetlands in this area.
 - a. Discuss drainage impacts from filling these areas.
 - b. Provide a discussion of historical permitting by the Army Corps of Engineers for activities within this wetland area. Provide a summary as to the facts supporting each approval.
 - c. Include a discussion of any proposed improvements or mitigation plans to the wetland and surrounding areas.
2. The proposed redevelopment will provide a total of approximately 780 units (main and lock-outs) and result in significantly higher numbers of guests/visitors. As such, a significant increase in pedestrian crossings on South Kihei Road can be expected.

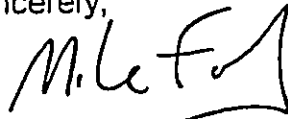
Mr. Chris Hart, ASLA
July 19, 2004
Page 2

- a. Provide an analysis as to the anticipated number of individuals using the crossing.
- b. Provide a discussion of these impacts.
- c. Provide a discussion of mitigative measures, including alternatives to those proposed in the DEA. As an alternative, include a discussion of establishing a pedestrian overpass.

To supplement Item No. 1 above, the Department of Planning recommends providing a map delineating the wetland boundaries.

Thank you for your cooperation. If additional clarification is required, please contact Ms. Kivette A. Caigoy, Environmental Planner, of my office at 270-7735.

Sincerely,



MICHAEL W. FOLEY
Planning Director

MWF:KAC:lar

c: Wayne A. Boteilho, Deputy Planning Director
Clayton I. Yoshida, AICP, Planning Program Administrator
Kivette A. Caigoy, Staff Planner
Joseph Alueta, Staff Planner
Project File (EA 2003/0008)
Project File (SM1 2003/0021)
General File
K:\WP_DOCS\PLANNING\EA\2003\0008_MauiLuRedevelop\MPC_DEAComments_2.wpd



August 2, 2004

Mr. Michael Foley, Director
Department of Planning
250 South High Street
Wailuku, Hawaii 96793
Attention: Ms. Kivette Caigoy, Environmental Planner

Dear Mr. Foley:

RE: Maui Lu Redevelopment
Draft Environmental Assessment (EA) and Special Management Area (SMA) Use
Permit Application. TMK: (2) 3-9-001:083, 086 & 120 Kihei, Maui, Hawaii.

We are responding to your letters dated June 14, 2004 and July 19, 2004 related to comments by the Maui Planning Commission at its meetings on May 25, 2004 and July 13, 2004.

Also, for your information, on Saturday, July 17, 2004, the owner, architect, traffic engineer and landscape architect/planner presented the Maui Lu Redevelopment project to approximately forty (40) members of the *mauka* Kaonoulu Estates Homeowners Association. This additional pre-consultation effort covered a wide range of issues with primary emphasis on the issues of density, height and scenic and open space resources (Section V.A.8). In general, the meeting was positive, however one owner is opposed to making any improvements to the county owned shoreline parcel.

A. This section addresses items enumerated in the June 14 letter:

1. Historical significance of the existing buildings. The existing Maui Lu resort was developed from the 1960s to the 1980s and all of the existing structures are less than 50 years old. The oldest existing buildings are the "Quadras" structures built in 1967 and the "Kahekili" building built in 1968.
2. Lockout Units.
 - a. As stated in the DEA, 388 units of the 400 total timeshare units have "lock-off" units. The "lock-off" functions as a second or third bedroom and will be sold as such, with each of the 388 units. When a family buys a two or three bedroom unit, they have the flexibility to rent out the "lock-off" independently or occupy it completely with family or friends as a 2- or 3- bedroom condominium unit. Regardless, the same number of guests would use the unit whether the unit is used wholly or individually. Family and friends would use the entire unit when it could fill all bedrooms. However, if it is a smaller party, the "lock-off" would be available for use by another small party.

Attached are bar graphs illustrating density comparisons (Attachment 1).

The first graph compares the floor/lot area ratio (FAR) and lot coverage (LC) for the three alternatives to the maximum allowable. Note that analysis based on square footage is not affected by the "lock-off" units. The second graph compares the FAR and LC with surrounding properties. Although Alternate 3 has a slightly higher FAR, the LC is comparable to surrounding properties. The third graph compares units per acre and illustrates that Alternate 3 is equivalent to Kaonoulu Villas and much lower than Southpointe and the Wailana Place properties.

- b. Revised project description will include the lock-off units.
 - c. The analysis of impacts already includes the lock-off units. The Traffic Impact Analysis Report (TIAR) is based on a conservative 50% occupancy of lock-off units. As previously mentioned, the timeshare industry indicates that "lock-off" units are occupied independently 20% to 25% of the time and Chapter 19.36 Off-street Parking and Loading of the Maui County code requires one (1) additional parking stall for every three (3) "convertible units", or 33% more.
3. Parking Plan. Attachment 2 provides a paved off-street "Parking Summary". The Maui Lu Redevelopment project will provide eighty (80) additional parking stalls and the parking plan will be incorporated into the Final EA.
- a. Fifty (50) employee parking stalls are labeled (northeast corner).
 - b. Twelve (12) stalls provided for public beach parking are labeled in the southwest corner.
 - c. Parking for construction workers during the phased construction process will be provided on-site in the existing undeveloped open areas of the site. During the final phase, construction workers will park on-site in the future unit parking area.
4. Pedestrian Crossings. A traffic signal at the Kaonoulu/South Kihei Road intersection is warranted by the Traffic Impact Analysis Report prepared by Phillip Rowell & Associates. Crossing at that intersection in addition to a raised crosswalk near the existing crosswalk will provide safe passage across South Kihei Road. Also, the applicant is contemplating a pedestrian activated warning signal at the second center crosswalk to the north. Both crosswalks will be raised and contribute to traffic calming. Also, the proposed median strip on South Kihei Road will provide a pedestrian refuge.
5. Public Beach Access.
- a. Twelve (12) public beach parking stalls will be provided for public access to the Maui County and Maui Lu Resort shoreline parcels.
 - b. Public lateral access will be on private property or within the future easements over the government beach reserve.
6. Traffic Impact Analysis Report.
- a. The TIAR has been revised to include traffic counts at the Alulike Street/Kaonoulu Road and Kenolio Road/Kaonoulu Road intersections.

Mr. Michael Foley, Director
County of Maui Planning Department
Re: Maui Lu Redevelopment
August 2, 2004
Page 3

- b. The summary of the TIAR (3.a.) states that left turns from westbound Kaonoulu Road to southbound South Kihei Road will operate at a Level-of-Service (LOS) "F" with and without the proposed project. LOS "F" is defined as follows:

"When demand volume exceeds the capacity of the lane, extreme delays will be encountered with queuing which may cause severe congestion affecting other traffic movements in the intersection. This condition usually warrants improvement of the intersection."

Note: Condition No. 13 for the nearby project, Kaonoulu Villas, requires the developer to complete design work on a traffic signal at the Kaonoulu/South Kihei Road intersection.

7. Irrigation System.

- a. The landscape irrigation demand for the proposed redevelopment project is estimated to average approximately 100,000 gallons per day (GPD) with summer peaks at 136,000 GPD. The test of the on-site non-potable well indicate an optimum flow rate of 285 gallons per minute (gpm) which would be adequate for peak requirements (See: Attachment 3).
- b. Reclaimed water is not currently available at the project site. Because the irrigation system will be utilizing an on-site well, a change over to reclaimed water, if and when it becomes available, can be accomplished.

8. Tsunami Inundation. Figure 5.1 (See: Attachment 4) will be added to delineate the tsunami inundation line which typically includes all parcels *mauka* to Alulike Street/Kenolio Road.

9. Drainage Analysis.

- a. See the attached hydrology calculations (Attachment 5) which includes the on-site hydrology analysis using the 100-year, 1-hour storm event. Based on the 100-year, 1-hour storm event, peak storm water discharge for the on-site existing and proposed conditions are 44.21 cfs and 54.81 cfs, respectively.
- b. Attached is a map (Attachment 6) with information provided by Fish and Wildlife showing nearby wetlands. The Army Corps of Engineers has reviewed the project and offered no comments pertaining to the nearby wetlands.
- c. The drainage plan and analysis has been revised.
 - i. The existing storm drainage culvert crossing for Kulanihakoi Gulch at South Kihei Road is inadequate to accommodate larger storm flows. By discharging the proposed roadway drainage system on the *makai* side of the existing storm drainage culvert, increased storm water flows to the inadequate culvert system are mitigated. Discharge on the *makai* versus the *mauka* side does not significantly impact the environment except to prevent additional stress to the existing drainage culvert and mitigation of pre-

Mr. Michael Foley, Director
County of Maui Planning Department
Re: Maui Lu Redevelopment
August 2, 2004
Page 4

development ponding at the Kaonoulu Road and South Kihei Road intersection.

- ii. The storm water generated by the majority of the project site sheet flows along South Kihei road and Kaonoulu Road toward Kulanihakoi gulch. Based on the on-site hydrology calculations, the existing peak storm water discharge based on a 50-year, 1-hour storm is 35.37 cfs. Since the proposed on-site storm drainage system will be required to store all increases in storm water flows based on a 50-year, 1-hour storm event, the storm runoff for the proposed condition will be the same as the existing condition. In other words, the 35.37 cfs storm water flowrate under the existing condition will be the same storm water flowrate under the proposed condition.
 - iii. The off-site storm drainage system concept including the outlet of the storm drainage system on the *makai* side of the culvert was informally discussed with DPWEM prior to the start of the project. At that time, DPWEM concurred with the concept of discharging the storm water flows on the *makai* side of South Kihei Road.
- d. The following is a list of mitigative measures proposed to reduce non-point source pollution both during and after construction:
- (a) Construction Management Techniques
 - (1) Clearing and grubbing shall be held to the minimum necessary for grading and equipment operation.
 - (2) Construction shall be sequenced to minimize the exposure time of the cleared surface area.
 - (3) Clearing, grubbing, and major grading operations will be scheduled in the dry season, as practical.
 - (4) Areas of one phase shall be stabilized before another phase is initiated. Stabilization shall be accomplished by temporarily or permanently protecting the disturbed soil surface from rainfall impacts and runoff.
 - (5) Erosion and sediment control measures shall be in place and functional before earth moving operations begin. These measures shall be properly constructed and maintained throughout the construction period.
 - (6) All control measures shall be checked and repaired as necessary, for example, weekly in dry periods and within twenty-four hours after any rainfall of 0.5 inches or greater within a 24-hour period. During prolonged rainfall, daily checking is necessary. The contractor shall maintain records of checks and repairs.
 - (7) The contractor shall maintain records of the duration and any unusual conditions related to storm water discharge(s).

Mr. Michael Foley, Director
County of Maui Planning Department
Re: Maui Lu Redevelopment
August 2, 2004
Page 5

- (8) The contractor's foreman shall be designated to be responsible for erosion and sediment controls on the project site.

(b) Vegetation Controls

- (1) Pre-construction vegetative ground cover shall not be destroyed, removed, or disturbed more than twenty calendar days prior to land disturbance.
- (2) Temporary soil stabilization with appropriate vegetation shall be applied on areas that will remain unfinished for more than thirty calendar days.
- (3) Install permanent landscaping ground cover and irrigation system as soon as final grades have been established.

(c) Structural Controls

- (1) Storm water flowing toward the construction area shall be diverted by using appropriate control measures, as practical.
 - (2) Erosion control measures shall be designed according to the size of disturbed or drainage areas to detain runoff and trap sediment.
 - (3) Water must be discharged in a manner that the discharge shall not cause or contribute to a violation of the basic water quality criteria as specified in section 11-54-04.
 - (4) Install permanent storm drainage system including drain inlets, underground storm drain lines, and above grade and below grade storm water detention basins.
- e. Since the County will likely require the project to improve the adjoining County roads (South Kihei Road and Kaonoulu Road) including installation of an underground storm drainage system, the localized drainage condition near the project should improve. Instead of storm water sheet flowing along South Kihei Road and Kaonoulu Road, the storm water will be conveyed underground via the new storm drainage system.
- f. See response to item 9.c.ii and 9.e above. Since all increases of storm runoff generated by the proposed project are retained on-site, there should be no adverse impact to Kulanihakoi Gulch. Additionally, there are no properties downstream of the project site that may be impacted by storm water flows.

A study of Kulanihakoi Gulch from South Kihei Road to approximately 300 feet upstream of Kakanui Road¹ was recently completed on January 14, 2003 as part of a Letter of Map Revision (LOMR). According to FEMA's letter dated June 3, 2003, the modified Base Flood Elevations

¹ FEMA FIRM panel 265 shows Kakanui Road although it is no longer there. Study actually goes up to Piilani Highway.

Mr. Michael Foley, Director
County of Maui Planning Department
Re: Maui Lu Redevelopment
August 2, 2004
Page 6

(BFEs) became effective on May 8, 2003. (See: Attachment 7)

10. Sea Engineering Report.

- a. Section 3 of the Coastal Engineering Assessment for the subject project indicates that the photos were taken on August 15, 2003.
- b. The report states that the water level rises in the project area due to the 1946, 1957 and 1960 tsunamis were 9, 7 and 8 feet respectively. The backshore elevation at the Maui Lu ranges from 8 to 10 feet, and is therefore susceptible to flooding from tsunamis. The revetment at the Maui Lu is a non-engineered structure of randomly placed boulders, and its stability in response to tsunamis is not known. In most areas of Hawaii, including the Kihei coast, tsunamis take the form of rapidly rising tides, rather than breaking waves or wave bores. Water velocities resulting from the tsunami therefore typically do not cause significant damage to shoreline structures such as rock revetments. At certain sites, however, local conditions may result in water velocities sufficiently high to cause damage, particularly during the water downrush.

The Maui Lu shoreline is directly exposed to large waves generated by Kona storms and hurricanes. Again, the revetment is a non-engineered structure, and its stability in response to wave forces is not known. However, since 1960, the project shoreline has experienced the following:

- 2 severe Kona storms, in 1960 and 1980, of magnitude sufficient to have effects lasting 20 years (Rooney, 2002). The 1980 storm has been described as a 100-year storm that caused extensive beach erosion and other damage in Kihei.
- 6 Kona storms of magnitude sufficient to have effects lasting 5 years (Rooney, 2002).
- Hurricanes Iniki and Iwa.

The revetments at the Maui Lu were built sometime between 1960 and 1963, and have withstood most of these events. Flank erosion at the ends of the revetments would render the revetments more vulnerable to storm wave damage.

- c. Sea Engineering has no records on fill content at the site. Borings may be required to characterize the fill.
- d. Flank erosion is a common effect at the ends of revetments, and has occurred on the south side of Building C and the Vancouver Monument. At the south side of Building C, sand bags have been placed to stem the flank erosion. During the field investigation, there was evidence of erosion in the backshore at this location. This flank erosion could continue and could eventually result in property loss or damage. Potential improvements discussed in the report include beach nourishment with and without structures. Alternatively, the revetment could be reinforced, or additional sand bags emplaced, at this location.

Mr. Michael Foley, Director
County of Maui Planning Department
Re: Maui Lu Redevelopment
August 2, 2004
Page 7

- e. Beach nourishment is a possible improvement alternative, and was discussed in the report. It offers the potential to widen the beach and provide shore protection. However, without retaining structures, the sand may erode, and frequent renourishment may be required. Stability of the sand fill can be provided with retaining structures such as T-head groins.

11. Alternatives.

- a. The potable water demand for the project is based on 350-gallons per day (gpd) per unit with no additional demand factor based on the number of lock-off units. Meter sizing is based on fixture counts which would remain the same with or without the lock-off units.

In the Traffic Impact Analysis Report (TIAR) by Phillip Rowell & Associates, the increased peak trip counts are based on 100% occupancy of the time share units (388) and 50% occupancy of the lock-off units (194). The lock-off units have traffic characteristics comparable to resort hotel rooms as defined by the Institute of Transportation Engineers (.47 trips per unit). Thus, a reduction of two lock-offs is equivalent to a reduction of approximately one trip.

- b. The water demand would lessen by 350 gpd for each main unit reduction.

The time share units have traffic characteristics comparable to an all-suites hotel as defined by the Institute of Transportation Engineers (.52 trips per unit). Thus, a reduction of two time-share units is equivalent to a reduction of approximately one trip.

- c. Public beach parking has been increased to 12 stalls (See: Attachment 2).
- d. Raised crosswalks and the median strip between lanes on South Kihei Road will calm traffic with or without the signalized intersection at Kaonoulu Road and South Kihei Road. A pedestrian controlled warning light may also be installed in lieu of a signal at the intersection.
 - i. As shown in the TIAR, Table 12, "2008 Levels-of-Service", the Kaonoulu/South Kihei Road intersection will operate at a level-of-service "F" without the proposed project. Hence, a reduction in units will not affect the warrant for a traffic signal at the intersection. As stated in 6.b. of this letter, Condition No. 13 for the nearby project, Kaonoulu Villas, requires that the developer complete design work on a traffic signal at the Kaonoulu/South Kihei Road intersection

B. This section addresses items enumerated in the July 19 letter:

- 1. Drainage. As previously stated, pre-development storm runoff will be conveyed via an underground drainage system and discharged *makai* of South Kihei Road into Kulanihakoi Gulch. Improvements on Kaonoulu Road will prevent runoff from crossing onto parcels to the south which contain wetland areas. The Army

Corps of Engineers has reviewed the project and did not offer any comments pertinent to wetlands.

- a. According to the civil engineer for the Kaonoulu Villas SMA permit, wetlands alteration was authorized by a prior wetlands permit at the parcel across Kaonoulu Road and *mauka* of South Kihei Road. Therefore, the Maui Lu Redevelopment project does not impact any currently existing wetlands.
- b. Prior approvals of activities within the wetland areas have no bearing on the Maui Lu Redevelopment project since this action does not affect the wetlands.
- c. There will be no impacts to possible *mauka* wetland areas since runoff will be discharged on the *makai* side of South Kihei Road.

2. Pedestrian Crossings.

As stated in the DEA, 388 units of the 400 total have "lock-off" units. The previous section 2.a. provides a discussion of how the "lock-off" does not contribute to a higher number of guests.

Conclusion: We agree that 388 new mauka units will result in an increase in pedestrian crossings on South Kihei Road. However, there are currently approximately 126 units on the mauka side and the actual new number of units is 262 units. In response, the following comments are provided:

- The redeveloped Maui Lu Resort will provide a fully developed swimming pool with a generously paved pool apron for chaise lounge chairs, together with a convenient pool side restaurant and bar. Also, there will be three (3) additional pools at each cluster of units.
 - After demolishing the second floor of the existing building parallel with South Kihei Road, distant ocean views will be available from the main mauka pool.
 - The existing separated sand beach areas on the makai side of South Kihei Road are quite small, windy and not designed for chaise lounges. Therefore, we believe that a majority of Maui Lu guests will congregate at the main mauka pool area.
- a. Analysis of pedestrian crossing. That with approximately 126 existing units on the mauka side including management and maintenance personnel there are approximately thirty (30) South Kihei Road pedestrian crossings per hour. Therefore, a build-out with 388 mauka two and three bedroom condominiums including look-off units; we estimate that there will be 95 pedestrian crossing per 2 hour period.
 - b. Discussion of pedestrian crossing impacts. As previously concluded, we strongly believe that a majority of the Maui Lu guests in the 388 mauka two and three bedroom condominiums including look-off units will congregate at the main mauka pool area and the three additional mauka

Mr. Michael Foley, Director
County of Maui Planning Department
Re: Maui Lu Redevelopment
August 2, 2004
Page 9

pools at each cluster of units. Instead of using the existing separated sand beach areas on the makai side of South Kihei Road which are quite small and windy and not designed for chaise lounges.

However, in order to mitigate the impact of increased pedestrian crossings, we believe: that the signalization of the Kaonoulu/South Kihei Road intersection, with a raised pedestrian crosswalk, together with, a pedestrian activated warning signal at the second center crosswalk to the north will provide safe passage across South Kihei Road. Also, both crosswalks will be raised and contribute to traffic calming, and the South Kihei Road median will provide a pedestrian refuge.

Conclusion: We believe that these improvements, together with new pedestrian sidewalks on all project road frontages will mitigate the impact of increased pedestrian crossings and make a significant contribution to the urban design and the health, safety and welfare of the Kihei Community.

Mitigative measures. The following comments are provided:

- We have spent a great deal of time meeting with the KCA and the Department of Public Works and Environmental Management, and we stand by our foregoing conclusion.
- In considering the impacts of the Maui Lu Redevelopment project with its two small sand beaches, we ask you to compare our proposed project with pedestrian/traffic mitigation measures to the pedestrian crossings at Kamaole Beach Parks Nos. I, II, and III. The condominium and residential development density is much greater and the beaches are much larger; yet the pedestrian/traffic mitigation measures are much less.

Also, we considered the possibility of a pedestrian overpass. However, it was rejected for the following reasons:

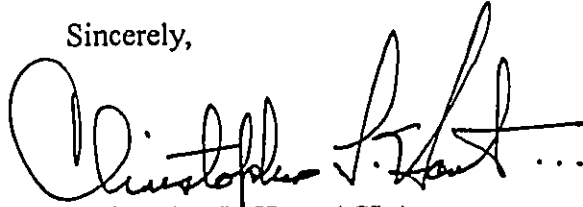
- It would not be possible to comply with ADA requirements without constructing an elevator on the makai side.
- Due to shoreline setback constraints, together with the paved parking requirement and the excessive construction cost, the proposal was abandoned in favor of the surface pedestrian crossing.
- Also, from an urban design perspective, a pedestrian bridge would be out of place in this predominantly residential North Kihei

Mr. Michael Foley, Director
County of Maui Planning Department
Re: Maui Lu Redevelopment
August 2, 2004
Page 10

neighborhood. (It is important to note that pedestrian bridges are not used in Waikiki across Kalaukua Avenue.)

Thank you for your cooperation. If additional clarification is necessary, please call.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher L. Hart", with a horizontal line extending to the right.

Christopher L. Hart, ASLA
President

attachments

c: Mr. Greg Schneider, Genesee Capital
Mr. Michael Wright, Michael Wright & Associates

ATTACHMENT 1

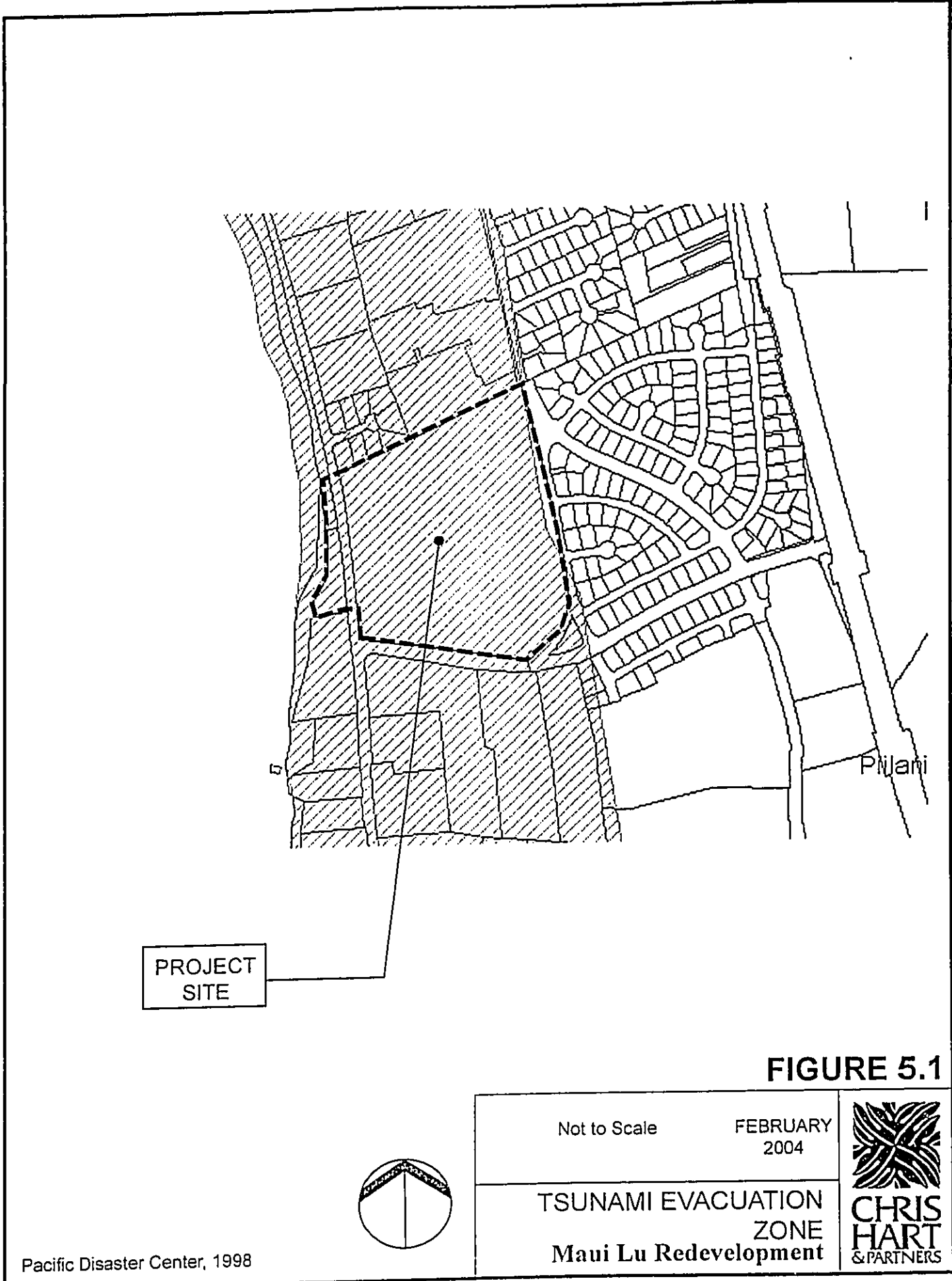
ATTACHMENT 2

SEE FIGURE 9.8

ATTACHMENT 3

SEE APPENDIX N

ATTACHMENT 4



PROJECT SITE

FIGURE 5.1

Not to Scale

FEBRUARY
2004



TSUNAMI EVACUATION
ZONE
Maui Lu Redevelopment

**CHRIS
HART
& PARTNERS**

Pacific Disaster Center, 1998

ATTACHMENT 5

TABLE 2

**Maui Lu Resort
Hydrologic Calculations for Existing Condition, 50-Year Storm**

| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) | LENGTH (ft) | SLOPE % | Tc (min) | Tm | 1-hr Rain | I | C | Q (cfs) |
|----------------|----------------|------------------------|-------------|---------|----------|-------|-----------|-----|------|--------------|
| E1 | 20.58 | 5.42 | 1000 | 2 | 20.0 | 50 yr | 2.0 | 3.2 | 0.43 | 35.37 |
| TOTAL | 20.58 | 5.42 | | | | | | | | 35.37 |

**Maui Lu Resort
Hydrologic Calculations for Proposed Condition, 50-Year Storm**

| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) | LENGTH (ft) | SLOPE % | Tc (min) | Tm | 1-hr Rain | I | C | Q (cfs) |
|----------------|----------------|------------------------|-------------|---------|----------|-------|-----------|-----|------|--------------|
| P1 | 12.93 | 13.07 | 1000 | 2 | 20.0 | 50 yr | 2.0 | 3.2 | 0.53 | 43.85 |
| TOTAL | 12.93 | 13.07 | | | | | | | | 43.85 |

| | | |
|----|-------------|-------------------|
| E1 | lawn 0.3 | Impervious 0.9 |
| P1 | 0.15 | 0.9 |

**Maui Lu Resort
Hydrologic Calculations for Existing Condition, 100-Year Storm**

| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) | LENGTH (ft) | SLOPE % | Tc (min) | Tm | 1-hr Rain | I | C | Q (cfs) |
|----------------|----------------|------------------------|-------------|---------|----------|--------|-----------|-----|------|--------------|
| E1 | 20.58 | 5.42 | 1000 | 2 | 20.0 | 100 yr | 2.5 | 4.0 | 0.43 | 44.21 |
| TOTAL | 20.58 | 5.42 | | | | | | | | 44.21 |

**Maui Lu Resort
Hydrologic Calculations for Proposed Condition, 100-Year Storm**

| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) | LENGTH (ft) | SLOPE % | Tc (min) | Tm | 1-hr Rain | I | C | Q (cfs) |
|----------------|----------------|------------------------|-------------|---------|----------|--------|-----------|-----|------|--------------|
| P1 | 12.93 | 13.07 | 1000 | 2 | 20.0 | 100 yr | 2.5 | 4.0 | 0.53 | 54.81 |
| TOTAL | 12.93 | 13.07 | | | | | | | | 54.81 |

| | | |
|----|-------------|-------------------|
| E1 | lawn 0.3 | Impervious 0.9 |
| P1 | 0.15 | 0.9 |

ATTACHMENT 6

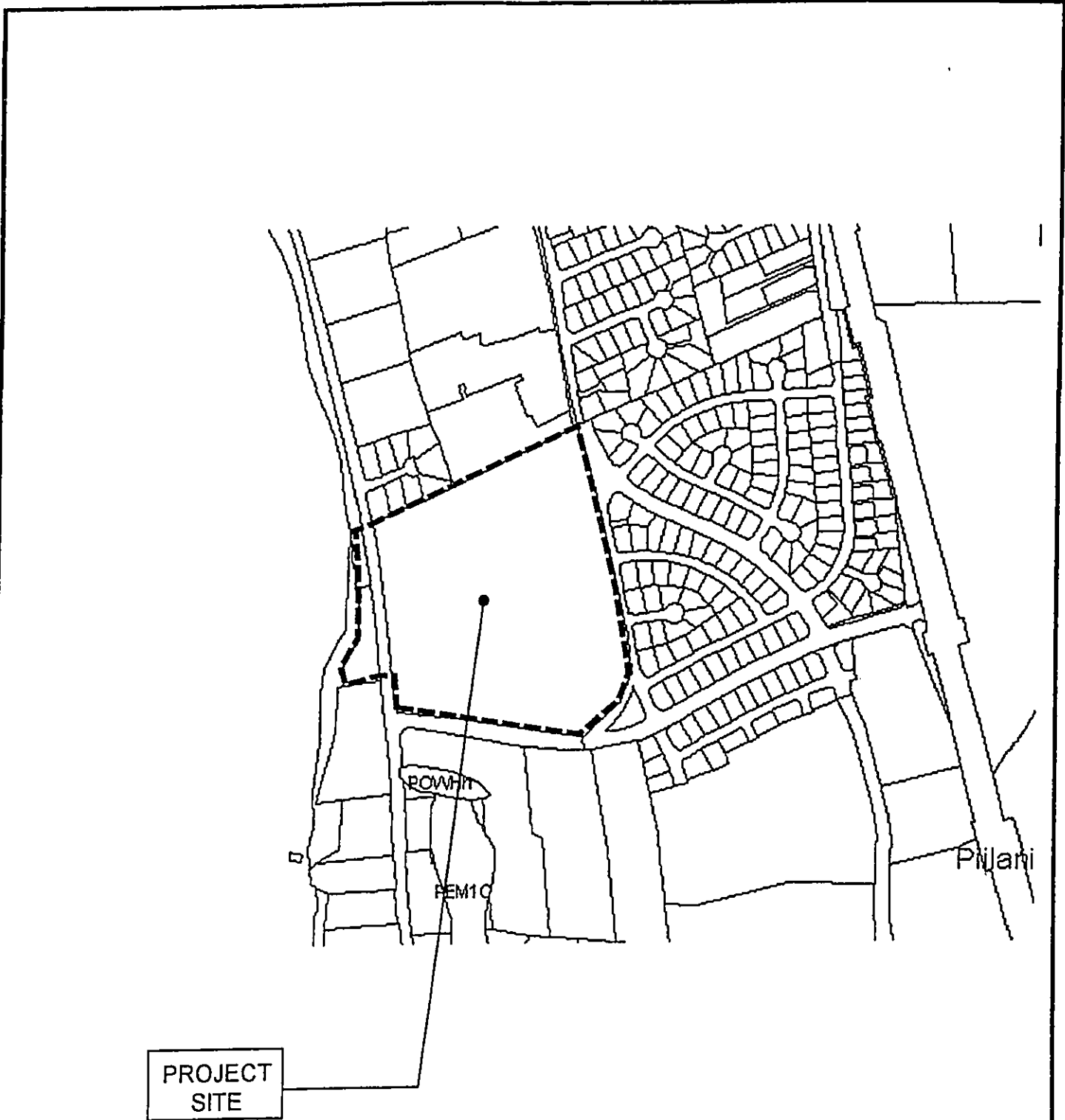


FIGURE 5.2

Not to Scale

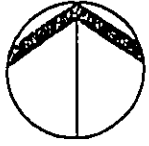
FEBRUARY
2004



NATIONAL WETLANDS
INVENTORY MAP
Maui Lu Redevelopment

**CHRIS
HART**
& PARTNERS

U.S. Department of the Interior,
Fish and Wildlife Service, 1978



ATTACHMENT 7

SEE APPENDIX N

ATTACHMENT 4



PROJECT
SITE

FIGURE 5.1

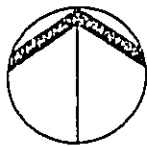
Not to Scale

FEBRUARY
2004



TSUNAMI EVACUATION
ZONE
Maui Lu Redevelopment

**CHRIS
HART**
& PARTNERS



Pacific Disaster Center, 1998

ATTACHMENT 5

ATTACHMENT 6

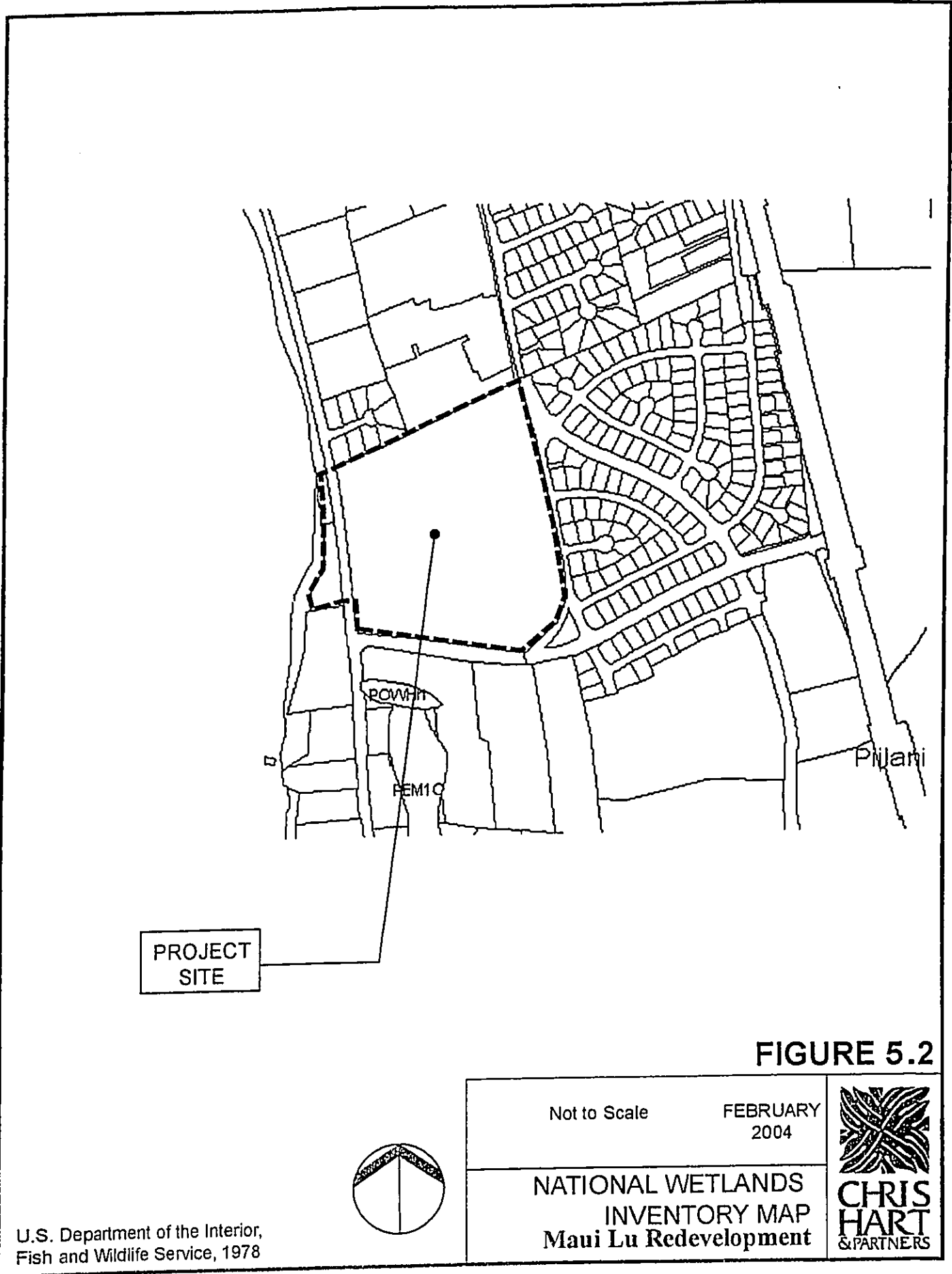


FIGURE 5.2

Not to Scale

FEBRUARY
2004



NATIONAL WETLANDS
INVENTORY MAP
Maui Lu Redevelopment

CHRIS
HART
& PARTNERS

U.S. Department of the Interior,
Fish and Wildlife Service, 1978

ATTACHMENT 7

63/73



Federal Emergency Management Agency

Washington, D.C. 20472

JUN 03 2003

Francis
TOP DATE
FRANK # 2180
KAPPA

RECEIVED
JUN -9 PM 2:44
OFFICE OF THE MAYOR

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 03-09-0144P

The Honorable James H. Apana
Mayor, County of Maui
200 South High Street
Wailuku, HI 96793

Community: Maui County, HI
Community No.: 150003
Map Panel Affected: 1500030265 C

116

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED
JUN 18 PM 2:08

Dear Mayor Apana :

In a letter of Map Revision (LOMR) dated January 14, 2003, you were notified of proposed modified flood elevation determinations affecting the Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) report for Maui County, Hawaii. These determinations were for Kulanihako'i Gulch from Kihai Road to approximately 300 feet upstream of Kanakanui Road. The 90-day appeal period that was initiated on February 6, 2003, when the Federal Emergency Management Agency (FEMA) published a notice of proposed Base Flood Elevations (BFEs) in the *Maui News*, has elapsed.



FEMA received no valid requests for changes to the modified BFEs. Therefore, the modified BFEs for your community became effective on May 8, 2003, remain valid and revise the FIRM and FIS report that was in effect prior to that date.

The modifications are pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. The community number(s) and suffix code(s) are unaffected by this revision. The community number and appropriate suffix code as shown above will be used by the National Flood Insurance Program (NFIP) for all flood insurance policies and renewals issued for your community.

FEMA has developed criteria for floodplain management as required under the above-mentioned Acts of 1968 and 1973. To continue participation in the NFIP, your community must use the modified BFEs to carry out the floodplain management regulations for the NFIP. The modified BFEs will also be used to calculate the appropriate flood insurance premium rates for all new buildings and their contents and for the second layer of insurance on existing buildings and their contents.



03 JUN 18 PM 2:08
DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

RECEIVED AS FOLLOWS

2



If you have any questions regarding the necessary floodplain management measures for your community or the NFIP in general, please contact the Director, Federal Insurance and Mitigation Division of FEMA in Oakland, California at (510) 627-7184. If you have any questions regarding the LOMR, the proposed modified BFEs, or mapping issues in general, please contact the FEMA Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627).

Sincerely,

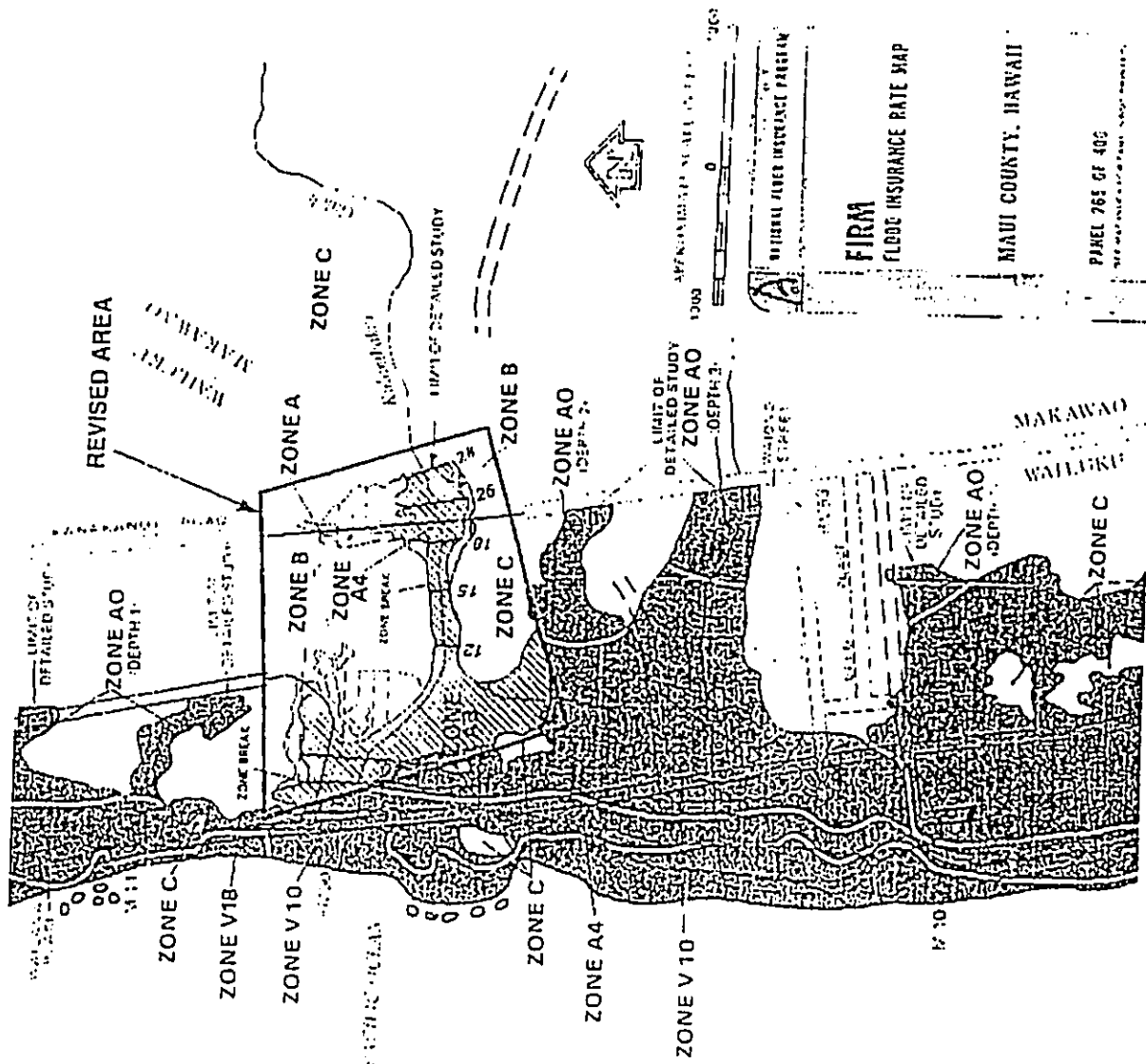
A handwritten signature in cursive script, appearing to read "Mary Jean Pajak".

Mary Jean Pajak, P.E. Chief
Hazards Study Branch
Federal Insurance and Mitigation Administration

cc: Mr. Francis Cerizo
Planner, Planning Department
County of Maui

Mr. Don Wolford, P.E.
Raymond Chin & Associates, Inc.

RECEIVED AS FOLLOWS



7056-01
July 12, 2004

**WILSON
OKAMOTO
CORPORATION**

Chris Hart & Partners
Landscape Architecture and Planning
1955 Main Street, Suite 200
Wailuku, Maui, Hawaii 96793



**ENGINEERS
PLANNERS**

1907 S. BERETANIA STREET
HONOLULU, HAWAII 96826
PH: (808) 946-2277
FAX: (808) 946-2253

Attention: Mr. Chris Hart, President

Subject: Maui Lu Timeshare
T.M.K. : (2) 3-9-001 : 086

Dear Mr. Hart:

In reference to your transmittal letter dated June 18, 2004 regarding the letter from Michael Foley, Director of the Department of Planning dated June 14, 2004 with the Draft EA comments from the May 25, 2004 Maui Planning Commission meeting, please find the following comments:

Comment 4

Response: Per our phone conversation, we understand that CHP will address this comment.

Comment 7a

Response: Per our conversation, we understand that CHP will address this comment.

Comment 7b

Response: According to the County of Maui's Wastewater Reclamation Division personnel, County reclaimed water system is currently not available for the subject project. CHP to address the irrigation system.

Comment 8

Response: ControlPoint Surveying has provided CHP the current FEMA map for the area in the vicinity of the project site as well as the tsunami inundation line as shown by the Maui Civil Defense map in the Maui phone book.

7056-01
Letter to Mr. Chris Hart
Page 2
July 12, 2004

Comment 9a

Response: See attached hydrology calculation that includes the on-site hydrology analysis using the 100-year, 1-hour storm event. Based on the 100-year, 1-hour storm event, peak storm water discharge for the on-site existing and proposed conditions are 44.21 cfs and 54.81 cfs respectively.

Comment 9b

Response: CHP to provide.

Comment 9c.i

Response: The existing storm drainage culvert crossing for Kulanihako'i Gulch at South Kihei Road is inadequate to accommodate larger storm flows. By discharging the proposed roadway drainage system on the makai side of the existing storm drainage culvert we would avoid adding storm water flows to the inadequate system.

Comment 9c.ii

Response: The storm water generated by the majority of the project site sheet flows along South Kihei Road and Kaonoulu Street toward Kulanihako'i Gulch. Based on the on-site hydrology calculations, the existing peak storm water discharge based on a 50-year, 1-hour storm is 35.37 cfs. Since the proposed on-site storm drainage system will be required to store all increases in storm water flows based on a 50-year, 1-hour storm event, the storm runoff for the proposed condition will be the same as the existing condition. In other words, the 35.37 cfs storm water flowrate under the existing condition will be the same storm water flowrate under the proposed condition.

Comment 9c.iii

Response: The off-site storm drainage system concept including the outlet of the storm drainage system on the makai side of the was informally discussed with DPWEM prior to the start of the project. At that time,

7056-01
Letter to Mr. Chris Hart
Page 3
July 12, 2004

DPWEM concurred with the concept of discharging the storm water flows on the makai side of South Kihei Road.

Comment 9d

Response: *The following is a list of mitigative measures proposed to reduce non-point source pollution both during and after construction.*

(a) Construction Management Techniques

- (1) Clearing and grubbing shall be held to the minimum necessary for grading and equipment operation.
- (2) Construction shall be sequenced to minimize the exposure time of the cleared surface area.
- (3) Clearing, grubbing, and major grading operations will be scheduled in the dry season, as practical.
- (4) Areas of one phase shall be stabilized before another phase is initiated. Stabilization shall be accomplished by temporarily or permanently protecting the disturbed soil surface from rainfall impacts and runoff.
- (5) Erosion and sediment control measures shall be in place and functional before earth moving operations begin. These measures shall be properly constructed and maintained throughout the construction period.
- (6) All control measures shall be checked and repaired as necessary, for example, weekly in dry periods and within twenty-four hours after any rainfall of 0.5 inches or greater within a 24-hour period. During prolonged rainfall, daily checking is necessary. The contractor shall maintain records of checks and repairs.
- (7) The contractor shall maintain records of the duration and any unusual conditions related to storm water discharge(s).

7056-01
Letter to Mr. Chris Hart
Page 4
July 12, 2004

- (8) The contractor's foreman shall be designated to be responsible for erosion and sediment controls on the project site.

(b) Vegetation Controls

- (1) Pre-construction vegetative ground cover shall not be destroyed, removed, or disturbed more than twenty calendar days prior to land disturbance.
- (2) Temporary soil stabilization with appropriate vegetation shall be applied on areas that will remain unfinished for more than thirty calendar days.
- (3) Install permanent landscaping ground cover and irrigation system as soon as final grades have been established.

(c) Structural Controls

- (1) Storm water flowing toward the construction area shall be diverted by using appropriate control measures, as practical.
- (2) Erosion control measures shall be designed according to the size of disturbed or drainage areas to detain runoff and trap sediment.
- (3) Water must be discharged in a manner that the discharge shall not cause or contribute to a violation of the basic water quality criteria as specified in section 11-54-04."
- (4) Install permanent storm drainage system including drain inlets, underground storm drain lines, and above grade and below grade storm water detention basins.

Comment 9e

Response: Since the County will likely require the project to improve the adjoining County roads (South Kihei Road and Kaonoulu Road) including installation of an underground storm drainage system, the localized drainage condition near the project should improve. Instead of storm water sheet flowing along South Kihei and

7056-01
Letter to Mr. Chris Hart
Page 5
July 12, 2004

Kaonoulu Road, the storm water will be conveyed underground via the new storm drainage system.

Comment 9f

Response: See response to item 9cii and 9e above. Since we are retaining all increases of storm runoff generated by the proposed project, there should be no adverse impact to Kulanihako'i Gulch. Additionally, there are no properties downstream of the project site that may be impacted by storm water flows.

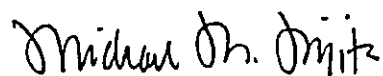
A study of Kulanihako'i Gulch from South Kihei Road to approximately 300-ft upstream of Kananui Road was recently completed in January 14, 2003 as part of a Letter of Map Revision (LOMR). According to FEMA's letter dated June 3, 2003 (attached), the modified Base Flood Elevations (BFEs) became effective on May 8, 2003.

Comment 11a and b

Response: The potable water demand for the project is based on 350-gallons per day per unit with no additional demand factor based on the number of lockout units.

Please call should you have any questions.

Sincerely:



Michael M. Fujita, P.E.

cc:

Enclosures: Revised Table 2-Hydrology Calculation (100-year, 1-hour storm)
Federal Emergency Management Agency (FEMA) letter dated June 3, 2003

TABLE 2

**Maui Lu Resort
Hydrologic Calculations for Existing Condition, 50-Year Storm**

| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) | LENGTH (ft) | SLOPE % | Tc (min) | Tm | 1-hr Rain | I | C | Q (cfs) |
|----------------|----------------|------------------------|-------------|---------|----------|-------|-----------|-----|------|--------------|
| E1 | 20.58 | 5.42 | 1000 | 2 | 20.0 | 50 yr | 2.0 | 3.2 | 0.43 | 35.37 |
| TOTAL | 20.58 | 5.42 | | | | | | | | 35.37 |

**Maui Lu Resort
Hydrologic Calculations for Proposed Condition, 50-Year Storm**

| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) | LENGTH (ft) | SLOPE % | Tc (min) | Tm | 1-hr Rain | I | C | Q (cfs) |
|----------------|----------------|------------------------|-------------|---------|----------|-------|-----------|-----|------|--------------|
| P1 | 12.93 | 13.07 | 1000 | 2 | 20.0 | 50 yr | 2.0 | 3.2 | 0.53 | 43.85 |
| TOTAL | 12.93 | 13.07 | | | | | | | | 43.85 |

| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) |
|----------------|----------------|------------------------|
| E1 | lawn 0.3 | Impervious 0.9 |
| P1 | 0.15 | 0.9 |

**Maui Lu Resort
Hydrologic Calculations for Existing Condition, 100-Year Storm**

| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) | LENGTH (ft) | SLOPE % | Tc (min) | Tm | 1-hr Rain | I | C | Q (cfs) |
|----------------|----------------|------------------------|-------------|---------|----------|--------|-----------|-----|------|--------------|
| E1 | 20.58 | 5.42 | 1000 | 2 | 20.0 | 100 yr | 2.5 | 4.0 | 0.43 | 44.21 |
| TOTAL | 20.58 | 5.42 | | | | | | | | 44.21 |

**Maui Lu Resort
Hydrologic Calculations for Proposed Condition, 100-Year Storm**

| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) | LENGTH (ft) | SLOPE % | Tc (min) | Tm | 1-hr Rain | I | C | Q (cfs) |
|----------------|----------------|------------------------|-------------|---------|----------|--------|-----------|-----|------|--------------|
| P1 | 12.93 | 13.07 | 1000 | 2 | 20.0 | 100 yr | 2.5 | 4.0 | 0.53 | 54.81 |
| TOTAL | 12.93 | 13.07 | | | | | | | | 54.81 |

| DRAINAGE BASIN | Lawn AREA (ac) | Hard Surface AREA (ac) |
|----------------|----------------|------------------------|
| E1 | lawn 0.3 | Impervious 0.9 |
| P1 | 0.15 | 0.9 |

53/73



Federal Emergency Management Agency

Washington, D.C. 20472

JUN 03 2003

Francis
TOP DPAC
Fruit # 2180
MAHI

RECEIVED
JUN -9 PM 2:44
OFFICE OF THE MAYOR

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 03-09-0144P

The Honorable James H. Apana
Mayor, County of Maui
200 South High Street
Wailuku, HI 96793

Community: Maui County, HI
Community No.: 150003
Map Panel Affected: 1500030265 C

116

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED
JUN 18 PM 2:00

Dear Mayor Apana :

In a Letter of Map Revision (LOMR) dated January 14, 2003, you were notified of proposed modified flood elevation determinations affecting the Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) report for Maui County, Hawaii. These determinations were for Kulanihakai Gulch from Kihei Road to approximately 300 feet upstream of Kananui Road. The 90-day appeal period that was initiated on February 6, 2003, when the Federal Emergency Management Agency (FEMA) published a notice of proposed Base Flood Elevations (BFEs) in the *Maui News*, has elapsed.




FEMA received no valid requests for changes to the modified BFEs. Therefore, the modified BFEs for your community became effective on May 8, 2003, remain valid and revise the FIRM and FIS report that was in effect prior to that date.

The modifications are pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. The community number(s) and suffix code(s) are unaffected by this revision. The community number and appropriate suffix code as shown above will be used by the National Flood Insurance Program (NFIP) for all flood insurance policies and renewals issued for your community.

FEMA has developed criteria for floodplain management as required under the above-mentioned Acts of 1968 and 1973. To continue participation in the NFIP, your community must use the modified BFEs to carry out the floodplain management regulations for the NFIP. The modified BFEs will also be used to calculate the appropriate flood insurance premium rates for all new buildings and their contents and for the second layer of insurance on existing buildings and their contents.



MAUI COUNTY DEPARTMENT OF PLANNING
COUNTY OF MAUI
RECEIVED
JUN 18 PM 2:00

 If you have any questions regarding the necessary floodplain management measures for your community or the NFIP in general, please contact the Director, Federal Insurance and Mitigation Division of FEMA in Oakland, California at (510) 627-7184. If you have any questions regarding the LOMR, the proposed modified BFEs, or mapping issues in general, please contact the FEMA Map Assistance Center, toll free, at 1-877-FEMA-MAP (1-877-336-2627).

Sincerely,



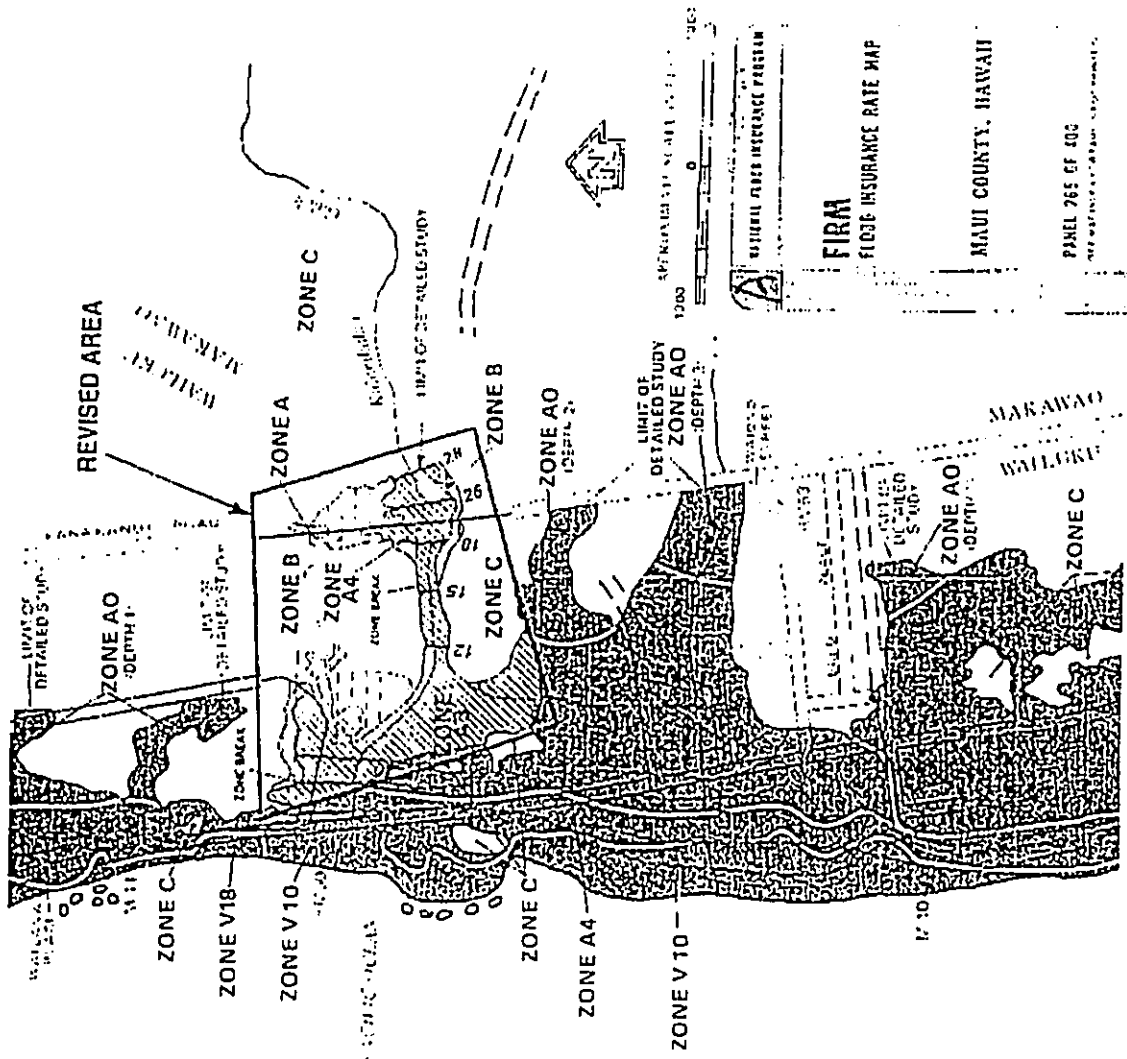
Mary Jean Pajak, P.E. Chief
Hazards Study Branch
Federal Insurance and Mitigation Administration

cc: Mr. Francis Cerizo
Planner, Planning Department
County of Maui

Mr. Don Welford, P.E.
Raymond Chan & Associates, Inc.



RECEIVED AS FOLLOWS



APPENDIX N
Well Pump Test Results and Analysis



Tom Nance Water
Resource Engineering

No. of pages: 10
Fax# 873-9494

Original will will not
be mailed to you.

July 28, 2004
04/325r (04-48)

MEMORANDUM

TO: Tal Shibley - Michael Wright & Associates, Inc.

FROM: Tom Nance *TN*

SUBJECT: Results of a Pump Test and Interpretations of the Supply Capacity of the Dug Well on the Maui Lu Property in Kihei, Maui

INTRODUCTION

This memo and its attachments present the results of a recently completed pump test of a dug well on the Maui Lu Hotel property (TMK 3-9-01:86) in Kihei, Maui. The well sits near the hotel's property boundary along Kaonoulu Road. It is an excavated feature which is dug through a relatively thin soil layer into the volcanics below. It exposes the basal groundwater table in a rectangular-shaped pit which is 14 feet long and 6 feet wide. The water depth generally varies between 1.5 and 2.0 feet, depending on the phase of the tide. At the makai end of the pit, a 3.5 to 4.0-foot deep sump has been excavated for the pump. There is an installed end suction pump of unknown (but modest) capacity which delivers water for landscape irrigation on the hotel grounds.

The pump test was undertaken to determine the well's hydraulic performance and the quality of water it is capable of delivering on a sustained basis. As I understand it, the 26-acre site is to be redeveloped as a condominium project which will include 15 acres of turfgrass and other landscaping. The intention is to provide all landscape irrigation by direct pumping from the dug well. Assuming a peak summertime evapotranspiration (ET) rate of 10 inches per month, the supply requirement would be 136,000 gallons per day (GPD). If all of this is applied in an 8-hour, nighttime irrigation cycle, the pumping capacity would need to be about 285 gallons per minute (GPM). On a year-round basis, the average use of the well is likely to be somewhat less than 100,000 gallons per day (based on annual ET of about 80 inches and discounting a contribution from rainfall).

CONDUCT OF THE PUMP TEST

Mel's Water Works Hawaii provided and installed the submersible pump, flowmeter, discharge hoses, and generator required for the test. The test itself was done in two parts. Initially, a step-drawdown test was performed to document the drawdown in the well at various pumping rates. Following about 40 minutes of recovery time, a continuous 24-hour pump test was run. Water level and conductivity recorders were installed in the pump sump to continually record these parameters. The pumping rate was monitored manually at the flowmeter and pumped samples were collected periodically and analyzed for their chloride content.

Memo to: Tal Shibley
 July 28, 2004 -- 04/325r
 Page 2

GROUNDWATER OCCURRENCE

Figure 1 depicts the well's water level recorded prior to, during, and for a short time following the pump test. Since an elevation benchmark was not available at the well site, the water level shown on the figure is an estimate relative to mean sea level. Over the 19-hour period prior to the start of the pump test, water level fluctuations in the basal aquifer were approximately five percent of the ocean's tidal amplitude and lagged by approximately 90 minutes.

For the well's relatively close proximity to the shoreline, the tidal response suggests that the average permeability of intervening formation between the well and the shoreline is somewhat less than is typical for Hawaiian basalts. However, as is discussed in the next section, the permeability of the volcanics themselves is quite high. It appears that the muted tidal response is the result of the lower permeability alluvial cover over the volcanics along the shoreline. This is actually a beneficial aspect for the quality of water in the basal lens, as the alluvium inhibits the intrusion of saltwater to some extent. In other words, for the well's near proximity to the shoreline, its salinity is significantly better than would otherwise be expected.

STEP-DRAWDOWN TEST RESULTS

During the step-drawdown portion of the test, the well was pumped at rates between 260 and 360 gallons per minute (GPM). Results as measured drawdown points and as a fitted performance curve are illustrated on Figure 2. The data on which the fitted curve is based are presented below. The well's hydraulic capacity is excellent. For example, at the maximum anticipated pumping rate for irrigation of 285 GPM, the drawdown is just 0.33 feet. It is clear that the volcanics it draws from have substantial permeability.

| Step Test Data | |
|----------------|-----------------|
| Flowrate (GPM) | Drawdown (Feet) |
| 258 | 0.286 |
| 269 | 0.303 |
| 339 | 0.440 |
| 361 | 0.480 |

Fitted Curve

$$S = AQ^2 + BQ$$

where: S = Drawdown (Feet)
 Q = Flowrate (GPM)
 A&B are Regression Constants
 A = 2.239×10^{-5}
 B = 5.288×10^{-4}
 $r^2 = 0.995$

CONSTANT RATE TEST RESULTS

Beginning at noon on July 20th, the pump was run for 24 hours continuously. For the first 10 hours until about 10:00 p.m., pumping was at an average of 362 GPM. Since there was a gradual increase in salinity, the pumping rate was cut back to an average of 285 GPM for the last 14 hours. At that rate, the salinity reached a plateau after about 10 hours and declined slightly through the last four hours of the test.

Memo to: Tal Shibley
July 28, 2004 -- 04/325r
Page 3

Data compiled during the 24-hour continuous pumping test are presented on Figures 3, 4, and 5. Figure 3 illustrates the pumping rate (as 2-hour averages and as instantaneous measurements) and the resulting water level responses. A characteristic to note is the rapid response of the water level when the pump was started, stopped, and when the pumping rate was changed. This is typical for wells which draw water from basal groundwater in highly permeable Hawaiian basalts.

Figure 4 shows the conductivity of the well water as recorded continuously in the pump sump and as periodically collected samples. The gradual decrease of the conductivity over the last four hours, in addition to it being a response to lowering the pumping rate, appears to be related to the phase of the tide. As the tide level declines in the well, it draws from higher in the basal lens where the water is slightly fresher.

Figure 5 is presented simply as a matter of completeness. It depicts the recorded temperature in the pump sump during the pump tests. Under continuous pumping, the water is slightly cooler (72.1°F.) than it is under static conditions (72.4°F.).

Table 1 is a compilation of the conductivity, chlorides, and temperature of water samples collected during the step-drawdown and constant rate pump tests. Chlorides were about 335 milligrams per liter (MG/L) in the initial hours, rose to a maximum of 420 MG/L about 20 hours into the constant rate test, and were at 410 MG/L at the end of 24 hours of pumping.

SUMMARY CONCLUSIONS

1. The 26-acre Maul Lu Hotel site is to be redeveloped as a condominium project that will have 15 acres of turfgrass and other landscaping.
2. The intention is to utilize the existing, onsite dug well to irrigate those 15 acres.
3. In the driest part of summer and discounting any beneficial contribution from rainfall, the irrigation supply should be capable of matching a plant ET rate of 10 inches per month. Over 15 acres, this is equivalent to 136,000 GPD.
4. Providing the summertime maximum irrigation requirement in an 8-hour, nighttime irrigation cycle would require pumping from the well at about 285 GPM.
5. On an average annual basis and again discounting the benefit of rainfall, plant evapotranspiration will be on the order of 80 inches. This is equivalent to about 90,000 GPD over 15 acres.
6. The pump test results demonstrate that the existing dug well has sufficient hydraulic capacity and can produce water of acceptable quality to provide the necessary irrigation supply. Based on the test results, chlorides of the pumped water would be in the range of 300 to 400 MG/L through most of the year. During extended dry summer periods, chlorides will be in the range of 400 to 500 MG/L.

Memo to: Tal Shibley
July 28, 2004 -- 04/325r
Page 4

7. It is my understanding that the turfgrass for the condominium project will be salt-tolerant seashore paspallum. Other plant materials should be selected for a salt tolerance of up to 500 MG/L chlorides.
8. The dug well is not a unique feature. It could easily be replicated with appropriate spacing and location elsewhere on the property. If desired to lower the salinity of the irrigation supply and to expand the types of plants that could be used, a second dug well could be constructed to distribute the draft for irrigation between two wells. The new dug well could be completed to a depth of 3 feet into groundwater and completed with 8-foot diameter perforated concrete rings.

Attachments

FIGURE 1. RECORDED WATER LEVEL IN THE MAUI LU WELL, JULY 19 TO 21, 2004

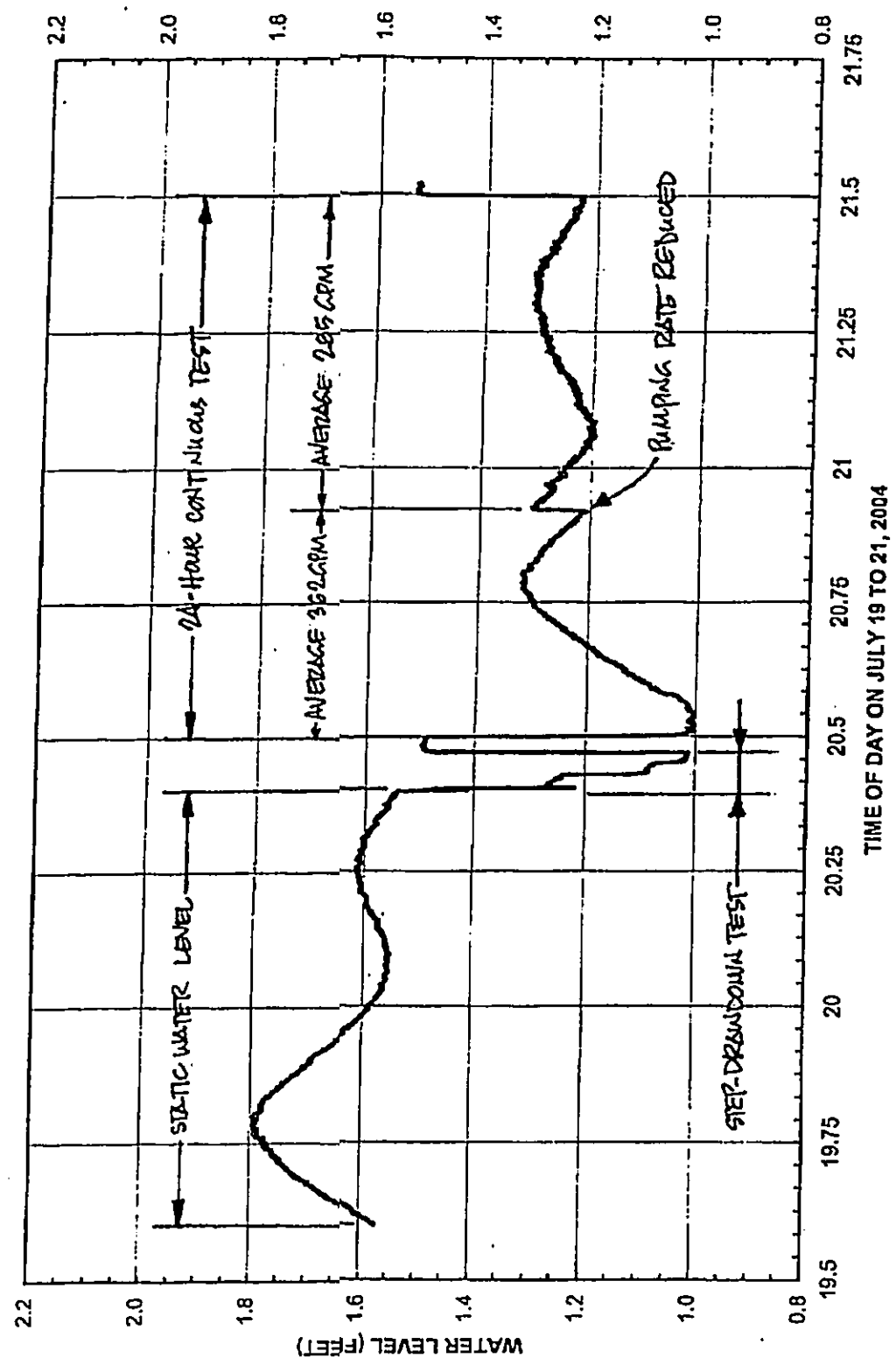


FIGURE 2. STEP-DRAWDOWN PERFORMANCE POINTS AND FITTED CURVE

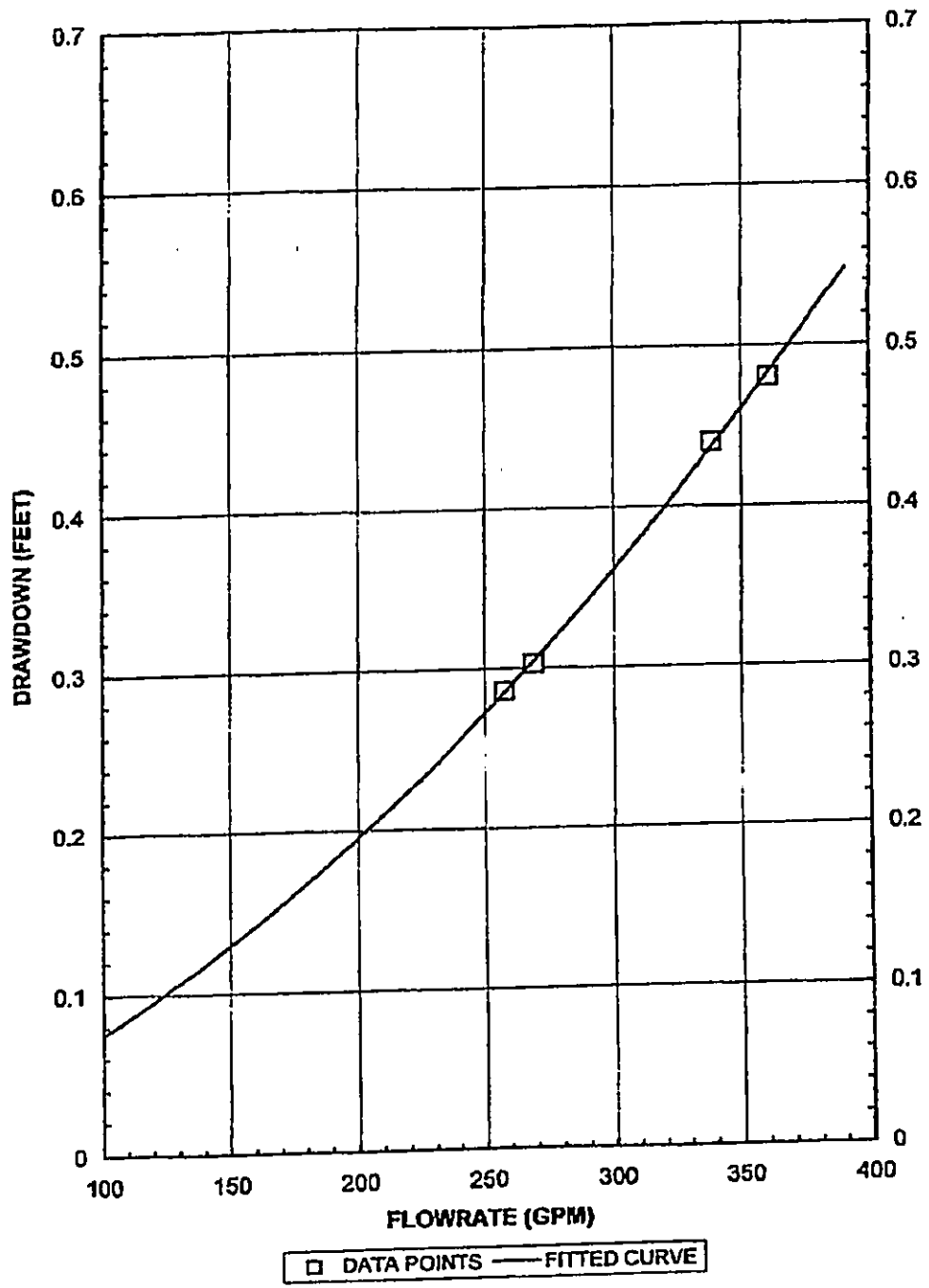


FIGURE 3. PUMPING RATE AND WATER LEVEL DURING THE JULY 20 TO 21, 2004 PUMP TEST OF THE MAUI LU WELL

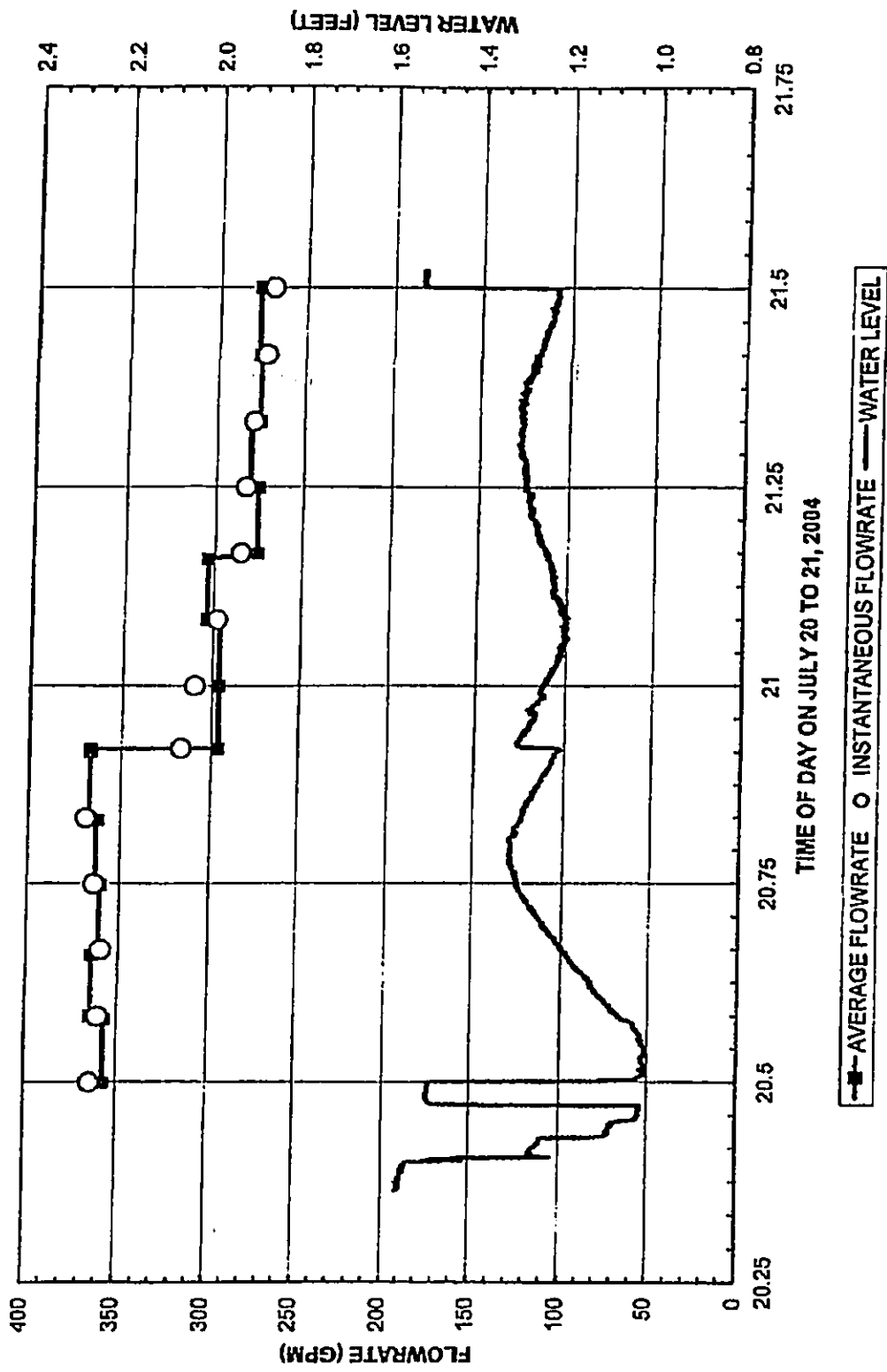
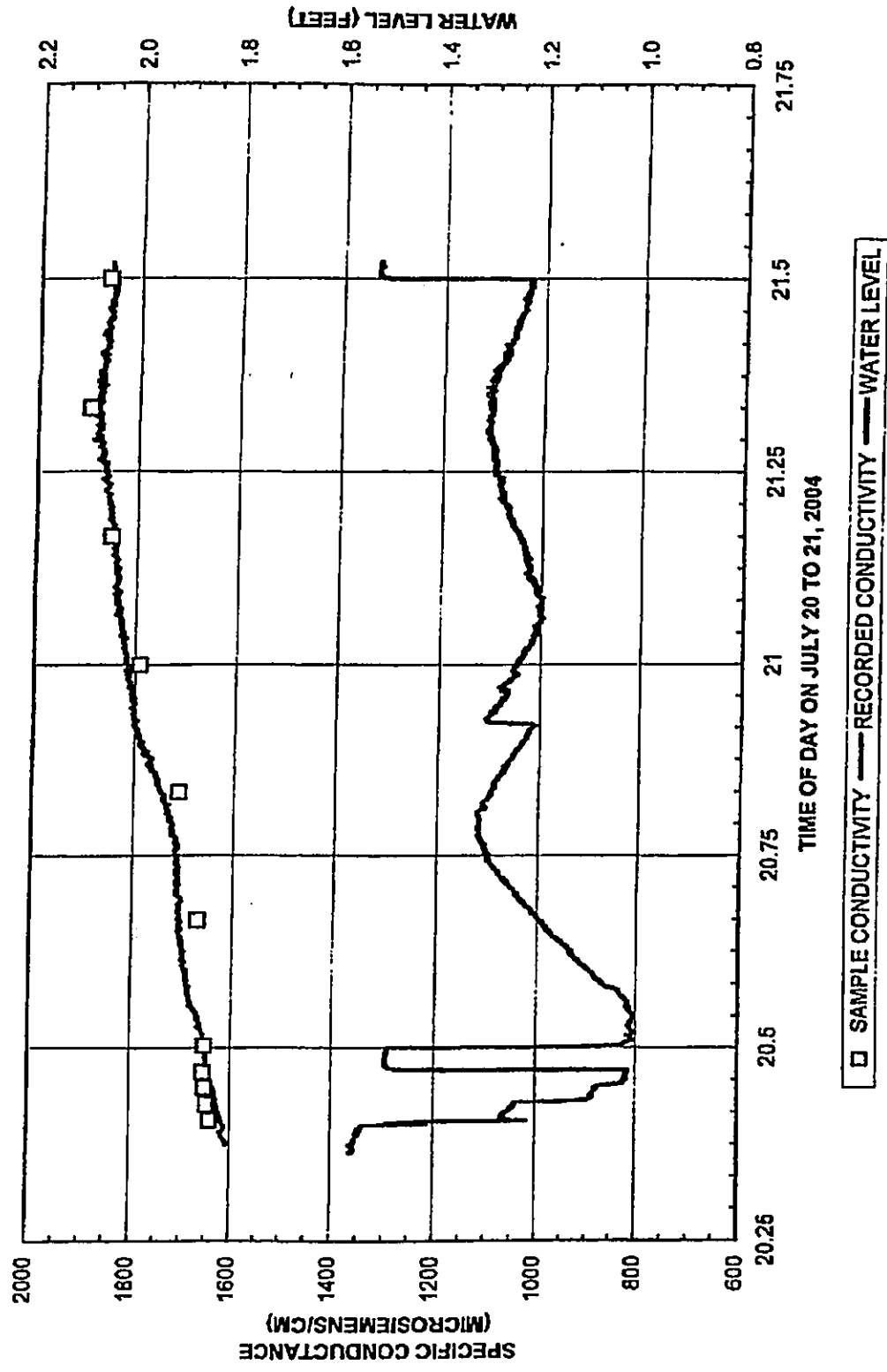


FIGURE 4. CONDUCTIVITY AND WATER LEVEL DURING THE JULY 20 TO 21, 2004 PUMP TEST OF THE MAUI LU WELL



□ SAMPLE CONDUCTIVITY — RECORDED CONDUCTIVITY — WATER LEVEL

FIGURE 5. TEMPERATURE AND WATER LEVEL DURING THE JULY 20 TO 21, 2004 PUMP TEST OF THE MAUI LU WELL

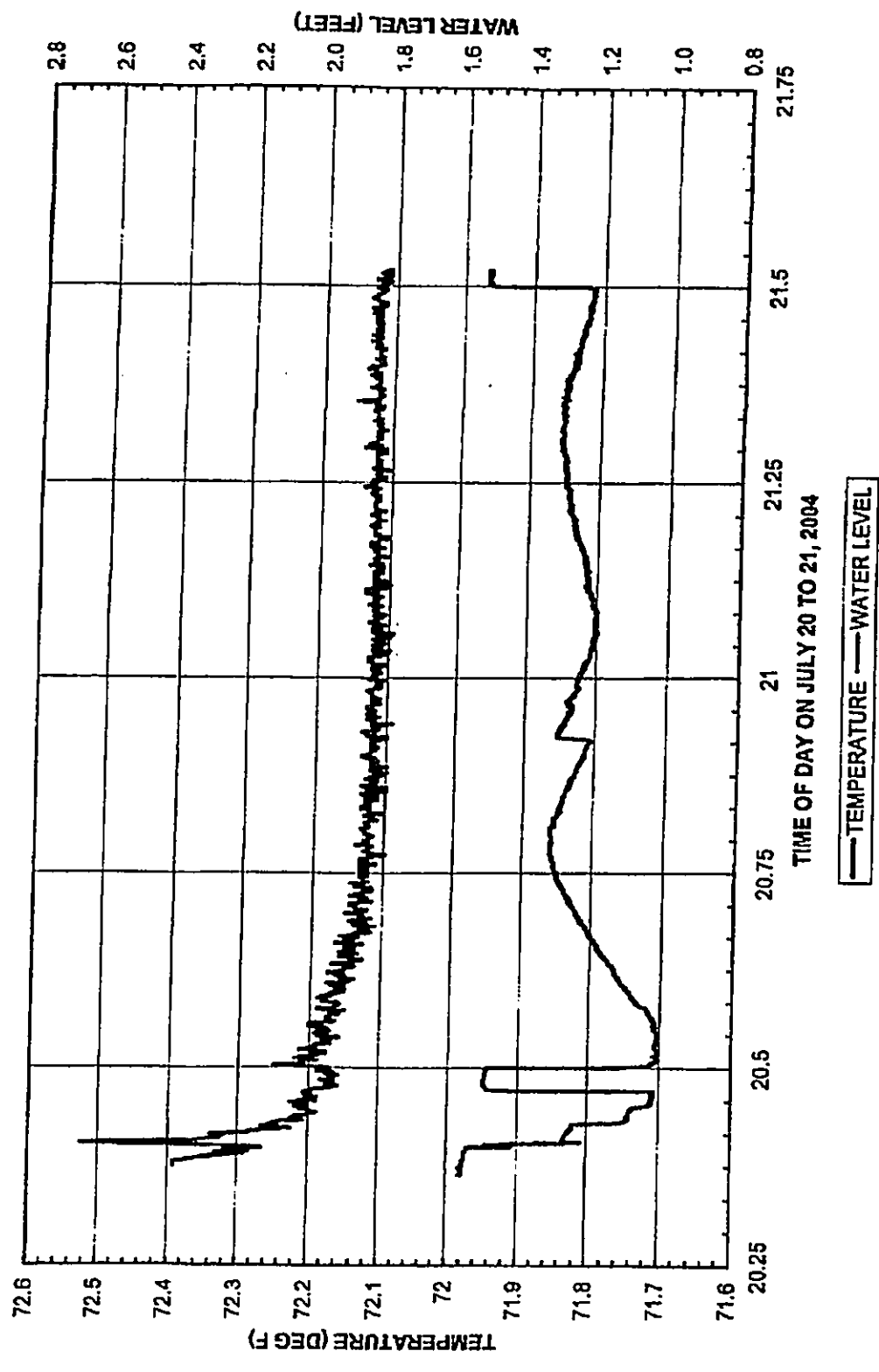


Table 1

Conductivity, Chlorides, and Temperature of
Water Samples Collected During the Maui Lu Pump Tests

| Sample | | Test | Specific Conductance ($\mu\text{S}/\text{cm}$ @ 25° C.) | Chlorides (MG/L) | Temperature (° F.) |
|-------------|-------|---------------|---|---------------------|-----------------------|
| Day in July | Time | | | | |
| 20 | 09:45 | Step-Drawdown | 1640 | 327 | 72.4 |
| 20 | 10:15 | | 1646 | 330 | 72.2 |
| 20 | 10:45 | | 1651 | 332 | 72.2 |
| 20 | 11:15 | | 1654 | 333 | 72.2 |
| 20 | 12:05 | Constant Rate | 1652 | 332 | 72.3 |
| 20 | 16:00 | | 1669 | 337 | 72.1 |
| 20 | 20:00 | | 1710 | 353 | 72.1 |
| 21 | 00:00 | | 1791 | 387 | 72.1 |
| 21 | 04:00 | | 1851 | 405 | 72.1 |
| 21 | 08:00 | | 1896 | 420 | 72.1 |
| 21 | 12:00 | | 1864 | 410 | 72.1 |

- Notes:
1. Specific conductance measured with a HACH Sensions 5 Meter.
 2. Chlorides determined by mercuric nitrate titration.
 3. Temperature measured with a Solinst LTC meter/recorder in the well's pump sump.