BART Agreement Number: 6M8207 **Approval Date: 07/25/25**

Work Plan A.03-01 Biddability/Constructability Review for Project 15NL006, 15NL007

Scope:

1. Project Management and Administration

Gannett Fleming will provide project management throughout this Work Plan's period of performance, including project setup, project budgeting, expenditure monitoring and control. The team will be led by Tiffani Bryant, PE, who is a licensed Professional Engineer in California. She will be responsible for coordinating timely reviews and monitoring the completeness of the reviews. She will also prepare monthly billing reports and status reports for submission to BART. In addition to performing project management tasks, Tiffani will also lead the review of the Division 1 specification section.

Supporting our Project Manager will be Maryanne Martinez, who will be our Project Administrative Assistant, and Bella Perez, who will provide Document Controls support.

- Project Administrative Assistant: Take and distribute meeting minutes, maintain file structure, follow up on action items, and other items as directed by the BART PM staff.
- Document Controls: Facilitate the review of BART provided design documents via Bluebeam, including uploading documents and ensuring distribution and access to team members.

2. Constructability/Biddability Reviews of contract design at multiple design milestones (65%*, 95%, 100%)

2.1. Meetings

Meetings

- A virtual kick-off meeting will be held to meet with the BART PM staff to confirm project understanding and key objectives for the project.
- Attend a virtual design meeting for each project (15NL006 and 15NL007) under review to coordinate with project stakeholders and provide constructability and biddability input.
- Attend a virtual comment/resolution meeting at each design milestone (65%*, 95%, 100%) virtually for each separate contract to discuss review comments and coordinate responses with the design team.
- Over the course of the project, the project manager will invite team members to participate in virtual meetings as directed by the BART PM.

2.2. Constructability/Biddability Reviews

Our review team's focus and main objective will be evaluating if the design documents have sufficient detail to allow the project to be clearly bid and constructed. These reviews will take place during the 65%*, 95%, and 100% design milestones. We will complete the BART Constructability and Biddability Review Checklist for each project under review. We will also provide comments on the BART Comment Review Form for each project under review. One Checklist and one Comment Review Form will be provided at each submission level.

During our reviews, we will reference the BART Facility Standards (BFS) that were in place at the time of the award of the design. For 15NL006, we will reference BFS 3.2.1 and for 15NL007, we will reference BFS 3.2.2 July 2024.

Architectural Reviews

The Architectural Reviews and Fire Life Safety reviews will be led by Martin Ramirez, AIA, who is a licensed architect in California. The Architectural scope is as follows:

- Review contract design documents at multiple design milestones (65%*, 95%, 100% stages) for accuracy, clarity, and constructability
- Evaluate design documents for potential construction challenges and provide recommendations for resolution.
- Ensure bid packages are clear, comprehensive, technically feasible, and aligned with the project scope to facilitate accurate contractor pricing.
- Analyze construction documents and technical specifications prepared by the design consultant for completeness and compliance with project requirements.
- Provide input to the cost estimate review
- Attend virtual meetings as described within section 2.1 of this workplan
- Provide detailed written feedback and recommendations at each design milestone to ensure constructability and biddability.
- Highlight potential risks, omissions, or ambiguities in design documents to mitigate issues during bidding and construction.

- Work collaboratively with BART, the design consultant, and other stakeholders to ensure project goals and quality standards are met.

Mechanical Reviews

The Mechanical Reviews will be led by Liu Yang, PE, who is a licensed engineer in California. Liu will be supported by Abe Oshana (Plumbing) and David Smith (Fire Protection). The Mechanical scope is as follows:

- Review the design packages for both projects under review (15NL006 and 15NL007) for the 65%*, 95%, and 100% design milestones. The reviews will cover Heating, Ventilation, and Air Conditioning Systems (HVAC), Plumbing and Fire Protection.
- Evaluate design documents for potential construction challenges and provide recommendations for resolution.
- Ensure bid packages are clear, comprehensive, technically feasible, and aligned with the project scope to facilitate accurate contractor pricing.
- Provide detailed written feedback and recommendations at each design milestone to ensure constructability and biddability.
- Attend virtual meetings as described within section 2.1 of this work plan.

Electrical Reviews

The Electrical Reviews will be led by Mandar Manjarekar, PE, who is a licensed electrical engineer in California. Mandar will be supported in the electrical reviews by Brian Seip, who will review the Telecommunications, CCTV, and Access Control related documents. The Electrical scope is as follows:

- Review the design packages for both projects under review (15NL006 and 15NL007) for the 65%*, 95%, and 100% design milestones. The reviews will cover Power, Lighting, Telecommunications, CCTV, Fire Alarm, and Access Control.
- Evaluate design documents for potential construction challenges and provide recommendations for resolution.
- Ensure bid packages are clear, comprehensive, technically feasible, and aligned with the project scope to facilitate accurate contractor pricing.
- Provide detailed written feedback and recommendations at each design milestone to ensure constructability and biddability.
- Attend virtual meetings as described within section 2.1 of this work plan.

Vertical Transportation (VT) Reviews

The Vertical Transportation Reviews will be led by Anthony DeFrancesco. He will be supported by Kent Reed. Both are Vertical Transportation experts and have provided support to BART on multiple vertical transportation projects over the years. The VT scope of work is as follows:

- Review the VT Specifications and VT Drawings for both projects under review (15NL006 and 15NL007) for the 65%*, 95%, and 100% design milestones. The reviews will cover Elevator Systems, including applicability of system type and all major components and subsystems, including compliance with the BFS and Codes.
- Review of all existing documents including conceptual engineering report and 35% VT Specifications and VT Drawings for 15NL006
- Review of all existing documents pertaining to the elevator modernization scope for 15NL007.
- Provide input to the cost estimators for the estimate specific to the elevator scope of work for both 15NL006 and 15NL007.
- Assess the possibility of differing site conditions and whether any additional field investigation/survey/potholing is recommended to better identify potential construction conflicts relating to the elevator modernization scope of work. Suggest alternatives for possible hydraulic pipe routing and elevator equipment to avoid or limit the possibility of conflicts in areas where excessive hidden obstacles or other differing site conditions can be anticipated.
- Review site access restrictions and space requirements for elevator equipment and elevator trade contractor construction activities
- Ensure VT Specifications and VT Drawings include mitigations for any impacts of the work including but not limited to access restrictions to ensure potential construction impacts are resolved before beginning construction

- Ensure the elevator scope of work is clear and coordinate with the scope of work for the building infrastructure (mechanical, electrical, fire/life safety, communications, structural)
- Evaluate the construction schedule assumptions for the elevator scope of work for reasonableness, recommending modifications as appropriate based on potential deficiencies identified.
- Review proposed hours of work for the elevator trade contractor, staging areas (day shift, night shift), and required District support.
- Attend virtual meetings as described within section 2.1 of this work plan.

Structural Reviews

The Structural Review will be led by Ted Krull, PE, who is a licensed civil engineer in California. He will be supported by Stephanie Templeton. The structural scope of work is as follows:

- Review Structural Specifications and Structural Drawings for both projects under review (15NL006 and 15NL007) for the 65%*, 95%, and 100% design milestones.
- Review of client-provided documents applicable to scope of work
- Evaluate design documents for potential construction challenges and provide recommendations for resolution.
- Ensure bid packages are clear, comprehensive, technically feasible, and aligned with the project scope to facilitate accurate contractor pricing.
- Provide detailed written feedback and recommendations at each design milestone to ensure constructability and biddability.
- Attend virtual meetings as described within section 2.1 of this work plan.
- The estimated hours for reviews assume no modification of the station structure will be required.

Civil Reviews

The Civil Reviews will be led by Mark Wood, PE, who is a licensed PE in California. The Civil scope of work is as follows:

- Review Civil Drawings for both projects under review (15NL006 and 15NL007) for the 65%*, 95%, and 100% design milestones.
- Review of client-provided documents applicable to scope of work
- Evaluate design documents for potential construction challenges and provide recommendations for resolution.
- Ensure bid packages are clear, comprehensive, technically feasible, and aligned with the project scope to facilitate accurate contractor pricing.
- Provide detailed written feedback and recommendations at each design milestone to ensure constructability and biddability.
- Attend virtual meetings as described within section 2.1 of this work plan.
- We assume that the civil scope of work is minimal based on the provided information. If additional civil work arise, hours will need to be revised.

Assumptions

- Site Visits and Travel for both projects are excluded.
- The review of IFB packages are excluded.
- We assume that the milestone reviews for 15NL006 will begin at the 95% design milestone.
- We assume that the milestone reviews for 15NL007 will begin at the 65% design milestone. If a 35% review is required, hours will need to be revised.
- We assume that this work plan will only require support for 2-3 deliverables (65%*, 95%, and 100%) per project.
- Completion of the BART Design Review Checklist is not included.

*For all disciplines, a 65% review will only be performed for project 15NL007, not 15NL006.

3. Cost Estimate and Schedule Peer Reviews of Contract Design at Multiple Design Milestones (65%*, 95%, 100%)

Our team, led by Vernon Scott, will review the cost estimating and schedule documents and will provide a report with their findings. The estimating and scheduling scope of work is as follows:

- Review the cost estimate and construction schedule for both projects under review (15NL006 and 15NL007) for the 65%*, 95%, 100% design milestones.
- Assess the schedule and estimate for assumptions
- Review the estimate mark-ups and suggest adjustments for current the current bid market
- Review the estimate for pricing that is excessively high or low
- Identify any scope items missing from the estimates
- Review the bid schedules
- Incorporate comments from the Gannett Fleming team into one overall report
- Provide a draft document within 3 weeks of receiving design documents
- Provide a final document within 5 days of receiving comments from the draft report

* A 65% review will only be performed for project 15NL007.

Prime: Gannett Fleming
Subconsultants: None

Total Work Plan Value: $ 736,868