

3. SCOPE OF WORK AND REQUIREMENTS

3.1. PROJECT DESCRIPTION

The Project includes, but is not limited to: the design, permitting and construction of a shared use pedestrian/bicycle path between Whitmore Village and Wahiawa Town. The Project consists of, but is not limited to:

- A. Constructing a new non-vehicular facility that includes a pedestrian/bicyclist bridge over Kiikii Stream
- B. Drainage analysis and construction of drainage utilities, if required
- C. Grading
- D. Construction of retaining walls
- E. Installation of chain link fencing, railings and gates (See HDOT Standard Plan D-03)
- F. Hydrology and hydraulics analysis, scour analysis and the resultant construction of necessary scour protection measures based on the analysis
- G. Installation of pedestrian/bicycle path lighting
- H. Pavement markings and signs
- I. Landscaping
- J. Providing temporary and permanent Best Management Practices (BMPs)
- K. Temporary work zone and permanent traffic control
- L. Public Information Meetings
- M. Processing and acquiring all permits required to ensure that the design and construction of the Project is in compliance with appropriate federal, State, and City and County of Honolulu Standards.

The Project is a design-build type project and will be awarded using a two-step process described herein and in the Request for Proposals ("RFP") in which Design Build Contractor shall submit their Design Concept Documents and Price Proposal.

The Proposer ("Proposer") is defined as all participants involved in, but not limited to, the design, administration, construction and other work related to the Project, Project No. HWY-O-07-18. The Proposer shall be responsible to use the information contained in this RFP package to:

- A. Obtain other information as determined by the Proposer
- B. Prepare documents such as, but not limited to, construction drawings, specifications, shop drawings, calculations, estimates, permits, clearances, etc.
- C. Obtain HDOT's confirmation of compliance of the Proposer's designed construction documents
- D. Obtain City and County of Honolulu approvals for the designed construction documents, as appropriate
- E. Obtain all necessary environmental and construction permits
- F. Coordinate and obtain necessary approvals from utility agencies. Verify the location of utilities that are within the Project limits and if necessary, beyond the limits.
- G. Provide quality control measures in accordance to the Engineer accepted Contractor's quality control plan
- H. Construct the Project in accordance with the accepted construction documents

3.2. DESIGN AND CONSTRUCTION REQUIREMENTS

The Project limits shall be from Whitmore Avenue to a roadway/sidewalk connection on the Wahiawa Town side of Kiikii Stream.

The pedestrian/bicycle path (including the bridge) shall meet all relevant AASHTO, DCAB, ADA, and other reasonable engineering design standards.

The portion of the path that will be paved shall be 12-feet wide minimum and consist of a pavement design structure of 6-inch thick Portland Cement Concrete (See HDOT Standard Plan D-18 with perpendicular joints) with 7.5 lbs/cy of Forta Ferro or equal to mix design. The Portland Cement Concrete pavement shall be over a minimum 6-inch thick Bedcourse Material. The Proposer's Geotechnical Engineer shall determine if additional Bedcourse Material is required. Submit design to HDOT for acceptance. The path shall have appropriate lighting, drainage and signing.

The pedestrian/bicycle bridge shall meet all relevant AASHTO, DCAB, ADA, and other required engineering design standards. The bridge is estimated to be approximately 400 to 600 linear feet long and it shall include:

- A. A pedestrian/bicycle safety railing
- B. multiple spans
- C. minimum width of twelve feet of clear walking space, measured from the inside of railing to the inside of railing
- D. lighting and appropriate signing
- E. Safety toe curb for concrete deck bridges or toe rail for steel bridges

Bridge Design Standards:

- A. All structural steel shall be hot-dipped galvanized.
- B. Reinforced concrete shall be used for all locations within the 500-year flood waters.
- C. The total cross-sectional area of all bridge piers combined that is below the Ordinary High Water Mark and above the river bottom shall not exceed 12% of the cross-sectional stream area below the Ordinary High Water Mark. In complying with this numeric design requirement, the bridge piers would not be considered/defined as fill by the US Army Corps of Engineers (US Army Corps), and the US Army Corps authorization will not be required for the bridge piers. If this cutoff requirement is exceeded, the Proposer shall consult with US Army Corps to determine if a permit is required, and obtain all necessary associated permits/clearances. This shall be done at no additional cost or contract time.
- D. The Proposer shall apply for US Army Corps authorization to discharge fill for temporary construction access Best Management Practices, if needed.
- E. If it is determined that a US Army Corps permit is required, the Proposer shall coordinate with the State of Hawaii Department of Health to determine the appropriate approach for obtaining a Section 401 Water Quality Certification.
- F. Bridge shall have a minimum 75-year life span.
- G. The Proposer shall analyze, design and construct scour countermeasures, if needed.

3.3. AS-BUILTS & SURVEY

There are no as-builts available.

Elevations shown are from National Oceanic and Atmospheric Administration (NOAA) 2-foot contours. The Proposer shall be responsible for conducting their own topographic survey. There will be no additional compensation for a difference in elevations between the NOAA 2-foot contours and actual.

3.4. PROJECT OBJECTIVES

HDOT is seeking the following characteristics:

- 3.4.1. **Minimize Project Cost** – Project cost should not exceed the budget of \$11,800,000.
- 3.4.2. **Technical Approach** – the Proposer shall maximize compliance to the specified requirements and guidelines, provide mitigative measures and advance notice when variance from the specified requirements and guidelines are proposed, and establish a cooperative work process which shall allow HDOT an opportunity within the design process to collaborate and offer input and acceptance. Variances from any requirements require HDOT's expressed approval prior to implementation. Time for external reviews and approvals shall be included in the Project schedule.
- 3.4.3. **Aesthetics of Design and Context Sensitivity** – the Proposer shall provide a balance of aesthetics and a Hawaiian and community sense of place while considering the principles of sustainability and low maintenance, including the appropriate materials for the Project area's location and general environment.
- 3.4.4. **Quality Control ("QC") plan** - the Proposer shall provide QC for both the design and construction elements of the Project. Coordinate design reviews and QC activities with HDOT and/or other affected agencies. The Proposer shall perform tests for quality control, provide inspection, and exercise management control to ensure that work conforms to the contract requirements. All material, time, labor, equipment, data, schedules, etc. that are required by HDOT and other affected agencies to conduct their quality assurance ("QA") activities shall be provided by the Proposer.

3.5. SCOPE OF WORK AND SERVICES

The Proposer shall be responsible for acquiring an engineering consultant and subconsultants, e.g., Civil, Structural, Geotechnical, Environmental, Electrical, Traffic, Surveying, Landscape and others as deemed necessary who are licensed in the State of Hawaii to prepare construction drawings and specifications to be used by the Contractor to construct the Project. HDOT will use these drawings and specifications to ensure the Project is constructed as designed and complies with the Project's requirements.

The Proposer is solely responsible for the design and successful construction of the Project using the Proposer prepared construction drawings and specifications. No claims will be paid or time extensions given for any items that HDOT may have reviewed in the Proposer's submittals. This will include, but will not be limited to: contained design errors or omissions, changes, scheduling conflicts, improper material, or other conflicting information that HDOT did not comment on or accepted in previous submittals. HDOT is not part of the Proposer's design QC team and will bear no responsibility for the Proposer's

design work. HDOT may compensate the Contractor for claims related to HDOT directed changes to the work scope, as solely determined by HDOT.

Elements of work will include, but shall not be limited to: topographic surveys; design work; design coordination with the State projects, City and County of Honolulu projects or known private projects in the area. Work shall also include geotechnical investigations; temporary and permanent Best Management Practices; structural calculations; drainage and scour studies and design; work zone traffic control and maintenance; permanent pavement markings and signing; dewatering provisions; pedestrian/bicycle path lighting; utilities coordination and relocation; if necessary, obtaining and complying with all applicable clearances and permits; obtaining additional construction parcels, easements or acquisition if needed; preparing, paying and obtaining required permits; all construction; and all other necessary items needed to complete the Project.

A Draft Environmental Assessment (DEA) dated May 23, 2020 has been prepared for the Wahiawa Pedestrian Bridge, Whitmore Village to Wahiawa Project and was published in the Office of Environmental Quality Control's (OEQC), *The Environmental Notice*, May 23, 2020. All design and construction work shall conform to all commitments contained in this document. Electronic copies of the DEA can be downloaded here, http://oeqc2.doh.hawaii.gov/Doc_Library/2020-05-23-OA-DEA-Wahiawa-Pedestrian-Bridge.pdf or a CD can be requested from the HDOT. Please contact Holly Yuen at (808) 692-7548 or by email at Holly.Yuen@hawaii.gov. A Finding of No Significant Impact (FONSI) is anticipated to be published in the August 23, 2020 of *The Environmental Notice*, and all design and construction work shall conform to all commitments contained in the FONSI.

This scope of work and services is intended to clarify the total scope that the Proposer shall assume. However, it is not a complete statement of work. As stated previously, the intent of this design/build contract is to combine all work and services for the Project into one contract and point of responsibility.

The Proposer shall be responsible for furnishing all supervision, professional services, labor, equipment, tools, supplies, permanent materials, and temporary materials required to complete the Project. The following are some of the services needed to complete the Project, but shall not be regarded as a definitive listing of all the work to be done on the Project:

3.5.1. Project Management and Coordination

The Proposer shall be responsible for the overall project management and coordination of all professional design consultants and subconsultants. In addition, it shall be responsible for construction subcontractors, and coordinating with County and State agencies, landowners and tenants, and utility companies. This shall include processing and paying consultant's and subcontractor's payment requests in a timely manner. The Proposer shall resolve in a timely manner disputes within the Proposer's team. Participate in disputes with HDOT when requested. Provide all information requested by HDOT related to a dispute. Distribute required documents. Provide required submittals to HDOT. Coordinate of work on site. Develop a project schedule and maintain it with updates. Have a document control system. Have a material control system. Conduct project related meetings. Resolve public complaints.

Perform all other coordination related to the Proposer's responsibilities which are required to complete the project.

All activities and decisions of the Proposer relating to the project where the following are involved will be subject to the review and acceptance by HDOT:

- a. Changes to the quality or quantity of materials,
- b. Changes to utilities cost or utilities schedule,
- c. Changes to project schedule, in general not including updates, but updates will be subject to acceptance by HDOT
- d. Changes in permit requirements or changes that require revisions to permits,
- e. Decisions or activities that may require changes to the Final Environmental Assessment (FEA),
- f. Decisions or activities where landowners or tenants will be affected,
- g. Decisions or activities where the traveling public or community members will be affected,
- h. Decisions or activities that will require additional land acquisition or rentals.
- i. Decisions or activities that impact historical or archeological sites.

In the event the Proposer's design changes any existing provisions in the FEA, the Proposer shall be responsible for all impacts, e.g., delays, associated costs. Time required for these processes shall be clearly noted as an activity on the Project Schedule. The Proposer shall submit pdf documentation related to items noted above for HDOT's review and acceptance. HDOT will review any such submittals within 30 calendar days from the date of receipt from the Proposer. In the event this review period falls on the critical path of the project, the project completion time will not be extended.

3.5.2. Design Services

The Proposer's engineering design team shall be responsible for providing the following services and preparation of documents:

- a. Basis of Geometric Design
- b. Design Exception Report, if necessary
- c. Shared Use Path and Bridge Design
- d. Drainage Report
- e. Storm Water Control Design Checklist
- f. Scour Analysis and Design, if necessary
- g. Pavement Design Report
- h. Topographic Survey

- i. Boundary Surveys
- j. All Engineering and Survey Calculations
- k. Landscaping
- l. Pedestrian/Bicycle Path and Bridge Lighting
- m. Structural Design Calculations and Load Rating Analysis for Bridges and Culverts (if applicable)
- n. Utility Coordination and Utility Agreement Estimates and Documents
- o. Public Announcements and Public Meetings
- p. Site-Specific Best Management Practices Plan and Details, if necessary
- q. Initial Bridge Inspection and Initial Structural Inventory Sheets
- r. If bridge is structural steel, provide bridge inspector training for HDOT personnel on how to inspect proposed steel bridge
- s. Permitting

3.5.3. Utility Relocation

Relocation of existing utilities affected by the proposed work shall be coordinated with the respective utility companies. All utilities impacted by the work shall be relocated in accordance with Hawai'i Administrative Rules ("HAR") Chapter 19-105, "Accommodation and Installation of Utilities on State Highways and the Federal Aid County Highways", HAR Chapter 6-73, the requirements of the utility company or government agency involved, and the Contract Documents. Should a conflict arise, HDOT will have the final say. Existing utilities that are no longer in use due to their relocation shall be removed completely.

Prepare construction plans and detailed cost proposals for the utility relocation. Obtain plan and cost proposal acceptance from the affected utility or government agency and from HDOT. Utility relocation will be paid for on a Force Account basis. Utility companies are responsible for all betterment costs (direct and indirect) and shall be required to provide funds in advance of construction. If the utility company does not comply with these requirements, no betterment work will be considered by HDOT.

Proposer shall prepare color-coded maps required for Utility Agreements or MOUs. HDOT shall prepare Utility Agreements or MOUs for all utilities, if affected by the Project:

3.5.4. Landscape Design Services

Prior to commencing design, Proposer shall meet with HDOT to discuss proposed landscaping concept. The Proposer shall prepare Construction Documents for landscaping improvements along the pedestrian/bicycle path. Landscaping shall be designed by a licensed landscape architect using the following criteria:

- a. Native, drought resistant, durable, and sustainable plant palette accepted by HDOT

- b. No permanent irrigation required
- c. Low maintenance
- d. Include complete restoration of all existing improvements removed during construction
- e. Pedestrian and bicyclist safety

The plans shall include the following minimum information:

- a. Limits of landscaping
- b. Planting Plan including:
 - list of plants (common and botanical plant names along with representative picture of proposed plant)
 - quantity
 - width
 - height
 - brown trunk height
 - trunk caliper size
 - minimum spacing for ground covers
 - details
- c. Landscape Operations and Maintenance Specifications including:
- d. Guidelines for invasive species management, pruning, weeding, mowing, pest eradication and control. Guidelines shall also include, soil analyses, fertilizing and soil amendment shall be based on the recommendations of the soil analyses, chemical storage, waste disposal, removal of temporary appurtenances, drainage facilities, and root pruning. All plants and irrigation system subject to theft, vandalism, etc. shall be replaced or repaired at no additional cost or increase in contract time
- e. All applicable sections of the Standard Specifications
- f. Maintenance Plan showing tasks and required frequency
- g. Fertilizer specifications and application
- h. Plant Material Inventory and Maintenance requirements
- i. Projected cost estimate for annual contracted maintenance during the Project's contract time, including planting period, and plant establishment
- j. Representative Plant Material Photographs illustrating desired appearance

3.5.5. Temporary Work Required for Incremental Work

Proposer shall be responsible to design, install, and remove from the Project all temporary work necessary to tie in a completed increment to the existing or new roadways. This work shall include but is not limited to, pavement striping and markers, traffic signs, lighting, traffic signals, utilities, and drainage.

HDOT will consider the temporary work as included in the contract prices of the various contract items and will not be paid separately.

The Proposer shall be responsible to maintain any completed increment opened for public use in accordance with Hawaii Standard Specifications for Road and Bridge Construction 2005 Subsection 105.13 Maintenance. HDOT will consider this maintenance work as included in the contract prices for the various contract items and will not pay for maintenance work separately.

3.5.6. Design and Construction Provisions

For evaluation purposes, HDOT will assume compliance to these provisions unless specifically stated otherwise in the Proposer's proposal. Variances from these provisions are subject to HDOT expressed acceptance. The Proposer's proposal may deviate from these provisions at the Proposer's risk. ~~Proposals which are considered as deviating from these technical provisions may not necessarily be considered nonresponsive, but will be scored with respect to all the stated requirements and their benefits and/or detriment to the project.~~



3.5.7. Additional Requirements

It is the responsibility of the Proposer to verify the right-of-way ("ROW"). All improvements shall be contained within the proposed ROW. The selected Proposer shall assist HDOT in acquiring the necessary ROW, which includes temporary right-of-entries or construction parcels for Proposer work areas and obtaining permanent easements. The Proposer shall prepare all maps and figures needed for acquisition of the properties. HDOT will negotiate with these landowners and finalize documents. This work is incidental to the various contract items.

Documentation for Design Exceptions shall be prepared by the Proposer and submitted to HDOT for review and acceptance. Design exception acceptance submittal deadlines shall be in accordance with the 'Alternative Technical Concepts' Provisions.

The Proposer shall be responsible for all miscellaneous work necessary to complete the Project. This shall include work even if the work is not described in the contract documents (e.g., specifications, attachments, proposal schedule). The HDOT, at its sole discretion, may compensate the Proposer for qualified HDOT directed changes.

If design exception triggers any federal undertakings, the Proposer shall be responsible to comply with all federal requirements and obtain all federal clearances.

3.5.8. Codes and Design Standards to be Used in Design

All permanent and temporary features of the Project shall be designed and constructed according to the specified codes and guidelines, as amended. Other Codes, Design standards, or Rules and Regulations not listed may also apply to the Project, and it

shall be the sole responsibility of the Proposer to adhere to the appropriate documents. A non-definitive list of referenced standards is provided in Section 3.E.18.

3.5.9. Reference Drawings

Conceptual drawings of the proposed improvements are provided as an attachment to this Request for Proposal ("RFP"). The Conceptual drawings are for informational purposes only and are subject to change. The conceptual drawings' electronic files (MicroStation) will be provided to the top three Proposers selected for the Step 2 - Design and Price Proposal submittal. Note that the conceptual drawings may not necessarily comply with the RFP's requirements; and therefore, are for reference and/or informational purposes only. Should the Proposer choose to further develop this design in whole or in part, the Proposer is responsible to meet the RFP's design criteria contained in the plans and technical provisions.

Elevations shown are from National Oceanic and Atmospheric Administration (NOAA) contour map using 2-foot contours. The Proposer shall be responsible for conducting their own topographic survey. There will be no additional compensation for a difference in elevations between the NOAA 2-foot contour map and actual lay of the land.

3.5.10. Environmental Impact Statements Reference Documents

State of Hawaii Revised Statutes (HRS) Chapter 343 Environmental Impact Statements shall be complied with. A Draft Environmental Assessment (DEA) for the project was published in OEQC's, *The Environmental Notice*, May 23, 2020. All design and construction work shall comply to all commitments contained in this document. Electronic copies of the DEA can be downloaded here, http://oeqc2.doh.hawaii.gov/Doc_Library/2020-05-23-OA-DEA-Wahiawa-Pedestrian-Bridge.pdf or can be requested from the HDOT. Please contact Holly Yuen at (808) 692-7548 or by email at Holly.Yuen@hawaii.gov. A Finding of No Significant Impact (FONSI) is anticipated to be published in the August 23, 2020 of *The Environmental Notice*, and all design and construction work shall conform to all commitments contained in the FONSI.

3.5.11. Archaeological and Historic Preservation Services

The HDOT is currently undergoing consultation with the State Historic Preservation Division ("SHPD") and other parties. At this time, no known archaeological or historic properties are known to be present within the Project limits or other areas that may be disturbed by the Project. Therefore, the HDOT anticipates a "no historic properties effect determination" to result from the on-going National Historic Preservation Act Section 106 consultation. At this time, no archaeological or historic preservation services are believed to be necessary. Should this change, an addenda will be issued.

If the Proposer encounters cultural materials e.g., archaeological sites, skeletal remains during construction, all earth-moving activity work within and around the immediate discovery area shall be stopped until a qualified archaeologist can assess the nature and significance of the find. If human remains are discovered, HAR Title 13, Subtitle 13, Chapter 300 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains. SHPD, the medical examiner or coroner of the City and County of Honolulu, and the Police Department shall be contacted. The appropriate process would then proceed in conformance with HAR §13-300

Subchapter 4 "Procedures for Proper Treatment of Burial Sites and Human Skeletal Remains."

3.5.12. Utilities

For the listed entities below the Proposer shall be responsible to furnish the design, materials, labor, and equipment for the installation/relocation of affected utilities/facilities. The spatial limits of the work is the Project limits or the limit of the impact the change had to the utility, e.g., to the nearest pull box, manhole or utility/joint pole outside the project limits. This work shall include coordination with the respective utility company and assisting HDOT in executing a utility agreement. The Proposer shall be responsible for preparing the utility agreement and color-coded maps. HDOT will process the utility agreement.

- a. Hawaiian Electric Company
- b. Hawaiian Telcom Inc.
- c. Spectrum.
- d. City and County of Honolulu, Board of Water Supply.
- e. City and County of Honolulu, Department of Environmental Services.
- f. Other Utility entities.

3.5.13. Permits and Clearances

The Proposer shall be responsible for the preparation, submittal, and obtaining approval for all permits and clearances necessary to construct and complete the Project, including but not limited to:

- a. NPDES Permits for discharge of storm water associated with Construction Activities, Hydrotesting Activities, and discharge of effluent from dewatering operations;
- b. Disability and Communication Access Board (DCAB) Project Review;
- c. Permit to Perform Work Upon City & County of Honolulu Roadways;
- d. Permit to Perform Work Upon a State Highway;
- e. Noise Permit for Construction activities;
- f. Noise Variance Permit for any work outside of standard hours; and
- g. Other permits as required (could include Stream Channel Alteration Permit, US Army Corps of Engineers Section 404 Permit, State of Hawaii Department of Health Water Quality Certification, among others).

All permits and clearances shall be obtained prior to the start of any work pertaining to permit activities. The Proposer shall be responsible for ensuring that all design and construction work complies with all permit conditions and commitments made with environmental and other agencies.

HDOT will consider permit fees as included in the contract prices for the various contract items and will not pay for permit fees separately. No time extensions will be granted for delays due to the permitting process as a result of the Proposer's actions.

Delays to the permitting agency actions may qualify for a contract time extension which will be the exclusive relief granted on account of such delays. HDOT will solely decide if the Proposer's claim for additional contract time justifies a contract time extension.

3.5.14. HDOT Review of Construction Documents

Prior to commencing with the construction documents, the Proposer shall meet with HDOT's Project Manager to confirm the drawing requirements, e.g., sheet size and content of drawings. Drawing requirements may vary based on proposed concepts. Also, the Proposer shall discuss special provision requirements and other topics. These requirements, as well as drawing requirements may be addressed in discussions with HDOT during preparation of Design and Cost Proposals. The cost to produce and the reproduction of the submittals shall be borne by the Proposer.

The Proposer is encouraged to maintain close communications with HDOT throughout the design and construction of the project. It is anticipated that this close communication may serve to expedite submittal reviews; facilitate the incorporation of innovative project solutions that may enhance the project; and facilitate final acceptance of the project.

Should the Proposer choose to hold meetings with HDOT, HDOT may be available to meet weekly during the design phase. Proposer shall provide a minimum of five (5) working days notice to allow for coordination of schedules of key HDOT personnel. The Proposer shall be responsible for preparing all meeting agendas and providing them to the invitees a minimum of one working day prior to meeting. HDOT may add items to agenda. The Proposer shall be responsible for providing meeting facilities and preparing meeting minutes to be sent to meeting participants within seven (7) calendar days after the meeting for review and comment. HDOT will return comments on the minutes, if any, within seven (7) calendar days of receiving the minutes. The Proposer shall be responsible for finalizing the minutes within seven (7) calendar days after receiving the HDOT comments.

If the Project is done in increments, the construction drawings for each increment shall be completed as a "stand alone" package. Cross referencing between increment plans will not be allowed.

The Special Provisions, which are part of the RFP, are the specifications governing the Project's work. The Proposer shall be responsible for adding to or modifying the sections in Division 200 to 700 to suit the final design and acceptance of HDOT. The Proposer shall be responsible for submitting a compilation of Special Provisions, Proposal, Contract, and Bond with the appropriate submittals.

HDOT will not pay claims for any item that HDOT may have reviewed in the Proposer's submittals, that may have contained design errors or omissions, changes, scheduling conflicts, improper or non-compliant work, or any other conflicting information that HDOT did not comment on or accept in previous submittals.

3.5.15. Submittal Format

- a. Submit pdfs and CAD files for construction drawings in Microstation V8.0 or AutoCAD 2009 using the Protocol for Line Weight, Color, Level, Size, Grid Reference, Standard Units, Fonts, and Symbolology for Microstation Produced Contract Plans ("State Drafting Protocol"), dated December 1999 on CD-ROM or DVD. CAD files are required for Final Submittal Only.

- b. All other electronic files shall be usable in Microsoft Word 2003 and Microsoft Excel 2003 on CD-ROM or DVD with the exception of the schedules in item b below.
- c. Submit pdf and mpp Design and Construction schedules in color. Schedules shall be produced using Microsoft Project or alternative software accepted by HDOT. Critical path shall be indicated in red. Schedules shall conform to requirements in Section 108 of the Standard Specifications.
- d. Detailed cost estimates shall follow HDOT's format used for Federal Aid projects. Excel and pdfs shall be submitted.

3.5.16. Copies per Submittal to HDOT

- a. Submit CAD files of full size construction drawings. Submit pdfs of full size and half-size sheets. Construction drawings shall be stamped and signed by a licensed engineer,
- b. Pdf set of calculations stamped by a licensed engineer,
- c. Pdf of permit applications and fully processed permits,
- d. Pdf of design reports stamped and signed by a licensed engineer,
- e. Pdf of detailed cost estimates,
- f. Pdf of special provisions specifications,
- g. Pdf of design and construction schedule plots on construction drawing size (or larger) sheets,
- h. Pdf of tabulations of response to comments, and

The Proposer shall be responsible for making all the necessary submittals to other government agencies and utility companies and securing the required acceptances independent of HDOT's review and acceptance.

3.5.17. Design Submittal and Review by HDOT

HDOT will review all scheduled submittals within 30 calendar days after HDOT notifies the Proposer in writing that a complete submittal was received as determined by HDOT. In the event a resubmittal is required due to incompleteness or non-compliance to HDOT's requirements as determined by HDOT, HDOT will be afforded an additional 30 calendar days to review any resubmittals. The Project's completion time will not be extended due to any review time required by HDOT for resubmittals due to incompleteness or non-compliance to HDOT's requirements. Scheduled submittals shall be as follows:

- a. 50% Design Submittal: Develop conceptual plans necessary to clearly document the complete scope of improvements and to allow the Proposer to determine the permitting, plan acceptances, and construction parcels necessary to accomplish the work. This may include, but is not limited to:
 - Proposer's Implementation Plan;

- Prefinal Drainage Report;
 - Site Specific Best Management Practices (BMP) Plan and details;
 - Prefinal Geotechnical Report, as required;
 - Landscape Maintenance Specifications;
 - Prefinal Pavement Justification Report;
 - Basis of Design for elements not covered by a specific report;
 - Conceptual construction drawings for all roadway improvements and temporary construction;
 - Request for Utility Agreement(s), Utility Relocation plan(s), Service(s) and estimate(s);
 - Pedestrian/Bicycle lighting calculations;
 - Construction parcel requirements;
 - Log of submittals made to other government agencies and utility companies and status of coordination and approvals;
 - Log of permit applications to be made in conjunction with the work proposed and copies of draft permit applications;
 - The Progress schedules shall be prepared in accordance with Section 108.06-Progress Schedules of the Standard Specifications and any activities including non-construction activities with durations exceeding 20 calendar days shall be broken into smaller sub-activities;
 - Schedule and copies of public announcements, in coordination with HDOT;
 - New or modified special provisions sections (Division 200-700), as applicable;
 - Quality Control Plan;
 - Operational and Maintenance Plan and detail breakdown of estimated O&M costs;
 - Detailed breakdown of contract payment items with schedule of values and theoretical quantities, broken down by increments in measurable units;
 - Design Exceptions, as necessary;
 - Prefinal Safety Plan; and
 - Prefinal Traffic Control Plan.
- b. 100% Design Submittal (Final Design): Develop all final plans and any documentation required (i.e., permitting, etc.) for construction of the proposed

improvements. This may include, but is not limited to:

- Design and construction phasing schedule (updated as necessary);
 - Construction drawings;
 - Finalized calculations;
 - Finalized cost estimate (including operation & maintenance costs);
 - Finalized Geotechnical Report;
 - Finalized Drainage Report;
 - Finalized Pavement Justification Report;
 - Compilation of Special Provisions, Proposal, Contract, Bond, and accepted additions and modifications to Division 200 to 700;
 - Finalized "Request for Utility Agreement" document;
 - Finalized Easement documentation;
 - Tabulation of how each comment from the 50% submittal was addressed;
 - CAD files in MicroStation format and pdf files for construction drawings;
 - Finalized Design Exceptions;
 - Finalized Safety Plan; and
 - Finalized Traffic Control Plan.
- c. End of Job Submittal. At the completion of the construction work, furnish pdfs, CAD files in MicroStation format, and pdf as-built drawings prepared within 90 calendar days of the completion of construction work in accordance with the Hawaii Standard Specifications for Road and Bridge Construction Section 108.13(B) (2) As-Built Drawing and the State Drafting Protocol along with any other submittals to complete the design and construction of the Project.

3.5.18. Codes and Design Standards

All permanent and temporary features of the project shall be designed and constructed according to the following codes and guidelines, as amended:

- a. American Association of State Highway and Transportation Officials (AASHTO) - A Policy on Geometric Design of Highways and Streets, 7th Edition, 2018 (Green Book) and subsequent interim revisions
- b. AASHTO LRFD Bridge Design Specifications US Units 8th Edition (November 2017) and subsequent interim revisions
- c. State of Hawaii, Department of Transportation Memorandum, HWY-DB 2.8646, Requirement for Load Ratings and Changes to Design Criteria for Bridges and

Structures, January 2, 2019

- d. AASHTO/AWS D1.5M/D1.5:2015-AMD1 Bridge Welding Code
- e. AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signal, 6th Edition, with 2015, 2019, and 2020 interim revisions, as amended by HDOT
- f. State of Hawaii, Department of Transportation Memorandum, HWY-DB 2.5098, Changes to Design Criteria for Bridges and Structures, January 8, 2018
- g. City and County of Honolulu, Standard Details for Public Works Construction, Sept. 1984 and subsequent revisions
- h. City and County of Honolulu, Standard Specifications for Public Works Construction, Sept. 1986 and subsequent revisions
- i. *Water System Standards*, Department of Water Supply, Board of Water Supply, City and County of Honolulu, 2002 as amended
- j. *Water System External Corrosion Control Standards*, Board of Water Supply, City and County of Honolulu, Volume 3, 1991
- k. Clean Water Act Section 401 404 MOU, July 2003
- l. Design Exception Policy, HDOT Highway Division, September 2016
- m. Statewide Work Zone Safety and Mobility Process, October 4, 2007 (HWY-TD 2.5931)
- n. Construction Best Management Practices Field Manual, HDOT Highways Division, January 2008
- o. Construction Best Management Practices Field Manual dated January 2008 including any and all applicable HDOT water quality guidelines and policies.
- p. Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and Specifications, Publication No. FHWA ED-88-053, August 1988, revised February 2003
- q. Updated Operating and Inventory Rating Using Load Factor Design (LFD) (HWY-DB 2.6272)
- r. Standard for Optical Fiber Outside Plant Communications Cable, ANSI/ICEA S-87-640-2016, 6th Edition, August 2016
- s. *Designing Sidewalks and Trails for Access, Parts I and II*, FHWA Reference Manual, July 1999 and September 2001
- t. State of Highway, Department of Transportation, Highways Division, Design Criterion for Bridges and Structures, August 8, 2014.
- u. Hawaii Department of Transportation, Memorandum, Highway Division, Design Branch, Bridge Design Section, Structural Design Criteria for Pedestrian

Overpass – Ala Moana Area, December 12, 2019.

- v. AASHTO LRFD Bridge Construction Specifications, 4th Edition, August 2017
- w. AASHTO LRFD Road Tunnel Design and Construction Guide Specifications, 1st Edition, 2017
- x. ACI 318-19: Building Code Requirements for Structural Concrete and Commentary
- y. AASHTO Roadside Design Guide, 4th Edition, 2011
- z. State of Hawaii, Department of Transportation (DOT), Highways Division, Statewide Policy for Permanent Highway Safety Hardware, dated September 25, 2017 (HWY-TD 17-20314) and Highway Division (HWY) Emphasis Areas September 1, 2017 (HWY-T 17-2029)
- aa. Hawaii Statewide Uniform Design Manual for Streets and Highways, State Highway Division, October 1980
- bb. AASHTO Guide for the Development of Bicycle Facilities, 4th Edition, 2012
- cc. AASHTO Guide for Planning, Design, and Operation of Pedestrian Facilities, 1st Edition, July 2004
- dd. Americans with Disabilities Act
- ee. Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition with revisions 1 & 2
- ff. New traffic control devices built after 2019 shall comply with the Manual For Assessing Safety Hardware (MASH). Certain traffic control device built before 2020 may be used on the Project. If the devices comply with the requirements of National Cooperative Highways Research Program (NCHRP) Report 350, HWY-T 17-.2.029 and HWY-TD 17-20314.
- gg. State of Hawaii, Department of Transportation, Highways Division, Work Zone Safety Management Guidelines, November 20, 2008.
- hh. State of Hawaii, Department of Transportation (DOT), Highways Division, Design Criteria for Highway Drainage dated June 15, 2019
- ii. Hydraulic Engineering Circulars and Hydraulic Design Series developed by the U.S. DOT
- jj. State of Hawaii, DOT Permanent Best Management Practices (BMP) Manual dated April 2015
- kk. Hawaii Department of Transportation, Highways Division (HDOT-HWY) Subsurface Utility Engineering (SUE) Procedures
- ll. Department of Transportation Right-of-Way Mapping Guideline, Cadastral Engineering Section, dated 1/7/2020

- mm. State of Hawaii, Department of Transportation, Highways Division, Cadastral Engineering Drafting Instruction Manual, March 31, 2000.
- nn. Storm Water Permanent Best Management Practices Manual, State of Hawaii, Department of Transportation, April 2015.
- oo. Accommodation and Installation of Utilities on State Highway and Federal Aid County Highway, Hawaii Administrative Rules, Title 19, Chapter 105
- pp. Pavement Design Manual by the Materials Testing and Research Branch, Highways Division, Department of Transportation, March 2002.
- qq. Applicable sections of 23 CFR 650 - Bridges, Structures and Hydraulics
- rr. NFPA 70, National Electrical Code (NEC), 2020 Edition *National Electric Code*
- ss. AASHTO, Roadway Lighting Design Guide, 7th Edition, October 2018.
- tt. National Transportation Communication for Intelligent Transportation Protocol (NTCIP) Standards.
- uu. State of Hawaii, Department of Transportation, Highways Division, Hawaii Standard Specifications for Road and Bridge Construction, 2005
- vv. State of Hawaii, Department of Transportation, Highways Division, Special Provisions for 2005 Hawaii Standard Specifications for Road and Bridge Construction
- ww. State of Hawaii, Department of Transportation, Highways Division, Standard Plans, 2008
- xx. Any other applicable outside agency or utility standards depending on the final design, including but not limited to City and County of Honolulu, Board of Water Supply, HECO.
- yy. Any other applicable codes and standards. If there is a conflict between documents, the more stringent shall apply. The more stringent requirement is defined as the requirement that benefits HDOT the most. Where it is unclear, HDOT will solely make the determination as to which document will apply.

3.5.19. Construction Work During Design

If HDOT determines that the construction drawings and other design documents satisfactorily address all comments, e.g., related to utilities, drainage, access, archaeology, and traffic control, HDOT may, at its sole discretion, authorize the Proposer, in writing, to start construction on BMPs, utility relocations, grading, and installation of traffic control, providing the Proposer has:

- a. Satisfactorily completed the 50% design plans;
- b. Submitted copies of approved applicable permits to HDOT prior to start of any construction work;
- c. Placed all site-specific Best Management Practice measures;

- d. Obtained written approval from all utility companies;
- e. Submitted to HDOT and obtained written acceptance of all proposed materials to be used at this stage; and
- f. Hold public meeting to apprise the public of construction and anticipated impacts and project status.

The Proposer shall be responsible for constructing the improvements in accordance with the accepted construction drawings and specifications. The Proposer shall be responsible for providing revised drawings and applicable calculations, including change order drawings and calculations. All versions shall be stamped and signed by a Hawaii licensed engineer. All revisions or deviations from the accepted construction drawings shall be submitted to HDOT for review and acceptance prior to performing the work.

The Proposer shall be responsible for providing HDOT copies of all communications, e.g., letters, memorandums, e-mails, that pertain to any corrections or clarifications to the shop drawings and specifications.

3.5.20. Plans, Specifications, and Attachments

In addition to the items covered in this Technical Provisions document and other CODES AND DESIGN STANDARDS referenced in Section 3.E.18, the following is a listing of Project Plans and Specifications that shall be used as applicable for the preparation of Construction Drawings, Project Specifications, and Estimates.

- a. Special Provisions for 2005 Standard Specifications. DOT/State Projects
- b. Applicable sections of the Department of Transportation 2005 Standard Specifications for Road and Bridge Construction:

<https://hidot.hawaii.gov/highways/s2005-standard-specifications/2005-standard-specifications/>

All applicable Division 200 to 700 sections shall have the measurement and payment subsections modified to reflect lump sum payment for all items except force account items listed in the attached Proposal Schedule.

3.5.21. Design-Build Quality Control Plan Requirements

Description:

This section shall apply to both Design and Construction. The Proposer is responsible for the Project's Quality Control (QC). HDOT will perform the Project's Quality Assurance (QA) reviews. The Proposer shall be responsible for preparation of a QC Plan acceptable to HDOT. The Proposer shall not be allowed to commence with design until the QC Plan has been accepted in writing by HDOT.

The plan shall detail how the Proposer shall provide QC and allow HDOT to perform QA for all the project's work and coordinate design reviews with HDOT or other affected agencies.

The Proposer's QC Plan shall include a description of the quality control organization, including the number of full-time equivalent employees with specific QC responsibilities and a chart showing lines of authority and reporting responsibilities.

The persons and organizations performing QC functions shall have sufficient authority and organizational autonomy to identify quality control problems, and to initiate recommendations, and verify implementation of solutions should a problem occur. Persons performing design QC functions shall be at an organizational level which ensures that they are not influenced by the impact of implementation of design QC measures on the Project, e.g., schedule, performance or cost. To ensure organizational independence the QC organization shall, at the very least, be established as a separate entity operating under a separate profit center from the design and production organizations. All key personnel performing QC functions shall be exclusively designated as such and shall not be assigned to perform other duties. The Proposer's QC plan shall describe, in detail, how the QC organization shall be established as organizational entities and operate under a separate profit center from the design and production organizations. Also, it shall describe, in detail, how it will accomplish the ability of QC organizations not to be influenced by the Project's schedule, performance or cost.

Partnering shall be considered an integral part of the Project's Quality Control program. Utilize Section 692 – Partnering of the Standard Specifications as a guide. A partnering agreement is recommended to handle disputes. In addition, a separate procedure with escalation ladder for an issue resolution shall be developed and agreed to by the partnering participants. The procedure may include, but is not limited to, the following elements:

- a. Disputes shall be delegated to the lowest appropriate level of authority on the project team to resolve within a specified timeframe.
- b. A timeframe for each level of authority shall be established before the Project begins. A list of typical disputes that could occur on a Project shall be made.
- c. If the dispute is not resolved to the satisfaction of both parties within the specified timeframe, the dispute would be automatically escalated to the next level of authority on the Project's team.
- d. If left unresolved, the process would then continue to escalate to the highest level of authority where a final resolution would be arbitrated by an unbiased third party, whose selection would be agreed upon in advance as part of the Project's QC Plan. Payment for the third party shall be divided evenly between the Proposer and HDOT. Merit claim documents shall not change from the submittal to the highest level of authority.
- e. A written report describing the dispute, all subsequent actions, and final disposition of the dispute shall be submitted to the project records.
- f. If subsequent disputes arise on the same issue, the written report shall be included as a resource during the resolution process. Disputes not resolved informally through the partnering process may be brought by either party to an action seeking judicial review of the decision in a Hawaii Circuit Court within the six months from the date of receipt of the decision.

Proposer's QC Staff

At a minimum, the Proposer's QC staff shall include the following:

a. Proposer's Quality Control Manager

The Proposer's Quality Control Manager is the individual with overall responsibility for development of and adherence to the Proposer's QC Plan. This individual shall be a Professional Engineer licensed by the State of Hawaii having a minimum of ten years supervisory experience in roadway design or ten years supervisory experience in inspection of roadway transportation construction projects or a combination thereof.

b. Proposer's Design QC Manager

The Proposer's Design QC Manager is the individual with overall responsibility for the design quality control portion of the Design-Build QC Plan. This individual shall have a minimum of five years supervisory experience in roadway design and on roadway transportation construction projects. Shall also be a Professional Engineer licensed by the State of Hawaii.

c. Proposer's Construction QC Manager

The Proposer's Construction QC manager is the individual with overall responsibility for the construction portion of the Design-Build QC Plan. This individual will be responsible for implementing, monitoring, and adjusting the processes as necessary to ensure acceptable quality. This individual shall be certified in all material tests expected to be performed during the Project by resource or comparable material testing certification entity. Shall have a minimum of five years supervisory experience in inspection or documentation of testing materials or combination thereof on roadway transportation construction projects and shall meet one of the following additional requirements:

- A Professional Engineer licensed in the State of Hawaii with at least two years of highway materials or inspection experience or both acceptable to the HDOT, or
- A Bachelor of Science Degree in Civil Engineering or Construction with at least six years of highway materials or inspection experience or both acceptable to the HDOT.

Design QC Plan

a. General

The quality control procedures for each type of Design and Construction Document shall be organized by the engineering discipline e.g., civil, landscaping, electrical, and utilities. These procedures shall specify measures to be taken by the Proposer's Design Team.

Quality control standards shall be specified and included in the Design Documents and Construction Documents. Control deviations from standards, it being understood and agreed by the Proposer that no deviations from such standards shall be made unless they have been previously submitted to HDOT reviewed and accepted by HDOT at HDOT's sole discretion. Detail how it shall ensure the selection of only compliant materials and elements of the Work are included in the Project.

b. Design QC Plan Requirements

The Design QC Plan shall include the following:

Design quality control procedures for preparing and checking all plans, calculations, drawings, and other items submitted shall ensure that they are independently checked and back-checked. It shall be done in accordance with generally accepted architectural and engineering practices used by experienced architects and engineers, respectively, who are experienced in the type of design and construction methods to be used. The originator, checker, and back-checker shall be clearly identified on the face of all submittals. Specific procedures for verifying computer programs used shall also be included on the first page of all submittals. Plans, reports, and other documents shall be stamped, signed, and dated by the responsible Hawaii registered architect or engineer where required under the Contract Provisions, generally accepted architectural or engineering practices, or by applicable laws.

The design quality control plan shall set forth the level, frequency, and methods of review of the adequacy of the design of the Project. It shall also include, the methods by which all final Design Documents and Construction Documents shall be independently reviewed and verified for adequacy of design and compliancy. Back-check in accordance with generally accepted design and engineering practice by architects and engineers experienced in the type design and construction methods to be used. Checkers and back-checkers shall not have been involved with the preparation of the Design Documents and Construction Documents they are checking.

The design quality control plan shall set forth the procedures for coordinating work performed by different persons in the same area, or in adjacent areas, or in related tasks. The design quality control plan shall ensure that conflicts, omissions, or misalignments do not occur:

- Between drawings or
- Between the drawings and the specifications

It shall coordinate the review, approval, release, distribution, and revision of documents involving such persons.

The design quality control plan shall identify those elements of the Contract Provisions, Design Documents, or Construction Documents, requiring special Quality Control attention, e.g., additional emphasis, applicable standards of quality or practice to be met, level of completeness extent of detailing required, or on-site training of the Proposer's staff and HDOT.

The design quality control plan shall identify in a table the discipline, name, qualifications, duties, responsibilities and authorities for all persons proposed to be responsible for QC.

The design quality control plan shall state the name and any requirement for qualifications, duties, responsibilities, and authorities of external technical experts necessary to ensure the quality of the design of the Project. The anticipated timing of use, the expected availability, and any coordination required with respect to any such experts.

The design quality control plan shall describe the required design quality control and assurance functions, e.g., scheduled activities for Design QC identifying the Design Documents and Construction Documents to be submitted to HDOT for its review at each stage of the design or work phase of the Project.

The Proposer's Design Team shall be responsible for maintaining all documents for the duration of the Contract. Documents shall be organized, indexed, and delivered to HDOT upon Final Acceptance unless required to be delivered earlier pursuant to the Contract Provisions, or even if incomplete, within seven (7) days of receipt of request from HDOT.

These documents shall include, but are not limited to, the following items: design criteria, reports, notes, calculations, drawings, schematics, supporting materials, etc.

c. QC of Design Changes

Changes in the design of the Project or any portion thereof as shown on the Design and Construction Documents, including field changes, shall be subject to design QC measures. Procedures commensurate with those applied to the original design of the portion of the Project being changed. Furthermore, all changes described in this Section shall be accepted in writing by the organization that performed the original design with the written acceptance of HDOT. Any changes affecting the basic configuration of the Project shall also be subject to the requirements contained in this Section. Documents containing design or field changes or both shall be distributed according to the requirements in the section titled "Plans Distribution".

d. Submittals for Review by HDOT

Design and Construction Documents relating to the following construction phases shall be submitted to HDOT for review. HDOT acceptance of these submittals is not required and will not be provided. Any review comments made by HDOT will be provided in writing to the Proposer within 30 calendar days, or as agreed to in writing. The following table indicates the submittals for review.

The Proposer shall be fully responsible for the schedule impacts and costs of revisions arising from HDOT's review of the Construction Documents for consistency with the requirements of the Contract Provisions and caused by the Proposer's non-compliance with Contract requirements.

Construction Phase	Documents
Environmental	All required permits
Civil	Pedestrian/Bicycle Geometrics (Plan and Profile) Erosion Control Plan Quantities Construction Specifications

Geotechnical	Draft Geotechnical Report Final Geotechnical Report
Surfacing and Pavements	Pedestrian/Bicycle Path Geometrics Typical Sections Paving Quantities Paving Plan Construction Specifications
Structures & Hydraulics	Hydraulics Report Scour Report Design calculations Structural calculations Drainage Plans & Profiles Drawing & Special Details Construction Specifications
Landscaping	Planting Plan Construction Specifications
Safety and Traffic Items	Phasing and Construction Sequence Report Traffic Management Plan Sign Inventory Traffic Markings and Delineation

	Pedestrian/Bicycle Lighting Permanent Signing Work Zone Traffic Control Plan Construction Specifications
Misc. Construction	Plans and Plan Details Construction Specifications

Construction Quality Control Plan

a. General

The Proposer shall submit a construction quality control plan. The construction quality control plan shall show the Proposer to be responsible for the quality of construction and materials incorporated into the Project. The Proposer's construction Quality Control measures are to ensure that its operational techniques and activities provide material of acceptable quality. Proposer sampling and testing shall be performed to control the quality of the processes and determine the degree of material compliance with the Contract Provisions. The construction quality control plan shall detail how the Proposer shall provide quality control for all construction elements of the Project, e.g., perform tests for quality control, provide inspection, exercise management control to ensure that work conforms to the contract requirements. The construction quality control plan shall also detail how the Proposer will assist HDOT with their independent QA program.

Construction Quality Control Plan Requirements

The construction quality control plan shall, at a minimum, address the following:

- a. Describe the Proposer's quality control organization, including the number of full-time equivalent employees with specific Quality Control responsibilities and an organizational chart showing lines of authority and reporting responsibilities;
- b. List by discipline the name, qualifications, duties, responsibilities, and authorities for all persons proposed to be responsible for Construction Quality Control;
- c. Project progress schedule;
- d. Submittal schedule;
- e. Inspection requirements;
- f. Quality control sampling, testing, and analysis plan with frequencies, general test locations, and methods;

- g. Identify the certified laboratory(ies) to be used;
- h. Specify documentation for QC activities, including control charts;
- i. Contract requirements for corrective action when quality control and/or acceptance results indicate nonconformance; and
- j. Communication procedures with HDOT inspection staff.
- k. Proof of material test method certification for all test laboratories, test laboratory technicians, any labor supply to help HDOT to take samples.

The Contract Provisions may also require specific quality control measures for certain materials. When so required, the Proposer will be responsible for providing all personnel, equipment, supplies, and facilities necessary to perform quality control, obtain samples, and perform tests required in the Contract Provisions. The certification of HDOT personnel in the test method shall be part of the construction quality control plan. Certification for HDOT personnel shall be paid for by the Proposer and shall be at no additional cost to HDOT.

Additional Personnel

Quality Testing Supervisor: The Quality Testing Supervisor may be an employee of the Proposer's laboratory, and shall be on-site during the testing. The Quality Testing Supervisor shall be certified to do all material test methods to be used on the Project. Disclose resume of the proposed individual as part of the RFP-selection process. The Quality Testing Supervisor shall meet one of the following requirements:

- a. A Professional Engineer registered in the State of Hawaii with at least one year of highway materials testing experience acceptable to the HDOT, or
- b. A Bachelor of Science Degree in Civil Engineering or related field acceptable to HDOT and at least three years of highway materials testing experience acceptable to the HDOT, or
- c. An individual with at least eight years of highway materials testing and construction experience acceptable to the HDOT.

Inspection Technicians: The Proposer's QC field and lab Inspection Technicians shall have a minimum of three years of roadway construction inspection experience in the work activity being inspected. All field technicians shall be HDOT certified and all labs must be re:source or CCRL approved in the test methods to be performed. All lab personnel shall have training records in the re:source folders for all tests to be performed by the testing firm and may be witnessed by HDOT. If HDOT samples are being tested HDOT shall be in control of the test. The Proposer shall supply the labor and may also supply the test equipment use.

The Proposer's Part in HDOT Quality Assurance Program

As stated previously, only HDOT is in control of QA testing for acceptance, and the Proposer's QA portion of the team is to provide aid, assistance, testing equipment use and information so HDOT will be able to conduct their QA program. The Proposer's testing equipment may be used if the calibration is verified by HDOT.

a. HDOT's Responsibilities

Verification acceptance sampling and testing will be performed by HDOT to validate the Proposer's sampling and testing as well as the quality of the material produced. An Independent Assurance Program will also be conducted and controlled by HDOT to evaluate all sampling and testing used in the acceptance of materials. HDOT will sample and test materials following the guidelines of the minimum sampling of material as shown in Standard Specifications Subsection 106.04 - Material Sample. HDOT reserves the right to increase the sampling rate as necessary from the amounts listed at no additional cost. The sampling of material (time, unit, location) and testing for verification purposes shall be controlled by HDOT or its agent. In addition, all samples that will be used for verification acceptance testing by HDOT will be stored and transported to the testing laboratory by HDOT or its agent. Samples not meeting these requirements will not be used for HDOT's QA.

The Proposer shall be responsible for providing a schedule for Work that may have material that may be tested by HDOT as required by these documents. The schedule shall state a suggested response time and advance notice. The notice shall be no less than a full working day before the Work that may be tested by HDOT is to occur. The response times will be reviewed by HDOT and HDOT will decide if it will test the material. Verification acceptance testing as well as inspection is for the benefit of HDOT. The Proposer's Construction Quality Control shall be responsible for ensuring the quality of the work and material meets contract requirements.

HDOT will be solely responsible for determining the acceptability of materials incorporated into the project. Disputes in the acceptability of a material will be addressed in accordance with HDOT's current "Quality Assurance Manual for Materials, Highways Division, Materials Testing and Research Branch" Dated October 2001. The exception to this document is if the person who did the sampling, or laboratory or laboratory technician are not certified to do the test method the Proposer has waived its rights to protest HDOT's result. HDOT's test results will be the valid result used in the acceptance decision.

b. Activities Meetings

Prior to the start of any major work activity, the Proposer will be responsible for holding an Activity Meeting to ensure that all project personnel have a thorough understanding of the work to be done. Major work activities generally correspond to the sections of the Standard Specifications, such as clearing and grubbing, earthwork, etc. or a definable feature of work such as a pre-paving conference. The Activity Meeting shall include discussions related to what will be accomplished, by whom it shall be performed, and where, when, and how the work will be done. The Activity Meetings are to ensure that all parties have the same understanding of the design intent, have the appropriate plans, specifications, and any special details, and are aware of safety regulations and procedures that need to be followed. At this time, the QC inspection checklist for this activity shall be reviewed. Activity Meetings shall be scheduled several weeks in advance of the beginning of the actual work. The Activity Meetings shall be planned and conducted by the Proposer's Construction QC Manager. Minutes of the meeting shall be taken to document what was discussed, any clarifications and understandings related to the construction of the item. Activity Meetings are classified as activity milestones and shall be identified in the Proposer's QC plan. Work classified as activity milestones shall not start until the Activities Meeting for it is held. More than one major activity, etc. can be discussed at one Activities Meeting.

c. Proposer Sampling and Testing

Proposer field and laboratory sampling and testing shall be performed as specified in the Standard Specifications and HDOT's "Quality Assurance Manual for Materials, Highways Division, Materials Testing and Research Branch" Dated October 2001, and any updated addendums, and shall also comply with the HDOT Materials Quality Control Manual. Sampling and testing shall be performed by certified testing personnel defined in this specification and shall be performed in a laboratory that is re:source or CCRL-certified in the test method they will be performing for the Project. The test equipment used shall be calibrated within the past 12 months. The Proposer shall furnish copies of all test results to HDOT within 24 hours of acquiring the sample or the next day of business. In general, HDOT acceptance of these submittals is not required and will not be given. Only in cases where the tests show that the material is or close to being non-compliant will there be a comment.

The Proposer shall provide HDOT a testing plan for each material to be tested. The testing plan shall be submitted prior to the beginning of production or placement of the material. The Proposer shall maintain a material summary of quantities of each specific material incorporated into the work with dates and results of quality control testing associated with the material usage and compliance to contract requirements. This summary shall be made available to HDOT when requested. All the testing equipment shall be calibrated by an independent certified calibration company within 1 year previously and be continually checked with verification tests as required by re:source. Prior to being accepted for testing, the equipment proposed for use needs to be listed and shall be inspected by HDOT testing lab personnel prior to use. The concrete testing apparatus shall have either neoprene caps or sulfur caps that fit the cylinder ends.

All laboratory soil tests and field density tests shall be performed by the Proposer's Geotechnical Engineering firm. All testing shall be done by certified personnel.

All concrete tests shall be conducted to failure, and data shall include the strain rate.

The Proposer is responsible for providing HDOT a complete acceptance and testing plan for all foundation types. This plan shall be submitted and accepted by HDOT before any work commences. HDOT shall be allowed 20 working days to review the plan.

d. Material Certification

When the Project is completed, the Proposer shall be responsible for completing a thorough final review of the documentations of material compliance to Contract requirements by verifying that all test reports, inspection reports, and other pertinent information and reports have been recorded and that such documents contain the required information.

The Proposer shall be responsible for preparing and submitting a letter of material certification to the HDOT Engineer. The letter shall include the following statement:

This is to certify that:

The results of quality control tests indicate that the materials incorporated into the construction work and construction operations, controlled by sampling and testing, were in compliance to the Contract requirements. Explanations for exceptions to the Contract requirements are as follows:

The material certification letter shall list any exceptions and how they were resolved, including any explanation for justification of material compliance or usage. It shall be signed by the Proposer's Project manager and the Quality Testing Supervisor. If the Quality Testing Supervisor is a licensed professional engineer the document shall be stamped also.

e. Coordination and Notification

The Proposer's Construction QC Manager shall designate a primary point of contact to notify HDOT of their construction activity schedule in a timely manner so that HDOT may conduct an inspection if it chooses. An alternate individual may be designated to function in this capacity in his/her absence. HDOT will also designate one individual to handle responses to the Proposer.

f. Quality Control Inspection

The QC Plan shall contain inspection plans for each construction work item included in the Project whether performed by the Proposer or a subcontractor or vendor. Work items may be definable features or items of work defined by HDOT's Standard Specifications.

g. Work Activities

The Proposer shall provide inspection for all work activities for conformance with the construction requirements in the Contract Provisions.

h. Inspection Guidelines

Inspections shall be performed during all phases of the Project from start to completion in order to assure that the work meets, and is being performed in accordance with the Contract Documents.

i. Inspection Documentation

Each of the Proposer's QC inspectors shall summarize their daily inspections and test and material sampling activities in a daily report. Copies of the inspector's diaries shall be provided to HDOT daily.

3.5.22. PUBLIC RELATIONS AND PUBLIC COMPLAINTS

HDOT's goal is to minimize the emotional and physical impact on Wahiawa and Whitmore Village residences, businesses, and neighborhoods that abut this project. It shall be the responsibility of the Proposer to provide the following services for the well-being of the affected residents, and businesses.

The Proposer shall be responsible for providing a public information specialist responsible for managing public information and public involvement activities outlined below. This staff member shall be experienced in all aspects of providing the public with information on public works projects, including newsletter writing, design and production, direct mailing, telecommunications, news release writing, webpage management, and public speaking. This public information specialist shall work with HDOT staff in a team effort to help promote public satisfaction with the project. All information released shall be submitted to HDOT in advance for review and acceptance. The information shall not be released without HDOT acceptance.

The public information specialist shall have “real-time” access to all project details that may be relevant to the public, public agencies, emergency service providers, businesses, and other interested groups. The public information specialist is expected to provide that “real-time” information to HDOT’s Project Manager on a weekly basis, at a minimum, and more frequently if deemed necessary by HDOT. The public information specialist is also expected to maintain a 24-hour hotline to handle public inquiries and complaints.

Although media interviews will mainly be the responsibility of HDOT, the Proposer or the public information specialist may be asked to provide the media with an interview or other information on short notice. In such a case, the Proposer or the public information specialist will be responsible for delivering a message consistent with HDOT’s message. The Proposer or designee shall inform and coordinate this activity with HDOT prior to the interview.

In addition, all written, audio and video materials produced by the Proposer’s staff for public dissemination shall comply with HDOT’s standards. A copy of all such materials shall be provided to HDOT for preapproval at least seven (7) calendar days prior to scheduled distribution.

The goal of written, audio, or video materials shall be to increase stakeholder satisfaction of the Project by educating and informing the public about the Project, including long-term, short-term, and daily disruptions, changes to traffic conditions, project benefits, Project staging when appropriate, and other relevant issues.

At least three weeks before construction activities begin, HDOT’s Project Manager will meet with the Proposer and public information specialist to review the following requirements. Provide HDOT three (3) weeks’ notice of the meeting.

a. Public Meetings

The Proposer will be responsible for having well-trained and informed speakers familiar with local issues available for public meetings, community and civic organizations, neighborhoods associations, private businesses, and other stakeholders.

The Proposer will be responsible for organizing, preparing, attending, and conducting, a minimum of three (3) Public Informational Meetings (PIM). One PIM will be conducted during design to provide Project status and information to the community. The second PIM will be conducted just prior to construction to advise the community of temporary construction impacts and schedule. A third PIM will be conducted after the start of construction to address any public complaints received by HDOT or the Proposer.

If required and as solely determined by HDOT, any additional PIMs conducted by the Proposer may be considered as extra work and compensable by change order. HDOT will not pay for the cost of public meeting(s) associated with the permits separately, if required. HDOT will consider the cost of the public meeting(s) associated with the permits as included in the contract prices for the various contract items.

For each meeting, the Proposer will be responsible for providing technical assistance, data, and information necessary to produce display boards, printed materials, video graphics, and other forms of information necessary for dialogue with the public per NCHRP Synthesis 407 Effective Public Involvement Using Limited Resources. The Proposer shall also be responsible for providing the necessary staffing and video equipment to present the information. The Proposer shall find a suitable venue (ADA accessible) to conduct the PIM and make arrangements to reserve the meeting facility. The Proposer shall make accommodations for disabled or disadvantaged people. The Proposer will be responsible for submitting a newspaper notice to HDOT for review and acceptance, and after obtaining HDOT's acceptance, the Proposer shall publish the notice in Honolulu Star Advertiser. The notice shall be published no later than 14 calendar days prior to the PIM date.

In addition to the general public attending the PIM, the Proposer shall, at a minimum, contact the following organizations:

- State Department of Transportation
- State Department of Land and Natural Resources, CWRM
- State Historic Preservation Division, SHPD
- Office of Hawaiian Affairs, OHA
- Oahu Island Burial Council
- Hawaii Visitors Bureau
- Oahu Historic Preservation Review Commission
- Hawaiian Telcom
- Spectrum
- Honolulu Police Department
- Honolulu Fire Department
- Owners/lessees within 500-feet
- Board of Water Supply
- Hawaiian Electric Company
- Outdoor Circle
- Mayor, City and County of Honolulu
- Wahiawa Council Member of City and County of Honolulu Council
- Wahiawa Legislative delegation: Currently Senator Donovan Dela Cruz, Representative Amy A. Perruso

The Proposer shall be responsible for preparing a list of attendees and meeting minutes. The meeting minutes shall accurately record all discussions in the PIM and identify all action items and responsible parties for each action item. An electronic Word document and pdf of the list of attendees and meeting minutes shall be provided to HDOT within seven (7) calendar days from the PIM date.

b. Bi-Weekly Progress Reports

The Proposer shall be responsible for providing updates every two weeks to the HDOT Project Manager. That information shall specify details of the following period's closures, detours, general Project status, and other information relevant to the motoring public.

The Proposer shall be responsible for providing the HDOT Project Manager a summary of public inquiries, complaints, and comments every two weeks. Include general categories and trends of comments and an explanation of how the Proposer has responded to those comments, whether addressed or is being resolved.

c. Project Web Page

The Proposer shall be responsible for developing and maintaining a Project web page that will contain information listed below and in Special Provisions Section 691:

<u>Information</u>	<u>Update Frequency</u>
Project Work Scope	Beginning of job
Project Site Map	Beginning of job
Proposer call-in number for complaints	Beginning of job
Progress Schedule/ Milestones	Beginning of job and when schedule is adjusted. Schedule changes must be approved by HDOT prior to posting.
Email list serve	Beginning of job
Contacts and emails or Physical Address	Beginning of job
Work progress narrative with sketches	Monthly
Scheduled Road/Lane Closures	14 calendar days prior to closure changes. HDOT shall be provided 14 calendar days notice for any road/lane closures or changes to road/lane closures.

HDOT may link this project web page to the HDOT's website. The Proposer shall include the web page address on a construction advisory sign that will be visible to the public in a location and format as directed by HDOT.

3.6. CONTRACT TIME

The approximate award date will be 34 calendar days after the Design and Price Proposal due date, the approximate date of contract signing will be 30 calendar days after the award date, and the approximate Design NTP date will be 32 calendar days after the contract is signed.

The Contract Time shall be 1095 calendar days from the date of Design Notice to Proceed to completion of all construction work items, or the duration shown in the Project Schedule submitted as part of the Design and Price Proposal. For any work beyond the established Contract Time, the Proposer will be subject to Liquidated Damages in accordance with Section 108.08 of the Special Provisions.

The above contract time shall not include the 9-month plant establishment period specified in Special Provision Sections 618 and 619.

3.7. REQUESTS FOR INFORMATION

HDOT will accept Requests for Information ("RFI") related to Step 1 – Qualification Proposal and Step 2 -Design & Price Proposal up to 4:00 pm on the date noted in Section 1.5, Table 1. RFIs shall be in writing and submitted electronically (email preferred) to [MS. HOLLY YUEN](mailto:MS.HOLLY.YUEN@hawaii.gov), FACSIMILE (808) [692-7555](tel:8086927555) OR E-MAIL AT HOLLY.YUEN@hawaii.gov. (Attention: RFI Submittal, Wahiawa Pedestrian Bridge, Whitmore Village to Wahiawa, HWY-O-07-18). No verbal inquiries will be accepted by HDOT.

HDOT's responses to the RFIs related to the preparation of the Design Concept Documents will be issued by Addendum no later than 14 calendar days prior to the submittal dates. After the Addendum is posted, the Proposers shall finish their documentation according to their best understanding of the project given all information received in this Request for Proposal Documents, the pre-qualifications proposal meeting, and any addenda documents received to that point.