

BART Agreement Number: 6M8144

Approval Date: 06/22/2022

Work Plan No.: A.10-03 - 19th St Station Mod - DSDC Services

Scope:

2.0 SCOPE OF SERVICES

Scope of services will include provision of as-needed Design Services During Construction of design elements related to the technical Specifications and Drawings associated with the structural design, electrical and lighting design, and mechanical and plumbing design. These services include, but are not limited to, the following tasks:

- Submittal Reviews including Shop Drawings and product information
- RFI Responses
- Change Reviews and support with drawing and specification changes and cost estimating
- Field visits and inspections for construction/design issues as required
- Assistance with resolution of design/construction conflicts as encountered
- Review Operation and Maintenance Manuals and Training Syllabus / Materials
- Elevator Support Services
- Other technical support as required
- Record Drawings

Task 1: Administration and Project Management

1.1.1 Project Coordination

The Project Manager in coordination with design leads will perform the following activities in support of the project:

- Supervise and coordinate workplan activities
- Workplan communications/meetings/record keeping
- Workplan progress reporting
- Subconsultant management

The Project Manager shall be responsible for creating and maintaining a Design Project Management Plan (DPMP) for the purposes of documenting design policies, procedures, and responsibilities throughout the life of the contract. Contract administration will include the following items:

- Sub-consultant coordination
- Monthly progress reports

1.1.2 Document Control

Documents and electronic files, CAD drawings, transmittal forms, submittals, letters, correspondence, and other miscellaneous papers will be managed using ProjectWise, SharePoint and/or other appropriate formats. The Design Team may also make use of an FTP site for file transfer.

1.1.3 Monthly Progress Reports

Monthly progress reports will be provided; the report will include the following:

- Cover letter
- Work plan invoice and billing summary
- Work performed during this month (bulleted list)
- Consultant team members working on work plan during this month
- Any work plan concerns including recommended corrective actions
- Updated Schedule

Deliverables:

- Monthly Progress Report

1.2 Site Visits and Notes

Site visits will be conducted by the project team as required by the District. It is assumed that these work activities will not affect the operation and safety of BART employees, passengers and trains. It is further assumed that no additional safety training is required, as the team has already participated in the 4-hour safety training prior to the start of the project.

Assumptions:

- Weekly meetings at the site, or via teleconference.

1.3 Team Coordination, Progress Meetings and Technical Meetings.

The Design Team will conduct weekly coordination meetings in person or via conference call over the construction phase:

- Weekly internal team coordination meetings
- Weekly progress meetings with BART and the CM team

Deliverables:

- Meeting minutes

Task 2: Design Services During Construction**2.1 Architectural Scope**

Architectural Scopes includes:

- Review and provide response to Contractor Request for Information. Responses to RFIs will be provided within 3 working days of receipt by FMG. If the RFI involves design revisions, BART will be notified immediately.
- Review and provide responses to Contractor Shop Drawings as they relate to the architectural design. Shop Drawings review will be returned within 10 working days. If the shop drawings involve design revisions, BART will be notified immediately.
- Review and provide responses to Contractor Submittals as they relate to the architectural design. If submittals are incomplete, they will be returned without review for conformance with specs. Submittals review will be returned within 5 working days.
- Provide design services as required to modify and update the Contract Documents to provide clarification and or necessary changes to the design. All revisions will be estimated at the time of the request to determine the level of effort.
- Attend meetings and perform site visits as requested.
- Coordinate all work with the other disciplines, BART and the Contractor.
- Issue Record Documents, as-built drawings and specifications, in both Revit and CAD formats, and pdf files, upon the request for the updated documents after completion of construction.

Assumptions:

- Respond to an average two (2) RFI per week for a period of 65 weeks.
- Review up to 40 Shop Drawings, one time each. Ten (10) of them will require a second review.
- Review 120 Submittals, one time each.
- Up to two (2) Design Revisions During Construction, each revision 160 hours.

Exclusions:

- Conversion of the Revit documents to CAD is not included in the fee.

2.2 Structural Scope

Scope of services will include provision of as-needed Engineering Support During Construction of design elements related to the technical Specifications and Drawings associated with the structural design. These services include the following tasks:

- Review submittals including structural product specifications, steel shop drawings, concrete mix designs, etc.
- Respond to Request for Information, RFI.
- Respond to BART approved Field Request Change, FCR, and issue revised drawings and specifications as necessary
- Perform site visits and provided engineer's observations during construction.
- Provide structural input and site visit as necessary to resolve conflicts and issues encountered during construction
- Provide structural input for secondary structure and support for non-structural elements.

Assumptions:

- Issue Record Documents, drawings and specifications, both electronic CAD files and pdf files, upon the request for the updated documents after completion of construction.
- Background drawings will be provided in PDF format, and Auto CAD format by the Architect.
- Structural drawings will be in AutoCAD format.
- Deliverables will be in electronic format, except that one set (hard copy) of signed and stamped Final Design drawings and calculations will be submitted.

Exclusions:

- Preparation of a structural construction cost estimate. Review of structural cost estimate prepared by others.

2.3 MEP Scope

Scope of services will include provision of as-needed Engineering Support During Construction of design elements related to the technical Specifications and Drawings associated with the Mechanical, Electrical and Plumbing (MEP) design. These services include the following tasks:

- Review submittals including mechanical, electrical and plumbing product specifications, shop drawings, Factory Acceptance Testing, etc.
- Respond to Request for Information, RFI.
- Respond to BART approved Field Request Change, FCR, and issue revised drawings and specifications as necessary
- Perform site visits and provided engineer's observations during construction.
- Provide MEP input and site visit as necessary to resolve conflicts and issues encountered during construction
- Issue Record Documents, as-built drawings and specifications, in both Revit and CAD formats, and pdf files, upon the request for the updated documents after completion of construction.

Assumptions:

- Updated substantial completion for the construction phase is scheduled for September 2022.
- Preparation of Record drawings will be based on Contractor's Redline markups.
- Background drawings will be provided in PDF format, and Auto CAD format by the Architect.
- Deliverables will be in electronic format, except that one set (hard copy) of signed and stamped Final Design drawings and calculations will be submitted.

Exclusions:

- Preparation of MEP construction cost estimate. Review of MEP cost estimate prepared by others.

2.4 Elevator Scope

Elevator consultant scope is part of the previous work plan A.10-02.

Prime: HNTB+FMG JV

Subconsultant	Amount	DBE (Y/N)	SBE (Y/N)
Structus	\$25,661	Y	Y
YEI	\$40,616	Y	Y

Work Plan Value: \$356,784