

BART Agreement Number: 6M8135

Approval Date: 2/02/2021

Work Plan: No. A.03-03 – TBT Internal Retrofit - Construction Management Services

Scope:

2.0 SCOPE OF SERVICES

JACOBS shall supply CM for the TBT Internal Retrofit Project in conformance with Agreement No. 6M8135.

Task 01: Inspection of Contractor's Work

Provide inspection services on every shift the Contractor performs Work. Inspectors shall be confirming that Work performed is done in accordance with the Construction Contract 09AU-120 Plans and Specifications. Inspectors shall:

1. Prepare Inspector Daily Reports (IDRs) that document the activities performed on the shift inspection services are provided. IDRs to be prepared using WongCMS. IDRs shall document/include:
 - a. Progress of Work categorized by Bid Item.
 - b. List of BART Operations Liaison Employees in Charge working the shift inspected.
 - c. List of Contractor Equipment performing the work.
 - d. List of Contractor Employees performing the work.
 - e. Photos documenting progress of work.
2. Prepare Non-Conformance Reports (NCRs) and ensure that non-conforming work is brought into compliance with the Contract Documents.
3. Monitor work performed on a Force Account basis. Sign Daily Extra Work Reports

(DEWRs) that list materials, equipment, and labor associated with Force Account work.

Task 02: Receive, Distribute, Review, and Respond to Contractor Submittals and Request for Information (RFIs)

Receive, distribute, review, and respond to Contractor's Submittals and RFIs. Archive responses on WongCMS.

Submittals

Review Submittals to confirm product conforms to Contract Documents or distribute to appropriate TBT Internal Retrofit Project team member for review. Assemble multiple reviewer comments into a consolidated Submittal Review. If necessary, facilitate discussion between multiple reviewers to resolve conflicting comments.

RFIs

Review and distribute RFIs to appropriate project team member for technical response. Once technical response is received, review and determine if technical response initiates a change to the Contract. If response does initiate change, confer with technical staff if change is necessary or if another means exists to address RFI that avoids a change to Contract.

Task 03: Prepare Change Notices / Change Orders

Prepare Change Notices and Change Orders in conformance with BART's Resident Engineer's Manual for Design, Bid, Build Construction and Procurement Contracts (RE Manual). Specific tasks include:

1. Prepare Finding of Fact (FOF) confirming reason for change and describing scope of work associated with change.
2. Prepare Engineer's Estimate (EE) showing detailed breakdown of cost for change. Cost should be determined based on a resource approach showing the following items associated with additional work: materials, equipment, and labor hours.
3. Prepare Pre-Negotiation Plans (PNPs) documenting approach CM will take in negotiating costs of Change with Contractor. PNPs will compare EE vs. Contractor's Cost Proposal and document differences between the two. JACOBS RE to establish Proposed Settlement Range in PNP.
4. Prepare Record of Negotiation (RON) documenting agreements and commitments made between CM and Contractor regarding Change Order. RON to detail discussion regarding Direct Labor, Material, Equipment, Mark-Ups, Unit Price (if applicable), Time, and DBE Participation.
5. Review and Audit Extra Work Bills (EWBs) associated w/ Force Account (FA) Change Order work furnished by Contractor. Confirm resources listed in EWB matches associated DEWR and that costs reported on EWB conforms to Contract.

Task 04: Quality Assurance

Perform following quality assurance (QA) inspections of Contractor's work:

1. Off-site fabrication facilities for precast concrete ties and steel retrofit plates.
2. Precast concrete ties and steel retrofit plates at fabrication facilities.
3. Erection and installation of concrete anchors in TBT.
4. Erection and installation of steel retrofit plates in Galleries and Bore.
5. Welded joints of steel retrofit plates in Galleries and Bore.
6. Shop and Field surface preparation and application of paint onto steel retrofit plates.
7. Reinforcement clearances to finished concrete surfaces.

Task 05: Maintenance Vehicle Consist (MVC): Design Review, Fabrication Inspection, Acceptance Testing Support, Operator Training Support

Review MVC design submittals. Inspect fabrication of MVC Locomotives and flatcars at fabrication facility. Assist in acceptance testing on BART Spur and Mainline tracks. Provide memos as needed documenting observations made on MVC Operational performance on BART system and recommendations for improvement. Develop MVC Locomotive Operations training curriculum with BART Maintenance and Engineering (BME) input. Provide on-hands training in MVC Locomotive to BART Operators.

Task 06: Site Specific Work Plan (SSWP) /Track Allocation / and other Intra-BART Coordination

Review SSWPs for Contract compliance. Forward to BME Operations Supervisor Liaison (OSL) with recommendation of appropriate BME reviewers. Consolidate SSWP reviewer comments, issue to Contractor, and confirm comments are satisfactorily addressed. Prepare Track Allocation requests compatible with the activities shown on Contractor's four (4) week look-ahead schedule. Process requests for Contractor Photo Identification (Red) Badges and clearances for Sensitive Security Information (SSI). Maintain log of Badge/Clearance status. Coordinate Contractor's work with other BART Capital Projects concurrently performing work in the TBT. Respond to internal RFI's from other BART Capital Projects concurrently performing work in the TBT. Furnish documents upon request from other BART Departments, including BME and BART System Safety.

Task 07: Review Contractor Schedule Updates / Time Impact Evaluations (TIEs)

Review Contractor Schedule Updates to determine Critical Path on monthly basis. Identify deficiencies in Contractor's actual progress compared to planned progress. Determine if deficiencies are due to owner, contractor, or differing site condition. Review Contractor's TIEs and determine if Contractor's request for extension in Contract Time is correct in magnitude, excusable or not excusable, and compensable or non-compensable.

Task 08: Review/Prepare, and Process Contractor's Progress Pay Application

Determine appropriate level of progress per month per Bid Item based on IDRs. Use determination of progress to prepare monthly Progress Pay Application. Maintain log of monthly expenditure per Bid Item and Schedule of Values.

Task 09: Design Review Board (DRB) Support

Maintain and update exhibits for DRB quarterly project status reports. Provide BART guidance and recommendation on best approach to address/resolve Contractor Notice of Potential Claims (NOPCs) to avoid DRB hearing. Prepare position papers and exhibits supporting BART's disposition regarding NOPCs if brought to DRB for a hearing.

Task 10: Project Management

Manage CM staff resources. Monitor quality of CM services and adjust/improve as necessary. Procure and provide staff as requested by BART. Prepare monthly reports for CM Services showing progress gained on CM Tasks.

Prime: Jacobs

Subconsultant	Amount	DBE (Y/N)	SBE (Y/N)
Acumen Building Enterprise, Inc.	\$ 221,106	Y	Y
SEM Incorporated	\$ 727,337	N	Y

Total Work Plan Value: \$ 2,716,092