The Applicant intends to maintain ownership of the agricultural preserve. However, it is possible that in the future the Applicant may decide to deed a portion and or all of the preserve to the State and or County for the purpose of establishing an Agricultural Park. Long-term ownership and management options are still being considered. For the foreseeable future, the Waikapū Properties, LLC and Wai'ale 905 Partners intend to manage the 800-acre Agricultural Preserve.

Within the agricultural preserve, several hundred acres will be developed as a public and/or private agricultural park to help facilitate Maui's agricultural development. The Maui Agricultural Development Plan (July 2009) was prepared by the Maui Country Farm Bureau in association with the County of Maui's Office of Economic Development in order to identify opportunities for the development and diversification of Maui's agricultural industry. The Plan states in part:

> *"The industry faces numerous immediate and longer-term challenges and opportunities. The availability of an adequate and reliable supply of affordable irrigation water is a critical issue as competing demands from urban and instream uses intensifies, and drought conditions persist."*
>
> *"Greater access to affordable land, a reliable and affordable inter-island transportation system, and greater access to markets are also critical issues to be addressed if Maui agriculture is to achieve sustained growth."*

The establishment of WCT's centrally located 800-acre agricultural preserve, with highly productive lands and affordable irrigation water, may help Maui farmers compete in local, mainland and international markets. These lands are located about three miles from Maui's only commercial harbor and its principal airport, servicing the mainland and Oahu.

There are currently ~~three~~ four commercial farms farming the Project areas lands. These include Kumu Farms, Hoaloa Farms, Makani Olu Ranch, and Beef and Bloom. ~~Hawai'i Taro LLC, and HC&S~~. ~~Waikapū Properties LLC~~ Makani Olu Ranch is raising a herd ~~heard~~ of Texas Longhorn

cattle and Beef and Bloom Black Angus cattle on the higher elevation agricultural lands. The recent discontinuation of HC&S's farming of sugarcane on the Project's agricultural lands will allow WCT's existing diversified farmers, as well as new farmers, to establish diversified agriculture onto these former sugarcane lands. Vehicular access into the Agricultural Preserve will be from the Wai'ale Bypass and from the Project's internal roadways. Access may also be available from Honoapi'ilani Highway and Kuihelani Highway, subject to approval of the State Department of Transportation. The longer-term agricultural development plan includes the following types of uses, the location of which are shown conceptually on Figure No. 26 A-C ~~24~~, "Conceptual Agricultural Master Plan":

- ***Waikapū Commons Agricultural Park (1).*** This private and/or publically owned and managed agricultural park will provide long-term leases to qualified Maui farmers for diversified agricultural production. The park would be serviced by irrigation water that would be supplied from on-site agricultural wells. The water would be stored in agricultural reservoirs and distributed to the Park as demand warrants and at rates to support profitable farming operations. It is expected that Kumu Farms and Hoaloa Farms ~~Hawaiian Taro LLC~~, both existing farmers on WCT lands, will relocate their operations to the agricultural park. Other qualified farmers will also be given an opportunity to lease these lands for farming endeavors. The area of the Park will likely range from approximately 250 to 800 acres, depending upon farmer demand. Figure 26, A ~~24~~ is an illustrative map identifying conceptually the location of the Agricultural Park and other potential agricultural uses on the Property.
- ***Community Farmers Market, Fruit and Vegetable Stands and other Direct Marketing (2, 3)***. The WCT will encourage direct marketing to consumers of agricultural products grown on the property and from elsewhere within Maui County. It is envisioned that a vibrant farmers market and fresh fruit and vegetable stands may be located within the WCT at strategic locations as shown on Figure 26, A.~~24~~ Because of the WCTs close proximity to Wailuku Town, Kahului and Kīhei, farmers may also decide to establish pick-your-own farms or participate in community supported agricultural programs where orders for produce are placed directly by consumers with local WCT farmers. On-site restaurants, such as the existing Mill House Restaurant, may also serve as customers agricultural products grown on WCT lands.

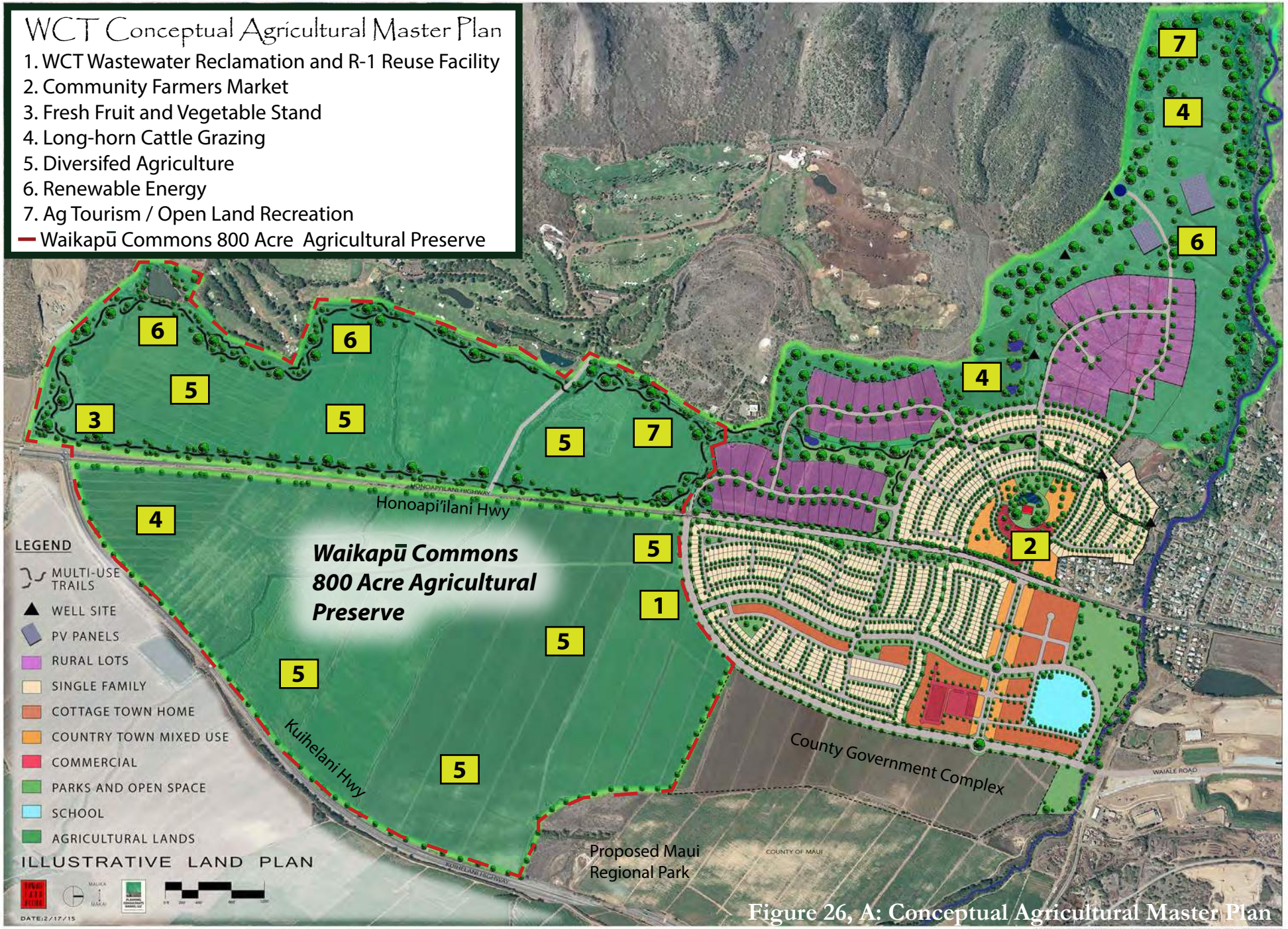


Figure 26, A: Conceptual Agricultural Master Plan

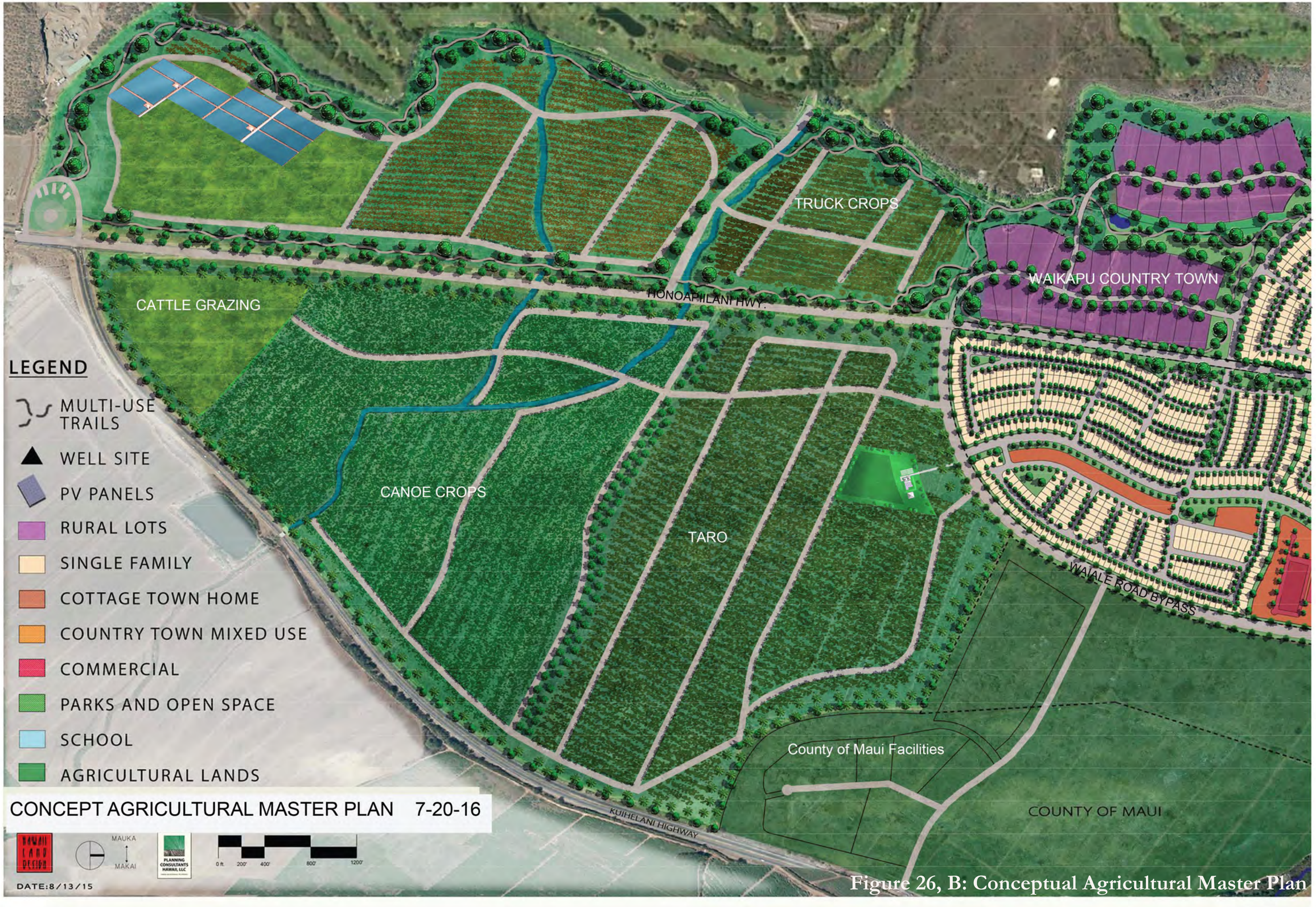


Figure 26, B: Conceptual Agricultural Master Plan

Figure 26, C: Conceptual Agricultural Master Plan

- ***Grazing of WCT Long-horn Cattle (4)***. A herd ~~heard~~ of approximately 200 Longhorn cattle are currently grazing the WCT's mauka agricultural lands. It is envisioned that a larger herd ~~heard~~ of cattle may be established on WCT lands not used for other diversified agricultural uses.
- ***Diversified Agriculture (5)***. Other agricultural production such as the growing of coffee, nursery products, orchards, sustainable forestry, energy crops, sugar and livestock may be conducted on WCT agricultural lands.
- ***Renewable Energy (6)***. Establishing one or more small solar farms may be considered if these farms are technically and economically viable and do not interfere with agricultural operations. These solar farms, if established, would be located on relatively small areas of land and would be subject to the permitting requirements of State and County land use laws, which regulate where and how much agricultural land can be used for renewable energy. Section 205-4.5 (20) & (21), Hawai'i Revised Statutes (HRS), states that solar energy facilities on "B" rated land cannot comprise more than ten percent of the acreage of the parcel or 20 acres of land without the issuance of a special use permit. The State Department of Agriculture in its March 30, 2016 comment letter (**See**: Appendix S, DEIS Agency and Community Comment and Response Letters) suggested that the Applicant consider incorporating compatible agricultural activates onto lands also used for renewable energy. The purpose of the proposed solar farms would be to generate clean renewable energy, while developing a diversity of revenue sources to support the agricultural lands.
- ***Agricultural Tourism/Active Recreation (7)***. Non-intrusive open land recreation activities may be permitted in appropriate locations if they do not conflict with agricultural operations. Likewise, agricultural tourism may be permitted in appropriate locations. Like renewable energy, appropriate agricultural tourism activities could help to generate alternative revenue sources to support the agricultural lands, while creating visitor industry jobs and additional on-site demand for locally produced agricultural products.

The Agricultural Preserve will be dedicated in perpetuity through an agricultural conservation easement once all of the entitlements for the WCT's proposed urban and rural lands are granted in accordance with the WCT Master Plan development as described in Section III.B of the FEIS.

The agricultural conservation easement will prohibit the development of farm dwellings and/or residential dwellings of any kind, including farm labor dwellings, within the Preserve. However, it is planned that any other agricultural use, agricultural accessory uses or special uses as permitted by Hawai'i Revised Statutes (HRS), Chapter 205 and Maui County Code (MCC), Chapter 19.30A will be permitted within the Agricultural Preserve. The underlying State Land Use Designation and County Zoning of the property will not be changed by the conservation easement, except that dwellings units will be prohibited within the Preserve. Once established, the Agricultural Preserve will be managed by the existing ownership entities; or it will be managed by a separate entity with the specific responsibility for the management and operations of the Preserve.

6. Sustainability Plan

Planning Consultants Hawai'i, LLC is preparing a Sustainability Plan to set forth project specific goals, objectives and strategies in the areas of urban design, construction and operation phase management. Together, the strategies identified will help to create a more sustainability community by mitigating development impacts and making more efficient use of scarce resources. Table No. 16 ~~The following~~ documents the Project's sustainability goals, objectives and strategies in the following areas: urban design, energy use, water use, storm drainage, waste management, local food production, and health and wellness.

Table 16: WCT Sustainability Goals, Objectives and Strategies

URBAN DESIGN	
UD.1	**Goal:** Establish a more complete community that balances housing with the provision of on-site supporting commercial, civic and employment uses.
UD.1.a	Integrate a balanced mix of residential, commercial, employment, and civic uses into the development.
UD.1.b	Incorporate compact and mixed use development patterns.
UD.1.c	Provide a diversity of housing choices for low, moderate and high income wage earners.
UD.1.d	Build "Complete Streets".
UD.1.e	Establish a diverse range of active and passive recreation opportunities.

UD.1.f	Encourage community gardening within designated areas.
UD.1.g	Integrate off-road pedestrian and bicycle paths and trails.
UD.1.h	Ensure efficient vehicular and non-motorized connectivity between residential, commercial and civic uses.
UD.1.i	Incorporate adequate transmit stops throughout the development.
UD.1.j	Meet all ADA standards for accessibility.
ENERGY USE	
EU.1	**Goal**: Reduce WCTs demand for transportation fuels
EU.1.a	Incorporate compact and mixed use development patterns.
EU.1.b	Build "Complete Streets".
EU.1.c	Ensure efficient vehicular and non-motorized connectivity between residential, commercial and civic uses.
EU.1.d	Incorporate adequate transit ~~transmit~~ stops throughout the development.
EU.1.e	Incorporate electric vehicle recharging stations within the development.
EU.1.f	Support regional bicycle and pedestrian ways to connect the development with neighboring communities.
EU.2.A	**Objective:** Reduce energy use in residential, commercial and institutional buildings by 30% to 50% or more from baseline levels
EU.2.A.a	Promote energy efficiency as a key consideration in the design of new buildings.
EU.2.A.b	Utilize an Integrated Design Process to determine the optimal mix of energy efficiency measures.
EU.2.A.c	Establish a design team with expertise in the design of energy efficient residential, commercial and institutional buildings.
EU.2.A.d	Utilize the following types of guides in the design of new buildings: ASHRAE Advanced Energy Design Guides for Small Office Buildings, for Small Retail Buildings, for K-12 School Buildings, etc.
EU.2.A.e	Consider utilizing the Energy Star Certified Homes Prescriptive or Performance Path recommendations to achieve Energy Star certification for single- and multi-family residences.
EU.2.A.f	Promote LEED certification of commercial and institutional buildings throughout the project.

EU.2.A.g	Orientate buildings to take optimum advantage of natural cooling and ventilation.
EU.2.A.h	Encourage the use of daylighting within new buildings.
EU.2.A.i	Utilize LED lighting to the maximum extent possible for interior and exterior lighting.
EU.2.A.j	Utilize canopy trees to provide shade and cooling of buildings.
EU.2.A.k	Install solar hot water heating into all single-family homes.
EU.2.A.l	Allow for laundry to be hang-dried in appropriate areas.
EU.3.B	**Objective:** Facilitate carbon storage and sequestration with additional forest and tree coverage
EU.3.B.a	Create an Urban Tree Canopy by planting shade trees in the following types of areas: along residential and collector streets, within parking lots, within passive and active recreation areas, and as landscape features within residential, commercial and institutional lots.
EU.3.B.b	Consider participation in Federal and State reforestation programs such as the State of Hawai'i Forest Stewardship Program (FSP) and the Conservation Reserve Enhancement Program (CREP).
EU.4.C	**Objective:** Develop renewable energy sources to offset at least 40 percent of the project's electrical energy demand
EU.4.C.a	Incorporate PV and battery storage systems as options for potential homebuyers.
EU.4.C.b	If technically and financially viable, develop on-site solar, wind and hydro resources.
EU.4.C.c	Consider farming and/or leasing agricultural lands for viable bio-fuel crops.
EU.4.C.d	Assess the viability of storing energy on-site for direct sale to WCT customers if connecting to the MECO grid is not available.
WATER USE	
WU.1	**Goal:** Significantly reduce the project's potable and non-potable water demand
WU.1.A	**Objective:** Reduce the overall project demand for potable water use by 30 to 50 percent
WU.1.A.a	Utilize low flow fixtures that exceed baseline standards established by the 2006 Uniform Plumbing Code by at least 20%.
WU.1.A.b	Utilize non-potable water for irrigation of common open spaces, parks, etc.

WU.1.A.c	Establish dual water systems to provide non-potable water for irrigation of parks and open space, residential and commercial landscape planting.
WU.1.A.d	Allow for rainwater catchment throughout the project.
WU.1.A.e	Utilize non-potable water reservoirs to store, capture, and manage the supply of non-potable water.
WU.1.A.f	Study the practicality of rainwater harvesting including the capture and storage of runoff for irrigation.
WU.1.A.g	Utilize draught tolerant plants, appropriate for the climate zone, throughout the project.
WU.1.A.h	Utilize drip irrigation and water conserving sprinkler systems.
STORM DRAINAGE	
SD.1	**Goal**: Convert storm water runoff into an economic and environmental resource
SD.1.A	**Objective:** Remove pollutants and facilitate ground water recharge
SD.1.A.a	Utilize a combination of structural and non-structural BMPs in a sequence to enhance treatment of runoff.
SD.1.A.b	Utilize Low Impact Development Techniques such as bioretention, grassed swales, level spreaders, vegetative filter strips, natural buffers and open space to reduce runoff volumes, promote infiltration, and remove pollutants.
SD.1.A.c	Assess the following types of structural systems to treat runoff, facilitate groundwater recharge, and contain any increase in runoff to the site: wet-ponds, infiltration basins, infiltration trenches, French drains, exfiltration trenches, etc.
SD.1.A.d	Promote the use, where practical, of grassed parking and permeable pavements for residential driveways, commercial and non-commercial parking lots and in other areas where appropriate.
SD.1.A.e	Establish a riparian buffer along the Waikapū Stream.
SD.1.A.f	Utilize catch basin inserts and/or oil/grit separators to remove oil, grease, trash and other pollutants from runoff.
SD.2.A	**Objective:** Prevent runoff and pollutants from being discharged from construction sites

SD.2.A.a	During the construction phase, utilize a combination of construction phase BMP's such as: • Silt fences; • Dust screens; • Seeding/sodding/mulching; • Covering exposed dirt; • Regular watering; and • Earthen berms.
SD.2.A.b	Obtain a National Pollutant Discharge Elimination System (NPDES) permit for areas of grading that are larger than one acre.
WASTE MANAGEMENT	
WM.1	**Goal:** Reduce the volume of project waste from entering landfills during construction and operations
WM.1.a	Develop a construction waste management policy and program for the construction phase.
WM.1.b	Establish a recycling program for residential, commercial and institutional users.
WM.1.c	Locate a material recycling collection center within the project.
WM.1.d	Assess the feasibility of establishing an on-site composting program for organic materials.
WM.1.e	Assess the feasibility of instituting a bi-annual durable goods collection drive.
AGRICULTURE DEVELOPMENT & LOCAL FOOD PRODUCTION	
AD.1	**Goal:** Create and maintain economically viable agricultural production on WCT agricultural lands
AD.1.a	Protect in perpetuity approximately 800 acres of prime agricultural lands from urban development through an agricultural easement or similar mechanism and limit subdivision approximately 5 lots for the remaining lands.
AD.1.b	Establish a public and/or private agricultural park within a portion of the project's agricultural lands.
AD.1.c	Provide opportunities for community gardening within the proposed parks and/or open space network
AD.1.d	Encourage the establishment of a farmers market, farm stands, and community

	supported agricultural programs within the WCT.
HEALTH & WELLNESS	
HW.1	**Goal:** Establish a community that promotes health and wellness
HW.1.a	Establish a network of off-road pedestrian and bicycle paths.
HW.1.b	Establish a compact and mixed-use settlement pattern that promotes active transportation.
HW.1.c	Construct "complete streets" that safely accommodate multi-modal transportation.
HW.1.d	Provide a network of parks and open spaces linked by pedestrian and bicycle paths.
HW.1.e	Promote the establishment of health related businesses and services within the development, including: gyms and fitness centers, health food stores, farmers markets, medical services, etc.
HW.1.f	Establish the opportunity for community gardening.
HW.1.g	Promote and support the establishment of pedestrian and bicycle networks linking the project with neighboring communities.
HW.1.h	Incorporate a diversity of park types, including mini-parks, neighborhood parks and community parks with both active and passive uses.

7. Phasing Plan

The WCT will be implemented in two five year phases through 2026. Figure No. 27 ~~25~~, "Conceptual Phasing Plan" and Tables 17 ~~14~~, 18 ~~15~~and 19 ~~16~~ show the Project's conceptual land use program for Phase I - 2017 through 2021 - and for Phase II - 2022 through 2026.

Table 17 ~~14~~: Phase I Conceptual Land Use Program for 2017 through 2021

Land Use	Net Acres	Gross Acres	Residential Units	Net Residential Density	FAR	Sq. Ft. Commercial
Single Family	45.51		332	7.30		
Multi-Family/Town	17.213	24.59	216	12.55		

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

Table 18 ~~15~~: Phase II Conceptual Land Use Program for 2022 through 2026

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

Land Use	Net Acres	Gross Acres	Residential Units	Net Residential Density	FAR	Sq. Ft. Commercial
Total Residential Units	**848**					

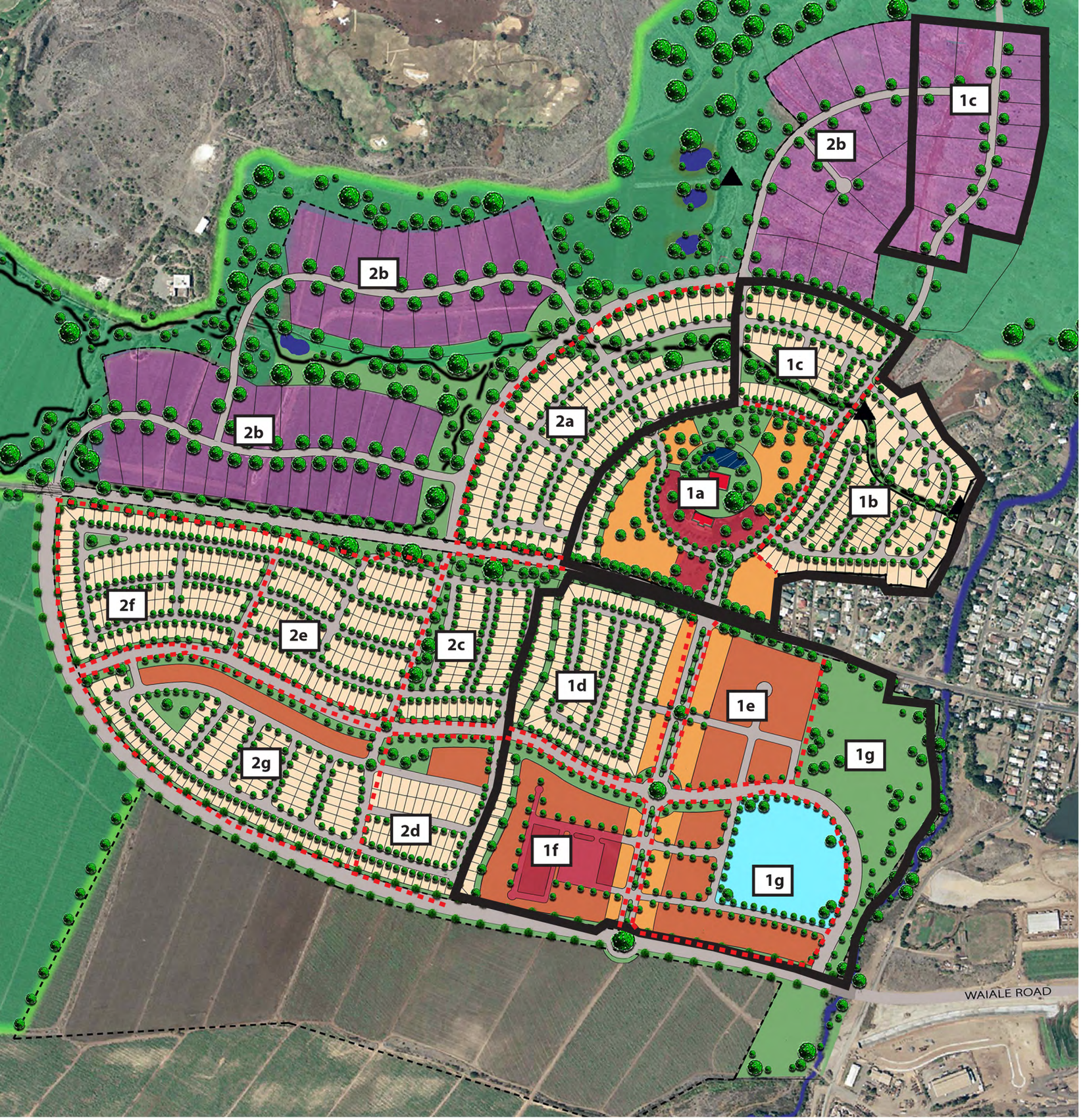
Table 19 ~~16~~: Conceptual Development Program for 2017 - 2026

Land Use	Net Acres	Gross Acres	Residential Units	Net Residential Density	FAR	Sq. Ft Commercial
Single Family	131.05		970	7.40		
Multi-Family / Town Home	21.203	30.29	256	12.07		
Rural	124.82		80	0.64		
Country Town Mixed-Use	16.168	20.21	127		0.25	58,475
Commercial / Employment		12.89			0.25	140,372
Existing Town Center / Lagoon		4.48				
School		12				
Active/Passive Park		32.44				
Greenways / Open Space	49.66	49.66				
Roads		81.163				
Acres	**499.003**					
Residential Units	**1433**					
'Ohana Units	**146**[6]					

[6] For planning purposes it was assumed that about 15 percent of single-family homeowners would decide to build an 'Ohana unit.

Land Use	Net Acres	Gross Acres	Residential Units	Net Residential Density	FAR	Sq. Ft Commercial
Total Residential Units	**1579**[7]					
Commercial / Employment	**198,847**					

[7] Includes ‘Ohana units. The number of ‘Ohana units may increase or decrease.



Hallstrom Absorption:

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

Phase 1: 2017-2021

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

Phase II: 2022-2026

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

Date: October 1, 2014

Figure 27: Conceptual Phasing Program

HAWAII LAND DESIGN

PLANNING CONSULTANTS HAWAII, LLC

8. Wastewater Treatment Plan

The policy of the DEM is that available wastewater capacity cannot be reserved until a project is ready to receive building permits. If capacity at the KWWRF is available at the time building permits are ready to be issued for the Project, the Project may consider a temporary connection to the County's sewer system and complete the required upgrades for the connection in the Phase I development (**See**: Chapter VIII, Alternatives Analysis, Wastewater Alternative 2).

However, since the DEM stated in its letter dated April 13, 2016 that the Project would not be allowed a connection to the KWWRF, a new private wastewater reclamation facility, collection system, and pump stations will be constructed. This new facility will utilize FCR technology and will include tertiary treatment producing R-1 recycled water which is the highest standard currently regulated by the State Department of Health. The facility will be developed in phases based on demand for wastewater treatment. The FCR facility will be located within the Agricultural Preserve on approximately 12-acres in the area and in the manner shown on Figures 28 and 32. Access to the facility will be from a driveway that will connect to the Wai'ale Bypass Road north of its intersection with Honoapi'ilani Highway. The wastewater facility will be located on property owned by the Applicant and identified as TMK Number (2) 3-6-002:003.

At full buildout of the Project, the wastewater reclamation facility is expected to process an average daily flow of about 0.65 million gpd. The peak flow into the facility is estimated to be approximately 1.3 million gpd. Wastewater processed at the facility will be reclaimed to R-1 recycled water standards, which will allow the non-potable water to be used for above-ground irrigation of most agricultural crops and open space uses, including parks. The Agricultural Preserve as well as the Project's parks and open space elements are expected to be the facility's future recycled water users.

The Wai'ale Bypass frontage of the 12- acre project site will be developed with a driveway and on-site parking; solar panels; an education center; a pre-treatment area and control room; biological treatment reactor area; the final clarifier; filtering and disinfection building and an R-1 recycled water storage tank. The buildings and the associated facilities that comprise the treatment facility will be 30-feet or less in height, and setback at approximately 400-feet from the Wai'ale Bypass.

Location | Site Plan - scale 1:1000

Water Reclamation Facility

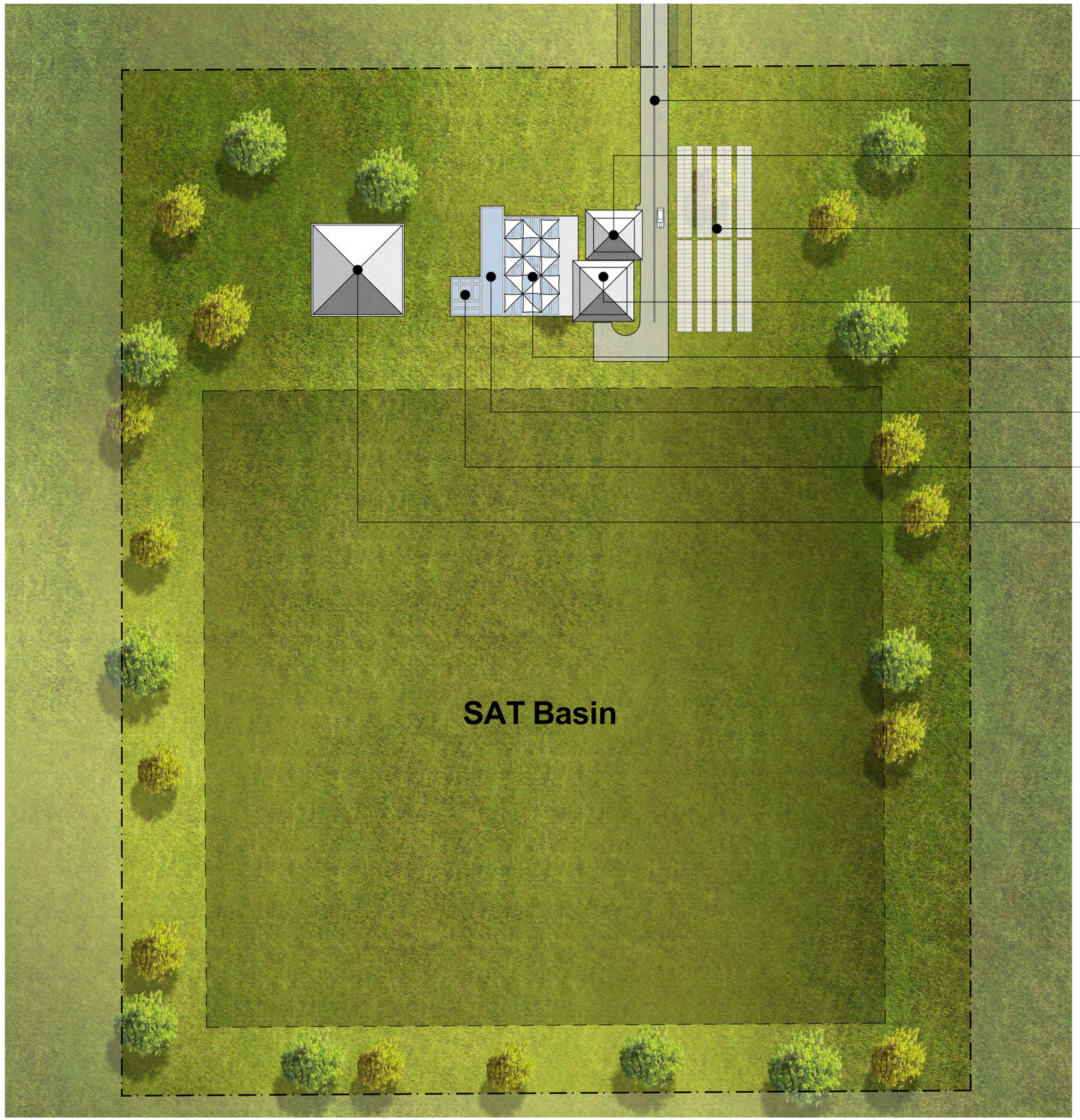


Figure 28: Conceptual WWRF Site Plan

An approximate 5.6 acre Soil Aquifer Treatment Basin will be located at the rear of the property. Agricultural lands will border the facility to the south and west, agricultural lands and then the County's regional park to the north, and agricultural lands and then the Wai'ale Bypass road and Project to the West.

Organica Treatment Plant Process

Organica is a leader in wastewater treatment and reuse in an energy efficient and aesthetically pleasing manner by marrying state of the art technology with a natural systems approach. Organica solutions utilize a Food Chain Reactor (FCR) configuration, consisting of biological treatment in successive reactor zones utilizing fixed biomass on a combination of natural plant roots and Organica's engineered biofiber media, along with a limited amount of suspended biomass (See: Figure No. 29).

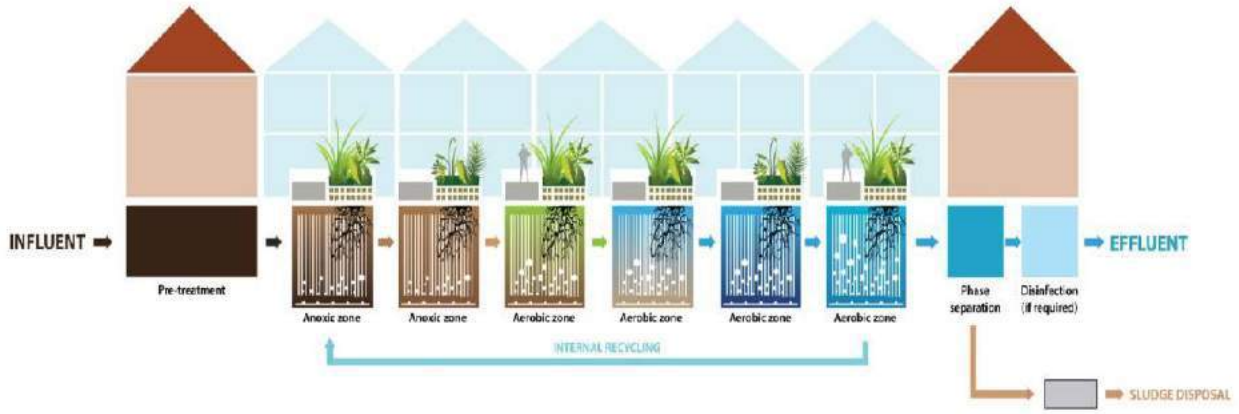


FIGURE 29: ORGANICA PROCESS DIAGRAM OF FCR PROCESS

Organica FCR solutions consist of a series of biological treatment zones simultaneously utilizing both fixed biofilm and suspended biomass in the reactors. Biodegradation of influent contaminants is accomplished by the combination of fixed and suspended biological cultures. Biomass in the Organica FCR is primarily comprised of fixed-film microorganisms, utilizing natural plant roots along with additional engineered (biofiber) media as biofilm carriers. As influent travels through the FCR zones, the available organics and nutrients (various carbon, nitrogen, and phosphorus fractions) are consumed and/or transformed. As a result, the