

R-2247EB

Project Synopsis

Stipend

- A stipulated fee of **\$75,000** will be awarded to each short-listed Design-Build Team that provides a responsive, but unsuccessful, Design-Build Proposal in response to the Final Request for Proposals and all associated Addenda. If a contract award is not made, all short-listed Design-Build Teams that provide a responsive Design-Build Proposal shall receive the stipulated fee. In the event that the Department suspends or discontinues the procurement process prior to the Design-Build Proposal submittal date current at the time of the suspension, no stipulated fee will be paid.

Project Description and Purpose

- The Design-Build Project R-2247EB will provide a new interchange on the Winston-Salem Northern Beltway at US 52 (Future I-74) in Forsyth County. The approximately 2.6-mile project will also widen US 52 (Future I-74) near NC 65 (Bethania – Rural Hall Road) to a six-lane divided facility.
- The purpose of this project is to improve poor roadway connectivity and capacity deficiencies in western Forsyth County.

Planning

- The R-2247 Final Environmental Impact Statement was approved on March 14, 1996.
- The R-2247 Supplemental Final Environmental Impact Statement / U-2579 and U-2579A Supplemental Draft Environmental Impact Statement was approved on October 1, 2004.
- The R-2247 Supplemental Final Environmental Impact Statement / U-2579 and U-2579A Final Environmental Impact Statement was approved on January 11, 2007.
- The R-2247 / U-2579 and U-2579A Record of Decision was approved on February 15, 2008.
- The R-2247 / U-2579 and U-2579A Project Environmental Construction Consultation was approved on July 13, 2017
- The Design-Build Team shall adhere to all environmental document commitments. A copy of the environmental documents noted above will be made available to the short-listed Design-Build Teams.

Public Information

- During the project's construction, the Design-Build Team shall coordinate with the Division 9 Office and the Construction Unit to inform the public of lane closures, construction progress, etc.

Roadway

- The Design-Build Team shall design and construct a new interchange on the Winston-Salem Northern Beltway at US 52 (Future I-74). The Design-Build Team shall design and construct the interchange to meet a 70 mph design speed for a freeway designed to interstate standards.
- The Department will provide the Traffic Noise Report to the short-listed Design-Build Teams. It is anticipated that the Design-Build Team will develop the Design Noise Report. The Design-Build Team and NCDOT responsibilities for the Design Noise Report will be outlined in the Request for Proposals.

Structures

- The Design-Build Team shall design and construct all structures necessary to complete the project, including but not limited to, structures at the following locations:
 - Bridge at -SB52- and -Y62RPC-
 - Bridge at -SB52- and -EBBYP-
 - Bridge at -NB52- and I-74
 - Bridge at -NB52- and -EBBYP-
 - Bridge at -WBBYP- and -SB52-
 - Bridge at -RPDB- and -SB52-
 - Bridge at -WBBYP-, I-74 and -NB52-
 - Bridge at -RPDB-, -NB52- and -EBBYP-
 - Bridge at -Y68- and Norfolk Southern Railroad
 - Bridge at I-74 and Norfolk Southern Railroad
 - Bridge at -WBBYP- and Norfolk Southern Railroad
 - Bridge at -RPDB- and Norfolk Southern Railway
- The Design-Build Team shall design and construct all reinforced concrete box culverts, including but not limited to extending / replacing existing reinforced concrete box culverts impacted by the project's design and / or construction.
- The Design-Build Team shall design and construct all required sound barrier walls and retaining walls.

Railroad Coordination

- The Design-Build Team shall coordinate all railroad design and construction details on Norfolk Southern Railroad right of way and obtain an executed agreement(s) with the Railroad.

Hydraulics

- The Design-Build Team shall design and construct all storm drainage.
- The Design-Build Team shall obtain FEMA compliance for the regulated stream crossing.
- The Design-Build Team shall be responsible for all Culvert Survey Reports.
- The Design-Build Team shall develop a Stormwater Management Plan.

Geotechnical

- Roadway and structure subsurface investigations will be provided to the short-listed Design-Build Teams. The Design-Build Team shall be responsible for all recommendations, as well as supplemental roadway and structural investigations.
- The Design-Build Team shall design and construct all foundations, embankments, slopes, retaining walls and temporary structures.

Geoenvironmental

- The Department has identified six sites of concern within the proposed project study area.
- The Design-Build Team and NCDOT responsibilities for geoenvironmental remediation will be outlined in the RFP.

Environmental

- The Department will obtain a phased US Army Corps of Engineers Section 404 Permit and a NC Department of Environmental Quality (DEQ), Division of Water Resources (DWR) Section 401 Water Quality Certification for the remaining portions of the Winston Salem Northern Beltway, including TIP Project U-2579D, E & F.
- The Design-Build Team shall prepare all documents necessary for the Department to obtain the final design environmental permits and / or permit modifications for this project.
- Project R-2247EB is in the Merger Process used by the environmental agencies and the Department to obtain environmental permits. The Design-Build Team shall

complete the Merger Process, including but not limited to obtaining Concurrence Point 4B and Concurrence Point 4C.

Erosion Control

- The Design-Build Team shall be responsible for all erosion control designs and implementation.

Transportation Management

- The Design-Build Team shall develop and implement the Transportation Management Plans. A list of parameters, such as lane closures, time restrictions and general guidelines will be provided in the Request for Proposals.

Pavement Markings

- The Design-Build Team shall develop Pavement Marking Plans and install all temporary and permanent pavement markings / markers.

ITS

- The Design-Build Team shall design and install ITS infrastructure, including but not limited to conduit and fiber optic communications cable.
- The Design-Build Team shall design, install and integrate ITS communication equipment, including but not limited to Local Area Network Equipment, Dynamic Message Signs and Closed Circuit Television Cameras.

Pavement Design

- Alternate asphalt and concrete mainline pavement designs will be provided in the Request for Proposals.
- Asphalt -Y- Line pavement designs will be provided in the Request for Proposals.
- The Design-Build Team shall design all temporary pavements and evaluate existing shoulders and roadways regarding their suitability for carrying traffic during construction, if necessary.

Signing

- The Design-Build Team shall design, fabricate and install all roadway signs.

Location and Surveys

- Electronic surveys will be provided to the short-listed teams. The Design-Build Team shall be responsible for all supplemental surveys.

- Known existing utilities have been located and will be included with the survey data provided to the short-listed teams. The Design-Build Team shall be responsible for all supplemental SUE work.
- The Design-Build Team shall be responsible for all structure surveys.

Utility Construction

- For all water and sewer facilities in conflict with the project, the Design-Build Team shall design and construct the required relocations.

R/W Utilities, Conflicts and / or Construction

- The Design-Build Team shall be responsible for all utility conflicts / relocations and utility construction plans. Coordination shall include, but not be limited to, preparations and / or obtaining all necessary utility agreements.
- The Design-Build Team shall coordinate the construction / relocation of private utilities with the appropriate owners.

Right of Way

- The Department will complete the right of way acquisitions required for the Map Act.
- The Design-Build Team shall acquire all right of way, easements and control of access for parcels not subject to the Map Act. For those parcels subject to the Map Act, the Design-Build Team shall acquire all additional right of way, easements and control of access required by the proposed design and / or construction.

Construction Engineering Inspection (CEI) Scope of Work

- The Department will be responsible for CEI work.