

Chapter 343 Environmental Assessment /  
Environmental Impact Statement  
Preparation Notice

# Waikapū Country Town

**Applicant:**

Waikapū Properties, LLC  
1670 Honoapiilani Highway  
Waikapu, Maui, Hawaii

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Planning  
Consultants  
Hawaii, LLC

April 2015

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## **I. PROJECT INFORMATION**

### **A. PROPERTY INFORMATION**

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-e, “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 property proposed for urban and rural development encompasses approximately 499 acres of the 1,576 acres. The TMKs that are proposed for urban and or rural development include:

- (2) 3-6-004: Portion of 003;
- (2) 3-6-005: Portion of 7;
- (2) 3-6-002: Portion of 3;
- (2) 3-6-004:006; and
- (2) 3-6-005:007.

Lands not proposed for urban or rural development will remain within the State Agricultural District.

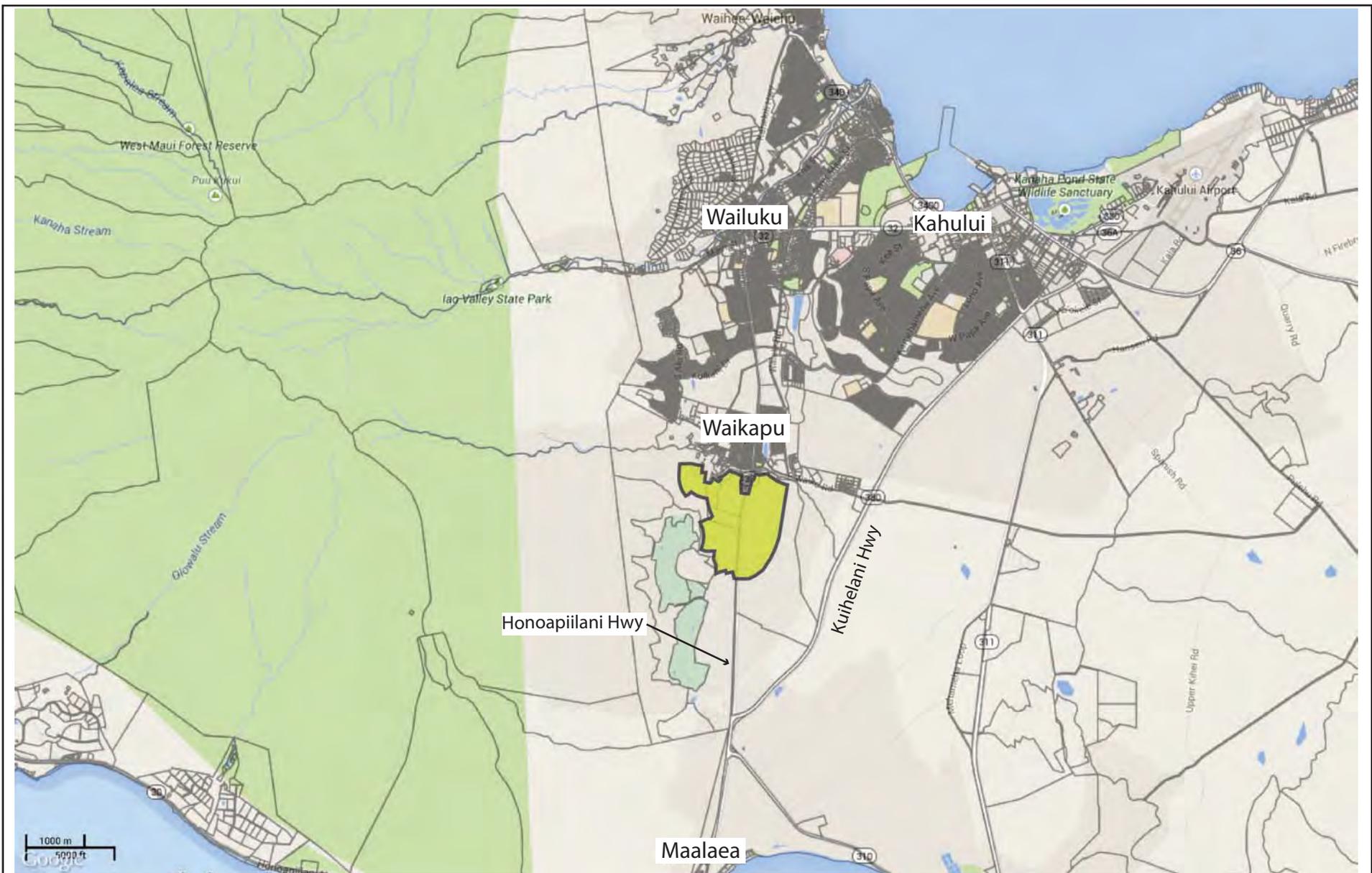
### **B. LAND OWNERSHIP AND PROJECT APPLICANT**

WCT land is owned in fee simple by various ownership entities.

**Table 1: WCT Land Ownership**

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

The Project Applicant is Waikapū Properties LLC.

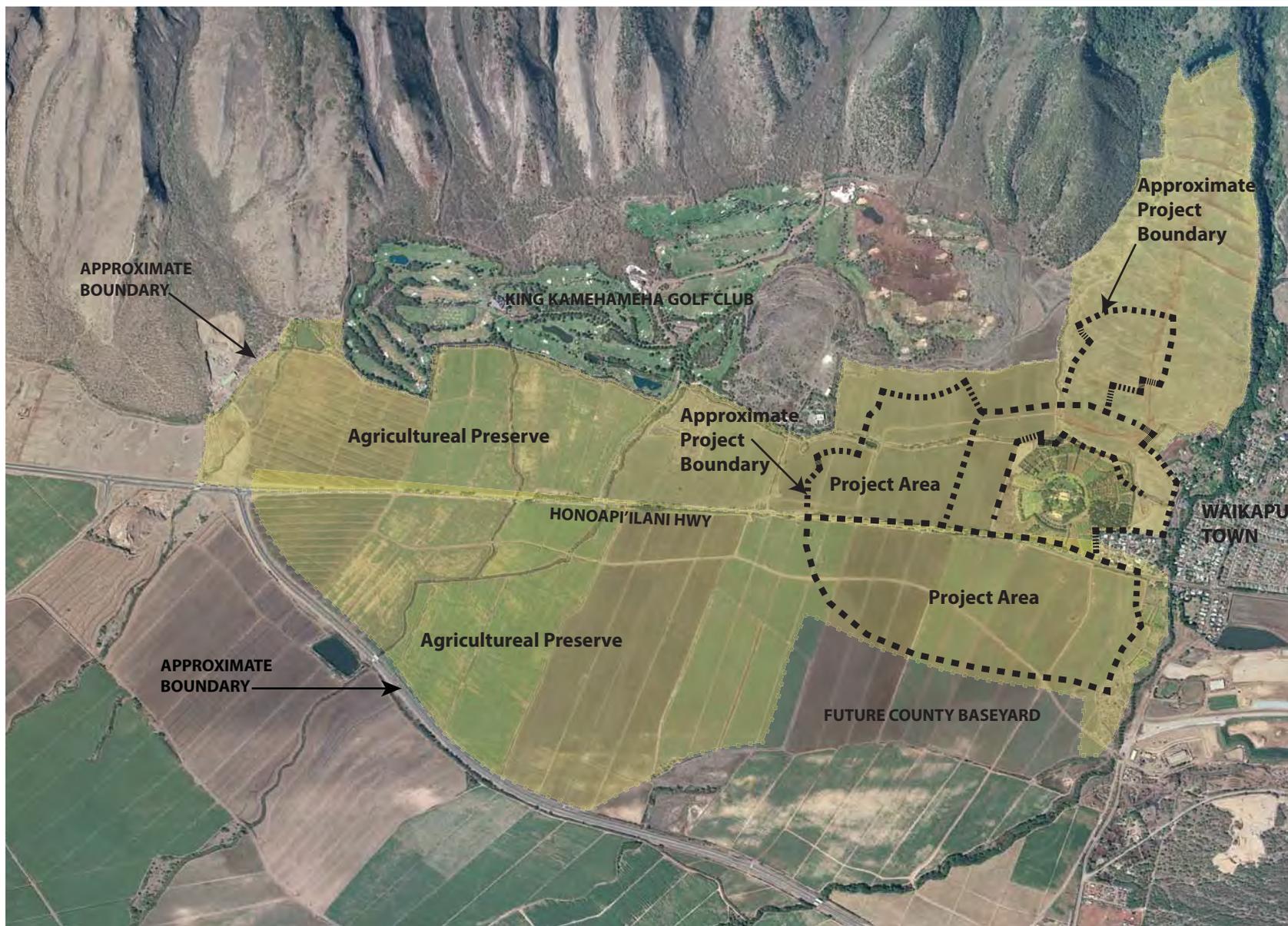


**Figure 1**  
Regional Location

  
Not to Scale

**WAIKAPŪ COUNTRY TOWN**





**FIGURE 2**

AERIAL LOCATION



Not to Scale

**WAIKAPŪ COUNTRY TOWN**

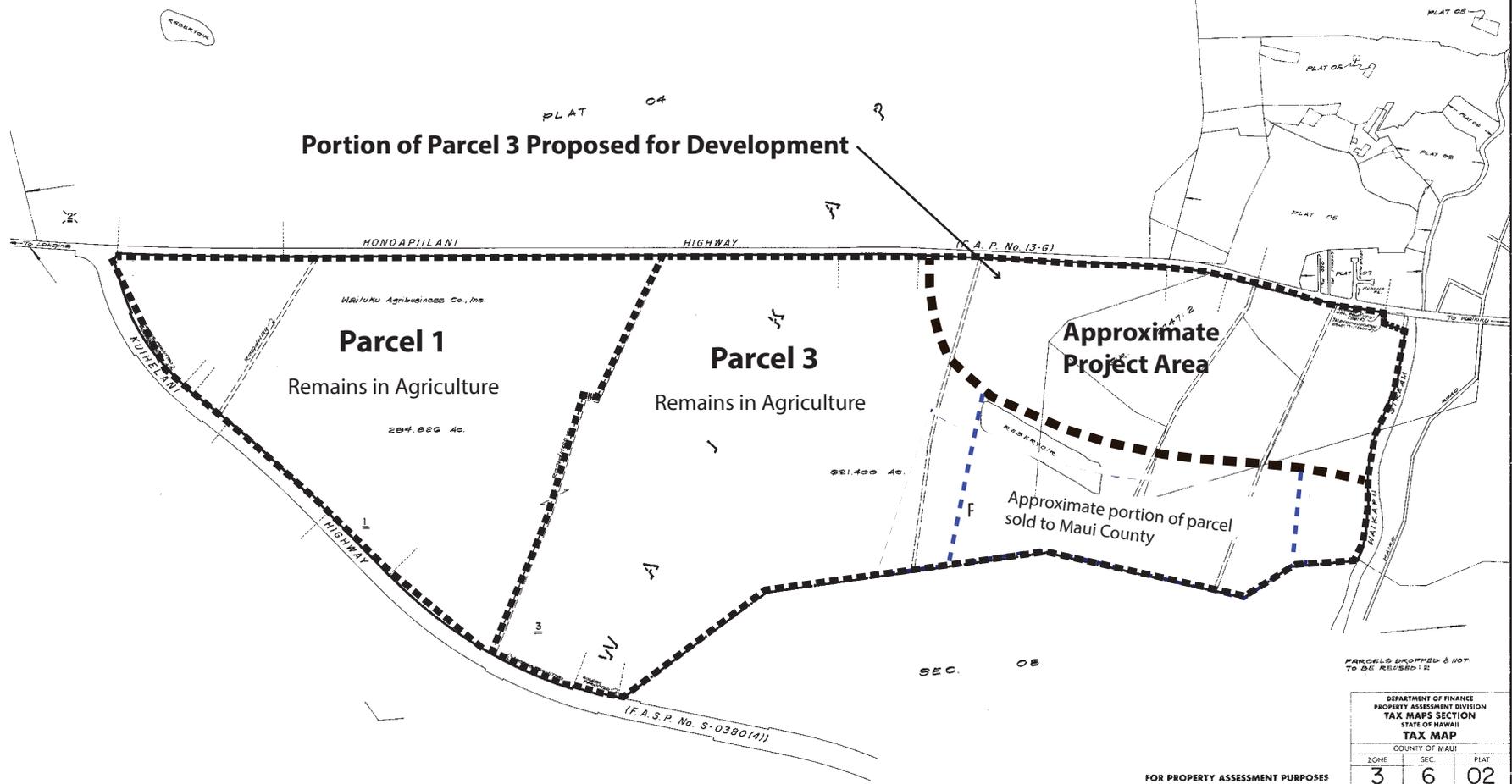


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TRUE NORTH  
Scale: 1" = 500 FT.

**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

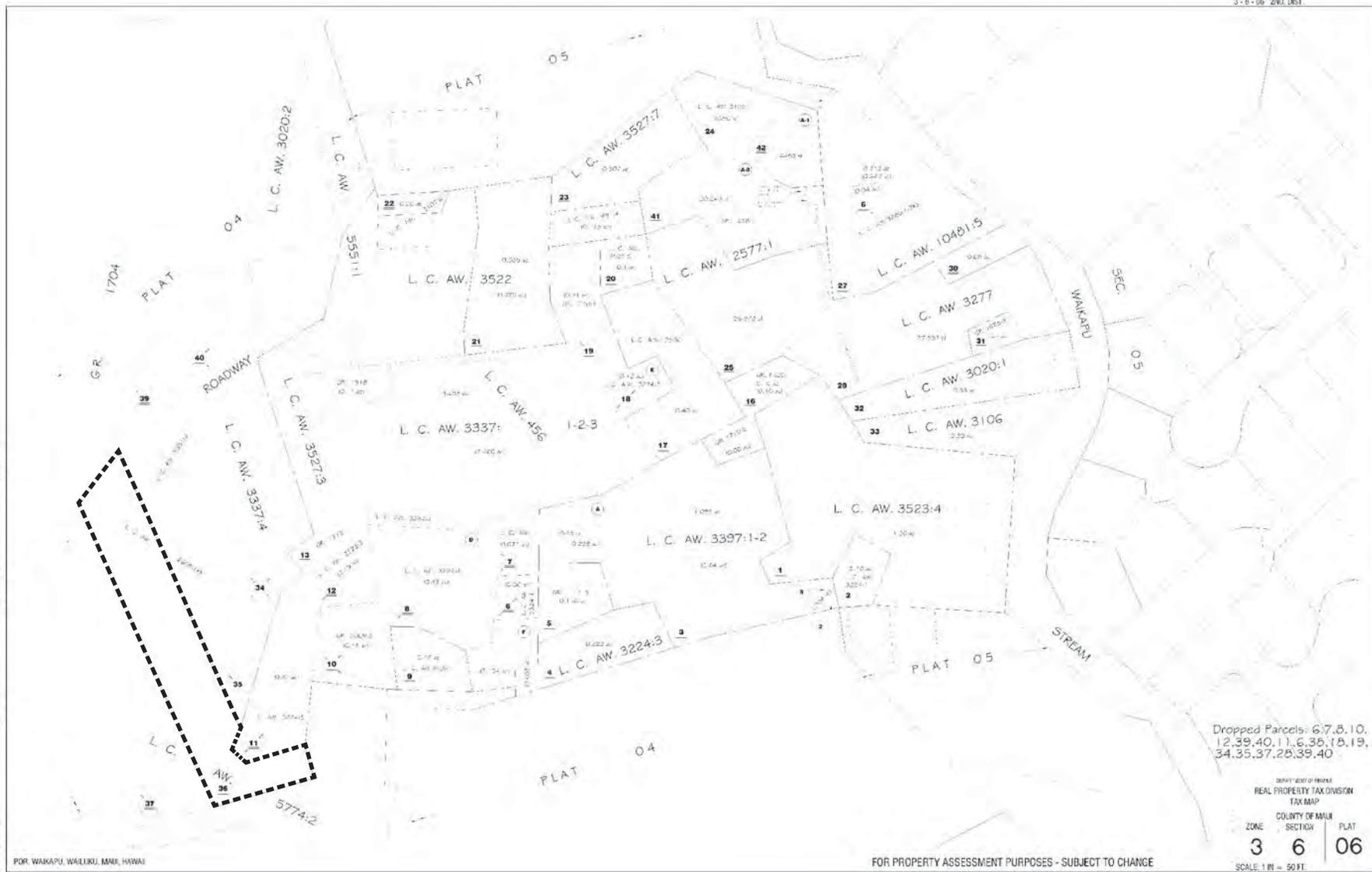
**Figure 3b**  
 TMK MAP  
 TMK No. (2) 3-6-002: 001 and 003

Not to Scale

**WAIKAPŪ COUNTRY TOWN**

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Dropped Parcels: 6,7,8,10,  
12,39,40,11,6,36,18,19,  
34,35,37,28,39,40

DEPT. OF REAL  
REAL PROPERTY TAX DIVISION  
TAX MAP

COUNTY OF MAUI  
SECTION PLAT  
3 6 06

SCALE 1 IN = 50 FT.  
PRINTED:

FOR PROPERTY ASSESSMENT PURPOSES - SUBJECT TO CHANGE

**Figure 3d**  
TMK MAP

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



Not to Scale



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**WAIKAPŪ COUNTRY TOWN**

### C. 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 A, “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.<sup>i</sup>*

Engledow further documents that small scale sugarcane growing was occurring in Waikapū by the 1840s. However, it wasn't until 1962, 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*.<sup>ii</sup>

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.<sup>iii</sup> 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 1,230 acres for sugarcane cultivation from the Project Applicants.

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. 10 and 11, “Community Plan Map” and “Zoning Map”).

**D. 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 acres of State Agricultural District lands are used for sugarcane cultivation, cattle grazing, and diversified agriculture. These include the following TMK’s:

**Table 2: State Agricultural District Designated Lands**

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

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 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 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 Molokai farm, which sells organic strawberry papayas throughout Hawai'i and on the U.S. Mainland. 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. 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 1,230 acres for sugarcane on parcels to the south and east (See: Figure No. 4 A-O, "Site Photographs").

#### **E. BACKGROUND**

In December, 2012, the County of Maui adopted the Maui Island Plan (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.

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 MIP's Directed Growth Plan places approximately 502 acres of Waikapū Country Town's (WCT's) 1,576 acres into urban (small town) and rural growth boundaries. The MIP maintains the remaining 1,074 acres within the State's Agricultural District. Of the Project's agricultural lands, approximately 800 acres 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 No. 5 and 6, “Maui Island Plan Directed Growth Map” and “Maui Island Plan Wailuku/Kahului Planned Growth Areas”).



# Waikapū

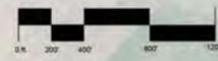
COUNTRY TOWN

**LEGEND**

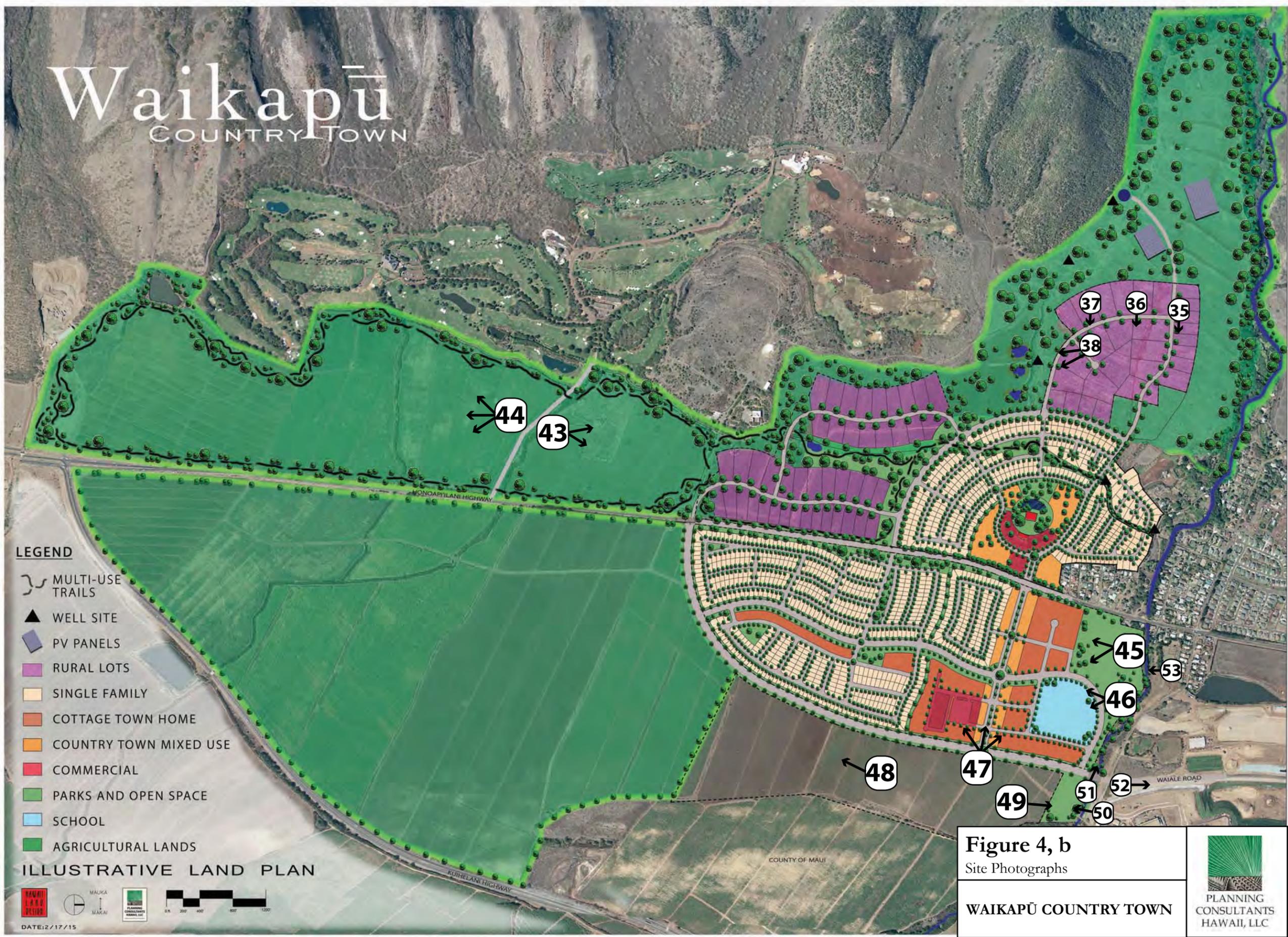
-  MULTI-USE TRAILS
-  WELL SITE
-  PV PANELS
-  RURAL LOTS
-  SINGLE FAMILY
-  COTTAGE TOWN HOME
-  COUNTRY TOWN MIXED USE
-  COMMERCIAL
-  PARKS AND OPEN SPACE
-  SCHOOL
-  AGRICULTURAL LANDS

**ILLUSTRATIVE LAND PLAN**



DATE: 2/17/15



**Figure 4, b**  
 Site Photographs

**WAIKAPŪ COUNTRY TOWN**





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 4, 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 4, 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 4, E**  
Site Photographs

WAIKAPŪ COUNTRY TOWN



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15. Ron L. Designs Jewlery Manufacturing Company.



16. History of Waikapu pavilion.



17. Flyin Hawaiian Zipline.



18. Maui Zipline.



19. Hawaiian Edible Islands.



20. Sweet Paradise Chocolatier.

**Figure 4, 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 4, 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 4, 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 4, 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 4, 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 4, 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 4, L**  
Site Photographs

**WAIKAPŪ COUNTRY TOWN**



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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 4, 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 4, N**

Site Photographs

**WAIKAPŪ COUNTRY TOWN**



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54. Proposed urban and rural areas and agricultural preserve.

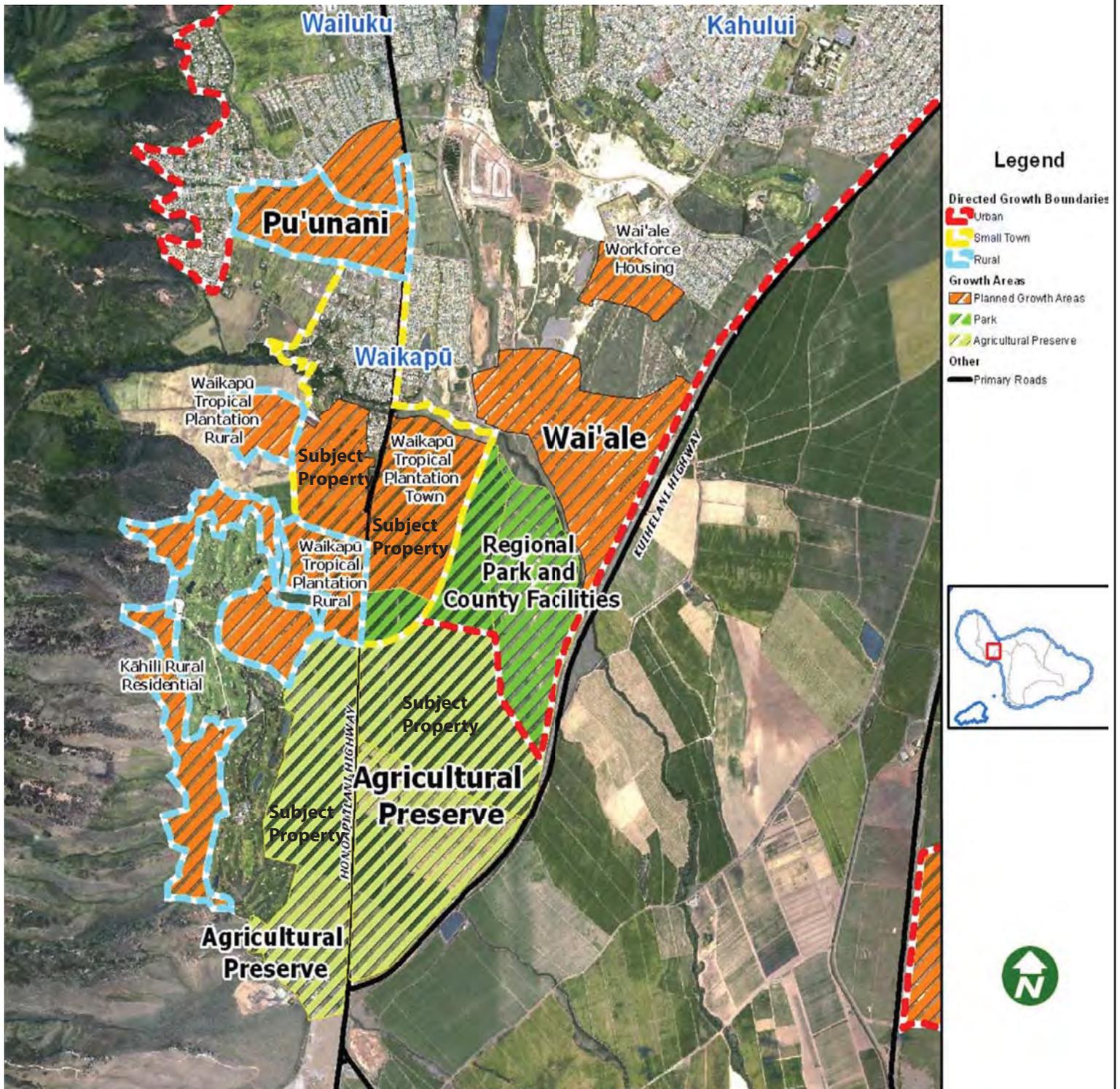
**Figure 4, O**  
Site Photographs

WAIKAPŪ COUNTRY TOWN



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

**Figure 6**  
 Maui Island Plan  
 Wailuku-Kahului Planned Growth Areas



Not to Scale

WAIKAPŪ COUNTRY TOWN



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 HAWAII, LLC

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 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 .<sup>iv</sup>*

**F. PROJECT OBJECTIVES**

The primary mission of the WCT Master Plan is to create a new mixed-use residential community that embodies the principles and policies of the MIP and that respects and implements the Statement of Values of the Waikapū Community Association. Key guiding principles in the MIP that have guided the development of the WCT Master Plan include:

1. ***Respect and encourage island lifestyles, cultures, and Hawaiian traditions:*** *The culture and lifestyle of Maui's residents is closely tied to the island's beauty and natural resources. Maintaining access to shoreline and mountain resources and protecting culturally significant sites and regions perpetuates the island lifestyle and protects Maui's unique identity. One of the most vital components of the island lifestyle and culture is Maui's people. In an island environment where resources are finite, future growth must give*

*priority to the needs of residents in a way that perpetuates island lifestyles.*

**2. Promote sustainable land use planning and livable communities:**

*Managing and directing future growth on Maui should promote the concept of sustainability, and the establishment of livable communities. Sustainable practices include: 1) Focusing growth into existing communities; 2) Taking advantage of infill and redevelopment opportunities; 3) Promoting compact, walkable, mixed-use development; 4) Revitalizing urban and town centers; 5) Providing transportation connectivity and multimodal opportunities; 6) Protecting and enhancing natural and environmental resources; 7) Protecting, enhancing, and expanding communities and small towns, where appropriate; and 8) Encouraging energy and water-efficient design and renewable energy technology.*

**3. Keep “urban-urban” and keep “country-country”:**

*Given the high cost of developing public infrastructure and facilities to service remote areas, the significant environmental and social impacts associated with long vehicle commutes, and the desire to “keep the country-side country” it is preferable to develop compact communities and to locate development within or as close as possible to existing urban areas and employment centers.*

**4. Protect traditional small towns:**

*Development within and adjacent to Maui’s traditional towns should be compatible with and perpetuate their unique character. Hard edges should be maintained around new and existing communities through the use of greenbelts and significant open space.*

5. **Protect open space and working agricultural landscapes:** *In light of continuing urbanization, the protection of agricultural and open-space resources will depend on a healthy agricultural industry and progressive planning and regulation. Planning should utilize agricultural lands as a tool to define the edges of existing and planned urban communities, apply innovative site design, create buffers along roadways, provide visual relief, and preserve scenic views.*
  
6. **Protect environmentally sensitive lands and natural resources:** *Environmentally sensitive lands, natural areas, and valued open spaces should be preserved. Native habitat, floodways, and steep slopes should be identified so future growth can be directed away from these areas. It will be important to plan growth on Maui in a manner that preserves habitat connectivity, watersheds, undeveloped shoreline areas, and other environmentally sensitive lands.*
  
7. **Promote equitable development that meets the needs of each community:** *Each region of the island should have a mix of housing types, convenient public transit, and employment centers. Where appropriate, all neighborhoods should have adequate parks, community centers, greenways, libraries, and other public facilities. No community should have a disproportionate share of noxious activities. Additionally, a fair, efficient, and predictable planning and regulatory process must be provided. A cornerstone of equitable development should reflect a focus on providing affordable housing for all of Maui's residents over developing nonresident housing.*

8. ***Plan for and provide efficient and effective public facilities and infrastructure:*** *Many of Maui’s public infrastructure systems and facilities were constructed decades ago and are in need of repairs and upgrades to meet current and future demand. Growth should be planned for areas with existing infrastructure, or where infrastructure can be expanded with minimal financial burden to the public. Transportation infrastructure should be designed to be in harmony with the surrounding area.*
  
9. ***Support sustainable economic development and the needs of small business:*** *Land use decisions should promote and support sustainable business activities.*
  
10. ***Promote community responsibility, empowerment, and uniqueness:*** *The development of community plans should be a broad-based, inclusive process. The community plans shall be reviewed by the Community Plan Advisory Committees, the planning commissions, and approved by the Council. The MIP shall provide a framework for the updated community plans. Subsequent proposed community plan amendments should be subject, as much as possible, to local community input.<sup>v</sup>*

The WCT Master Plan also seeks to embody the values of the existing residents of Waikapū. Waikapū Community Association Statement of Values and Supplemental Statements that have helped shape the WCT Master Plan include:

- *“Respect the principals and values of traditional Maui rural towns and sustainable communities.*

- *Incorporate employment uses into the project to reduce commuting.*
- *Maintain a physical and visual separation between communities.*
- *Prohibit gated neighborhoods.*
- *Preserve prime and productive agricultural lands in perpetuity.*
- *Establish an identifiable public town center.*
- *Preserve and enhance the property's natural and ecological systems, especially Waikapū Stream.*
- *Encourage mixed use development within a defined commercial/business core. Establish opportunities for easily accessible 'mom and pop' stores.*
- *Protect public view corridors of Waikapū Valley, the West Maui Mountains, the ocean, and the plains of Central Maui through the careful placement and massing of buildings and creative use of open space throughout the project.*
- *Incorporate 'green' and 'sustainable' development practices.*
- *Identify, evaluate and preserve historic and cultural landmarks on the property.*
- *Create a tiered and separated transportation network comprised of various modes, including vehicular, transit, walking and biking.*
- *Create pedestrian-friendly neighborhood roadways.*
- *Preserve the integrity of the Waikapū Ahupua'a by working with knowledgeable Kūpuna and Waikapū residents to ensure the conservation and sustainable use of the upland watershed, Waikapū stream and fertile kula agricultural lands.*
- *Provide a variety of recreational opportunities to facilitate good physical health.*
- *Encourage community input and participation in the formulation and execution of the Plan in accordance with the Plan's guiding principles and Statement of Values.*

- *Create a ‘Garden Town’ by dedicating a permanent agricultural buffer around the town, protecting view corridors, and incorporating a mixture of greenways, parks, open space, and tree-lined streets and landscaped public spaces throughout the project.”*

In addition to the above-referenced guiding principles from the MIP and Waikapū Community Association Statement of Values, the desire of the Applicant, Waikapū Properties LLC, is to accomplish the following objectives:

- Be a profitable development for the project’s entrepreneurial developers, the County and State;
- Provide a diverse range of market and affordably priced housing;
- Develop a “complete community” with a diversity of housing, retail, and civic uses to support residents;
- Protect the environment by directing development away from sensitive lands and by incorporating sustainability practices into the design, development and operation of the project;
- Reduce automobile dependence;
- Provide a jobs and housing balance within the development;
- Create the opportunity for more active and healthy lifestyles;
- Reduce the project’s energy demand through conservation, energy efficient design and development of on-site renewables;
- Respect traditional Hawaiian lifestyles and existing cultural practices;
- Facilitate agricultural development within the project’s protected agricultural lands;
- Maintain a sense of community where Maui residents feel comfortable visiting, living, working and playing.

## **G. PROPOSED ACTION**

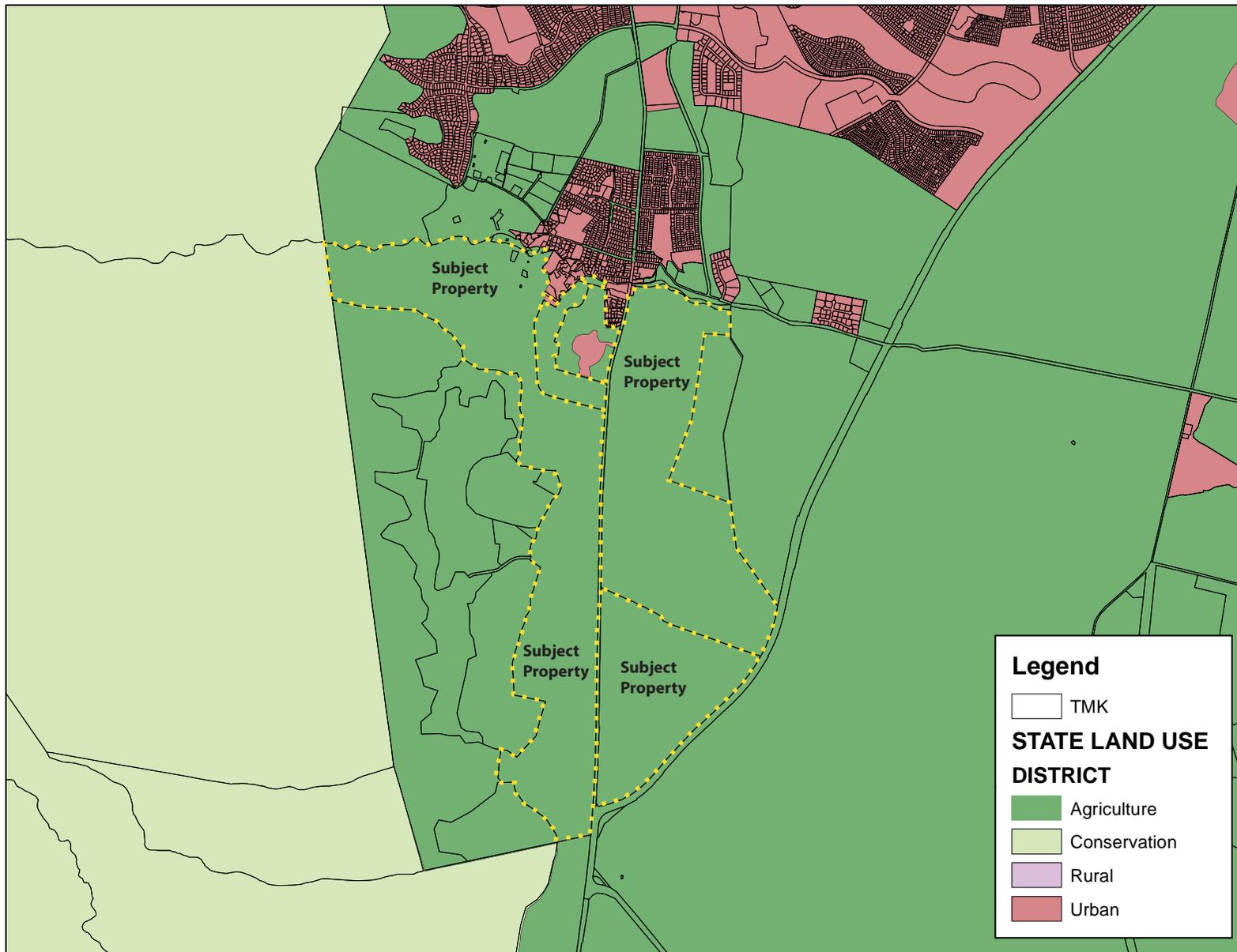
The project area encompasses approximately 14 acres of State Urban District land and 1,562 acres of State Agricultural District land (See: Figure No. 7, “State Land Use Designation”). The existing MTP retail shops, restaurant, convention hall, tropical gardens and lagoon are on the State Land Use Urban designated land, which is a portion of TMK No. (2) 3-6-005:007.

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. Much of this land, approximately 800 acres, 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 a “complete community,” encompassing a mixture of single- and multi-family residential units, commercial, and civic uses. In accordance with the MIP’s Directed Growth Area Guidelines, it will include 1,433 residential units, plus about 146 Ohana units, together with neighborhood retail, commercial, 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.

WCT will be built in two five year phases, both mauka and makai of Honoapi’ilani Highway. Development mauka of the highway will focus inward onto a “village center,” incorporating the existing buildings and grounds of the MTP. The WCT Master Plan calls for a diverse 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 parks. The makai development is bound to the east by the



**FIGURE 7**  
 STATE LAND USE  
 DISTRICT BOUNDARIES

Not to Scale

**WAIKAPŪ COUNTRY TOWN**



planned extension of the Wai’ale Road, which will intersect with Honoapi’ilani Highway. A primary objective of the project is to develop a community where walking and biking are the preferred modes of transportation and recreation for short commutes. Therefore, in addition to proposing mixed-uses and more compact development patterns, approximately eight miles of hiking, biking and walking trails will be incorporated into the project. Public transit will also be accommodated in strategic locations to facilitate the use of transit to job-rich areas in Wailuku/Kahului and South and West Maui (See: Figure 8: “Illustrative Land Plan”). For the purpose of assessing the Project’s development impacts, the WCT Master Plan and development program is consistent with the MIP’s allocation of 1,433 units, plus Ohana units. The MIP has an allowance for affordable housing and Ohana units. Affordable housing and Ohana units are not counted towards the total number of units allocated in the MIP.

The Applicant understands that local market conditions will ultimately determine the types of units sold and density of development within the project. It is intended that at full build-out the overall character of development, mix of uses and development pattern will be consistent with the master plan vision, design guidelines, and zoning ordinances. However, should future market demand warrant additional residential units, and/or a higher density of development within the WCT Planned Growth Area, then a future amendment to the MIP may be required together with an analysis of the impact of the additional units upon infrastructure and public facility systems. The Project will be implemented in two five year phases through 2026. Figure No. 9, “Conceptual Phasing Plan” and Tables 2, 3 and 4 show the Project’s conceptual land use program for Phase I - 2017 through 2021 - and for Phase II - 2022 through 2026.

**Table 3: Phase I Conceptual Land Use Program for 2017 through 2021**

Land Use	Net Acres	Gross Acres	Residential Units	Net Residential Density	FAR	Sq. Ft. Commercial
Single Family	45.51		332	7.30		

Land Use	Net Acres	Gross Acres	Residential Units	Net Residential Density	FAR	Sq. Ft. Commercial
Multi-Family/Town Home	17.213	24.59	216	12.55		
Rural	22.35		15	0.67		
Country Town Mixed-Use	16.168	20.21	127		0.25	58,475
Commercial / Employment		12.89			0.25	140,372
Existing Town Center / Lagoon		4.88				
School		12.00				
Active & Passive Parks		26.66				
<b>Total Residential Units</b>	<b>690</b>					
<b>Total Ohana Units</b>	<b>41</b>					
<b>Total Residential Units</b>	<b>731</b>					
<b>Total Commercial / Employment</b>	<b>198,847</b>					

**Table 4: Phase II Conceptual Land Use Program for 2022 through 2026**

Land Use	Net Acres	Gross Acres	Residential Units	Net Residential Density	FAR	Sq. Ft. Commercial
Single Family	85.54		638	7.46		
Multi-Family / Town Home	3.99	5.7	40	10.00		
Rural	102.47		65	0.63		
Active / Passive Parks		5.78				
<b>Total Residential Units</b>	<b>743</b>					
<b>Total Ohana Units</b>	<b>105</b>					
<b>Total Residential Units</b>	<b>848</b>					

**Table 5: Conceptual Development Program for 2017 - 2026**

Land Use	Net Acres	Gross Acres	Residential Units	Net Residential Density	FAR	Sq. Ft Commercial
Single Family	131.05		970	7.40		
Multi-Family / Town Home	21.203	30.29	256	12.07		
Rural	124.82		80	0.64		
Country Town Mixed-Use	16.168	20.21	127		0.25	58,475
Commercial / Employment		12.89			0.25	140,372
Existing Town Center / Lagoon		4.48				
School		12				
Active/Passive Park	32.44					
Greenways / Open Space	49.66					
Roads	81.03					
<b>Acres</b>	<b>498.87</b>					
<b>Residential Units</b>	<b>1433</b>					
<b>Ohana Units</b>	<b>146</b>					
<b>Total Residential Units</b>	<b>1579<sup>1</sup></b>					
<b>Commercial Employment</b>	<b>198,847</b>					

<sup>1</sup> Includes Ohana units. The number of Ohana units may increase or decrease.

# Waikapū

COUNTRY TOWN

## LEGEND

- MULTI-USE TRAILS
- WELL SITE
- PV PANELS
- RURAL LOTS
- SINGLE FAMILY
- COTTAGE TOWN HOME
- COUNTRY TOWN MIXED USE
- COMMERCIAL
- PARKS AND OPEN SPACE
- SCHOOL
- AGRICULTURAL LANDS

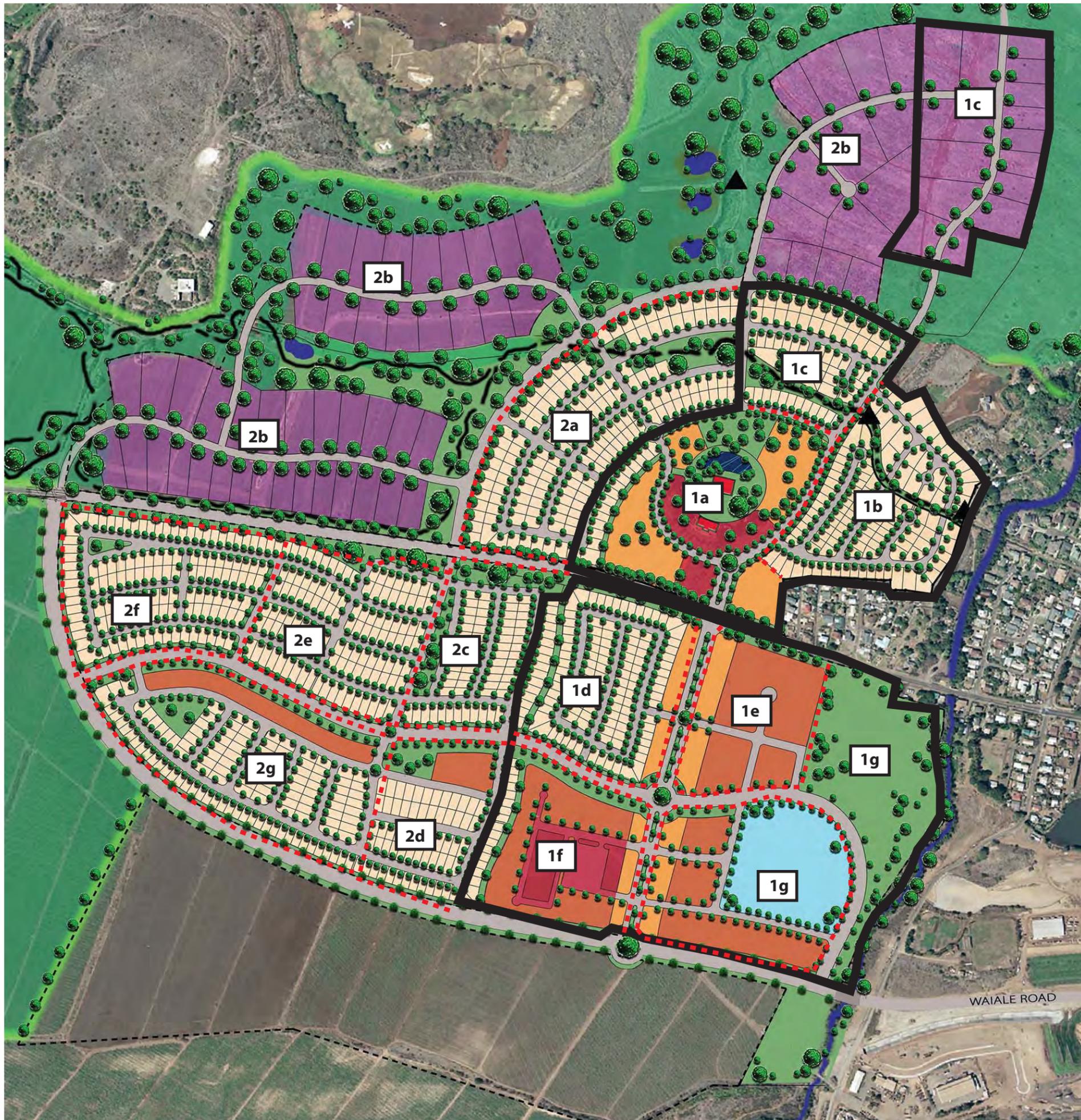
## ILLUSTRATIVE LAND PLAN

MAUI COUNTY  
PLANNING  
ENGINEERS  
MORRIS, LLC

0 ft. 200 400 800 1200

DATE: 2/17/15

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



**Hallstrom Absorption:**

Phase 1: 2017-2021: 690 Units  
 Phase II: 2022-2026: 743 Units

 **Phase 1: 2017-2021**

	Units	Sq. Ft.	Acres
Single Family	332		
Rural	15		
Multi-Family	216		
Ohana	41		
Country Town Mixed-Use	127	58,475	
Existing Commercial		29,250	
New Commercial/Employment		111,122	
Elementary School			12.00
Active/Passive Park			26.66

**Phase II: 2022-2026**

	Units	Sq. Ft.	Acres
Single Family	638		
Rural	65		
Multi-Family	40		
Ohana	105		
Active/Passive Park			5.78

**H. AGENCY AND COMMUNITY PRECONSULTATION**

Master planning for the project was initiated in January 2009, nearly six years ago. Since 2009, the Applicant has consulted with State and County agencies and the Waikapū community regarding its development plans. Meetings have been conducted with the County of Maui’s Department of Planning, Department of Public Works, Department of Environmental Management, Department of Parks and Recreation, and Department of Water Supply. Meetings have also been conducted with the State Department of Education, State Department of Transportation, State Office of Planning, and State Land Use Commission. In addition, the Applicant has consulted with the Waikapū Community Association, the General Plan Advisory Committee, the Maui Planning Commission, and the Maui County Council. Table No. 6 documents community meetings conducted through September 2014.

**Table 6: Neighborhood and Agency Pre-consultation Activities**

Date	Organization / Group	Purpose
February 19, 2009	General Plan Advisory Committee (GPAC)	Present the preliminary master plan report and conceptual development plan to the GPAC for inclusion into the MIP’s Directed Growth Plan.
March 26, 2009	Waikapū Community Leaders	Present the preliminary master plan report and conceptual development plan to the group for comment and further discussion.
July 21, 2009	Maui Planning Commission	Present the preliminary master plan report and conceptual development plan to the Commission for consideration of its inclusion into the MIP’s Urban and Rural Growth Boundaries.

Date	Organization / Group	Purpose
September 14, 2009	Waikapū Community	<p>Present the preliminary master plan report and conceptual development plan to the Community for discussion and comment.</p> <p>The meeting was attended by 158 persons. A community survey was administered at the conclusion of the presentation / discussion. (<u>See:</u> Appendix B, “September 14, 2009, Community Survey Results”).</p>
March 14, 2011	Waikapū Community Association	Present the Master Plan to the Waikapū Community Association for discussion and comment.
March 1, 2012	Maui County Council	Present the preliminary master plan report and conceptual development plan to the Committee for inclusion into the MIP’s Urban and Rural Growth Boundaries.
March 25, 2012	Maui County Council	Present the preliminary master plan report and conceptual development plan to the Committee for inclusion into the MIP’s Urban and Rural Growth Boundaries.
August 2013	Waikapū Community Association: “Waikapū Country Town Review Committee”	Working with the Waikapū Community Association, a committee of WCA members was

Date	Organization / Group	Purpose
		established to provide community input into the project.
February 2014	Waikapū Project Review Committee	Present the revisions to the Master Plan, discuss the project schedule, and address questions and concerns.

## I. ALTERNATIVES

The Draft EIS will analyze the potential impacts of various, alternative Master Plans, as well as keeping the property in its current condition.

## J. ENTITLEMENTS AND APPROVALS

### 1. 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. 7 identifies the parcels requiring a State Land Use Commission District Boundary Amendment for all or a portion of the property.

**Table 7: TMK Parcels Requiring a State Land Use District Boundary Amendment**

Ownership	Parcel	Acres	Existing State Land Use	Acres Subject to DBA	Proposed State Land Use
Waikapū Properties LLC	(2) 3-6-004:003	657.195	Agriculture	149.848	Rural
	(2) 3-6-004:006	52.976 <sup>2</sup>	Agriculture	53.775 <sup>3</sup>	Urban
MTP Land Partners LLC and the Filios, William	(2) 3-6-005:007	59.054	Agriculture	45.054	Urban

<sup>2</sup> Acreage identified on TMK Map.

<sup>3</sup> Acreage identified by survey.

Ownership	Parcel	Acres	Existing State Land Use	Acres Subject to DBA	Proposed State Land Use
Separate Property Trust					
Waiale 905 Partners LLC	(2) 3-6-002:003	521.40	Agriculture	236.236	Urban

## 2. Community Plan Amendment (CPA)

Community Plan Amendments are required for the approximate 499 acres of land that are proposed for development. Of this land, approximately 349 acres will require a community plan amendment from Agricultural to Project District and about 150 acres to Rural. The existing MTP properties, TMK Nos. (2) 3-6-005:007 and (2) 3-6-004:006, will require amendments from Wailuku-Kahului Project District No. 5 (Maui Tropical Plantation) to a new Project District. The new Project District designation will reflect the character and uses proposed in the WCT Master Plan vision (See: Figure 10, “Wailuku-Kahului Community Plan Map”). Table No. 8, identifies parcels requiring a Community Plan Amendment for all, or a portion of the property.

**Table 8: TMK Parcels Requiring a Community Plan Amendment**

Ownership	Parcel	Acres	Existing Community Plan Designation	Acres Subject to CPA	Proposed Community Plan Designation
Waikapū Properties LLC	(2) 3-6-004:003	657.195	Agriculture	149.848	Rural
	(2) 3-6-004:006	52.976	Agriculture	53.775	Project District
MTP Land Partners LLC and the Filios, William Separate Property Trust	(2) 3-6-005:007	59.054	Agriculture	45.054	Project District
Waiale 905 Partners LLC	(2) 3-6-002:003	521.40	Agriculture	236.236	Project District

### 3. Change in Zoning (CIZ)

The WCT Master Plan will similarly require a Change in Zoning for all lands proposed for development (See: Figure 11, “MTP Land Zoning Map 412”). A new project district zoning ordinance will be created to implement the vision and mix of uses proposed in the WCT Master Plan. Table No. 9, identifies the parcels subject to a Change in Zoning for all, or a portion of the property.

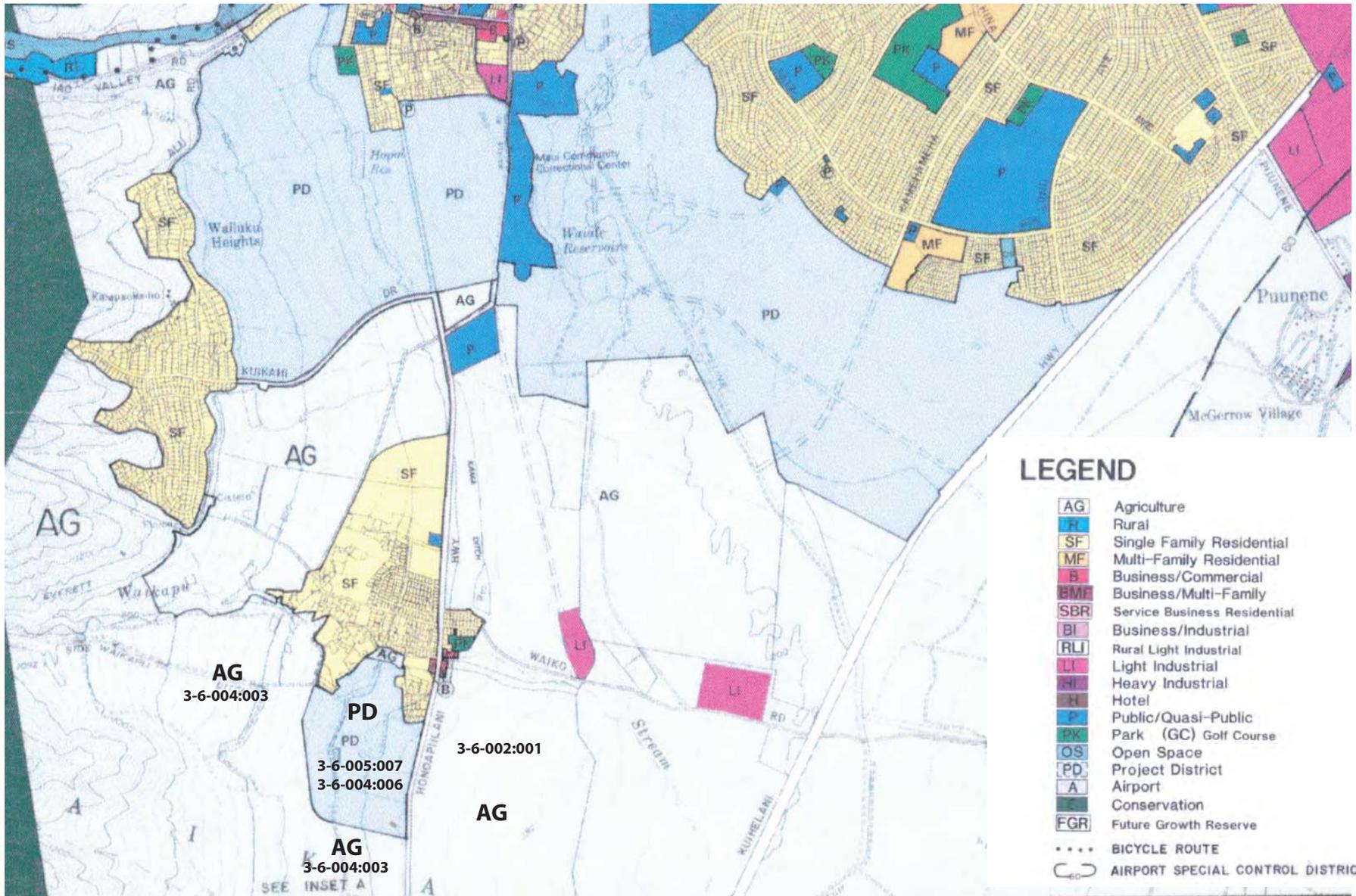
**Table 9: TMK Parcels Requiring a Change in Zoning**

Ownership	Parcel	Acres	Existing Zoning	Acres Subject to CIZ	Proposed Zoning
Waikapū Properties LLC	(2) 3-6-004:003	657.195	Agriculture	149.848	Rural
	(2) 3-6-004:006	52.976	Agriculture	53.775	Project District
MTP Land Partners LLC and the Filios, William Separate Property Trust	(2) 3-6-005:007	59.054	Agriculture	45.054	Project District
Waiale 905 Partners LLC	(2) 3-6-002:003	521.40	Agriculture	236.236	Project District

### 4. Environmental Impact Statement (EIS)

The Community Plan Amendment is a “trigger” action for Hawai’i’s Environmental Impact Statement law, Chapter 343, Hawai’i Revised Statutes. Additionally, off-site infrastructure work affecting State and County rights-of-way are anticipated, which may also act as triggers. Because of the overall scope of the project, which will induce significant population growth and require new infrastructure and public facility systems, it is anticipated that the project might generate environmental impacts. As such, an Environmental Impact Statement will be prepared to examine potential impacts and mitigation measures resulting from implementation of the proposed WCT Master Plan. The State Land Use Commission will serve as the Approving Agency for the EIS. This EIS Preparation Notice serves as official notice that the Approving Agency has

determined that the project may have significant effect and that an EIS is required. Upon publication of this Notice in the Environmental Bulletin, the public has 30 days to request to become a consulted party and make written comment upon the proposed action.



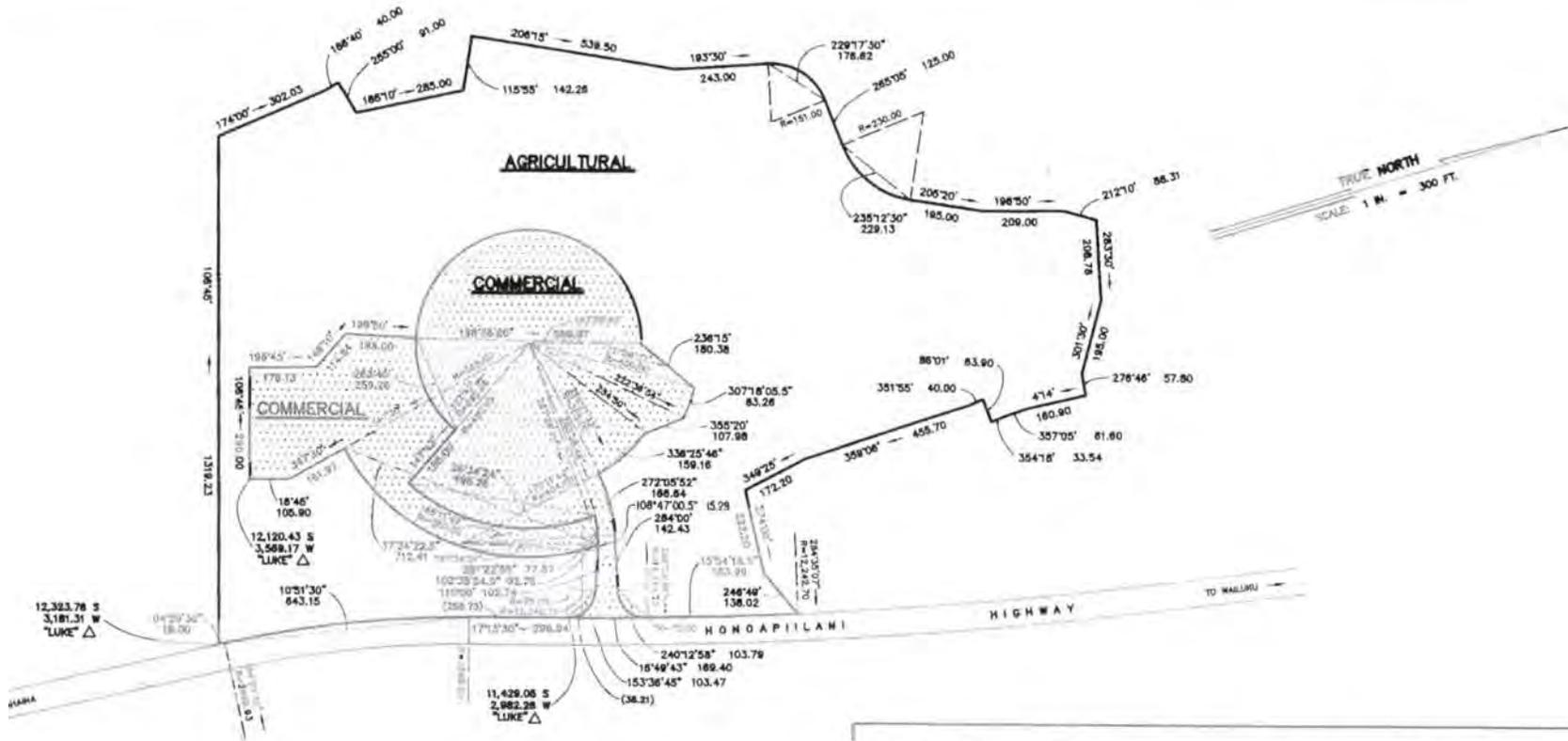
**FIGURE 10**  
 COMMUNITY PLAN MAP  
 (2) 3-6-005:007



**WAIKAPŪ COUNTRY TOWN**



PLANNING  
 CONSULTANTS  
 HAWAII, LLC



**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:	<i>County Clerk</i>	PUBLIC HEARING DATE: 11-05-91
APPROVAL:	<i>Planning Director</i>	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 11**

MTP ZONING MAP  
(2) 3-6-005:007



WAIKAPŪ COUNTRY TOWN



PLANNING  
CONSULTANTS  
HAWAII, LLC

## II. AFFECTED ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATION MEASURES

### A. PHYSICAL ENVIRONMENT

#### 1. Surrounding Land Uses

**Existing Conditions.** The project site is bound to the south by agricultural lands that are owned by the Applicant. These lands are leased by HC&S for sugar cane cultivation. To the west are agricultural lands that rise to the base of the West Maui Mountains. These lands are used for diversified agriculture and grazing cattle. To the east are agricultural lands that were recently acquired by the County of Maui for a County baseyard and regional park complex. Beyond the County owned property is agricultural land that A&B Properties proposes to develop. The proposed A&B development, known as Waiale, may include up to 2,550 residential units together with civic and commercial uses. In 2014 A&B Properties obtained a State Land Use Commission District Boundary Amendment from Agriculture to Urban to support the Waiale Development. To the north is the Waikapū Stream, which separates the proposed development from Waikapū Town. Waikapū Town is comprised mostly of single-family residences. Many of these residences were constructed from the early 1900s through the 1950s for workers of the Wailuku Sugar Company. The older neighborhoods are located along East and West Waiko Roads and are bound by the Waikapū Cemetery to the east, the Waikapū Stream to the south, and the mauka reaches of West Waiko Road. In recent years development has begun to stretch north, towards Wailuku, both mauka and makai of Honoapi'ilani Highway.

**Potential Impacts and Mitigation Measures.** The project area is located within the MIP's Small Town Growth Boundary. The MIP describes Waikapū Country Town as a "self-sufficient small town with a mix of single-family and multi-family housing units in a walkable community that includes affordable housing in close proximity to Wailuku's employment centers ...." The Draft EIS will thoroughly evaluate the potential impact of the Project on surrounding land uses.

## 2. Topography and Soils

**Existing Conditions.** Maui, like the rest of the Hawaiian Islands, was formed as the Pacific Plate moved over a “hot spot,” where the release of magma over thousands of years formed large volcanic islands. The process created two distinct shield volcanoes, Mauna Kahalawai (West Maui Mountains) in the west, and Haleakalā to the east, which together create the island of Maui. The West Maui Mountains comprise 25% of Maui’s land area. These mountains are steep and jagged, rising to 5,788 feet at Pu’u Kukui, with deep cut valleys formed by erosion from wind, rain and streams. Haleakalā, the larger eastern volcano, forms 75% of Maui’s land area. It rises to 10,023 feet at Pu’u ‘Ula’ula (Red Hill). As each volcano erupted they released lava and ash and, together with alluvium deposits, created the Central Maui isthmus, which joins the volcanoes together forming the island of Maui.

The project site lies within the fertile Central Maui isthmus, between the town of Wailuku to the north and Mā’alaea to the south. The elevation on the mauka development site ranges from approximately 350 feet above mean sea level at its southeasterly corner to approximately 710 feet above mean sea level at its northwesterly corner, with a slope averaging approximately 8%. The elevation on the makai development site ranges from approximately 256 feet above mean sea level at a low point along the southerly border to approximately 408 feet above mean sea level at the northwesterly corner, with a slope averaging approximately 4%. The land within the agriculture preserve areas will remain undeveloped.

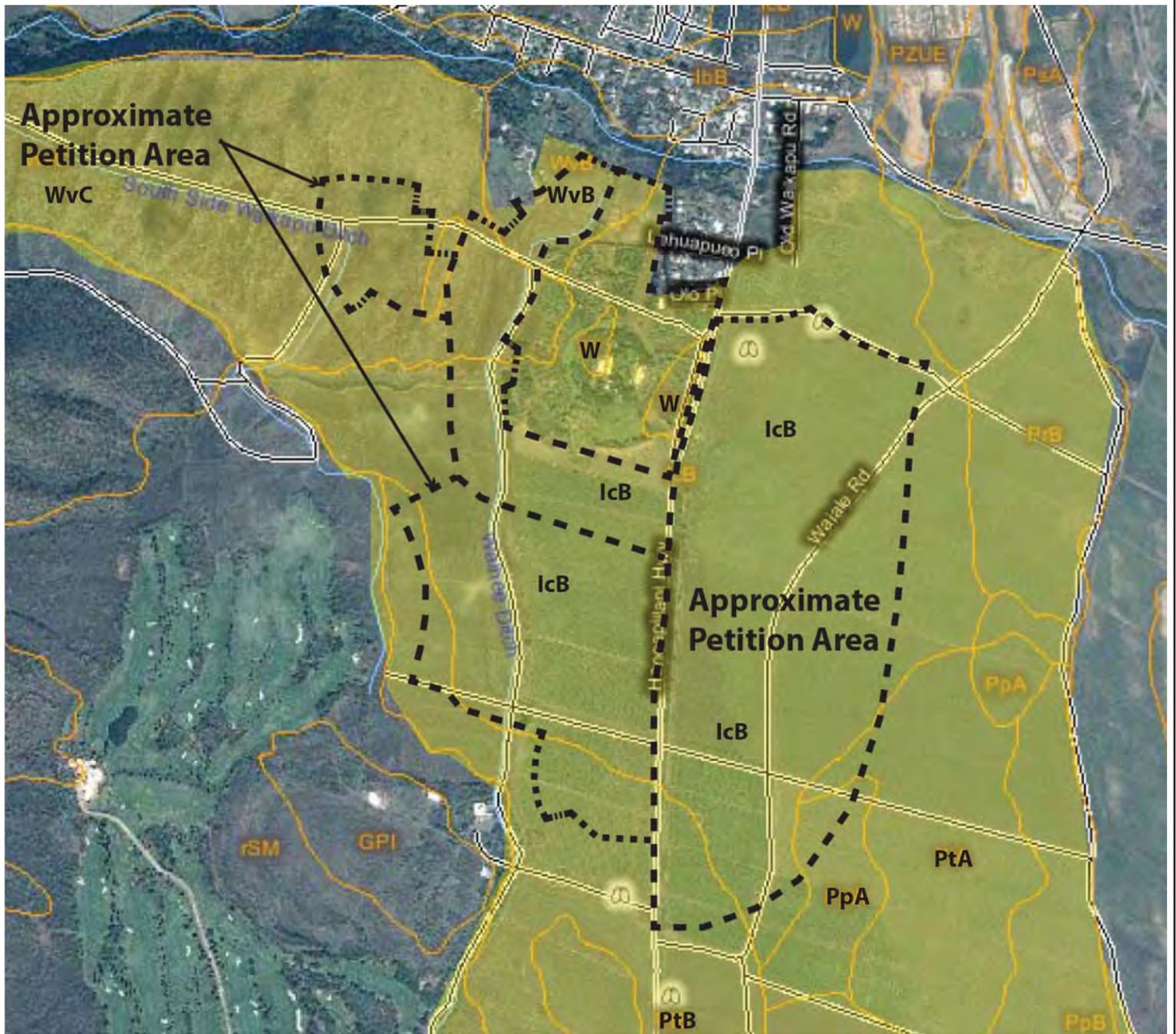
There are three soil series and seven soil types within the area proposed for development. The soil series are Pulehu Series, ‘Īao Series and the Wailuku Series. Each series consists of well-drained soils that are on alluvium fans formed from weathered basic igneous rock. The topography is gentle to moderately sloping, and the soil series are highly suited for both agriculture and urban development. The specific soil types are shown in Figure No. 12, “USDA Soils Map” and Table 10, “Waikapū Country Town Soil Types”.

**Table 10: Waikapū Country Town Soil Types**

<p><b>Waikapū Country Town Soil Types</b></p>
<p><b>Īāo clay, 3 to 7 percent slopes (IcB)</b></p>
<p>This soil occurs at elevations of 100 to 500 feet with slopes that range from 3 to 7 percent. It is a well-drained soil that is more than 80 inches in depth. The typical soil profile is 0 to 15 inches of clay, 15 to 48 inches of clay, and 48 to 60 inches of silty lay. The available water capacity is moderate at about 8.4 inches. Permeability is moderately slow. Runoff is medium and the erosion hazard is slight to moderate.</p>
<p><b>Pulehu silt loam, 0 to 3 percent slopes (PpA)</b></p>
<p>This soil occurs at elevations of 0 to 300 feet with slopes that range from 0 to 3 percent. It is a well-drained soil that is more than 80 inches in depth. The typical soil profile is 0 to 21 inches of silt loam and 21 to 60 inches of silty clay loam. The available water capacity is moderate at about 8.4 inches. Permeability is moderately moderate. Runoff is slow and the erosion hazard is no more than slight.</p>
<p><b>Pulehu cobbly clay loam, 3 to 7 percent slopes (PtB)</b></p>
<p>This soil occurs at elevations of 0 to 300 feet with slopes that range from 3 to 7 percent. It is a well-drained soil that is more than 80 inches in depth. The typical soil profile is 0 to 21 inches of cobbly clay loam and 21 to 60 inches of silty clay loam. The available water capacity is moderate at about 7.5 inches. Runoff is slow and the erosion hazard slight.</p>
<p><b>Water &gt; 40 acres (W)</b></p>
<p>Water bodies greater than 40 acres.</p>
<p><b>Wailuku silty clay, 3 to 7 percent slopes (WvC and WvB)</b></p>
<p>This soil occurs at elevations of 50 to 1000 feet with slopes that range from 3 to 7 percent. It is a well-drained soil that is more than 80 inches in depth. The typical soil profile is 0 to 12 inches of silty clay and 12 to 60 inches of silty clay. The available water capacity is moderate at about 8.4 inches. Runoff is slow and the erosion hazard slight.</p>

**Wailuku silty clay, 7 to 15 percent slopes (WvC and WvB)**

This soil occurs at elevations of 50 to 1000 feet with slopes that range from 7 to 15 percent. It is a well-drained soil that is more than 80 inches in depth. The typical soil profile is 0 to 12 inches of silty clay and 12 to 60 inches of silty clay. The available water capacity is moderate at about 8.4 inches. Runoff is slow and the erosion hazard slight.



**Figure 12**

PETITION AREA SOILS MAP



Not to Scale

WAIKAPŪ COUNTRY TOWN



PLANNING  
CONSULTANTS  
HAWAII, LLC

***Potential Impacts and Mitigation Measures.*** Implementation of the WCT Master Plan will require grading for roads, parks, and buildings upon development.

A National Pollutant Discharge Elimination System (NPDES) permit will be required from the State of Hawai'i, Department of Health (DOH) prior to grading activities. During site preparation, storm runoff from the project area will be controlled in compliance with the County's "Soil Erosion and Sediment Control Standards." Typical mitigation measures include appropriately stockpiling materials on-site to prevent runoff and building over or establishing landscaping as early as possible on disturbed soils to minimize length of exposure.

Impacts to the soils include the potential for soil erosion and the generation of dust during construction. Clearing and grubbing activities will temporarily disturb the soil retention values of the existing vegetation and expose soils to erosion forces. Some wind erosion of soils could occur without a proper watering and revegetation program. Heavy rainfall could also cause erosion of soils within disturbed areas of land.

To the extent possible, improvements will conform to the contours of the land, further limiting the need for extensive grading of the site. In addition, graded areas will be limited to specific areas for short periods of time. Measures taken to control erosion during the site development period may include

- Minimizing the time of construction;
- Retaining existing ground cover as long as possible;
- Constructing drainage control features early;
- Using temporary area sprinklers in non-active construction areas when ground cover is removed;
- Providing a water truck on-site during the construction period to provide for immediate sprinkling as needed;
- Using temporary berms and cut-off ditches, where needed, for control of erosion;

- Watering graded areas when construction activity for each day has ceased;
- Grassing or planting all cut-and-fill slopes immediately after grading work has been completed; and
- Installing silt screens where appropriate.

Construction activities on the property will comply with all applicable Federal, State and County regulations and rules for erosion control. Before issuance of a grading permit by the County of Maui, the final erosion control plan and best management practices required for the NPDES permit will be completed. All construction activities will also comply with the provisions of Chapter 11-60.1, Hawai'i Administrative Rules (HAR), Section 11-60.1-33, pertaining to Fugitive Dust. After construction, the establishment of permanent landscaping will provide long-term erosion control.

### 3. Natural Hazards

***Existing Conditions.*** Natural hazards impacting the Hawaiian Islands include hurricanes, tsunamis, volcanic eruptions, earthquakes, stream flooding, and coastal flooding.

Seismic hazards are those related to ground shaking. Landslides, ground cracks, rock falls and tsunamis are all seismic hazards. Engineers and other professionals have created a system of classifying seismic hazards on the basis of the expected strength of ground shaking and the probability of the shaking actually occurring within a specified time. The results are included in the Uniform Building Code (UBC) seismic provisions.

The UBC seismic provisions contain six seismic zones, ranging from 0 (no chance of severe ground shaking) to 4 (10% chance of severe shaking in a 50-year interval). Kauai County is located in Zone 1, County of Honolulu is Zone 2A, County of Maui is Zone 2B and County of Hawai'i is Zone 4.

In addition to seismic hazards, devastating hurricanes do occur and have impacted Hawai'i twice since 1980: Hurricane Iwa in 1982 and Hurricane Iniki in 1992. While it is difficult to predict these natural occurrences, it is reasonable to assume that future events could be likely, given the recent record.

Tsunamis are large, rapidly moving ocean waves triggered by a major disturbance of the ocean floor, which is usually caused by an earthquake but sometimes can be produced by a submarine landslide or a volcanic eruption. About 50 tsunamis have been reported in the Hawaiian Islands since the early 1800s, including the most recent Tsunami as a result of the March 2011 earthquake in Japan. The Waikapū Country Town is outside of the Civil Defense Tsunami Evacuation Zone.

Volcanic hazards are not a concern in the Central Maui area due to the dormant status of Haleakalā. In Hawai'i most earthquakes are linked to volcanic activity, unlike other areas where a shift in tectonic plates is the cause of an earthquake. Each year, thousands of earthquakes occur in Hawai'i, the vast majority of them so small they are detectable only with highly sensitive instruments. However, moderate and disastrous earthquakes have also occurred.

The 1938 Maui Earthquake, with a magnitude of 6.7-6.9 on the Richter scale and an epicenter six (6) miles north of Maui, created landslides and forced the closure of the road to Hana. Damaged water pipes and ground fractures also were reported in Lāhainā. More recently, on October 16, 2006, a 6.7 magnitude earthquake struck on the underwater segment of the major rift zone of the Hualalai volcano on the northwest side of the Island of Hawai'i. The earthquake caused rockslides and some damage to roadways on Maui.

Flood hazards are primarily identified by the Flood Insurance Rate Map (FIRM) prepared by the United States Department of Homeland Security Federal Emergency Management Agency (FEMA), National Flood Insurance Program. Flood zone designation can also be identified by using the Hawai'i National Flood Insurance Program, Flood Hazard Assessment Tool. A portion

of TMK Parcel Nos. 3-6-002:003 and 3-6-004:003, paralleling the Waikapū Stream, are located in Zones AEF and AE and XS. Zones AEF and AE are Special Flood Hazard Areas subject to inundation by the 1% annual chance flood. These areas have a 1% chance of being subjected to the 100-year flood each year. Mandatory Flood Insurance must be carried within Special Flood Hazard Areas. Zone AEF is defined as the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE. Zone AE is an area where the base flood elevation has been determined. Zone XS is an area of Non-Special Flood Hazard Area, which is an area considered to be of low to moderate risk. Mandatory flood insurance is not required in the Non-Special Flood Hazard Area. Zone XS is defined as an area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood (**See:** Figure 13 A-E, “Flood Hazard Assessment Maps”).

***Potential Impacts and Mitigation Measures.*** Any structures built within the WCT site will be constructed for protection from earthquakes and the destructive winds and torrential rainfall of tropical hurricanes, in accordance with the Building Code adopted by the County of Maui. All work will comply with applicable flood zone standards, such as those set forth in Chapter 19.62, “Flood Hazard Areas”, Maui County Code.

The project area located adjacent to the Waikapū Stream, within the Special Flood Hazard Area, is proposed to be set aside for parks, open space and agriculture. No structures will be will be located within Zone AEF.

The WCT project site is located approximately 3.5 miles inland of Kahului Harbor and about 4 miles inland of Mā‘alaea Harbor and should therefore not be impacted by tsunami or coastal flooding. In addition, the proposed development will be designed with a drainage system, including detention basins, to mitigate any increase in runoff that could negatively impact neighboring properties.



# FLOOD HAZARD ASSESSMENT REPORT

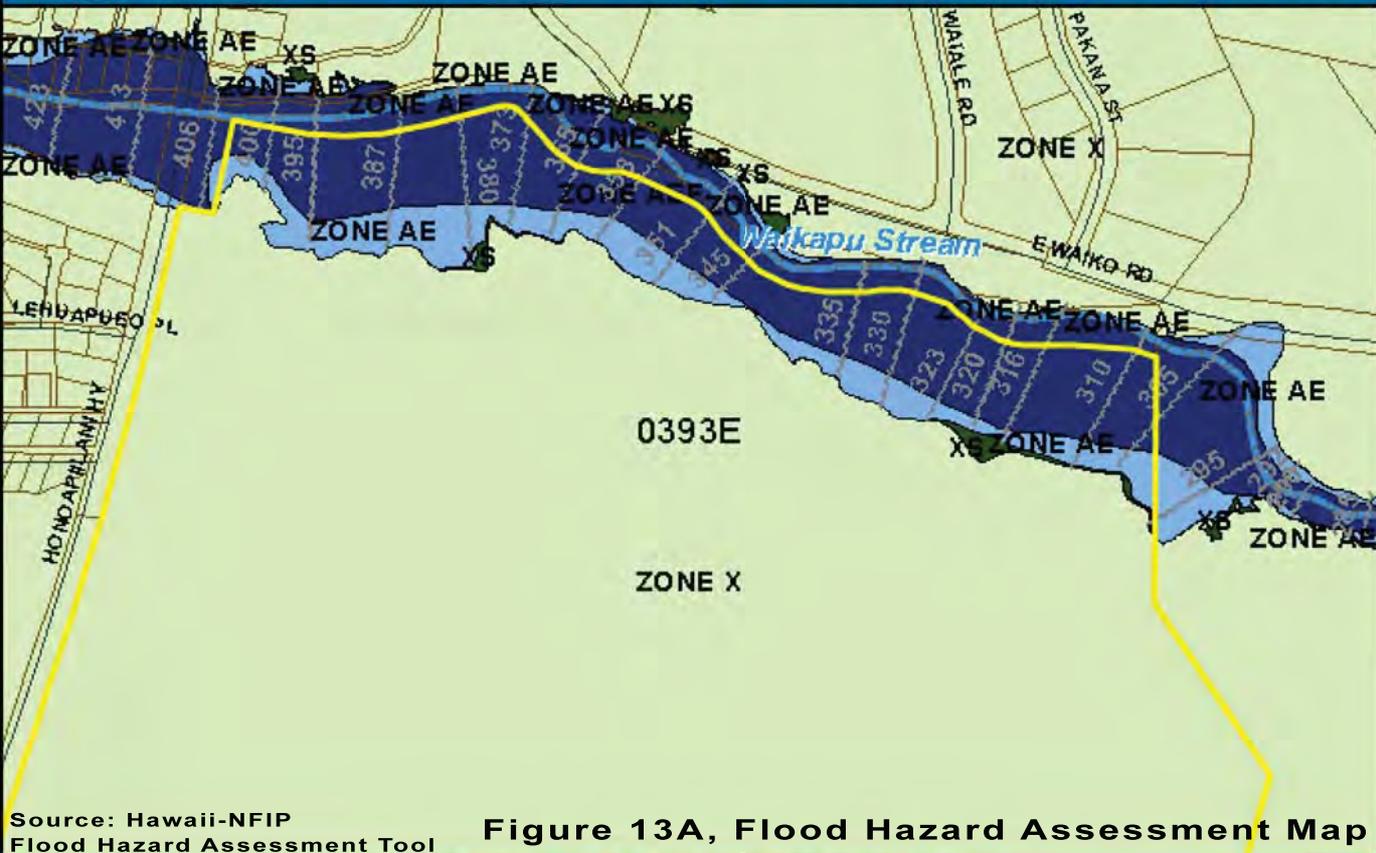


Figure 13A, Flood Hazard Assessment Map

## NATIONAL FLOOD INSURANCE PROGRAM

### FLOOD ZONE DEFINITIONS

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD** – The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

- Zone A:** No BFE determined.
- Zone AE:** BFE determined.
- Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V:** Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE:** Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

**NON-SPECIAL FLOOD HAZARD AREA** – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded):** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X:** Areas determined to be outside the 0.2% annual chance floodplain.

### OTHER FLOOD AREAS

- Zone D:** Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

### PROPERTY INFORMATION

**COUNTY:** MAUI  
**TMK NO:** (2) 3-6-002-003  
**PARCEL ADDRESS:** HONOAPIILANI HWY  
 WAILUKU, HI 96793  
**FIRM INDEX DATE:** SEPTEMBER 19, 2012  
**LETTER OF MAP CHANGE(S):** NONE  
**FEMA FIRM PANEL(S):** 1500030393E-SEPTEMBER 25, 2009  
 1500030556F-SEPTEMBER 19, 2012

**PARCEL DATA FROM:** JULY 2013  
**IMAGERY DATA FROM:** MAY 2005

### IMPORTANT PHONE NUMBERS

**County NFIP Coordinator**  
 County of Maui  
 Carolyn Cortez (808) 270-7253  
**State NFIP Coordinator**  
 Carol Tyau Beam, P.E., CFM (808) 587-0267

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# FLOOD HAZARD ASSESSMENT REPORT



Source: Hawaii-NFIP Flood Hazard Assessment Tool **Figure 13B, Flood Hazard Assessment Map**

## NATIONAL FLOOD INSURANCE PROGRAM

### FLOOD ZONE DEFINITIONS

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD** – The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

- Zone A:** No BFE determined.
- Zone AE:** BFE determined.
- Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V:** Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE:** Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

**NON-SPECIAL FLOOD HAZARD AREA** – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded):** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X:** Areas determined to be outside the 0.2% annual chance floodplain.

### OTHER FLOOD AREAS

- Zone D:** Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

### PROPERTY INFORMATION

**COUNTY:** MAUI  
**TMK NO:** (2) 3-6-004-003  
**PARCEL ADDRESS:** HONOAPIILANI HWY WAILUKU, HI 96793  
**FIRM INDEX DATE:** SEPTEMBER 19, 2012  
**LETTER OF MAP CHANGE(S):** NONE  
**FEMA FIRM PANEL(S):**  
 1500030389E-SEPTEMBER 25, 2009  
 1500030393E-SEPTEMBER 25, 2009  
 1500030556F-SEPTEMBER 19, 2012

**PARCEL DATA FROM:** JULY 2013  
**IMAGERY DATA FROM:** MAY 2005

### IMPORTANT PHONE NUMBERS

**County NFIP Coordinator**  
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 Carolyn Cortez (808) 270-7253  
**State NFIP Coordinator**  
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# FLOOD HAZARD ASSESSMENT REPORT



Source: Hawaii-NFIP  
Flood Hazard Assessment Tool

Figure 13C, Flood Hazard Assessment Map

## NATIONAL FLOOD INSURANCE PROGRAM

### FLOOD ZONE DEFINITIONS

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD** – The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

- Zone A:** No BFE determined.
- Zone AE:** BFE determined.
- Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V:** Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE:** Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

**NON-SPECIAL FLOOD HAZARD AREA** – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded):** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X:** Areas determined to be outside the 0.2% annual chance floodplain.

### OTHER FLOOD AREAS

- Zone D:** Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

### PROPERTY INFORMATION

**COUNTY:** MAUI  
**TMK NO:** (2) 3-6-004-003  
**PARCEL ADDRESS:** HONOAPIILANI HWY  
 WAILUKU, HI 96793  
**FIRM INDEX DATE:** SEPTEMBER 19, 2012  
**LETTER OF MAP CHANGE(S):** NONE  
**FEMA FIRM PANEL(S):**  
 1500030389E-SEPTEMBER 25, 2009  
 1500030393E-SEPTEMBER 25, 2009  
 1500030556F-SEPTEMBER 19, 2012

**PARCEL DATA FROM:** JULY 2013  
**IMAGERY DATA FROM:** MAY 2005

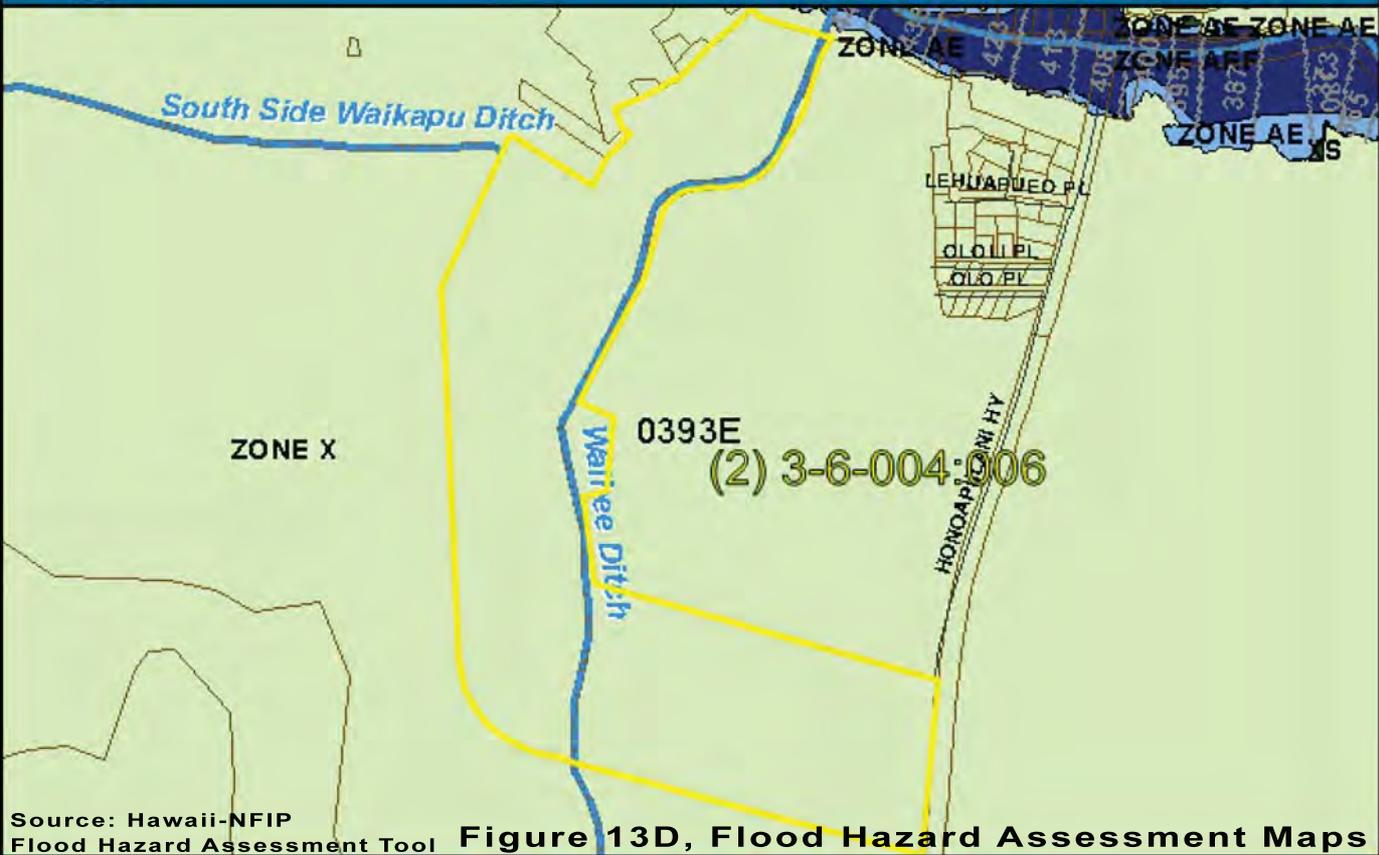
### IMPORTANT PHONE NUMBERS

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 Carolyn Cortez (808) 270-7253  
**State NFIP Coordinator**  
 Carol Tyau Beam, P.E., CFM (808) 587-0267

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# FLOOD HAZARD ASSESSMENT REPORT



Source: Hawaii-NFIP

Flood Hazard Assessment Tool

Figure 13D, Flood Hazard Assessment Maps

## NATIONAL FLOOD INSURANCE PROGRAM

### FLOOD ZONE DEFINITIONS

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD** – The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

- Zone A:** No BFE determined.
- Zone AE:** BFE determined.
- Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V:** Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE:** Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

**NON-SPECIAL FLOOD HAZARD AREA** – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded):** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X:** Areas determined to be outside the 0.2% annual chance floodplain.

### OTHER FLOOD AREAS

- Zone D:** Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

### PROPERTY INFORMATION

**COUNTY:** MAUI  
**TMK NO:** (2) 3-6-004-006  
**PARCEL ADDRESS:** 2000 HONOAPIILANI HWY WAILUKU, HI 96793  
**FIRM INDEX DATE:** SEPTEMBER 19, 2012  
**LETTER OF MAP CHANGE(S):** NONE  
**FEMA FIRM PANEL(S):** 1500030393E  
**PANEL EFFECTIVE DATE:** SEPTEMBER 25, 2009

**PARCEL DATA FROM:** JULY 2013  
**IMAGERY DATA FROM:** MAY 2005

### IMPORTANT PHONE NUMBERS

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 County of Maui  
 Carolyn Cortez (808) 270-7253  
**State NFIP Coordinator**  
 Carol Tyau Beam, P.E., CFM (808) 587-0267

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# FLOOD HAZARD ASSESSMENT REPORT



Source: Hawaii NFIP

Flood Hazard Assessment Tool Figure 13E, Flood Hazard Assessment Maps

## NATIONAL FLOOD INSURANCE PROGRAM

### FLOOD ZONE DEFINITIONS

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD** – The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

- Zone A:** No BFE determined.
- Zone AE:** BFE determined.
- Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V:** Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE:** Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

**NON-SPECIAL FLOOD HAZARD AREA** – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded):** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X:** Areas determined to be outside the 0.2% annual chance floodplain.

### OTHER FLOOD AREAS

- Zone D:** Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

### PROPERTY INFORMATION

COUNTY:	MAUII
TMK NO:	(2) 3-6-005-007
PARCEL ADDRESS:	1670 HONOAPIILANI HWY WAILUKU, HI 96793
FIRM INDEX DATE:	SEPTEMBER 19, 2012
LETTER OF MAP CHANGE(S):	NONE
FEMA FIRM PANEL(S):	1500030393E
PANEL EFFECTIVE DATE:	SEPTEMBER 25, 2009

PARCEL DATA FROM:	JULY 2013
IMAGERY DATA FROM:	MAY 2005

### IMPORTANT PHONE NUMBERS

<u>County NFIP Coordinator</u>	
County of Maui	
Carolyn Cortez	(808) 270-7253
<u>State NFIP Coordinator</u>	
Carol Tyau Beam, P.E., CFM	(808) 587-0267

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#### 4. Flora and Fauna

**Existing Conditions.** Botanical and Faunal Surveys were conducted by Robert W. Hobdy, Environmental Consultant, in February 2013 for the 494 acres proposed for development (See: Appendix B, “Botanical and Faunal Surveys”).

A total of 130 plant species were recorded during the survey. Seven species were found to be common within the project area: buffelgrass (*Cenchrus ciliaris*), Guinea grass (*Megathyrsus maximus*), sugar cane (*Saccharum officinarum*), smooth rattlepod (*Crotalaria pallida*), cheeseweed (*Malva parviflora*), ‘uhaloa (*Waltheria indica*) and Java plum (*Syzygium cumini*). These species are found naturally in Hawai‘i as well as throughout the tropics nearly worldwide and are common.

Just 3 native species were found within the project area: ‘uhaloa, koali awahia (*Ipomoea indica*) and popolo (*Solanum americanum*). These species are found naturally in Hawai‘i as well as throughout the tropics nearly worldwide and are common. Four plant species found during the survey were introduced over a thousand years ago by Polynesian voyagers: kukui (*Aleurites moluccana*), niu (*Cocos nucifera*), hau (*Talipariti tileaceum*) and ‘ihi‘ai (*Oxalis corniculata*). The remaining 123 species were non-native plants, including some useful forage grasses, but many are considered to be agricultural or roadside weeds.

All of the mammals recorded are common non-native species of no particular concern. None of the endangered Hawaiian hoary bats were detected during the survey. Birdlife is dominated by widespread introduced species. While no protected seabirds were found on the property, the ‘ua‘u and ‘a‘o are known to overfly the area between the months of March and November.

Three native insects were recorded during the survey. The indigenous dragonflies, the globe skimmer and the green darner are both widespread and common, both in Hawai‘i and elsewhere, and are of no particular conservation concern. The Blackburn’s sphinx moth, however, is an endangered species and is of special concern. Just two individuals of its preferred

host plants, the tree tobacco, were found on the northern end of the sugar cane fields at the base of a stockpiled sand pile. These two plants were carefully examined for eggs, larvae or signs of feeding. One plant was found to have two mature eggs on separate leaves. The eggs had turned brown, indicating they were ready to hatch out young larvae. Tree tobacco plants are not native to Hawai'i, but fall under the protection of the Endangered Species Act (1973) during the period of their association with the Endangered Blackburn's sphinx moth. The occurrences of the non-native amphibians, reptiles and mollusks are of no particular interest or concern.

***Potential Impacts and Mitigation Measures.*** As a result of the above findings it is determined that there is little of botanical concern and that the proposed project is not expected to have a significant negative impact on the botanical resources in this part of Maui. No recommendations with regard to plants are deemed appropriate or necessary.

With respect to the 'ua'u and 'a'o which are known to overfly the property, it is recommended that any significant outdoor lighting be shielded to direct the light downward so that it is not visible from above. This is because the 'ua'u and 'a'o are easily confused and distracted by bright lights and often crash to the ground, where they are particularly vulnerable to being run over by vehicles or killed by predators.

As for the presence of the two tree tobacco plants, one of which was host to two mature Blackburn's sphinx moth eggs, it is recommended that this occurrence be reported to the U.S. Fish and Wildlife Service so that the required protections and management actions can be clarified.

## **5. Air Quality**

***Existing Conditions.*** The air quality in the Central Maui area is generally good. Existing impacts to air quality include periodic impacts from distant volcanic emissions (VOG) and possibly occasional localized impacts from traffic congestion or agricultural activities.

Both Federal and State standards have been established to maintain ambient air quality. Seven parameters are regulated: particulate matter, sulfur dioxide, hydrogen sulfide, nitrogen dioxide, carbon monoxide, ozone, and lead. State of Hawai'i air quality standards are either equally or more stringent than the comparable national standards.

Regional and local climate, together with the amount and type of human activity, generally dictate the air quality of a given location. The climate of the Central Maui area is very much affected by its location on the isthmus, between the western side of Haleakalā and the West Maui Mountains, which gusty northeast tradewinds funnel through. The project site experiences relatively strong trade winds that blow from north to south across the isthmus and out to sea. At 30-feet above the ground, wind speeds across the site range from about 5.5 meters per second to 7.5 meters per second, which is approximately 12 to 17 miles per hour.<sup>vi</sup>

A generally semi-arid climate pertains. The project site receives its highest rainfall during the winter and lowest rainfall during the summer. Throughout the year rainfall is relatively low, averaging approximately 20- to 30-inches per year, with the monthly average ranging from 0.25 inches in August to approximately 5-inches in January.<sup>vii</sup>

***Potential Impacts and Mitigation Measures.*** During development, grading and construction-related activities will result in short-term impacts to air quality. Best Management Practices (BMPs) will help to mitigate such impacts. Adequate dust control measures, in compliance with Section 11-60-1-33, "Fugitive Dust", of the Hawai'i Administrative Rules will be implemented during all phases of construction. Mitigation measures will be implemented to minimize potential air quality impacts, as listed below.

***Short-Term Construction Activities.*** All construction activities will comply with the provisions of HAR, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust. In compliance with these provisions a dust control plan will be implemented during all phases of construction. Fugitive dust emissions will be controlled to a large extent by watering of active work areas,

using wind screens, keeping adjacent paved roads clean, and by covering of open-bodied trucks. Other dust control measures that may be implemented include limiting the area disturbed at any given time and/or mulching or stabilizing inactive areas that have been worked. Paving and landscaping early in the construction schedule will also reduce dust emissions. Exhaust emissions from construction equipment can be mitigated by moving equipment and workers to and from the site during off-peak traffic hours. The Draft EIS will include an Air Quality Impact Assessment prepared by B.D. Neal & Associates that will further document the project's potential short- and long-term impacts to air quality along with mitigation measures, if necessary, to reduce those impacts.

#### 6. Noise Quality

**Existing Conditions.** The dominant noise sources in the vicinity of the project are from vehicles using Honoapi'ilani Highway and from the seasonal use of harvesting equipment used by HC&S. There are currently no significant noise generators within or in close proximity to the property.

**Potential Impacts and Mitigation Measures.** The Draft EIS will include a Noise Impact Assessment prepared by DL Adams & Associates that will further document the project's potential short- and long-term impacts to noise levels along with mitigation measures, if necessary, to reduce those impacts.

#### 7. Historical and Archaeological Resources

**Existing Conditions.** An Archaeological Inventory Survey (AIS) is being prepared by Archaeological Services Hawai'i, LLC for the 499 acres of the project that are proposed for development. The purpose of the inventory survey is to determine the presence/absence, extent, and significance of historic properties within the project area and to formulate future mitigation measures for these remains within the project area.

***Potential Impacts and Mitigation Measures.*** Potential impacts and mitigation measures to archaeological resources will be assessed during the preparation of the AIS and will be thoroughly documented in the DEIS.

## **8. Cultural Impact Assessment**

***Existing Conditions.*** A Cultural Impact Assessment (CIA) is being 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.

The WCT project site has been used for agricultural purposes, primarily for sugarcane, since the 1870s. Prior to sugarcane, the lands along the Waikapū Stream, and in and around the existing Waikapū Town, were settled by native Hawaiians who cultivated taro and other diversified crops in terraced lo'i . The Waikapū Stream, one of four streams that comprise the Nā Wai 'Ehā, is an important cultural resource to native Hawaiians, who continue to have riparian rights for agricultural purposes. There are many Kuleana lots, many still owned by native Hawaiian and kama'āina families, within Waikapū and in close proximity to the Waikapū Stream. The Waikapū Stream corridor provides access to the Waikapū Valley, where native Hawaiian groups are currently reintroducing indigenous plants and trees into the valley.

***Potential Impacts and Mitigation Measures.*** The CIA, which is currently being prepared, will further document the history of the site and will identify and document any potential cultural impacts resulting from the project. The CIA will be incorporated into the Draft EIS.

## **9. Visual Resources**

***Existing Conditions.*** The WCT project area is located between the town of Wailuku to the north and Mā'alaea to the south along the Honoapi'ilani Highway. The project site generally slopes from west to east with a high elevation of approximately 710 feet msl at the northwesterly

corner and a low elevation of about 256 feet above msl at the southerly corner, within the fertile Central Maui isthmus.

Views from within the project site are both diverse and dramatic. Largely unobstructed views of Haleakalā, the West Maui Mountains, the Central Maui isthmus and the Pacific Ocean are available at the mid and upper elevations. At the higher elevations Wailuku and Kahului, East Maui and South Maui are all visible. From the lower elevations largely unobstructed views are available of the West Maui Mountains, Haleakalā, and sugar cane lands that stretch from Honoapiʻilani Highway to Māʻalaea and Kīhei.

These same lower elevation views are presently available from Honoapʻilani Highway looking into the project site. The existing mauka view from Honoapiʻilani Highway into the project site is of agricultural fields planted in sugar and diversified crops, the MTP, and the rugged West Maui Mountains. The makai view from the highway is of the existing sugarcane fields and Haleakalā. When the sugarcane is cut there are intermittent views of the ocean horizon (**See:** Figure 4 A-O, “Existing Photographs”).

***Potential Impacts and Mitigation Measures.*** Chris Hart & Partners, Inc. prepared an island-wide Scenic Resources Inventory Study for the County of Maui, Department of Planning, in July 2006 in support of the General Plan 2030 Update. The purpose of the study was to inventory and rate the island’s scenic resources so that appropriate advanced planning and mitigation strategies could be employed to protect these resources. The MIP incorporates the study’s scenic roadway corridor recommendations into its “Context and Character Map” and references the corridors in policies within Chapter 3, Heritage Resources (**See:** Figure No. 14, “Maui Island Plan, Context and Character Map”).

The Scenic Resources Inventory Study identifies the area along Honoapiʻilani Highway, fronting the project site, as an area of “High” scenic resource value. In the study, areas of “Exceptional” and “High” resource value are described as having “dramatic and diverse resource values



"Registered Historic Parcels" and "Registered Historic Sites" only represent those listed on State or National Registers and included within Maui County's GIS system. Sites shown are not all-inclusive and do not represent all historic sites on Maui. As additional data becomes available it will be integrated into future mapping.

### Character & Context Map Island of Maui

Background Map  
For Informational Purposes Only

#### Legend

- Primary Road
- Na Ala Hele or Other Trail
- Stream
- Wetland, Pond or Reservoir
- ▲ Waterfall
- ◆ Registered Historic Site
- Registered Historic Parcel
- Parks
- Scenic Corridor
  - Exceptional
  - High
  - Medium
- Boating Facility
  - Boat Launch Ramp
  - Small Boat Harbor
- Aquatic Activity
  - Ocean Recreation
  - Board Surfing
  - Body Surfing
  - Canoe Paddling
  - Snorkeling/Diving



Scale: 0 1 2 3 4 5 Miles

North Arrow

Product Code: M-CIT\_2012005-01  
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Includes material © 2008 DigitalGlobe, Inc. ALL RIGHTS RESERVED.  
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  
Wailuku, Hawaii 96793

## Map I-1

This map is for informational purposes only and subject to change based on future research and findings.

Figure 14, Maui Island Plan, Context and Character Map

consistently throughout the corridor” and are “typically in a natural condition and unmarked by development.” The study’s GIS inventory provides “field study” notes that describe the character of the subject corridor. The notes describing the Honoapi’ilani corridor, fronting the project site, are as follows:

*High concentration of agricultural lands; open space; and distant Haleakalā views. Intact West Maui mountain views and expansive views of Mā’alaea and the Kīhei coastline and Lanai views exist. There is considerable utility clutter along the highway. Sprawl conditions along the highway between Waikapū and Mā’alaea should be avoided through the establishment of clear boundaries and features such as landscape plantings and entry signage.*

Chapter 3, Heritage Resources, of the MIP contains policies that discourage sprawl and the merging of the island’s small towns. MIP policies also protect views of Haleakalā, the West Maui Mountains, the Pacific Ocean and other scenic resources.

As such, design strategies are needed to mitigate the impact of the proposed development on these visual resources. To accomplish this objective, the WCT Master Plan incorporates the following urban design strategies to address sprawl, impact to Haleakalā and West Maui Mountain views, and impact to open space resources:

- **Sprawl.** The WCT will have approximately one-mile of frontage along the Honoapi’ilani Highway. This frontage will occur on each side of the highway and will contain a variety of uses, including commercial, residential, rural, multi-family, schools and parks. The development pattern will represent a significant change from the current open space views that exist along this section of the highway. While the existing open space views of sugar cane fields will be impacted by the development, setbacks of at least 40, and in some areas up to 100-feet, will be utilized along each side of the Honoapi’ilani Highway to separate the development from the public right-of-way. Within these setbacks, the planting of large canopy Monkey Pod trees, tropical shrubs and bushes and grass will be

maintained to create a sense of separation and definition between the urban development and the highway. In addition, an approximate 10-foot wide shared pedestrian and bicycle track, separated from the highway, will meander along the highway frontage.

- ***Haleakalā and West Maui Mountains.*** From Honoapiʻilani Highway, the elevation of the project site rises rather gradually, at a 3% to 6% slope, from about 325-feet above mls to about 550-feet where the Waikapū Ditch traverses north to south across the property. From the Waikapū Ditch the slopes increase to between 10% and 15% as the elevation increases to the foot of the West Maui Mountains. The foot of the West Maui Mountains is at an elevation of approximately 1,250 feet and is about 3,000 feet from the highway.

In order to mitigate the obstruction of views from the highway to the West Maui Mountains, buildings will be setback at least 40-feet from the highway and building heights will be limited to a maximum of 30-feet along the highway frontage. Within the project, roadways will also be aligned, where practicable, to capture mauka and makai view corridors. This opportunity exists at each entrance into the project site and along these roads as they travel east to west.

- ***Open Space Resources.*** The project will impact views of sugarcane lands on each side of the Honoapiʻilani Highway fronting the project site. While these views are not unique within Central Maui, they do enhance Maui's beauty and are an important visual resource. In order to mitigate this impact, approximately 800 acres of sugarcane land will be preserved in perpetuity as an open space buffer and permanent separation between Waikapū Town and Māʻālaea. Along the section of the highway where agricultural land is to be preserved, largely unobstructed views of Haleakalā, the West Maui Mountains and partial views of the Pacific Ocean exist.

Within the project site, the WCT Master Plan will transform the current character of the MTP from a visitor oriented attraction to a park-like town center, with its existing lagoon, gardens, open spaces, shops, and restaurant coming together to create a unique sense of place. While the existing agricultural and open space ambiance of the lands abutting the MTP will be transformed to an urban settlement pattern, the WCT will maintain a rural and agricultural ambiance at its boundaries because of the preservation of agricultural land.

The WCT Master Plan Design Guidelines will limit building heights, where necessary, in order to maintain views towards the summit of Haleakalā and the West Maui Mountains. Moreover, open space will be integrated throughout the Project and, together with the proposed street layout, will create and frame view corridors throughout the WCT to the Pacific Ocean, Haleakalā, and the West Maui Mountains.

From an urban design perspective, the proposed project will complement the unique country-town architectural character that exists in Waikapū, Wailuku, Pā'ia, and Makawao. The WCT design guidelines are being developed to control the density, architectural design, and variation of all buildings in the WCT without sacrificing views or the aesthetic character of the development. Goals of the design guidelines will be to protect views, access to sunlight and the aesthetic character of the community. A defining quality of the urban design character of the development will be architecturally pleasing streets, with landscape planting that will frames the travel ways and help to screen the massing of buildings.

All buildings within the WCT will be designed in accordance with the applicable Maui County building code standards.

## 10. Agricultural Resources

**Existing Conditions.** In July 2013 Planning Consultants Hawai'i, LLC prepared an Agricultural Impact Assessment (AIA) to assess the long-term impact of the project on the State's and County's agricultural industries (**See:** Appendix C, "Agricultural Impact Assessment").

The scope of the study included the following tasks:

- Assessment of the current status of Hawai'i's agricultural industry;
- Assessment of the current availability of agricultural lands;
- Analysis of existing agronomic conditions within the project site;
- Description of the recent agricultural history of the property;
- Assessment of the impact of the project on current agricultural operations; and
- Analysis of the project's consistency with State and County agricultural policies.

The project area encompasses approximately 14 acres of State Urban District land and 1,562 acres of State Agricultural District land (**See:** Figure No. 5, "State Land Use Designation"). The existing MTP retail shops, restaurant, convention hall, tropical gardens and lagoon are on the urban designated land. In order to implement the Master Plan, approximately 485 acres will be re-designated from the State Agricultural District to the State Urban and Rural Districts.

### **Current Status of Hawai'i's Agricultural Industry**

While agriculture, predominantly sugar and pineapple, dominated Hawai'i's economy from the late 1800s through the 1950s, its overall significance has declined dramatically since the advent of mass market tourism. In 1927, sugar alone created 56,600 jobs throughout the State, whereas in 2011 the entire agricultural industry employed just 6,900 workers.<sup>viii</sup> In 2011, agriculture employed 1,600 Maui County workers, which was 2.4% of the 67,200 wage and salary jobs in the County.<sup>ix</sup>

Hawai'i farmers face stiff competition in local, national, and international markets. In the Hawai'i market, off-shore suppliers dominate the market for most fresh fruits, vegetables, dairy,

meat, and poultry products. It has been estimated that 85% of all food consumed in Hawai'i statewide is imported.

In the U.S. Mainland market, Hawai'i growers have sustained the value of their sales in recent years, but have lost significant export value of sales to Japan. Significant impediments to agricultural development in Hawai'i include high labor costs, high transportation costs, high energy costs and high land costs.

Despite major challenges, Hawai'i's growers are competitive in many niche products and opportunities are available. Because 85% of food consumed in Hawai'i is imported, a significant market exists for farmers who can find creative ways to displace imports. Moreover, Hawai'i's seed crop industry has demonstrated that Hawai'i agriculture can have significant comparative advantage in some sectors. Substituting locally grown biofuels for imported petroleum may also provide opportunities for Hawai'i farmers over the coming decades.

#### **State and County Agricultural Lands**

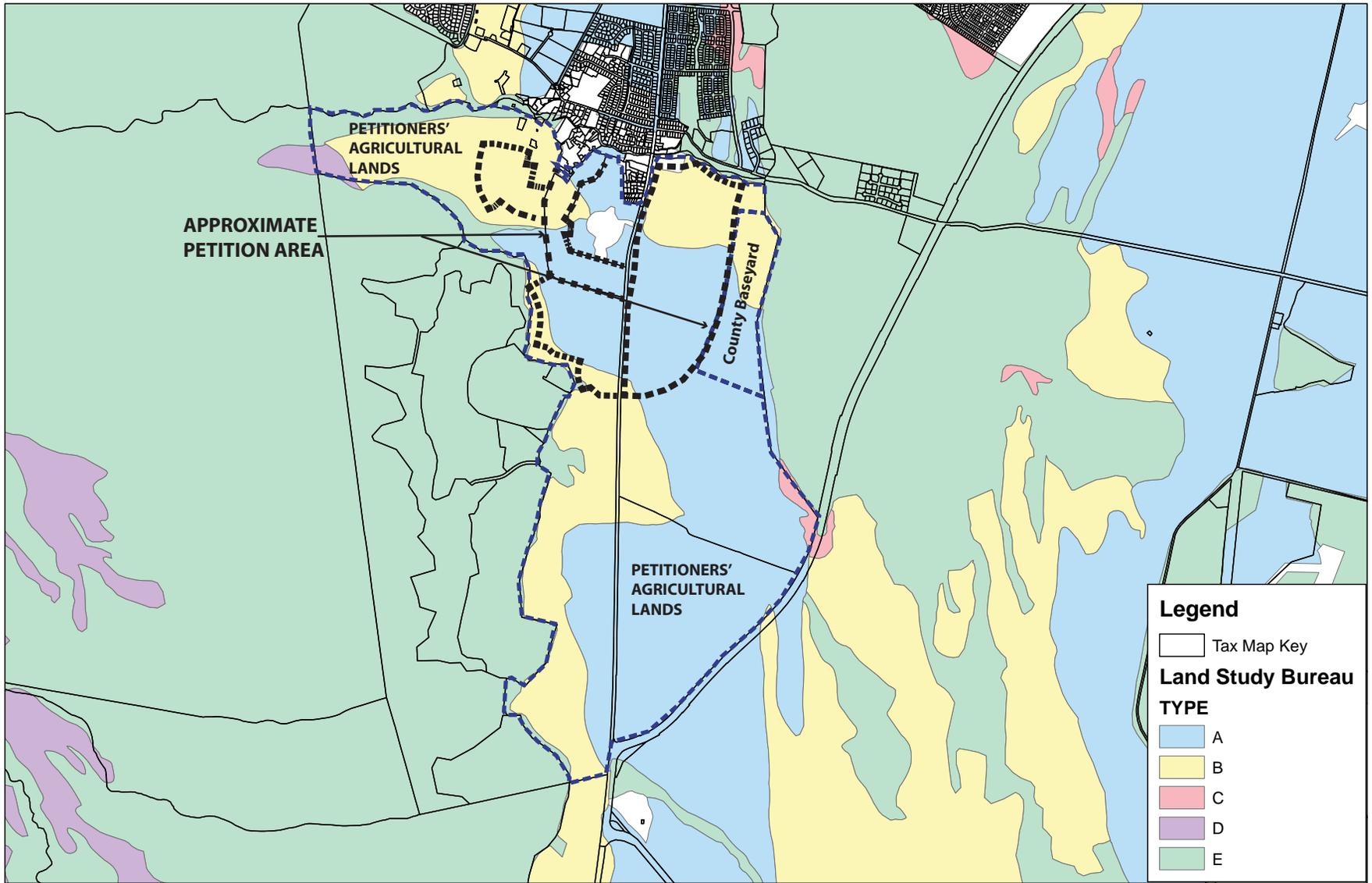
Since 1960, there has been a release of approximately 316,590 acres from crop farming, primarily sugar and pineapple. <sup>x</sup> While some of these lands have been absorbed by urban development and other agricultural uses, much is fallow and available for agricultural use on Oahu, Maui, Molokai, Lanai and Kauai.

The County of Maui has approximately 402,354 acres within the State Agricultural District. Of these lands, approximately 244,088 acres, or 61%, is located on Maui. <sup>xi</sup> Using the LSB rating system, Maui alone has approximately 82,592 acres that are classified "A", "B", or "C". <sup>xii</sup> Since 1960, there has been a release of approximately 64,150 acres from crop farming, primarily sugar and pineapple, within the County. <sup>xiii</sup> While some of these lands have been absorbed by urban development and other agricultural uses, much is fallow and available on the islands of Maui, Molokai, and Lanai.

Although there is an abundant supply of productive agricultural land throughout the State, access to affordable agricultural lots offering long-term tenure remains an impediment to agricultural development in Hawai'i. The current shortage of available State and County agricultural park lots is symptomatic of this issue.

WCT, including its adjoining agricultural lands, comprises approximately 1,576 acres, 14 acres of which are within the State Urban District. Over 90% of the project's agricultural lands are rated "A" or "B" by the Land Study Bureau and "Prime" by the Agricultural Lands of Importance to the State of Hawai'i rating systems (**See:** Figure Nos. 15 and 16, "Land Study Bureau Map" and "ALISH Map"). WCT agricultural lands are of very high quality and it has been determined that these lands are important resources to the State of Hawai'i.

**Potential Impacts and Mitigation Measures.** The Project will result in the urbanization of approximately 485 acres of prime agricultural land. This represents a very small percentage of agricultural lands statewide and on Maui. There are approximately 2 million acres in the State Agricultural District. The subject development represents just .024% of this area. On Maui, there are approximately 82,582 acres of agricultural lands rated by the LSB as A, B, or C. The subject development represents just 0.59% of these lands. Within Maui County, approximately 64,150 acres has been released from crop production since 1987. The subject development represents just 0.76% of these lands. Thus, the urbanization of the subject 485 acres should have minimal long-term impact on the availability of agricultural land within the County and/or State since an abundance of other land, of a similar or higher quality, is currently fallow and available for production elsewhere. As noted, the MTP Master Plan's agricultural component includes nearly 1,077 acres of land that will remain in agricultural use. Of these lands, approximately 800 acres will be permanently dedicated to agricultural use with no residential structures to be permitted. The remaining 277 acres may be subdivided into as many as five large agricultural lots where a farm dwelling may be permitted. Within the agricultural lands, several hundred acres may be developed as a public and/or private agricultural park to help facilitate Maui's agricultural development.



**Figure 15**

LAND STUDY BUREAU  
 DETAILED LAND CLASSIFICATION

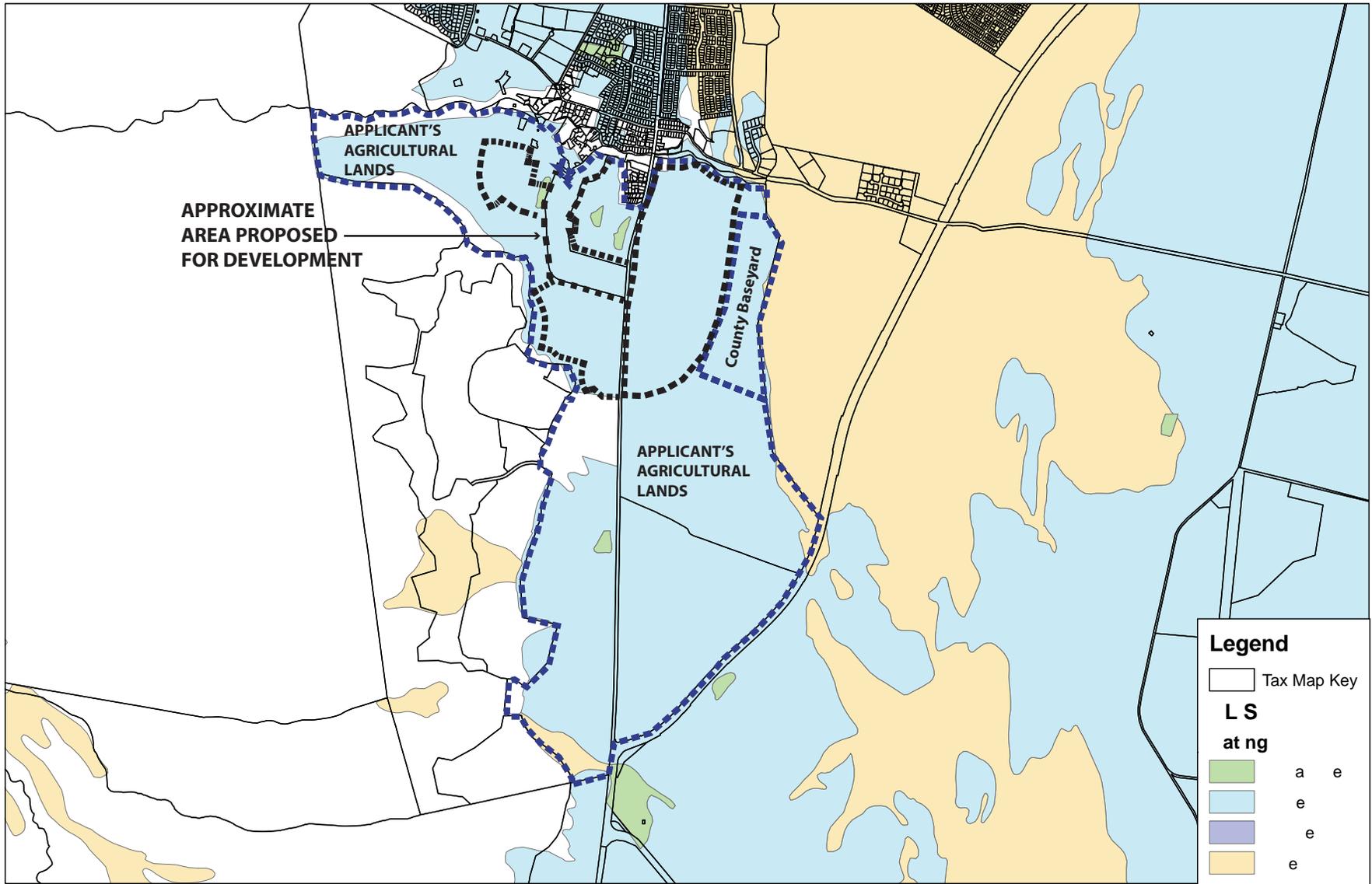


Not to Scale

**WAIKAPŪ COUNTRY TOWN**



PLANNING  
 CONSULTANTS  
 HAWAII, LLC



**Figure 16**  
 AGRICULTURAL LANDS OF IMPORTANCE TO THE STATE OF HAWAII



Not to Scale

WAIKAPŪ COUNTRY TOWN



PLANNING  
 CONSULTANTS  
 HAWAII, LLC

There are currently three commercial farms farming MTP lands. These include Kumu Farms, Hawai'i Taro LLC, and HC&S. The proposed urbanization will require both Kumu Farms and Hawai'i Taro to relocate their agricultural operations to the proposed agricultural park and other suitable agricultural lands within the project. The project will also impact a portion of the current lands being leased by HC&S. It is anticipated that these lands will gradually begin to be impacted in about three to five years. Over the long-term, HC&S may lose approximately 330 acres to urbanization and up to an additional 75 acres to a private agricultural park. According to HC&S General Manager, Mr. Rick Volner, HC&S would desire to continue farming its MTP lands to maximize its current economy of scale in production. However, Mr. Volner acknowledged that HC&S has additional lands available that are currently fallow and that urbanization of a portion of its MTP leased lands will not significantly impact the Plantation's long-term economic viability.

It has been noted that a significant impediment to agricultural development on Maui, and throughout the state, is the scarcity of agricultural land that is both readily available and affordable for long-term lease to diversified farmers. The establishment of a centrally located agricultural park, with productive lands and affordable irrigation water, should help Maui farmers compete in local, mainland and international markets.

#### **Consistency with State and County Agricultural Policies**

The Hawai'i State Plan and State Functional Plans establish policy to protect the viability of the sugar and pineapple industries, protect agriculturally suitable lands for future agricultural needs, and promote the growth of diversified agriculture.

The Maui County General Plan (County-wide Policy Plan, Maui Island Plan, and Wailuku-Kahului Community Plan) seek to preserve productive agricultural lands and facilitate agricultural self-sufficiency in food production. The General Plan also recognizes the need to provide sufficient land areas to accommodate future population growth. Goal 7.1.1.f of the Maui Island Plan (MIP) states, "Strongly discourage the conversion of productive and important agricultural lands

(such as sugar, pineapple, and other produce lands) to rural or urban use, unless justified during the General Plan update, or when other overriding factors are present.”<sup>xiv</sup>

The subject land was placed into an Urban Growth Boundary during the General Plan 2030 update, when other overriding factors were present. These factors included the forecasted demand for additional urban lands to accommodate projected population growth, the development suitability of the subject land, as well as its proximity to existing employment, infrastructure, public facility systems and existing urban development. Moreover, as documented in the Agricultural Impact Assessment, the urbanization of the subject lands will not significantly impact the future viability of the sugar or pineapple industries or the growth of diversified agriculture on Maui or throughout the State.

The proposed action has been carefully analyzed for its short- and long-term impacts upon the agricultural industry. While the proposed action will result in the loss of prime agricultural lands, it will not significantly impact the short- or long-term viability of agriculture in Hawai‘i since an abundance of currently fallow former sugar and pineapple land is currently available elsewhere. The project will, however, help to address the current shortage of agricultural park lots by establishing a new private and/or public agricultural park within Central Maui.

## **B. SOCIO-ECONOMIC ENVIRONMENT**

### **1. Population**

The resident population of Maui County has experienced rapid growth. According to census figures the resident population of Maui County has grown by approximately 56% since 1990, and from 100,504 to 156,764 in 2011.<sup>xv</sup> These robust growth rates are expected to continue through 2040. According to the State of Hawai‘i, Department of Business, Economic Development, and Tourism, “Population and Economic Projections for the State of Hawai‘i to 2040”, the County’s population is expected to reach 232,863 by 2040, which is an increase of 46%.<sup>xvi</sup>

Wailuku-Kahului is the island's largest population and employment center. In 2010 the region's population was approximately 53,456<sup>4</sup>, which was about 37% of the island's 2010 population of 144,444. Like the rest of Maui, the Wailuku-Kahului region has experienced high growth rates. In 1990 the region's population was 32,816 and by 2010 it had grown to approximately 53,456, which is an increase of 63% over 20 years. Between 2010 and 2030 the region's population is projected to grow to 65,616, which is a much more modest increase of 21%. The U.S. Census Bureau, in 2010, recorded a population of 2,965 persons living within the Waikapū Census Designated Place.

Kahului is home to the island's only major airport and commercial harbor. The Central Maui Wastewater Treatment Facility, which treats most of Central Maui's wastewater, is located in Kahului. Kahului is also home to the 78-acre University of Hawai'i Maui College, which offers Associate, Bachelor and Master Degree programs to more than 4,400 full- and part-time students. Several "Big Box" retail stores are also located in Kahului, including Costco, Walmart, Lowes, K-Mart and Home Depot.

Wailuku is the island's civic center. Most State and County offices are located in Wailuku, along Main and High Streets. The Wailuku Police Station, which services Central and Upcountry Maui, is located in Wailuku as is the Maui Memorial Hospital. Maui Memorial Hospital is the island's sole hospital, offering 240 inpatient beds. The island's only State Correctional Facility, Maui Community Correctional Center (MCCC), is also located in Wailuku, along Waiale Road. A small "main street" commercial district that dates to the 1880s is located in Wailuku along Main, Market, Vineyard and Church Streets. Both Wailuku and Kahului have supporting shopping centers, parks, recreation facilities, educational facilities, libraries, industrial districts and residential districts.

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<sup>4</sup> Includes Census Designated Places of Kahului, Waihe'e-Waiehu, Waikapu, and Wailuku

***Potential Impacts and Mitigation Measures.*** An Economic and Fiscal Impact Assessment is being prepared by The Hallstrom Group Inc. for inclusion in the Draft Environmental Impact Statement. This report will more fully document the project's impact upon the region's population.

## **2. Housing**

***Existing Conditions.*** Median home prices on Maui, like in most other regions of the Country, rose sharply between 1998 and 2006 and then fell precipitously between 2007 and 2010. In January 1998 the median sales price of a fee simple condominium on Maui was \$160,000 and a single-family residence was \$258,068. By 2006 the median sales price of a fee simple condominium had increased by over 300% to \$505,000 and a single-family residence by 269% to \$693,000. By December 2012, prices had come down from their peak by about 32% for single-family homes to \$470,000 and by 28% for fee simple condominium units to \$366,086. However, by December 2012 prices for single-family residences were still over 88% higher than prices in 1998, and for fee simple condominiums the prices were over 228% higher than in 1998.

Like the rest of Hawai'i, housing affordability on Maui is a significant concern. It is generally recommended that no more than 30% of monthly income be spent on rent. However, nearly half of all Maui residents exceed this threshold and, compared to the other counties, Maui residents spend more of their monthly income on housing. In 2011, 18% of Maui residents spent between 30 and 40% of their household income on shelter and 30.2% spent over 40%, while only 40.8% spent less than 30% of their income on shelter. By comparison, 54.1% of Oahu residents and 49.1% of Hawai'i County residents spent less than 30% of their income on shelter. 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.<sup>xvii</sup>

According to the County of Maui, Department of Housing and Community Concerns, Affordable Sales Price Guidelines, in February 2014 a Maui family earning 100% of the median income

(\$75,800 as determined by the United States Department of Housing and Urban Development), could afford a \$393,700 three-bedroom single-family residence at a 4.5% interest rate. The median single-family sales price in Central Maui between January and September 2014 was \$433,787 (Realtors Association of Maui). Maui County's 2014 Affordable Sales Price Guidelines for a 1-bedroom condominium for a family earning 100% of the median income is \$248,010. The median fee simple condominium sales price in Central Maui between February and September 2014 was \$267,655.

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.<sup>xviii</sup>

***Potential Impacts and Mitigation Measures.***

The WCT proposes the development of up to 1,433 residential dwelling units targeted at the full spectrum of workers in the development. Homes will be priced for a range of consumer groups, including workforce affordable homes in compliance with Chapter 2.96 MCC (Residential Workforce Housing Policy). All workforce affordable homes will be priced and subject to restrictions in accordance with the requirements of Chapter 2.96, MCC. The potential long-term demand for the project's housing will be analyzed in the Socio-Economic section of the Draft EIS.

**3. Economy**

***Existing Conditions.*** Tourism is the predominant component of Maui County's economy. In 2011 there was an annual average job count of 62,900 on Maui. At 29% of all jobs, the Accommodations and Food Service Industry accounts for the largest proportion of jobs on the island. This is followed by federal, state, and county government at 14%. The retail trade, also highly dependent upon tourism, ranks third at 13%. Professional and business services ranks fourth at 10%.<sup>xix</sup> Agriculture generates just 2.1% of Maui County jobs but is disproportionately important for its historic and cultural legacy and its contribution to the island's scenic beauty and quality of life.

According to the Economic Development Issue Paper (October 2007) prepared for the County of Maui, Department of Planning, in support of the Maui County General Plan 2030 update, Maui County is much more dependent upon tourism than other Hawai'i Counties. Of Maui County's Gross County Product (GCP), 39 percent is attributed to tourism, versus a range of 19-29% for the other counties (Economic Development Issue Paper, 2007). The Economic Development Issue Paper further notes that most Maui households support themselves on two or more jobs. Based on a living wage study of Maui County, a family of four (two adults, two children) would have needed an annual income of \$61,650 to support itself in 2005. A corresponding analysis of 2005 jobs and wage data for Maui found that the average wage of 78 occupations – representing 54 percent of all jobs – fell below the \$30,800 living wage standard.<sup>xx</sup>

Maui County had 2,446,084 visitor arrivals in the year 2011 and hotels on Maui Island experienced a 70.1 percent occupancy rate.<sup>xxi</sup> In June of 2013 Maui's occupancy rate was 69.1 percent. In the aftermath of the great recession, Maui County's unemployment rate rose to a high of 9.5% in June 2009 but has decreased to 4.9% as of July 2013. In Central Maui, economic activity centers on wholesale and retail trade, transportation services, business and professional services, education and government. HC&S is also a major employer in Central Maui.

According to the Economic Development Issue Paper (October 2007), diversifying Maui's economy has been a key, longstanding County policy. Chapter 4, Economic Development, of the MIP, December 2012, states the following in its analysis of the island's challenges and opportunities:

*The Island of Maui, like the County as a whole, faces two fundamental challenges in economic development: (1) diversification; and (2) increasing the number and proportion of living wage jobs. There is a subset of more specific challenges, such as the high cost of housing and the need to strengthen public education.*<sup>xxii</sup>

***Potential Impacts and Mitigation Measures.*** Development of WCT is expected to generate short-term economic benefits in the form of construction-related employment, as well as long-term benefits that include increased permanent employment and tax revenues. Short- and long-term economic benefits will be more thoroughly analyzed in the Socio-Economic section of the Draft EIS.

## **C. PUBLIC SERVICES**

### **1. Recreational Resources**

***Existing Conditions.*** In September 2007 the County of Maui conducted an infrastructure and public facilities assessment to support the update of the Maui County General Plan. The study analyzed existing park acreage by community plan district. According to the study, the Central Maui region currently has 186 acres of sub-regional park land and 377 acres of regional parks. There is a diverse selection of both active recreational parks and beach parks within proximity of the project site. These include

#### **Active Recreation Parks**

- Honoli'i Park
- Waikapū Park and Neighborhood Center
- Kahului Community Center and Pool
- Lihikai Park
- Maui Lani Park
- Pōmaika'i Park
- Wai'ale Neighborhood Park
- Wailuku Gym and Pool
- War Memorial Complex
- Keopuolani Regional Park
- Wells Community Park

### **Regional Parks**

- Keopuolani Regional Park
- War Memorial Complex

### **Beach Parks**

- Kanahā Beach Park
- Kahului Harbor Beach Park

Moreover, the County of Maui recently acquired 309 acres in Waikapū, near the project site, for a regional park. According to the Mayor's proposed 2013 capital improvement plan, the park will include soccer, baseball, and softball fields and will be built out in phases.

A central Maui sports complex is also being planned in Waikapū on 65 acres by the State of Hawai'i. The complex will be built in phases and may include a full-size baseball field, a quad of softball fields, a little league baseball quad, an area for soccer fields, comfort stations, concession buildings, and new infrastructure.<sup>xxiii</sup>

**Potential Impacts and Mitigation Measures.** The long-term implementation of the WCT Master Plan will contribute to the increase in population projected for the Wailuku-Kahului region. This impact, and its associated impact to recreational facilities, will be more thoroughly analyzed in the Socio-Economic section of the Draft EIS.

## **2. Medical Facilities**

**Existing Conditions.** Maui Memorial Medical Center, located approximately 4 miles from Waikapū, is in Wailuku and is the island's only acute care hospital. It is an approximately 240 bed hospital. Various private medical offices and facilities are located throughout Wailuku-Kahului. These facilities provide non-emergency medical care. Kaiser Permanente has clinics in Wailuku and in Maui Lanai and Maui Medical Group has offices in Wailuku.

***Potential Impacts and Mitigation Measures.*** The long-term implementation of the WCT Master Plan will contribute to the increase in population projected for the Wailuku-Kahului region. This impact, and its associated impact on the demand for medical facilities, will be more thoroughly analyzed in the Socio-Economic section of the Draft EIS.

### **3. Police Protection**

***Existing Conditions.*** The Waikapū area falls within the MPD's District I. This police district is served by the Wailuku (Central) Station, which houses the MPD headquarters for the entire County. The Police Department includes four programs:

- The Administration Program;
- Technical and Support Services Program;
- Investigative Services Program; and
- Uniformed Services Program.

In March 2007 the County of Maui conducted a Public Facilities Assessment Update to support the update of the General Plan to 2030. The Public Facilities Assessment documented the existing staffing conditions at the Department and projected future staffing needs based upon forecasted population growth.

According to the study, in FY 2005 the Wailuku Station was staffed with 146 budgeted uniformed patrol officers and an estimated share of 38 investigative officers. The study concluded that District I staffing was sufficient to meet the policing needs of the Wailuku-Kahului CPR. However, the study estimated that by 2030 police service needs will increase by approximately 41 percent from the current allocation of 162 officers to 229. In addition, the 67 new officers will require a further addition of 72 new support positions to be staffed at the Wailuku Station.

***Potential Impacts and Mitigation Measures.*** The long-term implementation of the WCT Master Plan will contribute to the increase in population projected for the Wailuku-Kahului region. This

impact, and its associated impact to police services, will be more thoroughly analyzed in the Socio-Economic section of the Draft EIS.

#### **4. Fire Protection**

***Existing Conditions.*** The Department of Fire and Public Safety includes five programs:

- The Administration and Maintenance Program;
- The Training Program;
- The Fire/Rescue Operation Program; and
- The Fire Prevention Program.

There are two fire stations that are within a five road mile service area of Waikapū. These include Wailuku Station at 21 Kinipopo Road and the Kahului Fire Station at 200 Dairy Road. The Wailuku Station is an Engine Company. The Kahului Fire Station is an Engine, Tanker and Rescue Company.

The County uses a distance standard of 2 to 3 miles to provide adequate coverage to residential districts. Waikapū is approximately 3 road miles from the Wailuku Fire Station and 4.5 road miles from the Kahului Fire Station.

In order to reduce response times for both fire and medical emergencies, construction of a new fire station is planned in Waikapū. According to the Mayor's proposed 2013 capital improvement program, the fire station will be situated on approximately 5 acres of the 100 acres recently acquired in Waikapū to accommodate a County campus for various departments, police and fire stations. The CIP states that the 5-acre fire station will be located along the proposed Waiko Road Extension. The development of a fire station within Waikapū will bring the proposed project well within the County's desired response time standard.

***Potential Impacts and Mitigation Measures.*** The long-term implementation of the WCT Master Plan will contribute to the increase in population projected for the Wailuku-Kahului region. This

impact, and its associated impact to fire protection services, will be more thoroughly analyzed in the Socio-Economic section of the Draft EIS.

## **5. Schools**

***Existing Conditions.*** Maui schools are organized into complexes and complex-areas. A complex consists of a high school and all of the intermediate/middle and elementary schools that flow into it. Groups of two to four complexes form a "complex area" that is under the supervision of a complex area superintendent.

The WCT is located within the State Department of Education's Baldwin-Kekaulike-Maui Complex-Area. The Complex is comprised of the following schools:

### **Elementary Schools**

- Pu'u Kukui
- Waihe'e
- 'Īao

### **Intermediate Schools**

- Lokelani Intermediate
- Maui Waena Intermediate

### **High Schools**

- Maui High

Current and projected enrollment and capacities for area schools were provided by the Planning Section of the Department of Education's Facilities Development Branch and are shown in Table 11, "DOE School Enrollment & Capacity" below.

**Table 11: DOE School Enrollment & Capacity**

Schools	2013 Enrollment	2013 Capacity	Surplus / Deficit	2018 Projected Enrollment	2018 Surplus / Deficit
Wailuku Elementary	740	958	218	695	263
Pu'u Kukui Elementary	541	550	9	603	-53
Īao Intermediate	886	999	113	972	27
Baldwin High School	1538	1809	271	1606	203
Kahului Elementary	1064	915	149	992	-77
Lihikai Elementary	943	1036	93	933	103
Pōmaika'i Elementary	550	760	210	545	215
Maui Waena Intermediate	1095	1276	181	1197	79
Maui High School	1908	2035	127	1394	641

**Potential Impacts and Mitigation Measures.** The long-term implementation of the WCT will contribute to the increase in population projected for the Wailuku-Kahului region. This impact, and its associated impact to school facilities, will be more thoroughly analyzed in the Socio-Economic section of the Draft EIS.

## 6. Solid Waste

**Existing Conditions.** The Central Maui Landfill services the residential waste stream for Central Maui, including Waikapū. The privately owned and operated Decoite Landfill services the Island's construction and demolition waste stream. According to the County of Maui's Integrated Solid Waste Management Plan (ISWMP) (February 2009), the amount of waste generated in 2006 was 345,000 tons of which 124,000 tons was diverted for recycling.<sup>xxiv</sup> In 2006, the Central Maui Landfill received 213,993 tons of residential waste, the Maui Construction and Demolition Landfill (Decoite Landfill) received 50,000 tons of construction waste, and the Eco Compost Facility received 54,243 tons of yard waste. It is projected that by 2030 the total generated waste on Maui will be 499,381 tons per year (TPY) of which

approximately 31 percent, or 147,309 TPY, would be recycled. Thus, by 2030 it is projected that approximately 353,632 TPY of solid waste would be entering the Island's landfills. In comparing planned capacity versus projected solid waste generation, the ISWMP projects that the planned capacity is sufficient to accommodate demand through 2026.

The County of Maui is currently assessing the feasibility of developing a waste-to-energy facility in Central Maui, on land near the Central Maui Landfill. The facility could have the potential to divert up to 80% of the waste generated on Maui with the byproduct used as a renewable fuel. Such a capital improvement would significantly mitigate the need for additional landfill space to accommodate the projected population growth.

The ISWMP also uses residential and commercial waste generation rates for its projections. The residential generation rate in tons per household per year for Maui (excluding Hana) is 2.3. The Commercial Generation Rate (tons per employee per year) for Maui (excluding Hana) is 1.58

***Potential Impacts and Mitigation Measures.*** The long-term implementation of the WCT Master Plan will contribute to the increase in population projected for the Wailuku-Kahului region. This impact, and its associated impact on solid waste collection facilities and services, will be more thoroughly analyzed in the Socio-Economic section of the Draft EIS.

## **D. INFRASTRUCTURE**

### **1. Roadways**

***Existing Conditions.*** The mauka side of the Project at the MTP is accessible from Honoapi'ilani Highway, a two-lane, two-way State Highway that connects Wailuku with Waikapū, Mā'alaea and Lāhainā. The makai side of the property is undeveloped and in sugar cane cultivation. Access to the makai land is from Honoapi'ilani Highway, East Waiko Road and Kuihelani Highway from cane haul roads.

***Potential Impacts and Mitigation Measures.*** A Traffic Impact Analysis Report (TIAR) will be prepared for the project and included in the Draft EIS. The report will analyze current and projected conditions with and without full development based upon the Master Plan. It will also make recommendations for any traffic mitigation measures deemed necessary.

## **2. Utilities**

***Existing Conditions.*** There are existing power, telephone, and cable television transmission facilities along Honoapi'ilani Highway.

***Potential Impacts and Mitigation Measures.*** Proposed electrical, telephone, and cable television distribution systems will be served from the existing facilities along Honoapi'ilani Highway. Potential impacts to utilities will be more thoroughly analyzed in the Preliminary Engineering Report prepared in support of the Draft EIS.

## **3. Drainage**

***Existing Conditions.*** A Preliminary Drainage Report will be prepared for the Draft EIS. The report will analyze current conditions, including drainage patterns, existing improvements, and runoff totals.

***Potential Impacts and Mitigation Measures.*** The Drainage Report will analyze anticipated changes in stormwater runoff and recommend improvements necessary to comply with County drainage requirements.

## **4. Water**

***Existing Conditions.*** A Preliminary Engineering Report will be prepared for the Draft EIS. The report will analyze current water source and transmission requirements to support the implementation of the WCT Master Plan.

**Potential Impacts and Mitigation Measures.** The Engineering Report will analyze anticipated increases in water demand and propose means of meeting that demand.

## 5. Wastewater

**Existing Conditions.** A Preliminary Engineering Report will be prepared for the Draft EIS. The report will analyze current wastewater system capacity and existing infrastructure to support the project.

**Potential Impacts and Mitigation Measures.** The Engineering Report will analyze anticipated increases in wastewater flows and propose means of meeting that demand.

## E. CUMULATIVE AND SECONDARY IMPACTS

Cumulative impacts are defined as the impact on the environment that 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 distance, but which are reasonably foreseeable. They can be viewed as actions of others that are taken because of the presence of the project. Secondary impacts from highway projects, for example, can occur because they can induce development by removing transportation impediments to growth.

The Draft EIS will discuss potential cumulative and secondary impacts from the proposed Master Plan.

## F. SUMMARY OF UNAVOIDABLE IMPACTS ON THE ENVIRONMENT AND RESOURCES

The Draft EIS will discuss unavoidable impacts on the environment and resources and analyze their significance.

### III. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

#### A. STATE LAND USE

Chapter 205, Hawai'i Revised Statutes, relating to the Land Use Commission (LUC), establishes four (4) major land use districts in which all lands in the state are placed. These districts are designated as *Urban*, *Rural*, *Agricultural*, and *Conservation*. The lands of the WCT lie within the State *Urban* and *Agricultural* districts. Refer to Figure 7, "State Land Use Map".

The proposed Master Plan will require a State Land Use District Boundary Amendment in order to bring the land proposed for urbanization into the *Urban* district and the land proposed for rural into the *Rural* district. The majority of the land will remain classified as *Agricultural*. The total land area expected to be affected comprises approximately 499 acres and is identified by Tax Map Parcels (2) 3-6-5:007 (Por.), (2) 3-6-004:003 (Por.), (2) 3-6-004:006, (2) 3-6-006:036, and (2) 3-6-002:003 (Por.) (**See**: Figure 3a-d, "TMK Maps"). The Project will require amendments to the conditions placed upon the 14-acres of currently urbanized lands, identified as a portion of TMK Map Parcel (2) 3-6-5:007.

The Draft EIS will analyze the proposed boundary reclassification's consistency with the following standards of the Urban and Rural Districts, Sec 15-15-18, Hawai'i Administrative Rules:

#### **Urban District Standards**

1. It shall include lands characterized by "city-like" concentrations of people, structures, streets, urban and other related land uses; streets, urban level of services and other related land uses;
2. It shall take into consideration the following specific factors:

- A. Proximity to centers of trading and employment except where the development would generate new centers of trading and employment;
  - B. Availability of basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection; and
  - C. Sufficient reserve areas for foreseeable urban growth;
3. It shall include lands with satisfactory topography, drainage, and reasonably free from the danger of any flood, tsunami, unstable soil condition, and other adverse environmental effects;
  4. Land contiguous with existing urban areas shall be given more consideration than non-contiguous land, and particularly when indicated for future urban use on state or county general plans;
  5. It shall include lands in appropriate locations for new urban concentrations and shall give consideration to areas of urban growth as shown on the state and county general plans;
  6. It may include lands which do not conform to the standards in paragraphs (1) to (5):
    - A. When surrounded by or adjacent to existing urban development; and
    - B. Only when those lands represent a minor portion of this district;
  7. It shall not include lands, the urbanization of which will contribute toward scattered spot urban development, necessitating unreasonable investment in public infrastructure or support services; and
  8. It may include lands with a general slope of twenty per cent or more if the commission finds that those lands are desirable and suitable for urban purposes and that the design and construction controls, as adopted by any federal, state, or county agency, are adequate to protect the public health, welfare and safety, and the public's interests in the aesthetic quality of the landscape.

### **Rural District Standards**

1. Areas consisting of small farms; provided that the areas need not be included in this district if their inclusion will alter the general characteristics of the areas;
2. Activities or uses as characterized by low-density residential lots of not less than one-half acre and a density of not more than one single-family dwelling per one-half acre in areas where “city-like” concentration of people, structures, streets, and urban level of services are absent, and where small farms are intermixed with the low density residential lots; and
3. It may also include parcels of land which are surrounded by, or contiguous to this district, and are not suited to low-density residential uses for small farm or agricultural uses.

### **B. HAWAII’I STATE PLAN**

Chapter 226, HRS, also known as the *Hawaii’i State Plan*, is a long-range comprehensive plan that serves as a guide for the future long-range development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. As stated in Section 226-1,

The purpose of this chapter is to set forth the Hawaii’i state plan that shall serve as a guide for the future long-range development of the State; identify the goals, objectives, policies, and priorities for the State; provide a basis for determining priorities and allocating limited resources, such as public funds, services, human resources, land, energy, water, and other resources; improve coordination of federal, state, and county plans, policies, programs, projects, and regulatory activities; and to establish a system for plan formulation and program coordination to provide for an integration of all major state, and county activities.

The Draft EIS will analyze the Master Plan’s consistency with State Plan Objectives and Policies.

### **C. MAUI COUNTY 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.

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 Maui Island Plan and nine Community Plans.

The MIP functions as a regional plan and addresses the policies and issues 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 WCT Master Plan, and request for land use entitlements, should be consistent with the goals, policies and actions found in the General Plan.

#### **County-wide Policy Plan**

The County-wide Policy Plan establishes a list of county-wide goals, objectives, policies, and implementing actions related to the following core themes:

- Protect the Natural Environment
- Preserve Local Cultures and Traditions
- Improve Education

- Strengthen Social and Healthcare Services
- Expand Housing Opportunities for Residents
- Strengthen the Local Economy
- Improve Parks and Public Facilities
- Diversify Transportation Options
- Improve Physical Infrastructure
- Promote Sustainable Land Use and Growth Management
- Strive for Good Governance

**Analysis.** The Draft EIS will provide a comprehensive discussion of the Project’s conformance to the County-wide Policy Plan’s themes and associated goals, policies and actions.

#### **Maui Island Plan (MIP)**

The MIP serves as the regional plan for the Island of Maui. The Plan is comprised of the following nine elements: 1) Population; 2) Heritage Resources; 3) Natural Hazards; 4) Economic Development; 5) Housing; 6) Infrastructure and Public Facilities; 7) Land Use; 8) Directed Growth Plan; 9) Monitoring and Evaluation; and 10) Implementation. Each element contains goals, objectives, policies and implementing actions. The Directed Growth Plan identifies the location of future development through 2030. The Directed Growth Plan is intended to guide the location and general character of future urban development and will direct future zoning changes and guide the development of the County’s short-term and long-term capital improvement plan budgets.

**Analysis.** The project site is within the MIP’s “Small Town” Growth Boundary. The MIP establishes policies to support the development of the Project at the subject location.

The Draft EIS will analyze the proposed development’s consistency with the MIP’s goals, objectives and strategies.

#### **D. WAILUKU-KAHULUI COMMUNITY PLAN**

Within Maui County, there are nine (9) community plan regions. From a General Plan implementation standpoint, each region is governed by a Community Plan, which sets forth desired land use patterns together with goals, objectives, policies, and implementing actions for a number of functional areas including infrastructure-related parameters.

The WCT is located within the Wailuku-Kahului Community Plan region. The majority of the project area is designated *Agriculture* in the Community Plan, with a portion designated *Wailuku-Kahului Project District 5 (Maui Tropical Plantation)*. Refer to Figure 10, “Community Plan Map”.

Community Plan Amendments will be sought to bring the entire project site into community plan designations that better align with the Master Plan vision.

The Draft EIS will analyze the WCT Master Plan’s consistency with the *Wailuku-Kahului Community Plan* Objectives and Policies.

#### **E. COUNTY ZONING**

Title 19 of the Maui County Code provides comprehensive zoning for the county. The purpose and intent of this comprehensive zoning is to regulate the utilization of land in a manner that encourages orderly development that protects the health, safety and welfare of the people of the County.

The Project will require a Change in County Zoning in order to implement the master plan vision. The proposed zoning designations will be described in the Draft EIS.

## **F. COASTAL ZONE MANAGEMENT**

Coastal Zone Management objectives and policies (section 205A-2 HRS) and the Special Management Area Rules for the Maui Planning Commission (Chapter 202) have been developed to preserve, protect and, where possible, to restore the natural resources of the coastal zone of Hawai'i. While the subject property is not located within the Special Management Area, the Draft EIS will analyze the project's consistency with Coastal Zone Management Objectives and Policies.

### **1. Recreational Resources**

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

*Policies:*

- (a) Improve coordination and funding of coastal recreational planning and management; and
- (b) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:
  - (i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
  - (ii) Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or require reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;
  - (iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
  - (iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;

- (v) Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having standards and conservation of natural resources;
- (vi) Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;
- (vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing;
- (viii) Encourage reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of Section 46-6, HRS.

## **2. Historical/Cultural Resources**

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

*Policies:*

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

### **3. Scenic and Open Space Resources**

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

*Policies:*

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

### **4. Coastal Ecosystems**

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

*Policies:*

- (a) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
- (b) Improve the technical basis for natural resource management;
- (c) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;
- (d) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
- (e) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and non-point source water pollution control measures.

## **5. Economic Use**

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

*Policies:*

- (a) Concentrate coastal dependent development in appropriate areas;
- (b) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area;
- (c) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such development and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:
  - (i) Use of presently designated locations is not feasible;
  - (ii) Adverse environmental impacts are minimized; and
  - (iii) The development is important to the State's economy.

## **6. Coastal Hazards**

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

*Policies:*

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

## **7. Managing Development**

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

*Policies:*

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

## **8. Public Participation**

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

*Policies:*

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

## **9. Beach Protection**

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

*Policies:*

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

#### **10. Marine Resources**

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

*Policies:*

- (a) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;
- (b) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;
- (c) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;
- (d) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and
- (e) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources. [L 1977, c 188, pt of §3; am L 1993, c 258, §1; am L 1994, c 3, §1; am L 1995, c 104, §5; am L 2001, c 169, §3]

## **IV. FINDINGS AND CONCLUSIONS**

According to the Department of Health Rules (11-200-12), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. In making the determination, the Rules establish “Significance Criteria” to be used as a basis for identifying whether significant environmental impact will occur. The criteria consists of the following items:

1. The proposed action will not result in an irrevocable commitment to loss or destruction of natural or cultural resources.
2. The proposed action will not curtail the range of beneficial uses of the environment.
3. The proposed action will not conflict with State or County long-term environmental policies and goals as expressed in Chapter 344, HRS, and those which are more specifically outlined in the Conservation District Rules.
4. The proposed action will not substantially affect the economic or social welfare and cultural activities of the community, county or state.
5. The proposed action will not substantially affect public health.
6. The proposed action will not result in substantial secondary impacts.
7. The proposed action will not involve substantial degradation of environmental quality.
8. The proposed project will not produce cumulative impacts and does not have considerable effect upon the environment or involve a commitment for larger actions.
9. The proposed project will not affect a rare, threatened, or endangered species, or its habitat.

10. The proposed action will not substantially or adversely affect air and water quality or ambient noise levels.
11. The proposed action will not substantially affect or be subject to damage by being located in an environmentally sensitive area, such as flood plain, shoreline, tsunami zone, erosion-prone areas, estuary, fresh waters, geologically hazardous land or coastal waters.
12. The proposed action will not substantially affect scenic vistas or view planes identified in county or state plans or studies.
13. The proposed action will not require substantial energy consumption.

The Draft EIS will analyze the Project in relation to these Significance Criteria. A final declaration will be made after the Accepting Authority has considered all agency and public comments on the Draft EIS.

## V. REFERENCES

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<sup>i</sup> Atlas of Hawai'i, 3<sup>rd</sup> Edition. Prepared by the University of Hawai'i at Hilo (Author), James O. Juvik (Editor), Sonya P. Juvik (Editor). November 1998.

<sup>ii</sup> A History of Waikapu. Prepared by Jill Engledow. Prepared for Mike Atherton. August 2009.

<sup>iii</sup> An Island Community: Ecological Succession in Hawai'i. N Lind, Andrew W. ew York, New York: Greenwood Press Publishers, 1938.

<sup>iv</sup> Maui Island Plan. Prepared by County of Maui, Department of Planning, Long-range Planning Division. December 2012.

<sup>v</sup> Maui Island Plan. Prepared by County of Maui, Department of Planning, Long-range Planning Division. December 2012.

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