

Work Plan No B.11-01 34.5 kV Project Support (Construction)

Scope:

2.1 Field and Construction Engineering, Scheduling, Planning, Procurement & Coordination, Quality Assurance

- a. Provide planning, scheduling, resource allocation, coordination support including corresponding projects and Authority Having Jurisdiction (AHJ);
- b. Develop and/or Review Interim Operating Procedures (IOP), Site-Specific Work Plans (SSWP), System Access Request (SARs), Work Orders and Operating Bulletins;
- c. Prepare written documents including correspondence, emails, proposals, reports, records, memos and other construction type documents;
- d. Provide material and construction cost estimates;
- e. Manage, conduct and provide technical support for field including measurements and surveying;
- f. Coordinate and support procurements and materials;
- g. Prepares take-offs of construction materials as needed;
- h. Review or provide engineering, construction, and contractual documentation/submittals, inspection reports and provide comments/recommendation;
- i. Engages Engineer of Record or Engineer assigned to provide Design Support During Construction as needed to ensure technical compliance and safety of construction work.
- j. Assist with project budget, scope, schedule, and quality requirements;
- k. Prepare scope of work and planning documents for BART-constructed project(s);
- l. Track progress and project resource allocation of construction activities, including staffing, materials, equipment, tools, and others;
- m. Documents Changes during construction and maintain document control system for Changes during construction;
- n. Implements and ensures that District approved quality Assurance Program is successfully executed;
- o. Tracks Project submittals, responses and, if necessary, reviews the submittals;

- p. Processes and/or assists in the making and processing of System Access Requests, and attends meetings;
- q. Escalate construction issues to BART Project Manager as needed;
- r. Schedule and conduct meetings and prepare meeting summaries;
- s. Provide day to day management of construction schedule, cost, and milestones;
- t. Provide support for closeout activities including as-builts, redlines and inspections;
- u. Archive and maintain construction files in BART repository system (BART server and/or sharepoint)
- v. Quality assurance of in-house material fabrications.
- w. Other task as requested by and agreed with the District.

2.2 Quality Control & Inspections

- a. Attend construction site activities.
- b. Become familiar with the design documents, Issue For Construction (IFC) plans, material specifications, manufacturer's recommendations, design changes and other engineering plans prior to construction.
- c. Provide daily progress reports.
- d. Takes and catalogues photographs of work in progress or problems encountered on the construction site;
- e. Record deviations from design and document in progress reports.
- f. Coordinate with the project support services team for any construction or design updates.
- g. Plan, coordinate and process all logistics for the special inspections as required by the engineering plans.
- h. Coordinate any deviations with engineering and construction through the project support services team.
- i. Review special inspection testing reports and outcomes and prepare reports for submittals and approvals.
- j. Prepare punch lists, organize and attend punch list walks.
- k. Prepare red-line markups and provide as-built drawings to project support services team.
- l. Archive and maintain construction files in BART repository system (BART server and/or sharepoint).
- m. Update project repository with progress reports daily.
- n. Provide on-site observational inspection (concrete placement, reinforcing steel, anchor placement, etc.) and report any deviations from standard practices to Field and Construction Engineering team and to BART Project Manager.
- o. Attend meetings as required.
- p. Must maintain Roadway Worker Protection (RWP) compliance.
- q. Perform the duties and responsibilities of a BART EIC, if requested.
- r. Extensive driving may be required; must be able to obtain and maintain CA State Driver's License.
- s. Quality control of in-house material fabrications.
- t. Other tasks as directed by the project support services team or the District.

2.3 Special Inspections & Surveys

AtkinsRéalis will provide special inspections and survey services as required in the engineering plans or by BART Engineering. These services may include:

- a. Structural steel welding special inspection, as needed.
- b. Reinforcing steel placement special inspection.
- c. Concrete placement special inspection.
- d. Concrete compressive strength special inspection.
- e. Concrete slump tests.
- f. Utility location including Ground Penetrating Radar Survey and tracing
- g. Rebar scanning
- h. Soil compaction testing
- i. Grounding testing
- j. Other tests as specified on engineering plans or as identified as needed during construction.

Testing shall conform with assigned BART Facilities Standard (BFS) for each engineering plan set. Should engineering plans not call for any specific BFS version, the latest version applies. Testing shall also adhere to ICC-ES reports, if applicable.

Special inspection and structural observation shall be performed in accordance with chapter 17 of the 2016 California Building Code (CBC) or as specified on the engineering plans (CBC takes precedence).

At BART’s discretion, the quality engineer/inspector may receive training and/or take certification tests for special inspections applicable to the project such as Post-Installed Concrete Anchor Installation and Concrete Construction Special Inspector.

Prime: AtkinsRéalis USA, Inc

Subconsultant	Amount	DBE (Y/N)	SBE (Y/N)
Quality Engineering, Inc. (QEI)	\$450,487	Y	Y
Inspection Services Inc (Second-Tier Subcontractor)	\$40,893	Y	Y

Total Work Plan Value: \$941,395