



CHAPTER I

Introduction & Summary



I. INTRODUCTION AND SUMMARY

A. PURPOSE OF THE ENVIRONMENTAL IMPACT STATEMENT

This ~~Draft~~ Final Environmental Impact Statement (~~EIS~~) (FEIS) is being prepared for the Proposed Action in accordance with the State of Hawai'i requirements in Chapter 343 of Hawai'i Revised Statutes (HRS) and Chapter 200 of Hawai'i Administrative Rules (HAR) from the Department of Health describing the contents of an EIS (HAR 11-200-17).

The purpose of HRS Chapter 343 is to establish a system of environmental review to ensure that environmental concerns are given appropriate consideration in decision making along with economic and technical considerations. Within the law are nine 'triggers' or uses that necessitate environmental review. Environmental review is required for any program or project that contains specified land uses or administrative acts, including use of State or County lands or funds other than for feasibility studies, the use of any land classified as Conservation District by State law, proposed amendments to existing county general plans where the amendment would result in designations other than agriculture, conservation or preservation, development of a wastewater treatment facility serving more than 50 dwellings, among other actions.

The Proposed Action is subject to review under HRS Chapter 343 because an amendment to the Wailuku-Kahului Community Plan is required to re-designate land currently designated for agricultural use to urban and rural uses. Other applicable triggers for the Proposed Action include the possible use of State and County lands or funds related to infrastructure improvements, including but not limited to roadway, traffic, water, sewer, drainage, utility or other related facilities. The Proposed Action may also include development of an on-site wastewater treatment facility to service all or a portion of the development.

This ~~DEIS~~ FEIS was prepared in accordance with HRS Chapter 343 and HAR Chapter 11-200, to provide sufficient information, evidence and analysis to decision makers for determining the environmental and socio-economic impacts of the Proposed Action.

B. LIST OF PREPARERS

This EIS was prepared by a qualified team of urban planning, landscape architectural, engineering, socio-economic, archaeological, cultural, and environmental professionals.

Table 1: Prime Consultant

Firm	Expertise	Contact Information
Planning Consultants Hawai'i, LLC	Urban Planning	Michael J. Summers President 2331 W. Main Street Wailuku, HI 96793 Telephone: 808-244-6231 Email: msummers@planningconsultantsHawaii.com

Table 2: Sub-Consultants

Firm	Expertise	Contact Information
Hawai'i Land Design	Landscape Architecture; Urban Design	Bill Mitchell President 2331 W. Main Street Wailuku, HI 96793 Telephone: 808-385-2859 Email: bmitchell@Hawaiilanddesign.com
Otomo Engineering	Civil Engineering	Stacy Otomo President 305 South High Street Wailuku, HI 96793 Telephone: 908-242-0032 Email: stacy@otomoengineering.com
Fehr & Peers	Traffic Engineering	Sohrab Rashid Principal 7 Waterfront Plaza 500 Ala Moana Blvd., Suite 7-4000 Honolulu, Hawai'i 96813 Telephone: 619-758-3002 Email: s.rashid@fehrandpeers.com
The Hallstrom Group CBRE, Inc.	Market Studies; Fiscal	Thomas Holliday Charter Member

Firm	Expertise	Contact Information
The Hallstrom Group	and Economic Impact Studies	Vice President 1003 Bishop Street Pauahi Tower, Suite 1350 Honolulu, Hawai'i 96813 Telephone: 808-526-0444 Email: tw@hallstromgroup.com 1003 Bishop Street, Ste. 1800 Honolulu, Hawai'i 96813 Telephone: 808-541-5120 Email: Tom.Holliday@cbre.com
Archaeological Services Hawai'i	Archaeology	Lisa Rotunno-Hazuka 1930 East Vineyard Street, #A Wailuku, HI 96793 Telephone: 808-244-2012 Email: lisa@ashmaui.com
DL Adams & Associates	Acoustic Studies	Dana Dorsch <u>John Garreston</u> 970 N. Kalaheo Avenue, Suite A311 Kailua, HI 96734 Telephone: 808-254-3318 Email: ddorsch@dlaa.com
Planning Consultants Hawai'i, LLC	Agricultural Impact Assessment; Sustainability Plan	Michael J. Summers President 2331 W. Main Street Wailuku, HI 96793 Telephone: 808-269-6220 Email: msummers@planningconsultantsHawaii.com
B.D. Neal & Associates	Air Quality	Barry Neal President P.O. Box 1808 Kailua-Kona, Hawai'i 96745 Telephone: 808-329-1627 Email: bdneal@bdneal.com
Robert Hobdy	Flora and Fauna	Robert Hobdy President 2560-B Pololei Place Ha`ikū, HI 96708 Telephone: 808-573-8029 Email: Hobdyroo1@Hawaii.rr.com
Hana Pono, LLC	Cultural Impact Assessment	Kimokeo P.O. Box 2039 Wailuku, HI 96793 Telephone: 808-573-1643

Firm	Expertise	Contact Information
		Email: hanapono@gmail.com
Jill Engledow	Historian; Writer	Jill Engledow jill@mauiislandpress.com
Enviniti, LLC	Wastewater Engineering	Jonathan Nagato Managing Member P.O. Box 256659 Honolulu, HI 96825 Telephone: 808-596-2378 Email: jon@enviniti.com
<u>Mana Water LLC</u>	<u>Wastewater Engineering</u>	<u>Zoltan Milaskey</u> <u>Vice President Operations</u> <u>2010 Honoapi'ilani Highway C-1</u> <u>Lahaina, HI 96791</u> <u>Telephone: 808-280-1395</u> <u>Email: zoltan@mana-water.com</u>
Newcomber-Lee Land Surveyors	Land Surveying	Bruce Lee President 1498 Lower Main Street, Suite E Wailuku, HI 96793 Telephone: 808-244-8889 Email: new.lee@Hawaiiantel.net
Warren S. Unemori Engineering Inc.	Land Surveying	Darren Unemori President Wells Street Professional Center 2145 Wells Street, Suite 403 Wailuku, HI 96793

C. PROJECT PROFILE

1. Applicant

The Project Applicant is Waikapū Properties LLC.

Table 3: Project Applicant

Contact	Telephone/Email	Address
Mike Atherton	209-601-4187 athertonisland@aol.com athertonisland@gmail.com	Maui Tropical Plantation 1670 Honoapi'ilani Highway Waikapū, HI 96793
Albert Boyce	209-239-4014 albertboyce@gmail.com	Waikapū Properties, LLC P.O. Box 1780

Contact	Telephone/Email	Address
		Manteca, CA 95336

2. Land Ownership

Waikapū Country Town (WCT) or (the Project) land is owned in fee simple by various ownership entities.

Table 4: WCT Land Ownership

Ownership Group	Parcel(s)	Acres
Waikapū Properties LLC	(2) 3-6-004:003	657.195
	(2) 3-6-006:036	0.72
	(2) 3-6-004:006	52.976
MTP Land Partners LLC and the Filios, William Separate Property Trust	(2) 3-6-005:007	59.054
Wai'ale 905 Partners LLC	(2) 3-6-002:003	521.40
	(2) 3-6-002:001	284.826
TOTAL		1576.171

3. Accepting Authority

The Accepting Authority for the EIS is the State of Hawai'i, Land Use Commission.

Table 5: State of Hawai'i, Land Use Commission

Contact(s)	Telephone/Email	Address
Daniel E. Orodener Executive Director	Telephone: 808-587-3822 Fax: (808) 587-3827 Email:	State of Hawai'i Land Use Commission Department of Business, Economic Development & Tourism
Scott Derrickson, AICP Planner	luc@dbedt.Hawai'i.gov	P.O. Box 2359 Honolulu, Hawai'i 96804-2359

4. Project Overview

The Applicant is proposing to develop a new residential mixed-use community on lands within and around the Maui Tropical Plantation (MTP), which is just south of the small town of Waikapū, Maui. The Project will encompass approximately 499.003 acres of lands to be used for urban and rural development. Approximately 1,077.168 acres will remain in agricultural use and

about 800 acres of this agricultural land will be placed into an agricultural conservation easement. The project area is within the Maui Island Plan’s (MIPs) Small Town Growth Boundary and is identified as the “Tropical Plantation Town Planned Growth Area”. The MIP allocates 1,433 residential units and supporting commercial and civic uses to the Planned Growth Area.

The WCT will include 1,433 residential units, plus about 146 ‘Ohana units, together with neighborhood retail, commercial, employment uses, a school, parks and open space. The project will be developed in accordance with the goals, objectives and policies of the MIP and Wailuku-Kahului Community Plan. The project will be developed in two five-year phases, once all State and County approvals have been granted.

5. Project Location

The Project is located in Central Maui at the Maui Tropical Plantation (MTP), 1670 Honoapi‘ilani Highway, Wailuku, Maui, Hawai‘i. The boundaries of the project include lands that are makai (east) and mauka (west) of the Honoapi‘ilani Highway and extending north and south of the existing MTP. (See: Figure 1, “Regional Location Map” and Figure 2, “Aerial Photograph”).

6. Tax Map Keys

The entire property, including the lands that are to remain in agricultural use, is identified by the following six Tax Map Key Numbers (See: Figure 3, a-d: “TMK Maps”):

Table 6: Project Tax Map Key Numbers

Project Tax Map Key Numbers	
(2) 3-6-005:007	(2) 3-6-002:001
(2) 3-6-002:003	(2) 3-6-006:036
(2) 3-6-004:003	(2) 3-6-004:006

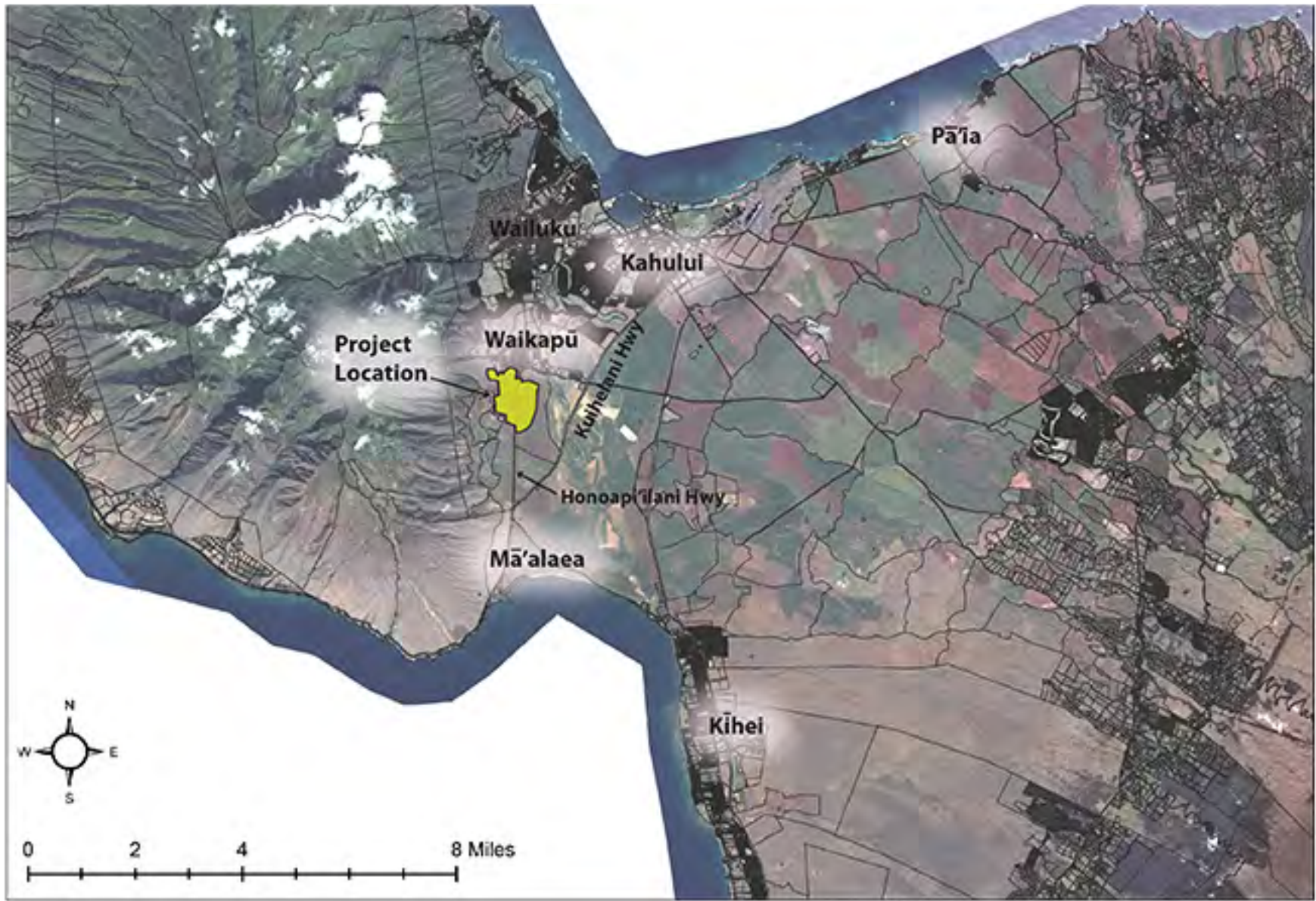


Figure 1

Regional Location

WAIKAPŪ COUNTRY TOWN



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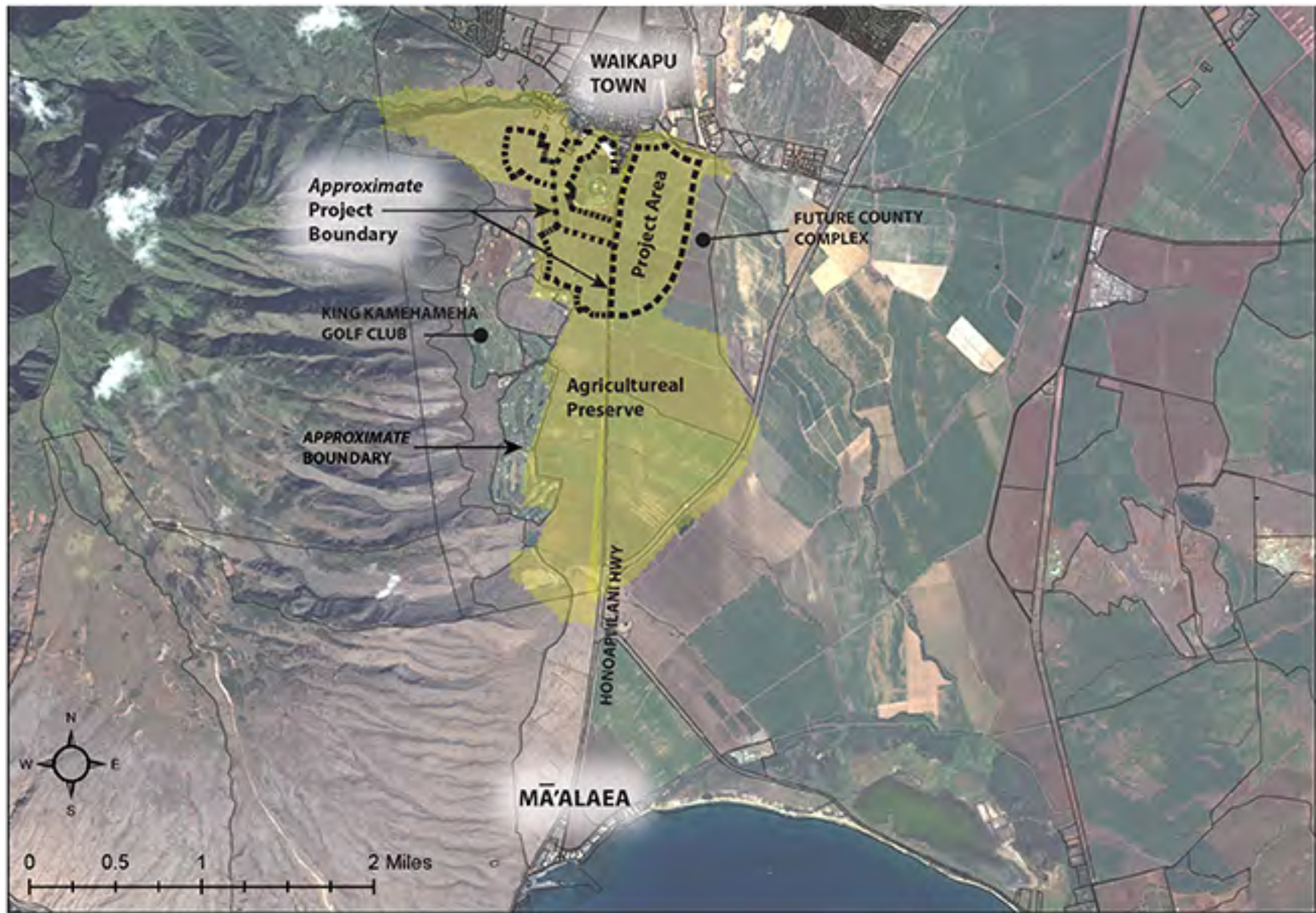


FIGURE 2
AERIAL LOCATION



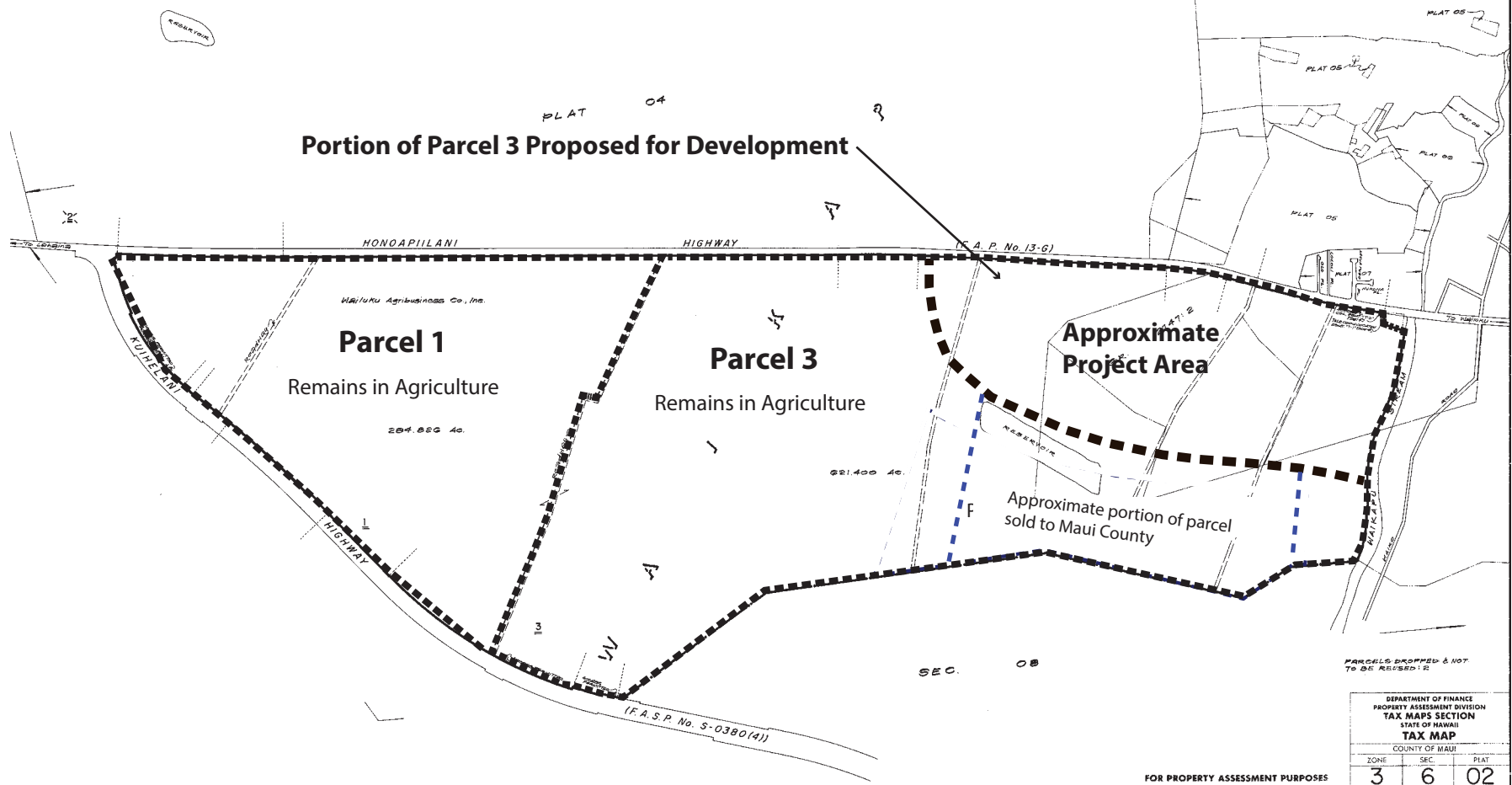
WAIKAPŪ COUNTRY TOWN



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TRUE NORTH
Scale: 1" = 500 FT.

Portion of Parcel 3 Proposed for Development



Portion of WAIKAPU, WAILUKU, MAUI, HAWAII

PARCELS DROPPED & NOT TO BE RECLOSED

DEPARTMENT OF FINANCE PROPERTY ASSESSMENT DIVISION TAX MAPS SECTION STATE OF HAWAII TAX MAP		
COUNTY OF MAUI		
ZONE	SEC.	PLAT
3	6	02
SCALE: 1" = 500 FT.		

FOR PROPERTY ASSESSMENT PURPOSES
SUBJECT TO CHANGE

Figure 3b

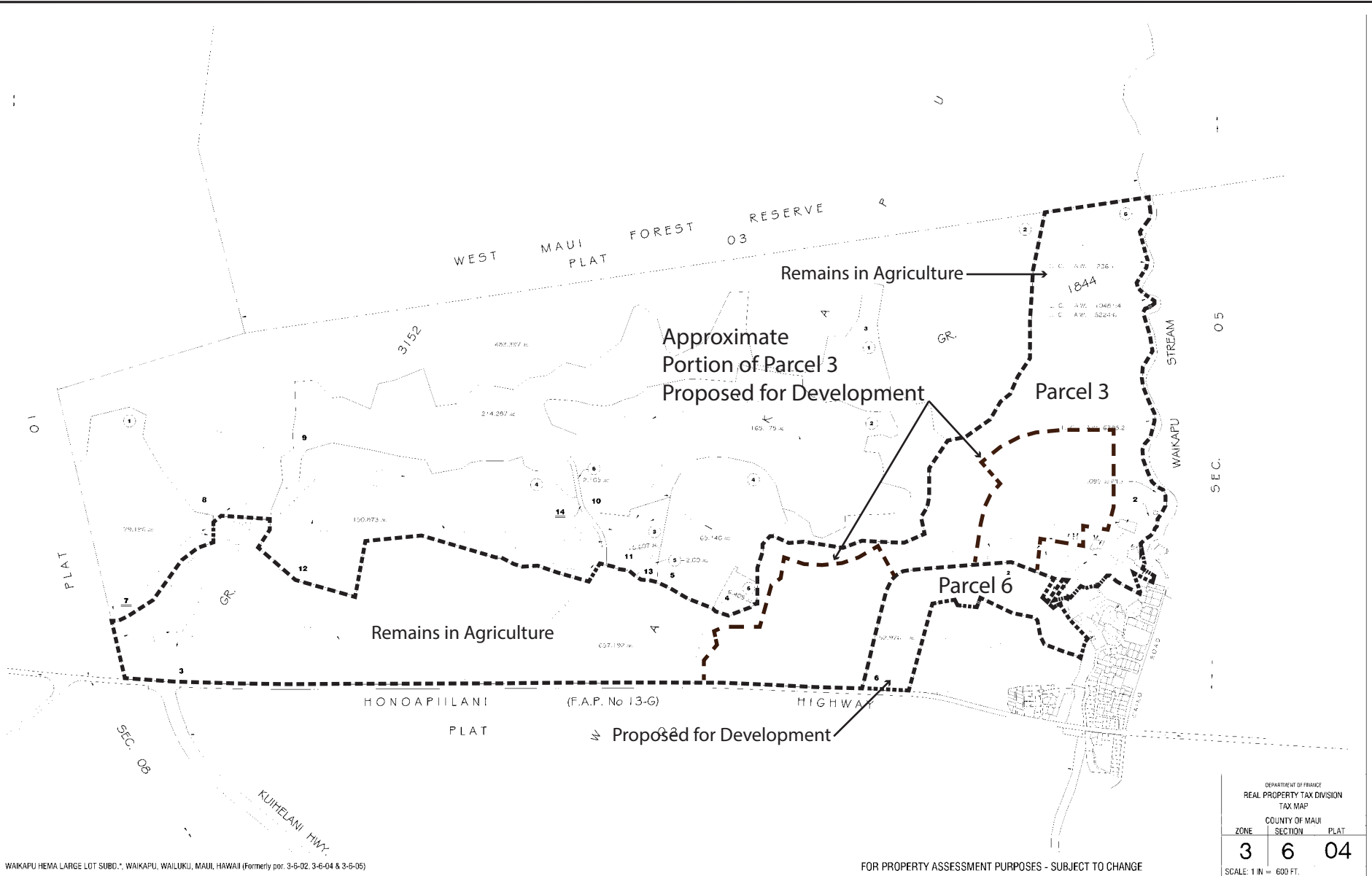
TMK MAP
TMK No. (2) 3-6-002: 001 and 003



WAIKAPU COUNTRY TOWN



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WAIKAPU HEMA LARGE LOT SUBD., WAIKAPU, WAILUKU, MAUI, HAWAII (Formerly par. 3-6-02, 3-6-04 & 3-6-05)

FOR PROPERTY ASSESSMENT PURPOSES - SUBJECT TO CHANGE

DEPARTMENT OF REVENUE
REAL PROPERTY TAX DIVISION
TAX MAP

COUNTY OF MAUI		
ZONE	SECTION	PLAT
3	6	04

SCALE: 1 IN = 600 FT.

Figure 3c
TMK MAP
TMK No. (2) 3-6-004: 003 and 6



WAIKAPŪ COUNTRY TOWN



**PLANNING
CONSULTANTS
HAWAII, LLC**



DRAWN: 2/22 DATE: 01/24 BY: BDCJL SOURCE: TM

POR. WAIKAPU, WAILUKU, MAUI, HAWAII

FOR PROPERTY ASSESSMENT PURPOSES - SUBJECT TO CHANGE

Figure 3d
TMK MAP
 TMK No. (2) 3-6-006:036



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 HAWAII, LLC**

WAIKAPŪ COUNTRY TOWN

7. Land Area

The land area owned by the various ownership entities comprises 1,576.171 acres. The property proposed for urban and rural development encompasses approximately 499.003 acres. Lands not proposed for urban or rural development will remain within the State Agricultural District (**See:** Figure No. 4, “Petition Area Illustration” and Appendix **M N**, District Boundary Amendment Petition Maps).

8. State Land Use Districts

Of the 1,576.171 acres under ownership, 1,562.171 acres are located within the State Land Use Agricultural District and 14 acres are located within the State Land Use Urban District (**See:** Figure No. 5, “State Land Use Designation”).

Table 7: State Land Use Districts

Ownership Group	Parcel(s)	Acres	State Land Use
Waikapū Properties LLC	(2) 3-6-004:003	657.195	Agricultural
	(2) 3-6-006:036	0.72	Agricultural
	(2) 3-6-004:006	52.976	Agricultural
MTP Land Partners LLC and the Filios, William Separate Property Trust	(2) 3-6-005:007	59.054	Agricultural (45.054 acres) Urban (14 acres)
Wai’ale 905 Partners LLC	(2) 3-6-002:003	521.40	Agricultural
	(2) 3-6-002:001	284.826	Agricultural
TOTAL		1576.171	

9. State Land Use District Boundary Amendment (DBA)

The WCT Master Plan will require a State Land Use District Boundary Amendment in order to bring 485 acres of State Agricultural District land into the State Land Use Urban and Rural districts. Table No. 8 identifies the parcels requiring a State Land Use Commission District Boundary Amendment for all or a portion of the property (**See:** Figure No. 5, State Land Use Designation”). See Appendix **R M** for the proposed District Boundary Petition Area Maps.

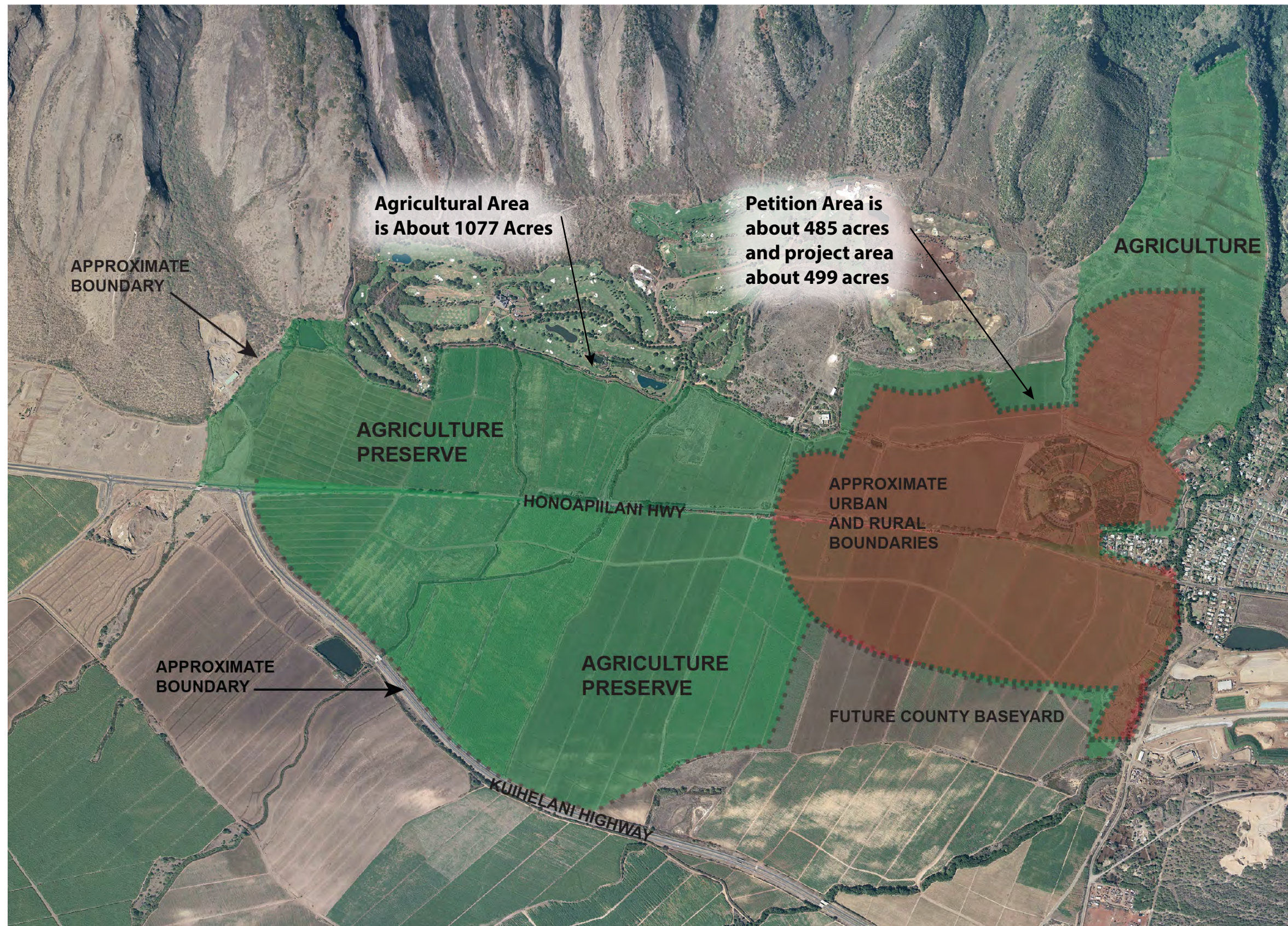


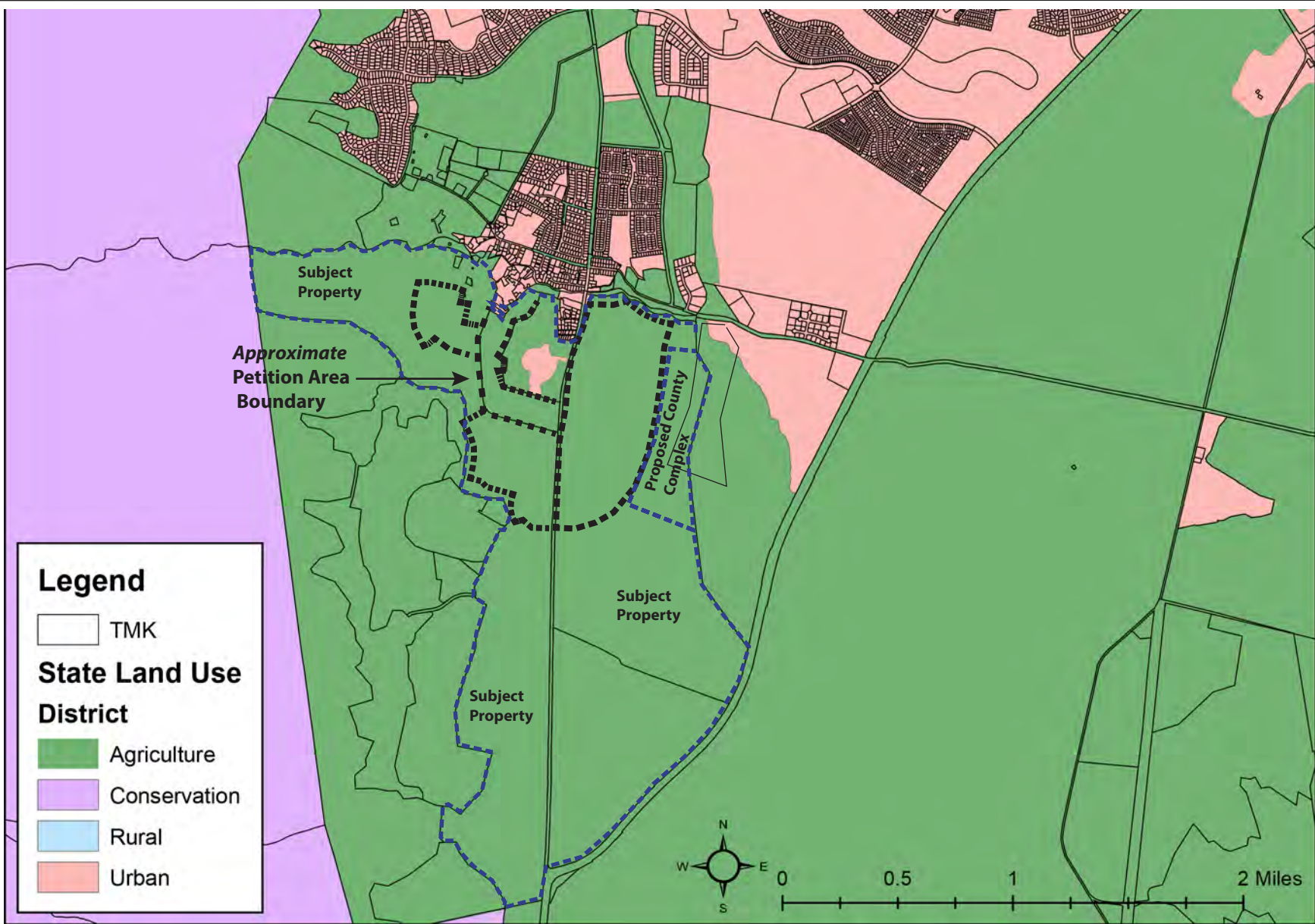
Figure 4

Petition Area Illustration



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HAWAII, LLC

WAIKAPŪ COUNTRY TOWN



Legend

TMK

State Land Use District

- Agriculture
- Conservation
- Rural
- Urban

FIGURE 5
STATE LAND USE
DISTRICT BOUNDARIES


Not to Scale

WAIKAPŪ COUNTRY TOWN



Table 8: TMK Parcels Requiring a State Land Use District Boundary Amendment

<u>Ownership</u>	<u>Parcel</u>	<u>Acres</u>	<u>Existing State Land Use</u>	<u>Acres Subject to DBA</u>	<u>Proposed State Land Use</u>
Waikapū Properties LLC	(2) 3-6-004:003	657.195	Agriculture	149.848	Rural
	(2) 3-6-004:006	52.976 ¹	Agriculture	53.775 ²	Urban
MTP Land Partners LLC and the Filios, William Separate Property Trust	(2) 3-6-005:007	59.054	Agriculture	45.054	Urban
Wai`ale 905 Partners LLC	(2) 3-6-002:003	521.40	Agriculture	236.326	Urban

10.9. Wailuku-Kahului Community Plan Designations

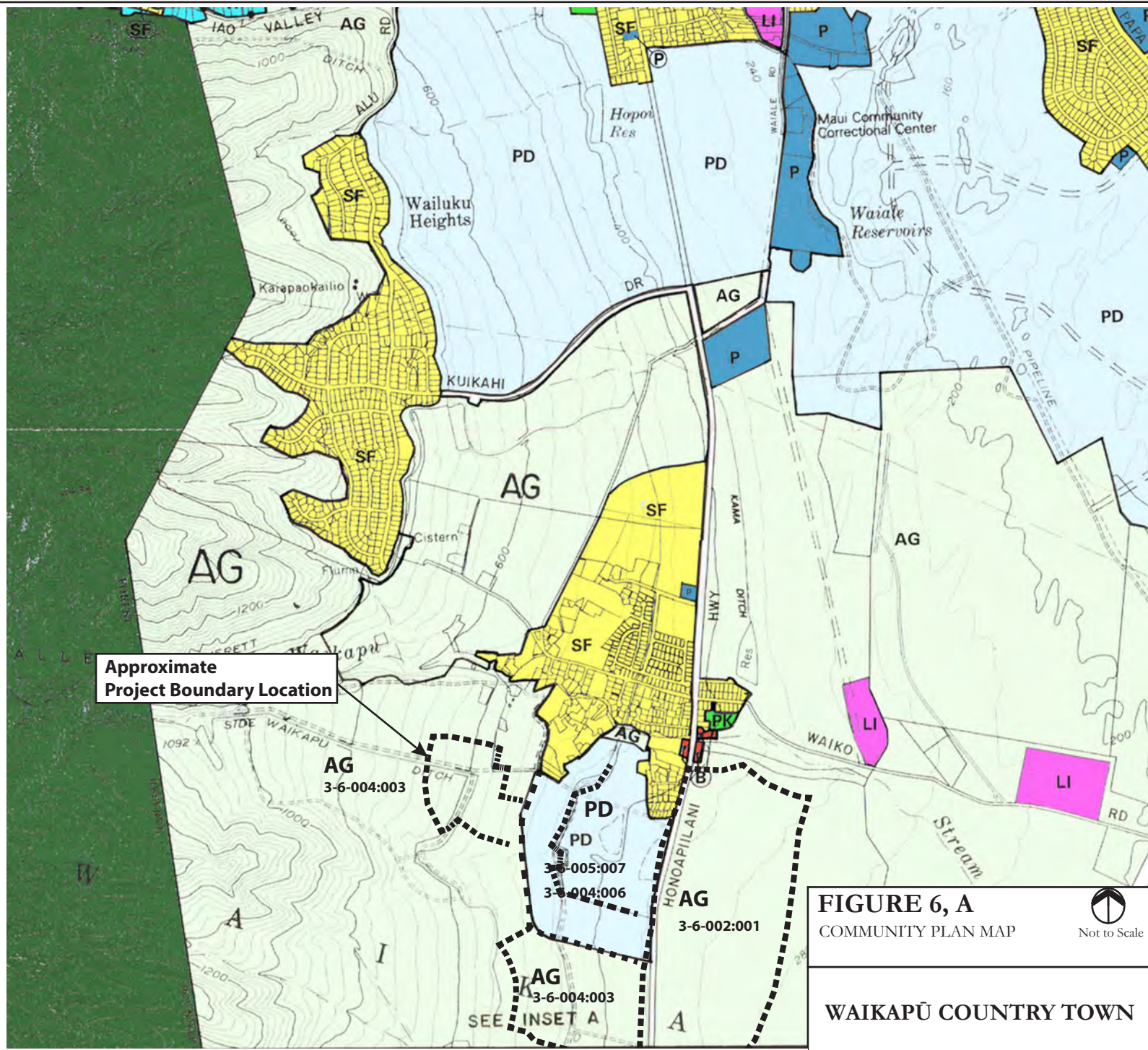
Of the 1,576.171 acres under ownership, 1,464.141 acres are designated Agriculture by the Wailuku-Kahului Community Plan and 112.03 acres are designated Project District (**See:** Figure No. 6, A-B: “Wailuku-Kahului Community Plan Designations”).

Table 9 8: Wailuku-Kahului Community Plan Designations

Ownership Group	Parcel(s)	Acres	Community Plan
Waikapū Properties LLC	(2) 3-6-004:003	657.195	Agriculture
	(2) 3-6-006:036	0.72	Agriculture
	(2) 3-6-004:006	52.976	Project District
MTP Land Partners LLC and the Filios, William Separate Property Trust	(2) 3-6-005:007	59.054	Project District
Wai`ale 905 Partners LLC	(2) 3-6-002:003	521.40	Agriculture
	(2) 3-6-002:001	284.826	Agriculture
TOTAL		1576.171	

¹ Acreage identified on TMK Map.

² Acreage identified by survey.



Approximate Project Boundary Location

FIGURE 6, A
COMMUNITY PLAN MAP



WAIKAPŪ COUNTRY TOWN



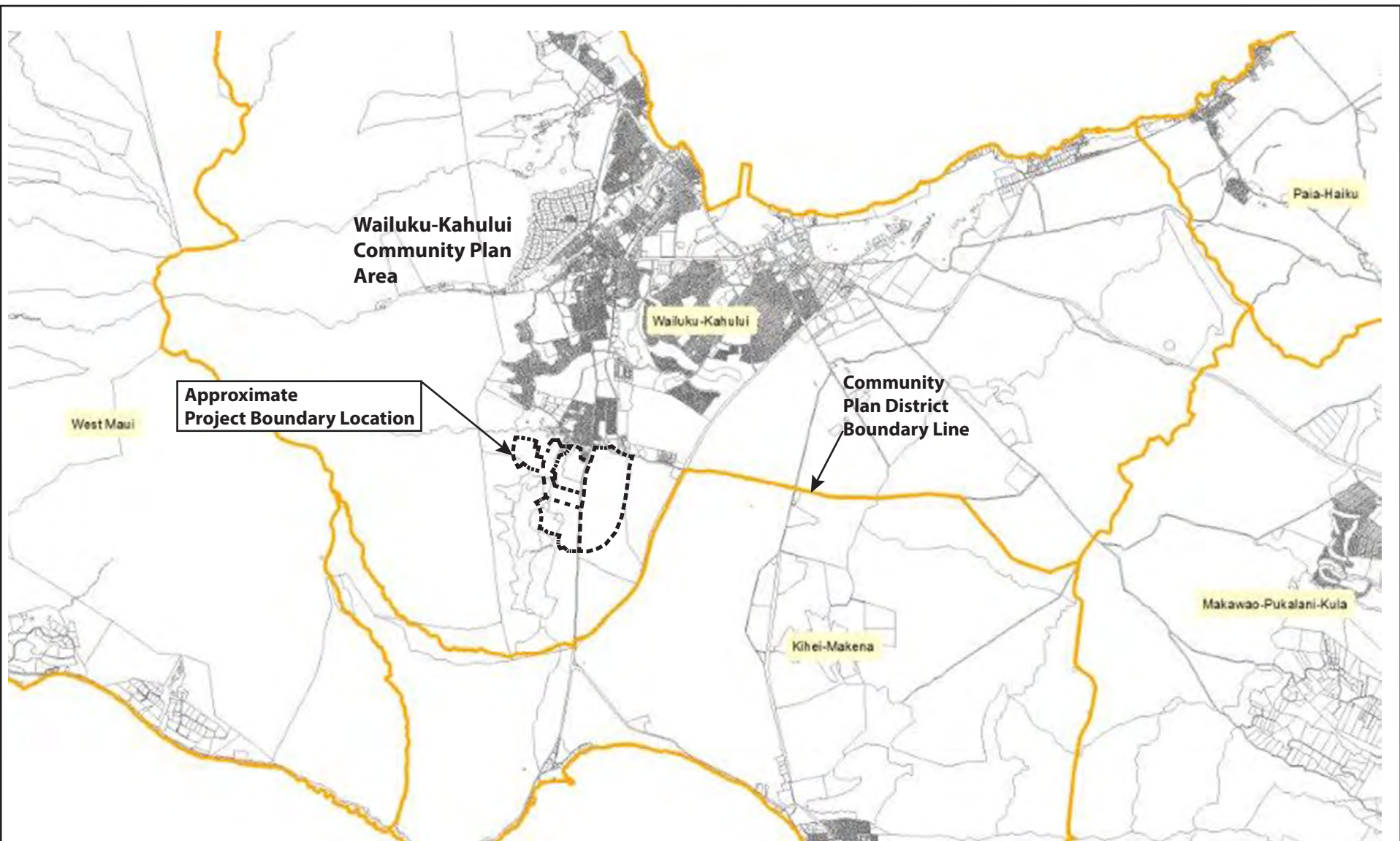


FIGURE 6, B
COMMUNITY PLAN MAP


Not to Scale

WAIKAPŪ COUNTRY TOWN



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HAWAII, LLC**

11. ~~10.~~ County Zoning Districts

Of the 1,576.171 acres under ownership, 1,517.177 acres are located within the County's Agricultural District and 59.054 acres are located within the County's Project District PD-Wk/5 (See: Figure No. 7, "County Zoning Map"). Of the 59.054 acres within PD-Wk/5, 14.00 acres are zoned Commercial and 49.054 acres are zoned Agricultural.

Table 10 9: County Zoning Districts

Ownership Group	Parcel(s)	Acres	County Zoning
Waikapū Properties LLC	(2) 3-6-004:003	657.195	Agricultural
	(2) 3-6-006:036	0.72	Agricultural
	(2) 3-6-004:006	52.976	Agricultural
MTP Land Partners LLC and the Filios, William Separate Property Trust	(2) 3-6-005:007	59.054	Project District (PD-WK/5)
Wai'ale 905 Partners LLC	(2) 3-6-002:003	521.40	Agricultural
	(2) 3-6-002:001	284.826	Agricultural
TOTAL		1576.171	

12. ~~11.~~ Status of Required State and County Approvals and Permits

The following is a summary of major approvals and permits required for implementation of the proposed action. Table 11 10 documents permits and approvals specific to the residential and commercial development and Table 12 documents approvals specific to the development of the Project's wastewater reclamation facility. Additional approvals and permits may be necessary.

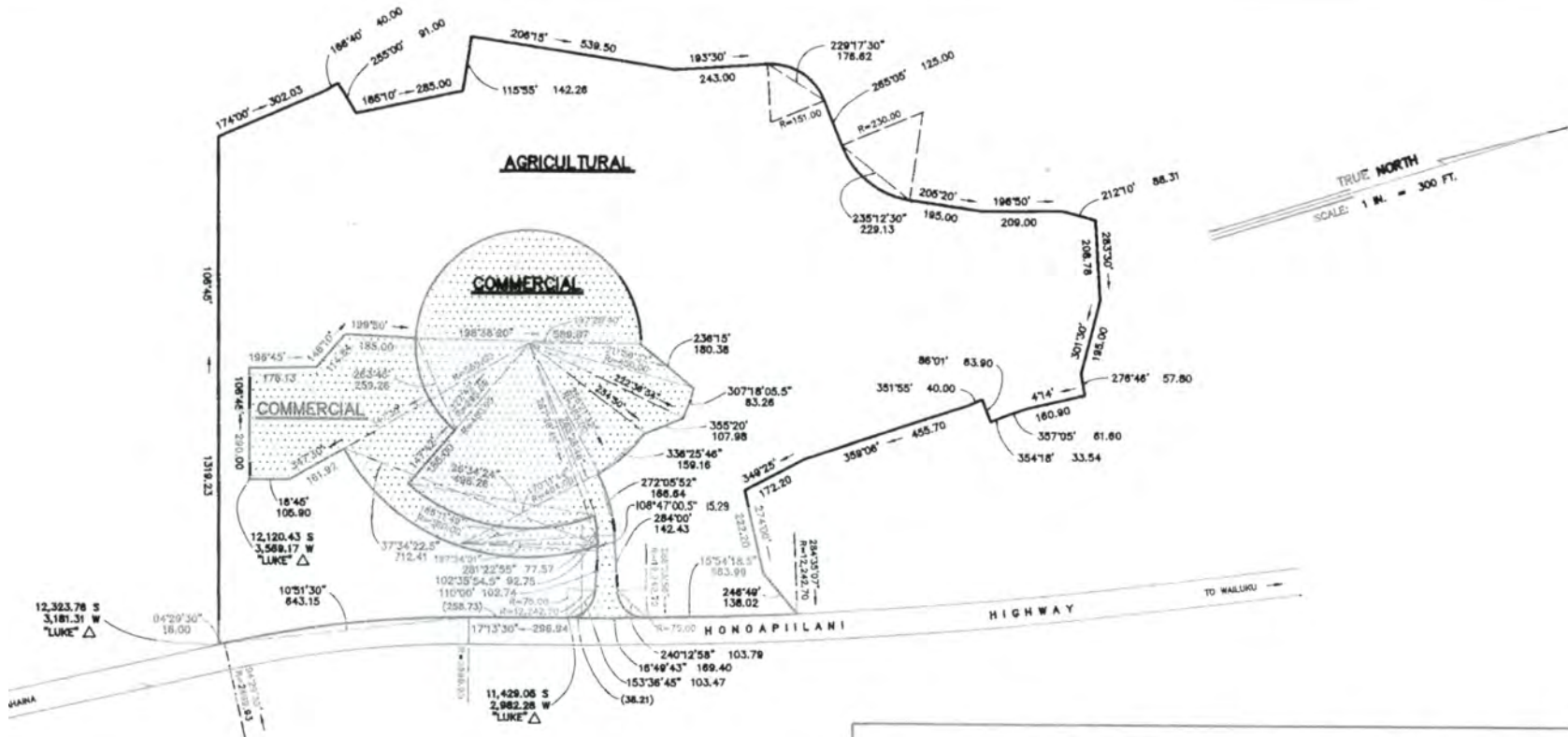
Table 11 10: ~~TMK Parcels Requiring a Change in Zoning~~ Required State and County Approvals and Permits

Permit/Approval	Responsible Agency	Status
Chapter 343 Compliance	State Land Use Commission	Pending public comments on DEIS and acceptance of FEIS <u>Pending Acceptance of FEIS and a Finding of No Significant Impact (FONSI) determination.</u>
State Land Use District Boundary Amendment	State Land Use Commission	Petition has been filed. Processing is on hold until the

Permit/Approval	Responsible Agency	Status
		EIS (Chapter 343, HRS) process has been completed.
Community Plan Amendment	Maui Department of Planning	Application to be processed concurrently with State Land Use District Boundary Amendment. Final approval will be issued if the DBA is granted.
Change in Zoning / Project District Phase I Approval	Maui Department of Planning	Application to be processed concurrently with State Land Use District Boundary Amendment. Final approval will be issued if the DBA is granted.
Project District Phase II	Maui Department of Planning	Application to be submitted after Project District Phase I Approval.
Project District Phase III	Maui Department of Planning	Application to be submitted after Project District Phase II Approval.
Chapter 6E, HRS Compliance	State Historic Preservation Division	Archaeological Inventory Survey has been filed. Archaeological Monitory Plan to be prepared and filed. Reports are pending approval of the SHPD.
Chapter 343 HRS Compliance for Wastewater Treatment Plant	Department of Public Works	Application to be filed if entitlement requests are granted
National Pollutant Discharge Elimination System Permit	State Department of Health	Application to be filed prior to Grading/Building permits.
Subdivision Approval	Maui Department of Public Works	Application to be submitted after Project District Phase II Approval.
Grading Permit	Maui Department of Public Works	Application to be filed after Project District Phase II approval.
Building Permit	Maui Department of Public Works	Application to be filed after Project District Phase II approval.

Table 12: Governmental Approvals and Permits for Wastewater Reclamation Facility

<u>Permit/Approval</u>	<u>Responsible Agency</u>	<u>Status</u>
<u>National Pollutant Discharge Elimination System Permit</u>	<u>State Department of Health</u>	<u>Applications to be filed for the following:</u> <ul style="list-style-type: none"> • <u>Stormwater Associated with Construction Activity</u> • <u>Dewatering; and</u> • <u>Hydrotesting.</u>
<u>Noise Permit</u>	<u>State Department of Health</u>	<u>Application to be filed prior to issuance of building permit.</u>
<u>Air Quality Permit</u>	<u>State Department of Health</u>	<u>Application to be filed prior to issuance of building permit.</u>
<u>Underground Injection Control (UIC) Permit</u>	<u>State Department of Health</u>	<u>Application to be filed prior to issuance of building permit.</u>
<u>Wastewater Management Plan Permit</u>	<u>State Department of Health</u>	<u>Application to be filed prior to issuance of building permit.</u>
<u>Use of Recycled Water for Irrigation Permit</u>	<u>State Department of Health</u>	<u>Application to be filed prior to issuance of building permit.</u>
<u>Chapter 6E, HRS Compliance</u>	<u>State Historic Preservation Division</u>	<u>Archaeological Inventory Survey has been filed. Archaeological Monitory Plan to be prepared and filed. Reports are pending approval of the SHPD.</u>
<u>Coastal Zone Management (CZM) Program Consistency Review</u>	<u>Office of Planning</u>	<u>Application to be filed prior to issuance of building permit.</u>
<u>State Land Use Commission Special Use Permit</u>	<u>Maui Planning Commission</u>	<u>Application to be submitted after Project District Phase II Approval.</u>
<u>Driveway Permit</u> <u>Grading/Grubbing Permit</u> <u>Building Permit</u> <u>Excavation Permit</u> <u>Drainage Plan Approval</u>	<u>Maui Department of Public Works</u>	<u>Application to be filed after Project District Phase II approval.</u>



LAND:

AGRICULTURAL
COMMERCIAL

AREA:

45.054 ACRES
14.000 ACRES

TOTAL = 59.054 ACRES

X MAP KEY: 3-6-05 : PORTION OF 7

LAND ZONING MAP NO. 412
CHANGE IN ZONING - WAILUKU, MAUI
FROM COUNTY AGRICULTURAL DISTRICT TO WAILUKU /KAHULUI
PROJECT DISTRICT PD-WK/5

APPROVAL: _____
County Clerk
APPROVAL: _____
Planning Director

PUBLIC HEARING DATE: 11-05-91
ADOPTED BY COUNTY COUNCIL: 10-2-92
ADOPTED BY MAYOR: 10-5-92
ORDINANCE NO.: 2159 (BILL No 69(1992))
DATE: _____ SCALE: 1" = 300'

OFFICE OF THE COUNTY CLERK
200 SO. HIGH ST., WAILUKU, MAUI, HAWAII, 96793

L-412

FIGURE 7

MTP LAND ZONING MAP NO. 412 Not to Scale
(2) 3-6-005:007



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CONSULTANTS
HAWAII, LLC

WAIKAPU COUNTRY TOWN

D. EXECUTIVE SUMMARY

1. Project Description

Waikapū Country Town (hereafter “WCT” or the “Project”) is located in Central Maui at Waikapū, which is approximately two (2) miles south of Wailuku, Maui, Hawai‘i (See: Figure 1, “Regional Location Map” and Figure 2, “Aerial Photograph”). The urbanized portion of the property, which is the site of the existing Maui Tropical Plantation (MTP), is approximately 2,000 feet south of the intersection of Waiko Road and Honoapi‘ilani Highway. The Project will be built on each side of Honoapi‘ilani Highway. The entire property, including the land to remain in agricultural use, is identified by Tax Map Key Numbers (TMKs) (2) 3-6-005:007; (2) 3-6-002:001 and 003; (2) 3-6-006:036; (2) 3-6-004:003 and 006 (See: Figure 3a-d, “TMK Maps”). This area encompasses approximately 1,576 acres, of which 1562 acres is within the State Agricultural District and 14 acres is within the State Urban District.

The Applicant is proposing to redistrict approximately 485 acres of State Agricultural District land to the State Urban and Rural Districts. Approximately 1,077 acres of the Applicant’s holdings will remain within the State Agricultural District. About 800 acres of the agricultural land will be permanently protected by the Applicant through an agricultural easement, or similar mechanism, to facilitate long-term farming on these lands.

The Project, which will be situated on approximately 499 acres, is intended to be developed as a “complete community”. A complete community is a settlement pattern in which jobs, housing, private and public facilities and services come together to provide the basic needs of a community, without having to be dependent upon long vehicular commutes.

The Project area was placed into the MIPs Small Town Growth Boundary in December 2012. The purpose for placing the lands within the growth boundary is so that the land can provide additional housing and services to accommodate projected population growth through 2030. In accordance with the MIP’s Planned Growth Guidelines, the WCT will comprise 1,433 residential units, plus about 146 ‘Ohana units, together with neighborhood retail, commercial, employment uses, a school, parks and open space. The Project will be bound by agricultural land that will be

preserved in perpetuity through a conservation easement. The utilization of conservation subdivision design (CSD) practices will preserve additional rural land for farming, open space, and open land recreation uses.

The WCT will be built in two five year phases, both mauka and makai of Honoapiʻilani Highway. Development mauka of the highway will focus inwards onto a “village center,” incorporating the existing buildings and tropical grounds of the MTP. The WCT Master Plan calls for a mixture of affordable and market priced housing, along with commercial, entertainment, and civic uses within and around the village center. Development makai of the highway will focus onto a pedestrian-oriented “main street,” a nearby elementary school, and neighborhood and community parks. The makai development is bound to the east by the planned extension of the Waiʻale Road, which will intersect with Honoapiʻilani Highway.

2. Purpose and Need

Like the rest of Hawaiʻi, housing affordability on Maui is a pressing problem, especially for lower and middle income families and young adults. It is generally recommended that no more than 30% of monthly income be spent on rent. However, in 2011 60% of Maui residents exceeded this threshold. According to the US Census Bureau, 2007-2011 American Community Survey 5-Year Estimates, 65% of renters in Wailuku spend over 30% of their income on gross rent and 44% spend over 50% of their income on gross rent.ⁱ Spending such a high percentage of a family’s income on rent takes away from other needed spending and investments, such as saving for a child’s education or for retirement.

While housing affordability is a significant concern, demand for housing is projected to increase, placing further pressure on housing prices. According to the MIP (December 2012), there will be a demand for an additional 29,589 housing units on Maui through 2030. Of these units, approximately 10,845 are expected to be built on lands not currently entitled for urban development.ⁱⁱ Therefore, about 18,744 units are to be built on lands already zoned for residential use. The majority of the future demand for housing will be in Central Maui. According to the County’s Land Use Forecast (November 2006), there will be a demand for an additional 16,549 residential units within the Central Maui region by 2030. This demand will have to be met by new housing developments on both entitled and non-entitled lands.

However, a critical constraint to the development of future housing in Central Maui is the availability of potable water. Due to a current shortage of County water to support future Central and South Maui development, the County is not approving new subdivisions unless those subdivisions develop their own sources of water. This has stopped many projects from proceeding.

In December 2012 the County of Maui adopted the MIP, which set forth the County's first comprehensive island-wide managed and directed growth strategy to address housing demand through 2030. The MIP identifies several "Planned Growth Areas" where future growth will be directed. The subject property is one of these Planned Growth Areas, receiving an allocation of approximately 1,433 residential units. Additional housing may be built, but it must be affordable workforce housing that exceeds County requirements.

It should be expected that as demand outpaces supply at an accelerating rate, housing prices will continue to escalate, which will further exacerbate Maui's affordable housing problems. The proposed project is addressing a critical community need by supplying an additional supply of housing to an underserved market.

3. Projected Market Demand

A market study and economic and fiscal impact assessment was conducted by the Hallstrom Appraisal Group | CBRE, Inc. and is included in the ~~DEIS~~ FEIS as Appendix A (**See:** Appendix A, "Market Study, Economic Impact Analysis, and Public Fiscal Assessment").

The purpose of the market study was to determine if there will be sufficient market demand to absorb the proposed residential and commercial development during a reasonable exposure period given competing developments and projected statewide/regional market trends.

According to the Hallstrom | CRBE study, it is estimated the demand for new residential units in the Wailuku-Kahului study area will be from 9,647 to 16,814 units over the next 21 years (through 2035); including allowances for non-resident purchasers and vacancies, with a mid-point demand of 13,230 units. The number of existing unsold and planned resident housing units within the regional "Directed Growth Boundary", excluding the proposed WCT product,

totals some 7,296 units. This indicates there will be a shortfall in the sector of from 2,351 to 9,518 new residential units; with a mid- point under-supply of 5,935 units. Thus, sufficient unmet demand should exist to readily absorb the 1,433 units of subject inventory during the projection period.

The Hallstrom | CRBE study estimates that the 1,433 proposed residential units of WCT will require about 10 years to be fully absorbed following anticipated commencement of sales in 2017, or at an average rate approaching 150 units annually. It is estimated the demand for neighborhood commercial space by WCT residents and day workers at build-out will be some 85,100 square feet, with patronage by guests in the community, other Waikapū households, and passer-byes contributing an additional 34,000 square feet of demand on a stabilized basis. The remaining 50,500 square feet (of the total 169,600 square feet proposed) will be modestly absorbed over-time with specialized/niche businesses, many with cross-over appeal to residents and visitors, and keeping with the small town context. It is estimated that it will require about 12 years for the WCT commercial space to be fully absorbed.

4. Summary of Beneficial and Adverse Impacts and Mitigation Measures

a. Flora and Fauna

Botanical and Faunal Surveys were conducted by Robert W. Hobdy, Environmental Consultant, in February 2013 for the area proposed for development (See: Appendix B, “Botanical and Faunal Surveys”). The study determined that there is little of botanical concern on the property and that the proposed project is not expected to have a significant negative impact on botanical resources. No recommendations with regard to plants were deemed necessary. The study also found that all mammals recorded were common non-native species of no particular concern. However, the study did find two mature Blackburn’s sphinx moth eggs on the leaves of one of two Tree Tobacco plants found on the property. The Blackburn’s sphinx moth is an endangered species and is of special concern. In response to the findings, the U.S. Fish and Wildlife Service was consulted and appropriate mitigation measures, as described in Section IV.A.4 of the ~~DEIS~~ FEIS, will be taken to mitigate impacts to the Blackburn’s sphinx moth. Implementation of these measures will not constrain development of the site.

b. Air Quality

An Air Quality Study was conducted by B.D Neal & Associates to examine the potential short- and long-term air quality impacts that could occur as a result of the construction and operation phases of the development and suggests mitigation measures to reduce any potential air quality impacts where possible and appropriate (See: Appendix C, “Air Quality Study”).

Except for periodic impacts from volcanic emissions (vog) and possibly occasional localized impacts from traffic congestion and local agricultural sources, the present air quality of the project area is believed to be relatively good. There may be some short- and/or long-term impacts on air quality that may occur either directly or indirectly as a consequence of project construction and use. Short-term impacts from fugitive dust could occur during the project construction phases. Fugitive dust emissions can be controlled to a large extent by watering of active work areas, using wind screens, keeping adjacent paved roads clean and covering of open-bodied trucks.

To assess the potential long-term impact of emissions from project-related motor vehicle traffic operating on roadways in the project area after construction is completed, a computerized air quality modeling study was undertaken. With the project in the year 2026 and with proposed roadway improvements, estimated worst-case carbon monoxide concentrations indicated only minimal or no impact compared to the without project case. Concentrations would remain well within standards. Moreover, the Project’s wastewater reclamation facility will be designed and operated to keep any emissions of odorous gases at the facility boundary below the odor threshold. Thus, offsite odor nuisance is not expected to be an issue.

c. Noise Quality

A Noise Assessment Report was prepared by D.L. Adams & Associates to describe the existing and future traffic noise levels in the environs of the project site. (See: Appendix D, “Noise Assessment Report”). The construction phases of the project will generate significant amounts of noise. In cases where construction noise is expected to exceed the Hawai’i Department of Health (HDOH) "maximum permissible" property line noise levels, a permit must be obtained to allow the operation of construction equipment. HDOH may require additional noise mitigation,

such as temporary noise barriers, or time of day usage limits for certain kinds of construction activities.

During the operations phase, residences within the WCT that are located along Honoapiʻilani Highway, and the major perimeter roadways, will be exposed to elevated traffic noise. Housing and Urban Development (HUD) site acceptability standards must be satisfied by providing minimum setback distances or other traffic noise mitigation measures in order to reduce the noise impact to these homes. The recommended setback for residences located along Honoapiʻilani Highway is 60-feet.

Regarding the proposed on-site wastewater reclamation facility, based on data collected of similar facilities and operations, the wastewater reclamation facility is not expected to produce high noise levels at or beyond property lines adjacent to it.

d. Archaeological Resources

Archaeological Services Hawaiʻi, LLC conducted an Archaeological Inventory Survey (AIS) of the subject parcels to be developed (TMK's 3-6-002:003; 3-6-004:003, 006; and 3-6-005:007) (See: Appendix E, "Archaeological Inventory Survey").

During the AIS investigation, no evidence of traditional Hawaiian activities, with the possible exception of Site 7882 (remnant retaining wall or terrace) was recorded. These negative results are primarily due to the compounded disturbances from sugarcane cultivation, historic habitation and modern land use; and possibly the inherent bias of random sampling during the inventory survey testing. Based on the proposed development plan, Site 7884 Features 2-3 (historic trash scatter and refuse pit); a section of Site 5197 (Waihe`e Ditch) and possibly Site 7883 (WWII bunker) may be adversely affected during the development activities. The AIS notes that these historic properties have been properly recorded and may be removed and or altered during construction. Archaeological monitoring is recommended for those areas that contain former LCA's and Grants. Prior to the commencement of construction, an Archaeological Monitoring Plan (AMP) detailing the localities to undergo monitoring procedures will be prepared and submitted to SHPD for review and approval. The project is not expected to have

an adverse impact upon archaeological or historical resources with implementation of the proposed mitigation measures.

e. Cultural Resources

A Cultural Impact Assessment (CIA) was prepared by Hana Pono, LLC to describe existing Native Hawaiian cultural activities, practices and resources that occur on the property, potential impacts from the project, and mitigation, if necessary, to address these impacts (See: Appendix F, “Cultural Impact Assessment”). The cultural practices and beliefs that are documented in the CIA include Hawaiian subsistence and residential agriculture on kuleana lands. These lands utilize the Waikapū Stream, which is a valuable cultural resource. Intricate irrigation systems built prior to western contact continue to be maintained and utilized. There are also on-going projects in the mauka portion of the Applicant’s land that are being utilized for cultural site and native habitat restoration, while providing a traditional access point into the Waikapū Valley for gathering of lā’au lapa’au (medicinal plants) and native seed gathering.

There are two kuleana lots privately owned by the Mahi family (LCAw: 2499, R.P. 4070 AP 1 & 2 to Ehunui) and (Grant 1153 to Ehunui) that are situated within TMK: (2) 3-6-004:003 on lands that the Applicant proposes to keep in agricultural use. The WCT Master Plan has these properties located within the Project’s agricultural lands. The Mahi family would like to preserve the subject properties. The CIA also notes that there is a community desire to protect and restore the Waikapū Stream. There is an established 100-foot riparian buffer along the stream as it traverses mauka to makai along the eastern edge of the project boundary. The WCT proposes agricultural, park and open space land uses along the entire stream corridor abutting the WCT. The closest abutting urban land use is located approximately 100-feet away from the stream.

Kuleana farmers have expressed concerns about sedimentation entering Waikapū Stream during high rainfall events and from maintenance and management needs related to the plantation irrigation infrastructure, some of which traverses through WCT agricultural lands. The Applicant is committed to working with neighboring kuleana farmers to help resolve these issues. Concern has also been raised about the potential degradation of native plant species and habitats within the Waikapū Ahupua’a from the potential increase in access to the watershed

from future WCT residents. The Applicant is committed to working with the kama'āina of Waikapū and other concerned residents to develop proper access management programs to protect the Ahupua'a for future generations. Regarding ground water withdrawals from the Waikapū aquifer, these will be done within the strict guidelines established by the Commission on Water Resources Management (CWRM), which should address concerns expressed that ground water withdrawals might impact the health of the aquifer and reduce stream flows.

f. Visual Resources

The WCT will change the character of the existing open space, Haleakalā and West Maui Mountain views along the frontage of the Highway where the urban and rural development is being proposed. The frontage that will be impacted stretches approximately 4,700 linear feet just south of Waikapū in the direction of Mā'ālaea, from the northern boundary of the MTP. The views from this area, where not impacted by existing vegetation within the right-of-way, are of agricultural lands and the West Maui Mountains in the background looking in a mauka direction. Looking in a makai direction, where existing vegetation does not obstruct the views, Haleakalā is prominent and views of the Pacific Ocean can also be seen when the sugarcane has been harvested (See Section V.A.6 and Figure ~~40 35~~, A-E of the ~~DEIS~~ FEIS).

While the existing character of the open space, Haleakalā and West Maui Mountain views will be impacted by the WCT, setbacks of at least 60-feet, and in some areas up to 100-feet or more, will be utilized along each side of the Honoapi'ilani Highway to separate the development from the public right-of-way. In order to mitigate the obstruction of views from the highway to the West Maui Mountains, buildings will be setback at least 75-feet from the highway and building heights will be limited to a maximum of 30-feet along the highway frontage. Buildings will also be separated, placed and oriented in a manner that will establish view corridors from the highway to the West Maui Mountains. Building setbacks and placement will help to mitigate the WCTs overall impact upon the existing views of Haleakalā and the West Maui Mountains.

While the development will produce an impact upon the character of views fronting the urban lands, it is important to note that the Applicant is also proposing to create a permanent 800-acre agricultural preserve that will exist on both the mauka and makai sides of Honoapi'ilani Highway. The preserves frontage is approximately 7,550 linear feet along the highway from the

southern boundary of the project towards Mā‘alaea. The approximate 800-acres of agricultural land will create a permanent open space buffer and permanent separation between Waikapū Town and Mā‘alaea. Along this section of the highway, largely unobstructed views of Haleakalā, the West Maui Mountains and partial views of the Pacific Ocean will exist in perpetuity.

g. Population³

In 2010 the population of Wailuku-Kahului was approximately 53,456, which was about 37% of the island’s 2010 population of 144,444. As of mid-year 2015, there were approximately 57,616 residents in the Wailuku-Kahului region and projections of the resident population by 2035, based on County and State Forecasts range from circa 78,800 to 97,100. It is estimated that at buildout of the WCT the de facto population of the Project will be approximately ~~3,511~~ 4,085 persons, comprised of ~~3,362~~ 3,921 full-time residents and some ~~148~~ 163 part-time residents and second home owners.⁴ The Project’s resident population represents from approximately ~~8.40%~~ 9.93% to ~~15.40%~~ 18.51% of the region’s projected resident population growth to 2035. It is not expected there will be meaningful in-migration to Maui as a direct result of the operating components of the project.

h. Housing

According to the MIP (December 2012), there will be a demand for an additional 29,589 housing units on Maui through 2030. Of these units, approximately 10,845 are expected to be built on lands not currently entitled for urban development.ⁱⁱⁱ The WCT proposes the development of approximately 1,433 residential dwelling units, plus the potential for up to 146 Ohana units, in accordance with the MIP’s allocation to the Planned Growth Area. The WCT will offer a mix of single and multi-family housing types to address the diverse housing needs of Maui residents. Due to the Project’s Central Maui location and the expected lot and unit size configurations, the Applicant expects that the majority of the Project’s market priced housing will be sold at prices considered affordable to Maui County residents earning between 100 and 140 percent of the County’s median income as determined by the United States Department of Housing and Urban

³ See Chapter V.B.1. and Appendix A, Exhibit III-Table 5 of the Market Study, Economic Impact Analysis and Public Fiscal Assessment for the methodology used to calculate the Project’s population

⁴ Source: Market Study, Economic Impact Analysis, and Public Fiscal Assessment of the Proposed Waikapū Country Town, July 2015; Prepared by the Hallstrom Group | CBRE, Inc.; Addendum C, Table III-5 (Appendix A)

Development. The WCT will also include workforce housing units pursuant to Chapter 2.96, MCC, "Residential Workforce Housing Policy". These homes will be subject to price controls and resale restrictions to ensure that affordable homes remain available for full-time Maui residents. Housing types within the WCT may include multi-family condominiums, small cottage homes on small lots with common open spaces, traditional single-family lots within a variety of home and lot size configurations, rental apartments, townhomes and larger estate rural lots. The goal is to serve the demands of all Maui residents.

i. Economic Impacts

A market study and economic and fiscal impact assessment (FIA) was conducted by the Hallstrom Appraisal Group | CBRE, Inc. and is included as Appendix A in the ~~DEIS~~ FEIS.

The WCT is expected to indirectly support Maui's existing economic base activities by providing much needed housing to serve the island's workforce. The WCT is intended to provide housing along with supporting commercial, employment and institutional uses that will allow for Maui's economic base industries to grow, diversify and become more sustainable, including the island's agricultural industry.

The project will also create direct, indirect and induced short- and long-term positive economic impacts. During the construction phase, the WCT components will directly create an estimated ~~2,320~~ 2,476 "worker-years" of employment (the equivalent of 52 work weeks at 40 hours per week) in the trades and associated businesses during build-out, averaging about ~~193~~ 165 worker years annually, with an estimated ~~\$188.3~~ \$201 million in wages (averaging about ~~\$15.7~~ \$13.4 million per year). Moreover, the on-going operations and maintenance of the business commercial, and residential components will directly provide an estimated 4,251 worker-years and \$151.6 million in total wages over the 13-year period from opening of the first businesses until full absorption and stabilization are achieved (2018 to 2030). The operating businesses and maintenance of the housing units will support a projected ~~597~~ 531 "full-time equivalent" positions following stabilization (many of which are anticipated to be held by WCT residents) with annual wages of ~~\$19.5~~ \$2.2 million. Associated secondary/off-site employment during the overall development and absorption time-frame will total ~~1,750~~ 1,789 worker-years with wages

of ~~\$89.3~~ \$91.3 million. After "stabilization" the community will contribute to the support of some 149 secondary/off-site positions with \$7.6 million in yearly wages off-site.

j. Fiscal Impacts

It is projected that the County of Maui will realize new Real Property Taxes (~~\$28.3~~ \$27.7 million), other secondary receipts, and impact fees of ~~\$48.8~~ \$47.9 million during the 15-year projection period (2016-2030), and ~~\$5~~ \$4.9 million annually on a stabilized basis thereafter. The WCT will also be providing approximately 32.5 acres of public park land within the project, of which at least 16.5 acres will be dedicated to the County. After new per capita costs for services are considered the County will earn a net "profit" of \$42.2 million during build-out and \$4.2 million annually after stabilization. The State of Hawai'i will receive Gross Excise and Income taxes, secondary revenues, and impact fees of ~~\$228.0~~ \$95.4 million during the 2016-2030 period, and ~~\$20.0~~ \$4.4 million per year thereafter. The State of Hawai'i will also receive a 12-acre elementary school site. Overall, after new per capita governmental costs are deducted, the State will generate net benefits of \$82.6 million during build-out and \$2.9 million annually on a stabilized basis.

~~As is typical of a residential focused master planned community, with limited commercial components, and having a significant percentage of affordably priced housing units for local families, the expense to the State and County from a "per capita basis" of all governmental operating costs perspective may exceed the specific on-site tax/fee revenue benefits. However, given~~ Given the existing emergency services and social services infrastructure available in nearby Wailuku and Kahului, the provision of a school site within WCT, payment of impact fees, and young age of the project components, it is unlikely the "actual" public cost burden associated with the project would be greater than the per capita assessment or independently require the need for major new public facilities. ~~exceed the revenues generated.~~

k. Public Facilities

Development of the project will increase demand for public facilities, including police, fire, schools, parks, libraries, and solid waste services. The ~~DEIS~~ FEIS documents the direct demand placed upon these facilities and proposed mitigation measures. The following summarizes proposed mitigation measures:

- **Schools.** The WCT will contribute 12-acres for the development of an elementary school. The school site is conveniently located next to the regional park and residential housing. The WCT will also pay to the DOE approximately \$2,600,000 in impact fees for construction costs.
- **Parks.** In order to comply with the County’s park land dedication requirement of 500 square feet of land per unit, the project would be required to dedicate approximately 16.5-acres of land for park use. The WCT proposes to dedicate approximately 32.5 acres of sub-regional park land. This land will comprise a variety of park types including mini-parks, neighborhood parks and a community park. The parks are strategically located to provide easy pedestrian and bicycle access from the project’s single- and multi-family residential neighborhoods and the elementary school. The project also provides approximately 50-acres of greenways and open-space, which will include pedestrian and bicycle paths and will create additional opportunities for passive recreation. Moreover, within the abutting 1,077-acres of agricultural lands owned by the Applicant, opportunities for various forms of open-land recreation such as horseback riding, mountain biking, trail running, hiking and community gardening may also be provided.
- **Police and Fire.** The WCT will increase demand for police and fire facilities, equipment and personal. The Police and Fire Departments receive over ninety percent of their funding from the County General Fund, which is funding primarily by property taxes. Owners of the developed lots will pay property taxes to the County.
- **Solid Waste.** The WCT will increase demand for solid waste facilities, equipment and personal. The Department of Environmental Management receives most of its funding for solid waste collection and disposal from the collection of solid waste fees. Owners of the developed lots will pay monthly solid waste collection fees to the County.

I. Traffic

A Traffic Impact Analysis Report was prepared by Fehr & Peers in December 2014 to document the impact of the project and propose mitigation measures (See: Appendix L 4, “Traffic Impact Analysis Report”). The Traffic Impact Analysis Report (TIAR) analyzed the typical weekday AM and PM traffic conditions under existing conditions and potential project-related traffic impacts at partial buildout in 2022 and at full buildout in 2026. The analysis evaluated the operations at eight existing and six future intersections (a total of 14 study intersections) in the vicinity of the

proposed project. The project will increase traffic within the immediate area as project residents, customers and employees commute to and from the project site. The WCT will contribute to cumulative impacts (LOS E or F conditions) during one or both peak hours and the project will contribute to cumulative impacts (LOS E or F conditions) during one or both peak hours at six of the eighteen intersections. The projects will also have project-specific impacts at two of these intersections where the addition of project-generated traffic would cause the overall intersection operations to degrade below LOS D in the peak hours.

In response to the DEIS, the DPW informed the Applicant by letter dated May 23, 2016 (See: Appendix S, DEIS Agency and Community Comment and Response Letters) that the timing of the Wai'ale Bypass is uncertain and that the Applicant should assume that the roadway may not be constructed. In response, the Applicant contracted with Fehr and Peers to conduct an analysis of the Project's traffic impacts at full buildout in 2026 without the Wai'ale Bypass Road. Fehr & Peers completed the analysis in October 2016 (See: Appendix M, Fehr & Peers Prepared "No Wai'ale Bypass" Memorandum). While three more study intersections would be significantly impacted under this scenario than in the "with Bypass" scenario analyzed in the December 2014 TIAR, LOS D can be achieved at the impacted locations with an expanded program of roadway improvements as mitigation.

In the past, projects would make a fair share financial contribution for each mitigation measure to the appropriate governing agency (i.e., the County or Hawai'i State Department of Transportation (HDOT)). However, providing just partial funds for a variety of different improvements does not ensure construction of any individual improvement. More recently, HDOT has indicated a preference for development projects to fully design and build improvements at a select set of locations to ensure their implementation. The WCT proposes a mitigation planning program in the amount of its fair share requirements that would fund improvements at intersections closer to the project site where the project contributes to, but does not directly cause a significant impact. The project proposes to fully fund mitigation measures that would return operations to pre-project levels at those intersections.

During the construction phase, the Applicant will implement a traffic control plan to mitigate impacts to operating conditions along Honoapi'ilani Highway from construction vehicles ingressing and egressing from the Project site.

m. Utilities and Energy

There are existing power, telephone, and cable television transmission facilities along Honoapi'ilani Highway. If approved by MECO, It is anticipated that the power poles will be relocated underground fronting the project site along Honoapi'ilani Highway. Within the WCT, utility poles will be placed underground within the road right-of-way. It is expected that the project will create a total demand of about 10 megawatts of electricity. The WCT intends to promote the use of renewable energy. The installation of photovoltaic systems will be encouraged on residential and commercial buildings. If forty percent of residential and commercial buildings install photovoltaic systems (generating approximately 11.9 GWh per year), demand for carbon-based fuels could be reduced by roughly 50 percent. Moreover, the WCT desires to install a limited number of solar farms in appropriate locations within the agricultural lands. If two solar farms of approximately 5-acres (0.75 MW each) each are developed, the electricity generated would be about 2.6 GWh per year, which could service approximately 236 residential units. Thus, the WCT could potentially generate about 70 percent of its energy consumption through renewables. However, the installation of such systems will depend upon the technical and financial viability of such systems at the time the project is being constructed.

n. Drainage

A Preliminary Drainage Report was prepared by Otomo Engineering. The report analyzes current conditions, including drainage patterns, existing improvements, and runoff totals (**See:** Appendix H, "Preliminary Engineering and Drainage Report").

The WCT will produce an increase in impervious surfaces and will therefore be required to capture and treat the increase in runoff from the project. It is estimated that the WCT will be required to mitigate an increase in runoff of 516 cubic feet per second (cfs) and provide a minimum storage volume of 1,528, 233 cubic feet. With the drainage improvements, there will be no increase in runoff from the project site. The design of the stormwater system will include

water quality treatment to reduce the discharge of pollutants to the maximum extent practicable. Some examples of stormwater best management practices (BMPs) are grass swales, open space and parks and stormwater detention. With stormwater detention the stored runoff will infiltrate into the underlying soils and recharge groundwater. Temporary erosion control measures will be incorporated during the construction period to minimize dust and soil erosion. Additional controls will be implemented to protect the Waikapū Stream. Temporary BMPs include the construction of diversion berms and swales, dust fences, silt fences, stabilized construction entrances, truck wash down areas, inlet protection, temporary grassing of graded areas, and slope protection.

o. Water

The Preliminary Engineering Report documents existing sources of water and infrastructure improvements that service the property (**See:** Appendix H, "Preliminary Engineering and Drainage Report"). Water and fire protection for the project will be provided from a private onsite water system. Six (6) wells have been drilled on the site. One of these wells is a monitoring well. ~~Three (3) wells have been designated for potable use and two (2) for non-potable purposes.~~ Water quality testing has been conducted on three of these wells and the testing concluded that these wells are capable of producing potable water of excellent quality. The pump test results demonstrated that the three wells can produce sufficient water to service the Project's potable water demand (See: Appendix I, "Water Resources Associates Results of 10-Day Pumping Tests for Wells 1, 2, and 3". All of the wells are located within the Waikapū Aquifer. A dual water system is proposed to service the development. The non-potable water will provide irrigation to the parks, open space and commercial and residential landscape planting of individual lots. It is estimated that the dual system will reduce potable water demand by at least 33 percent. The projected non-potable water demand for the Project's agricultural lands as well as irrigation of parks and open space is estimated to be 3,420,000 gallons per day (gpd). Sources for the non-potable water are proposed to include surface water from the Iao Stream via the Iao-Waikapū Ditch and Waikapū Stream via the South Waikapū Ditch and Waihee Ditch, agricultural well water and reclaimed water from the Project's wastewater reclamation facility. Based on the water usage, the projected average daily potable water demand for the Project is 655,508 gallons per day (gpd). Water conservation measures,

such as low-flow toilets and shower heads will be utilized throughout and efficient water conserving irrigation practices will also be adopted.

p. Wastewater

A Preliminary Engineering Report was prepared for the Draft EIS that assesses current wastewater system capacity and existing infrastructure to support the project (See: Appendix, H, "Preliminary Engineering and Drainage Report").

The Project will produce an increase in demand for wastewater treatment. Based on the "Preliminary Wastewater Report", prepared by Enviniti LLC, dated March 2013 (See: Appendix J), the average wastewater flow estimate for the project is 698,000 gpd and the design maximum flow estimate is 2,449,819 gpd. It is projected that the average daily demand of wastewater generation for the project will be 529,709 gpd. According to the Wastewater Reclamation Division, County of Maui, as of July 31, 2014, the Kahului Wastewater Reclamation Facility (KWRF) has a capacity of 7.9 million gallons per day (mgd). The average flow into the KWRF is 4.7 mgd and the allocated capacity is 6.33 mgd. The remaining wastewater capacity at the KWRF is approximately 1.57 mgd. During pre-consultation for the DEIS, the Department of Environmental Management (DEM) has had noted that in order for the existing collection system to accept flows from the WCT, transmission improvements will would be required along Lower Main Street, Waiko Road, and the Wailuku Pump Station. However, the DEM in their October 13, 2016 letter in response to the DEIS informed the Applicant that the Project would not be allowed to connect to the existing County wastewater collection system and treatment system (See: Appendix S, DEIS Agency and Community Comment and Response Letters). After analyzing various alternatives for treating the Project's wastewater, the Applicant has determined that the preferred alternative is to construct a standalone private wastewater treatment facility. The facility will be designed using the most sustainable technologies available based upon Organica's Food Chain Reactor (FCR) configuration, which consists of biological treatment in successive reactor zones utilizing fixed biomass on a combination of natural plant roots and Organica's engineered biofiber media, along with a limited amount of suspended biomass. This system will also serve the dual purpose of reclaiming the Project's wastewater so that at full buildout it will be able to provide approximately 650,000 gpd of recycled water that can be used for irrigation of the WCT's agricultural lands and urban open spaces. The

~~Developer is consulting with the Department regarding the opportunity of making such improvements in order to have some of the initial demand generated by the project serviced at the KWRF. However, the WCT will need to construct a stand-alone private wastewater treatment facility, or partner with other projects in the Waikapū area, such as A&B's Wai'ale project or the County of Maui to construct a regional wastewater treatment facility. The Applicant is analyzing several package wastewater treatment options, including a conventional wastewater treatment facility and a facility using a Food Chain Reactor (FCR) configuration.~~

5. Cumulative and Secondary Impacts

Cumulative impacts are defined as the impact on the environment which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Secondary impacts are those that have the potential to occur later in time or farther in the future, but which are reasonably foreseeable. They can be viewed as actions of others that are taken because of the presence of the project.

The gradual build-out of the WCT will produce a range of impacts that are described in the ~~DEIS~~ FEIS. These are the same types of impacts that are projected for the region overtime as population increases and land is developed to accommodate population growth. Cumulative and Secondary impacts resulting from the Project, together with other development planned for Central Maui, will include increased demand upon public infrastructure and facility systems such as traffic, schools, police, fire, wastewater and water. Cumulative and Secondary impacts can also have an effect upon air and water quality, sensitive environmental habitats and natural resources if not properly monitored and mitigated. Section VI.B of the ~~DEIS~~ FEIS discusses cumulative and secondary impacts in greater detail.

6. Consistency with State and County Plans and Policies

a. State Land Use Law, Chapter 205, HRS

The State Land Use Law (Chapter 205, HRS), establishes the Land Use Commission (LUC) and authorizes the body to designate all lands in the State into one of four districts: Urban, Rural, Agricultural or Conservation. The WCT comprises about 1,576 acres of which 14 acres are

located within the State Urban District and the remaining lands are within the State Agricultural District. To develop the property as proposed, approximately 335.155 acres will need to be redesignated to the Urban District and 149.848 acres to the Rural District. Section VII.A of the ~~DEIS~~ FEIS discusses the Project's consistency with the State Land Use Law in greater detail.

b. Coastal Zone Management Act, Chapter 205A, HRS

The Coastal Zone Management (CZM) Area as defined in Chapter 205A includes all of the lands in the State. As such, the property is within the CZM area. Section VII.E of the ~~DEIS~~ FEIS contains a detailed discussion of the Project's compliance with the objectives and policies of the CZM Act.

c. Hawai'i State Plan, Chapter 226, HRS

The Hawai'i State Plan (Chapter 226, HRS), establishes a set of goals, objectives and policies that serve as long-range guidelines for the growth and development of the State. Section VII.A-B of the ~~DEIS~~ FEIS discusses how the project is either supportive or not supportive of these goals, objectives and policies.

d. State Functional Plans

The Hawai'i State Plan directs State agencies to prepare functional plans for their respective program areas. There are 14 state functional plans. These plans direct State policy in areas that range from agriculture to the natural environment and economic development. Section VII.D of the ~~DEIS~~ FEIS discusses how the project is either supportive or not supportive of these goals, objectives and policies.

e. County of Maui General Plan

The General Plan of the County of Maui refers to a hierarchy of planning documents that together set forth future growth and policy direction in the County. The General Plan is comprised of the following documents: 1) County-wide Policy Plan; 2) Maui Island Plan; and 3) nine community plans.

1) Countywide Policy Plan

The County-wide Policy Plan was adopted in March 2010 and is a broad policy document that identifies a vision for the future of Maui County. It establishes a set of guiding

principles and provides comprehensive goals, objectives, policies and implementing actions that portray the desired direction of the County's future. The County-wide Policy Plan provides the policy framework for the development of the MIP and nine Community Plans. Section VII.H.1 discusses how the project is either supportive or not supportive of these goals, objectives and policies.

2) Maui Island Plan

The MIP functions as a regional plan and addresses the policies and issued that are not confined to just one community plan area, including regional systems such as transportation, utilities and growth management, for the Island of Maui. Together, the Island and Community Plans develop strategies with respect to population density, land use maps, land use regulations, transportation systems, public and community facility locations, water and sewage systems, visitor destinations, urban design and other matters related to development. The MIP was adopted on December 28, 2012. The MIP designates as a "Planned Growth Area" the land area comprising the proposed urban and rural areas that comprise the WCT. Section VII.H.2 of the ~~DEIS~~ FEIS discusses how the project is either supportive or not supportive of these goals, objectives, policies and implementing actions.

3) Wailuku-Kahului Community Plan

The Wailuku-Kahului Community Plan designates the urban and rural land proposed for development Agriculture and Wailuku-Kahului Project District No. 5 (Maui Tropical Plantation). Community Plan Amendments are required for the approximate 499 acres of land that are proposed for development. Section VII.H.3 of the ~~DEIS~~ FEIS discusses how the project is either supportive or not supportive of these goals, objectives and policies.

4) County of Maui Zoning

The WCT Master Plan will similarly require a Change in Zoning for all lands proposed for development. A new project district zoning ordinance will be created to implement the vision and mix of uses proposed in the WCT Master Plan.

7. Alternatives Considered

The Project alternatives that have been considered are:

- No Action Alternative;
- Develop Fewer Units;
- Develop More Units by Building More Workforce Housing
- Develop at a Lower Density; and
- Develop at an Alternative Location.

The Applicant has also evaluated several alternatives for the treatment of the Project's wastewater. The alternatives analyzed included following:

1. Connect to the KWWRF to treat the entire Project;
2. Temporarily connect to the KWWRF for the first 650 residential units and then construct a private on-site and/or regional Waikapū wastewater reclamation facility;
3. Construct a regional Waikapū wastewater reclamation treatment facility in association with the County of Maui and adjoining property owners;
4. Construct a private wastewater reclamation facility on property owned by the Applicant;
5. Construct a conventional wastewater treatment plan within the subject property;
6. Construct an Organica Food Chain Reactor (FCR) facility within the subject property;
and
7. No action, which is to not proceed with the Project.

Chapter VIII of the DEIS FEIS contains a discussion of the alternatives.

8. Unresolved Issues

The following issues remain unresolved at the time this document is being prepared:

Wastewater Treatment

~~The WCT proposes to complete off-site upgrades to the County's wastewater transmission system in order to temporarily connect to the KWRF for the initial 650 units, or development producing an equivalent amount of wastewater, in the Phase I development. It is unclear at this~~

~~time if the County will agree to this proposal. In any event, the Applicant will need to construct a stand-alone private wastewater treatment facility, or partner with the County and other projects in the Waikapū area, to construct a combined wastewater treatment plant.~~

Wai`ale By-pass Road Improvements

The Wai`ale Bypass Road is identified in the County's Fiscal Year 2016 Capital Improvement Program for funding between 2017 and 2021. The precise schedule for funding and development of this roadway is uncertain at this time.

Elementary School Timing

The FEIS assumes that the Project's elementary school will be built within the first phase of the development. Thus, the impacts of the facility are addressed during this phase. However, the precise schedule for development of this State facility will be dependent upon funding from the State Legislature, which the Applicant has no control over. Moreover, the Educational Contribution Agreement (ECA) between the Applicant and the State Department of Education has not yet been executed.

Final Water Quality Testing

Pump tests and water quality testing for compliance with State DOH water quality standards is being conducted on the Project's three potable wells.

Renewable Energy Development

Development of renewable on-site photovoltaic energy will be dependent upon many factors including financial viability and securing any necessary agreements from MECO.

Amendments to Maui County Code (MCC) Chapter 19.33

Implementation of the Master Plan will require the adoption of a Project District Ordinance, pursuant to MCC Chapter 19.58. It is not yet known whether the ordinance will be adopted through the legislative process. Should the ordinance not be adopted, or be revised significantly, then the ultimate mix of land uses and character of development may be affected.



CHAPTER II

Planning Context



II. PLANNING CONTEXT

A. HISTORICAL LAND USE

A history report prepared by Jill Engledow for Mike Atherton (August, 2009) describes the history of Waikapū, including the Applicant's property (See: Appendix N ↓, "A History of Waikapū"). Engledow's report is briefly summarized here.

The Waikapū land division originates from the valley created by the Waikapū Stream, which is one of four streams that comprise what is known as the Nā Wai 'Ehā. The other three valleys are called 'Īao, Waiehu and Waihe'e. The Nā Wai 'Ehā streams are culturally and economically significant. For generations these streams have provided a fresh water source vital for the cultivation of crops throughout the Central Maui isthmus. From the base of each of these valleys, native Hawaiian settlements arose to take advantage of the abundant natural resources that formed the traditional Hawaiian ahupua'a from mountain to sea.

According to early censuses conducted by Christian missionaries in 1832 and 1836, there were 733 persons living in Waikapū in 1832 and 709 persons in 1836. A report from 1834 counts students attending two schools in Waikapū, one with 170 boys and 155 girls and the other with 84 boys and 54 girls. Thus, prior to the large-scale cultivation of sugarcane in Central Maui, there was a sizable native Hawaiian population in and around Waikapū.

Prior to land extensive sugarcane cultivation, kalo was cultivated along the Waikapū stream along with other vegetable crops. As documented by Engledow, E.S.C. Handy wrote the following in 1934:

“Spreading north and south from the base of Waikapū to a considerable distance below the valley are the vestiges of extensive wet plantations, now almost obliterated by sugarcane cultivation . . . Far on the north side, just above the main road and at least half a mile below the entrance to the canyon, an extensive truck garden on old terrace ground showed the large area and the distance below and away from the valley that was anciently developed in terraced taro culture. On the south side there are likewise several sizable kuleana where, in 1934, old terraces were used for truck gardening. . . There were probably once a few small terraces on the narrow level strips of valley bottom in the lower canyon.”^{iv}

Engledow further documents that small scale sugarcane growing was occurring in Waikapū by the 1840s. However, it wasn’t until 1862, when James Louzada founded Waikapū Plantation, that larger scale sugar cultivation took root in the area. An early depiction of the plantation is provided in an article from the April 9, 1864, edition of the *Pacific Commercial Advisor*.^v

“The capacity of the mill is about four thousand pounds of sugar per day, though, by working nights, which is sometimes done, five thousand pounds can be got off. To obtain this product, Messrs. Louzada and Cornwell employ about seventy field and mill laborers, of whom forty are females, who are engaged on account of the scarcity of men. . . .The land at Waikapū consisting of a gentle slope from the base of the mountain to the road, irrigated by the Waikapū river, is admirably adapted to sugar culture, producing, when well cared for, very heavy crops. The extent of land suitable for cane is limited only by the amount of water obtainable for irrigation. The proprietors of the mill have purchased land largely since they began operations and have now some 200 acres. They purchase cane from the natives, paying generally about one hundred dollars an acre for the standing crop, taking it off at their own expense.”

By the mid-1870s, sugar cane production in the Central Valley was thriving. Between 1867 and 1880, land in cane cultivation on Maui increased by 136%, from 5,080 acres to 12,000 acres.^{vi} In 1889 and 1890, Wailuku Sugar Company, owned by famed sugar baron Claus Spreckels,

purchased all of the shares of the Waikapū Plantation from James Louzada and Henry Cornwell. Wailuku Sugar Company, under different ownership groups, continued sugar cultivation on the Waikapū lands until 1988. Thereafter, the Maui Land & Pineapple Company leased land for pineapple production and HC&S leased land both mauka and makai of Honoapiʻilani Highway to supplement its sugar production. Pineapple ceased to be farmed on Waikapū lands in about 1997. HC&S continues to lease approximately 938 acres for sugarcane cultivation from the Project Applicant.

In 1982, Wailuku Sugar Company petitioned the State Land Use Commission for a Special Use Permit to develop the “Hawaiʻi Tropical Plantation” on 8.92 acres of the approximate 59 acres that comprise TMK: (2) 3-6-5:007. The purpose of the project, as described in 1982, was to develop a visitor-oriented destination where a variety of tropical agricultural products could be showcased. The agricultural component of the project included the growing, harvesting and processing of tropical fruits, plants and flowers. In addition, tours were offered so that visitors could experience the agricultural activities. Of the 8.92 acres subject to the Special Use Permit, 5.25 acres was proposed for a plantation center, 2.64 acres for parking, and 1.03 acres for an agricultural tour route. Agricultural activities were to occur on the remaining agricultural lands that encircle the facilities. On July 21, 1982, the Maui Planning Commission granted the Special Use Permit, subject to conditions. The Tropical Plantation Market was constructed in 1984 and the restaurant in 1986. By 1988, the Plantation was expected to draw approximately 450,000 visitors.

By the late 1980s the Maui Tropical Plantation’s management determined that greater regulatory flexibility was needed so that the facility could be expanded to better serve its customers. In 1988, Maui Tropical Plantation filed a Hawaiʻi Revised Statutes (HRS) Chapter 343 Environmental Assessment to support a State Land Use Commission District Boundary Amendment from Agricultural to Urban and a Change in Zoning and Community Plan Amendment from Agriculture to Wailuku/Kahului Project District 5. In October 1992, the Maui County Council granted the request. The Project District Zoning Ordinance zoned 14 acres for commercial uses and approximately 45 acres for agricultural uses (See: Figure Nos. 6 and 7, “Community Plan Map” and “Zoning Map”).

B. EXISTING LAND USE

The Applicant purchased the bulk of the property from Wailuku Agribusiness Company between 2004 and 2006. Today, the Applicant's 1,562.171 acres of State Agricultural District lands are used for sugarcane cultivation, cattle grazing, and diversified agriculture. These include the following TMK's:

Table 13 14: State Agricultural District Designated Lands

TMK Number	Acres
(2) 3-6-005:007 (Portion)	45.054
(2) 3-6-004:003	657.195
(2) 3-6-004:006	52.976
(2) 3-6-006:036	0.72
(2) 3-6-002:003	521.40
(2) 3-6-002:001	284.826
TOTAL	1,562.171

The commercial component of the MTP, located on a 14-acre portion of TMK (2) 3-6-005:007, continues to be a visitor destination that is based on a tropical agricultural theme. As in previous years, the facility integrates ongoing agricultural activities with daily tours, restaurants, gift shops, farm stands, and adventure tours. Surrounding the MTP is sugarcane stretching to the south and east and the diversified farming operations of Kumu Farms and Hawaiian Taro to the west and north. The existing town of Waikapū, Census Designated Place population of 2,965 (Maui County Data Book, 2012), abuts the northern boundary. MTP facilities include a 9,389 square feet country store/gift shop and a 15,821 square feet restaurant/special events hall with seating for up to 500. There are also a number of smaller structures that serve as artist studios and gift shops. The most popular attraction at the MTP is a daily tram ride, which offers a guided tour of the abutting agricultural fields and tropical lagoon and gardens. The special events hall is popular for weddings, fund raising campaigns, parties and performances. In recent years the facility has attracted approximately 100,000 visitors per year.

Kumu Farms and Hoaloa Farms Hawaiian Taro farm along the northern and western perimeter of the MTP. Kumu Farms specializes in organically grown fruits, vegetables and herbs and is well-known for its Moloka'i farm, which sells organic strawberry papayas throughout Hawai'i and on the U.S. Mainland. Hoaloa Farms Hawaiian Taro is owned by farmer and University of Hawai'i taro researcher Bobby Pahia. Hawaiian Taro grows dry land taro, banana and sweet potato. Makani Olu Ranch is raising a herd of Texas Longhorn cattle and Beef and Bloom Black Angus cattle on the higher elevation agricultural lands. In July 2016 HC&S announced it will no longer lease WCT lands for agriculture. Kumu Farms, Hoaloa Farms, Makani Olu Ranch and Beef and Bloom will expand their production to these lands. These lands may also be leased to other viable farming operations. MTP owner, Mike Atherton, is raising a small herd of Texas Longhorn cattle on the mauka fields at the base of the West Maui Mountains. HC&S is leasing approximately 938 acres for sugarcane on parcels to the south and east.

C. SITE PHOTOGRAPHS

Site photographs were taken of the entire 1,576 acres between September 2013 and October 2014. Figure Nos. 7a and 7b show the approximate location of the photos taken. The site photographs document existing site conditions at the MTP, the agricultural lands mauka and to the south of the MTP and the existing agricultural lands makai of Honoapi'ilani Highway in the area proposed for development. The site photographs also document existing conditions along the boundaries of the project, including conditions along Waiko Road. (See: Figure No. 8 A-N, "Site Photographs").

D. MAUI ISLAND PLAN DIRECTED GROWTH PLAN

In December, 2012, the County of Maui adopted the MIP. The MIP establishes goals, objectives, policies and actions to direct growth and development on Maui through the year 2030. The MIP was based upon a comprehensive analysis of population growth, economic conditions, development capacity of existing entitled lands, and extensive community outreach.

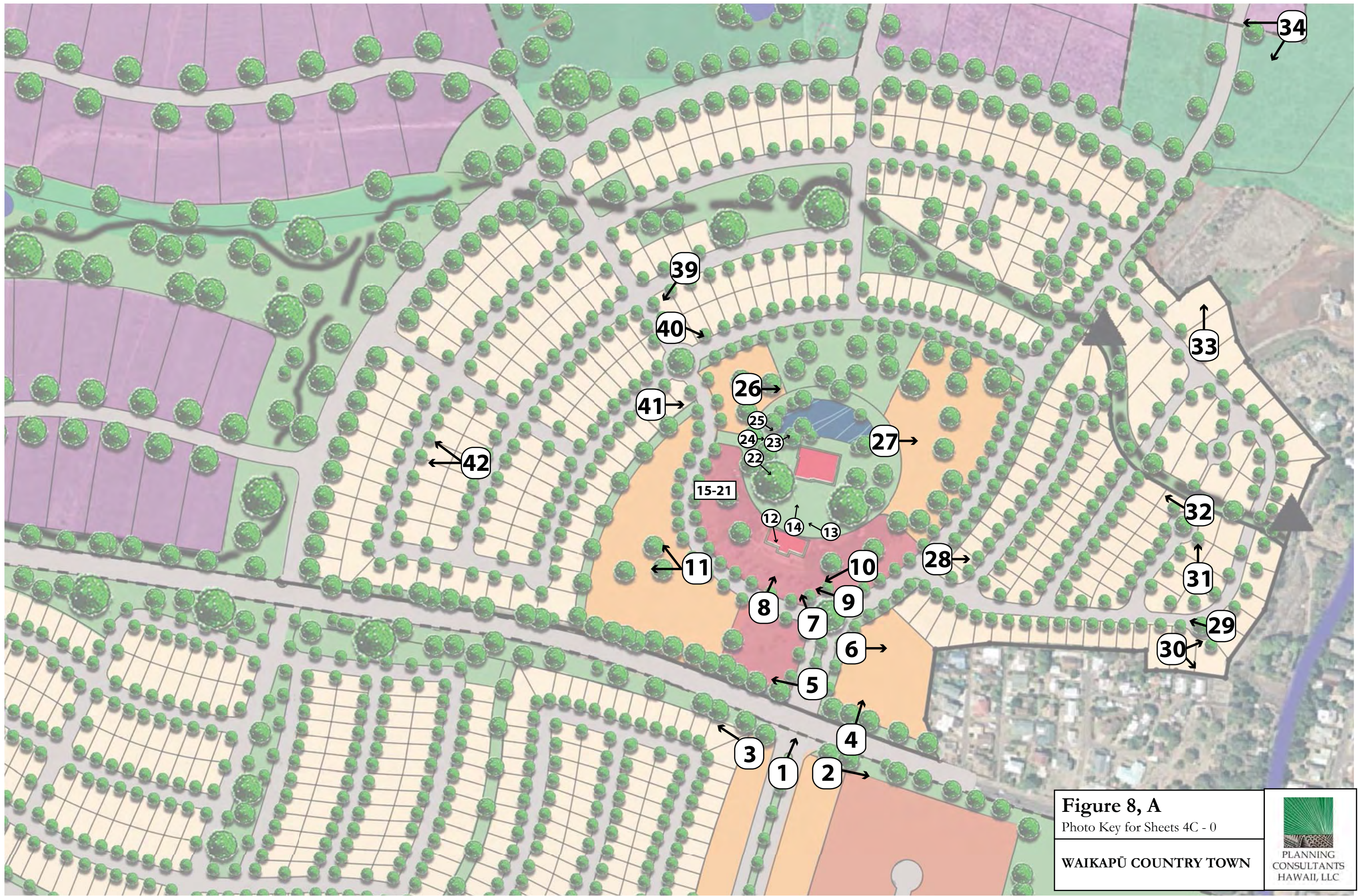


Figure 8, A
 Photo Key for Sheets 4C - 0
WAIKAPŪ COUNTRY TOWN



Waikapu

COUNTRY TOWN

LEGEND

- RURAL LOTS
- SINGLE FAMILY
- COTTAGE TOWN HOME
- COUNTRY TOWN MIXED USE
- COMMERCIAL
- PARKS AND OPEN SPACE
- SCHOOL
- AGRICULTURAL LANDS

ILLUSTRATIVE LAND PLAN

HAWAII
LAND
PLANNING

MALIKA
MAKAI

PLANNING
CONSULTANTS
HAWAII, LLC

0 ft 200 400 800 1000

DATE: 2/6/14

Figure 8, b

Site Photographs

WAIKAPŪ COUNTRY TOWN



PLANNING
CONSULTANTS
HAWAII, LLC

THIS DRAWING IS AN INSTRUMENT OF SERVICE ONLY AND REMAINS THE PROPERTY OF THE LANDSCAPE ARCHITECT. ALL COPYRIGHT RESERVED.



1. Looking west (mauka) from Honoapi'ilani Highway into the project site.



2. Looking north along Honoapi'ilani Highway towards Waikapū Town fronting the project.



3. Looking south along Honoapi'ilani Highway fronting the project site.



4. Looking northwest across the subject property from Honoapi'ilani Highway.



5. Looking south from the project driveway across the subject property.



6. The existing Kumu Farms agricultural products stand.

Figure 8, C
Site Photographs

WAIKAPŪ COUNTRY TOWN



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7. Existing electric vehicle recharging stations installed by JumpSmart Maui.



8. Looking west at the entrance to the existing Maui Tropical Plantation Visitor Store.



9. Looking south at the frontage of the Maui Tropical Plantation Visitor Store.

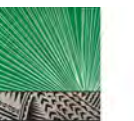


10. Panning from the southeast to the south across the existing Maui Tropical Plantation parking lot.

Figure 8, D

Site Photographs

WAIKAPŪ COUNTRY TOWN



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11. Looking from south to west across the project site.



12. Looking east (makai) at the rear of the Maui Tropical Plantation Visitor Store from the village green.



13. Looking across the existing village green.



14. Looking west (mauka) at the restaurant / special events hall from the village green.

Figure 8, E
Site Photographs

WAIKAPŪ COUNTRY TOWN



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15. Ron L. Designs Jewellery Manufacturing Company.



16. History of Waikapu pavilion.



17. Flyin Hawaiian Zipline.



18. Maui Zipline.



19. Hawaiian Edible Islands.



20. Sweet Paradise Chocolatier.

Figure 8, F
Site Photographs

WAIKAPŪ COUNTRY TOWN



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21. Typical retail shop at the Maui Tropical Plantation.



22. Current improvements to the lagoon to recognize Waikapu's sugar legacy.



23. Looking across the lagoon towards areas proposed for future multi-family residential.



24. View of the lagoon with new improvements.



25. Looking across the lagoon at the renovated restaurant and bar.

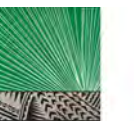


26. Looking north across the village green behind the lagoon.

Figure 8, G

Site Photographs

WAIKAPŪ COUNTRY TOWN



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27. Wedding gazebo at the northern end of the lagoon.



28. Looking north at Kumu Farm's farming operation.



29. Looking south across Kumu Farm's farming operations.

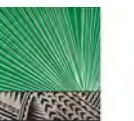


30. Looking along the northern and eastern property lines from the northeast corner of the property.

Figure 8, H

Site Photographs

WAIKAPŪ COUNTRY TOWN



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31. Looking west (mauka) towards proposed rural and agricultural lands.



32. Looking southwest at the existing Waihe`e irrigation ditch that lies north to south across the property.



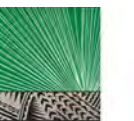
33. Looking west (mauka) towards the proposed rural and agricultural lands.



34. Looking east (makai) towards proposed rural and residential lands.

Figure 8, I
Site Photographs

WAIKAPŪ COUNTRY TOWN



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35. Looking east (makai) at Kumu Farms agricultural lands.



36. Looking east (makai) at Kumu Farms agricultural lands towards the MTP.



37. Looking east (makai) at Kumu Farms agricultural lands towards the MTP.



38. Panning southeast towards lands being farmed by Hawaii Taro, LLC.

Figure 8, J
Site Photographs

WAIKAPŪ COUNTRY TOWN



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39. Looking northeast at agricultural lands near the MTP.



40. The existing Maui Zipline within the MTP.



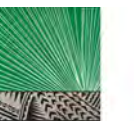
41. Looking north across the MTP.



42. Looking south across proposed single-family and rural lands and agricultural lands beyond.

Figure 8, K
Site Photographs

WAIKAPŪ COUNTRY TOWN



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43. Looking north across the proposed agricultural park in the agricultural preserve.



44. Looking southwest across the agricultural preserve.



45. Looking east at lands proposed for urban development, (makai) at lands makai of Honoapi'ilani Highway.

Figure 8, L
Site Photographs

WAIKAPŪ COUNTRY TOWN



PLANNING
CONSULTANTS
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46. Looking south across agricultural lands makai of Honoapiʻilani Highway.

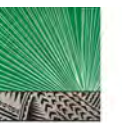


47. Looking west (mauka) from the location of the proposed Waiʻale Bypass Road across lands proposed for urban development.

Figure 8, M

Site Photographs

WAIKAPŪ COUNTRY TOWN



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48. Looking south along an existing cane haul road in the vicinity of proposed Wai'ale Bypass.



49. Looking north along existing cane haul road in the vicinity of the proposed Wai'ale Bypass.



50. Looking in the direction of the cane haul road from Waiko Road.



51. Looking northwest up Waiko Road.



52. Looking north along Wai'ale Road from Waiko Road.



53. Looking at the existing Waikapū Stream bed.

Figure 8, N
Site Photographs

WAIKAPŪ COUNTRY TOWN



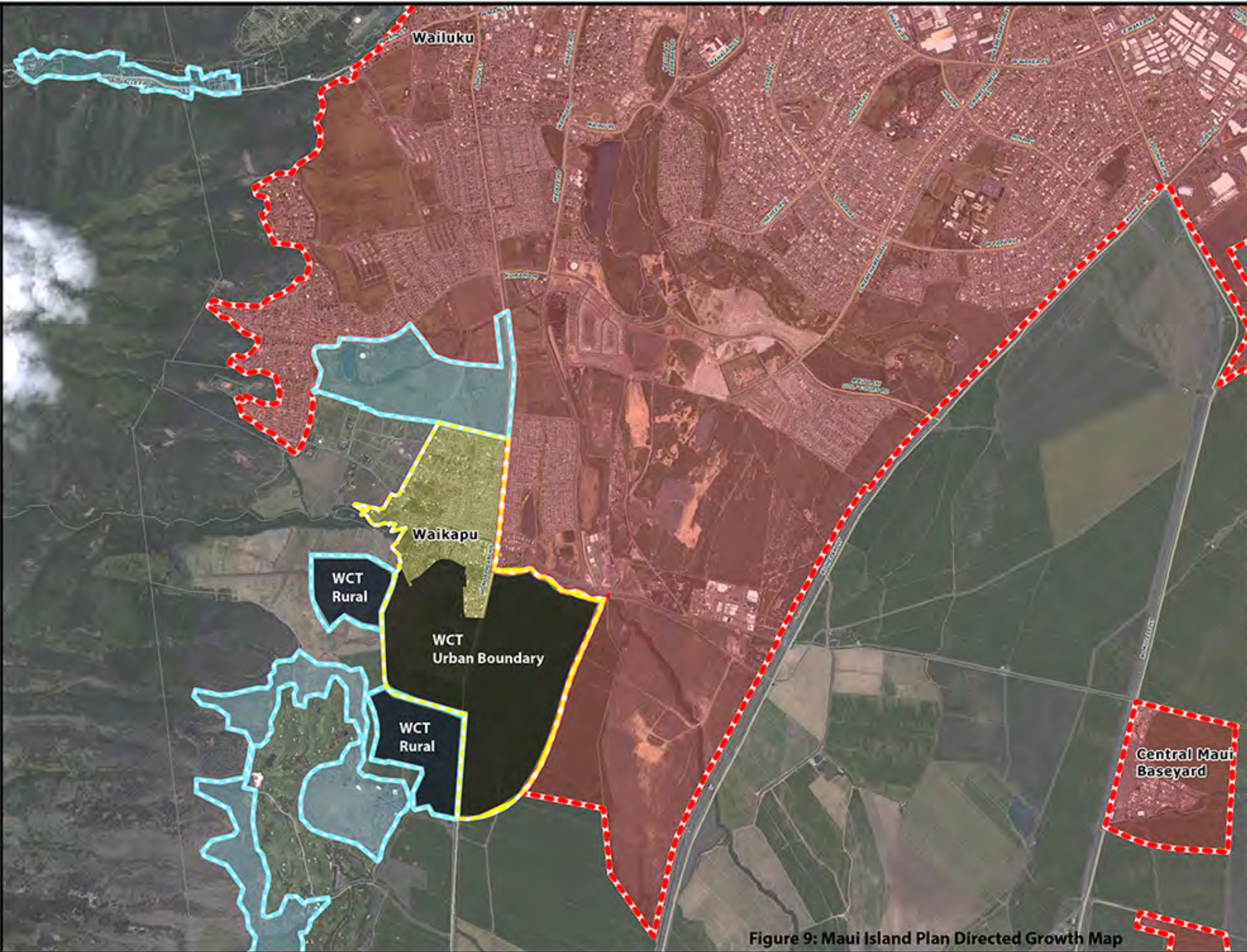
PLANNING
CONSULTANTS
HAWAII, LLC

To guide development of future urban lands, the MIP sets forth policies requiring higher urban densities, a greater balance between single- and multi-family housing types, mixed-use development, vehicular and pedestrian connectivity between land uses, and the incorporation of parks, schools, open space and affordable housing into future developments.

The MIPs Directed Growth Plan places approximately 502 acres of WCTs 1,576 acres into urban (small town) and rural growth boundaries. The MIP keeps the remaining 1,074 acres within the State's Agricultural District. Of the Project's agricultural lands, approximately 800 acres extending south of the Project's Small Town Boundary are preserved in perpetuity for agricultural use through a conservation easement. The remaining lands may be subdivided in the future into several large agricultural lots (**See:** Figure Nos. 9 and 10, "Maui Island Plan Directed Growth Map" and "Maui Island Plan Wailuku/Kahului Planned Growth Areas").

The MIP describes the purpose and intent of the WCT "Planned Growth Area" as follows:

The Waikapū Tropical Plantation Town planned growth area is situated in the vicinity of the Maui Tropical Plantation, and includes lands on both the mauka and makai sides of Honoapi'ilani Highway. Providing the urban character of a traditional small town, this area will have a mix of single-family and multifamily rural residences, park land, open space, commercial uses, and an elementary or intermediate school developed in coordination with the Wai'ale project. The area is located south of Waikapū along Honoapi'ilani Highway, and it will incorporate the integrated agricultural and commercial uses of the existing tropical plantation complex. This area is proximate to the Wai'ale planned growth area, providing additional housing in central Maui within the Wailuku-Kahului Community plan region. As part of this project, parcels to the south of the project (identified as Agricultural Preserve on Figure 8-1) shall be protected in perpetuity for agricultural use through a conservation easement. A portion of this area may be dedicated to the County as an agricultural park administered pursuant to County regulations. Alternatively, this area can be developed as a private agricultural park available to Maui farmers, and executed through a unilateral agreement between the landowner and Maui County. The



Maui Island Plan Directed Growth Map

Waikapu / Kahului C3

Legend

Growth Boundaries

- Urban (Red dashed line)
- Small Town (Yellow dashed line)
- Rural (Blue dashed line)

Reference

- 2011 Parcels (White outline)
- Primary Roads (Grey line)



Scale: 0 500 1000 2000 3000 4000 Feet

Product Code: M-CET_20121210-02
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Background Image: Worldview 2 - 2010

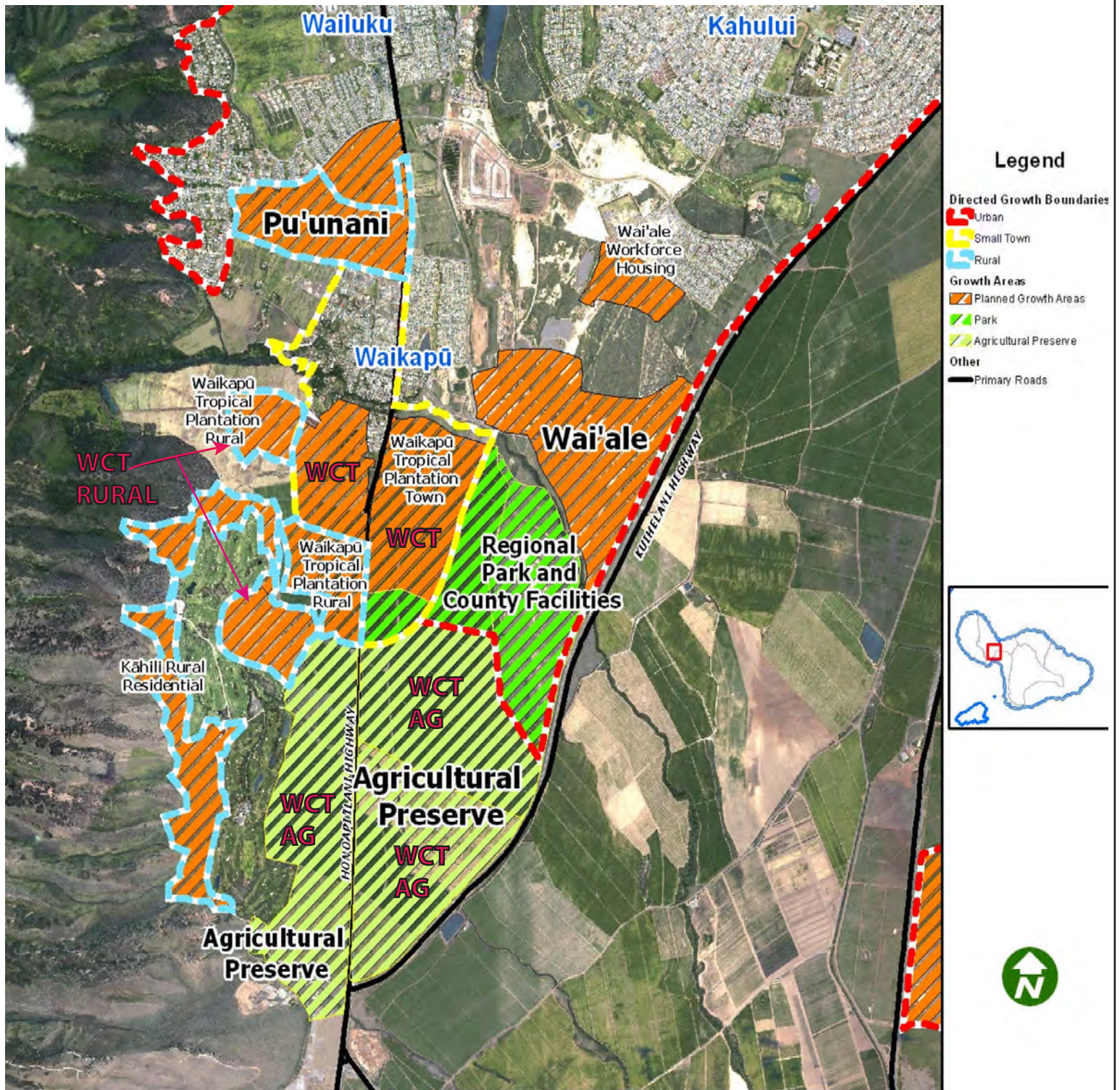
This is not a zoning map. Please contact the Planning Department for Zoning confirmation.

PREPARED BY:

Long Range Planning Division
Department of Planning
County of Maui
250 South High Street
Waikuku, Hawaii 96793



Figure 9: Maui Island Plan Directed Growth Map



Source: Maui Island Plan, Department of Planning, Long-range Planning Division, December 2012

Figure 10
 Maui Island Plan
 Wailuku-Kahului Planned Growth Areas



Not to Scale



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WAIKAPŪ COUNTRY TOWN

rural lots mauka of Honoapi'ilani Highway are intended to be developed using a CSD plan. The CSD plan shall provide access to uninterrupted walking and bicycling trails and will preserve mauka and makai views while protecting environmentally sensitive lands both along Waikapū stream and mauka of the subdivision.

Planned Growth Area Rationale:

Keeping the Waikapū Tropical Plantation as its town core, this area will become a self-sufficient small town with a mix of single-family and multifamily housing units in a walkable community that includes affordable housing in close proximity to Wailuku's employment centers. Schools, parks, police and fire facilities, transit infrastructure, wastewater, water supply resources, and other infrastructure should be developed efficiently, in coordination with neighboring developments including Maui Lani, Kehalani, Pu'unani and Wai'ale. The Waikapū Tropical Plantation Town planned growth area is located on Directed Growth Map #C3.^{vii}

E. PROJECTED MARKET DEMAND

A market study and economic and fiscal impact assessment was conducted by the Hallstrom Appraisal Group | CBRE, Inc. and is included as Appendix A.

The purpose of the market study was to determine if there will be sufficient market demand to absorb the proposed residential and commercial development during a reasonable exposure period given competing developments and projected statewide/regional market trends. The study also assessed if the project is an appropriate use of the underlying site relative to market needs.

Wailuku-Kahului, or "Central Maui", is the center for government, transportation and non-visitor economic activity on the island, and its most populous district. In addition to its historic standing as the location of a significant share of urban uses, it has been a focal point for light industrial,

commercial and residential development for the past two decades, with numerous major projects actively adding inventory, in construction or proposed. The region's proximity to services, goods, transportation facilities, and business/employment opportunities, ready access to the island's highway system, and a desirable climate will facilitate continuing demand for real estate into the long-term; although it will "lose" some of its market dominance as development continues in South (primarily) and West Maui.

There are an estimated 19,200 housing units in Central Maui of which some twelve-plus percent are owned by non-residents as second/vacation homes. The average resident household size is just under 3.50 persons and is forecast to decline meaningfully in coming decades as a result of family/household trends and a changing mix of unit types from new development.

There are an estimated twelve million square feet of gross leasable light industrial and commercial floor space in Central Maui, about three-quarters of the island-wide total, but a limited visitor-oriented component with only 462 total transient units (just 2.3 percent of the island total) and limited tourist-dominated retail.

Waikapū is potentially a highly competitive location within the Maui housing market. It is considered to have distinctive, unique characteristics relative to nearby Wailuku and Kahului, although it represents the southerly boundary of their greater urban sphere. All of the just over 900 units of residential inventory built in the Waikapū Village area to date (less than five percent of the regional total) have been successfully absorbed, and the number of units available for resale is typically limited with only six active house listings at the report date, or just 0.66% of the total units in the community. Waikapū is considered desirable for its relative ease of access to the Wailuku/Kahului commercial and service centers as well as the resort employment areas in West and South Maui; for its cooler climate; panoramas across the isthmus to Haleakalā; and, small town ambience.

The subject property is a superior location for the proposed development in regards to access, views, topography, shape, consistency with nearby uses and land planning objectives, climate, and ability to provide a quality lifestyle and business opportunities for a wide-range of

owners and end-users. It will have the attributes necessary to be highly competitive in all its product sectors, and will capture a reasonable market share during its offering period.

It is estimated the demand for new residential units in the Wailuku-Kahului study area will be from 9,647 to 16,814 units over the next 21 years (through 2035); including allowances for non-resident purchasers and vacancies, with a mid-point demand of 13,230 units. The number of existing unsold and planned resident housing units within the regional "Directed Growth Boundary", excluding the proposed WCT product, totals some 7,296 units. This indicates there will be a shortfall in the sector of from 2,351 to 9,518 new residential units; with a mid-point under-supply of 5,935 units. Thus, sufficient unmet demand should exist to readily absorb the 1,433 units of subject inventory during the projection period.

The median price for a single family home in Central Maui (which includes many smaller, older homes/units) during the first half of 2015 was \$507,300 and at \$308,750 for a multifamily unit. Both indicators show meaningful appreciation since prices reached a post-recessionary nadir in 2011. Median prices are anticipated to increase into the long-term as thousands of higher priced new units manifesting the higher costs of land, construction, impact fees and entitlement, are added to the inventory, and appreciation (though cyclical) continues.

It is estimated that approximately 75 percent of the demand for resident housing in the Wailuku-Kahului Study Area will be for units with a current price of \$660,000 or less; the upper-price threshold for meeting County affordability standards (160 percent of median household income), with 30 percent of demand for units having a current price of less than \$330,000 (the 80 percent of median household income threshold).

Multifamily units are expected to comprise an increasing proportion of the total regional inventory, moving from the current 25 percent level to 45 percent over the coming two decades. Based on the limited availability of alternative Central Maui supply relative to demand and the favorable competitive characteristics of the subject location/community, it is estimated that the 1,433 proposed residential units of WCT will require about 10 years to be fully absorbed following anticipated commencement of sales in 2017, or at an average rate approaching 150 units annually. This represents only some 20 percent of total regional mid-point demand during

the sales period; a moderate perspective which could readily be swifter if some proposed projects fail to reach fruition and the market standing of WCT achieves expectations.

It is estimated the demand for neighborhood commercial space by WCT residents and day workers at build-out will be some 85,100 square feet, with patronage by guests in the community, other Waikapū households, and passer-byes contributing an additional 34,000 square feet of demand on a stabilized basis. The remaining 50,500 square feet (of the total 169,600 square feet proposed) will be modestly absorbed over-time with specialized/niche businesses, many with cross-over appeal to residents and visitors, and keeping with the small town context. The developer is hopeful the existing on-site Tropical Plantation shops will remain at WCT. It is estimated that it will require about 12 years for the WCT commercial space to be fully absorbed. The annualized mid-point subject residential unit absorption estimates are summarized in Table ~~14~~ ~~12~~ below.

Table ~~14~~ ~~12~~: Estimated Annualized Mid-Point Market Absorption of Residential Product

Calendar	Year of Development	Construction, Sale and Absorption Timing	Residential Units
2016	1	Infrastructure Emplacement Commences	
2017	2	Infrastructure Completed, Vertical Construction and Pre-Sales Begin	150
2018	3	Initial Buildings Completed and Occupied	120
2019	4	Vertical Construction, Absorption and Sales On-Going	130
2020	5	Construction, Absorption and Sales On-Going	140
2021	6	Construction Absorption and Sales On-Going	150
2022	7	Construction Absorption and Sales On-Going	150
2023	8	Construction Absorption and Sales On-Going	150
2024	9	Construction Absorption and Sales On-Going	150
2025	10	Construction Absorption and Sales On-Going	150
2026	11	Construction Absorption and Sales On-Going	143
TOTAL			1,433

Note: Total excludes potential 'Ohana units which may be permitted within the community. The number and location of possible 'Ohana units are unknown at this time, with some developer materials discussing totals of about 150 units. For purposes of the analysis it is assumed only the 1,433 proposed non 'Ohana units will be built and reflected this figure throughout our analysis.

Note: Plus construction of 146 Ohana units which is assumed to occur with maximum build-out.

Source: The Hallstrom Group/CBRE

The forecasted absorption of the commercial component is shown below in Table ~~15~~ ~~13~~.

Table 15-13: Estimated Annualized Mid-Point Market Absorption of Commercial Product

PROJECTED SUBJECT COMMERCIAL SPACE ABSORPTION BY PERIOD			
Gross Leasable Area in Square Feet			
2016-2020	2021-2025	2026-2030	Total
42,399	110,238	16,960	169,597
Source: The Hallstrom Group/CBRE			