

**BART Agreement Number: 6M8187**

**Approval Date: 11/14/23**

**Work Plan No. A.04-01 49GH008 - CBTC - Consor - Construction Management Oversight**

**Scope:**

Summary of Work

This Work Plan is being submitted to continue Consor PMCM, Inc. (Conсор) Construction and Project Management Services for the construction of District Contract 49GH-110 for the Design-Build of a Communication Based Train Control System for the District's Transbay Corridor Core Capacity Program (TCCCP) for a period between October 1, 2023, through December 31, 2024. Consor to access to staff with expertise in the following engineering disciplines to complete the tasks below: Civil, Structural, Electrical, Communication, Train Control Software and Hardware, Safety and Transit Vehicle.

Specific tasks are listed below.

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 accepted Issued for Construction (IFC) Drawings and Specifications. Consor shall provide the following:

1. Prepare Inspector Daily Reports (IDRs) that document the activities performed by the Contractor on the shift inspection services are provided. IDRs are 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 Project's Document Management System (DMS). Specific tasks for Submittals and RFIs are listed below.

Submittals

Confirm Design Contract Data Requirement List Submittals (CDRLs) conform to the Contract Technical Requirements. Primary review tasks will be for review of Migration Design Review (MDR) CDRLs, which result in IFC Drawings and Specifications. Confirm that IFC Submittals conform to active IFC Drawings and Specifications. Distribute CDRLs and IFC Submittals to appropriate Project Team Subject Matter Experts (SMEs). Assemble multiple reviewer comments into consolidated comment resolution forms. Facilitate discussion between multiple discipline reviewers to resolve conflicting comments.

RFIs

Review and distribute RFIs to appropriate SMEs 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: Construction Contract Change Management

Determine merit and respond to Contractor's request for additional compensation and Notice of Potential Claims.

Prepare Change Notices and Change Orders in conformance with BART's Design Build Oversight Management 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. Consor 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.
6. Provide monthly report on status of Construction Contract Contingency. Monthly report to identify magnitude of pending Change Orders, anticipated Change Orders, and potential Change Orders. Include accruals of Change Orders performed under Force Account in Monthly.

**Task 04: Site Specific Work Plan (SSWP) /Track Allocation / and other Intra-BART Coordination**

Review SSWPs for Contract compliance. Forward to Operations Supervisor Liaison (OSL) with recommended list of District reviewers. Consolidate SSWP reviewer comments into common CRF, 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 active construction CBTC areas. Respond to internal RFI's from other BART Capital Projects. Furnish documents upon request from other District Departments, including Operations and System Safety.

**Task 05: 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 Time Impact Evaluations 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 06: Review/Prepare, and Process Contractor's Progress Pay Application**

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

Task 07: Design Review Board (DRB) Support / Claims Mitigation

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

Task 08: Project Controls

Develop and maintain Project Estimate at Completion (EAC). Gather, evaluate Project cost data monthly and update EAC accordingly. Accrue Consultant billings and incorporate into EAC monthly updates. Develop a project controls dashboard that can convey EAC trends external project stakeholders such as the Assistant General Manager (AGM) of Office of Infrastructure Delivery (OID) and Federal Transit Administration's (FTA's) Project Management Oversight Consultant (PMOC). Notify District management team of trends that indicate an increase in budget or a need to secure additional funding.

Task 09: Document Control

Receive, categorize, and post onto DMS all project correspondence from Contractor. Categorize and release all District Correspondence to the Contractor via DMS. Provide weekly updates on project correspondence status, indicating what documents are under review and when response is due back to Contractor.

Task 10: Risk Management

Maintain Project Risk Register on monthly basis. Provide status updates on identified risks. Insert new risks as identified by project Work Group Leads. Assign score to each risk based on FTA guidelines. Assist Work Group Leaders in developing appropriate and actionable risk mitigation measures. Monitor risk mitigations and measure their efficacy. Recommend corrections to ineffective risk mitigations. Quantify risk to determine how it influences the EAC.

Task 11: Quality Assurance / On-Site Acceptance Testing Inspection

Track Contractor adherence to accepted Quality Assurance Program (QAP). Quality Assurance is to cover both Contractor design and construction activities. Perform audits evaluating Contractor's performance on quality initiatives and requirements. Report findings and observations and non-conformance reports to District. Request Corrective Action Plans (CAPs) from contractor as needed to address audit findings. Maintain log of non-conformance reports and confirm when corrective actions are complete.

Task 12: WorkPlan Management

Manage Construction and Project Management staff resources. Monitor quality of services and personnel and adjust/improve as necessary. Provide staff as requested by BART. Prepare monthly reports for Construction and Project Management Services listing activities and services performed and completed in the reporting period. Monthly report should indicate monthly expenditure trend and provide a forecast when workplan will be exhausted.

Task 13: Estimating

Provide independent cost estimates for Change Notices. Review contractor proposals. Prepare record of negotiations, and PMPs. Assist with negotiating CN/COs.

**Prime: CPM Associates**

<b>Subconsultant</b>	<b>Amount</b>	<b>DBE (Y/N)</b>	<b>SBE (Y/N)</b>
SMG	\$ 150,623	N	Y
STV	\$ 538,953	N	N
VSCE	\$ 647,059	Y	Y
AECOM	\$ 835,706	N	N
QEI	\$ 445,217	Y	Y
Saylor Consulting Group	\$ 1,065,345	Y	Y

**Total Work Plan Value: \$ 8,163,900**