BART Agreement Number: 6M8143 **Approval Date: 09/28/23**

Work Plan No. B.36-01 Electrical Design for Emergency Access BART Richmond and Concord Control Towers

Scope:

These services are as described as follows:

Project management

- Project management support from site survey to bid support services
- Coordinate weekly design meetings with design team and BART project staff
- Take meeting minutes
- Arrange kick-off meeting
- Design Schedule to be developed and approved by BART
- Design Quality management process
- Safety Certification Process

Task 1 – Design of Concord Tower Access – Electrical Design

Task 1.1 – Initial Layout Phase (~35% Design) – Concord

- Review as-builts, existing building features, and available reports (Geotechnical, Surveys, utilities, etc).
- Identify physical constraints and limiting dimensions
- Identify code requirements regarding the width, rise and run of the emergency access stairs.
- Establish Basis of Design Memo
- Develop conceptual 35% electrical design layouts
- Proposed location of egress lights
- Identify emergency branch circuit panel and UPS panel source for egress lighting circuit
- Conceptual design review meeting

Task 1.2 – 65% Design – Concord

- Engineer Site visit to confirm existing conditions
- 65% lighting system specifications
- 65% Electrical Plans
    a. Location of exterior egress lights
    b. Panel schedule showing lighting circuit
    c. Exterior lighting control diagram
    d. Lighting fixture schedule
    e. Photometric calculations.
    f. UPS location & installation
- 65% Design - Opinion of Probable Construction Cost (OPCC)
- 65% Internal QA/QC review

Task 1.3 – 95% Design – Concord

- Coordination with BART on in house construction vs contracting out package break out
    a. Get direction from BART how they will like us to deliver the 95% design package
- Meet with BART to close out previous comments form 65% submittal
- 95% lighting system specifications
- 95% Electrical Plans
- 95% Design - Opinion of Probable Construction Cost (OPCC)
- 95% Internal QA/QC review

Task 1.4 – 100%/IFC Design – Concord

- Meet with BART to close out previous comments form 95% submittal
- 100% Lighting system specifications
- 100% Electrical Plans

- 100% Design - Opinion of Probable Construction Cost (OPCC)
- 100% Internal QA/QC review

Task 1 - Assumptions

- Previously completed Concord Tower Arch and Structural design was broken out into 2 construction phase packages, electrical will be completed as one package, not broken out into construction phases.
    - Therefore, the four (4) design submittals will be:
        - Concord Tower – Electrical design – 35/65/95/100_IFC
- This scope of work is provided on an as-requested basis
- weekly meetings will be held between BART and HDR design team to discuss schedule updates, submittal and RFI progress
- Construction Schedule to end with Concord yard work roughly in June of 2025, as mentioned by BART
- BART to coordinate and confirm to HDR on packaging of IFC design plans that will be released out to the public for bidding for work that will not be performed by BART
- Site visits to be planned in advance for HDR team to be present as requested
- Seismic or Code retrofit of the existing building is not included.
- Structural evaluation of the existing building for Code compliance is not included.
- Concept Review Meeting will be conducted after each 35% submittal
- Construction details will not be included
- Review meeting with BART post 65% submittal to confirm construction breakout between BART self-performed work versus released to bidding for outside contractor to perform.
- Coordinate with BART on how to develop the 95% design/construction package to support BARTs preferred approach for construction prior to commencing 95% package
- Collaborative efforts on timely review periods and comment response time frames between BART and Design Team
- One review period for each submittal milestone last a max of 15 work days
- Bi-weekly team meetings between necessary BART and Design team members
- Combine 100% and IFC submittal into one since we have a 95% submittal prior to this design phase
    - if design submittal milestone percentage to change it would come from BARTs direction and work plan to be revised appropriately

Task 2 – Engineering Services During Construction

- Respond to RFIs (up to 30)
- Review shop drawings.

- Review and address issues with field site conditions and construction during installation

Prime: HDR
Subconsultants: None

Total Work Plan Value: $ 162,512