JOSH GREEN Lt. Governor



State of Hawaii DEPARTMENT OF AGRICULTURE

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July 18, 2019



Mr. Daniel Orodenker Executive Officer Land Use Commission 235 South Beretania Street Suite 406 Honolulu, Hawaii 96813

Dear Mr. Orodenker:

Subject: Petition for Declaratory Order to Designate Important Agricultural Lands

Docket No. DR19-66 Pomaika'i Partners, LLC

TMK: 6-4-01: por. 1, 5, and 12

Area: approximately 810 acres Paalaa Uka, Oahu

Thank you for this opportunity to comment on this important petition. The Department of Agriculture expresses its appreciation to the Petitioner for seeking Important Agricultural Land (IAL) designation for 810 acres of their agricultural lands in Paalaa Uka on Oahu.

We note that the Petitioner is not seeking a reclassification of land pursuant to Section 205-45(b), Hawaii Revised Statutes (HRS), in conjunction with this petition to designate IAL (Petition, page 22). The Petitioner is also voluntarily waiving all rights to claim any credits pursuant to Section 205-45(h), HRS (Petition, page 22).

This is the eighth submitted IAL petition involving agricultural lands on the island of Oahu and the seventeenth IAL petition submitted statewide. Over 135,000 acres of agricultural land has been designated as IAL by the Land Use Commission since 2009.

In summary, the Department believes seven of the eight IAL identification criteria have been met. The Department recommends the Petitioner provide information regarding the improvements necessary to the Wahiawa Irrigation System to supply water to the fallow land which represents nearly one-half of the petitioned area (see the discussion on criterion 5, from page 4 of this letter).

In the following, we are responding to the Petitioner's statements as to how the petitioned lands meet the eight criteria used for identifying potential IAL (Section 205-44, HRS).



1. Land currently used for agricultural production.

(Petition, pages 6-8, and Exhibit D, page 5 and Figure 2, Agricultural Areas, page 6) About 246 acres (30%) of the 810-acre petitioned area is currently in agricultural production - seed corn/sunflower (140 acres in the western end) and coffee (106 acres along Kamehameha Highway). The 391 acres (48%) of fallow land are located primarily on the eastern end of the petitioned area, sandwiched between Helemano and Opaeula gulches. This area is identified as vacant agricultural land according to the 2015 Statewide Agricultural Land Use Baseline (Oahu Crop Summary, page 55). According to the Land Study Bureau Detailed Land Classification – Island of Oahu (December 1972, maps 42 and 43), this vacant agricultural land area was once "A"-rated irrigated sugarcane land.

The remaining 173 acres (21%) of petitioned area is identified as "steep area" that "...promote land stewardship and soil conservation as well as cohesion and continuity of agricultural uses." (Petition, page 7) This stated purpose of including steep areas within the petition was used by Kualoa Ranch, Inc. in their petition for IAL designation. We note however that Kualoa Ranch uses lands with 25% or greater slopes for grazing of cattle, whereas the subject petition does not have or suggest agricultural use of similarly sloped land.

The 645 acres of "remainder land", mostly in the western end of the Petitioner's total property and outside the petitioned area contains significant acreage in seed crops, a horse ranch, fallow land, and steep areas.

DOA staff has not been able to determine how much of the 810-acre petitioned area is dedicated to agricultural use pursuant to Section 8-7.3, Dedication of Lands for Agricultural Use, Revised Ordinances of Honolulu. About 911 acres (65%) of the largest parcel (1,406 acres) that contain the majority of the petitioned area is dedicated to agricultural use. Of the 911 acres, about 392 acres is under pasture dedication and is identified in the Petition as fallow land. About 145 acres is under vacant agricultural dedication. The four approved dedications come up for renewal in 2020, 2022, 2026, and 2027, respectively. DOA uses dedication status as an indicator of current agricultural use. Furthermore, the 2015 Statewide Agricultural Land Use Baseline (Oahu Crop Summary, page 55) identified the primary agricultural activity within the Petitioner's lands as seed corn cultivation at the time the study was done.

Agricultural activities being proposed or believed to be suited for the petitioned lands include: Native Hawaiian plant nursery and industrial hemp farm within the 391-acre fallow lands on the eastern end of the petitioned area.

Cacao, breadfruit, sweet potatoes, dryland and wetland taro primarily within the western end of the property.

DOA position on Criterion 1: This criterion is satisfactorily met.

2. Land with soil qualities and growing conditions that support agricultural production for food, fiber or fuel and energy-producing crops. (Petition, pages 9-10 and Exhibit D, page 10 and Figure 5, page 12))

Fifty-two percent (422 acres) of the 810 acres in the petition area have a Land Study Bureau (LSB) Overall Productivity Rating of "A" or very good productivity potential for most agricultural uses. There are 82 acres of "B", 9 acres of "C", no acreage of "D", and 297 acres (37%) of "E".

The petition quotes from the LSB report for Oahu that "[f]armers or ranchers are better informed than others regarding the agricultural quality of the lands they operate for the uses to which the lands are presently being used." We were not able to confirm the existence of this quote in the "Island of Oahu, LSB Bulletin No. 11" (December 1972).

DOA position on Criterion 2: This criterion is satisfactorily met.

3. Lands 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. (Petition, pages 10-12 and Exhibit D, pages 10-11 and Figure 6 on page 13)

The ALISH "Prime" footprint of 514 acres substantially overlaps the higher-rated LSB soils ("A" through "C") (see Petition, pages 12 and 9; and Exhibit D, Table 4: LSB Productivity Rating on page 10 and Table 5: ALISH Rating on page 11). About 284 acres (35%) of the petitioned area is not classified according to ALISH. Most of this area is located in Opaeula Gulch that demarcates the northern boundary of the petitioned area.

DOA position on Criterion 3: This criterion is satisfactorily met.

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. (Petition, pages 12-13)

The petition does not identify any traditional Hawaiian agricultural uses or unique agricultural crops on the petitioned area. The petition does identify dry- and wet-land taro cultivation as a potential crop. The principal historic use was the cultivation of sugarcane. We note that the petitioned area contains no "Unique" agricultural lands according to the ALISH system which would indicate the potential for wetland or similar crops. The Department acknowledges that coffee is being grown on the petitioned area.

DOA position on Criterion 4: This criterion is satisfactorily met.

5. Lands with sufficient quantities of water to support viable agricultural production. (Petition, pages 13-15 and Exhibit D, pages 16-18 and Figure 8)

The petitioned area has a mean annual rainfall of less than 30 (west end, or makai) to 45 inches (east end, or maka). This amount and its annual distribution are inadequate to support crop cultivation without supplemental irrigation.

The petition states that the property has been granted a groundwater allocation of 3.5 million gallons per day. According to the Commission on Water Resource Management (CWRM) staff submittal and minutes of the CWRM meeting (both dated June 19, 2018), the water is to be sourced from the existing Pump 17 which is located about midway in the petitioned area. It appears that groundwater will be used for the proposed edible crops. Having R-1 quality irrigation water available throughout the petitioned area will increase the crop options available to future agricultural operations, if this is the intention of the Petitioner.

The petition indicates that the existing irrigation source (Lake Wilson) and distribution system (Wahiawa Irrigation System) is sufficient to provide irrigation water to the existing seed corn and coffee farm operations. The petition states that water flow through the System is unmonitored (Exhibit D, page 16). The petition does not state whether the amount of water (classified as R-2 by the Wastewater Branch, Department of Health) available is sufficient to meet existing crop needs throughout the year or whether there are periods of inadequate water supply. The figure of 1,150 gallons per acre per day for seed corn is, according to our information, sufficient to meet demand only during the winter months. The irrigation requirement for seed corn during the summer months is 3,860 gallons per acre per day, an increase in demand of 330 percent over the winter months ("Seeds From Paradise: The Rise of Hawaii's Seed Corn Industry", Master's Thesis, Benjamin Schrager, University of Hawaii, Department of Geography, May 2014, page 54). Therefore, the estimated irrigation water usage for the 125 acres of seed corn typically in cultivation ranges from 143,750 gallons per acre per day (summer) to 482,500 gallons per acre per day (winter). If the Petitioner proposes continued use of Lake Wilson as a source of irrigation water, accurate information on the adequacy and reliability of irrigation water supply and distribution is critically important for farmers to maintain optimal crop production.

R-2 rated water is subject to the Department of Health's standard of use guidelines as found in their "Reuse Guidelines; Volume II: Recycled Water Projects" (Wastewater Branch, Department of Health; January 2016; pages 9-10).

The Petitioner has identified necessary improvements to the Wahiawa Irrigation System to allow crop cultivation in the fallow areas of the petitioned area (Exhibit D, page 18, Table 6). We presume this to include the 391-acres of fallow land in the eastern half of the property. The Department recommends that the Petitioner provide an estimate of when these repairs will be completed, the estimated cost, and identification of the party(ies) who will be responsible for the operations and maintenance of the infrastructure.

In support of future agricultural activities on non-cultivated areas that require potable water quality, the Petitioner will seek approvals for and develop a new well-based source, storage,

treatment, and distribution system at the upper elevation of the petitioned area (Petition, page 15 and Exhibit D, page 18). The petition does not make clear if these improvements are related to Pump 17 and related infrastructure at the mid-elevation location on the property, or on the eastern edge. One of the facilities to benefit from this potable water source is described later in this letter.

DOA position on Criterion 5: Based on the information in the petition and exhibits, we are not able to confirm whether this criterion is met for the entire petitioned area. An adequate and reliable supply of irrigation water and its distribution is critically important for existing and future farmers within the petitioned area to achieve and maintain optimal crop production and to meet food safety standards. The Department recommends the Petitioner provide additional information on the improvements to the Wahiawa Irrigation System, its relationship to Pump 17, and the new well-based source and related infrastructure at the upper elevation of the petitioned area that are necessary to provide irrigation water to the entire petitioned area. Specifically, we request an estimate when these repairs may be completed, the approximate cost of the improvements, and identification of the party(ies) who may be responsible for the operations and maintenance of the infrastructure.

6. Land whose designation as Important Agricultural Land is consistent with general, development, and community plans of the County. (Petition, p. 15-21) The petitioned area is entirely within the State Agricultural District. The petition states that "Current uses on the Property are consistent with the uses permitted within the State Agricultural District." (Petition, page 16) In the prior paragraph, the following activities and uses that are permitted on Agricultural District land are listed - agricultural tourism and open area recreation facilities. The reference to agricultural tourism may be technically incorrect as State law requires the applicable county to have adopted ordinances regulating agricultural tourism and agricultural tourism activities under Section 205-5, HRS (Section 205-2(d)(11 and 12), HRS). We understand that the City and County of Honolulu has not adopted ordinances regulating agricultural tourism.

The petitioned area conforms with the City's General Plan (2002) and the North Shore Sustainable Communities Plan (2011).

With respect to the City's identification of potential IAL, almost the entire petitioned area as well as the Petitioner's "Remainder Lands" were identified as potential IAL (Exhibit D, page 26, Figure 12, Initial City and County of Honolulu Important Agricultural Lands Overlay). The Petitioner successfully argued for the removal of their entire landholdings in the area, as they were pursuing voluntary IAL designation for the 810-acre petitioned area.

DOA position on Criterion 6: This criterion is satisfactorily met with the understanding that agricultural tourism may not be a permitted activity on the petitioned area.

7. Land that contributes to maintaining a critical land mass important to agricultural operating productivity. (Petition, p. 21)

The petition cites the 150-year history of agricultural activity in the petitioned area as the reason for meeting this criterion (Page 13). Together with the designated IAL in Kawailoa (Kamehameha Schools; DR14-52, 9,171 acres) and Waialua (Castle and Cooke Waialua LLC; DR10-42, 242 acres) approval of the Petitioner's request will result in approximately 10,223 acres of agricultural land in three separate areas of the north shore of Oahu being designated as IAL.

DOA position on Criterion 7: This criterion is satisfactorily met.

8. Land with or near support infrastructure conducive to agricultural productivity, such as transportation to markets, water, or power. (Petition, p. 21)

Existing infrastructure includes the aforementioned Wahiawa Irrigation System (reservoir, distribution, filters, etc.) that is need of repair, agricultural roads, and adjacency to Kamehameha Highway. Future infrastructure improvements and features include electrical power distribution; access roadways; security; and a centralized agricultural processing facility (to be located approximately in the middle of the petitioned area, near the site of the new potable water well, and a reservoir on the far eastern border of the petitioned area) to provide support for processing, packing, packaging, chilling, temporary storage, and distribution of agricultural products (Petition, page 8 and Exhibit D, page 5 and page 18).

DOA position on Criterion 8: This criterion is satisfactorily met.

Overall Comments and Recommendations:

In summary, the Department believes seven of the eight IAL identification criteria have been met. The Department recommends that the Petitioner provide additional information for Criterion 5, "Lands with sufficient quantities of water to support viable agricultural production". An adequate and reliable supply of irrigation water and its distribution is critically important for existing and future farmers within the petitioned area to achieve and maintain optimal crop production. Specifically, we recommend the following condition:

Within 180 days from approval, the Petitioner shall provide to the Department of Agriculture the following information on the improvements to the Wahiawa Irrigation System, its relationship to Pump 17, and the new well-based source and related infrastructure at the upper elevation of the petitioned area that are necessary to provide irrigation water to the entire petitioned area.

- 1. An estimate when these repairs may be completed,
- 2. The approximate cost of the improvements; and
- 3. Identification of the party(ies) who may be responsible for the operations and maintenance of the infrastructure.

Should you have any questions, please contact Earl Yamamoto at 973-9466, or email at earl.j.yamamoto@hawaii.gov.

Sincerely,

Phyllis Shimabukuro-Geiser Chairperson, Board of Agriculture

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c: Ms. Mary Alice Evans, Director, Office of Planning Ms. Kathy K. Sokugawa, Acting Director, City Department of Planning and Permitting Ms. Dawn Apuna, Deputy Attorney General

Pomaika'i Partners IAL DR19-66