# R-4045 / BR-0012 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 the Department suspends or discontinues the procurement process prior to the Technical Proposal or Price Proposal submittal date current at the time of the suspension, no stipulated fee will be paid.

## **Project Description and Purpose**

- The R-4045 / BR-0012 Design-Build Project in Cleveland County upgrades the US 74 / SR 1168 (Lattimore Road) intersection to an interchange, and replaces Bridge Nos. 220048 and 220049 on US 74 over Sandy Run Creek.
- The project's primary purpose is to provide a consistent facility that meets driver expectations by upgrading a section of US 74 to interstate standards.

## **Planning**

- NCDOT is currently developing the R-4045 / BR-0012 Type III Categorical Exclusion which is anticipated to be approved in December 2022. It is important for Proposers to note, at this time, the proposed Project remains in the environmental process and that final environmental approvals have not been secured. Additional alternatives, including a no-build alternative, are always considered in the environmental process, and it is possible that the project scope may need to be modified to comply with the environmental process, or that a no-build alternative may be adopted. Nothing contained in the RFQ / RFP is intended to modify, limit, or otherwise constrain the environmental process or commit NCDOT to undertake any action with respect to this project.
- The Design Build Team shall adhere to all environmental document commitments. A copy of the R-4045 / BR-0012 Type III Categorical Exclusion will be provided to the short-listed Design-Build Teams once available.

### **Public Information**

• During the project's construction, the Design-Build Team shall coordinate with the Division 12 Office and the Construction Unit to inform the public of lane closures, construction progress, etc.

## Roadway

- From Mooresboro to the Shelby Bypass, a distance of approximately 1.2 miles, the Design-Build Team shall design and construct US 74 improvements that adhere to a 70 mph design speed for a freeway designed to interstate standards.
- The Design-Build Team shall convert the US 74 / SR 1168 (Lattimore Road) intersection to an interchange.
- From the abandoned railroad bridge over US 74 to beneath the new bridges on US 74 over Sandy Run Creek, the Design-Build Team shall accommodate a ten-foot multi-use path outside of, and adjacent to, the control of access fence for the future extension of the Carolina Thread Trail System.
- The Department will provide a Traffic Noise Report. The Design-Build Team shall develop the Final Design Noise Report based on the final roadway plans developed by the Design-Build Team.

### **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 on SR 1168 (Lattimore Road) over US 74
  - ➤ Bridges on US 74 over Sandy Run Creek
- If required by the Service Road Study being developed by the Department, the Design-Build Team shall design and construct a bridge on Red Bird Lane extension over Sandy Run Creek.
- The Design-Build Team shall remove and dispose of the abandoned Norfolk Southern Railway bridge over US 74.
- 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 the demolition and removal of an abandoned railroad bridge over US 74 with Norfolk Southern Railway, and obtain all required railroad agreement(s).

### **Hydraulics**

- The Design-Build Team shall design and construct all storm drainage.
- 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 design and construct all foundations, embankments, slopes, retaining walls and temporary structures.

### Geoenvironmental

- The Department has not identified any sites of concern within the proposed project study area.
- The Design-Build Team and NCDOT responsibilities for geoenvironmental remediation will be outlined in the Request for Proposals.

### **Environmental Permits**

- The Design-Build Team shall prepare all documents necessary for the Department to obtain the environmental permits. The anticipated required environmental permits include a US Army Corps of Engineers Section 404 Individual Permit; and a NC Department of Environment and Natural Resources, Division of Water Quality (DWQ) Section 401 Water Quality Certification.
- Project R-4045 / BR-0012 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.

### ITS

• The Design-Build Team shall design, install and integrate ITS communication equipment, including but not limited to local area network equipment and closed-circuit television cameras.

## **Pavement Design**

- Asphalt 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.

## **Pavement Markings**

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

# **Location and Surveys**

- The Department will provide electronic surveys. 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 by the Department. 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.

# Utility Rights of Way, 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 Design-Build Team shall acquire all right of way, easements and control of access required by the proposed design and / or construction.

# **Cost-Loaded Critical Path Method Project Schedule (CPM Schedule)**

• The Design-Build Team will not be required to provide a Cost-Loaded Critical Path Method Project Schedule.

# **Construction Engineering Inspection (CEI)**

• The Department will be responsible for CEI work.