Ualena Option Follow-Up Responses to FTA Comments

1. FTA would like to see more information on the anticipated impacts from the proposed alternative alignment. For example, under environmental justice, rather than say there are no identified EJ areas or communities of concern, we would like to see what information was used to make that determination. This information could be somewhere in the technical reports or draft environmental impact statement. If so, reference back to specific pages and methods in these reports. Please do this with each resource area topic.

Land Use –On Ualena Street three privately owned parcels will be fully-acquired and converted into transportation use. There will be no effect on land use, farmland or on Land Use Plans and Policies. This finding is consistent with text in the Draft EIS, Section 4.1 and Table 4-1. A field survey of the properties on Ualena Street and Waiwai Loop was completed on March 13 and 14 the property information is documented in the attached table that summarizes the types of properties and impacts to those properties along Ualena Street and Waiwai Loop.

Economic Activity –The one business relocation in this area is not expected to result in long-term adverse effects on property tax revenues. This is consistent with text in the Draft EIS, Section 4.2 and Table 4-5.

Acquisitions, Displacements and Relocations – The Aolele Street transition to Ualena Street require the acquisition of an additional 4 full parcels, and 9 partial acquisitions (portions of the parcel that would generally not affect the use). There is one partial take that includes one of the business displacements. There would be 5 additional businesses displaced with this Ualena to Aolele transition as compared to the Airport Alternative discussed in the Draft EIS. The information used to determine these changes in Acquisitions, Displacements and Relocations comes from ROW plan sheets RW033 and RW034, sheets 37 and 38 of 49, March 2010.

Community Services and Facilities – There is no impact to community facilities above what is discussed in the Draft EIS Section 4.4 (Keehi Lagoon Beach Park as part of the Section 4(f) Evaluation).

Neighborhoods – Constructing the Project on Ualena Street will not affect the character of the Airport neighborhood. This neighborhood comprises non-residential land uses including light industrial businesses, retail services and some airport related industry, see Section 4.5.2, page 4-4,1 from the Draft EIS. There are no schools, churches or houses adjacent to the Project on Ualena Street.

Environmental Justice –There are no identified EJ areas or communities of concern in the Airport neighborhood in the Ualena Street area. Section 4.6 of the Draft EIS explains the methodology of how the analysis identified potential effects on minority and low-income populations that reside within the study corridor. Included in this section is an Environmental Justice Population with the Study Corridor map, Figure 4-14, on page 4-49. It can be seen on this map that the Project alignment on Ualena Street is makai by a few blocks from the closest EJ area Oahu MPO EJ area 9.

Visual and Aesthetic Conditions – The Project alignment on Ualena Street will have a low to moderate visual effect. In the Draft EIS Section 4.7, page 4-73, Figure 4-25 Viewpoint 9 –Ke'ehi Lagoon Park, looking Koko Head shows a multi-lane asphalt roadway with an elevated structure to the left. This viewpoint did not show the Aolele Street to Ualena Street transition and therefore, a new simulation

was prepared (submitted to FTA March 31, 2010). This simulation is taken from within the Park looking mauka and Ewa. From this vantage point, the guideway and columns will be located along the mauka perimeter of the park. They will be visible elements in the background of mauka views from the park as is the H-1 viaduct today. It will contrast with the open character of park facilities as it traverses the perimeter of tennis courts near the mauka side and the open field. Further Koko Head it will run parallel with the H-1 Freeway viaduct where it will be less noticeable.

Air Quality –No air quality impacts are anticipated from the Project on Ualena Street. This statement is consistent with the Draft EIS Section 4.8, page 4-96, because no substantial air quality impacts are anticipated to result from operation of any of the project alternatives...any measures to reduce automobile travel would reduce air pollutant emissions.

Noise and Vibration –There are no noise or vibration sensitive receptors along the Ualena Street or Waiwai Loop and therefore, there are no noise and vibration impacts. This statement is consistent with the Draft EIS Section 4.9.1, page 4-98, Table 4-13 because the land use descriptions in this table are noise-sensitive. Ualena Street alternative does not have any noise sensitive land uses. In addition the Draft EIS Section 4.9.1, page 4-99, Table 4-14 lists the FTA ground-borne vibration impact criteria land use categories and Ualena Street alternative does not meet any of the land use categories.

Energy and Electric and Magnetic Fields – There are no additional Energy consumption needs with the Project on the Ualena Street alignment. This statement is consistent with the Draft EIS Section 4.10.1, page 4-107. There are no EMF-sensitive receptors on Ualena Street as the types of businesses do not use sensitive electronic equipment. This statement is consistent with the Draft EIS Section 4.10.2, page 4-108, Table 4-17 because there are no potential EMF receptors within 200 feet of the Project that would be impacted by the Project.

Hazardous Waste and Materials – The alignment on Ualena Street option requires the acquisition of a parcel with an operating gasoline station at the corner of Lagoon Drive and Waiwai Loop. A phase 1 assessment will be completed. This statement and approach is consistent with the Draft EIS Section 4.11.2, page 4-111, under the heading Petroleum Contaminants.

Ecosystems – There are no natural ecosystems on Ualena Street. This statement is consistent with the Draft EIS Section 4.12.2, Affected Environment, which begins on page 4-119.

Water – The Project on Ualena Street does not impact waters of the U.S. in the area and does not change the amount of temporary or permanent fill below the ordinary high water mark. This statement is consistent with the Draft EIS Section 4.13.2, see Table 4-25, Table 4.26, Table 4.27 and Table 4-28, which begin on page 4-129 and Section 4.14 of the Final EIS (with input from the US Army Corps of Engineers).

If the alignment remained on Aolele Street, the runway approach lights in the lagoon would need to be reconstructed to meet FAA lighting standards. This would require additional fill in waters of the U.S. Work within the lagoon would require additional study to determine potential impacts to turtle and fish habitat in the lagoon. These additional impacts to waters of the U.S. would not be consistent with the Corps of Engineers guidance to identify the least environmentally practicable alternative.

Street Trees – The Project alignment on Ualena Street has no effect on the number of street trees affected by the project. This statement is consistent with the Draft EIS Section 4.13.2, specifically Figure 4-48 which is a map that locates all the excellent and notable trees. All other trees removed by the

Project will be transplanted to another location or when that is not possible new trees will be planted in their place. On Ualena Street no trees will be removed for the Project as trees do not exist at this location.

Archaeological, Cultural, and Historic Resources –The Project on Ualena Street does not have an effect on historic properties. There are no additional properties eligible for the National Register of Historic Places along Ualena Street and Waiwai loop (documented on eligibility determination forms).

Indirect Effects – The Project on Ualena Street does not have an effect on the Indirect Effect on Growth, Station Area Development (since there is not much TOD potential at Lagoon Drive Station).

Cumulative Effects –The Project alignment on Ualena Street causes no change to the overall cumulative effects of the project as resource-specific Direct Effects, the Cumulative Effects of our Project plus the other Reasonably Foreseeable Projects are not affected.

Construction Effects – The Ualena Street option affects access and truck movements. The design of the guideway is being developed to reduce those effects as it is in other locations where these effects are anticipated.

2. Describe how, in developing the avoidance alternative, efforts were made to minimize impacts on property acquisitions, privately owned businesses, historic properties, and Keehi Lagoon Beach Park. We also note that the DEIS did not document the 4(f) effects at Keehi Lagoon Park as de minimis. FTA has yet to make a section 4(f) finding and we will need additional information to assist us in our finding.

Ke`ehi Lagoon Beach Park (De minimis Impact)
Description and Significance of Property
Ke`ehi Lagoon Beach Park is an approximately 70-acre community park at Lagoon Drive and Aolele Street (Figures 5-7 and 5-8). It is bounded on the makai side by Ke`ehi Lagoon and on the mauka side by mixed industrial developments and Nimitz Highway, which at that point is on a viaduct 10 feet above the park just outside its mauka border. The park is Koko Head of Lagoon Drive and `Ewa of the Disabled American Veterans Ke'ehi Lagoon Memorial. It is operated and maintained by the DPR. There are two parking areas—the smaller one (53 spaces) is near the lagoon, and the larger one (421 spaces) is adjacent to the park's access road near the mauka border of the park. The recreational use of the park is primarily for daytime activity, with limited use of four lighted tennis courts in the evening.

Recreational amenities include 12 tennis courts, 1 baseball diamond, an open field, a paved walking path, picnic areas, a pavilion, and access to the water. Cultural events are held in the picnic area and the field. The baseball diamond is makai of the Project and mauka of Ke'ehi Lagoon. Eight of the tennis courts are near Lagoon Drive and the entrance of the park, while the other four mauka courts are near Nimitz Highway. The four mauka courts near Nimitz Highway are the only courts with lighting to facilitate nighttime use. The open field is makai of the access road. Primarily local residents use the field for cricket, soccer, and softball practice and games, as well as other team and individual sports. Canoe clubs engage in active practice sessions and events at the park, including the State Canoe Regatta. The water is calm and the current is gentle, but it is not a swimming beach; the beach area is primarily used for boating or outrigger canoes.

Section 4(f) Evaluation

All of the recreational features, attributes, and activities of the park, other than the four lighted mauka tennis courts, are located makai and away from the Project. The Project will traverse the park near its mauka property line, generally following the alignment of the park's access road until it leaves the park, where it continues on an elevated guideway within the right-of-way of Nimitz Highway. In the park, the Project guideway will be approximately 30 feet wide, between 30 to 35 feet high, and will be elevated above approximately 1 acre of land within the park, primarily in the parking lot and the park access road. Within the park, the guideway will be constructed on approximately 10 columns that will be about 6 feet in diameter, which will result in the use of approximately 280 square feet of park land for the placement of columns.

Lagoon Drive Station will be located outside the park, approximately 200 feet `Ewa and one block mauka of the park entrance on Lagoon Drive and Ualena Street. The Project will provide transportation benefits to park users since the station will be located within walking distance. Hence, the Project will offer another transportation option for recreation users and spectators of events to access the park.

Measures to Minimize Harm

Measures to minimize harm were considered in the Project's design in coordination with the DPR. To minimize project use of the park, the project guideway was designed as close to the mauka boundary as possible, consistent with operational and engineering constraints, and to be away from the recreational activities and facilities, including the baseball diamond, open field, paved walking path, picnic areas, pavilion, and access to the water where canoeing events occur and most of the tennis courts are located. The views of the water by park users will not change with the Project. Looking mauka, near the water, the Project will be slightly more visible than the H-1 Freeway in the background and will not noticeably change the character of the landscape (Figure 4-27 in Chapter 4 of this Final EIS).

The Project guideway was designed with the minimal curve radius needed to maintain efficient system operation to serve the Lagoon Drive Station, while minimizing impacts to the park. The support columns have been designed to use as little park land as practicable, be located in areas away from recreational activities, and accommodate access to the park by recreational users. The alignment is designed to be elevated above the parking area, and there will be no net loss of parking spaces.

None of the 12 tennis courts will be permanently used by the Project. The guideway will cross above the park, just makai of the four lighted mauka tennis courts near Nimitz Highway, as shown in Figure 5-8. Given their proximity to the guideway, these tennis courts will be closed during construction and reopened as unlighted tennis courts when this portion of the Project is completed. DPR's desire is to have lighted tennis courts available for evening use. To accomplish this and mitigate temporary impacts to these lighted mauka tennis courts, RTD will coordinate with DPR during Final Design to provide lighting and associated resurfacing for four of the tennis courts near the park entrance prior to construction so that nighttime tennis court use will be maintained during construction and after project completion. The lighting will be designed and constructed in accordance with regulatory requirements.

During Final Design, RTD will coordinate with DPR to restore the area around the four mauka tennis courts to provide recreational benefit to park users including, but not limited to, restoring the four mauka tennis courts to their original condition for daytime use, planting grass, and installing landscaping and picnic tables.

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RTD will coordinate with DPR to develop a planting plan for trees that will be removed during construction and a landscaping plan within the park. RTD will replant new trees in accordance with the City's requirements for street tree planting. DPR will maintain new landscaping as part of their regular park operation and maintenance.

Access to the park will be maintained during construction in accordance with project maintenance of traffic and safety plans. During construction, there will be a temporary loss of approximately 10 percent of the parking spaces. RTD will coordinate with DPR to identify and implement alternate access to the park to mitigate for parking that will be temporarily closed during construction. For major events held during construction of the Project, park users may park on streets near the park. Based on park user demand during major events, RTD will temporarily provide additional bus service and/or shuttle bus service to the park from existing City transit centers or parking lots. After construction, the parking area will be restored and there will be no net loss of parking.

Agency Coordination and Consultation

DPR officials who operate and maintain Ke'ehi Lagoon Beach Park have been involved in the project planning and design process within the boundaries of the park. Meetings were held with DPR in May 2008, September 2009, and December 2009 to discuss use of the park to ensure that the Project will result in a net benefit with regard to recreational use. DPR provided a letter to RTD on September 25, 2008, stating that the Project's use of the park is considered a *de minimis* impact (Appendix F). With the measures to minimize harm and mitigation described above, DPR has reiterated its concurrence at its meeting with RTD in December 2009 that the Project's use of the park would have a *de minimis* impact on the park since it would not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f). Coordination will continue during Final Design and construction.

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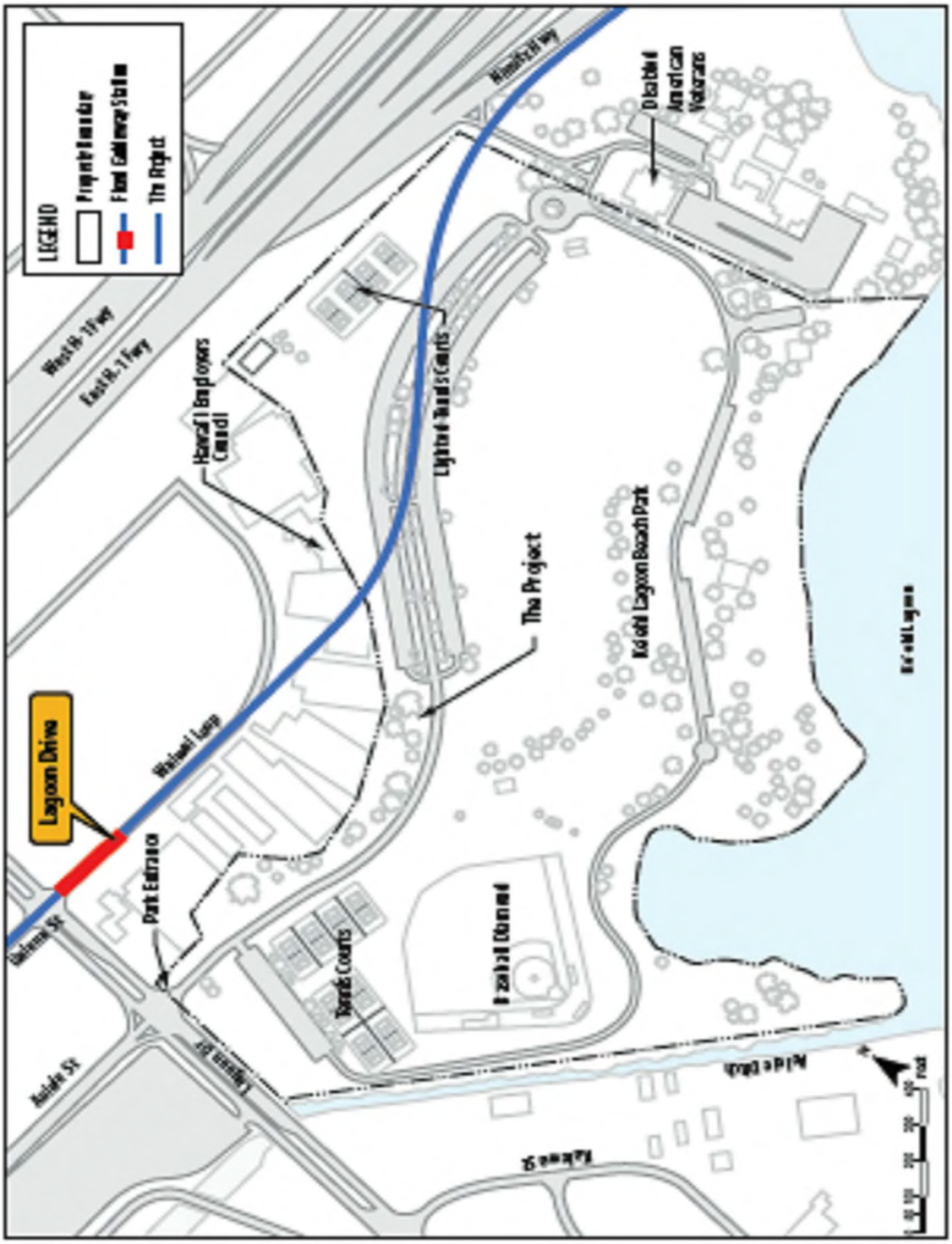

Figure 5-8 Ke'ehi Lagoon Beach Park—Project and Features

3. For historic resources, the City provided new information on properties along Ualena Street that were not previously included in the project's Area of Potential Effect. However, there is no discussion or information provided about the properties that would now be demolished as part of the proposed alternative alignment. Again, this information may be in the technical reports and draft environmental document. Direct FTA to specific reports and page numbers to support the statement that there would be no historic properties affected. This information will eventually need to be packaged in a way to share with the SHPD and other consulting parties.

The alignment shift from Aolele to Ualena would not adversely affect any additional historic resources. As shown on the map of the adjusted APE and resources that was provided last week, the Ualena alignment would not require property from any Historic Resources. The Historic Resources Technical Report developed to support the Draft EIS details the eligibility of resources located between Aolele and Ualena Streets. As detailed in that report and summarized in Table 4-32 of the Draft EIS, only the Hawaii Employers Council Building was determined National Register eligible.

The single resource in the vicinity (Hawaii Employers Council Building) that was determined to be adversely affected because the guideway would be visible from the resource in the case of the Aolele Alignment would continue to be affected by the Ualena Alignment for the same reason.

The City has drafted a letter for FTA to send to SHPD requesting concurrence with the determination of no additional eligible properties and no change to the finding of effect.

4. To support the administrative record, more information will be needed on the potential effects from City's preferred alignment presented in the draft environmental impact statement. We anticipate that HDOT and the Federal Aviation Administration will provide information on the impacts related to the Aolele alignment. Please provide your analysis of the potential effects at HNL.

Effects to Airport Facilities

The elevated Project guideway alignment through the airport was developed in consideration of the Honolulu International Airport Draft Master Plan (2009) and the Airport Layout Plan for Honolulu International Airport (1995) to minimize effects on existing and future airport facilities and aviation activities. Support columns will be located to maintain normal roadway movements and minimize effects to parking, car rental operations, lei stands, freight movement, and other business interests near the airport.

Specifically, the guideway alignment is being designed to minimize the effect on current and future operations at the airport. The guideway alignment has been located to avoid the new Mauka Terminal and airplane ramp planned for where the existing commuter terminal parking lot is located. A total of approximately two acres of airport land will still be needed to accommodate the placement of elevated guideway support columns and for a passenger station on airport property. A station entrance building would be constructed near the overseas parking garage on what is now a surface economy parking lot just 'Ewa of the parking garage exit lanes, fronting Alaonaona Street, near the existing lei stands on Aolele Street. Approximately 110 of the 175 spaces will be permanently closed in this lot to accommodate the station. The Honolulu International Airport Station will serve airline passengers and

employees of the airport and other businesses. This station will be connected to the Overseas and Interisland Terminals with ground-level pedestrian walkways. Access to local buses and TheHandi-Van will be provided at the station's entrance.

Based on discussions with both HDOT-Airports Division and the United States Postal Service (USPS), DTS has adjusted the alignment to minimize overall impact to both facilities. Other design measures have been taken to minimize impact to Airport facilities. DTS will continue to coordinate with HDOT Airports Division and USPS on final alignment and design as the Project moves forward.

Continuing Koko Head, the alignment exits the airport on Aolele Street and then transitions to Ualena Street at an extension of Ohohia Street, which is about 2,000 feet 'Ewa of the Lagoon Drive Station. The alignment traverses airport property but does not preclude future commercial uses.

The guideway will pass near the end of runways 22R/4L and 22L/4R. Due to the proximity of the guideway to the runways, FAA Form 7460-1, Notice of Proposed Construction or Alteration will need to be submitted to the Federal Aviation Administration about two years prior to construction. Preparation of the necessary submittal materials has begun with assistance from HDOT-Airports staff. Honolulu International Airport Operations has evaluated the project impact and verified that it does not affect airport operations.

The Lagoon Drive Station has been located at the intersection of Waiwai Loop and Lagoon Drive. It will serve nearby businesses and employees in the area, including Māpunapuna and Salt Lake, and provide access to Ke'ehi Lagoon Park. Local buses and TheHandi-Van will provide service to the station.

The Federal Aviation Administration (FAA) has specific horizontal and vertical clearance requirements for the runways at Honolulu International Airport. Due to the proximity of the Project to runways 22R/4L and 22L/4R, the following clearance requirements were evaluated for the elevated project guideway, including the Lagoon Drive Station: building restriction line, runway protection zone, approach surface, and the transitional surface. The transition to Ualena Street was made to avoid the central portion of the runway protection zone. The Project will pass through a small portion of the less-restrictive controlled activity area. The FAA has indicated this is acceptable. The airspace evaluation confirmed that the Project is consistent with requirements of the building restriction line, approach surface and transitional surface regulations. Results of the evaluation are shown in Appendix K. In addition, the Airport Layout Plan was updated in cooperation with HDOT and FAA to show the Project alignment and stations, and a copy is included in Appendix K. The City will coordinate with FAA to obtain the necessary permits and approvals related to construction at or near the airport.

Agency Coordination

The City has been coordinating with FAA, HDOT Airport Division, and FTA to address the effects of the alignment on the airport, including future expansion as proposed in the Airport Master Plan and FAA requirements. As a result of coordination, the decision was made to transition the alignment from Aolele Street to Ualena Street to avoid the runway protection zone and any impacts that would be created by mitigations such as relocating the runway to move the runway protection zone away from the Project if it were to remain on Aolele Street.

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Construction-related Effects on Airport Facilities

Construction of the Project will have temporary effects on airport facilities and notification of any short-term obstructions (e.g., cranes and gantries) will be made to the appropriate parties. Temporary lane closures on Ualena Street and Waiwai Loop could cause short-term delays to trucking and deliveries at airport-related facilities. The economy surface parking lot will be closed during construction of the Honolulu International Airport station, and other nearby roadways could be temporarily affected when support columns and guideway sections are transported and installed. Additionally, lei stand parking may be temporarily relocated during construction.

(There could be additional information if we receive a report from the FAA.)

5. Resulting from the need to shift the runway, there was a question about intrusion into the lagoon to move or "bridge from existing foundations" the navigation lights which could result in ecological impacts and a Section 7 Endangered Species Act review. Please discuss and reference documentation on the potential impacts to threatened or endangered species and coastal wetlands. Include review steps by resource agencies.

If the alignment remained on Aolele Street, requiring the relocation of Runway 4R/22L, the runway lights in the lagoon would need to be reconstructed to meet FAA runway approach lighting standards. This would require additional fill in waters of the U.S. Work within the lagoon would require additional study to determine potential impacts to any possible endangered or threatened species habitats in the lagoon. The additional impacts to waters of the U.S. would not be consistent with the Corps of Engineers guidance to identify the least environmentally damaging practicable alternative.

The Airport Alternative was identified as the Preferred Alternative. Of the three fixed guideway alternatives addressed in the Draft EIS, without the added runway relocation effects, the Airport Alternative encroaches the least into waters of the U.S. during both construction and operation. Consequently, the Airport Alternative is the Least Environmentally Damaging Practicable Alternative (LEDPA) under the Section 404(b) (1) analysis (Clean Water Act). Any effect on the lagoon as a result of a runway relocation would increase the effect on waters and could change this finding.

6. The Aolele to Ualena alignment does not fully avoid the RPZ. Please provide information on this and detail changes at HNL that may be required to receive FAA approval.

Since the question of the RPZ was identified in June 2009, the City worked with HDOT-Airports and the FAA to find the best way to avoid impacts to the RPZ. In the case of Runway 4L/22R, there was recognition that its use by smaller, primarily general aviation Category A and B aircraft justified a 1,000 foot RPZ. The options considered for Runway 4R/22L varied from modifying the operational practices on the mauka end of the runway to moving the runway to developing an avoidance alternative. The avoidance option proved to be the preferred course of action, but in all cases, the FAA insisted that the Central Portion of the RPZ (the extended Obstacle Free Zone) must remain unaffected by the Project. That was the basis for the City's efforts to clear the RPZ. At the same time, the FAA, which establishes the RPZ requirements, was willing to allow limited use of the Controlled Activity Areas (CAA) of the RPZ (the outside edges) as long as no "places of public assembly," such as a station, are located within the RPZ. The Ualena guideway alignment uses only a small corner of the outer edge of the RPZ in an area still occupied by other buildings. The FAA also gave consideration to how the runway is used in practice.

No large aircraft (Categories C and D) ever take-off toward the mountains on Runway 4R and very seldom land on 22L. The smaller aircraft that do use 4R always turn right, away from the affected portion of the CAA, once airborne to avoid the mountains. The FAA has attested to their acceptance of the use of the CAA at meetings on this subject and has been consistent in its position on the issue.

7. Detail mitigations that are required by HDOT for impacts to HNL.

The following mitigation measures have been requested by HDOT, or are in response to concerns raised by HDOT in their review of the DEIS and Admin FEIS, for impacts to Honolulu International Airport:

- In response to concerns regarding impacts to airport modernization projects, the guideway alignment is being designed to minimize the effect on current and future operations at the airport. The guideway alignment has been modified since the Draft EIS to avoid the new Mauka Terminal and airplane tarmac planned for where the existing commuter terminal parking lot is located. In this location, the guideway will enter the airport from above the H-1 Freeway near the Airport Interisland Terminal.
- The City will continue work with the airport to minimize disruption to travelers and businesses during construction of the guideway and stations. To the extent possible, all roadways will be kept open and access will be maintained. The economy parking lot will be completely closed during construction. Where existing parking is disrupted by construction, signs will be posted directing people to nearby locations with available parking. If the lei stand parking area needs to be temporarily relocated, signs will direct customers to the temporary parking area and from there to the lei stands.
- Near the overseas parking garage, a station entrance building would be constructed on what is now a surface parking lot just Ewa of the parking garage exit lanes, fronting Alaonaona Street. Pedestrian routes will connect the station to the Interisland and Overseas Terminals. Enhanced signage and wayfinding techniques will enable visitors to easily find the station from the airport terminals.
- HDOT recommended allowing baggage on rail vehicles; Chapter 2 of the Administrative Final EIS specifies that luggage will be allowed on trains.
- FAA Form 7460-1 will be submitted to FAA at the appropriate time, which is about 2 years prior to construction. This has been included in the list of permits and approvals in the Final EIS.
- DTS will continue to coordinate with HDOT Airports Division on the final alignment, location of support columns, and connection between the rail station and airport terminals.

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