

Work Plan No A.08-01 Destination Station Signs - CSE Engineering Support

Scope:

PGH Wong Engineering, Inc. (CONSULTANT) will support BART's Computer Systems Engineering (CSE) group in developing the Conceptual Design, Prototype Evaluation, and Final Design for new platform destination signs to replace the existing signage currently deployed throughout the District. This development includes preparing a conceptual engineering report, assisting CSE in the assessment of proposed solutions and the preparation of the Final Design.

3.0 DELIVERABLES

Deliverables for Conceptual Design, Prototype Assessment, and Final Design will include the following:

3.1 Conceptual Engineering Report

- a. Assist with the coordination of stakeholder groups to acquire and confirm user requirements. These requirements include integration with existing BART computer systems, connecting the signs to the existing BART communications infrastructure, and environmental (i.e. temperature, weather, dust, etc.) constraints.
- b. Conduct regional market survey of available off-the-shelf and custom fabricated platform destination sign solution.
- c. Conduct remote (no travel) market survey of available off-the-shelf and custom fabricated platform destination sign solution for agencies not located within the San Francisco Bay Area.
- d. Develop a Conceptual Engineering Report that includes recommendations for prototype units to be tested and the test criteria for these units. This will be a joint effort with BART CSE.
- e. Review as-built documentation from BART to review the different types of installations.
- f. Work with BART engineering to perform necessary site surveys of representative selection of existing BART stations. The stations to be surveyed will be selected by BART.
- g. Attend project meetings and report deliverables status. Prepare and issue meeting agenda and minutes.

3.2 Prototype Procurement and Assessment

- a. Assist with the preparation of technical specification and procurement documentation necessary for prototype procurement. The prototypes will be tested in two phases. Phase 1 will test the signs in the BART laboratory and Phase 2 will test the signs in the Concord Yard.
- b. Procure equipment necessary for prototype assessment as agreed upon with BART.
- c. Assist with coordinating engineering disciplines and maintenance groups needed to install and perform assessment of the prototype destination sign units.

- d. Assist BART engineering and maintenance with technical support for the installation of the signs for assessment in the laboratory and Concord Yard. Labor to install the signs will be performed by BART.
- e. Assist BART's Computer System Engineering department with the assessment of prototype units.
- f. Develop a report including results from prototype assessment and final recommendations with input from stakeholders.
- g. Attend project meetings and report deliverables status. Prepare and issue meeting agenda and minutes.

3.3 Final Design/Technical Specifications

- a. Assist with the preparation of final design/technical specifications and procurement documentation necessary for procurement, including the preparation of mounting details for installation by a third-party contractor. The plans and specifications will include details for the new destination signs and modifications or fabrications needed to install and commission the signs.
- b. Assist with stakeholder coordination to support final design.
- c. Support BART engineering to update relevant BFS sections.
- d. Work with BART engineering to perform necessary site surveys.
- e. Attend project meetings and report deliverables status. Prepare and issue meeting agenda and minutes.

Prime: PGH Wong

Subconsultant	Amount	DBE (Y/N)	SBE (Y/N)
AMC	\$ 57,113	Y	Y

Total Work Plan Value: \$ 519,707