



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

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GOVERNOR

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SECRETARY

November 15, 2013

Addendum No. 3

Contract No.: C 203359
TIP No.: R-3601
Counties: Brunswick and New Hanover
Project Description: US 17 / US 74 / US 76 from NC 133 / SR 1472 Interchange to the US 421 / NC 133 Interchange

RE: Addendum No. 3 to Final RFP

December 17, 2013 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals with Addendum No. 1 dated October 21, 2013 recently furnished to you on the above project. We have since incorporated changes, and have attached a copy of Addendum No. 3 for your information. Please note that all revisions have been highlighted in gray and are as follows:

The second page of the *Table of Contents* has been revised. Please void the second page in your proposal and staple the revised second page thereto.

Page No. 115 of the *Hydraulics Scope of Work* has been revised. Please void Page No. 115 in your proposal and staple the revised Page No. 115 thereto.

Page No. 117 of the *Pavement Management Scope of Work* has been revised. Please void Page No. 117 in your proposal and staple the revised Page No. 117 thereto.

Page No. 142 of the *Signing Scope of Work* has been revised. Please void Page No. 142 in your proposal and staple the revised Page No. 142 thereto.

Page Nos. 177 and 178 of the *Erosion and Sedimentation Control Scope of Work* have been revised. Please void Page Nos. 177 and 178 in your proposal and staple the revised Page Nos. 177 and 178 thereto.

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CENTURY CENTER COMPLEX
ENTRANCE B-1
1020 BIRCH RIDGE DRIVE
RALEIGH NC

Please do not hesitate to forward any questions associated with the revisions noted above and / or any outstanding unresolved questions to the Design-Build e-mail address (designbuild@ncdot.gov).

Sincerely



R.A. Garris, P.E.
Contract Officer

Cc: Ms. Karen Fussell, PE
Ms. Teresa Bruton, PE

Mr. Victor Barbour, PE
File

Mr. Rodger Rochelle, PE

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HYDRAULICS SCOPE OF WORK (11-14-13)

- The Design-Build Team shall employ a private engineering firm to perform hydraulic design for all work required under this contract. The private engineering firm shall be prequalified for hydraulic design work under the Department's normal prequalification procedures prior to the Technical Proposal submittal date.
- The Design-Build Team shall hold a pre-design meeting with the Transportation Program Management Director and Hydraulic Review Engineer upon acceptance of the Preliminary Roadway Plans developed by the Design-Build Team.
- The Design-Build Team shall design the Storm Drainage using Geopak Drainage.
- If necessary, the Design-Build Team shall analyze spread for bridges identified in the Structures Scope of Work found elsewhere in this RFP, and provide mitigation that eliminates spread in a travel lane. If required, the Design-Build Team shall adhere to the bridge drainage system requirements noted below:
 - The Design-Build Team shall design bridge drainage without the use of Bridge Scuppers (open-grated inlets). If a closed drainage system is used on a bridge, the closed drainage system shall use vertical pipes at the flow line through the deck with no elbow and shall be consistent with that shown in the current NCDOT Stormwater Best Management Practices Toolbox.
- The Design-Build Team shall provide bridge drainage features that prevent direct discharge into waterways.
- The Design-Build Team shall provide revised permit drawings, calculations and impact sheets, and all other documents necessary for any modifications to the USACE 404 Permits and the NCDWQ Section 401 Certification. (Reference the Environmental Scope of Work found elsewhere in this RFP)
- The BSRs developed, sealed and provided by the Department utilized data from the report entitled "Scour Analysis of Tidal Bridges in the Cape Fear River Estuary System, North Carolina". This same report may be used by the Design-Build Team to support any re-design of the bridges on this project. No 2-D models are required.
- The Design-Build Team shall use a minimum ditch grade of 0.3% and avoid using ditches in wetlands.
- The Design-Build Team shall replace the cross pipe located at Station 74+00.00 -LMED- on the Right of Way Plans provided by the Department. Trenchless construction shall be used to install any portion of this pipe beneath any travel lane. For any other portions of pipes that cross under travel lanes of the mainline, as required by the Design-Build Team's hydraulic design, the pipes shall be installed using trenchless methods unless the installation work does not occur under an active travel lane. For this purpose, an active travel lane is considered to be any temporary or permanent travel lane that is either in use by traffic or is anticipated to be in use within one week (or other such duration as needed to ensure that any concerns regarding settlement and installation quality can be addressed prior to re-opening to traffic).
- The Design-Build Team shall remove or fill with flowable fill all pipes not retained for drainage purposes.

PAVEMENT MANAGEMENT SCOPE OF WORK (11-14-13)

The pavement design for the mainline median widening -LMED-, -LLT-, -LRT-, -RPLLT-, and -RPLRT-, shall consist of one of the following designs:

<u>Alternate 1</u>	<u>Alternate 2</u>
3.0" S9.5C	3.0" S9.5C
3.0" I19.0C	3.0" I19.0C
7.0" B25.0C	3.0" B25.0C
	8.0" ABC

The alternate chosen shall be identified in the Technical Proposal and shall be consistent through the project limits.

Other pavement designs for this project shall be as listed in the table below:

LINE	Surface	Intermediate	Base
-RPAY-, -RPAYLT-, -RPAYRT-, -RPBY-, -RPBYLT-, -RPBYRT-, -RPCY-, -RPCYLT-, -RPCYRT-, -RPDY-, -RPDYLT-, -RPDYRT-, -Y-, -YSBL- and -YNBL-	3.0" S9.5B	4.0" I19.0B	4.0" B25.0B
-Y1-	3.0" S9.5B	-	4.5" B25.0B
-Y3-	3.0" S9.5B	-	4.0" B25.0B
-LMED- (Outside Shoulder Widening)	3.0" S9.5C	-	11.0" B25.0C

The Design-Build Team shall mill the existing -Y1- (Main Street) pavement, from Station 10+50 to 11+82.50, to a depth of 1.5" and fill the milled area with 1.5" S9.5B. The Design-Build Team shall resurface the existing -LMED-, -LLT- and -LRT- pavement to the back of the gore (12-foot width) with a minimum 1.5" S9.5C. The Design-Build Team shall resurface the existing -Y-, -Y1- and -Y3- pavement with a minimum 1.5" S9.5B. The Design-Build Team shall resurface the existing ramps with a minimum 3.0" S9.5B.

Unless noted otherwise elsewhere in this RFP, the minimum widened width shall be six feet. The minimum widened may be reduced to four feet only if the Design-Build Team demonstrates that their new equipment properly compacts narrow widening and obtains prior Department approval. Tapers that tie proposed pavement to existing pavement and the -LMED- outside shoulder widening are excluded from the narrow widening requirements noted above.

In areas where the existing paved shoulders are proposed to be incorporated into a permanent travel lane, the Design-Build Team shall be responsible for evaluating the existing paved shoulder regarding its suitability for carrying the projected traffic volumes. In the event that the existing paved shoulder is found to be inadequate, the Design-Build Team shall be responsible

- Mount exit gore sign to existing bridge deck and protect supports with positive protection.
- Design exit gore sign supports to extend to the existing ground level below the existing bridge with positive protection at ground level.

The Design-Build Team shall design, fabricate and install ground mounted sign supports in accordance with the revised NCDOT Roadway Standard Drawing 903D10, Sheet 2 of 3, dated March 8, 2012. The aforementioned revised Roadway Standard Drawing may be referenced on the website noted below:

<https://connect.ncdot.gov/resources/safety/Pages/Signing-and-Delineation.aspx>

Overhead Sign Assemblies

The Design-Build Team shall design, fabricate and install overhead sign assemblies that meet all Department requirements. The windspeed for the overhead sign assembly designs shall be 130 mph. The Design-Build Team shall be responsible for calculating the windload area for the overhead sign assembly. The windload area shall be flush with the sign height and width. When calculating the windload area, the Design-Build Team shall include exit panels as part of the sign height. The coordination with future projects and sign messages shall be considered when designing and fabricating overhead sign assemblies.

The minimum vertical clearance beneath all overhead sign assemblies shall be 17 feet. For all overhead sign assemblies, the Design-Build Team shall submit documentation that verifies the actual vertical clearance at all critical points.

The Design-Build Team shall design, fabricate, and install overhead and pedestal sign supports and foundations in accordance with the Foundations and Anchor Road Assemblies for Metal Poles, Overhead and Dynamic Message Sign Foundations and Overhead Sign Supports Project Special Provisions found elsewhere in this RFP.

Lighting will not be required on overhead sign assemblies.

The Design-Build Team shall design and fabricate sign panels to match the overall square footage of the existing sign panels as shown for Existing Overhead Sign Assembly "AA" as shown on the R-3601 Signing Concept Map dated October 4, 2013.

All work associated with Overhead Sign Assembly "V", as shown on the R-3601 Signing Concept Map dated October 4, 2013, including the removal of the existing sign structure at this location, will be included in this contract but will be deemed Extra Work and will be paid for in accordance with Article 104-8(A) of the Standard Specifications.

Overhead Sign Supports for Freeway Facilities

Except as allowed below, overhead sign supports shall be located a minimum of 40 feet from the edge of the outside travel lane to the center of the sign supports. To minimize right of way, utility, drainage and / or jurisdictional impacts, or to allow a cantilever overhead sign assembly in lieu of a

Ground cover stabilization shall be done in accordance with the following:

Short Term Stabilization: 0 – 14 Days

At a minimum, erodible areas that will not be disturbed for 14 days or less shall be stabilized utilizing non-vegetative cover. Non-vegetative cover options include straw mulch, hydraulic applied erosion control products or rolled erosion control products.

Mid-Term Stabilization: 14 – 90 Days

Erodible areas that will not be disturbed for more than 14 days and less than 90 days shall be stabilized utilizing the following stabilization protocol:

March 1 - August 31

50# German or Browntop Millet
500# Fertilizer
4000# Limestone

September 1 - February 28

50# Rye Grain or Wheat
500# Fertilizer
4000# Limestone

Long Term Stabilization: 90+ Days

Erodible areas that will not be disturbed for more than 90 days shall be stabilized utilizing the following stabilization protocol:

All Roadway Areas

March 1 - August 31

50# Tall Fescue Cultivars *
10# Centipede
25# Bermudagrass (hulled)
500# Fertilizer
4000# Limestone

September 1 - February 28

50# Tall Fescue Cultivars *
10# Centipede
35# Bermudagrass (unhulled)
500# Fertilizer
4000# Limestone

Riparian and Wetland Locations

March 1 - August 31

18# Creeping Red Fescue Cultivars *
6# Indiangrass
8# Little Bluestem
4# Switchgrass
25# Browntop or German Millet
500# Fertilizer
4000# Limestone

September 1 - February 28

*18# Creeping Red Fescue Cultivars **
6# Indiangrass
8# Little Bluestem
4# Switchgrass
35# Rye Grain
500# Fertilizer
4000# Limestone

Waste and Borrow Locations

March 1 – August 31

75# Tall Fescue Cultivars *
25# Bermudagrass (hulled)
500# Fertilizer
4000# Limestone

September 1 - February 28

75# Tall Fescue Cultivars *
35# Bermudagrass (unhulled)
500# Fertilizer
4000# Limestone

*** Approved Tall Fescue Cultivars**

2nd Millennium	Duster	Magellan	Rendition
Avenger	Endeavor	Masterpiece	Scorpion
Barlexas	Escalade	Matador	Shelby
Barlexas II	Falcon II, III, IV & V	Matador GT	Signia
Barrera	Fidelity	Millennium	Silverstar
Barrington	Finesse II	Montauk	Southern Choice II
Biltmore	Firebird	Mustang 3	Stetson
Bingo	Focus	Olympic Gold	Tarheel
Bravo	Grande II	Padre	Titan Ltd
Cayenne	Greenkeeper	Paraiso	Titanium
Chapel Hill	Greystone	Picasso	Tomahawk
Chesapeake	Inferno	Piedmont	Tacer
Constitution	Justice	Pure Gold	Trooper
Chipper	Jaguar 3	Prospect	Turbo
Coronado	Kalahari	Quest	Ultimate
Coyote	Kentucky 31	Rebel Exeda	Watchdog
Davinci	Kitty Hawk	Rebel Sentry	Wolfpack
Dynasty	Kitty Hawk 2000	Regiment II	
Dominion	Lexington	Rembrandt	

**** Approved Creeping Red Fescue Cultivars**

Aberdeen

Boreal

Epic

Cindy Lou

The Design-Build Team shall apply centipede, at a rate of five pounds per acre, on cut and fill slopes 2:1 or steeper. From January 1 – December 31, the Design-Build Team shall apply an additional 20# of Sericea Lespedeza on cut and fill slopes 2:1 or steeper.

Fertilizer shall be 10-20-20 analysis or a different analysis that provides a 1-2-2 ratio applied at a rate that provides the same amount of plant food as a 10-20-20 analysis and as directed.

Soil Analysis

If vegetation establishment indicates a deficiency in soil nutrients or an incurred pH level is present, the Design-Build Team shall take soil samples and apply additional soil amendments to the affected area and as directed.

Fertilizer Topdressing

Prior to completion of the project, a minimum of one Fertilizer Topdressing application shall be done for all permanently seeded areas and as directed.

Fertilizer used for topdressing shall be 10-20-20 analysis applied at a rate of 500 pounds per acre; or a different analysis that provides a 1-2-2 ratio applied at a rate that provides the same amount of plant food as a 10-20-20 analysis and as directed.