STATE OF NORTH CAROLINA
# DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

April 5, 2012

**Addendum No. 1**

| | |
|---|---|
| Contract No. | C 202981 |
| TIP No. | 17BP.6.R 39 |
| County: | Columbus |
| Project Description: | Twelve (12) Express Design-Build Bridge Replacements in Division 6 |

RE: Addendum No. 1 to Final RFP

**April 17, 2012 Letting**

To Whom It May Concern:

Reference is made to the Final Request for Proposals dated March 13, 2012 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 54 of the *Geotechnical Engineering Scope of Work* has been revised. Please void Page 54 in your proposal and staple the revised Page No. 54 thereto.

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

Sincerely,

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

Attachments
RAG/vm

Cc: Mr. Victor Barbour, PE
Mr. Rodger Rochelle, PE
Ms. Teresa Bruton, PE
Mr. Greg Burns, PE
Ms. Virginia Mabry

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CENTURY CENTER COMPLEX
ENTRANCE B-1
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610

**A. Structure Foundations**

When the weathered rock or rock elevation is below the 100-year hydraulic scour elevation, the 100-year and 500-year design scour elevations are equal to the 100-year and 500-year hydraulic scour elevations from the structure survey report accepted by the NCDOT Hydraulics Unit. When the weathered rock or rock elevation is above the 100-year hydraulic scour elevation, the 100-year design scour elevation may be considered equal to the top of the weathered rock or rock elevation, whichever is higher, and the 500-year design scour elevation may be set two feet below the 100-year design scour elevation.

End bent slopes shall be 1.5:1 (H:V) or flatter with rip rap slope protection. Place end bent slope protection from the toe of slope to berm to protect the approach embankment from scour.

Analyze deep foundations pile bents using either LPile or FB-Pier. Design vertical piles with a sufficient embedment in soil and/or rock to achieve "fixity".

B. **Roadway Foundation**

All proposed unreinforced fill and cut slopes shall be 3:1 (H:V) or flatter except bridge end bent slopes (see Section A – Structure Foundations). In areas where a sliver fill is required to tie the proposed grade into the existing ground, fill slopes may be steeper than 3:1 (H:V) provided the existing slopes are stable and erosion control measures are utilized on the sliver fill slopes. However, in no case shall a slope be steeper than 1.5:1. The Design-Build Team shall submit slope stability analysis verifying stability of any modified slopes, including details to control erosion of the slope. For all other proposed slopes steeper than 3:1 (H:V), the slopes shall be reinforced and detailed design calculations shall be submitted to the NCDOT Geotechnical Engineering Unit, via the Transportation Program Management Director, for review and acceptance.

The Design-Build Team shall submit the analysis and methods for ensuring subgrade stability under areas of new full depth pavement.

Bridge approach fills shall be required for end bents on all bridges in accordance with NCDOT Standard Drawings. Standard Drawing 422.10 of the NCDOT January 2012 Roadway Standard Drawings may be used with cored slabs or box beams on the subregional tier; however, the reinforced bridge approach fill shall extend to fully support the approach, Reference Roadway Scope of Work.

## III. CONSTRUCTION REQUIREMENTS:

All construction and materials shall be in accordance with the NCDOT 2012 *Standard Specifications for Roads and Structures* and current NCDOT *Project Special Provisions* unless noted otherwise elsewhere in this RFP. The Design-Build Team shall be responsible for investigating, proposing and incorporating remedial measures for any construction problems related to foundations, retaining walls, subgrades, settlement,