

## U-5713 / R-5777A & B 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 primary purpose of Design-Build Project U-5713 / R-5777A & B is to provide additional capacity along the existing alignment of US 70 from the eastern approach of the Neuse River Bridge to approximately one (1) mile east of Thurman Road, and to improve mobility and reduce congestion on both US 70 and intersecting roadways.
- The Design-Build Project U-5713 / R-5777A & B generally consists of upgrading US 70 along its existing alignment to a controlled-access highway in compliance with interstate standards. The project will provide a six-lane divided facility, with a 22-foot median, from the eastern approach of the Neuse River Bridge to SR 1121 (Garner Road); and a four-lane divided facility, with a 46-foot median, from Garner Road to approximately one (1) mile east of SR 1116 (Thurman Road). The project will also convert at-grade intersections to grade-separated interchanges at the US 70 intersections with SR 1167 (Williams Road), SR 1131 (Airport Road), SR 1124 (Grantham Road), SR 1922 (Taberna Way), and Thurman Road; and two-way access roads on both sides of US 70 to connect existing service roads and maintain access to side streets and abutting properties.

### **Planning**

- A combined Type III Ground Disturbing Categorical Exclusion Action for U-5713 / R-5777A & B is currently underway and FHWA approval is expected in July, 2018.
- The Design-Build Team shall adhere to all environmental commitments. A copy of the Categorical Exclusion Action document and environmental commitments 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 NCDOT's Division 2 Office, the Construction Unit, and other local municipalities to inform the public of lane closures, construction progress, etc.

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## Roadway

- The Design-Build Team shall design and construct a six-lane, controlled-access, divided facility with a 22-foot paved median from the eastern approach of the Neuse River Bridge to SR 1121 (Garner Road). From Garner Road to approximately one (1) mile east of S.R. 1116 (Thurman Road), the Design-Build Team shall design and construct a four-lane, controlled-access, divided facility with a 46-foot median. The design and construction of the mainline shall be compliant with interstate standards.
- The Design-Build Team shall design and construct interchanges at the US 70 intersections with SR 1167 (Williams Road), SR 1131 (Airport Road), SR 1124 (Grantham Road), SR 1922 (Taberna Way), and Thurman Road; and two-way access roads on either side of US 70 to connect existing service roads and maintain access to side streets and abutting properties.
- The Department will provide a Traffic Noise Report to the short-listed Design-Build Teams. The Design-Build Team shall develop the Design Noise Report.

## Structures

- The Design-Build Team shall design and construct all structures necessary to complete the project, including, but not limited to following structures:
  - **Interchanges:**
    - Bridge on the Mainline (U.S. 70) over -Y4- Line (SR 1167 - Williams Road)
    - Bridge on the Mainline (U.S. 70) over -Y3- Line (SR 1131 - Airport Road)
    - Bridge on the Mainline (U.S. 70) over -Y2- Line (SR 1124 - Grantham Road)
    - Bridge on the Mainline (U.S. 70) over -Y22- Line (SR 1922 - Taberna Way)
    - Bridge on the Mainline (U.S. 70) over -Y21- Line (SR 1116 - Thurman Road)
  - **Grade Separation:**
    - Bridge on the Mainline (U.S. 70) over -Y5- Line (SR 1133 - Elder Street)
- 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 North Carolina Railroad Company / 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 crossings.
- 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 35 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

- The Design-Build Team shall prepare all documents necessary for the Department to obtain the environmental permits for this project. The anticipated required permits include a US Army Corps of Engineers Section 404 Individual Permit and a NC Department of Environmental Quality (DEQ), Division of Water Resources (DWR) Section 401 Water Quality Certification.

## 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.

## **Pavement Design**

- Asphalt 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 standard signs required to appropriately sign the mainline and all -Y- Lines.

## **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**

- The Design-Build Team shall design and construct the relocation of all water and sewer facilities in conflict with the project.

## **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, easement, and / or control of access required by the proposed design and / or construction.

## **Traffic Signals**

- The Design-Build Team shall design and install all temporary and permanent traffic signals and modify existing traffic signals within the project limits. All traffic signals at U.S 70 ramp terminals shall be designed with metal mast-arm or metal strain poles.

### **Lighting**

- A highway lighting analysis is currently being conducted by the Department, the results of which will be provided to short-listed Design-Build Teams.
- In the event highway lighting along the mainline or -Y- Lines is required, the Department will provide signed and sealed Lighting Plans.
- The Design-Build Team shall install all lighting.

### **ITS**

- The Design-Build Team shall design and install all Intelligent Traffic Systems (ITS) infrastructure and devices, including, but not limited to, fiber-optic communications cable and conduit, CCTV cameras, travel information Dynamic Message Signs (DMS), gate control systems, and related hardware.

### **Construction Engineering Inspection (CEI) Scope of Work**

- The Department will be responsible for CEI work.