

KAMEHAMEHA SCHOOLS
REVISED MASTER PLAN AND SCHEDULE FOR DEVELOPMENT

LAND USE COMMISSION
STATE OF HAWAII
2010 OCT -7 P 4 14

Successor Petitioner LANCE KEAWE WILHELM, ROBERT K.W.H. NOBRIGA, ELLIOT K. MILLS, MICAH A. KANE, and CRYSTAL KAUILANI ROSE, as Trustees of the Estate of Bernice Pauahi Bishop, dba Kamehameha Schools (“Kamehameha Schools” or “KS”) submits its revised master plan (the “Waiawa Master Plan”) and development schedule in Docket A87-610 for its approximately 1,395 acres of land situated at Waiawa and Waipi‘o, ‘Ewa, O‘ahu, Hawai‘i, currently designated by Tax Map Keys (1) 9-4-006: 034(por.), 035(por.), 036, 037(por.); 9-6-004:024 (por.), 025, 026; 9-6-005: 003 (por.) (the “Petition Area”), as required by Condition No. 1 of the State of Hawai‘i Land Use Commission’s (“LUC”) Order Granting Motion for Order Amending Findings of Fact, Conclusions of Law and Decision and Order Dated May 17, 1988, filed November 26, 2014.¹ As detailed herein, KS’ proposed Waiawa Master Plan includes the Petition Area together with additional KS lands in the Waiawa ahupua‘a (collectively the “KS Waiawa Lands”).

I. BACKGROUND

A. Gentry Plan

In 1987, Tom Gentry, Gentry Pacific, Ltd. and KS entered into a development agreement, whereby Gentry would entitle and develop the Petition Area for the proposed Waiawa Ridge development project (“Gentry Plan”). Within the Petition Area, the Gentry Plan included up to 7,906 residential dwellings, half of which were retirement/leisure housing units for those 55 and

¹ Under the November 26, 2014 Order, KS must “submit to the Commission a revised master plan and schedule for development for the approximately 1,395-acre KS Property within five (5) years from the date of the Commission’s issuance of an order approving the Motion to Amend.”

older, parks, open space, school sites, two golf courses, and areas for commercial and light industrial uses. Gentry sought Urban District reclassification from the LUC to develop the Gentry Plan, which the LUC granted in 1988.² Figure 1 depicts the Gentry Plan.

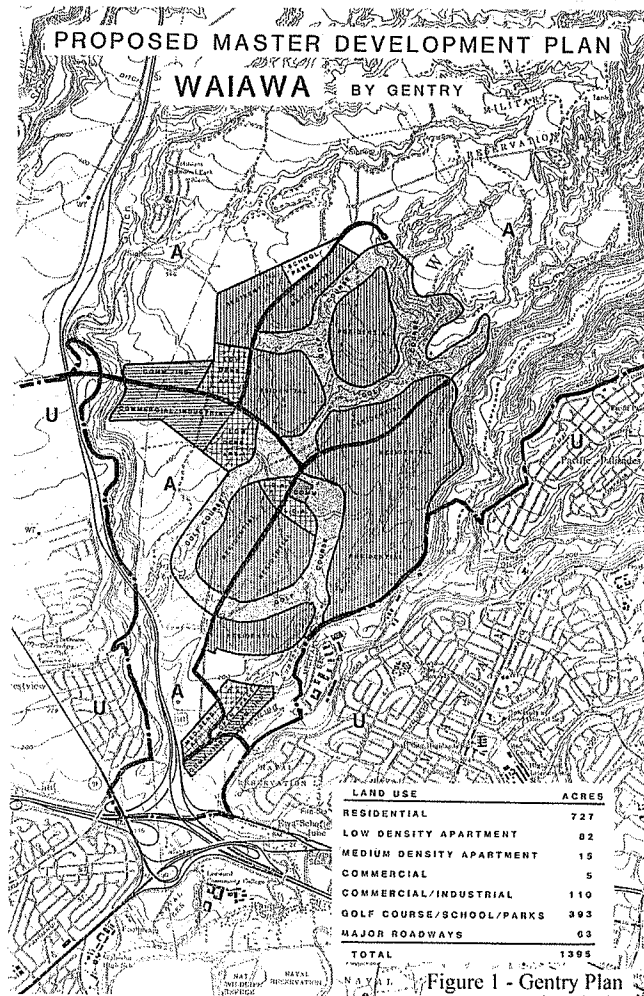


Figure 1 - Gentry Plan

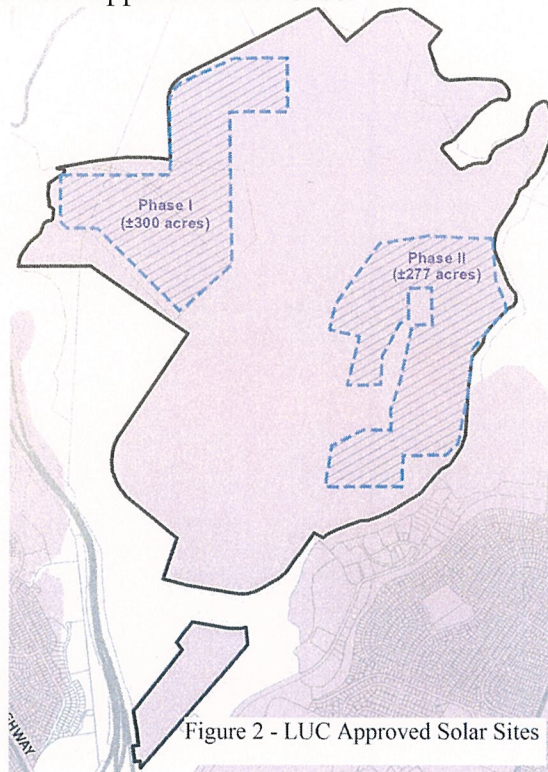
Gentry subsequently obtained several rezoning approvals from the Honolulu City Council. In 2006, Gentry and A&B Waiawa, LLC formed Waiawa Ridge Development LLC to undertake project development and secure financing, with groundbreaking scheduled for the fall of 2009. However, this long-planned development was adversely affected by the 2008

² See Findings of Fact, Conclusions of Law and Decision and Order filed May 17, 1988 in Docket No. A87-619 (In re the Petition of Tom Gentry and Gentry-Pacific, Ltd.).

worldwide financial crisis, as well as difficulty due to enormous upfront infrastructure costs and related exactions. Ultimately, Gentry could not proceed with the Gentry Plan and returned the KS Waiawa Lands to Kamehameha Schools in late 2012.

B. Solar Project

Shortly after regaining control of the Petition Area KS determined that until it was able to fully reassess potential development options, the best interim use of the Petition Area would include utility scale renewable energy solar projects. On November 26, 2014, the LUC issued an order approving the use of approximately 655 acres of the Petition Area for two solar projects for a term of 35 years (one solar farm was planned within approximately 387 acres in the northwest of the Petition Area, and the other within approximately 268 acres in the northeast of the Petition Area). See Figure 2 for the LUC approved solar sites.



Unfortunately, the Public Utilities Commission did not approve the power purchase agreement between Hawaiian Electric Company (“HECO”) and the originally proposed solar

farm developer (SunEdison). Nonetheless, consistent with KS' previous commitments to utilize two areas within the Petition Area for utility scale solar energy development on an interim basis, KS filed a motion with the LUC in July 2019, seeking approval for a modified solar project to be located within the eastern portion of the Petition Area previously approved by the LUC for solar farm development. KS also alerted the LUC of the likelihood of KS seeking future approval for modifications to the solar farm that was previously approved for the northwest portion of the Petition Area. Similar to the previously approved solar projects, the modified solar project(s) are intended as interim uses of the Petition Area.

C. Due Diligence for Revised Master Plan

In compliance with its obligations to submit a revised master plan and development schedule, KS began working to create a sustainable and thoughtful long-term vision for its Waiawa lands. As set forth in more detail in the following sections, the Waiawa Master Plan envisions a community where ahupua'a planning principles for a variety of uses can be incorporated to address regional solutions for housing, infrastructure, business, health, and āina. As part of developing the Waiawa Master Plan, KS has also engaged in extensive due diligence regarding the development potential for the KS Waiawa Lands. See Appendix A. KS also initiated outreach with community partners, legislators, and State and City agencies regarding the Waiawa Master Plan. See Appendix B.

II. KAMEHAMEHA SCHOOLS' MISSION, VALUES, AND STRATEGY

In order to understand the Waiawa Master Plan, it is first important to understand how KS approaches the perpetual stewardship and development of its lands, in alignment with its values and mission.

A. Kamehameha Schools' Educational Mission

Founded in 1887 by the legacy of Princess Bernice Pauahi Bishop, Kamehameha Schools is a private, educational, charitable trust committed to improving the capability and well-being of Native Hawaiians through education. As the largest private landowner in the State of Hawai'i, Pauahi endowed her trust with land assets totaling approximately 375,500 acres, of which less than 3,755 acres (or 1%), together with other financial investments, generate more than 96% of the revenue needed to fund KS' mission of providing educational opportunities to Native Hawaiians.

In accordance with its core educational mission, in 2018 alone KS spent \$327 million toward education, serving a total of 61,565 learners, including:

- 5,404 students on 3 campuses.
 - Funding for the 3 campuses amounted to \$178.7 million.
- 1,607 preschool students at 30 preschools.
 - Funding for the 30 preschools amounted to \$35.3 million.
- 13,594 extension education learners.
 - Supported by \$48 million in funding.
- 4,981 non-KS-campus students who received scholarships.
 - Scholarship funding was \$32.5 million. Scholarships funded include the Pauahi Keiki scholarships for preschool age Native Hawaiian keiki attending other private schools, the Kipona scholarships for K-12 Native Hawaiian keiki attending other private schools, and post-high scholarships.
- 35,979 students through community investing.
 - Supported by community investment of \$31.0 million disbursed to 92 organizations.

KS also spent \$1.7 million on innovation funding to 15 organizations, including an innovation hub in Mō'ili'ili for Hawaiian community events, a partnership with several schools

to support students and teachers in exploring new ideas and new technologies, and a high school entrepreneurial summer camp.

Recognizing that KS can broaden its educational impact through partnerships, KS maintains relationships with the State of Hawaii Department of Education, the University of Hawaii, and private schools throughout the State. For instance, the Ho'oulu 'Āhuimanu partnership with Saint Louis School supports tuition, engagement, and Hawaiian culture-based education to ensure learners are culturally grounded and prepared for college and career. In 2018, this translated to 100% of Saint Louis graduates with firm college/career paths, and 95% enrolling in 2- and 4-year colleges and universities. KS' partnerships reach beyond traditional education and include collaborations with Hawaii Pacific Health to improve education, health, and economic stability of students and families through internships and occupational training, with MA'O Organic Farms and Central Pacific Bank to expand MA'O's farm operation in Lualuelei, and with the Ko'olau Mountains Watershed Partnership to help protect the vital Waiawa watershed.

B. Healthy Communities Support KS' Educational Mission

The success of KS' educational mission is intimately connected to the health and well-being of the surrounding communities. In assessing whether a community is healthy and thriving, KS uses a regional approach that takes into consideration six measures of community vibrancy: (1) education; (2) housing; (3) infrastructure; (4) business; (5) health; and (6) 'āina, all of which align with KS' five land management values (culture, environment, education, economics, and community).

- **Education.** Access to quality education opportunities is key for thriving communities. In many of Hawai'i's communities there is a lack of early

education options. There is also an increasing but unmet demand for Hawaiian culture-based education within the K-12 school system.

- **Housing.** Housing in Hawai‘i is expensive. Low inventory, high costs of construction, a highly regulated land use environment, and competition from non-resident buyers, have all led to higher housing costs. In Honolulu County, the demand for new housing units is expected to be between 25,800 and 26,400 housing units by 2025.³ The high cost of housing and lack of business opportunities contribute to Hawai‘i residents leaving the State (between July 2017 and July 2018, an average of 34 residents left Hawai‘i each day).
- **Infrastructure.** Hawai‘i, more than any other state, depends on petroleum for its energy needs. Less than 1% of the electricity in the USA is generated using oil, but in Hawai‘i 68% of our electricity is from oil and 13.2% is from coal.⁴ Hawai‘i’s electricity prices are more than twice the USA average. However, Hawai‘i is moving toward its goals of having 100% renewable energy by 2045 and being 100% carbon neutral by 2045. Energy from renewable resources (solar, wind, hydro, biofuels, biomass, geothermal) has increased, but Hawai‘i still has a long way to go to satisfy the goals established for 2045. Relatedly, strategically planned mixed use communities that offer residents more transportation options, including mass transit, community shuttles, rail, and busses, can allow Hawai‘i residents to use less fossil fuel.
- **Business.** A thriving business community requires an educated workforce, and our mission is to improve the capability and well-being of Native Hawaiians through education. Earnings have a close positive relationship with education level. In Hawai‘i, the average annual salary for workers with high school diplomas (including GEDs) is \$32,653, versus the average of \$63,700 for workers with bachelor degrees or higher.⁵ A supportive environment for entrepreneurship and innovation will help a community thrive.
- **Health.** Commitment to sustainability and improved access to healthy foods and lifestyles is important for the revitalization of communities. In 2012, the Hawai‘i legislature reported that 90% of the beef, 67% of the fresh vegetables, 65% of the fresh fruits, and 80% of all milk purchased in the State are imported. Local food sustainability will enhance the well-being of our communities.
- **‘Āina.** Thriving communities include opportunities to support natural ecosystems and protect and preserve conservation lands that support those ecosystems, as well

³ Department of Business, Economic Development & Tourism, March 2015, Measuring Housing Demand in Hawaii, 2015-2025.

⁴ Hawaii State Energy Office, Hawaii Energy Facts & Figures, July 2019.

⁵ Department of Business, Economic Development & Tourism, Hawaii’s Working Population: An Analysis by Industry 2012-2016, April 2018.

as opportunities to share the mo'olelo of various places and access to the 'āina to help connect communities to 'āina resources.

KS has utilized the foregoing factors and strategies in determining how best to steward and develop its land base across various regions.

C. Urban Core Strategy

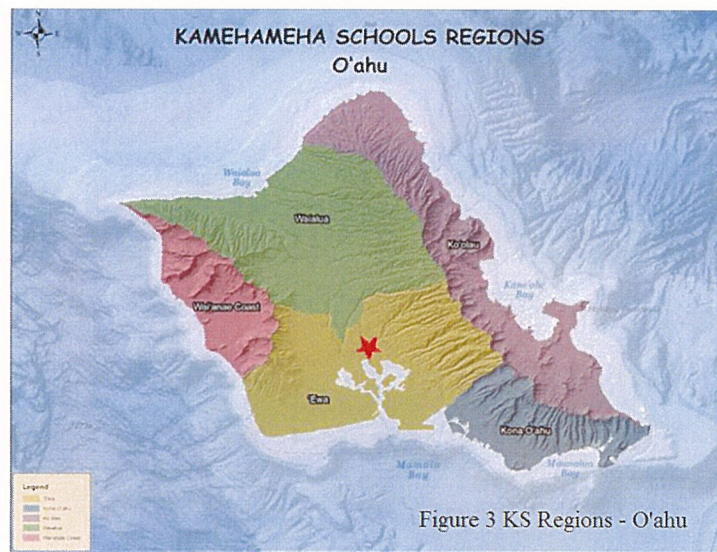
In addition to the regional six-factors described above, it is essential that KS' land assets that are urban/commercial zoned lands, including those in Waiawa, be developed in a manner to continually generate a financial return that can support its educational mission. As KS considered development of its lands in the urban corridor, especially those lands that are located in close proximity to rail transit, KS formulated its Urban Core Strategy to provide housing, lifestyle and economic return opportunities. Components of KS' Urban Core Strategy are as follows:

- KS' Urban Core Strategy seeks to redefine urban core living by creating higher density, mixed residential and commercial communities with communal open spaces and place-based programming and activities. It is intended to preserve the unique characteristic of the surrounding communities, while at the same time addressing market and social economic area demands.
- The Urban Core Strategy aligns with the City and County of Honolulu's transit-oriented development ("TOD"). With the completion of rail expected in 2025, KS' Urban Core Strategy seeks to enhance neighborhoods around the rail stations, increase the availability of housing, and provide easy access to work in walkable neighborhoods.
- KS' Urban Core Strategy is focused on growth along and near the rail corridor, which will reduce pressures to develop rural and agricultural lands. TOD communities offer the chance to create vibrant mixed-use communities across the island, creating housing and lifestyle options that reduce people's commutes and create a better quality of living.

The Waiawa Master Plan is supportive of KS' Urban Core Strategy.

D. Waiawa Vision

KS intends to continue to implement the Urban Core Strategy for future development, however, as previously mentioned, KS' development strategy also takes into account a regional approach. Altogether, the KS land base includes 9 regions, 5 of which are on the island of Oahu, with the remaining 4 on the islands of Mau'i, Kaua'i, and Hawai'i. The Oahu regions are Kona, 'Ewa (Central), Wai'anae Coast, Waialua, and Ko'olau, as depicted in the figure below. These regions are based on both traditional land divisions (ahupua'a) and alignment with the school complex areas established by the State of Hawai'i Department of Education, KS's largest educational partner. The KS Waiawa Land, identified by a red star in Figure 3 below, is within the 'Ewa region.



In 2015, there were approximately 52,000 Native Hawaiians in the 'Ewa region, and that population is expected to grow by 66% to approximately 84,000 by 2040. In 2017 KS commissioned a needs assessment of the 'Ewa region and learned from 'Ewa residents that the key strengths of 'Ewa are its central location and proximity, cultural diversity, community cohesiveness, and safety. Residents identified crime and drugs, lack of housing and overcrowding in housing, traffic, delays in completion of the rail system, and infrastructure as

areas of concern. The ‘Ewa region needs assessment informed KS’ planning for the Waiawa Master Plan.

Taking KS’ regional approach into consideration, KS has been working to create a sustainable and thoughtful long-term vision for its lands at Waiawa in a way that is consistent with its mission, Urban Core Strategy, and opportunities to serve the larger ‘Ewa region. Waiawa is envisioned as a place where ahupua‘a planning principles can be incorporated to address regional issues of housing, infrastructure, business, health, and āina.

Taking all of the foregoing into account, KS formulated its objectives for the Waiawa Master Plan as follows:

- To use ahupua‘a concepts to sustain the needs of the new community. Incorporating ahupua‘a concepts starts with a Hawaiian cultural mindset honoring ‘ohana, multiple generations, community, kuleana, and laulima. There is also a need for access to diverse resources (multi modal transportation, opportunities for food production and open space, homes that allow for multi-generational living, and local businesses that are part of the community). Finally, the notion of how to be ecologically aligned so that new land uses complement existing natural resources and are developed with a deep respect for, and close observation of, the environment.
- To foster a community that aligns with KS’ Strategic Vision 2040/Strategic Plan 2020 Goals, KS’s land management values, and the ‘Ewa regional needs. KS Strategic Plan 2020 aligned goals include: (1) cultivating a sense of Native Hawaiian identity where KS beneficiaries feel welcome and educational opportunities are offered; (2) being a high-performing Native Hawaiian organization that aligns with strategic partnerships and optimizes collective impacts; and (3) utilizing an impact driven resource management style that includes accountability in our decision making. At a minimum, KS will incorporate the use of traditional names, moolelo and wahi pana of Waiawa and interactive programming to create a Hawaiian sense of place in the Waiawa Master Plan development. KS plans to engage in aligned partnerships within the Ewa region to achieve similar educational, career, health, economic and aina stewardship outcomes that have resulted from the existing partnerships described above.

- To identify strategic partnerships and resources for delivery of infrastructure and pursue investment spending in alignment with regional priorities.

All of the foregoing served as a basis for the Waiawa Master Plan, the components of which are set forth in the following section.

III. WAIAWA MASTER PLAN

Kama‘āina housing is a key aspect of the Waiawa Master Plan. As proposed, the Waiawa Master Plan would provide 11,109 homes and 51 agricultural farm lots. The Waiawa Master Plan is proposed to be developed in 5 phases and encompass approximately 2,010 acres of the KS Waiawa Lands. This includes the 1,395-acre Urban District Petition Area, an additional 476 acres that are planned for Urban District reclassification, and approximately 139 acres that are intended to remain within the Agricultural District. See **Exhibit 1** for a depiction of the Waiawa Master Plan area identifying each of the 5 phases and the areas identified for Urban District reclassification.

The Waiawa Master Plan is necessarily conceptual at this point and will be refined through a development partnership agreement, a future environmental impact statement process, significant community outreach, and the land use entitlements processes. With KS focused on its educational mission, KS intends to identify a development partner to help KS realize its vision for Waiawa (similar to KS’ strategy in developing Kaka‘ako). While the selected development partner may have different approaches to style and design, it must implement this vision for the KS Waiawa Lands as a thriving community that incorporates elements supportive of education, housing, infrastructure, business, health, and āina.

The Waiawa Master Plan anticipates a diverse range of housing options within approximately 11,109 homes (single family, multi-family, for sale/rental, and mixed-use) to be

provided over the next 56 years together with 51 agricultural residential farm lots, and approximately 105 acres of schools, 371 acres of open space, 134 acres of parks, and 558,666 square feet of neighborhood retail/commercial uses. The Waiawa Master Plan Preliminary Development Schedule is provided as Appendix C.⁶ Throughout the Waiawa Master Plan there are large areas of open space for drainage, agricultural uses, and other open space uses that are strategically located in areas that have naturally steep terrain and are therefore difficult to develop for residential purposes in a sustainable manner.

TOD Increment. Consistent with KS' Urban Core Strategy, the primary and initial focus of development will be in what KS refers to as the TOD Increment, located in the southern portion of the KS Waiawa Lands. The TOD Increment is less than 1 mile from the Pearl Highlands rail station. The proximity of the rail line and the planned stations for Pearl Highlands and Leeward Community College provides an opportunity for KS to reexamine how the southern portion of the KS Waiawa Lands could be developed to embrace TOD.⁷ The TOD Increment (approximately 1,027 acres) is planned in two phases (Phase A and Phase B), and collectively is proposed to provide approximately 4,362 homes of varying product types, 380,771 square feet of neighborhood commercial/retail uses, 28 agricultural farm lots, 3 schools, 26.6 acres of parks, and approximately 293 acres of open space. See Exhibit 3 for a depiction of the Conceptual Land Use Plan for the TOD Increment with three proposed solar sites.

TOD Increment Phase A- Located in the southern portion of the KS Waiawa Lands and comprised of approximately 410 acres (71 of which are proposed for Urban District

⁶ The development schedule provided as Appendix C is preliminary for informational purposes only and subject to change.

⁷ As there was no rail development contemplated at the time, the Gentry Plan assumed a northerly approach to the KS Waiawa Lands, creating access from Ka Uka Boulevard and bringing sewer and water capacity to the KS Waiawa Lands from Kamehameha Highway, thereby requiring a significant upfront investment in development infrastructure

reclassification, and 139 acres of which are proposed to remain in the Agricultural District). To take advantage of the rail station, TOD Phase A anticipates more dense neighborhoods with a high number of residential units. TOD Increment Phase A is proposed to have a total of approximately 2,024 residential units, many (almost half) of which will be incorporated into the mixed-use commercial planned for the area. TOD Increment Phase A will include neighborhood retail, a DOE elementary school, a large park, and additional areas of open space. This is envisioned as a vibrant and walkable area with approximately 324,326 sq. ft. of commercial and business floor area and a residential density of approximately 24 units per acre. Phase A will also have 20 agricultural farm lots both within and outside of the Urban District boundaries. As detailed in the Preliminary Development Schedule provided as **Appendix C**, TOD Increment Phase A site work is projected to start in 2030 and build out is projected to be completed by 2040.

TOD Increment Phase B- Comprised of approximately 617 acres within the existing Urban District boundaries. TOD Increment Phase B is proposed to have a total of approximately 2,338 residential units, 8 agricultural farm lots, and 56,445 sq. ft. of commercial/mixed use space. TOD Increment Phase B is planned to be somewhat less dense than TOD Phase A (approximately 13 units per acre, not including the agricultural farm lots), but still retains a density suitable for multi-family and mixed use living. TOD Increment Phase B will include a DOE middle school and another DOE elementary school. Park areas will be provided together with additional areas of open space. Development of a 200-acre solar farm within the eastern portion of the Waiawa Master Plan, largely adjacent to TOD Increment Phase B, is expected to be underway within the next couple of years. As detailed in **Appendix C**, TOD Increment Phase B site work is projected to start in 2038 and build out is projected to be completed by 2048.

Phase C- Comprised of approximately 316 acres, of which 114 acres will need to be reclassified to the Urban District. Phase C is planned to include 2,636 homes and approximately 83,452 sq. ft. of commercial/mixed-use space. This area is envisioned to have more single-family homes than found in the TOD Increment. Light industrial uses may be included within the mixed-use areas in Phase C. A DOE high school, a large park, and areas for open space are also planned for the Phase C area. See Exhibit 2 for the Overall Conceptual Master Plan, which includes the proposed land uses for Phase C. As detailed in Appendix C, Phase C site work is projected to start in 2046 and build out is projected to be completed by 2060.

Phase D- Comprised of approximately 268 acres all within the current Urban District boundaries. It is planned to have some 1,436 homes and approximately 24,346 sq. ft. of commercial space. The residential density in this area is expected to be less than in the TOD phases (less than 9 units/acres). The homes envisioned for Phase D are more likely to be single-family homes. The existing gulches and overall terrain for this area make it unsuitable for agricultural farm lots. See Exhibit 2 for the Overall Conceptual Master Plan, which includes proposed land uses within Phase D. As detailed in Appendix C, Phase D site work is projected to start in 2056 and build out projected to be completed by 2066.

Second Phase Solar/Phases C and D: The areas identified as Phases C and D include the 387 acre area that the LUC approved for development of a utility scale solar farm in 2014. KS intends to allow portions of this area within the KS Waiawa Lands to be used for solar farm development on an interim basis, as the development of the Waiawa Master Plan progresses northward from the south. However, rather than having one large solar farm within the previously approved footprint, to accommodate the Waiawa Master Plan, KS proposes to separate the area to allow for the development of two solar farm sites. One site would be within

Phase C and would be decommissioned no later than 2044, and the other site would be within Phase D and would be decommissioned no later than 2054. These decommissioning deadlines were established based upon the projected timeframes for the start of site work in Phases C and D respectively. See Exhibit 3, identifying the areas for Solar 2044 and Solar 2054 sites.

Phase E- Comprised of approximately 399 acres, of which approximately 108 acres are within the Urban District boundaries and 291 acres are proposed for Urban District reclassification. Some 2,675 homes, 23 agricultural farm lots, and approximately 70,097 sq. ft. of commercial/mixed-use space are planned for Phase E. A third DOE elementary school is planned within Phase E, along with approximately 7.7 acres in park space and additional open space areas. Residential density is envisioned to be less than 10 units/acres. See Exhibit 2 for the Overall Conceptual Master Plan, which includes proposed land uses within Phase E. As detailed in Appendix C, Phase E site work is projected to start in 2062 and build out is projected to be completed by 2076.

The Waiawa Master Plan supports the six factors that KS identified for thriving communities.

- **Education.** Aside from the educational contributions to the DOE as required by the City/State, KS sees an opportunity for connectivity between ‘āina based educational programs and the new Waiawa community. Based on a KS’s ‘Ewa regional needs assessment, there is an increasing demand for ‘āina based education which connects people to a place, increases awareness of environmental issues and nurtures a sense of kuleana. Within the Waiawa ahupua‘a but outside of the Waiawa Master Plan boundaries, KS owns 68 acres known as KS’ Waiawa Kai Kipuka adjacent to Pearl Harbor and Leeward Community College. There, KS has partnered with Kūhiawaho, Hanakehau, Camp Agape, and Leeward Community College to provide focused ‘āina based learning at Waiawa Kai. The entire Waiawa ahupua‘a, including the Conservation District lands above the KS Waiawa Lands, is used as a learning tool.

- **Housing.** A significant element of the Waiawa Master Plan is housing, where KS proposes up to 11,109 residential homes and 51 agricultural farm lots by 2076. These units are envisioned to be a diverse mix of housing types, with high density and mixed-use homes together with lower density and single-family homes with connectivity to rail transit less than a mile away.
- **Infrastructure.**
 - Renewable energy is a significant component of the Waiawa Master Plan. The Waiawa Master Plan integrates 3 areas for solar farm developments, with the first solar farm alone expected to generate 36 megawatts of power with a 144-megawatt hour battery energy storage system. The renewable energy components within the Waiawa Master Plan will be a significant contributor toward meeting the State's goal of 100% renewable energy by 2045.
 - Rail is a significant consideration in the formulation of the Waiawa Master Plan. The new mass transit system under construction falls within a quarter mile of the southern portion of the KS Waiawa Land. The proximity of the rail line and the planned stations for Pearl Highlands and Leeward Community College provide an opportunity to reexamine how the KS Waiawa Land can be developed to embrace TOD. Proximity to rail and an emphasis on walkable communities and multi modal transportation options are other important features of the Waiawa Master Plan. Additionally, an internal Waiawa community bus shuttle to the Pearl Highlands transit station will enhance access and transit ridership.
 - Sewer and water infrastructure needs of the proposed Waiawa Master Plan have been evaluated through a preliminary engineering review. There are existing wells originally approved by the State to serve the former Gentry Plan and could provide water capacity for the Waiawa Master Plan. A sewer connection application has been filed with the City Department of Planning & Permitting to assess existing available sewer capacities. KS has spent considerable amount of time and resources to evaluate alternative sewer treatment designs for water conservation considerations and transportation solutions and strategies to address the concerns for traffic. See Appendix A for a description of infrastructure diligence efforts.
- **Business.** The business element of KS's vision for Waiawa includes approximately 558,666 square feet of commercial and mixed-use space to be developed throughout the 5 phases of the Waiawa Master Plan. These spaces will create new opportunities for local business to take root in an area centrally located between the Waialua and 'Ewa regions, and also close to UH West Oahu. Proximity to rich educational resources, in conjunction with KS's continuing mission to expand and increase high-quality educational opportunities for Native Hawaiians, means that the commercial and mixed-use areas within the Waiawa Master Plan could become an incubator for innovative new businesses. The incorporation of agriculture within the Waiawa Master Plan offers the opportunity not only for farming but related food production

businesses. The emphasis on renewable energy, respect for ‘āina, and proximity to the KS’ watershed management units in the Ko’olau mountains, creates opportunities for businesses involved in environmental science and management.

- **Health.** The integration of agriculture and a network of recreational and a multi-modal network of trail systems within the Waiawa Master Plan opens opportunities for healthy lifestyles within the community. Options for residents to grow their own food in community gardens and participate in nutritional educational programs are envisioned for Waiawa, with an eye toward creating opportunities for community members to make positive lifestyle choices. Creating meaningful mauka to makai connections will help residents get from one location to another, making the community more walkable and creating enhanced healthy transportation options for Waiawa community members.
- **‘Āina.** As a partner of Hawai‘i Green Growth and its Aloha+ Challenge, KS is committed to smart sustainable communities, green workforce and education, clean energy, local food, natural resource management, and waste management. The forests in the mauka regions of Waiawa in the central Ko’olau mountains comprise some of the most important watersheds on the island of O’ahu. The Waiawa watershed is the principle recharge area for the Pearl Harbor aquifer, which supplies the majority of the drinking water for communities across O’ahu - more than 364 million gallons each day. KS’s partnership with the Ko’olau Watershed Alliance, the Honolulu Board of Water Supply, and Coca-Cola has ensured legislative support to protect this watershed. Educating members of the Waiawa Master Plan community about these large ‘āina conservation initiatives connects a community to the importance of stewardship and the relationship between the land and its community members. In addition to protecting the mauka Conservation District lands above the Waiawa Master Plan area, the use of low impact development techniques and green building measures would be considered, such as native landscaping, permeable surfaces, use of rain barrels/cisterns, bioretention and bicycle parking and shelters.

IV. NEXT STEPS

The Waiawa Master Plan Preliminary Development Schedule is provided as **Appendix**

C. Initially, KS anticipates proceeding with the pending request for LUC approval of the modified solar farms to be developed within the eastern portion of the KS Waiawa Lands.

Thereafter, pending decisions by HECO, KS anticipates seeking LUC approval for modifications to the solar farm the LUC approved within the western portion of the KS Waiawa Lands.

The next steps toward the development of the Waiawa Master Plan will include seeking

and identifying a development partner for the Waiawa Master Plan. That will be followed by more extensive community outreach, executing a development agreement, further refining the Waiawa Master Plan, completing studies and an environmental impact statement, seeking a district boundary amendment from the LUC for the inclusion of the additional areas into the Waiawa Master Plan area, seeking updated zoning from the Honolulu City Council (current City zoning was tailored to the Gentry Plan and not appropriate to the Waiawa Master Plan), completing Waiawa Master Plan governance documents, processing subdivision applications, and finally obtaining construction permitting. The projected timeframe for these pre-development tasks, together with the preliminary development schedule for the Waiawa Master Plan, is provided in **Appendix C**.

APPENDIX A

WAIAWA MASTER PLAN PRELIMINARY DUE DILIGENCE EFFORTS

Due Diligence. Upon completing its 2040 visioning process, KS undertook significant due diligence and costs to analyze sustainable development approaches to land use planning, grading, wastewater, traffic and water consumption. Due diligence included commissioning several studies and consultants;

- Retaining Mitsunaga & Associates to advise on and refine a land use plan from an engineering point of view and to provide rough orders of magnitude costs for the necessary infrastructure. The initial draft preliminary land use plan was then revised to incorporate elements to reduce the overall infrastructure costs yet produce a development in line with the KS vision.
- Retaining Nelson\Nygaard to explore transportation solutions that identify strategies to reduce number of vehicle trips and impacts to H1/H2 and neighborhood roads associated with the Waiawa Master Plan, land use planning strategies, transportation network strategies, and transportation demand management strategies were all considered. Successful use of these strategies could significantly reduce traffic impacts by close to 40%.
- Working with PBR Hawaii on conceptual, cultural, and agricultural plans to incorporate the KS vision, as well as incorporating the findings from the preliminary engineering report completed by Mitsunaga & Associates and the transportation solutions plan completed by Nelson\Nygaard. Concepts explored with PBR resulted in road designs with a mixed-use path for pedestrians and bicyclists, and complete streets, and identifying optimal areas within the Master Plan for community gardening, food hubs, edible landscapes and community supported agricultural programming.
- Retaining Brown and Caldwell to explore onsite wastewater treatment options for sustainable water conservation and reuse considerations. This analysis determined that due to the location of the Waiawa aquifer location, there is limited space for disposal of treated water and the supply of treated recycled water was significantly less than its supply produced by the community.
- An archaeological inventory survey of the entire 1,395-acre KS property was prepared in 2015 and accepted by the Hawai'i Department of Land and Natural Resources State Historic Preservation Division (SHPD).
- Pursuant to the archaeological inventory survey, an archaeological preservation plan was prepared and accepted by SHPD in September 2015.

APPENDIX B

WAIAWA MASTER PLAN PRELIMINARY OUTREACH EFFORTS

Earlier this year KS initiated discussions with stakeholders regarding the proposed Waiawa Master Plan. Stakeholders included City and State leadership, City, State, and Federal agencies, groups involved in environment, education, and culture. The objectives were to:

- Share KS's Waiawa Vision, Urban Core Strategy and Waiawa Master Plan; and
- Provide stakeholders with an overview of next steps

A partial list of people contacted during this preliminary stage is provided below;

Linda Takeyama, Chief of Staff, Governor's Office
Joey Manahan Council, Chair of Budget and Vice Chair of Infrastructure
Amy Perruso Rep., Dist 46 (Wahiawa, Whitmore Village, Launani Valley)
Clarence Nishihara, Senator, Dist 17 (Waipahu, Crestview, Manana, Pearl City, Pacific Palisades)
Michelle Kidani, Senator, Dist 18 (Mililani, Waipi'o Gentry, Waikele, Village Park, Royal Kunia)
Donovan Dela Cruz, Senator, Dist 22 (Mililani Mauka, Waipi'o, Wheeler, Whitmore, Wahiawa)
Ryan Yamane Rep., Dist 37, (Mililani, Waipio Gentry, Waikele)
Roy Takumi Rep., Dist 35 (Pearl City, Manana, Waipio)
Roy Amemiya, Managing Director, Mayor's Office
Brandon Elefante, Councilman, District 8 (Lower Aiea, Pearlridge, Waimalu, Newtown, Pearl City, Waipio Gentry, Waipahu)
Ron Menor, Councilman, District 9 (Waikele, Royal Kunia, Mililani, Iroquois, Ewa Viilages/Ewa Beach)
Kimberly Pine, City Council Vice Chair Dist 1
Joanna Seto, State Department of Health
Mary Alice Evans, Office of Planning
Rodney Funakoshi, Office of Planning
Daniel Orodener, Executive Officer, State Land Use Commission
Jade Butay, State Department of Transportation
Ed Sniffen, Deputy Dir. Highways, State Department of Transportation
Kaleo Manuel Deputy Dir., Commission of Water Resource Management
Craig Hirai, Executive Director, HHFDC
Susan Lebo, Archeology Branch Chief, State Historical Preservation Division
Lori Kahikina, Director, Department of Environmental Services
Marc Alexander, Executive Director, Office of Housing
Ed Hawikins, Executive Director, Office of Economic Development
Suzanne Case, Director, DLNR
Bob Matsuda, Deputy Director, DLNR

Heidi Meeker, DOE, Facilities Development
Kathy Sokugawa, Acting Director, Honolulu Department of Planning and Permitting
Barry Usugami, Honolulu Board of Water Supply
Diane Dohm, Oahu Metropolitan Planners Association
Kyle Chock, Carpenter's Union
Nathaniel Kinney, Hawaii Construction Alliance
Sylvia Hussey Interim CEO, Office of Hawaiian Affairs
John Ching, Legacy Land Specialist, OHA
Kalei'aina Lee, KS Alumni Association
Maenette Benham, Chancellor, UH West Oahu
Suzette Robinson, Chancellor, Leeward Community College
Nicholas Comerford, Dean/Director, College of Tropical Agriculture and Human Services (CTAHR)
Jobie Masagatani, Chair, DHHL
William Aila, Deputy Director, DHHL
Stewart Matsunaga, Administrator of Land Development, DHHL
Jimmy Nakatani, Agricultural Development Corp
Ko'olau Watershed Partnership

A second phase of outreach and engagement is anticipated upon the selection of a development partner. The goal of a second phase of engagement is to meet with the broader community and share KS' desire to create a thriving community, collect community sentiment and concerns, and apply the feedback to the development of a more thorough and executable Waiawa Master Plan in coordination with KS' future development partner.

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WAIAWA MASTER PLAN PRE DEVELOPMENT INFRASTRUCTURE TIMELINE
 PHASE A PHASE B (TOD INCREMENT)

TOD Phase B: 617 Acres		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032-2034	2034-2036	2036-2038	2038-2040	2040-2042	2042-2044	2044-2046	2046-2048	2048-2050	2050-2052	2052-2054	2054-2056	2056-2058	2058-2060			
Waiawa Solar Phase 1																																		
Waiawa Solar Phase 2A																							2044									2059		
Waiawa Solar Phase 2B (2022-2054)																												2054						
Construction Docs: Phase B																																		
Construction Permitting: Phase B																																		
Commence Civil Infrastructure																																		
Roads & Utilities																																		
Road 2																																		
Road A																																		
Road D, E, F																																		
Water Infrastructure																																		
595' Well , pump & reservoir																																		
Residential (42.9 acres)	Units																																	
Single and Multi Family (300 units/year)	2338																																	
Ag Farm Lot- 8	8																																	
Commercial	SF																																	
	56,445																																	
Mixed Use (acres)	8.6																																	
Other	Acres																																	
Schools	31.2																																	
Park	12.1																																	
Open Space (drainage, agricultural field): 99.5 Acres	99.5																																	

Cumulative Totals TOD Phase A + TOD Phase B
 Residential Units 4,362
 Ag Farm Lots 28
 Parks 26.6 Acres
 Schools 43.5 Acres
 Open Space 293.3 Acres

Blue- KS
 Black- City/State
 Yellow - Solar

Red- Commercial
 Green- Residential

WAIAWA MASTER PLAN PRE-DEVELOPMENT INFRASTRUCTURE TIMELINE
(PHASES C-E)

		Construction																	
		Phase C (2052-2060)					Phase D (2060-2066)				Phase E (2066-2076)								
Phase C: 316 Acres		2042-2044	2044-2046	2046-2048	2048-2050	2050-2052	2052-2054	2054-2056	2056-2058	2058-2060	2060-2062	2062-2064	2064-2066	2066-2068	2068-2070	2070-2072	2072-2074	2074-2076	
Construction Docs: Phase C																			
Construction Permitting: Phase C																			
Commence Civil																			
Waiawa Solar Phase 1 (2021-2057)										2059									
Waiawa Solar Phase 2 (2022-2044 in Phase C)		2044																	
Waiawa Solar Phase 2B (2023-2054 in Phase D)							2054												
Infrastructure																			
Roads (incl. water, sewer, drain, elec)																			
Road 2																			
Road 3																			
Road F																			
Road G																			
Road H																			
Panakauahi Road Bridge																			
Ka Uka Blvd Interchange																			
Residential		Units																	
Single and Multi Family (300 per year)		2636																	
Commercial		SF																	
		83,452																	
Mixed Use (acres)		23.1																	
Other		Acres																	
School		49.2																	
Park		22																	

Cumulative Totals: TOD Phase A, TOD Phase B, Phase C

Residential Units	7,026
Commercial Space (sf)	464,223
Parks (acres)	48.6
Schools (acres)	92.7
Open Space (acres)	293.3

Phase D: 268 acres		2042-2044	2044-2046	2046-2048	2048-2050	2050-2052	2052-2054	2054-2056	2056-2058	2058-2060	2060-2062	2062-2064	2064-2066	2066-2068	2068-2070	2070-2072	2072-2074	2074-2076
Construction Docs: Phase D																		
Constructin Permitting: Phase D																		
Commence Civil																		
Waiawa Solar Phase 1 (2021-2058)										2059								
Waiawa Solar Phase 2A (2022-2044)		2044																
Waiawa Solar Phase 2B (2023-2054)							2054											
Infrastructure																		
Roads & Utilities																		
Road 2																		
Road 3		2024																
Road I																		
Water																		
785' Reservoir(3MG), pump, well																		

Red- Commercial
Green-Residential

WAIAWA MASTER PLAN PRE-DEVELOPMENT INFRASTRUCTURE TIMELINE
(PHASES C-E)

Residential	Units																		
Single and Multi Family (300 units/year)	1436																		
Commercial	SF																		
	24,346																		
Mixed Use (acres)	0																		
Other	Acres																		
School	0																		
Park	0																		
Open Space (drainage, agricultural field):	78.1																		

Cumulative Totals: TOD Phase A, TOD Phase B, Phase C, Phase D

Residential Units	8,462
Commercial Space (sf)	488,569
Parks (acres)	48.6
Schools (acres)	92.7
Open Space	371.4

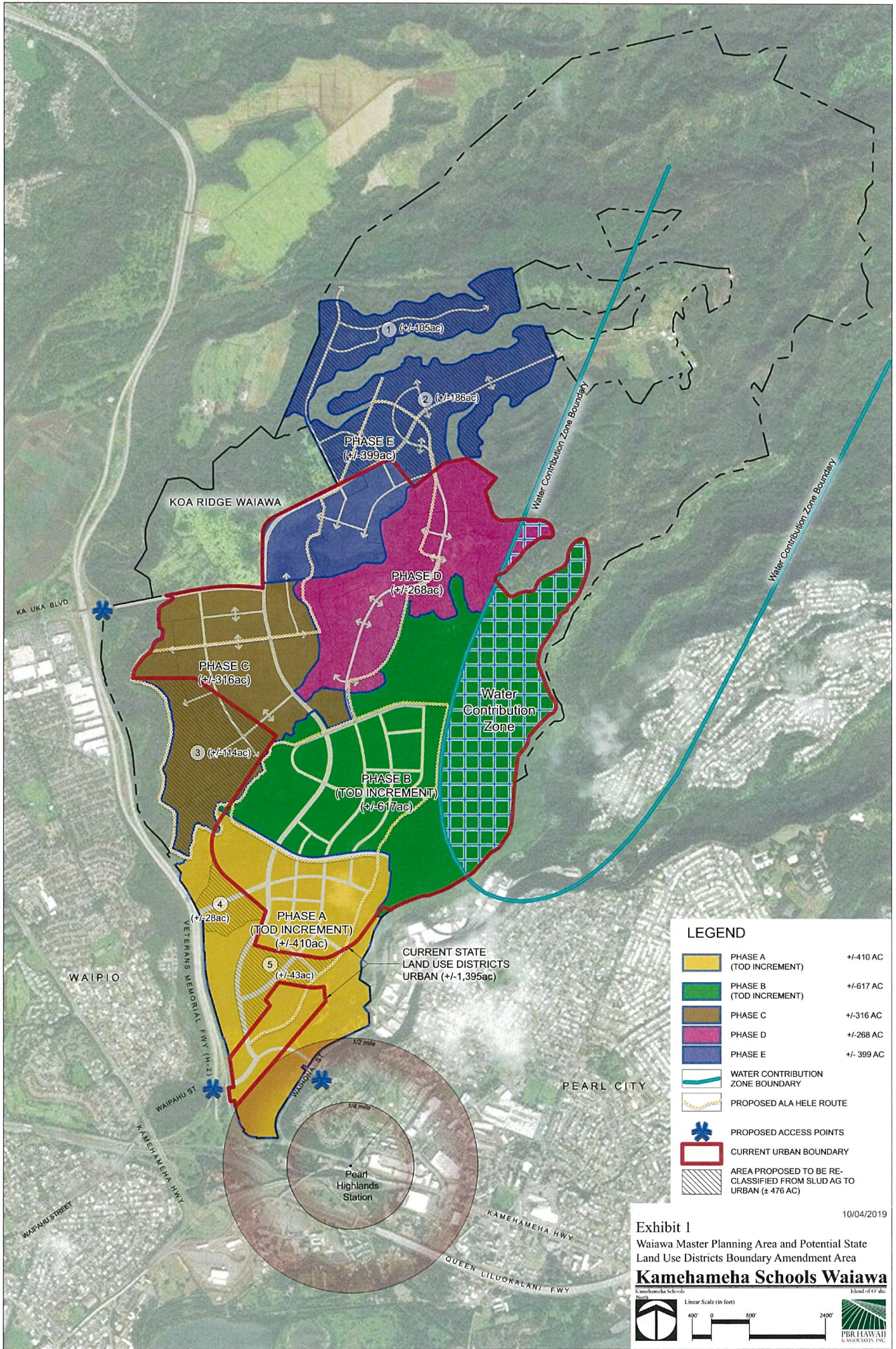
Phase E: 399 acres		2042-2044	2044-2046	2046-2048	2048-2050	2050-2052	2052-2054	2054-2056	2056-2058	2058-2060	2060-2062	2062-2064	2064-2066	2066-2068	2068-2070	2070-2072	2072-2074	2074-2076
Construction Docs																		
Construction Permitting																		
Commence Civil																		
Waiawa Solar Phase 1 (2021-2058)										2059								
Waiawa Solar Phase 2A (2022-2044)		2044																
Waiawa Solar Phase 2B (2023-2054)							2054											
Infrastructure																		
Roads & Utilities																		
Road 1																		
Road 3																		
Road 1																		
Water																		
975' Reservoir (2.0MG), pump, well																		
Residential	Units																	
Single and Multi Family (300 units/year)	2675																	
Ag Farm Lots-23																		
Commercial	SF																	
	70,097																	
Mixed Use (acres)	13																	
Other	Acres																	
School	12																	
Park	7.7																	
Open Space (drainage, agricultural field)	4																	

Cumulative Totals: (TOD Phase A, TOD Phase B, Phase C,

Phase D, Phase E)

Residential Units	11,109
Ag Farm Lots	51
Parks (acres)	134.4
Schools (acres)	104.7
Open Space (acres)	371.4

Red- Commercial
Green-Residential



KOA RIDGE WAIAWA

KA UKA BLVD

PHASE C
(+/-316ac)

PHASE D
(+/-268ac)

PHASE B
(TOD INCREMENT)
(+/-617ac)

PHASE A
(TOD INCREMENT)
(+/-410ac)

CURRENT STATE
LAND USE DISTRICTS
URBAN (+/-1,395ac)

WAIPIO

PEARL CITY

VETERANS MEMORIAL FWY (H-2)

1/2 mile

1/4 mile

Pearl
Highlands
Station

KAMEHAMEHA HWY

QUEEN LILUOKALANI FWY

WAIPIU STREET

WAIPIU ST

WAIPIU ST

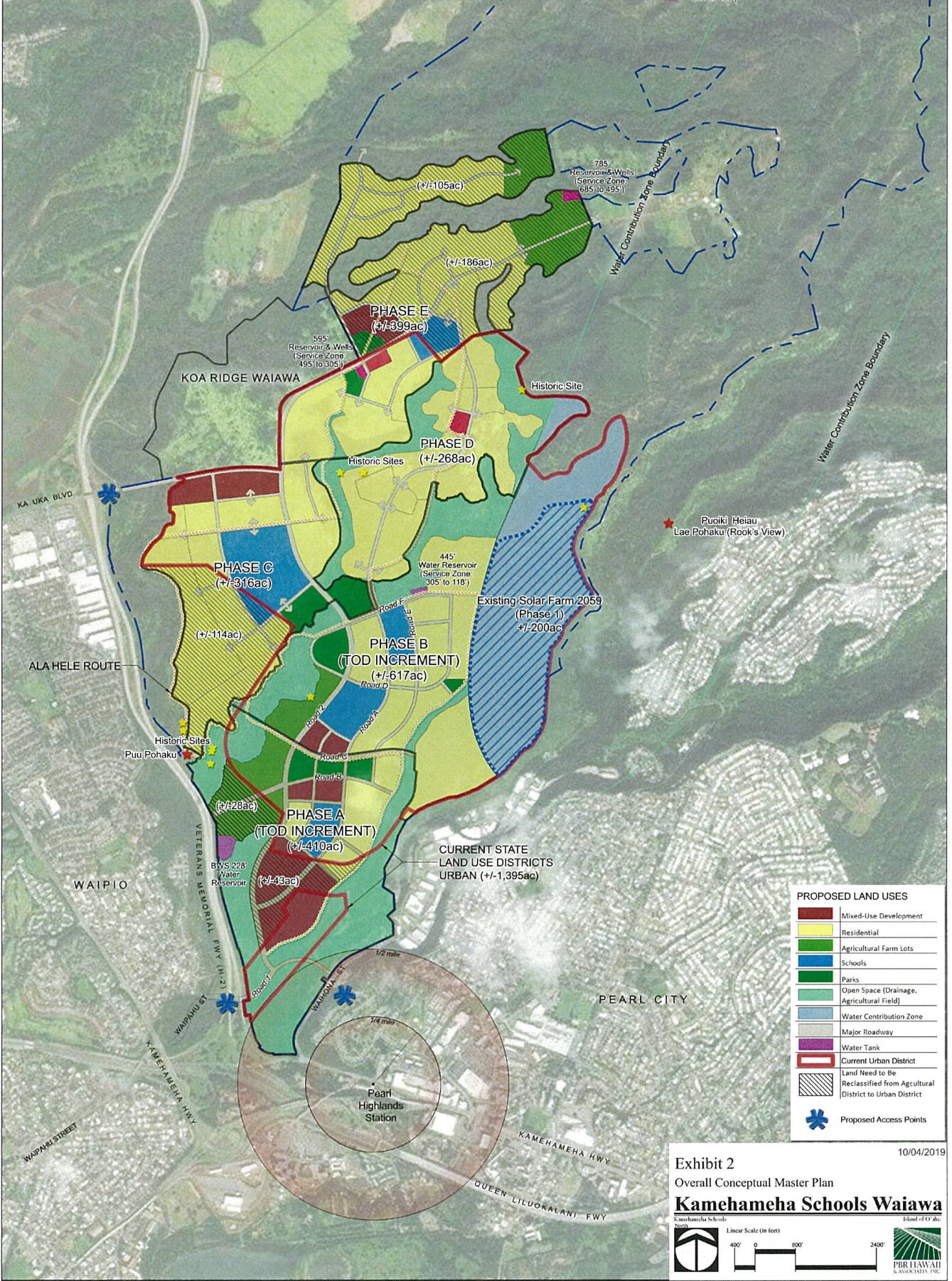
LEGEND		
	PHASE A (TOD INCREMENT)	+/-410 AC
	PHASE B (TOD INCREMENT)	+/-617 AC
	PHASE C	+/-316 AC
	PHASE D	+/-268 AC
	PHASE E	+/- 399 AC
	WATER CONTRIBUTION ZONE BOUNDARY	
	PROPOSED ALA HELE ROUTE	
	PROPOSED ACCESS POINTS	
	CURRENT URBAN BOUNDARY	
	AREA PROPOSED TO BE RE- CLASSIFIED FROM SLUD AG TO URBAN (± 476 AC)	

10/04/2019

Exhibit I
Waiawa Master Planning Area and Potential State
Land Use Districts Boundary Amendment Area
Kamehameha Schools Waiawa
Kamehameha Schools
Island of Oahu
PBR HAWAII
& ASSOCIATES, INC.

Linear Scale (in feet)
400' 0 800' 2400'

	TOD Increment A	TOD Increment B	PHASE C	PHASE D	PHASE E	Total
Approx. Total Gross Land Area (acre)	410	617	316	268	399	2,010
Land in the Current Urban District (acre)	200	617	202	268	108	1,395
Land Proposed to be Reclassified - AG to Urban (acre)	71	0	114	0	291	476
Land to be Kept as AG District (acre)	139	0	0	0	0	139
Proposed Residential Unit	2,024	2,338	2,636	1,436	2,675	11,109
Proposed Agricultural Farm Lot	20	8	0	0	23	51
Proposed Commercial Gross Floor Area (sqft)	324,326	56,445	83,452	24,346	70,097	558,666



10/04/2019

Exhibit 2
Overall Conceptual Master Plan
Kamehameha Schools Waiawa

Kamehameha Schools
Island of Oahu
PBR HAWAII & ASSOCIATES, P.C.

Linear Scale (in feet)
400' 0 800' 2400'

Proposed Planning Area	PHASE A (TOD INCREMENT)			PHASE B (TOD INCREMENT)		
	Approx. Land Area (acre)	Proposed Residential Unit	Proposed Commercial Floor Area (sqft)	Approx. Land Area (acre)	Proposed Residential Unit	Proposed Commercial Floor Area (sqft)
Mixed-Use Development	56.7	975	324,326	8.6	123	56,445
Residential	42.9	1,049		172.3	2,215	
Agricultural Farm Lots	44.2	20		17.5	8	
Schools	12.3			31.2		
Parks	14.5			12.1		
Open Space (Drainage, Agricultural Field)	193.8			99.5		
Water Contribution Zone	0.0			243.0		
Major Roadway	42.5			32.2		
Water Tank	3.5			1.0		
TOTAL:	410	2,044	324,326	617	2,346	56,445
Land Need to Be Reclassified from Agricultural District to Urban District	71			0		

 Proposed Access Points

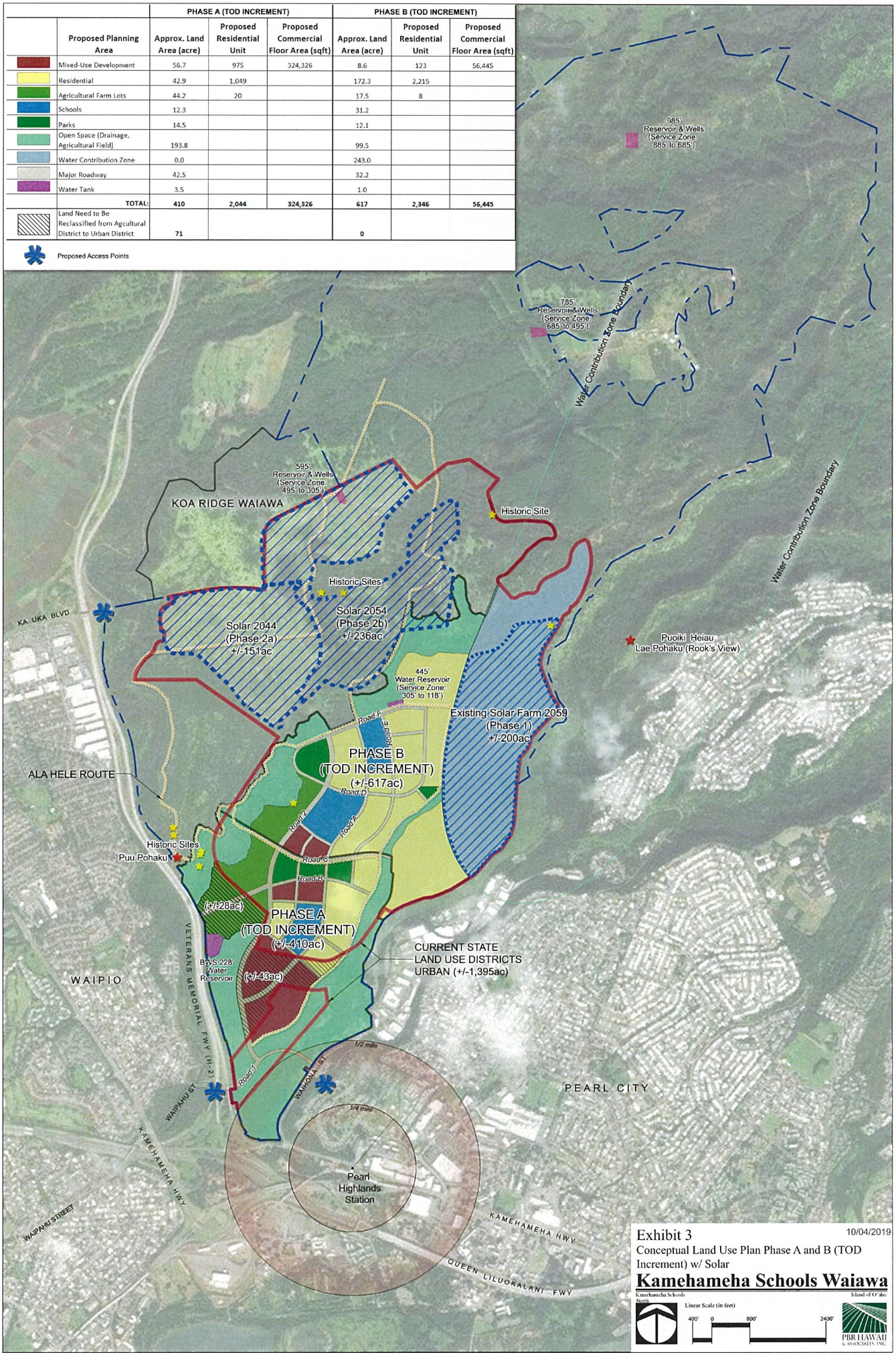


Exhibit 3
 Conceptual Land Use Plan Phase A and B (TOD Increment) w/ Solar
Kamehameha Schools Waiawa
 Kamehameha Schools
 Island of O'ahu
 PBR HAWAII & ASSOCIATES, INC.

10/04/2019

Linear Scale (in feet)
 400' 0 800' 2400'