

**Agricultural Land Assessment**  
**For**  
**Mālaekahana Hui West's**  
**Proposed Important Agricultural Land**  
**Island of O'ahu**

Prepared for:

Prepared by:



December 2018

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**Agricultural Land Assessment for Mālaekahana Hui West's  
Proposed Important Agricultural Land**

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**Agricultural Land Assessment for Mālaekahana Hui West's  
Proposed Important Agricultural Land**

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# 1. Introduction/Purpose

This Agricultural Lands Assessment: 1) is prepared in support of a Petition for Declaratory Order to Designate Important Agricultural Lands (IAL) for land on O‘ahu owned by Mālaekahana Hui West, LLC (Mālaekahana Hui West); and 2) provides an overview of various agricultural and other characteristics of the land that Mālaekahana Hui West proposes to designate as IAL.

## **Mālaekahana Hui West’s Land and Proposed IAL Designation**

Mālaekahana Hui West owns approximately 455.62 acres of land on O‘ahu. Specifically, Mālaekahana Hui West’s land is along the windward side of the North Shore of O‘ahu, in the southern portion of Kahuku and 1.4 miles north-northwest of Lā‘ie. The land is within all or portions of two ahupua‘a: Mālaekahana and Keana. Of Mālaekahana Hui West’s total land approximately 453.43 acres (99.5 percent) is within the State Agricultural District (Agricultural District); and approximately 2.19 acres (0.5 percent) is within the State Urban District (Urban District).

Throughout this report the term:

- “Mālaekahana Hui West” refers to the entity that owns the land
- “Mālaekahana Hui West’s Land” or “Land” refers to Mālaekahana Hui West’s total land holdings
- The “Property” refers to the land Mālaekahana Hui West proposes to designate as IAL; all land proposed for IAL designation is within the Agricultural District
- The “Remainder Land” refers to Mālaekahana Hui West’s Land within the Agricultural District and Urban District that it is not proposing to designate as IAL.

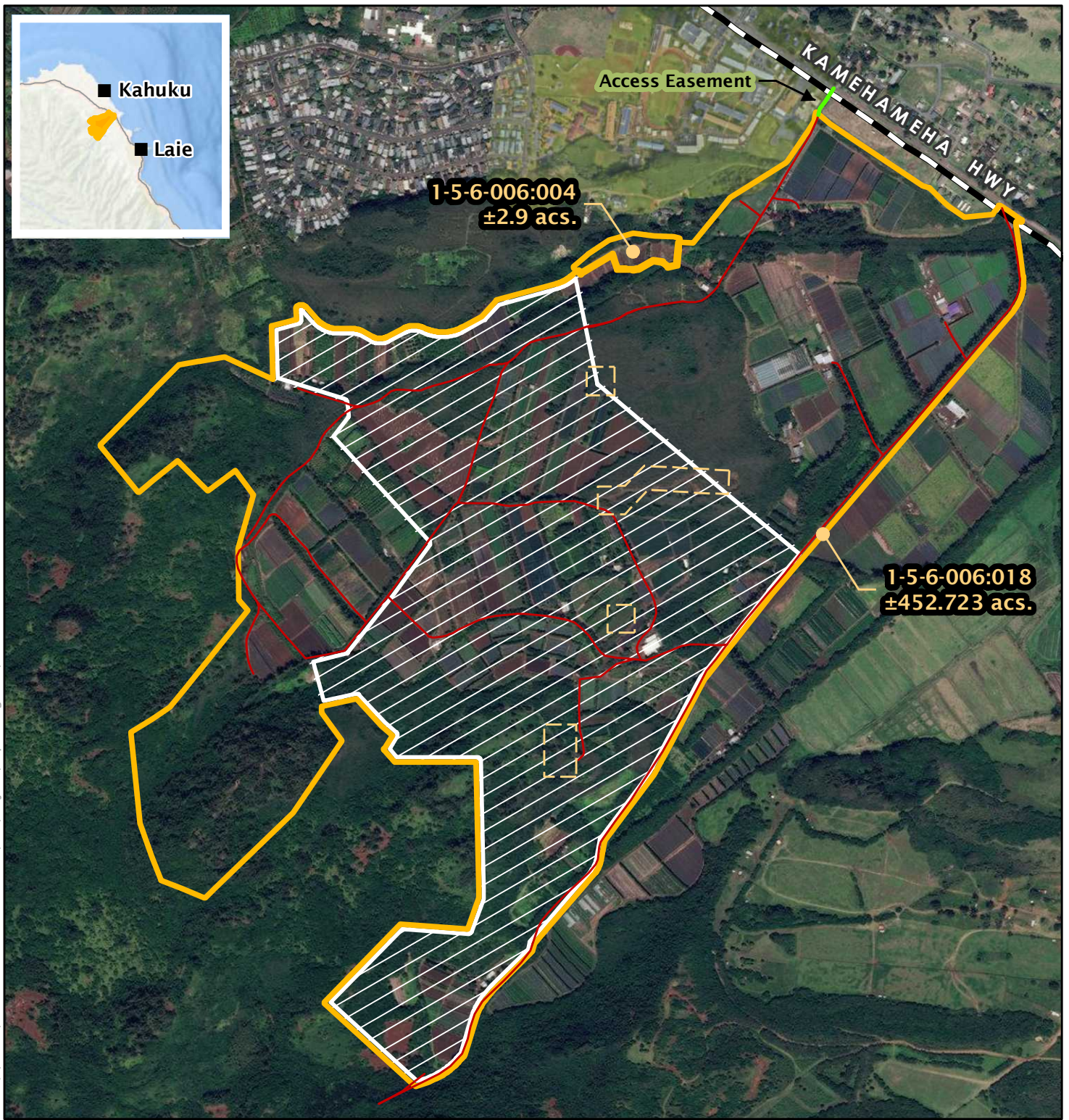
Mālaekahana Hui West proposes to designate a majority (50.6 percent or 230.33 acres) of its combined Land in the Agricultural District and Urban District as IAL<sup>1</sup>; however, all the area proposed to be designated as IAL is within the Agricultural District. The balance of the combined Land in the Agricultural District and Urban District (49.4 percent or 225.29 acres) (the Remainder Land) is not proposed to be designated as IAL. A large majority of the Land Mālaekahana Hui West is proposing for IAL designation is consistent with City and County of Honolulu (“City”) Department of Planning and Permitting’s (“DPP”) proposed IAL designations for Mālaekahana Hui West’s Land (see Section 12 and Figure 12 of this report for more information).

Figure 1 shows the TMK parcels and indicates the area of each parcel proposed to be designated IAL with hatch marks.

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<sup>1</sup>.Section 205-49, Hawai‘i Revised Statutes, provides that a majority of a landowner’s landholdings excludes lands held in the State Conservation District; therefore, the calculation of the percentage of land that Mālaekahana Hui West is proposing to designate IAL, compared to the percentage it is not proposing to designate IAL, is based on Mālaekahana Hui West’s total Land in the Agricultural District and Urban District. Mālaekahana Hui West has no land in the Rural District.

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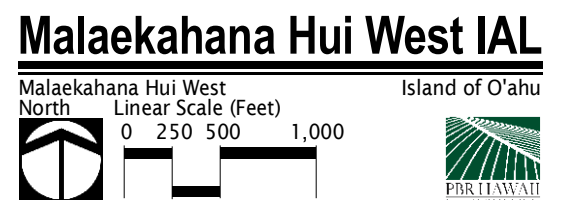
-  Malaekahana Hui West's Land
-  CPR Lots
-  Proposed IAL ("Property")
-  Ag. Road

Figure 1  
TMK Parcels and Proposed IAL



Source: City & County of Honolulu, 2018. ESRI Aerial, 2016.  
Disclaimer: This graphic has been prepared for general planning purposes only.

Table 1 (below) shows the Tax Map Key (TMK) number of both parcels that Mālaekahana Hui West owns, the area in the Agricultural and Urban districts, the area proposed to be designated IAL, and the area that is not proposed to be designated as IAL.

**Table 1: TMKs and Proposed IAL Areas**

<b>Tax Map Key Parcel No.</b>	<b>Total Acres (Land)</b>	<b>Agricultural District Acres</b>	<b>Urban District Acres</b>	<b>IAL Acres (Property)</b>	<b>Non-IAL Acres (Remainder Land)</b>
5-6-006:018	452.72	450.53	2.19	230.33	222.39
5-6-006:004	2.90	2.90	0.00	0.00	2.90
<b>Total</b>	<b>455.62</b>	<b>453.43</b>	<b>2.19</b>	<b>230.33</b>	<b>225.29</b>
<b>Percentage of Total</b>		<b>99.5%</b>	<b>0.5%</b>	<b>50.6%</b>	<b>49.4%</b>
		<b>100%</b>		<b>100%</b>	

### **Standards and Criteria to Identify IAL**

Hawai‘i Revised Statutes (HRS) §205-44(c) provides standards and criteria to identify IAL. HRS §205-44(a) provides that lands identified as IAL need not meet every standard and criteria, but rather, lands meeting any of the criteria shall be given initial consideration, provided that the designation of IAL shall be made by weighing the standards and criteria with each other to meet: 1) the constitutionally mandated purposes in Article XI, Section 3, of the Hawai‘i Constitution; and 2) the objective and policies for IAL set forth in HRS §205-42 and HRS §205-43.

The standards and criteria to identify IAL set forth in HRS §205-44(c) are:

- 1) *Land currently used for agricultural production;*
- 2) *Land with soil qualities and growing conditions that support agricultural production of food, fiber, or fuel-and energy-producing crops;*
- 3) *Land identified under agricultural productivity rating systems, such as the agricultural lands of importance to the State of Hawaii (ALISH) system adopted by the board of agriculture on January 28, 1977;*
- 4) *Land types associated with traditional native Hawaiian agricultural uses, such as taro cultivation, or unique agricultural crops and uses, such as coffee, vineyards, aquaculture, and energy production;*
- 5) *Land with sufficient quantities of water to support viable agricultural production;*
- 6) *Land whose designation as important agricultural lands is consistent with general, development and community plans of the county;*
- 7) *Land that contributes to maintaining a critical land mass important to agricultural operation productivity;*
- 8) *Land with or near support infrastructure conducive to agricultural productivity, such as transportation to markets, water or power.*

The information in this assessment is provided to demonstrate that the Property is consistent with the standards and criteria to identify IAL as set forth in HRS §205-44(c).

## **2. Agricultural Use History**

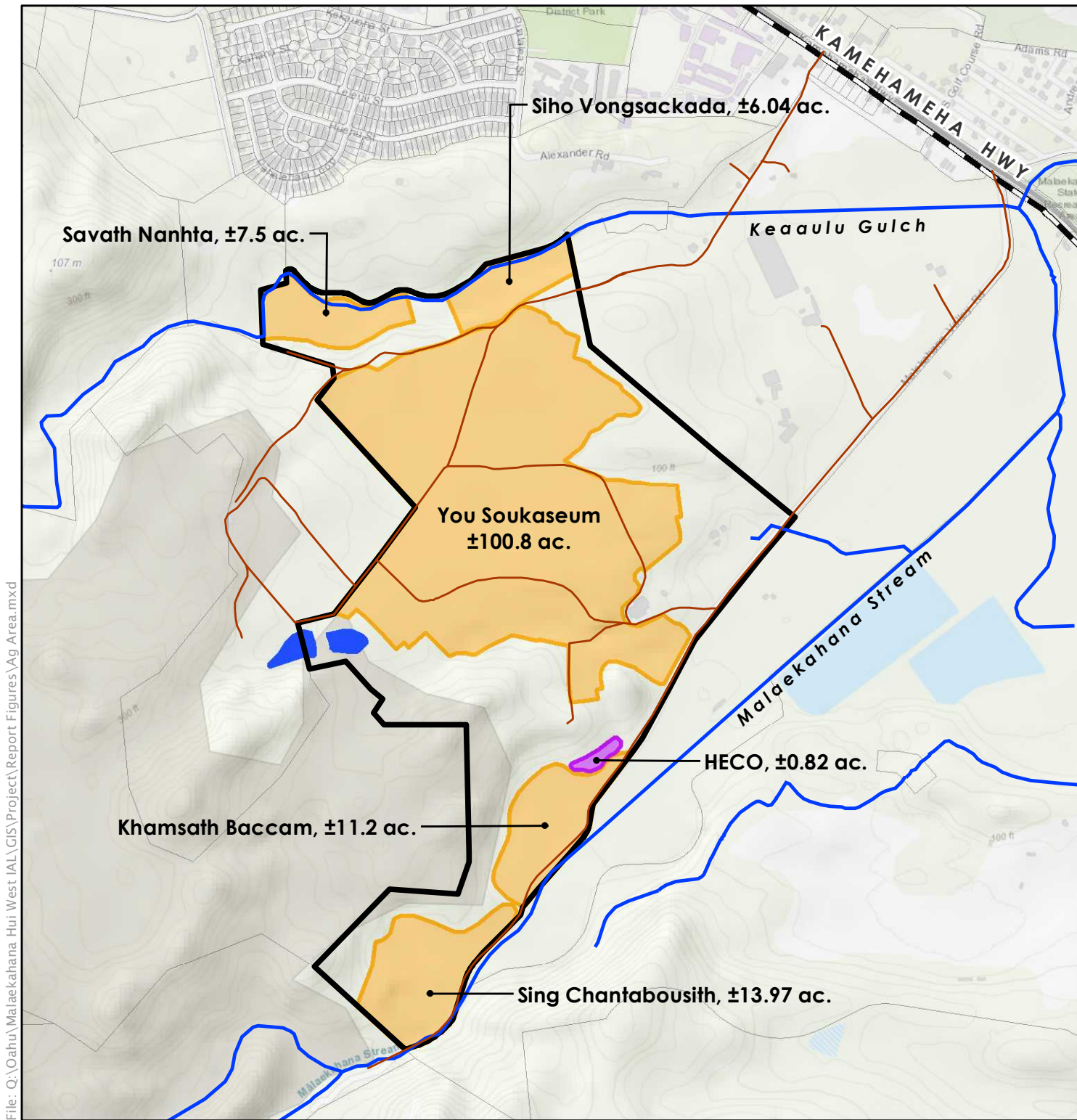
Mālaekahana Hui West's Land has a long history of agricultural use dating back to the pre-Contact era. Traditional accounts and conditions indicate considerable agricultural use in the Kahuku region prior to European arrival, as part of the traditional Hawaiian ahupua'a system. The Mālaekahana region was associated with agricultural terraces along the Kaukanala'au Stream, however much of the area had since been left fallow around the time of the initial Contact period due to a major decline in population (Handy & Handy, 1991).

Following European contact, cattle ranching in the Kahuku began in the 1850s with the establishment of Kahuku Ranch and subsequent expansions which transformed the landscape and replaced previously-established traditional farms (Korn, 1958). By the late nineteenth century, James Campbell established large-scale commercial agriculture with the Kahuku Plantation, resulting in further evolution of the agricultural landscape in the region (Stride, Craddock, & Hammatt, 2003). The plantation continued operations until its closure in 1971 and cemented the Kahuku region's character as an agricultural area (Stride, Craddock, & Hammatt, 2003). The Property was primarily cultivated with sugar cane during the commercial-agricultural era. After the closure of the plantation, active agricultural uses continued on the Property reflecting the existing conditions with cultivation of truck crops on lands leased and managed by individual farmers.

## **3. Current and Future Agricultural Operations**

The Property comprises lands that either are currently in agricultural use or historically have been used for agricultural purposes. Current agricultural operations on the Property include a variety of diversified crops managed by tenant farmers. Crops grown on the Property vary based on growing cycles and market conditions and include: apple-bananas, papaya, watermelon, bitter melon, lilikoi, tomato, cherry tomato, squash, bell peppers, long bean, eggplant, cucumber, asparagus, carrots, green onion, bok choy, taro, kale, lettuce, cabbage, basil, mint, Hawaiian chili pepper, and various herbs.

Mālaekahana Hui West manages agricultural use on the Property through leases with individual tenant farmers. Currently five tenant farmers, leasing a total of approximately 139.55 acres, actively grow crops on the Property: 1) You Soukaseum leases approximately 100.84 acres; 2) Sing Chantabousith leases approximately 13.97 acres; 3) Khamsath Baccam leases approximately 11.2 acres; 4) Savath Nanhta leases approximately 7.5 acres; and 5) Siho Vongsackada leases approximately 6.04 acres. While the leases are on a month-to-month basis, all of the farmers have been leasing lands for their farms for over 12 years and Mālaekahana Hui West intends to continue those leases for the foreseeable future. Figure 2 shows the location and acreages of each farmer's farm.



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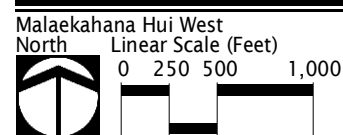
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|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|  Proposed IAL   |  Leased Area       |
|  Ag. Road       |  Diversified Crops |
|  Pond           |  Utility           |
|  Stream / Gulch |                                                                                                       |

Figure 2  
Agricultural Areas

## Malaekahana Hui West IAL



Island of O'ahu



Further documenting agricultural use on the Property, the Statewide Agricultural Land Use Baseline 2015 (Melrose, Peroy, & Cares, 2015) confirms diversified crop use on at least 133.5 acres of the Property. In addition, more than half of the Property is covered under a restrictive covenant for the protection and preservation of agricultural production for at least 10 years (beginning in 2014)<sup>2</sup>. Further, more than half of the Property is dedicated to agricultural use pursuant to Section 8-7.3, Dedication of Lands for Agricultural Use, Revised Ordinances of Honolulu. This dedication comes up for renewal in February 2024 but shall persist for the duration of Malaekahana Hui West agribusiness activities on the Land.

Figure 3 shows the Property topography and illustrates the slopes, showing areas with relatively gentle grades conducive for food crop production and supporting infrastructure such as agricultural buildings. Table 2 summarizes the Property slopes. While some areas of the Property may have steeper slopes that are not currently cultivated, are too steep for the current types of crops grown, or are drainage ways, these areas support the agricultural activities on the cultivated lands and are important parts of the overall Property for: 1) land stewardship, soil conservation, and cohesion and continuity of agricultural uses; and 2) maintaining a critical land mass important to overall agricultural operation productivity.

**Table 2: Slope Summary**

<b>Slope</b>	<b>Acres</b>	<b>Percent</b>
Less than 10%	123.37	53.6%
10%-20%	55.90	24.3%
20%-25%	17.45	7.6%
Greater than 25%	33.61	14.6%
<b>Total:</b>	<b>230.33</b>	<b>100%</b>

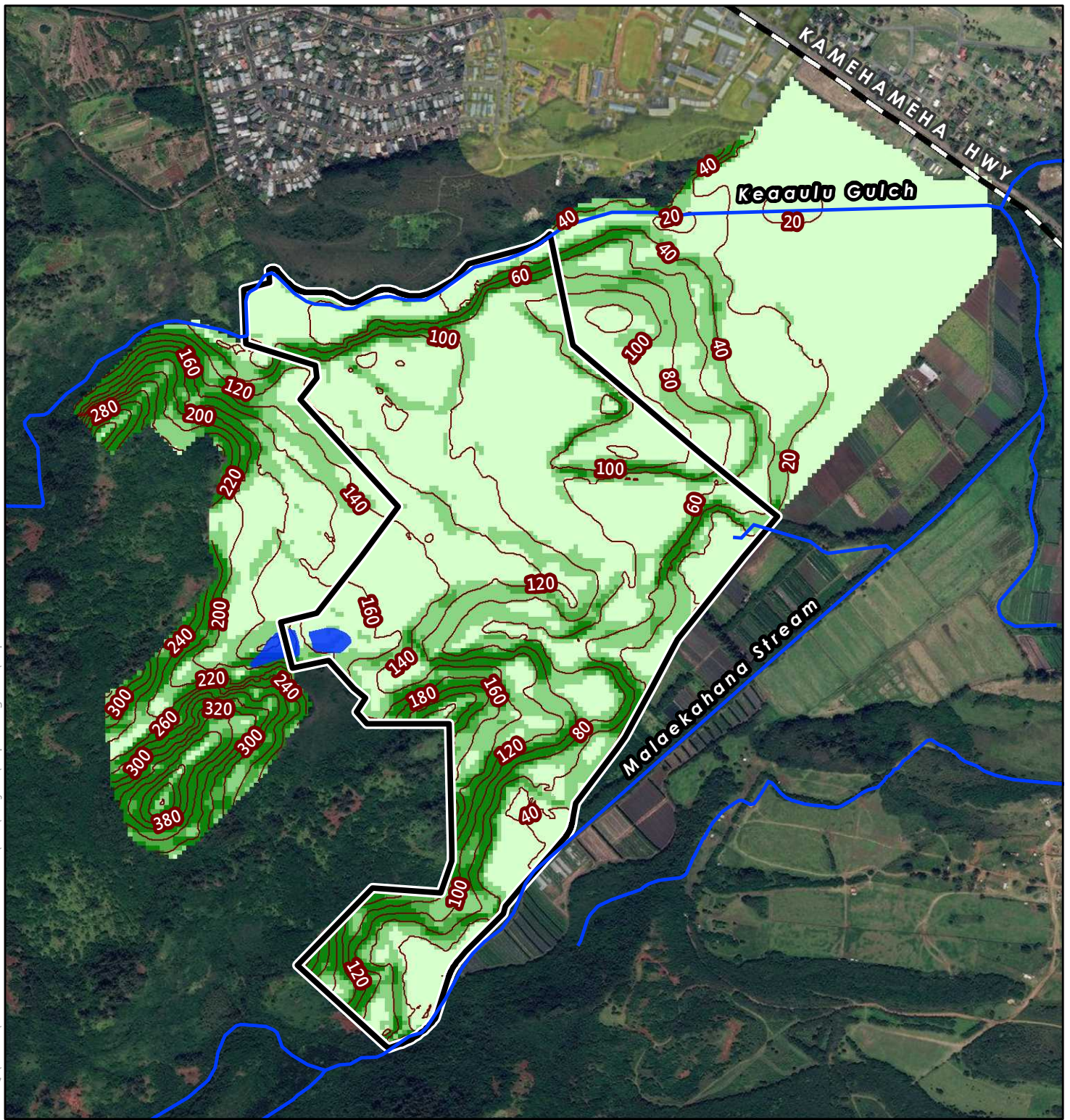
The Land that Mālaekahana Hui West is not proposing to designate as IAL (the Remainder Land) is approximately 225.29 acres (49.4 percent of Mālaekahana Hui West's total Land within the Agricultural and Urban Districts). The Remainder Land within the Agricultural District contains individual small farms with various diversified crops. Mālaekahana Hui West intends to continue using the Remainder Land within the Agricultural District for these uses and other uses consistent with Chapter 205, HRS. Mālaekahana Hui West is not seeking IAL designation for the portions of its Land in the Agricultural District and within the Remainder Land. The Remainder Land within the Urban District also is not proposed for designation as IAL.

## **4. Agricultural Soils Productivity Ratings**

The Detailed Land Classification System and Agricultural Land Productivity Ratings by the Land Study Bureau (LSB) (1972) are based on a five-class productivity rating system using the letters A, B, C, D, and E. The rating is based upon several environmental and physical qualities of the land such as soil condition, climate, surface relief, and drainage.

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<sup>2</sup> Land Court Land Court Doc No T-8803258 Declaration of Restrictive Covenants (For Agricultural Preservation)



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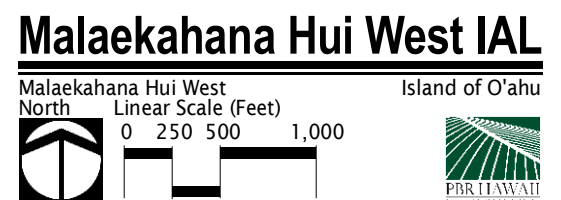
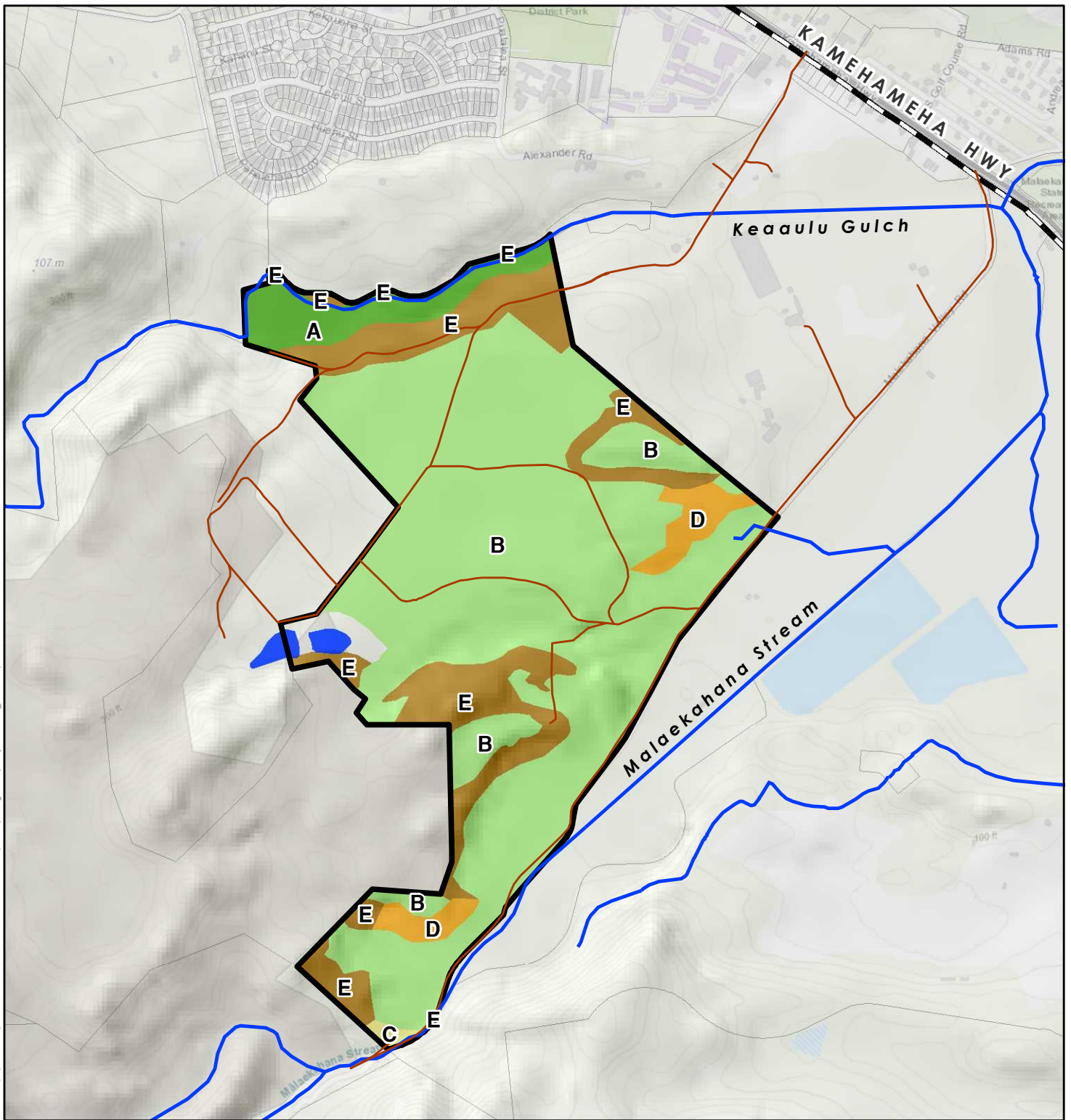
- |                                                                                    |                |                                                                                                      |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------------------------|
|  | Proposed IAL   | <b>Slope in Malaekahana Hui West's Land</b>                                                          |
|  | Pond           |  Less than 10%    |
|  | Stream / Gulch |  10-20%           |
|  | Contours 20Ft  |  20-25%           |
|                                                                                    |                |  Greater than 25% |

Figure 3  
Topography and Streams



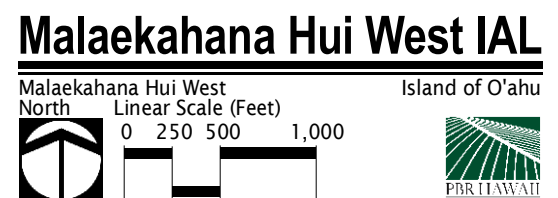


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	Proposed IAL		LSB Land Classification
	Ag. Road		A - Very Good
	Pond		B - Good
	Stream / Gulch		C - Fair
			D - Poor
			E - Very Poor
			Unclassified

Figure 4  
Detailed Land Classification System (LSB)



As shown on and summarized in Table 3, approximately 5.6 percent of the Property is rated A, 70.7 percent of the Property is rated B, 0.4 percent is rated C, 3.6 percent is rated D, 17.9 percent is rated E, and 1.8 percent is unclassified (Land Study Bureau, 1972). According to the LSB, only 5.5 percent and 9.3 percent of the agricultural land on O‘ahu is rated A and B respectively. With the high percentage (76.3%) of the Property being rated as A and B, the productivity of the soil is strong and the Property has been and continues to be used for active agriculture.

**Table 3: LSB Productivity Rating**

<b>Productivity Rating</b>	<b>Total IAL</b>	
	<b>Acres</b>	<b>% of IAL</b>
A	12.82	5.6%
B	162.94	70.7%
C	1.02	0.4%
D	8.24	3.6%
E	41.24	17.9%
Unclassified	4.08	1.8%
<b>Total</b>	<b>230.33</b>	<b>100%</b>

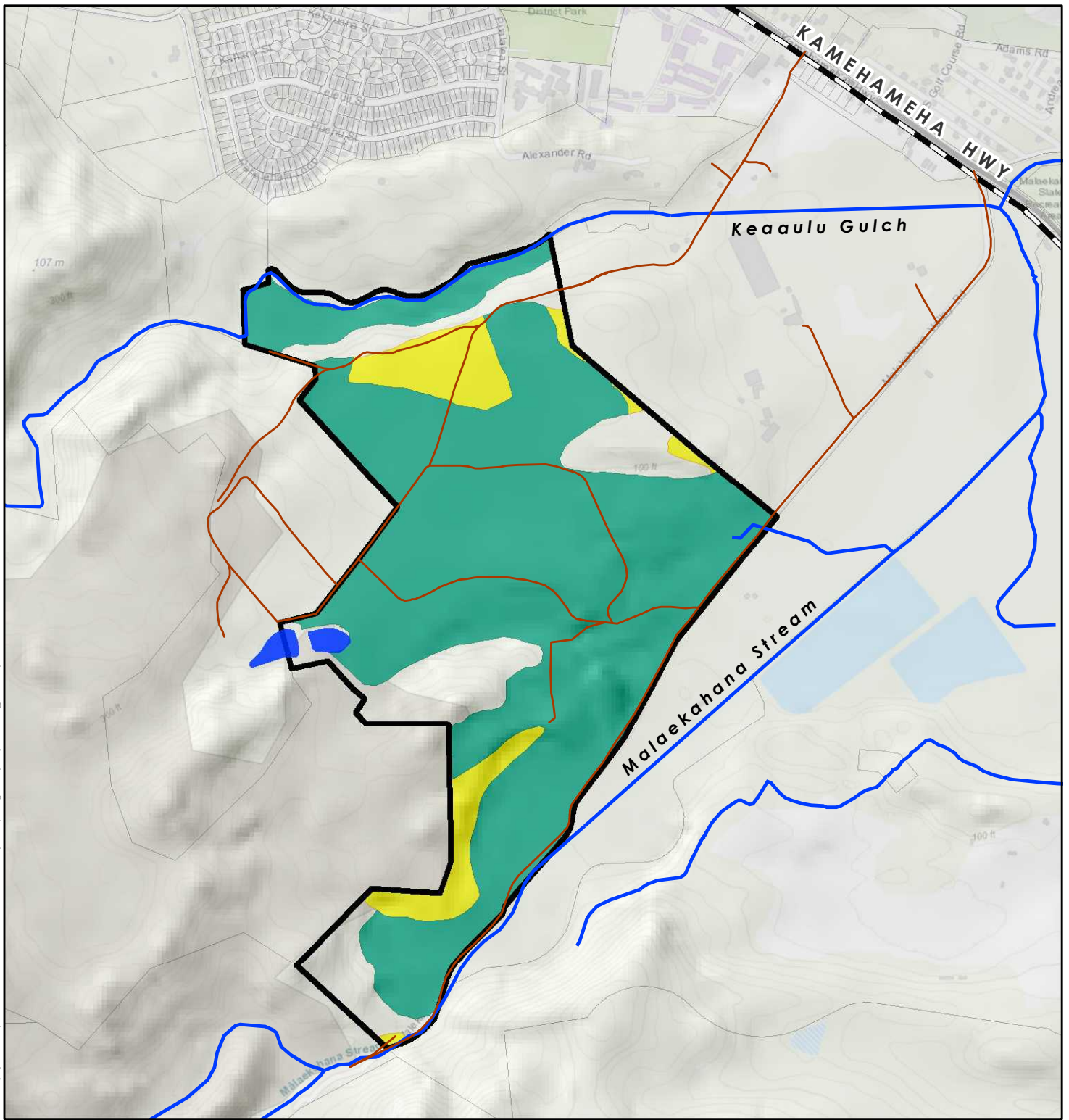
## **5. Agricultural Lands of Importance to the State of Hawai‘i (ALISH)**

The Agricultural Lands of Importance to the State of Hawai‘i (ALISH) classification system was developed in 1977 by the State Department of Agriculture (Hawai‘i State Department of Agriculture, 1977). The ALISH system was primarily, but not exclusively, based on the soil characteristics of lands and existing cultivation. There are three classes of land under the ALISH system: Prime, Unique, and Other.

The Prime ALISH rating is for lands best suited for the production of food, feed, forage, and fiber crops. The land has the soil quality, growing season, and moisture supply needed to economically produce high yields of crops when the land, including water resources, is treated and managed according to modern farming methods.

The Unique ALISH rating is applied to lands other than Prime ALISH lands, that are used for the production of specific, high-value food crops. Such lands have the special combination of soil quality, growing season, temperature, humidity, sunlight, air drainage, elevation, aspect, moisture supply, or other conditions, such as nearness to market, that favor the production of a specific crop of high quality and/or high yield when the land is treated and managed according to modern farming methods. In Hawai‘i, some examples of such crops are coffee, taro, rice, watercress, and non-irrigated pineapple (Hawai‘i State Department of Agriculture, 1977).

The Other ALISH ratings is for lands other than Prime or Unique that are of state-wide or local importance for the production of food, feed, fiber, and forage crops. Such lands are important to agriculture in Hawai‘i and yet they exhibit properties such as seasonal wetness, erodibility, limited



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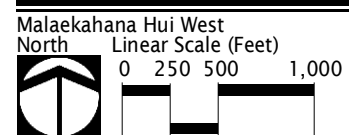
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|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|  Proposed IAL   |  Prime ALISH  |
|  Ag. Road       |  Other ALISH  |
|  Pond           |  Unclassified |
|  Stream / Gulch |                                                                                                  |

Figure 5

Agricultural Lands of Importance to the State of Hawai'i (ALISH)

## Malaekahana Hui West IAL



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rooting zone, slope, flooding, or droughtiness that exclude the land from Prime or Unique rating classifications. Two examples are: 1) lands which lack adequate moisture supply to be qualified as Prime; and 2) lands with similar characteristics and properties as Unique rated lands, except that the land is not currently in use for the production of a “unique” crop. These Other rated lands can be farmed sufficiently by applying greater amounts of fertilizer and other soil amendments, drainage improvement, erosion control practices, and flood protection. Lands with an Other ALISH rating can produce fair to good crop yields when managed properly.

As shown on Figure 5 and summarized in Table 4, approximately 83 percent of the Property is classified under the ALISH system: 73.7 percent is classified as Prime and 9.3 percent is classified as Other.

Table 4: ALISH Rating

ALISH Classifications	Total IAL	
	Acres	% of IAL
Prime	169.77	73.7%
Unique	0.00	0.0%
Other	21.44	9.3%
Not ALISH	39.12	17.0%
<b>Total:</b>	230.33	100%

The balance of the Property is not classified under the ALISH system but: 1) is integral to overall use of the Property for agricultural operations and to Mālaekahana Hui West’s land stewardship; and 2) provides for a unified and clearly defined IAL area.

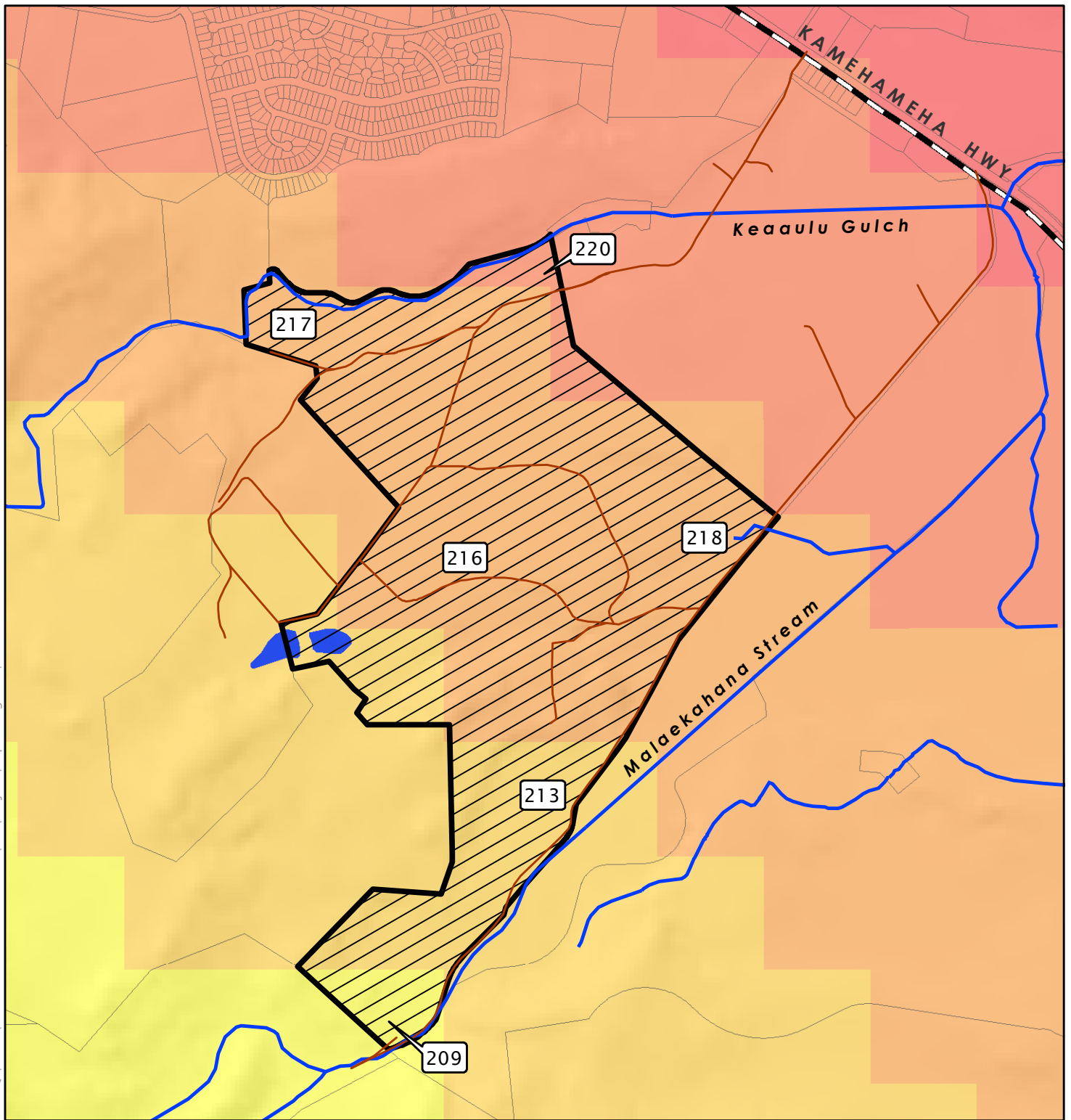
## 6. Solar Radiation

The Property receives sufficient solar radiation to support agricultural production. Mean annual solar radiation on the Property ranges from 220 to 209 watts per square meter per hour, based on information from the *Evapotranspiration of Hawai‘i Final Report* prepared in February 2014 by Department of Geography, University of Hawai‘i at Mānoa for U.S. Army Corps of Engineers Honolulu District and State of Hawai‘i Commission on Water Resource Management (Giambelluca, et al., 2014). Figure 6 shows the solar radiation levels received on the Property in graphic form.

## 7. Water Resources and Agricultural Infrastructure

The Property has sufficient quantities of water, water-related infrastructure, and other agricultural-related infrastructure to support viable agricultural production, as summarized below. Figure 7 shows the water resources and agricultural infrastructure on the Property.

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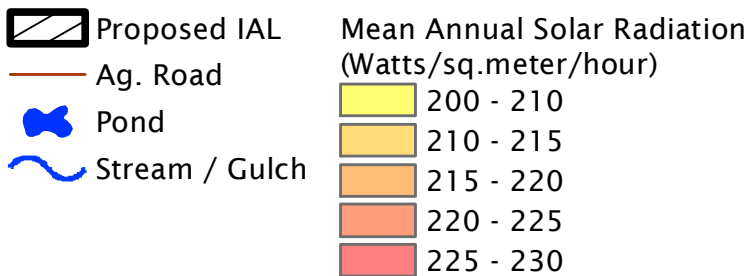
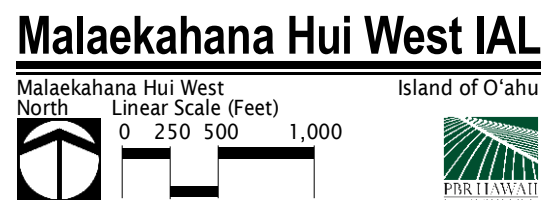


Figure 6  
Solar Radiation



Source: University of Hawai'i Evapotranspiration of Hawai'i, 2014. State of Hawaii. City & County of Honolulu, 2018.  
Disclaimer: This graphic has been prepared for general planning purposes only.

## **Water Resources**

Mālaekahana Hui West has three water use permits (WUP No. 780, WUP No. 781, WUP No. 782) all issued in 2006 by the Commission on Water Resource Management, State of Hawai‘i allowing withdrawal of water from the Ko‘olau Loa Groundwater Management Area at four well locations on Mālaekahana Hui West’s Land.

Water Use Permit No. 780 allows for withdrawal of 1.244 million gallons per day (mgd) of water from Well No. 3957-01 & Well No. 3957-03 (Pump 3 & 3A) on a 12-month moving average basis. For the past two fiscal years (July 2016 through June 2018), the 12-month moving average collective water use of Mālaekahana Hui West and its tenants has ranged from 0.215 mgd to 0.314 mgd per day. More capacity for additional water for agricultural applications is available for farmer use under the existing Water Use Permit. Well Nos. 3957-01 & 3957-03 are on the Property.

Water Use Permit No. 782 allows for withdrawal of 0.300 million gallons per day (mgd) of water from Well No. 4057-07 (Pump 12) on a 12-month moving average basis. For the past two fiscal years (July 2016 through June 2018), the 12-month moving average collective water use of Mālaekahana Hui West and its tenants has ranged from 0.228 mgd to 0.284 mgd per day. Excess capacity for additional water needed for agricultural applications is available for farmer use under the existing Water Use Permit. Well No. 4057-07 is on the Property.

Water Use Permit No. 781 allows for withdrawal of 0.670 million gallons per day (mgd) of water from Well No. 4057-06 (Pump 8) on a 12-month moving average basis. For the past two fiscal years (July 2016 through June 2018), the 12-month moving average collective water use of Mālaekahana Hui West and its tenants has ranged from 0.001 mgd to 0.005 mgd per day. Excess capacity for additional water needed for agricultural applications is available for farmer use under the existing Water Use Permit. Well No. 4057-06 is on the Remainder Land.

The Property also has on-site irrigation systems consisting of pipelines that distribute water from the existing wells to the various tenant farmers. Each tenant farmer manages their own irrigation infrastructure within their farms and there are no detailed irrigation plans showing irrigation systems within each farm.

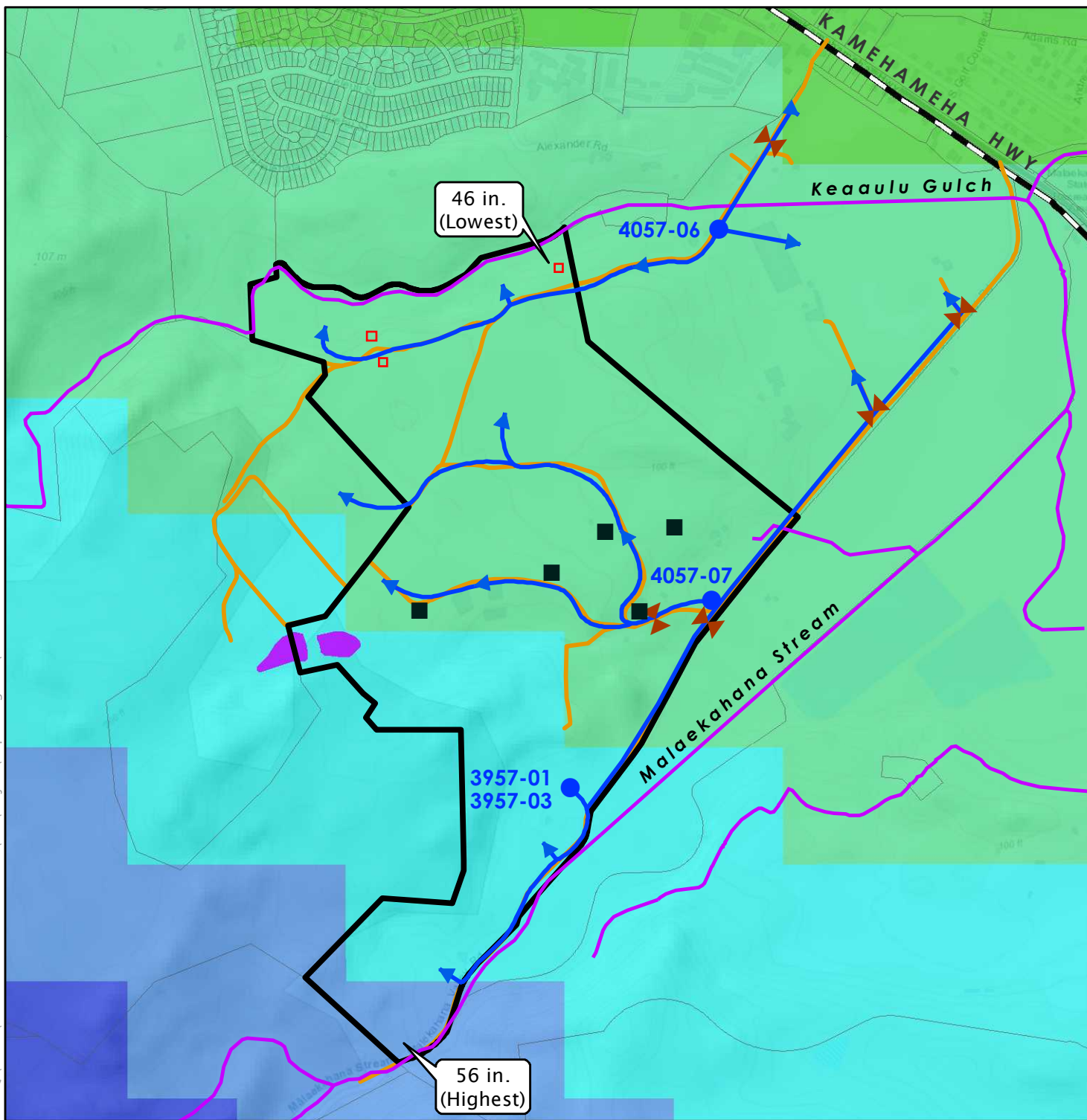
Figure 7 shows the well numbers and locations and water distribution lines that provide water service to each farm.

In addition to water from the Ko‘olau Loa Groundwater system, the Property receives a mean annual rainfall of approximately 46 to 56 inches, providing significant water resources (Giambelluca T. Q., 2013). The Property also receives the highest amounts of rainfall across the entire lands owned by Mālaekahana Hui West.

## **Agricultural Infrastructure**

In addition to the water resources infrastructure, as shown in Figure 7, the Property contains, gates, storage facilities, and agricultural roads to facilitate agricultural production. The Property also has

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












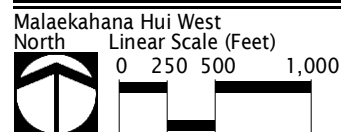
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|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|  Proposed IAL                 |  Mean Annual Rainfall (Inch) < 45 |
|  Storage Facility            |  45 - 50                          |
|  Gate                        |  51 - 55                          |
|  Ag. Road                     |  56 - 60                          |
|  Well                        |  > 60                             |
|  Water Distribution Direction |  Pond                             |
|  Ag Education Station        |  Stream / Gulch                   |

Figure 7  
Water Resources and  
Agricultural Infrastructure

## Malaekahana Hui West IAL



Island of O'ahu



Source: University of Hawaii Rainfall Atlas of Hawaii, 2011. Malaekahana Hui West, 2018.  
City & County of Honolulu, 2018.  
Disclaimer: This graphic has been prepared for general planning purposes only.

a few fences, but most farmers use dense vegetation barriers, such as hedges, to restrict access or delineate their farms. The Property has two direct access points to Kamehameha Highway for: 1) transportation of agricultural products to/from markets; 2) access to/from the Property for agricultural equipment.

## **8. State Land Use District Boundaries**

The State Land Use Law (HRS Chapter 205) establishes the State Land Use Commission and authorizes this body to designate all lands in the State into one of four districts: Urban, Rural, Agricultural, and Conservation. Mālaekahana Hui West's Land is located mostly within the Agricultural District (99.5%) with a much smaller portion, approximately 0.5% of the total Land, within the State Urban District (Figure 8). HRS §205-2(d) specifies that lands within the State Agricultural district shall include (among other things): 1) activities or uses as characterized by the cultivation of crops; 2) farming activities or uses related to animal husbandry; 3) aquaculture; 4) agricultural tourism conducted on a working farm or a farming operation; and 5) open area recreational facilities. Current uses on the Property are consistent with these authorized agricultural uses.

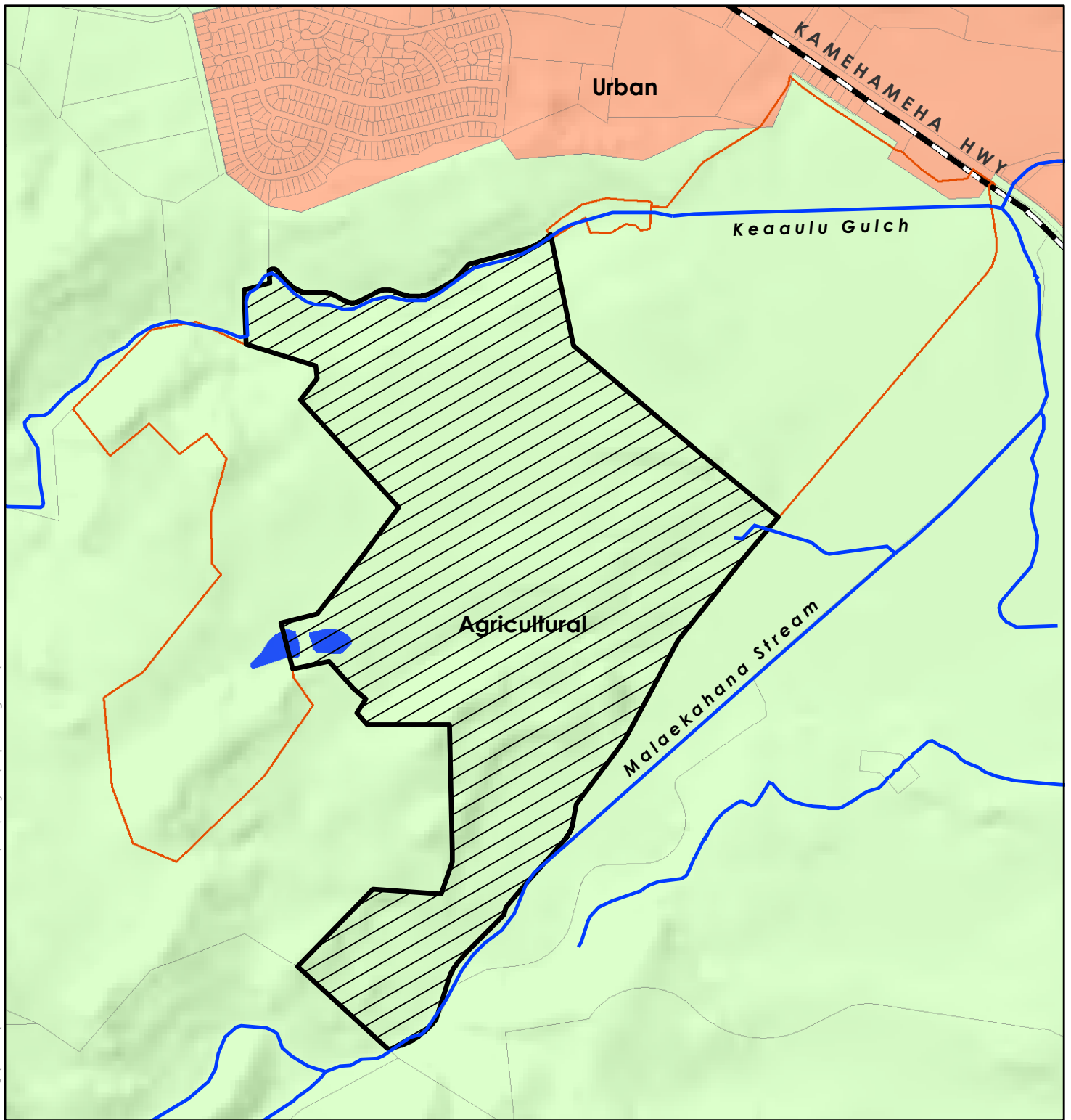
## **9. General Plan for the City and County of Honolulu**

The General Plan for the City and County of Honolulu (2002) ("General Plan") is a comprehensive statement of objectives and policies which sets forth the long-range aspirations of O'ahu's residents and the strategies of actions to achieve them. The General Plan includes 11 subject areas that provide the framework for the City's expression of public policy concerning the needs of the people and the functions of government.

The "Economic Activity" section of the General Plan lists an objective and several policies to maintain the viability of agriculture on O'ahu. The designation of the Property as IAL is consistent with this objective and these policies as the designation of the land as IAL will: 1) contribute toward the continuation of agriculture as an important source of income and employment; 2) help ensure sufficient agricultural lands in Ko'olau Loa by encouraging the continuation of agriculture activity in these areas; and 3) encourage more intensive use of productive agricultural lands.

As of December 2018, the City is in the process of updating the General Plan. In December 2017, the City presented the updated draft of the General Plan (Proposed Revised General Plan) at a public meeting and in March 2018, the Planning Commission conducted a public hearing on the Proposed Revised General Plan and provided recommendations to the City Council in April 2018. A forthcoming public hearing on the Proposed Revised General Plan by the Council is awaiting notice. As in the General Plan, the Proposed Revised General Plan includes an objective and several policies to ensure the long-term viability and continued productivity of agriculture on O'ahu.

The designation of the Property as IAL is consistent with General Plan's and the Proposed Revised General Plan's objectives and policies regarding maintaining the viability of agriculture in that the



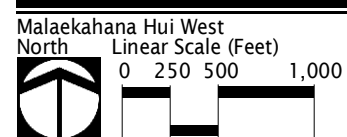
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- |                                                                                                                 |                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|  Proposed IAL                | State Land Use District                                                                          |
|  Malaekahana Hui West's Land |  Agricultural |
|  Pond                        |  Urban        |
|  Stream / Gulch              |                                                                                                  |

Figure 8  
State Land Use Districts

## Malaekahana Hui West IAL



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designation as IAL will: 1) help to ensure the continuation of agriculture as an important component of O‘ahu’s economy; 2) encourage active use of high quality agricultural land for agricultural purposes; 3) permanently preserve agricultural land with high productivity potential for agricultural production; 4) contribute toward lessening the urbanization of high-value agricultural land located outside the City’s growth boundaries; 5) encourage investment to improve and expand agricultural infrastructure, such as irrigation systems, agricultural processing centers, and distribution networks.

## **10. City and County of Honolulu: Ko‘olau Loa Sustainable Communities Plan**

The City and County of Honolulu’s Sustainable Communities Plans are policy documents that are intended to guide the City’s land use approvals, infrastructure improvements, and private sector investment decisions for the enhancement and improvement of life on O‘ahu. The Island of O‘ahu is organized into eight regions. The Property is located within the Ko‘olau Loa Sustainable Communities Plan (“Ko‘olau Loa SCP”) region.

The Ko‘olau Loa SCP (1999) contains a map for various designations within the Ko‘olau Loa SCP region. The Ko‘olau Loa SCP map designates the large majority of the Property as “Agricultural” with small portions designated as “Preservation” and “Military.” Additionally, the Ko‘olau Loa SCP map shows growth boundaries<sup>3</sup> and the Property is outside the growth boundaries as shown on all the Ko‘olau Loa SCP maps. Figure 9 shows the Ko‘olau Loa SCP (1999) land use map which illustrates land use designations across the Property.

The City is currently in the process of updating the Ko‘olau Loa SCP (Pre-Final Revised Ko‘olau Loa SCP) (2012). The Pre-Final Revised Ko‘olau Loa SCP (2012) land use map shows nearly identical designations on the Property with the large majority designated as “Agriculture,” a small portion designated as “Military,” and a small area showing a portion of a stream. Also, the Property is outside of growth boundaries, consistent with the previously adopted Ko‘olau Loa SCP (1999). Figure 10 shows the Pre-Final Revised Ko‘olau Loa SCP (2012) land use map, which illustrates land use designations across the Property.

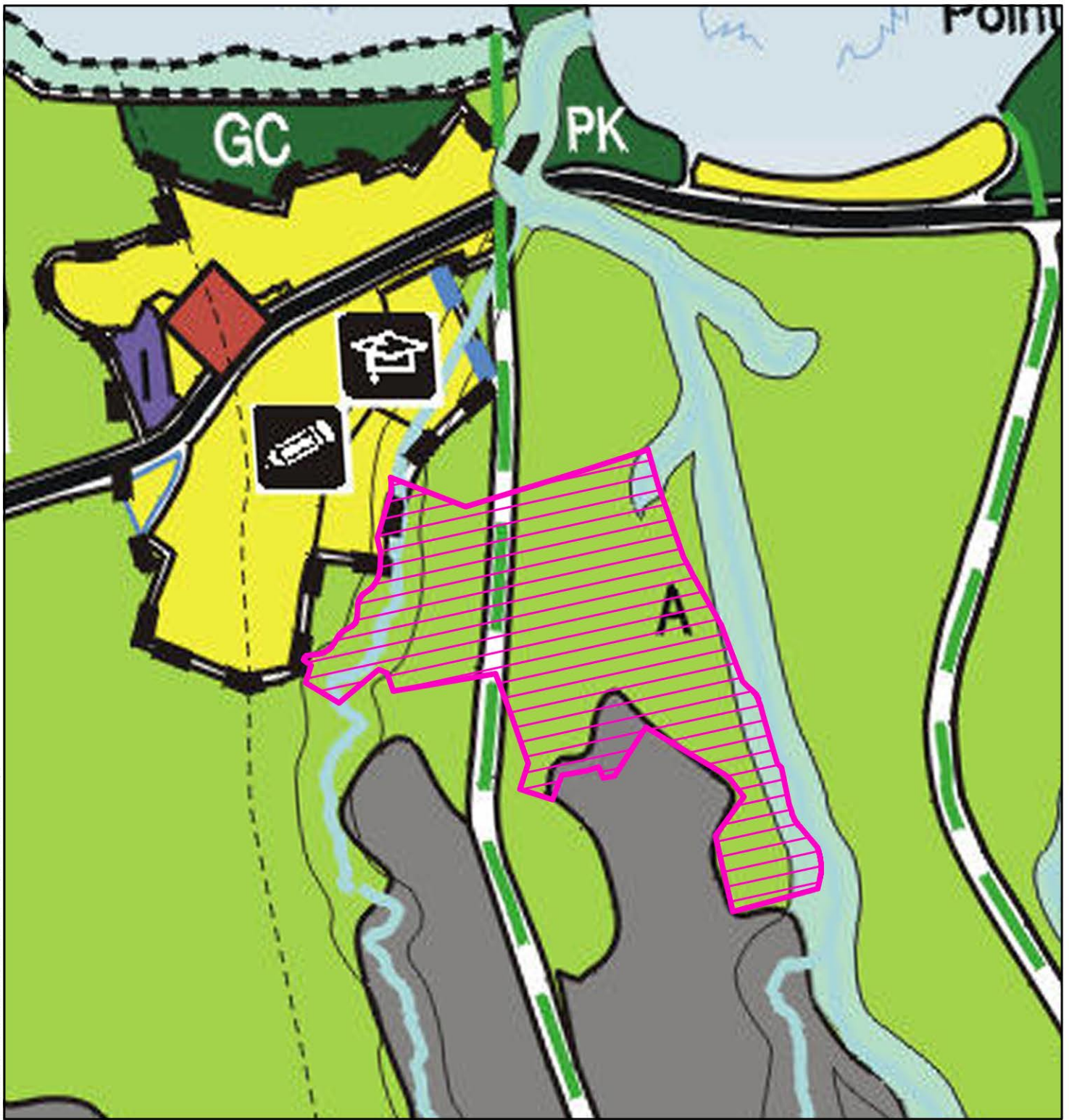
In addition to maps, the Ko‘olau Loa SCP (1999), and Pre-Final Revised Ko‘olau Loa SCP (2012) include objectives and policies to preserve the rural character of the regions by retaining agricultural lands identified as “prime,” “unique,” “arable,” or “high-value for future agricultural use.”

## **11. City and County of Honolulu Zoning**

The City and County of Honolulu zoning of the Property is AG-1, Restricted Agricultural District (AG-21) (Figure 11). According to the Revised Ordinances of Honolulu (ROH) §21-3.50(b), the intent of the AG-1 District is to “conserve and protect important agricultural lands for the performance of agricultural functions by permitting only those uses which perpetuate the retention

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<sup>3</sup> The Ko‘olau Loa SCP (1999) maps refer to a “Rural Community Boundary” and the Pre-Final Revised Ko‘olau Loa SCP (2012) maps refer to a “Community Growth Boundary.”



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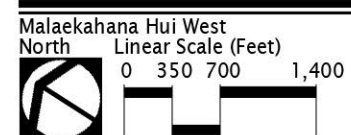
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- |                                                                                     |                   |                                                                                     |                            |
|-------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------|----------------------------|
|  | Proposed IAL      |  | Ahupua'a Boundary          |
|  | Agricultural      |  | Rural Community Boundary   |
|  | Preservation      |  | Intermediate / High School |
|  | Rural Residential |                                                                                     |                            |
|  | Military          |                                                                                     |                            |

Figure 9

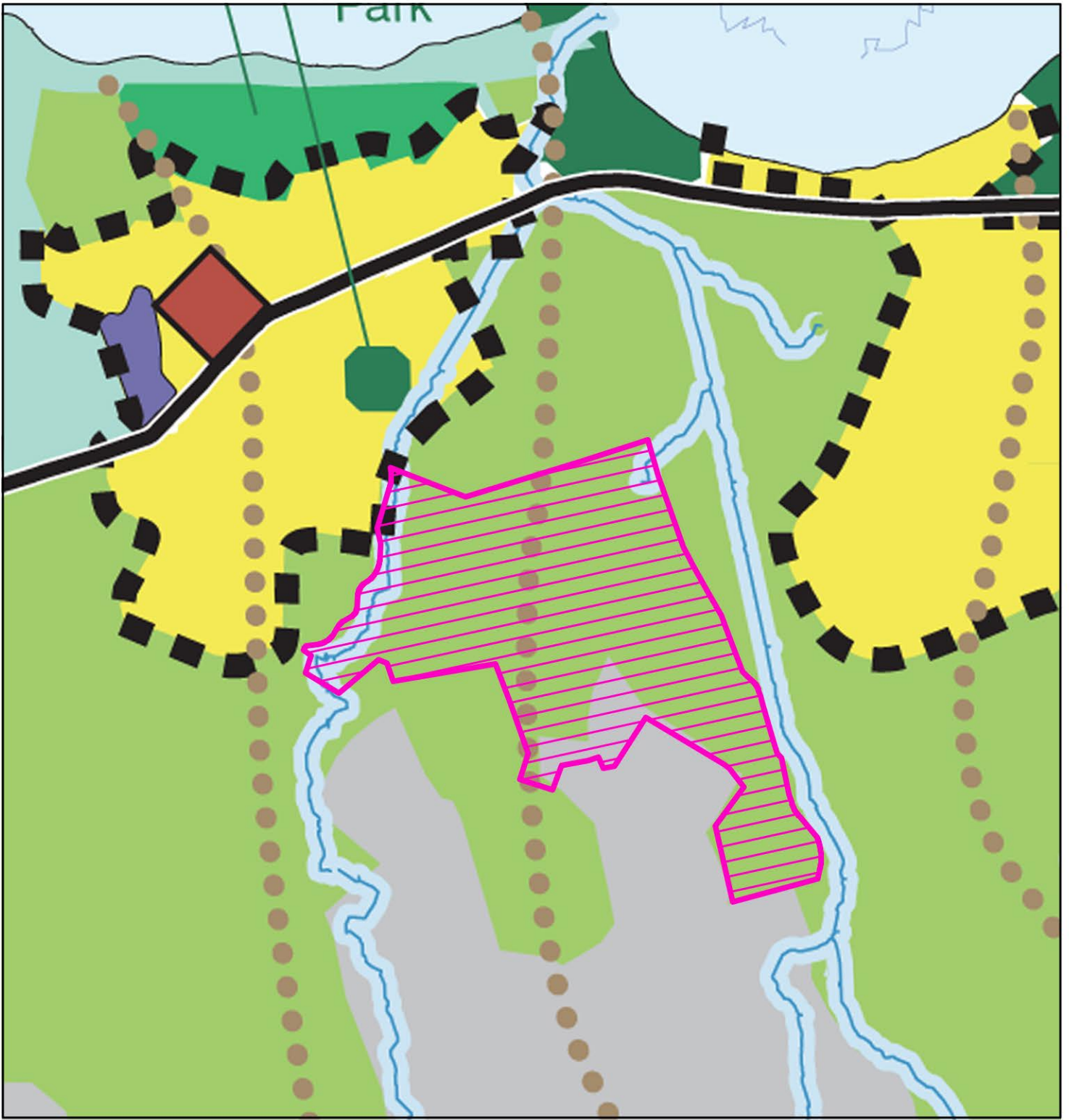
Ko'olau Loa Sustainable  
Communities Plan (1999)

## Malaekahana Hui West IAL










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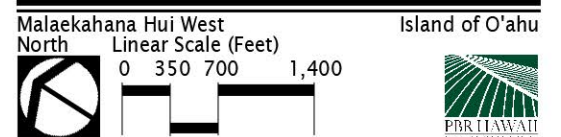
-  Proposed IAL
-  Agriculture
-  Preservation
-  Rural Residential
-  Military
-  Community Growth Boundary
-  Ahupua'a Boundary

Source: City and County of Honolulu  
Disclaimer: This graphic has been prepared for general planning purposes only.

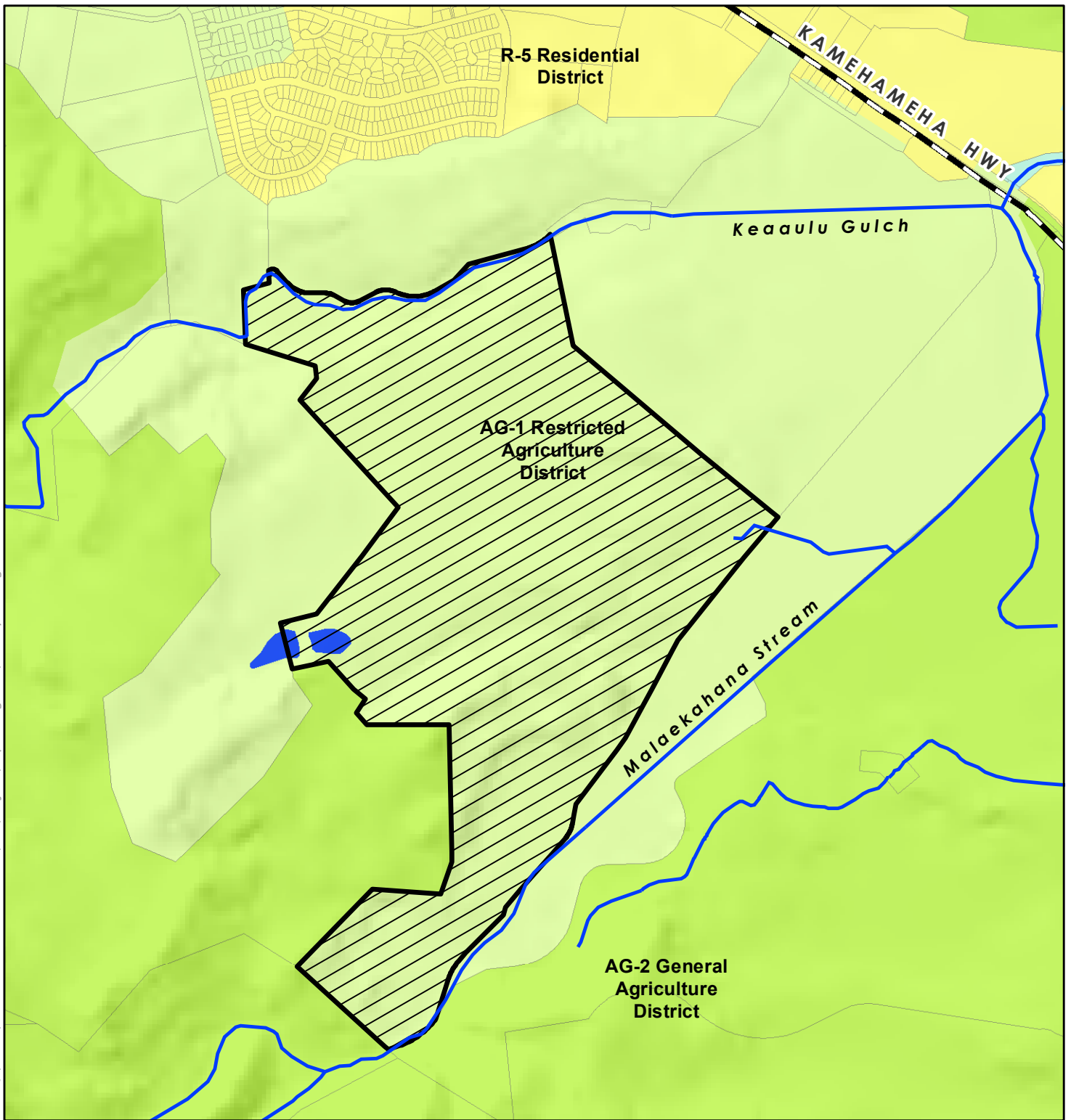
Figure 10

Pre-Final Revised Ko'olau Loa  
Sustainable Communities Plan (2012)

## Malaekahana Hui West IAL



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




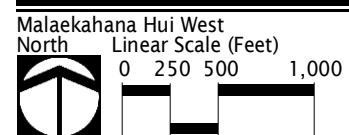
	Proposed IAL	<b>Zoning</b>
	Pond	 P-2 General Preservation
	Stream / Gulch	 AG-1 Restricted Agriculture
		 AG-2 General Agriculture
		 R-5 Residential

Figure 11

City and County of Honolulu Zoning

## Malaekahana Hui West IAL



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of these lands in the production of food, feed, forage, fiber crops and horticultural plants.” Current uses on the Property are consistent with this intent.

## **12. City and County of Honolulu’s Pending Important Agricultural Lands Study and Submission**

In July 2012, the City and County of Honolulu (City) Department of Planning and Permitting (DPP) initiated the City’s Important Agricultural Land Study (Study) to identify the City’s candidate lands for IAL designation. The Study consists of two phases. DPP completed Phase I in April 2014. Phase I tasks included: 1) defining the IAL site selection criteria; 2) identifying available data sets to assist in mapping the defined criteria; and 3) developing methodology for weighing or ranking the criteria. Formal public review, a comment period, and notification to affected land owners was not a part of the Phase I tasks. Although the City’s proposed IAL were not defined in the Phase I study, the DPP prepared a series of criteria maps and came up with two composite maps of the City’s top three and four priority criteria using a geographic information system (GIS) (City and County of Honolulu Department of Planning and Permitting, 2014).

DPP began Phase II of the Study after the completion of Phase I in 2014, with public meetings held in November 2017. In Phase II, DPP considered incentives for landowners to designate their lands as IAL and produced draft maps of proposed IAL on O’ahu based on the City’s top three criteria: 1) land currently used for agricultural production; 2) land with soil qualities and growing conditions suitable for agricultural production; and 3) land with sufficient quantities of water to support viable agricultural production.

In September 2018 DPP forwarded its “O’ahu Important Agricultural Land Mapping Project” report to the City Council for review, comment, revision, and approval. DPP’s report includes revised maps of proposed IAL lands on O’ahu recommendations, and a summary of major comments received during the public engagement phase (City and County of Honolulu Department of Planning and Permitting, 2018). As of December 2018, the City Council is still reviewing DPP’s report and may adopt it as is or with revisions. Adoption must happen via resolution of the City Council. As of November 2018, the City Council has not scheduled any hearings on any related resolutions. Only after hearings, revisions, and final adoption of report by the City Council, would the City then submit to the State Land Use Commission (“LUC”) the City’s recommendations and maps proposing the designation of certain lands on the island of O’ahu as IAL.

Upon receipt of the City’s initial submission, the LUC would then begin working with the City and DPP to ensure that the City provides a complete record of its proceedings in support of its recommendation. The LUC would have to coordinate with the City to ensure that the LUC possessed all relevant supporting documents, including evidence that the City has adhered to the requirements of HRS § 205-47. This would include records evidencing that the City’s maps designating certain lands as IAL were developed in consultation and cooperation with landowners, the State Department of Agriculture and other groups. It would also include evidence that the City’s mapping relates to, supports, and is consistent with the representations or position statements of the owners whose lands are subject to the potential IAL designation.

As required under HAR § 15-15-125, once the City has provided all the required evidence to the LUC's satisfaction, the LUC may then deem the submission from the City complete, move forward with a hearing, and then elect to: 1) remand the matter back to the City for further review or clarification, 2) adopt the City's recommendations, or 3) amend and/or revise the City's recommendations to include or exclude certain lands from those the City will propose for IAL designation.

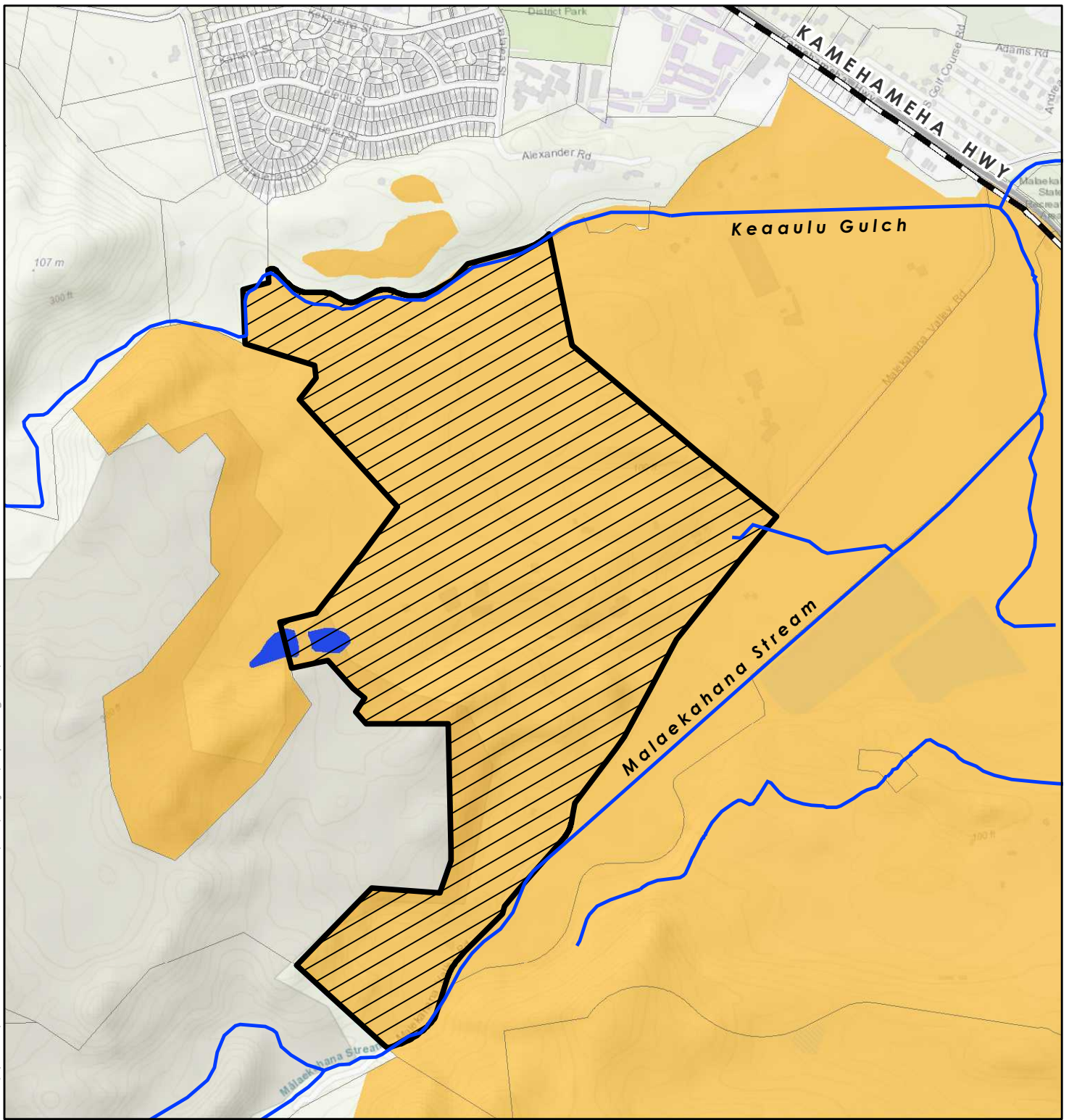
Figure 12 shows the Property in relation to the City's proposed IAL lands. As shown on Figure 12, 100% of the Property is consistent with the City's proposed IAL.

In accordance with the intent of HRS Chapter 205 Part III, Important Agricultural Lands and the "majority incentive" in HRS Section 205-49(a)(3), Mālaekahana Hui West proposes to designate a majority (50.6 percent or 230.33 acres) of its Land as IAL<sup>4</sup>. The land that Mālaekahana Hui West is proposing to designate as IAL (i.e. the Property) is consistent with: 1) the objective and policies for IAL set forth in HRS §205-42 and HRS §205-43; and 2) a majority of the standards and criteria for the identification of important agricultural lands set forth in HRS §205-44.

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<sup>4</sup> Section 205-49, Hawai'i Revised Statutes, provides that a majority of a landowner's landholdings excludes lands held in the State Conservation District; therefore, the calculation of the percentage of land that Mālaekahana Hui West is proposing to designate IAL, compared to the percentage it is not proposing to designate IAL, is based on Mālaekahana Hui West's total Land in the Agricultural District and Urban District. Mālaekahana Hui West has no land in the Rural District.

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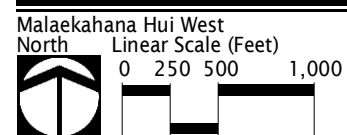
-  Proposed IAL
-  City Proposed IAL Lands
-  Pond
-  Stream / Gulch

Figure 12

City and County of Honolulu  
Important Agricultural Lands Overlay

## Malaekahana Hui West IAL



Island of O'ahu



Source: City & County of Honolulu, January 2017, Updated September 2018. ESRI Basemap.  
Disclaimer: This graphic has been prepared for general planning purposes only.

## 13. References

- City and County of Honolulu. (1987 Supp. to 1983 Ed.). *Zoning Maps*. Retrieved August 8, 2017, from Appendix 21-C to the Revised Ordinances: [https://www.honolulu.gov/rep/site/ocs/roh/ROH\\_Chapter\\_21\\_app\\_C\\_.pdf](https://www.honolulu.gov/rep/site/ocs/roh/ROH_Chapter_21_app_C_.pdf)
- City and County of Honolulu Department of Planning and Permitting. (1999). *Ko'olau Loa Sustainable Communities Plan*. Retrieved August 8, 2017, from <http://www.honoluludpp.org/Planning/DevelopmentSustainableCommunitiesPlans/>
- City and County of Honolulu Department of Planning and Permitting. (2002). *O'ahu General Plan*. Retrieved August 20, 2017, from <http://www.honoluludpp.org/Planning/GeneralPlan.aspx>
- City and County of Honolulu Department of Planning and Permitting. (2012). *Ko'olau Loa Sustainable Communities Plan (Pre-Final Revised Plan)*. Retrieved from <http://dev.honoluludpp.org/Planning/DevelopmentSustainableCommunitiesPlans.aspx>
- City and County of Honolulu Department of Planning and Permitting. (2014). *O'ahu Important Agricultural Lands Phase I Study*. Retrieved August 8, 2017, from <http://www.honoluludpp.org/Portals/0/pdfs/planning/OAHU%20IAL%20PHASE%201%20FINAL%20REPORT%20April-2014.pdf>
- City and County of Honolulu Department of Planning and Permitting. (2017). *O'ahu General Plan (Proposed Revised Plan)*.
- City and County of Honolulu Department of Planning and Permitting. (2018). *O'ahu Important Agricultural Land Mapping Project*. Honolulu.
- Giambelluca, T. Q. (2013). Online Rainfall Atlas of Hawai'i. *Bulletin of the American Meteorological Society*, pp. 94(3), 313-316.
- Giambelluca, T. W., Shuai, X., Barnes, M. L., Alliss, R. J., Longman, R. J., Miura, T., . . . Businger, A. D. (2014). *Evapotranspiration of Hawai'i*. Retrieved August 8, 2017, from <http://evapotranspiration.geography.hawaii.edu/assets/files/PDF/ET%20Project%20Final%20Report.pdf>
- Handy, E. C., & Handy, E. G. (1991). *Native Planters in Old Hawaii*. Honolulu: Bishop Museum Press.
- Hawai'i State Department of Agriculture. (1977). *Agricultural Lands of Importance to the State of Hawai'i (ALISH)*. Retrieved from Prepared with the assistance of the Soil Conservation Service, U.S. Department of Agriculture, and the College of Tropical Agriculture, University of Hawai'i.: <http://files.hawaii.gov/dbedt/op/gis/data/alish.pdf>
- Korn, A. (1958). *The Victorian Visitors*. Honolulu: University of Hawai'i Press.
- Land Study Bureau. (1972). *Detailed Land Classification - Island of O'ahu*. Honolulu: University of Hawai'i.
- Melrose, J., Peroy, R., & Cares, S. (2015). *Statewide Agricultural Land Use Baseline 2015*. University of Hawai'i at Hilo. Hawai'i State Department of Agriculture.
- Stride, L., Craddock, T., & Hammatt, H. (2003). *Archaeological Inventory Survey of the proposed. Cultural Surveys Hawai'i*.

