SPECIAL USE PERMIT – ADDENDUM
Prepared in Accordance with Revised Ordinance of Honolulu (ROH) Chapter 21 - Land Use Ordinance (LUO) of the City and County of Honolulu

PVT Integrated Solid Waste Management Facility Relocation Project

PVT Land Company, Ltd.
Wai‘anae District, O‘ahu, Hawai‘i
Tax Map Key (TMK) 8-7-009:007

June 2020

The additions, omissions, clarifications, and corrections herein have been prepared by Belt Collins Hawaii on behalf of PVT Land Company to provide additional information requested by the City and County of Honolulu Department of Planning and Permitting (DPP) for the Special Use Permit (2020/SUP-4).
ATTACHMENTS

**Item #1** The letter dated April 15, 2020 was prepared in response to DPP’s request for additional information in the Special Use Permit (SUP) for the PVT ISWMF Relocation Project. The tables provided in this letter indicate the location of each response within the updated application.

**Item #2** The letter dated June 11, 2020 was prepared in response to DPP’s request for additional information during review of the updated SUP application. The information provided will be filed as an addendum to the updated SUP application for the PVT ISWMF Relocation Project.

**Item #3** The TMK labels at the existing PVT ISWMF were revised on Figure 2-5 in response to DPP’s request during preliminary review.
ITEM #1

Letter to DPP – April 15, 2020
Ms. Kathy Sokugawa, Acting Director  
Department of Planning & Permitting  
650 South King Street, 7th Floor  
Honolulu, HI  96813

Dear Ms. Sokugawa:

PVT Integrated Solid Waste Management Facility (ISWMF) Relocation  
Tax Map Key: (1) 8-7-009:07  
Waiʻanae, Oʻahu, Hawaiʻi

This letter is prepared in response to your letter dated March 12, 2020 requesting additional information in the Special Use Permit (SUP) application for the PVT ISWMF Relocation Project. The following tables are provided in response to the questions received and indicate the location where the content/responses can be found in the updated SUP submittal:

1. **The Approving Agency for your SUP application is the City and County of Honolulu Planning Commission and the State of Hawaii Land Use Commission. Please revise the Project Summary sheet (page v) accordingly.**

<table>
<thead>
<tr>
<th>Project Summary</th>
<th>City and County of Honolulu Planning Commission and the State of Hawaii Land Use Commission</th>
</tr>
</thead>
</table>

2. **On average, by weight and volume, what is the percentage composition of the materials in the construction and demolition waste stream received by PVT?**

| Section 3.4.1, C&D Debris Acceptance | Table 3-2 provides a summary of the types and weight of solid waste materials received at the existing PVT ISWMF, based on PVT’s 2018-2019 Annual Operating Report.  
Table 3-2: Type and Weight of Waste Materials Received at Existing PVT ISWMF |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Section 3.4.2, Waste Recycling and Materials Recovery | Table 3-3 provides a summary of the type, weight, and destination of recycled material, such as scrap metal, concrete/ asphalt/ aggregate, feedstock, soil, and residual waste for disposal.  
Table 3-3: Type, Weight, and Destination of Recycled Material |
3. By weight and volume, please provide more detailed information about the type and content mix of the feedstock produced from construction and demolition (C&D) debris processing, including the quantity of feedstock needed to power PVT’s operations. Provide a list of other renewable energy providers on Oahu, and how the feedstock will be transported to them. Is this accounted for in the estimated number of trucks expected to visit the ISWMF each day?

<table>
<thead>
<tr>
<th>Section 1.2.3, Construction and Renewable Energy Industry</th>
<th>Individual contracts with renewable energy providers will be established after all necessary permits are secured.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 3.5.2, Materials Recovery and Diversion (MRD) Units</td>
<td>Feedstock would be primarily composed of wood and other combustibles salvaged during the MRD process; the type and content mix of feedstock material would be approximately 99% wood and 1% or less plastic.</td>
</tr>
<tr>
<td>Section 3.5.3.1, Gasification Unit</td>
<td>The system is designed to utilize approximately 43 tons of feedstock generated by the MRD-2 or MRD-3 per day, which would produce between 7,200 and 24,000 kWh of electrical power, depending on PVT’s daily power needs. Additional feedstock would be sold to individual contractors, such as those seeking to provide renewable energy to Hawai’i Gas. Outgoing feedstock would be loaded onto the customer’s trucks. Most of the customer’s trucks will back haul feedstock after delivering debris to PVT, thereby minimizing transportation costs. Truck traffic would remain within the total daily truck limit set forth in PVT’s SWMP (see Section 4.1, Transportation, of the Final EIS).</td>
</tr>
<tr>
<td>Section 6.4.1, Transportation</td>
<td>Traffic to the Project Site would include up to 300 haul trucks per day and 80 employees, including incoming materials, such as C&amp;D debris, and outgoing materials, such as recyclables and feedstock.</td>
</tr>
</tbody>
</table>

4. With an estimated 7-12 years of operational capacity of the existing ISWMF left, might there be a period where both the existing ISWMF and the Project site are both operational?

| Section 3.7, Permits and Approvals | PVT estimates an additional 5-7 years of operational capacity at the existing landfill; however, this timeline may change based on market demand for C&D solid waste management on O’ahu (CCH 2017, CCH 2008). An increase in demand for C&D waste management, such as a new essential infrastructure project, a surge in the |
construction industry, or the occurrence of a natural disaster, would cause the existing landfill to reach capacity much sooner than anticipated.

Once all necessary permits and approvals are secured, the Project Site will require an additional 4+ years of construction and relocation activities before PVT ISWMF services are fully operational. Therefore, this process is considered time critical to ensure that these services will remain available without interruption.

5. Please describe in more detail how the operations are being phased and transitioned from the existing ISWMF to the Project site. Section 3.6.1 provides the acreage of the cells in the proposed landfill design. Please provide information about the volume of each proposed cell and how much is expected to be landfilled annually.

| Section 1.2.1, Integrated Solid Waste Management | PVT’s recycling rate is expected to reach approximately 235,000 tons annually within the next 2 years (Jacobs 2019); this would leave approximately 58,750 tons of C&D debris to be landfilled each year. Figure 1-3 illustrates the average total waste stream on O’ahu in 2017. |
| Section 3.5.1, Landfill Design | The total anticipated capacity of all five cells is 11,923,000 cubic yards. Individual cell volume would be calculated from final engineering designs, which will not be obtained until necessary permit approvals are received. |
| Section 3.8, Site Development and Relocation Schedule | Site development and relocation is scheduled to begin after all necessary permits and approvals are secured (Table 3-5). Construction activities and operational activities will be completed and transitioned in phases, as described below. Table 3-6 provides a tentative schedule for the Proposed Action over the next 10+ years. |

6. In Section 2.6, it appears the description of the existing and proposed ISWMF is incorrect. The existing ISWMF is west, not east, and the Project site is east of Lualualei Naval Road, not west. The state land use districts could be better identified if Figure 2-17 were color-coded, accordingly. Please make these necessary revisions.

| Section 2.6, Historical Land Use | Prior to PVT’s ownership, the parcel west of Lualualei Naval Road was reclassified in 1971 to the State Urban District for a proposed affordable housing development (LUC [Land Use Commission] Docket no. A71-275). The parcel east of Lualualei Naval Road remained under State Agricultural District. |
7. In Section 3.1.4, Solidification of Liquid Wastes, please provide information on what type and quantities of liquids are typically solidified, what potential contaminants are in the liquids, and what protection is provided under the soil stockpile where the solidification basin is created to prevent unwanted infiltration into the soil.

| Section 3.4.5, Solidification of Liquid Wastes | Under the Proposed Action, a portion of a lined cell would be used for the solidification of non-hazardous liquid wastes, such as petroleum-contaminated liquids, before the solidified waste is buried in the landfill. Special accounts, testing, and review procedures would be required for customers proposing to dispose of liquid wastes for solidification.

Liquid would be discharged into the basin and solidified using soil, coal ash, and feedstock ash as approved by the SWMP.

An impermeable landfill liner will be installed beneath each landfill cell to protect underlying soils and groundwater from potential contaminants, including the cell with the solidification basin. Another liner would be installed as part of the solidification basin to provide additional protection. |

| Section 3.5.1, Landfill Design | The landfill liner installation would be certified by a professional engineer and meet rigorous quality assurance standards. The proposed liner meets State requirements for MSW landfills, whereas regulatory and industry standards for C&D landfills only require a clay barrier.

The life expectancy of a high-density polyethylene liner in buried applications, such as solid waste landfills, is up to 300 years. |

8. Because the SUP application infers that the life expectancy of the ISWMF Project could have a total of up to 60 years (30 years active, 30 years for post-closure), and the ISWMF appears to have industrial-like features, the SUP application should explain why a SUP is more suitable than a boundary amendment to the State Land Use Urban District.

| Section 3.7, Permits and Approvals | Once all necessary permits and approvals are secured, the Project Site will require an additional 4+ years of construction and relocation activities before PVT ISWMF services are fully operational. Therefore, this process is considered time critical to ensure that these services will remain available without interruption. PVT has initiated this process in accordance with the permitting requirements and timeline set forth by DPP in |
a letter dated June 19, 2019, which is attached as Appendix A-2. Table 3-5 summarizes the list of permits and approvals anticipated for the Proposed Action.

<table>
<thead>
<tr>
<th>Table 3-5: Proposed Actions Permits and Approvals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative permitting options have been explored and dismissed due to the time and eligibility requirements to complete the process. As noted by DPP, the Proposed Action is a compatible use of the Project Site with a Conditional Use Permit (CUP)-Major, and therefore does not require an amendment to the Waianae Sustainable Communities Plan (WSCP), change to the land use designation, or expansion of the Community Growth Boundary. In addition, the timeline for both the Boundary Amendment and the Zone Change would result in a significant gap between the closure of the existing C&amp;D Landfill and the opening of the new site.</td>
</tr>
</tbody>
</table>

9. In Proposed Structures, Section 3.6, we laud PVT’s goals to meet their energy needs through renewal sources. However, the discussion shows the combined output from renewable energy generated by either the gasification unit or anaerobic digestion system and the photovoltaic power (PV) system is in excess of the power requirements needed for the Project. Please describe the use and the end-user distribution of the excess generated electrical power.

<table>
<thead>
<tr>
<th>Section 3.5.3, Renewable Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVT aims to meet 100% of its proposed power needs through renewable energy sources, which would generate between 17,000 kilowatt hours (kWh) to 55,000 kWh per day, dependent on PVT’s operational demand. PVT would limit the amount of power generated on-site to service daily operations, and therefore no excess electrical power would be generated or distributed.</td>
</tr>
</tbody>
</table>

10. Figure 3-2 shows the composition of the landfill liner. Will the gravel layer of the landfill liner be produced from the ISWMF Aggregate Materials Process or what is the source of the gravel?

<table>
<thead>
<tr>
<th>Section 3.5.1, Landfill Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>The proposed gravel layer would be composed of crushed basaltic rock sourced directly from the Project Site during grading and excavation or purchased and imported from Grace Pacific.</td>
</tr>
</tbody>
</table>

11. In Section 4.3, please add to the discussion the types of environmental controls PVT would employ to mitigate the potential impacts to air quality, water resources, and
land use characteristics that might cause potential impacts to the surrounding activities.

<table>
<thead>
<tr>
<th>Section 5, Environmental Controls</th>
<th>PVT’s Operations Plan includes several processes and protocols that would be implemented at the Project Site to minimize potential impacts to the surrounding area. The following environmental controls are undertaken by PVT to mitigate potential areas of concern.</th>
</tr>
</thead>
</table>
|                                   | 5.1 Litter Control  
5.2 Dust Control  
5.3 Odor Control  
5.4 Vector Control  
5.5 Gas Control  
5.6 Noise Control  
5.7 Emergency Management |

<table>
<thead>
<tr>
<th>Section 6.3, The Proposed Action Would Not Adversely Affect the Surrounding Community</th>
<th>A complete assessment of the potential impacts and proposed mitigation is discussed in the Final EIS as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Section 2, Proposed Actions and Alternatives, discusses environmental controls that would be implemented at the Project Site specific to the Proposed Action.</td>
</tr>
<tr>
<td></td>
<td>• Section 3.4, Water Resources, discusses water quality impacts, including decades of groundwater data from existing PVT ISWMF operations.</td>
</tr>
<tr>
<td></td>
<td>• Section 3.5, Air Quality, discusses potential air quality impacts, including the results of ten different air quality studies.</td>
</tr>
<tr>
<td></td>
<td>• Section 5.3.2.5, Land Use Characteristics, discusses potential impacts related to future land uses.</td>
</tr>
<tr>
<td></td>
<td>• Section 7.1, Cumulative Impacts, discusses the potential for cumulative impacts related to other land uses.</td>
</tr>
</tbody>
</table>

| Section 10, Additional Discussion on Key Preliminary Concerns | PVT is committed to mitigating anticipated impacts using BMPs in design, site development, and operations. Potential significant adverse impacts have been anticipated and addressed based on PVT’s years of operations in this community. The PVT ISWMF Operations Plan includes processes and protocols that would be modified for the Proposed Action to avoid and minimize impacts on the surrounding areas. |
12. In discussing Emergency Services under Section 4.4.7, the claim is made that in the wake of natural disaster, "PVT would receive 2/3 of the anticipated four million cubic yards of all C&D debris generated on Oahu ... " What becomes of the other 1/3 of this potential C&D debris? Are there other landfills that accept C&D debris in the event of a large-scale natural disaster?

Section 6.4.7, Emergency Services

The CCH Disaster Debris Management Plan (2001) and the Makani Pahili 2019 Honolulu Debris Management Workshop evaluated PVT’s role in managing C&D disaster debris during a disaster planning scenario. Under this scenario, the workshop attendees determined PVT would receive the debris, bury it, and recover it later for recycling. With the two proposed MRD units, PVT would be able to process the debris efficiently and continue to generate feedstock for renewable energy production while maximizing the amount of debris that is ultimately diverted from the landfill.

Omitted: 2/3 of the anticipated 4 million cubic yards of all C&D debris generated on O‘ahu, which is comparable to filling Yankee Stadium five times.

13. In Section 4.4.2, will any of the ISWMF-generated feedstock go to H-POWER waste-to-energy facility?

Section 3.5.3.1, Gasification Unit

Distribution of the ISWMF-generated feedstock would not include H-POWER’s waste-to-power facility, as it is not allowed to accept feedstock by its solid waste permit.

14. In terms of suitability of the Project site for permissible uses in the Agricultural District, there needs to be further elaboration why the site would not be suitable for the raising of all forms of livestock. Grazing seems to only imply cattle and perhaps sheep, but other forms of animal husbandry are known to occur elsewhere in Lualualei Valley.
Section 2.2.3, Important Agricultural Lands (IAL)

There is no access to potable water at the Project Site due in part to low rainfall and high salt content of the groundwater, and therefore, it did not meet the IAL criterion for adequate water supply. Therefore, the Project Site is determined to be unsuitable to support viable agriculture, including grazing and animal husbandry due to a lack of fresh water supply.

15. Please provide an analysis to support the claim in Table 4-4 why commercial scale solar energy facilities would not be economically viable on this site.

Section 6.6, The Project Site is Uns suited for the Permissible Uses

PVT previously explored the option of leasing land to solar energy providers; however, after further investigation, it was determined that “low” levels of solar radiation across the majority of the Project Site would not support solar energy production at a commercial scale (Figure 6-4). The amount of land suitable for solar energy production is also limited by the proximity of Pu‘u Heleakalā ridge causing shade from the sun over a significant portion of the day.

As an alternative, the Proposed Action includes a 7-acre PV power system and individual panels in the lower and upper parking area to offset daily power requirements of PVT ISWMF operations.

16. Reference to Westside Mauka Pavilion should be removed from Figure 4-3 since it is an unauthorized venue.

17. In the discussion of the consistency with the Waianae Sustainable Communities Plan, Table 5-3 asserts the Project is neither light nor heavy industry. If neither, what use(s) would the Project be classified as?

Section 7.3, Wai‘anae Sustainable Communities Plan

The PVT ISWMF is listed in the WSCP under “Solid Waste Handling and Disposal,” and therefore has been defined as “Public Facilities and Infrastructure.”

18. Please clarify whether the Dust Screen/Security Fence along the southern border of the Project Site is 15 or 20 feet. Reference to the dust screen height in Figure 3-1 and Section 6.3 is inconsistent.

Figure 3-1

20 ft. tall dust screen and chain-link fence along southern border of the property.
19. Figure 3-1 and Section 6.3 are further misaligned with respect to shading of the parking areas. Section 6.3 of the application states shading requirements of the employee parking areas will be fulfilled using PV panel installations. However, these structures are not discussed in the Project Site Development Plan (Figure 3-1). Please correct accordingly and revise the estimate of energy produced by PV panels on-site in Section 3.6.3.3., if these were not included in those calculations.

<table>
<thead>
<tr>
<th>Section 3.5.3.3, Photovoltaic Power System</th>
<th>The Proposed Action would install a PV power system on approximately 7 acres of the Project Site and individual panels over the lower and upper parking areas (Figure 3-1). The proposed PV power equipment would be scaled to meet the demand of daily operations, with a total capacity of 8,000 to 10,000 kWh per day.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 3-1</td>
<td>Additional PV panels would be installed in each parking area to meet shading requirements of Section 21-4.70 of the LUO. The size and number of panels will depend on the selected manufacturer.</td>
</tr>
</tbody>
</table>

20. Please explain why drought-tolerant vegetation will be planted in the landscaping strip when an irrigation system will be installed? If irrigation is to be provided, consider a wider variety of tree and plant types that would more effectively screen the Project site from the adjacent residents.

| Section 3.6.1, Grading and Landscaping | The Proposed Action would include landscaping designed to support environmental goals of the CCH, State, and Wai’anae Sustainable Community Plan, such as restoration of native species, increase in urban tree canopy, and preservation of water resources. Native Hawaiian plant species suitable for the local climate have been selected by an experienced landscape architect, as advised in the CCH “Storm Water BMP Guide for New and Redevelopment.” This guidance is summarized as follows:  

> “An experienced landscape architect can choose plant species and planting materials that are easy to maintain, aesthetically pleasing, and capable of effectively reducing pollutants in runoff from the site... Native species should be selected, taking into account the local climate, expected water depth in the basin, and expected tolerances to pollutant loads and varying soil moistures. The trees should be smaller ones similar to those found in the forest understory, since it is more difficult to perform maintenance with the tall trees that...” |


are normally part of the forest canopy. Ground cover, such as grasses or legumes, should be planted after the trees and shrubs are in place.”  

The proposed irrigation system is intended to supplement natural rainfall and ensure long-term sustainability of the PVT landscape.

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### Section 3.9, Closure and Post-Closure Plans

Plant species selected for the Proposed Action’s landscaping plan are intended to support long-term conservation of water resources, appear consistent with the surrounding environment, and remain self-sufficient to the greatest extent possible after the landfill is closed.

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21. In the discussion of the Alternative Design Analysis, Section 8.4.3.3, siting the Project entrance further north was dismissed because renegotiating the license with the U.S. Navy would take several years. A copy of PVT’s license with the U.S. Navy to use Lualualei Naval Road (Appendix D) shows that the license expires on December 31, 2021. With license renewal in the near-term, there will be an opportunity to consider an alternative design of the landfill in order to help mitigate the long-standing complaints of fugitive dust, noise, and traffic from the landfill operations. In the upcoming license renewal negotiation, PVT should work with the U.S. Navy to consider moving the Project entrance further north on Lualualei Naval Road.

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### Section 10.2.2.2, Site Entrance/Exit

PVT has strategically located the Project Site entrance/exit directly across from the existing PVT ISWMF site entrance/exit on Lualualei Naval Road (Figure 2-3). The location was selected to minimize disturbance to the surrounding areas by establishing the shortest possible distance for trucks to travel into the Project Site. Placing the entrance further up the road would consequently increase traffic and the potential for fugitive dust. The Proposed Action has been designed to maximize on-site mitigation and BMPs, including the entrance/exit location in relation to other design considerations.

Access to Lualualei Naval Road is permitted by PVT’s license with the U.S. Navy (Appendix E). PVT considered siting the entrance further north on the road as a design alternative to the Proposed Action, however this was found to be a costly process that would take years to negotiate. This option was dismissed due to the aforementioned impacts and restrictions.

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22. In Table 8-2, Summary of Concerns and Mitigative Measures, please provide a response to the environmental justice concern that the economically disadvantaged population
of Waianae has the inequitable burden of hosting undesirable land uses that benefit all of Oahu. A "N/A" response is unacceptable, and mitigative measures on this topic cannot be overlooked.

| Section 9.4, Summary of Preliminary Concerns and Mitigation Measures | PVT is deeply committed to maintaining a high standard of corporate-social responsibility and principles of environmental justice in service to the community it resides within. PVT would continue to provide essential social, economic, and environmental services to residents of Wai’anae as discussed in Section 10.3, Environmental Justice.

The Proposed Action has been designed to meet state and local BMPs for siting, developing, and operating a C&D waste management facility. PVT would continue to incorporate BMPs into its daily operations to ensure that the Proposed Action does not cause any significant impacts that would disproportionately burden residents in the surrounding area. |
| --- | --- |
| Section 10.3, Environmental Justice | PVT utilizes the following definition of environmental justice in Hawaiʻi as stated in the Hawaiʻi Environmental Justice Initiative Report (Kahihikolo 2008):

“Environmental justice is the right of every person in Hawaiʻi to live in a clean and healthy environment, to be treated fairly, and to have meaningful involvement in decisions that affect their environment and health; with an emphasis on the responsibility of every person in Hawaiʻi to uphold traditional and customary Native Hawaiian practices that preserve, protect, and restore the ʻāina for present and future generations.”

While PVT recognizes that it is unlikely for a landfill to be welcomed into a community, it places a high priority on establishing responsible business practices and community engagement that align with the environmental justice principles described above. Despite the concerns expressed during the Draft EIS process, PVT continues to receive tremendous support from businesses, schools, and residents for its positive role within the community. The Proposed Action would allow PVT to continue providing beneficial recreation, education, and socioeconomic opportunities to its neighbors on the Waiʻanae Coast by offering student scholarships, non-profit grants, and specialized training to its employees (see Section 5.3.2.3, Economic Characteristics, and Section 5.3.2.4, Social Characteristics, of the Final EIS). PVT employees are able to earn competitive wages (Table... |
10-2) working within their own community, which is often unavailable for residents of West O‘ahu.

Table 10-2: Comparison of Waste/Treatment Disposal Industry Wages by Occupation

PVT also provides essential environmental services that foster a clean and healthy environment for residents of West O‘ahu. It takes pride in being a valued neighbor and often supports community efforts to remove unmanaged waste that would otherwise accumulate and create increased health hazards for nearby residents. PVT’s day-to-day operations implement a wide range of BMPs and environmental protection measures that exceed normal standards in the C&D waste management industry to ensure that their ISWMF operations do not impact the health of residents or the environment. Years of environmental monitoring and reporting have proven these measures to be effective. Despite this success, PVT is committed to improving on-site mitigation by regularly engaging with its neighbors to address any on-going concerns. Under the Proposed Action, PVT would continue to encourage community engagement “in decisions that affect their environmental and health,” as discussed in Section 9.2, Public Outreach, and Section 9.3, Public Feedback.

As discussed in the Final EIS, the Proposed Action would not significantly impact cultural or traditional Hawaiian practices. PVT has developed a SHPD-approved Preservation Plan to provide additional protection to historic resources in the vicinity of the Project Site. The Proposed Action would protect and restore the land by planting native species outside of landfilled areas and would preserve the open space character after the landfill is closed.

Overall, PVT is deeply committed to maintaining a high standard of corporate-social responsibility and principles of environmental justice in service to the community it resides within. PVT would continue to incorporate BMPs into its daily operations to ensure that the Proposed Action does not cause any significant impacts that would disproportionately burden residents in the surrounding area. The Project Site was selected in accordance with industry guidelines prepared by the U.S. Army Corps of Engineers, Engineer Research and Development Center / Construction Engineering Research Laboratory, for responsible
management of C&D debris. The criteria for siting a C&D landfill is summarized as follows:

“Solid waste landfills in the US sited in arid regions will continue to receive significant volumes of waste generated in urban areas. Landfills located in wet regions, near waterways, and in other environmentally sensitive areas will continue to trend toward closure.”

The Proposed Action must also adhere to the requirements set forth for siting a C&D solid waste landfill by the State of Hawaiʻi in HAR §11-58.1-19(c)(1):

“Landfills shall not be located in areas susceptible to flooding, in wetlands, close to potable water supplies, near fault areas, or any other unstable locations.”

Locating a site on Oʻahu that meets this criterion is difficult in nature due to the limited availability of land on an island. The climate of West Oʻahu is characteristically arid (dry), with high temperatures and low rainfall (generally less than 1 inch per month), which satisfies the conditions set forth by federal researchers and regulators for responsible waste management. These are also the conditions that make the Project Site generally unsuitable for agricultural productivity. Table 10-3 provides a summary of the climate data collected at the PVT ISWMF weather station between 2006 to 2018. See Section 3.1, Climate and Rainfall, of the Final EIS for more information.

Table 10-3: PVT ISWMF Station Climate Data 2006-2018

The Proposed Action has been designed to meet state and local BMPs for siting, developing, and operating a C&D waste management facility. PVT’s mitigation measures have proven effective based on years of environmental, health, and safety reports at the existing PVT ISWMF. The Proposed Action would provide significant socioeconomic benefits to residents of West Oʻahu and essential services that extend to all communities across Oʻahu while abiding by all applicable environmental laws, regulations, and policies to protect the environment and health of the surrounding community.

23. In Table 8-2, Summary of Concerns and Mitigative Measures, the discussion regarding the loss of open space and agricultural land (Section 5.3 of the Final Environmental Impact Statement) should include a range of viable options for beneficial re-use of the land.
### Section 3.9, Closure and Post Closure

Closure and post-closure requirements will be determined by HDOH’s Solid Waste Rules and PVT’s Solid Waste Management Permit. PVT would continue to engage the community through a neighborhood board process at the time of closure to explore potential post-closure land use options. Future land use will prioritize public safety and implement safeguards to protect the integrity of the landfill cap and landfill monitoring systems. Viable options for re-use of land will be explored at the time of closure.

### Section 9.4, Summary of Preliminary Concerns and Mitigative Measures

Viable options for re-use of land are dependent on post-closure requirements of state law and PVT’s SWMP. Future uses will need to prioritize public safety and maintain safeguards to protect the integrity of the landfill cap and landfill monitoring systems. Any alternatives to open space would have to be explored at the time of closure.

24. **In Appendix O, it would be helpful to have a colored rendering of the 100-foot wide landscaping strip along the southern perimeter of the Project Site from a ground level viewpoint looking north to see the combination of fences and landscaping. Such a rendering would help to visualize how the proposed landscaping has a sufficient combination of density and variety of heights to effectively screen views from the adjoining properties. Much of the 100-foot wide landscape buffer is open space with no landscaping between the fences to help soften the visual impact of the 15- or 20-foot high dust screen upon the adjoining neighbors. In addition, please explain the purpose of the four-foot gap at the bottom of the fence.**

### Section 3.6.1, Grading and Landscaping

A 15 to 25 foot “grassed shield berm” would be planted prior to development of the first landfill cell to shield the debris disposal activities from the community’s view. In addition, a 100-foot landscaping strip with a variety of plant heights and densities would be planted along the southern boundary to provide a visual barrier and mitigate potential impacts to neighboring residents (Figure 3-1). The Proposed Action would include a dust screen outside of the landscape buffer and property line to provide an additional barrier to adjacent properties. The bottom of the dust screen would have a four-foot gap shielded by dense, low-lying shrubbery to accommodate the irrigation system and allow high winds to flow through the landscaping instead of pushing dust over the fence.

### Appendix O

See Appendix O
We thank you for your assistance on this matter. If you have any questions, please feel free to call me at 521-5361 or email me at akam@bchdesign.com.

Sincerely yours,
BELT COLLINS HAWAII LLC

Allen Kam
Director of Planning

AK:sa

c: Franz Kraintz, DPP

Enclosures:
1. Updated Special Use Permit Application for the PVT ISWMF Relocation Project (Volume I)
Ms. Kathy Sokugawa, Acting Director
Department of Planning & Permitting
650 South King Street, 7th Floor
Honolulu, HI 96813

Dear Ms. Sokugawa:

PVT Integrated Solid Waste Management Facility (ISWMF) Relocation Project
Tax Map Key: (1) 8-7-009:07
Waiʻanae, Oʻahu, Hawaiʻi

This letter is prepared in response to DPP’s request for additional information during review of the updated Special Use Permit (SUP) application that was filed on April 15, 2020. The following information will be attached as an addendum to the updated SUP application for the PVT ISWMF Relocation Project.

1. Volume of Proposed Landfill Cells

The following summarizes the gross and net disposal capacity for the Phase III landfill Cells 10 through 14. Gross capacity is the volume between the liner surface and the final grades after installation of the final cover. Net capacity is the actual space remaining for waste after accounting for volume consumed by leachate collection gravel, operations cover, and final cover. The tonnage capacity is based on an assumed average in-place waste density of 1,450 pounds per cubic yard.

<table>
<thead>
<tr>
<th>Cell</th>
<th>Gross (cubic yards)</th>
<th>Net (cubic yards)</th>
<th>Net (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>2,174,480</td>
<td>2,028,086</td>
<td>1,470,362</td>
</tr>
<tr>
<td>11</td>
<td>2,270,478</td>
<td>2,095,560</td>
<td>1,519,281</td>
</tr>
<tr>
<td>12</td>
<td>2,579,424</td>
<td>2,415,203</td>
<td>1,751,022</td>
</tr>
<tr>
<td>13</td>
<td>2,946,756</td>
<td>2,785,681</td>
<td>2,019,619</td>
</tr>
<tr>
<td>14</td>
<td>2,014,179</td>
<td>1,874,287</td>
<td>1,358,858</td>
</tr>
<tr>
<td>Total</td>
<td>11,985,317</td>
<td>11,198,817</td>
<td>8,119,142</td>
</tr>
</tbody>
</table>
2. **Weight Volume of Materials Processed at PVT**

   The weight volume of materials processed at PVT varies each day depending on market influences and current events. The nominal operating rate of the landfill is 1,200 tons per day. The Disposal rate shall not exceed 3,000 tons per day, except as may be designated during a state-declared emergency. Therefore, PVT finds it difficult to predict annual tons, especially during exposure to wide-scale events, such as a pandemic or a hurricane year.

3. **Proposed Site Plan – Lighting Plan**

   As noted in the Final Environmental Impact Statement (FEIS), normal operations of the PVT ISWMF will be limited to daytime hours. Night lighting is generally used to improve visibility on the security cameras in the event of theft or trespassing. The proposed lighting plan is consistent with the existing project site, which includes lights in the scale area, around the offices, and at the MRD area. The lights point down to the ground and away from neighbors. In the case of an emergency, like a hurricane or tsunami, PVT could operate at night if needed to support emergency response measures. Additional night lights would only be implemented as a safety measure and adhere to mitigation measures outlined in the FEIS and SUP application (i.e. shielded and facing towards the ground).

4. **Land Use Designation, Ownership, and Permitting History at Existing Project Site**

   According to LUC Docket No. A71-275, the Land Use Commission approved a petition by Oceanview Ventures to reclassify land at the existing project site (currently TMK: 8-7-009:025 and TMK: 8-7-021:026) from State Agriculture District to State Urban District for a proposed affordable housing complex. Subsequent records show that a Conditional Use Permit (85/CUP-6) was granted to Linton Company/Amazon Construction in 1985 to establish extractive and landfill operations at this site. This land was later purchased by PVT Land Company, Ltd. in 1989. PVT obtained all necessary land use permits for the existing ISWMF (i.e. CUP Major) prior to initiating its landfill and recycling operations. A Special Permit was/is not required for landfill activities in the Urban District. PVT had no involvement in the previous ownership and permitting history, and therefore PVT’s knowledge of prior use and/or intended use of this land is limited to public records.
5. **Acreage of Land Uses (Including Setbacks and Non-Functional Areas)**

<table>
<thead>
<tr>
<th>Land Use Area</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper &amp; Lower Facilities Areas</td>
<td>12</td>
</tr>
<tr>
<td>Stormwater Basin and Desilting Terraces Areas</td>
<td>11</td>
</tr>
<tr>
<td>Landfill Footprint</td>
<td>75</td>
</tr>
<tr>
<td>Roads and Drainage Ditches</td>
<td>20</td>
</tr>
<tr>
<td>Slopes and Idle Areas</td>
<td>61</td>
</tr>
<tr>
<td><strong>Total Property Acreage</strong></td>
<td><strong>179</strong></td>
</tr>
</tbody>
</table>

We thank you for your assistance on this matter. If you have any additional questions, please call me at 521-5361 or email me at akam@bchdesign.com.

Sincerely,

BELT COLLINS HAWAII LLC

Allen Kam
Director of Planning

AK:hp
cc: Franz Kraintz, DPP
ITEM #3

Figure 2-5 – Revised TMK
Figure 2-5: Land Use

Legend
- Project Site
- Streams
- PVT ISWMF
- Ahupua'a
- Tax Map Key (TMK) Parcels
- Vacant lots

Existing Land Use
- Agriculture - Rural Residential
- Business
- Federal / Military Residential

Planned Projects
1. Green Homes II Lualualei
2. Wai'anae Coast Emergency Access Route
3. Nanakuli Village Center
4. Leeward Bikeway
5. PVT ISWMF C&D Landfill Closure
6. Wai'anae Coast Parallel Road
7. Nanaikoa Village
8. M&A Organic Farms
9. Street Repairs and Maintenance
10. Farrington Highway Transportation Corridor Coordination
11. Cemetery Repair and Expansion
12. Identify and Plan Community Use Areas

*Planned project location and/or routes subject to change

Source: Environmental Impact Statement, PVT ISWMF Relocation

Figure 2-5

Land Use
PVT ISWMF Relocation
Nanakuli, Wai'anae District, Oahu, Hawaii

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, DFP 2017

Revised 06/19/20