## **R-2507A Project Synopsis**

## **Project Description and Purpose**

- In Hertford and Gates Counties, the Design-Build Project R-2507A widens US 13 / US 158 from US 158 / NC 45 near Winton to the US 158 Bypass in Tarheel. The proposed improvements widen approximately 7.1 miles of US 13 / US 158 to a four-lane divided facility with directional crossovers and median U-Turn bulb-outs.
- The project's primary purpose is to reduce traffic congestion and improve travel time and safety within the project limits.

## **Planning**

- The R-2507A State Environmental Assessment (SEA) was approved on January 22, 2010. It is anticipated that the State Finding of No Significant Impact (SFONSI) will be approved in January 2011. The Design-Build Team shall adhere to all environmental document commitments. A copy of the SEA and SFONSI will be made available to the short-listed Design-Build Teams.
- Project R-2507A is following the Merger 01 Process. The Department has obtained the necessary concurrence up to Concurrence Point 4A. The Design-Build Team shall be responsible for obtaining all remaining Merger 01 Concurrence Points.

#### **Public Involvement**

• During the project's construction, the Design-Build Team shall coordinate with the Division 1 Office and the Construction Unit to inform the public of lane closures, construction progress, etc.

# Roadway

- The Design-Build Team shall design and construct US 13 / US 158 as a four-lane divided facility with a 46-foot median (30-foot at the Chowan River). The partial control of access facility shall be designed and constructed to meet a 60-mph design speed for a level rural principal arterial.
- The Design-Build Team shall design and construct an interchange at US 13 / US 158 / NC 45. All other -Y- Lines along the mainline shall be at-grade intersections with directional crossovers and median U-Turn bulb-outs.

#### **Structures**

• The Design-Build Team shall be responsible for the design and construction of all structures necessary to complete the project.

- The Design-Build Team shall design and construct bridges at the following locations that adhere to the AASHTO LRFD Bridge Design Specifications:
  - Single structure on US 158 / NC 45 over US 13 / US 158
  - Single structure on US 13 / US 158 over the Chowan River
  - Dual structure on US 13 / US 158 over Buckhorn Creek / Run Swamp
- The Design-Build Team shall be responsible for the replacement and / or extension of approximately eight reinforced concrete box culverts.

## Hydraulic

- The Design-Build Team shall be responsible for all storm drainage design and construction.
- The Design-Build Team shall obtain FEMA compliance for the regulated stream crossings.
- The Design-Build Team shall be responsible for all Bridge Survey Reports and Culvert Survey Reports.
- The Design-Build Team shall develop a State 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 be responsible for the design and construction of all foundations, embankments, slopes, retaining walls, and temporary structures.

#### Geoenvironmental

- Three underground storage tanks, three former gas stations and one former construction facility have been discovered on the project and have the potential to be contaminated. The NCDOT has completed preliminary environmental studies on these sites and will provide the results to the short-listed teams.
- The specific Design-Build Team and NCDOT responsibilities for geoenvironmental remediation will be outlined in the Request for Proposals.

#### **Environmental**

 The Design-Build Team shall be responsible for preparing all documents necessary for the Department to obtain the environmental permits for this project. The anticipated project permits include a US Army Corps of Engineers Section 404 Individual Permit; a NC Department of Environment and Natural Resources, Division of Water Quality (DWQ) Section 401 Water Quality Certification; a State Stormwater Permit; a North Carolina Division of Coastal Management (DCM) Major Development Permit and a U. S. Coast Guard Permit.

• The Design-Build Team shall be responsible for completing the Merger 01 Process, including but not limited to obtaining Concurrence Points 4B and 4C.

#### **Erosion Control**

- The Design-Build Team shall be responsible for all erosion control designs and implementation.
- The Design-Build Team shall have a certified erosion control inspector on the project at all times during construction.

## **Traffic Management**

• The Design-Build Team shall be responsible for developing and adhering to the Traffic Control Plans. A list of parameters, such as lane closures, time restrictions and general guidelines will be provided in the Request for Proposals.

## **Pavement Marking**

• The Design-Build Team shall be responsible for developing Pavement Marking Plans and installing all required temporary and permanent pavement markings and markers.

# **Traffic Signals**

 The Design-Build Team shall be responsible for maintaining an existing traffic signal, as required by construction operations. The Design-Build Team shall be responsible for removal of the existing traffic signal once it is no longer required by construction operations.

# **Pavement Management**

- Final asphalt mainline and -Y- Line pavement designs will be provided in the Request for Proposals.
- The Design-Build Team shall be responsible for all temporary pavement designs and the evaluation of existing shoulders and roadways regarding their suitability for carrying traffic during construction. If required, the Design-Build Team shall be responsible for strengthening existing facilities prior to routing traffic on them.

### Signing

• The Design-Build Team shall be responsible for the design, fabrication and installation of all roadway signs.

### **Location and Surveys**

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

• The Design-Build Team shall be responsible for the design and construction of water and sewer facilities in conflict with the project.

### R/W Utilities, Conflicts and / or Construction

- The Design-Build Team shall be responsible for all utility conflicts / relocations and utility construction plans.
- The Design-Build Team shall be responsible for coordinating the construction / relocation of private utilities with the appropriate owners.
- The Design-Build Team shall be responsible for preparing and / or obtaining all necessary utility agreements.

# Right of Way

• The Design-Build Team shall be responsible for all right of way, easement and control of access acquisitions required by the proposed design and / or construction.

# **Construction Engineering Inspection (CEI)**

• The Department will be responsible for CEI work.