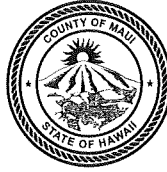


ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

July 17, 2013

MEMO TO: DANIEL ORODENKER
Executive Director
Land Use Commission
State of Hawaii
P. O. Box 2359
Honolulu, Hawaii 96804

FROM: Department of Planning, County of Maui
Clayton Yoshida, Planning Program Administrator *CSY*

SUBJECT: **DOCKET No. A10-787 / Maui R&T Partners, Inc.**

TRANSMITTED ARE THE FOLLOWING:

COPIES	DATE	DESCRIPTION
Original and 16 copies	07/16/13	Witness List – Amendment #1; Exhibit List – Amendment #1; Exhibits 7 – 10; Certificate of Service.

- ☐ For your information & files
☐ For approval & signature
☐ Per your request

- ☐ For your review and approval
☐ See REMARKS below
☒ For filing

REMARKS: **LAND USE COMMISSION - Please return a file-marked copy of the documents to us in the enclosed self-addressed envelope. Thank you.**

Attachments

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LAND USE COMMISSION
STATE OF HAWAII
2013 JUL 18 A 8:57

DEPARTMENT OF PLANNING
COUNTY OF MAUI
One Main Street
2200 Main Street, Suite 315
Wailuku, Hawaii 96793
Telephone: (808) 270-7735

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of:	)	Docket No. A10-787
)	
MAUI R&T PARTNERS, LLC	)	DEPARTMENT OF PLANNING'S LIST
	)	OF WITNESSES -AMENDMENT #1;
	)	LIST OF EXHIBITS – AMENDMENT #1;
To Amend the Land Use District Boundary	)	EXHIBITS 7, 8, 9, AND 10; CERTIFICATE
of certain lands situated at Kihei, Island of	)	OF SERVICE
Maui, State of Hawaii, consisting of 253.05)	
Acres from the Agricultural District to the)	
Urban District, Tax Map Key Nos.)	
(2) 2-2:024:016 and 017, and)	
(2) 2-2-002:084 (por.))	

DEPARTMENT OF PLANNING'S LIST OF WITNESSES – AMENDMENT #1,
LIST OF EXHIBITS – AMENDMENT #1,
EXHIBITS 7, 8, 9, AND 10, AND CERTIFICATE OF SERVICE

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2013 JUL 18 A 8:57
LAND USE COMMISSION
STATE OF HAWAII

LAND USE COMMISSION

PAGE NO. 1 OF 1

DOCKET NO./PETITIONER: A10-787 / MAUI R&T PARTNERS, LLC.

PARTY: COUNTY OF MAUI

LIST OF WITNESSES – AMENDMENT #1

NAME/ORGANIZATION/POSITION (List in Order of Appearance)	TO BE QUALIFIED AS A WITNESS IN:	SUBJECT MATTER	WRITTEN TESTIMONY (Yes or No)	EXHIBIT NUMBER(S)	LENGTH OF DIRECT
William Spence, Director, Department of Planning, County of Maui or his representative	Planning & Land Use	Planning, Land Use, Overall Project Analysis	Yes	1, 2, 3, 7	15 Minutes
Rowena Dagdag-Andaya, Deputy Director, Department of Public Works, County of Maui or her representative Nolly Yagin, Civil Engineer, Department of Public Works, Engineering Division, County of Maui	Public Works	Traffic	Yes	4, 8	15 Minutes
Dave Taylor, Director, Department of Water Supply, County of Maui or his representative	Water Supply	Water Supply	Yes	5, 9	15 Minutes
Kyle Ginoza, Director, Department of Environmental Management, County of Maui or his representative	Environmental Management	Wastewater	Yes	6, 10	15 Minutes

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DOCKET NO./PETITIONER: A10-787 / MAUI R&T PARTNERS, LLC.PARTY: COUNTY OF MAUILIST OF EXHIBITS – AMENDMENT #1

EXHIBIT NUMBER	DESCRIPTION	PARTY: OBJECTIONS	ADMIT
1	Applicable Sections of Maui Island Plan Relating to Maui Research and Technology Park		
2	Kihei-Makena Community Plan		
3	Resume for William Spence, Director, Department of Planning, County of Maui		
4	Resume for Rowena Dagdag-Andaya, Deputy Director, Department of Public Works, County of Maui		
5	Resume for Dave Taylor, Director, Department of Water Supply, County of Maui		
6	Resume for Kyle Ginoza, Director, Department of Environmental Management, County of Maui		
7	Written Testimony of William Spence, Director, Department of Planning, County of Maui		
8	Written Testimony of Nolly Yagin, Civil Engineer, Department of Public Works, Engineering Division, County of Maui		
9	Written Testimony of Dave Taylor, Director, Department of Water Supply, County of Maui		
10	Written Testimony of Kyle Ginoza, Director, Department of Environmental Management, County of Maui		

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DEPARTMENT OF PLANNING
COUNTY OF MAUI
One Main Plaza
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Wailuku, Hawaii 96793
Telephone: (808) 270-7735
Facsimile: (808) 270-7634

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of:	)	Docket No. A10-787
)	
MAUI R&T PARTNERS, LLC	)	TESTIMONY STATEMENT OF THE
	)	DEPARTMENT OF PLANNING, COUNTY
	)	OF MAUI; CERTIFICATE OF SERVICE
To Amend the Land Use District Boundary)	
of certain lands situated at Kihei, Island of)	
Maui, State of Hawaii, consisting of 253.05)	
Acres from the Agricultural District to the)	
Urban District, Tax Map Key Nos.)	
(2) 2-2-024:016 and 017, and)	
(2) 2-2-002:084 (por.))	

TESTIMONY STATEMENT OF THE DEPARTMENT OF PLANNING, COUNTY OF MAUI

The County of Maui Department of Planning (hereinafter referred to as "Department") recommends, subject to conditions, approval of the petition by Maui R&T Partners, LLC (hereinafter referred to as "Petitioner"), to reclassify approximately 253.05 acres from the State Agricultural Land Use District to the State Urban Land Use District at Tax Map Keys (2) 2-2:024:016 and 017, and (2) 2-2-002:084 (portions) (hereinafter referred to as "Property"), Kihei, Maui, Hawaii.

It should be noted that descriptions and analysis in this testimony statement reference details from the *Final Environmental Impact Statement Maui Research and Technology Park* ("EIS"), March, 2013, prepared for the Petitioner by Chris Hart & Partners, Inc. On April 19, 2013, the Final Environmental Impact Statement filed by Maui R&T Partners, LLC was accepted by the State Land Use Commission ("Commission").

DESCRIPTION OF THE PROJECT

The Petitioner requests the Commission reclassify approximately 253.05 acres in Kihei, Maui, from the State Agricultural Land Use District to the State Urban Land Use District. The goal is to transform the existing and operational Maui Research and Technology Park ("MRTP") located on 150.032 acres of land reclassified by the Commission in LUC Docket No. A84-585 into a multi-use project consisting of a total of 403.082 acres. The ultimate goal of the Petitioner is to create a sustainable and walkable Kihei community where people can live, work, and recreate. The Petitioner has also submitted a motion to amend the Amended Findings of Fact, Conclusions of Law

and Decision and Order dated February 25, 1986 in Docket No. A84-585 to allow for the change in uses that will include a village center and housing, as well as an expansion of the industrial and employment components. A separate motion has also been submitted to consolidate the hearings for Docket Nos. A84-585 and A10-787.

The Maui Research and Technology Park Master Plan update will use the principles of New Urbanism and Smart Growth to transform the current, single-use large lot research and technology campus into an integrated and vibrant mixed-use community focused around a regional knowledge edge-based industry employment base with residential properties on-site.

DESCRIPTION OF THE PROPERTY

1. The Petition Area is designated PD-6 (Project District 6), Public/Quasi-Public, and Agriculture in the Kihei-Makena Community Plan and is zoned Agricultural by the County of Maui ("County"). As such, the proposed mixed-use is not consistent with the current land use designation in the Community Plan and with County Zoning. Consequently, the Petitioner submitted to the County of Maui applications for a Community Plan Amendment ("CPA") and Change in Zoning ("CIZ") on June 15, 2012. In reviewing this project, the Department has consistently supported the Petition and anticipates continuing to do so. The Community Plan designation and County Zoning are requested to be changed to a new category entitled "Maui Research and Technology Park District". The passage of the Maui Island Plan on December 28, 2012, by the Maui County Council designated the Petition Area to be within the planned growth area, and the Property is within the Maui Island Urban Growth Boundary.
2. Land Use Designations --
 - a. State Land Use District -- Agricultural
 - b. Maui Island Plan -- Within the Maui Island Urban Growth Boundary
 - c. Kihei-Makena Community Plan -- PD-6 (Project District 6), Public/Quasi Public, and Agriculture
 - d. County Zoning -- Agricultural
3. Surrounding Uses --

North --	Agricultural and grazing land
East --	Keokea Gulch, agricultural and grazing land
South --	Agricultural and ranch lands; Kihei Wastewater Treatment Plant
West --	Elleair Golf Course; Single-family Residential; Piilani Village residential subdivision; Kihei Community Center; Piilani Shopping Village; South Maui Community Park

APPLICABLE REGULATIONS

Standards for reviewing a Land Use Commission Urban District Boundary Amendment are found under Title 15, Subtitle 3 State Land Use Commission, Chapter 15 Land Use Commission Rules, Subchapter 2, §15-15-18 of the Hawaii Administrative Rules as follows:

- (1) It shall include lands characterized by "city-like" concentrations of people, structures, 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 floods, 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 percent 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.

Pursuant to §15-15-77 Decision-making criteria for boundary amendments:

- (a) The commission shall not approve an amendment of a land use district boundary unless the commission finds upon the clear preponderance of the evidence that the proposed boundary amendment is reasonable, not violative of section 205-2, HRS, and consistent with the policies and criteria established pursuant to sections 205-16, 205-17, and 205A-2, HRS.
- (b) In its review of any petition for reclassification of district boundaries pursuant to this chapter, the commission shall specifically consider the following:
 - (1) The extent to which the proposed reclassification conforms to the applicable goals, objectives, and policies of the Hawaii state plan and relates to the applicable priority guidelines of the Hawaii state plan and the adopted functional plans;
 - (2) The extent to which the proposed reclassification conforms to the applicable district standards;
 - (3) The impact of the proposed reclassification on the following areas of state concern:
 - (A) Preservation or maintenance of important natural systems or habitats;
 - (B) Maintenance of valued cultural, historical, or natural resources;
 - (C) Maintenance of other natural resources relevant to Hawaii's economy including, but not limited to agricultural resources;
 - (D) Commitment of state funds and resources;

- (E) Provisions for employment opportunities and economic development; and
- (F) Provision for housing opportunities for all income groups, particularly the low, low-moderate, and gap groups;
- (4) In establishing the boundaries of the districts in each county, the commission shall give consideration to the general plan of the county in which the land is located;
- (5) The representations and commitments made by the petitioner in securing a boundary change, including a finding that the petitioner has the necessary economic ability to carry out the representations and commitments relating to the proposed use or development; and
- (6) Lands in intensive agricultural use for two years prior to date of filing of a petition or lands with a high capacity for intensive agricultural use shall not be taken out of the agricultural district unless the commission finds either that the action:
 - (A) Will not substantially impair actual or potential agricultural production in the vicinity of the subject property or in the county or State; or
 - (B) Is reasonably necessary for urban growth.

ANALYSIS OF THE DEPARTMENT OF PLANNING, COUNTY OF MAUI

NEED FOR THE PROPOSED USE

It has been a long standing goal of Maui County to develop a vibrant high technology park in the region. The current Maui Research and Technology Park went from concept to full entitlement for development by the late 1980s, and the first building opened in the early 1990s. The MRTP is privately owned; however, it has received significant support and investment by Federal, State, and County Governments, notably the High Performance Computing Center and the Maui Research and Technology Center. Since its inception approximately 180,000 sq. ft. of Class A office, laboratory, and data center space has been developed. An estimated \$100 – \$150 million a year in revenue flows through the MRTP's businesses and projects. The MRTP and its current buildings represent an estimated \$60 million investment. Approximately 400 people work at the MRTP in over 20 companies. However, even with such accomplishments, the breadth and depth of employment opportunities is less than what more modern and progressively planned mixed-use parks are capable of delivering. At their best, technology parks act not only as a magnet for established businesses, but also serve as an economic generator for new businesses and a focal point for the community.

The Maui Research and Technology Park, in its current form, is too inflexible to fully respond to an increasingly diverse high technology industry characterized by a widely diverse range and size of business enterprises. The MRTP's current 2-acre minimum size makes it cost prohibitive for small businesses to enter the MRTP and it represents outdated planning ideas. And, at the other end of the spectrum, fully entitled lots of sufficient size are not readily available for large campus type users. If such a user was to desire a lot in the MRTP, complex entitlement processing would be required before the campus could be developed. In short, ramping up businesses both large and small is an overly complex process.

Further complicating MRTP development is the current condition in the MRTP's zoning ordinance which prohibits mixed-use development. This restriction has made the

M RTP isolated from the types of goods, services, and amenities that a high technology workforce desires and that can engender a vibrant mixed-use community. Since the creation of the M RTP, the understanding of innovation clusters and the needs of knowledge workers and businesses has radically changed. Technology businesses thrive in areas of diversity and activity, which is quite the opposite from the current condition of the M RTP.

The Master Plan Update will use the principles of New Urbanism and Smart Growth to transform the current large-lot research and technology campus into an integrated and vibrant mixed-use community for the benefit of the whole Maui community. The Master Plan Update includes fundamental design elements that will have a positive effect on the surrounding economic base, on individual health and well-being, and on the long-term economic viability and adaptability of the M RTP. The Master Plan Update encompasses 411 acres and includes the following components: employment core; knowledge industry expansion; mixed-use village center; residential areas; and an open space network and parks. The employment core includes the M RTP's existing buildings and currently vacant lots. Major new knowledge-based employment zones (knowledge industry expansion) are located mauka and to the south of the employment core. Sufficient land is available within the knowledge industry expansion zones to accommodate up to 2 million sq. ft. of building area on various lot sizes. A 64 acre mixed-use village center will include housing, office, civic, live-work, park and neighborhood retail uses within a compact setting. A mix of single-family and multi-family residential dwellings totaling 1,250 units are anticipated covering a wide range of prices. The Master Plan will be implemented in two phases through 2034.

Phase 1 includes approximately 750 residential units and 700,000 square feet of commercial and industrial floor area. Phase 2 to begin in 2025 will include approximately 500 residential units and 1,300,000 square feet of commercial and industrial floor area. Major infrastructure improvements will accompany this phased development.

LAND USE

1. Hawaii State Plan. The proposed project is in conformance with the goals, objectives and policies of the Hawaii State Plan. Following are headings of sections of Hawaii Revised Statutes (HRS) that state goals, objectives, and policies with which the Petition and/or its associated development are in conformance. The EIS provides specific detailed analysis of this project conformance may be found on pages 311 to 366.

§226-4 State Goals

§226-5 Objective and policies for population

§226-6 Objectives and policies for the economy - in general

§226-7 Objectives and policies for the economy - agriculture

§226-8 Objectives and policies for the economy - visitor industry

§226-9 Objectives and policies for the economy - federal expenditures

§226-10 Objectives and policies for the economy - potential growth activities

§226-10.5 Objectives and policies for the economy - information industry

§226-11 Objectives and policies for the physical environment - land based, shoreline, and marine resources

§226-12 Objective and policies for the physical environment - scenic, natural beauty, and historic resources

§226-13 Objectives and policies for the physical environment - land, air, and water quality

§226-14 Objectives and policies for facility systems - in general

§226-15 Objectives and policies for facility systems - solid and liquid waste

§226-16 Objectives and policies for facility systems - water

§226-17 Objectives and policies for facility systems - transportation

§226-18 Objectives and policies for facility systems - energy

§226-18.5 Objectives and policies for facility systems - telecommunications

§226-19 Objectives and policies for social-cultural advancement - housing

§226-20 Objectives and policies for socio-cultural advancement - health

§226-21 Objectives and policies for socio-cultural advancement - education

§226-22 Objectives and policies for socio-cultural advancement - social services

§226-23 Objectives and policies for socio-cultural advancement - leisure

§226-24 Objectives and policies for socio-cultural advancement - individual rights and personal well-being

§226-26 Objectives and policies for socio-cultural advancement - public safety

§226-27 Objectives and policies for socio-cultural advancement - government

Furthermore, following are headings of sections of HRS that list categories of priority guidelines of the Hawaii State Plan for which the Petition and/or its associated development supports one of more of the priority guidelines listed in that section.

§226-103 Economic priority guidelines

§226-104 Population growth and land resources priority guidelines

§226-105 Crime and criminal justice

§226-106 Affordable housing

§226-107 Quality education

- 2, Hawaii Land Use State District. The subject property is in the State Agricultural District. The Petitioner has requested the Commission to amend the District Boundary to include the property within the State Urban District. The proposed use is consistent with the requested Urban District designation of the property.

3. Maui Countywide Policy Plan. As stated in the Maui County Charter, as amended in 2002:

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

The County of Maui 2030 General Plan Countywide Policy Plan, adopted by the Maui County Council on March 19, 2010, is the first component of the decennial General Plan update. The Countywide Policy Plan replaces the General Plan as adopted in 1990 and amended in 2002. The Countywide Policy Plan acts as an over-arching values statement and umbrella policy document for the Maui Island Plan and the nine Community Plans that provides broad goals, objectives, policies, and implementing actions that portray the desired direction of the County's future. The plan includes:

1. A vision statement and core values for the County to the year 2030
2. An explanation of the plan-making process
3. A description and background information regarding Maui County today
4. Identification of guiding principles
5. A list of countywide goals, objectives, policies, and implementing actions related to the following core themes:
 - A. Protect the Natural Environment
 - B. Preserve Local Cultures and Traditions
 - C. Improve Education
 - D. Strengthen Social and Healthcare Services
 - E. Expand Housing Opportunities for Residents
 - F. Strengthen the Local Economy
 - G. Improve Parks and Public Facilities

- H. Diversify Transportation Options
- I. Improve Physical Infrastructure
- J. Promote Sustainable Land Use and Growth Management
- K. Strive for Good Governance

The proposed project is in keeping with the Countywide Policy Plan goals, objectives and policies. Details and analysis of the proposed MRTP Master Plan Update and its applicability to the Maui Countywide Policy Plan may be found in the EIS on pages 367 to 414.

4. Maui Island Plan. The Maui Island Plan ("MIP") was adopted by the County Council as Ordinance No. 4004 on December 21, 2012, and became effective with the Mayor's signature on December 28, 2012. The Introduction to the Maui Island Plan starts with "The Purpose of the Maui Island Plan", stating that:

The Maui Island Plan accomplishes the following:

- Assesses existing conditions, trends, and issues specific to the island of Maui;
- Provides policy direction for the use and development of land, extension and improvement of transportation services and infrastructure, development of community facilities, expansion of the island's economic base, provision of housing, and protection of natural and cultural resources;
- Establishes policies to manage change and to direct decisions about future land use and development; and
- Provides the foundation to set capital improvement priorities, revise zoning ordinances, and develop other implementation tools.

The MIP is guided by the following Vision Statement and Core Values:

Maui Island Vision

*Ua mau ke ea o ka `āina i ka pono
Maui Island will be environmentally, economically, and culturally
sustainable with clean, safe, and livable communities and small
towns that will protect and perpetuate a pono lifestyle for the
future.*

Core Values

To achieve our island's vision, we will be guided by the following values:

- A. Adopt responsible stewardship principles by applying sound natural resource management practices;
- B. Respect and protect our heritage, traditions, and multi-cultural resources;
- C. Plan and build communities that include a diversity of housing;
- D. Retain and enhance the unique identity and sense of place;
- E. Preserve rural and agricultural lands and encourage sustainable agriculture;
- F. Secure necessary infrastructure concurrently with future development;

- G. Support efforts that contribute to a sustainable and diverse economy for Maui;
- H. Create a political climate that seeks and responds to citizen input;
- I. Respect and acknowledge the dignity of those who live on Maui;
- J. Establish a sustainable transportation system that includes multiple modes, including walking, biking, and mass transit, as well as automobile-based modes; and
- K. Recognize and be sensitive to land ownership issues and work towards resolution.

The proposed project is in keeping with the MIP goals, objectives and policies and importantly is located within the Urban Growth Boundary in the Kihei-Makena region. Details and analysis of the proposed MRTP Master Plan Update and its applicability to the Maui Island Plan may be found in the EIS on pages 414 to 429.

It should be noted that the Property lies with the Urban Growth Boundary, as well as within the overall boundaries of the "Kihei-Makena Planned Growth Areas". The MIP describes that growth area as follows:

"The MRTP was the vision of a core group of community leaders in the early 1980s who sought to diversify the economic and employment base on Maui beyond tourism and agriculture. Today, the MRTP is home to a diverse range of companies and government projects that together employ approximately 400 persons in high-technology and related industries. The MRTP is envisioned to continue to be a major employment generator for Maui. The Park's mission of job creation and diversification of the island's economy remains one of vital importance."

Furthermore, the MIP goes on to developing the Planned Growth Area Rationale for this area as follows:

"Since the opening of the MRTP, experts in the field of economic development have gained a better understanding of innovation clusters and the needs of knowledge workers and businesses. Technology businesses thrive in areas of diversity and activity. A diversity of businesses and workers, and the availability of a variety of commercial and industrial spaces, enhance the viability and success of individual businesses. The intent of the MRTP planned growth area is to create opportunities for a broader range of desirable knowledge-based and emerging industries, which will provide high-skilled and well-paying jobs for Maui residents.

As the MRTP develops, it should utilize the principles of new urbanism, smart growth, and the Association of University Research Park's "Power of Place" study to create a community of innovation. This includes providing diverse housing options within close proximity of the MRTP's employment, and integrating neighborhood-serving retail, civic, and commercial uses in a manner that encourages bicycling, walking, and public transport. The growth area may also include exhibit halls and meeting space to support the development of the research and technology sector, and to serve the broader needs of South and Central Maui. Build-out of the MRTP should be coordinated with the development of the neighboring Kihei Mauka planned growth area to ensure efficient intra- and inter-regional transportation

connectivity for both motorized and non-motorized transportation. The MRTP should also develop pedestrian and bicycle linkages between the future Kihei High School and the core commercial and civic uses within Central Kihei."

5. Kihei-Makena Community Plan. According to the Kihei-Makena Community Plan the Property is currently identified as combination of PD-6 (Project District 6), Public/Quasi Public, and Agriculture land uses. The majority of the existing MRTP is designated Project District 6 (R&T Park) in the Community Plan adopted by Ordinance No. 2641 on March 6, 1998. A Community Plan Amendment will be sought from the County of Maui to bring the entire expanded Park site into the new "Maui Research and Technology Park District" designation.

Categories under which this project has been reviewed in regard to the Community Plan include: Land Use, Environment, Cultural Resources, Economic Activity, Housing and Urban Design, Physical and Social Infrastructure, Transportation, Water Distribution, Liquid and Solid Waste, Drainage, Energy and Public Utilities, Recreation, Health and Public Safety, Education, Government, and Indigenous Architecture. In addition Land Use Standards and Project District Standards have been reviewed. Details and analysis of the proposed MRTP Master Plan Update and its applicability to the Kihei-Makena Community Plan may be found in the EIS on pages 429 to 462.

6. County of Maui Zoning. The Master Plan Update will require a Change in Zoning from Agricultural to the new district called "Maui Research and Technology Park District." In addition, changes will also be sought to the language of Maui County Code MCC Title 19.33, to allow for a more diversified development that comports with the Master Plan Update. The following criteria have been met in regards to the proposed Change in Zoning and details and analysis of the proposed MRTP Master Plan Update and its applicability to County Zoning may be found in the EIS on pages 462 to 465. In addition, the proposed Change in Zoning meets the following guidelines:

- The proposed request meets the intent of the General Plan and the objectives and policies of the newly adopted Maui Island Plan.
- The proposed request meets the intent and purposed of the district being requested.
- The application, if granted, would not adversely affect or interfere with public or private schools, parks, playgrounds, water systems, sewage, and solid waste disposal, drainage, roadway and transportation systems, or other public requirements, conveniences, and improvements.
- The application, if granted, would not adversely impact the social, cultural, economic, environmental and ecological character and quality of the surrounding area.

AGRICULTURE

1. The State Department of Agriculture reviewed the Petition and the EIS. In a letter to the Office of Planning dated June 12, 2013, the Department of Agriculture "has reviewed the subject petition and the Final Environmental Impact Statement and does not object to the Petitioner's request, as we believe the project will not adversely affect the existing agricultural activities or agricultural resources of the area. HDOA offers the following comments on the petition and FEIS for the subject lands:
 - 100% of the subject lands are rated "E" by the Land Study Bureau's Detailed Land Classification for the Island of Maui. 100% of the land is not in the Agricultural Lands of Importance in the State of Hawaii.
 - While Petitioner prefers to use water from the County of Maui public water system, in the alternate, Petitioner plans to source its drinking water from on or off site wells drawing brackish groundwater from the Kamaole Aquifer. The pumpage from the wells will be within the State Commission on Water Resources Management's definition of the sustainable supply for the aquifer.
 - The Maui Research and Technology Park (MRTP) expansion areas are still used by Haleakala Ranch. Development of the project will remove around 102 acres of grazing land from the ranch, or approximately 0.44% of the ranches 23,000 acres of grazing land on Maui. The expansion area is unsuitable for other commercial field crops.
 - Petitioner is planning to notify future MRTP residents that farming activities will occur on abutting agricultural lands. In addition, Petitioner will establish landscape planting around the perimeter of the property with a buffer to mitigate potential agricultural use conflicts."
2. Section 19.30A.020 of the Maui County Zoning Ordinance states that "Agricultural lands that meet at least two of the following criteria should be given the highest priority for retention in the agricultural district:
 - A. Agricultural Lands of Importance to the State of Hawai'i (ALISH);
 - B. Lands not classified by the ALISH system whose agricultural land suitability, based on soil, topographic, and climatic conditions, supports the production of agricultural commodities, including but not limited to coffee, taro, watercress, ginger, orchard and flower crops and nonirrigated pineapple. In addition, these lands shall include lands used for intensive animal husbandry, and lands in agricultural cultivation in five of the ten years immediately preceding the date of approval of this chapter; and
 - C. Lands which have seventy-five percent or more of their boundaries contiguous to lands within the agricultural district."

100% of the site is unclassified under the ALISH designations (Criterion A), and criterion B is not met. Therefore, the Maui County Zoning Ordinance would not consider that the property "should be given the highest priority for retention in the agricultural district."

ARCHAEOLOGICAL, HISTORIC AND CULTURAL RESOURCES

The Cultural Impact Assessment ("CIA") concluded that development of the site will not impact cultural resources within the Property. The CIA reported that there were no visible cultural resources, i.e. medicinal plants, shoreline resources, religious sites, or archeological resources observed on the property. Based on archaeological and historical research, the area was not subject to permanent or expansive population due to lack of natural resources. The FEIS recommends that a qualified cultural specialist should provide a cultural orientation for construction personnel, and provide advice for cultural concerns during the long-term development of the MRTP.

The Archeological Inventory Survey ("AIS") was prepared by Scientific Consultant Services ("SCS") and completed in September 2008. The Survey found five (5) historic sites featuring historic modified outcroppings, a traditional or historical boundary wall, a military training feature, and three mounds which are traditional location markers. The features were given a significance assessment of Criterion D – a site that has yielded, or has the potential to yield, information important to prehistory. An archaeological site can be considered no longer significant if Criterion D is the only applicable criterion and sufficient information has been collected from the site during the assessment. All sites identified by the AIS were assessed as significant under ONLY Criterion D and therefore no further archaeological work is recommended.

The AIS did not recommend archaeological monitoring. However, the State Historic Preservation Division ("SHPD") indicates that Site #50-50-10-6241, which is identified as a traditional or historic boundary wall located in the Waipuilani Gulch should be bordered by a protection orange construction fence prior to ground altering activities within TMK (2) 2-2-024:017. On October 27, 2008, the SHPD determined the AIS was acceptable.

INFRASTRUCTURE AND PUBLIC FACILITIES AND SERVICES

1. **Water** - The Maui Research and Technology Park is located within Maui County Department of Water Supply's Central Maui Water System service area. Drinking water for the 18 existing lots within the MRTP currently comes from existing wells located in upper Waiehu and North Waihee which draw groundwater from the Iao and Waihee Aquifers. Drinking water from these wells is pumped into an existing 1.0 million gallon (MG) capacity concrete water storage tank located in upper Waiehu, then conveyed across the isthmus by the Central Maui Water System's 36-inch diameter transmission main to consumers in South Maui. Water for the existing lots in MRTP is then taken from the 36-inch Central Maui transmission line into a 16-inch diameter waterline which runs from Liloa Drive near the Lipoa Street intersection, along Lipoa Street and Lipoa Parkway to the project site to supply the existing MRTP drinking water distribution system.

According to the EIS, MRTP has an agreement with the County of Maui, Department of Water Supply ("DWS") to construct a 0.5 MG water storage tank at an approximate elevation of 330 feet by the year 2014 to serve the future needs of the MRTP. Under the terms of this agreement, the existing 18 lots in the MRTP may rely on a connection to the County water system for their drinking water and fire protection water needs without having to construct a 0.5 MG water storage tank. Development beyond the first 18 lots before the year 2014 would require the completion of the 0.5 MG water storage tank.

The existing MRTP distribution system consists of 12-inch waterlines located within the existing roadways fed from the 16-inch transmission line on Lipoa Parkway through a

pressure reducing valve. Due to the high water pressure in the 16-inch transmission line, a pressure reducing valve was installed at the MRTP water distribution system connection to reduce the water pressure to approximately the same pressure that would be obtained after the 0.5 MG water storage tank is constructed in the future.

The Kihei Wastewater Reclamation Facility (KWWRF) produces R-1 quality effluent which is the highest quality reclaimed non-drinking water under the Department of Health Standards.

The County of Maui has established a limited reclaimed water distribution infrastructure to facilitate public reuse of the R-1 quality effluent generated by the KWWRF. This system consists of an existing 1.0 million gallon (MG) concrete tank located east of the KWWRF at elevation 300 feet above mean sea level. A distribution system consisting of 16-inch and smaller reclaimed water distribution lines deliver R-1 quality effluent from the 1.0 MG concrete water storage tank to users located primarily north of the KWWRF. The R-1 quality effluent is primarily used for irrigation purposes. The existing irrigation systems for the landscaped common areas and developed parcels in the MRTP now utilize R-1 quality effluent from the KWWRF by drawing it from the existing County 10-inch R-1 waterline which runs along the easterly (mauka) boundary of the MRTP.

Potential Impacts and Mitigation Measures. Drinking and non-drinking water demand projections were based on land area and unit estimates using consumption rates adopted from the Maui County Department of Water Supply's Water System Standards. A 60% potable/40% non-potable demand ratio -- the ratio recommended by the Honolulu Board of Water Supply for dual systems -- was also selectively applied in certain instances to break total demand down into drinking and non-drinking water demand components. The projected water demand for MRTP is summarized as follows:

Summary of the Average Drinking water and Irrigation Requirements for the Portion of the MRTP Expansion Not Supplied by DWS			
Phase	Developed Area	Average Daily Demand (GPD)	
		Drinking Water	Non-drinking Irrigation
1	Employment Core	18,877	19,609
	Village Center	225,743	114,854
	Makai Residential	211,260	25,660
	Drainage Basins	--	9,632
	Total for Phase 1	455,880	169,755
2	Knowledge Exp / Campus	40,084	59,460
	Residential and Knowledge Industry Exp.	302,101	144,114
	Total for Phase 2	342,185	203,574
Total for Both Phases		798,065	373,329

Infrastructure. Drinking Water Supply. The County of Maui Dept. of Water Supply-operated public water system remains the Petitioner's preferred source of water for the expansion of the Maui Research and Technology Park. As the Maui County Dept. of Water Supply has indicated that they cannot commit to providing drinking water beyond the existing 18 lots within the MRTP, MRTP has proposed an alternate, privately owned and maintained drinking water source and distribution system to support further expansion. In response to comments from the County of Maui DWS, the Petitioner will cooperate with the Commission on Water Resource Management ("CWRM") to determine available water use in the underlying Kamaole Aquifer. The Petitioner will continue to coordinate with the Department of Water Supply and is willing to discuss alternatives to private water system development.

The Makawao-Pukalani-Kula ("MPK") Community Plan prohibits the use of wells developed in the MPK Community Plan area from being used as a water source for another plan area and thereby constrains the location of a new well source. The MPK Community Plan boundary in the vicinity of the MRTP is the 600-foot elevation contour, which means that wells developed to serve the MRTP must be located below this elevation contour.

"Assessment of the Impacts on Groundwater Resources" identifies two (2) alternate sources of water for the project and outlines the improvements required to provide the privately owned and maintained potable drinking water system for the MRTP. These alternate systems would all be privately operated and separate from the existing DWS water system currently serving the 18 existing parcels in the MRTP. The two source alternatives are summarized as follows:

Source Alternative 1 - Offsite Brackish Wells at 580-foot Elevation

This alternative consists of five (5) offsite brackish wells spaced 1,250 feet apart with a capacity of 360 gallons per minute (GPM) per well located at the 580-foot elevation on land currently owned by Haleakala Ranch Company. Three wells would be developed to accommodate the needs of the MRTP Phase 1, and the remaining two wells would be required for Phase 2. Offsite improvements associated with this alternative will include a 0.25 million gallon (MG) brackish water head tank located at the 590-foot elevation, a 12-inch transmission waterline to a Reverse Osmosis (RO) treatment plant using a high pressure filtration process to produce drinking water, two disposal wells to discharge the concentrate (wastewater) generated by the RO process, potable water storage tanks at the 375 foot elevation, and a 16-inch distribution waterline connecting the storage tanks to the MRTP's potable water distribution system. The RO treatment plant will consist of three 250 GPM treatment trains for Phase 1 and two additional 250 GPM treatment trains to accommodate Phase 2.

Brackish water desalinization according to the Petitioner was the least desirable alternative considered. In the desalinization scenario, the proposed spacing between wells and pump capacities for these wells have been selected so as not to create a local overdraft or adversely impact existing wells and or future uses of groundwater from wells to the north or south. Therefore, in this scenario, present and future public and private users will not be adversely impacted according to the EIS.

However, in the mauka-to-makai corridor of groundwater flow from which the MRTP wells will draw, other future uses of this portion of the aquifer's sustainable supply could adversely impact the MRTP wells. It is anticipated that lands mauka of the MRTP may not be able to use the groundwater, and alternate sources may be necessary. It is an unavoidable impact

of the desalinization alternative. The makai users in the residential areas below Piilani Highway will continue to use Maui County drinking water and will not be impacted according to the EIS.

In response to comments from the Maui County Department of Water Supply the proposed *Alternative 1 Offsite Brackish Wells* will not affect the water quality of the existing Maui Highlands wells according to the EIS. The proposed MRTP well locations have been specifically selected as not to create a local overdraft or adversely impact existing wells or future uses of groundwater from wells to the north or south.

The disposal wells for all of the desalting alternatives would be designed to deliver the RO concentrate into the depth at which the density of the receiving groundwater is similar to that of the RO concentrate (a function of temperature and salinity). This will be done so that there will be no tendency for the injected concentrate to rise into the basal lens and adversely impact its water quality, therefore there is no anticipated impact to the seed corn growing field located to the southeast of the MRTP. For the brackish desalting alternatives, the disposal depths would be somewhere in the basal lens' transition zone. For the saline groundwater desalting alternative, disposal will be at greater depth in the saltwater zone. The concentrate will be hypersaline, meaning that it will be of greater density than the receiving groundwater with no tendency to rise up into the basal lens according to the EIS analysis.

Source Alternative 2 - Brackish Wells Within the MRTP

This alternative consists of five (5) onsite brackish wells located along the easterly portion of the MRTP, spaced 1,500 feet apart with a capacity of 400 GPM per well. Three wells would be developed to accommodate the needs of the MRTP Phase 1, and the remaining two wells would be required for Phase 2. A 0.25 MG brackish water head tank and RO treatment plant with two disposal wells to discharge the concentrate from the RO treatment plant would be located within the MRTP. The RO product water would be pumped from the RO treatment facility into drinking water storage tanks also located within the MRTP at the 212-foot elevation. Three wells would initially be developed to accommodate Phase 1 of the MRTP and two more wells developed later with Phase 2. The RO treatment plant would consist of three treatment trains for Phase 1 and two additional treatment trains for Phase 2 the Petitioner will continue to coordinate with the Department of Water Supply and is willing to discuss alternatives to private water system development.

Storage and Distribution

A total drinking water storage capacity of 1.5 MG will ultimately be needed to supply the combined fire protection and domestic use needs of Phases 1 and 2. This will be provided incrementally by constructing a 1.0 MG tank with Phase 1, followed by a 0.5 MG tank with Phase 2.

Source Alternative 1 will utilize concrete tanks constructed above the MRTP at the 375-foot elevation on land currently owned by Haleakala Ranch Company. Source Alternative 2 will utilize concrete storage tanks constructed within MRTP at the 212-foot elevation and employ pumps to provide water pressure comparable to having storage tanks at the 375-foot elevation. A 16-inch distribution main will connect the potable storage tanks to the MRTP, where a new network of 8- and 12-inch distribution mains will be deployed to supply the individual lots within the development.

Water Service Agreement with County of Maui

The MRTP currently has an obligation with DWS to construct a 0.5 MG water storage tank at the 330-foot elevation by the year 2014 to service the existing 18 parcels in the project. However, since alternative sources of water will be utilized for the project, the Owner will address the possible amendment of this obligation with DWS.

Non- Drinking Water Supply

Primary Source

MRTP will continue to utilize R-1 quality effluent from the Kihei Wastewater Reclamation Facility ("KWWRF") as its primary source of non-drinking water to supply its landscape irrigation demand. Expanded usage of R-1 reclaimed water from the KWWRF offers the dual benefit of conserving potable water and reducing the amount of reclaimed water that the County of Maui must dispose of using injection wells.

The County of Maui Wastewater Reclamation Division which oversees the R-1 reclaimed water system has indicated that there may be periods where the R-1 supply may not be sufficient to accommodate the landscape irrigation needs for the entire MRTP because of constant fluctuations in the quantity of wastewater treated at the KWWRF and limited R-1 water storage capacity in the County's reclaimed water system. This may be particularly evident during the drier part of the year when the demand for R-1 quality effluent is the greatest.

Therefore, to ensure that there will be a reliable supply of non-potable drinking water available to satisfy MRTP landscape irrigation demand, additional non-potable drinking water sources and associated storage and distribution infrastructure will need to be constructed to supplement the County of Maui's reclaimed water system.

Supplemental Sources

The "Evaluation of Source of Supply Alternatives for the Planned Expansion of the Maui Research and Technology Park" identified alternative sources of non-drinking water from the development of new wells for the MRTP.

Provisions to provide supplemental non- drinking water have been incorporated into each of the alternate water sources as follows:

Supplemental Source Alternative 1 - Brackish Wells at 580-Foot Elevation

Under this alternative, the 5 brackish wells at the 580-foot elevation will pump the non-drinking water into a 0.25 MG brackish water head tank located at the 590-foot elevation. A 6-inch waterline from the 0.25 MG brackish water head tank will supply the non-drinking brackish water to the non-drinking water storage tank at elevation 350 feet that feeds the MRTP non-drinking water system in the event that there is insufficient R-1 water from the County of Maui Reclaimed Water System available to supply MRTP's irrigation demand. This alternative will require a booster pump station to lift the R-1 quality effluent from the KWWRF – whose non-drinking water storage tank is located at elevation 300 feet – to the new MRTP offsite non-drinking water storage tank at elevation 350 feet.

Supplemental Source Alternative 2 - Brackish Wells Within MRTP

Under this alternative, the five (5) brackish wells located within the MRTP will pump the non-drinking water into a 0.25 MG brackish water head tank located within the MRTP site. Brackish water from the 0.25 MG head tank will be used to fill the 0.4 MG non-potable drinking water storage tank located at elevation 202 feet when needed.

Storage and Distribution

A total non-potable water storage capacity 0.4 MG of will be needed to supply the combined irrigation needs of Phases 1 and 2. Source Alternative 1 will utilize a single 0.4 MG capacity concrete or steel storage tank constructed above the MRTP at the 350-foot elevation on land currently owned by Haleakala Ranch Company. Source Alternative 2 will utilize a single 0.4 MG capacity concrete or steel storage tank constructed within MRTP at approximately the 202-foot elevation and utilize pumps to provide water pressure comparable to having storage tank at the 350-foot elevation.

A 14-inch distribution main will connect the 0.4 MG storage tank to MRTP, where a new network of 12-, 8- and 6-inch distribution mains will be constructed to supply the individual lots within the development.

2. **Wastewater** - The existing lots in the Maui Research and Technology Park are served by a privately owned and maintained wastewater system which collects and conveys their wastewater to the Kihei Wastewater Reclamation Facility ("KWWRF") for processing. Existing gravity sewer mains located under existing roads and within designated sewer easements collect wastewater from the existing lots and convey it to an existing sewer pump station located near the western boundary of the MRTP project area. This pump station, in turn, lifts the collected wastewater through a 6-inch force main to a transition manhole located near the southern end of the MRTP project area. The wastewater is then conveyed by a 10-inch gravity sewerline to a second pump station located near the northeast corner of the KWWRF, which then lifts the wastewater through a 6-inch sewer force main directly into the headworks of the KWWRF.

The existing sewer pump stations have a capacity of approximately 880 gallons per minute (gpm), or 1.26 million gallons per day (mgd); the 6-inch force mains can accommodate approximately 880 gpm, or 1.26 mgd, of wastewater flow based on a maximum flow velocity of 10 feet per second in the force main.

The Kihei Wastewater Reclamation Facility, located just south of the MRTP project area, has a treatment capacity of approximately 8 mgd and currently has unused treatment capacity. The facility is also capable of producing R-1 quality effluent; however, the County of Maui's reclaimed water system is only able to utilize about 40 to 50 percent of the R-1 effluent generated by the KWWRF -- most of which is used for irrigation by the limited number of properties now within reach of existing reclaimed water distribution pipelines. The unused R-1 effluent which remains is disposed of through existing injection wells located on the KWWRF site.

Potential Impacts and Mitigation Measures. Wastewater flow projections for the MRTP were developed using land use, land area and unit count data multiplied by corresponding

demand rates adopted from the Maui County Wastewater Reclamation Division.

Proposed Improvements. Wastewater improvements needed for the expansion of MRTP will consist of new gravity sewer mains located primarily within planned roadways to collect wastewater from the developed lots and convey it a new or existing sewer pump station that will then convey the wastewater by force main to the Kihei Wastewater Reclamation Facility for treatment. The expanded wastewater system will be connected to the existing MRTP system and continue to be privately owned and maintained.

Wastewater generated by the northern portion of Phase 1 and the northeastern portion of Phase 2 (residential and knowledge industry expansion area) will be collected by gravity sewer mains and conveyed to a new wastewater pump station that will be located at the low point of the collection system near the western tip of the MRTP. The new pump station will then lift the wastewater through a new force main to a new sewer transition manhole located at the high point on Hookena Street near the currently developed portion of the MRTP. The wastewater will then continue on through the existing MRTP wastewater system by gravity flow and force main to the KWWRF for treatment.

Wastewater generated from the southern portion of Phase 2 (knowledge industry/ campus area) will be conveyed by gravity sewerline to either the existing sewer pump station at the western boundary of MRTP or the existing pump station near the southern end of the MRTP close to the KWWRF. The wastewater will then be conveyed by force main from either pump station to the KWWRF for treatment.

Incremental improvements to increase the capacity of the existing MRTP wastewater pumping system will be required to accommodate the larger design peak wastewater flows generated by development Phases 1 and 2 as they are built out. Capacity improvements and modifications to the existing force main connection at the headworks of the KWWRF may also be required by the County of Maui to accommodate the increased wastewater flow into the facility.

The MRTP has an agreement allowing a wastewater connection and discharge of up to 25,000 gallons per day (gpd) into the existing private wastewater gravity and pump station/force main system in the adjoining Signature Homes Development located west of the MRTP. This wastewater flow is ultimately conveyed to the existing MRTP wastewater pump station located near the western boundary of the MRTP project area. It is not anticipated that the MRTP will exercise this option; however, this option remains available should circumstances change.

Treatment Capacity. The County of Maui currently treats an actual average daily wastewater flow of approximately 3.4 mgd at the Kihei Wastewater Reclamation Facility. Wastewater Reclamation Division records indicate that cumulative allocated wastewater flows at the KWWRF total approximately 6.8 mgd as of November 20, 2012. The KWWRF has a treatment capacity of 8 mgd; therefore, the amount of treatment capacity which remains available is 4.6 mgd based on actual average daily flows, or 1.2 mgd based on allocated wastewater flows. Since the design average wastewater flow from the MRTP is expected to be approximately 0.6 mgd, there is currently sufficient treatment capacity available to accommodate the project.

The County of Maui, under the provisions of Hawaii Administrative Rules, Title 11, Chapter 62 - Wastewater Systems, Section 23.1, is required to initiate a facility plan when the actual

wastewater flow reaches 75 percent of the plant design capacity and implement the facility plan when the actual wastewater flow reaches 90 percent of the plant design capacity. Consequently, treatment capacity at the KWWRF should remain sufficient to accommodate development of the MRTP over time

3. **Drainage** - The Property is located between two major drainage ways: Waipuilani Gulch to north and Keokea Gulch to the south. The area east, or mauka, of the Property consists of higher elevated undeveloped lands which create an east-to-west directional runoff, situating the Property in the drainage path. Flows draining westerly enter the Property, flow through the site, then the Elleair Golf Course to culverts under the Piilani Highway, and then to makai locations. Flows generated within the Property enter into minor drainage areas before joining with off-site generated flows.

Project development is expected to increase the peak flow of runoff. However, the increase in drainage caused by the project development will be retained on-site in accordance with County of Maui's Drainage Rules. An on-site drainage plan has been prepared to mitigate surface runoff caused by storm events. Facility design for peak post-development runoffs are based on a 50-year, 1-hour storm. The collective result of all land uses in the Property employing peak runoff mitigation will be a no increase in peak runoff downstream of the Property. The Preliminary Engineering and Drainage Report outlining this runoff mitigation may be found in the EIS.

Elements of the drainage system may include: drainage detention basins distributed among internal drainage areas for roads and residential areas; commercial and institutional lots that will be required to mitigate their own increase in runoff by constructing subsurface storage chambers, or above ground drainage ponds within each lot; drainage reserve areas that include modification of existing natural drainage ways with bank stabilization and erosion control measures; use of vegetated surface drainage facilities to treat and infiltrate stormwater in order to control water pollution, reduce peak flows and runoff volumes, and promote groundwater recharge; use of porous pavements on pedestrian and bike paths to promote infiltration; and encouragement for residential, commercial and institutional building occupants to use vegetated drainage facilities in their building site planning.

4. **Roadways and Transportation** - A Traffic Impact Analysis Report ("TIAR") was prepared by Parsons Brinkerhoff, Inc. dated February 2012, and revised February 2013, which describes the traffic characteristics of the proposed project and likely impacts to the adjacent roadway network. Current access to the Park is from Lipoa Parkway at its intersection with Piilani Highway. Piilani Highway, State Route 31, is functionally classified as a Principal Arterial with a posted speed limit of 40 MPH. As part of the revised TIAR for the Final EIS, four (4) scenarios were analyzed for Phases 1 and 2 of the project as a result of comments from the Department of Transportation (HDOT).

Scenario 1 - No Build. The No Build scenario represents the background conditions without the MRTP development scenario. Only existing roadways and those roadways committed by other developments, the State, and the County are included.

Scenario 2 - Build. The Build scenario adds MRTP development generated trips to the No Build scenario. The assumed roadway network is the same as in the No Build scenario.

Scenario 3- Build with MRTP Roadway Improvements. This scenario represents the Build scenario with additional transportation improvements committed by the MRTP.

Scenario 4 - Build with MRTP and Regional Roadway Improvements. The final scenario represents the Build with MRTP Roadway Improvements with other needed regional transportation improvements in the analysis year (2024 for Phase 1 and 2034 for Phase 2).

The Petitioner will work with HDOT to submit another revised TIAR prior to zone change approval. The Petitioner will comply with the Hawaii State and the Maui County standard to make necessary revisions to the TIAR.

Conclusions and Recommendations from the EIS are as follows:

The development of the MRTP will occur in two phases ending in 2024 and 2034. The following mitigative transportation improvements for each phase are provided below:

Phase 1 in Year 2024

Phase 1 will be located directly off of Lipoa Parkway and will consist of residential, mixed-use commercial, civic, and employment core land uses. Phase 1 will consist of 723,200 sq. ft. of employment, 100,000 sq. ft. of retail, 750 residential dwelling Units, 150 hotel rooms, 102,000 sq. ft. of elementary school. The planned MRTP Phase 1 will generate 1,285 trips during AM peak hour and 1,056 during PM peak hour.

Based on the intersection operational analyses, it is recommended that MRTP construct the following necessary transportation improvements to mitigate Phase 1 project generated impacts along Piilani Highway:

1. Piilani Highway/Hookena Street Access
 - a) Construct 2-lane Hookena Street from within MRTP to intersect Piilani Highway across from East Waipuilani Road;
 - b) Configure the westbound Hookena approach as a right-in/right-out access with stop control;
 - c) Provide acceleration and deceleration lanes to and from Piilani Highway;
 - d) Maintain existing delineators on Piilani Highway to prevent left turns from East Waipuilani Road or Hookena Street from crossing the center line of Piilani Highway.
2. Piilani Highway/Piikea Avenue
 - a) Construct an additional eastbound Piikea Avenue left turn lane (two total);
 - b) Retime the traffic signal accordingly to optimize the intersection operation.
3. Piilani Highway/Lipoa Parkway
 - a) Construct an additional southbound Piilani left turn lane (two total);
 - b) Widen westbound Lipoa Parkway to provide for left, through, and right turn lanes;
 - c) Widen and/or restripe eastbound Lipoa Street to provide left, through, and right turn lanes;
 - d) Adjust signal timing and phasing to provide leading protected left turn phases for the east and westbound Lipoa left turn movements;
 - e) Add the missing crosswalk on north Piilani leg of the intersection to improve pedestrian connectivity.
4. Internal Kihei High School Access
 - a) Construct an internal Kihei High School Access from within MRTP;
 - b) Provide bicycle and pedestrian connectivity between the school and MRTP

In addition, the background traffic growth from planned future developments including developments in the Kihei/Wailea/Makena areas warrants extending Liloa Drive as a two-lane facility to provide a direct connection between Kaonoulou Street and Kanani Road. It is important that the Liloa Drive Extension be constructed as the added capacity as the area continues to grow. Without Liloa Drive extension, the traffic conditions along Piilani Highway would be adversely affected and generally deteriorate to Level of Services "E" or "F" with and without MRTTP.

The County of Maui has included Liloa Drive Extension in its Fiscal Year ("FY") 2013 Capital Improvement Project Proposal. \$18.2 million was budgeted for design and construction from FY 2015 to 2018. The project is not, however, included in Hawaii State DOT's current Statewide Transportation Improvement Program ("STIP"). Extensive consultation and discussions with the County indicated that Liloa Drive Extension project will be the County's priority and will be programmed into future STIP.

Phase 2 in Year 2034

Building upon the land uses in Phase 1, Phase 2 will consist of 1,014,800 sq. ft. of employment and 500 residential dwelling units. In addition to the trips generated by Phase 1, the planned MRTTP Phase 2 will generate 835 trips during AM peak hour and 878 during PM peak hour.

Based on the intersection operational analyses, it is recommended that MRTTP construct the following necessary transportation improvements to mitigate Phase 2 project generated impacts along Piilani Highway:

1. Piilani Highway/Old Welakahao Road
 - a. Construct 2-lane Old Welakahao Road as MRTTP's direct access to Piilani Highway;
 - b. Signalize the intersection and provide a leading protected left turn phase for the southbound Piilani Highway left turn into Old Welakahao Road;
 - c. Provide southbound left turning lane from Piilani Highway to Old Welakahao Road and westbound left turning lane from Old Welakahao Road to Piilani Highway;
 - d. Provide acceleration and deceleration lanes to and from Piilani Highway.
2. Mauka Collector within MRTTP property
 - a. Construct the Mauka Collector as a four-lane roadway within MRTTP property;
 - b. Construct three mauka-bound access points to the Mauka Collector with proper intersection spacing within MRTTP property;

Piilani Highway will continue to encounter conditions of congestion and excessive delays with and without MRTTP by Year 2034 due to regional growth. The construction of the Mauka Collector between Mokulele Highway and a point somewhere south of MRTTP on Piilani Highway will be critical to north-south mobility in Kihei because it would provide much needed additional capacity and divert regional trips away from Piilani Highway.

The MRTTP is only one of several projects planned in the Kihei Mauka region. The Maui Island Plan in fact designates an area of 583 acres as the Kihei Mauka planned growth area which is slated for approximately 1,500 dwelling units. This area will be comprised of a mix of land uses, housing types, lot sizes, open space, parks, and other public facilities to create an interconnected network of walkable communities that together will create a self-sufficient

town. The development of the Mauka Collector must be done in concert with the development not only of the MRTP, but also in connection with the growth of the Kihei Mauka planned growth area. Should the development of the Kihei Mauka planned growth area move forward quickly bringing a substantial increase in traffic prior to Year 2034, the Petitioner of the MRTP would need to construct their portion of the Mauka Collector prior to 2034 in order to address regional traffic needs and accommodate the growth of the Kihei Mauka region.

The issues associated with the operating condition of the intersections along Piilani Highway would become an element of the overall regional transportation planning issue associated with all the major arterials in Kihei. Because these issues are long range and of a regional nature, they must be addressed collectively by the State, the County, the land owners, and other stakeholders as part of the long-range highway planning documents.

Maui County strongly supports an interconnected Kihei Mauka transportation network as growth in the region warrants. The 1998 Kihei-Makena Community Plan also echoed the need for a North-South roadway mauka of Piilani. The Maui Island Plan contemplates a future north south roadway in several sections and depicts the preferred road alignment. Similar directions are included in the project descriptions of Kihei Mauka and the North Kihei residential planned growth areas to the north of MRTP.

MRTP has initiated discussions with other landowners about providing a continuous in-tract mauka collector roadway as directed by the County General Plan. MRTP is willing to work with other land owners located mauka of Piilani Highway to coordinate on Mauka Collector cost sharing and alignment.

It is recommended that this TIAR be updated at the conclusion of construction on Phase 1 and prior to starting Phase 2 in order to update if and when the four-lane roadway will be required.

Additionally, the following Transportation Demand Management Measures (TDMM) are being considered:

1. ***Trip reductions through the development of compact mixed use communities*** – Mixed-use developments provide many benefits, including reducing reliance on automobiles (especially for external trips).
2. ***Pedestrian and bicycle-friendly infrastructure*** – Within the MRTP development, sidewalks and bike lanes will be provided along collector and local roadways to encourage residents and employees to use alternate forms of transportation.
3. ***Provide connectivity with any future adjacent developments to the north and south*** – Creating a continuous roadway network mauka of Piilani Highway will provide options for drivers mauka of Piilani Highway. This will reduce the dependence on Piilani Highway.
4. ***Encourage alternate work schedules and off peak hours for employment generators*** - Alternate work schedules allow employees to work with their employers to establish their own schedules. Alternate work schedules can provide the flexibility for employees to avoid the AM and PM commuter peaks, thereby reducing the development's impact on peak hour traffic. Encouraging off peak hours for

employment generators would have the same effect. MRTP should work with its employers and tenants.

5. **Alternate Access Methods** – Encourage and work with employers and tenants to interview employees on commuting habits. It may be feasible to run a shuttle or park and ride in areas such as Kahului/Wailuku which contain high amounts of residential land. It may also make sense for employees to carpool. The following methods of consolidating trips should be considered:
 - a. Park and Ride
 - b. Ridesharing/Carpooling/Vanpooling
 - c. Regional and sub-regional shuttles
 6. Work with HDOT to provide a suitable interface with Piilani Highway for pedestrian and bicycle facilities.
 7. Work with Kihei High School to provide bicycle and pedestrian connectivity between the school and MRTP.
5. **Electrical, Telephone and Cable - Existing Conditions.** Maui Electric Company's ("MECO") Maalaea Power Plant serves the Kihei-Wailea region from the Kihei and Wailea Substations, which are connected by a 69kV (kilo-volt) overhead transmission line that runs along the western shoulder of Piilani Highway.

The Kihei Substation serves the MRTP area. The substation transformers convert the 69kV transmission power to 12.47kV distribution power. 12.47kV distribution power is then transmitted, via primary overhead lines that are under-built below the previously mentioned 69kV overhead transmission lines. On East Lipoa Street, the overhead distribution lines are fed into an underground distribution system, which currently is tied into the MRTP main feed.

Hawaiian Telcom, Sandwich Isles Communications, Time Warner Telecommunications, and Wavecom Solutions provide telephone and data connectivity service in the Kihei region, including MRTP. Oceanic Time Warner Cable provides cable television service. The telecommunications infrastructure from the providers servicing the area consists of both overhead and underground facilities.

Currently, Hawaiian Telcom, Time Warner Telecommunications, and Wavecom Solutions have underground systems in place at MRTP, but additional underground infrastructure may need to be installed to accommodate the proposed residential and commercial addition. Sandwich Isles Communications is currently sharing conduit and other infrastructure with another provider, but is planning to have a separate dedicated system in MRTP in the future.

Oceanic Time Warner Cable has one node servicing all of the residential lots in the area and another node servicing all the commercial lots. They feel that everything that is being proposed to be built on this project can be serviced with current nodes, which should be adequate for a while. However, in the event that additional nodes are needed, Oceanic Time Warner Cable will initiate their installations.

Potential Impacts and Mitigation Measures. When fully built out, the electrical demand for the Master Plan update is forecast to be 38,750 kilowatts. Based on the anticipated demand, MECO anticipates a new substation be required in the first phase of the Project—along with associated electrical infrastructure, equipment and related easements.

Current plans for the Project include adequate land for locating a new substation. Additionally, the Project proposes to underground existing overhead power lines that run north south along the mauka boundary of the southern portion of the Project. These lines will be placed underground as the Project is built out from the existing employment core towards the south. The developer will coordinate closely with MECO to ensure adequate service is provided.

6. **Parks** - There are several parks in the Kihei region that provide recreational opportunities to the community. A number of existing park facilities, including South Maui Community Park, Kihei Aquatic Center, Kihei Community Center, Kalama Park, Cove Park, and Charley Young Park are within close proximity to the project site.

On-site parks will include mini- and neighborhood parks, and open space, totaling 88.7 acres. This equates to 32.18 acres of park land per 1,000 Project population. The proposed Project will be providing a higher level-of-service than the existing conditions in the region. In addition, the owners of the Project will comply with the requirements for Parks and Playgrounds, pursuant to Maui County Code Section 18.16.320. The park assessment requirements are designed to mitigate the incremental impact that new development places upon the region's park facilities. As such, the Project is not anticipated to significantly impact recreational facilities.

7. **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 MRTP is located within the State Department of Education's ("DOE") Maui Complex, within the Baldwin-Kekaulike-Maui Complex-Area. The Maui Complex is composed of the following schools:

Elementary Schools

- Kahului Elementary
- Kihei Elementary
- Lihikai Elementary
- Kamalii Elementary
- Pomaikai Elementary

Intermediate Schools

- Lokelani Intermediate,
- Maui Waena Intermediate

High School

- Maui High

Current and projected enrollment and capacities for area schools are given below in "DOE School Enrollment & Capacity" below.

DOE School Enrollment & Capacity

Schools	2010-2011- 2012 Enrollment	2009-2010 Capacity	2016-2017 Projected Enrollment
Kahului Elementary	986	963	1031
Kihei Elementary	920	923	966
Lihikai Elementary	971	1072	996
Kamalii Elementary	638	809	666
Pomaikai Elementary	655	885	717
Lokelani Intermediate	597	808	635
Maui Waena Intermediate	1084	909	1197
Maui High	1826	1701	1855

Currently, the State DOE is planning to build a new high school for grades 9-12 in Kihei on approximately 77 acres mauka of Piilani Highway between Kulanihakoi and Waipuilani Gulches, north of the MRTP. Phase I is slated to open in 2016 with a design capacity of 930 students, staff and visitors and Phase II is planned to open in 2025 with a design capacity of 1,941.

Additionally, Kihei Charter School which provides K through 12 education, 2011-12 enrollment was 546 students.

Potential Impacts and Mitigation Measures. In response to comments from the DOE the Petitioner will comply with all applicable impact fees. In 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees". Based upon this legislation, the Department of Education has enacted impact fees for residential developments that occur within identified school impact districts. The Project is within the boundaries of the Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area pay a construction fee and either a fee-in-lieu of land or a land donation, at the DOE's discretion. At the appropriate time, the Petitioner will contact the DOE to enter into an impact fee agreement.

Using State of Hawaii, DOE multipliers for standard housing types of school aged children, the proposed project could increase the student population of the affected schools by approximately 479 broken down as follows:

Projected Increase in Student Population

Grade	Students
Elementary	238
Intermediate	103
High	138

The MRTP is being designed to accommodate a public and/or private elementary or intermediate school campus within the Village Center. The site will include sufficient land area for buildings, playgrounds and play fields to be used for informal, or non-regulation, soccer and baseball and will be within a short, five minute walk of most of the projects' residential neighborhoods. The civic site, which would also conceptually include charter or private schools, was included in the project by the project master planner, Calthorpe

Associates. The civic use site on the illustrative plan is 10.1 acres in size, and located in the heart of the mixed use center. Civic activities such as schools or other civic uses are an important component of the Master Plan for a community of innovation. The Petitioner is aware that providing a school campus would not automatically meet the land requirements of the DOE's Central Maui Impact District.

While both the Petitioner and the Department of Education acknowledge the wish for direct pedestrian and bicycle access between the Project and the future Kihei High School, The type and timing of connection is uncertain at this time. A direct route of access for bicycles and pedestrians is being considered in the Waipuilani gulch area near Piilani highway. The Petitioner has discussed pedestrian and bicycle connectivity options with the Department of Education team assigned to the future Kihei High School and has agreed to keep in close contact as plans for the High School are made. The Petitioner will work with the Department of Education, the owner of Waipuilani Gulch, and other government and community stakeholders towards resolving the issue of pedestrian connectivity.

8. **Solid Waste - Existing Conditions.** Weekly, residential solid-waste collection in the area is provided by the County of Maui, Department of Environmental Management ("DEM"), Solid Waste Division. The Department's Residential Collection program collects and disposes of residential waste in three major districts: Wailuku (including Kahului and South Maui), Makawao (including Kula, Pukalani, Paia, and Haiku) and Lahaina (West Maui).

The Central Maui Landfill, which is located in the Wailuku-Kahului Community Plan region, receives residential solid waste from the area. Green waste is collected by EkoCompost, which is located at the Central Maui Landfill. Construction and demolition (C&D) waste is accepted at the privately operated C&D Landfill in Maalaea.

Plastic, glass, metal, cardboard, and newspaper can be recycled when left at various drop-boxes throughout the County. Green waste recycling is provided by several private organizations. Since 2000, approximately 30 percent of the solid waste generated annually in Maui County is diverted by means of recycling, reuse, and composting. The County is targeting a 50 percent waste diversion rate by 2030.

Potential Impacts and Mitigation Measures. In the Public Facilities Assessment Update County of Maui (2007), R.M. Towill Corporation projected that the Central Maui Landfill will have adequate capacity to accommodate residential and commercial waste through the year 2025. This projection was arrived at by multiplying Maui County's de facto population projections by an estimated number of pounds per person per day of waste generated, and assumes that solid waste generated by commercial and industrial growth will be captured by a corresponding trend in projected population growth. This estimate does not take into account future increases in source reduction and waste diversion. Increases in waste diversion achieved through education, recycling, composting, and reuse programs are expected to decrease demand for landfill space and extend the life of the Central Maui Landfill beyond the currently projected closure date. The County's DEM, Solid Waste Division anticipates that additional phases of the Central Maui Landfill will be developed as needed to accommodate future waste.

Waste generated by site preparation will primarily consist of vegetation, rocks, and debris from clearing, grubbing, and grading. Very little demolition material is expected, as the site is essentially vacant.

During the short term, construction activities will require the disposal of the existing onsite waste, as well as cleared vegetation and construction-related solid waste. A solid waste management plan will be coordinated with the County's Solid Waste Division for the disposal of onsite and construction-related waste material. The Petitioner will work with the contractor to minimize the amount of solid waste generated during the construction of the Project. The County's DEM, Solid Waste Division estimates that residential households on Maui generate approximately 2.3 tons of solid waste per household per year. Commercial units on Maui generate approximately 1.58 tons of solid waste per employee per year. Solid waste generation includes all the waste produced in a residence or business, including that which is reused or recycled as well as that which is disposed of in landfills.

Using the above rates, after full build-out and occupancy of all residential units and commercial units at the project site, total waste generated is estimated to be approximately 11,653 tons per year. Using the County's waste diversion rate of 30 percent, total waste from the project site is estimated to be approximately 8,157 tons per year. Achieving the County's waste diversion rate of 50 percent by 2030 would reduce the Project's waste to 5,827 tons per year.

The Master Plan Update will support the County's recycling, reuse, and composting activities. The County of Maui Integrated Solid Waste Management Plan (2009) provides strategies for diverting solid waste from landfills to reduce landfill dependency, save landfill capacity and improve operational efficiency. The MRTP will implement these strategies by providing options for recycling, such as collection systems and bin space, within the MRTP, and promoting sound recycling practices among residents and businesses.

9. **Public Services - Medical Facilities - Existing Conditions.** Maui Memorial Medical Center, located in Wailuku and approximately 10 miles from the MRTP, is the island's only acute care hospital. This 240-bed facility provides acute, general, and emergency care services. Various private medical offices and facilities are located in the South Maui area including Kihei Clinic and Wailea Medical Service, Kihei Pediatric Clinic, Kihei Physicians, the Kihei-Wailea Medical Center, Maui Medical Group, and Kaiser Permanente.

Potential Impacts and Mitigation Measures. The Project will produce an increase in the population of the immediate area. The increase in population will produce a marginal increase in demand for physicians, dentists, nurses, mental health personnel, and hospital beds. In the context of the overall population growth for the island, the proposed project will not produce an overall significant impact to the island's medical facilities.

The MRTP's commercial areas will provide the opportunity for medical services, such as medical and dental offices, medical clinics, hospitals, and long term care facilities to be developed within the project site to serve the community and neighboring areas.

Police and Fire Protection Services - Existing Conditions. The Maui Police Department is headquartered at the Wailuku Police Station on Mahalani Street. The MRTP falls within the Maui Police Department's Kihei Patrol District 6 (Maalaea, Kihei, Wailea, Makena). This police district is served by the Kihei Station, located approximately 2.5 miles from the MRTP at the Kihei Town Center. Two small offices are also located at Wailea Point between Kamaole Beach Parks II and III and at the old Kihei Community Center.

According to the Maui Police Department, currently the Kihei Police District is commanded by one Police Captain, who is assisted by one Police Lieutenant and one Civilian Clerk.

Staffing for the Kihei District Station includes seven Police Sergeants who supervise 30 Police Officer positions, three Community Police Officer positions, and two Visitor Oriented Police Officer positions and one School Resource Officer position. There are also six Public Safety Aides (civilian employees).

The new Kihei District Police Station is under construction at the intersection of Piilani Highway and Ke Alii Alanui Road, approximately 1.5 miles south of the MRTP. This full service police station will replace the current station at Kihei Town Center.

There are two fire stations servicing South Maui; Wailea Fire Station and Kihei Fire Station. The Kihei Fire Station is located near Kalama Park on South Kihei Road, about 1.5 miles from the MRTP, sufficiently proximate to provide adequate fire service to the site.

Potential Impacts and Mitigation Measures. The Project will produce an increase in the population of the immediate area. The increase in population will produce a marginal increase in demand for police and fire protection services, including personnel, vehicles, and facilities. According to the *Maui County Public Facilities Assessment Update* (R.M. Towill Corporation, 2007) the Maui Police Department's generation rate for officers per 1,000 population is 1.96, and the generation rate for total employees per 1,000 population is 2.56. Using these generation rates the proposed project will generate the need for 5.40 additional officers and 7.06 additional total employees.

Increased tax revenues generated by the project will provide additional funds to the County for police and fire capital facility improvements and service upgrades. Additionally, the Project will comply with any impact fee ordinances for police and fire that may be adopted.

SOCIO-ECONOMIC IMPACTS

Development of the MRTP 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. The following are the conclusions of the *Economic and Fiscal Impact Assessment* detailed in the EIS:

- Under the updated Master Plan, the subject development (including the Economic Opportunity Campus Area) will generate circa \$1.39 billion in capital investment into Maui's economy. The construction of the Park and on-going operations/maintenance of the residences, on-site commercial and industrial/businesses, and community facilities, will provide an estimated 63,507 "worker-years" of employment and \$2.7 billion in total wages over a 19-year period. After "stabilization" the urban village community will support some 5,878 permanent jobs on-site with an annual payroll of about \$217 million, and an additional 1,469 workers with \$68.6 million in yearly wages off-site.
- The on-going business activity within the commercial and industrial/business park components will be substantial, both directly on-site and in stimulation of existing off-site companies. During the construction and absorption period, a total of \$6.2 billion in taxable sales/revenues are projected, averaging \$324.7 million per year. Following stabilization, \$557 million annually in business activity will be occurring in the community. The Economic Opportunity Campus Area will contribute upwards of an estimated \$160 million per year in operating revenues to the MRTP, depending upon the ultimate use of the property.

- The majority of the gross operating revenues within the project, 92 percent, will be a result of outside patrons coming to the in-project companies. The base economic impact on Maui will total at least \$7.8 billion during build-out and \$903.9 million annually upon stabilization.
- The County of Maui will realize Real Property and Transient Accommodation taxes, and other secondary receipts and impact fees of \$141.3 million during the 19-year construction and absorption period, and \$28.5 million annually on a stabilized basis thereafter. The net benefit to the County purse will be in excess of \$25.3 million during development, and \$21.5 million annually on a stabilized basis
- The State of Hawaii will receive Gross Excise, Income, Transient Accommodation taxes, secondary revenues, and impact fees of \$752.5 million during the build and sales projection time frame, and \$84.4 million per year thereafter. The net benefit to the State purse will be in excess of \$466.3 million during development, and a stabilized 'profit' of \$57.3 million per year.

In summary, the Master Plan Update responds to the most current trends in the development of innovation centers nationwide. The Master Plan Update will strengthen Maui's economy by making the MRTP a more attractive location for knowledge-based industries. These industries will create high paying jobs for residents, which will in turn have a positive impact on the rest of the Maui economy. The result will be an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires, which will promote increased opportunities for Hawaii.

Housing. The Project proposes to construct 1,250 residential units; 750 units in Phase I and 500 units in Phase 2 of the development. Housing options will consist of a mix of multi-family, single-family homes, and townhouse units. The estimated price range of the proposed multi-family units will range from \$280,000 to \$400,000, townhomes will range in price from \$400,000 to \$560,000, and single-family homes from \$640,000 to \$1,000,000.

All workforce affordable homes will be priced and subject to restrictions in accordance with the requirements of Chapter 2.96 of the Maui County Code.

ENVIRONMENTAL IMPACTS

1. **Air quality - Existing Conditions.** An Air Quality Study was prepared by B.D. Neal & Associates which examines the potential short- and long-term air quality impacts that could occur as a result of construction and use of the proposed Project and suggests mitigative measures to reduce any potential air quality impacts where possible and appropriate.

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 project area is very much affected by its elevation near sea level and by nearby mountains.

Haleakala shelters the area from the northeast trade winds, and local winds (such as land/sea breezes and upslope/downslope winds) affect the wind flow in the area much of the time. Temperatures in the project area are generally very consistent and warm with average daily temperatures ranging from about 63 degrees F to 86 degrees F. Rainfall in the project area is minimal with an average of only about 12 inches per year. Except for periodic impacts from volcanic emissions (vog) and possibly occasional localized impacts from traffic congestion and local agricultural sources, the present air quality of the project area is believed to be relatively good. There is very little air quality monitoring data from the

Department of Health for the project area, but the limited data that are available suggest that concentrations are generally well within state and national air quality standards.

To assess current ambient air quality conditions, a computer modeling study was undertaken of carbon monoxide at intersections in the project vicinity and to predict future levels both with and without the proposed project. During worst-case conditions, model results indicated that present 1-hour and 8-hour carbon monoxide concentrations are well within both the state and the national ambient air quality standards.

Potential Impacts and Mitigation Measures. Short- and/or long-term impacts on air quality will occur either directly or indirectly as a consequence of project construction and use. Short-term impacts from fugitive dust will likely occur during the project construction phases. To a lesser extent, exhaust emissions from stationary and mobile construction equipment, from the disruption of traffic, and from workers' vehicles may also affect air quality during the period of construction. State air pollution control regulations require that there be no visible fugitive dust emissions at the property line. Hence, an effective dust control plan must be implemented to ensure compliance with state regulations. Fugitive dust emissions can be controlled to a large extent by implementing the following types of mitigation measures:

- Watering of active work areas;
- Using wind screens;
- Keeping adjacent paved roads clean; and
- Covering open-bodied trucks.
- Limiting the area that can be disturbed at any given time;
- Mulching or chemically stabilizing inactive areas that have been worked.

Paving and landscaping of project areas early in the construction schedule will also reduce dust emissions. Monitoring dust at the project boundary during the period of construction could be considered as a means to evaluate the effectiveness of the project dust control program. Exhaust emissions can be mitigated by moving construction equipment and workers to and from the project site during off-peak traffic hours. During development, adequate dust control measures, in compliance with HAR, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust will be implemented to control dust during all phases of construction.

After construction, motor vehicles coming to and from the proposed development will result in a long-term increase in air pollution emissions in the project area. To assess the impact of emissions from these vehicles, a computer modeling study was undertaken to estimate current ambient concentrations of carbon monoxide at intersections in the project vicinity and to predict future levels both with and without the proposed project. During worst-case conditions, model results indicated that present 1-hour and 8-hour carbon monoxide concentrations are well within both the state and the national ambient air quality standards.

In the year 2034 without the project, carbon monoxide concentrations were predicted to decrease (improve) somewhat in the project area despite an increase in traffic volumes, and worst-case concentrations should remain well within air quality standards. This is primarily due to the assumed retirement of older motor vehicles with less efficient emission control equipment with the passage of time. With the project in the year 2034 after full build-out and with the mauka collector road, carbon monoxide concentrations compared to the without-project case were projected to be slightly lower (better), and worst-case concentrations should remain well within air quality standards.

With or without the project, carbon monoxide concentrations in the project area during the next 20 years will likely decrease (improve) somewhat compared to existing concentrations. Implementing mitigation measures for traffic-related air quality impacts is probably unnecessary and unwarranted. Additionally, based on the review of the revised TIAR dated February 2013 it is the opinion of the air quality consultant that further air quality analysis for this project is unnecessary because it is unlikely that the air quality results and conclusions would change significantly. (See: Appendix K-1 "Letter from Air Quality Consultant")

Depending on the demand levels, long-term impacts on air quality are also possible due to indirect emissions associated with a development's electrical power and solid waste disposal requirements.

The peak electrical demand of the project when fully developed is expected to reach about 24 megawatts. Assuming the average demand is approximately one-half the peak demand, the annual electrical demand of the project will reach approximately 105 million kilowatt-hours. Quantitative estimates of these potential impacts were not made, but based on the estimated demand level and assuming that power continues to be derived mostly from fuel oil, sulfur dioxide emissions could increase by about 275 tons per year and nitrogen oxides emissions could increase by about 93 tons per year.

Renewable energy sources, if developed, could reduce these emissions substantially. Incorporating energy conservation design features and promoting energy conservation programs within the proposed development could also serve to reduce any associated emissions. Presently, all solid waste on Maui is landfilled, and any associated air pollution emissions are relatively negligible. Nevertheless, promoting conservation and recycling programs within the proposed development could serve to further reduce any associated impacts.

2. **Noise – Existing Conditions.** The noise level is an important indicator of environmental quality. In an urban environment, noise is due primarily to vehicular traffic, air traffic, heavy machinery, and heating, ventilation, and air-conditioning equipment. Ramifications of various sound levels and types may impact health conditions and an area's aesthetic appeal.

An Acoustic Study was prepared by Y. Ebisu & Associates to describe the existing and future traffic noise levels in the environs of the proposed Park. Traffic noise level increases and impacts associated with the project were determined within the project site and along public roadways servicing the development. Impacts from on-site activities and short-term construction noise at the project site were also assessed. Recommendations for minimizing noise impacts are also provided.

The existing background ambient noise levels within the project site are relatively low at the mauka (east) end and moderate on the makai (west) end of the site. Traffic along Piilani Highway controls the background noise levels at the makai end of the project site, and diminishes to inaudible levels at the mauka end of the project site. On the makai side of Piilani Highway, existing noise levels also diminish with increasing distances from Piilani Highway, and are controlled by the traffic on connector roads and South Kihei Road in areas between Piilani Highway and the shoreline.

The existing traffic noise levels in the project environs along Piilani Highway are in the "Significant Exposure, Normally Unacceptable" category, and at or greater than 65 Day-Night

Average Sound Level (DNL) at the first row of existing homes on the makai side of the highway. The existing traffic noise levels in the project environs along South Kihei Road are in the "Significant Exposure, Normally Unacceptable" categories, and at or greater than 65 DNL within 61 to 67 feet of the roadway's centerline. Along the lower volume connector streets, existing noise levels are in the "Moderate Exposure, Acceptable" category, and less than 65 DNL at 50 feet or greater distance from the roadways' centerline.

Potential Impacts and Mitigation Measures. The existing and future noise levels in the vicinity of the Project were evaluated for their potential impacts and their relationship to current FHA/HUD noise standards for noise sensitive land uses. The traffic noise level increases along the roadways servicing the project site were calculated and available in the EIS.

Significant increases in traffic noise levels at noise sensitive properties are not expected to occur as a result of the project traffic following build-out by CY 2024 and 2034.

Along Piilani Highway fronting the project site, traffic noise levels of approximately 70 DNL are expected to increase to approximately 71 to 73 DNL at 100 foot distance from the centerline by CY 2024 as a result of project and non-project traffic. By CY 2034, traffic noise levels along Piilani Highway are expected to be reduced to existing noise levels following completion of the proposed north-south collector road on the mauka side of the project site.

The largest increases 1.5 to 10.4 DNL in project related traffic noise are predicted to occur along Lipoa Parkway, East Welakahao Street east of Piilani Highway, and along Lipoa Street west of Piilani Highway. Adverse traffic noise impacts along Lipoa Parkway and East Welakahao Street are not expected to occur since noise sensitive developments are not planned to be located along those two roadways. The noise sensitive buildings along Lipoa Street west of Piilani Highway have adequate setback distances from Lipoa Street, such that predicted CY 2024 and CY 2034 traffic noise levels should remain in the "Moderate Exposure, Normally Acceptable" category at these buildings. For these reasons, traffic noise mitigation measures should not be required.

The project site is planned such that noise sensitive residential uses of the project are situated at very large setback distances from Piilani Highway, where existing and future traffic noise levels are predicted to be less than 61 DNL. The large buffer distances to the highway will allow for the use of naturally ventilated buildings on the project site.

The dominant traffic noise sources in the project environs will continue to be traffic along Piilani Highway and South Kihei Road. In addition, the addition of the proposed north-south collector road mauka of the project will increase the existing background ambient noise levels at the mauka end of the project site and along the proposed corridors of the collector road and connecting roadways.

Based on the review of the revised TIAR dated February 2013 it is the opinion of the acoustic consultant that further acoustic analysis for this project is unnecessary because it is unlikely that the acoustic results and conclusions would change significantly. Unavoidable, but temporary, noise impacts may occur during construction of the proposed project, particularly during the excavation and earth moving activities on the project site. Because construction activities are predicted to be audible within the project site and at nearby properties, the quality of the acoustic environment may be degraded to unacceptable levels during periods of construction. Mitigation measures to reduce construction noise to

inaudible levels will not be practical in all cases, but the use of quiet equipment and compliance with State Department of Health construction noise regulations are recommended as standard mitigation measures. The incorporation of State Department of Health construction noise limits and curfew times are applicable throughout the State. Noisy construction activities are not allowed on Sundays and holidays, during the early morning, and during the late evening and nighttime periods under the DOH permit procedures.

3. **Scenic and visual resources – Existing Conditions.** The MRTP is located on the southern slope of Haleakala, mauka (landward) of Kihei Town. Elevations of the project site range from 160 feet above mean sea level near Piilani Highway to approximately 260 feet above mean sea level at the most mauka point of the MRTP. Existing buildings at the MRTP do not exceed 45 feet in height and are screened by the existing golf course development when viewed from the Piilani Highway. The site is located between two gulches that are natural buffers along the northern and southern edge of the property.

Notable natural visual resources in the area include the West Maui Mountains, the Pacific Ocean, Molokini and the islands of Kahoolawe and Lanai, to the west, and Haleakala to the east.

Potential Impacts and Mitigation Measures. Environmental Planning Associates Inc. prepared a Maui Coastal Scenic Resources Study for the County of Maui, Planning Department on August 31, 1990. The MRTP project site is located in an area with open spaces views. This is expected because most of the land mauka of Piilani Highway in the vicinity of the MRTP is owned by Haleakala Ranch and Kaonoulou Ranch and has been used for cattle grazing, however the land surrounding the MRTP has been designated for Urban expansion for over 20 years by the County of Maui in the Kihei-Makena community plan.

The site ranges from approximately 600 feet to nearly one mile mauka of the Piilani Highway. The furthest makai portion of the site nearest to the highway is planned for single- and multi-family residential use. Residential building heights within the MRTP are limited to 3-stories or 40-feet, as they are throughout the rest of the MRTP. Because of the Project's separation/buffer from Piilani Highway and the relatively low profile of the buildings, mauka views of Haleakala from Piilani Highway should not be significantly impacted by the development.

The proposed update to the Master Plan will transform the character of the MRTP from its existing large lot-only design to a community involving parks, housing, neighborhood-serving retail, commercial space, pedestrian and bicycle networks and open space. The Master Plan Design Guidelines will limit building height in order to maintain views towards the summit of Haleakala and the Pacific Ocean. Open space is integrated throughout the Project and, together with the proposed street layout, creates and frames view corridors throughout the MRTP to the Pacific Ocean and to Haleakala.

With regard to design, the proposed project will complement the high quality architectural character of the existing buildings at the MRTP as well as other developed properties in the area. The MRTP design guidelines are being developed to control the density, architectural design, and variation of all buildings in the MRTP without sacrificing views or the aesthetic character of the MRTP. The goals of the master plan urban design are to protect views, access to sunlight and the aesthetic character of the MRTP. As noted, the maximum building height for non-residential buildings within the MRTP will be 50-feet to minimize impacts to

views. Overall urban design of the project will position buildings fronting landscaped roadways to screen the massing of the buildings.

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

4. **Flora and Fauna – *Existing Conditions*.** Botanical and Fauna Surveys were conducted for the MRTTP site by Mr. Robert W. Hobdy in October 2008. SWCA Environmental Consultants conducted additional botanical and wildlife reconnaissance surveys of the property on February 23 and March 31, 2011.

The project site was originally populated with dry native forest/scrubland plant species. These species have gradually diminished over the past 150 years as the area has been used extensively for cattle grazing. Introduced Axis deer and human-resultant fires have further reduced the native plant population.

The site is now dominated by two (2) non-native species: kiawe trees and buffelgrass. A total of fourteen (14) species were noted during site surveys, of which two (2) were native to the Hawaiian Islands: 'ilima and 'uhaloa.

Three (3) mammalian species were noted in the surveys: cattle, Axis deer, and feral cats. Fourteen (14) non-native bird species were recorded as well. Using sight survey and a bat listening device, the surveys found no evidence of the Hawaiian hoary bat (*Lasiurus cinereus semotus*). The bat is the only land mammal native to the Hawaiian Islands. The report also found no evidence of the Blackburn's sphinx moth (BSM). The BSM (*Manduca blackburni*) is Hawaii's largest native insect. The bat and the moth are on the Federal list of Endangered Species.

Potential Impacts and Mitigation Measures. Two (2) of the twelve (12) plant species identified on the property by Robert Hobdy in October 2008 are indigenous to Hawaii ('ilima and 'uhaloa). Hobdy noted that 'ilima was rarely observed on the property, and 'uhaloa was also uncommon there.

The USFWS comment letter to the EISPN dated October 28, 2010, indicated that additional surveys should be conducted to determine the presence of endangered species on the MRTTP property. In response to the October 28, 2010 comment letter, the Petitioner retained SWCA to conduct additional survey work.

Both Hobdy and SWCA found the area to be dominated by non-native kiawe and buffelgrass. SWCA found an additional nine (9) plant species not previously reported by Hobdy, all of which were non-native. The Obscure Morning Glory (*Ipomoea obscura*), a possible host plant for the adult BSM, was found to be rare; however, no species confirmed as larval host plants for the BSM were found within the MRTTP properties. No additional species of wildlife other than those reported by Hobdy were observed by SWCA within the properties in February and March 2011. No listed or candidate endangered species of plants or animals were observed within the property.

The Petitioner responded to USFWS on April 27, 2011, and received another response letter from USFWS dated June 7, 2011. The letter provided guidance to assess project impacts to federally listed species and native habitats.

The Petitioner responded to the letter on August 24, 2011, and intends to incorporate the following measures into the project to minimize potential impacts. As part of the Draft EIS review process, the USFWS prepared another comment letter dated August 3, 2012 similar to the previous letters. The Petitioner responded to the letter on October 12, 2012, and intends to incorporate the following measures into the project to minimize potential impacts.

Avoid Direct Impacts to Hawaiian Hoary Bats. To minimize the potential impacts to the Hawaiian Hoary bat, woody plants greater than fifteen (15) feet tall will not be removed or trimmed between June 1 and September 15 throughout the development and operation of the project. These dates were provided by the USFWS in a letter dated June 7, 2011.

Minimize Light Impacts to Seabirds. Outdoor lighting will be minimized to the extent practicable to help avoid creating an attractive nuisance to Newell's shearwaters (*Puffinus newelli*) and Hawaiian petrels (*Pterodroma sandwichensis*) that might transit over the property at night. Outdoor lights will be shielded so that the bulb can only be seen from below in accordance with the guidelines for light fixtures provided in the USFWS letter dated October 28, 2010.

Minimize Attraction and Impacts to Listed Birds. Development of the MRTP will not involve the creation of golf course(s) or permanent open water features, which typically attract bird species. Tenants will be expected to comply with Maui County leash laws. Maui R&T Partners, LLC will institute a pest control program administered by groundskeepers aimed primarily at rodent and feral animal control.

Avoid or Address Impacts to the Blackburn's Sphinx Moth. No known larval host plants for the Blackburn's sphinx moth have been observed within the MRTP property. Another comprehensive survey for endangered Blackburn's sphinx moth host plants will be conducted just prior to land clearing to ensure that the species and its habitat will not be affected by the proposed project. As recommended by the USFWS in a letter dated June 7, 2011.

Survey for Yellow-Faced Bees and Protected Plant Species. Biologists from SWCA Environmental Consultants surveyed the MRTP property in February and March 2011 and found no listed or candidate endangered plants species. In June 2010, the USFWS announced that it would take a year to review the status of seven (7) species of Hawaiian yellow-faced bees to determine whether they should be listed as endangered species and if critical habitat should be designated (Federal Register: 6/10/10; Vol. 75, No. 115). A number of the bee species exist on islands in Maui County. The bees play a critical role in pollinating native Hawaiian Plants. Dr. Karl Magnacca has indicated that so far these rare bees are only known to be from areas dominated by native plant communities (K. Magnacca, University of Hawaii at Hilo, personal communication). Since the MRTP is dominated by non-native grasses and scrub vegetation and 'ilima is uncommon here, SWCA concluded that it is highly unlikely that the MRTP property is habitat for Hawaiian yellow-faced bees.

Minimize Wildfire Impacts. During project construction, measures will be taken to maintain a sufficient fire break along the boundaries of the proposed MRTP expansion. When completed, the MRTP will remove all non-native grass, weed, and scrub fuels from the project area. Undeveloped lands immediately adjacent to the northern, and eastern and southern boundaries of the MRTP are owned by Kaonoulou Ranch and Haleakala Ranch, respectively. These lands serve as a de facto fire break for MRTP because they are currently zoned for Agriculture and are actively grazed by cattle. Grazing plays a key role in

minimizing fuel loads on privately owned lands outside the project footprint. In addition to the Kihei Fire Station (11 Waimahaihai Street) which lies about 1.5 miles from the project site, the MRTTP is currently serviced by the Wailea Fire Station (300 Kilohana Drive) which is located approximately 2 miles from the site. Additional fire control support is also available from Windward Helicopters and Pacific Helicopters at the Kahului Airport. To service the area, the completed MRTTP will have fire hydrants and water pressures as required by law. The Petitioner will also work with the County Fire Prevention Bureau to minimize potential wildfire risks within and adjacent to the MRTTP footprint. The Petitioner will continue to coordinate with the USFWS on wildfire prevention and response measures throughout the planning process.

Minimize the Spread of Invasive Species. During land clearing and construction associated with expansion of the MRTTP, care will be taken to prevent the invasion of disturbed areas by noxious invasive weed species, non-native tree tobacco, and other potential non-native host plants of the Blackburn's sphinx moth. However, to minimize the potential for introducing new invasive plants to the project area, Maui R&T Partners, LLC will ensure that off-site sources of revegetation materials (seed mixes, gravel, mulches, etc.) are certified weed-free. All areas that are hydroseeded would be monitored for six months after hydroseeding to ensure removal of any invasive plants that have established from seeds inadvertently introduced as part of the seed mixes. Building supplies imported to Maui for construction will be regularly inspected at Kahului Harbor for presence of alien species.

The MRTTP will employ a palette of suitable native plant species which are known to occur within the natural dry scrubland habitats native to the Kihei area for landscaping. To the extent practicable, the MRTTP will utilize seeds of native species previously harvested from the Kihei environs and available from local nurseries and related sources. Specific species suitable for use may include, but may not be limited to, koai'a (*Acacia koa*), native wiliwili (*Erythrina sandwicensis*), kolomana (*Senna gaudichaudii*), and kou (*Cordia subcordata*). Other native plants, such as 'a'ali'i (*Dodonaea viscosa*), 'āhinahina (*Achyranthes splendens* var. *rotunda*), 'āwikiwiki (*Canavalia pubescens*), kulu'i (*Nototrichium sandwicense*), maiapilo (*Capparis sandwichiana*), naio (*Myoporum sandwicense*), 'ōhai (*Sesbania tomentosa*), pili (*Heteropogon contortus*), and ti leaf (*Cordyline fruticosa*) can be used throughout the site to the extent possible.

5. **Sustainability.** Act 181, Session Laws of Hawaii, 2011, established priority guidelines for sustainability in the Hawaii State Plan. Furthermore, the State of Hawaii's Clean Energy Initiative has adopted a goal of using efficient and renewable energy resources to meet 70% of Hawaii's energy demand by 2030, with 30% from efficiency measures and 40% from locally-generated renewable sources.

The Petitioner's Sustainability Plan applies sustainable elements in the project design, including: compact designed road networks with bicycle and pedestrian paths, use of recycled water, encouragement of renewable energy use, providing a diverse and balanced mix of uses, creating a safe and friendly pedestrian environment, and providing a variety of connections to surrounding developments, including the use of an efficient and effective transit system.

CONCLUSIONS REGARDING COMPLIANCE WITH STATE URBAN DISTRICT STANDARDS

The Planning Department finds that the petition is in compliance with the standards of the State Urban District as follows:

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

The Agricultural district portion of the MRTP project is located immediately adjacent to existing commercial uses in the MRTP, which comprise a major employment center for Maui. Along the Project's western boundary are the Elleair Golf Course and the Hokulani residential subdivision. Across the Piilani Highway and with close proximity of the MRTP are an intermediate and elementary school, the South Maui Community Park, Kihei Aquatic and Community Center, Piilani Shopping Center, and a variety of business and commercial services along with single-family and multi-family residential development.

- (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;

The Agricultural land of the project area is adjacent to an existing center of trading and employment, specifically the MRTP, which is home to Akimeka, Boeing, The Pacific Disaster Center, and the US Air Force which currently employ about 400 people in high technology and supporting industries. The project area is located within proximity to one of three commercial nodes in central Kihei. The Piilani Shopping Center, Azeka Shopping Center, and Lokelani Intermediate School, along with professional and business services are all located a short distance from the Petition Area and generate substantial employment. In addition, the Kihei-Makena Community Plan and the recently completed draft Maui Island Plan envision the MRTP, including the Agricultural land, becoming an even larger and more important regional employment center for the island.

- (B) Proximity to basic services such as sewers, transportation systems, water, sanitation, schools, parks, and police and fire protection;

Basic public services and facilities, such as transportation systems, sewer, water, drainage and public utility hook-ups are available in close proximity to the MRTP. All of the drainage improvements for the proposed development will comply with County of Maui standards. The County of Maui currently provides solid waste disposal service to single-family residences in the area. The MRTP is also adjacent to Piilani Highway, a major roadway serving the general Kihei area. Lipoa Parkway provides direct access from the MRTP to nearby shopping, schools, and business and commercial services west of Piilani Highway.

The Agricultural lands of the project area have poor soil conditions, limited topography, and are close to existing infrastructure making the subject property a suitable location for the proposed development. Schools and several parks are located in close proximity to the MRTP, such as the three (3) Kamaole Beach Parks, Charley Young Park, Kalama Park and South Maui Community Park. Other recreational facilities include the Kihei Aquatic Center and the Kenolio Recreational Complex, both a short distance from the MRTP. It should be noted that the proposed development will also include a number of open space and park areas, which will help to mitigate vehicular traffic to and from the subject property.

The State Department of Education's public school system in the Kihei region includes Kamalii and Kihei Elementary Schools (Grades K to 5), Lokelani Intermediate School (Grades 6 to 8) and Maui and Kihei Public Charter High School (Grades 9 to 12). The Kihei Charter School provides K-12 classes within close proximity of the project site at Lipoa Center and Kihei Commercial Center. The future Kihei High School is proposed for development adjacent to the northwestern boundary of the subject property, along Piilani Highway, and the State Department of Education is prepared and processed an Environmental Impact Statement for this development. Once developed, the MRTP will be within walking distance of an elementary, intermediate and high school. In addition, project plans propose public and/or private educational facilities within the Project site to mitigate demand generated by the Project's development.

Police protection for the Kihei area is provided by the Maui County Police Department, with the existing Kihei Station located approximately 2.5 miles from the MRTP. In addition, a new region-serving police station is planned approximately 1 mile south of the Project site on the mauka side of Piilani Highway. Likewise, fire protection for the Kihei area, which encompasses fire prevention, suppression, rescue, and emergency services, is provided by the Maui County Fire Department, with the Kihei Fire Station located at 11 Waimahaihai Street, approximately 1 mile from the MRTP. The proposed development will not result in any extension of the existing service area limits for these emergency services

- (C) Sufficient reserve areas for urban growth in appropriate locations based on a ten year projection;

The Master Plan Update addresses a total of approximately 411 acres. Significantly, all of the Master Plan Update lands are community plan designated Project District 6, "Research & Technology Park" except for Parcel 17, which is designated Public/Quasi-Public. Of the total 411 acres, approximately 157.76 acres are designated Urban and 253.50 acres Agricultural. With the requested District Boundary Amendment the MRTP will have sufficient urban lands to accommodate the land uses contemplated in the Master Plan. Having sufficient land area is necessary to reduce costs and delays associated with land use redistricting that would otherwise be born by prospective investors.

The MRTP's overarching purpose is to spur research and technology and other knowledge-based industry development on Maui and to expand and diversify the island's economic and employment base. The previous master plan has had limited success in accomplishing this mission; and a new approach is necessary if the Park is to achieve the community's economic development goals.

The earlier Park vision was that of a single-use large-lot campus with strict controls over the types of uses allowed within the Park. This approach has made it prohibitively expensive for many high technology-based businesses to locate in the Park. Moreover, strict zoning controls have limited the availability of support services for businesses and employees. Extensive study by the Petitioner of successful research and technology parks on the mainland has shown that technology and other knowledge-based industries are attracted to locations offering not only office and lab space, but also support services and amenities, including a mix of housing opportunities for employees, commercial, retail, and professional services, parks and open space. These types of development patterns reduce commuting,

decrease the cost of doing business, energize communities, and facilitate a greater sense of place and quality of life.

In keeping with the key success factors identified at prominent mainland parks, the Master Plan Update proposes a mixed-use village center and residential and civic components to complement existing and future technology and other knowledge-based industry development. In addition, a greater diversity of lots will be made available, ranging from small lots and commercial spaces for start-ups to very large parcels for large institutional and corporate users.

The MRTP will be utilized for these, technology, and other knowledge-based industry uses, as well as complimentary commercial and residential areas in accordance with the Maui Island Plan. Re-districting the Agricultural portion at this time will allow the Petitioner to react more quickly to market forces and meet demand as it arises, without the risk of significant delays associated with incremental redistricting.

- (3) It shall include lands with satisfactory topography and drainage and reasonably free from the danger of floods, tsunامي, unstable soil conditions, and other adverse environmental effects;

Elevations across the project site range from approximately 270 feet above Mean Sea Level (MSL) along the easterly boundary to approximately 160 feet MSL along the westerly boundary and approximately 73 feet at the Lipoa Parkway / Piilani Highway intersection. The average slope across the project site is 3.2%, although there are variations in the slopes on the knolls and gullies within the MRTP site.

As indicated by the Flood Insurance Rate Map, the MRTP is located within Zone X, which is outside of any flood hazard. The MRTP is not subject to tsunامي, unstable soil conditions or other adverse environmental effects which would render it unsuitable or inappropriate for the proposed development.

- (4) In determining urban growth for the next ten years, or in amending the boundary, land contiguous with the 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;

As reflected on the State Land Use Classification map, the Agricultural land is immediately adjacent to areas which are already designated "Urban", including Urban land that is already part of the MRTP. In addition, the Agricultural land itself is within the Maui Island Plan's Urban Growth Boundary and is also designated by the Kihei-Makena Community Plan for urban use, i.e. "Project District 6, "Research & Technology Park District" (Parcels 16 and 54) and Public/Quasi-Public (Parcel 17)". The Petitioner has filed a community plan amendment to change these designations to "Maui Research & Technology Park District". Concurrently with the filing of the community plan amendment, changes will be made to Maui County Code Title 19.33, "Kihei Research & Technology Park District" to allow for mixed-use development within the Park, in accordance with the Master Plan Update and an accompanying form-based development code.

As noted previously, the Agricultural land is contiguous to existing urban areas, including existing developed portions of the MRTP, the Elleair golf course and the Hokulani residential subdivision. In addition, the future South Maui High School is proposed on lands adjacent to

the Project's northwestern boundary. Just west of the MRTP, across Piilani Highway, are commercial, civic, and residential developments within central Kihei.

- (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;

Given the "Project District 6" designation of the MRTP by the Kihei-Makena Community Plan and the placement of the Project area within the Urban Growth Boundary by the Maui Island Plan, the Agricultural land is in an appropriate location for new urban concentration and growth. Both of these plans envision the MRTP becoming an even larger employment center, and with existing infrastructure and public facilities in close proximity, balancing employment with housing and services is a central tenet of smart growth.

- (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:

While the Petitioner believes the Agricultural land conforms with the standards in paragraphs (1) to (5) of HAR § 15-15-18, it is significant to note that the Agricultural land is immediately adjacent to existing urban development such as the MRTP and other residential subdivisions in the immediate area. Because of the Agricultural land's proximity to existing and planned urban development, the projected demand for additional housing in the area, and the number of jobs directly and indirectly created by the Park, any potential impact to agriculture is significantly outweighed by the benefits of the proposed development. This is especially true since the Agricultural land is poorly suited to agriculture and considerable agricultural land remains available on the island of Maui and in South Maui to support the growth of diversified agriculture.

- (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;

Urbanization of the Agricultural land of the Project area will not contribute to scattered spot urban development. The Agricultural land is located adjacent to, and will become part of, the existing urban uses in the MRTP and other residential and commercial subdivisions in the area.

The proposed development will not necessitate unreasonable public investment in infrastructure facilities or public services. The Petitioner will be engaging in infrastructure improvements to mitigate any potential impacts of the proposed development.

- (8) It may include lands with a general slope of twenty percent or more which do not provide open space amenities or scenic values if the commission finds that those lands are desirable and suitable for urban purposes and that official design and construction controls are adequate to protect the public health, welfare and safety, and the public's interests in the aesthetic quality of the landscape.

The Agricultural land of the project area is characterized by an average slope of four (4) percent.

The proposed boundary reclassification of the Agricultural land of the project area would provide additional urban land surrounding the existing urban lands of the MRTTP. The site is not suitable for productive agricultural land use and is better suited for urban development. The proposed development would provide additional opportunities for housing and employment because a portion of the MRTTP is already developed as an employment center. Basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection are in close proximity to the site. The MRTTP is currently within the General Plan's Urban Growth Boundary.

POSITION OF THE DEPARTMENT OF PLANNING, COUNTY OF MAUI

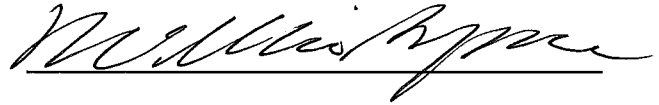
The Planning Department supports approval of the Petition for a District Boundary Amendment from the State Agricultural District to the State Urban District for the Property, reserving the opportunity for additional comments and conditions during the District Boundary Petition hearings with the Commission. Suggested conditions include:

1. That the Petitioner shall provide the necessary water source, storage and transmission facilities and improvements to the satisfaction of the County of Maui's Department of Water Supply and/or State Department of Health as applicable to service the petition areas.
2. That the Petitioner shall implement water conservation and best management practices in the design and construction of the petition area.
3. That the Petitioner shall construct drainage improvements to accommodate the development of the petition area in accordance with the requirements of the County of Maui's Department of Public Works.
4. That the Petitioner shall fund, construct, and implement roadway improvements to accommodate the development of the petition area in accordance with the requirements of the County of Maui's Department of Public Works.
5. That the Petitioner shall fund, construct, and implement all transportation improvements and measures required to mitigate impacts to state roadway facilities caused by the Project as set forth in a Memorandum of Agreement ("MOA") agreed to and executed by the DOT and the Petitioner. Petitioners shall submit to the DOT an updated TIAR, and Petitioner shall obtain acceptance of the Project's TIAR from the DOT and shall execute the MOA prior to final subdivision approval of lots intended for above ground construction for the Petition Area in Docket A10-787, and excluding construction of roads, utilities, and other infrastructure by Petitioner. The MOA shall include, but not be limited to, the following terms and conditions: (i) the accepted TIAR shall be incorporated in the MOA by reference; (ii) Petitioner's responsibilities for funding, construction, and implementation of improvements and mitigation; (iii) a schedule of agreed to improvements and a schedule for future TIAR updates or revisions to be accepted by DOT; (iv) development of the Project shall be consistent with the executed MOA and TIAR; and (v) any fees or in-kind contribution that is roughly proportional to any indirect or secondary impacts caused by the Project.

6. That the Petitioner shall construct the portion of the Mauka Collector within the MRTTP boundary either during construction of Phase 2 or prior to Year 2034 concurrent with the development of the Kihei Mauka planned growth area as outlined in the Maui Island Plan and shall coordinate these efforts with the Department of Transportation.
7. That the Petitioner shall comply with the requirements of the County Department of Environmental Management and/or State Department of Health as applicable.
8. That the Petitioner shall comply with the Parks Dedication requirements of the County of Maui as approved by the Director of Parks and Recreation.
9. That the Petitioner shall comply with all housing requirements to the satisfaction of the Department of Housing and Human Concerns.
10. That the Petitioner shall complete construction of the proposed backbone infrastructure for Phase 1 of the Project, which consists of primary roadways and access points, internal roadways, on- and offsite water and electrical system improvements, and stormwater/drainage and other utility system improvements within fifteen (15) years of the date of the Decision and Order approving the Petition.
11. In the event that historic resources, including skeletal remains, are identified during construction activities, all work shall cease in the immediate vicinity of the find, the find shall be protected from additional disturbance, and the Department of Land and Natural Resources, State Historic Preservation Division, Maui Island Section, shall be contacted immediately.
12. That the Petitioner shall develop mitigation measures to address any potential impacts on endangered species in the Petition area and shall as necessary consult with the DLNR, DOFAW, and USFWS to develop such mitigation measures.
13. For all land in the Petition Area or any portion thereof that is adjacent to land the State Land Use Agricultural District, Petitioner shall comply with the following:
 - A. Petitioner and its successors and assigns shall not take any action that would interfere with or restrain farming operations conducted in a manner consistent with generally accepted agricultural and management principles on adjacent or contiguous lands in the State Agricultural District. For the purpose of these conditions, "farming operations" shall have the same meaning as provided in HRS section 165-2; and
 - B. Petitioner shall notify all prospective developers or purchasers of land or interest in land in the Petition Area, and provide or require subsequent notice to lessees or tenants of the land, that farming operations and practices on adjacent or contiguous land in the State Agricultural District are protected under HRS chapter 165, the Hawaii Right to Farm Act. The notice shall disclose to all prospective buyers, tenants, or lessees of the Petition Area that potential nuisances from noise, odors, dust, fumes, spray, smoke, or vibration may result from agricultural uses on adjacent lands. The notice shall be included in any disclosure required for the sale or transfer of real property or any interest in real property.

14. Pursuant to Article XII, section 7, of the Hawaii State Constitution, Petitioner shall preserve any established access rights of Native Hawaiians who have customarily and traditionally used the Petition Area to exercise subsistence, cultural, and religious practices, or for access to other areas.

DATED: Wailuku, Hawaii, July 17, 2013.

A handwritten signature in cursive script, appearing to read "William Spence", written over a horizontal line.

WILLIAM SPENCE
Planning Director
Department of Planning

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ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

Telephone: (808) 270-7745
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RALPH NAGAMINE, L.S., P.E.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
DEPT. OF PLANNING
COUNTY OF MAUI
RECEIVED

July 12, 2013

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**EXPANSION OF EXISTING RESEARCH & TECHNOLOGY PARK
PETITION FOR AMENDMENT OF STATE LAND USE DISTRICT BOUNDARY
KIHEI, MAUI, TMK: (2) 2-2-024: 016, 017**

**TESTIMONY TO THE STATE LAND USE COMMISSION FROM
NOLLY I. YAGIN**

My name is Nolly I. Yagin. I am a Civil Engineer with the Department of Public Works ("Department") for the County of Maui, and have served in this capacity since October 2002. The Department is responsible for the planning, designing, building, and maintenance of the highways and related roadway infrastructure under the County's jurisdiction. The Engineering Division of the Department of Public Works reviews and provides comments on subdivision and construction plans, as well as Preliminary Engineering Reports, Drainage Reports, and other studies for proposed projects.

Thank you for this opportunity to share our comments on the proposed Expansion of the Existing Research & Technology Park relating to roadways.

The Department previously commented that this project should coordinate with the planning of a future "Mauka" by-pass highway. Although this roadway is not identified in any official adopted traffic master plan, this future roadway has been discussed as a possible alternative for circulation of traffic in South Maui.

The Department additionally recommends that the applicant ensure traffic projections and impact analysis be based on only existing infrastructure as well as future roadways and roadway improvements that have secured commitments for construction. It should be noted that the North-South Collector Road (Liloa Drive) is a roadway/corridor anticipated to address traffic circulation in this area South Maui. The County of Maui however, has no current plans to expand this roadway beyond one travel

Testimony of Nolly I. Yagin

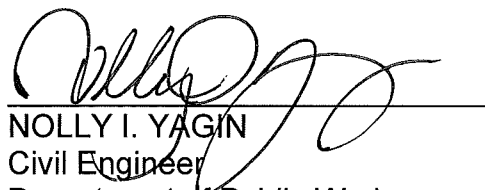
July 12, 2013

Page 2

lane in each direction. It should also be noted that future funding and improvements to the North South Collector Road may be contingent on the findings of a regional master plan update that is currently in development.

The applicant shall fully fund the planning, design, and construction of any recommended transportation improvements required for the proposed Research and Technology Park Expansion, to mitigate effects from project generated traffic.

We defer to the State Department of Transportation as to any impacts or proposed recommendations affecting the Pi'ilani Highway.



NOLLY I. YAGIN
Civil Engineer
Department of Public Works

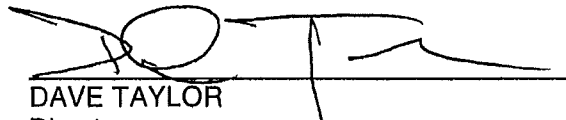
DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 South High Street, Suite 102
Wailuku, Hawaii 96793
Telephone: (808) 463-3101

**BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII**

In the Matter of the Petition of:	)	Docket No. A10-787
)	
MAUI R&T PARTNERS, LLC	)	TESTIMONY STATEMENT OF THE
	)	DEPARTMENT OF WATER SUPPLY,
	)	COUNTY OF MAUI; CERTIFICATE OF
	)	SERVICE
To Amend the Land Use District Boundary)	
of certain lands situated at Kihei, Island of)	
Maui, State of Hawaii, consisting of 253.05)	
Acres from the Agricultural District to the)	
Urban District, Tax Map Key Nos.)	
(2) 2-2:024:016 and 017, and)	
(2) 2-2-002:084 (por.))	

TESTIMONY STATEMENT OF THE DEPARTMENT OF WATER SUPPLY, COUNTY OF MAUI

DATED: Wailuku, Hawaii, July 15, 2013.


DAVE TAYLOR
Director
Department of Water Supply

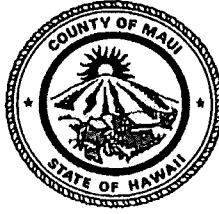
The Department of Water Supply (DWS) would like to communicate the following concerns relating to Maui R&T Partner's, LLC's Petition To Amend the Land Use District Boundary.

The DWS cannot commit to providing potable water beyond the 18 lots within the existing technology park without further source improvements. Private water resource development entails certain logistical and viability risks for which the private developer assumes sole responsibility, and the DWS assumes no responsibility. In other words, as the developer has proposed to unilaterally develop a private system for the project, the DWS has no intention of assuming responsibility for this system or for meeting future additional project components' water demand requirements.

ALAN M. ARAKAWA
Mayor

KYLE K. GINOZA, P.E.
Director

MICHAEL M. MIYAMOTO
Deputy Director



TRACY TAKAMINE, P.E.
Solid Waste Division

ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

**COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**

2200 MAIN STREET, SUITE 100
WAILUKU, MAUI, HAWAII 96793

July 12, 2013

State Land Use Commission Docket No. 10-787
Maui R & T Partners, LLC
TMK (2) 2-2-024:16 and 17, and 2-2-002:054 (por.)

To Whom It May Concern:

**SUBJECT: TESTIMONY TO THE STATE LAND USE COMMISSION FROM KYLE
GINOZA**

Thank you for the opportunity to share our comments on the proposed development relative to how it impacts our wastewater infrastructure facilities. Please find the Department's comments below:

- a. Although wastewater system capacity is currently available as of 7/12/2013, the developer should be informed that wastewater system capacity cannot be ensured until the issuance of the building permit.
- b. Wastewater contribution calculations are required before building permit is issued.
- c. Developer shall pay assessment fees for treatment plant expansion costs in accordance with ordinance setting forth such fees. The property is located in Kihei Sewer Service Area (Facility Fee Only).
- d. Developer is required to fund any necessary off-site improvements to collection system and wastewater pump stations.
- e. Indicate on the plans the ownership of each easement (in favor of which party). Note: County will not accept sewer easements that traverse private property.
- f. Commercial kitchen and other applicable facilities within the proposed project shall comply with pre-treatment requirements (including grease interceptors, sample boxes, screens etc.)
- g. Non-contact cooling water and condensate should not drain to the wastewater system.
- h. The existing and proposed wastewater system shall remain privately owned and maintained.
- i. The County has tentatively planned to construct a second 1.0 million gallon R-1 tank in 2017 in order to provide more R-1 quality water on a reliable basis to existing and future customers. Although we strive to have R-1 water available 100% of the time, this is not always possible. Plans for a contingent supply are recommended as planned.

- j. While the current delivery of wastewater from this project to the Kihei WWRF is adequate, improvements funded by the developer may be necessary in the future as equipment/pipeline conditions change and flows increase.

Sincerely,

A handwritten signature in black ink, appearing to read 'K. Ginoza', with a horizontal line extending from the end of the signature.

KYLE K. GINOZA, P.E.

Director of Environmental Management

In the Matter of the Petition of:	)	Docket No. A10-787
)	
MAUI R&T PARTNERS, LLC	)	CERTIFICATE OF SERVICE
)	
)	
To Amend the Land Use District Boundary)	
Of certain lands situated at Kihei, Island of)	
Maui, State of Hawaii, consisting of 253.05)	
Acres from the Agricultural District to the)	
Urban District, Tax Map Key Nos.)	
(2) 2-2:024: 016 and 017, and)	
<u>(2) 2-2-002:084 (por.)</u>)	

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served on the following on the date indicated below:

JESSE K. SOUKI Director Office of Planning 235 Beretania Street, 6 th Floor Honolulu, Hawaii 96813	Mail
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BRYAN C. YEE, ESQ. Deputy Attorney General Commerce and Economic Development Department of the Attorney General 425 Queen Street Honolulu, Hawaii 96813	Mail
--	------

BENJAMIN M. MATSUBARA CURTIS T. TABATA WYETH M. MATSUBARA MATSUBARA - KOTAKE 888 Mililani Street, 8 th Floor Honolulu, Hawaii 96813	Mail
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--	------

JENNIFER MAYDAN
BRETT DAVIS
CHRIS HART & PARTNERS, INC.
115 N. Market Street
Wailuku, HI 96793

Mail

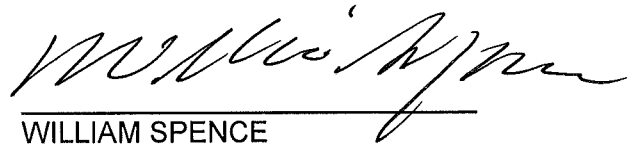
JAMES A. GIROUX
Deputy Corporation Counsel
Department of the Corporation Counsel
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Wailuku, Hawaii 96793

Hand delivery

PLANNING COMMISSION
County of Maui
One Main Plaza, Suite 315
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Wailuku, Maui, Hawaii 96793

Hand Delivery

DATED: Wailuku, Hawaii, July 17, 2013.



WILLIAM SPENCE
Planning Director
Department of Planning