

## **BD-5112V Project Synopsis**

The Design-Build Project consists of replacing five (5) bridges located in Alexander, Catawba, Cleveland, Iredell and Lincoln Counties. Bridges to be replaced are shown in the following table.

<b>County</b>	<b>Structure No.</b>	<b>Route</b>	<b>Across</b>
Alexander	010137	SR 1608	Glade Creek
Catawba	170009	SR 1700	Elk Shoal Creek
Cleveland	220261	SR 1005	First Broad River Trib 30
Iredell	480183	SR 1907	Fourth Creek
Lincoln	540124	SR 1113	Howards Creek

All the bridges for this project are on the Subregional Tier. A general overview of the Roadway, Hydraulics, Geotechnical and Structures Scope of Work is specified in the *Sub Regional Tier Design Guidelines for Bridge Projects* dated February 2008. An electronic copy of this document may be obtained for the website noted below:

<https://connect.ncdot.gov/resources/Structures/Documents/Forms/AllItems.aspx>

The Design-Build Team's replacement bridges shall meet the requirements of these Guidelines.

### **Planning**

The Department is currently preparing a Project Data Sheet for each bridge which will serve as the Programmatic Categorical Exclusion (PCE).

### **Roadway**

The Design-Build Team shall be responsible for the roadway design and construction.

The Department will provide all permanent pavement designs.

### **Hydraulics**

The Design-Build Team shall be responsible for all hydraulic designs and construction.

The Design-Build Team shall provide signed and sealed Bridge Survey Reports for all structures.

The Design-Build Team shall obtain FEMA compliance for all regulated floodways and be responsible for all State Stormwater Permits.

### **Permitting**

The Design-Build Team shall be responsible for preparing design plan sheets and providing all data necessary for the Department to obtain the required environmental permits. It is anticipated that each bridge site will require a Nationwide Permit 3 and a Water Quality Certificate.

## **Structures**

The Design-Build Team shall be responsible for all structure designs and construction.

The Department will provide Standard Bridge Plans that may be used at certain bridge sites; however, the Design-Build Team shall sign and seal the aforementioned Plans.

The Request for Proposals will disallow and / or prescribe certain structure types.

## **Geotechnical**

The Department will provide two to three borings per bridge site.

The Design-Build Team shall be responsible for all geotechnical recommendations, as well as supplemental roadway and structural geotechnical investigations.

## **Transportation Management**

The Design-Build Team shall be responsible for the development and implementation of 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.

## **Erosion and Sedimentation Control**

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

## **Signing and Pavement Markings**

The Design-Build Team shall be responsible for the development and installation of the Pavement Marking Plans.

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

## **Right of Way and Utilities**

The Design-Build Team shall be responsible for all right of way and easement acquisitions required to construct the project.

The Design-Build Team shall be responsible for all utility conflicts / relocations and utility construction plans. Utility relocation cost responsibilities will be defined in the Request for Proposals. However, it is anticipated that the utility relocation costs will be the responsibility of the utility owners or the Department.

## **Surveys**

The Department will provide electronic surveys to the short-listed teams.

The Design-Build Team shall be responsible for all supplemental surveys.

## **Construction Engineering Inspection**

The Design-Build Team shall provide the Quality Control / Quality Assurance.

The Department will provide Independent Assurance.

## **Contract Completion Date**

As this is an Express Design-Build Project without a Technical Proposal, the Request for Proposals will define an overall contract completion date, with associated liquidated damages. The completion date will be established to allow greater flexibility in the Design-Build Team's scheduling and completion of the work.

Intermediate contract times for road closures or for early completion of certain bridges, with associated liquidated damages, will be outlined in the Request for Proposals.

## **Compensation**

To reduce the amount of pre-bid work performed by the Design-Build Teams, and to ensure to the greatest extent possible that all Design-Build Teams are bidding on similar designs, the Department will include an estimated bridge length, bridge width and assumed geotechnical design parameters (e.g. point of fixity, embedment, bearing elevation) in the Request for Proposals. For each bridge site, the Design-Build Team shall bid a unit price for each of these high level pay items or, to enhance the opportunity for innovation, a lump sum bid for all required work.

Should the actual bridge design parameters differ from those identified in the Request for Proposals and the Design-Build Team did not provide a lump sum bid, a Supplemental Agreement will be executed for the bridge length, foundation depth, etc. that differ from those design parameters identified in the Request for Proposals.

A lump sum bid shall be full compensation for all design work and other ancillary construction work, including but not limited to minor approach work, approach slabs, supplemental investigations, drainage, erosion control, traffic control, etc. regardless if the actual bridge design parameters differ from those identified in the Request for Proposals.