Consolidated Applications for a
HRS Chapter 343 Final Environmental Assessment and
Special Management Area Permit.

Alahele Subdivision

Kihei, Maui, Hawaii
TMK: (2) 3-9-017:034

Prepared for:
Wilshire DMK I, LLC.
2001 Wilshire Boulevard, Suite 302
Santa Monica, CA 90403

Submitted by:
Chris Hart and Partners
Landscape Architecture and Planning
115 N. Market Street
Wailuku, HI 96793
Phone: 242-1955
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CHRIS HART & PARTNERS, INC.
LANDSCAPE ARCHITECTURE & LAND USE PLANNING

May 2008

APPLICATION

Special Management Area

COUNTY OF MAUI
DEPARTMENT OF PLANNING
250 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
TELEPHONE: (808) 270-7735 FAX: (808) 270-7634

APPLICATION TYPE: MAUI PLANNING COMMISSION SPECIAL MANAGEMENT AREA PERMIT APPLICATION

DATE: 6-7-07

PROJECT NAME: Alahele Subdivision

PROPOSED DEVELOPMENT: Subdivision of Parcel 34 into 48 R-2 Residential buildable Lots with supporting infrastructure. The project will also include the construction of the North - South Collector Road on Parcel 34.

TAX MAP KEY NO.: (2) 3-9-017:034 **CPR/HPR NO.:** _____ **LOT SIZE:** 7,511 - 10,382 Sq Ft

PROPERTY ADDRESS: Alahele Place

OWNER: Wilshire DMK I, LLC. PHONE:(B) (310) 712-2770 (H) _____

ADDRESS: 2001 Wilshire Blvd., Ste. 302

CITY: Santa Monica STATE: CA ZIP CODE: 90403

OWNER SIGNATURE: Wilshire DMK I, LLC By: Wilshire Mgmt, Inc. By: Jon Dishell, Pres.

APPLICANT(PRINT) Wilshire DMK I, LLC.

ADDRESS: 2001 Wilshire Blvd., Ste. 302

CITY: Santa Monica STATE: CA ZIP CODE: 90403

PHONE (B): (310) 582-8999 x21 (H): _____ FAX: (310) 496-2055

APPLICANT SIGNATURE: Wilshire DMK I, LLC By: Wilshire Mgmt, Inc. By: Jon Dishell, Pres.

CONTACT NAME:(PRINT) Chris Hart and Partners, Inc.

ADDRESS: 115 N. Market Street

CITY: Wailuku STATE: HI ZIP CODE: 96793

PHONE (B): (808) 242-1955 (H): _____ FAX: (808) 2424-1956

EXISTING USE OF PROPERTY: Vacant Lot

CURRENT STATE LAND USE DISTRICT BOUNDARY DESIGNATION: URBAN

COMMUNITY PLAN DESIGNATION: SINGLE FAMILY ZONING DESIGNATION: R-2 Residential

OTHER SPECIAL DESIGNATIONS: Special Management Area (SMA)

BUILDING APPLICATION NO. _____ PROJECT VALUATION $ 3,800,000

NOTICE OF APPLICATION
SPECIAL MANAGEMENT AREA USE PERMIT

Please be advised that the undersigned has filed an application for a Special Management Area Use Permit with the County of Maui Planning Department for the following parcel(s):

1. Tax Map Key: (2) 3-9-017:034
(See attached location map)

2. Location (street address): Alahele Place, Kihei, Maui, Hawaii

3. Existing Land Use Designations:

a. State Land Use District: URBAN

b. Community Plan Designation: SINGLE FAMILY

c. County Zoning: R-2 RESIDENTIAL

4. Description of the Existing Uses on Property:

Vacant

5. Description of the Proposed Development on Property:

Subdivision of Parcel 34 into 48 R-2 Residential buildable lots with supporting infrastructure

The project will also include the construction of North- South Collector Road on Parcel 34

****

BY: Wilshire DMK I, LLC.
(Owner/Applicant)
BY: Wilshire Mgmt, Inc.
BY: Jon Dishell
Jon Dishell, President
(Signature)

2001 Wilshire Blvd., Ste. 302
Santa Monica, CA 90403
(Address)

(310) 582-8999 x 21
(Telephone)

Chris Hart and Partners, Inc.
(Agent)

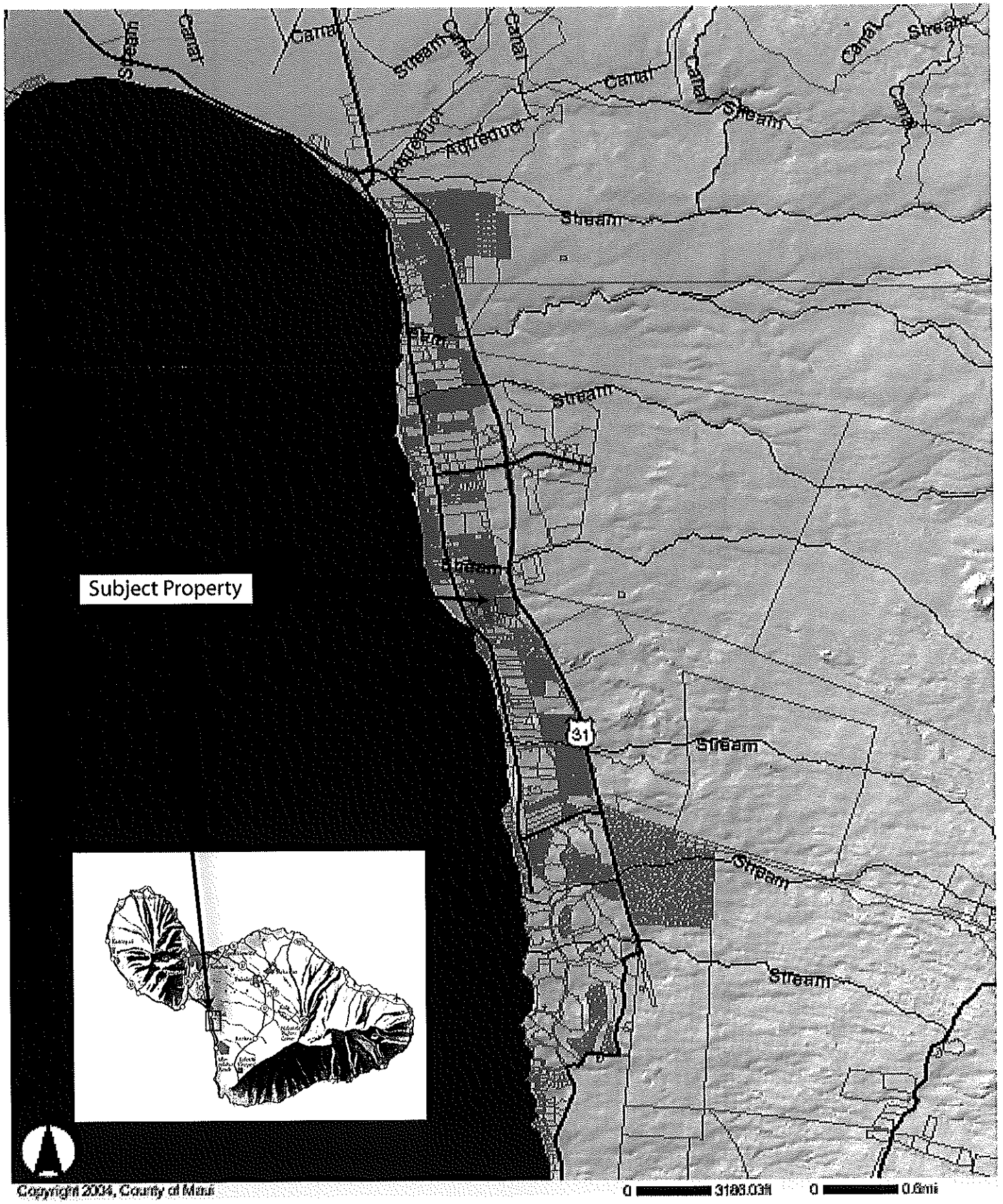
(Signature)

115 N. Market Street
Wailuku, HI 96768
(Address)

(808) 242-1955
(Telephone)

(Maui Planning Department Certification of Completion: _____)
The Applicant is responsible for ensuring accuracy of the information.

Published by _____ (In Newspaper printed and issued at least twice weekly in the County and which is generally circulated through the County with legible location map)



Alahele Subdivision

Figure No. 1

September 2006

Regional Map

CHRIS HART & PARTNERS, INC.

MAUI PLANNING COMMISSION

TO: DATE: 6-7-07

Please be informed that the undersigned has applied to the Maui Planning Commission of the County of Maui for a Special Management Area Permit Application pursuant to the Special Management Area Rules of the commission for the following parcel:

1. Tax Map Key: (2) 3-9-017:034

2. Street Address: Alahele Place Kihei, Maui, Hawaii
(Location Map Attached)

3. Community Plan: Single Family Zoning: R-2 Residential

4. Proposed Development:
Subdivision of Parcel 34 into 48 R-2 Residential buildable lots with supporting infrastructure
The project will also include the construction of a portion of the North- South Collector Road on Parcel 34.

THIS SECTION TO BE COMPLETED BY THE PLANNING DEPARTMENT:

Public Hearing Date:

Time:

Place:

The hearing is held under the authority of Chapters 205A and 91, Hawaii Revised Statutes (HRS), and the Maui Planning Commission Rules. The particular sections of the Statute and Rules involved are Sections 205A-26,205A-27,205A-28, and 205A-29, HRS and Chapter 201 and 202, Maui Planning Commission Rules.

Petitions to intervene shall be in conformity with Section 12-201-20 of the Rules of Practice and Procedure for the Maui Planning Commission and shall be filed with the commission and served upon the applicant no less than ten days before the first public hearing date. Filing of all documents to the commission is c/o the Maui Planning Department, 250 South High Street, Wailuku, Maui, Hawaii 96793.

The computation of time begins with the day following the act, event, or default, and includes the last day of the period unless it is a Saturday, Sunday or legal state holiday in which event the period runs until the end of the next day which is not a Saturday, Sunday, or state holiday. When the prescribed period of time is 10 days or less, Saturdays, Sundays, or state holidays within the designated period will be excluded in the computation. Any party may be represented by Counsel or other representative.

Testimony relative to this request may be submitted in writing to the Maui Planning Commission, 250 South High Street, Wailuku, Maui, Hawaii 96793, or presented in person at the time of the public hearing.

Information relative to the application is available for review at the Planning Department, 250 South High Street, Wailuku, Maui, Hawaii, Telephone (808) 270-7735; toll-free from Molokai 1-800-272-0117, Extension 7735; and toll-free from Lanai 1-800-272-0125, Extension 7735.

Wilshire DMK I, LLC	Chris Hart and Partners, Inc.
Name of Applicant	Name of Applicant's Agent, if applicable
BY: Wilshire Mgmt., Inc. BY: Josh Diskell, Pres.	
Signature	Signature
2001 Wilshire Blvd., Ste. 302 Santa Monica, CA 90403	115 N. Market Street Wailuku, HI 96793
Address	Address
(310) 582-8999 x21	(___) 808-242-1955
Telephone	Telephone

REQUIRED SUBMITTALS

SPECIAL MANAGEMENT AREA (SMA)

REQUIRED SUBMITTALS

Evidence that the applicant is the owner or lessee of record of the real property.

See: Appendix "A".

A notarized letter of authorization from the legal owner if the applicant is not the owner and evidence that the authorization is from the legal owner.

Not applicable.

Provide documentation that full compliance with Chapter 343, Hawaii Revised Statutes (HRS), and the Environmental Impact Statement (EIS) Rules of the State Department of Health have been met. If required pursuant to Chapter 343, HRS or by the Planning Director, an original set plus one copy will be submitted.

This application is part of a Draft Environmental Assessment prepared for the proposed project. Because the proposed project involves construction of the future North South Collector Road, a Chapter 343 Environmental Assessment is triggered.

Notice of Application and legible map (see attached form).

Notice of Application with a map is submitted with this application.

A written description of the proposed action, including, but not limited to the use, length, width, height, depth, building material and statement of objectives of the proposed action.

The proposed project will create forty-eight R-2 residential buildable lots ranging in size from 7,511 square feet to 10,382 square feet with necessary supporting infrastructure. This application is for a "lots only" subdivision. The proposed project will also include construction of a portion of the North-South Collector Road.

An Assessment Report identifying the anticipated impacts of the proposed action on the special management area that addresses or describes:

The environmental setting of the property that is the subject of the proposed action;

The consolidated HRS Chapter 343 Environmental Assessment and SMA Application identify the environmental setting of the property including but not limited to;

- Land Use
- Topography and Soils
- Flood and Tsunami Zone
- Terrestrial Biota

- Air Quality and Noise Characteristics
- Archaeological/Historical/Cultural Resources
- Visual Resources

Additionally the consolidated application contains studies on water, sewer, drainage, roadways and electrical systems. These technical reports can be found in the Appendices section.

The relationship of the proposed action to land use plans, policies, and control of the affected area;

The subject property is situated within the State's Urban District and is Maui County zoned (R-2) Residential District and Kihei-Makena Community Plan (SF) Single-Family residential. Therefore, the proposed project is in conformance with State and County land use plans and policies including Chapter 205A, HRS, as well as, the Kihei-Makena Community Plan Land Use Map.

The probable impact, including cumulative impacts, of the proposed action on the environment;

The development of the subject parcel will have a positive cumulative effect on the immediate community. During significant storm events the neighboring properties on Alaloa Road experience flooding. The proposed subdivision will incorporate drainage system improvements that will enhance the retention of debris and sediments, thereby improving the water quality of storm runoff. The drainage system will reduce downstream flooding therefore providing a positive effect on the downstream neighbors and the immediate environment.

Any probable adverse environmental affects that can be avoided;

The proposed development is not anticipated to result in significant environmental impacts to surrounding properties, nearshore waters, natural resources, and/or archaeological and historic resources on the site or in the immediate area. Public infrastructure and services including roadways, sewer and water systems, medical facilities, police and fire protection, parks, and schools are adequate to serve the proposed subdivision and are not anticipated to be significantly impacted. The proposed project is not anticipated to negatively impact public view corridors and is not anticipated to result in a significant adverse impact upon the visual character of the site and its immediate environs.

Alternatives to the proposed action;

The following alternatives were considered:

No Action: This alternative would forego developer driven infrastructure improvements to the project site and surrounding area.

Positive Impacts: By leaving the property in its existing undeveloped state, the short-term impacts associated with construction would be avoided. Also maintaining the site as undeveloped would reduce energy consumption, and the number of automobiles in the immediate area.

Negative Impacts: The County would not realize higher tax revenues associated with development of the property. Businesses and services in the Kihei area and on the island would not benefit from spending by occupants of the development on the property. The high carrying costs of the property would be a burden for the landowner to absorb for an indefinite period of time and likely result in the sale of the property.

The full negative seasonal flooding impacts would continue to be experienced by the neighbors who live on Alaloa Road if this Parcel was not developed. The subject parcel is mauka of an existing single-family residential subdivision that experiences flooding during significant storm events. During heavy storms a large portion of Alaloa Road is flooded during peak portions of the storm event. Development of this parcel will include mitigation measures designed to reduce the impact of future flooding events, i.e. (A reduction in storm water, siltation and debris.) Also, traffic mitigation will result from development of a portion of the North South Collector road intersection with Auhana Road.

Deferred Action: This alternative would delay development to a later time.

Positive Impacts: There would be no immediate construction-related impacts associated with development.

Negative Impacts: A delay in commencing development would result in uncertainties related to market conditions, interest rates, construction costs, and availability of infrastructure. These considerations along with the carrying costs of the property would be financially burdensome for the landowner. Primarily in the context of the off-site infrastructure burden.

Alternative Site: This option would require that the applicant find and develop another single-family residential parcel.

Positive Impacts: The short term and peripheral impacts associated with construction would be avoided.

Negative Impacts: The applicant does not own another suitable site and the land costs involved in acquiring a suitable site could be high.

Mitigating measures proposed to minimize impact; and

The proposed subdivision will not significantly impact the applicant has taken the proper mitigation measures to minimize the impact of runoff felt by downstream neighbors. The proposed Drainage Plan will retain all onsite water runoff as required by the Public Works Department. Additionally the developer has recognized that additional offsite retention is a component of this

subdivision and will help reduce the flooding during significant storm events that effect downstream residences.

Any irreversible and irretrievable commitment of resources.

Please see Section III of this application.

Said Assessment Report should also address the objectives, policies and guidelines set forth in Sections 12-202-10 and 12-202-11 of the Special Management Area Rules of the Maui Planning Commission.

Three (3) sets of a certified shoreline survey (one original). Survey shall be the actual field location of the shoreline as prepared by a land surveyor registered in the State of Hawaii. The survey maps developed by the registered land surveyor shall bear the surveyor's signature and date of field survey and the certifying signature and date of the chairman of the Board of Land and Natural Resources (for properties abutting the shoreline).

This parcel does not abut the shoreline and therefore a shoreline certification is not necessary.

List of owners and lessees of real property within a 500-foot radius of the subject parcel boundaries obtained from the most current available list at the Maui County Department of Finance, Real Property Division. This list shall be listed by Tax Map Key numbers with names and mailing addresses of all owners and lessees to be notified, and shall include a map drawn to scale, clearly defining the 500-foot notification boundary and the parcels affected.

See: Appendix "K".

A preliminary drainage plan.

See: Appendix "D".

A set of a plot plan of the land on which the proposed action is to occur. The plot plan shall be prepared to scale and be based upon an accurate instrument survey, and shall define and show the design of the proposed action and the existing physical conditions of the land, including, but not limited to property boundaries, topography, natural and man-made features, trees and structures.

See: Figure No. 10.

A preliminary plan of the development designating in dimensions the location of the proposed action on the land. If structures are included in the action, the plan of the development will also show a dimensioned floor plan, sections, elevations, and other physical features Said plans must be dated.

See: Figure No. 10.

A preliminary landscape planting and irrigation plan defining tree and shrub locations, type of plant materials, sizes, irrigation lines as well as landscape lighting and graphics. Said plans must be dated.

See: Figure No. 11.

Photographic Analysis (consisting of photographs or slides) or VHS format videotape identifying the area where the proposed action is to occur. The visual analysis should include the site, surrounding properties, and relationship of the site to the nearest public roadway.

See: Figure Nos. 9.1-9.2.

Colored rendering.

See: Figure No. 11.

Non-refundable filing fee (see Fee Schedule, Table A) payable to County of Maui, Director of Finance.

A check for the filing fee is submitted with this application.

Any other information and documentation required by the Director, (i.e., traffic-impact analysis, archaeological reconnaissance, etc.)

Traffic Impact Analysis Report	Appendix J
Archaeological Monitoring Plan	Appendix F
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REPORT

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I. PROJECT INFORMATION

A. PURPOSE OF THE REQUEST

The purpose of this Environmental Assessment (EA) is to analyze the potential impacts related to the proposed subdivision of a 14 acre parcel into 48- single-family residential buildable lots in Kihei, Maui, HI at TMK: (2) 3-9-17:034. The project will also require a Special Management Area (SMA) Permit. The proposed project will include the construction of a significant portion of the future North/South Collector Road with dedication to the County of Maui. As a significant public infrastructure improvements, it constitutes and H.R.S. Chapter 343 trigger. Additionally the project is located in an area subject to significant storm events. The project-generated runoff will be retained on-site and additional off-site capacity is proposed as a partial mitigation measure. Depending on the location of off-site retention could trigger Chapter 343 compliance.

B. PROJECT PROFILE

Proposed Project:	Single Family Residential Subdivision and construction of a portion of the North – South Collector Road (NSCR).
Project Address:	Alahele Place Kihei, Maui, Hawaii
Project TMK:	(2) 3-9-17:034
Parcel Size:	14 acres
Existing Land Use:	Vacant
Access:	Proposed NSCR connection to Auhana road.

C. IDENTIFICATION OF THE APPLICANT/OWNER

Land Owner:	Wilshire DMK I, LLC.
Address:	2001 WILSHIRE BLVD, SUITE 302

SANTA MONICA, CA 90403

Phone: Business: (310) 712-2770
Facsimile: (310) 712-2775

Contact: Anand Kapadia

D. CONSULTANTS

Land Use Planner & Landscape Architect: Chris Hart & Partners, Inc.
1955 Main Street, Suite 200
Wailuku, Maui, Hawaii 96793-1706

Phone: Voice: (808) 242-1955
Facsimile: (808) 242-1956

Contact: Christopher L. Hart

Project Manager: Michael Wright and Associates, Inc.
2145 Wells Street, Suite 305
Wailuku, Maui, Hawaii 96793-1706

Phone: Voice: (808) 244- 1600
Facsimile: (808) 244-3600

Contact: Mr. Michael W. Wright

Civil Engineer: Stacy Otomo Engineering Inc.
305 South High Street, Suite 102
Wailuku, HI 96793

Phone: Voice: (808) 242-0032
Facsimile: (808) 242- 5779

Contact: Mr. Stacy Otomo

Archaeological/ Cultural Professional: Scientific Consultant Services
711 Kapiolani Blvd. Suite 975
Honolulu, Hawaii 96813

Phone: Voice: (808) 597-1182
Facsimile: (808) 597-1193

Contact: Mr. Robert L. Spear, Ph.D.

Traffic Engineer: Phillip Rowell and Associates
47-273 "D" Hui Iwa Street
Kaneohe, HI 96744

Phone: Voice: (808) 239-8206
Facsimile: (808) 239-4175

Contact: Mr. Phillip Rowell, P.E.

E. ACCEPTING AGENCY

Agency: Maui Planning Commission
C/o Department of Planning, County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Phone: Voice: (808) 270-7735
Facsimile: (808) 270-7634

Contact: Mr. Jeffrey Hunt, Director, AICP

F. MAJOR LAND USE, DEVELOPMENT AND CONSTRUCTION APPROVALS

1. Subdivision approval from the Department of Public Works and Environmental Management (DPWEM), County of Maui.
2. Grading/Grubbing Permit approval from the DPWEM.
3. Building, Electrical, and Plumbing Permits for future structures from the DPWEM.
4. Special Management Area Use Permit by the Maui Planning Commission, via the Department of Planning.

G. PRE-CONSULTED AGENCIES& PRIVATE INTERESTS

COUNTY OF MAUI

1. Department of Planning
2. Department of Public Works and Environmental Management
3. Housing Commissioner, Office of the Mayor (Jo-Ann Ridao)

PRIVATE INTEREST

1. Haleakala Ranch

II. DESCRIPTION OF THE PROPERTY AND PROPOSED ACTION

A. PROPERTY LOCATION

The fourteen (14) acre subject parcel is located at TMK: (2) 3-9-017: 034 in Kihei on the island of Maui. Parcel 34 is situated at the end of Alahele Place and is currently inaccessible. The proposed NSCR will bisect Parcel 34 and connect to Auhana Road. Additional access will occur from Alahele Place. (**See:** Figure No. 1, Location Map)

B. EXISTING LAND USE

The subject parcel is in the State Land Use Urban district, zoned R-2 Residential and is SF- Single Family in the Kihei-Makena Community Plan. Parcel 34 is currently vacant. (**See:** Figure Nos. 2 State Land Use Map, 3 Maui County Zoning Map, and 4 Kihei-Makena Community Plan Map)

C. LAND USE DESIGNATIONS

State Land Use Classification:	Urban
Kihei-Makena Community Plan:	Single Family (**See**: Figure No. 4, "Kihei-Makena Community Plan Map")
County Zoning:	R-2 Residential (**See**: Figure No. 3, "County Zoning")
Flood Zone Designation:	Zone C Minimal flooding

(**See**: Figure No. 7, "Flood Map")

Special Designations: Special Management Area (SMA)
(**See**: Figure No. 8, "SMA Map")

D. ALTERNATIVES

The following alternatives were considered:

1. No Action: This alternative would forego developer driven infrastructure improvements to the project site and surrounding area.

Positive Impacts: By leaving the property in its existing undeveloped state, the short-term impacts associated with construction would be avoided. Also maintaining the site as undeveloped would reduce energy consumption, and the number of automobiles in the immediate area.

Negative Impacts: The County would not realize higher tax revenues associated with development of the property. Businesses and services in the Kihei area and on the island would not benefit from spending by occupants of the development on the property. The high carrying costs of the property would be a burden for the landowner to absorb for an indefinite period of time and likely result in the sale of the property.

The full negative seasonal flooding impacts would continue to be experienced by the neighbors who live on Alaloa Road if this Parcel was not developed. The subject parcel is mauka of an existing single-family residential subdivision that experiences flooding during significant storm events. During heavy storms a large portion of Alaloa Road is flooded during peak portions of the storm event. Development of this parcel will include mitigation measures designed to reduce the impact of future flooding events, i.e. (A reduction in storm water, siltation and debris.) Also, traffic mitigation will result from development of a portion of the North South Collector road intersection with Auhana Road.

2. Deferred Action: This alternative would delay development to a later time.

Positive Impacts: There would be no immediate construction-related impacts associated with development.

Negative Impacts: A delay in commencing development would result in uncertainties related to market conditions, interest rates, construction costs, and availability of infrastructure. These considerations along with the carrying costs of the property would be financially burdensome for the landowner. Primarily in the context of the off-site infrastructure burden.

3. Alternative Site: This option would require that the applicant find and develop another single-family residential parcel.

Positive Impacts: The short term and peripheral impacts associated with construction would be avoided.

Negative Impacts: The applicant does not own another suitable site and the land costs involved in acquiring a suitable site could be high.

E. DESCRIPTION OF PROPOSED ACTION

The proposed subdivision will create forty-eight (48) R-2 Residential District buildable lots ranging in size from 7,511 square feet to 10,382 square feet with necessary supporting on site and off-site infrastructure. The project does not include the construction of homes or allowable accessory dwelling (Ohana) units. The intent is to sell the lots to individual owners for future single-family home construction. The proposed project will also include construction of a portion of the North-South Collector Road (NSCR) with access to Auhana Road.

Associated project improvements include paved roadways; concrete curbs, gutters and sidewalks; onsite and offsite drainage systems, water system, sewer system, underground utilities, landscaping, and offsite roadway improvements along Alaloa Road and Alahele Place fronting the project site.

III. DESCRIPTION OF THE EXISTING ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATION MEASURES

A. PHYSICAL ENVIRONMENT

1. Land Use

Existing Conditions.
The subject property is a vacant Parcel located in Kihei, island of Maui TMK: (2) 3-9-017:034. (**See**: Figures No. 1 "Regional Location" & No. 5 "Tax Map Key").

The subject parcel is in the State Land Use Urban District; County zoned (R-2) Residential District and is proposed as SF- Single Family in the Kihei-Makena Community Plan. The subject parcel is currently vacant. (**See:** Figure Nos. 2 "State Land Use map", 3 "Maui County Zoning Map", and 4 "Kihei-Makena Community Plan")

The surrounding area is primarily residential in nature and consists of developments constructed in the 1970's and 1980's. Individual owners apparently constructed homes, as there are a wide variety of architectural styles. Most recent is the Keala Hills subdivision to the North, which has a consistent architectural theme. The Akina bus facility is adjacent to Parcel 34 on the southwestern side and the Church of Jesus Christ of the Latter Day Saints is on the most southerly border. (**See:** Figure No. 1 "Location Map")

The following is a description of zoning, community plan designations, and existing land uses adjacent and in close proximity to the subject property:

North:	Zoning: R-2 Residential Community Plan: Single Family (SF) State Land Use: Urban **Existing uses**. Vacant Parcel/ Keala Hills subdivision.
South:	Zoning: R-2 Residential Community Plan: Single-Family (SF) State Land Use: Urban

	Existing uses. Single-Family Residences, Church of Latter Day Saints.
East:	Zoning: R-2 Residential and AG Agriculture Community Plan: Agriculture (A) across Piilani Highway State Land Use: Agricultural **Existing uses.** A remnant parcel owned by the State, and Piilani Highway
West:	Zoning: R-2 Residential Community Plan: Single-Family (SF) State Land Use: Urban **Existing uses.** Single-Family residences and Akina Bus facility.

Potential Impacts and Mitigation Measures.

The site of the proposed subdivision is designated State Land Use Urban District, is County Zoned (R-2) Residential District and proposed for (SF) Single-family in the Kihei-Makena Community Plan. The proposed subdivision for residential use is permitted and an appropriate development within the State Land Use designation, County Zoning district, and Kihei-Makena Community Plan.

2. Topography and Soils

Existing Conditions.

The topographic elevation of the project site ranges from 70 feet above mean sea level at the eastern end of the site to 20 feet above mean sea level at the southwest end, averaging approximately 4.3%. (**See:** Appendix C, Preliminary Engineering and Drainage Report)

According to the United States Department of Agriculture, Natural Resources Conservation Service, and the soil classification found on the project site is Puuone sand (PZUE). The Puuone sand (PZUE) soil type has a typical slope of 7 to 30 percent. Runoff is slow and permeability is rapid above the cemented layer. The soil is typically used for pastures and home sites. (**See:** Figure No. 6, "Soils Map")

Potential Impacts and Mitigation Measures.

The owner has retained a State of Hawaii certified Civil Engineer to develop a drainage plan designed to mitigate project-generated runoff created by the installation of impervious surfaces such as streets and driveways. The proposed project will also include onsite and offsite drainage improvements designed to reduce downstream storm runoff and reduce the impacts of siltation and debris.

3. Flood and Tsunami Zone

Existing Conditions.

According to Panel Number 150003 0265 C dated September 6, 1989, of the Flood Insurance Rate Map (FIRM), prepared by the United States Federal Emergency Management Agency, the project site is situated within Zone C. Flood Zone C represents areas of minimal flooding. (**See**: Figure No. 7, "Flood Insurance Rate Map").

Potential Impacts and Mitigation Measures.

During the subdivision application process, the applicant will be required to comply with Maui County Code Chapter 20.08, Soil Erosion and Sediment Control. The subdivision improvements will meet necessary requirements so that no adverse flood hazards impact neighboring or downstream properties.

4. Terrestrial Biota (Flora and Fauna)

Existing Conditions. The subject parcel is vacant land. Existing vegetation on the property consists of Kiawe trees, grass and weeds. Avifauna typically found in the area includes common myna, several species of dove, cardinal, house finch, and house sparrow. Mammals common to this area include cats, dogs, rats, mice, and mongoose. No known rare, endangered, or threatened species of flora or fauna were seen on the subject property.

Potential Impacts and Mitigation Measures.

There are no known significant habitats of rare, endangered or threatened species of flora and fauna located on the subject property. Thus, rare, endangered, or threatened species of flora and fauna will not be impacted by the proposed project.

5. Air Quality

Existing Conditions.

Air quality refers to the presence or absence of pollutants in the atmosphere. It is the combined result of the natural background and emissions from many pollution sources. The impact of land development activities on air quality in a proposed development's locale differs by project phase (site preparation, construction, occupancy) and project type. In general, air quality in Kihei is considered relatively good and Non-point source emissions (automobile) are not significant to generate a high concentration of pollutants. The relatively high quality of air can also be attributed to the region's exposure to wind, which quickly disperses concentrations of emissions. The Kihei area is currently in attainment of all criteria pollutants established by the Clean Air Act, as well as, the State of Hawaii Air Quality Standards.

Potential Impacts and Mitigation Measures.

Air quality impacts attributed to the proposed project could include dust generated by the short-term construction related activities. Preliminary site work such as grading and road 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. Some of these measures will include:

- Providing adequate water source on site prior to start-up of construction activities.
- Landscape planting and rapid covering of bare areas, including slopes, beginning with the initial grading phase.
- Controlling of dust from shoulders, project entrances, and 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 project site.

6. Noise Characteristics

Existing Conditions.

The noise level is an important indicator of environmental quality. In an urban environment, noise is due primarily to vehicular traffic, air traffic, heavy machinery, and heating, ventilation, and air-conditioning equipment. Ramifications of various sound levels and types may impact health conditions and an area's aesthetic appeal. Noise levels in the vicinity of the project area are created from traffic on Piilani Highway.

Traffic noise from Piilani Highway and noise associated with the residential uses nearby are the predominant source of background noise in the vicinity of the subject property.

Potential Impacts and Mitigation Measures.
In the short-term, the proposed project could generate some adverse impacts during infrastructure construction. Noise from heavy construction equipment, such as material-carrying trucks and trailers, would be the dominant source of noise during the construction period. To minimize construction related impacts to the surrounding neighbors, the developer will limit construction activities to normal daylight hours, and adhere to the Department of Health's Administrative Rules, Chapter 11-46, Community Noise Control." In the longer-term, the proposed project should not significantly impact existing noise conditions in the area due to the existing Piilani Highway traffic noises.

7. Archaeological/Historical/Cultural Resources

Existing Conditions. A previous owner of the subject parcel prepared a Special Management Area Use Permit for the Proposed Keala Village Subdivision, which was never constructed. In 2002 Archaeological Services Hawaii, LLC was retained and conducted an Archaeological Inventory Survey of the subject parcel. As a result of that survey no further work was recommended, and then revised by the State Historic Preservation Division as outlined below.

- In a letter to Lisa Rotunno-Hazuka dated February 3, 2003 the State Historic Preservation Division (SHPD) recommended that no further work is necessary for this parcel. (See: Appendix H)
- In a letter to Michael Foley, Former Planning Director dated April 15, 2003 Cathleen A. Dagher of SHPD determines that no historic properties will be affected by this project. (See: Appendix H)
- In a letter to Michael Foley, Former Planning Director dated July 18, 2003 Holly McEldowney, Acting Administrator of SHPD revised the initial comments and recommends that an Archaeological Monitor Plan be submitted. (See: Appendix H)

As recommended by SHPD the Wilshire DMK I, LLC retained Scientific Consultant Services (SCS) to prepare an Archaeological Monitoring Plan for any future ground disturbing work on Parcel 34. (**See:** Appendix F)

Additionally SCS was retained to conduct a Cultural Impact Assessment on Parcel 34 and concluded that, pursuant to Act 50, the exercise of native Hawaiian rights, or any ethnic group, related to gathering, access or other customary activities will not be

affected by development activities on the subject parcel. Because there were no cultural activities identified within the project area, there are no adverse effects. **(See:** Appendix I Cultural Impact Assessment)

The Cultural Impact Assessment involves evaluating the probability of impacts on identified cultural resources, including values, rights, beliefs, objects, records, properties, and stories occurring within the project area and its vicinity cultural values and rights within the project area and its vicinity.

Scientific Consultant Services (SCS) conducted the Cultural Impact Assessment for the proposed subdivision in 2007 and determined that no cultural activities were identified within the project area, and that the project would have no adverse cultural impacts. At the request of the MPC, SCS sent letters requesting information and made phone calls to individuals who may have knowledge of cultural practices in the vicinity of the proposed project site. (**Note:** This extra effort resulted in no additional information. (**See:** Appendix I)

Potential Impacts and Mitigation Measures.
The Cultural Impact Assessment conducted on the property identified no cultural activities and therefore no adverse effects are anticipated. Previously, Archaeological work was completed in 2002 on the property and yielded no significant findings. However based on sand deposits on the subject parcel an Archaeological Monitoring Plan was recommended by SHPD and a monitoring plan was written for this proposed project. **(See:** Appendix F)

8. Visual Resources

Existing Conditions. The subject property is an urban infill parcel situated along the Makai side of Piilani Highway. The subject parcel is surrounded by existing residential uses that prevent direct ocean view corridors. A majority of the proposed lots will have northerly views of the West Maui Mountains and mauka views of Haleakala. The subject parcel has a topography that may allow for some limited ocean views from the lots at the Western most portion of the project site, closest to Piilani Highway.

Numerous scenic resources have been identified in Kihei, which are identified and discussed in the *Maui Scenic Coastal Resources Study*, by Environmental Planning Associates Inc., August 1990. (**See:** Figure No. 12 "Scenic Resources Map") The resource/ inventory map in this report identifies that no significant scenic resources are present on the subject parcel.

Potential Impacts and Mitigation Measures. The proposed single-family residential project has a relatively low profile and low-density will not significantly affect view resources in the area. The area does not present any unique scenic resources. As a result the proposed project is not anticipated to significantly impact public view corridors, or the visual character of the site and its immediate environs.

The owner will incorporate feasible LEED principles, into draft conditions, covenants and restrictions (CC&R) guidelines to be managed by a Home Owners Association (HOA). The applicant supports tropical architectural elements such as wide roof overhangs, in order to integrate this development into the existing surrounding landscape. The proposed architectural design guidelines will recommend building materials such as siding, roof shingles, etc. and design elements such as double pitched hip roofs with deep overhangs, porches, and lanais.

As mentioned the design guidelines will be enforced by the HOA to ensure that the project build-out will maintain a residential scale and proportion, in order to maintain surrounding views. The proposed project site improvements will consist of street trees, a passive recreation area and stabilized gravel walkway/bikeway along the North South Collector Road.

9. Affordable Housing

Existing Conditions

The proposed subdivision will result in forty-eight (48) (R-2) Residential buildable lots with necessary supporting infrastructure. The proposed subdivision will result in more than five (5) lots and is therefore subject to the Residential Workforce Housing Ordinance No. 3438. Appropriate compliance will be rendered during the subdivision process.

B. SOCIO-ECONOMIC ENVIRONMENT

1. Population and Housing

Existing Conditions.

The population of Maui has exhibited relatively strong growth over the past decade with a 2000 population of 128,241, a 2.6% increase over the 1990 population of 100,504. The 2000 population of South Maui District was 22,870 residents or 19.4% of Maui Island population. (Maui County Community Plan Update Program: Socio-Economic Forecast, SMS Research, June 14, 2002).

Potential Impacts and Mitigation Measures.

The proposed subdivision will consist of 48-lots and will slightly increase the population in the immediate area. The subject parcel is located in the Kihei Census Designated Place (CDP). The Kihei CDP identifies the average household size as 2.70. (U.S. Census Bureau, 2000) The proposed subdivision may increase the immediate population by approximately 130 people. (Methodology: Multiply the average household size by the proposed number of proposed building lots. (2.70 * 48= 129.6)

2. Economy

Existing Conditions.

With the mild arid climate and expansive sandy beaches, the South Maui economy is strongly oriented towards the visitor industry. The region includes two (2) major resort destination areas on the island, namely the Wailea Resort and Makena Resort. Other visitor accommodations are located near the coastline and Kihei Road. The Maui Ocean Center Aquarium, the Kihei Research and Technology and agricultural seed corn operations also boost South Maui's economy. The subject parcel is vacant and currently does not contribute to the local economy of South Maui.

Potential Impacts and Mitigation Measures.

The proposed subdivision will generate construction-phase economic impacts that are short-term effects. The effects include employment, income and expenditure impacts that are created by on-site and off-site construction employment, on-site and off site trade/transportation/service employment, and manufacturing employment in support of construction.

The project may generate long-term economic benefits to the local community including additional tax revenue to the County of Maui. The additional households may utilize and support many of the local goods and services within the immediate area. The proposed subdivision will provide building lots at market and affordable prices suitable for working families on Maui.

The applicant is willing to consider the possibility of reducing the sales price of lots to encourage owner occupancy by working Maui families in the context of the overall project viability. The Alahele subdivision is subject to the Residential Workforce Housing Policy, which provides reduced price-housing lots to workforce families in Maui County. Prior to final subdivision approval the owner will coordinate with the Department of Housing and Human Concerns to enter into an agreement that will result in the payment of an in lieu fee to a Non-profit organization that is developing affordable housing in South Maui.

Additionally, the applicant would like to work with the MPC to develop possible incentives in the form of either reduced SMA conditions or reduced project fees to reduce the lots sale prices, in an effort to expand owner-occupancy opportunities to working Maui families.

C. PUBLIC SERVICES

Recreational Facilities

Existing Conditions.

The South Maui area has a 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 Parks, Ulua Beach, Wailea Beach, Polo Beach, Makena Beach Park, and Ahihi-Kinau marine Reserve, including the northern portion of La Perouse Bay.

Potential Impacts and Mitigation Measures.

The proposed subdivision is located in Kihei, a community with existing Recreational Facilities. The subject parcel is substantially mauka of the ocean adjacent to Piilani Highway and will not disrupt existing recreational beach activites or access. The proposed project is not expected to adversely impact existing recreational facilities and services in the region. The developer will pay all required assessments for public services. Upon completion, the project will provide increased real property tax revenues to the County of Maui that is used to support various services and programs.

Police and Fire Protection

Existing Conditions.

There are two fire stations serving the south Maui community. The first fire station is located at 11 Waimahaihai Street at Kalama Park, approximately 1 mile from the subject parcel. The second fire station is located in Wailea at the intersection of Kilohana Street and Kapili Street, approximately 1.75 miles from the subject parcel.

The proposed project is located in the Maui Police Department District VI. Patrol officers on assignment provide police services for the Kihei-Makena district from a police substation at Kihei Town Center. The Kihei Police Station has 45 budgeted uniformed patrol officers.

Potential Impacts and Mitigation Measures.

The proposed project is not expected to produce a significant increase in the population of the immediate area. The Maui Police and Fire Departments will continue to provide adequate police protection for the residents of Kihei.

Medical Facilities

Existing Conditions.

The Maui Memorial Medical Center (MMMC) located in Wailuku provides centralized medical services for the Island. Medical and dental offices are located in Kihei and Wailea to serve the regions residents.

According to the County's Public Facilities Assessment Update, March 9, 2007, the status of hospital facilities on Maui in 2004 is as follows:

- **Obstetric and Pediatric Beds** are significantly underutilized throughout the County of Maui, with a maximum actual occupancy rate of 44% compared to the desirable rate of 75%.

- **Critical Care Beds**, available only at Maui Memorial Medical Center, stayed occupied at a fairly favorable 64% rate in 2004, compared to the desirable rate of 75%.

- **Acute Care Beds** appeared to be underutilized at MMMC. Molokai and Kula experienced occupancy of less than 20% of acute care bed capacity compared to the desirable rate of 80-85%.

- **Long-term Care Beds** at Hale Makua appeared to be inadequate to handle demand in 2004, with occupancy rates exceeding the desired rate of 95%.

- **Specialty Care Beds** were generally underutilized in facilities in the County of Maui in 2004. The optimal occupancy rate for specialty care beds is 95% and this was not achieved by any of the facilities.

Potential Impacts and Mitigation Measures.

The proposed subdivision will not result in a significant population increase and will therefore not produce an increase in demand for physicians, dentists, nurses, mental health personnel and hospital beds.

Solid Waste

Existing Conditions.

Two (2) landfills are currently operating on Maui, the Central Maui Landfill in Puunene and the Hana landfill. The County of Maui will provide solid waste collection.

Potential Impacts and Mitigation Measures.

Based upon figures provided by the County of Maui, Curbside Refuse Collection System Plan, February 2001, Single-family residences will generate approximately 1.72 tons per household per year. Thus the proposed 48-lot subdivision is anticipated to generate approximately 82.56 tons of solid waste per year. Green waste from initial clearing of the site will either be mulched on site or deposited at the Central Maui landfill's green waste recycling facility.

Schools

Existing Conditions.

The Kihei District is serviced by both private and public schools, which provide for preschool through high school education. Currently the Kihei-Makena Community Plan region has three public schools serving 2,275 students including two (2) elementary schools and one intermediate school. Kihei Charter High School provides an alternative high school opportunity in Kihei; however traditional public high schools are located in Wailuku and Kahului community plan region.

Potential Impacts and Mitigation Measures.

The Public Facilities Assessment Update prepared for the County of Maui March 9, 2007 indicates that capacity is sufficient to accommodate existing enrollments of elementary students. However, the need for an additional intermediate school is already evident, since Lokelani Intermediate was at 118% of rated capacity in 2005. This region is projected to need its own high school in the near future and the Department of Education has begun to address this need.

The applicant will comply with the Educational Impact Fees required by Act 245 for the proposed subdivision.

D. INFRASTRUCTURE

1. Water

Existing Conditions.

Domestic water and fire flow will be provided by the County's water system. There is an existing 18-inch waterline, which traverses approximately midway through the project site. A 12-inch waterline traverses immediately north of the project site and interconnects the 18-inch waterline to an existing 8-inch waterline along Alaloa Road. There are two existing fire hydrants along Alaloa Road.

A 2.0 million gallon concrete water tank above the R&T Park provides storage for the area. The source for the water system is the Mokuhau wells located in Happy Valley.

Potential Impacts and Mitigation Measures.

In accordance with the Department of Water Supply's Domestic Consumption Guidelines for a single-family development, the average daily demand for the 48-lot subdivision is 42,000 gpd based on 3,000 gallons per acre. Fire flow demand for residential development is 1,000 gallons per minute for a 2-hour duration. Fire hydrants are required, and will be installed with a maximum spacing of 350 feet. (**See:** Appendix C, Preliminary Engineering Report)

The existing 18-inch waterline, which traverses through the project site, will be relocated along the subdivision roadway and within easements to prevent conflicts with the development of the subdivision.

Low flow fixtures, drought tolerant plants, and efficient irrigation, such as drip, will be implemented in order to conserve water. Although the Central Maui Water System source is reaching its limits, to date there are no restrictions in obtaining an upgrade or additional meter. Estimated flow at the fire hydrants is expected to meet fire protection requirements for residential areas.

The Maui County Council with the support of the Department of Water Supply (DWS) on December 14, 2007 adopted Ordinance No. 3502 "Ordinance Amending Article 1 of

Title 14, Maui County Code, and Title 18, Maui County Code, Relating to Water Availability". As a result of the adoption of this bill the DWS is currently not issuing water meters for new subdivisions. This situation will impact the proposed project. However, the applicant chooses to continue to pursue the Special Management Area (SMA) Permit anticipating that sufficient water meters will become available during the lengthy subdivision approval process and that this project can be constructed as a needed infill single-family residential project within the State Urban District consistent with the Kihei-Makena Community Plan.

2. Sewer

Existing Conditions.

There are existing 8-inch sewer lines along Alahele Place and Keala Place. Both 8-inch sewer lines connect to an existing 36-inch sewer line along South Kihei road, which transports wastewater to the main sewer pump station located at the northern end of Kalama Park.

Wastewater collected from the Kihei area is transported to the Kihei Wastewater Treatment Plant located above Piilani Highway and south of the Elleair Golf Course.

Potential Impacts and Mitigation Measures.

The project will connect to the existing 8-inch sewer line on Alahele Place. The proposed subdivision will generate approximately 16,800 gallons per day (gpd) of wastewater, based on the forty-eight lots.

The project site is located with the Kihei Assessment Area 6. The anticipated facility expansion assessment in this area is $4.65 per gallon or $ 78,120.00 and the anticipated collection system upgrade assessment is $0.46 per gallon or $7,728.00.

The Kihei Wastewater Reclamation Facility (KWRF) has a capacity to treat 8 million gallons of sewerage daily. As of September 6, 2006, the Wastewater Reclamation Division, County of Maui, indicated that the daily flow to the KWRF is estimated to be 4.6 million gallons per day. The County has allocated a total capacity of 6.6 million gallons per day. There is sufficient capacity at the KWRF to accommodate the sewerage flow from this project. (**See:** Appendix C, Preliminary Engineering Report)

3. Drainage

Existing Conditions.

The elevation on the project site ranges from elevation 70 feet above mean seal level at the southeastern end of the site to elevation 20 feet above mean sea level at the northwest end, averaging approximately 4.3%.

According to the "Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii (August, 1972)," prepared by the United States Department of Agriculture Soil Conservation Service, the soils within the project site are classified as Puuone sand (PZUE). Puuone sand is characterized as having rapid permeability above the cemented layer, slow runoff, and a moderate to severe wind erosion hazard.

There is no existing storm drainage system within the project site. Three (3) culvert systems convey runoff mauka of Piilani Highway and discharges immediately mauka of the project site. The first culvert system outlets near the northeast corner of the project site via a 54-inch culvert. There is a 24-inch culvert which outlets approximately midway on the project site and a double 84-inch culvert system which outlets near the southeastern end of the site.

Presently, runoff from the three culverts sheet flows across the parcel in an east to west direction into an existing drainage way. The runoff then flows in a westerly direction toward Alaloa Place into an earth channel in the Kalama Park.

Three Piilani Highway culverts convey runoff water to areas mauka of the project site. The first culvert outlets near the northeast corner of the project site. The second culvert outlets approximately in the middle and the third culvert outlets near the southeastern end of the site. Runoff from the three culverts sheetflows across the site in an east to west direction into an existing drainage way. The runoff then flows in a westerly direction towards Alaloa place into a double 48-inch culvert, which outlets into a drainage way makai of Alaloa Place through the Kalama Subdivision. The earth channel is grass with a cement block wall along a portion of the Southern boundary. The channel abuts the rear property line of residences in the Kalama Subdivision. (**See:** Figure 9.1) Makai of the Kalama Subdivision, the channel flattens and runoff sheet flows through developed areas (Foodland Shopping Center), across South Kihei Road and into Kalama Park.

As noted, all storm runoff generated, as a result of site build-out will be retained in onsite detention basins.

Additionally the applicants have acknowledged existing regional drainage impacts and have taken proactive steps to coordinate with the Public Works Department to develop additional mitigative drainage solutions. Public Works has approved the use of an unimproved portion of Kanakanui Road as an additional off site detention basin for existing storm runoff.
According to the "Drainage Master Plan for Kihei, Maui, Hawaii; August 1997," the 54-inch culvert has a design flow of 95 cfs, the 24-inch culvert has a design flow of 10 cfs, and the double 84-inch culverts crossing Alaloa Road is estimated to have a capacity of 140 cfs. It is estimated that the present 50-year storm runoff from the project site is 9.70 cfs. (**See:** Appendix D, Preliminary Drainage Report)

Potential Impacts and Mitigation Measures
According to Panel Number 150003 0265 C of the Flood Insurance Rate Map, September 6, 1989, prepared by the United States Federal Emergency management Agency, the project site is situated in Flood Zone C. Flood Zone C represents areas of minimal flooding.

After the development of the proposed project, it is estimated that the 50-year storm runoff from the project site will be 28.25 cfs, with a net increase of 18.55 cfs. The increase in runoff generated by the proposed project will be mitigated onsite by the creation of detention basins. The onsite detention basins will be sized to accommodate the increase in runoff from the subdivision. The onsite detention basin will be designed as a passive recreation green space that incorporates perimeter seating opportunities and landscape planting. (**See:** Figure No. 11 Landscape Plan) There will be no increase in runoff sheet flowing from the project site into the downstream or adjacent properties. (**See:** Appendix D, Preliminary Drainage Report)

Curb-inlet catch basins will be installed at appropriate intervals along the subdivision roadway. Culverts will be installed along the roadways to allow offsite runoff along its existing route. The runoff intercepted by the catch basins will be conveyed to the onsite detention basin, which will be sized to accommodate increase in runoff from a 50-year, 1-hour storm. In addition, the basin will be sized to provide a factor of safety.

Based on the Drainage Standards for the County of Maui, runoff from a drainage area greater that 100 acres must be determined using a 100-year, 24-hour storm. It is estimated that the runoff flowing in the major existing drainage way that traverses through the project site through double 84-inch culverts at Piilani Highway is 911 cfs. For comparison purposes, the State Department of Transportation used a design flow of 817 cfs for a 100-year, 6-hour storm event. (**See:** Appendix D, Preliminary Drainage

Report) The drainage design criteria will be to minimize any alterations to the natural pattern of the existing onsite surface runoff.

The developer is negotiating with the landowner mauka of Piilani Highway to obtain a site to construct an offsite retention basin. It is anticipated that an offsite retention basin will be constructed on approximately 2-acres of land and the basin will be able to mitigate approximately 10 percent of the 100-year, 24-hour storm. Therefore, the peak flow will be reduced by approximately 90 cfs makai of the project site. (**See:** Appendix D, Preliminary Drainage Report)

In consideration, it is the professional opinion of the project engineer that the proposed development will not have an adverse effect on the adjoining or downstream properties.

4. Roadway

Existing Conditions. Piilani Highway is the primary roadway linking Kihei, Wailea and Makena. Piilani Highway is a north-south four-lane highway to Kilohana drive, which is owned and maintained by the State of Hawaii. South of Kilohana Drive, Piilani Highway turns into a two-lane highway. The terminus of Piilani Highway is at its intersection with Wailea Ike Drive.

South Kihei Road is a two-lane, two-way, north-south major roadway. The intersections with Keala Street at Kealii Alanui are currently signalized. All the remaining intersections along South Kihei Road are unsignalized. However the intersection of South Kihei Road at Kanani Road is to be signalized as a condition of the Hale Kanani multi-family housing project. The posted speed limit along South Kihei Road is 20 miles per hour in the vicinity of the project.

Auhana Road is also a two-lane, two-way road. The intersection of Auhana Road t Kanai Road is unsignalized. The STOP sign is along the Kanani Road approach. The posted speed limit is 20 miles per hour.

Between Kanakanui Road and Piilani Highway, Kealii Alanui is a four-lane, divided roadway. A westbound to southbound left turn storage lane was recently added. Between Kanakanui Road and South Kihei Road, Kealii Alanui Road is a two-lane, two-way divided roadway. Parking is allowed along both sides.

Keala Place, Alaloa Road and Alahele Place form a U-shaped roadway system from South Kihei Road to the western boundary of the project site.

Potential Impacts and Mitigation Measures.

The proposed subdivision consists of forty-eight R-2 Residential buildable lots. The county is proposing an alignment for the North South Collector Road (NSCR), which bisects the subject property in the north-south direction. A roadway right-of –way has been designated within a parcel immediately south of the subject property, which will allow the NSCR to connect to Auhana Road.

Keala Place, Alahele Place and Alaloa Road are partially improved with A.C. pavement; however, the right-of-way is limited to 30 feet for most of its length. As part of subdivision improvements, the NSCR will be improved with two twelve-foot travel lanes with two 12-foot lanes with the subdivision to Auhana Road. The interior subdivision roadways will be constructed to County standards for roadways in the urban district. Cul-de-sacs will be designated to the turning requirements of the Fire department. (**See:** Appendix C Preliminary Engineering and Drainage Report)

Phillip Rowell and Associates prepared a Traffic Impact Assessment Report; dated May 25, 2007 for the proposed subdivision and NSCR construction. (**See:** Appendix J, Traffic Impact Assessment Report)

One of the areas of concern is the distance between Kanakanui Road and Piilani Highway along Kealii Alanui. There is a capacity for only six (6) vehicles to queue for the left turn from eastbound Kealii Alanui to northbound Piilani Highway. This left turn storage area is not sufficient to accommodate current peak hour demand. Plans are being prepared to improve the eastbound approach to Piilani Highway to provide an additional left turn lane. This improvement is part of the Ke Aliii Villa housing project.

No mitigation measures are required to mitigate the traffic impacts of the proposed project as the findings of the level-of-service analysis is that the traffic impacts of the project are minimal. All controlled movements at the signalized intersections will operate at a level of Service D, or better, without and with the project generated traffic.

A the unsignalized intersections along South Kihei Road, left turns from the side streets will operate at Level-of-Service F without an with the project. With the exception of the left turn lanes from westbound Auhana Road to southbound South Kihei Road, all changes in delay are 12% or less. At the intersection of Auhana Road at South Kihei Road, the change in delay is 17%. It should be noted that this projection does not consider the impacts of the future traffic signal at the intersection of South Kihei Road at Kanani Road. When this traffic signal is installed, a significant number of left turns will be diverted from Auhana Road to Kanani Road. Our experience is that this number

cannot be reliably estimated. It is more practical to perform new traffic counts several months after the traffic signal is installed. This was done after the installation of the traffic signal at the intersection of Piilani Highway at Kanai Road.

Lastly, it should be noted that a portion of the NSCR would be constructed as part of the proposed project. The section to be constructed consists of the section through the subject parcel and the connection between the subject parcel and Auhana Road. (**See:** Appendix J, Traffic Impact Assessment Report)

5. Electrical, Telephone, Cable and Data Systems

Existing Conditions.
Currently, existing underground and overhead facilities are located along Alaloa Place.

Potential Impacts and Mitigation Measures.
The proposed electrical, telephone and cable TV distribution systems for the proposed improvements will be installed underground from the existing underground and overhead facilities along Alaloa Place.

IV. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

A. STATE LAND USE LAW

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission, establishes four major land use districts into 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 subdivision is permitted within the Urban District.

Pursuant to § 15-15-18, Land Use Commission Rules, Subchapter 2, Standards for Determining "U" Urban District Boundaries, the proposed request is consistent with the following standard:

> *1. It shall include lands characterized by "city-like" concentrations of people, structures, streets, urban level services and other related land uses;*

Analysis: The subject parcel is located in Kihei, a highly populated urban area with city-like concentrations of structures, streets and urban level services on the island of Maui. The adjacent parcels to the North, South and West are designated urban.

2a. Proximity to centers of trading and employment except where the development would generate new centers of trading and employment.

Analysis: The subject property is located in Kihei, a highly populated urban area and resort destination that is in close proximity to a wide range of employment opportunities and is a center of trading. The proposed development is a residential "infill" project and is not expected to generate new centers of trading and employment.

2b. Availability of basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection: and

Analysis: As noted in the Public Services section of this application, basic services such as schools, parks, wastewater, solid waste, drainage, water, police and fire are available in Kihei.

2c. Sufficient reserve areas for foreseeable urban growth:

Analysis: Kihei has a sufficient inventory of undeveloped parcels that will provide areas for future urban growth in the Kihei area. The Kihei-Makena Community Plan, states, "The significant amount of vacant land mauka of Pi'ilani Highway will, in the future, provide opportunities to expand public facilities, parks and housing". (Page 13, Kihei-Makena Community Plan March 6, 1998).

3. It shall include lands with satisfactory topography, drainage, and reasonably free for the danger of any flood, tsunami, unstable soil condition, and other adverse environmental effects;

Analysis: The subject parcel has satisfactory topography and is reasonably free from the danger of any flood or tsunami. As noted in the Land Use section the subject parcel is located in flood Zone C. The owner has retained a Hawaii State certified Civil Engineer to develop a drainage plan to mitigate potential flooding of downstream neighbors during storm events.

4. Land contiguous with existing urban areas shall be given more consideration than non-contiguous land, and particularly when indicated for future urban use on state or county general plans.

Analysis: The subject parcel is contiguous to other lands with Urban, State Land Use classification. The subject parcel is in the State Urban District and is zoned for residential use. (See: Figure No. 2 "State Land Use Map")

5. It shall include lands in appropriate locations for new urban concentrations and shall give consideration to area of urban growth as shown on the state and county general plans;

Analysis: The subject parcel is located in the Urban district and therefore the proposed subdivision is an appropriate use.

6. A) It may include lands which do not conform to the standards in paragraphs (1) to (5): When surrounded by or adjacent to existing urban development; and
B) Only when those lands represent a minor portion of this district;

Analysis: The subject parcel conforms to the standards in paragraphs (1) to (5) and therefore is not applicable.

7. It shall not include lands, the urbanization of which will contribute toward scattered spot urban development, necessitating unreasonable investment in public infrastructure or support services; and

Analysis: The proposed subdivision of the subject parcel is and infill project located adjacent to existing single-family residential homes and will not contribute to scattered spot urban development. Additionally, the developer of the project is providing a portion of the proposed NSCR, therefore providing a private investment on public infrastructure.

8. It may include lands with a general slope of twenty per cent or more if the commission finds that those lands are desirable and suitable for urban purposes and that the design and construction controls, as adopted by any federal, state, or county agency, are adequate to protect the public health, welfare, safety and the public's interests in the aesthetic quality of the landscape.

Analysis: The subject parcel has an average slope of 4.3%. The design and construction controls, as adopted by any federal, state, or county agency will be adequate to protect

the public health welfare and safety. A Landscape Architect has been retained to provide an aesthetically pleasing landscape planting design for the subdivision.

B. MAUI COUNTY ZONING

The subject property is situated within the County of Maui's R-2 Residential District. (**See**: Figure No. 3 Maui County Zoning Map). The proposed subdivision is an allowable use.

C. GENERAL PLAN OF THE COUNTY

The General Plan of the County of Maui (1990 update) provides long-term goals, objectives, and policies directed toward improving living conditions in the County. The following General Plan Themes, Objectives and Policies are applicable to the proposed project:

Goal: Population

Objective No. 1.: To plan the growth of resident and visitor population through a directed and managed growth plan so as to avoid social, economic and environmental disruptions.

Policies: *(a) Manage population growth so that the County's economic growth will be stable and the development of public and private infrastructures will not expand beyond growth limits specified in the appropriate community plans or negatively impact our natural resources.*

(b) Balance population growth by achieving concurrency between the resident employee work force, the job inventory created by new industries, affordable resident/employee housing, constraints on the environment and its natural resources, public and private infrastructure, and essential social services such as schools, hospitals, etc.

Analysis: The County of Maui has developed zoning to manage growth and establish areas of similar land uses to avoid the above mentioned disruptions. The project site is zoned R-2 Residential District and the proposed Single-Family use is appropriate for the current county zoning designation.

The proposed subdivision will result in forty-eight (48) R-2 Residential buildable lots with necessary supporting infrastructure. The proposed subdivision will result in more than five (5) lots and is therefore subject to the Residential Workforce Housing Ordinance No. 3438.

Goal: Land Use

Objective No. 1.: To preserve for present and future generations existing geographic, cultural and traditional community lifestyles by limiting and managing growth through environmentally sensitive and effective use of land in accordance with the individual character of the various communities and regions of the County.

Policies: *(a) Through a community needs assessment analysis, define urban and rural limits in each community plan.*

(b) Provide and maintain a range of land use districts sufficient to meet the social, physical, environmental and economic needs of the community.

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

Analysis: The subject property is located adjacent to existing residential developments and the State Land Use designation is Urban. The Kihei-Makena region maintains a range of land use districts that are sufficient to meet the needs of the community.

The proposed subdivision of the subject parcel is an infill project located adjacent to existing single-family residential homes and therefore follows the directed land use growth strategy of the General Plan.

Goal: Housing

Objective No. 1.: To provide a choice of attractive, sanitary and affordable homes for all our residents.

Policies: *(a) Provide or require adequate physical infrastructure to meet the demands of present and planned future affordable housing needs.*

(b) Encourage the construction of housing in a variety of price ranges and geographic locations.

Analysis: The proposed development is adjacent to Piilani Highway and accessed by either Alahele Place or the proposed North/South Collector Road. The immediate area surrounding the parcel is developed as existing residential and the proposed infrastructure improvements will meet the demand for this future subdivision development. The proposed subdivision has retained a civil engineer to develop a drainage plan to provide the adequate physical infrastructure.

The proposed subdivision will result in forty-eight (48) (R-2) Residential buildable lots with necessary supporting infrastructure. The proposed subdivision will result in more than 5 lots and is therefore subject to the Residential Workforce Housing Ordinance No. 3438.

Goal: Transportation

Objective No. 1.: To support an advanced and environmentally sensitive transportation system, which will enable people and goods to move safely, efficiently and economically.

Analysis: The proposed subdivision includes the construction of a portion of the NSCR as mentioned in this application. The county is proposing an alignment for the NSCR, which bisects the subject property in the north-south direction. A roadway right-of –way has been designated within a parcel immediately south of the subject property, which will allow the NSCR to connect to Auhana Road. The proposed NSCR will enable people and goods, to move more safely and efficiently in Kihei.

Objective No. 2.: To develop a program for anticipating and enlarging the local street and highway systems in a timely response to planned growth.

Policies: *(b) Ensure that transportation facilities are anticipated and programmed for construction in order to support planned growth.*

Analysis: The County is proposing the future NSCR to reduce traffic congestion on South Kihei Road and provide an alternate transportation route in the Kihei region. The proposed project includes construction of a portion of the NSCR that bisects the parcel, which will help relieve traffic congestion in the Kihei region. The construction of the portion of the NSCR will be privately funded and will be planned to support the resulting subdivision.

D. 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 Maui County General Plan. The purpose of the community plan is to outline a relatively detailed agenda for carrying out these objectives.

The subject property is located within the Kihei-Makena Community Plan region and has a designation SF Single-family. (**See**: Figure No. 4). The Community Plan was adopted by Ordinance No. 2641 on March 6, 1998.

The following Kihei-Makena Community Plan goals, objectives, and policies are applicable to the proposed action:

Goal: ***Land Use.*** *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.*

Objectives:

b. Identify priority growth area to focus public and private efforts on the provision of infrastructure and amenities to serve existing residents and to accommodate new growth.

c. Upon adoption of this plan, allow no further development unless infrastructure, public facilities, and services needed to service new development are available prior to or concurrent with the impacts of new development.

q. Allow Ohana units only where sufficient infrastructure is available.

Implementing Actions:

d. Control timing and phasing of project district construction through zoning in order to ensure systematic and incremental development. Such an action shall prevent haphazard development, and ensure that the provision of adequate infrastructure and public facilities and services take place prior to or concurrent with the development.

Analysis. The Kihei Makena Community Plan Map designates the subject parcel as SF-Single Family. The proposed subdivision is subject to Ordinance No. 3438 and therefore will create additional market and affordable residential units to satisfy the community need for various housing options in the Kihei-Makena region. The proposed subdivision will create forty-eight (48) (R-2) Residential buildable lots (with the option of Ohana accessory dwelling units on all lots) and includes the construction of a portion of the NSCR. The roadway and all necessary supporting infrastructure for the subdivision will be constructed prior to any future Single-family residential development.

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

Objectives:

e. Protect the quality of near shore waters by ensuring that land-based discharges meet water quality standards. Continued monitoring of existing and future waste disposal systems is necessary to ensure their efficient operation. Programs should be implemented to reduce the reliance on injection wells for wastewater disposal.

Analysis: As described in Section III and the infrastructure section related to drainage, Kihei-Makena's unique and fragile environmental resources, including its shoreline, near and off-shore water quality, drinking water, visual resources, archeological resources, and endangered species of flora and fauna, will not be significantly impacted by this project. The proposed onsite and off-site drainage system will reduce flooding effects to downstream neighbors during significant storm events and also improve water quality of the runoff by retaining debris and sediments.

Goal: ***Housing and Urban Design.*** *A variety of attractive, sanitary, safe and affordable homes for Kihei's residents, especially for families earning less than the median income for families within the County. Also, a built environment, which provides complementary and aesthetically pleasing physical and visual linkages with the natural environment.*

Objectives and Policies:

a. Provide an adequate variety of housing choices and range of prices for the needs of Kihei's residents especially for families earning less than the median income for families with the County. Also, a built environment, which provides complementary and aesthetically pleasing physical and visual linkages with the natural environment.

b. Require a mix of affordable and market-priced housing in all major residential projects, unless the project is to be developed exclusively as an affordable housing project.

c. Preserve Kihei-Makena's significant views of the Pacific Ocean and broad vista to the Central Maui and Upcountry region. Prohibit the use of walls higher than 4 feet in front yard setbacks especially in areas close to the shoreline where view corridors can be blocked.

f. Incorporate the principals of xeriscaping in all future landscaping.

g. Encourage the use of native plants in landscaping in the spirit of Act 73, Session Laws of Hawaii, 1992.

Analysis: The architecture of the proposed new structures will reflect the scale, texture, and materials of the natural surroundings and other properties in the vicinity. The

proposed subdivision is subject to the Residential Workforce Housing Bill, Ordinance 3418 and therefore will provide a mix of market rate and affordable housing.

The subject parcel is surrounded by existing residential uses that prevent direct ocean view corridors. A majority of the proposed lots will have views of the West Maui Mountains and mauka views of Haleakala. The subject parcel has a topography that may allow for some limited ocean views from the lots at the Western most portion of the lot, closest to Piilani Highway.

Numerous scenic resources have been identified in Kihei, which are identified and discussed in the *Maui Scenic Coastal Resources Study*, by Environmental Planning Associates Inc., August 1990. (**See:** Figure No. 12 Scenic Resources Map) The resource/ inventory map in this report identifies that no significant scenic resources are present on the subject parcel.

The proposed subdivision will incorporate principals of xeriscaping in all future landscape planting and irrigation and where possible and the owners will be encouraged to select native plants for use in the landscape planting plan.

Goal: ***Physical and Social Infrastructure.*** *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 support present and planned land uses, especially in the case of project district implementation.*

Allow no development for which infrastructure may not be available concurrent with the development's impacts.

Transportation

Objectives:

a. *Develop and implement a well-planned road and public transportation system to allow residents and visitors to move safely, effectively and comfortably within the region. Roadway improvements should be planned, designed and constructed as prioritized under the Implementing Action section below and as generally described in the Kihei Traffic Master Plan.*
b. *Undertake transportation system improvements concurrently with planned growth of the Kihei-Makena region. Require adequate interregional highway*

capacity, including the widening of Piilani and Mokulele Highways to four lanes, prior to the construction of major projects south of Kilohana Road or mauka of Piilani Highway.

h. Encourage joint public/private participation in the planning, design and construction of roadway improvements, especially those identified in this plan.

Implementing Actions:

b. Plan, design and construct appropriate sections of a new North-South Collector Road, from Uwapo Road to Keonekai Road, to facilitate improved traffic movement in Kihei proper. When selecting a specific alignment, impacting existing structures should be kept to a minimum. Consideration should be given to segments between Kaonoulu Street and Auhana Street as well as between Ke Alii Alanui and Keonekai Road. In terms of roadway improvements within the community plan region, this shall be the second priority.

Analysis: The proposed project will include the construction of a portion of the NSCR by the owner built to Maui County standards. The portion of the NSCR on the subject parcel will provide an alternate route and allow residents to move safely, more effectively and comfortably within the Kihei region. The necessary infrastructure, public facilities, and services will be available prior to and/or concurrent with development of the site.

The proposed NSCR on the subject parcel will be constructed privately, therefore alleviating construction cost for the County of Maui. The roadway will be designed to the required County standards. The proposed subdivision includes the construction of the NSCR from the project site to Auhana Road to facilitate improved traffic movement in Kihei proper.

V. SPECIAL MANAGEMENT AREA OBJECTIVES AND POLICIES

The subject project is located within the Special Management Area (SMA). As such, the proposed subdivision improvements will require an SMA Use Permit. Pursuant to Chapter 205A, Hawaii Revised Statutes, and the Rules and Regulations of the Planning Commission of the County of Maui, projects located within the SMA are evaluated with respect to SMA objectives, policies, and guidelines. This section addresses the project's relationship to applicable coastal zone management considerations, as set forth in Chapter 205A and the Rules and Regulations of the Planning Commission.

A. RECREATIONAL RESOURCES

Objective: 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:

- *(i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*
- *(ii) Requiring placement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or require reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;*
- *(iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*
- *(iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*
- *(v) Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having standards and conservation of natural resources;*
- *(vi) Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;*
- *(vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing;*

(viii) *Encourage reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, county planning commissions; and crediting such dedication against the requirements of Section 46-6, HRS.*

Analysis. The subject parcel is adjacent to the Piilani Highway and is not a coastal land. The proposed subdivision will not have a direct impact on the public's use or access to the shoreline area.

B. HISTORICAL/CULTURAL RESOURCES

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

Policies:

(a) Identify and analyze significant archeological resources;

(b) Maximize information retention through preservation of remains and artifacts or salvage operations; and

(c) Support state goals for protection, restoration, interpretation, and display of historic structures.

Analysis. As discussed in Section III Archaeological/Historical/Cultural Resources of this application, based on the previous completed Archaeological work, and a newly written Cultural Impact Assessment there is minimal potential of encountering significant historical or cultural resources. The project area does not appear to hold much archeological significance. As such, the proposed subdivision supports the community's objective of insuring that new development does not disturb historic and prehistoric resources in the coastal zone management area that are deemed to be significant in Hawaiian and American history and culture. The State Historic Preservation Division has recommended an Archeological Monitoring Plan. (See: Appendix H)

C. SCENIC AND OPEN SPACE RESOURCES

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

Policies:

(a) Identify valued scenic resources in the coastal zone management area;

(b) *Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;*

(c) *Preserve, maintain, and where desirable, improve and restore shoreline open space and scenic resources; and*

(c) *Encourage those developments that are not coastal dependent to locate in inland areas.*

Analysis. As discussed in Section III of this report, numerous scenic resources have been identified in Kihei/Makena area, which are identified and discussed in the Maui Coastal Scenic Resources Study, August 1990.

The proposed subdivision is located adjacent to the Piilani Highway in South Maui and not expected to alter public views. As mentioned in the visual resources section of this report, the proposed project is not anticipated to significantly impact public view corridors, or the visual character of the site and its immediate environs. (**See:** Figure No. 12 Scenic Resources Map)

D. COASTAL ECOSYSTEMS

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

Policies:

(a) *Improve the technical basis for natural resource management;*

(b) *Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;*

(c) *Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and*

(d) *Promote water quantity and quality planning and management practices, which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses, which violate state water quality standards.*

Analysis. As noted previously, the project site is adjacent to the Piilani Highway. The project site is situated approximately ½ mile from the coast. Therefore, the proposed project is not anticipated to have a significant impact on the coastal ecosystem. Furthermore, the incorporation of mitigation measures during construction as identified

in Section III.D.3 of this report will minimize the potential for short-term adverse impacts.

E. ECONOMIC USES

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

Policies:

(a) Concentrate coastal dependent development in appropriate areas;

(b) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area;

(c) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such development and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:

- *(i) Use of presently designated locations is not feasible;*
- *(ii) Adverse environmental impacts are minimized; and*
- *(iii) The development is important to the State's economy.*

Analysis. The proposed single-family residential use of the property is consistent with the State's urban land use designation, and the County's (R-2) Residential District zoning. As such, the proposed project is within an area that has been planned for growth and development and will provide the supporting infrastructure and services required to accommodate this growth.

F. COASTAL HAZARDS

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

Policies:

(a) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and non-point source pollution hazards;

(b) Control development in areas subject to storm wave, tsunami, flood, erosion, subsidence, and point and non-point pollution hazards;

(c) Ensure that developments comply with requirements of the Federal Flood Insurance Program;

(d) Prevent coastal flooding from inland projects; and
(e) Develop a coastal point and nonpoint source pollution control program.

Analysis. As discussed in Section III of this report, the project site is situated within Zone C. Thus, hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence and pollution is not expected to be significant. The owner has retained a State of Hawaii certified Civil Engineer to develop a drainage plan to mitigate potential flooding conditions.

G. MANAGING DEVELOPMENT

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

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

Analysis. 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 and the State's environmental assessment review process.

H. 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 advise 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, developments, and government activities; and

(c) *Organize workshops, policy dialogues, and site-specific medications to respond to coastal issues and conflicts.*

Analysis. In conjunction with the submittal of the SMA application, a notice of application will be mailed to property owners within 500 feet. The mail-out describes the proposed project and solicits any issues or concerns that need to be addressed through the permitting process. A number of governmental agencies have also been consulted and copies of this application will be circulated to various agencies by the Department of Planning. During the scheduled public hearing, the public will have an opportunity to review and comment on the proposed project. Landowners located within 500 feet of the project will be notified of the scheduled public hearing dates. Public hearing date and location map will also be published in the Maui News on two separate occasions. The public will be allowed to participate in the public hearing portion of the Maui Planning Commission's review process. The Environmental Assessment (EA) process also provides an opportunity for public comment.

I. BEACH PROTECTION

Objective: 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.*

Analysis. As noted previously, the project site is adjacent to the Piilani Highway. The project site is situated approximately ½ mile from the coast. The proposed onsite and off-site drainage improvements will reduce debris and sediment, therefore improving the water quality of the storm run-off. Therefore, the proposed subdivision project is not anticipated to have a significant impact on the coastal ecosystem. Also, the proposed subdivision project on the subject property will not have a direct physical impact upon the shoreline area.

J. MARINE RESOURCES

Objective: Implement the State's ocean resources 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 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.

Analysis. The proposed project does not involve the direct use or development of marine resources. In addition, with the incorporation of erosion and drainage control measures during construction and after construction as identified in this report, there should not be significant adverse impacts to nearshore waters from point and non-point sources of pollution. Therefore, the subject project will not produce any significant impacts on any coastal or marine resources.

VI. 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 Final Environmental Assessment, the proposed subdivision is not anticipated to result in any loss or destruction of natural resources. The Cultural Impact Assessment Report determined that no cultural resources are expected to be disturbed as a result of the proposed subdivision.

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

The neighboring properties are in residential use and the proposed subdivision does not introduce a new use to the area. 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.*

In the short term, the project will result in increased construction related employment. In the long-term the proposed subdivision will positively affect the social welfare of the community by providing affordable single-family homes, drainage mitigation to the downstream neighbors, and a portion of the future North-South Collector Road. 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 a negative impact on public health.

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

The proposed project will not lead to a substantial impact on population levels due to its relatively small scale. As documented in this report, the project will not result in a significant negative impact on public facilities. Upon completion, the project will provide increased real property tax revenues to the County of Maui that is used to support 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 retain debris and sediments, therefore improve water quality of runoff. The proposed onsite and off-site drainage

improvements will mitigate downstream flooding during storm events and minimize degradation of environmental quality.

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

The development of the subject parcel will have a positive cumulative effect on the immediate community. During significant storm events the neighboring properties on Alaloa Road experience flooding. The proposed subdivision will incorporate a drainage system that will retain debris and sediments, therefore improve water quality of runoff and reduce flooding therefore providing an improved effect on the downstream neighbors and the immediate 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. *Detrimentally 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 project site is located in Zone C, an area subject to minimal flooding. As noted previously, the project site is adjacent to the Piilani Highway. The project site is situated approximately ½ mile from the coast. Therefore, the proposed project is not anticipated to have a significant impact on the coastal ecosystem.

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

The subject property is an urban infill parcel situated along the Makai side of Piilani Highway. The subject parcel is surrounded by existing residential uses that prevent direct ocean view corridors. A majority of the proposed lots will have views of the West Maui Mountains and Haleakala. The subject parcel has a topography that may allow for some limited ocean views from the lots at the Western most portion of the lot, closest to Piilani Highway.

Numerous scenic resources have been identified in Kihei, which are identified and discussed in the *Maui Scenic Coastal Resources Study*, by Environmental Planning Associates Inc., August 1990. (**See:** Figure No. 12 Scenic Resources Map). The resource/ inventory map in this report identifies that no significant scenic resources are present on the subject parcel.

M. *Requires substantial energy consumption.*

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

VII. FINDINGS AND CONCLUSIONS

This Final Environmental Assessment (EA) and Special Management Area (SMA) application examines the environmental and socio-economic impacts associated with the applicant's proposed subdivision, which will result in forty-eight (48) (R-2) residential buildable lots. The project site is a 14-acre parcel located in Kihei, Maui, Hawaii.

The development of the subject parcel will have a positive cumulative effect on the immediate community. During significant storm events the neighboring properties on Alaloa Road experience flooding. The proposed subdivision will incorporate drainage system improvements that will enhance the retention of debris and sediments, thereby improving the water quality of storm runoff. The drainage system will reduce flooding therefore providing a positive effect on the downstream neighbors and the immediate environment.

The proposed development is not anticipated to result in significant environmental impacts to surrounding properties, nearshore waters, natural resources, and/or archaeological and historic resources on the site or in the immediate area. Public infrastructure and services including roadways, sewer and water systems, medical facilities, police and fire protection, parks, and schools are adequate to serve the proposed subdivision and are not anticipated to be significantly impacted. The proposed project is not anticipated to negatively impact public view corridors and is not anticipated to result in a significant adverse impact upon the visual character of the site and its immediate environs.

The subject property is situated within the State's Urban District and is Maui County zoned (R-2) Residential District and community planned for (SF) Single-Family residential. Therefore, the proposed project is in conformance with State and County land use plans and policies including Chapter 205A, HRS, as well as, the Kihei-Makena Community Plan Land Use Map.

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

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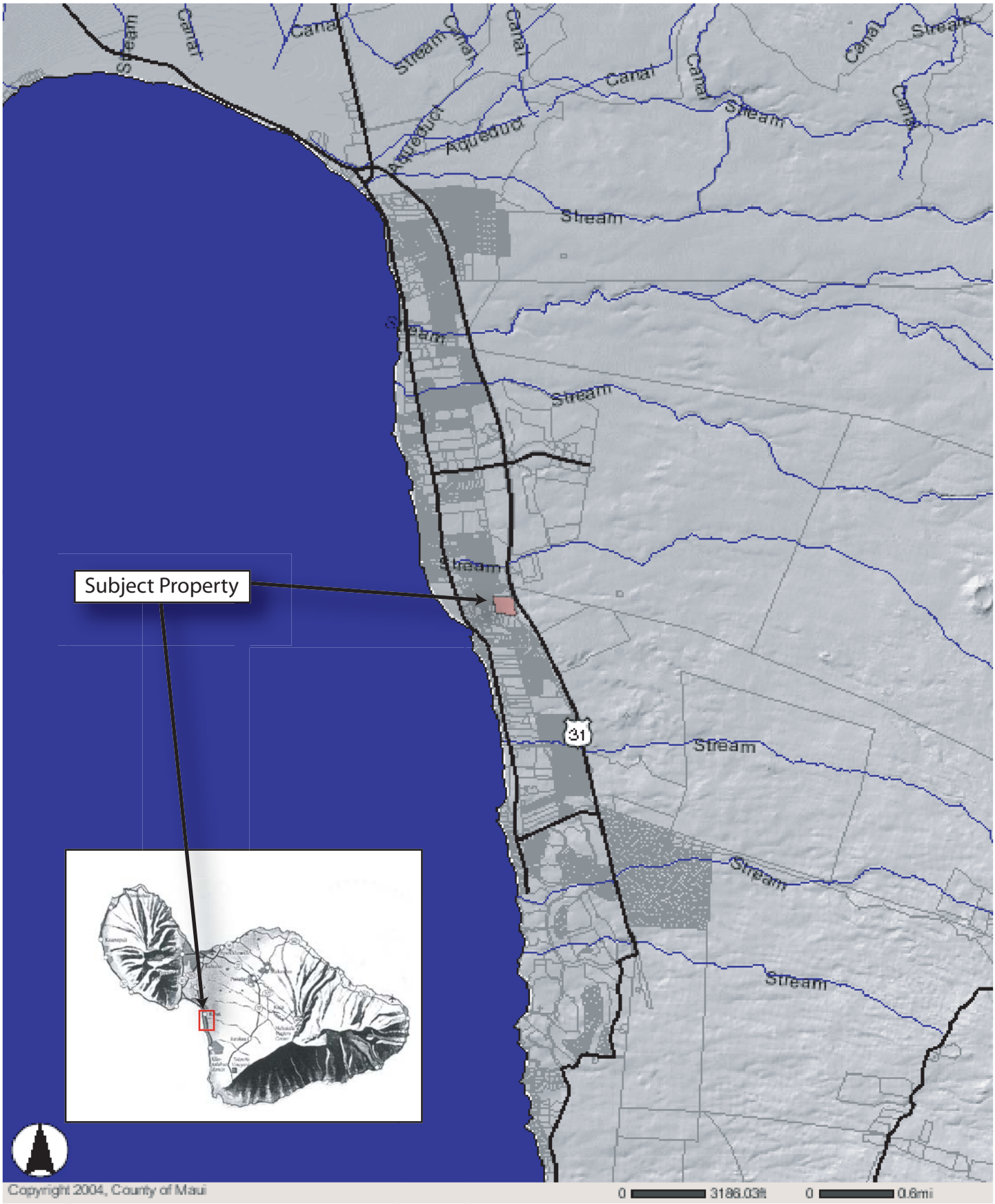
FIGURES



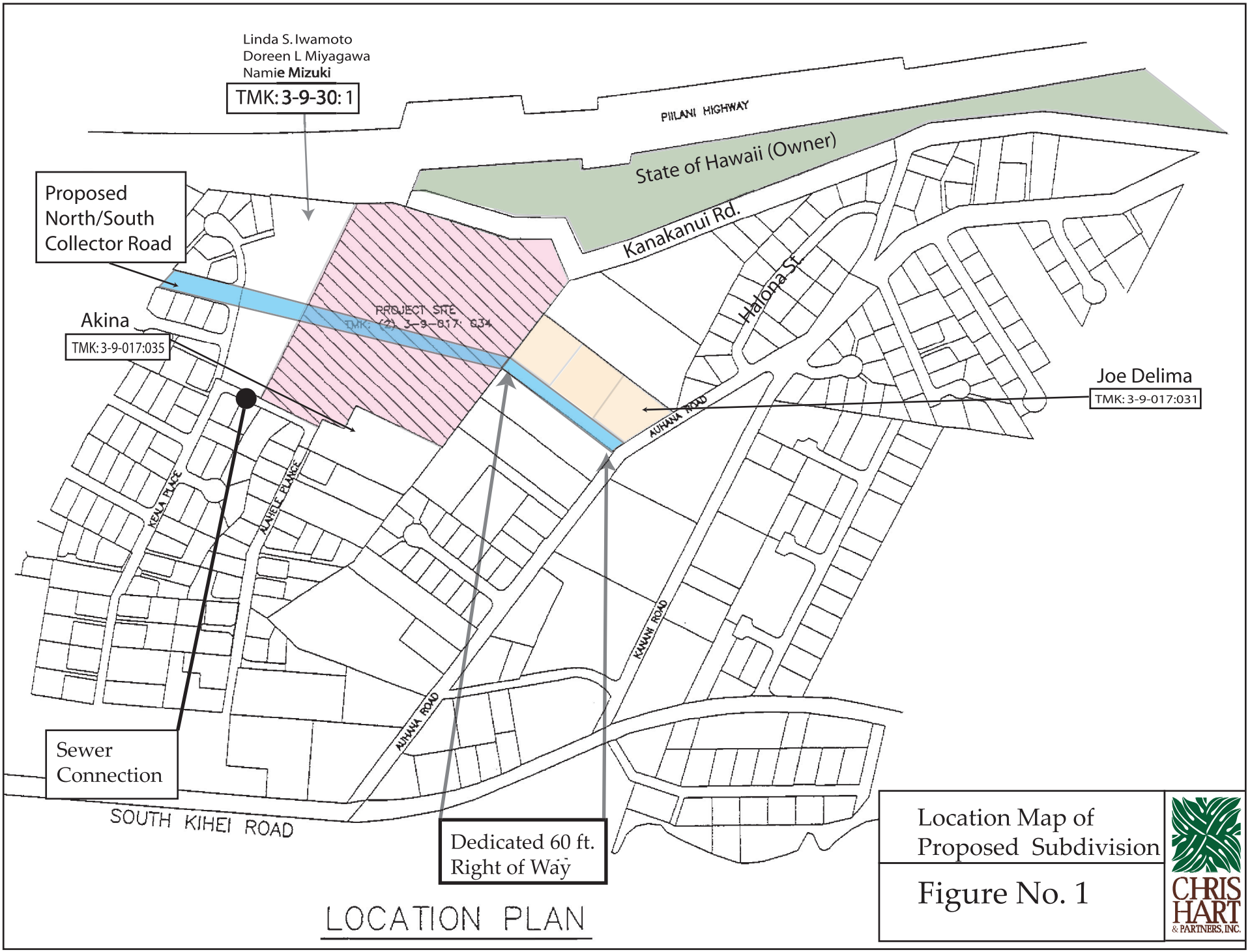
Alahele Subdivision

Figure No. 1

September 2006

Regional Map

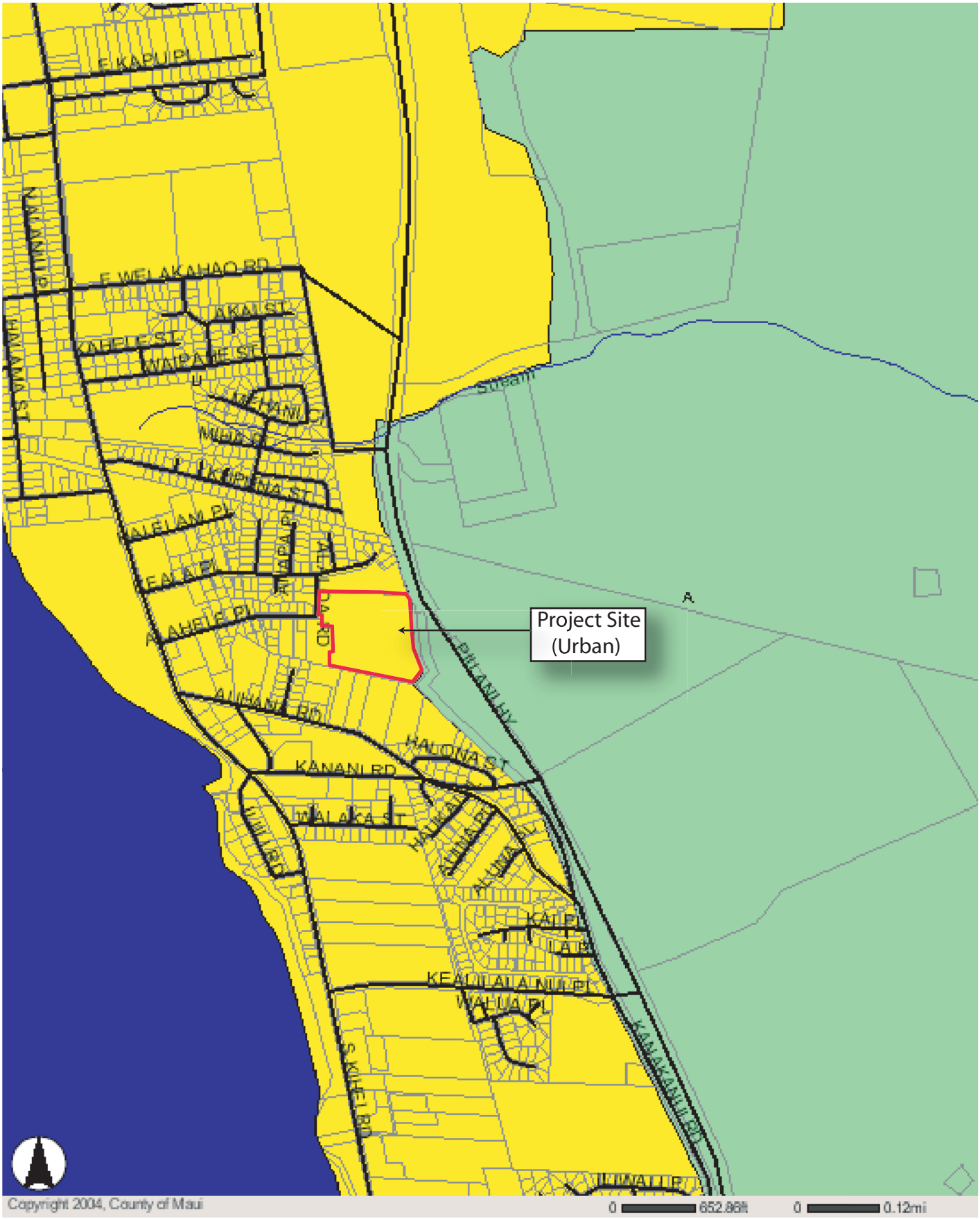
CHRIS HART & PARTNERS, INC.



Location Map of Proposed Subdivision

Figure No. 1

CHRIS HART & PARTNERS, INC.



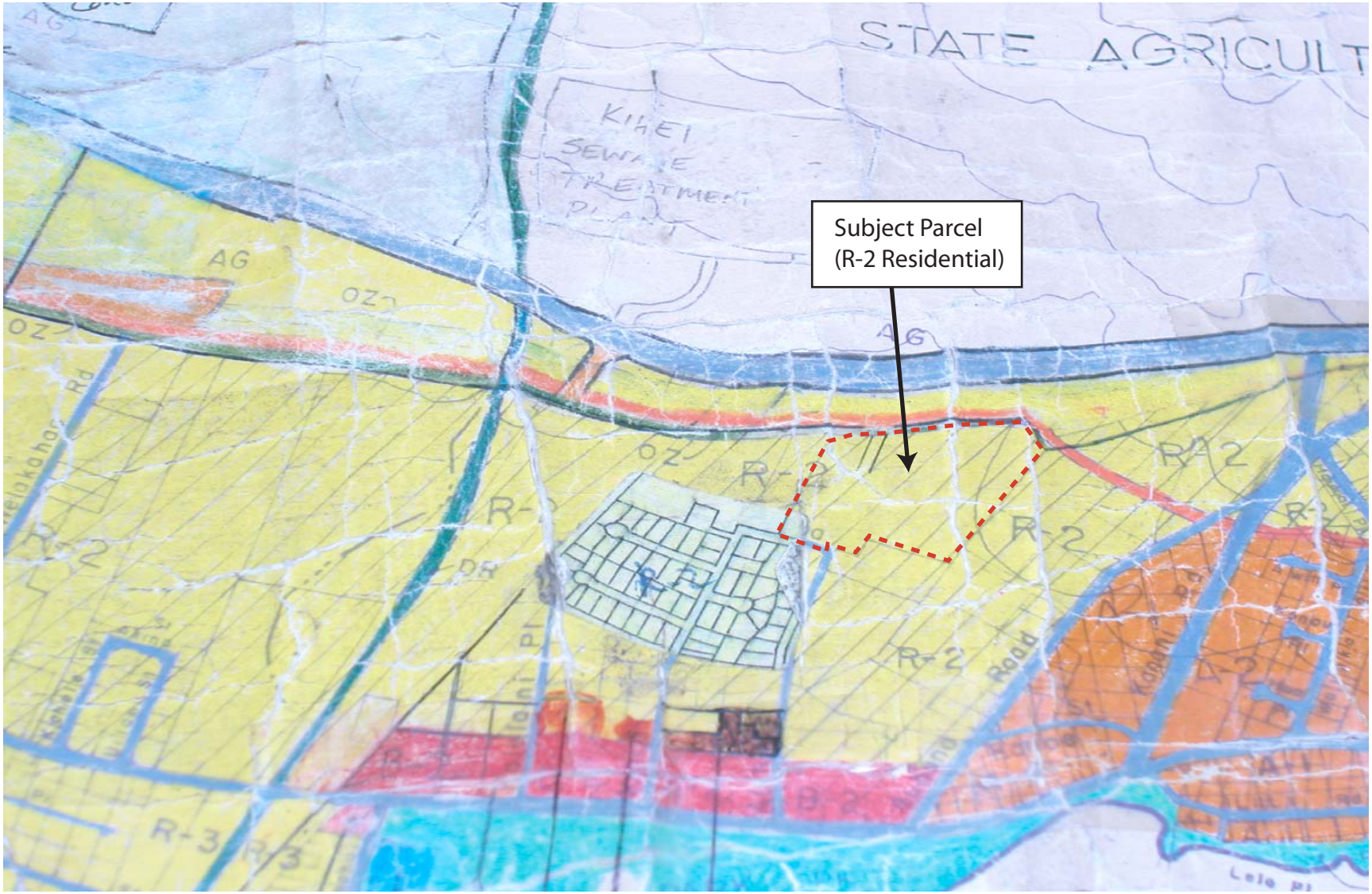
Alahele Subdivision

Figure No. 2

September 2006

State Land Use District Boundary Map

CHRIS HART & PARTNERS, INC.

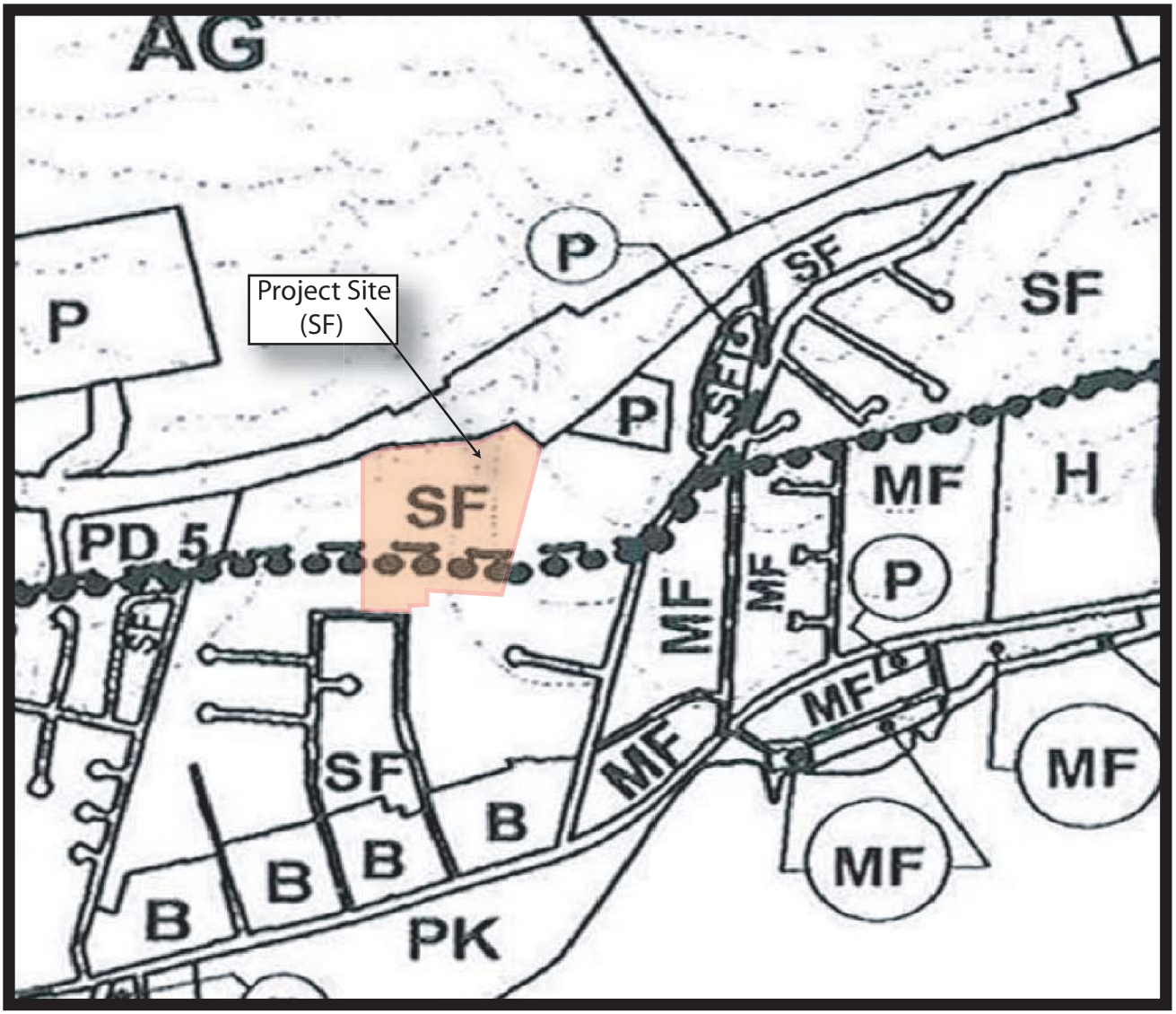


Alahele Subdivision

Figure No. 3

Maui County
Zoning Map
(not to scale)

CHRIS HART & PARTNERS, INC.



Alahele Subdivision

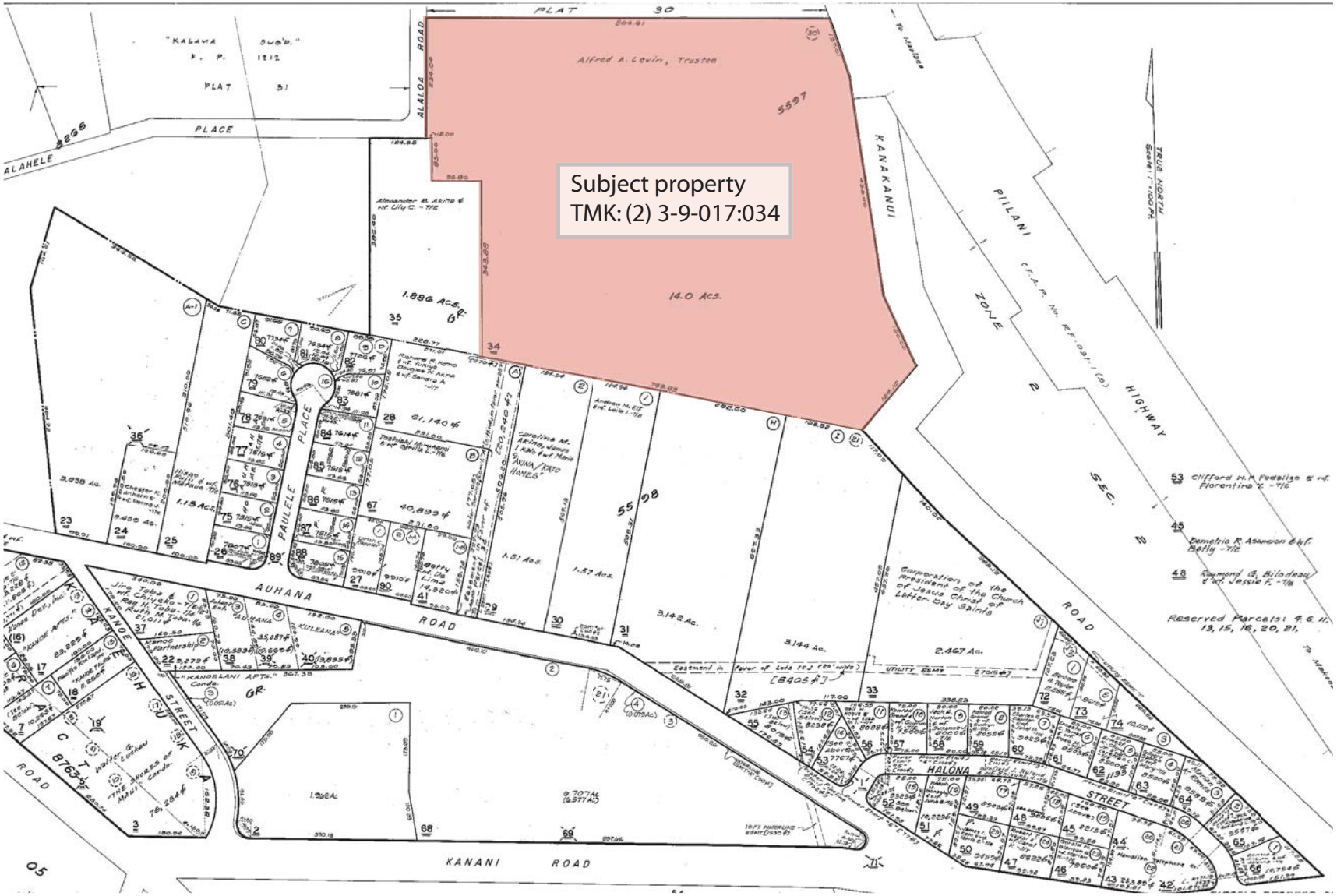
Figure No. 4

September 2006

Kihei-Makena Community Plan Map

(not to scale)

CHRIS HART & PARTNERS, INC.



Alahele Subdivision

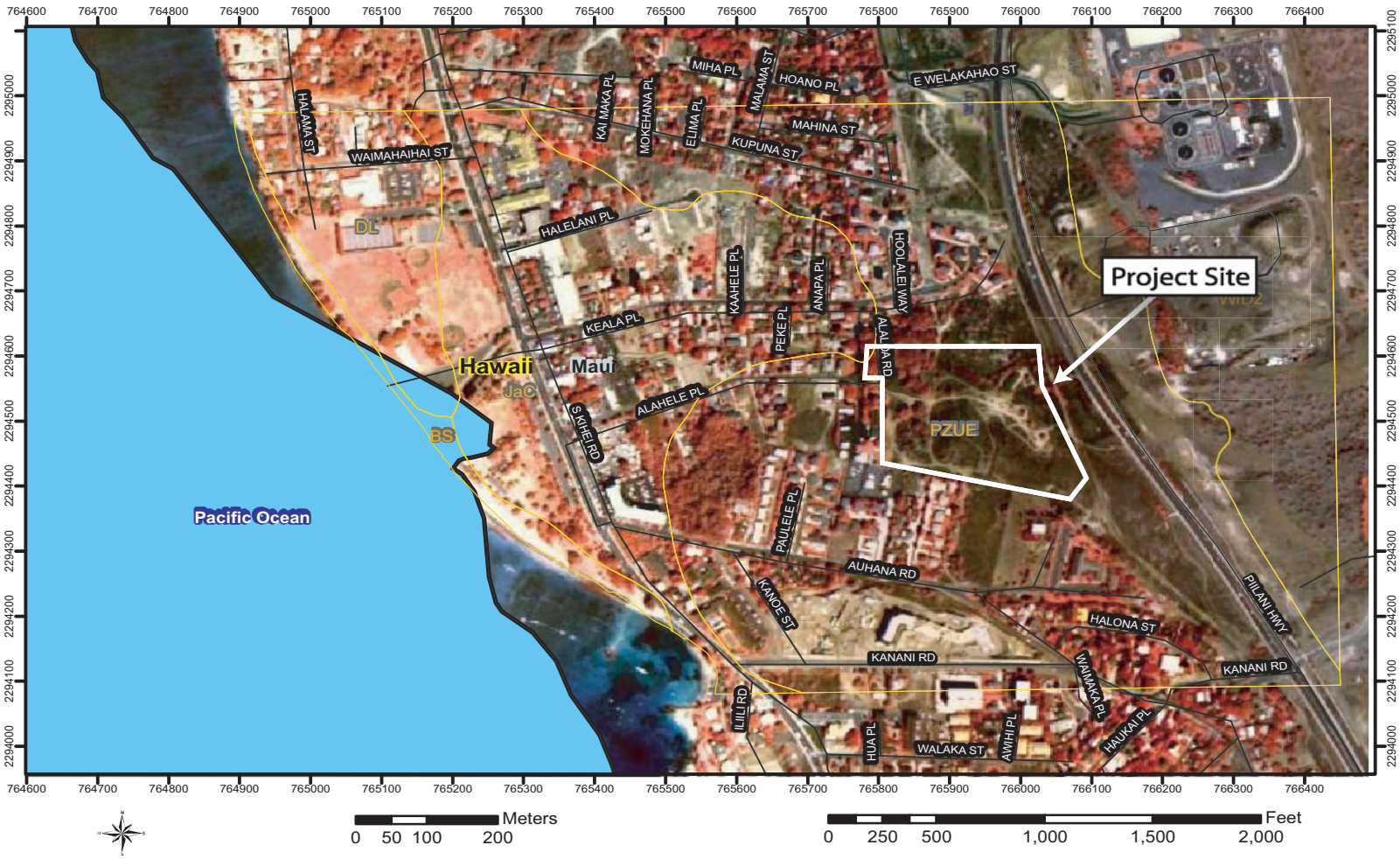
Figure No. 5

September 2006

Tax Map Key

CHRIS HART & PARTNERS, INC.

SOIL SURVEY OF ISLAND OF MAUI, HAWAII



USDA Natural Resources Conservation Service

Web Soil Survey 1.1
National Cooperative Soil Survey

Alahele Subdivision

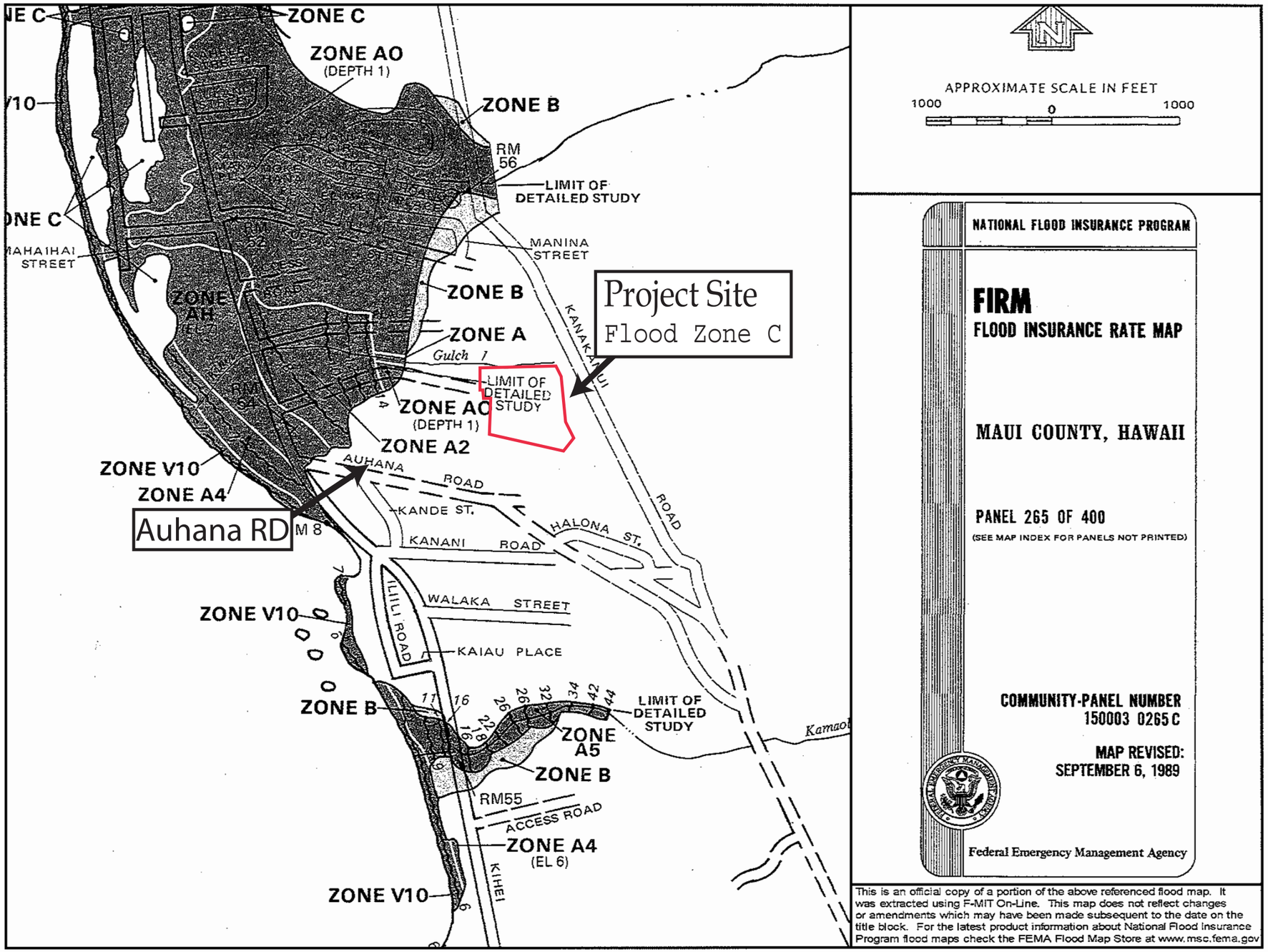
Figure No. 6

March 2007

Soils Map

(Source: USDA Natural Resources Conservation Resources)

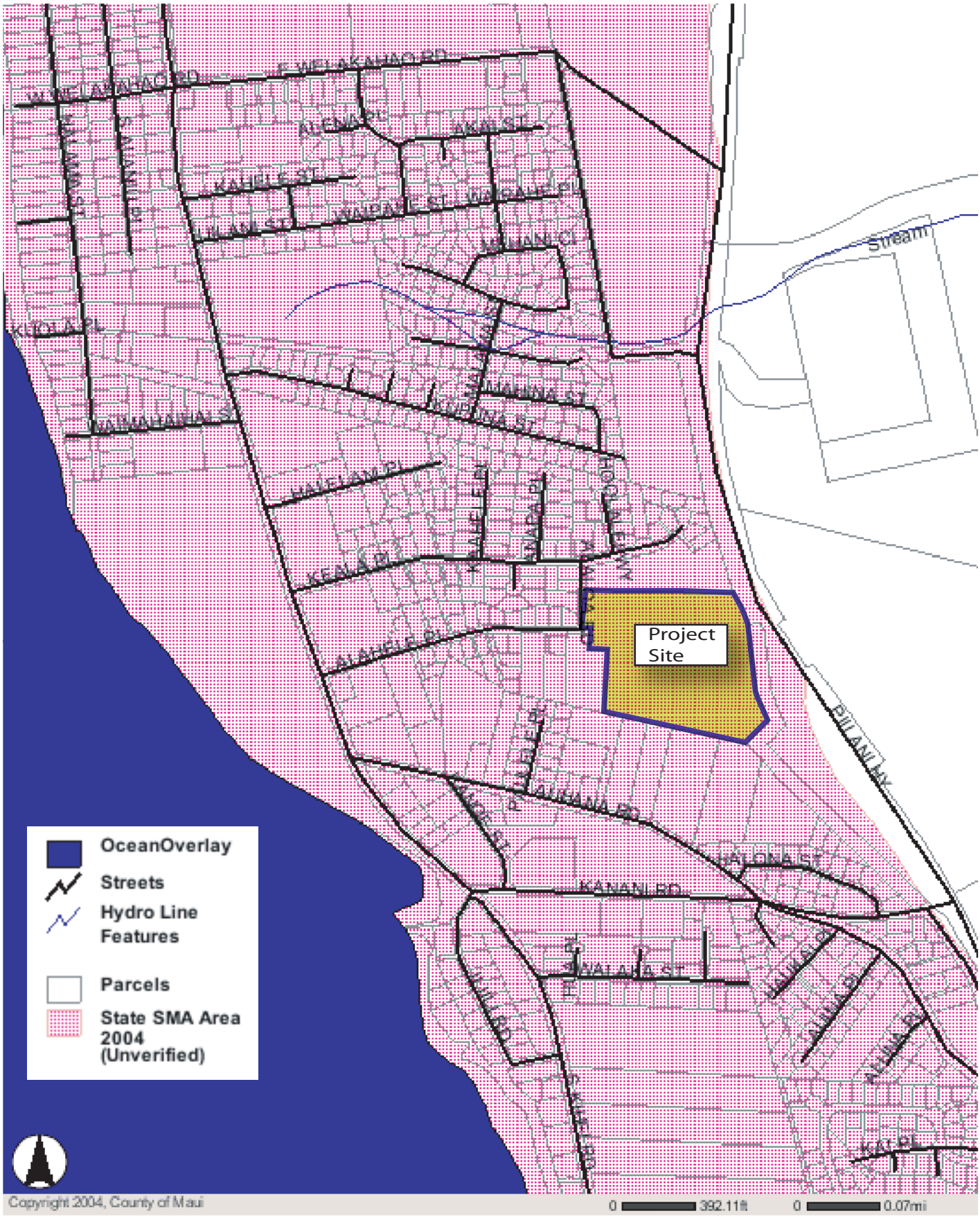
CHRIS HART & PARTNERS, INC.



Alahele Subdivision
Figure No. 7

FEMA Flood Insurance Rate Map

CHRIS HART & PARTNERS, INC.



Alahele Subdivision

Figure No. 8

October 2006

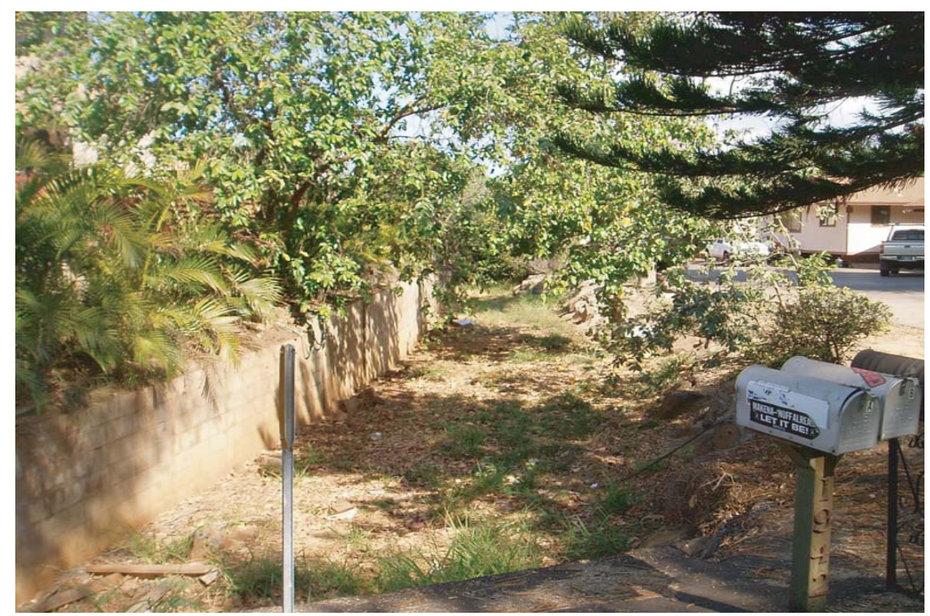
Special Mangement Area Map

CHRIS HART & PARTNERS, INC.

Looking Northwest from the project site

Looking North at project stie and existing Keala Hills Subdivsion in the background

Drainage Culverts under Alaloa Road with the subject parcel in the background



Existing Drainage Ditch

Alahele Subdivision
Figure No. 9.1
March 2007

Site Photographs

CHRIS HART & PARTNERS, INC.

Looking North from Keala Place at the proposed North/South Collector Right of Way (ROW)

Looking South from the proposed North/South Collector Road ROW towards the subject parcel

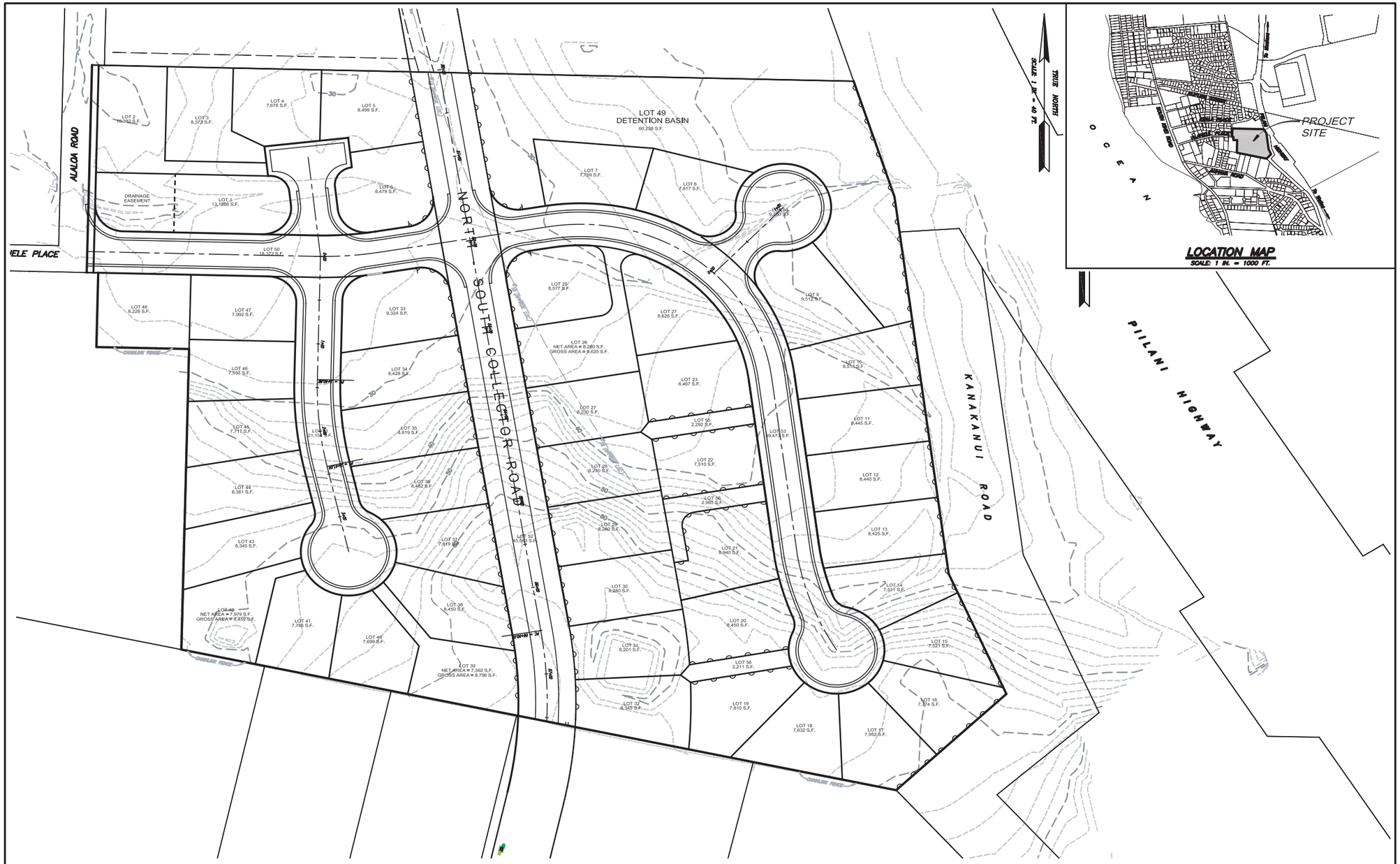
Looking North from Auhana Road at proposed North/South Collector ROW

Looking East on Alahele Place towards the proposed subdivision entrance

Alahele Subdivision
Figure No. 9.2
March 2007

Site Photographs

CHRIS HART & PARTNERS, INC.



NOTES:

1. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON FEBRUARY AND MARTH 2003.
2. OWNERS OF ADJOINING LAND PARCELS TAKEN FROM TAX MAP RECORD.
3. AZIMUTHS AND COORDINATES ARE BASED ON RECORD INFORMATION AND REFER TO GOVERNMENT SURVEY TRIANGULATION STATION "PUU O KALI".
4. PURSUANT TO MAUI COUNTY CODE SECTION 3.44.015 (C), THE COUNTY OF MAUI IS NOT RESPONSIBLE FOR ANY PARK, ROADWAY, EASEMENT (INCLUDING BUT NOT LIMITED TO DRAINAGE, SEWER, ACCESS, RECLAIMED WATER, OR AVIGATION EASEMENT), OR ANY OTHER INTEREST IN REAL PROPERTY SHOWN ON THIS MAP OR SHOWN ON THESE PLANS, UNLESS THE MAUI COUNTY COUNCIL HAS ACCEPTED ITS DEDICATION BY A RESOLUTION APPROVED BY A MAJORITY OF COUNCIL MEMBERS AT A REGULAR OR SPECIAL MEETING OF THE MAUI COUNTY COUNCIL.
5. DENOTES NO VEHICULAR ACCESS PERMITTED.
6. LOTS 50 TO 54 ARE ROADWAY LOTS TO BE DEDICATED TO THE COUNTY OF MAUI.
7. LOT 55 IS A PRIVATE ROADWAY LOT IN FAVOR OF LOTS 27 AND 28.
8. LOT 56 IS A PRIVATE ROADWAY LOT IN FAVOR OF LOTS 29 AND 30.
9. LOT 57 IS A PRIVATE ROADWAY LOT IN FAVOR OF LOTS 31 AND 32.

T.M.K.: (2) 3-9-017: 34

PRELIMINARY SUBDIVISION MAP
ALAHELE SUBDIVISION

SUBDIVISION OF A PORTION OF GRANT 5597
TO AUHANA AKINA INTO LOTS 1 TO 57, INCLUSIVE

SITUATED AT KAMAOLE, MAUI, HAWAII

0 40 80 120 160

SCALE: 1 IN. = 40 FT.

OWNER: WILSHIRE DMK I, LLC
ADDRESS: 2001 WILSHIRE BLVD., SUITE 302
SANTA MONICA, CALIFORNIA 90403

PREPARED BY :
OTOMO ENGINEERING, INC.
305 S. HIGH ST., STE. 102
WAILUKU, HI 96793

STACY A. OTOMO
LICENSED PROFESSIONAL ENGINEER
No. 5118-C
HAWAII, U.S.A.

THIS MAP WAS PREPARED BY ME OR UNDER MY SUPERVISION. DATE

DATE: OCTOBER 31, 2006
REVISED: NOVEMBER 15, 2006

SUBDIVISION FILE NO.

30" X 36"

Alahele Subdivision
Figure No. 10

Site Plan

June 2007

(Source:Otomo Engineering Inc. 11-15-2006)

CHRIS HART & PARTNERS, INC.

TREE LEGEND

PINK TACOMA
- MIN 2" CAL., 6' PLANTED HT.
- W/ ROOT BARRIER TYP.

NOTES:

1 - ALL TREES TO BE LOCATED IN THE R.O.W. WHERE POSSIBLE.
2 - ALL STREET TREE LOCATIONS ARE APPROXIMATE & WILL BE ADJUSTED 'IN-THE-FIELD' BY LANDSCAPE CONTRACTOR TO HAVE A 8'-0" CLEAR ZONE TO ALL UTILITIES INCLUDING WATER MAINS, FIRE HYDRANTS, AND SERVICE LATERALS. (AS PER DEPARTMENT OF WATER SUPPLY REQUIREMENTS)
3 - ALL STREET TREES TO HAVE 10'-0" OF ROOT BARRIER INSTALLED AT BACK OF CURB. ADDITIONAL ROOTBARRIER TO BE INSTALLED WHEN "CLEAR ZONE" CANNOT BE ACCOMMODATED.
4 - ALL LANDSCAPE MATERIAL TO BE WATERED USING AN AUTOMATIC IRRIGATION SYSTEM.
5 - SEE CIVIL PLANS FOR ALL GRADING AND RETAINING WALLS.

FIG. 11

PRELIMINARY LANDSCAPE PLAN

scale: 1"=40'-0"

CHRIS HART & PARTNERS
LANDSCAPE ARCHITECTURE AND PLANNING
1955 MAIN STREET, SUITE 200
WAILUKU, MAUI, HI 96793-1708
TELEPHONE: 808-242-1955
FACSIMILE: 808-242-1956

PREPARED FOR:

ALAHELE SUBDIVISION

TMK:39-017:034 MAUI, HAWAII

WILLIAM MITCHELL
LICENSED PROFESSIONAL LANDSCAPE ARCHITECT No. 9173
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY SUPERVISION.

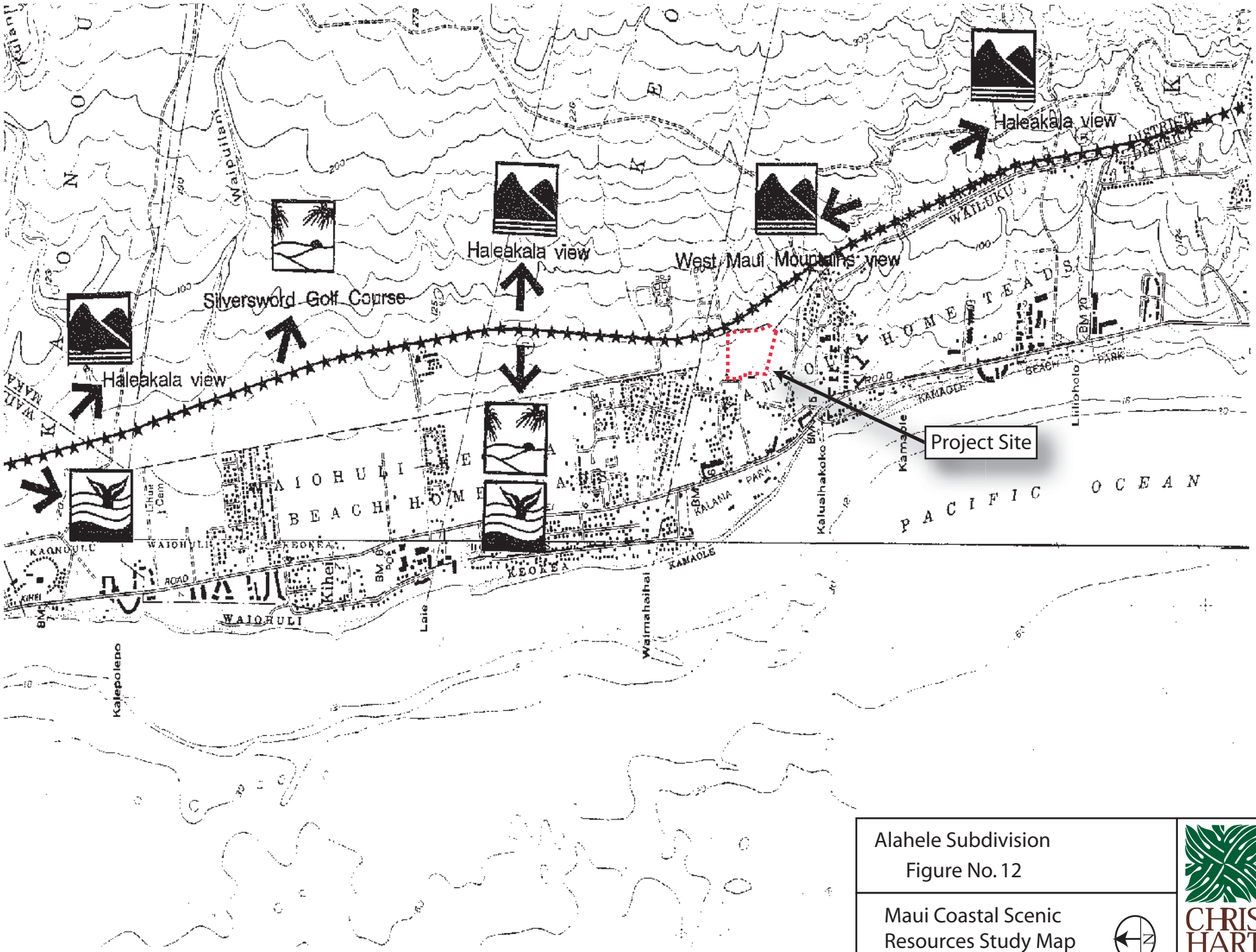
Signature Expires 04-30-06

1 -
2 -
3 -
4 -
5 -
6 -
7 -

Designed by	WM
Drawn by	ZH
Checked by	WM
Date	JUNE 29, 2007
File No.	06-055

SHEET L-1

1 of 1 sheets



Alahele Subdivision
Figure No. 12

Maui Coastal Scenic Resources Study Map

CHRIS HART & PARTNERS, INC.

APPENDICES

APPENDIX A

Ownership Documents

6

R-936 STATE OF HAWAII
BUREAU OF CONVEYANCES
RECORDED
SEP 20, 2006 11:00 AM
Doc No(s) 2006-172668

/s/ CARL T. WATANABE
REGISTRAR OF CONVEYANCES

CTax (30): $18000.00

20 1/3 Z9

LAND COURT SYSTEM | REGULAR SYSTEM

Return by Mail ( ) Pickup ( ) To:

WILSHIRE DMK I, LLC
2001 WILSHIRE BOULEVARD,
SUITE 302
SANTA MONICA, CA 90403

Escrow No. 20204372-CK
Job No. 00175790

FHTC

Tax Key: (2) 3-9-017-034 Total No. of Pages: 6

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS:

That ALFRED FAIRBANKS and GAYLE FAIRBANKS, husband and wife, whose address is 3301 Johnson Road, Pullman, Washington 99163, hereinafter called the "Grantor," in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration to Grantor paid by WILSHIRE DMK I, LLC, a Delaware limited liability company, whose address is 2001 Wilshire Boulevard, Suite 302, Santa Monica, California 90403, hereinafter called the "Grantee," the receipt whereof is hereby acknowledged, does hereby grant and convey unto the Grantee, as

these presents shall be signed by two or more Grantors or by two or more Grantees, all covenants of such parties shall for all purposes be joint and several.

IN WITNESS WHEREOF, the Grantor has executed these presents on this 18th day of Sept., 2006.

APPROVED AS TO FORM:
MANCINI, WELCH & GEIGER LLP

By James W. Geiger

ALFRED FAIRBANKS

GAYLE FAIRBANKS

Grantor

STATE OF WASHINGTON)
) SS.
COUNTY OF WHITMAN)

On this 18th day of Sept., 2006, before me personally appeared ALFRED FAIRBANKS and GAYLE FAIRBANKS, to me personally known, who, being by me duly sworn or affirmed, did say that such person(s) executed the foregoing instrument as the free act and deed of such person(s), and if applicable, in the capacity shown, having been duly authorized to execute such instrument in such capacity.

KELLY N. BROWN
COMMISSION EXPIRES
NOTARY
PUBLIC
JANUARY 15, 2010
STATE OF WASHINGTON

Print Name: Kelly N. Brown
Notary Public, in and for said State and County.

My commission expires: 1/15/2010

beginning and containing an area of 14.000 acres, more or less.

TOGETHER WITH an easement for ingress and egress to and from the above described premises over, through and across a 40 foot roadway, being a portion of Land Patent Grant Number 5598 to Auhana Akina, situate on the northerly side of the 50 foot Government Road, at Kamaole, Kihei, Island and County of Maui, State of Hawaii, more particularly described as follows:

Beginning at a 3/4 inch pipe on the southeasterly corner of this 40 foot Road Easement, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUU O KALI" being 553.04 feet south and 20,856.24 feet west and running by azimuths measured clockwise from true South:

1.	102°	40'	40.00	feet along the northerly side of the 50 foot road to a 3/4 inch pipe; thence
2.	192°	40'	505.85	feet along Lot 1 and across Lot 2 to a point; thence
3.	282°	10'	40.00	feet to a 3/4 inch pipe; thence
4.	12°	40'	506.20	feet along Lot G to the point of beginning and containing an area of 0.465 acre, more or less.

Being all of the land conveyed by Warranty Deed from Aheahe Makani LLC, a Hawaii limited liability company, as Grantor, to the Grantor herein, as Grantee, dated February 24, 2004, and recorded in the Bureau of Conveyances of the State of Hawaii as Document No. 2004-067371.

SUBJECT, HOWEVER, to the following:

1. Reservation in favor of the State of Hawaii of all mineral and metallic mines.

2. "SUBJECT, HOWEVER, to the right in favor of Maui Electric Company, Ltd., and Hawaiian Telephone Company, as set forth in that certain unrecorded Right-of Way Agreement dated October 17, 1957, and identified as Document No. 857, to construct, operate and maintain pole and wire lines and/or underground power lines for the transmission of electricity and/or communications and control circuits, over, under, through and across the above described premises."; as set forth in Deed

APPENDIX B

Flood and Zoning Confirmation

COUNTY OF MAUI
DEPARTMENT OF PLANNING
Kalana Paku`i Building
250 South High Street
Wailuku, Hawaii 96793

Zoning Administration
and Enforcement Division
Telephone: (808) 270-7253
Facsimile: (808) 270-7634
E-mail: planning@mauicounty.gov

ZONING AND FLOOD CONFIRMATION

APPLICANT INFORMATION: *(To be completed by Applicant)*			
APPLICANT	***Brett Davis for Wilshire DMKI, LLC.***		
TELEPHONE	***(808) 242-1955***	E-MAIL	***bdavis@chpmaui.com***
PROJECT NAME	***Alahele Subdivision***		
ADDRESS/LOCATION	***Alahele Place, Kihei, Maui, Hawaii***		
TAX MAP KEY NO(S)	***(2) 3-9-017:034***		
ZONING INFORMATION: *(To be completed by ZAED)*			
COMMUNITY PLAN DESIGNTION(S)	***Single Family Residential***		
COUNTY ZONING(S)	***R-2 Residential***		
STATE LAND USE DISTRICT(S)	***Urban***		
SPECIAL DISTRICT(S)	***Special Management Area (SMA)***		
FLOOD INFORMATION: *(To be completed by ZAED)*			
FLOOD HAZARD AREA ZONE(S)	***C***		
BASE FLOOD ELEVATION(S)	***N.A.***	mean sea level, 1929 National Geodetic Vertical Datum; or	
For Flood Zone AO, FLOOD DEPTH	***N.A.***		
FLOODWAY	☐ Yes ☒ No		
FLOOD DEVELOPMENT PERMIT REQUIRED	☐ Yes ☒ 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.

FOR COUNTY USE ONLY

REMARKS/COMMENTS:

☐ Additional information required
☐ Required for Agricultural Subdivisions
Agricultural Assessment RFS No:
☒ Information submitted is correct
☐ Correction has been made and initialed

Reviewed and Confirmed by:

Russell T. Higa	***05/05/08***
(Signature)	(Date)

For: AARON SHINMOTO, Planning Program Administrator
Zoning Administration and Enforcement Division

APPENDIX C

PRELIMINARY ENGINEERING REPORT

PRELIMINARY ENGINEERING REPORT

FOR

ALAHELE SUBDIVISION

Kihei, Maui, Hawaii
T.M.K.: (2) 3-9-017: 034

Prepared for:

Wilshire DMKI, LLC
2001 Wilshire Blvd., Ste. 302
Santa Monica, California 90403

STACY A. OTOMO
LICENSED PROFESSIONAL ENGINEER
No. 5115-C
HAWAII, U.S.A.

Prepared by:

OTOMO
ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS
305 SOUTH HIGH STREET, SUITE 102
WAILUKU, MAUI, HAWAII 96793
PHONE: (808) 242-0032
FAX: (808) 242-5779

May 2007

TABLE OF CONTENTS

1.0 INTRODUCTION

2.0 EXISTING INFRASTRUCTURE

2.1 ROADWAYS

2.2 DRAINAGE

2.3 SEWER

2.4 WATER

2.5 ELECTRIC, TELEPHONE AND CABLE TV

3.0 ANTICIPATED INFRASTRUCTURE IMPROVEMENTS

3.1 ROADWAYS

3.2 DRAINAGE

3.3 SEWER

3.4 WATER

3.5 ELECTRIC, TELEPHONE AND CABLE TV

PRELIMINARY ENGINEERING REPORT
FOR
ALAHELE SUBDIVISION
Kihei, Maui, Hawaii

1.0 INTRODUCTION

The purpose of this report is to provide information on the existing infrastructure which will be servicing the proposed project. It will also evaluate the adequacy of the existing infrastructure and anticipated improvements which may be required for the proposed project.

The subject property is identified as T.M.K.: (2) 3-9-017 :034, which contains an area of approximately 14.00 acres. It is bordered by residential areas to the north and south, Piilani Highway and Kanakanui Road to the east; and Alahele Place, Alaloa Road and residential areas to the west. Presently, the project site is undeveloped and covered with kiawe trees, weeds and grass.

The proposed project involves the subdivision of the parcel into forty-eight residential lots ranging in size from approximately 7,511 square feet to 10,382 square feet. Associated improvements include paved roadways; concrete curbs, gutters and sidewalks; drainage system, water system, sewer system, underground utilities, landscaping, and offsite roadway improvements along Alaloa Road and Alahele Place fronting the project site.

2.0 EXISTING INFRASTRUCTURE

2.1 ROADWAYS

Piilani Highway is the primary roadway linking Kihei, Wailea and Makena. Piilani Highway is a north-south four-lane highway to Kilohana Drive which is owned and maintained by the State. South of Kilohana Drive, Piilani Highway turns into a two-lane highway. The terminus of Piilani Highway is at its intersection with Wailea Ike Drive.

South Kihei Road is a two-lane, north-south County roadway which parallels Piilani Highway and connects the Kihei and Wailea communities. Welakahao Road to the north and Kanani Road to the south are the two adjacent east-west roadways in the vicinity of the project site which connect South Kihei Road and Piilani Highway.

Keala Place, Alaloa Road and Alahele Place forms a U-shaped roadway system from South Kihei Road to the western boundary of the project site.

2.2 DRAINAGE

The elevation on the project site ranges from elevation 70 feet above mean sea level at the southeastern end of the site to elevation 20 feet above mean sea level at the northwest end, averaging approximately 4.3%.

According to the "Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii (August, 1972)," prepared by the United States Department of Agriculture Soil Conservation Service, the soils within the project site are classified as Puuone sand (PZUE). Puuone sand is characterized as having rapid permeability above the cemented layer, slow runoff, and a moderate to severe wind erosion hazard.

There is no existing drainage system within the project site. Three culvert systems convey runoff mauka of Piilani Highway and discharges immediately mauka of the project site. The first culvert system outlets near the northeast corner of the project site via a 54-inch culvert. There is a 24-inch culvert which outlets approximately midway on the project site and a double 84-inch culvert system which outlets near the southeastern end of the site. Presently, runoff from the three culvert systems sheet flows across the parcel in an east to west direction into an existing drainageway. The runoff then flows in a westerly direction toward Alaloa Place into double 48-inch culverts, which outlets into a drainageway makai of Alaloa Place and into an earth channel in the Kalama Subdivision. Makai of the Kalama Subdivision, the channel flattens and runoff sheet flows through developed areas, across South Kihei Road and into Kalama Park.

According to the "Drainage Master Plan for Kihei, Maui, Hawaii; August 1997," the 54-inch culvert has a design flow of 95 cfs, the 24-inch culvert has a design flow of 10 cfs, and the double 84-inch culverts have a design flow of 817 cfs. The design flows were based on a 100-year, 6-hour storm. The capacity of the double 48-inch culverts crossing Alaloa Road is estimated to have a capacity of 140 cfs.

It is estimated that present 50-year storm runoff from the project site is 9.70 cfs.

2.3 SEWER

There are existing 8-inch sewerlines along Alahele Place and Keala Place. Both 8-inch sewerlines connect to an existing 36-inch sewerline along South

Kihei Road which transports wastewater to the main sewer pump station located at the northern end of Kalama Park.

Wastewater collected from the Kihei area is transported to the Kihei Wastewater Treatment Plant located above Piilani Highway and south of the Elleair Golf Course.

2.4 WATER

Domestic water and fire flow will be provided by the County's water system. There is an existing 18-inch waterline which traverses approximately midway through the project site. A 12-inch waterline traverses immediately north of the project site and interconnects the 18-inch waterline to an existing 8-inch waterline along Alaloa Road. There are two existing fire hydrants along Alaloa Road.

A 2.0 million gallon concrete water tank above the R&T Park provides storage for the area. The source for the water system is the Mokuhau wells located in Happy Valley.

2.5 ELECTRIC, TELEPHONE AND CABLE TV

The existing electrical distribution system fronting the project site runs overhead along Keala Place, Alahele Place and Alaloa Road. Service to the proposed subdivision will be from these facilities.

3.0 ANTICIPATED INFRASTRUCTURE IMPROVEMENTS

3.1 ROADWAYS

The proposed subdivision consists of forty-eight single-family residential lots. The County is proposing an alignment for the North-South Collector Road (NSCR) which bisects the subject property in the north-south direction. A roadway right-of-way has been designated within a parcel immediately south of the subject property which will allow the NSCR to connect to Auhana Road.

Keala Place, Alahele Place and Alaloa Road are partially improved with A.C. pavement, however, the right-of-way is limited to 30 feet for most of its length. As part of the subdivision improvements, the NSCR will be improved with two twelve foot travel lanes with two 12-foot lanes within the subdivision to Auhana Road. The interior subdivision roadways to County standards for roadways in

the urban district. Cul-de-sacs will be designed to meet the turning requirements of the Fire Department.

The Traffic Impact Assessment Report prepared by Phillip Rowell & Associates, dated June 12, 2007 outlined the following mitigation:

"No mitigation measures are required to mitigate the traffic impacts of the proposed project as the findings of the level-of-service analysis is that the traffic impacts of the project are minimal. All controlled movements at the signalized intersections will operate at Level-of-Service D, or better, without and with the project generated traffic.

At the unsignalized intersections along South Kihei Road, left turns from the side streets will operate at Level-of-Service F without and with the project. With the exception of the left turn lanes from westbound Auhana Road to southbound South Kihei Road, all changes in delay are 12% or less. At the intersection of Auhana Road at South Kihei Road, the change in delay is 17%. It should be noted that this projection does not consider the impacts of the future traffic signal at the intersection of South Kihei Road at Kanani Road. When this traffic signal is installed, a significant number of left turns will be diverted from Auhana Road to Kanani Road. Our experience is that this number cannot be reliably estimated. It is more practical to perform new traffic counts several months after the traffic signal is installed. This was done after the installation of the traffic signal at the intersection of Piilani Highway at Kanani Road.

Lastly, it should be noted that a portion of the North-South Collector Road will be constructed as part of the project. The section to be constructed consists of the section through the project and the connection between the project and Auhana Road."

3.2 DRAINAGE

According to Panel Number 150003 0265 C of the Flood Insurance Rate Map, September 6, 1989, prepared by the United States Federal Emergency Management Agency, the project site is situated in Flood Zone C. Flood Zone C represents areas of minimal flooding.

After the development of the proposed project, it is estimated that the 50-year storm runoff from the project site will be 28.25 cfs, with a net increase of 18.55 cfs. The increase in runoff generated by the proposed project will be

mitigated onsite by the creation of detention basins. The onsite detention basins will be sized accommodate the increase in runoff from the subdivision. There will be no increase in runoff sheet flowing from the project site into the downstream or adjacent properties.

Curb-inlet catch basins will be installed at appropriate intervals along the subdivision roadway. Culverts will be installed along the roadways to allow offsite runoff to flow along its existing route. The runoff intercepted by the catch basins will be conveyed to the onsite detention basin, which will be sized to accommodate increase in runoff from a 50-year, 1-hour storm. In addition, the basin will be sized to provide a factor of safety.

Based on the Drainage Standards for the County of Maui, runoff from a drainage area greater than 100 acres must be determined using a 100-year, 24-hour storm. It is estimated that the runoff flowing in the major existing drainageway which traverses through the project site through double 84-inch culverts at Piilani Highway is 911 cfs. For comparison purposes, the State Department of Transportation used a design flow of 817 cfs for a 100-year, 6-hour storm event.

The developer is negotiating with the landowner mauka of Piilani Highway to obtain a site to construct an offsite detention basin. It is anticipated that an offsite retention basin will be constructed on approximately 2 acres of land and the basin will be able to mitigate approximately 10 percent of the 100-year, 24-hour storm. Therefore, the peak flow will be reduced by approximately 90 cfs makai of the project site.

The drainage design criteria will be to minimize any alterations to the natural pattern of the existing onsite surface runoff.

3.3 SEWER

The project will connect to the existing 8-inch sewerline on Alahele Place. The proposed subdivision will generate approximately 16,800 gallons per day (gpd) of wastewater, based on the forty-eight lots.

The project site is located within the Kihei Assessment Area 6. The anticipated facility expansion assessment in this area is $4.65 per gallon or $78,120.00 and the anticipated collection system upgrade assessment is $0.46 per gallon or $7,728.00.

The Kihei Wastewater Reclamation Facility (KWRF) has a capacity to treat 8 million gallons of sewerage daily. As of September 6, 2006, the Wastewater Reclamation Division, County of Maui, indicated that the daily flow to the KWRF is estimated to be 4.6 million gallons per day. The County has allocated a total capacity of 6.6 million gallons per day. There is sufficient capacity at the KWRF to accommodate the sewerage flow from this project.

3.4 WATER

In accordance with the Department of Water Supply's Domestic Consumption Guidelines for a single family development, the average daily demand for the 48-lot subdivision is 42,000 gpd based on 3,000 gallons per acre. Fire flow demand for residential development is 1,000 gallons per minute for a 2-hour duration. Fire hydrants are required to be installed with a maximum spacing of 350 feet.

The existing 18-inch waterline which traverses through the project site will be relocated along the subdivision roadway and within easements to prevent conflicts with the development of the subdivision.

A detailed analysis of the water and fire protection systems will be included when the subdivision construction plan is submitted for review.

3.5 ELECTRIC, TELEPHONE AND CABLE TV

The proposed electrical, telephone and cable TV distribution systems for the proposed improvements will be installed underground from the existing underground and overhead facilities along Alaloa Place.

APPENDIX D

PRELIMINARY DRAINAGE REPORT

PRELIMINARY DRAINAGE REPORT

FOR

ALAHELE SUBDIVISION

Kihei, Maui, Hawaii
T.M.K.: (2) 3-9-017: 034

Prepared for:

Wilshire DMKI, LLC
2001 Wilshire Blvd., Ste. 302
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May 2007

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PRELIMINARY
DRAINAGE REPORT
FOR
ALAHELE SUBDIVISION
Kihei, Maui, Hawaii

I. INTRODUCTION

The purpose of this report is to examine both the existing and proposed drainage conditions for the proposed project.

II. SITE LOCATION AND PROJECT DESCRIPTION

The subject property is identified as T.M.K.: (2) 3-9-017 :034, which contains an area of approximately 14.00 acres. It is bordered by residential areas to the north and south, Piilani Highway and Kanakanui Road to the east; and Alahele Place, Alaloa Road and residential areas to the west. Presently, the project site is undeveloped and covered with kiawe trees, weeds and grass.

The proposed project involves the subdivision of the parcel into forty-eight residential lots ranging in size from approximately 7,511 square feet to 10,382 square feet. Associated improvements include paved roadways; concrete curbs, gutters and sidewalks; onsite and offsite drainage systems, water system, sewer system, underground utilities, landscaping, and offsite roadway improvements along Alaloa Road and Alahele Place fronting the project site.

III. EXISTING TOPOGRAPHY AND SOIL CONDITIONS

The elevation on the project site ranges from elevation 70 feet above mean sea level at the eastern end of the site to elevation 20 feet above mean sea level at the southwest end, averaging approximately 4.3%.

According to the "Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii (August, 1972)," prepared by the United States Department of Agriculture Soil Conservation Service, the soils within the project site are classified as Puuone sand (PZUE). Puuone sand is characterized as

having rapid permeability above the cemented layer, slow runoff, and a moderate to severe wind erosion hazard.

IV. EXISTING DRAINAGE CONDITIONS

There is no existing drainage system within the project site. Three culvert systems convey runoff mauka of Piilani Highway and discharges immediately mauka of the project site. The first culvert system outlets near the northeast corner of the project site via a 54-inch culvert. There is a 24-inch culvert which outlets approximately midway on the project site and a double 84-inch culvert system which outlets near the southeastern end of the site. Presently, runoff from the three culvert systems sheet flows across the parcel in an east to west direction into an existing drainageway. The runoff then flows in a westerly direction toward Alaloa Place into double 48-inch culverts, which outlets into a drainageway makai of Alaloa Place and into an earth channel in the Kalama Subdivision. Makai of the Kalama Subdivision, the channel flattens and runoff sheet flows through developed areas, across South Kihei Road and into Kalama Park.

According to the "Drainage Master Plan for Kihei, Maui, Hawaii; August 1997," the 54-inch culvert has a design flow of 95 cfs, the 24-inch culvert has a design flow of 10 cfs, and the double 84-inch culverts have a design flow of 817 cfs. The design flows were based on a 100-year, 6-hour storm. The capacity of the double 48-inch culverts crossing Alaloa Road is estimated to have a capacity of 140 cfs.

It is estimated that present 50-year storm runoff from the project site is 9.70 cfs.

V. FLOOD AND TSUNAMI ZONE

According to Panel Number 150003 0265 C of the Flood Insurance Rate Map, September 6, 1989, prepared by the United States Federal Emergency Management Agency, the project site is situated in Flood Zone C. Flood Zone C represents areas of minimal flooding.

VI. PROPOSED DRAINAGE PLAN

After the development of the proposed project, it is estimated that the onsite 50-year storm runoff from the project site will be 28.25 cfs, with a net increase of 18.55 cfs.

Curb-inlet catch basins will be installed at appropriate intervals along the subdivision roadway. Culverts will be installed along the roadways to allow offsite runoff to flow along its existing route. The runoff intercepted by the catch basins will be conveyed to the onsite detention basin, which will be sized to accommodate the increase in runoff from a 50-year, 1-hour storm. In addition, the basin will be sized to provide a factor of safety.

Based on the Drainage Standards for the County of Maui, runoff from a drainage area greater than 100 acres must be determined using a 100-year, 24-hour storm. It is estimated that the runoff flowing in the major existing drainageway which traverses through the project site through double 84-inch culverts at Piilani Highway is 911 cfs. For comparison purposes, the State Department of Transportation used a design flow of 817 cfs for a 100-year, 6-hour storm event.

The developer is negotiating with the landowner mauka of Piilani Highway to obtain a site to construct an offsite detention basin. It is anticipated that an offsite retention basin will be constructed on approximately 2 acres of land and the basin will be able to mitigate approximately 10 percent of the 100-year, 24-hour storm. Therefore, the peak flow will be reduced by approximately 90 cfs makai of the project site.

The drainage design criteria will be to minimize any alterations to the natural pattern of the existing onsite surface runoff.

VII. HYDROLOGIC CALCULATIONS

The hydrologic calculations are based on the "Rules for Design of Storm Drainage Facilities in the County of Maui," and the "Rainfall Frequency Atlas of the Hawaiian Islands," Technical Paper No. 43, U.S. Department of Commerce, Weather Bureau.

For the design of retention and detention basins, a recurrence interval of 50 year based on 1 hour storm for drainage areas of 100 acres or less.

Rational Formula Used: $Q = CIA$

Where Q = rate of flow (cfs)

C = rainfall coefficient

I = rainfall intensity for a duration equal to the time of concentration (inches/hour)

A = drainage area (Acres)

A recurrence interval of 100 years based on a 24-hour storm will be used for drainage areas more than 100 acres.

See Appendix A for Hydrologic Calculations

VIII. CONCLUSION

The development of the proposed subdivision is expected to generate an onsite 50-year storm runoff 28.25 cfs, with an increase of 18.55 cfs. The runoff will be intercepted by onsite grated catch basins located along the roadways and conveyed to an onsite underground subsurface drainage system. The drainage system will be sized to accommodate the increase in runoff from the 50-year storm. No additional onsite runoff will be allowed to sheet flow from the project site onto Halelani Place or the adjoining properties. This is in accordance with Chapter 4, Rules for the Design of Storm Drainage Facilities in the County of Maui.

The developer is negotiating with the landowner mauka of Piilani Highway to obtain a site to construct an offsite retention basin. It is anticipated that an offsite retention basin will be constructed on approximately 2 acres of land and the basin will be able to mitigate approximately 10 percent of the 100-year, 24-hour storm. Therefore, the peak offsite flow will be reduced by approximately 90 cfs makai of the project site.

Therefore, it is our professional opinion that the proposed development will not have an adverse effect on the adjoining or downstream properties.

IX. REFERENCES

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

B. Erosion and Sediment Control Guide for Hawaii, prepared by U.S. Department of Agriculture, Soil Conservation Service, March, 1981.

C. Rainfall-Frequency Atlas of the Hawaiian Islands, Technical Paper No. 43, U.S. Department of Commerce, Weather Bureau, 1962.

D. Flood Insurance Rate Maps of the County of Maui, September, 1989.

E. Chapter 4, Rules for the Design of Storm Drainage Facilities in the County of Maui, prepared by the Department of Public Works and Waste Management, County of Maui, 1995.

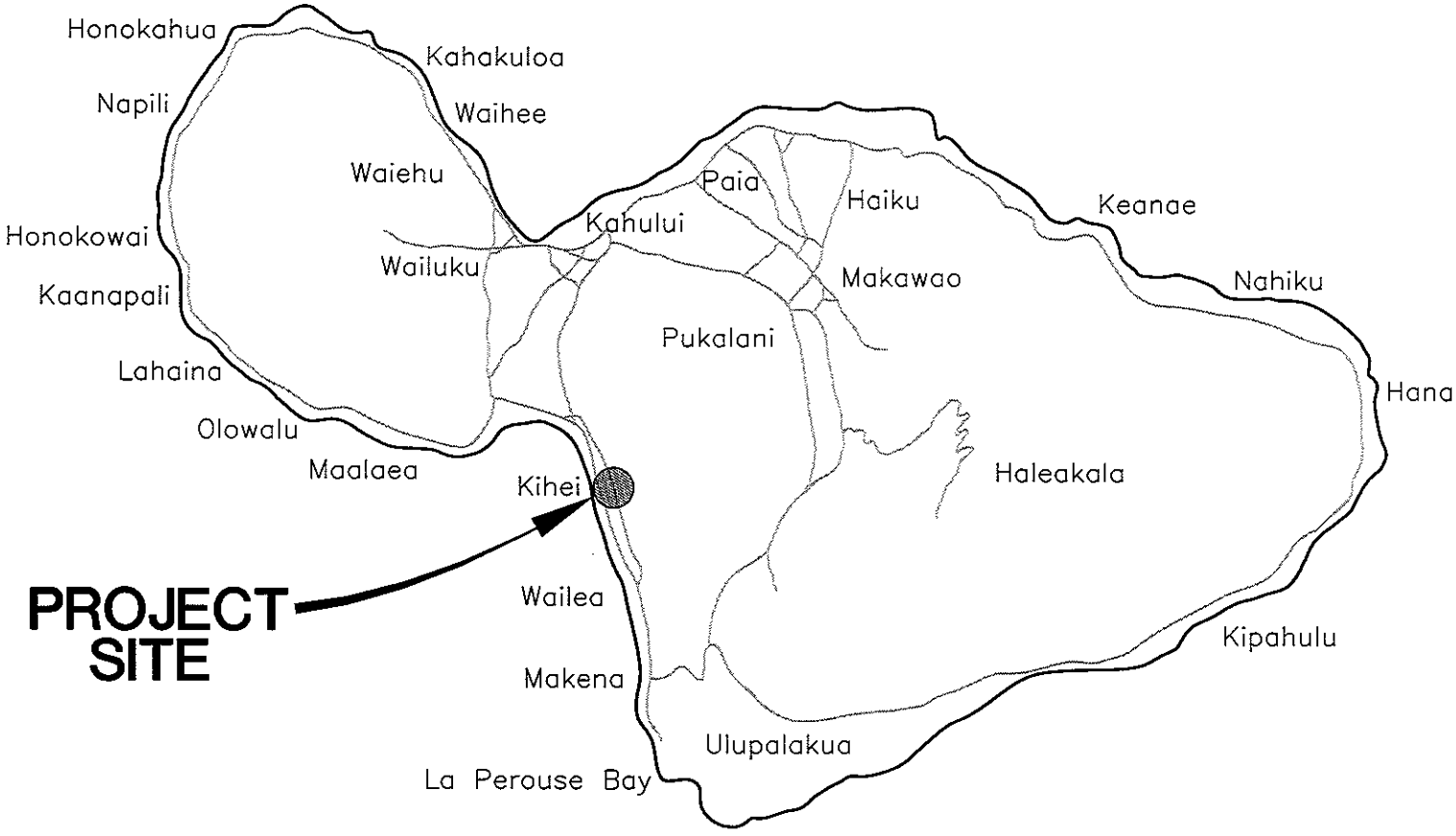
EXHIBITS

1 Location Map

2 Vicinity Map

3 Soil Survey Map

4 Flood Insurance Rate Map

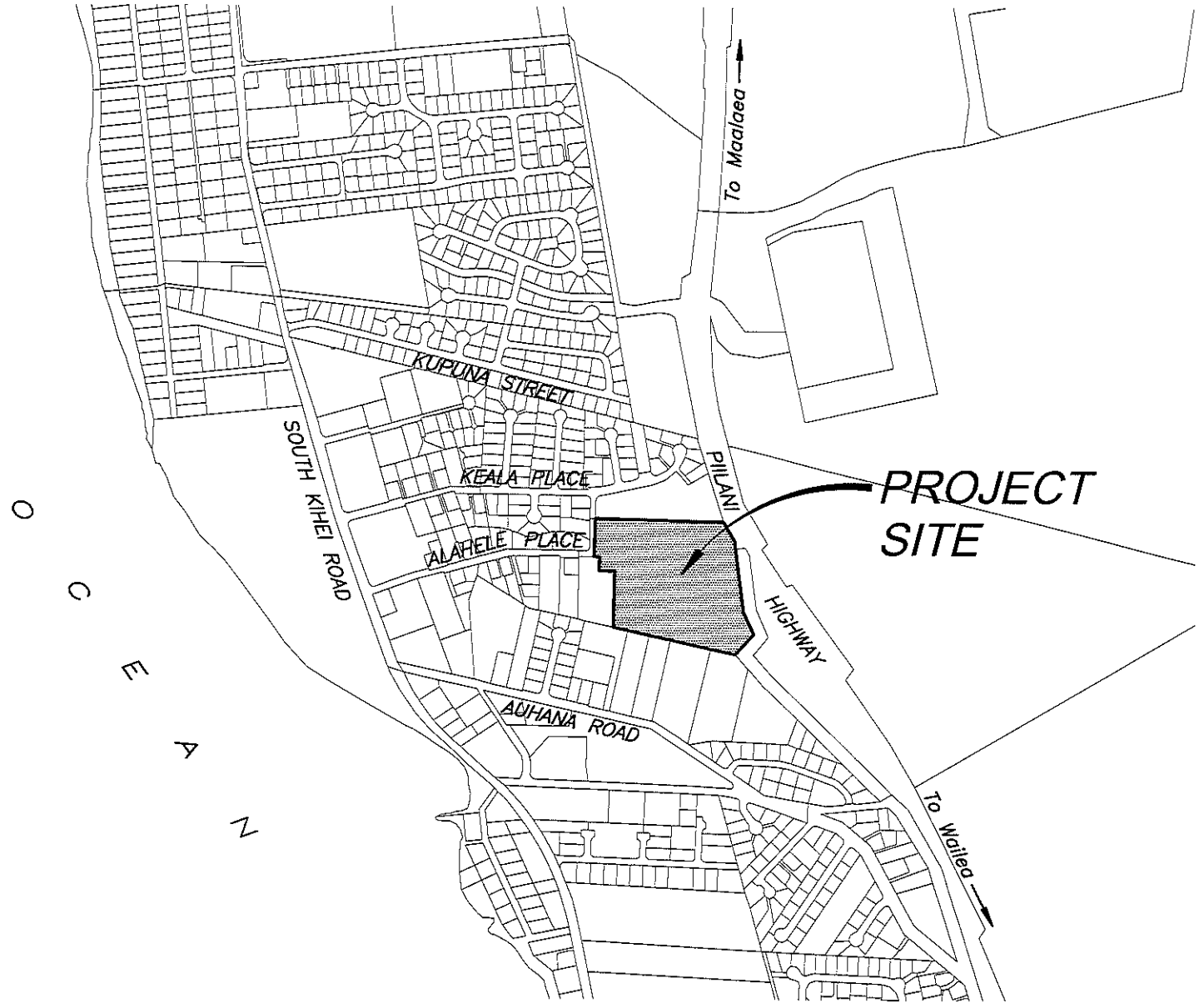


N

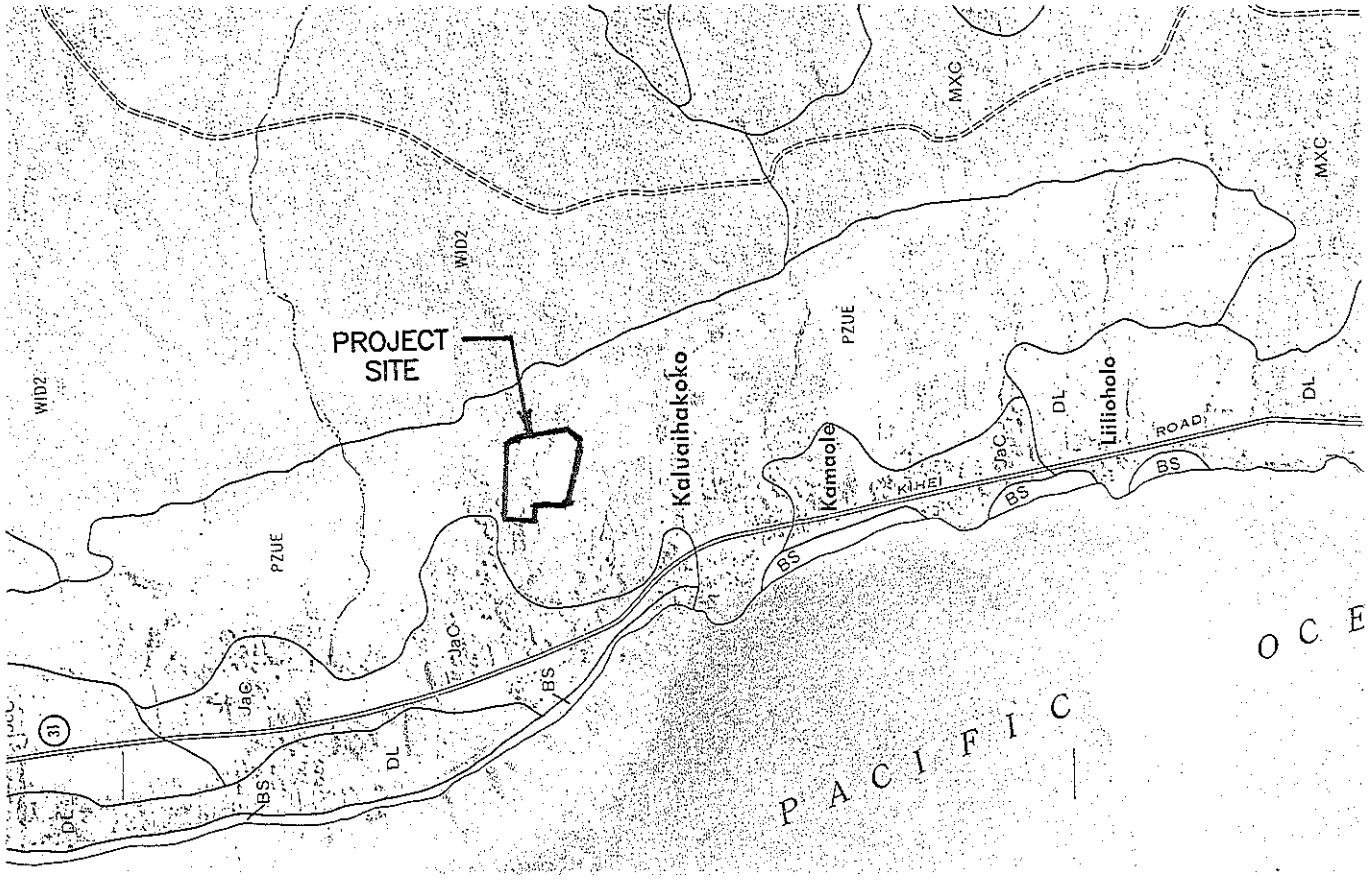
ISLAND OF MAUI

NOT TO SCALE

LOCATION MAP
EXHIBIT 1



VICINITY MAP
EXHIBIT 2



SOIL SURVEY MAP
EXHIBIT 3

FLOOD INSURANCE
RATE MAP
EXHIBIT 4

APPENDIX A

ONSITE HYDROLOGIC AND HYDRAULIC CALCULATIONS

Hydrologic Calculations

Purpose: Determine the increase in surface runoff from the development of the proposed project based on a 50-year, 1-hour storm.

A. Determine the Runoff Coefficient (C):

EXISTING CONDITIONS:

Infiltration (Medium)	=	0.07
Relief (Flat)	=	0.00
Vegetal Cover (High)	=	0.00
Development Type (Open)	=	0.15
C	=	0.22

PAVEMENT AREAS:

Infiltration (Negligible)	=	0.20
Relief (Flat)	=	0.00
Vegetal Cover (None)	=	0.07
Development Type (Pavement)	=	0.55
C	=	0.82

RESIDENTIAL AREAS:

Infiltration (Medium)	=	0.07
Relief (Flat)	=	0.00
Vegetal Cover (Good)	=	0.03
Development Type (Residential)	=	0.40
C	=	0.50

DEVELOPED CONDITIONS:

Pavement Areas = 2.00 Acres

Landscaped Areas = 12.00 Acres

WEIGHTED C = 0.55

B. Determine the 50-year 1-hour rainfall:

i_{50} = 2.2 inches

Adjust for time of concentration to compute Rainfall Intensity (I):

Existing Condition:

T_c = 27 minutes

I = 3.59 inches/hour

Developed Condition:

T_c = 19 minutes

I = 4.14 inches/hour

C. Drainage Area (A) = 14.00 Acres

D. Compute the 50-year storm runoff volume (Q):

Q = CIA

Existing Conditions:

Q = (0.22)(3.15)(14.00)

= 9.70 cfs

Developed Conditions:

Q = (0.55)(3.67)(14.00)

= 28.25 cfs

The increase in runoff due to the proposed development is 28.25 cfs - 9.70 cfs = 18.55 cfs.

Hydrograph Plot

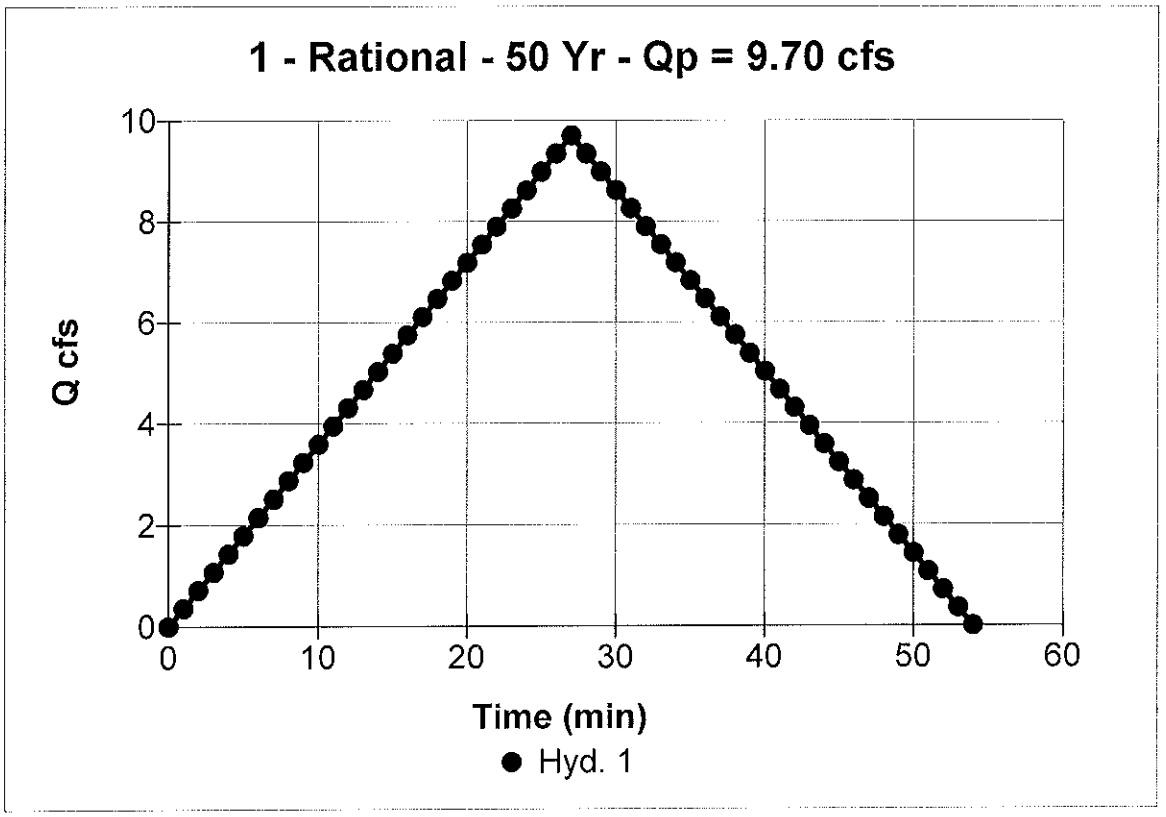
English

Hyd. No. 1

ALAHELE SUBDIVISION - EXISTING CONDITIONS

Hydrograph type	= Rational	Peak discharge	= 9.70 cfs
Storm frequency	= 50 yrs	Time interval	= 1 min
Drainage area	= 14.0 ac	Runoff coeff.	= 0.22
Intensity	= 3.15 in	Time of conc. (Tc)	= 27 min
I-D-F Curve	= 2-2.IDF	Reced. limb factor	= 1

Total Volume = 15,712 cuft



Hydrograph Plot

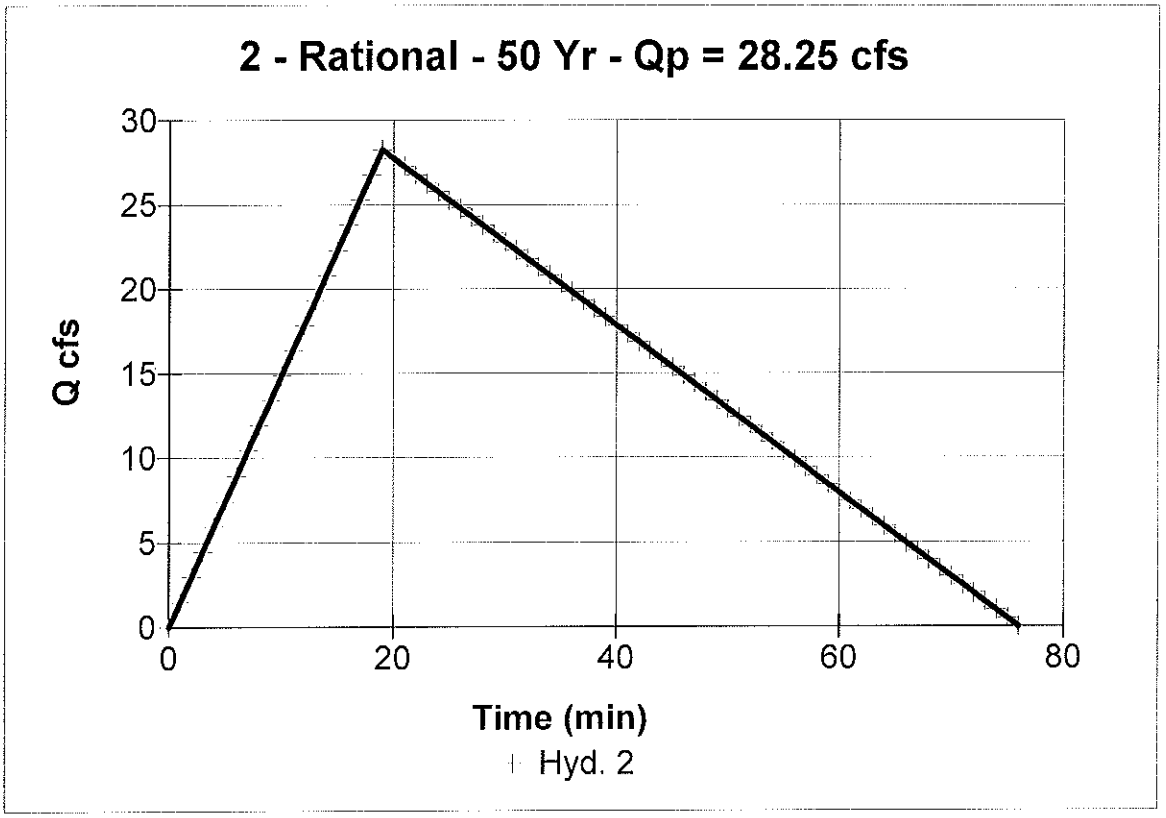
English

Hyd. No. 2

ALAHELE SUBDIVISION - DEVELOPED CONDITIONS

Hydrograph type	= Rational	Peak discharge	= 28.25 cfs
Storm frequency	= 50 yrs	Time interval	= 1 min
Drainage area	= 14.0 ac	Runoff coeff.	= 0.55
Intensity	= 3.67 in	Time of conc. (Tc)	= 19 min
I-D-F Curve	= 2-2.IDF	Reced. limb factor	= 3

Total Volume = 64,417 cuft



APPENDIX B

OFFSITE HYDROLOGIC AND HYDRAULIC CALCULATIONS

Hydrograph Plot

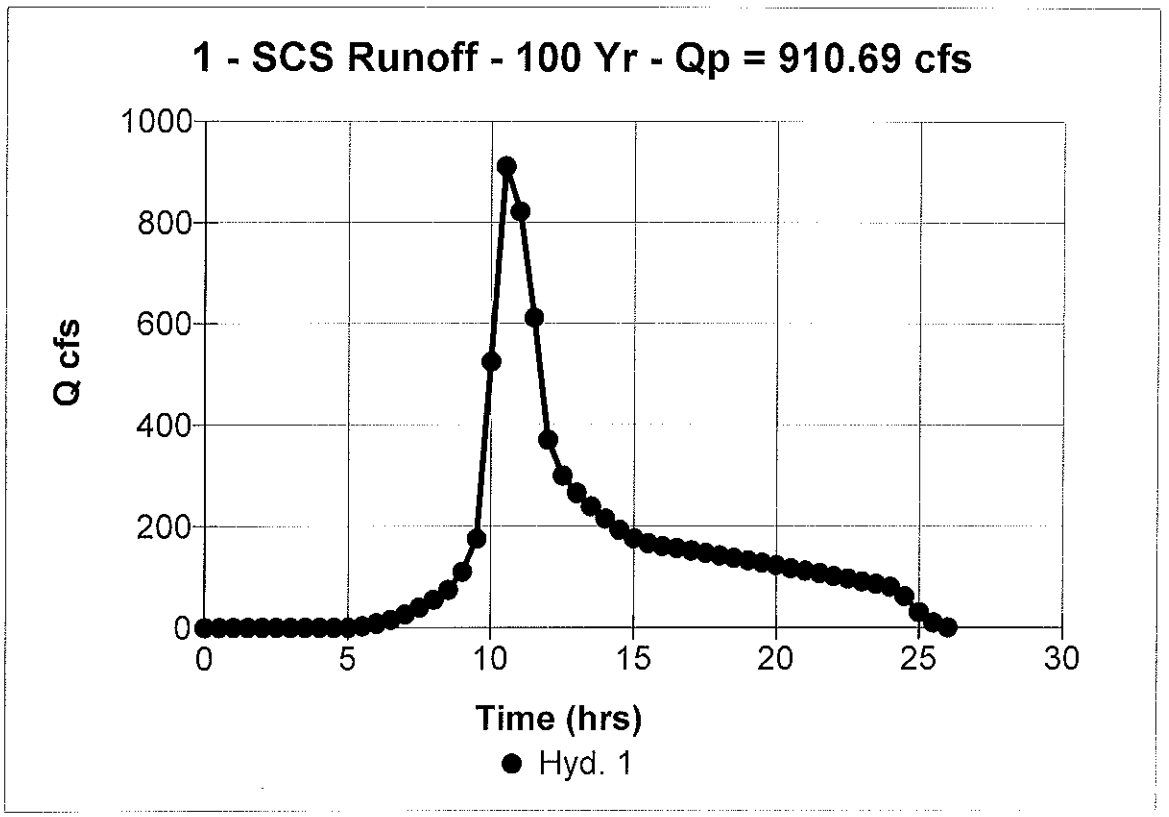
English

Hyd. No. 1

ALAHELE SUBDIVISION OFFSITE DRAINAGE

Hydrograph type	= SCS Runoff	Peak discharge	= 910.69 cfs
Storm frequency	= 100 yrs	Time interval	= 30 min
Drainage area	= 650.00 ac	Curve number	= 69
Basin Slope	= 6.7 %	Hydraulic length	= 20000 ft
Tc method	= USER	Time of conc. (Tc)	= 49 min
Total precip.	= 10.00 in	Distribution	= Type I
Storm duration	= 24 hrs	Shape factor	= 484

Total Volume = 13,479,030 cuft



APPENDIX E

HALEAKALA RANCH DOCUMENT

Currently, the owner DMK I LLC. is in negotiations with a landowner mauka of the Piilani Highway to obtain a site to construct an offsite detention basin. The negotiations are on going and a formal agreement will be included in the Final Draft EA.

The developers, DMK I LLC (DMK) has requested assistance from HR to mitigate existing mauka storm run-off conditions that cause flooding to certain neighborhoods below the proposed Alahele Subdivision project at certain times of the year. We understand that the flooding occurs during periods of heavy rainfall in the mountain areas, and passes under Piilani Highway, through the Alahele Subdivision parcel and adjacent neighborhoods, eventually reaching the shoreline.

The detention basin will make a positive contribution to the Kihei community by reducing the flooding debris and siltation that occurs with heavy rains, and will result in a cleaner shoreline and offshore waters.

APPENDIX F

ARCHAEOLOGICAL MONITORING PLAN

SCS Project Number 803-AMP-1

ARCHAEOLOGICAL MONITORING PLAN FOR A PARCEL IN KIHEI, KAMA`OLE AHUPUA`A, WAILUKU DISTRICT MAUI ISLAND, HAWAI`I [TMK: 3-9-17:34]

Prepared by:
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and
Michael F. Dega, PH.D.

April 2007

For:
Anand N. Kapadia, Director
Real Estate and Securities Group
Credit Suisse
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Los Angeles, CA 90067

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Figure 2: Tax Map Key [TMK] of the Project Area Location 3
Figure 3: Plan View of the Proposed Collector Road Corridor in the Project Area. 4

INTRODUCTION

At the request of Mr. Anand Kapadia, Scientific Consultant Services, Inc. (SCS) has assembled this Archaeological Monitoring Plan for proposed construction work to take place on a property (TMK: 3-9-017: por. 034) located in Kīhei, Kama`ole Ahupua`a, Makawao District, Maui Island (Figures 1, 2, and 3). SCS was contracted to write this AMP in accordance with the state permitting process.

A Cultural Impact Assessment has been conducted on the subject property by McGerty and Spear 2006. No significant archaeological resources were identified, but the authors recommended Archaeological Monitoring for any future development due to the presence of buried sand dune deposits in portions of the parcel. Other nearby studies (see below) in the same general physiographic setting have documented traditional features and sites. Taken together, these data clearly justify Archaeological Monitoring in association with planned construction activities.

Planned construction activities involve subsurface disturbance throughout the subject parcel, inclusive of grading and grubbing, trenching for sewer laterals and other infrastructure improvements, and excavation for foundations/footings. This AMP covers all ground disturbing activities associated with this project. The principal objective of Archaeological Monitoring is to ensure proper mitigation of significant cultural resources and/or burials.

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

This AMP will require approval of the State Historic Preservation Division (Dr. Melissa Kirkendall, SHPD-Maui) prior to the commencement of any construction activities on the lot. The following text provides more detailed information on the reasons for monitoring, potential site types to be encountered, monitoring conventions, and methodology for field and laboratory work, curation of any finds, and reporting of the data.

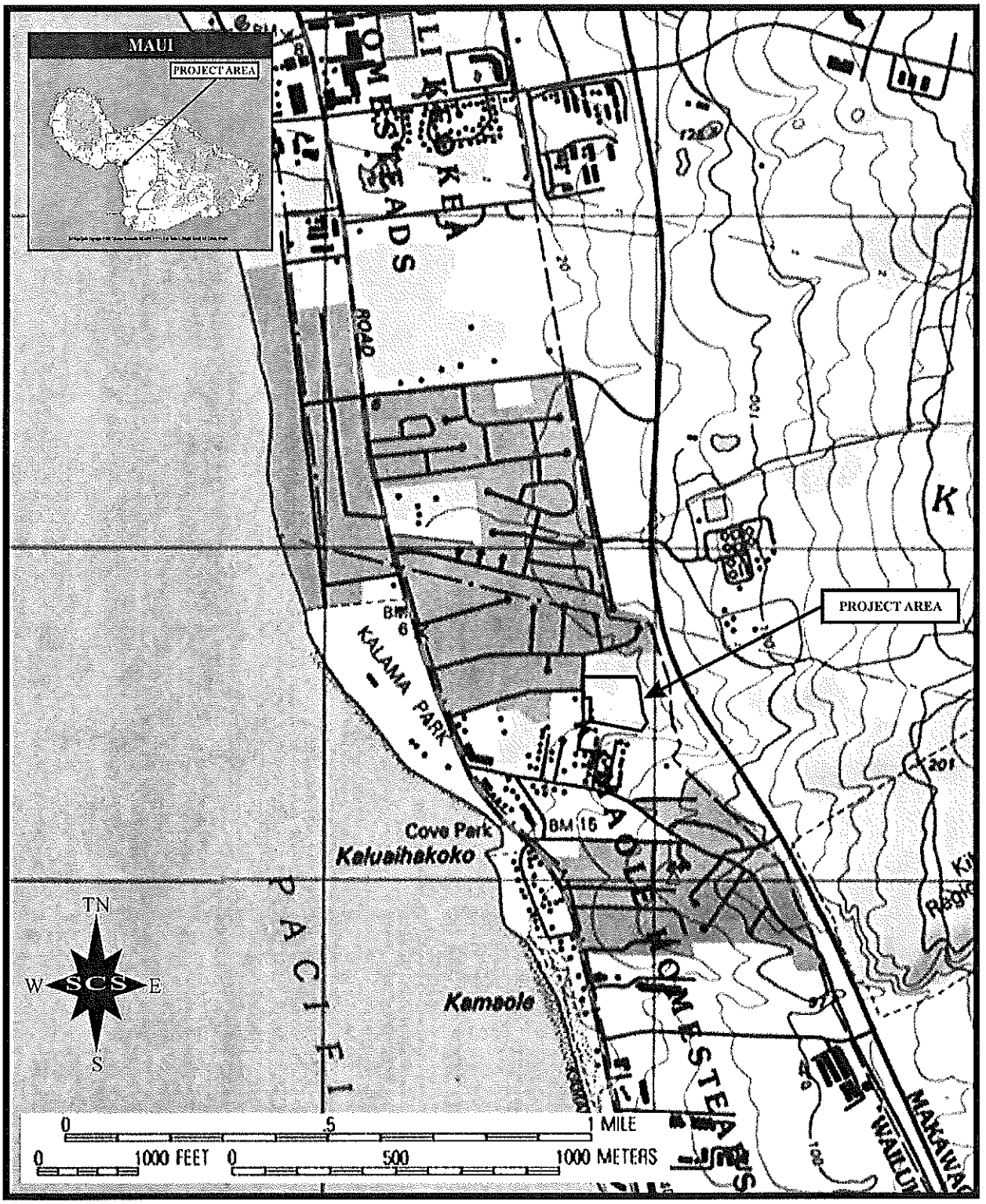

Figure 1: USGS (Puu O Kali Quadrangle) Map, Showing Project Area Location.

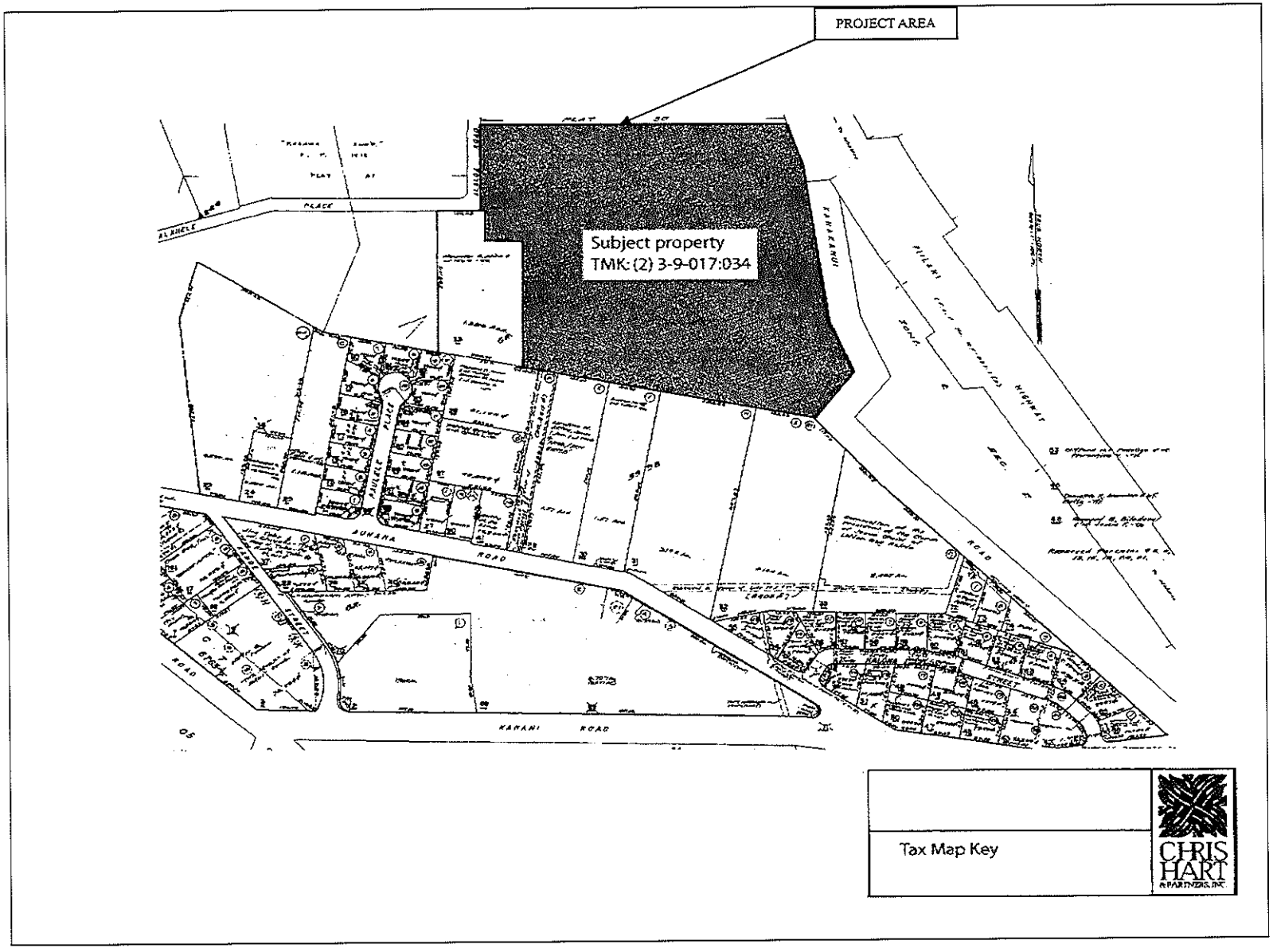

Figure 2: Tax Map Key [TMK] of the Project Area Location.

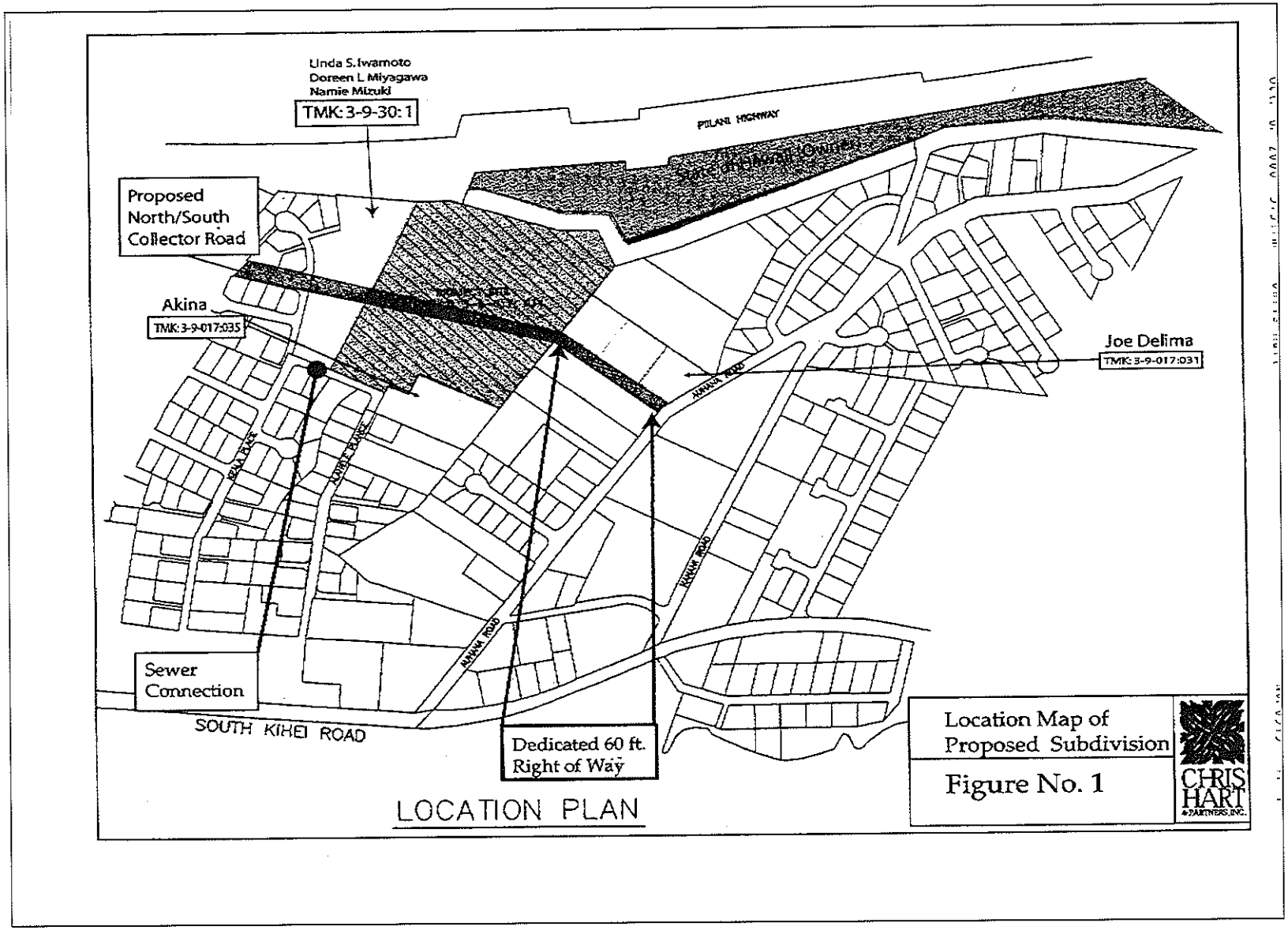

Figure 3: Plan View of the Proposed Collector Road Corridor in the Project Area.

REASON FOR MONITORING

The primary reason for requiring Archaeological Monitoring in this case is the documented presence of sand dune deposits in portions of the parcel (Fredricksen and Fredricksen 2003). Geotechnical trenching (Biegel 2003) confirmed the presence of buried sand deposits on the parcel. Soil survey data by Foote *et al.* (1972) show the project area is dominated by Puuone Sand (PZUE), which represents ancient stabilized sand hills.

Naturally occurring buried sands typically require monitoring because these sediments were commonly used as burial grounds by Native Hawaiians in traditional times (*e.g.,* Kirch 1985). In addition, although the project area is not a prime location for traditional settlement—being located in the relatively dry (*kula*) zone between the more settled coast and the relatively wet uplands, the documented presence of significant cultural resources near the project area suggests there is a moderate probability of encountering traditional archaeological sites on the parcel. No significant *surface* sites or features are present on the parcel, but significant *subsurface* deposits may be present.

POSSIBLE SITE TYPES TO BE ENCOUNTERED

There was no Land Commission Awards (LCA) in or around the parcel, which implies that the project area environs, one of the hottest and driest regions of Maui, were not formally settled at the time of the Mahele (1848). Archaeological and historical evidence suggests that this so-called 'barren zone,' consisting of inland areas receiving less than 10 cm of rain annually, was a relatively marginal area for traditional and/or early historic settlement, and was essentially devoid of permanent settlement (Cordy 1977; Kolb *et al.* 1997; Colin *et al.* 2000).

Previous archaeological studies in the Kihei area have yielded modest evidence of human settlement. For example, several large-scale archaeological surveys in the barren zone have recorded only small, temporary habitation or temporary use sites (*e.g.*, Walton 1972; Cox 1976; Cordy 1977). Other studies in the barren zone of Kama`ole Ahupua`a reached similar results (Mayberry and Haun 1988; Hammatt and Shideler 1989, 1990, 1992; Tome and Dega 2002, 2003). Historic artifacts related to ranching activities have also been recovered in the vicinity. No evidence of permanent habitation, agricultural features, or burial grounds was recovered in these studies.

An Archaeological Inventory Survey on a nearby parcel by Fredricksen and Fredricksen (2003) failed to document any significant archaeological resources. However,

subsurface testing (17 shovel probes and several auger probes) documented buried sand dune deposits in the northeastern half of the parcel; geotechnical trenching by Biegel (2003) confirmed the presence of buried sand deposits on the parcel. Based on this sedimentary evidence, the authors recommended Archaeological Monitoring for any future development due to the presence of buried sand dune deposits in portions of the parcel.

Fredricksen *et al.* (1994a) conducted archaeological survey on an adjacent, 24-acre parcel to the south (TMK: 3-9-18: 1). A total of 11 sites were documented (several of which had been previously identified by the B.P. Bishop Museum), including historic ranching walls and enclosures, surface midden scatters, a trail remnant, a rock formation of indeterminate function, and a pre-Contact rockshelter (Site -3541). Other nearby studies (*e.g.,* Fredricksen *et al.* 1994b; Pantaleo *et al.* 1991) documented traditional artifacts (including a hearth dated to the pre-Contact period) and historic sites, respectively.

Tome and Dega (2003) conducted Inventory Survey on a parcel nearly next door (TMK 3-9-17:31). One archaeological site composed of four features, State Site No. 50-50-10-5192, was identified during that survey. The site consists of a basalt alignment with associated surface midden scatter and three other discrete surface midden scatters. Primarily, recovered cultural materials consisted of lithics and shell midden. One historic artifact was also recovered from the surface near the alignment.

Based on this background information, including the Archaeological Inventory Survey conducted on the subject parcel by Tome and Dega (2003), there is a moderate probability of encountering buried archaeological sites and/or human remains in the project area.

MONITORING CONVENTIONS AND METHODOLOGY

This AMP has been prepared in accordance with DLNR-SHPD rules governing standards for Archaeological Monitoring (DLNR-SHPD draft rules 1996). Archaeological monitors will adhere to the following guidelines during monitoring:

1. A qualified archaeologist from SCS familiar with the project area and the results of previous archaeological work conducted in the area will monitor subsurface construction activities on the lot. If significant deposits or features are identified and additional field personnel are required, the archaeologist will notify the contractor or representatives before additional personnel are brought to the site.

2. If features or cultural deposits are identified during Archaeological Monitoring, the on-site archaeologist will have the authority to temporarily suspend construction activities at the significant location so that the cultural feature(s) or deposit(s) may be fully evaluated and appropriate treatment of the cultural deposit(s) is conducted. SHPD (Dr. M. Kirkendall) will be consulted to establish feature significance and potential mitigation procedures. Treatment activities primarily include documenting the feature/deposit through plotting its location on an overall site map, illustrating a plan view map of the feature/deposit, profiling the deposit in three dimensions, photographing the finds (with the exception of human burials), artifact and soil sample collection, and triangulation of the finds. Construction work will only continue in the significant location when all documentation has been completed.

3. Control stratigraphy in association with subsurface cultural deposits will be noted and photographed, particularly those containing significant quantities or qualities of cultural materials. If deemed significant by SHPD and SCS, these deposits will be sampled.

4. In the event that human remains are encountered, all work in the immediate area of the find will cease; the area will be secured from further activity until burial protocol has been completed. The SHPD-Maui cultural historian (H. Rodrigues) and SHPD-Burial Sites Program (located in Kapolei, O'ahu) will both be immediately notified about the inadvertent discovery of human remains on the property. Notification of the inadvertent discovery will also be made to the Maui/Lanai Islands Burial Council by either SHPD (H. Rodrigues) or by a representative of SCS. A determination of minimum number of individuals (MNI), age(s), and ethnicity of the burial(s) will be ascertained in the field by SCS, following standard osteological procedures (*e.g.,* White 2000). Rules outlined in Chapter 6E, Section 43 shall be followed. Profiles, plan view maps, and illustrative documentation of skeletal parts will be recorded to document the burial(s). The burial location will be identified and marked. If a burial is disturbed, materials excavated from the vicinity of the burial(s) will be manually screened through 1/8-inch wire mesh screens in order to recover any displaced skeletal material. If the remains are to be removed, the work will be in compliance with HRS 6.E-43.6, Procedures Relating to Inadvertent Discoveries after approval from all parties (SHPD, Burial Council).

5. To ensure that contractors and the construction crew are aware of this AMP and possible site types to be encountered on the lot, a brief coordination meeting will be held between the construction personnel and monitoring archaeologist prior to initiation of the project. The construction crew will also be informed as to the possibility that human burials could be encountered and how they should proceed if they observe such remains.

6. SCS will provide all coordination with the contractor, SHPD, and any other group involved in the project. SCS will coordinate all monitoring and sampling activities with the safety officers for the contractors to ensure that proper safety regulations and protective measures meet compliance. Close coordination will also be maintained with construction representatives in order to adequately inform personnel of the possibility that open archaeological units or trenches may occur in the project area.

7. One Archaeological Monitor per each piece of machinery conducting excavation or other ground altering activities will be present.

8. As necessary, verbal reports will be made to SHPD and any other agencies as requested.

LABORATORY ANALYSIS

All samples collected during the project, except human remains, will undergo analysis at the SCS laboratory in Honolulu. In the event that human remains are identified and the SHPD and Maui/Lanai Islands Burial Council authorize their removal, they will be curated on Maui. Photographs, illustrations, and all notes accumulated during the project will be curated at the Honolulu laboratory. All retrieved artifact and midden samples will be cleaned, sorted, and analyzed. Significant artifacts will be photographed, sketched, and classified (qualitative analysis). All metric measurements and weights will be recorded (quantitative analysis). These data will be presented in tabular form within the final monitoring report. Midden samples will be minimally identified to major 'class' (e.g., bivalve, gastropod mollusk, echinoderm, fish, bird, and mammal). All data will be clearly recorded on standard laboratory forms, which also include number and weight (as appropriate) of each constituent category. These counts will also be included in the final report.

Should any samples amenable to dating be collected from a significant cultural deposit, they will be prepared in the SCS laboratory and submitted for specialized radiocarbon analysis. While primary emphasis for dating is placed on charcoal samples, we do not preclude the use of other materials such as marine shell or nonhuman bone materials. SCS will consult with SHPD and the client if radiocarbon dates are deemed necessary.

All stratigraphic profiles will be drafted for presentation in the final report. Representative plan view sketches showing the location and morphology of identified sites/features/deposits will be compiled and illustrated.

CURATION

If requested by the landowner, SCS will curate all recovered materials in Honolulu (except human remains, which would remain on-island) until a permanent, more suitable curation locale is identified. The land owner(s) may request to curate all recovered materials once analysis has been completed.

REPORTING

An Archaeological Monitoring report documenting the project findings and interpretation, following SHPD guidelines for Archaeological Monitoring reports, will be submitted within180 days of the completion of fieldwork. This time line is requested to account for any radiocarbon age determinations (typically 60 days), if necessary.

If cultural features or deposits are identified during fieldwork, the sites will be evaluated for historical significance and assessed under State and Federal Significance Criteria. The Archaeological Monitoring report will be drafted until accepted by SHPD and will be submitted to both SHPD and to the client.

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APPENDIX G

SHPD ARCHAEOLOGICAL MONITORING PLAN LETTER

LINDA LINGLE
GOVERNOR OF HAWAII

803

LAURA H. THIELEN
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LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESEERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

January 24, 2008

Dr. Michael F. Dega
Scientific Consultant Services, Inc.
711 Kapiolani Blvd., Suite 975
Honolulu, Hawaii 96793

LOG NO: 2007.1225
DOC NO: 0801TD16
Archaeology

Dear Dr. Dega:

Subject: **Chapter 6E-42 Historic Preservation Review of an Archaeological Monitoring Plan for Construction of a North-South Collector Road in Kihei Kama'ole Ahupua'a, Wailuku District, Island of Maui TMK: (2) 3-9-17:34**

Thank you for submitting the subject archaeological monitoring plan, to be implemented in connection with all ground disturbing activities associated with the proposed road construction project (David B. Chaffee and Michael F. Dega, April 2007). We apologize for the delay in responding to your submittal, which was received in Kapolei on or around April 4, 2007.

The plan contains the appropriate background information, maps and procedural stipulations as specified in Hawaii Administrative Rule §13-279-4 regarding monitoring plans, and it is acceptable.

We wish to clarify one item (4) in the listed monitoring conventions and methodology (page 7). The extent and nature of field osteological analysis to be conducted for the determination of minimum numbers of individuals and ethnicity is not specified in the plan. We would like to clarify that the specifics of such analysis should be in accordance with Hawaii Administrative Rule §13-300-32, and should be discussed with SHPD personnel and approved prior to implementation. Such analysis shall not involve the removal or further disturbance of *in situ* skeletal remains, unless such removal has been approved by SHPD.

Please direct any questions or comments regarding this review to Theresa K. Donham, (808-281-4620) or Jenny L. Pickett (808-243-4641).

Aloha,

Nancy A. McMahon

Nancy A. McMahon
Acting Archaeology Branch Chief

c: Jeffery Hunt, Director, Maui county Planning Dept., 250 S. High Street, Wailuku, HI 96793
Maui County Cultural Resources Commission, 250 S. High Street, Wailuku, HI 96793

APPENDIX H

SHPD Determination Letters, 2003

3-9-17:34

LINDA LINGLE
GOVERNOR OF HAWAII

PETER T. YOUNG, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCES MANAGEMENT

DEPUTY
ERNEST Y. W. LAU

RECEIVED
NOV 13 2006
Chris Hart & Partners
Landscape Architecture & Planning

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KAKUHIHEWA BUILDING, ROOM 555
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CONSERVATION AND RESOURCES ENFORCEMENT
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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS

February 3, 2003

Lisa Rotunno-Hazuka
Archaeological Services Hawai'i, LLC
16 South Market Street, Suite G
Wailuku, Hawai'i 96793

LOG NO: 31618
DOC NO: 0301MK19

RECEIVED
NOV 13 2006
Chris Hart & Partners
Landscape Architecture & Planning

Dear Ms. Rotunno-Hazuka:

Subject: **Historic Preservation Review - 6E-42 - Archaeological Inventory Survey**
14 acre Parcel of Land, for Mr. Paul Tan, Canco Hawai'i LLC
Kama'ole Ahupua'a, Wailuku District, Maui Island
TMK (2)3-9-17:34

Thank you for the opportunity to review this report which our staff received on 9 December 2002 (Pantaleo 2002, *An Archaeological Inventory Survey of a 14-Acre Parcel of Land, Kama'ole Ahupua'a, Wailuku District, Maui Island, TMK 3-9-17:34*)...ASH, LLC ms.

The background section acceptably establishes the ahupua'a settlement pattern, referring the reader to a more comprehensive (albeit older) report. The section also predicts the likely site pattern in the project area.

The survey has adequately covered the project area documenting no historic properties. Subsurface testing in the form of 15 backhoe trenches evidenced no subsurface cultural deposits.

We find this report to be acceptable. We agree with the recommendation that no further work is necessary on this parcel. The historic preservation review process is concluded. Development of the project areas will have "no effect" on significant historic sites. Should you have any questions, please contact Dr. Melissa Kirkendall (Maui/Lana'i SHPD 243-5169) as soon as possible to resolve these concerns.

Aloha,

P. Holly McEldowney

Holly McEldowney, Acting Administrator
State Historic Preservation Division

MK:jk

c: Michael Foley, Director, Dept. of Planning, County of Maui, FAX 270-7634
Bert Ratte, County of Maui, Land Use and Codes, FAX 270-7972
Glen Ueno, County of Maui, Land Use and Codes, FAX 270-7972

FEB - 4 2003

3-9-17:34

LINDA LINGLE
GOVERNOR OF HAWAII

PETER T. YOUNG, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DAN DAVIDSON, DEPUTY DIRECTOR FOR LAND
ERNEST Y.W. LAU, DEPUTY DIRECTOR FOR
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII

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HAWAI'I HISTORIC PRESERVATION DIVISION REVIEW

Log #: 2003.0272
Doc #: 0304CD18

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 a Special Management Area Use Permit for the Proposed Keala Village Subdivision (Subject I.D.: SM1 2002/0027) [County/Planning]
Ahupua'a: Kama'ole
District, Island: Wailuku, Maui
TMK: (2) 3-9-017:034

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 See SHPD DOC NO.: 0301MK19/LOG NO.: 31618)
✓ e) other: 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.

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

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

Staff: Cathleen A. Dagher Date: 15 April 2003
Cathleen A. Dagher, Assistant Maui/Lana'i Island Archaeologist (808) 692-8023

APR 21 2003

3-9-17:34

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

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NOV 13 2006
Planning & Architecture & Planning

July 18, 2003

Michael Foley, Director
Department of Planning – Maui
250 South High Street
Wailuku, Hawaii 96793

LOG NO: 2003.1216
DOC NO: 0307MK18

Dear Mr. Foley,

SUBJECT: **Revised Chapter 6E-42 Historic Preservation Review – Archaeological Inventory Survey Report on 14 acre Parcel of Land, for Mr. Paul Tan, Canco Hawai'i LLC Kama'ole Ahupua'a, Wailuku District, Maui Island TMK (2)3-9-17:34**

Thank you for the opportunity to revise our initial comments regarding this report which our staff received on December 9, 2002 (Pantaleo 2002, *An Archaeological Inventory Survey of a 14-Acre Parcel of Land, Kama'ole Ahupua'a, Wailuku District, Maui Island, TMK 3-9-17:34*, ASH, LLC ms).

We originally accepted this report (Doc 0301MK19), with no revisions requested. During archival research for other projects in the area we have reexamined issues pertaining to this parcel. In our original letter we concurred with the recommendation that no further work was necessary on this parcel. Sand deposits were identified in several of the trenches at depths between .50 m below surface to 1.00 m below surface. We wish to alter our comments and recommend that monitoring occur during ground disturbance in the areas of the parcel where backhoe trenching identified sand deposits. A monitoring plan should be submitted to our O'ahu and Maui offices for review and acceptance. The monitoring plan may specify which areas will be monitoring based on the results of the inventory survey (some trenches did not exhibit sand deposits).

Should you have any questions, please contact Dr. Melissa Kirkendall (Maui/Lana'i SHPD 243-5169) as soon as possible to resolve these concerns.

Aloha,

P. Holly McEldowney

P. Holly McEldowney, Acting Administrator
State Historic Preservation Division

Post-it® Fax Note 7671	Date 11/13/06 # of pages ▸ 2
To Brett	From Melissa
Co./Dept.	Co.
Phone #	Phone #
Fax # 242-1956	Fax # 243-5838

MK:jen

c: Bert Ratte, County of Maui, Land Use and Codes, FAX 270-7972
Glen Ueno, County of Maui, Land Use and Codes, FAX 270-7972
Cultural Resources Commission, Planning Dept, County of Maui, 250 S. High Street, Wailuku, HI 96793

JUL 21 2003

APPENDIX I

Cultural Impact Assessment

SCS Project Number 772-CIA-2

A CULTURAL IMPACT ASSESSMENT OF PROPERTY LOCATED IN KĪHEI, KAMA`OLE AHUPUA`A, WAILUKU DISTRICT, MAUI ISLAND, HAWAI`I [TMK 3-9-017:034]

Prepared By:
Leann McGerty, B.A.
And
Robert L. Spear, Ph.D.

Revised June 2008

Prepared For:
Anand N. Kapadia, Director
Real Estate and Securities Group
Credit Suisse
2121 Avenue of the Stars, Suite 3100
Los Angeles, CA 90067

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INTRODUCTION

At the request of Mr. Anand Kapadia, Scientific Consultant Services, Inc. (SCS) conducted a Cultural Impact Assessment, on a piece of property (TMK: 3-9-017: por. 034) located in Kīhei, Kama`ole Ahupua`a, Wailuku District, Maui Island (Figure 1). Documents submitted by Chris Hart and Partners describe the proposed development of 48 lots to be sold for future single-family home construction.

The Constitution of the State of Hawai`i clearly states the duty of the State and its agencies is to preserve, protect, and prevent interference with the traditional and customary rights of native Hawaiians. Article XII, Section 7 requires the State to "protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by *ahupua`a* tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778" (2000). In spite of the establishment of the foreign concept of private ownership and western-style government, Kamehameha III (Kauikeaouli) preserved the peoples traditional right to subsistence. As a result in 1850, the Hawaiian Government confirmed the traditional access rights to native Hawaiian *ahupua`*a tenants to gather specific natural resources for customary uses from undeveloped private property and waterways under the Hawaiian Revised Statutes (HRS) 7-1. In 1992, the State of Hawai`i Supreme Court, reaffirmed HRS 7-1 and expanded it to include, "native Hawaiian rights…may extend beyond the *ahupua`a* in which a native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner" (Pele Defense Fund v. Paty, 73 Haw.578, 1992).

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].

Act 50 requires state agencies and other developers to assess the effects of proposed land use or shore line developments on the "cultural practices of the community and State" as part of the HRS Chapter 343 environmental review process (2001). Its purpose has broadened, "to promote and protect cultural beliefs, practices and resources of native Hawaiians [and] other ethnic groups, and it also amends the definition of 'significant effect' to be re-defined as "the sum of effects on the quality of the environment including actions that are…contrary to the

Figure 1: USGS Quadrangle Map Showing Project Area.

State's environmental policies…or adversely affect the economic welfare, social welfare, or cultural practices of the community and State" (H.B. 2895, Act 50, 2000).

Thus, Act 50 requires an assessment of cultural practices to be included in the Environmental Assessments and the Environmental Impact Statements, and to be taken into consideration during the planning process. The concept of geographical expansion is recognized by using, as an example, "the broad geographical area, e.g. district or *ahupua`a*" (OEQC 1997). It was decided that the process should identify 'anthropological' cultural practices, rather than 'social' cultural practices. 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.

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 manmade and natural, which support such cultural beliefs.

This Cultural Impact Assessment involves evaluating the probability of impacts on identified cultural resources, including values, rights, beliefs, objects, records, properties, and stories occurring within the project area and its vicinity cultural values and rights within the project area and its vicinity (H.B. 2895, Act 50, 2000.

METHODOLOGY

This Cultural Impact Assessment was prepared in accordance with the methodology and content protocol provided in the Guidelines for Assessing Cultural Impacts (OEQC 1997). In outlining the "Cultural Impact Assessment Methodology", the OEQC state:

> …information may be obtained through scoping, community meetings, ethnographic interviews and oral histories… (1997).

The report contains archival and documentary research, as well as communication with organizations having knowledge of the project area, its cultural resources, and its practices and beliefs. This Cultural Impact Assessment was prepared in accordance with the methodology and content protocol provided in the Guidelines for Assessing Cultural Impacts (OEQC 1997). The assessment concerning cultural impacts should address, but not be limited to, the following matters:

(1) a discussion of the methods applied and results of consultation with individuals and organizations identified by the preparer as being familiar with cultural practices and features associated with the project area, including any constraints of limitations with might have affected the quality of the information obtained;

(2) a description of methods adopted by the preparer to identify, locate, and select the persons interviewed, including a discussion of the level of effort undertaken;

(3) ethnographic and oral history interview procedures, including the circumstances under which the interviews were conducted, and any constraints or limitations which might have affected the quality of the information obtained;

(4) biographical information concerning the individuals and organizations consulted, their particular expertise, and their historical and genealogical relationship to the project area, as well as information concerning the persons submitting information or interviewed, their particular knowledge and cultural expertise, if any, and their historical and genealogical relationship to the project area;

(5) a discussion concerning historical and cultural source materials consulted, the institutions and repositories searched, and the level of effort undertaken, as well as the particular perspective of the authors, if appropriate, any opposing views, and any other relevant constraints, limitations or biases;

(6) a discussion concerning the cultural resources, practices and beliefs identified, and for the resources and practices, their location within the broad geographical area in which the proposed action is located, as well as their direct or indirect significance or connection to the project site;

(7) a discussion concerning the nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area, affected directly or indirectly by the proposed project;

(8) an explanation of confidential information that has been withheld from public disclosure in the assessment;

(9) a discussion concerning any conflicting information in regard to identified cultural resources, practices and beliefs;

(10) an analysis of the potential effect of any proposed physical alteration on cultural resources, practices or beliefs; the potential of the proposed action to isolate cultural resources, practices or beliefs from their setting; and the potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place, and;

(11) the inclusion of bibliography of references, and attached records of interviews, which were allowed to be disclosed.

Based on the inclusion of the above information, assessments 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 a 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.

INTERVIEW METHODOLOGY

Interviews are conducted in accordance with Federal and State laws and guidelines. Individuals and/or groups who have knowledge of traditional practices and beliefs associated with a project area or who know of historical properties within a project area are sought for consultation. Individuals who have particular knowledge of traditions passed down from preceding generations and a personal familiarity with the project area are invited to share their relevant information. Often people are recommended for their expertise, and indeed, organizations, such as Hawaiian Civic Clubs, the Island Branch of Office of Hawaiian Affairs, historical societies, Island Trail clubs, and Planning Commissions are depended upon for their recommendations of suitable informants. These groups are invited to contribute their input, and suggest further avenues of inquiry, as well as specific individuals to interview.

If knowledgeable individuals are identified, personal interviews are sometimes taped and then transcribed. These draft transcripts are returned to each of the participants for their review and comments. After corrections are made, each individual signs a release form, making the information available for this study. When telephone interviews occur, a summary of the information is often sent for correction and approval, or dictated by the informant and then incorporated into the document. Key topics discussed with the interviewees vary from project to project, but usually include: personal association to the *ahupua`*a, land use in the project's

vicinity; knowledge of traditional trails, gathering areas, water sources, religious sites; place names and their meanings; stories that were handed down concerning special places or events in the vicinity of the project area; evidence of previous activities identified while in the project vicinity.

In this case, letters briefly outlining the development plans along with maps of the project area were sent to individuals and organizations whose jurisdiction includes knowledge of the area with an invitation for consultation (Appendix A). Consultation was sought from Lance Foster, the Director of Native Rights, Land and Culture, Office of Hawaiian Affairs on O`ahu; Thelma Shimaoka, Coordinator of the Maui branch of the Office of Hawaiian Affairs; the Central Maui Hawaiian Civic Club; Hinano Rodrigues, Cultural Historian with State Historic Preservation Division; Kīhei Community Association; and the Maui Planning Department. If cultural resources are identified based on the information received from these organizations and additional informants, an assessment of the potential effects on the identified cultural resources in the project area and recommendations for mitigation of these effects can be proposed.
In May, a second set of letters containing the same information was sent to those individuals and organizations that had not yet responded, to assure the information had been received.

PROJECT AREA AND VICINITY

The project area is located in Kama`ole Ahupua`a but is near the boundary of Kēōkea Ahupua`a. It is bordered on the north by undeveloped land, to the west by private property and Alaloa Road. Kanakanui road forms the eastern border and to the south is privately owned land. The coastline is located less than one mile to the west of the project area (Figure 2).

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 it 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

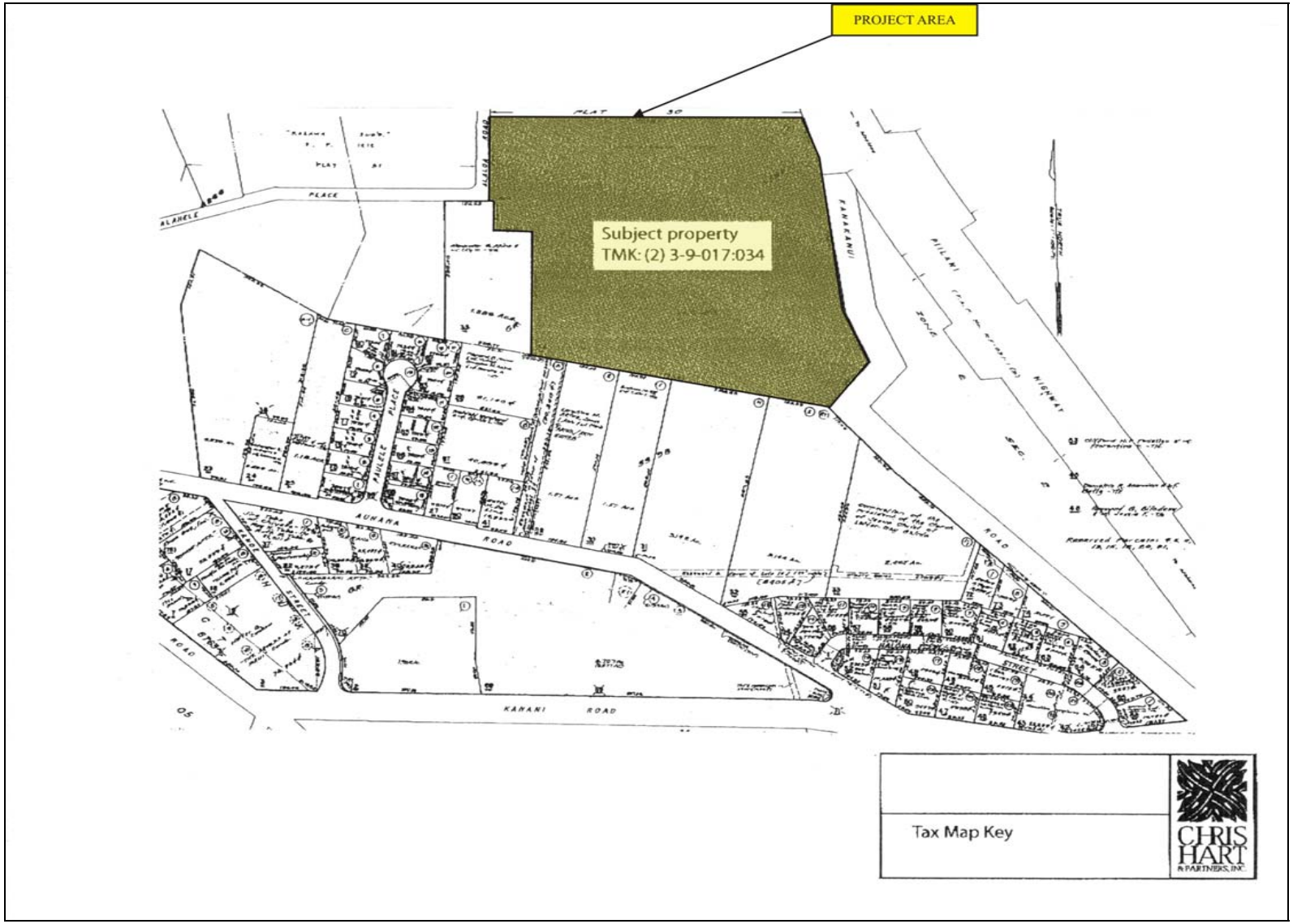

Figure 2: Tax Map Key [TMK] Showing Project Area.

population was found occupying the uplands above the 30-inch rainfall line where crops could easily be grown, coastal settlement was also common (Kolb *et al*. 1997). The existence of three fishponds at Kalepolepo, north of the project area, and at least two *heiau* have been identified near the shore.

The literature confirms 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 or in the vicinity of Kealia Pond. It is suggested that permanent habitation and their associated activities occurred from A.D. 1200 through the present in both the uplands and coastal region (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 for the gods. The title of *ali`i `ai moku* ensured rights and responsibilities to the land, but did not confer absolute ownership. The king kept the parcels he wanted, his higher chiefs received large parcels from him and, in turn, distributed smaller parcels to lesser chiefs. The *maka`āinana* (commoners) worked the individual plots of land.

In general, several terms, such as *moku*, *ahupua`a*, *`ili* or *`ili`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 to importance to the *ahupua`a* and were administered by the chief who controlled the *ahupua`a* in which it was located (*ibid*:33; Lucas 1995:40). The *mo`o`āina* were narrow strips of land within an *`ili*. The land holding of a tenant or *hoa `āina* residing in an *ahupua`a* was called a *kuleana* (Lucas 1995:61). The project area is located in the *ahupua`a* of Kama`ole, which translated means literally "childless" (Pukui *et al*.:81).

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. Ideally, this situation allowed each *ahupua`a* to be self-sufficient by supplying needed resources from different environmental zones (Lyons 1875:111).

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 officinaruma*) and *mai`a* (banana, *Musa* sp.), were also grown and, where appropriate, such crops as *`uala* (sweet potato, *Ipomoea batatas*) were produced. This was the typical agricultural pattern seen during traditional times on all the Hawaiian Islands (Kirch and Sahlins 1992, Vol. 1:5, 119; Kirch 1985). Agricultural development on the leeward side of Maui was likely to have begun early in what is known as the Expansion Period (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. It was recorded that occasionally the blustery Kaumuku Winds would arrive with amazing intensity along the coast (Wilcox 1921).

There were several fishponds in the vicinity of Kīhei; Waiohuli, Kēōkea-kai, and Kalepolepo Pond (also known by the ancient name of Kō`ie`ie Pond; Kolb *et al*. 1997). Constructed on the boundary between Ka`ono`ulu and Waiohui 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 *konohik*i (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 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. Kolb noted that two traditional trails extended through Kēōkea. One trail,

named "*Kekuawaha`ula`ula*" or the "red-mouthed god", went from Kīhei inland to Kēōkea. Another, the Kaleplepo 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 becalmed in the Ma`alaea Bay close to the project area. 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 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, Kauikeaouli (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, *`okipū* (on O`ahu), stream fisheries or many other resources necessary for traditional survival (Kelly 1983; Kame`elehiwa 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). Forty-three land claims were made in the *ahupua`a* of Kama`ole. No land claims were in or near the project area.

As western influence grew, Kalepolepo in Kīhei became the 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 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 1V, 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. 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 around 1890.

With the introduction of a dependable water supply in 1952, came overseas investment and development, which has continued up to, and including this time.

SUMMARY

The "level of effort undertaken" to identify potential effect by a project to cultural resources, places or beliefs (OEQC 1997) has not been officially defined and is left up to the investigator. A good faith effort can mean contacting agencies by letter, interviewing people who may be affected by the project or who know its history, research identifying sensitive areas and previous land use, holding meetings in which the public is invited to testify, notifying the community through the media, and other appropriate strategies based on the type of project being proposed and its impact potential. Sending inquiring letters to organizations concerning development of a piece of property that has already been totally impacted by previous activity and is located in an already developed industrial area may be a "good faith effort". However, when many factors need to be considered, such as in coastal or mountain development, a good faith effort might mean an entirely different level of research activity.

In the case of the present parcel, letters of inquiry were sent to organizations whose expertise would include the project area. Consultation was sought from Lance Foster, the Director of Native Rights, Land and Culture, Office of Hawaiian Affairs on O`ahu; Thelma Shimaoka, Coordinator of the Maui branch of the Office of Hawaiian Affairs; the Central Maui Hawaiian Civic Club; Hinano Rodrigues, Cultural Historian with the State Historic Preservation Division, Maui; Kīhei Community Association, and Michael Foley, Planning Director for the Maui Planning Department. Several individuals were suggested for possible additional information. Attempts were made without success, to contact Hamby Akina Kahawai, James Kenolio, and letters of inquirely were sent to Dr. Teresa Donam, archaeologist with the State Historic Preservation Division, and Kimokeo Kapahulehua, a Kīhei.

Historical and cultural source materials were extensively used and can be found listed in the References Cited portion of the report. Such scholars as I`i, Kamakau, Beckwith, Chinen, Kame`eleihiwa, Fornander, Kuykendall, Kelly, Handy and Handy, Puku`i and Elbert, Thrum, Sterling, and Cordy have contributed, and continue to contribute to our knowledge and understanding of Hawai`i, past and present. The works of these and other authors were consulted and incorporated in the report where appropriate. Land use document research was supplied by the Waihona `Aina 2005 Data base.

CIA INQUIRY RESPONSE

As suggested in the "Guidelines for Accessing Cultural Impacts" (OEQC 1997), CIAs incorporating personal interviews should include ethnographic and oral history interview procedures, circumstances attending the interviews, as well as the results of this consultation. It is also permissible to include organizations with individuals familiar with cultural practices and features associated with the project area.

As stated above, consultation was sought from the Director of Native Rights, Land and Culture, Office of Hawaiian Affairs on O`ahu; the Maui branch of the Office of Hawaiian Affairs; the Central Maui Hawaiian Civic Club; Cultural Historian with the State Historic Preservation Division, Maui; Kīhei Community Association, and the Maui Planning Department. None of the native Hawaiian organizations, or the Maui Planning Department responded with information concerning the potential for cultural resources to occur in the project area (TMK 3-9-017:034). Additional suggestions for further contacts were followed, and also resulted in no further information. A telephone call was received from the Kīhei Community Association, noting that they had no knowledge of any cultural activities taking place on the parcel, and a

letter from The Office of Hawaiian Affairs, O`ahu was received acknowledging our letter inquiry. Another telephone call was received from Kimokeo Kapahulehua of `Ao`ao O Nā Loko I`a O Maui, who stated that as far as he knew, there were no cultural activities within or near the project area. In May, a second set of letters containing the same information, was sent to those organizations and individuals who had not responded to assure the information concerning the proposed project had been received (Appendix B). No responses were received from the second group of letters.

Analysis of the potential effect of the project on cultural resources, practices or beliefs, its potential to isolate cultural resources, practices or beliefs from their setting, and the potential of the project to introduce elements which may alter the setting in which cultural practices take place is a requirement of the OEQC (No. 10, 1997). To our knowledge, the project area has not been used for traditional cultural purposes within recent times. The visual impact of the project from surrounding vantage points, e.g. the highway, mountains, and coast is minimal, as it is incorporated in an already subdivided and developed land area.

CULTURAL ASSESSMEMNT

Based on information received from the Kīhei Community Association, Kimokeo Kapahulehua, asserting no knowledge of on going cultural activities in lot 34, no additional suggestions or information from the remaining organizations, and the negative results of archival research, it is reasonable to conclude that, pursuant to Act 50, the exercise of native Hawaiian rights, or any ethnic group, related to gathering, access or other customary activities will not be affected by development activities on a portion of lot 34. Because there were no cultural activities identified within the project area, there are no adverse effects.

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APPENDIX A: CONSULTANTION INQUIRES

SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

November 14, 2006

Lance Foster
Director of Native Rights
C/o Office of Hawaiian Affairs
711 Kapi`olani Blvd, Suite 500
Honolulu, HI 96813

Dear Mr. Markell:

Scientific Consultant Services, Inc. (SCS) has been contracted by Chris Hart and Partners, Inc. to conduct a Cultural Impact Assessment on the on a land parcel in Kīhei, Maui (TMK: 3-09-17: 034). Parcel 34 is presently vacant land. According to information received from Chris Hart and Partners, Inc., proposed development includes 48 lots to be sold for future single-family home construction.

This involves assessing 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* (Office of Environmental Quality Control, Nov. 1997):

> The types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religious 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…

We are requesting early consultation and comments to facilitate the preparation of a Cultural Impact Assessment and we are asking you for any information that might contribute to the knowledge of traditional activities on this property or any traditional rights that might be impacted by construction on Parcel 34. The assessment results are dependent on the response and contributions made by individuals and organizations such as yours.

Enclosed are maps showing the project area's location. Please contact me at out SCS Honolulu office at (808) 597-1182; my cell phone, 225-2355; or home, (808) 637-9539, with any information or recommendations concerning this Cultural Impact Assessment.

Best wishes,

Leann McGerty

Leann McGerty, Senior Archaeologist
Enclosures (2)

Ph: 808-597-1182 SCS... SERVING ALL YOUR ARCHAEOLOGICAL NEEDS Fax: 808-597-1193
Neighbor Island Offices • Hawai'i Island • Maui • Kaua'i

SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

Hinano Rodrigues, Cultural Historian
DLNR Maui Office
130 Mahalani Street
Wailuku, HI 96791

November 14, 2006

Dear Hinano:

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SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

Thelma Shimaoka
c/o Office of Hawaiian Affairs
140 Hoohana St.
Suite 206
Kahului, HI 96732

November 14, 2006

Dear Ms. Shimaoka:

Scientific Consultant Services, Inc. (SCS) has been contracted by Chris Hart and Partners, Inc. to conduct a Cultural Impact Assessment on the on a land parcel in Kīhei, Maui (TMK: 3-09-17: 034). Parcel 34 is presently vacant land. According to information received from Chris Hart and Partners, Inc., proposed development includes 48 lots to be sold for future single-family home construction.

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Neighbor Island Offices • Hawai'i Island • Maui • Kaua'i

SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

Hawaiian Civic Club
Central Maui
310 Ka`ahumanu Ave.
Kahului, Maui 96732

November 14, 2006

Dear Members:

Scientific Consultant Services, Inc. (SCS) has been contracted by Chris Hart and Partners, Inc. to conduct a Cultural Impact Assessment on the on a land parcel in Kīhei, Maui (TMK: 3-09-17: 034). Parcel 34 is presently vacant land. According to information received from Chris Hart and Partners, Inc., proposed development includes 48 lots to be sold for future single-family home construction.

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711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

Kīhei Community Association
Kīhei, Maui
FAX: 808-879-5390

November 14, 2006

Dear Sirs:

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We are requesting early consultation and comments to facilitate the preparation of a Cultural Impact Assessment and we are asking you for any information that might contribute to the knowledge of traditional activities on this property or any traditional rights that might be impacted by construction on Parcel 34. The assessment results are dependent on the response and contributions made by individuals and organizations such as yours.

Enclosed are maps showing the project area's location. Please contact me at out SCS Honolulu office at (808) 597-1182; my cell phone, 225-2355; or home, (808) 637-9539, with any information or recommendations concerning this Cultural Impact Assessment.

Best wishes,

Leann McGerty

Leann McGerty, Senior Archaeologist
Enclosures (2)

SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

November 14, 2006

Michael Foly
County of Maui
Department of Planning
250 S. High Street
Wailuku, HI 96793

Dear Sir or Madam:

Scientific Consultant Services, Inc. (SCS) has been contracted by Chris Hart and Partners, Inc. to conduct a Cultural Impact Assessment on the on a land parcel in Kīhei, Maui (TMK: 3-09-17: 034). Parcel 34 is presently vacant land. According to information received from Chris Hart and Partners, Inc., proposed development includes 48 lots to be sold for future single-family home construction.

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Best wishes,

Leann McGerty

Leann McGerty, Senior Archaeologist
Enclosures (2)

SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai`i 96813

Dr.Teresa Donam
786 Kaulana St.
Kahului, Hi 96732

April 15, 2008

Dear Dr. Donam:

Again, I ask for your consultation in your capacity as a long time resident of Maui. We have been asked to conduct a Cultural Impact Assessment of a land parcel in Kama`ole Ahupua`a [TMK:3-9-017:034]. Letters inviting suggestions and consultation have been sent to several organizations including, OHA, O`ahu, Thelma Shimaoka, OHA Maui; Central Maui Hawaiian Civic Club; Hinano Rodrigues, Cultural Historian; Kīhei Community Association; and the Maui Planning Department, Cultural Resources Commission, with no response.

Enclosed are two figures identifying the location of the project area. If you are acquainted with any one who may be knowledgeable concerning any cultural activities on this lot or in the nearby vicinity, I would appreciate notification.

Please contact me at our SCS Honolulu office at (808) 597-1182; my cell phone, 225-2355; or home, (808) 637-9539, with any information or recommendations concerning this Cultural Impact Assessment.

Sincerely yours,

Leann McGerty

Leann McGerty
Senior Archaeologist
Enclosures (2)

Ph: 808-597-1182 SCS... SERVING ALL YOUR ARCHAEOLOGICAL NEEDS Fax: 808-597-1193
Neighbor Island Offices • Hawai'i Island • Maui • Kaua'i

SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

May 6, 2008

Kimokeo Kapahulehua
P.O. Box 1574
Kīhei, Maui 96753

Dear Mr. Kapahulehua:

Scientific Consultant Services, Inc. (SCS) has been contracted by Chris Hart and Partners, Inc. to conduct a Cultural Impact Assessment on the on a land parcel in Kīhei, Maui (TMK: 3-09-17: 034). Parcel 34 is presently vacant land. According to information received from Chris Hart and Partners, Inc., proposed development includes 48 lots to be sold for future single-family home construction.

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APPENDIX B: SECOND RESPONDENT REQUEST LETTERS

SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

Kīhei Community Association
Kīhei, Maui
FAX: 808-879-5390

May 12, 2008

Dear Sirs:

Scientific Consultant Services, Inc. (SCS) has been contracted by Chris Hart and Partners, Inc. to conduct a Cultural Impact Assessment on the on a land parcel in Kīhei, Maui (TMK: 3-09-17: 034). Parcel 34 is presently vacant land. According to information received from Chris Hart and Partners, Inc., proposed development includes 48 lots to be sold for future single-family home construction.

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Best wishes,

Leann McGerty

Leann McGerty, Senior Archaeologist
Enclosures (2)

SCIENTIFIC CONSULTANT SERVICES, Inc.

711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

Teresa Donam
30 Laumaewa Loop
Kīhei, HI 96793

May 12, 2008

Dear Dr. Donam:

Scientific Consultant Services, Inc. (SCS) has been contracted by Chris Hart and Partners, Inc. to conduct a Cultural Impact Assessment on the on a land parcel in Kīhei, Maui (TMK: 3-09-17: 034). Parcel 34 is presently vacant land. According to information received from Chris Hart and Partners, Inc., proposed development includes 48 lots to be sold for future single-family home construction.

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Best wishes,

Leann McGerty

Leann McGerty, Senior Archaeologist
Enclosures (2)

Ph: 808-597-1182 SCS... SERVING ALL YOUR *ARCHAEOLOGICAL* NEEDS Fax: 808-597-1193

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SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

County of Maui
Department of Planning
Cultural Resources Commission
250 S. High Street
Wailuku, HI 96793

May 12, 2008

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Scientific Consultant Services, Inc. (SCS) has been contracted by Chris Hart and Partners, Inc. to conduct a Cultural Impact Assessment on the on a land parcel in Kīhei, Maui (TMK: 3-09-17: 034). Parcel 34 is presently vacant land. According to information received from Chris Hart and Partners, Inc., proposed development includes 48 lots to be sold for future single-family home construction.

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SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

May 12, 2008

Hinano Rodrigues, Cultural Historian
DLNR Maui Office
130 Mahalani Street
Wailuku, HI 96791

Dear Hinano:

Scientific Consultant Services, Inc. (SCS) has been contracted by Chris Hart and Partners, Inc. to conduct a Cultural Impact Assessment on the on a land parcel in Kīhei, Maui (TMK: 3-09-17: 034). Parcel 34 is presently vacant land. According to information received from Chris Hart and Partners, Inc., proposed development includes 48 lots to be sold for future single-family home construction.

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SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

May 12, 2008

Thelma Shimaoka
c/o Office of Hawaiian Affairs
140 Hoohana St.
Suite 206
Kahului, HI 96732

Dear Ms. Shimaoka:

Scientific Consultant Services, Inc. (SCS) has been contracted by Chris Hart and Partners, Inc. to conduct a Cultural Impact Assessment on the on a land parcel in Kīhei, Maui (TMK: 3-09-17: 034). Parcel 34 is presently vacant land. According to information received from Chris Hart and Partners, Inc., proposed development includes 48 lots to be sold for future single-family home construction.

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SCIENTIFIC CONSULTANT SERVICES, Inc.
711 Kapiolani Blvd., Suite 975 Honolulu, Hawai'i 96813

May 12, 2008

Hawaiian Civic Club
Central Maui
310 Ka`ahumanu Ave.
Kahului, Maui 96732

Dear Members:

Scientific Consultant Services, Inc. (SCS) has been contracted by Chris Hart and Partners, Inc. to conduct a Cultural Impact Assessment on the on a land parcel in Kīhei, Maui (TMK: 3-09-17: 034). Parcel 34 is presently vacant land. According to information received from Chris Hart and Partners, Inc., proposed development includes 48 lots to be sold for future single-family home construction.

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APPENDIX J

TRAFFIC IMPACT ASSESSMENT REPORT

TRAFFIC IMPACT ASSESSMENT REPORT FOR

ALAHELE SUBDIVISION

IN KIHEI, MAUI, HAWAII

Prepared For

WILSHIRE DMK I, LLC
2001 Wlshire Boulevard, Suite 302
Santa Monica, CA 90403

Phillip Rowell and Associates
47-273 'D' Hui Iwa Street
Kaneohe, Hawai'i 96744
Tel: 808-239-8206 Fax: 808-239-4175
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June 12, 2007

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1. INTRODUCTION

Phillip Rowell and Associates has been retained to prepare a Traffic Impact Assessment Report for a proposed single-family residential development in Kihei, Maui, Hawaii. This study is required as part of the Environmental Assessment and Special Management Area (SMA) Permit for the proposed project.

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

Project Location and Description

The project is summarized as follows:

1. The project will consist of 48 single-family units and up to 48 ohana units.

2. The project is located along the north side of Auhana Road approximately midway between South Kihei Road and Piilani Highway. See Figure 1.

3. Primary access and egress will be via a new connection to Auhana Road. Since this roadway may become part of the future North-South Collector, the alignment will be consistent with the Collector and the roadway is referred to as the North-South Collector in this report. The typical section for this roadway has not yet been finalized, but for this report it has been assumed that the roadway will be a two-lane, two-way roadway. Access to and egress will also be provided via Keala and Alahele Streets. Both are existing two-lane, two-way streets between the project and South Kihei Road.

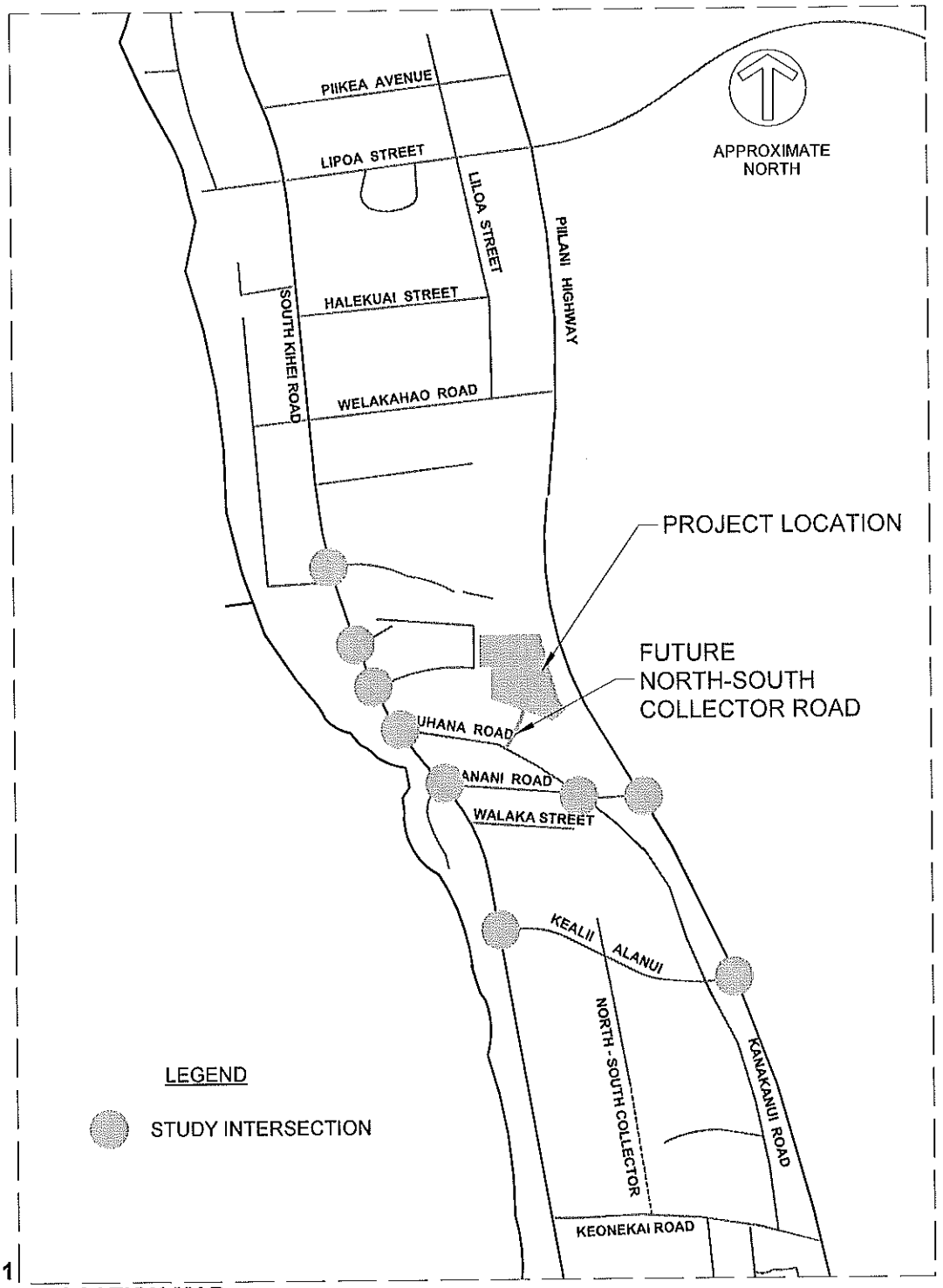

Figure 1
PROJECT LOCATION MAP

Study Methodology

The study area and the scope of work was defined using criteria established by the Institute of Transportation Engineers[1] for small developments. Small developments are projects that generate between 100 and 500 peak hour trips. This was based on the results of a preliminary trip generation analysis that determined the proposed project would generate approximately 100 trips during the peak hour. See Table 1.

The following is a summary list of the tasks performed:

1. A field reconnaissance was performed to identify existing roadway cross-sections, intersection lane configurations, traffic control devices, and surrounding land uses.

2. Existing traffic volumes were obtained for the study intersections.

3. Existing levels-of-service of the study intersections were determined using the methodology described in the *2000 Highway Capacity Manual.*

4. A list of related development projects within and adjacent to the study area that will impact traffic conditions at the study intersections was compiled. This list included both development projects and anticipated highway improvement projects.

5. Future background traffic volumes at the study intersections without traffic generated by the study project were estimated.

6. Peak hour traffic that the proposed project will generate was estimated using trip generation analysis procedures recommended by the Institute of Transportation Engineers.

7. Project generated traffic was assigned to the adjacent roadway network.

8. A level-of-service analysis for future traffic conditions with traffic generated by the study project was performed.

9. The impacts of traffic generated by the proposed project at the study intersections was quantified and summarized.

10. Locations that project generated traffic significantly impacts traffic operating conditions were identified.

11. If required, improvements or modifications necessary to mitigate the traffic impacts of the project and to provide adequate access to and egress from the site were formulated.

12. A report documenting the conclusions of the analyses performed and recommendations was prepared.

---

[1] Institute of Transportation Engineers, *Transportation and Land Development, Second Edition*, Washington, D.C., 2002, pages 3-1 thru 3-16.

Table 1 Suggested Requirements for Various Types of Traffic Impact Analyses[2]

	Trip Generation Threshold			
	Access Location & Design Review	Small Development: Traffic Impact Assessment	Medium Development: Traffic Impact Statement	Large Development: Regional Traffic Analysis
	T ≤ 100 Peak Hour Trips	100 < T ≤ 500 Peak Hour Trips	500 < T ≤ 1000 Peak Hour Trips	T > 1000 Peak Hour Trips
Pre-application meeting or discussion	✔	✔	✔	✔
Analysis of Roadway Issues				
Existing condition analysis within study area	✔	✔	✔	✔
Sight distance evaluation	✔	✔	✔	✔
Nearby driveway locations	?	✔	✔	✔
Existing traffic conditions at nearby intersections and driveways		✔	✔	✔
Future road improvements		?	✔	✔
Crash experience in proximity to site	?	✔	✔	✔
Trip generation of adjacent development		?	✔	✔
Trip distribution analysis		✔	✔	✔
Background traffic growth		?	✔	✔
Future conditions analysis at nearby intersections		?	✔	✔
Mitigation identification and evaluation		?	?	✔
Site Issues				
Traffic generation	✔	✔	✔	✔
Traffic distribution	?	✔	✔	✔
Evaluate number, location & spacing of access points	?	✔	✔	✔
Evaluate access design, queuing, etc.	✔	✔	✔	✔
Evaluate site circulation	✔	✔	✔	✔
Other Analyses				
Gap analysis for unsignalized locations		?	?	✔
TSM/TDM [3] Mitigation measures (car- or van-pooling, transit, etc.)- transit agency participation			?	✔
Effect on traffic signal progression, analysis of proposed signal locations			?	✔

Notes:
(1) Key: ✔ = required, ? = may be appropriate on a case-by-case basis
(2) Source: Institute of Transportation Engineers, *Transportation and Land Development*, Washington, D.C., 2002, p.3-6
(3) TSM/TDM = Transportation System Management/Transportation Demand Management

Study Area

The study area for the project includes the following intersections:

1. South Kihei Road at Kealii Alanui
2. South Kihei Road at Kanani Road
3. South Kihei Road at Auhana Road
4. South Kihei Road at Alahele Street
5. South Kihei Road at Keala Street
6. South Kihei Road at Halelani Place
7. Piilani Highway at Kealii Alanui
8. Piilani Highway at Kanani Road
9. Kanakanui Road at Kanani Road
10. Kanani Road at Auhana Road
11. Auhana Road at North-South Collector Road (Project Entrance)

Order of Presentation

Chapter 2 describes existing traffic conditions, the Level-of-Service (LOS) concept and the results of the Level-of-Service analysis of existing conditions.

Chapter 3 describes the process used to estimate 2015 background traffic volumes and the resulting background traffic projections. Background conditions are defined as future background traffic conditions without traffic generation by the study project.

Chapter 4 describes the methodology used to estimate the traffic characteristics of the proposed project, including 2015 background plus project traffic projections.

Chapter 5 discusses the results if the traffic impact analysis and identifies potential mitigation measures.

2. EXISTING CONDITIONS

This chapter discusses 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 Chapter 5.

Existing Roadway and Traffic Conditions

Within the study area, South Kihei Road is a two-lane, two-way, north-south major roadway. There are separate left turn storage lanes at all of the study intersections. The intersections with Keala Street at Kealii Alanui are currently signalized. All the remaining intersections along South Kihei Road are unsignalized. However, the intersection of South Kihei Road at Kanani Road is to be signalized as a condition of the Hale Kanani multi-family housing project The posted speed limit along South Kihei Road is 20 miles per hour within the study area.

Auhana Road is also a two-lane, two-way road. The intersection of Auhana Road at Kanani Road is unsignalized. The STOP sign is along the Kanani Road approach. The posted speed limit is 20 mph. Adjacent development is residential.

Kanakanui Road is a two-lane, two-way roadway between Auhana Road and Kealii Alanui. Adjacent development is residential and the posted speed limit is 20 mph.

Between Kanakanui Road and Piilani Highway, Kealii Alanui is a four-lane, divided roadway. A westbound to southbound left turn storage lane was recently added. Between Kanakanui Road and South Kihei Road, Kealii Alanui Road is a two-lane, two-way divided roadway. Parking is allowed along both sides.

Piilani Highway is a four-lane, two-way roadway with separate left turn storage lanes at major intersections and right turn deceleration lanes at most intersections. The intersections with Kealii Alanui and Kanani Road are signalized. The posted speed limit is 40 mph.

One of the areas of concern is the distance between Kanakanui Road and Piilani Highway along Kealii Alanui. There is capacity for only six vehicles to queue for the left turn from eastbound Keallii Alanui to northbound Piilani Highway. This left turn storage area is not sufficient to accommodate current peak hour demand. Plans are being prepared to improve the eastbound approach to Piilani Highway to provide an additional left turn lane. This improvement is part of the Ke Alii Villa housing project.

These streets and the lane configurations of the study intersections are shown as Figure 2. Also shown are the method of right-of-way control at the study intersections.

Existing Peak Hour Traffic Volumes

The existing peak hour traffic volumes are shown in Figures 3 and 4.

1. The traffic counts include buses, trucks, motorcycles, mopeds and other large vehicles. Bicycles and pedestrians were not counted.

2. All intersections were counted from 6:30 AM to 9:00 AM and from 3:30 PM to 6:00 PM on weekdays.

3. The traffic volumes shown are the peak hourly volume of each movement rather than the peak sum of all approach volumes.

4. The traffic volumes of adjacent intersections may not match the volumes shown for an adjacent intersection because the peak hours of the adjacent intersections may not coincide and there are driveways between the intersections.

5. Pedestrian activity was negligible during the traffic counts.

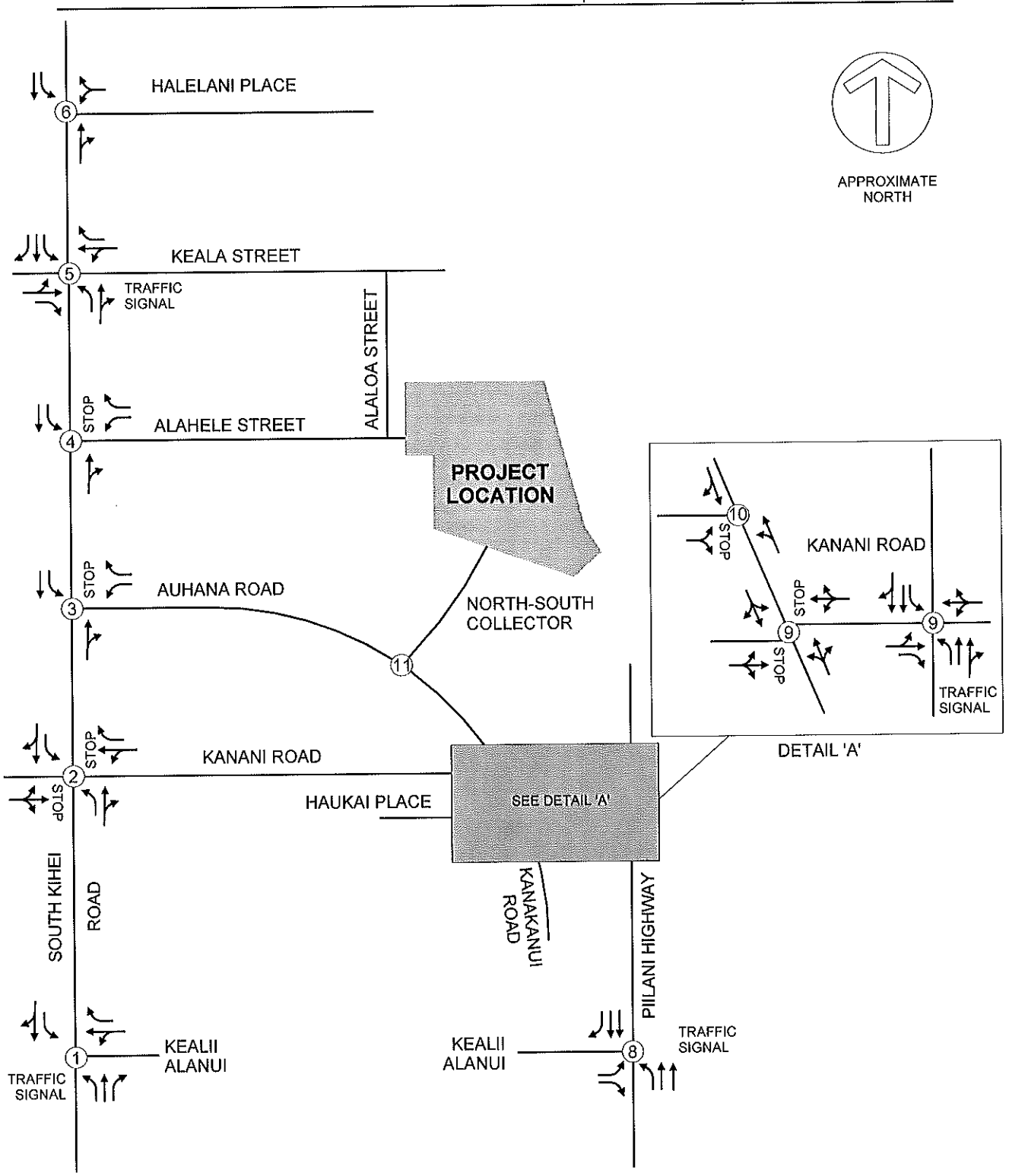

Figure 2
EXISTING LANE CONFIGURATIONS AND RIGHT-OF=WAY CONTROLS

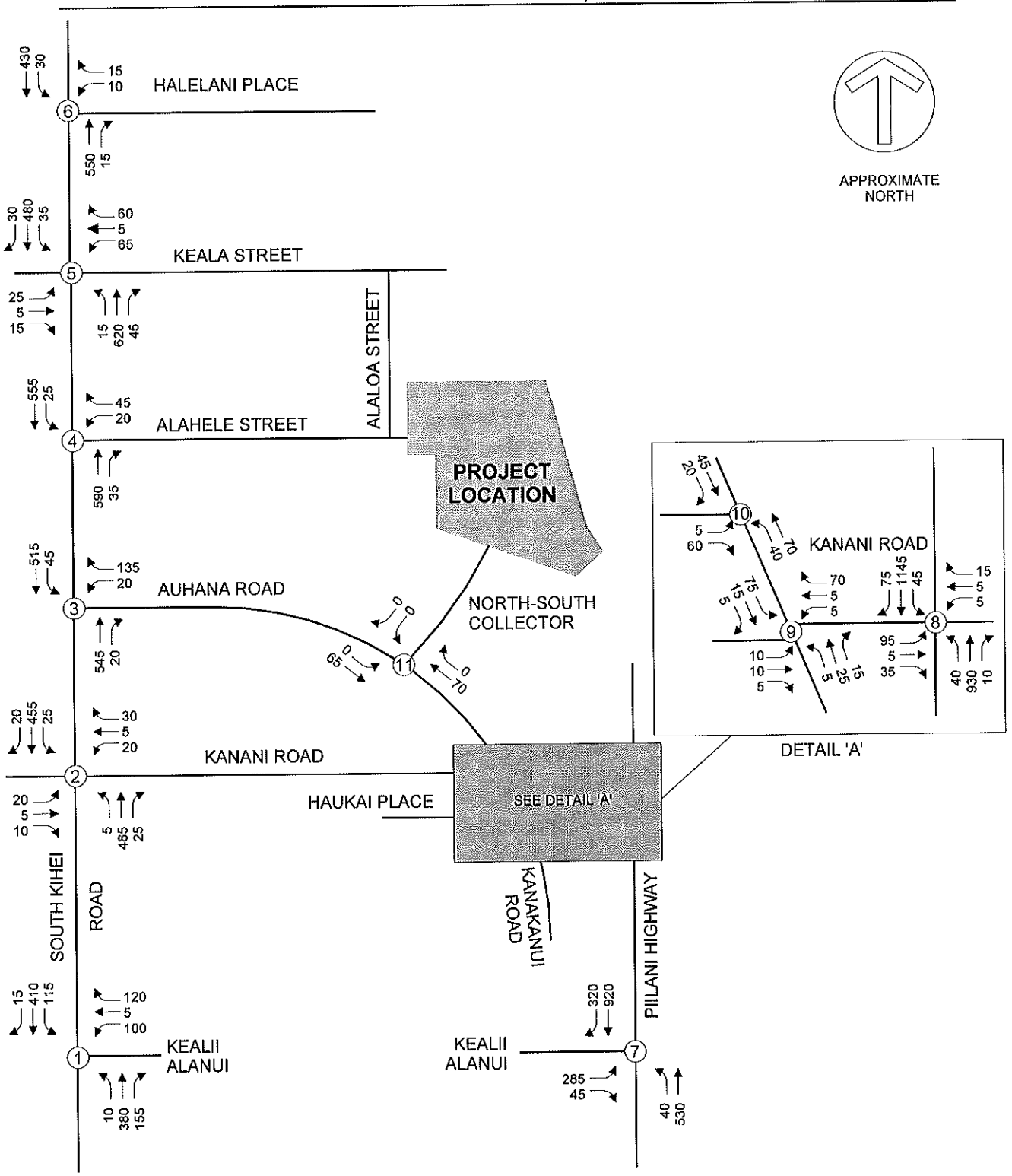

Figure 3
EXISTING AM PEAK HOUR TRAFFIC VOLUMES

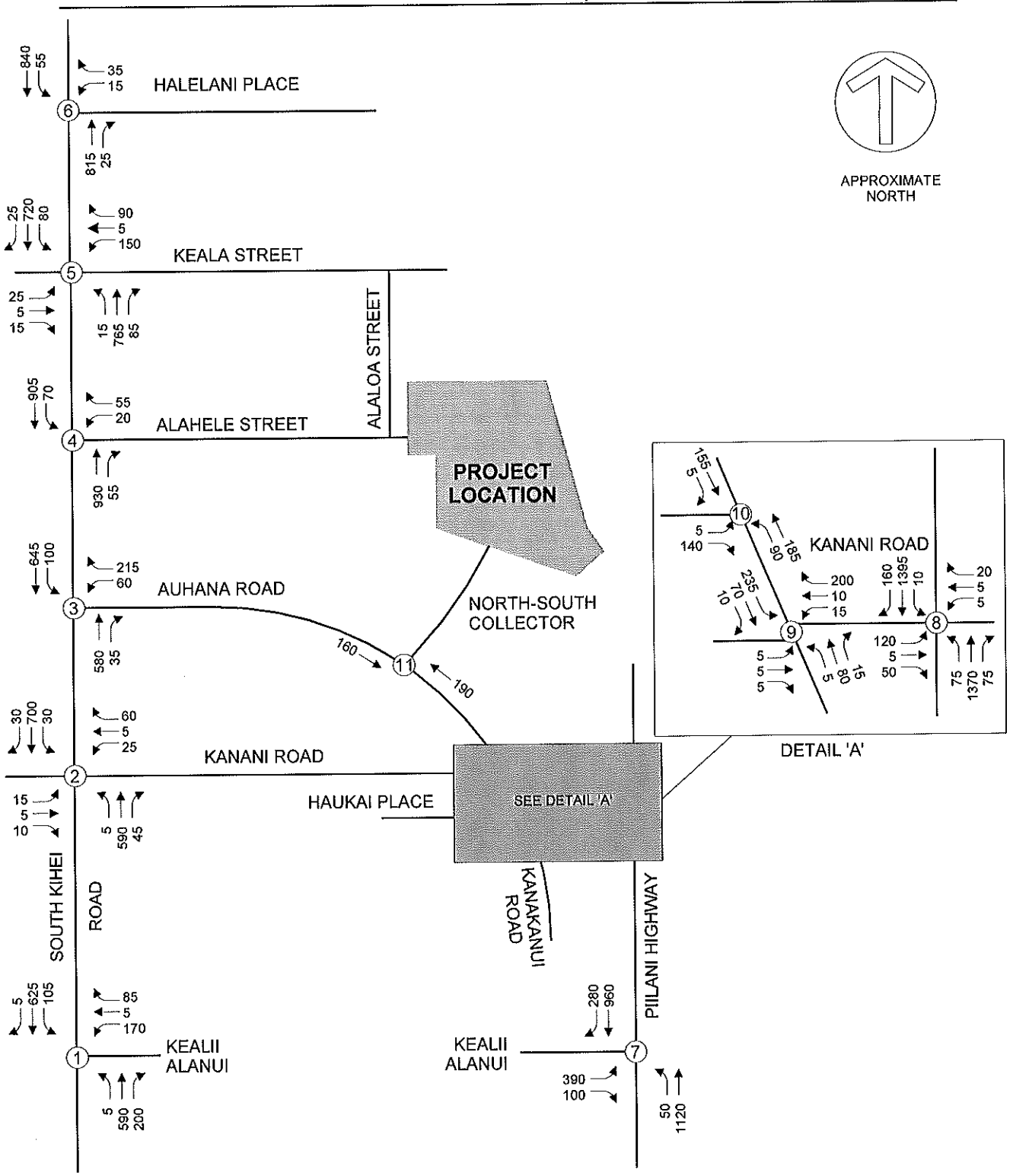

Figure 4
EXISTING PM PEAK HOUR TRAFFIC VOLUMES

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 1. 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.***[2]

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	<10.0
C	Light congestion; occasional backups on critical approaches.	0.701-0.800	10.1-20.0
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	20.1-35.0
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	35.1-80.0
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.

[2] Institute of Transportation Engineers, *Traffic Access and Impact Studies for Site Development, A Recommended Practice*, Washington, D.C., 1991, p.39.

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
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.

Existing Levels-of-Service

The level-of-service of signalized intersections is determined using the operations method described in the *Highway Capacity Manual*. The results of this analysis for the signalized intersections are summarized in Table 4. As shown, all movements operate at Level-of-Service D or better, except for the southbound left turn along Piilani Highway at Kanani Road. However, the volume-to-capacity ratio of this movement is low, indicating Level-of-Service B. This implies that the long delay is a function of the traffic signal timing and not the roadway configuration.

Table 4 Existing (2006) Levels-of-Service of Signalized Intersections

	AM Peak Hour			PM Peak Hour		
Intersection, Approach and Movement	V/C	Delay [1]	LOS [2]	V/C	Delay	LOS
South Kihei Road at Kealii Alanui	***0.39***	***12.5***	***B***	***0.59***	***15.3***	***B***
Westbound Left & Thru	0.20	26.8	C	0.50	30.7	C
Westbound Right	0.08	24.1	C	0.06	23.8	C
Northbound Left	0.02	6.3	A	0.01	7.3	A
Northbound Thru	0.41	11.1	B	0.63	14.7	B
Northbound Right	0.11	8.4	A	0.14	8.7	A
Southbound Left	0.21	6.2	A	0.27	8.6	A
Southbound Thru & Right	0.43	10.4	B	0.64	13.7	B
South Kihei Road at Keala Street	***0.54***	***10.2***	***B***	***0.76***	***16.2***	***B***
Eastbound Left, Thru & Right	0.21	38.4	D	0.15	33.1	C
Westbound Left & Thru	0.34	41.0	D	0.73	47.6	D
Westbound Right	0.04	37.2	D	0.06	32.4	C
Northbound Left	0.02	3.3	A	0.05	6.2	A
Northbound Thru & Right	0.53	7.1	A	0.75	14.0	B
Southbound Left	0.08	3.6	A	0.31	9.7	A
Southbound Thru & Right	0.40	5.0	A	0.63	10.2	B
Piilani Highway at Kealii Alanui	***0.60***	***12.4***	***B***	***0.67***	***16.0***	***B***
Eastbound Left	0.60	31.0	C	0.93	48.8	D
Eastbound Right	0.77	18.4	B	0.07	17.4	B
Northbound Left	0.03	31.2	C	0.52	32.9	C
Northbound Thru	0.47	4.9	A	0.56	8.1	A
Southbound Thru	0.55	11.1	B	0.60	12.9	B
Southbound Right	0.22	8.0	A	0.19	9.4	A
Piilani Highway at Kanani Road	***0.56***	***11.3***	***B***	***0.72***	***14.2***	***B***
Eastbound Left & Thru	0.67	50.2	D	0.70	49.2	D
Eastbound Right	0.02	36.7	D	0.03	34.4	C
Westbound Left, Thru & Right	0.06	36.9	D	0.06	34.6	C
Northbound Left	0.42	45.7	D	0.52	43.9	D
Northbound Thru & Right	0.41	6.3	A	0.59	7.8	A
Southbound Left	0.60	55.4	E	0.42	56.4	E
Southbound Thru & Right	0.54	8.0	A	0.76	14.3	B

NOTES:
(1) Delay in seconds per vehicle.
(2) LOS denotes Level-of-Service catculated using the operations method described in *Highway Capacity Manual*. Level-of-Service is based on delay.

Unsignalized Intersections

The level-of-service of an unsignalized intersection is determined by the control delay per vehicle. The results in the delay analysis and the resulting levels-of-service for the study intersections are shown in Table 5. Shown in the table are the control vehicle delays calculated using the gaps lengths determined for the field delay analysis.

Table 5 Existing (2006) Levels-of-Service of Unsignalized Intersections

	AM Peak Hour		PM Peak Hour	
Intersection, Approach and Movement	Delay [1]	LOS [2]	Delay	LOS
South Kihei Road at Kanani Road				
Northbound Left	8.4	A	9.2	A
Southbound Left	8.5	A	9.0	A
Westbound Left & Thru	26.8	D	56.4	F
Westbound Right	11.8	B	13.7	B
Eastbound Left, Thru & Right	24.0	C	44.3	E
South Kihei Road at Auhana Road				
Southbound Left	8.8	A	9.3	A
Westbound Left	26.2	D	42.0	E
Westbound Right	14.6	B	18.6	C
South Kihei Road at Alahele Street				
Southbound Left	8.9	A	10.9	B
Westbound Left	28.2	D	118.2	F
Westbound Right	13.3	A	20.1	C
South Kihei Road at Halelani Place				
Southbound Left	8.7	A	10.0	A
Westbound Left & Right	16.3	C	35.3	E
Kanakanui Road at Kanani Road				
Northbound Left, Thru & Right	7.2	A	7.4	A
Southbound Left, Thru & Right	7.4	A	7.9	A
Westbound Left, Thru & Right	9.0	A	11.4	A
Eastbound Left, Thru & Right	10.4	B	16.4	C
Auhana Road at Kanani Road				
Northbound Left & Thru	7.4	A	7.7	A
Eastbound Left & Right	8.9	A	10.1	B

NOTES:
(1) Delay 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 conclusion of this analysis is that all controlled traffic movements at the study intersections operate at a Level-of-Service D or better except at the intersections of South Kihei Road at Kanani Road, South Kihei Road at Alahele Street and South Kihei Road at Halelani Place. The deficiencies at the intersection of South Kihei Road at Kanani Road will be mitigated when this intersection is signalized. Installation of traffic signals is a condition of approval of the Hale Kanani multi-family housing project. These traffic signals have not yet been constructed. At the other two intersections, left turns from the side streets (Alahele Street and Halelani Place) operate at Level-of-Service F and E, respectively, during the afternoon peak hours. The long calculated delays are not consistent with the delays observed during the traffic counts. Traffic along South Kihei Road moves slowing and drivers stop to allow traffic from the side streets to turn onto South Kihei Road.

Other conditions observed during the traffic surveys are:

1. Pedestrian volumes along South Kihei Road are heavy.

2. There is a school crossing guard at the intersection of Kealii Alanui at Kanakanui Road. His actions occasionally cause traffic to back up at this intersection. However, the backups have a short duration and usually clear within the following traffic signal cycle at Piilani Highway.

3. The traffic demand for the left turn from Kealii Alanui to northbound Piilani Highway exceeds the queue capacity of the area between Piilani Highway and Kanakanui Road.

3. PROJECT BACKGROUND TRAFFIC CONDITIONS

The purpose of this chapter is to discuss the assumptions and data used to estimate 2015 background traffic conditions. Background 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.

Design Year for Traffic Forecasts

The design, or horizon, year of a project is the future year for which background traffic conditions are estimated. For the projects the size of the study project, the anticipated opening or completion year is suggested by the Institute of Transportation Engineers[3]. It is anticipated that the project will be completed within 24 months. Using this standard, the design year for this project is two years after completion of the traffic study, which is 2009.

However, there are a number of other development projects within and adjacent to the study area that will probably not be completed within this time frame. In order to consider the traffic generated by these projects, it was decided to use 2015 as the design year rather than 2009 noted above.

[3] Institute of Transportation Engineers, *Transportation and Land Development*, 2nd Edition, Washington, D.C., 2002, p. 3-13.

Background Traffic Growth

The *Maui Long Range Transportation Plan*[4] provides base year (1990) and future (2020) traffic projections for Piilani Highway and South Kihei Road. The closest station for which these projections were provided is south of Lipoa Street. Average annual growth rates were calculated using the data provided. These calculations are shown in Table 6 and 7.

Table 6 Calculation of Background Growth Rate Along Piilani Highway[1]

	AM Peak Hour		PM Peak Hour	
Year	Northbound	Southbound	Northbound	Southbound
1990	678	601	816	700
2020	1,139	841	1,482	1,342
Average Annual Growth Rate [2]	1.74%	1.13%	2.01%	2.19%

Notes:
1. Source: Kaku & Associates, *Maui Long Range Land Transportation Study*, February 1997, p. 67
2. Compounded growth rate.

Table 7 Calculation of Background Growth Rate Along S. Kihei Road[1]

	AM Peak Hour		PM Peak Hour	
Year	Northbound	Southbound	Northbound	Southbound
1990	425	243	478	552
2020	735	657	818	843
Average Annual Growth Rate [2]	1.84%	3.37%	1.81%	1.42%

Notes:
1. Source: Kaku & Associates, *Maui Long Range Land Transportation Study*, February 1997, p. 67
2. Compounded growth rate.

These average annual growth rates were used to estimate the background growth between 2006 and 2015, which is the design year for this project. The growth factor was calculated using the following formula:

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

where F = Growth Factor
i = Average annual growth rate
n = Growth period, or 9 years

[4] Kaku Associates, *Maui Long Range Land Transportation Plan*, October 1997

Separate growth factors were calculated for northbound and southbound directions and morning and afternoon peak hours. The growth factor was applied to the northbound and southbound movements along Piilani Highway and South Kihei Road.

Related Projects

The second component in estimating background traffic volumes is traffic resulting from related projects. Related projects are defined as those projects in the immediate vicinity of the study project that would significantly impact traffic in the study area. Related projects are typically projects that are under construction or have been approved for construction, but often includes adjacent vacant parcels that have a high probability of being developed within the design period. 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 8. The locations of these projects are shown on Figure 5. Traffic from these projects was assigned to the appropriate traffic movements at the study intersections.

In addition to the development projects listed, the following are roadway improvements that will be completed before the 2015:

1. The intersection of Piilani Highway at Kealii Alanui will be signalized.

2. The eastbound approach of Kealii Alanui at Piilani Highway will be modified to provide a second eastbound to northbound left turn lane.

3. The North-South Collector Road will be constructed between the project and Auhana Road.

Table 8 Trip Generation Summary of Related Projects

	Related Project	Description	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
A	NOT USED		0	0	0	0	0	0
B	Cove Beach Condos	32 Multi-Family Units	21	5	26	27	15	42
C	Ke Alii Villas	160 Multi-Family Units	98	26	124	108	60	168
D	Kalama Heights	40 Senior Units	23	12	35	27	15	42
E	Ke Alii SF Subdivision	90 Single Family Units Plus 45 Ohana Units	89	21	110	116	75	191
F	Aloha Village	78 Multi-Family Units	34	6	40	42	27	69
G	Liloa Village	65 Family + 65 Ohana	19	64	83	68	38	106
H	Azeka Retail	Retail & Offices	145	74	219	190	356	546
I	Kai Ani Village	100 Condos + 10,000 Retail	24	54	78	49	30	79
J	Paradise Ridge	32 MF Units	3	11	14	11	6	17
K	Maui Dive Shop	18 Apartments	3	7	10	7	5	12
L	Kamaole Homesteads	7SF + 7 Ohana	2	7	9	7	4	11
M	Kihei Farms Subdivision	12 SF + 12 Ohana	3	12	15	13	6	19
N	South Maui Regional Park		22	19	41	78	159	237
O	Hale Mahalou	113 Senior Housing Units	4	5	9	8	5	13
P	Kalama Hills	12 SF + 12 Ohana	3	11	14	12	6	18
Q	Kamaole Apts & Condos	96 Condos & 32 Timeshares	28	46	74	50	37	87
R	NOT USED				0			0
S	Pacific Plaza	Retail and Office	67	21	88	22	59	81
		TOTALS	588	401	989	835	903	1,738

2015 Background Traffic Projections

2015 background traffic projections were calculated by expanding existing traffic volumes by the appropriate growth rates and then superimposing traffic generated by related projects. The resulting 2015 background peak hour traffic volumes are shown in Figures 6 and 7.

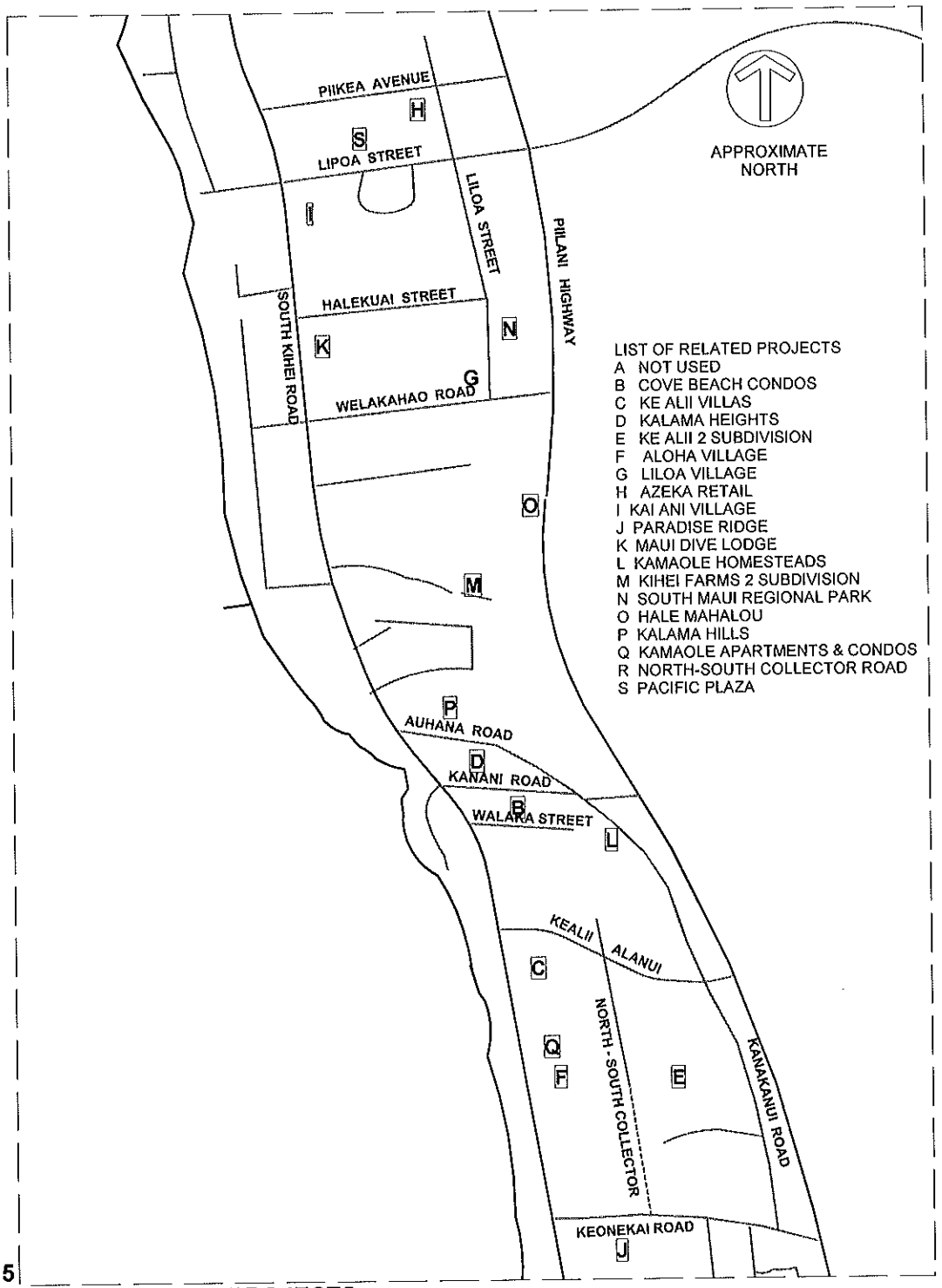

Figure 5
LOCATIONS OF RELATED PROJECTS

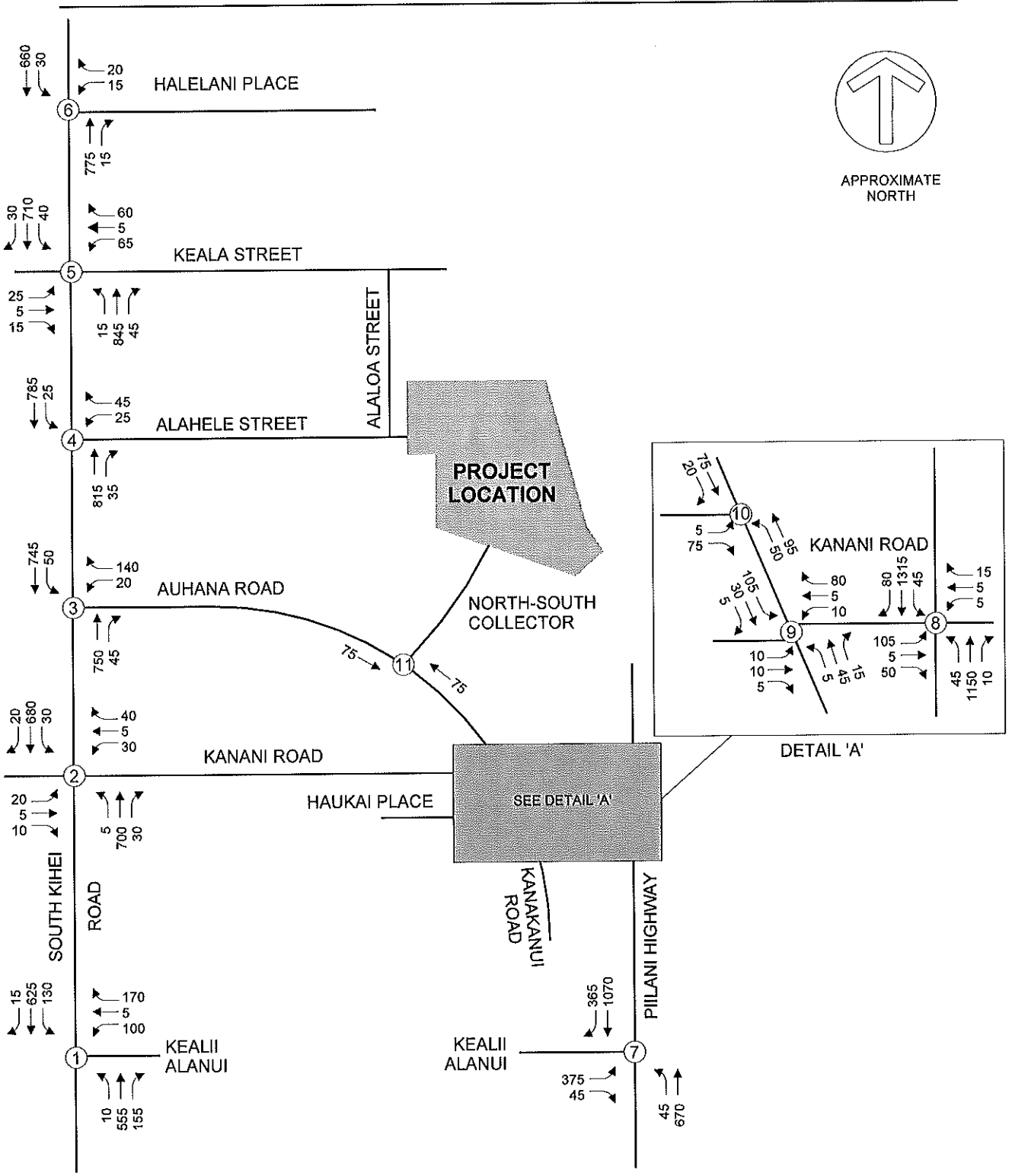

Figure 6
2015 BACKGROUND AM PEAK HOUR TRAFFIC PROJECTIONS

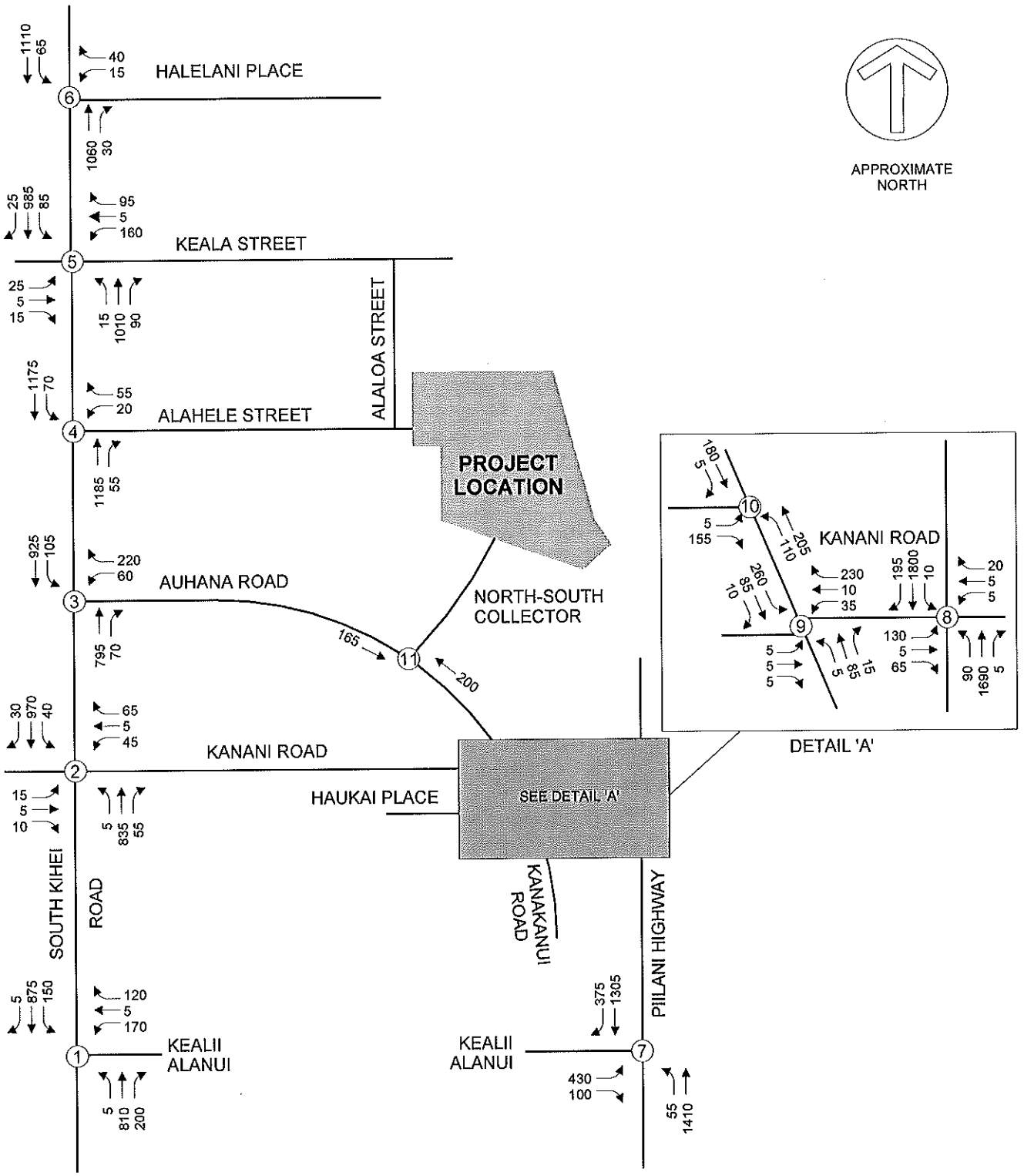

Figure 7
2015 BACKGROUND PM PEAK HOUR TRAFFIC PROJECTIONS

4. PROJECT-RELATED TRAFFIC CHARACTERISTICS

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

Project Trip Generation

Future traffic volumes generated by the project were estimated using the procedures described in the *Trip Generation Handbook*.[5] This method uses trip generation rates to estimate the number of trips that a proposed project will generate during the morning and afternoon peak hours.

The single-family portion of the project will consist of 48 single-family units. Single-family detached housing is defined by the Institute of Transportation Engineers as follows:

> *Single-family detached housing includes all single-family detached homes on individual lots. A typical site surveyed is a suburban subdivision.*[6]

[5] Institute of Transportation Engineers, *Trip Generation Handbook*, Washington, D.C., 1998, p. 7-12

[6] Institute of Transportation Engineers, *Trip Generation*, Washington, D.C., 1997, p. 262

In addition to the single-family units, 100% of the units may have ohana units. Since there are no trip generation rates for ohana units in *Trip Generation*, trips generated by the ohana units were estimated using trip generation rates for apartments. These rates most likely result in an overestimation of the traffic from these units as some ohana units may be used by family members and some may be rented as an apartment. Use of the trip rates for apartments should result is conservative conclusions.

The trip generation analysis is 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 62 trips during the morning peak hour, 17 inbound and 45 outbound. During the afternoon peak hour, this phase will generate 50 inbound and 29 outbound trips for a total of 79 trips.

Table 9 Trip Generation Analysis

Period & Direction		Single Family Units			Ohana (Apartment) Units			Total Trips
		Trips per Unit or Percent	Units	Trips	Trips per Unit or Percent	Units	Trips	
AM Peak Hour	Total	0.77	48	37	0.55	48	26	63
	Inbound	26%		10	29%		8	18
	Outbound	74%		27	71%		18	45
PM Peak Hour	Total	1.02		49	0.67		32	81
	Inbound	64%		31	61%		20	51
	Outbound	36%		18	39%		12	30

The Institute of Transportation Engineers recommends that a traffic impact study should be performed if, in lieu of another locally preferred criterion, development generates an additional 100 vehicle trips in the peak direction (inbound or outbound) during the site's peak hour.[7] Based on the criterion, a traffic impact study is not warranted. To date, the County of Maui has not established criteria for projects within its jurisdiction.

[7] Institute of Transportation, *Traffic Access and Impact Studies for Site Development, A Recommended Practice*, 1991, page 5.

Trip Distribution and Assignments

The project generated traffic was distributed along the logical approach and departure routes, considering the adjacent land uses and existing turning movements at the study intersections. The distribution plan was then used to assign project generated traffic to the appropriate traffic movements at the study intersections. The resulting peak hour trip assignments are shown in Figures 8 and 9.

2015 Background Plus Project Projections

Background plus project traffic conditions are defined as 2015 background traffic conditions plus project related traffic. The incremental difference between background and background plus project is the traffic impact of the project under study.

2015 background plus project traffic volumes with the project were estimated by superimposing the peak hourly traffic generated by the proposed project on the 2015 background peak hour traffic volumes presented in Chapter 3. The traffic projections for 2015 background plus project conditions are shown on Figures 10 and 11.

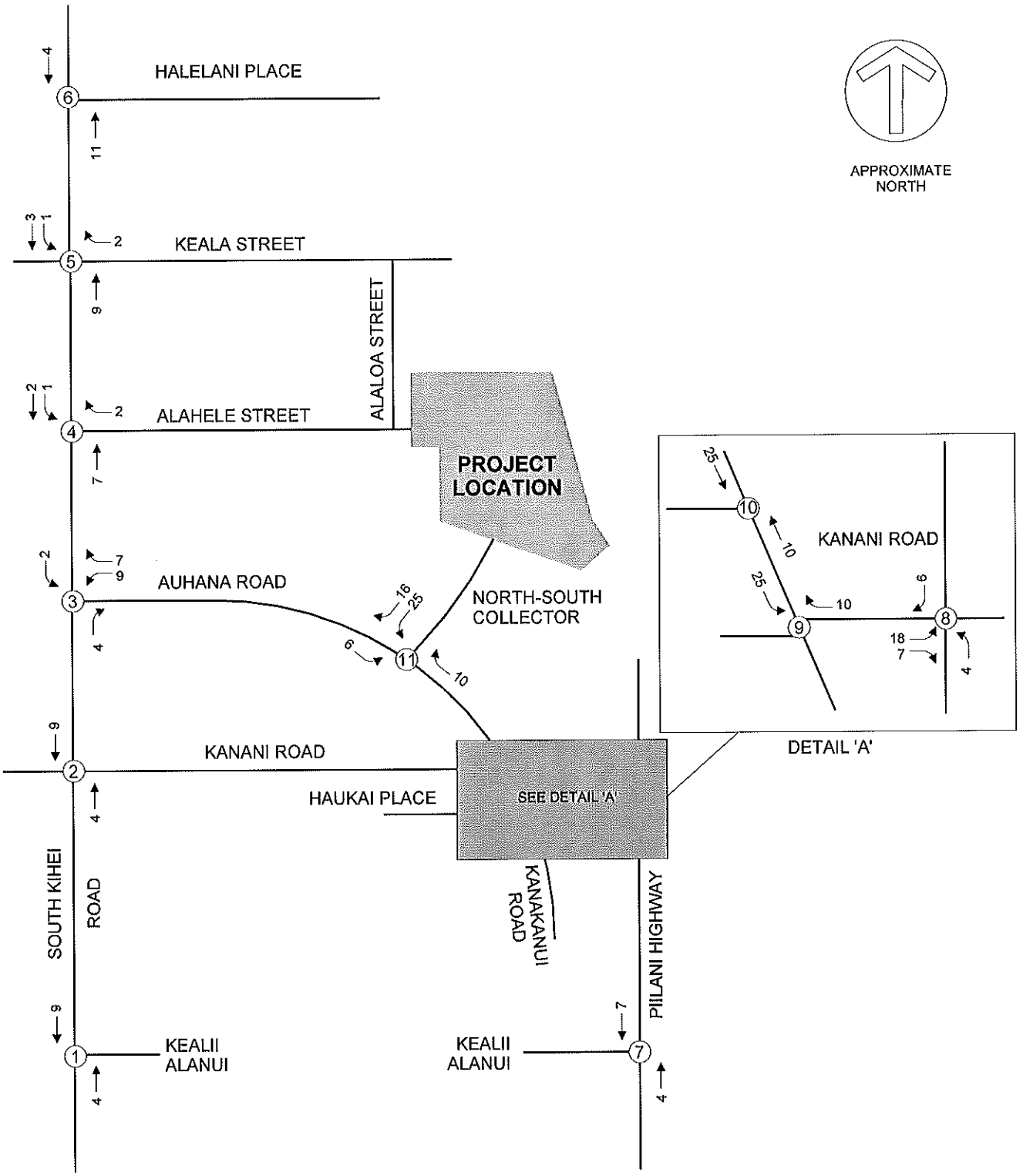

Figure 8
AM PROJECT TRIPS ASSIGNMENTS

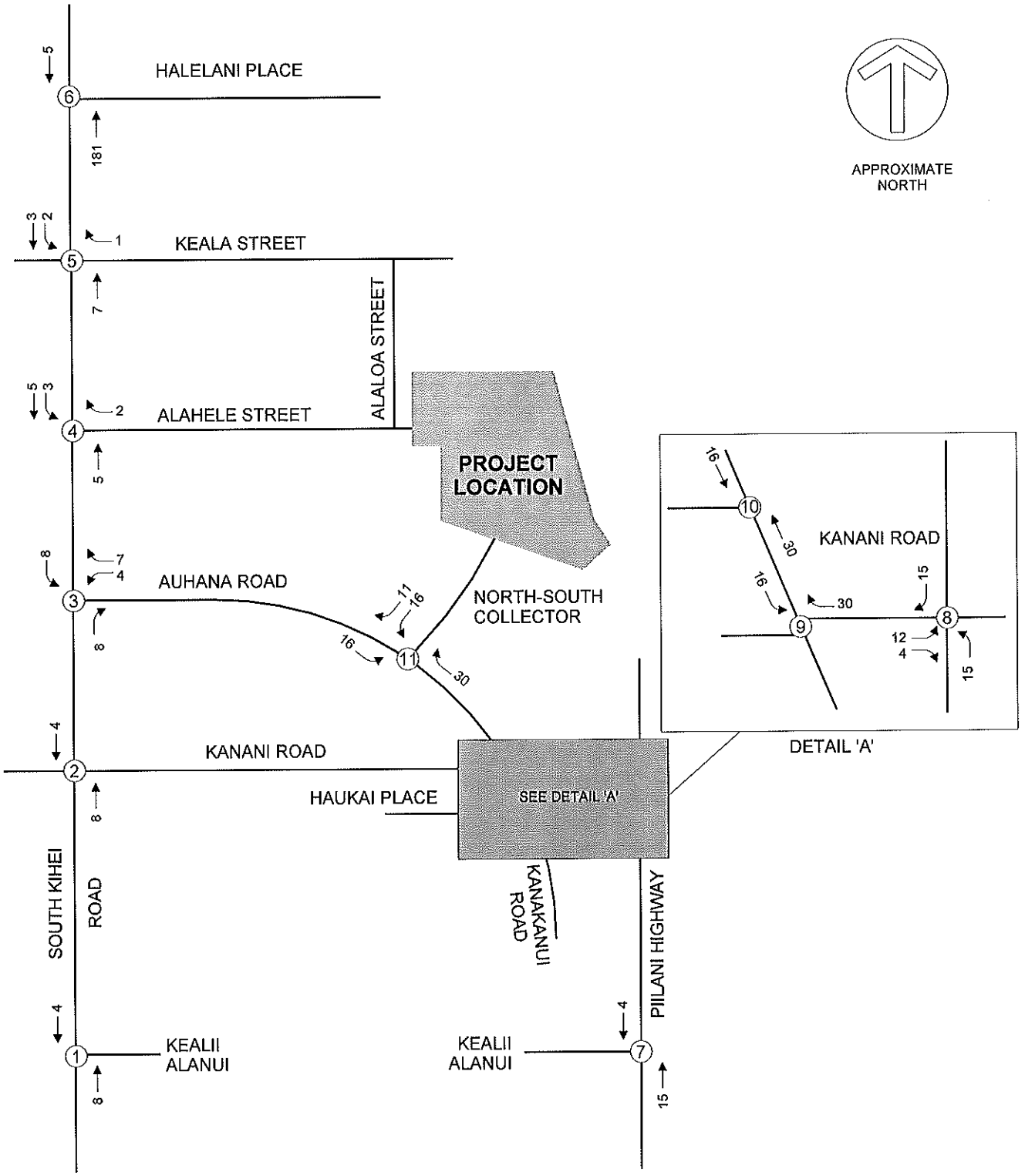

Figure 9
PM PROJECT TRIPS ASSIGNMENTS

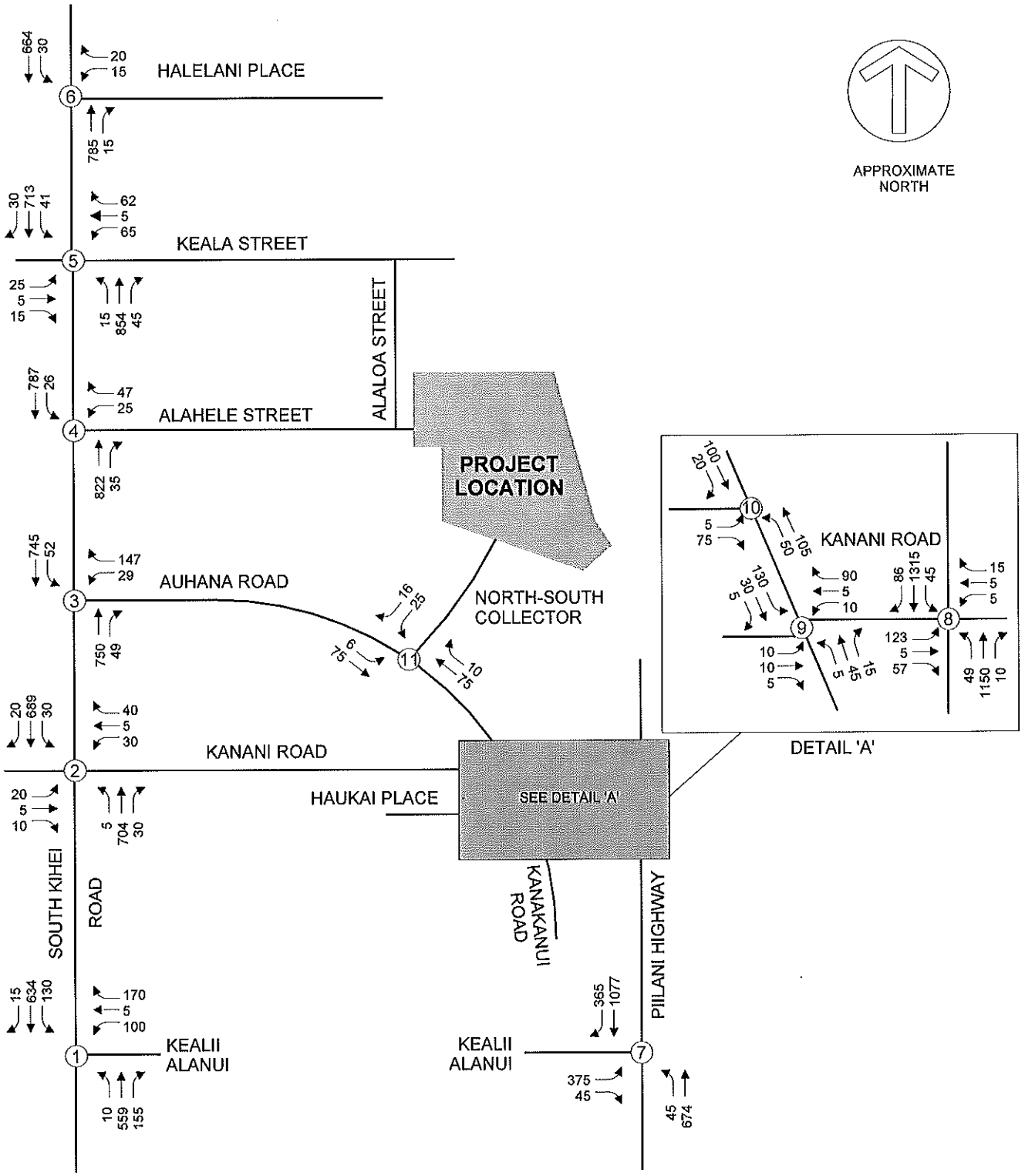

Figure 10
2015 BACKGROUND PLUS PROJECT AM PEAK HOUR TRAFFIC PROJECTIONS

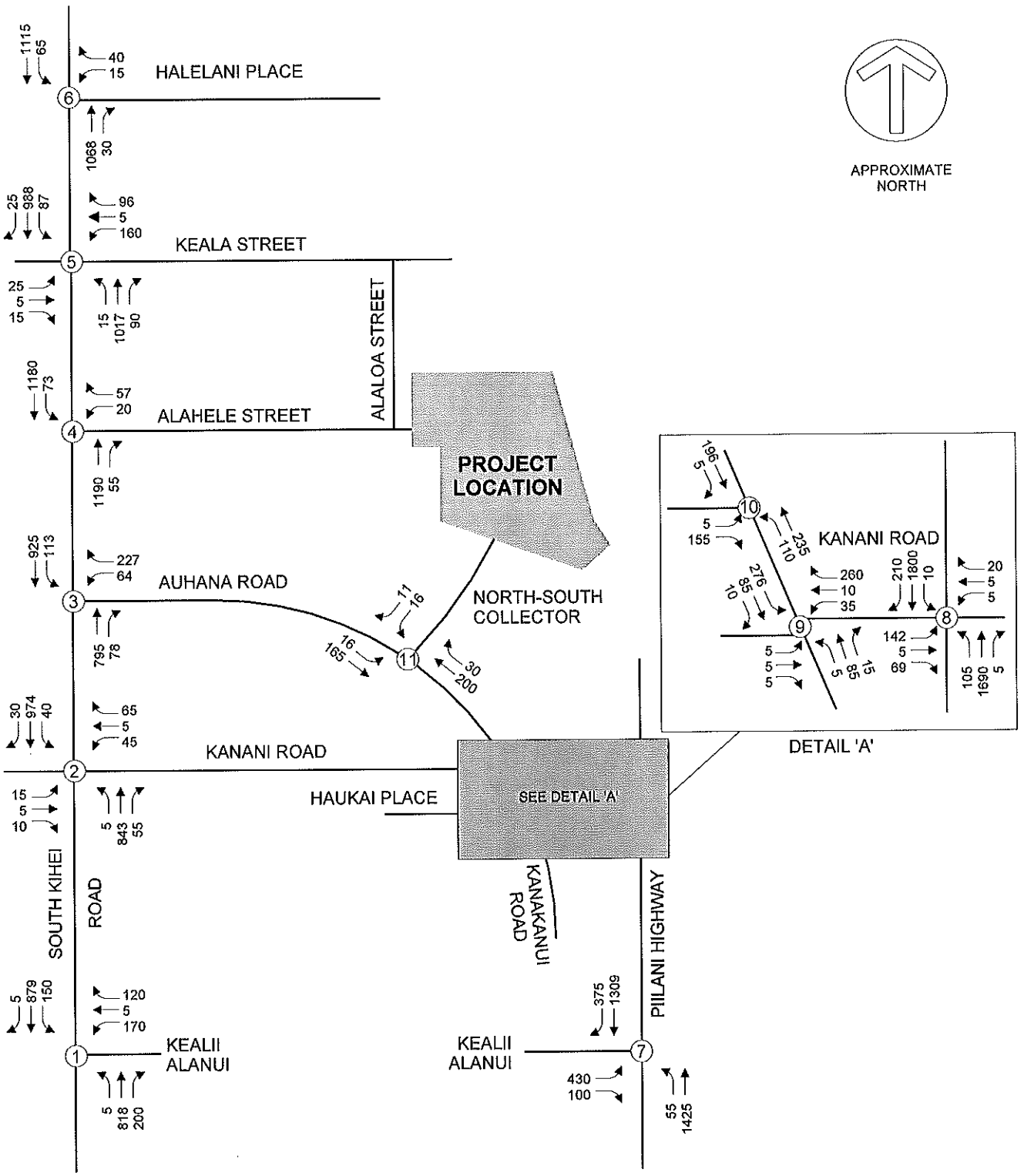

Figure 11
2015 BACKGROUND PLUS PROJECT PM PEAK HOUR TRAFFIC PROJECTIONS

5. TRAFFIC IMPACT ASSESSMENT

The purpose of this chapter is to summarize the results of the level-of-service analysis of future conditions with the proposed project. This analysis identifies any potential traffic operational deficiencies. If deficiencies are anticipated, mitigation measures are identified and assessed.

The impact of the project was assessed by analyzing the changes in traffic volumes and levels-of-service at the study intersections.

Changes in Total Intersection Volumes

An analysis of the project's share of 2015 background plus project intersection approach volumes at the study intersections is summarized in Table 10. The table summarizes the project's share of total 2015 peak hour approach volumes at each intersection. Also shown are the percentage of 2015 background plus project traffic that is the result of background growth and traffic generated by related projects.

An analysis of the project's pro rata share of the increase of traffic volumes between 2005 and 2015 summarized in Table 11. This table summarizes the growth between 2005 and 2015 and indicates the percentage of growth resulting from background growth and related projects and the percentage growth resulting from project generated traffic.

Table 10 Analysis of Project's Share of Total Intersection Approach Volumes (1)

Intersection	Period	Existing	2015 Background	2015 Background Plus Project	Background Growth		Project Traffic	
					Trips	Percent of Total Traffic (2)	Trips	Percent of Total Traffic (3)
S. Kihei Road at Kealii Alanui	AM	1310	1765	1778	455	25.6%	13	0.7%
	PM	1790	2340	2352	550	23.4%	12	0.5%
S. Kihei Road at Kanani Road	AM	1105	1575	1588	470	29.6%	13	0.8%
	PM	1520	2080	2092	560	26.8%	12	0.6%
S. Kihei Road at Auhana Road	AM	1280	1750	1772	470	26.5%	22	1.2%
	PM	1635	2175	2202	540	24.5%	27	1.2%
S. Kihei Road at Alahele Street	AM	1275	1730	1742	455	26.1%	12	0.7%
	PM	2035	2560	2575	525	20.4%	15	0.6%
S. Kihei Road at Keala Street	AM	1400	1860	1875	460	24.5%	15	0.8%
	PM	1980	2515	2528	535	21.2%	13	0.5%
S. Kihei Road at Halelani Place	AM	1050	1515	1530	465	30.4%	15	1.0%
	PM	1785	2320	2332	535	22.9%	12	0.5%
Piilani Highway at Kealii Alanui	AM	2140	2570	2581	430	16.7%	11	0.4%
	PM	2900	3675	3694	775	21.0%	19	0.5%
Piilani Highway at Kanani Road	AM	2405	2830	2860	425	14.9%	30	1.0%
	PM	3220	4020	4066	800	19.7%	46	1.1%
Kanakanui Road at Kanani Road	AM	245	325	360	80	22.2%	35	9.7%
	PM	780	875	921	95	10.3%	46	5.0%
Kanani Road at Auhana Road	AM	240	320	355	80	22.5%	35	9.9%
	PM	580	660	706	80	11.3%	46	6.5%

Notes:
(1) Volumes shown are total intersection approach volumes or projections.
(2) Percentage of total 2015 background plus project traffic.

Table 11 Analysis of Project's Pro Rata Share of Intersection Traffic Growth (1)

Intersection	Period	Existing	2015 Background	Background Plus Project	Background Growth (2)		Project Trips (3)	
					Volume	% of 2005 to 2015 Growth	Volume (4)	% of 2005 to 2015 Growth
S. Kihei Road at Kealii Alanui	AM	1310	1765	1778	455	97.2%	13	2.8%
	PM	1790	2340	2352	550	97.9%	12	2.1%
S. Kihei Road at Kanani Road	AM	1105	1575	1588	470	97.3%	13	2.7%
	PM	1520	2080	2092	560	97.9%	12	2.1%
S. Kihei Road at Auhana Road	AM	1280	1750	1772	470	95.5%	22	4.5%
	PM	1635	2175	2202	540	95.2%	27	4.8%
S. Kihei Road at Alahele Street	AM	1275	1730	1742	455	97.4%	12	2.6%
	PM	2035	2560	2575	525	97.2%	15	2.8%
S. Kihei Road at Keala Street	AM	1400	1860	1875	460	96.8%	15	3.2%
	PM	1980	2515	2528	535	97.6%	13	2.4%
S. Kihei Road at Halelani Place	AM	1050	1515	1530	465	96.9%	15	3.1%
	PM	1785	2320	2332	535	97.8%	12	2.2%
Piilani Highway at Kealii Alanui	AM	2140	2570	2581	430	97.5%	11	2.5%
	PM	2900	3675	3694	775	97.6%	19	2.4%
Piilani Highway at Kanani Road	AM	2405	2830	2860	425	93.4%	30	6.6%
	PM	3220	4020	4066	800	94.6%	46	5.4%
Kanakanui Road at Kanani Road	AM	245	325	360	80	69.6%	35	30.4%
	PM	780	875	921	95	67.4%	46	32.6%
Kanani Road at Auhana Road	AM	240	320	355	80	69.6%	35	30.4%
	PM	580	660	706	80	63.5%	46	36.5%

Notes:
(1) Volumes shown are total intersection approach volumes or projections.
(2) Background versus existing.
(3) Background plus project versus background.
(4) Project generated traffic

Methodology for Level-of-Service Analysis

1. As previously noted, State Department of Transportation (Honolulu) has requested the Synchro software package be used to performed level-of-service analyses. Accordingly, Synchro 6 was used to analyze the signalized intersections. The Highway Capacity Software was used to analyze the unsignalized intersections. Both software packages are based on the *Highway Capacity Manual.*

2. Neither Synchro nor the Highway Capacity Software results report a volume-to-capacity ratio for unsignalized intersections or results for the overall unsignalized intersection.

3. We have used the Institute of Transportation Engineers standard that a Level-of-Service D is the minimum acceptable level-of-service and that the criteria is applicable to the overall intersection and the major movements on the major roadways rather than each controlled lane group. If project generated traffic causes the level-of-service to drop below Level-of-Service D, then mitigation should be provided to improve the level-of-service to Level-of-Service C or better. Minor movements, such a left turns and side street approaches may operate at Level-of-Service E for short periods. "Although this level is generally considered undesirable for a signalized intersection, Level-of-Service E is sometimes tolerated for minor movements such as left turns when there are no feasible mitigating measures or if it helps maintain the main through movements at acceptable levels-of-service."[8]

4. As the *Highway Capacity Manual* defines level-of-service by delay, we have used the same definitions.

Results of Level-of-Service Analysis

Since a traffic impact analysis is not warranted based on criteria established by the Institute of Transportation Engineers, a level-of-service analysis was performed for 2015 conditions with project generated traffic to identify potential problem locations where improvement may be necessary.

The level-of-service analysis for 2015 conditions was performed using the following assumptions:

1. All intersection configurations are the same as existing.

2. Level-of-Service D is the minimum level-of-service acceptable. Minor movements, such as left turns and side street approaches may operate at Level-of-Service E or F so that the major movements operate at Level-of-Service D, or better.

3. The roadway improvements described in Chapter 3 have been completed. These improvements include the following:

[8] M&E Pacific, Inc. *Traffic Impact Analysis Report for Lihue Civic Center Master Plan*, October 2005, p. 25

a. Traffic signals at the intersection of South Kihei Road at Kanani Road

b. Widening of the eastbound approach of Kealii Alanui at Piilani Highway to provide a second eastbound to northbound left turn lane

c. Completion of the North-South Collector Road between Kealii Alanui and Keonekai Road.

Signalized Intersections

The results of the level-of-service analysis for the signalized intersection is shown in Tables 12 through 16. Shown in the table are volume-to-capacity ratio, control delay per vehicle and Levels-of-Service. As shown, all traffic movements will operate at Level-of-Service D or better during both peak periods for background and background plus project conditions. The conclusion is that all the traffic movements will operate at an acceptable level-of-service for background plus project traffic conditions. It should also be noted that there are no changes in the level-of-service of any lane group as a result of project generated traffic except the southbound approach of Piilani Highway at Kanani Road. During the morning peak hour the level-of-service changes from Level-of-Service A to Level-of-Service B and during the morning peak hour the level-of-service changes from Level-of-Service C to Level-of-Service D.

Table 12 2015 Levels-of-Service - South Kihei Road at Kealii Alanui

Intersection and Movement	Without Project			With Project			Change	
	V/C	Delay [1]	LOS [2]	V/C	Delay	LOS	V/C	Delay
AM Peak Hour	***0.55***	***14.8***	***B***	***0.57***	***15.1***	***B***	***0.02***	***0.3***
Westbound Left & Thru	0.30	26.8	C	0.30	26.8	C	0.00	0.0
Westbound Right	0.12	24.5	C	0.12	24.5	C	0.00	0.0
Northbound Left	0.03	7.5	A	0.03	7.9	A	0.00	0.4
Northbound Thru	0.59	13.9	B	0.60	14.0	B	0.01	0.1
Northbound Right	0.11	8.4	A	0.11	8.4	A	0.00	0.0
Southbound Left	0.32	8.6	A	0.32	8.7	A	0.00	0.1
Southbound Thru & Right	0.65	14.0	B	0.68	14.7	B	0.03	0.7
PM Peak Hour	***0.80***	***24.1***	***C***	***0.81***	***24.6***	***C***	***0.01***	***0.5***
Westbound Left & Thru	0.50	30.7	C	0.50	30.7	C	0.00	0.0
Westbound Right	0.08	24.1	C	0.08	24.1	C	0.00	0.0
Northbound Left	0.03	12.4	B	0.03	12.5	B	0.00	0.1
Northbound Thru	0.86	24.3	C	0.87	25.1	C	0.01	0.8
Northbound Right	0.14	8.7	A	0.14	8.7	A	0.00	0.0
Southbound Left	0.66	26.6	C	0.68	27.9	C	0.02	1.3
Southbound Thru & Right	0.90	25.6	C	0.90	26.0	C	0.00	0.4

NOTES:
(1) Delay 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.

Table 13 2015 Levels-of-Service - South Kihei Road at Kanani Road

Intersection and Movement	Without Project			With Project			Change	
	V/C	Delay [1]	LOS [2]	V/C	Delay	LOS	V/C	Delay
AM Peak Hour	***0.52***	***8.0***	***A***	***0.52***	***8.1***	***A***	***0.00***	***0.1***
Eastbound Left, Thru & Right	0.25	42.1	D	0.25	42.1	D	0.00	0.0
Westbound Left & Thru	0.32	42.2	D	0.32	42.6	D	0.00	0.4
Westbound Right	0.03	39.5	D	0.03	40.4	D	0.00	0.9
Northbound Left	0.01	2.8	A	0.01	2.8	A	0.00	0.0
Northbound Thru & Right	0.56	6.1	A	0.56	6.1	A	0.00	0.0
Southbound Left	0.07	3.0	A	0.07	3.0	A	0.00	0.0
Southbound Thru & Right	0.52	5.1	A	0.53	5.2	A	0.01	0.1
PM Peak Hour	***0.73***	***11.6***	***B***	***0.73***	***11.7***	***B***	***0.00***	***0.1***
Eastbound Left, Thru & Right	0.16	37.1	D	0.16	37.1	D	0.00	0.0
Westbound Left & Thru	0.44	40.0	D	0.44	40.1	D	0.00	0.1
Westbound Right	0.04	36.5	D	0.04	36.5	D	0.00	0.0
Northbound Left	0.02	6.7	A	0.02	6.8	A	0.00	0.1
Northbound Thru & Right	0.71	9.3	A	0.71	9.5	A	0.00	0.2
Southbound Left	0.13	5.8	A	0.13	5.9	A	0.00	0.1
Southbound Thru & Right	0.77	10.2	B	0.77	10.3	A	0.00	0.1

NOTES:
(1) Delay 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.

Table 14 2015 Levels-of-Service - South Kihei Road at Keala Street

Intersection and Movement	Without Project			With Project			Change	
	V/C	Delay [1]	LOS [2]	V/C	Delay	LOS	V/C	Delay
AM Peak Hour	***0.70***	***11.5***	***B***	***0.70***	***11.6***	***B***	***0.00***	***0.1***
Eastbound Left, Thru & Right	0.21	38.4	D	0.21	38.4	D	0.00	0.0
Westbound left & Thru	0.46	40.9	D	0.46	40.9	D	0.00	0.0
Westbound Right	0.04	37.1	D	0.04	37.1	D	0.00	0.0
Northbound Left	0.04	4.2	A	0.04	4.2	A	0.00	0.0
Northbound Thru & Right	0.71	10.3	B	0.72	10.5	B	0.01	0.2
Southbound Left	0.14	6.8	A	0.15	7.0	A	0.01	0.2
Southbound Thru & Right	0.58	6.9	A	0.58	7.0	A	0.00	0.1
PM Peak Hour	***0.97***	***28.8***	***C***	***0.97***	***29.4***	***C***	***0.00***	***0.6***
Eastbound Left, Thru & Right	0.15	32.8	C	0.16	32.8	C	0.01	0.0
Westbound left & Thru	0.76	49.3	D	0.76	49.8	D	0.00	0.5
Westbound Right	0.06	32.1	C	0.07	32.1	C	0.01	0.0
Northbound Left	0.11	13.6	B	0.11	13.7	B	0.00	0.1
Northbound Thru & Right	0.97	34.2	C	0.98	35.2	D	0.01	1.0
Southbound Left	0.64	32.1	C	0.66	33.7	C	0.02	1.6
Southbound Thru & Right	0.86	19.0	B	0.87	19.1	B	0.01	0.1

NOTES:
(1) Delay 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.

Table 15 2015 Levels-of-Service - Piilani Highway at Kealii Alanui

Intersection and Movement	Without Project			With Project			Change	
	V/C	Delay [1]	LOS [2]	V/C	Delay	LOS	V/C	Delay
AM Peak Hour	***0.60***	***11.1***	***B***	***0.60***	***11.1***	***B***	***0.00***	***0.0***
Eastbound Left	0.58	22.1	C	0.58	22.1	C	0.00	0.0
Eastbound Right	0.03	18.5	B	0.03	18.5	B	0.00	0.0
Northbound Left	0.46	29.5	C	0.46	29.5	C	0.00	0.0
Northbound Thru	0.31	4.6	A	0.31	4.7	A	0.00	0.1
Southbound Thru	0.62	11.2	B	0.63	11.3	B	0.01	0.1
Southbound Right	0.25	8.2	A	0.25	8.2	A	0.00	0.0
PM Peak Hour	***0.75***	***12.8***	***B***	***0.75***	***12.9***	***B***	***0.00***	***0.1***
Eastbound Left	0.62	22.3	C	0.62	22.3	C	0.00	0.0
Eastbound Right	0.07	18.3	B	0.07	18.3	B	0.00	0.0
Northbound Left	0.57	33.6	C	0.57	33.6	C	0.00	0.0
Northbound Thru	0.67	8.0	A	0.68	8.2	A	0.01	0.2
Southbound Thru	0.77	14.7	B	0.78	14.8	B	0.01	0.1
Southbound Right	0.26	8.6	A	0.26	8.6	A	0.00	0.0

NOTES:
(1) Delay 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.

Table 16 2015 Levels-of-Service - Piilani Highway at Kanani Road

Intersection and Movement	Without Project			With Project			Change	
	V/C	Delay [1]	LOS [2]	V/C	Delay	LOS	V/C	Delay
AM Peak Hour	***0.63***	***12.2***	***B***	***0.65***	***13.5***	***B***	***0.02***	***1.3***
Eastbound Left & Thru	0.71	53.1	D	0.71	53.1	D	0.00	0.0
Eastbound Right	0.03	36.4	D	0.04	36.4	D	0.01	0.0
Westbound Left, Thru & Right	0.05	36.5	D	0.05	36.5	D	0.00	0.0
Northbound Left	0.46	45.9	D	0.48	45.9	D	0.02	0.0
Northbound Thru & Right	0.51	7.3	A	0.53	8.4	A	0.02	1.1
Southbound Left	0.59	54.9	D	0.59	54.5	D	0.00	-0.4
Southbound Thru & Right	0.63	9.3	A	0.65	10.8	B	0.02	1.5
PM Peak Hour	***0.95***	***25.0***	***C***	***0.95***	***28.8***	***A***	***0.00***	***3.8***
Eastbound Left & Thru	0.73	50.4	D	0.77	52.5	D	0.04	2.1
Eastbound Right	0.04	33.5	C	0.05	33.5	C	0.01	0.0
Westbound Left, Thru & Right	0.05	33.6	C	0.05	33.6	C	0.00	0.0
Northbound Left	0.59	45.5	D	0.67	49.3	D	0.08	3.8
Northbound Thru & Right	0.74	10.4	B	0.75	20.9	B	0.01	10.5
Southbound Left	0.41	54.6	D	0.41	54.6	D	0.00	0.0
Southbound Thru & Right	0.99	34.1	C	1.01	40.7	D	0.02	6.6

NOTES:
(1) Delay 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.

Unsignalized Intersections

The results of the level-of-service analysis for unsignalized intersections are summarized in Table 17. Shown are the average vehicle delays and levels-of-service for each controlled lane group or traffic movement. Volume-to-capacity ratios are not calculated for unsignalized intersections.

All levels-of-service are the same without and with the proposed project. There is no change of level-of-service of any controlled lane group or movements as a result of project generated traffic. All controlled movements operate at Level-of-Service D, or better, except the following movements, which operate at Level-of-Service E or F:

1. The left turn from westbound Auhana Road to southbound South Kihei Road during the morning and afternoon peak hours.

2. The left turn from westbound Alahele Street to southbound South Kihei Road during the morning and afternoon peak hours.

3. The left and right turn from westbound Halelani Place at South Kihei Road during the afternoon peak hour.

The above conditions are typical for left turns from side streets along South Kihei Road. When possible, this has been mitigated by installing a left turn refuge lane. This is not feasible at these intersections because of the limited distance between adjacent intersections.

Table 17 2015 Levels-of-Service - Unsignalized Intersections

	AM Peak Hour				PM Peak Hour			
	Without Project		With Project		Without Project		With Project	
Intersection and Movement	Delay [1]	LOS [2]	Delay	LOS	Delay	LOS	Delay	LOS
South Kihei Road at Auhana Road								
Southbound Left	9.8	A	9.8	A	10.6	B	10.7	B
Westbound Left	53.3	F	59.5	F	321.9	F	375.5	F
Westbound Right	20.2	C	20.7	C	32.6	D	34.3	D
South Kihei Road at Alahele Street								
Southbound Left	9.9	A	9.9	A	12.7	B	12.8	B
Westbound Left	58.9	F	60.5	F	423.7	F	454.2	F
Westbound Right	16.8	C	17.0	C	29.0	D	29.8	D
South Kihei Road at Halelani Place								
Southbound Left	9.6	B	9.7	A	11.6	B	11.6	B
Westbound Left & Right	27.5	D	28.2	D	103.8	F	103.8	F
Kanakanui Road at Kanani Road								
Northbound Left, Thru & Right	7.3	A	7.3	A	7.4	A	7.4	A
Southbound Left, Thru & Right	7.5	A	7.5	A	7.9	A	8.0	A
Westbound Left, Thru & Right	9.3	A	9.5	A	13.9	B	14.6	B
Eastbound Left. Thru & Right	11.4	B	12.0	B	18.4	C	19.9	C
Auhana Road at Kanani Road								
Northbound Left & Thru	7.5	A	7.5	A	7.8	A	7.6	A
Eastbound Left & Right	9.1	A	9.3	A	10.5	B	10.6	b
Auhana Road at North-South Collector Road								
Eastbound Left & Thru			7.4	A			7.7	A
Southbound Left & Right			9.3	A			10.7	B

NOTES:
(1) Delay is average vehicle delay per vehicle in seconds.
(2) LOS denotes Level-of-Service calculated using the operations method described in *Highway Capacity Manual*. Level-of-Service is base on average vehicle delay for unsignalized intersections.

Mitigation

No mitigation measure are required to mitigate the traffic impacts of the proposed project as the findings of the level-of-service analysis is that the traffic impacts of the project are minimal. All controlled movements at the signalized intersections will operate at Level-of-Service D, or better, without and with project generated traffic.

At the unsignalized intersections along South Kihei Road, left turns from the side streets will operate at Level-of-Service F without and with the project. With the exception of the left turns from westbound Auhana Road to southbound South Kihei Road, all changes in delay are 12% or less. At the intersection of Auhana Road at South Kihei Road, the change in delay is 17%. It should be noted that this projection does not consider the impacts of the future traffic signal at the intersection of South Kihei Road at Kanani Road. When this traffic signal is installed, a significant number of left turns will be diverted from Auhana Road to Kanani Road. Our experience is that this number cannot be reliably estimated. It is more practical to perform new traffic counts several months after the traffic signal is installed. This was done after the installation of the traffic signal at the intersection of Piilani Highway at Kanani Road.

Lastly, it should be noted that a portion of the North-South Collector Road will be constructed as part of the project. The section to be constructed consists of the section through the project and the connection between the project and Auhana Road.

APPENDIX K

PROPERTY OWNERS WITHIN 500 FEET OF SUBJECT PROPERTY INCLUDING MAP

Alahele Subdivision

May 2007

Owner's within 500 Ft

CHRIS HART & PARTNERS, INC.

TMK	CPR	OWNER	C/O	Street Address	Town / Zip
222002054	0	HALEAKALA RANCH COMPANY		529 KEALALOA AVE	MAKAWAO HI 96768
222002054	0	PACIFIC RIM LAND INC		381 HUKU LI'I PL	KIHEI HI 96753
222002069	0	HALEAKALA RANCH COMPANY		529 KEALALOA AVE	MAKAWAO HI 96768
222002069	0	PACIFIC RIM LAND INC		381 HUKU LI'I PL	KIHEI HI 96753
239003004	0	KONG,KENNETH Y S TRUST		296 S KAULAWAHINE ST	KAHULUI HI 96732
239003050	0	GORCONIO B MANUEL ETAL		2309 HOONANEA ST	HONOLULU HI 96822
239003052	0	PARTIN,GAY GASTON TRUST	PARTIN,GAY GASTON TRS	P O BOX 2194	KIHEI HI 96753
239003053	0	REID,JOY M TRUST	C/O CLARKE,JENNIFER A	1932 ALALOA RD	KIHEI HI 96753
239003054	0	PACKA,MIKE		P O BOX 959 PMB 727	KIHEI HI 96753
239003055	0	YITZCHAKI,MALCAH U S PROP TR	C/O MANOR SHADIAN	989 S KIHEI RD	KIHEI HI 96753
239003060	0	KONG, SANDRA L		757 ECKER COURT	CAMPBELL CA 95008
239003062	0	KONG,KENNETH Y S TRUST		296 S KAULAWAHINE ST	KAHULUI HI 96732
239003067	0	SOUZA,RONALD JAMES		120 ALAHELE PL	KIHEI HI 96753
239017025	0	H M FUJII LIMITED PTSP		820 OLOWALU	LAHAINA HI 96761
239017027	0	THOMPSON,TRUST	THOMPSON,JAMES R/SHELBY Y TRS	111 AUHANA RD	KIHEI HI 96753
239017028	0	AKINA,DOUGLAS W	DOUGLAS & SANDRA AKINA	P O BOX 933	KIHEI HI 96753
239017029	0	AKINA/KATO HOMES		CONDO MASTER	00000 0000
239017029	1	KATO,JAMES I		211 KAMALEI CIR	KAHULUI HI 96732
239017029	2	KATO FAMILY PARTNERSHIP		211 KAMALEI CIRCLE	KAHULUI HI 96732
239017030	0	155 AUHANA STREET CONDO - CONDO MASTER	155 AUHANA LLC	3525 LANIHOU PL	KIHEI HI 96753
239017030	1	155 AUHANA LLC	155 AUHANA LLC	3525 LANIHOU PL	KIHEI HI 96753
239017030	2	155 AUHANA LLC	155 AUHANA LLC	3525 LANIHOU PL	KIHEI HI 96753
239017030	3	155 AUHANA LLC	155 AUHANA LLC	3525 LANIHOU PL	KIHEI HI 96753
239017030	4	155 AUHANA LLC	155 AUHANA LLC	3525 LANIHOU PL	KIHEI HI 96753
239017030	5	155 AUHANA LLC	155 AUHANA LLC	3525 LANIHOU PL	KIHEI HI 96753
239017030	6	155 AUHANA LLC	155 AUHANA LLC	3525 LANIHOU PL	KIHEI HI 96753
239017030	7	155 AUHANA LLC	155 AUHANA LLC	3525 LANIHOU PL	KIHEI HI 96753
239017030	8	155 AUHANA LLC	155 AUHANA LLC	3525 LANIHOU PL	KIHEI HI 96753
239017030	9	155 AUHANA LLC	155 AUHANA LLC	3525 LANIHOU PL	KIHEI HI 96753
239017030	10	155 AUHANA LLC	155 AUHANA LLC	3525 LANIHOU PL	KIHEI HI 96753
239017031	0	NORQUIST,LLOYD - OVER 1.082 ACS		P O BOX 1393	KIHEI HI 96753
239017032	0	BERKITZ,BETINA REVC TR		P O BOX 597	KIHEI HI 96753
239017032	0	BERKITZ,LEONARD FAMILY TRUST	SWARTZ,VEIA B TTEE	P O BOX 1756	KIHEI HI 96753
239017032	0	SWARTZ,MATTHEW & VEIA FAMILY TRUST		P O BOX 1756	KIHEI HI 96753
239017033	0	CHURCH OF LATTER DAY STS	C/O LDS CHURCH, TAX DIVISION/RE 512-4190	50 E N TEMPLE ST 22ND FLR	SALT LAKE CITY UT 84150 3620
239017034	0	WILSHIRE DMK I LLC	C/O WILSHIRE DMK I, LLC	2001 WILSHIRE BLVD, SUITE 302	SANTA MONICA CA 90403
239017035	0	AKINA,DOUGLAS WAYNE		140 ALAHELE PL	KIHEI HI 96753
239017041	0	FUJII, WALLACE H ETAL		PO BOX 511	KAHULUI HI 96732
239017067	0	ELF,ROY A TRUST		PO BOX 625	KIHEI HI 96753
239017075	0	OSTERSTOCK,BRENT KERN		2024 PAULELE ST	KIHEI HI 96753
239017076	0	SMITH,JACK LAWRENCE JR		12217 MALONE ST	LOS ANGELES CA 90066
239017077	0	SHEPHERD,FAMILY REV TRUST		565 MARGE WAY	SAN JOSE CA 95117
239017078	0	GRISSOM,RANDY WELDON		2008 PAULELE PL	KIHEI HI 96753
239017079	0	PEYTON,BRIAN J		124 TORO CANYON RD	CARPINTERIA CA 93013 3039
239017080	0	BRYANT,DAVID BARRETT		1994 PAULELE PL	KIHEI HI 96753
239017081	0	LANSMAN,PHILIP R	LANSMAN,PHILIP/TERESA	1990 PAULELE PL	KIHEI HI 96753
239017082	0	DONAGHY,JOSEPH N REV TR		1995 PAULELE PL	KIHEI HI 96753
239017083	0	WAINWRIGHT,DEREK ALAN		2001 PAULELE PL	KIHEI HI 96753
239017084	0	BAUMAN,FAMILY TRUST	BAUMAN,KENNETH W/ROSE M TRS	6517 ASHTON CT	GRANITE BAY CA 95746 6273
239017085	0	JANNECK,ALFRED		PO BOX 792080	PAIA HI 96779 2080
239017086	0	LATTEN,GLENN T LIVING TRUST	LATTEN,GLENN T RS	870 KUPULAU DR	KIHEI HI 96753
239017087	0	GOEBBERT,RANDALL C		2025 PAULELE PL	KIHEI HI 96753
239017088	0	OCAMPO,RENEE	C/O M/M JULIO OCAMPO	2039 PAULELE PL	KIHEI HI 96753
239017090	0	ARLIDGE,ROSS CHARLES		117 AUHANA RD	KIHEI HI 96753 8731
239030001	0	MIZUKI,NAMIE		P O BOX 592	KIHEI HI 96753
239030002	0	KASAHARA, CHARLES T		155 KEALA PLACE	KIHEI HI 96753

TMK	CPR	OWNER	C/O	Street Address	Town / Zip
239030003	0	BURGE,ETHEL HARUKO TRUST		149 KEALA PL	KIHEI HI 96753
239030004	0	ITO,DARREN Y	C/O KENNETH YAMAMOTO	306 W PAPA AVE	KAHULUI HI 96732
239030005	0	VIRTUE,CURTIS R		1887 ANAPA PL	KIHEI HI 96753
239030006	0	YAMAMOTO,STELLA S TRUST		306 W PAPA AVE	KAHULUI HI 96732
239030007	0	GARDINER,RYAN LEE	GARDINER,RYAN/DEANNA	1875 ANAPA ST	KIHEI HI 96753
239030008	0	NEAL,LINDA J		1869 ANAPA PL	KIHEI HI 96753
239030014	0	LYNCH,JOHN R REV TRUST		38665 FREMONT BLVD	FREMONT CA 94536
239030015	0	LAMOTHE,BLAIR		8117 NE 110TH PL	KIRKLAND WA 98034
239030016	0	LOPEZ, CHRISTOPHER B JR		366 HOKULANI ST	MAKAWAO HI 96768
239030017	0	COLEMAN, DONALD/PATRICIA A		1894 ANAPA PL	KIHEI HI 96753
239030018	0	NAGATA,NOREEN N TRUST		716 LALANI CIR	KAHULUI HI 96732
239030021	0	FARRELL,DAVID PATRICK		165 KEALA PL	KIHEI HI 96753 7806
239030038	0	DUARTE,DAVID SCOTT TR		598 KAIMAMA ST	KAHULUI HI 96732
239030039	0	SERNA,ANTHONY		1915 KAAHELE PL	KIHEI HI 96753
239030041	0	SWAY,JEFFREY MARK		11 HO'OLALEI WAY	KIHEI HI 96753
239030042	0	MORSE,RICHARD J./RITA TRUST		25 HO'OLALEI WY	KIHEI HI 96753
239030043	0	RASOR,DONALD L		19 HOOLALEI WAY	KIHEI HI 96753
239030044	0	LAUER,DAVID M		P O BOX 543	KIHEI HI 96753
239030048	0	KUME,HIROYUKI		28 HO'OLALEI WAY	KIHEI HI 96753
239030049	0	KISSEL,STEVEN ALBERT		22 HOOLALEI WY	KIHEI HI 96753
239030050	0	BACLIG,ROBERT F		16 HO'OLALEI WAY	KIHEI HI 96753
239030051	0	MANUPUNA,SIONE L ET AL		P O BOX 1361	KIHEI HI 96753
239030052	0	BELLOWS,GLENN J		211 KEALA PL	KIHEI HI 96753
239030053	0	SAR,BO C		225 KEALA PL	KIHEI HI 96753
239030054	0	MILLER,ALFRED J		217 KEALA PL	KIHEI HI 96753 7803
239030055	0	RASNAK,CHARLES RICHARD	C/O DEBLER,PHILLIP M/M	40 HALELANI PL	KIHEI HI 96753
239030056	0	CASTLES,LENA R TRUST		235 KEALA PL	KIHEI HI 96753
239030057	0	CREMER,BRIAN ALLEN		236 KEALA PL	KIHEI HI 96753
239030058	0	PARRISH,GARY P		230 KEALA PL	KIHEI HI 96753
239030059	0	BOLINSKI,PETER M		226 KEALA PL	KIHEI HI 96753
239030060	0	GARCIA,EUGENE B	C/O GARCIA,EUGENE	10206 OKLAHOMA AVE #A	CHATSWORTH CA 91311
239031001	0	BEAVER,TERRY J TRUST	BEAVER,TERRY & DEBRA TTEES	2370 PUU MALA PL	KIHEI HI 96753
239031002	0	AMBROSE, ROBERT L/HARRIDEEN		141 ALAHELE ST	KIHEI HI 96753
239031003	0	HICKLE,BRADNEY WAYNE		139 ALAHELE ST	KIHEI HI 96753
239031004	0	TROTTO, MICHAEL		PO BOX 1332	KIHEI HI 96753
239031005	0	STEVENS,JAMES W	C/O M/M JAMES STEVENS	5256 EL CEMONTE AVE	DAVIS CA 95616 4418
239031006	0	LEVAN,KATHERINE T		113 ALAHELE PL	KIHEI HI 96753
239031011	0	MASON,CANDACE KAY		P O BOX 942	KIHEI HI 96753
239031012	0	PIERMAN,WILLIAM JAMES		1941 PEKE PL	KIHEI HI 96753 7805
239031013	0	AKIONA,LAWRENCE K		1937 PEKE PL	LAHAINA HI 96761
239031014	0	GEORGE,CICELY ANN TRS		1521 PUNAHOU ST #202	HONOLULU HI 96822 4607
239031015	0	CLARKE,JENNIFER ANNE		1932 ALALOA RD	KIHEI HI 96753 7813
239031016	0	BARNETT,HAROLD		150 KEALA PL	KIHEI HI 96753
239031017	0	BARRETT,DAVID GEORGE		142 KEALA PLACE	KIHEI HI 96753
239031018	0	PAZ,NEREO D P		1932 PEKE PL	KIHEI HI 96753
239031019	0	CAMERON,JOHN M	C/O CAMERON,JOHN/CHRISTINE	13322 HIGHWAY 99 S STE 201	EVERETT WA 98204
239031020	0	NISHIDA,STEVEN S		114 KEALA PL	KIHEI HI 96753
239031021	0	ALCAIN,JENNILIN		480 KENOLIO RD #24-101	KIHEI HI 96753

APPENDIX L

Government Agency Early Consultation Letters With Responses

CHARMAINE TAVARES
Mayor

JEFFREY S. HUNT
Director

COLLEEN M. SUYAMA
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

August 6, 2007

Post-it® Fax Note 7671	Date 8/8	# of pages ▶
To Brett Davis	From Jim Buika	
Co./Dept.	Co.	
Phone #	Phone # 270 6271	
Fax # 242 1956	Fax #	

Mr. Jon Dishell, President
Wilshire DMK I, LLC
2001 Wilshire Blvd. Ste. 302
Santa Monica, CA 90403

Dear Mr. Dishell:

RE: Pre-Consultation Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii; TMK: (2) 3-9-017:034; (EAC 2007/0022) (SM1 2007/0006)

The Maui Department of Planning (Department) is in receipt of your request for comments in preparation of a Draft Environmental Assessment (EA) dated June 25, 2007, for the above-referenced project. In addition, the Department has received the draft Environmental Assessment in a transmittal dated June 29, 2007, which is accompanied by the Special Management Area (SMA) Use Permit Application for the proposed Alahele Subdivision.

It is a pleasure to review a well-constructed and well-articulated Draft Environmental Assessment. The SMA objectives and policies of the Coastal Zone Management Act, Chapter 205A, Hawaii Revised Statutes, and the Rules and Regulations of the Maui County Planning Commission.

The purpose of this letter is to:

1. Provide the Department's requested pre-consultation comments regarding drafting of the required EA for comments by the Office of Environmental Quality Control, Maui Planning Commission, and relevant agencies; and
2. Provide review comments from the Department regarding the submitted draft EA.

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793
MAIN LINE (808) 270-7735; FACSIMILE (808) 270-7634

The Department understands that the proposed action includes the following:

- The project is a forty-eight (48) lot, single-family, residential subdivision ranging in lot size from 7,511 square feet to 10,382 square feet with necessary on-site and off-site infrastructure. The proposed project will include construction of a portion of the North-South Collector Road with vehicular access to Auhana Road.

- Subdivision improvements include paved roadways, concrete curbs, gutters and sidewalks, onsite and offsite drainage systems, water system, sewer system, underground utilities, land planting and offsite roadway improvements along Alaloa Road and Alahele Place fronting the project site.

- The proposed project does not include building the homes or optional ohana units that are permissible on each lot.

- The proposed project is consistent with land use designations, as follows:

  - State Land Use – Urban
  - Community Plan – Single Family
  - County Zoning – R-2 Residential
  - Other – Special Management Area

- Surrounding parcels are all consistent with the zoning, community plan, and State land use. This is an in-fill project.

- Mitigation of impacts to Hawai'ian cultural and Historic resources is proposed through the use of pre-construction surveys and monitoring during construction, represented by the Archeological Monitoring Plan For a Parcel In Kihei, Kama'ole Ahupua'a, Wailuku District, Maui Island, Hawai'i, April 2007, and Cultural Impact of Property Located in Kihei, Kama'ole Ahupua'a, [Wailuku District], Maui Island, Hawai'i, January 2007. The State Historic Preservation District approval of the Archeological Monitoring Plan for the Alahele Subdivision will be included in the final Draft Environmental Assessment.

- The proposed project will also include onsite and offsite drainage improvements designed to reduce downstream storm runoff and reduce the impacts of siltation and debris. An engineer has been retained to develop drainage plans with mitigation measures.

- The applicant is aware of the requirement to comply with Residential Workforce Housing Ordinance No. 3438 and is pre-consulting with the Housing Commissioner, Office of the Mayor.

- The trigger for the EA is the development of the North-South Collector Road.

Based on the foregoing, the Department provides the following three (3) comments as pre-consultation in preparation of the Draft EA:

1) **Environmental Assessment Trigger.** Please state in Section 1A, *Purpose of the Request*, the reason for the Chapter 343 Environmental Assessment Trigger;

2) Project Description. Please add any available information to the Project Description that details the planned disposition of the subject property, once the proposed project is completed; and

3) **Consolidation and Completion of Required Submittals for Special Management Area Use Permit Application.** The submitted document is the *Consolidated Applications for a HRS Chapter 343 Environmental Assessment and Special Management Area Permit, Alahele Subdivision, June 2007.* This consolidated document begins with a portion of the SMA Use Permit Application. The remainder of the SMA Application is found to begin on page 39 of the document, with Appendices and Figures referenced. For completeness sake and organization, please consolidate the entire SMA Use Permit Application at the beginning of the report by moving pertinent application information located on pages 39-41, to the beginning of the document. Appendices and Figures can still be referenced as is. In addition, please complete all elements of the Required Submittal #6, *An Assessment Report identifying the anticipated impacts of the proposed action on the special management area that addresses or describes items a) through g), etc.* The consolidated SMA Application and completed step #6 will expedite Maui Planning Commission and additional agency review and comment.

Based on the foregoing, the Department provides these additional following eight (8) comments as Department comments on the Draft EA:

4) **Preliminary Design Review Guidelines.** The Department encourages the applicant to consider developing preliminary design review guidelines for single-family homes and ohanas for the subject subdivision which can be presented to the Urban Design Review Board.

5) **Drainage and Soil Erosion Control Report.** Ensure mitigation of the impacts to air and water quality through the application of construction best management practices described in a Drainage and Soil Erosion Control Report.

6) **Secondary Impacts.** The Drainage Report in the Preliminary Engineering Report for Alahele Subdivision, May 2007, discusses briefly that the increase in runoff generated by the proposed project will be mitigated onsite by creation of detention basins. The project also cites potential construction of a detention basin mauka of the project on available land to reduce impacts of a 100-year, 24 hour storm. Compliance with HRS Chapter 343 Significance Criteria (section VI of draft EA) states that the proposed project will provide "drainage mitigation to downstream neighbors". In addition, this project will be built upstream from one of Kihei's most chronically flooded areas along and adjacent to South Kihei Road. In anticipation of public comment regarding potential for the proposed project to add to the flooding problem, we ask that the applicant consider devising additional alternative flood mitigation solutions for consideration that will not only negate anticipated increased runoff from the proposed project but also to reduce the overall flooding downstream. Clearly demonstrate the outcome of reduced flooding to the downstream neighbors for the preferred mitigation alternatives.

7) **Grading Plan.** Submit a grading plan.

8) **Visual Resources.** Please address minimizing impacts to scenic resources, such as keeping building heights low, screening buildings with landscaping, and down-shielding of lighting. Please address any residual negative impacts of the proposed subdivision development on makai views of the ocean which are currently available from Pi'ilani Highway through the site.

9) **Water.** Discuss the potential for utilizing reclaimed water to irrigate the proposed landscaping of common areas in an effort to conserve water.

10) **Residential Workforce Housing Policy.** Compliance with HRS Chapter 343 Significance Criteria (section VI of draft EA) states that the proposed project will provide "affordable single-family homes." Please provide a narrative of how the project will comply with the Residential Workforce Housing Policy. An agreement with the Department of Housing and Human Concerns regarding affordable housing is required.

11) **North-South Collector Road.** Part of the proposed project is to complete a significant section of the North-South Collector Road. Since one of the land use policies of the Kihei-Makena Community Plan is to encourage land-use patterns that foster a pedestrian-oriented environment to include such amenities as bike paths, linear parks, landscaped buffer areas, and mini-parks, the applicant is encourage to ensure that community design for the North South Collector Road is incorporated into the subject project portion of the road.

Thank you for the opportunity to comment. Should you require further clarification, please contact Mr. Jim Buika, Staff Planner, at james.buika@mauicounty.gov or 270-6271.

Sincerely,

Jeffrey S. Hunt, AICP
Planning Director

JSH:JAB:bg
c: Clayton I. Yoshida, AICP, Planning Program Administrator
Aaron H. Shinmoto, P.E., Planning Program Administrator (2)
[redacted], Staff Planner
Christopher L. Hart, Chris Hart & Partners, Inc.
EA Project File
General File
K:\WP_DOCS\PLANNING\SM1\2007\0006_Alahele Subdivision\EA_Preconsultation, AlaheleSubd, vFINAL, 07.24.07.wpd

CHRIS HART
& PARTNERS INC.

August 23, 2007

Mr. Jeffrey S. Hunt, AICP
Planning Director
250 South High Street
Wailuku, HI 96793

Dear Mr. Hunt:

RE: Pre-Consultation Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii; TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your pre-consultation comment letter dated August 6, 2007. The following comments are provided for your consideration:

1. **Environmental Assessment Trigger**
   The proposed project will include the construction of a significant portion of the future North/South Collector Road and dedication to the County of Maui. As a significant public infrastructure improvement, it constitutes an H.R.S. Chapter 343 trigger. Additionally the project is located in an area subject to significant storm events. The project-generated runoff will be retained on-site and additional off-site capacity is proposed as a partial mitigation measure. Depending on the location of off-site retention it could trigger Chapter 343 compliance.

2. **Project Description**
   The proposed subdivision will create forty-eight (48) R-2 Residential District buildable lots ranging in size from 7,511 square feet to 10,382 square feet with necessary supporting on-site and off-site infrastructure. The project does not include the construction of homes or allowable accessory dwelling (Ohana) units. The intent is to sell the lots to individual owners for future single-family home construction. The proposed project will also include construction of a portion of the North-South Collector Road (NSCR) with access to Auhana Road.

   Associated project improvements include paved roadways; concrete curbs, gutters and sidewalks; onsite and offsite drainage systems, water system, sewer system, underground utilities, landscape planting, and offsite roadway improvements along Alaloa Road and Alahele Place fronting the project site.

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

3. **Consolidated and Completion of Required Submittals for Special Management Area Use Permit Application**
The revised HRS Chapter 343 Environmental Assessment and Special Management Area Permit consolidated application will be re-organized by moving pages 39-41 to the beginning of the document. In addition language will be added to item #6, *An assessment report identifying the anticipated impacts of the proposed action of the SMA that addresses or describes items a) through g)* in order to expedite Maui Planning Commission and additional agency review and comment.

Thank you for your consideration of this application. Should you have further questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

CC. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

CHARMAINE TAVARES
MAYOR

CARL M. KAUPALOLO
CHIEF

NEAL A. BAL
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE AND PUBLIC SAFETY
FIRE PREVENTION BUREAU

780 ALUA STREET
WAILUKU, HAWAII 96793
(808) 244-9161
FAX (808) 244-1363

July 18, 2007

Christopher L. Hart, ASLA
1955 Main Street, Suite 200
Wailuku, Hawaii 96793

Subject: Early Consultation for Alahele Single Family Residential Subdivision
TMK (2)3-9-017:034

Dear Mr Hart,

At this time, we have no specific concerns regarding the Alahele Subdivision Project. A detailed look of the subdivision roadways will take place by our office during the building permit process. We will also take a look at details of the cul-de-sacs and turn arounds

Feel free to contact Lt. Paul Haake of our office if there are any questions or concerns.

Sincerely,

Valeriano F. Martin
Captain
Fire Prevention Bureau

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JUL 23 2007
CHRIS HART & PARTNERS
Landscape Architecture & Planning
061055
CC: Brett

CHRIS HART
& PARTNERS INC.

August 23, 2007

Captain Valeriano F. Martin
Fire Prevention Bureau
780 Alua Street
Wailuku, HI 96793

Dear: Captain Martin,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

On behalf of the applicant, DMK I, LLC, we acknowledge the receipt of your letter dated July 18, 2007 which acknowledges that your department has no comment at this time. However, subdivision roadways, cul-de-sacs and turnarounds will be reviewed during the final subdivision approval process.

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Project File
Wilshire DMK I, LLC
Michael Wright and Associates

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CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
COUNTY OF MAUI

CHARMAINE TAVARES
Mayor

VANESSA A. MEDEIROS
Director

LORI TSUHAKO
Deputy Director

200 SOUTH HIGH STREET • WAILUKU, HAWAII 96793 • PHONE (808) 270-7805 • FAX (808) 270-7165 • EMAIL director.hhc@mauicounty.gov

July 6, 2007

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JUL 12 2007

CC: BIGH 061055

Mr. Christopher L. Hart, ASLA
President
Chris Hart & Partners, Inc.
115 N. Market Street
Wailuku, Hawaii 96793-1706

Dear Mr. Hart:

SUBJECT: Alahele Single-Family Residential Subdivision
Alahele Place, Kihei, Maui
TMK (2) 3-9-017:034

We have reviewed your June 25, 2007 early consultation letter and enclosures and would like to offer the following comments:

1. Wilshire DMK I, LLC is proposing to subdivide the approximately 14 acre parcel into approximately 48 residential lots.

2. Since the proposed project will involve the subdividing of five or more lots, the project is subject to the requirements of Chapter 2.96, Maui County Code (MCC).

3. Section 2.96.080A, MCC, states that before final subdivision approval or issuance of a building permit, the developer shall enter into a residential workforce housing agreement with the County of Maui that sets forth the detailed terms and conditions of compliance with the residential workforce policy.

Thank you for the opportunity to comment.

Very truly yours,

Vanessa A. Medeiros

VANESSA A. MEDEIROS
Director of Housing and Human Concerns

xc: Edwin Okubo, Housing Administrator

CHRIS HART & PARTNERS INC

August 23, 2007

Vanessa Medeiros, Director
County of Maui
Department of Housing & Human Concerns
200 South High Street
Wailuku, Hawaii 96793

Dear: Ms. Medeiros,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

Thank you for your June 29, 2007 letter indicating that the Department of Housing and Human Concerns will require that the developer of the subject parcel enter into a Residential Workforce Housing Agreement. The developer is aware of this requirement and will enter into an appropriate agreement with the County of Maui prior to final subdivision approval.

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

CHARMAINE TAVARES
Mayor

TAMARA HORCAJO
Director

ZACHARY Z. HELM
Deputy Director

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

DEPARTMENT OF PARKS & RECREATION

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

July 27, 2007

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AUG - 1 2007
CHRIS HART & PARTNERS
Landscape Architecture & Planning

06/055
Brett

Christopher L. Hart, ASLA
Chris Hart & Partners, Inc.
115 Market Street
Wailuku, Hawaii 96793

Dear Mr. Hart:

SUBJECT: **ALAHELE SUBDIVISION**
TMK (2) 3-9-017:034
SUBDIVISION FILE NO. 3.2181

Thank you for the opportunity to review the Early Consultation Request for the proposed Alahele Subdivision. Our Department is requiring the applicant to satisfy the parks and playgrounds requirements with a cash contribution in lieu of land. We will not accept any detention basins for park dedication.

The current parks and playgrounds assessment fee rate for the Kihei-Makena Community Plan Area is $17,510.00 per lot in excess of three (3). Utilizing the 3-lot exemption, the parks and playgrounds assessment fee for the subject forty eight (48) lot subdivision is **$787,950.00** [$17,510.00/lot x (48-3) lots].

Be advised, the aforementioned rate and fees, are valid until June 30, 2008 and are subject to change. Also, the applicant is required to satisfy the applicable parks and playgrounds requirements at the time of final subdivision approval.

Should you have any questions or concerns, please feel free to call me, or Karla Peters, of our Parks Planning and Development Division, at 270-7981.

Sincerely,

for TAMARA HORCAJO
Director

c: Patrick Matsui, Chief of Planning and Development Division

CHRIS HART
& PARTNERS INC.

August 23, 2007

Ms. Tamara Horcajo, Director
Department of Parks and Recreation
700 Hali'a Nakoa Street, Unit 2
Wailuku, HI 96793

Dear: ~~Ms. Horcajo~~ Tamara,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

On behalf of the applicant, DMK I, LLC, we acknowledge the receipt of your letter dated July 27, 2007 and are responding to your comments.

Per your request, the applicant will satisfy the parks and playgrounds requirements with a cash contribution in lieu of land. The current parks and playgrounds assessment fee for the proposed 48-lot subdivision is $787,950.00. Additionally the applicant understands that detention basins for park dedication will not be accepted.

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Project File
Wilshire DMK I, LLC.
Michael Wright and Associates

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

LINDA LINGLE
GOVERNOR
STATE OF HAWAII

MICAH A. KANE
CHAIRMAN
HAWAIIAN HOMES COMMISSION

BEN HENDERSON
DEPUTY TO THE CHAIRMAN

KAULANA H. PARK
EXECUTIVE ASSISTANT

STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

P.O. BOX 1879

HONOLULU, HAWAII 96805

RECEIVED
JUL - 6 2007

July 5, 2007

cc: Brett
061055

Mr. Christopher L. Hart
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793

Dear Mr. Hart:

Thank you for the opportunity to provide comments in the early consultation phase of an Environmental Assessment report for the proposed Alahele Single-Family Residential Subdivision at Alahele Place in Kihei, Maui. The Department of Hawaiian Home Lands has no comments.

Should you have any questions, please call the Planning Office at (808) 586-3836.

Aloha and mahalo,

Micah A. Kane, Chairman
Hawaiian Homes Commission

CHRIS HART
& PARTNERS INC.

August 23, 2007

Micah Kane, Chairman
State of Hawaii
Department of Hawaiian Homelands
PO Box 1879
Honolulu, Hawaii 96804

Dear: Mr. Micah A. Kane,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

Thank you for your June 29, 2007 letter indicating that the Department of Hawaiian Home Lands has no comments.

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
President

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

LINDA LINGLE
GOVERNOR OF HAWAII

ALLAN A. SMITH
INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

RECEIVED
JUL 18 2007
CHRIS HART & PARTNERS
Landscape Architecture & Planning

cc: Brett
0610055

July 16, 2007

Chris Hart & Partners, Inc.
115 N. Market Street
Wailuku, Hawaii 96793

Gentlemen:

Subject: Early Consultation for Proposed Alahele Single Family Residential Subdivision, Kihei, Maui, Tax Map Key: (2) 3-9-17:34

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Engineering Division, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

Russell Y. Tsuji
Administrator

LINDA LINGLE
GOVERNOR OF HAWAII

ALLAN A. SMITH
INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

June 29, 2007

MEMORANDUM

TO: **DLNR Agencies:**
__Div. of Aquatic Resources
__Div. of Boating & Ocean Recreation
x Engineering Division
__Div. of Forestry & Wildlife
__Div. of State Parks
__Commission on Water Resource Management
__Office of Conservation & Coastal Lands
X Land Division – Maui District

'07 JUL 03 PM 09:23 ENGINEERING

FROM: Russell Y. Tsuji
SUBJECT: Early Consultation for Proposed Alahele Single Family Residential Subdivision
LOCATION: Kihei, Maui, Tax Map Key: (2) 3-9-17:34
APPLICANT: Wilshire DMK I, LLC

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by July 10, 2007.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
( ) We have no comments.
(X) Comments are attached.

Signed: [signature]
Date: 7/6/07

DEPT OF LAND & NATURAL RESOURCES STATE OF HAWAII

2007 JUL -6 P 2:55

RECEIVED
LAND DIVISION

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/RYT
ReF.: AlaheleSFRSubdivision
Maui.362

COMMENTS

( ) We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone ___.

(X) **Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone C. The National Flood Insurance Program does not have any regulations for developments within Zone C.**

( ) Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ___.

( ) Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

( ) Mr. Robert Sumimoto at (808) 523-4254 or Mr. Mario Siu Li at (808) 523-4247 of the City and County of Honolulu, Department of Planning and Permitting.

( ) Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kiran Emler at (808) 327-3530 (Kona) of the County of Hawaii, Department of Public Works.

( ) Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.

( ) Mr. Mario Antonio at (808) 241-6620 of the County of Kauai, Department of Public Works.

( ) The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.

( ) The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

( ) Additional Comments:

( ) Other:_____

Should you have any questions, please call Ms. Suzie S. Agraan of the Planning Branch at 587-0258.

Signed: _____
ERIC T. HIRANO, CHIEF ENGINEER

Date: 7/6/07

CHRIS HART
& PARTNERS INC.

August 23, 2007

Mr. Russell Y. Tsuji, Administrator
State of Hawaii
Department of Land and
Natural Resources
Post Office Box 621
Honolulu, Hawaii 96809

Dear: Mr. Tsuji,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

Thank you for your June 29, 2007 letter indicating that other than the comments from the Engineering Division, the Department of Land and natural Resources has no comments.

The Engineering Division has confirmed that the proposed project is located in Flood Zone C according to the Flood Insurance Rate Map (FIRM). The national Flood Insurance Program does not have any regulations for developments within Zone C.

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC
Michael Wright and Associates
Project File

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

Maui Electric Company, Ltd. • 210 West Kamehameha Avenue • PO Box 398 • Kahului, Maui, HI 96733-6898 • (808) 871-8461

RECEIVED
JUL - 3 2007
CHRIS HART & PARTNERS
Planning Architecture Interiors Inc

CC: Brett Oldoss

June 29, 2007

Mr. Christopher Hart, ASLA
President
Chris Hart & Partners, Inc.
115 N. Market Street
Wailuku, HI 96793

Dear Mr. Hart,

Subject: Early Consultation Request for Proposed
Alahele Single-Family Residential Subdivision
Kihei, Maui, Hawaii
TMK: (2) 3-9-017:034 (approximately 14 acres)

Thank you for allowing us to comment on the early consultation phase of the proposed subject project, which was received on June 27, 2007.

In reviewing our records and the information received, Maui Electric Company (MECO) has no objection to the project at this time. However, we highly encourage the developer's electrical consultant to submit its electrical demand requirements and project time schedule as soon as practical so that service can be provided on a timely basis.

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

Should you have any other questions or concerns, please call Kim Kawahara at 871-2345.

Sincerely,

Neal Shinyama
Manager, Engineering

NS/kk:lh
cc: Sage Kiyonaga – MECO DSM

CHRIS
HART
& PARTNERS INC.

August 23, 2007

Mr. Neal Shinyama
Manager, Engineering
Maui Electric Company, Ltd.
210 West Kamehameha Avenue
P.O. Box 398
Kahului, Maui, HI 96733-6898

Dear: Mr. Neal Shinyama,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

Thank you for your June 29, 2007 letter indicating that Maui Electric Company has no objection to the project at this time. During the final subdivision application approval process the developer's electrical engineer will submit electrical demand requirements and project time schedule.

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

LINDA LINGLE
GOVERNOR OF HAWAII

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

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

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

July 23, 2007

RECEIVED
JUL 25 2007
CHRIS HART & PARTNERS
Landscape Architecture & Planning
CC: Brett
061055

Christopher L. Hart, ASLA
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawai`i 96793

Dear Mr. Hart:

Subject: **Early Consultation Request for Alahele Single-Family Residential Subdivision**
TMK: (2) 3-9-017: 034

Thank you for the opportunity to participate in the early consultation process for the proposed Alahele Single-Family Residential Subdivision. The following comments are offered:

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

2. 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.

3. National Pollutant Discharge Elimination System (NPDES) permit coverage is required for this project. The Clean Water Branch should be contacted at 808 586-4309.

It is strongly recommended that the Standard Comments found at the Department's website: www.state.hi.us/health/environmental/env-planning/landuse/landuse.html be reviewed, and any comments specifically applicable to this project should be adhered to.

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

Sincerely,

Herbert S. Matsubayashi
District Environmental Health Program Chief

CHRIS HART
& PARTNERS INC.

August 23, 2007

Mr. Herbert S. Matsubayashi
District Environmental Health Program Chief
State of Hawaii
Department of Health
Maui District Health Office
54 High Street
Wailuku, Maui
Dear: Mr. Wong,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

On behalf of the applicant, DMK I, LLC, we acknowledge the receipt of your letter dated July 23, 2007 and are responding to your comments.

1. The noise created during the construction phase of the project is not anticipated to exceed maximum allowable levels as set forth in Hawaii Administrative Rules (HA), Chapter 11-46, "Community Noise Control". Prior to the time of construction a noise permit will be obtained if necessary.

2. Prior to the start of construction a civil engineer will develop a dust management plan. At the time of construction adequate dust control measures will be taken and comply with provisions of HAR, Chapter 11-60.

3. The applicant will obtain the required National Pollutant Discharge Elimination System (NPDES) permit prior to construction.

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC
Michael Wright and Associates
Project File

POLICE DEPARTMENT
COUNTY OF MAUI

CHARMAINE TAVARES
MAYOR

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

THOMAS M. PHILLIPS
CHIEF OF POLICE

GARY A. YABUTA
DEPUTY CHIEF OF POLICE

OUR REFERENCE
YOUR REFERENCE tj

July 10, 2007

RECEIVED
JUL 10 2007
CHRIS HART & PARTNERS
Landscape Architecture & Planning
cc: Porch 06/055

Mr. Christopher L. Hart, ASLA
President
Chris Hart & Partners, Inc.
1955 Main Street, Suite 200
Wailuku, HI 96793-1706

Dear Mr. Hart:

SUBJECT: Early Consultation Request for Proposed Alahele Single-Family Residential Subdivision
TMK (2) 3-9-017:034 (approximately 14 acres)

Thank you for your letter of June 25, 2007, requesting comments on the above subject.

We have reviewed the information submitted for this project and submitted our comments and recommendations.

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

Very truly yours,

Assistant Chief Wayne Ribao
for: Thomas M. Phillips
Chief of Police

c: Jeffrey Hunt, Maui County Planning Department

COPY

TO : THOMAS PHILLIPS, CHIEF OF POLICE, COUNTY OF MAUI

CONCUR:

VIA : CHANNELS

FROM : BRAD HICKLE, POLICE OFFICER III, DISTRICT VI KIHEI

07/09/07

SUBJECT : EARLY CONSULTATION REQUEST FOR THE PROPOSED ALAHELE-SINGLE FAMILY RESIDENTIAL SUBDIVISION LOCATED @ TMK (2) 3-9-017:034

APPLICANT INFORMATION:

The applicant, Wilshire DMK I, LLC, is proposing the development of an approximate 14 acre vacant lot located at TMK (2) 3-9-017:034.

The proposed development of a (48) lot, single-family residential subdivision will include not only the approximate (48) lot subdivision and the supporting infrastructure but also include the construction of a portion of the north-south collector road with vehicular access to Auhana Road from Keala Place.

RESIDENTIAL CONCERNS:

This area has been the topic of discussion by the Kihei Community Association (KCA) and local area residents in the past because of severe flooding from stormwater runoff.

Many properties in the area are subjected to flooding several times each year because of this runoff. Area residents are concerned and suspect if the subject property is developed without consideration for existing residences "makai" of this property that their properties may be caught in the future flood(s) to come. Area residents are concerned that the development of this property may change the natural flow of the runoff and channel the runoff towards their properties which will worsen the situation.

The development of the Keala Hills Subdivision located to the north of the subject property was an example to local area residents. There are now homes located makai of the Keala Hills Subdivision which have been flooded and have experienced damages from runoff that never occurred prior to the development of that subdivision.

An in-depth study should be done of this area to determine, what's the best course of action to take in addressing the runoff issue for all concerned prior to the development of this property.

Respectfully Submitted

Officer Brad Hickle

07/05/07 18:15 hours

CHRIS HART
& PARTNERS INC.

August 23, 2007

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

Dear: Mr. Phillips,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

Thank you for your July 10, 2007 letter indicating that the Police Department has concerns that the development of the subject parcel related to existing flooding conditions in the community.

A licensed Civil Engineer has conducted an in-depth study to determine the best course of action to take in addressing the impacts of storm runoff. The study includes a drainage plan and infrastructure improvements with necessary calculations to reduce the existing flooding conditions during significant storm events. An on-site detention basin has been designed to retain the increase in onsite runoff. An increase in site runoff can be expected as a result of the proposed project due to the installation of impervious surfaces such as streets and roofs. Additionally, the owner has been in negotiations with a mauka landowner to secure a site, to build an additional detention basin mauka of Piilani Highway. The additional storm water detention capacity is a gesture of goodwill by the owner for the Kihei community and it will reduce silt and debris and help to reduce the amount of storm runoff during significant storm events.

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

CC. Wilshire DMK I, LLC
Michael Wright and Associates
Project File

LINDA LINGLE
GOVERNOR OF HAWAII

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

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

In reply, please refer to:
EMD / CWB

07024PKP.07

RECEIVED
JUL 10 2007
CHRIS HART & PARTNERS
LANDSCAPE ARCHITECTURE & PLANNING
cc: Brett 06/055

July 9, 2007

Mr. Christopher L. Hart, ASLA
President
Chris Hart & Partners, Inc.
1955 Main Street, Suite 200
Wailuku, Hawaii 96793

Dear Mr. Hart:

Subject: Early Consultation Request for Proposed Alahele Single-Family Residential Subdivision, Kihei, Maui, Hawaii

The Department of Health, Clean Water Branch (CWB), has reviewed the subject document and offers these comments on your project. Please note that our review is based solely on the information provided in the subject document and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.

   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.

   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. If this project requires Department of the Army (DA) permit for stream crossing or maintenance, then a Section 401 Water Quality Certification (WQC) is required from our office.

3. You are required to obtain a National Pollutant Discharge Elimination System (NPDES) general permit coverages for the following types of discharges:

   a. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. **An NPDES permit is required before the start of the construction activities.**

   b. Hydrotesting water.

   c. Construction dewatering effluent.

   You must submit a separate Notice of Intent (NOI) form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

4. You must also submit a copy of the NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the CWB that SHPD has or is in the process of evaluating your project. Please submit a copy of your request for review by SHPD or SHPD's determination letter for the project along with your NOI or NPDES permit application, as applicable.

5. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

If you have any questions, please visit our website at http://www.hawaii.gov/health/environmental/water/cleanwater/index.html,or contact the Engineering Section, CWB, at 586-4309.

Sincerely,

ALEC WONG, P.E., CHIEF
Clean Water Branch

KP:np

CHRIS HART & PARTNERS INC.

August 23, 2007

Mr. Alec Wong, P.E., Chief
State of Hawaii
Department of Health
Clean Water Branch (CWB)
PO Box 3378
Honolulu, Hawaii 96801

Dear: Mr. Wong,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

On behalf of the applicant, DMK I, LLC, we acknowledge the receipt of your letter dated July 9, 2007 and are responding to your comments.

1. The proposed project is a vacant parcel is not anticipated to produce any potential impacts to State waters.
2. The proposed project does involve a stream crossing or maintenance and there fore the subject parcel is not subject to Section 401 Water Quality Certification (WQC).
3. The proposed project will result in grading the parcel in order to construct necessary infrastructure to support 48 buildable lots. A national Pollutant Discharge Elimination System (NPDES) general permit will be obtained prior to construction activities.
4. The NPDES permit application will also be submitted to necessary government agencies as applicable.
5. All potential discharges related to future project construction will comply with the State Water Quality Standards.

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Project File

PHONE (808) 594-1888

FAX (808) 594-1865

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

RECEIVED
JUL 24 2007
CHRIS HART & PARTNERS
Landscape Architecture & Planning
06/055

HRD07/933C

July 16, 2007

Christopher L. Hart, ASLA
Chris Hart & Partners, Inc.
Landscape Architecture Planning
1955 Main Street
Wailuku, Maui 96793

RE: Early Consultation Request for Proposed Alahele Single-Family Residential Subdivision, Alahele Place, Kīhei, Maui, TMK (2) 3-9-017:034

Dear Chris Hart,

The Office of Hawaiian Affairs (OHA) is in receipt of your June 25, 2007 submission and offers the following comments:

Cultural Impact

First, we recommend that a Cultural Impact Assessment (CIA) be conducted in support of the proposed project. Although an Archaeological Inventory Survey (AIS) was conducted (*An Archaeological Inventory Survey of a 14-Acre Parcel of Land, Kama'ole Ahupua'a, Wailuku District, Maui Island (TMK 3-9-17:34)* by Archaeological Services Hawaii, LLC, a CIA is recommended to assess the cultural relevance of the parcel. The parcel has been described as in the "barren zone" in past surveys and environmental reports, but this does not preclude the existence of resources and cultural relevance to Native Hawaiians.

Secondly, OHA asks that, in accordance with Section 6E-46.6, Hawaii Revised Statutes and Chapter 13-300, Hawaii Administrative Rules, if the project moves forward, and if any significant cultural deposits or human skeletal remains are encountered, work shall stop in the immediate vicinity and the State Historic Preservation Division (SHPD/DLNR) shall be contacted.

Water

Past environmental studies of the parcel have not assessed the 'Īao aquifer for adequate supply and quality of water for additional real estate development. The proposed development could have negative effects upon Native Hawaiian gathering rights and the ability to grow taro in 'Īao and Waihe'e areas. OHA is also concerned about potential negative environmental impacts that

a decreased water flow could have on native and endemic flora and fauna. We request that an in-depth water study be conducted before moving forward with any development plans.

Thank you for the opportunity to comment and for your continued correspondence. If you have further questions or concerns, please contact Jason Jeremiah, Policy Advocate-Preservation, Native Rights, Land and Culture, at (808) 594-0239 or jasonj@oha.org.

Aloha,

Clyde W. Nāmu'o
Administrator

C: Thelma Shimaoka
Community Resource Coordinator
OHA-Maui Office
140 Hoohana St., Ste 206
Kahalui, HI 96732

CHRIS HART
& PARTNERS INC.

August 23, 2007

Mr. Clyde W. Nāmuo, Administrator
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, HI 96813

Dear: Mr. Nāmuo,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

Thank you for your July 16, 2007 letter indicating that the Office of Hawaiian Affairs has the following comments at this time.

Cultural Impact
The applicant has retained the services of a professional Archaeological firm to conduct a Cultural Impact Assessment (CIA). The CIA has been completed and will be included in the Draft Environmental Assessment application. Additionally an Archaeological Monitoring Plan (AMP) was prepared for the proposed project. In the event that any significant cultural deposits or human skeletal remains are encountered, work shall stop in the immediate vicinity and the State Historic Preservation Division will be contacted.

Water
As requested the Civil Engineer retained by the applicant will conduct an in-depth water study. The study will be part of a Preliminary Engineering Report and Drainage Study. The report will indicated water sources and expected potable and non-potable water demand for the proposed 48-lot single-family subdivision.

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Project File

LINDA LINGLE
GOVERNOR

BARRY FUKUNAGA
DIRECTOR

Deputy Directors
FRANCIS PAUL KEENO
BRENNON T. MORIOKA
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.2549

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

RECEIVED
JUL 23 2007
CHRIS HART & PARTNERS
Landscape Architecture & Planning

July 19, 2007

CC: Brea
06105

Mr. Christopher L. Hart, ASLA
President
Chris Hart & Partners, Inc.
115 North Market Street
Wailuku, Hawaii 96793

Dear Mr. Hart:

Subject: Early Consultation Request for Proposed
Alahele Single-Family Residential Subdivision
Wilshire DMK I, LLC (applicant)
TMK: (2) 3-9-017: 034 (approximately 14 acres)

We are submitting the following comments in response to your early consultation request for the proposed residential subdivision at Alahele Place, Kihei, Maui:

1. The proposed project appears to be similar or comparable to an earlier development at the same site in 2003. At the moment, and based on the initial information you provided, our prior comments on traffic impacts in letter HWY-PS 2.0066 dated April 22, 2003 (copy attached), are still applicable. We reserve, however, final comment on the proposed project until the applicant's submittal of its formal permit application to Maui County.

2. A portion of the subject project borders our State highway right-of-way for Piilani Highway. Request that precautions be taken to ensure that no impacts (e.g., drainage, etc.) affect the right-of-way. Any plans for construction or project work in or along the highway right-of-way requires the Highways Division's prior review and approval through the Highways Maui District Office.

3. It is our understanding that the additional traffic generated by the subject project will contribute to the cumulative effects from the growth and build-out in Kihei from 2003 through today and into the future, and that these impacts will be addressed by Maui County's mitigating measures on the roadways that intersect and affect Piilani Highway.

We appreciate the courtesy of your advance consultation and for the opportunity to provide comments.

Very truly yours,

BARRY FUKUNAGA
Director of Transportation

Attach.

c: John Hunt, Maui Planning Department

HWY-PS
2.0066

APR 2 2 2003

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

Dear Mr. Foley:

Subject: Special Management Area Permit, SM1 2002/0027, Keala Village Subdivision (49 lots), Kihei, TMK: 3-9-017: 34

Thank you for requesting our review of the Special Management Area Permit application.

The proposed subdivision is not anticipated to have a significant impact on our State highway facilities. We feel that transportation issues with respect to the subdivision will be principally on roads under the County of Maui's jurisdiction.

If there are questions regarding our comments, please contact Ronald F. Tsuzuki, Head Planning Engineer, Highways Division, at (808) 587-1830. Please reference file review number: 03-078 in all contacts and correspondence regarding our comments.

Very truly yours,

RODNEY K. HARAGA
Director of Transportation

RI: mt

CHRIS HART
& PARTNERS INC.

August 23, 2007

Mr. Barry Fukunaga, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96809

Dear: Mr. Fukunaga,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

Thank you for your July 19, 2007 letter indicating that the Department of Transportation has the following comments at this time.

1. The letter HWY-PS 2.0066 dated April 22, 2003 states that the proposed subdivision is not anticipated to have a significant impact on the State Highway facilities, and that the transportation issues with respect to the subdivision will be principally on roads under the County of Maui's jurisdiction.

2. The proposed project is not expected to impact the adjacent State highway right-of-way for Piilani Highway. Currently there are no plans for construction of project work in or along the highway right-of-way.

3. The applicant will work with the County of Maui to mitigate measures related to roadways that intersect and affect Piilani Highway.

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

CC. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

LINDA LINGLE
GOVERNOR OF HAWAII

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

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

In reply, please refer to:
EPO-07-134

July 26, 2007

RECEIVED
JUL 31 2007
Group Mgt & Properties
Landscape Architecture & Planning

CC: Brut
06/055

Mr. Christopher L. Hart, President
Landscape Architect-Planner
115 North Market Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Hart:

SUBJECT: Pre-Assessment Consultation for Proposed Alahele Single-Family Residential Subdivision
Alahele Place, Kihei, Maui, Hawaii
TMK: (2) 2-9-017: 034

Thank you for allowing us to review and comment on the project. The document was routed to the various branches of the Department of Health (DOH) Environmental Health Administration. We have the following Wastewater Branch, Safe Drinking Water Branch and General comments.

Wastewater Branch

The project is located in the Critical Wastewater Disposal Area (CWDA) where no new cesspools will be allowed.

Mr. Brett Davis of Landscape Architect-Planner has informed the Department of Health-Wastewater Branch that the subject development will connect to the County of Maui's sewer system. Therefore we have no objections to the proposed single-family subdivision. Use of recycle water in large common areas such as parks and roadway landscaping is encouraged.

All wastewater plans must meet Department's Rules, HAR Chapter 11-62, "Wastewater Systems." We do reserve the right to review the detailed wastewater plans for conformance to Applicable rules. If you have any questions, please contact the Planning & Design Section of the Wastewater Branch at 586-4294.

Safe Drinking Water Branch (SDWB)

We understand the applicant, Wilshire DMK I, LLC, is proposing the development of an approximate 48 lot, single-family residential subdivision. At this time, it is not clear if the applicant will connect to the existing county water system or construct its own source, storage,

and transmission network for the drinking water requirements. If the applicant does connect to the existing system, it will be considered as a major modification to the existing system. In either case, construction plans and specifications shall be submitted to the Safe Drinking Water Branch for approval, prior to construction.

All projects that propose development of new sources of drinking water serving or proposed to serve a public water system must comply with the terms of Section 11-20-29 of the Hawaii Administrative Rules, Title 11, Chapter 20, titled "Rules Relating to Potable Water Systems." This section requires that all new public water system sources be approved by the Director of Health prior to its use. Such approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in Section 11-20-29.

The engineering report must identify all potential sources of contamination and evaluate alternative control measures which could be implemented to reduce or eliminate the potential for contamination, including treatment of the water source. In addition, water quality analyses for all regulated contaminants, performed by a laboratory certified by the State Laboratories Division of the State of Hawaii, must be submitted as part of the report to demonstrate compliance with all drinking water standards. Additional parameters may be required by the Director for this submittal or additional tests required upon his or her review of the information submitted.

Furthermore, all sources of public water systems must undergo a source water assessment which will delineate a source water protection area. This process is preliminary to the creation of a source water protection plan for that source and activities which will take place to protect the source of drinking water.

Section 11-20-29.5 of Chapter 20 requires that all new community (probable classification of this water system) public water systems demonstrate adequate technical, managerial, and financial capacity to reliably and consistently produce and deliver drinking water in compliance with all state and federal drinking water regulations, in effect or likely to be in effect when operations begin.

- Technical capacity refers to the physical infrastructure of the water system, including but not limited to the adequacy of the water source(s), treatment, storage, and distribution systems, and the ability of system personnel to adequately operate and maintain the system and to otherwise implement technical knowledge.

- Managerial capacity refers to the ability of the water system to manage itself, including clear ownership, organization, communications, accountability, adequate management, staffing, policies, training, and information management; and effective relationships with customers and regulatory agencies.

- Financial capacity refers to the financial resources of the water system, including an adequate budget, adequate fiscal controls, and credit worthiness.

We are enclosing a copy of the document, "New Community and New Non-transient Non-community Water System Start-Up Requirements (September 10, 1999)" to help explain capacity, how and when it must be demonstrated, and the approval process.

The document does not mention if the applicant plans to use brackish and/or reclaimed water for non-potable water uses such as irrigation. However, if the applicant proposes the use of dual water systems or the use of a non-potable water system in proximity to an existing drinking water system to meet irrigation or other needs, he or she must be careful in the design and operation of these systems to prevent the cross-connection of these systems and prevent the possibility of backflow of water from the non-potable system to the drinking water system. The two systems must be clearly labeled and physically separated by air gaps or reduced pressure principle backflow prevention devices to avoid contaminating the drinking water supply. In addition, backflow devices must be tested periodically to assure their proper operation. Further, all non-potable spigots and irrigated areas should be clearly labeled with warning signs to prevent inadvertent consumption of non-potable water. Compliance with Hawaii Administrative Rules, Title 11, Chapter 11-21 titled "Cross Connection and Backflow Control" is required.

Should you have any questions regarding the drinking water system, please contact Mr. Kumar Bhagavan of the SDWB Compliance Section at 586-4258 in Honolulu.

Injection wells used for the subsurface disposal of wastewater, sewage effluent, or surface runoff are subject to environmental regulation and permitting under Hawaii Administrative Rules, Title 11, Chapter 23, titled "Underground Injection Control" (UIC). The Department of Health's approval must be first obtained before any injection well construction commences. A UIC permit must be issued before any injection well operation occurs.

Authorization to use an injection well is granted when a UIC permit is issued to the injection well facility. The UIC permit contains discharge and operating limitations, monitoring and reporting requirements, and other facility management and operational conditions. A completed UIC permit-application form is needed to apply for a UIC permit.

A UIC permit can have a valid duration of up to five years. Permit renewal is needed to keep an expiring permit valid for another term.

Questions about UIC may be directed to Mr. Chauncey Hew at 586-4258.

General

We strongly recommend that you review all of the Standard Comments on our website: www.state.hi.us/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this project should be adhered to.

If there are any questions about these comments please contact Jiacai Liu with the Environmental Planning Office at 586-4346.

Sincerely,

KELVIN H. SUNADA, MANAGER
Environmental Planning Office

c: EPO
WWB
SDWB
EH-Maui

CHRIS HART
& PARTNERS INC.

August 23, 2007

Mr. Kelvin H. Sunada, Manager
Environmental Planning Office
Department of Health
PO Box 3378
Honolulu, Hawaii 96801

Dear: Mr. Sunada,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

On behalf of the applicant, DMK I, LLC, we acknowledge the receipt of your letter dated July 31, 2007 and are responding to your comments.

Wastewater Branch
As stated in your July 31 letter, you department has no objections to the proposed project connecting to the County of Maui's sewer system. The proposed project will include a wastewater plan that meet's the Department's Rules, HAR Chapter 11-62, "Wastewater Systems."

Safe Drinking Water Branch (SDWB)
The proposed project will connect to the existing county water system. Your department identifies this as a major modification to the existing system and construction plans and specifications will be submitted to the Safe Drinking Water Branch for approval, prior to construction.

The project does not propose development of new sources of drinking water serving or proposed to serve a public water system.

General
The applicant will be reminded to review all the Standard Comments on the Office of Environmental Planning website.

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Project File

CHARMAINE TAVARES
Mayor

JEFFREY K. ENG
Director

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

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

RECEIVED
JUL 24 2007
CHRIS HART & PARTNERS
Landscape Architecture & Planning

061055
cc, Brett w/originals

July 16, 2007

Mr. Christopher L. Hart, ASLA
Chris Hart and Partners, Inc.
1955 Main Street, Suite
Wailuku HI 96793

SUBJECT: Early Consultation Request for Proposed Alahele Single-Family Residential Subdivision
Alahele Place, Kihei, Maui
TMK (2) 3-9-017:034

Dear Mr. Hart:

Thank you for the opportunity to provide comments on this project proposal.

Source Availability and Consumption
The project site is served by the Central Maui system. Main sources of water for this system are the designated Iao aquifer, Waihee aquifer, the Iao tunnel and the Iao-Waikapu Ditch. New source development projects include Waikapu South well and Maluhia well. DWS does not grant or imply any guarantee of water until an application for water meter has been received and reviewed. Water availability will be determined at the time of meter application. DWS will not issue reservations for future meters until new development efforts are completed. The Department will not issue temporary construction meters for Central Maui projects.

The EA should identify sources and expected potable and non-potable demand for the proposed 48 single-family residential subdivision. Based on system standards, daily demand for the proposed development would be in the range of 28,000 - 42,000 gallons.

System Infrastructure
The applicant will be required to provide domestic, irrigation and fire protection in accordance with system standards. There are three waterlines situated on or in proximity of the parcel. Twelve inch and eight-inch waterlines border the property on the Northwest and an18-inch waterline traverses the subject parcel. The applicant will be required to provide an easement for the waterline. Based on the preliminary subdivision map, relocation of the waterline will also be required.

Conservation

In order to reduce demand in the Central Maui system, we encourage the applicant to include the following water conservation measures in the project design and construction and convey to future homeowners, where applicable:

Use brackish and /or reclaimed water sources for dust control during construction and other non-potable uses.

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

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

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

Use Climate -adapted Plants: The project is located in the Maui County Planting Plan - Plant Zone 4. We encourage the applicant to utilize appropriate native and non invasive species and avoid the use of potentially invasive plants. Native plants adapted to the area, conserve water and protect the watershed from degradation due to invasive alien species. Attached is a list of appropriate plants for the zones as well as potentially invasive plants to avoid.

Limit Irrigated Turf: Limit irrigated turf to 25% or less of total landscaped area. Low-water use shrubs and ground covers can be equally attractive and require substantially less water than turf.

Pollution Prevention

The project overlies the Iao aquifer which has an estimated sustainable yield of 20 MGD. In order to protect surface and groundwater resources, we encourage the applicant to adopt Best Management Practices (BMPs) designed to minimize infiltration and runoff from construction and vehicle operations. We have attached copy of sample BMPs for reference. Additional mitigation measures are enumerated below and should be implemented during construction:

1. Prevent cement products, oil, fuel and other toxic substances from falling or leaching into the water.
2. Properly and promptly dispose of all loosened and excavated soil and debris material from drainage structure work.
3. Retain ground cover until the last possible date.
4. 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.
5. Avoid fertilizers and biocides, or apply only during periods of low rainfall to minimize chemical run-off.
6. Keep run-off on site.

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

Sincerely,

Jeffrey K. Eng
Director

eam
c: engineering division
applicant, with attachments

The Costly Drip
Selected BMP's from "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters"-EPA
Maui County Planting Plan - Saving Water in the Yard - What and How to Plant in your Area
Ordinance No. 2108 - 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 the Homes and Yard

CHRIS HART
& PARTNERS INC.

August 23, 2007

Mr. Jeffrey K. Eng, Director
Department of Water Supply
200 South High Street
Wailuku, Maui, HI 96793

Dear: ~~Mr. Eng,~~ Jeff

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

Thank you for your July 16, 2007 letter indicating that the Department of Water Supply has the following comments at this time.

The Environmental Assessment contains a preliminary engineering report that determines the average daily demand for the proposed 48-lot subdivision is 42,000 gpd based on 3,000 gallons per acre. Fire flow demand for the residential development is 1,000 gallons per minute for a 2-hour duration. Fire hydrants are required to be installed with a maximum spacing of 350 feet.

During the final subdivision application phase the applicant will provide necessary domestic, irrigation and fire protection system in accordance with County of Maui Department of Water Supply standards. Also, the applicant will provide an easement for the waterline and relocation of that waterline.

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

LINDA LINGLE
GOVERNOR

PATRICIA HAMAMOTO
SUPERINTENDENT

STATE OF HAWAI'I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI'I 96804

OFFICE OF THE SUPERINTENDENT

RECEIVED
JUL 23 2007
CHRIS HART & PARTNERS
Landscape Architecture & Planning

CC: Brett
061055

July 17, 2007

Mr. Christopher L. Hart, ASLA, President
Chris Hart and Partners, Inc.
1955 Main Street, #200
Wailuku, Hawaii 96793

Dear Mr. Hart:

Subject: Early Consultation for Proposed Alahele Single-Family Subdivision

The Department of Education has no comment on the proposed 48-lot single-family subdivision at this time.

We request that we also be sent the draft environmental assessment once it is completed.

Thank you for the opportunity to comment. If you have any questions, please call Heidi Meeker of the Facilities Development Branch at (808) 733-4862.

Very truly yours,

Patricia Hamamoto
Superintendent

PH:jmb

c: Randolph Moore, Assistant Superintendent, OBS
Duane Kashiwai, Public Works Administrator, FDB

CHRIS HART
& PARTNERS INC.

August 23, 2007

Ms. Patricia Hamamoto, Superintendent
Department of Education
Post Office Box 2360
Honolulu, Hawaii 96809

Dear: Ms. Hamamoto,

RE: Early Consultation request for proposed Alahele Subdivision at TMK: (2) 3-9-017:034 in Kihei, Maui, Hawaii.

Thank you for your June 29, 2007 letter indicating that the Department of Education has no comment at this time.

Thank you for your consideration of this application. Should you have any questions, please contact Chris Hart at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

CHARMAINE TAVARES
Mayor

JEFFREY S. HUNT
Director

COLLEEN M. SUYAMA
Deputy Director

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DEC 19 2007
CHRIS HART & PARTNERS
Landscape Architecture & Planning
Cc: Brett
06/055

COUNTY OF MAUI
DEPARTMENT OF PLANNING

TRANSMITTAL REMINDER

December 17, 2007

STATE AGENCIES
- √ Dept of Health, Maui (1 HD/1CD)*
- √ DOT, Statewide Planning Office (2/2)
- x DLNR (3HD/2CD))
- x DLNR, Historic Preservation Div.(CD)
- √ DAGS, Survey Division (CD)
- √ DOE, Office of Business Svcs (CD)
- x DBEDT, Office of State Planning(CD)

OTHER
- √ Maui Electric Company (CD)

COUNTY AGENCIES
- x DPW, DEM, DSA (5)
- √ Dept of Water Supply (HD)
- √ Dept of Parks and Recreation (CD)
- x Fire Dept (CD)
- √ Police Dept (CD)
- x Dept of Housing and Human Concerns (CD)

FEDERAL AGENCIES
- √ Nat. Resource Conserv. Serv., Maui (HD)
- x U.S. Fish and Wildlife (CD)
- √ U.S. Army Corp of Engineers (HD)

*HD = Hard Copy, CD= Compact Disc
√= comments received, thank you.
x= comments still pending.

PROJECT NAME: ALAHELE SUBDIVISION
APPLICANT: CHRIS HART & PARTNERS, INC
SUBJECT I.D.: SM1 2007/0006
TMK: (2) 3-9-017:034

On September 12, 2007, a request for comment and recommendation was sent to your office regarding the above-referenced application. The deadline for response was on October 12, 2007; however, as of this date, the Maui County Department of Planning (Department) has not received a response from your agency. **If comments have been transmitted to the Department, please disregard this reminder.** If you have not responded, please address your comments and recommendations directly to the Staff Planner Jim Bulka.

Thank you for your cooperation. If additional clarification is required, please contact me by email at james.bulka@maulcounty.gov or by phone at 270-6271.

Sincerely,

James A. Bulka, Staff Planner
For: JEFFREY S. HUNT, AICP
Planning Director

JSH:JAB:nt
c: Thorne E. Abbott, Coastal Resource Planner
James A. Bulka, Staff Planner
Chris Hart & Partners, Inc
EA Project File
Project File
General File
K:\WP_DOCS\PLANNING\SM1\2007\0006_Alahele Subdivision\AgencyTransmittalReminder.wpd

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793
MAIN LINE (808) 270-7735; FACSIMILE (808) 270-7634
CURRENT DIVISION (808) 270-8205; LONG RANGE DIVISION (808) 270-7214; ZONING DIVISION (808) 270-7253

CHARMAINE TAVARES
Mayor

JEFFREY S. HUNT
Director

COLLEEN M. SUYAMA
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

August 6, 2007

Post-it® Fax Note 7671	Date 8/8	# of pages ▶
To Brett Davis	From Jim Buick	
Co./Dept.	Co.	
Phone #	Phone # 270 6271	
Fax # 242 1956	Fax #	

Mr. Jon Dishell, President
Wilshire DMK I, LLC
2001 Wilshire Blvd. Ste. 302
Santa Monica, CA 90403

Dear Mr. Dishell:

RE: Pre-Consultation Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii; TMK: (2) 3-9-017:034; (EAC 2007/0022) (SM1 2007/0006)

The Maui Department of Planning (Department) is in receipt of your request for comments in preparation of a Draft Environmental Assessment (EA) dated June 25, 2007, for the above-referenced project. In addition, the Department has received the draft Environmental Assessment in a transmittal dated June 29, 2007, which is accompanied by the Special Management Area (SMA) Use Permit Application for the proposed Alahele Subdivision.

It is a pleasure to review a well-constructed and well-articulated Draft Environmental Assessment. The SMA objectives and policies of the Coastal Zone Management Act, Chapter 205A, Hawaii Revised Statutes, and the Rules and Regulations of the Maui County Planning Commission.

The purpose of this letter is to:

1. Provide the Department's requested pre-consultation comments regarding drafting of the required EA for comments by the Office of Environmental Quality Control, Maui Planning Commission, and relevant agencies; and
2. Provide review comments from the Department regarding the submitted draft EA.

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793
MAIN LINE (808) 270-7735; FACSIMILE (808) 270-7634

The Department understands that the proposed action includes the following:

- The project is a forty-eight (48) lot, single-family, residential subdivision ranging in lot size from 7,511 square feet to 10,382 square feet with necessary on-site and off-site infrastructure. The proposed project will include construction of a portion of the North-South Collector Road with vehicular access to Auhana Road.

- Subdivision improvements include paved roadways, concrete curbs, gutters and sidewalks, onsite and offsite drainage systems, water system, sewer system, underground utilities, land planting and offsite roadway improvements along Alaloa Road and Alahele Place fronting the project site.

- The proposed project does not include building the homes or optional ohana units that are permissible on each lot.

- The proposed project is consistent with land use designations, as follows:

  - State Land Use – Urban
  - Community Plan – Single Family
  - County Zoning – R-2 Residential
  - Other – Special Management Area

- Surrounding parcels are all consistent with the zoning, community plan, and State land use. This is an in-fill project.

- Mitigation of impacts to Hawai'ian cultural and Historic resources is proposed through the use of pre-construction surveys and monitoring during construction, represented by the Archeological Monitoring Plan For a Parcel In Kihei, Kama'ole Ahupua'a, Wailuku District, Maui Island, Hawai'i, April 2007, and Cultural Impact of Property Located In Kihei, Kama'ole Ahupua'a, [Wailuku District], Maui Island, Hawai'i, January 2007. The State Historic Preservation District approval of the Archeological Monitoring Plan for the Alahele Subdivision will be included in the final Draft Environmental Assessment.

- The proposed project will also include onsite and offsite drainage improvements designed to reduce downstream storm runoff and reduce the impacts of siltation and debris. An engineer has been retained to develop drainage plans with mitigation measures.

- The applicant is aware of the requirement to comply with Residential Workforce Housing Ordinance No. 3438 and is pre-consulting with the Housing Commissioner, Office of the Mayor.

- The trigger for the EA is the development of the North-South Collector Road.

Based on the foregoing, the Department provides the following three (3) comments as pre-consultation in preparation of the Draft EA:

1) **Environmental Assessment Trigger.** Please state in Section 1A, *Purpose of the Request*, the reason for the Chapter 343 Environmental Assessment Trigger;

2) Project Description. Please add any available information to the Project Description that details the planned disposition of the subject property, once the proposed project is completed; and

3) **Consolidation and Completion of Required Submittals for Special Management Area Use Permit Application.** The submitted document is the *Consolidated Applications for a HRS Chapter 343 Environmental Assessment and Special Management Area Permit, Alahele Subdivision, June 2007.* This consolidated document begins with a portion of the SMA Use Permit Application. The remainder of the SMA Application is found to begin on page 39 of the document, with Appendices and Figures referenced. For completeness sake and organization, please consolidate the entire SMA Use Permit Application at the beginning of the report by moving pertinent application information located on pages 39-41, to the beginning of the document. Appendices and Figures can still be referenced as is. In addition, please complete all elements of the Required Submittal #6, *An Assessment Report identifying the anticipated impacts of the proposed action on the special management area that addresses or describes items a) through g), etc.* The consolidated SMA Application and completed step #6 will expedite Maui Planning Commission and additional agency review and comment.

Based on the foregoing, the Department provides these additional following eight (8) comments as Department comments on the Draft EA:

4) **Preliminary Design Review Guidelines.** The Department encourages the applicant to consider developing preliminary design review guidelines for single-family homes and ohanas for the subject subdivision which can be presented to the Urban Design Review Board.

5) **Drainage and Soil Erosion Control Report.** Ensure mitigation of the impacts to air and water quality through the application of construction best management practices described in a Drainage and Soil Erosion Control Report.

6) **Secondary Impacts.** The Drainage Report in the Preliminary Engineering Report for Alahele Subdivision, May 2007, discusses briefly that the increase in runoff generated by the proposed project will be mitigated onsite by creation of detention basins. The project also cites potential construction of a detention basin mauka of the project on available land to reduce impacts of a 100-year, 24 hour storm. Compliance with HRS Chapter 343 Significance Criteria (section VI of draft EA) states that the proposed project will provide "drainage mitigation to downstream neighbors". In addition, this project will be built upstream from one of Kihei's most chronically flooded areas along and adjacent to South Kihei Road. In anticipation of public comment regarding potential for the proposed project to add to the flooding problem, we ask that the applicant consider devising additional alternative flood mitigation solutions for consideration that will not only negate anticipated increased runoff from the proposed project but also to reduce the overall flooding downstream. Clearly demonstrate the outcome of reduced flooding to the downstream neighbors for the preferred mitigation alternatives.

7) **Grading Plan.** Submit a grading plan.

8) **Visual Resources.** Please address minimizing impacts to scenic resources, such as keeping building heights low, screening buildings with landscaping, and down-shielding of lighting. Please address any residual negative impacts of the proposed subdivision development on makai views of the ocean which are currently available from Pi'ilani Highway through the site.

9) **Water.** Discuss the potential for utilizing reclaimed water to irrigate the proposed landscaping of common areas in an effort to conserve water.

10) **Residential Workforce Housing Policy.** Compliance with HRS Chapter 343 Significance Criteria (section VI of draft EA) states that the proposed project will provide "affordable single-family homes." Please provide a narrative of how the project will comply with the Residential Workforce Housing Policy. An agreement with the Department of Housing and Human Concerns regarding affordable housing is required.

11) **North-South Collector Road.** Part of the proposed project is to complete a significant section of the North-South Collector Road. Since one of the land use policies of the Kihei-Makena Community Plan is to encourage land-use patterns that foster a pedestrian-oriented environment to include such amenities as bike paths, linear parks, landscaped buffer areas, and mini-parks, the applicant is encourage to ensure that community design for the North South Collector Road is incorporated into the subject project portion of the road.

Thank you for the opportunity to comment. Should you require further clarification, please contact Mr. Jim Buika, Staff Planner, at james.buika@mauicounty.gov or 270-6271.

Sincerely,

Jeffrey S. Hunt, AICP
Planning Director

JSH:JAB:bg

c: Clayton I. Yoshida, AICP, Planning Program Administrator
Aaron H. Shinmoto, P.E., Planning Program Administrator (2)
[redacted], Staff Planner
Christopher L. Hart, Chris Hart & Partners, Inc.
EA Project File
General File
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CHRIS HART & PARTNERS INC.

January 18, 2008

Mr. Jeffrey S. Hunt, AICP, Director
Maui County Planning Department
250 South High Street
Wailuku, HI 96793

Dear Mr. Hunt:

Attn: Jim Buika

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated August 6, 2007 that indicates the eight (8) comments your department has.

1. Preliminary Design Review Guidelines
   The applicant will create a Home Owners Association (HOA) for the subdivision to implement and enforce urban design guidelines controlling roof types and colors, building materials, fencing and landscape planting. The HOA will implement and administer the, design guidelines.

2. Drainage and Soil Erosion Control Report
   A Registered Civil Engineer, Otomo Engineer, Inc. has provided a Drainage Report Study. Grading and runoff water generated by the project will be retained onsite in detention basins located on the subject parcel. The mitigation measures are expected to not have an adverse effect on the adjacent and downstream properties. The retention of water on the project site will reduce downstream runoff flows and also retain silt and debris therefore improving the water quality of the runoff.

   The drainage report includes onsite and off-site hydrologic and hydraulic calculations and the schemes for disposal of runoff waters. The drainage report complies with the provisions of the "Rules and Design of Storm Drainage Facilities in the County of Maui" and will provide verification that the grading and runoff water generated by the project will not have an adverse effect on adjacent and downstream properties. Additionally, the BMP plan will show measures to control erosion and sedimentation to the maximum extent practicable.

3. Secondary Impacts
   The proposed subdivision has retained the services of a licensed Civil Engineer who has prepared a Drainage and Soil Erosion Control Report that outlines the drainage concept.

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CITY AND REGIONAL PLANNING
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The drainage concept will include a primary landscaped detention basin with passive recreation features located adjacent to Piilani Highway and a secondary detention basin located adjacent to Alahele Place. The proposed subdivision is in a location that experiences flooding during significant storm events, thus creating a regional drainage problem. During the planning process the project Civil Engineer has facilitated discussions with the Department of Public Works Engineering Division that resulted in a letter of support to use a portion of the Kanakanui Road right-of-way as a detention basin which will provide mitigate some of the regional runoff in the area. The letter also indicates that the onsite improvements already meet the drainage standards and requirements of the subdivision. (See: Public Works Letter dated 10-12-07)

4. Grading Plan
A Grading Plan will be submitted prior to grading permit approval.

5. Visual Resources
The site will be graded to maximize the views from each building lot. Grading for the proposed development will be performed in compliance with the applicable requirements of the Maui County Grading Ordinance. It is expected that grading will be essentially associated with the construction of the proposed North/South Collector Road and internals subdivision roadways.

The proposed subdivision is an "infill" project that is adjacent to parcels developed as residential use. The proposed project will not include construction of any structures and is a "lots only" subdivision. As mentioned, the HOA will maintain design guidelines, including, but not limited to height restrictions on buildings. The height limit for structures in the project site is 30 feet from natural grade. The height restrictions will create a consistent housing "look" in the immediate area and reduce view impacts on surrounding neighbors.

6. Water
The developer will utilize reclaimed water to irrigate the proposed landscaping of common areas, where possible, in an effort to conserve water.

7. Residential Workforce Housing Policy
In December 2006, the County of Maui passed a Residential Workforce Housing Policy (RWHP), Chapter 2.96, Maui County Code. Any subdivision of the existing parcel into 5 or more lots would trigger the requirements of the RWHP. We assume that the subdivision will have a market value less than $600,000 per lot, therefore current legislation requires that 40 percent of new units be sold or rented as workforce units, or that some in-lieu fee is paid. The in-lieu fee is adjustable, based on interest rates, and can be reduced if delivered in partnership with a non-profit, affordable housing project. At present, the in lieu fee is approximately $200,000 per workforce housing unit owned, while partnership with a non-profit is approximately $120,000 per workforce unit owed. The developer will enter into a Workforce Housing Agreement at the time of final subdivision approval.

8. North-South Collector Road
The Developer will construct a portion of the North-South Collector Road to final subdivision approval standards. The proposed subdivision will incorporate a crushed stone pathway to encourage pedestrian activity. Additionally, the proposed subdivision will incorporate landscaping and a passive recreation space with seating. (**See:** Landscape Plan)

Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

Jim

CHARMAINE TAVARES
MAYOR

OUR REFERENCE
YOUR REFERENCE

POLICE DEPARTMENT
COUNTY OF MAUI

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

THOMAS M. PHILLIPS
CHIEF OF POLICE

GARY A. YABUTA
DEPUTY CHIEF OF POLICE

'07 OCT 16 A9:11
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COUNTY OF MAUI
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October 12, 2007

MEMORANDUM

TO : JEFFREY S. HUNT, PLANNING DIRECTOR

FROM : THOMAS M. PHILLIPS, CHIEF OF POLICE

SUBJECT : I.D. : SM1 2007/0006
TMK : (2) 3-9-017:034
Project Name : Alahele Subdivision
Applicant : Chris Hart & Partners, Inc.

___ No recommendation or comment to offer.

_x_ Refer to enclosed comments and/or recommendations.

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

AC Wayne T. Ribao

Assistant Chief Wayne T. Ribao
For: THOMAS M. PHILLIPS
Chief of Police

Enclosure

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 AND ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED ALAHELE SUBDIVISION @ TMK (2) 3-9-017:034

CONCUR: AC 10/12/07

APPLICANT INFORMATION:

The application was prepared by Chris Hart & Partners, Inc. for Wilshire DMK I, LLC.

The applicant is requesting the Special Management Area use Permit (SMA) and combined Environmental Assessment (EA) for the proposed Alahele Subdivision. This parcel of land is currently undeveloped. It is located mauka of the Kalama Subdivision, Kihei Kalama Village and Kalama Park. It is located south of the Keala Subdivision, north of the Halona Subdivision and it is bordered to the east by the Piilani Highway.

The applicant is proposing the development of a (48) forty-eight unit, Single-Family Residential Subdivision on a 14 acre site located at TMK (2) 3-9-017:034.

IMPACT ON POLICE:

With the development of any undeveloped property in the South Maui area there will undoubtedly be greater opportunity for crime and criminal activities to occur and greater need for trained police personnel.

I do not believe that this one residential development will have a great impact on Police services in the South Maui area. I do however believe that this development combined with the many other proposed developments and residential properties currently under construction there will be a definite impact on Police and other emergency service agencies working in this area.

The problem and impact will exist because the emergency service agencies are not able to expand quickly enough and provide trained personnel in these areas to match the pace of the new-continually developing communities around us.

As mentioned in the SMA by the applicant, there are 45 budgeted police positions in the South Maui District, however a number of the positions are currently vacant. Further development in this area will create a greater need for additional officers which are just not available.

RESIDENTIAL CONCERNS:

The local area residents are very concerned about the rain water run off. Several times a year rain water run off causes flooding in the Kalama Subdivision. They have voiced their concerns to the applicant during a recent community meeting in hopes that a thorough study can be completed before the applicant receives approval to develop the property. Development of this land could create worse flooding and property damages to homes in the Kalama Subdivision caused by the seasonal rains and the proposed mauka development.

CRIME PREVENTION RECOMMENDATIONS:

In an attempt to take a proactive approach to crime prevention in South Maui regarding this development we are recommending the applicant use "Best Practices" in Crime Prevention Through Environmental Design (CPTED) when developing this property.

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

Studies have shown that the likelihood of criminal activities are greatly impacted by the criminals perception of the entire environment design of his/her target.

To find out more about the CPTED principals on crime prevention you may refer to the National Criminal Justice Reference Service (NCJRS) web site at, www.ncjrs.org.

Respectfully Submitted,

Officer Brad Hickle
10/10/07 17:15 hours

10/10/07
CK

CHRIS HART
& PARTNERS INC.

November 29, 2007

Mr. Thomas M. Phillips, Chief
Maui Police Department
55 Mahalani Street
Wailuku, HI 96793

Dear Chief Phillips:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated October 12, 2007 that provides the Police Departments comments.

Impact on Police
As indicated in your letter, the proposed single-family subdivision is not anticipated to have a large impact on Police. However we acknowledge that Kihei is a growing community and population is increasing the demand for Police officers in South Maui and that the Kihei substation currently understaffed, which also increases the impact on Police.

Residential Concerns
The proposed project is located in an area that is subject to flooding due to water runoff after significant storm events. A licensed Civil Engineer has been retained to create a drainage plan to mitigate downstream flooding to the Kalama Subdivision. The applicant will retain all onsite runoff water in addition to the runoff created from the development. Additionally the County of Maui has acknowledged that the proposed project will also retain storm runoff in an additional retention basin located in the Kanakanui Roadway. *(See: Public Works Engineering Letter)*

Crime Prevention Recommendations
When possible, the proposed subdivision will be designed utilizing "Best Practices" in Crime Prevention Through Environmental Design (CPTED when developing this property. The proposed subdivision will have design guidelines that incorporate the CPTED principals.

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Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

(Enclosure)

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

LINDA LINGLE
GOVERNOR

PATRICIA HAMAMOTO
SUPERINTENDENT

STATE OF HAWAI'I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI'I 96804

OFFICE OF SCHOOL FACILITIES
AND SUPPORT SERVICES

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NOV 15 2007
CHRIS HART & PARTNERS
Landscape Architecture & Planning

Post-it® Fax Note 7671	Date	# of pages ▶
To BRETT DAVIS	From JIM BUIKA	
Co./Dept.	Co.	
Phone #	Phone # 270 6271	
Fax # 242-1956	Fax #	

06105

October 19, 2007

'07 OCT 23 P1:18
DEPT OF PLANNING
COUNTY OF MAUI

Mr. Jeffrey S. Hunt, Planning Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawai'i 96793

Attn: Mr. James A. Buika, Staff Planner

Dear Mr. Hunt:

SUBJECT: Application for Special Management Area Permit, Alahele Subdivision, Kihei TMK: 3-9-017:034 (SM1 2007/0006)

The Department of Education (DOE) has reviewed the application for the Alahele residential subdivision in Kihei.

The 2007 Legislature passed a bill establishing school impact fees. The bill became Act 245 and is in the process of being implemented. Under this new law, we believe the project will be required to pay an impact fee. We currently do not know the amount of the fee per residential unit.

It would have been useful if the application included information on the number of units that would be permitted on each lot and the estimated size of the housing likely to be built in the project. To estimate the student impact of the project, we would need to know the number of bedrooms anticipated in each type of housing and the general price range for the housing.

We disagree with the statement on page 10 of the application which stated that schools are adequate to serve the proposed subdivision. While at present, there is room for enrollment growth at Kihei's two elementary schools, enrollment at Lokelani Intermediate is close to the school's facility capacity, and Maui High's enrollment exceeds its facility capacity by close to 200 students.

Thank you for this opportunity to offer our early comments. If you have any questions, please call Heidi Meeker of the Facilities Development Branch at (808) 733-4862.

Sincerely yours,

Duane Y. Kashiwai, Public Works Administrator
Facilities Development Branch

DYK:jmb

c: Bruce Anderson, CAS, Baldwin/King Kekauliko/Maui High Complex Areas

CHRIS HART
& PARTNERS INC.

December 3, 2007

Mr. Duane Y. Kashiwai, Public Works Administrator
Facilities Development Branch
Department of Education
P.O. Box 2360
Honolulu, HI 96804

Dear Mr. Kashiwai:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated October 19, 2007 providing the DOE comments on the proposed subdivision.

Your letter indicates that the DOE believes that the proposed Alahele subdivision is subject to an impact fee required by newly passed legislation, Act 245. Additionally your letter indicates that the DOE does not know the amount of the fee per residential unit. If Act 245 warrants an impact fee, the developer will enter into an agreement with the department prior to final subdivision approval.

The proposed project is a "lots only" subdivision and does not include building construction. The project site is zoned R-2 residential where each lot must be at least 7,500 square feet. Also, accessory "Ohana" units are an allowable use.

Further, your letter acknowledges that Kihei's two elementary schools and intermediate school are not to capacity and that the enrollment of Maui High School exceeds its capacity. However, a new high school site in Kihei has recently been chosen and it will provide adequate capacity for the future growth of Kihei.

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Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

LINDA LINGLE
GOVERNOR

BARRY FUKUNAGA
DIRECTOR

Deputy Directors
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRENNON T. MORIOKA
BRIAN H. SEKIGUCHI

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

'07 OCT 17 P1:57

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COUNTY OF MAUI
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IN REPLY REFER TO:

STP 8.2652

October 10, 2007

Mr. Jeffrey S. Hunt, AICP
Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Hunt:

Subject: Alahele Subdivision
SMA Permit Application (SM1 2007/0006)
TMK: 3-9-017:034, Kihei, Maui

The following comments are provided in response to your request for the State Department of Transportation's (DOT) review of the subject project's application:

1. The proposed subdivision development project alone is not anticipated to create any significant, direct impacts on DOT highway facilities.

2. The proposed subdivision development project will, however, contribute an equal share of the collective traffic generated by the comparably sized developments in the area. The DOT thus supports Maui County's stipulation of measures to mitigate the additional Piilani Highway traffic impacts created by the various development projects in Kihei.

We appreciate the opportunity to provide comments.

Very truly yours,

BARRY FUKUNAGA
Director of Transportation

CHRIS HART
& PARTNERS INC.

November 29, 2007

Mr. Barry Fukunaga, Director
State of Hawaii
Department of Transportation (DOT)
869 Punchbowl Street
Honolulu, HI 96813

Dear Mr. Fukunaga:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated October 10, 2007 providing the DOT comments on the proposed subdivision.

Your letter identifies that the proposed development project is not anticipated to create any significant, direct impacts on DOT highway facilities. However, your letter indicates that the proposed project will contribute an equal share of the collective traffic generated by the comparably sized developments in the area. Additionally, your department will support Maui County measures to mitigate the additional Piilani Highway traffic impacts.

The proposed project is relatively small in scale and will generate 62 trips during the morning peak hour and 79 during the afternoon peak hour. The proposed project generates under 100 trips during each peak hour (morning and afternoon), which is not enough to warrant a Traffic Impact Study by the Institute of Transportation Engineers. The project trip generation is relatively small scale and the proposed project will include the construction of a portion of the North South Collector Road, which will help alleviate congestion in Kihei. Therefore the proposed project is not anticipated to produce significant traffic impacts in Kihei.

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Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

by NT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

2007 SEP 18 PM 3 30

DEPARTMENT OF PLANNING
COUNTY OF MAUI
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September 14, 2007

County of Maui
Department of Planning
250 South High Street
Wailuku, Hawaii 96793

Attention: Mr. James Buika

Gentlemen:

Subject: Special Management Area Permit (SM1 2007/0006) for Alahele Subdivision, Kihei, Maui, Tax Map Key: (2) 3-9-17:34

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources has no comment to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

Charlene E. Unoki

Russell Y. Tsuji
Administrator

CHRIS HART
& PARTNERS INC.

November 29, 2007

Mr. Russell Y. Tsuji, Administrator
State of Hawaii
Department of Land and Natural Resources
Land Division
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Tsuji:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated September 14, 2007 that indicates the Department of Land and Natural Resources has no comment on the proposed project.

Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
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CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

Maui Electric Company, Ltd. ( ) West Kamehameha Avenue • PO Box 398 • ( )ului, Maui, HI 96733-6898 • (808) 871-8461

5'm

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September 20, 2007

Mr. James A. Buika, Staff Planner
Department of Planing
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Buika,

Subject: Alahele Subdivision
SM1 2007/0006
Kihei, Maui, Hawaii
TMK: (2) 3-9-017:034

Thank you for allowing us to comment on the Draft Environmental Assessment and Special Management Area applications for the proposed subject project, which was received on September 14, 2007.

In reviewing our records and the information received, Maui Electric Company (MECO) has no objection to the project at this time. However, the addition of this project's anticipated load demand will have a substantial impact to our system. Therefore, in addition to an electrical line extension, upgrades to our substation, transmission, and/or distribution system may be necessary to accommodate a project of this magnitude. We highly encourage the developer's electrical consultant to submit its electrical demand requirements and project time schedule as soon as practical so that service can be provided on a timely basis.

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

Should you have any other questions or concerns, please call Kim Kawahara at 871-2345.

Sincerely,

Neal Shinyama
Manager, Engineering

NS/kk:lh
cc: Sage Kiyonaga – MECO DSM

CHRIS HART
& PARTNERS INC.

November 29, 2007

Mr. Neal Shinyama, Manager
Maui Electric Company, Ltd. (MECO)
210 West Kamehameha Avenue
P.O. Box 398
Kahului, HI 96733

Dear Mr. Shinyama:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated September 20, 2007 that indicates MECO has no objection other project at this time.

However, we acknowledge that at the time of construction electrical line extensions, upgrades to the substation, transmission and or distribution system may become necessary.

Prior to construction the developer's electrical consultant will submit electrical demand requirements and project time schedule in addition to meeting with MECO's Demand Side management (DSM) group at 872-3283 to review potential energy conservation and efficiency opportunities for their project.

Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
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CHARMAINE TAVARES
Mayor

CHERYL K. OKUMA, Esq.
Director

GREGG KRESGE
Deputy Director

TRACY TAKAMINE, P.E.
Solid Waste Division

DAVID TAYLOR, P.E.
Wastewater Reclamation Division

COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2200 MAIN STREET, SUITE 175
WAILUKU, MAUI, HAWAII 96793

October 23, 2007

MEMO TO: **JEFF HUNT, PLANNING DIRECTOR**

FROM: CHERYL K. OKUMA, ESQ., DIRECTOR OF ENVIRONMENTAL MANAGEMENT Cheryl K. Okuma Digitally signed by Cheryl K. Okuma Date: 2007.10.23 08:27:06 -10'00'

SUBJECT: **ALAHELE SUBDIVISION**
SM1 2007/0006
TMK (2) 3-9-017:034, KIHEI

We reviewed the subject application and have the following comments:

1. Solid Waste Division comments

   a. Include plan for disposal/composting of cleared and grubbed material.

2. Wastewater Reclamation Division comments:

   a. Although wastewater system capacity is currently available as of 10/23/2007, the developer should be informed that wastewater system capacity cannot be ensured until the issuance of the building permit.
   b. Developer shall pay assessment fees for treatment plant expansion costs in accordance with ordinance setting forth such fees.
   c. Developer is required to fund any necessary off-site improvements to collection system and wastewater pump stations.
   d. Plans should show the installation of a single service lateral and advanced riser for each lot.
   e. 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.
   f. Non-contact cooling water and condensate should not drain to the wastewater system.

If you have any questions regarding this memorandum, please contact Gregg Kresge at 270-8230.

CHRIS HART
& PARTNERS INC.

November 29, 2007

Ms. Cheryl K. Okuma, Director
Department of Environmental Management
220 Main Street, Suite 175
Wailuku, HI 96793

Dear Ms. Okuma:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated October 23, 2007 that provides comments of the Solid Waste and Wastewater Reclamation Divisions.

- Solid Waste Division:

The proposed project has retained the services of a licensed Civil Engineer and a plan for disposal and or composting of cleared and grubbed material.

- Wastewater Reclamation Division:

(a)The developer understands that wastewater system capacity is not guaranteed until the issuance of a building permit.
(b)The proposed project is located in Kihei Assessment Fee Area 6. The developer of the individual lot will pay the required fee for facility expansion assessment and the collection system upgrade assessment at the time of building permits.
(c) In the event any offsite improvements to the collection system and wastewater pump stations are necessary, the developer will be required to fund those additional improvements.
(d., e.) Prior to the issuance of building permits, the plans will show installation of a single service lateral and advanced riser for each lot. Additionally the plans will indicate ownership of each easement (in favor of each party).
(f) The plan will identify that non-contact cooling water and condensate will not drain to the wastewater system.

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Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

IB

SM1 2007/0006

CHARMAINE TAVARES
MAYOR

JEFFREY K. ENG
DIRECTOR
ERIC H. YAMASHIGE, P.E., L.S.
DEPUTY DIRECTOR

DEPARTMENT OF WATER SUPPLY

COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
Telephone (808) 270-7816 • Fax (808) 270-7833

'07 OCT 18 AM 10:29
DEPT OF PLANNING
COUNTY OF MAUI

October 12, 2007

Mr. Jeffrey S. Hunt, Director
Department of Planning
County of Maui
250 South High Street
Wailuku HI 96793

Re: I.D.: SM1 2007/2006
TMK: (2) 3-9-017:034
Project Name: Alahele Subdivision

Dear Mr. Hunt:

Thank you for the opportunity to comment on this application. Please find attached our comment letters on this project dated April 16, 2003 and July 16, 2007.

Source Availability and Consumption
The project area is served by the Central Maui System. The main sources of water for this system are the designated Iao aquifer, Waihee aquifer, the Iao tunnel and the Iao-Waikapu Ditch. New source development projects include Maui Lani Wells, Waikapu South well and Waiale Surface Water Treatment Plant. Demand for 48 residential lots with potential ohanas would be about 42,000 - 57,600 gallons per day based on system standards. To meet system standards, there is currently no additional source available to accommodate new customers on the Central Maui System. The Department may delay issuance of meters to serve this project until new sources are on line.

System Infrastructure
The subject property is bordered by 12-inch and 8-inch waterlines on the northwest. An 18-inch waterline that traverses the subject parcel, is proposed to be relocated. Easements will be required in the subdivision process. Two fire hydrants are located along Alahele Road northwest of the property. The applicant will be required to provide for water service and fire protection in accordance with system standards. Required fire flow for R-2 zoned subdivision is 1,000 gallons

per minute for 2 hours duration and 350 ft hydrant spacing. The applicant obtained preliminary subdivision plan approval for this project on April 4, 2007.

Conservation

To alleviate demand on the Central Maui system, we suggest that the applicant provide the following conservation information and attached brochure to individual lot owners:

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. Lot owners should establish a regular maintenance program.

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

Use Climate-adapted Plants: Please consider climate-adapted native plants. The project is located in the "Maui County Planting Plan" - Plant Zone 3. Native plants adapted to the area conserve water and protect the watershed from degradation due to invasive alien species.

Pollution Prevention

In order to protect ground and surface water sources, we encourage Best Management Practices (BMPs) designed to minimize infiltration and runoff from construction. The mitigation measures below should be implemented during construction:

1. Prevent cement products, oil, fuel and other toxic substances from falling or leaching into the water.
2. Properly and promptly dispose of all loosened and excavated soil and debris material from drainage structure work.
3. Retain ground cover until the last possible date.
4. 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.
5. Avoid fertilizers and biocides, or apply only during periods of low rainfall to minimize chemical run-off.
6. Keep run-off on site.

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

Sincerely,

Jeffrey K. Eng, Director
emb/mlb

c: engineering division
Attachments:

DWS letter dated April 16, 2003
DWS letter dated July 16, 2007
Low Flow Fixture Ordinance
A Checklist of Water Conservation Ideas for the Home
Plant Brochure: "Saving Water in the Yard"

C:\WPdocs\Permcomm\3-9-017_034Alahele_SD_SMA.wpd

CHRIS HART
& PARTNERS INC.

November 29, 2007

Mr. Jeffrey K. Eng, Director
Department of Water Supply
200 South High Street
Wailuku, HI 96793

Dear Mr. Eng:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated October 12, 2007 that provides the Department of Water Supply comments. The Water Department had previously commented on this project in letters dated April 16, 2003 and July 16, 2007.

The Environmental Assessment contains a Preliminary Engineering Report that determines the average daily demand for the proposed 48-lot subdivision is 42,000 gpd based on 3,000 gallons per acre. Fire flow demand for the residential development is 1,000 gallons per minute for a 2-hour duration. Fire hydrants will be installed with a maximum spacing of 350 feet.

During the final subdivision application phase the applicant will provide necessary domestic, irrigation and fire protection system in accordance with County of Maui Department of Water Supply standards. Also, the applicant will provide an easement for the waterline and relocation of that waterline. The developer will implement Best Management Practices to minimize infiltration and runoff during construction of these improvements.

The developer understands that the Water Department may delay issuance of meters to serve this project until new sources are on line. The proposed project will comply with all Maui County Water Department requirements.

LANDSCAPE ARCHITECTURE
CITY AND REGIONAL PLANNING
115 N. MARKET STREET • WAILUKU, MAUI, HAWAII 96793-1706 • PHONE 808-242-1955 • FAX: 808-242-1956

Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

CHARMAINE TAVARES
Mayor

TAMARA HORCAJO
Director

ZACHARY Z. HELM
Deputy Director

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

DEPARTMENT OF PARKS & RECREATION

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

2007 SEP 26 AM 10 48
DEPARTMENT OF PLANNING
COUNTY OF MAUI
RECEIVED

September 24, 2007

Jeffrey Hunt, Planning Director
County of Maui
Department of Planning
250 South High Street
Wailuku, HI 96793

Attn: Mr. James A Buika

Subject: Alahele Subdivision SM1 2007/0006

We have reviewed the combined draft environmental assessment and SMA permit application for the above referenced project, and have no additional comments to make.

Please contact me or Patrick Matsui, Chief of Planning and Development, at 270-7387 if there are any questions.

Sincerely,

TAMARA HORCAJO
Director, Parks & Recreation

xc: Patrick Matsui, Chief of Planning & Development

TH:PM:ak

CHRIS HART
& PARTNERS INC.

November 29, 2007

Mrs. Tamara Horcajo, Director
Department of Parks and Recreation
700 Hali'a Nakoa Street, Unit 2
Wailuku, HI 96793

Dear Mrs. Horcajo:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated September 24, 2007 that indicates the Department of Parks and Recreation has no comments on the Draft Environmental Assessment and SMA permit application.

Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

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SM1 07/06
EA 07/0

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
210 Imi Kala St. Ste 209
Wailuku, HI 96793
808-244-3100

2007 OCT 22 AM 11 20

DEPARTMENT OF PLANNING
COUNTY OF MAUI
RECEIVED

October 22, 2007

Mr. James Buika
Planning Department
County of Maui
250 S. High St.
Wailuku, HI 96793

Subject: Alahele Subdivision
TMK: 3-9-017: 034

Dear Mr. Buika:

Design parking lot/driveways which will direct and capture run off to landscape areas.

Native plants should be required for groundcovers for the proposed development to reduce water usage.

Provide specific adequate design information on the proposed drainage plan or erosion control for future comments.

Thank you for the opportunity to comment.

Sincerely,

Ranae Ganske-Cerizo
District Conservationist

CHRIS HART
& PARTNERS INC.

November 29, 2007

Mrs. Ranae Ganske-Cerizo
District Conservationist
Natural Resources Conservation Service
210 Imi Kala St. Ste 209
Wailuku, HI 96793

Dear Mrs. Ganske-Cerizo:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated October 22, 2007 with your department's comments. A professional Civil Engineer has been retained for the proposed subdivision that will design driveways that direct runoff into landscaped retention areas. Additionally, the Civil Engineer will be able to provide adequate design information on the proposed drainage plan or erosion control at the time of future comments from Natural Resources Conservation Service.

The proposed project will incorporate native plants when possible. The submitted Draft Environmental Assessment landscape plan identifies native plantings in the detention basin area.

Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

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Jim

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, HONOLULU
BUILDING 223
FORT SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF: CEPOH-EC-T

September 17, 2007

Civil Works Technical Branch

'07 SEP 17 P2:42

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

Mr. Jeffrey S. Hunt, Staff Planner
County of Maui
Department of Planning
250 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Hunt:

Thank you for the opportunity to review and comment on the Special Management Area Application and Draft Environmental Assessment (DEA) for the Alahele Subdivision Project, Kihei, Maui (TMK 3-9-17: 34). The flood hazard information provided on Page 9 of the DEA is correct.

The documents have been forwarded to our Regulatory Branch to determine Department of the Army permit requirements (Mr. George Young – telephone: 438-9258). They will respond to your office under separate cover. Should you require additional information, please call Ms. Jessie Dobinchick of my staff at 438-8876.

Sincerely,

James Pennaz

James Pennaz, P.E.
Chief, Civil Works Technical Branch

CHRIS HART
& PARTNERS INC.

November 29, 2007

Mr. James Pennaz, P.E.
Chief, Civil Works Technical Branch
Department of the ARMY
U.S. ARMY Engineer District, Honolulu
Building 223
Fort Shafter, HI 96858

Dear Mr. Pennaz:

RE: Agency Comments in Preparation of a Draft Environmental Assessment (DEA) for Alahele Subdivision located at Kihei, Maui, Hawaii; TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated September 17, 2007 that indicates the flood hazard information provided in the DEA is correct.

Additionally, we look forward to receiving the comments of the Regulatory Branch.

Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

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CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

JB

LINDA LINGLE
GOVERNOR

RUSS K. SAITO
Comptroller

BARBARA A. ANNIS
Deputy Comptroller

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

Response refer to:
MA-368(07)

October 11, 2007

2007 OCT 15 PM 3 12
DEPARTMENT OF PLANNING
COUNTY OF MAUI
RECEIVED

MEMORANDUM

TO: Jeffrey S. Hunt, AICP, Planning Director
Maui County Planning Department

FROM: Reid K. Siarot, State Land Surveyor
DAGS, Survey Division

SUBJECT: I.D.: SM1 2007/0006
TMK: 3-9-17: 34
Project Name: Alahele Subdivision
Applicant: Chris Hart & Partners, Inc.

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

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

CHRIS HART
& PARTNERS INC.

November 29, 2007

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

Dear Mr. Siarot:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated October 11, 2007 that indicates the Department of Accounting and General Services has no objections to the proposed project.

Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

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LINDA LINGLE
GOVERNOR OF HAWAII

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

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

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

October 3, 2007

2007 OCT 4 AM 8 47
DEPARTMENT OF PLANNING
COUNTY OF MAUI
RECEIVED

Mr. Jeffrey S. Hunt
Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawai`i 96793

Attention: James A. Buika

Dear Mr. Hunt:

Subject: **Alahele Subdivision**
TMK: (2) 3-9-017: 034
SM1 2007/0006

Thank you for the opportunity to comment on the proposed Alahele Subdivision. We have no further comments to offer beyond those provided to Mr. Christopher Hart during the early consultation request.

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

Sincerely,

Herbert S. Matsubayashi
District Environmental Health Program Chief

CHRIS HART
& PARTNERS INC.

November 29, 2007

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

Dear Mr. Matsubayashi:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated October 3, 2007 that indicates your department has no further comments other than those provided during the early consultation request, dated August 23, 2007, which is enclosed for your reference.

Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

(ENCLOSURE)

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

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CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

CHARMAINE TAVARES
Mayor

VANESSA A. MEDEIROS
Director

LORI TSUHAKO
Deputy Director

DEPARTMENT OF HOUSING AND HUMAN CONCERNS COUNTY OF MAUI

200 SOUTH HIGH STREET • WAILUKU, HAWAII 96793 • PHONE (808) 270-7805 • FAX 270-7165 • EMAIL director.hhc@mauicounty.gov

Resp. to 242. 1952
Brett 4/7/08

Date: April 4, 2008

To: **James A. Buika** Staff Planner, Department of Planning

From: Vanessa A. Medeiros, Director Housing and Human Concerns

Subject: **Preliminary Planning Review**
Applicability to Residential Workforce Housing Policy
Chapter 2.96, MCC; effective 12/5/2006

Project Name: **Alahele Subdivision**
Applicant: **Chris Hart & Partners, Inc.**
Subject I.D.: **SM1 2007/0006**
TMK: **(2) 3-9-017: 034**
Street Address: **Alahele Place, Kihei, Hawaii 96753**
Determination:

☐ **Not-Applicable**
Does not meet applicability as set forth in 2.96.030(A), MCC

☑ **Applicable**
☑ **No Exemptions**

☐ **Exemptions: (2.96.030)**
- ☐ B.1. An executed affordable housing agreement, currently in effect and approved prior to the effective date of chapter.
- ☐ B.2. A development subject to a change in zoning condition that requires affordable or residential workforce housing.
- ☐ B.3. A subdivision granted preliminary subdivision approval prior to the effective date of this chapter. (12/5/2006)
- ☐ B.4. A building permit application submitted prior to the effective date of this chapter.
- ☐ B.5. A family subdivision, for immediate family members, as described in sections 18.20.280(B)(1) and (B)(2) of this code.
- ☐ B.6. A development by a government entity, 201H, community land trust, or an affordable housing project with more than the residential workforce housing units, in-lieu fees, or in-lieu land required by section 2.96.040, as approved by the director.

Additional Comments: ☑ **See comments below** ☐ **See Attachment(s)**
☐ **We have NO comment**

Pending Residential Workforce Housing Agreement.

Reviewed By: Vanessa A Medeiros
Vanessa A. Medeiros

4/4/08
Date

CHARMAINE TAVARES
Mayor

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

MICHAEL M. MIYAMOTO
Deputy Director

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

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

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

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

OCT 0 9 2007
Landscape Architecture & Planning
CC: Brett 06/055

October 2, 2007

CHRIS HART & PARTNERS, INC.
115 North Market Street
Wailuku, Maui, Hawaii 96793

Gentlemen:

SUBJECT: ALAHELE SUBDIVISION
TMK: (2) 3-9-017:034
SM1 2007/0006

We reviewed the subject application and have the following comments:

1. The architect and owner are advised that the project is subject to possible flood inundation. As such, said project must conform to Ordinance No. 1145, pertaining to flood hazard districts.

2. A road-widening lot shall be provided for the North-South Collector Road to provide for a future 60 foot wide right-of-way and improved to County standards to include, but not limited to pavement widening, construction of curb, gutter and sidewalk, street lights and relocation of utilities underground. Said lot shall be dedicated to the County upon completion of the improvements.

3. All structures such as walls, trees, etc., shall be removed or relocated from the road-widening strip. The rear boundaries of the road-widening strip shall be clearly marked to determine if said structures have been properly removed and relocated.

4. A 30 foot radius shall be provided at the intersection of the proposed subdivision road and the adjoining subdivision roads.

5. A verification shall be provided by a Registered Civil Engineer that the grading and runoff water generated by the project will not have an adverse effect on the adjacent and downstream properties.

6. A detailed final drainage report and a Best Management Practices (BMP) plan 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.

7. All existing features such as structures, driveways, drainage ways, edge of pavement, etc. shall be shown on the project plat plan.

8. 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.

9. Sight distance setbacks and easements will not be allowed for roadways to be dedicated to the County. Right-of-way must accommodate sight distance allowances and be dedicated to the County.

10. The 100-year flood inundation limits shall be shown on the project site plans. Lot geometrics cannot be approved until such data is submitted and reviewed.

11. The existing streets providing access to the subdivision shall have a 24 feet minimum pavement width, and therefore, must be improved.

12. A detailed final Traffic Impact Assessment Report for the entire subdivision shall be submitted for our review and approval. The report shall also address regional traffic impacts and include assessments from the local community police officer.

13. For all infrastructure that may be dedicated to the County, preliminary construction plan submittal shall include a completed technical assistance review performed by the Disability and Communication Access Board (DCAB) for compliance with the

Americans with Disabilities Act Accessibility Guidelines (ADAAG) for all facilities. All technical and structural infeasible assessments shall be the responsibility of the developer and an agreement waiving the County of Maui of any future liability, including redesign and reconstruction for said facility, shall be recorded with the State Bureau of Conveyances.

14. The applicant shall be responsible for all required improvements as required by Hawaii Revised Statutes, Maui County Code and rules and regulations.

15. Construction plans shall be designed in conformance with Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and Standard Details for Public Works Construction, 1984, as amended.

16. Worksite traffic-control plans/devices shall conform to "Manual on Uniform Traffic Control Devices for Streets and Highways", 2003.

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

Sincerely,

MILTON M. ARAKAWA, A.I.C.P.
Director of Public Works

MMA:MMM:da
S:\LUCA\CZM\alahele_subd_sm1_39017034_da.wpd

CHRIS HART & PARTNERS INC.

January 18, 2008

Mr. Milton M. Arakawa, A.I.C.P., Director
Department of Public Works
200 South High Street
Wailuku, HI 96793

Dear Mr. Arakawa:

RE: Agency Comments in Preparation of a Draft Environmental Assessment for Alahele Subdivision located at Kihei, Maui, Hawaii;
TMK: (2) 3-9-017:034: (EAC 2007/0022) (SM1 2007/0006)

Thank you for your letter dated October 2, 2007 that provides the Department of Public Works comments.

1. **Flooding:** The owner is aware the project site is subject to possible flood inundation. At this time the owner is proposing a "lots-only" subdivision and at the time of future construction, when necessary, said project will conform to Ordinance No. 1145.

2. **Road Widening:** A road-widening lot will be provided for the North-South Collector Road and dedicated to the County. The road widening will comply with the standards set forth in the final subdivision approval.

3. **Road Widening Lot Preparation:** The subject parcel is currently vacant and contains trees, shrubs and various grasses. All structures will be removed or relocated from the road-widening strip. The rear boundaries of the road-widening strip will be clearly marked to determine that structures have been removed or relocated properly.

4. **Subdivision Entry Road:** Otomo Engineering, Inc. has been retained as the project Civil Engineer to process the subdivision application and design the subdivision plan. The street design of the proposed subdivision plan provides a 30-foot radius at the intersection of the proposed subdivision road and the adjoining subdivision roads.

5. **Drainage:** Registered Civil Engineer, Otomo Engineer, Inc. has provided a Drainage Report Study that provides a verification that the grading and runoff

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CITY AND REGIONAL PLANNING
115 N. MARKET STREET · WAILUKU, MAUI, HAWAII 96793-1706 · PHONE 808-242-1955 · FAX: 808-242-1956

water generated by the project will be retained onsite in detention basins located on the subject parcel. The mitigation measures are expected to not have an adverse effect on the adjacent and downstream properties. The retention of water on the project site will reduce downstream runoff flows and also retain silt and debris therefore improving the water quality of the runoff.

6. **Grading Permit:** Prior to the issuance of grading permits, a detailed final drainage report and Best management Practices (BMP) plan will be submitted. A preliminary drainage report has been prepared and includes onsite and off-site hydrologic and hydraulic calculations and the schemes for disposal of runoff waters. The drainage report complies with the provisions of the "Rules and Design of Storm Drainage Facilities in the County of Maui" and will provide verification that the grading and runoff water generated by the project will not have an adverse effect on adjacent and downstream properties. Additionally, the BMP plan will show measures to control erosion and sedimentation to the maximum extent practicable.

7. **Project Plat Plan:** The project plat plan will identify all existing features such as structures, driveways, drainage ways, edge of pavement, etc.

8. **Sight Distance:** A site plan and a sight distance report will be provided to the Department of Public Works for review and approval.

9. **Right-of-Way:** As required, the right-of-way will accommodate the sight distance allowances and be dedicated to the County.

10. **100 Year Flood Limit:** The Final subdivision project site plan will identify the 100-year flood inundation limits.

11. **Access:** The existing streets providing access to the subdivision are Alahele Place and Alaloa Road. Additionally, the proposed North South Collector Road will intersect with Auhana Road to provide another access point.

12. **Traffic Report:** A final Traffic Impact Assessment Report will be submitted for review and approval by the Department of Public Works. The report will address regional traffic impacts and include assessments from the local community police officer.

13. **Disability Access:** All infrastructure dedicated to the County will include a completed technical assistance review performed by the Disability and Communication Access Board (DCAB) for compliance with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) for all facilities.

14. **Required Improvements:** The developer will be responsible for all required improvements as required by Hawaii Revised Statues (HRS), Maui County Code and rules and regulations.

15. **Infrastructure Design Standards:** Prior to the time of construction, plans will be designed in conformance with Hawaii Standard Specification for Road and Bridge Construction dated 2005 and Standard Details for Public Works Construction, 1984, as amended.

16. **Traffic Control:** During construction activities, Worksite traffic-control plans/devices will conform to "Manual on Uniform Traffic Control Devices for Streets and Highways", 2003.

Thank you for your consideration of this application. Should you have any questions, please contact Mr. Brett Davis of my staff at 242-1955.

Sincerely yours,

Christopher L. Hart, ASLA
Landscape Architect - Planner

Cc. Wilshire DMK I, LLC.
Michael Wright and Associates
Project File

APPENDIX M

MAUI PLANNING COMMISSION COMMENT LETTER AND RESPONSE

CHARMAINE TAVARES
Mayor

JEFFREY S. HUNT
Director

COLLEEN M. SUYAMA
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

April 18, 2008

Mr. Christopher L. Hart, ASLA
Chris Hart & Partners, LLC
115 North Market Street
Wailuku, Hawaii 96793

Dear Mr. Hart:

SUBJECT: **Maui Planning Commission Comments on the Draft Environmental Assessment (DEA) for the Proposed 48-Lot Single Family Residential Alahele Subdivision at TMK (2) 3-9-017:034, Kihei, Maui, Hawaii (EA 2007/002) (SM1 2007/0006)**

At its regular meeting on April 8, 2008, the Maui Planning Commission (MPC) reviewed the Draft Environmental Assessment, August, 2007, referenced above. Based upon those discussions and questions to the applicant and architect, the Commission's five recommendations are listed below:

1. Incorporate elements of Leadership in Energy and Environmental Design guidelines into development of a draft set of Conditions, Covenants, and Restriction guidelines for the project. (Commissioner Starr)

2. Comply with any Education Impact Fees required by Act 245. (Commissioner U'u)

3. Consider exploring the possibility of reducing the sales price for some of the lots in order to encourage, allow, or require owner occupancy. In order to reduce the sales price of some of the lots, define incentives to the Applicant in terms of either reduced SMA conditions or reduced project fees. (Commissioner Guard)

4. Readdress the Cultural Impact Assessment to solicit responses and to conduct interviews where none have been conducted, as stated on page 14 of the Cultural Impact Assessment, Appendix I. (Commissioner Mardfin)

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793
MAIN LINE (808) 270-7735; FACSIMILE (808) 270-7634
CURRENT DIVISION (808) 270-8205; LONG RANGE DIVISION (808) 270-7214; ZONING DIVISION (808) 270-7253

5. Define drainage channels and storm runoff areas from the Pi'ilani Highway, near the project area, down to the ocean to determine the areas of potential impact from project drainage runoff on downstream properties. (Commissioner Hedani)

Please address each of the above requests in the Final Environmental Assessment.

Thank you for your cooperation. If additional clarification is required, contact Mr. James A. Buika, Staff Planner, at james.buika@mauicounty.gov or at 270-6271.

Sincerely,

JEFFREY S. HUNT, AICP
Planning Director

xc: Clayton I. Yoshida, AICP, Planning Program Administrator
Jim A. Buika, Staff Planner
Brett Davis, Chris Hart & Partners, LLC
EA 2007002 file
Project File
General File

JSH:JAB:bg
K:\WP_DOCS\PLANNING\SM1\2007\0006_Alahele Subdivision\MPC AGENDAS WITH ALAHELE\DEA Recommendations From MPC, 04.08.08.Doc

CHRIS HART
& PARTNERS INC.

May 16, 2008

Mr. Jeffrey Hunt, A.I.C.P.
Planning Director
Department of Planning
250 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Hunt

Subject: Maui Planning Commission Comments on the Draft Environmental Assessment (DEA) for the Proposed 48-lot Single Family Residential Alahele Subdivision at TMK (2) 3-9-017:034, Kihei Maui, Hawaii (EA 2007/002) (SM1 2007/006)

At its regular meeting on April 8, 2008, the Maui Planning Commission (MPC) reviewed the DEA dated August 2007 referenced above. The five recommendations and responses, with page location in the Final Environmental Assessment Report are listed below:

Incorporate Elements of Leadership in Energy and Environmental Design (LEED) guidelines into development of a draft set of Conditions, Covenants, and Restriction guidelines for the project. (Commissioner Starr)

The owner will incorporate feasible LEED principles, into draft conditions, covenants and restrictions (CC&R) guidelines to be managed by a Home Owners Association (HOA). The applicant supports tropical architectural elements such as wide roof overhangs, in order to integrate this development into the existing surrounding landscape. The proposed architectural design guidelines will recommend building materials such as siding, roof shingles, etc. and design elements such as double pitched hip roofs with deep overhangs, porches, and lanais.

As mentioned the design guidelines will be enforced by the HOA to ensure that the project build-out will maintain a residential scale and proportion, in order to maintain surrounding views. The proposed project site improvements will consist of street trees, a passive recreation area and stabilized gravel walkway/bikeway along the North South Collector Road. (**See:** Page 13)

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Comply with any Education Impact Fees required by Act 245. (Commissioner U'u)

The applicant will comply with the Educational Impact Fees required by Act 245 for the proposed subdivision. (**See:** Page 18)

Consider exploring the possibility of reducing the sales price for some of the lots to encourage, allow, or require owner occupancy.
In order to reduce the sales price of some of the lots, define incentives to the Applicant in terms of either reduced SMA conditions or reduced project fees. (Commissioner Guard)

The applicant is willing to consider the possibility of reducing the sales price of lots to encourage owner occupancy by working Maui families in the context of the overall project viability. The Alahele subdivision is subject to the Residential Workforce Housing Policy, which provides reduced price-housing lots to workforce families in Maui County. Prior to final subdivision approval the owner will coordinate with the Department of Housing and Human Concerns to enter into an agreement that will result in the payment of an in lieu fee to a Non-profit organization that is developing affordable housing in South Maui. (**See:** Pages 14-15)

Additionally, the applicant would like to work with the MPC to develop possible incentives in the form of either reduced SMA conditions or reduced project fees to reduce the lots sale prices, in an effort to expand owner-occupancy opportunities to working Maui families.

Readdress the Cultural Impact Assessment to solicit responses and conduct interviews where none have been conducted, as stated on page 14 of the Cultural Impact Assessment, Appendix I. (Commissioner Mardfin)

Scientific Consultant Services (SCS) conducted the Cultural Impact Assessment for the proposed subdivision in 2007 and determined that no cultural activities were identified within the project area, and that the project would have no adverse cultural impacts. At the request of the MPC, SCS sent letters requesting information and made phone calls to individuals who may have knowledge of cultural practices in the vicinity of the proposed project site. (**Note:** This extra effort resulted in no additional information. (**See:** Page12 and Appendix I)

Define drainage channels and storm runoff areas from the Piilani Highway near the project area, down to the ocean to determine the areas of potential impact from project drainage runoff on downstream properties. (Commissioner Hedani)

Three Piilani Highway culverts convey runoff water to areas mauka of the project site. The first culvert outlets near the northeast corner of the project site. The second culvert outlets approximately in the middle and the third culvert outlets near the southeastern end of the site. Runoff from the three culverts sheetflows across the site in an east to west direction into an existing drainage way. The runoff then flows in a westerly direction towards Alaloa place into a double 48-inch culvert, which outlets into a drainage way makai of Alaloa Place through the Kalama Subdivision. The earth channel is grass with a cement block wall along a portion of the Southern boundary. The channel abuts the rear property line of residences in the Kalama Subdivision. (**See:** Figure 9.1) Makai of the Kalama Subdivision, the channel flattens and runoff sheet flows through developed areas (Foodland Shopping Center), across South Kihei Road and into Kalama Park.

As noted, all storm runoff generated, as a result of site build-out will be retained in onsite detention basins.

Additionally the applicants have acknowledged existing regional drainage impacts and have taken proactive steps to coordinate with the Public Works Department to develop additional mitigative drainage solutions. Public Works has approved the use of an unimproved portion of Kanakanui Road as an additional off site detention basin for existing storm runoff. (**See:** Pages 20-22)

Thank you for your cooperation. If additional clarification is required, please call.

Sincerely,

Christopher L. Hart, ALSA
President
Landscape Architect/Planner

CC: DMK I, LLC.
Michael Wright & Assoc.
Project File

APPENDIX N

Public Transportation Analysis

Public Transportation Analysis

The Alahele Subdivision will have access to the Kihei Island #10 Bus Route. The closest bus stop to the proposed subdivision is located at the intersection of Keala Place at South Kihei. Rd. (**Note:** This information was provided by the Maui County Department of Transportation)

The bus stop at the intersection of Keala Place at South Kihei Road is located approximately 1500 ft (0.28 miles) from the project site.

SOUTH MAUI BUS STOPS

KIHEI ISLANDER #10
QUEEN KA'AHUMANU CENTER
KAHULUI SALVATION ARMY
MA'ALAEA HARBOR VILLAGE
UWAPO ST. / S. KIHEI RD.
OHUKAI RD. / S. KIHEI RD.*
KAONOULU ST. / S. KIHEI RD.*
KULANIHAKOI ST. / S. KIHEI RD.*
WAIPULANI RD. / S. KIHEI RD.*
PI'IKEA AVE. / S. KIHEI RD.*
PI'ILANI SHOPPING CENTER
LIPOA STREET*
ST. THERESA'S CHURCH*
WELAKAHAO RD. / S. KIHEI RD.*
KEALA PL. / S. KIHEI RD.*
WALAKA ST. / S. KIHEI RD.*
KAMAOLE BEACH I*
KAMAOLE SHOPPING CENTER*
KAMAOLE BEACH III
MANA KAI (NORTH)*
KILOHANA ST. (NORTH)*
WAILEA IKE DRIVE
KILOHANA ST. (SOUTH)*
MANA KAI (SOUTH)*
KAMAOLE BEACH III
KAMAOLE SHOPPING CENTER*
KAMAOLE BEACH I*
WALAKA ST. / S. KIHEI RD.*
KEALA PL. / S. KIHEI RD.*
WELAKAHAO RD. / S. KIHEI RD.*
LIPOA STREET*
PI'ILANI SHOPPING CENTER
PI'IKEA AVE. / S. KIHEI RD.*
WAIPULANI RD. / S. KIHEI RD.*
KULANIHAKOI ST. / S. KIHEI RD.*
KAONOULU ST. / S. KIHEI RD.*
OHUKAI RD. / S. KIHEI RD.*
UWAPO ST. / S. KIHEI RD
MA'ALAEA HARBOR VILLAGE
KAHULUI SALVATION ARMY
QUEEN KA'AHUMANU CENTER

*** UNLISTED STOPS**

KIHEI VILLAGER #15
PI'ILANI SHOPPING CENTER
PI'IKEA AVE. / S. KIHEI RD.
WAIPUILANI RD. / S. KIHEI RD.
KULANIHAKOI ST. / S. KIHEI RD.
KAONOULU ST. / S. KIHEI RD.
OHUKAI RD. / S. KIHEI RD.
UWAPO RD. / S. KIHEI RD.
MA'ALAEA HARBOR VILLAGE
UWAPO RD. / S. KIHEI RD.
OHUKAI RD. / S. KIHEI RD.
KAONOULU ST. / S. KIHEI RD.
KULANIHAKOI ST. / S. KIHEI RD.
WAIPULANI RD. / S. KIHEI RD.
PI'IKEA AVE. / S. KIHEI RD.
PI'ILANI SHOPPING CENTER