

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT SECRETARY

August 15, 2003

Addendum No. 1

RE:

Contract Number: C200725

TIP: R-2641 Wake County

East Wake Expressway From Proposed

US-64 Bypass to US-64 East.

August 29, 2003 Proposal Submission

To Whom It May Concern:

Reference is made to the Design-Build Package (RFP) recently furnished to you on the above project.

The following revisions have been made to the RFP:

On Page No. 33, the first paragraph of the "Roadway Design Scope of Work" has been revised. Please void Page No. 33 in your package and staple the revised Page No. 33 thereto.

On Page No. 39, the sixth paragraph of the "Structures Scope of Work" has been revised. Please void Page No. 39 in your package and staple the revised Page No. 39 thereto.

Sincerely.

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

WEBSITE: WWW.DOH.DOT.STATE.NC.US

LOCATION:

R-2641

RAG/jag/pa (Attachments)

cc: Mr. J. D. Goins, P.E.

Ms. D. M. Barbour, P.E.

Mr. J. V. Barbour, P.E. (w/attachment)

Mr. S. D. DeWitt, P.E (w/attachment)

Mr. J. G. Nance, P.E. (w/attachment)

Mr. Scott Blevins, P.E.

Mr. Greg Perfetti, P.E. (w/attachment)

Mr. Ron Davenport, Jr., P.E (w/attachment).

Ms. Kim Canady

Ms. Yang Steelman

Technical Review Committee Members

Project File (2)

Revised 8/15/03

CONTRACT No. C200725 (R-2641) WAKE

SCOPE OF WORK

ROADWAY DESIGN SCOPE OF WORK:

- Design and construct the East Wake Expressway (R-2641) from the US 64 Bypass (R-2547BB) to the North Wake Expressway (R-2000G) -L- Station 475+00. The proposed noise wall extends onto R-2000G. The Design Build Team shall establish appropriate limits at the interchange with US 64 Bypass to ensure proper grading and paving in order to accommodate the proposed structures, ramps, loop, and any drainage items. These limits shall be approved by the NCDOT and be consistent with the environmental permit. The structure on the East Wake Expressway over the US 64 Bypass shall be constructed to the ultimate 4 lanes. There is a section of the Northbound Lanes in the R-2641/R-2547BB interchange area that traffic will not have access to until the completion of the future project south of the US 64 Bypass. These Northbound lanes from North of the US 64 Bypass to the gore area of the flyover (from eastbound US 64 Bypass to the Expressway) shall be graded to the ultimate section including all drainage structures. Pavement will not be required where traffic will not be placed upon completion of the R-2641 project, with the exception of approximately 100 feet south of the gore area. The proposed design consists of three lanes in each direction with a variable 18m to 14m median. The median width shall be 18m from the Knightdale Bypass R-2547BB to station 206+80 and transition to 14 meter at station 208+20. The Design Build Team shall design and construct the fly-over from eastbound US 64 Bypass to the Expressway, the ramp from the southbound Expressway to the westbound US 64 Bypass, the ramp from westbound US 64 Bypass to the Expressway, and the loop from the southbound Expressway to the eastbound US 64 Bypass. The Design Build Team shall design the future ramps, loops, and fly-over to the degree necessary to ensure that the future interchange will function. The Future fly-over shall be designed 2 lanes. The Design Build Team shall inform NCDOT of any changes to the design to a previously approved submittal.
- The design shall meet AASHTO 2001 Guidelines, January 2002 NCDOT Roadway Standard Drawings, NCDOT 2002 Roadway Design Manual, Roadway Design Policy and Procedure Manual, Design Services Unit's Guidelines for Roadway Design Activities, January 2002 North Carolina Standard Specifications for Highways and Bridges, and the AASHTO Roadside Design Guide 2002. The mainline shall meet Interstate standards, 110 kmh (70mph) design speed in rolling terrain, and follow the 0.10 max chart for superelevation. The design speeds for the ramps, loops, and fly-overs shall follow the guidelines as set forth in the AASHTO. The ramps shall follow the 0.08 max chart for superelevation. The pavement width for the ramps shall meet AASHTO guidelines, and satisfy capacity warrants. The fly-over from eastbound US 64 Bypass to the Expressway shall have 2 lanes. This does not necessarily require additional work along R-2547. The paved shoulders on the fly-over shall be per the NCDOT 2002 Roadway Design Manual. One-lane ramps shall provide 4.8 meter width for the through lane. The functional classifications that have a defined usable shoulder, shall have 0.6m added to the usable shoulder in both cut and fill sections. The offsets for all bridges shall be equal to or greater than the approach roadway paved shoulder. The limits of -Y-line construction shall be of sufficient length to tie to existing per all guidelines and standards. The slopes in the interchange area shall follow the requirements set forth in the Guidelines for Roadway Design Activities. The cul-de-sac on -Y11- will be built on the R-2547BB project.
- Structure Recommendations shall be provided by the Design Build Team and should be submitted for review with the 25% plans.
- No Design Exceptions shall be allowed for the 6-lane freeway. NCDOT prefers not to have design exceptions for the ramps, loops, fly-overs, and -Y- lines.

CONTRACT No. C200725 (R-2641)

Revised 8/15/03 SCOPE OF WORK

WAKE

The bridge width on Old Faison road shall be designed to accommodate a future sidewalk on one side with two bar metal rails (Standard BMR3M) on both sides. On the sidewalk side, the parapet height shall be increased by 50mm and the metal post decreased by 50m. The sidewalk shall be placed by others.

Other bridge barrier rails shall be jersey shaped barriers (Standard CBR1M).

Monotube or cantilever DMS support structures will not be allowed.

Attachment of sign structures to bridges will not be allowed.

Bridge attachments (e.g. ITS conduit, water lines) will not be allowed in the overhang of grade separations. Castings of conduit in the bridge deck or railing will not be allowed.

Shoulder piers for the bridge on Old Faison Road over East Wake Expressway are not allowed. A minimum horizontal clearance of 10m from outside edge of pavement shall be maintained underneath the bridge on Old Faison Road over the East Wake Expressway.

The substructures for dual bridges on EWE over US 64 Bypass and dual bridges on EWE over NSC/Mango Creek/Lynnwood Road shall line up to facilitate future widening to the median. Preliminary Engineering and Preliminary General Drawings for the NBL bridge for EWE over US 64 Bypass shall be prepared and submitted to the Department for review and for future completion of the Raleigh Outer Loop. The SBL bridge shall be designed and constructed to the lengths or vertical clearances dictated by the longer of the NBL or SBL bridge design.

Preliminary Engineering and Preliminary General Drawings shall be completed and submitted for Bridge on Ramp AC1 over US 64 Bypass using the guidelines stated above. The final horizontal and vertical alignments for Ramp A1 and Ramp AC1 shall accommodate this future bridge design over US 64 Bypass.

Contract Plan Submittals:

The required design submittals for each bridge in the scope of work are Preliminary General Drawings, Final Plans accompanied by special provisions, Release For Construction Drawings (RFCs), and As-Built Plans with complete design files. Preliminary General Drawings shall contain sufficient details either in the drawings or by an accompanying narrative to explain the scope of design and construction intended for the bridge(s), and shall list all anticipated special provisions and notes describing design data and materials properties (for guidance, refer to NCDOT Structure Design Manual Section 5, General Drawings). Final Plans are expected to have all plan details and notes completed for final review. The Final Plans submittals may be separated into substructure and superstructure or other submittals as necessary to accommodate construction schedules. If the Final Plans submittal is separated, each submittal should contain sufficient information for the review of that submittal.