

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PAT MCCRORY GOVERNOR ANTHONY J. TATA Secretary

February 7, 2013

#### Addendum No. 1

Contract No.:	C 203241
Project:	17BP.13.R.111
County :	Burke, McDowell, Mitchell and Rutherford
Project Description:	Eleven (11) Bridge Replacements in Division 13, Set A
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RE: Addendum No. 1 to Final RFP

### February 19, 2013 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals dated January 18, 2013 recently furnished to you on the above project. We have since incorporated changes, and have attached a copy of Addendum No. 1 for your information. Please note that all revisions have been highlighted in gray and are as follows:

Page Nos.3, 4 and 6 of the *Project Special Provisions* have been revised. Please void Page Nos. 3, 4 and 6 in your proposal and staple the revised Page Nos. 3, 4 and 6 thereto.

Page No. 50 of the *Roadway Scope of Work* has been revised. Please void Page No. 50 in your proposal and staple the revised Page No. 50 thereto.

Page No. 53 of the *Structures Scope of Work* has been revised. Please void Page No. 53 in your proposal and staple the revised Page No. 53 thereto.

If you have any questions or need additional information, I can be reached by telephone at (919) 707-6900.

Sincerely, htract Offi

RAG/tab

Attachments

MAILING ADDRESS: NC DEPARTMENT OF TRANSPORTATION CONTRACT STANDARDS AND DEVELOPMENT UNIT 1591 MAIL SERVICE CENTER RALEIGH NC 27699-1591 TELEPHONE: 919-707-6900 FAX: 919-250-4119

WEBSITE: www.NCDOT.ORG LOCATION: CENTURY CENTER COMPLEX ENTRANCE B-2 1020 BIRCH RIDGE DRIVE RALEIGH NC Project 17BP.13.R.111 Addendum No. 1 Page 2 of 2

cc: Mr. Victor Barbour, PE Mr. Rodger Rochelle, PE Ms. Virginia Mabry Mr. Jay Swain, PE Ms. Teresa Bruton, PE Payment will be made under:

### **Pay Item** Bridge Length

**Pay Unit** Linear Feet

**Foundation Length (LF):** Foundation Length will be measured from the elevation at the top of the piles (at end bents) or columns atop drilled piers (at interior bents) to the average pile or drilled pier tip elevation actually installed at a given end bent or interior bent and will be paid for in units of linear feet. The final foundation pay length per bent or end bent will be determined by dividing the total pile or column plus drilled shaft lengths measured as defined above by the total number of piles or drilled shafts per bent or end bent. Work will include all materials, labor, and equipment to install and construct the foundations, including pile auguring as necessary, regardless of the number of piles or columns/drilled piers per bent, including that portion of the piles or columns/drilled piers that extend into the end bent or interior bent cap. In the event that additional interior bents are required beyond that specified in the Structures Scope of work, the unit price bid for linear feet of Foundation Length for the closest interior bent will be used to compensate for the additional length of columns/drilled piers.

Payment will be made under:

Pay Item	Pay Unit
Average Foundation Length at End Bent #1	Linear Feet
Average Foundation Length at Bent #	Linear Feet
Average Foundation Length at End Bent #2	Linear Feet

**Interior Bent Caps (Each):** *Interior Bent Caps* will be measured and paid for by each. Work will include all material, labor, and equipment to construct each interior bent cap, including the necessary bearing devices, anchors bolts or other such connection.

Payment will be made under:

Pay Item	Pay Unit
Interior Bent Caps	Each

**End Bents (Each):** *End Bents* will be measured and paid for by each. Work will include all material, labor, and equipment to construct each end bent, including the necessary bearing devices, anchors bolts or other such connection, and wing walls. This work will also include all material, labor, and equipment to install sheet piles, at the sites specified in the Hydraulics Scope of Work.

Payment will be made under:

Pay Item End Bents Pay Unit Each

**Design and Construction for Bridges (LS):** *Design and Construction for Bridges* will be paid for as lump sum. No measurement will be made. Work will include all material, labor and

equipment to complete all of the work required by the contract at all sites specified as bridges in this RFP, excluding those specific contract unit price items listed above. Work will include all preconstruction activities including, but not limited to, design, permitting, utility coordination services and other preconstruction services, regardless of the final design, bridge length, foundation length, or number of interior bents. Work will also include all other construction required by the contract including, but not limited to, erosion and sediment control, earthwork, drainage, pavement, signing, bridge approach fills, approach slabs, removal of the existing structure, and guardrail. Work will also include all surveying and geotechnical investigative work as may be required by the contract. Work will also include all items needed for staged construction such as temporary shoring, temporary barrier, traffic control devices, etc.

At all sites with proposed bridges, work will also include any additional materials and labor needed to provide up to a 1'-6" increase in the existing roadway grade to satisfy all contract requirements, including FEMA compliance, as applicable.

Payment will be made under:

## **Pay Item** Design and Construction of Bridges

**<u>Right of Way Acquisition (EA)</u>**: *Right of Way Acquisition* services will be paid for per each parcel from which a utility easement and/or right of way is required. Work will include all labor and services necessary to acquire the easements/right of way as required by the Right of Way Scope of Work.

**Pay Unit** Lump Sum

### Adjustments to Quantities and Payment

The Itemized Proposal Sheet provides the quantity of linear feet of *Bridge Length*, *Foundation Length* and the quantity of *Interior Bent Caps* to be bid for each bridge site. By submitting this Price Proposal, the Design-Build Team acknowledges that these quantities are intended for bidding purposes and may or may not be the final design quantities. Unless otherwise noted in the Structures Scope of Work, in the event that the final design quantities for *Bridge Length*, *Foundation Length*, and *Interior Bent Caps* differ from those presented in the Itemized Proposal Sheet, adjustment will be made to the partial payments made to Design-Build Team per the applicable contract unit prices.

The Itemized Proposal Sheet provides the quantity of parcels from which utility easement or right of way will be required across all bridge sites. By submitting this Price Proposal, the Design-Build Team acknowledges that this quantity is intended for bidding purposes and may or may not be the final quantity. In the event that the final quantity of impacted parcels differs from that shown in the Itemized Proposal Sheet, adjustment will be made to the partial payments made to the Design-Build Team per the unit price bid per Each for *Right of Way Acquisition*.

All contract pay items for this contract are considered minor contract items.

No adjustments to the pay quantities will be made until such time that all pertinent design submittals are approved and all permits and FEMA compliance for a given structure site have been obtained. If during the course of the design, the Design-Build Team determines that the existing roadway grade must be raised by more than 1'-6" to accommodate other contract requirements, including FEMA compliance, then the provisions of Article 104-7 of the Standard Specifications will apply to the work items covered by the *Design and Construction* line item to the extent needed beyond the 1'-6" grade change already accommodated in the lump sum price bid for *Design and Construction*.

### ALTERNATE LUMP SUM BID

The Design-Build Team may provide an <u>alternate</u> lump sum bid for any or all of the bridges listed below:

• Bridge No. 800038

If the Design-Build Team elects to submit an alternate lump sum bid for one or more of the above bridges, the Design-Build Team shall be solely responsible for all costs, including but not limited to, overruns, additional design, and any additional right-of way, additional utility relocation, or additional mitigation costs that would not otherwise have been attributable to the bridge description specified in the Structures Scope of Work. The Design-Build Team also must forego any additional compensation that would have otherwise been afforded under the "Value Analysis" and "Measurement and Payment" Project Special Provisions. In addition, providing an alternate lump sum bid does not relieve the Design-Build Team of any contract requirements including permitting agency requirements, hydraulic design requirements, and FEMA compliance requirements. The bridge design shall not rely upon any design exceptions except to the extent that may be specifically permitted in the Roadway Scope of Work.

With the exception of Right-of-Way Acquisition services, which will still be paid on a unit basis the lump sum bid entered on the Itemized Proposal Sheet will be full compensation for all work necessary at the applicable bridge site, including all pay items outlined in the Measurement and Payment" Project Special Provision. In the event that the design, upon which the alternate lump sum bid, is not ultimately accepted by the Department, the Design-Build Team will be required to design and construct a bridge that does satisfy the Department that all contract and permit conditions (including FEMA) can and will be met, which may include the design and construction of the bridge specified in the Structures Scope of Work for that site. Culverts will not be acceptable in lieu of bridges. Cored Slab or box beam bridges in lieu of specified girder bridges will not be acceptable.

The Design-Build Team is cautioned that the bridge description specified in the Structures Scope of Work was determined jointly by the Department and the regulatory and permitting agencies and variation therefrom will likely require subsequent concurrence from these agencies. The Design-Build Team is fully responsible for engaging the Department to understand the rationale for the bridge descriptions outlined in the Structures Scope of Work prior to exercising the lump sum bid alternate afforded by this provision.

To elect this option, the Design-Build Team shall enter a lump sum amount for all work required by the contract for the applicable bridge site on the Itemized Proposal Sheet. The unit cost and amount for all other line items specific to that bridge shall be left blank on the Itemized Proposal Sheet. shall pave to the face of guardrail for its full length and then taper at an 8:1 ratio to the proposed edge of pavement.

- At Bridge No. 600049, the length of overlay, wedging, and new pavement shall extend a minimum 150 feet from east end of the proposed structure (fill face) and to the edge of pavement of SR 1211.
- Structure No. 580232 shall have 50 feet of new pavement from each end of the proposed structure (fill face) and shall provide ABC from each end of the new pavement for the remainder of the realignment.
- The Design-Build Team shall replace the entire length of existing guardrail in all four quadrants at Bridge Site No. 800038 for the exact limits as it is currently placed, and resurface and provide 6 foot shoulders (2 ft. paved) to the face of guardrail for the full length of the new guardrail.
- Outside the guardrail limits on the subregional tier, for all approaches with paved shoulders, the Design-Build Team shall provide a minimum of 2'-0" of graded shoulder from the edge of the pavement to the shoulder point.
- The grade may be adjusted as needed by the Design-Build Team to assist in the attainment of FEMA compliance or to assist in minimizing hydraulic spread. (Reference the Hydraulic Scope of Work).
- The Design-Build Team may use asymmetrical widening about the existing bridge and roadway centerline where appropriate to minimize impacts to utilities and/or natural systems.
- Unless noted otherwise elsewhere in this RFP, all guardrail shall be designed and placed in accordance with the January 2012 NCDOT *Standard Drawings* and / or approved details in lieu of standards. For subregional bridges, the length of guardrail installed shall be based on the length provided in the NCDOT *Sub Regional Tier Design Guidelines for Bridge Projects* dated February 2008.
- A crest vertical curve high point is permitted on a bridge or approach slab provided the Design-Build Team can demonstrate that (1) the design directs water off the travel lanes in an effective manner and (2) providing a tangent grade on the structure would create significant additional roadway approach work. In no case shall a sag vertical curve low point be located on any bridge or approach slab.
- The Design-Build Team will be responsible for furnishing and placing concrete monuments for all proposed right of way.

#### STRUCTURES SCOPE OF WORK

### **Project Details:**

The Design-Build Team will be responsible for all structures necessary to complete the project in accordance with the table provided herein. Reference the Project Special Provision entitled "Measurement and Payment" for a description of pay items and resolution of differences between the quantities and data provided herein and the final design prepared by the Design-Build Team and approved by the Department.

### All bridge lengths stated herein are based on an assumed end bent cap depth of 4-feet.

All bridges shall be cored slab or box beams. Bridge No. 800038 shall have a concrete overlay riding surface and all other bridges shall have a bituminous concrete overlay.

Note that the bridge lengths in the table below are from fill face to fill face and therefore may require adjustment to the length on any cored slab or box beam standard that the Design-Build Team may wish to use. In lieu of adjusting these beam lengths, and at no additional cost to the Department, the Design-Build Team may elect to use the cored slab or box beam 5-foot increment standards and lengthen the fill face to fill face dimension as needed. Regardless of the method chosen, the Design-Build Team shall ensure that the model used for FEMA compliance includes the correct span lengths and end points (end of beam).

Unless noted otherwise herein, provide 42" Concrete Barrier Rail per Structures Management Unit Manual. At Bridge No. 110203, provide on both sides the NCDOT standard two-bar metal rail anodized dark bronze.

The Design-Build Team shall be responsible for Tennessee Valley Authority review and approval as required by Section 26a of the Tennessee Valley Authority Act of 1933, as amended, for all applicable bridge sites. The team shall act as agent on the TVA permit application and the Department will be the applicant. The Team shall supply said approval to the Department prior to beginning work on any bridges. A copy of the executed TVA Section 26a Permit or waiver letter shall be forwarded to the Department. Watershed Team contacts may be found at the following website:

### https://connect.ncdot.gov/resources/Structures/Documents/TVA%20Submittal%20Guidelines.pdf

The table below denotes certain locations where a vertical face at end bents is required. At these locations, the Design-Build Team shall construct a vertical face using steel sheet piles in front of the end bent and embedded in the end bent cap or a separate concrete coping. At these locations, the vertical wall or sheeting shall be of sufficient depth to accommodate abutment scour.

### **Bridge Removal:**

The Design-Build team is responsible for the removal and disposal of all existing bridges, piles, abutments and previous bridge substructure remnants per NCDOT's *Best Management Practices of Maintenance and Construction Activities* and the Standard Specifications except as otherwise noted herein.