

Synopsis
Bridge Replacements Division 11 Year 10
January 12, 2021

General

This contract will be used to replace 3 bridges. None of these include the construction of culverts.

All of the bridges in the Division 11 contract are less than two hundred feet in length.

These bridges are located on the Subregional Tier, in such case, 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 these documents is located at:

<https://connect.ncdot.gov/resources/Structures/Pages/Structure-Resources.aspx>

Planning

The Department is currently preparing environmental documents for each of the bridges. The Design-Build Team will be responsible for providing impact quantities to complete these environmental documents.

Roadway

Roadway plans will be the responsibility of the Design-Build Team. Pavement designs will be provided by the Department.

Hydraulics

The Design-Build Team shall be responsible for all hydraulic designs and shall provide signed and sealed Bridge Survey Reports for all bridge replacements. The Design-Build Team shall be responsible for all storm drainage design, permit drawings and construction and shall obtain FEMA compliance for the regulated floodways.

The Department will provide information prior to issuance of the Final Request for Proposals to establish the type and size of bridge to be bid.

Permitting

The Design-Build Team shall be responsible for preparing design plan sheets and providing all data necessary for the Department to obtain the environmental permit for each bridge replacement. These will often include a Nationwide Permit 3 or 14 and a Water Quality Certificate.

Structures

The Design-Build Team will be responsible for the design and construction of all structures necessary to complete the project. Standard bridge plans will be made available and may be used at certain sites; however, the design must be signed and sealed by the Design-Build Team.

Geotechnical

The Department will provide 2 to 4 borings per bridge to the Design-Build Teams. The Design-Build Team shall be responsible for all geotechnical recommendations, as well as any necessary supplemental borings, roadway and structural investigations.

Traffic Management

Bridge sites will be conducive to off-site detours, staged construction or new alignments. The Design-Build Team will be responsible for Traffic Control Plans as appropriate for the bridge site as will be detailed in the Requests for Proposals.

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

Pavement marking plans will be the responsibility of the Design-Build Team. Permanent signing on these projects will be minimal and will be the responsibility of the Design-Build Team.

Right-of-Way and Utilities

In general, the Design-Build Team will be responsible for acquisition of additional right of way, as necessary, to construct the projects in Division 11.

The Design-Build Team will be responsible for the coordination of all utility relocations necessary for construction. It is anticipated that the cost of utility relocations will be paid by the utility owners or the Department.

Surveys

The Department will provide initial survey information pre-bid. The Design-Build Team shall be responsible for any supplemental location and construction surveys.

Construction Engineering Inspection

CEI on the contract will be performed by the Department or its agent.

Provided Materials

The Department will provide surveys, including property ties, geotechnical borings, pavement designs, pre-design hydraulic reports, and environmental documents, bridge inspection reports, and field scoping meeting minutes.

Contract Completion Date

As these are Express Design-Build projects without a Technical Proposal, an overall contract completion date will be set in the contract, with associated liquidated damages. The date will be established to allow for greater flexibility in the Design-Build Team 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 as outlined in the Request for Proposals.

Compensation

To reduce the amount of work necessary to be performed pre-bid 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 parameter (e.g., embedment, bearing elevation) in the Requests for Proposals. The Design-Build Team will bid a unit price for these high level pay item quantities. However, the Department will allow the Design-Build Team to bid a lump sum for all work at certain bridge sites to enhance the opportunity for innovation in the procurement.

It is likely that the bridge length, etc. will change from that estimated in the contract. In such event, a supplemental agreement will be entered into for the additional (or lesser) bridge length, foundation depth, etc. from those quantities placed in the Request for Proposals.

A lump sum item will most likely be included to provide 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.