# SUCCESSOR PETITIONER (AS TO PARCEL 52) HO‘OHANA SOLAR 1, LLC MOTION FOR MODIFICATION AND TIME EXTENSION LUC DOCKET NO. A92-683 

## Written Direct Testimony of Jeffrey H. Overton

I, Jeffrey H. Overton, have personal knowledge of the matters set forth herein and am qualified and competent to make these statements.

1. Please state your name and business address for the record.

Jeffrey H. Overton, AICP, LEED AP, Group 70 International, Inc. (dba G70), 111 South King Street, Suite 170, Honolulu, Hawai‘i 96813.
2. What is your current occupation?

I am a Principal Planner at Group 70 International, Inc. ("G70").
3. How long have you specialized in land use permitting and planning?

I have worked in the land use field for over 37 years. Included in my work doing land use permitting and land use planning, I also conduct or oversee numerous environmental reviews under Hawaii Revised Statutes Chapter 343. I focus on preparing master plans, site selection studies, urban design plans, environmental impact assessments, land use permitting, and community consultation for private, military, and government projects. I also focus on permitting for residential communities, infrastructure and utilities, renewable energy projects, as well as government and private facilities. I have completed environmental assessments/impact studies and master plans for over 150 projects, including utility-scale solar farms, residential communities, resort complexes, commercial centers, school campuses, agricultural developments, parks and recreational facilities, harbors and coastal structures, scientific installations, infrastructure (highways, wastewater, electrical transmission), biofuel refineries, and transit-oriented development.
4. Did you provide a copy of your resume for these proceedings?

Yes, my resume was provided as Petitioner's Exhibit ("Pet. Ex.") 39.
5. Please briefly describe your educational background.

I hold a Bachelor of Science in Zoology, Biology, and Oceanography from Duke University, and a Master of Science in Marine Environmental Science from the State University of New York at Stony Brook. I am also certified by the American Institute of Certified Planners (AICP) and am a Leadership in Energy and Environmental Design (LEED) Accredited Professional (AP).

## 6. To what professional organizations do you belong?

I am a member of the American Institute of Certified Planners; Urban Land Institute Hawai'i Chapter; American Planners Association, Hawai'i Chapter, and U.S. Green Building Council, LEED AP. I also serve as the Chair of the O'ahu Economic Development Board and State Advisory Board Member for the Trust for Public Land.

## 7. Have you even been qualified as an expert witness in permitting and as land use planner before the Land Use Commission ("Commission")?

Yes. Most recently I was qualified as an expert witness in land use and environmental planning before this Commission in 2020. I have been qualified as an expert before this Commission for the following projects: Maniniowali (1990), Lihilani Pupukea (1992), Upcountry Town Center (2002), Keauhou Master Plan (2005), Forest City Keahuolu (2009), Waipio Solar (2016), Waiawa Solar (2019), Pomaikai IAL (2019), and University of the Nations Kona (2019). I was also so qualified by this Commission in 2015 in connection with Ho'ohana Solar 1, LLC's ("Ho'ohana") initial request for approval from this Commission in Docket A92-683.
8. Are you familiar with the proposed development of a solar farm as an interim use of Parcel 52 under Docket A92-683?

Yes. G70 was retained by Ho'ohana in February 2014 as the land use planner for the originally proposed solar farm, which the Commission approved in 2015 ("2015 Solar Project"). The Commission approved the 2015 Solar Project under its January 28, 2015 Order Granting Successor Petitioner (To Parcel 52), Ho'ohana Solar 1, LLC's Motion for Order Amending the Amended Findings of Fact, Conclusions of Law, and Decision and Order filed on October 1, 1996 ("2015 Order") (Pet. Ex. 16). Ho'ohana also retained G70 for land use planning and permitting in connection with the current solar farm project.

The currently proposed solar farm project consists of a 52 megawatt ("MW") photovoltaic system, paired with a $52 \mathrm{MW} / 208$ megawatt-hours battery energy storage system with a four-hour duration at full capacity, and includes related electrical improvements and structures and utility tie-ins (the "Project" or the " 2020 Solar Project"). The Project is proposed to be installed within the 161.02 -acre parcel owned by Robinson Kunia Land, LLC (and subject to Ho'ohana's ground lease), located at TMK No. (1) 9-4-002:053 ("Parcel 52"), in the Kunia area. Parcel 52 is the same property that this Commission approved for solar farm development under the 2015 Order.

## 9. What is your role in this Project?

I am a principal planner at G70. We were hired by Ho'ohana to assist with the planning and permitting for the 2020 Solar Project. G70 prepared the request for a minor modification to the conditional use permit (minor) ("CUP") that was previously approved by the Honolulu Department of Planning and Permitting ("DPP") and also prepared the waiver application. DPP approved those permits on August 12, 2020 (Pet. Ex. 32, 35). G70 also prepared several of the graphics that have been filed with the Commission and
also retained certain subconsultants to prepare studies to assess various aspects of the 2020 Solar Project.

G70 prepared the graphic showing Parcel 52 and the other properties within Docket A92683 (Pet. Ex. 1), we also prepared the zoning maps, Central Oahu Sustainable Communities map, the site plan, the graphic showing distances from Parcel 52 to the airports, the view study from various vantage points, including from the boundary of TMK Parcel No. (1) 9-4-002:071 ("Parcel 71"), the photo showing existing conditions and locations of the existing Hawaiian Electric Company, Inc. ("HECO") 138 and 46 kilovolt (" $\mathbf{k V}$ ") lines, and several graphics showing the relative locations of the lines and improvements for the 2020 Solar Project and the 2015 Solar Project. See Pet. Ex. 1, 3, 4, 5, 9, 11, 31, 25, 24, 26, 27, 28.

The studies we had prepared by subconsultants for Parcel 52 include: An Archaeological Inventory Survey Report for the Ho'ohana Solar Farm Project in Kunia, Waikele Ahupua'a, 'Ewa District, Island of O'ahu, Hawai'i [TMK: (1) 9-4-002:052], prepared by Scientific Consultant Services, Inc. (Pet. Ex. 7); Construction Traffic Assessment for the Proposed Hoohana Solar Farm (Oahu, HI), dated June 8, 2020, prepared by Fehr \& Peers (Pet. Ex. 10); Cultural Impact Assessment of Ho'ohana Solar Energy Facility, Waikele and Hō'ae'ae Ahupua'a, Ewa District, O'ahu, Island of Hawai'i, dated July 2020, prepared by TCP Hawai'i, LLC (Pet. Ex. 12); Natural Resources Survey for the Ho'ohana Solar Farm Site in Kunia, O'ahu, dated September 24, 2014, prepared by AECOS, Inc. (Pet. Ex. 13).

## 10. Please briefly describe the history of the Docket No. A92-683.

The Docket covers approximately 503 acres ("Petition Area") that the Commission reclassified to the Urban District by Findings of Fact, Conclusions of Law, and Decision and Order dated December 9, 1993 ("1993 Order"). The original petitioner in this Docket No. A92-683 was Halekua Development Corporation ("Halekua"), who at that time had control, through a development agreement with the fee owner, Robinson Estate, of the entire Petition Area. In 1992, Halekua filed a petition to reclassify the Petition Area to develop it as Royal Kunia Phase II. Halekua set forth a development plan in three parts, identified as Increments 1, 2, and 3. As presented, at full build out, the Royal Kunia Phase II project would have approximately 2,000 residential units, 123 acres dedicated to light industrial uses, a 6 acre elementary school site, and an 11.1 acre public park.

Increment 1 will include light industrial uses, a park, a school, low-density apartments, and single-family residences. Increment 2 will be developed with low-density apartments and single-family residences. As provided in the 1996 Development Plan Amendment Application and Final Environmental Assessment, Parcel 52 will be developed as Royal Kunia Phase II, Increment 3, which is planned for approximately 580 residential units.

In 1996, Halekua filed a motion to amend the 1993 Order to delete the proposed golf course, change the ownership interest in the Petition Area, and to correct the metes and bounds of the Petition Area to 503.886 acres. The Commission approved the motion to amend by Findings of Fact, Conclusions of Law, and Decision and Order dated October

1, 1996 ("1996 Order"). Various legal proceedings in the 2000s (including a bankruptcy proceeding for the original Petitioner) resulted in Halekua losing control of the Petition Area.

The Increments within the Petition Area, as depicted in the Final Environmental Assessment Royal Kunia Phase II, Increment 3, and as depicted in a figure submitted to the Commission by the Office of Planning ("OP") and/or the State Department of Agriculture ("DOA"), and posted on the Commission's website (Pet. Ex. 50), and the current ownership is provided in the table below.

| TMK Parcel | Increment | Acres | Owner |
| :--- | ---: | ---: | :--- |
| $9-4-002: 001$ | 1 | 123.71 | HRT Realty, LLC (under contract to sell to Jupiter <br> Investors II, LLC) |
| $9-4-002: 070$ | 1 | 13.30 | Haseko Royal Kunia, LLC ("Haseko") |
| $9-4-002: 078$ | 1 | 36.66 | Haseko |
| $9-4-002: 071$ | 2 | 161.36 | Haseko |
| $9-4-002: 079$ | 3 | 12.00 | RKES LLC |
| 9-4-002: 052 <br> $($ i.e., Parcel 52$)$ | 161.02 | Robinson Kunia Land LLC (subject to Ho'ohana's <br> ground lease) |  |

## 11. Are you familiar with the Motion that Ho'ohana filed with the Commission on August 17, 2020?

Yes, generally. I know Ho'ohana filed a Motion for Modification and Time Extension in order to get Commission approval for some modifications to the approved 2015 Solar Project. The requested modifications are to recognize the change in the project (from 20 MW to 52 MW ), and to adjust the project start and stop dates that the Commission had authorized under the $2015 \mathrm{D} \& \mathrm{O}$. The $2015 \mathrm{D} \& \mathrm{O}$ authorized an operational period, excluding decommissioning, not to exceed 35 years from the date of the $2015 \mathrm{D} \& \mathrm{O}$ (i.e. operational period to end January 2050). For the 2020 Solar Project, Ho'ohana is requesting a 40 -year operational period. Taking construction and decommissioning into account, Ho'ohana is requesting Commission approval to use Parcel 52 for the 2020 Solar Project for a total of 43 years.

## 12. Will the $\mathbf{2 0 2 0}$ Solar Project delay the planned development of Parcel 52?

No. As discussed above, Parcel 52 is the last increment (Increment 3) of this larger master plan. Increment 3 cannot feasibly be developed until Increments 1 and 2 are built because Increment 3 needs to connect to the infrastructure developed by those Increments. Increments 1 and 2 have to be developed first. As such, approving the 2020 Solar Project will allow Parcel 52 to be utilized for an interim use that will be beneficial not just to the environment (as a renewable energy project), but to the State of Hawaii as a whole to help achieve our $100 \%$ renewable energy goal. If the 2020 Solar Project does not go forward, Parcel 52 will likely remain undeveloped and unproductive, until such time as the remainder of the Petition Area (Increments 1 and 2) get developed.
13. What are the primary differences in renewable energy capacity between the

## approved 2015 Solar Project and the proposed 2020 Solar Project?

The 2020 Solar Project makes more efficient use of Parcel 52 and would generate substantially more renewable energy than the 2015 Solar Project. Both projects are entirely within Parcel 52 and therefore entirely within the State Land Use Urban District. (Pet. Ex. 1; Pet. Ex. 16).

The 2015 Solar Project was designed to generate 20 MW of electricity. The proposed 2020 Solar Project will generate 52 MW of power (in other words, a $160 \%$ increase in renewable energy generation capacity, due to improved technology and more efficient design).

The 2020 Solar Project will result in a significantly higher avoidance of imported fuel and carbon dioxide emissions. The 2015 Solar Project was anticipated to avoid the use of 4.7 million gallons of imported oil and 46,000 tons of carbon dioxide emissions annually. The 2020 Solar Project is expected to avoid the use of 10.6 million gallons of imported oil and 95,400 tons of carbon dioxide emissions annually.

I note that the State Energy Office's September 11, 2020 letter to the Office of Planning, which was filed as OP Exhibit 3, explains that the 2020 Solar Project would produce $1.4 \%$ of all renewable energy generated for HECO, and would therefore be the sixth most productive renewable energy project of the 28 renewable energy projects currently being undertaken for HECO.

## 14. Is Parcel 52 still appropriate for development of a solar farm?

Yes. The Commission made this determination when it approved the 2015 Solar Project under the 2015 Order. It determined, among other things, that the 2015 Solar Project would satisfy objectives and policies under the Hawaii State Plan including HRS § 22618 related to energy facilities systems, HRS § 226-103(a) regarding economic priority guidelines, and HRS § 226-103(f) regarding energy use and development. See 2015 Order at FOF 228-231. These objectives and policies include (1) helping the state to obtain greater energy security and self-sufficiency by providing an independent and renewable source of energy; (2) reducing greenhouse gas emissions; (3) promoting the use of renewable energy sources; (4) ensuring that the combination of energy are sufficient to support the demands of growth; and (5) promoting a cost-effective method of energy.

If anything, since the time of the 2015 Order, the State's need for renewable energy has grown even greater. Under Act 97, passed into law in June 2015, the State committed to utilities generating $100 \%$ electricity from renewable energy resources by the year 2045. (Pet. Ex. 14).

Moreover, Parcel 52 is ideal for solar energy generation development because the area receives ample natural sunlight and is relatively level.

## 15. Will the $\mathbf{2 0 2 0}$ Solar Project adversely impact any views or sightlines, or create glare for the surrounding areas?

No. The 2020 Solar Project should not generate glare that will affect surrounding neighborhoods. The Commission already made that determination as to the 2015 Solar Project. See 2015 Order at FOF 109, 166.

More recently G70 prepared a view study, dated May 15, 2020 (Pet. Ex. 11) that included view planes from eight regional vantage points surrounding Parcel 52, with the approximate location of the 2020 Solar Project indicated in the distance as a reference point. Next, we created accurate depictions of the future condition of the solar array and facilities and produced the computer visual simulations of the ridge. This is typically how we prepare such studies.

The view study shows that the 2020 Solar Project will not adversely impact any views or sightlines because it is low profile, hugging the existing topography. Moreover, the lowrise solar panels will extend only approximately six feet off the ground with a perimeter fence and an approximately seven-foot high landscaping screen. As the photos show, the 2020 Solar Project is really in the background and will not create is not anticipated to create an eyesore for the surrounding communities.

For the view study (Pet. Ex. 11), the eight vantage points we tested ranged from 0.35 to 2.2 miles away from Parcel 52. View simulations were prepared with views from (a) the H-1 Freeway 'Ewa Bound, looking across Waikele Gulch toward Parcel 52 ( 1.7 miles away); (b) Anoiki Street and Anonui Street (Royal Kunia), looking north toward Parcel 52 ( 0.35 miles away); (c) Kunia Road looking northeast towards Parcel 52 (1 mile away; (d) a different vantage point along Kunia Road, looking east towards Parcel 52 (1 mile away); (e) Kunia Road, north of Hawai'i County Club, looking southeast towards Parcel 52 (1.5 miles away); (f) Central Oahu Regional Park Tennis Courts, facing west towards Parcel 52 ( 1.1 miles away); (g) Pakela Street, Waikele, facing northwest towards Parcel 52 (1.1 miles away); and (h) Waipahu Elementary School, facing north towards Parcel 52 ( 2.2 miles away).

Due to the topography and tall grasses surrounding Parcel 52 and the distance from communities or roadways, the solar farm will not be visible from those areas.

More recently G70 prepared renderings of the 2020 Solar Project to assess the views from the Haseko-owned property at TMK (1) 9-4-002: 071. (Pet. Ex. 31). Those renderings also accounted for the landscape concept plan that was prepared for the 2020 Solar Project (Pet. Ex. 30). As is evident by the rendering, even from the closet boundary of Parcel 71, the solar array will not be readily visible. The proposed fencing and landscaping should mitigate virtually any potential view or contact impacts from the 2020 Solar Project.

## 16. Did G70 prepare the landscape concept plan?

No. That plan (Pet. Ex. 30) was prepared by Walters Kimura Motoda, Inc. However, G70 took that landscape plan into consideration when preparing the rendering mentioned above.
17. Can you explain how the 2020 Solar Project will connect into the HECO grid?

Generally, yes, from a land use perspective (I cannot address any highly technical details of that interconnection).

## 18. Please explain how the 2020 Solar Project will connect to the HECO grid and whether that connection is different from the 2015 Solar Project.

The 2020 Solar Project will connect to the HECO grid through an existing 138 kV transmission system that runs just outside of Parcel 52's northern boundary. The location of the 138 kV lines is clearly shown in the photograph we provided as Pet. Ex. 25. That photo was taken within the past month. The vantage point is from the closest boundary of the Haseko-owned Parcel 71 looking across Parcel 52. The lines and poles for the HECO 138 kV system and HECO's 46 kV system are clearly visible in the distance.

G70 prepared several graphics to show the Commission how the 2015 Solar Project would have connected to the HECO grid and how the 2020 Solar Project will connect to the HECO grid. Pet. Ex. 24 shows how the 2020 Solar Project will tie into the existing HECO 138 kV system (the tie-in is depicted in green). I note that the distance between Haseko's Parcel 71 and Ho'ohana's point of interconnection is approximately 80 further from the distance between Parcel 71 and the existing HECO 138 kV line.

## 19. Is the HECO interconnection for the 2020 Solar Project different from the interconnection for the approved 2015 Solar Project?

Yes, in several ways. First of all, as depicted on Pet. Ex. 27, the location of the 2020 Solar Project substation is even further away from the other Petition Area properties than the substation that was planned for the 2015 Solar Project. Current distance is approximately 1,320 feet to the nearest Petition Area property (Parcel 71), while the substation for the 2015 Solar Project was approximately 1,057 feet from Parcel 71.

Another key difference is that the 2015 Solar Project was approved to connect to HECO's grid through an existing 46 kV transmission line that currently crosses Parcel 52. That transmission line is the pink line shown on Pet. Ex. 26 and 27. However, for the 2020 Solar Project, as discussed above, the point of interconnection will be further back into Parcel 52 and will connect to the existing 138 kV line. Moreover, part of the 2020 Solar Project involves relocating the existing (shown in pink) 46 kV line even further to the north and away from the Petition Area. The route of the relocated line is shown in blue on Pet. Ex. 26. In other words, the portion of the pink line within Parcel 52 will be removed and the line will be rerouted in approximately the alignment shown in blue.

## 20. Is the solar array itself different in the 2020 Solar Project than it was for the 2015 Solar Project?

Yes, but both projects were entirely within Parcel 52 and entirely within Urban District property, so in certain key respects the differences in land use are not significant.

As noted by the State Energy Office, the 2020 Solar Project has a dense land use ratio of 3 acres per MW (the project is within approximately 157 acres within Parcel 52 and will generate 52 MW of energy). (OP. Ex. 3). In contrast, the 2015 Solar Project was sited
within 124 acres within Parcel 52 and would have generated 20 MW of energy, resulting in a land use ratio of 6 acres per MW. See 2015 Order at FOF 104.

G70 prepared a graphic showing the land areas of the two projects. Pet. Ex. 28. The overall footprint of the 2020 Solar Project, which is outlined in blue, is larger than that of the 2015 Solar Project, but it will also generate more than twice as much renewable energy.
21. Is the $\mathbf{2 0 2 0}$ Solar Project consistent with the lot setback requirements under the Land Use Ordinance?

Yes. Parcel 52 is zoned AG-1 Restricted Agricultural District. That zoning district requires a front yard setback of 15 feet and a side yard setback of 10 feet. As is evident by the diagram provided as Pet. Ex. 28, the 2020 Solar Project is in compliance with both the front yard and the side yard setback requirements under the Land Use Ordinance.
22. Does the LUC have the authority to allow the 2020 Solar Project on Parcel 52?

Yes. The solar farm is permitted under City and County of Honolulu law. Parcel 52 is zoned AG-1 Restricted Agricultural District by the City and County of Honolulu (Pet. Ex. 3). "Utility installations" defined under the Honolulu Land Use Ordinance, Revised Ordinances of Honolulu, Chapter 21, is defined as "uses or structures, including all facilities, devices, equipment, or transmission lines, used directly in the distribution of utility services, such as water, gas, electricity, telecommunications other than broadcasting antennas, and refuse collection other than facilities included under waste disposal and processing." Utility installations also include accessory uses and structures directly associated with the distribution of the utility service. Id.

As shown in the Master Use Table under the Honolulu Land Use Ordinance (Pet. Ex. 29), utility installations are permitted in all zoning districts, including AG-1. Under the LUC's rules (HAR §15-15-24) any and all uses permitted by the counties either by ordinance or rules may be allowed within the Urban District.
23. Did any of the Commission's Orders impose a deadline for completion of the residential development of Increment 3 on Parcel 52?

No, there is no completion deadline. However, the original Petitioner's estimated deadline for the completion of Royal Kunia Phase II has passed.

I'll also mention that under the 2015 Order, if the Ho'ohana 20 MW solar project was built, the Commission ordered that it be substantially completed by January 2017, i.e. within two years of the issuance of the 2015 D\&O. Obviously that did not occur due to decisions by the Hawaii Public Utilities Commission to reject the Power Purchase Agreement for that project. However, with respect to the 2020 Solar Project, Ho'ohana anticipates that it would be substantially completed within two years of the Commission's approval. In other words, the same timeframe that the Commission ordered in 2015.

## 24. Will the Project generate glare affecting air traffic or motor vehicle traffic?

In general, the PV modules that will be used for this Project are similar to residential rooftop solar panels and are designed to absorb as much solar energy as possible. The modules will be dark blue in color, being designed to absorb as much solar energy as possible, and therefore create minimal glare. The panel modules reflect back no more than 1.25 percent light. For context, typical window glass reflects approximately 1.5 percent light, and smooth water reflects approximately 1.33 percent light. So, the PV modules are less reflective than both window glass and water.

## 25. Will there be any significant use of groundwater or surface water by the solar farm?

No. There will be no significant use of groundwater or surface water by the 2020 Solar Project, and thus no impairment to the public trust relating to water resources. The 2020 Solar Project does not require a water allocation. To provide water for initial landscaping (until plants are established) and the operations and maintenance building, Ho'ohana intends to install temporary water tanks. Water used during the construction period will be provided from a nearby hydrant located within approximately 1,000 feet from the site. Ho'ohana plans to rely on rainwater to keep the solar modules clean.

## 26. Has an environmental assessment ("EA") been prepared for either the 2015 Solar Project or the 2020 Solar Project?

No, because an EA was not necessary. Whether or not an EA needs to be prepared depends on whether or not the proposed project triggers that requirement under HRS Chapter 343. HRS Section 343-5 set out the triggers for environmental review. The proposed solar farm does not implicate any of those EA triggers. Moreover, the 2020 Solar Project is ultimately a low-impact, environmentally-friendly use of the land and will not generate adverse impacts to the environment.

## 27. What are the socio-economic effects of the proposed 2020 Solar Project?

HECO estimates that the Project will displace up to $1,555,687$ barrels of fuel, 465 tons of coal, and approximately 747,601 tons of greenhouse gas emissions over the first 20 years of the Project. See Hawaii State Energy Office Letter (OP Ex. 3).

Over 30 years, the Project will replace the need for approximately 10.6 million gallons of imported oil and 94,500 tons of carbon dioxide annually. That is the equivalent to the power used by approximately 19,100 homes.

The 2020 Solar Project is anticipated to generate approximately 50 jobs during majority of the two-year construction period, but for an estimated period of seven months during peak construction activity it is anticipated that approximately 175 workers will be needed on site. Once construction is completed, it is estimated to require approximately five fulltime employees.

Additionally, it is my understanding that Ho'ohana plans to partner with the Maui Economic Development Board, which has developed a State-wide and internationally recognized diverse renewable energy curriculum for grades $\mathrm{K}-12$. Ho'ohana will provide funds to sponsor a training cohort of teachers from the Waipahu Complex, including one
year of mentorship and course materials on alternative energy. The Waipahu Complex teachers have a reach of over 1,000 students per year.

## 28. Will the $\mathbf{2 0 2 0}$ Solar Project generate new impacts on State or County services?

No, the Project will not generate any new or additional demands for parks, schools, and health care services nor will it extend the service area limits for police and fire protection.
29. Are you generally familiar with the Natural Resources Survey for the Ho'ohana Solar Farm Site in Kunia, O'ahu, dated September 24, 2014 (Pet. Ex. 13)?

Yes. G70 did not prepare that survey, it was prepared by AECOS, Inc. at our request.
Mr. Eric Guinther submitted written direct testimony which this Commission accepted in 2014 detailing that survey. I understand that testimony has been filed here as Pet. Ex. 48.

The survey covered all of Parcel 52 including Plantation Road. The Project will not adversely impact any biological resources. AECOS' survey concluded there are no threatened or endangered species, or federally-declared critical habitat, located on or within Parcel 52. No animal species of interest or concern were located on Parcel 52. A total of 615 birds representing 22 species were observed on Parcel 52, none of which are native to Hawai'i. Four mammalian species were detected on Parcel 52 (dog, mongoose, cat, and pig).

Additionally, no botanical resources of interest or concern were located on Parcel 52. The vegetation over most of Parcel 52 has been controlled by past land use, and the majority of Parcel 52 has little vegetation. The remaining portions are Parcel 52 are covered with a weedy growth of grasses (Guinea grass), scattered trees (koa hale and silk oak), scrubs, and other herbaceous plants. Two native plants were located on the property, the 'Uhaloa and 'A'ali'i plants. No wetlands or streams are located in Parcel 52.

## 30. Will the Project adversely impact any biological resources?

No, the Project will not adversely impact any biological resources. As stated above, there are no animal or plant species of interest.

As discussed in the survey and Mr. Guither's written testimony, the Hawaiian hoary bat was not detected during the course of the survey. He concluded that, based on the habitats present in Parcel 52 and the lack of suitable roosting trees, any use of the area by the Hawaiian hoary bat would be of an incidental foraging nature.

Nevertheless, I understand that Ho'ohana is committed to taking protective measures, such as not removing any trees during the hoary bat roosting season (June 1 through September 15). Ho'ohana has also committed to monitoring for ponding while conducting any grading work during stilt-nesting season, as there may be a stilt that could try to nest in such ponds. These commitments were made with respect to the 2015 Solar Project (Pet. Ex. 6) and I understand that Ho'ohana will continue to honor these commitments. I understand that the State of Hawai'i Department of Land and Natural

Resources, Division of Forestry and Wildlife made some additional complimentary recommendations for protections of biological resources (OP Ex. 4), and my understanding is that Ho'ohana will comply with those should the 2020 Solar Project get approved.

## 31. Did the Commission impose any conditions of approval on the 2015 Solar Project? If so, what is the status of those conditions?

Yes. The Commission imposed seven conditions of approval on the 2015 Solar Project. Those are identified as items B. 1 through B. 7 of the 2015 Order.

The 2015 Order instructs that the conditions "shall be applicable only to the solar farm on Parcel 52, and shall be applicable only upon development of the solar farm use on Parcel 52." 2015 Order at 54.

Condition B. 1 required Ho'ohana, concurrent with the construction of the 2015 Solar Project, to design and provide an offsite, non-potable waterline from Reservoir 225 to the boundary of the Royal Kunia Agricultural Park to specifications mutually acceptable to Ho ohana and the Department of Agriculture. Condition B. 1 also anticipated the potential for delays due to requirements to comply with the EA requirements under HRS Chapter 343: "If Ho'ohana is required to perform an environmental impact statement pursuant to Chapter 343, Hawai'i Revised Statutes, then the time period set forth in this condition shall be extended by the number of days that Ho'ohana is delayed as a result." Although the 2015 Solar Project did not go forward, as a land use planner and environmental consultant, I believe it was insightful for the Commission to take that potential into account. While the Solar Projects themselves would not trigger HRS Chapter 343, the use of State or County lands for infrastructure to support a State project could.

Condition B. 2 required Ho'ohana to consult with the US Fish and Wildlife Service to coordinate staff training programs and measures to mitigate adverse impacts on endangered and migratory avian species. I understand that was done as presented in Pet. Ex. 6.

Condition B. 3 prohibited any ground altering activity until such time as the State Historic Preservation Division approved the then-pending Archaeological Inventory Survey. That Survey has been completed (Pet. Ex. 7) and accepted by SHPD (Pet. Ex. 8), and therefore Condition B. 3 has been fully satisfied.

Condition B. 4 required Ho'ohana to immediately initiate steps to mitigate hazard if the Department of Transportation ever notified Ho'ohana that the photovoltaic array was creating a hazardous condition for pilots or motorists. As discussed in prior responses, there is little chance that the 2020 Solar Project would create any sort of visual hazard for planes or cars. Pet. Ex. 9 shows that at its closest points, Parcel 52 is approximately 8 miles from the nearest runway at the Daniel K. Inouye International Airport, and approximately 7 miles from the nearest runway at the Kalaeloa Airport. The renderings and view studies G70 prepared (Pet. Ex. 31 and 11, respectively) show little to no
likelihood of hazardous glare. Therefore, compliance with this condition is not a concern.

Condition B. 5 required construction of the 2015 Solar Project to be substantially completed within two years of the date of the Commission's 2015 Order. The 2020 Solar Project can be constructed within a similar timeframe.

Condition B. 6 required Ho'ohana to develop the 2015 Solar Project in substantial compliance with its representations reflected in the 2015 Order. Due to the changes in the energy generation of the Projects and the updated timeframe, I understand that Ho'ohana's motion was filed to seek compliance with this Condition.

Condition B. 7 set forth the decommissioning standards for the 2015 Solar Project. Obviously that Condition was never triggered, but the requirements thereunder remain sound and would be suitable for the 2020 Solar Project.
32. In your professional opinion as a land use planner, is the 2020 Solar Project consistent with the relevant provisions of the Hawai‘i State Plan, the Land Use Laws (HRS Chapter 205), the City's Central Oahu Sustainable Communities Plan, and the Commission's Rules and the applicable Decision and Orders in this Docket?

Yes. The as with the 2015 Solar Project, the 2020 Solar Project is highly suitable interim use of Parcel 52 which is consistent with all of those land use criteria. The solar farm Project will preserve future development of Parcel 52 for the residential units proposed as Royal Kunia Phase II, Increment 3.

When the 2015 Project was approved, the Commission determined that the development of a solar farm on Parcel 52 is consistent with Hawaii's renewable energy goals. The Commission also determined that the development of a solar farm within Parcel 52 is consistent with the Hawai'i Clean Energy Initiative, which aims to achieve 70\% clean energy by the year 2030, $40 \%$ of which is meant to come from locally generated renewable sources.

Specifically, the Commission made findings that the interim solar use of the Petition Area for solar farms is consistent with HRS $\S \S 226-18$ (Objectives and Policies for Facility Systems - Energy); 226-103 (Economic Priority Guidelines) (with respect to encouraging the development of clean industries, and energy use and development). Since 2015, the Legislature has passed even more laws reflecting the State's energy priorities. This Project is also consistent with the more recent legislation signed into law since 2015, focusing on increasing Hawaii's renewable energy generation portfolio and energy efficiency, decreasing our dependence on fossil fuels, and becoming carbon neutral

Additionally, because the current Project will generate significantly more renewable energy than the 2015 Project, the current Project will contribute that much more to achieving the State's goal of reaching $100 \%$ renewable energy by 2045, as mandated by Governor Ige on June 8, 2015, when he signed Act 97 into law. By providing 52 MW of clean, renewable energy, the solar farm is a prime example of the development and commercialization of a renewable energy source in support of the State's policies and
goals to generate $100 \%$ of its electricity use from renewable sources and becoming carbon neutral by 2045 .
33. In your professional opinion, is there good cause for the Commission to grant the requested Motion for Modification and Extension of Time to allow the 2020 Solar Proiect to go forward?

Yes. Developing a utility scale solar project for a fixed period of time on land designated for Urban uses is an appropriate use of this portion of the Petition Area and helps the State to achieve its near-term and long-term energy goals. Furthermore, this use is consistent with the use that was previously approved by this Commission for Parcel 52. This Motion simply seeks to adjust the time period for the Project and increase the scale of the renewable energy from 20 MW to 52 MW .

DATED: Woods Hole, Massachusetts on September 25, 2020.
Respectfully submitted,


## Written Direct Testimony of Sohrab Rashid, TE

1. Please state your name and business address for the record.

Sohrab Rashid
Fehr \& Peers
555 West Beach Street, Suite 302
San Diego, CA 92101
2. What is your current occupation?

I am a traffic engineer, and principal and part-owner with Fehr \& Peers. I am also the Senior Market Leader for our Honolulu and San Diego markets.
3. How long have you specialized in transportation planning and traffic engineering? Over 32 years. My first experience was doing a four-year internship with the Santa Clara Valley Transportation Authority. After that, I spent seven years as a consultant with Barton-Aschman Associates (subsequently absorbed by the Parsons Corporation) working in San Jose, California, Honolulu, Hawai'i, and Sacramento, California. Since 1995, the remainder of my professional career has been as an employee and now partowner of Fehr \& Peers.
4. Did you provide a copy of your resume for these proceedings? Yes, my resume was provided as Successor Petitioner Ho'ohana Solar 1, LLC's
("Ho'ohana") Exhibit 41
5. Please briefly describe your educational background.

I have a Bachelor of Science in Mechanical Engineering from San Jose State University. I am also a Licensed Traffic Engineer in California.
6. Do you specialize in any particular areas?

I have a wide range of experience in traffic engineering and transportation planning. Several key specialty areas include site planning and design, traffic operations, multimodal planning and design, and parking.
7. To what professional organizations do you belong?

I am a member of the Institute of Transportation Engineers (ITE), the American Planning Association (APA), and the Women's Transportation Seminar (WTS).
8. Have you even been qualified as an expert witness in traffic engineering and traffic management before the Land Use Commission?
Yes, in 2010 I was qualified and testified as an expert witness before the State Land Use

Commission in traffic planning and traffic engineering for a large, mixed-use project in Kona. In that context, after the Land Use Commission approval, I also prepared the final Traffic Impact Assessment Report ("TIAR") that was accepted by the Hawai'i State Department of Transportation ("DOT"). Around 2014, I submitted written testimony to the LUC for the Kamehameha Schools SunEdison solar project in Waiawa, and I did so again for Clearway's solar project on the Kamehameha Schools' property in November 2019. Also in 2014, I submitted written direct testimony about the impact on local and regional traffic near the subject Petition Area in conjunction with the prior approval of Ho'ohana's solar farm project.
9. Are you familiar with the solar farm project currently proposed within a portion of the Petition Area?
Yes. The solar farm project consists of a 52 megawatt photovoltaic system, paired with a 52 megawatt/208 megawatt-hours battery energy storage system with a four-hour duration at full capacity, and includes related electrical improvements and utility tie-ins (the "Project"). The Project is proposed to be installed within the 161.02-acre parcel owned by Robinson Kunia Land, LLC (and subject to Ho'ohana's ground lease), located at TMK No. (1) 9-4-002:053 ("Parcel 52"), in the Kunia area. This is the same property that the Land Use Commission approved for solar farm development in 2015. Parcel 52 is north of the H-1 freeway between Kunia Road and H-2, and mauka of Royal Kunia Country Club.
10. Please identify the studies you prepared for the Project.

Fehr \& Peers prepared a Construction Traffic Assessment for the Proposed Ho 'ohana Solar Farm (Oahu, HI) ("Traffic Assessment"), dated June 8, 2020, which was submitted as Petitioner's Exhibit 10.
11. Please describe the scope of your study.

We analyzed how construction and operation of the Project would impact local and regional traffic near the Project, including an assessment of the vehicle trip generation anticipated during Project construction and typical Project operations, as well as an analysis of intersection operations to determine any traffic-related impacts from the Project. In addition, we analyzed the potential impact on alternate modes of access, including bicycle and pedestrian travel, and public transit.
12. Are the methodologies that Fehr \& Peers used consistent with generally accepted industry standards?
Yes. We considered the existing (2019) baseline conditions, year 2021 construction traffic plus projected existing traffic, and compared opening year (2023) traffic under noProject versus with-Project scenarios. We analyzed the roadway operations based on procedures presented in the Highway Capacity Manual (HCM) published by the Transportation Research Board (TRB). We used SYNCHRO 10 traffic analysis software
to analyze intersection operations. This methodology is consistent with other traffic studies completed for local and regional projects on Oahu.

## 13. In general, how did you conduct your review?

The Traffic Assessment evaluated the traffic operations and potential impacts at six intersections near the Project and along the primary travel route, including along H-1 freeway and Kunia Road (State Highway 750), and the private access road to the Project along Plantation Road, during peak AM and PM traffic hours.

The six intersections analyzed are (1) Kunia Road/H-1 Eastbound On-Ramp; (2) Kunia Road/H-1 Westbound Off-Ramp; (3) Kunia Road/Kupuna Loop (South); (4) Kunia Road/Kupuna Loop (North); (5) Kunia Road/Anonui Street; and (6) Kunia Road/Plantation Road.

The operations of the study intersections were evaluated during the busiest peak (one) hour in the morning (between 6:00 and 9:00 AM), and in the afternoon (between 3:00 and 6:00 PM). The peak hour for each intersection was determined from traffic count data collected in October 2019, which serves as the basis of the Existing Conditions analysis. Existing lane configurations, signal controls, and weekday AM and PM peak hour turning movement volumes were obtained as part of the data collection.

## 14. How did you conduct your review of construction-year traffic impacts?

The construction year (2021) traffic was evaluated by increasing the existing 2019 peak hour volumes by an average growth factor of one percent per year and rounded to the nearest tenth to forecast 2021 traffic volumes and account for growth in the area. Traffic on Plantation Road was not grown or adjusted because no additional development is anticipated other than the Project. This methodology is consistent with other traffic studies completed for local and regional projects on Oahu. Additionally, given the limited existing traffic along Kunia Road, this approach to forecasting 2021 traffic volumes is conservative.

## 15. What were your assumptions in forecasting construction-year traffic impacts?

Project construction is anticipated to require up to 175 workers on-site at a time during the peak of construction, or up to six months, and approximately 50 workers on-site during non-peak construction, or approximately 15 months. As a conservative approach, we evaluated potential traffic impacts during the peak of construction with 175 workers. Workers will be on-site between 6:00 AM to 6:00 PM Monday through Sunday, with typical construction hours of operation occurring from 7:00 AM to 5:00 PM.

Additionally, although construction staff will be on-site at 6:00 AM, we conservatively added all inbound Project commute traffic to the AM peak hour count, which occurs during from 6:45 to 7:45 AM in the study area.

We assumed, based on our conservative estimate on the number of carpooling workers,
that up to 150 construction worker vehicles would make one inbound trip and one outbound trip, for a total of two daily trips during the peak of construction, or 300 total daily trips. In reality, it is expected that additional carpooling will occur, and that roughly half of the worker trips will actually be made outside of the peak traffic hours on Kunia Road.

During non-peak months of construction, approximately 50 workers (or one-third of peak construction) will arrive and depart the Project site each day, or 100 total daily trips.

Construction workers and employees approaching the site in the morning will travel in both directions on Kunia Road and turn onto Plantation Road. Based on that fact, trip distribution percentages were applied to the forecasted trip generation for each scenario, and assigned to the surrounding roadway network to assess potential traffic impacts.
Additionally, Ho'ohana provided detailed information on construction activities, including the number of trucks needed to deliver the photovoltaic panels, steel mounting piles, and gravel for on-site roadways. Construction truck traffic was spread equally throughout the hours of operation to reflect the rotation of trips typical for construction activity. It is anticipated that 30 trucks will arrive each day. The construction operating hours between 7:00 AM and 5:00 PM would result in an average of three truck trips, or roughly 10 percent of the daily total arriving and departing during peak hours. Based on the available regional access points and interchanges, and the fact that materials will be transported from the Sand Island area to the site, all heavy trucks are expected to use the H-1 Freeway, and turn right onto Kunia Road from the Ewa-bound H-1 Off-Ramp to access the Project site via Plantation Road, and return using the opposite movements.

We applied a Passenger Car Equivalent (PCE) factor of 2.5 vehicle trips per construction truck or work truck, to account for the larger impact and slower speeds of construction vehicles on the roadway network. The forecasted trip generation during construction is 360 daily trips (or 450 PCE), including 156 trips (or 165 PCE) during both the AM and PM peak hour conditions.

## 16. What were your conclusions on the potential traffic impacts during the Project construction period?

The Project will not have a significant adverse effect to either local or regional traffic near the Petition Area. Construction truck traffic is not anticipated to have a major impact or cause major disruptions to vehicular traffic on Kunia Road.

During the construction period, all intersections through which Project traffic is routed are forecast to operate at a desirable Level of Service ("LOS") D or better during both AM and PM peak hours, with the exception of Kunia Road/H-1 Eastbound Ramps and Kunia Road/Plantation Road.
17. How would the Kunia Road/H-1 Eastbound Ramp intersection be affected during construction?

The Kunia Road/H-1 Eastbound Ramps will remain at the 2019 existing level of LOS E during the AM peak hour, and LOS C during the PM peak hour. Traffic conditions at this intersection during the AM peak hour has long queues of vehicles waiting to get onto the H-1 Eastbound on-ramp from both the northbound (via Fort Weaver) and southbound (via Kunia Road) directions.

During the peak of construction, the Project is forecasted to add up to 23 northbound through trips, and eight southbound left-turn trips to this intersection during the AM peak hour. Because the additional traffic is a temporary condition during Project construction and because traffic volumes can vary from day to day by up to 10 percent, the additional construction traffic is not likely to be noticed by the average driver, and is not considered a significant traffic impact. In addition, no project trips will be added to the northbound right-turn, which has the most significant vehicle queues.
18. How would the Kunia Road/Plantation Road intersection be affected during construction?

The Kunia Road/Plantation Road intersection is unsignalized, and traffic on the Plantation Road approach is stop controlled. Traffic flows on Kunia Road (north and southbound) operate at LOS A. At this location, the worst-case LOS is experienced by outbound vehicles turning left from Plantation Road waiting for a gap in traffic along Kunia Road. The worst-case movement at this intersection is forecasted to remain at the 2019 existing level of LOS F during the peak AM hour. For the peak PM hour, the worst-case movement at this intersection is projected to change from the current LOS E down to LOS F during construction. Based on the HCM analysis by approach, the LOS F and additional delay resulting from Project operations will occur on Plantation Road, which is a private, stop-controlled roadway.
19. How would the remaining four study intersections be affected during construction?

The other four study intersections will not be substantially impacted. Kunia Road/H-1 Westbound Ramps will remain at the 2019 existing level of LOS A for both the AM and PM peak hours. Kunia Road/Kupuna Loop (South) will remain at the 2019 existing level of LOS C during the AM peak hours, and at LOS B during the PM peak hour. Kunia Road/Kupuna Loop (North) will remain at the 2019 existing level of LOS B for both the AM and PM peak hours. Kunia Road/Anonui Street will remain at the 2019 existing level of LOS B during the AM peak hour, and change from LOS B to LOS C for the PM peak hour during the Project's construction. However, the average delay for this intersection during the operational period in the with-Project scenario is only 0.3 seconds greater than the no-Project scenario.
20. Are any traffic mitigation measures recommended during the construction period?

The volume of traffic generated by construction of the Project does not result in the need for typical roadway capacity enhancements (for example, new turn or through lanes). The addition of vehicles, especially large trucks, turning into and out of the east leg of the Kunia Road/Plantation Road intersection is expected to necessitate some modification to traffic control devices in the area to raise driver awareness and enhance safety.

Fehr \& Peers recommends that the solar farm developer include the following elements in a construction traffic management plan (these measures are listed on page 12 of the Traffic Assessment):

- Installation of temporary signage on mauka-bound Kunia Road between Anonui Street and Plantation Road that indicates the presence of trucks and their movements entering and exiting the roadway near Plantation Road.
- Installation of temporary signage on makai-bound Kunia Road between the Hawai'i Country Club and Plantation Road that indicates the presence of trucks and their movements entering the roadway from Plantation Road.
- Field verification of available sight distance, and maintenance of adequate sight distance for drivers exiting Plantation Road and turning onto Kunia Road. Maintenance may include pruning vegetation and not installing signage or other barriers that would block driver's field of vision at the intersection.
- Extension of the painted median solid line delineating the "Do Not Pass" zone on Kunia Road at Plantation Road for mauka-bound vehicles at least an additional 500 feet in the makai direction.

These measures should be sufficient to address the short-term traffic impacts anticipated during Project construction.

## 21. What were vour assumptions in forecasting traffic impacts during the Proiect operational period?

Once operational, the Project is anticipated to have a maximum of five employees on site at any given time, who will visit the site for maintenance and operating purposes. We assumed each employee would make one in-bound and one out-bound trip to the Project site per day, or 10 total daily trips.
22. What were your conclusions on the potential traffic impacts during the Project operational period?

The 10 total daily employee trips generated by the Project during operations are nominal and would not substantially impact any of the study locations.
23. Are any mitigation measures required during the Project operational period?

No traffic mitigation measures or improvements are recommended or required for the Project operations period.

## 24. In your professional opinion, will the Project adversely impact regional traffic?

No. The Project will generate a negligible amount of vehicle traffic when fully constructed and operational.

During the peak of construction, there may be limited and temporary impacts to traffic at Kunia Road/H-1 Eastbound Ramps and Kunia Road/Plantation Road. Thus, our suggested measures described above should be implemented to reduce or ameliorate the impacts.

The proposed point of access is sufficient to serve the anticipated construction traffic volume.

Moreover, given the undeveloped nature of Parcel 52, the low-density development of the immediate surrounding area, and the short period of construction, there is little to no potential for Project-related traffic to conflict with non-automobile modes of travel (walking and biking).
25. Your Traffic Assessment is dated June 2020. What effect, if any, does the COVID19 pandemic have on the assumptions in your study and your conclusions.

The COVID-pandemic has caused fewer passenger vehicle trips overall, which results in less congested roads, but, as a conservative approach, we did not include that in our analysis when applying the growth factors to the existing 2019 traffic conditions. Thus, it is possible that traffic impacts will be even lower than anticipated, depending on pandemic-related developments during construction in the year 2021. This approach was intended to provide the Commission with a conservative forecast of the potential impacts during the Project's construction and operation.

DATED: San Diego, California, September 23, 2020.

Respectfully submitted,


SOHRAB RASHID

# SUCCESSOR PETITIONER (AS TO PARCEL 52) HO‘OHANA SOLAR 1, LLC - 

 MOTION FOR MODIFICATION AND TIME EXTENSION LUC DOCKET NO. A92-683[^0]
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## 7. What does a Hawai'i cultural resource management firm do?

We study the past and address historic preservation laws through the investigation of properties for the presence/absence of archaeological site-features and other cultural resources of significance to Native Hawaiians; and if site-features or other cultural resources are found, we assess their significance, describe possible effects on such resources based upon the particular development proposal being considered, and provide mitigation commitments for each cultural resource that may be affected by the proposed development. We also prepare plans to address the particular mitigation commitments presented, such as data recovery plans, preservation plans, burial treatment plans, and archaeological monitoring plans. We also provide verification for completed mitigation plans. Our work also includes assessment of Native Hawaiian cultural resources, and may include consultation with Native Hawaiian organizations and others.
8. Have you even been qualified as an expert witness in archaeology, cultural resources, and historical resources before the Land Use Commission?

Yes. I was qualified as an expert witness in archaeology before the Land Use Commission for a solar farm in Waiawa proposed for land owned by Kamehameha Schools. I was also qualified as an expert witness in archaeology before the Kaua'i County Planning Department (for a Special Management Use [SMA] application).
9. Are you familiar with the solar farm project currently proposed within a portion of the Petition Area?

Yes. The solar farm project consists of a 52 megawatt photovoltaic system, paired with a 52 megawatt/208 megawatt-hours battery energy storage system with a four-hour duration at full capacity, and includes related electrical improvements and structures and utility tie-ins (the "Project"). The Project is proposed to be installed within the 161.02acre parcel owned by Robinson Kunia Land, LLC (and subject to Ho'ohana's ground lease), located at TMK No. (1) 9-4-002:053 ("Parcel 52"), in the Kunia area. This is the same property that the Land Use Commission approved for solar farm development in 2015.
10. Are you familiar with the archaeological, historic, and cultural resources within and around the proposed Project?

Yes. TCP Hawai‘i prepared a Cultural Impact Assessment of Ho 'ohana Solar Energy Facility Waikele and Hō 'ae 'ae Aphupua 'a, Ewa District, O'ahu, Hawai'i, dated July 2020 ("CIA") for Parcel 52 and the surrounding area. I understand that the CIA was filed as Petitioner's Exhibit 12. The design of the CIA is consistent with the Guidelines for Assessing Cultural Impacts, adopted by the Environmental Council, State of Hawai‘i, on November 19, 1997.

Additionally, I note that in 2015, Scientific Consultant Services (SCS) completed an

Archaeological Inventory Survey ("AIS") for Parcel 52. SHPD accepted the 2015 AIS in February of 2015. SHPD concurred with the determination that no further archaeological work was required for Parcel 52.
11. Have you prepared any data recovery, preservation, or burial treatment plans for the Project area? If not, why?

As stated in response to the prior question, SHPD determined that no further work was needed for this property (Parcel 52). Therefore, no further plans (data recovery or preservation) are needed or appropriate. Additionally, because no burial sites were identified within Parcel 52, no burial treatment plans are needed.

## 12. Please describe the process you followed in preparing the CIA.

In short, we researched historical archives and conducted community outreach to identify cultural or historical resources in or around Parcel 52.

First, archival research was conducted to systematically obtain relevant information for interpreting the Project area's cultural, historical, and archaeological context. We focused on reviewing cultural and archaeological studies previously completed in the Waikele and Hō'ae‘ae Ahupua'a, where Parcel 52 is located. That type of archival review is important not only for predicting the types of historic properties and wai pana (legendary places) the Project area may contain, as well as those community members may deem significant, but also for understanding and interpreting cultural resources that are discovered and discussed during interviews and other data gathering activities. In addition to conducting a records search at the SHPD library in Kapolei specifically to identify previous archaeological studies and other cultural-resources assessments in and near the Project area, we also used over a dozen online database to obtain relevant cultural, historical, and archaeological information.

Second, we conducted community outreach to identify and cultural or historical resources in or around Parcel 52. We took several steps to ensure both a broad outreach and that the community had ample time to respond. On or about March 17, 2020, we sent out a notification letter with map attachments. The letter included background detail that Ho'ohana was awarded a Hawaiian Electric Company Request for Proposal for a 52-MW renewable, dispatchable solar farm, and provided background on the historic-preservation review process in the Project area, including detail about the 2015 AIS Report and its findings about the few plantation-era historic properties located in the area. We invited recipients to contact us to participate in the CIA, to provide information they believed is relevant to cultural resources in the Project area, or to sit for a formal interview about the Project. Our request included an invitation to provide feedback about both the 2015 AIS Report and the current study.

We sent another round of letters on May 7, 2020. We sent a third round of letters and emails around May 30, 2020. The third batch was based on feedback received from the SHPD staff, and was designed to capture responses from people SHPD was aware of who would possess relevant knowledge and be interested in being interviewed for this CIA. We also published a notification in the June 2020 edition of the Office of Hawaiian

Affairs (OHA) newspaper. Overall, input was sought from a total of 23 individuals and organizations (including SHPD and the Office of Hawaiian Affairs), and relatively little substantive feedback was received. Despite reaching out to 23 individuals, the feedback we received was limited. The SHPD staff recommended a number of individuals and organizations that we should contact, and all of these were contacted (they are included in the 23 individuals cited above). The staff at OHA indicated they would have no specific comment on the proposed Project or the CIA study. The notification in OHA's newsletter yielded no responses. One individual, a local historian of Honouliuli and frequent contributor to CIA studies (McD Philpotts) indicated he had no specific knowledge of the area. Two long-time Hawaiian activists and contributors to cultural studies were kind enough to contribute some of their mana'o: Shad Kane and Tom Lenchanko. Mr. Kane indicated he was not familiar with the Project area. Mr. Lenchanko focused his commentary on the recognition of ancient land boundary concepts, even older than the ahupua' $a$, which is beyond the scope of our CIA.

It is important to note that extensive oral-historical information about the Project area environs and ahupua' $a$, gathered by other researchers for other projects and also reconstructed from historical newspapers, is included in this CIA.

## 13. Please describe your findings in the CIA.

The major findings can be summarized as follows:
In general, other than being part of a much larger, traditional Hawaiian landscape, there are no specific, extant cultural or historical resources of significance in the CIA project area, nor are there any ongoing traditional and customary practices in the CIA project area. There are two main reasons for this. First, the Hawaiian sense of place was essentially erased from the Project area more than a century ago when it was transformed by the introduction of mechanized sugarcane agriculture by the Oahu Sugar Company, which began in 1897 and shut down around 1995. Second, the plantation-era "feel" or sense of place has also been essentially erased from the landscape following the closure of sugarcane operations. The 2015 AIS demonstrated very little intact evidence of these plantation structures or infrastructures. The current built environment includes dirt access roads, agricultural fields, and power lines and poles. See for example Figures 4 7 of the CIA.

## 14. What were the final recommendations of the CIA?

In general, other than being part of a much larger, traditional Hawaiian landscape, there are no specific, extant cultural or historical resources of significance in the Project area. Nor are there any ongoing traditional and customary practices in the Project area.

We have determined that the proposed Project will have no negative impacts on the traditional and customary practices associated with the Project area.
15. Are you familiar with the requirements imposed by the Hawai‘i Supreme Court in Ka Pa'akai O Ka 'Äina v. Land Use Commission?

Yes. In that case, the Hawaii Supreme Court ruled that an agency must make specific findings and conclusions related to cultural, historical, and natural resources and any associated traditional and customary practices prior to making a decision that may impact those resources.

Specifically, the agency must make specific findings on (1) the identity and scope of "valued, cultural, historical, or natural resources" in the area under consideration, including the extent to which traditional and customary native Hawaiian rights are exercised in the Petition Area; (2) the extent to which those resources, including traditional and customary native Hawaiian rights, will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the agency to reasonably protect native Hawaiian rights if they are found to exist.
16. In light of Ka Pa'akai, do you feel that the CIA and 2015 AIS are sufficiently detailed to identify the cultural and historical resources in the Project area?

Yes. The CIA and 2015 AIS are sufficiently detailed to identify any cultural and historical resources in the Project area, and there are no such resources to protect.
17. In your professional opinion, will the Project adversely impact any archaeological, historic, or cultural resources or traditional and customary practices?

No. The proposed Project will have no negative impacts on traditional and customary practices; cultural resources that support these practices; and/or other beliefs about the Project area that relate to these resources and practices. That is because, consistent with the decision of the Hawaii Supreme Court in Ka Pa'akai O Ka 'Āina v. Land Use Commission, 94 Hawaii 'i 31, 74, 7 P.3d 1068, 1084 (2000), we have determined that there are no valued cultural, historical or natural resources in the Project area and therefore no such resources-including traditional and customary native Hawaiian rights-will be affected or impaired by the proposed Project.

DATED: Honolulu, Hawaii, September 23, 2020.

Respectfully submitted,

$\overline{\text { CHRISTOPHER M. MONAHAN, PHD. }}$

## Ho'ohana Solar 1, LLC - Motion to amend Docket A92-683

## Written Direct Testimony of Eric B. Guinther

I, Eric Guinther, have personal knowledge of the matters set forth herein and am qualified and competent to make these statements:

Please state your name and business address for the record.
Eric Guinther 45-939 Kamehameha Highway, Kane'ohe, Hawaii 96744

## Did you provide a copy of your resume for these proceedings?

Yes, my resume was provided as Successor Petitioner's Exhibit 30.
Please identify the studies you prepared for the Petition Area.
I prepared the Natural Resources Survey for the Ho'ohana Solar Farm site in Kunia O'ahu ("Survey"). The Survey was filed with the Commission as Successor Petitioner's Exhibit 18.

## What is your current occupation?

I am the Senior Ecologist and President of $A E C O S$ Inc.

## How long have you worked in that capacity?

For roughly 35 years as President of AECOS.

## How long have you specialized in ecology?

For over 40 years.
Please briefly describe your educational background.
I have a Bachelor's degree in Biology from the University of the Pacific. I completed graduate studies at both the University of the Pacific and the University of Hawai‘i.

## Do you specialize in any particular areas?

I specialize in conducting environmental studies, including field surveys, producing environmental survey reports, and making plant and animal identifications. My work is focused in the areas of ecology, encompassing zoology, botany, geology, and water quality, in marine,

## EXHIBIT 48

freshwater, and terrestrial environments. In the last 20 years, my work has involved mostly surveys assessing the distribution of terrestrial plants to document presence or absence of sensitive species (i.e., rare native species or those that are listed as threatened or endangered) for client projects, as well as conducting wetland inventory and delineations of jurisdictional waters. Have you ever been qualified as an expert witness in the areas of botany, zoology, ecology, and general natural environmental studies before the Land Use Commission?

Yes. The last time that I was qualified as an expert before this Commission was on the water quality impacts for the Koa Ridge project in Central O'ahu.

Are you familiar with the proposed development of the interim solar farm (the "Project") and the Petition Area?

Yes. I understand that if Ho'ohana's Motion to Amend is granted by the Commission, the portion of the Petition Area identified as Parcel 52 will be developed as an approximate 20 MW solar farm. These areas are shown on Successor Petitioner's Exhibit 1.

## Are you familiar with the natural resources within and around the proposed Project Area?

Yes. I was retained by Group 70 International, Inc. to prepare a natural resources study related to the natural resources on Parcel 52, the site for the proposed solar farm. I was lead author on that study.

## Describe the scope of the Survey.

The Survey covered the entire 161.023 acres that comprises Parcel 52, along with that portion of Plantation Road proposed to be used to access Parcel 52.

## How did you prepare your study?

I conducted the Survey on May 20 and August 18, 2014. The methodology used for plants entailed a wandering pedestrian transect primarily of Plantation Road and all those portions
of Parcel 52 not being actively farmed at the time. Plant species were identified as they were encountered.

My associate, Reginald David, conducted the survey of vertebrates on the Project site. For birds, twelve (12) avian count stations were sited at roughly equal distances from each other within the Survey area by vertebrate biologists. A single six-minute avian point count was made at each of the count stations. The Survey area was also searched for species and habitats not detected during point counts.

Survey of mammals was limited to visual and auditory detection, as well as visual detection of scat, tracks, and other animal signs.

Did you rely on any other studies or consultations in drawing your conclusions and making your assessment of the Project?

Not really in this case; although we of course reference numerous texts and published papers as integral to our identifying flora and fauna present, and what might be rare or otherwise of natural resource value.

## Please describe your findings.

Parcel 52 is composed of land formerly and currently used for agricultural purposes. AECOS's final natural resources survey found no botanical resources of interest or concern located on Parcel 52. The vegetation over most of Parcel 52 has been controlled by past and present land use. The majority of Parcel 52 has little vegetation. The remaining portions of Parcel 52 are covered with a weedy growth of grasses (Guinea grass), scattered trees (koa haole and silk oak), shrubs, and herbaceous plants. Sixty-three (63) species of plants were identified from the survey area, although only two (2) are native Hawaiian species. These are common native plants: 'uhaloa and 'a'ali'i plants. No wetlands or streams are located in the Project Area.

A total of 722 birds representing 24 species were observed on Parcel 52. All 24 species are nonnative to Hawai'i. Four mammalian species were detected on Parcel 52: dog, mongoose, cat, and pig.

As noted at page 14 of our report, the endangered Hawaiian hoary bat was not detected during the course of this Survey. Given the habitats present on the site and the lack of suitable roosting trees, any usage of the area by the hoary bat would be of an incidental foraging nature.

## What were the final recommendations of the Survey?

While the survey did not identify any threatened or endangered species, nor any federallydeclared critical habitat on or within the Parcel 52, the U.S. Fish and Wildlife Service ("FWS") in its comments to the Motion to Amend noted that the Hawaiian hoary bat may forage or roost on Parcel 52. Therefore, the FWS recommended that, if any trees greater than 15 feet tall must cleared for the development of the solar farm, any clearing be done outside of the hoary bat's birthing season of June through September.

Although no seabirds, shorebirds, or migratory birds were detected during the Survey, it is probable that at least one of those birds will use the resources on Parcel 52, at least on a seasonal basis. Furthermore, nocturnally flying seabirds may become disoriented with exterior lighting. Therefore, we recommend that if any exterior lighting is used or if construction activities are proposed to take place at night, some effective form of light shielding be used. Ho'ohana has agreed to coordinate a staff training program to mitigate adverse impacts to endangered and migratory species.


Are you familiar with the requirements imposed by the Hawai'i Supreme Court in Ka

## Pa'akai O Ka 'Āina v. Land Use Commission?

Yes. The Ka Pa'akai analysis requires the Commission to make specific findings of fact and conclusions of law related to cultural, historical, and natural resources and the associated traditional and customary practices of a site prior to granting a reclassification.

Specifically, the Commission must have information on (1) the identity and scope of "valued, cultural, historical, or natural resources" in the Petition Area, including the extent to which traditional and customary native Hawaiian rights are exercised in the Petition Area; (2) the extent to which those resources, including traditional and customary native Hawaiian rights, will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the Commission to reasonably protect native Hawaiian rights if they are found to exist.

## In light of Ka Pa 'akai, do you feel that the Survey was sufficiently detailed to identify the

## natural resources in the Petition Area?

Yes, certainly with respect to the existence/non-existence of natural resources of cultural interest or value.

## Were any native resources identified in the Project Area?

Two native plants were located on the property: 'uhaloa and ' $a$ 'ali'i plants. Athough both have cultural uses, the numbers here are small and each is relatively common across the Islands. Neither of these plants is listed as threatened or endangered, and we saw no evidence of cultural gathering or traditional and customary native Hawaiian practices being conducted during our survey. No native fauna species were identified within the Project Area.

In your professional opinion, will the Project adversely impact any natural resources in the Project Area?

No. Due to the historic agricultural uses of the Property, the lack of threatened or
endangered species, and the lack of culturally significant plants or animals on the Property, development of the solar Project will not have an adverse effect on any such resources.

DATED: Honolulu, Hawai'i, November 17, 2014.


Ho‘ohana Solar 1, LLC - Motion to Amend Docket A92-683
Written Direct Testimony of Robert L. Spear, Ph.D.
I, Robert L. Spear, have personal knowledge of the matters set forth herein and am qualified and competent to make these statements:

## Please state your name and business address for the record.

Robert L. Spear, Ph.D. 1347 Kapiolani Boulevard \#408, Honolulu, HI 96814
Did you provide a copy of your resume for these proceedings?
Yes, my resume was provided as Successor Petitioner's Exhibit 25.
Please identify the studies you prepared for the Petition Area.
The archaeological inventory survey ("AIS") that I prepared was filed with the Commission as Successor Petitioner's Exhibit 12. What is your current occupation?

I am the President and Principal Investigator of Scientific Consultant Services, Inc. ("SCS"). How long have you worked in that capacity?

For over 22 years, since late 1991.

## How long have you specialized in archaeology?

I have worked in the Pacific archaeology field for 36 years, since 1978. I have specifically worked in the Hawaiian Islands for 28 years, since 1986.

## Please briefly describe your educational background.

I have a Bachelor's degree and Master's degree in Anthropology from Western Washington University, and a Ph.D. in Anthropology from the University of Oregon.

## Do you specialize in any particular areas?

I specialize in conducting archaeological assessments, archaeological inventory surveys,
data recovery, emergency burial treatment, and construction monitoring. SCS is on SHPD's list of approved archaeological consultants.

## What does an archaeology and historic preservation specialist do?

Study the past and address historic preservation laws. I also investigate the presence/absence of archaeological features and traditional and cultural practices, if any, on the subject area, and if found, assess future function, construction methods, associated cultural deposits, and site significance.

Please describe the type of work you perform at SCS.
As the President and Principal Archaeologist, I oversee much of the field and laboratory work conducted by SCS employees for SCS archaeological projects, which include archaeological assessments, inventory surveys, data recovery, burial treatment, traditional cultural properties studies, cultural resources management, and general archaeological consultations. Have you ever been qualified as an expert witness in the areas of archaeology and historic preservation before the Land Use Commission?

No, but I have testified and been qualified as an expert witness in archaeology in the Third Circuit Court before Judge Ibarra in Kona for the archaeological aspects of the Hokuli'a project. Are you familiar with the proposed development of the interim solar farm (the "Project") and the Petition Area?

Yes. I understand that if Ho'ohana's Motion to Amend is granted by the Commission, the portion of the Petition Area identified as Parcel 52 will be developed as an approximate 20 MW solar farm. These areas are shown on Successor Petitioner's Exhibit 1.

Are you familiar with the archaeological, historical and cultural resources within and around the proposed Project and the Petition Area?

Yes. SCS was retained by Group 70 International, Inc. to prepare an AIS report related to
the historic, cultural, and archaeological resources in Parcel 52, the site for the proposed solar farm. The AIS covered the entire 161.023 acres that comprises Parcel 52, along with that portion of Plantation Road proposed to be used to access Parcel 52.

## Has SHPD issued a concurrence letter or otherwise responded?

Not yet. The AIS was submitted to SHPD on July 30, 2014, and received by SHPD on August 1, 2014. In early October 2014, SHPD requested additional historic background on military uses of Parcel 52. SCS submitted this information to SHPD in the form of a supplemental report on November 5, 2014.

## What are the historical uses of Parcel 52?

Parcel 52 has historically been used for agricultural uses for over 100 years. Parcel 52 has been used to farm sugar cane since about 1913. The land in that area is believed to have been used for cattle ranching and grazing prior to sugar farming.

## How did you prepare vour study?

I began my review by looking at the historical uses of Parcel 52 and past archaeological surveys done in the area. Then a pedestrian survey of Parcel 52 was conducted in order to identify archaeological sites in the Project area as well as any geographical/physiographical features. We also conducted limited excavation of the site in the form of six (6) Shovel Probes. Samples and photographs collected during the pedestrian survey were then analyzed in or lab.

## Did you rely on any other studies or consultations in drawing your conclusions and making

## your assessment of the Project?

Yes. Several archaeological surveys have been conducted near the Project Area since 1933. The last archaeological survey conducted within the Project Area was in 1988 by Archaeological Consultants of Hawaii. The 1988 survey concluded that due to the history of intensive sugarcane cultivation, the prospect of identifying archaeological sites above ground was
remote. The list of and map identifying the past archaeological surveys done are provided in Successor Petitioner's Exhibit 12, pages 10-15.

## Are there any regulatory guidelines applicable to the AIS?

Yes. The AIS for this Project was prepared according to the historic preservation review procedures outlined by Hawai'i Revised Statutes ("HRS") Chapter 6E-8 and Hawai'i Administrative Rules ("HAR") Chapter 13-276. Please describe your findings.

Based on the available physiographic and archaeological research for the Project Area, the Parcel 52 has undergone extensive disturbance from commercial sugarcane cultivation, as well as possible railroad and military activity. Therefore, we did not expect to, and we did not, identify any evidence of use pre-dating the Plantation-Era above grade. In our review, we did, however, identify two (2) new archaeological sites that have not been previously identified by other surveys. We identified the first site as SCS TS-1 ("Site 1"), which was later determined by SHPD to lack sufficient site integrity to be assigned a State Site number. This site consisted of artifact scatter and was likely a habitation structure. These materials are man-made, from the historic era, and included porcelain insulators, ceramic dish sherds, colored bottle and vessel glass, and a metal buckle. Site 1 also included modern materials such as quarried basalt, sparse limestone gravel, chunks of broken concrete, black plastic erosion protection sheeting, irrigation tubing, and PVC fragments.

We identified the second site as SCS TS-2, which has been designated by SHPD as State Site 50-80-08-7671 ("Site 2"). Site 2 is a historic road complex consisting of three features: Feature 1 - alignment; Feature 2 - wall; and Feature 3 - paved segments of a road and railroad alignment. This site also contained modern cultural material, such as thin, black plastic for agriculture. Marine detritus was also observed. These features were evaluated for significance
under criteria
Most of Parcel 52 is currently being actively farmed and has been consistently farmed for the past 100 years. The six (6) Shovel Probes determined that the Project Area consists of mixed fill.

Both sites identified within the Project area are significant under Criteria " d " as "having yielded, or is likely to yield, information important for research on prehistory or history," and both sites are attributable to historic land usage.

What were the final recommendations of the AIS?
Consistent with the two (2) archaeological studies that were previously conducted in the Project area, as well as the historic and recent agricultural use of the Project area, SCS recommended that no further archaeological work be done. If any archaeological, historical, or cultural artifacts, or burials are found during construction, we recommend that Ho'ohana stop work and coordinate with SHPD on how to proceed.

Are you familiar with the requirements related to the Commission's duty to review traditional and customary practices for the land in question imposed by the Hawai'i Supreme Court in Ka Pa'akai O Ka 'Āina v. Land Use Commission?

Yes. The Ka Pa'akai analysis requires the Commission to make specific findings of fact and conclusions of law related to cultural, historical, and natural resources and the associated traditional and customary practices of a site prior to granting a reclassification.

Specifically, the Commission must have information on (1) the identity and scope of "valued, cultural, historical, or natural resources" in the Petition Area, including the extent to which traditional and customary native Hawaiian rights are exercised in the Petition Area; (2) the extent to which those resources, including traditional and customary native Hawaiian rights, will
be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the Commission to reasonably protect native Hawaiian rights if they are found to exist. In light of Ka Pa'akai, do you feel that the AIS was sufficiently detailed to identify the cultural, historical and archaeological resources in the Petition Area?

Yes. Although we did not prepare a formal cultural impact analysis as typically required in an environmental impact study document, in light of the nearly 100 years of sugar cane farming over nearly all of Parcel 52 and all of the area for the proposed solar farm, the absence of finding any cultural practices in the archaeological survey, and our contact with kupuna from this area, we found no traditional and customary practices were or are being practiced in the area of the Project.

## Were any burials or cultural resources identified in the Proiect Area?

No burial sites were identified within Parcel 52 and no culturally significant sites were identified within Parcel 52. As such SCS does not recommend that any data recovery, preservation, or burial treatment plans be prepared for Parcel 52.

Were any Native Hawaiian traditional and customary practices identified as being exercised on Parcel 52?

We consulted with Shad Kane, a kupuna for the area of this Project and he confirmed that no Native Hawaiian traditional and customary practices have been identified as being exercised on Parcel 52, or in the Petition Area generally.

In your professional opinion, will the Proiect adversely impact any archaeological, historic and cultural resources?

No. No significant cultural, historical, archaeological, or natural resources have been identified within Parcel 52 or Plantation Road. Therefore, the Project will not have an adverse effect on any such resources. If any such resources are discovered during construction of the
proposed solar farm, Ho'ohana will take steps to mitigate such effects and work with the appropriate state and county agencies.


Imanaka Asato, LLLC
745 Fort Street Mall, Suite $1700 \quad$ TGOH 202008462-S
Honolulu, Hawaii 96813 TGES 210-20143416
(808) 521-9500 (MAI)
LAND COURT SYSTEM

Conveyance Tax: $\$ 200,000.00$
LAND COURT SYSTEM

Tax Map Key No. (1) 9-4-002-071
Total Pages: 11

## WARRANTY DEED

THIS DEED, made this 12 the day of Qulyst, 2020 , by and between RP2 VENTURES, LLC, a Hawaii limited liability company, herefnafter called the "Grantor," and HASEKO ROYAL KUNIA, LLC, a Hawaii limited liability company, whose mailing address is 91-1001 Kaimalie Street, Suite 205, Ewa Beach, Hawaii 96706-6250, hereinafter called the "Grantee."

3

## WITNESSETH:

That for Ten Dollars (\$10.00) and other valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, the Grantor does hereby grant, bargain, sell and convey unto the Grantee, its successors and assigns, all of that certain real property described in Exhibit A attached hereto and made a part hereof.

And the reversions, remainders, rents, issues and profits thereof and all of the estate, right, title and interest of the Grantor, both at law and in equity, therein and thereto.

TO HAVE AND TO HOLD the same, together with all buildings, improvements, rights, easements, privileges and appurtenances thereon and thereto belonging or appertaining or held and enjoyed therewith, unto the Grantee as tenant in severalty, forever.

AND in consideration of the premises, the Grantor does hereby covenant with the Grantee that the Grantor is seized of the property herein described in fee simple; that said property is free and clear of and from all liens and encumbrances, except for the lien of real property taxes not yet by law required to be paid, and except as may be specifically set forth herein; that the Grantor has good right to sell and convey said property, as aforesaid; and, that the Grantor will WARRANT AND DEFEND the same unto the Grantee against the lawful claims and demands of all persons, except as aforesaid.

The conveyance herein set forth and the warranties of the Grantor concerning the same are expressly declared to be in favor of the Grantee and the Grantee's successors and assigns.

AND the Grantee further acknowledges and confirms that the Grantee has inspected the property more particularly described in Exhibit A, that Grantee acknowledges the physical condition of such property, improvements, and personal property, and accepts the same "AS IS" and "WHERE IS" as of the date hereof, and except for the warranty of title contained herein and for the representations and warranties of Grantor as Seller under the Agreement for the Sale and Purchase of Real Estate dated as of October 3, 2017, by and between Grantor, as Seller, and Grantee, as Purchaser, as amended, without any representations or warranties whatsoever, either expressed or implied, by Grantor or any person acting for Grantor, as to, but not limited to, the property's condition, state of repair, operating order, safety, environmental problems, structural soundness, fitness for any particular purpose, or compliance with laws and/or regulations including, but not limited to, zoning or use, building or plumbing codes, or the status of development rights.

The terms "Grantor" and "Grantee," as and when used herein, or any pronouns used in place thereof, shall mean and include the masculine, feminine or neuter, the singular or plural number, individuals, partnerships, trustees or corporations and their and each of their respective successors, heirs, personal representatives, successors in trust and assigns, according to the context thereof. All covenants and obligations undertaken by two or more persons shall be deemed to be joint and several unless a contrary intention is clearly expressed elsewhere herein.

This instrument may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.
[The remainder of this page is intentionally left blank; signature page(s) follow]

IN WITNESS WHEREOF, the parties herein have executed these presents on the day and year first above written.

## RP2 VENTURES, LLC,

a Hawaii limited liability company

"Grantor"

HASEKO ROYAL KUNIA, LLC,
a Hawaii limited liability company
By Haseko Development, Inc. Its Manager

By:
Tsutomu Sagawa Its President
"Grantee"

IN WITNESS WHEREOF, the parties herein have executed these presents on the day and year first above written.

RP2 VENTURES, LLC,
a Hawaii limited liability company

By:
Robert E. Spencer
Its Manager
"Grantor"

HASEKO ROYAL KUNIA, LLC,
a Hawaii limited liability company
By Haseko Development, Inc.
Its Manager

By:


Tsutomu Sagawa Its President
"Grantee"

## CITY AND COUNTY OF HONOLULU

## SS:

On this 10th day of July , 2020, before me appeared ROBERT E. SPENCER, to me personally known, who, being by me duly sworn or affirmed, did say that such person(s) executed the foregoing instrument as the free act and deed of such person(s), and if applicable, in the capacities shown, having ,heen duly authorized to execute such instrument in such capacities.


Notary Public, in and for said State
My commission expires: $\qquad$
(Official Stamp or Seal)

## NOTARY CERTIFICATION STATEMENT

Document Identification or Description: WARRANTY DEED
Document Date: $\qquad$ or Undated at time of notarization.

No. of Pages: 10 $\qquad$ Jurisdiction: First Circuit (in which notarial act is performed)


Joanne M. Fujioka
Printed Name of Notary

On this $\quad 1^{10^{\text {th }}} \quad$ _ day of _July $\qquad$ , 2020, before me appeared TSUTOMU SAGAWA, to me personally known, who, being by me duly sworn or affirmed, did say that such person(s) executed the foregoing instrument as the free act and deed of such person(s), and if applicable, in the capacities shown, having been duly authorized to execute such instrument in such capacities.


## EXHIBIT A

All of that certain parcel of land (being portion(s) of the land(s) described in and covered by Royal Patent Number 4490, Land Commission Award 10474, Apana 9 to N. Namauu and Royal Patent Number 4486, Apana 1, Mahele Award to Luluhiwalani) situate, lying and being at Hoaeae and Waikele, District of Ewa, City and County of Honolulu, State of Hawaii, being LOT 2, same being a portion of Lot 3 of "Royal Kunia Phase II, Increment 1 Subdivision" (File Plan 2171) and thus bounded and described as per survey dated April 24, 2002, to-wit:

Beginning at the most northwesterly corner of this parcel of land, being the easterly line of Kunia Road, the coordinates of point of beginning referred to Government Survey Triangulation Station "EWA CHURCH" being $4,708.80$ feet north and $20,874.67$ feet west and thence running by azimuths measured clockwise from true South:

1. $246^{\circ} 16^{\prime} 30^{\prime \prime} \quad 22.00$ feet along Royal Kunia Phase II, Increment I Subdivision (File Plan 2171);
2. Thence along the same on a curve to the left having a radius of 40.00 feet the chord azimuth and distance being:

|  | $291^{\circ}$ | $16^{\prime}$ | $30^{\prime \prime}$ | 56.57 | feet; |
| :---: | :---: | :---: | :---: | :---: | :--- |
| 3. | $246^{\circ}$ | $16^{\prime}$ | $30^{\prime \prime}$ | 1943.75 | feet along the same; |

4. Thence along the same, on a curve to the left having a radius of $1,360.00$ feet the chord azimuth and distance being:
$239^{\circ} \quad 59^{\prime} \quad 15^{\prime \prime} \quad 297.89$ feet;
5. $233^{\circ} 42^{\prime} \quad 888.15$ feet along the same;
6. $142^{\circ} \quad 16^{\prime} \quad 1663.48$ feet along the same;
7. $232^{\circ} 16^{\prime} 589.74$ feet along Lot 2 of Royal Kunia Phase II, Increment I (File Plan 2154);
8. $187^{\circ} \quad 16^{\prime} \quad 779.25$ feet along the same;
9. $234^{\circ} 44^{\prime} \quad 661.78$ feet along the same;
10. Thence along the same, on a curve to the right having a radius of 600.00 feet the chord azimuth and distance being:
$289^{\circ} \quad 20^{\prime} \quad 978.15$ feet;
11. $343^{\circ} 56^{\prime} \quad 1592.99$ feet along the same;
12. $8^{\circ} 00^{\prime} \quad 792.41$ feet along Lot 1 of Royal Kunia Subdivision Lot C (File Plan 2310);

Exhibit "A"
Page of 1 of 5

| 13. | $32^{\circ}$ | $00^{\prime}$ | 80.00 | feet along Lot 4 of Royal Kunia Subdivision Increment E (File Plan 2308); |
| :---: | :---: | :---: | :---: | :---: |
| 14. | $302{ }^{\circ}$ | $00^{\prime}$ | 172.00 | feet along the same; |
| 15. | Thence along the same, on a curve to the right having a radius of 20.00 feet the chord azimuth and distance being: |  |  |  |
|  | $347^{\circ}$ | $00^{\prime}$ | 28.28 | feel; |
| 16. | $32^{\circ}$ | $00^{\prime}$ | 108.57 | feet along the same and continuing along the same northwesterly line of 'Anoiki Street; |
| 17. | Thence along the northwesterly line of 'Anoiki Street on a curve to the right having a radius of 972.00 feet, the chord azimuth and distance being: |  |  |  |
|  | $39^{\circ}$ | $30^{\prime}$ | 253.74 | feet; |
| 18. | $47^{\circ}$ | 00' | 760.02 | feet along the same; |
| 19 | Thence along the same, on a curve to the right having a radius of 972.00 feet, the chord azimuth and distance being: |  |  |  |
|  | $49^{\circ}$ | $59^{\prime}$ | 101.18 | feet; |
| 20. | $52^{\circ}$ | $58^{\prime}$ | 877.02 | feet along the same; |

21. Thence along the remainder of Lot 3 of Royal Kunia Phase II, Increment 1 Subdivision (File Plan 2171), on a curve to the left having a radius of 30.00 feet, the chord azimuth and distance being:
$187^{\circ} 58^{\prime} \quad 42.43$ feet;
22. $142^{\circ} 58^{\circ} \quad 142.00 \quad$ feet along the same;
23. Thence along the same, on a curve to the right having a radius of $1,028.00$ feet, the chord azimuth and distance being:
$143^{\circ} \quad 20^{\circ}$
13.16
feet;
24. $143^{\circ} \quad 42^{\prime}$
457.70
feet along the same;
25. $53^{\circ} \quad 42^{\prime}$
733.69 feet along the same;
26. $156^{\circ} 16^{\prime} \quad 30^{\prime \prime} \quad 454.93$ feet along Lot 1 , as said Lot is described in Deed to HRT, Ltd. recorded October 25, 2001, as Regular System Document No. 2001-168369 of Official Records;
27. $66^{\circ} \quad 16^{\prime} \quad 30^{\prime \prime} \quad 697.75$ feet along the same;
28. Thence along the same, on a curve to the left having a radius of 30.00 feet, the chord azimuth and distance being:
$21^{\circ} \quad 16^{\prime} \quad 30^{\prime \prime} \quad 42.43 \quad$ feet;
29. $66^{\circ} \quad 16^{\prime} \quad 30^{\prime \prime} \quad 56.00 \quad$ feet along the same;
30. Thence along Lot 2 of Royal Kunia Phase II, Increment 1 Subdivision (File Plan 2171), on a curve to the left having a radius of 30.00 feet, the chord azimuth and distance being:
$111^{\circ} \quad 16^{\prime} \quad 30^{\prime \prime} \quad 42.43 \quad$ feet;
31. $66^{\circ} \quad 16^{\prime} \quad 30^{\prime \prime} \quad 810.00 \quad$ feet along the same;
32. Thence along the same, on a curve to the left having a radius of 40.00 feet, the chord azimuth and distance being:

|  | $21^{\circ}$ | $16^{\prime}$ | $30^{\prime \prime}$ | 56.57 | feet; |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 33. | $66^{\circ}$ | $16^{\prime}$ | $30^{\prime \prime}$ | 22.00 | feet along the same; |

34. $156^{\circ} 16^{\prime} \quad 30^{\prime \prime} \quad 160.00$ feet along the southeasterly line of Kunia Road to the point of beginning and containing an area of 161.360 acres, more or less.

Being the premises acquired by Warranty Deed dated September 29, 2017, by and between Canpartners IV Royal Kunia Property LLC, a Delaware limited liability company, as Grantor, and RP2 Ventures, LLC, a Hawaii limited liability company, as Grantee, recorded at the Bureau of Conveyances of the State of Hawaii as Document No. A-64850097.

SUBJECT, HOWEVER, to the following:

1. Mineral and water rights of any nature.
2. The terms and provisions contained in Certificate and Consent, made by Waitec Development, Inc., a Hawaii corporation, dated December I, 1986, recorded at said Bureau in Liber 20114 at Page 517.
3. The terms and provisions contained in Declaration of Conditions and Consent dated April 8, 1994, recorded at said Bureau as Document No. 94-065022.

Said Declaration was amended by instrument dated December 10, 1997, recorded at said Bureau as Document No. 99-056493.
4. Existing Easement " 10 " ( 60 feet wide), for road and utility purposes, as shown on survey map prepared by Roy T. Yama, Land Surveyor, with ParEn, Inc., dba Park Engineering, dated June 21, 1985.
5. Existing Easement " 11 " ( 60 feet wide), for road purposes, as shown on survey map prepared by Roy T. Yama, Land Surveyor, with ParEn, Inc., dba Park Engineering, dated June 21, 1985.
6. Existing Easement "13" ( 10 feet wide), for powerline purposes, as shown on survey map prepared by Roy T. Yama, Land Surveyor, with ParEn, Inc., dba Park Engineering, dated June 21, 1985.
7. Existing Easement "14" ( 60 feet wide), for road and utility purposes, as shown on survey map prepared by Roy T. Yama, Land Surveyor, with ParEn, Inc., dba Park Engineering, dated June 21, 1985.
8. Setback ( 22 feet wide), for roadway purposes, as shown on survey map prepared by Roy T. Yama, Land Surveyor, with ParEn, Inc., dba Park Engineering, dated June 21, 1985.
9. Existing Easement "1," for flowage purposes, as shown on File Plan No. 2154.
10. The terms and provisions contained in Unilateral Agreement and Declaration for Conditional Zoning dated March 6, 1995, recorded at said Bureau as Document No. 95-030454.
11. The terms and provisions contained in Unilateral Agreement and Declaration for Conditional Zoning dated April 9, 1997, recorded at said Bureau as Document No. 97-047601.
12. The terms and provisions contained unrecorded Connection Agreement dated March 2, 2007, made by and between Kunia Residential Partners, a Hawaii limited partnership, "KRP," and Halekua Development Corporation, a Hawaii corporation, "Owner."

Memorandum of Agreement dated March 12, 2007, recorded at said Bureau as Document No. 2007-045264.

Assignment and Assumption of Connection Agreement dated as of September 29, 2017, recorded at said Bureau as Document No. A-64850099.
13. The terms and provisions contained in unrecorded Agreement Re Infrastructure dated March 2, 2007, made by and between Halekua Development Corporation, a Hawaii corporation, "Owner," and HRT Realty LLC, a Maryland limited liability company, "HRT."

Memorandum of Agreement dated March 12, 2007, recorded at said Bureau as Document No. 2007-045265.

Assignment and Assumption of Agreement Re Infrastructure and Related Agreements dated as of September 29, 2017, recorded at said Bureau as Document No. A-64850098.
Memorandum of Amended and Restated Agreement Re Infrastructure dated Quey. 12,20,20
recorded at said Bureau as Document No. - Dos A-75290284 _
14. The terms and provisions contained in unrecorded Letter Agreement dated July 24, 1992.

Said Agreement was supplemented and amended by instrument dated February 28, 2007.
Memorandum of Agreement dated March 12, 2007, recorded at said Bureau as Document No. 2007-045266, made by and between Halekua Development Corporation, a Hawaii corporation, "HDC," and Robinson Kunia Land LLC, a Hawaii limited liability company, "Robinson."

Assignment and Assumption of The Robinson Trust Agreements dated as of September 29, 2017, recorded at said Bureau as Document No. A-64850100.
15. The terms and provisions contained in Declaration of First Amendment to the Amended Findings of Fact, Conclusions of Law, and Decision and Order Filed on October 1, 1996 (filed October 7, 2013), dated June 19, 2014, recorded at said Bureau as Document No. A-52840766.
16. The terms and provisions contained in Declaration of Conditions Imposed by the State Land Use Commission dated March 17, 2015, recorded at said Bureau as Document Nos. A-55670868A through A-55670868E.
17. Claims arising out of customary and traditional rights and practices including, without limitation, those exercised for subsistence, cultural, religious, access or gathering purposes, as provided for in the Hawaii Constitution or the Hawaii Revised Statutes.
18. Any rights or interests which may exist or arise by reason of the following facts referenced on ALTA/NSPS Survey prepared by Ryan M. Suzuki, Land Surveyor, with R.M. Towill Corporation, dated July 6, 2020:
(A) Dirt roads through subject property are being used for access purposes onto adjacent parcels.
19. Discrepancies, conflicts in boundary lines, shortage in area as disclosed by Subdivision Map prepared by Wayne M. Teruya, Land Surveyor, with ParEn, Inc., approved by City and County of Honolulu on March 13, 2009, Subdivision File No. 2008/SUB-257.

## End of Exhibit "A"


[^0]:    Written Direct Testimony of Christopher M. Monahan, Ph.D.

    1. Please state your name and business address for the record.

    Christopher M. Monahan, Ph.D.
    150 Hamakua Drive, \# 810
    Kailua, Hawai‘i 96734
    2. What is your current occupation?

    I am the president and founder of TCP Hawai' $i$, LLC ("TCP Hawai'i"). TCP Hawai'i is an archaeology and cultural resource management firm.
    3. How long have you worked in the field of cultural resource management?

    I have been actively engaged in the field of cultural resource management and historic preservation for over 30 years, 19 of which have been in Hawai'i. In 2006, I was the Lead O'ahu Archaeologist and Acting Archaeology Branch Chief for the State Historic Preservation Division ("SHPD"). I have also been a lecturer at U.H. Mānoa in the Department of Anthropology.
    4. Did you provide a copy of your resume for these proceedings?

    Yes, my resume was provided as Successor Petitioner Ho'ohana Solar 1 LLC's ("Ho'ohana") Exhibit 42.
    5. Please briefly describe your educational background.

    I have a Bachelor of Arts in Anthropology from St. Lawrence University (with a concentration in archaeology) and a Master's degree and Ph.D. in Anthropology from the University of Wisconsin-Madison.

    ## 6. Do you specialize in any particular areas?

    I specialize in conducting archaeological and cultural resource surveys and historic preservation studies, including work on Hawaiian archaeology, cultural studies, archaeological assessments, reconnaissance, inventories, site testing, recovery, preservation planning, burial treatment plans, and monitoring. TCP Hawai'i is on SHPD's list of approved archaeological consultants. (Our 2020 Permit \# 20-21).

