

BART Agreement Number: 6M8132

Approval Date: 03/22/2021

Work Plan: No. B07-02 Systemwide HVAC Upgrades - Additional Design and DSDC

Scope:

Project Understanding

AECOM Technical Services, Inc. is pleased to submit the attached technical and cost proposal prepared for the crack repair of BART bridge over Washington Avenue. This proposal will present both a technical and cost proposal to complete the engineering services including preparation, design and construction observation services with these activities.

Scope of Services

The request for proposal calls for the crack repair retrofit design that carries BART passenger line over Washington Avenue. A more specific identification of what is proposed for these activities is as follows:

Design of Crack Repairs

Design

To gain a complete understanding of the nature of the fatigue cracks AECOM engineering staff will review all readily available existing documentation such as inspection reports, analysis, photographs, design plans, As-builts..

Based on the location and nature of the cracks AECOM will examine the need to develop two types of retrofit details:

1. Exterior diaphragm retrofit – This unique detail will stiffen the box girder web gap between the box girder bottom flange and the bottom flange of the exterior diaphragm.
2. Interior Diaphragm retrofit (positive moment region) – The anticipated repair is to drill 1" diameter crack arrest holes for cracks that are turning perpendicular to the web plate.

Traffic Control Plans

AECOM will coordinate all work with local municipalities prior to initiating fieldwork. AECOM will be responsible for procuring any necessary permits, developing traffic control plans and coordination of work with sub-contractors and BART. In 2017 AECOM developed traffic control plans for a full road closure of Washington Avenue. AECOM will review the plans to ensure they meet current Caltrans and local agency standards. AECOM will also coordinate with the City of San Leandro on approvals and schedules.

Drafting

AECOM will develop a plan set of details to be used for repair work. AECOM anticipates at least three sheets will be required, including:

- General Notes, General Plan and Elevation
- Framing plan
- Bottom flange detail/section

Specifications

AECOM will reference BART specification standard format and similar specifications developed for other projects. Anticipated specifications will be developed for materials, painting, bolting, non-destructive testing (NDT), core drilling, hot surface grinding, cover hole plates and other necessary specifications as required.

Quality Assurance

At the core of our technical expertise is our corporate commitment to provide our clients with a quality product based upon a corporate devotion to excellence. AECOM is an ISO 9001 company. Our commitment to excellence is formalized in a written ISO 9001 compliant Quality Assurance Program dedicated to providing superior work. This program has been developed to assure that all work is carried out in a planned, controlled and correct manner. It includes procedures for scheduling and assigning work, for documenting correspondence, for resolving budget problems early to remedy the situation prior to completion and for guaranteeing high quality deliverables. Our Project Quality Representative (PQR) on the project will perform independent quality assurance reviews of all submittals prior to delivery. He will verify that the AECOM high quality standards are implemented and that project requirements are met or exceeded.

Construction Services

It is assumed that BART maintenance forces will perform the crack repairs. AECOM will provide services during construction to assist BART in following all plans and specifications as intended. AECOM will review all necessary shop drawing submittals, respond to requests for information (RFIs) and call-in for any construction status meetings. It is assumed field construction inspection services will be provided for 10 man-days.

Prime: ACm

Subconsultant	Amount	DBE (Y/N)	SBE (Y/N)
Statewide Traffic Safety and Signs	\$ 19,200	N	N

Total Work Plan Value: \$ 102,506