



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

November 8, 2011

Addendum No. 3

Contract No.: C202771
TIP No.: R-2554BB & C
Counties: Wayne & Lenoir
Project Description: US 70 (Goldsboro Bypass) from east of SR 1556 (Wayne Memorial Drive) to east of SR 1323 (Promise Land Road)

RE: Addendum No. 3 to Final RFP

December 20, 2011 Letting

To Whom It May Concern:

On October 14, 2011, you were issued the R-2554BB & C Final RFP with Addendum No. 1. Unfortunately, the required prequalification label was not included with this distribution. Thus, please find attached the prequalification label that must be affixed to the aforementioned Final RFP with Addendum No. 1 for submittal of the Price Proposal to this office.

Reference is made to the aforementioned Final Request for Proposals with Addendum No. 1 dated October 14, 2011 recently furnished to you. 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 Nos. 90 and 91 of the *Roadway Scope of Work* have been revised. Please void Page Nos. 90 and 91 in your proposal and staple the revised Page Nos. 90 and 91 thereto.

Page No. 97 of the *Pavement Management Scope of Work* has been revised. Please void Page No. 97 in your proposal and staple the revised Page No. 97 thereto.

Page Nos. 163 and 165 of the *Signing Scope of Work* have been revised. Please void Page Nos. 163 and 165 in your proposal and staple the revised Page Nos. 163 and 165 thereto.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROGRAM MANAGEMENT
1595 MAIL SERVICE CENTER
RALEIGH NC 27699-1595

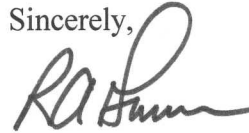
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WWW.NCDOT.GOV

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

Please accept the Department's apologies for any inconvenience associated with the aforementioned omission. Please do not hesitate to contact me at (919) 707-6900 if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "R.A. Garris". The signature is fluid and cursive, with a large initial "R" and "A" followed by a surname that is less distinct.

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

Cc: Mr. John Rouse, PE
Mr. Victor Barbour, PE
Mr. Rodger Rochelle, PE
Ms. Teresa Bruton, PE
Project File

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C202771 (R-2554BB & C)

Roadway Scope of Work

Wayne & Lenoir Counties

- The Design-Build Team shall provide milled rumble strips along the mainline and -Y30- outside and inside paved shoulders, including acceleration, deceleration and auxiliary lanes, and ramps to the back of the gore (12-foot width).
- Excluding ramps -Y8RPA- and -Y8RPD-, the Design-Build Team shall design and construct one-lane ramps that provide a minimum 16-foot lane width. The Design-Build Team shall design and construct two lane ramps that provide minimum 12-foot lanes. Excluding ramps -Y8RPA- and -Y8RPD-, one-lane and two-lane ramps shall have 14-foot outside shoulders, four-foot of which shall be full depth paved shoulders and 12-foot inside shoulders, four-foot of which shall be full depth paved shoulders.
- For lane and shoulder widths only, Loop C at the US 70 Bypass / existing US 70 interchange shall be considered a ramp.
- The Design-Build Team shall design and construct ramps -Y8RPA- and -Y8RPD- to provide a minimum 14-foot lane width with 12-foot outside and inside shoulders, four-foot of which shall be full depth paved shoulders.
- The Design-Build Team shall design and construct all ramps to meet a 55 mph design speed and use a 50 mph ramp speed to determine the required acceleration and deceleration lengths for the entrance and exit termini, respectively.
- The Design-Build Team shall design and construct loops that adhere to Exhibit 3-51, *Design Widths of Pavements for Turning Roadways*, shown in AASHTO's *A Policy on Geometric Design of Highways and Streets* (2004) - Case II / Condition C for one-lane loops; Case III / Condition C for two-lane loops. All loops shall have 12-foot outside shoulders, four-foot of which shall be full depth paved shoulders. All loops shall have 2'-6" curb and gutter along the inside edge of pavement, with a 14-foot berm. Unless noted otherwise elsewhere in this RFP, the minimum loop design shall be 30-mph with a minimum 250-foot radius.
- Unless accommodated on the R-2554BB Preliminary Plans or R-2554C Right of Way Plans provided by the Department, the Design-Build Team will not be required to design or construct ramps or bridges to accommodate future loops.
- The Design-Build Team shall design and construct the Wayne Memorial Drive eastbound entrance ramp such that the full ramp width extends to beyond the east end of the bridge over Reedy Branch. The Reedy Branch eastbound bridge rail offset shall be a minimum of six feet wide.
- Unless noted otherwise elsewhere in this RFP, the Design-Build Team shall design and construct at-grade intersections with the lane configurations noted in the R-2554BB & C Capacity Analysis Review Report dated July 8, 2011. All turn lane lengths shall meet the current NCDOT standards where vehicle storage does not govern or the lengths required by the aforementioned Congestion Management Recommendations, whichever is greater. This determination shall be made by calculating the recommended treatment for turn lanes, incorporating the minimum deceleration lengths as defined in the NCDOT Roadway Design Manual, (Reference Section 9-1, Figure F-4A) and comparing the calculated values with the NCDOT minimum turn lane lengths. The Design-Build Team shall accommodate the right turn maneuver at all intersections in accordance with the NCDOT Roadway Design Manual

(Reference Section 9-1, Figure F-4C). It is anticipated that the final projected traffic volumes will be provided in November 2011. The Design-Build Team shall include in the lump sum price bid for the entire project a re-evaluation of the final 2035 projected traffic volumes and the determination of required intersection configurations, turn lane lengths and right turn tapers, in accordance with the NCDOT Congestion Management Guidelines. If necessary, the revised intersection design and construction costs resulting from the re-evaluation will be paid for as extra work in accordance with Article 104-8(A) of the 2006 *Standard Specifications for Roads and Structures*.

- Excluding service road and “Tee” intersections, the Design-Build Team shall provide a maximum 0.02 roll-over between the outside edge of travel lane of the primary roadway and the beginning of the proposed grade for the secondary roadway at all intersections.
- The mainline grade point shall be located at the median edge of the lane. In a normal crown section, the mainline lanes shall slope in the same direction from the pavement edge adjacent to the median shoulder to the outside edge of pavement at a 0.025 cross slope.
- Unless noted otherwise elsewhere in this RFP, the Design-Build Team shall design and construct -Y- Lines, ramps, service roads and cul-de-sacs providing the same or better access, widening and improvements included in the R-2554BB Preliminary Plans and R-2554C Right of Way Plans provided by the Department. The limits of -Y- Line and service road construction shall be of sufficient length to tie to existing based upon the current NCDOT guidelines and standards.
- The Design-Build Team shall be responsible for all Service Road Studies required by variations to the Department’s design. If required by the aforementioned Service Road Studies, the Design-Build Team shall be responsible for the design and construction of all additional service roads, as well as all associated NEPA requirements.
- **At a minimum**, the Design-Build Team shall design and construct bridge rail offsets as indicated in the NCDOT *Roadway Design Manual* or that are equal to the approach roadway paved shoulders, whichever is greater. Narrower bridge rail offsets based on bridge length will not be allowed. Twelve-foot mainline outside bridge rail offsets will not be required regardless of the final 2035 projected design year truck volumes.
- Unless noted otherwise elsewhere in this RFP, all guardrail / guiderail placement shall be in accordance with the July 2006 NCDOT *Roadway Standard Drawings* and / or approved details in lieu of standards. The proposed guardrail height shall be in accordance with the Draft 2012 NCDOT *Roadway Standard Drawings*. Along all 3:1 fill slopes, constructed at fill heights that are equal to or greater than 12 feet, the Design-Build Team shall install guardrail. Along all fill slopes steeper than 3:1, constructed at fill heights that are equal to or greater than six feet, the Design-Build Team shall install guardrail. The guardrail / guiderail design shall be submitted for review with the Preliminary Plans submittal.

PAVEMENT MANAGEMENT SCOPE OF WORK (11-8-11)

The Design-Build Team shall choose from the mainline pavement alternates presented in this scope of work unless otherwise submitted and approved as an Alternate Technical Concept. The mainline pavement type (asphalt or concrete) shall be consistent throughout the limits of the mainline, except as otherwise allowed herein. The Design-Build Team shall commit to the pavement design mainline alternate, and shoulder option, if applicable, and present the selected alternates/options in the Technical Proposal. The selection of an asphalt mainline pavement or concrete mainline pavement, and shoulder options, will be binding for the duration of the contract. The pavement design for the mainline new location shall consist of one of the following alternates:

<u>Alternate 1</u>	<u>Alternate 2</u>	<u>Alternate 3</u>	<u>Alternate 4</u>
3.0" S9.5C	3.0" S9.5C	3.0" S9.5C	10.0" Concrete *
3.0" I19.0C	3.0" I19.0C	3.0" I19.0C	4.0" B25.0B
6.0" B25.0C	3.0" B25.0C	3.0" B25.0C	
	8.0" ABC	8.0" CTABC	

* The Design-Build Team may reduce the concrete layer to 9.0". However, this reduction shall require the Design-Build Team to provide dowel bars with a minimum 1.25" diameter; and to design and construct the mainline inside and outside shoulders in accordance with Option 2 noted below.

Concrete pavement for the travel lanes shall be doweled jointed concrete with 15-foot uniform joint spacing. Unless noted otherwise elsewhere in this RFP, dowel bars shall have a 1.5" diameter.

If Alternate 4 is selected, the limits of this alternate shall be from the east end of the bridges located at approximate Sta. 154+00 -L- to a point where the full typical section on new alignment ends near US 70. If Alternate 4 is selected, then any of Alternates 1, 2 or 3 may be chosen for the areas of the project outside these limits.

For Alternates 1, 2 and 3, the inside shoulder and the outside paved shoulder shall use the travel lane pavement design, except that the outside shoulders may include 3.0" of S9.5B in lieu of the 3.0" of S9.5C.

For Alternate 4, two options for the shoulder pavement are shown below. The option (asphalt or jointed concrete) chosen by the Design-Build Team for the shoulders shall be consistent throughout the limits of the travel lane concrete. Both outside and inside shoulders shall use the same option.

Option 1: 3.0" S9.5C or S9.5B
3.0" I19.0C
4.0" minimum B25.0C

Option 2: A minimum thickness of 7.0" jointed concrete, without dowels, with a joint spacing matching the adjacent mainline pavement. This option shall be anchored to the mainline pavement with tie bars.

assemblies as shown in the R-2554 Signing Concept Map dated July 27, 2011, and as required to meet all applicable standards.

The Design-Build Team shall remove and dispose of all "ALL TRAFFIC EXIT" signs and lane drop signs associated with the existing all traffic exit maneuvers for the eastbound US 70 Bypass traffic at Wayne Memorial Drive.

The Design-Build Team shall post the mainline at a 70 mph speed limit. The Design-Build Team shall post all other roadways at a speed limit five mph less than the design speed. (Reference the Roadway Scope of Work found elsewhere in this RFP)

Sign Design

The Design-Build Team shall be responsible for the design, fabrication and installation of all signs required for the mainline, as well as all -Y- Lines and cul-de-sacs. The Design-Build Team shall be responsible for all Type A, B, and D sign designs, fabrication and installation for ground mounted signs. Type D signs shall be designed with 8" Emod or 6" Emod text. The Design-Build Team shall be responsible for sizing, fabricating, locating and installing all Type E (warning and regulatory signs), Type F signs (route marker assemblies) and milemarkers.

Overlays shall not be allowed on existing Type A or B Signs.

All advance guide signs and exit directional signs on the -L- Line and all -Y- Lines shall be designed with 16" Emod text and 36" shields.

The Design-Build Team shall design, fabricate and install milemarkers every 0.5 mile on the project. Each milemarker location shall have two milemarkers on one U-post, on the outside shoulder for each direction of travel on the mainline. The milemarker designs shall be in accordance with the Intermediate Enhanced Reference Location Signs (D10-5) referenced in the *Standard Highway Signs* (2004 Edition).

The Design-Build Team shall design, fabricate and install Thru Bolts for Type A Signs in accordance with the NCDOT Roadway Standard Drawing No. 901.10 dated January 2008.

All sign designs shall be included in the Signing Plans. All sign designs shall be prepared using the latest version of GuideSign software.

The latest GuideSign updates are located in the *Seed Files* folder located under *Private Engineering Firms* on the website noted below:

<http://www.ncdot.org/doh/preconstruct/traffic/congestion/sign/>

Logo Signs

The Design-Build Team is not responsible for designing, locating, or installing any new Logo signs (blue service signs with specific business panels included on signs); however, the Design-Build Team shall be responsible for relocating existing Logo signs upon completion of the widening, realignment, or other construction procedures.

Prior to modifying existing overhead sign assemblies within the project limits to accommodate proposed signs, the Design-Build Team shall perform a structural analysis on the overhead sign structures in accordance with the latest version of the latest *AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals*. The Design-Build Team shall obtain Department acceptance of the structural analysis prior to construction. The Design-Build Team shall replace all existing overhead sign assemblies determined to be structurally inadequate for the proposed modifications.

The Design-Build Team shall prepare shop drawings for all modified overhead sign structures for NCDOT review and acceptance. (Reference *Guidelines for Preparation of Signing Plans for Design-Build Projects* and *2006 Standard Specifications for Roads and Structures* for additional requirements, including but not limited to shop drawing design and submittal requirements)

The Design-Build Team shall design, fabricate, and install overhead sign assemblies and foundations in accordance with the *Overhead Sign Supports* and *Overhead Sign Foundations* Project Special Provisions found elsewhere in this RFP.

Lighting will not be required on overhead sign assemblies.

The Design-Build Team shall provide Overhead Sign Assemblies as shown on the R-2554 Signing Concept Map dated July 27, 2011.

Overhead Sign Supports for Freeway Facilities

Unless otherwise approved by the Engineer, 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. If the Engineer agrees that the minimum 40-foot distance noted above cannot be obtained, the overhead sign supports shall be located a minimum of 22 feet from the outside travel lane and protected by guardrail or other NCDOT approved positive protection barrier.

The Design-Build Team shall provide the appropriate positive protection and drainage for all overhead sign median supports.

Overhead Sign Sheeting

The Design-Build Team shall design and fabricate all proposed overhead signs installed on overhead sign assemblies with an existing sign(s) that will be retained with retroreflective sheeting that matches the existing sign(s). (Reference R-2554BA Signing Plans provided on DVD1 Titled R-2554BB & C Materials – Dated June 24, 2011) The Design-Build Team shall design and fabricate all other proposed overhead signs in accordance with the NCDOT “Standard Practice for Retroreflectivity Sign Sheeting”, using North Carolina Grade A retroreflective sheeting for the legends (text) and border, and North Carolina Grade C retroreflective sheeting for the background.

The Department’s “Standard Practice for Retroreflectivity Sign Sheeting” is located under *Resources* on the website noted below:

<http://www.ncdot.org/doh/preconstruct/traffic/congestion/sign/>