

APPENDIX A

DILLINGHAM AND KAKA‘AKO STATION GROUP DESIGN CONSULTANT INDICATIVE LISTING OF TASKS RELATED TO THE SCOPE OF WORK

01 Dillingham and Kaka‘ako Station Group (DKSG) Description

The Dillingham and Kaka‘ako Station Group is located in the 4.1 mile City Center section of the H RTP alignment and consists of the following eight (8) stations: Kalihi Station, Kapalama Station, Iwilei Station, Chinatown Station, the Downtown Station, Civic Center Station, Kaka‘ako Station, and Ala Moana Station. The scope of work under this solicitation does not include the design work of the guideway structure and bus stops at these stations.

A general description of the stations is as follows:

Kalihi Station:

The elevated station with two hundred forty (240) feet long side platforms is located in the median of Dillingham Boulevard and extends over the Mokauea Street intersection. Station entrance buildings are located in the corner parcels on both the mauka and makai sides of Dillingham Boulevard. There are two (2) elevated pedestrian walkways from each entrance building that provide access to the station platforms for the respective eastbound and westbound trains. There is no concourse level connecting the two (2) platforms. There are existing on-street bus stops on Dillingham Boulevard in either direction near station entrances. This scope of work does not include design work for bus stops.

The design of the station shall include the buildings’ fare gate modules (including conduit for power and data) for future installation of Ticket Vending Machines (TVMs) and fare gates. Procurement and installation of TVMs and fare gates are not included in this contract. The entry buildings shall include the vertical circulation elements (stairs and elevators, but not escalators), janitor storage room, electrical closet, trash room, and elevator machine room. The entry building on the mauka side of the guideway shall include a restroom. Pedestrian bridges connect the entry buildings directly to the station platforms. Canopies are to be included to shelter a part of each platform, the entry buildings, and the pedestrian bridges.

The makai entry building parcel also contains an ancillary structure with driveway access from Mokauea Street. The ancillary structure is a single-story building housing the Train Control and Communications Room (TCCR)/Uninterruptible Power Supply (UPS), electrical room and mechanical room. The transformer that provides power to the station is located between the ancillary structure and the makai station entry building.

Kapalama Station:

The elevated station with two hundred forty (240) feet long side platforms is located in the median of Dillingham Boulevard just Koko Head of Kokea Street. Station entrance buildings are located on both the

mauka and makai sides of Dillingham Boulevard. An elevated pedestrian walkway from each building provides access to the station platforms for the respective eastbound and westbound trains. There is no concourse level connecting the two (2) platforms. Passengers will need to use the cross walks on Dillingham Boulevard to gain access to the station platform on the opposite side of the street. There are existing on-street bus stops on Dillingham Boulevard in either direction near the station entrances. This scope of work does not include design work for bus stops.

The design of the station shall include the buildings' fare gate modules (including conduit for power and data) for future installation of TVMs and fare gates. Procurement and installation of TVMs and fare gates are not included in this contract. The entry buildings shall contain the vertical circulation elements (stairs and elevators but not escalators), janitor storage room, electrical closet, trash room, and elevator machine room. The entry building on the mauka side of the guideway shall include a restroom. Pedestrian bridges connect the entry buildings directly to the station platforms. Canopies are to be provided to shelter a part of each platform, the entry buildings, and the vertical circulation elements. Emergency egress stairs shall be provided near the Koko Head end of both platforms and offer ground-level exits to Dillingham Boulevard.

The mauka entry building parcel contains an ancillary structure with driveway access from Kokea Street. The ancillary structure is a single story building housing the TCCR/ UPS, electrical room, and mechanical room. The transformer that provides power to the Station is located on the mauka side of the ancillary structure.

Iwilei Station:

The elevated station with two hundred forty (240) feetlong side platforms is located on the makai corner of Dillingham Boulevard and Ka'aahi Street. A single station entrance structure is located directly under the guideway approximately across Ka'amalu Place with the entrance facing Dillingham Boulevard. A short-term kiss-and-ride parking lot is provided makai of the station. There are existing on-street bus stops on Dillingham Boulevard in either direction near the station entrance. This scope of work does not include design work for bus stops.

A concourse connects the ground-level to the platforms, however, movement from platform to platform can only be accomplished at the ground level. Two (2) sets of stairs and an elevator provide access from the concourse to each platform.

The design of the station shall include the building fare gate module (including conduit for power and data) for future installation of TVMs and fare gates. Procurement and installation of TVMs and fare gates are not included in this contract. The entry building shall contain vertical circulation elements (stairs and elevators but not escalators), janitor storage room, restroom, and elevator equipment room. Canopies are to be provided to shelter a part of each platform, the vertical circulation elements, and the entrance building.

An ancillary building is located on the makai side of the station entrance building directly under the guideway and contains the TCCR/UPS, electrical room, mechanical room, and trash room. The transformer that provides power to the Station is located adjacent to the kiss-and-ride parking lot. Access to the transformer site is provided from the kiss-and-ride parking lot.

Chinatown Station:

This elevated station with two hundred forty (240) feet long side platforms is located in the median of Nimitz Highway just 'Ewa of Kekaulike Street. A single station entrance structure is located on the mauka-Ewa corner of the Nimitz Highway/Kekaulike Street intersection. The entrance building connects to both station platforms via a concourse-level pedestrian bridge. The westbound platform may also be accessed through a platform-level pedestrian bridge from the entrance building. An elevator is provided between the eastbound platform and concourse. Canopies are provided to shelter a part of each platform, the entry building, and the vertical circulation elements. There are no existing bus stops on Nimitz Highway in either direction near the station entrance.

The design of the station shall include the building fare gate module (including conduit for power and data) for future installation of TVMs and fare gates. Procurement and installation of TVMs and fare gates are not included in this contract. The entry building shall contain vertical circulation elements (stairs and elevators, but not escalators), janitor room, trash room, restroom, and elevator machine room.

A single-story ancillary building housing the TCCR/ UPS, electrical room, and mechanical room is attached to the mauka side of the entrance building. A service driveway from Kekaulike Street and parking apron is provided to serve the entrance and ancillary buildings.

Downtown Station:

The elevated station and two hundred forty (240) feet-long side platforms are located in the median of Nimitz Highway between Bishop and Alakea Streets. Station entrance buildings are located on both the mauka and makai sides of Nimitz Highway. Platform- and concourse-level elevated pedestrian walkways provide access from each entrance building to the station platforms as well as pedestrian access from one side of the highway to the other, respectively. There are existing bus stops on Alakea and Bishop Streets near the mauka entrance. This scope of work does not include design work for bus stops.

The design of the entry buildings shall contain the vertical circulation elements (stairs, elevators and escalators), janitor storage room, electrical closet, trash room, and elevator machine room. The entry building on the mauka side of the guideway shall include a restroom located at the platform level. Canopies are to be provided to shelter a part of each platform, the pedestrian bridges, and the entry buildings.

The design of the station shall include the buildings' fare gate modules (including conduit for power and data) for future installation of TVMs and fare gates. The fare gates are located on the concourse and platform level as opposed to the ground level at most stations. Procurement and installation of TVMs and fare gates are not included in this contract.

The Train Control and Communications Room (TCCR)/Uninterruptible Power Supply (UPS), electrical room and mechanical room are located within the makai entrance building. A service driveway and parking area is also provided at the makai entrance. The transformer that provides power to the station is located on the south side of the makai entrance building.

Civic Center Station:

This elevated station with two hundred forty (240) feet long side platforms is located in the middle of Halekauwila Street between South and Keawe Streets. Because Halekauwila Street has only two through-lanes, the elevated guideway will be supported by concrete straddle bents with piers on each side of the roadway rather than in the median. A single station entrance building is located on the makai side of Halekauwila Street with the main entrance to the building facing South Street. An elevated pedestrian walkway from the entry building will provide access to the station platforms at the concourse level for the respective eastbound and westbound trains. Canopies are provided to shelter a part of each platform, the pedestrian bridges, and the entry buildings. Bus stops are located on Halekauwila Street and South Street near the station entrances. This scope of work does not include design work for bus stops.

The design of the station shall include the building fare gate module (including conduit for power and data) for future installation of TVMs and fare gates. Procurement and installation of TVMs and fare gates are not included in this contract. The entry building contains the vertical circulation elements (stairs, elevator, and an escalator) for access to the pedestrian bridge, janitor storage room, trash room, restroom, and elevator equipment room. Two sets of stairs and an elevator are supported by the platform and concourse structures to provide access to the westbound platform. Two sets of stairs, supported by the platform and concourse structures, and the elevator in the entry building provide access to the eastbound platform.

There are two ancillary facilities adjacent to the station entrance building. One is a single story building housing the TCCR/UPS, electrical room and mechanical room. The other is Systems Site #22; a Traction Power Substation (TPSS), switchgear and HECO station transformer. Both facilities are located Koko Head of the station entrance building with Systems Site #22 located farthest east. The design scope of work shall include site work and infrastructure for the entry building and ancillary facilities including a driveway and paved parking area for maintenance vehicles. While the TPSS, transformer, and switchgear will be provided by others, the station design shall include the interface requirements to be located within a screened or walled enclosure.

Kaka'ako Station:

The Kaka'ako Station is elevated with two hundred forty (240) feet long side platforms located on the Koko Head side of Ward Avenue across Halekauwila Street. A single station entrance building is located below the guideway and platforms and provides direct access to either platform. A landscaped plaza and main entry to the station building is located on the Ewa side of the building. Because the station is not above a roadway, access to the platforms is accomplished without a concourse. The design of the station shall include the building fare gate module (including conduit for power and data) for future installation of TVMs and fare gates. Procurement and installation of TVMs and fare gates are not included in this contract. The entry building design shall contain the vertical circulation elements (stairs and elevators, but not escalators), janitor storage room, staff room, trash room, restroom, and elevator equipment room. Canopies are to be provided to shelter a part of each platform and the entry building.

The TCCR/ UPS, electrical room and mechanical room are housed in a separate single story building located on the Koko Head side of the entrance building. The transformer that provides power to the station is located on the Koko Head side of the ancillary structure. There are existing on-street bus stops on Ward Avenue in both directions near the station entrance. This scope of work does not include design work for bus stops.

Ala Moana Station:

This station is elevated with a two hundred forty (240) feet long center platform supported by straddle bents spanning Kona Street on the mauka side of Ala Moana Center. A station entry building is located on the mauka side of Kona Street, on the Koko Head side of Konaiki Street, and contains vertical circulation elements (stairs, elevator, and escalator), a fare gate module, an electrical closet and elevator machine room. The entrance building serves to connect passengers to the concourse from which access to the platform is provided.

An ancillary building is also located on the mauka side of Kona Street. It is located on the Koko Head side of the station entrance building and houses the TCCR/ UPS, electrical room, mechanical room, janitor room, and trash room. A service driveway and parking area adjacent to the ancillary building is accessed from Kona Street. The transformer that provides power to the station is located next to the service driveway. Existing bus stops are located along both sides of Kona Street. This scope of work does not include design work for the service driveway, parking area or bus stops.

At ground level along Kona Street on the makai side of the station are many vertical circulation element access points to the concourse (two (2) stairs, an elevator, two (2) escalators, and provision for a future escalator).

The station's concourse level contains vertical circulation elements (elevator, escalators, and stairs) to access the platform, a staff room, janitor room, restroom, and elevator equipment room. Fare gates are also located at the concourse level to account for the many access points to the station. The fare gate modules shall contain provisions (including conduit for power and data) for future installation of TVMs and fare gates. A fire protection screen is also provided ten (10) feet beyond the top and bottom landing of the Koko Head escalators. Access to and from the second level of the shopping center parking lot is also provided at the concourse. Fire protection screen glass is provided along the vertical circulation elements' boundary with the parking garage. Canopies are provided to shelter a part of the platform and the vertical circulation elements.

02 Phased Design and Duration of the Contract

The work in this contract is phased to allow development of the design to occur in accordance with Federal Transit administration (FTA) procedural requirements. The design phases will be initiated by a Notice-To-Proceed (NTP) issued by HART. A total of six (6) are anticipated:

NTP #1a – Workshop, Design Schedule and Schedule of Milestones (SM)

The work to be performed under this NTP will consist of the following activities:

- Provide HART within ten (10) working days of receipt of NTP #1a with a DRAFT Detailed Design Schedule and SM that includes all work for which the CONSULTANT expects to be compensated and a FINAL SM to HART by the conclusion of NTP#1a. The intent of the DRAFT Baseline Design Schedule and SM is to establish the logic of the schedule and milestones for HART's review and concurrence prior to establishing the fully loaded SM. The SM is to be organized by NTP and will serve as the basis for payment. The CONSULTANT's Baseline

Design Schedule must conform to the SM and include all review times required by HART. The CONSULTANT shall update the Baseline Design Schedule on a monthly basis. HART and the CONSULTANT shall reach agreement on the proposed Baseline Design Schedule and SM at which time HART will approve the SM and issue NTP #1b. The SM format shall follow the sample SM provided to the CONSULTANT.

- A three (3)-day Design Workshop is included in this phase, as well as the initiation of the Right-of-Entry permitting request process for field investigations such as geotechnical work and topographic surveying.
- The right-of-entry permitting request process for field investigations will be initiated during this phase. The right-of-entry request format shall be done by submitting CONSULTANT information as directed by HART.
- Duration of NTP #1a is forty (40) days.
- HART review: ten (10) days.

NTP #1b – Revisions to Preliminary Engineering (PE)

The work to be performed under this NTP will consist of the following activities:

- Commencing with agreement on NTP #1a, CONSULTANT will revise the current drawings to a Preliminary Engineering level.
- Periodic Design review meetings, led by the Project/Design Manager, will be held for all eight (8) stations.
- Presentation materials, including plans, sections, perspective renderings, charts, PowerPoint slides and other appropriate information, will be prepared for a community presentation. The materials will include displays of the layout and features of the stations.
- Perform cost estimation to ensure the design is within budget.
- Ensure compliance of PE design with FEIS/ROD, applicable codes, regulations and design standards.
- Duration for DKSG PE design: ninety (90) days.
- HART review: thirty (30) days.

NTP #2 –Interim Design (ID)

The work to be performed under this NTP will consist of the following activities:

- Incorporation of HART comments on PE: Not to exceed thirty (30) days.
- Commence ID drawings, detailed working drawings and specifications.
- Periodic Design review meetings, led by the Project/Design Manager, will be held for all four (4) stations.
- Incorporate Project standard details provided by HART and develop Project specific details as required; provide consistent material selection that considers pedestrian safety, durability, maintenance, sustainability, and aesthetics relating to the transit environment.
- Perform cost analysis to ensure that the design is within budget.
- Duration for DKSG Interim Design: one hundred twenty (120) days.
- HART review: thirty (30) days.

NTP #3 – Final Design (FD)

The work to be performed under this NTP will consist of the following activities:

- Incorporation of HART Comments on ID: Not to exceed thirty (30) days.
- Commence FD and preparation of construction contract documents.
- Provide detailed construction contract documents to permit accurate cost estimate and expedite construction activities.
- Periodic Design review meetings, led by the Project/Design Manager, will be held for all four (4) stations.
- The duration of NTP #3, prior to submittal of draft camera-ready final documents to HART assumes the following:
 - Final Design: sixty (60) days.
 - Thirty (30) days for HART review.
 - Thirty (30) days for the CONSULTANT to incorporate review comments and prepare final advertisement-ready (“ad-ready”) construction documents suitable for obtaining building permit(s).
- Prepare presentation materials, including a scale model of one of the stations selected by HART, plans, rendering elevations, PowerPoint slides, and other appropriate information indicating the features of the FD for a community presentation.

NTP #4 – Design Support During Bidding

- Assist HART in the solicitation of the construction contract including provisions of technical design support for questions posed by potential bidders.
- Duration is based on HART’s advertisement and bidding schedule.
- Fees and expenses are to be included in the fee proposal.

NTP #5 – Design Support During Construction

- Assist HART in resolving design issues during construction.
- Duration is based on HART’s approved construction schedule.
- Fees and expenses are to be included in the fee proposal.

The FD will be based upon, but not limited to, the existing drawings, Preliminary Engineering design documents, the Signage & Wayfinding Systems Manual, HART’s Standard and Directive Drawings, Compendium of Design Criteria, Standard Special Provisions, Standard Specifications, and Design Language Pattern Book, and the Value Engineering study recommendations. All plans will be done in accordance with HART’s Plans Standards and CADD procedures.

03 Scope of Work

Design

The Station Design work for this Contract includes, but is not limited to:

- Station public spaces and ancillary structures;
- Station finishes;

- Vertical circulation elements;
- Concourse and concourse supports, except within the limits of the guideway construction contract;
- Platform and platform canopy;
- Electrical Mechanical, electrical, and plumbing design;
- Site work, including demolition;
- Site landscaping and furnishings;
- Incorporation of guideway landscaping and furnishings design by the GEC's guideway landscape consultant;
- Coordination with the Transit Arts Program;
- Signage and graphics;
- Parking facilities and/or transit centers;
- Lighting, Heating, Ventilation & Air Conditioning (HVAC), electrical and other ancillary space equipment;
- Accommodation of safety and security systems and alarms;
- Interface and coordination of design with other contracts;
- Permitting;
- Participation in community outreach and public presentations; and
- Sustainable design practices.

Sustainability: Utilize the H RTP Systemwide Sustainability Report and the principles of the U.S. Green Building Council's (USGBC) LEED Greening Building Rating System guidelines throughout the station design process. Note that the station structures will not be seeking LEED certification.

Design Support During Construction: Provide limited design support during construction including, but not limited to: shop drawing review and approval; material samples / mock-up review and approval; periodic inspections; development of punch lists; resolution of punch lists; final acceptance of finishes and preparation of as-built drawings based on mark-ups from the construction contractor(s); and participate in various meetings. Upon request, assist HART in resolving design issues during construction.

Professional Licenses

All work under the Contract is to be done under the supervision of architects, landscape architects and professional engineers licensed by the State of Hawaii Department of Commerce and Consumer Affairs.

Project Team Management

1. Interface with HART and its General Engineering Consultant
2. Provide management and oversight of the design of the DKSG Contract
3. Prepare a Project Management Plan (PMP)
4. Coordinate meetings, design schedule, and document control
5. Coordinate and manage subconsultants (including civil, electrical, structural, etc.)
6. Consultant is required to follow HART's Quality Management Plan (QMP) and establish a Quality Assurance Plan (QAP) for the DKSG Contract
7. Comply with applicable sections of the HART Construction Safety and Security Plan (CSSP). The consultant shall submit a Site Specific Safety and Security Plan (SSSP) for the project
8. Prepare Baseline Design Schedule and provide an update to HART

Design Workshop

Commence design with a three (3)–day workshop to review station design concepts previously completed and, if necessary, update the design based on HART input. Participants shall include Consultant’s Project manager, Design Manager, Architectural and Structural Managers, HART Staff and GEC staff.

Environmental

Prepare an Environmental Compliance Plan (ECP) that addresses how compliance and documentation will be achieved in design and construction, including the design review process to address pertinent mitigation measures and permits specified in the Project’s FEIS, the Record of Decision (ROD) and the Programmatic Agreement (PA). The Consultant will prepare environmental constraint maps as directed by HART as part of the ECP. Prepare application(s) for pertinent environmental permits and related design plans that reflects achievement of environmental compliance. The Consultant will update the ECP, as needed, when new or modified mitigation or environmental compliance conditions are developed during the term of the Contract. The Consultant will be responsible for preparing additional environmental documents, in compliance with the National Environmental Policy Act (NEPA) and State of Hawai’i Chapter 343 for all environmental clearances specified by permit conditions, as required.

Permits

The Consultant shall prepare all applicable permits related to this scope of work. This may include, but is not limited to, building permits, stockpiling, and grading.

Safety and Security Certification

Complete Safety and Security Certification for design in accordance with the HART Safety and Security Certification Plan (SSCP) and the FTA Handbook for Transit Safety and Security Certification. HART will provide a PE guidance Certifiable Items List (CIL) to the contractor to develop and certify all applicable elements.

Civil Design

1. Perform topographic survey and prepare construction document base map.
2. Develop and execute a geotechnical investigative exploration plan.
3. Design and prepare street restoration construction documents.
4. Prepare hydrology and drainage reports (including scour analysis and mitigation design as necessary).
5. Design and prepare grading, drainage and paving construction documents for station site and station parking areas.
6. Design and prepare construction documents for demolition.
7. Prepare temporary traffic control plans.
8. Prepare right-of-way plans.
9. Prepare traffic signaling, roadway signing and striping construction documents for station areas that are not part of the City Center Guideway Contract.
10. Evaluate requirements to protect adjacent buildings or existing structures that may be affected by station construction.

Utility Design

1. Prepare composite utilities rearrangement plans, service connections, utility relocation and restoration construction plans and details.
2. Perform additional pothole investigation as needed.
3. Prepare street lighting plans for station areas that are not part of the City Center Guideway contract.

Structural Design

1. Perform final structural analysis and design, including the preparation of contract documents showing structural details for all station structures (exclusive of the guideway) and architectural finishes, and artwork if provided as part of the contract.
2. Coordinate with the City Center Guideway contractors/consultants.
3. Evaluate requirements to protect adjacent buildings or existing structures that may be affected by station construction.

Architectural Design

1. Develop and prepare schematic designs and presentation materials for public presentations.
2. Design and prepare construction documents for station public and ancillary spaces, architectural finishes, vertical circulation elements, and station site design, including parking facilities, transit center facilities, and artwork.

Landscape Architecture

1. Design and prepare final landscaping and irrigation construction documents for stations.
2. Incorporate the final landscape and irrigation design for medians and curb strips along the transit corridor connecting the stations. The General Engineering Consultant's landscape architect will prepare the design and construction documents of the guideway landscape areas.

Mechanical and Plumbing Design

Perform mechanical calculations and final design of mechanical systems and prepare Construction Documents for HVAC, plumbing and fire suppression systems.

Electrical Design

Design and prepare construction documents for lighting, power distribution, communication, security, fire alarm, and grounding in the station area.

Specifications

Prepare detailed specifications for the construction bid documents using HART's Special Provisions and Standard Specifications wherever possible.

Cost Estimates

At each submittal, prepare material quantity take-offs and a construction cost estimate to assess the design's adherence to HART's budget. Adjust the design as necessary to maintain compliance with the budget. Format for the material quantity take-offs will be provided by HART.

Construction Staging Plan

1. Develop Construction Staging Plan to maximize the area available for construction, minimize traffic disruption for both vehicular and pedestrian, and maximize accessibility to adjacent properties and businesses, and to ensure constructability.
2. Develop maintenance of traffic plans for construction.
3. Identify permits required and responsibility.

Public Involvement

1. Support HART in community meetings and workshops.
2. Provide illustrative materials such as plans, sketches, and/or models.
3. A maximum of two (2) meetings for each of the eight (8) stations is to be held.

Design Support During Bidding

Upon request, assist HART in resolving design questions during the construction solicitation process.

Interface with Other Contractors

Core Systems Contract

The Core Systems Contractor will be responsible for train communications and control; traction electrification; train control and signaling; passenger vehicles; and fare vending. The Dillingham and Kaka'ako Station Group Design Consultant will design and prepare construction documents for embedded conduits and other embedded components, blockouts, structural supports and mountings, and other enclosures and finishes as needed for systems equipment.

Public Involvement

Interface is required with HART's Public Involvement team for the required Community Meetings. The Dillingham and Kaka'ako Station Group Design Consultant will support and participate in community presentations or meetings hosted by HART to present station design and convey information to the public.

City Center Guideway Contract

Interface is required between the City Center Guideway Contractor/Consultant and the Dillingham and Kaka'ako Station Group Design Consultant in the station areas. The design of guideway superstructure, columns and foundations, and temporary landscaping within the guideway right-of-way is not included in the Contract.

Elevators and Escalators

The Dillingham and Kaka'ako Station Group Design Consultant will interface with the procured contractor who will be installing elevators and/or escalators at the stations in the Dillingham and

Kaka‘ako Station Group contract. The Dillingham and Kaka‘ako Station Group Design Consultant will incorporate Architectural Standard Plans for elevator cab and escalator cladding materials.

Transit Arts Program

HART’s Transit Arts Program is intended to integrate art into transit station designs during the design process rather than add artwork after the process is complete. The Dillingham and Kaka‘ako Station Group Design Consultant will be required to work with HART’s Transit Arts Program personnel and selected artist(s) to integrate artwork into the design of the stations and station sites.