

Design/Build Projects

Headquarters' Role & Project Updates

Leland Colvin, SCDOT

38th Annual Highway Conference

Project Selection and Award

- Design/Build (D/B) projects are advertised and selected using the qualification/proposal process. Sometimes referred to as the RFQ/RFP process.
- D/B Projects do not appear in SCDOT's monthly lettings.
- In the 2-part RFQ/RFP process, proposers are short listed based on submitted qualifications in response to the request from SCDOT. (Generally a minimum score is needed)
- After proposers are short listed, then the selection is made based on the adjusted low scores.
- The adjusted low score is generally the proposer's cost divided by the technical score from their proposal as defined in SCDOT's RFP.

Project Selection and Award

- A D/B project committee is set up for each project that reviews both the RFQ and RFP. Also, the project committee reviews the qualifications and proposals, and recommends a technical score for each proposer.
- The project committee generally includes the responsible RPG Program Manager and Design personnel, District personnel, DOC personnel, FHWA, and any other area that project specific scope may be included such as rights-of-way.
- The Program Manager is generally responsible for the RFQ/RFP documents, in conjunction with the project committee.

Notice of Award/Contract Execution

- After Selection and Notice of Award, the following items are needed prior to executing the D/B contract;
 - Bonds (Performance/Indemnity, Payment, & **Warranty**)
 - Insurance (Worker's Compensation, General Liability, Business Auto, Umbrella Liability, & **Errors and Omissions**)
 - DBE Committal Sheet – generally received as part of proposal
 - **Schedule of Values**

Contract Deliverables

- Once a contract has been executed, the following contract deliverables are needed upfront;
 - Escrow Documentation – Leland & Roberta Mack coordinates
 - CPM Schedule – incorporates schedule of values previously submitted. CPM schedule is approved by RCE via District scheduler.
 - Utility Meeting

Typical D/B Contract Deliverables

- Schedule of Values
- Design Plans
- Erosion Control Plan
- Storm Water Pollutant Prevention Plan
- Spill Prevention Plan
- Notice of Intent
- Transportation Management Plan
- Quality Control Plan
- Drainage Notebooks
- Public Relations Plan
- Right-of-Way Documents
- As-built Plans
- CPM Schedule
- EEO/DBE/OJT Reporting Requirements

Typical D/B Contract Deliverables

- Shop Plans & Working Drawings
- Preliminary & Final Geotechnical Reports
- Final Electronic Design Files
- Escrow Documents
- Material Certification
- 12 of the 20 contract deliverables are generally the responsibility of the Contractor's Engineer

Contract Deliverables (other)

Prior to Design and Construction Activities	Target Date	Contract Reference
Public Relations Plan	Prior to the initial design submittal	Agreement II.D.2
Project Quality Control Plan	30 days before any design submittal to SCDOT - SCDOT Approval	Agreement V.A.1
Prior to Construction Activities	Target Date	C Contract Reference
Design Report - Superstructure & Substructure	Prior to construction - SCDOT acceptance	SOW
Seismic Analysis of structure	Prior to construction - SCDOT acceptance	SOW
Bridge Erection Plans and Shop Drawings	For SCDOT Review and Acceptance	Tech Spec 6.2 & 6.3
Total Quality Assurance Program for Bridge Machinery	Prior to fabrication	Tech Spec 4.1.4
Transportation Management Plan	Prior to any construction activity - SCDOT Acceptance	SOW / Attachment C
OJT Plan	Prior to any construction activity - SCDOT Approval	Exhibit 5d Part 1
PreCon w/ Resource Agencies	Prior to any construction activity - Schedule w/ SCDOT	Agreement IX.B
Erosion Control Plan/ SWPP/ NPDES Co-permittee	Prior to any construction activity - SCDOT needs info to send NOI	Agreement II.D.2

Contract Deliverables

Miscellaneous	Target Date	Contract Reference
Conceptual, Preliminary, & Final Plans	21 days prior to next phase of work - SCDOT Review	Agreement II.D.1
Mix Designs	30 days prior to use - SCDOT review	Agreement V.A.5
Material Certifications	Prior to incorporating material item in project - SCDOT Acceptance	Agreement V.A.6
Executed DBE Contracts	Prior to work item starting - SCDOT information/review	Agreement XVII.B
Subcontractor Expenditure Report	Monthly during project - SCDOT information/review	Agreement XVII.C
Crane Safety Plan	Prior to any crane operations	Special Provision 24

Lump Sum Contract

- D/B contracts are lump sum and not unit price as typical contracts.
- The lump sum cost is broken down as per the approved schedule of values.
- The cost loaded CPM shall incorporate the schedule of values.
- Monthly Estimates are generated and paid as a percent complete of the SOV.
- Some items may be paid as a straight line monthly.
(Project Management & Quality Control)

Lump Sum Contract

- Typical project breakdown
 - Mobilization
 - Project Management
 - Quality Control
 - Design & Engineering
 - Site Preparation
 - Grading & Drainage
 - Bridge Superstructure
 - Bridge Substructure
 - Pavement & Misc. Roadway

Project Partnering

- All D/B Projects are partnered
- At a minimum there are 2 partnering workshops
 - 1st Workshop is at the start of the project and generally focuses on the design submittal and review process. Also, project deliverables are discussed.
 - 2nd Workshop focuses on the construction phase of the project and the typical preconstruction conference is discussed at this workshop.
 - Other workshops are scheduled as needed and based on project size.

Design Review Contract Language

Contractor shall provide to SCDOT **21** days prior to commencement of the next phase of work, so that SCDOT will have an opportunity to review the plans prior to commencement of each design phase or construction activity.

Design Review Contract Language

SCDOT review comments shall be addressed in written form prior to commencement of the next design phase or construction activity.

SCDOT will have the right, but not the obligation, to review and comment upon the plans. This review and comment is fully discretionary.

Design Review Contract Language

The failure to review or comment shall not absolve the Contractor of its responsibility to design and build the Project in accordance with the contract or to shift responsibility to SCDOT.

D/B Project Specific Operations

- All D/B projects are 100% Federal oversight. Typical approvals needed by FHWA;
 - RFQ/RFP
 - Contractor Selection
 - DBE Committal Sheet
 - Design Reviews
 - SOVs
 - All Change Orders
 - All Issue Papers

D/B Project Specific Operations

- RCE approves all sub-contractors at project level.
- Monthly Estimates are generated based on percent complete of SOVs added into SiteManager.
- All project documentation is submitted to RCE from Contractor Project Manager. (Some design documents may be excluded)
- The Engineer of Record is responsible for the NOI application and SWPP. (Permit is sent to DHEC via SCDOT) 10 days no detailed review – 20 days detailed review

Headquarters Points of Contact

- FHWA – Tad Kitowicz (Project Oversight)
- DOC – Leland Colvin (Project Oversight)
- Preconstruction – RPG Program Manager, RPG Design POC
(Preconstruction has been gracious to appoint a single POC for all design submittals due to time sensitive nature and project history of issues)
- Traffic Engineering – Brent Dillon (TE has also been gracious to appoint a single POC for all design submittals)
- OMAR – Chad Hawkins (Sampling & Testing, Material Certification)
- DBE Office – James Cooper/Gary Linn

Other Items

- Requests for Information (RFIs) – Engineer usually asks SCDOT for clarification of requirement or Contractor asks Engineer for clarification of design detail
- Issue Papers – Format for SCDOT and D/B Team to modify D/B contract. May require change order. Requires FHWA approval.

Project Updates

Palmetto Parkway Phase II

Aiken County

- Scope of Work – Extend I-520 for approximately 6.5 miles from US 1 to I-20. Includes 3 interchanges and 16 bridges.
- Contractor – United Contractors, Inc.
- Engineer of Record – Triplett-King & Associates/Florence & Hutcheson, Inc.
- CE&I – LPA Group
- RCE – Claude Ipock
- Contract Value – approximately \$150,000,000
- Percent Complete – 82%
- Completion Date – January 2010

US 17 (ACE Basin) – Phase I Beaufort/Colleton Counties

- Scope of Work – Widen US 17 from Gardens Corner through the Combahee River causeway. Includes an interchange at Gardens Corner with US 21.
- Contractor – Phillips & Jordan, Inc.
- Engineer of Record – Davis & Floyd
- CE&I – HDR Engineering/ Triplett-King & Associates
- RCE – Chris Hernandez
- Contract Value – approximately \$100,000,000
- Percent Complete – 52%
- Completion Date – September 2010

Ben Sawyer Bridge Rehabilitation

Charleston County

- Scope of Work – Rehab the existing swing span bridge between Mt. Pleasant and Sullivan’s Island to include new approach spans, swing span, and tender’s house. Also, includes all new mechanical and electrical systems associated with swing span.
- Contractor – PCL Civil Constructors, Inc.
- Engineer of Record – Hardesty & Hanover
- CE&I – Parsons Brinckerhoff
- RCE – Jeff Rajabi
- Contract Value – approximately \$30,000,000
- Percent Complete – 15%
- Completion Date – May 2010

District #4 D/B Bridge Replacements

- Scope of Work – Includes the replacement of 19 secondary bridges located throughout District #4 and includes the emergency Kings Creek Bridge replacement.
- Contractor – United Contractors, Inc.
- Engineer of Record – Triplett-King & Associates
- RCE – Shane Parris
- Contract Value – approximately \$17,000,000
- Percent Complete – 35%
- Completion Date – March 2010

US 1/5th Street Connector Interchange – Aiken County

- Scope of Work – Construct full interchange at US 1/5th Street to include the widening of the US 1 bridge over 5th Street.
- Contractor – Mabus Brothers Construction
- Engineer of Record – Cranston Engineering
- RCE – Jeff Terry
- Contract Value – approximately \$2,300,000
- Percent Complete – 9%
- Completion Date – November 2009

Port Access Road Charleston County

- Scope of Work – Construct new location roadway from the State Ports Authority to I-26 to include a new interchange at I-26. Most of the new location roadway will be on structure.
- Currently working with the State Ports Authority on the funding agreement.
- It is anticipated that a RFQ will be issued in early summer, pending approval of the funding agreement.

Questions?