

BART Agreement Number: 6M8209

Approval Date: 07/15/2024

Work Plan A.17-01 Design Services for BART Embarcadero Structure Long-Term Adaptation (Conceptual Design)

Scope:

Task 1.0 – Owner Project Requirements

The Consultant shall provide the following scope of services:

- Schedule and conduct a kick-off meeting with BART.
- Schedule and conduct bi-weekly progress meetings with BART.
- Work with BART to define this project's scope and objectives.
- Define Requirements:
 - (1) Design/Engineering: Define requirements for addressing the problem, including sea-level rise (SLR) and flooding due to climate change, and identify relevant codes and standards to ensure compliance.
 - (2) Functional, Operational, and Maintenance: Gather and specify requirements from various BART stakeholders, including engineering, maintenance, and safety, including impacts on other agencies.

Task 1.0 Deliverables:

1. Requirements Memorandum: Provide a summary of the owner's project requirements, incorporating BART stakeholder feedback. This document will be produced in draft and final forms, incorporating feedback from at least one review iteration with stakeholders.
2. Meeting Minutes from Kick-off and Bi-Weekly meetings.

Task 1.0 Assumptions:

- 1 4-hour kickoff meeting at BART or HNTB office
- Up to 2 1-hour Bi-Weekly Meetings

Task 2.0 – Existing Conditions Review

The Consultant shall provide the following scope of services:

- Schedule and conduct bi-weekly progress meetings with BART.
- Review relevant previously completed work and documents, including:
 - (1) BART Sea Level Rise (SLR) Flooding and Resiliency Study
 - (2) As-built information and data
- Review the physical features, utilities, land use, and the operations and functions of the SFTS and its surroundings.
- Identify any information gaps that are needed to support the project's design and construction phases.
- Conduct field investigations or engage with asset owners to gather essential data.
- Schedule and conduct meetings with stakeholders.
- Prepare a memo that summarizes the findings of the existing conditions review, identifies the opportunities, and outlines the recommendations resulting from that review.

Task 2.0 Deliverables:

1. Existing Conditions Memorandum: Summarize existing conditions of the SFTS, including field investigation findings. This document will be produced in draft and final forms, incorporating feedback from at least one review iteration with stakeholders.
2. Meeting Minutes: Provide meeting minutes for stakeholder meetings and progress meetings.

Task 2.0 Assumptions:

- BART will provide electronic copies of existing reports and studies related to the SFTS
- BART will provide electronic copies of as-built or record drawings for SFTS
- BART or Port of SF will provide electronic copies of as-builts for the pier
- Up to 6 1-hour Bi-Weekly Meetings
- 1 4-hour field investigation. BART will provide an Employee-In-Charge and access to the inside of the SFTS
- The SFTS is classified as Security Sensitive Information (SSI). Electronic documents identified by BART as SSI including record drawings will be saved in a folder that is inaccessible to staff not working on this work plan.

Task 3.0 – Conceptual Engineering

The Consultant shall provide the following scope of services:

- Schedule and conduct bi-weekly progress meetings.
- Perform conceptual engineering for the SFTS's long-term adaptation measures.
- Establish the technical feasibility, identify constraints, identify stakeholder issues, and progress the conceptual design phase.
- Conduct an integrated assessment covering conceptual construction cost and

constructability issues, and considering operability, encompassing functionality, maintainability, and integration with existing or future systems. Ensure engineering integrity through conceptual level calculations. Consider environmental impacts, permitting, and planning requirements.

- Develop conceptual plans and details through sketches and/or renderings to illustrate design concepts.
- Compile a conceptual engineering report detailing the design rationale, scope, schedule, conceptual construction cost, cost- benefit analysis, and a summary of the following implementation steps. These steps should cover funding options, coordination needs, permitting requirements, and implementation timing.
- Schedule and conduct meetings with stakeholders.

Task 3.0 Deliverables:

1. Conceptual Engineering plans, sketches, or renderings to illustrate conceptual design concepts.
2. Conceptual Engineering calculations supporting the conceptual design.
3. Conceptual Engineering Report. This document will be produced in draft and final forms, incorporating feedback from at least one review iteration with stakeholders.
4. Meeting Minutes: Provide meeting minutes for stakeholder meetings and progress meetings.

Task 3.0 Assumptions:

- Conceptual engineering will include Structures, Mechanical, Civil, and Utilities concepts
- Up to 16 1-hour Bi-Weekly Meetings

Prime: HNTB-FMG JV

Subconsultant	Amount	DBE (Y/N)	SBE (Y/N)
Structus, Inc.	\$ 26,867	Y	Y
Saylor Associates	\$ 18,109	Y	Y

Total Work Plan Value: \$ 339,947