

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT SECRETARY

March 15, 2006

Addendum No. 2

RE: Contract ID: C201269

TIP Number: I-2808A FA No.: IMF-77-1(157)72

Yadkin County

Project Description: I-77 from south of SR 1125 (Ashbury Church Road) to US 21

May 12, 2006 Letting

To Whom It May Concern:

Reference is made to the Request for Proposal recently furnished to you on the above project. The following revisions have been made to the Request for Proposal:

The *TABLE OF CONTENTS* has been revised. Please void the *TABLE OF CONTENTS* and staple the revised *TABLE OF CONTENTS* thereto.

On pages 24 – 29A, the *EROSION & SEDIMENTATION CONTROL/STORMWATER CERTIFICATION* special provision has been revised. Please void Pages No. 24 – 29A in your proposal and staple the revised Pages No. 24 – 29A thereto.

Page 31, the *GENERAL SECTION* has been revised. Please void Page No. 31 in your proposal and staple the revised Page No. 31 thereto.

On page 51, the *TRAFFIC CONTROL SCOPE OF WORK* has been revised. Please void Page No. 51 in your proposal and staple the revised Page No. 51 thereto.

Sincerely,

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

c: Mr. Steve DeWitt, PE (w/)

Mr. Steve Varnedoe, PE

Ms. Deborah Barbour, PE

Mr. Victor Barbour, PE (w/)

Mr. Art McMillan, PE

Mr. Clarence Coleman, PE - FHWA (w/3)

Mr. Phillip Harris, PE

Mr. Rodger Rochelle, PE (w/)

Mr. Carl Goode

Mr. Shannon Sweitzer, PE (w/)

Mr. Ron Hancock, PE (w/)

Mr. David Harris, PE

Mr. Ron Davenport, PE (w/)

Mr. Van Argabright, PE

Mr. Trent Beaver, PE (w/3)

Mr. Jimmy Hamrick, PE (w/)

Mr. Dean Ledbetter, PE (w/)

Mr. Jesse Gilstrap (w/)

Mr. Marshall Clawson, PE (w/)

Mr. Nathan Phillips, PE (w/)

Mr. Roger Worthington, PE (w/)

Mr. Brian Mayhew, PE (w/)

Mr. John Emerson (w/)

Ms. Jennifer Brandenburg, PE (w/)

Mr. Tony Wyatt, PE (w/)

Mr. Wayne Johnson, PE (w/)

Ms. Virginia Mabry (w/)

Ms. Teresa Bruton, PE (w/3 copies)

Mr. Khaled Al-Akhdar (w/)

Ms. Marsha Sample (w/)

Mr. Ayman Alqudwah, PE (w/)

Mr. James Bridges, PE

Ms. Cheryl Gregory (w/)

Mr. Andy Gay, PE (w/)

Ms. Betty Rawls (w/)

Technical Review Committee Members (w/)

File (w/)

Ms. Brenda Moore, PE - Roadway (w/)

Dr. Clark Morrison, PE - Pavement Design (w/)

Mr. John Pilipchuk, PE - Geotechnical (w/)

Ms. Elizabeth Lusk - Environmental Permits (w/)

Ms. Michelle Long, PE - Public Information (w/)

Mr. Murray Howell - Utility Coordination (w/)

Mr. Stephen Worthy - Utility Coordination (w/)

Mr. Barney Blackburn - Erosion & Sed. Cont. (w/)

Mr. Mitch Hendee, PE - Traffic Control (w/)

Mr. Tim McFadden - Signing (w/)

Ms. Anne Gamber, PE - Hydraulics (w/)

Mr. Richard Mullinax, PE

Mr. Michael Pettyjohn, PE

Mr. Njoroge Wainaina, PE

Mr. Ron King, PE

Mr. Greg Perfetti, PE

Dr. Greg Thorpe, Ph.D.

Mr. Stuart Bourne, PE

Dr. Judith Corley-Lay, PhD., PE

Mr. Calvin Leggett, PE

Mr. Don Lee

Mr. Ellis Powell, PE

Mr. Jay Bennett, PE

Mr. Dave Henderson, PE

Mr. John Williamson

TABLE OF CONTENTS

COVER SHEET PROPOSAL SHEETS

PROJECT SPECIAL PROVISIONS (GREEN SHEETS)	PAGE NO
Contract Time and Liquidated Damages	1
Other Liquidated Damages	
Project Schedule	
Payout Schedule	3
Mobilization	4
Fuel Price Adjustment	4-5
Partnering	
Execution of Signature Sheets and Debarment Certification	6
Submission of Design-Build Proposals	
Confidential Questions.	7
Value Analysis	
Schedule of Estimated Completion Progress.	
Disadvantaged Business Enterprise.	8-16
Certification for Federal-Aid Projects.	
Contractor's License Requirements	17
Domestic Steel and Iron Products.	
U. S. Department of Transportation Hotline	
Submission of Records – Federal-Aid Projects.	
Design Build Team Borrow Source.	
Subsurface Information.	
Training Requirements	
Safety Vests	19
Bid Documentation.	20-22
Twelve Month Guarantee.	
Outsourcing Outside U.S.A	
Disqualification of Bidders	
Rejection of Bids.	
Erosion & Sediment Control/Stormwater Certification	
Price Adjustments for Asphalt Binder	
Price Adjustments Asphalt Concrete Plant Mix	
Recycling Concrete Pavement.	29A
GENERAL (GREEN SHEETS)	30-41
SCOPES OF WORK (GREEN SHEETS)	
Roadway Design	
Pavement Management Design.	
Hydraulics Design.	
Traffic Control and Pavement Markings	51-63
Geotechnical Engineering	
Signing	69-70
Erosion and Sedimentation Control.	
Public Information	
Utilities Coordination	77-81

employed or with the knowledge or approval of the business firm or thereafter ratified by

- 17. Being debarred from performing work with other city, state, and federal agencies.
- Failure to perform guaranty work within the terms of the contract. 18.

DB1 G155

Yadkin County

REJECTION OF BIDS (12-20-05)

Revise the 2002 Standard Specifications as follows:

Page 1-17, Article 102-15, add the following after the third paragraph:

All proposers shall comply with all applicable laws regulating the practice of general contracting as contained in Chapter 87 of the General Statutes of North Carolina which requires the bidder to be licensed by the N.C. Licensing Board for Contractors when bidding on any nonfederal aid project where the bid is \$30,000 or more, except for certain specialty work as determined by the licensing board. Proposers shall also comply with all other applicable laws regulating the practices of electrical, plumbing, heating and air conditioning and refrigeration contracting as contained in Chapter 87 of the General Statutes of North Carolina. Notwithstanding the limitations on bidding, the proposer who is awarded any project shall comply with Chapter 87 of the General Statutes of North Carolina for licensing requirements within 60 calendar days of bid opening, regardless of funding sources.

DB1G175

EROSION & SEDIMENT CONTROL/STORMWATER CERTIFICATION:

I. General

The purpose of this certification program is to assure that all responsible parties involved in the construction of this project are properly trained and have the skills necessary to fulfill all environmental commitments required of this project. It is intended contractor/subcontractor representatives work jointly with the Department on the project to assure that all plan and contract requirements are met, that necessary adjustments are made and that all devices and features are installed in a timely manner. In the case of difference of opinion or interpretation of plan or contract requirements between the Contractor and the Engineer, the Engineer's determination and decision will be final.

Schedule and conduct construction activities in a manner that will minimize soil erosion and the resulting sedimentation and turbidity of surface waters. Comply with the requirements herein regardless of whether or not a National Pollutant Discharge Elimination System (NPDES) permit for the work is required.

Establish a chain of responsibility for operations and subcontractor's operations to ensure that the Erosion and Sediment Control Stormwater (E&SC/SW) Pollution Prevention Plan is implemented and maintained over the life of the contract.

- (A) Certified Supervisor —Provide a certified E&SC/SW Supervisor to manage the Design-Build Team and subcontractor(s) operations, insure compliance with Federal, State and Local ordinances and regulations, and to manage the Quality Control Program.
- (B) Certified Foreman Provide certified, trained foremen for each construction operation that increases the potential for soil erosion or the possible sedimentation and turbidity of surface waters.

II. Roles and Responsibilities

- (A) Certified E&SC/SW Supervisor The Certified Supervisor shall be responsible for ensuring E&SC/SW is adequately implemented and maintained on the project and conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours from initial exposure of an erodible surface to the project's final acceptance when questions or concerns arise with E&SC/SW issues. Perform the following duties:
- (1) Manage Operations Coordinate and schedule the work of subcontractors so E&SC/SW measures are fully executed for each operation and in a timely manner over the duration of the contract.

Oversee the work of subcontractors so that appropriate E&SC/SW preventive measures are conformed to at each stage of the work.

Prepare the required weekly erosion control punchlist and present it to the Engineer.

Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection log and other related issues.

Implement the E&SC/SW site plans requested.

Provide for E&SC/SW methods for Design-Build Team's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.

Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Design-Build Team in jurisdictional areas.

Conduct all E&SC/SW work in a timely and workmanlike manner.

Fully install E&SC/SW work prior to suspension of the work.

Coordinate with the Department, Federal, State and Local Regulatory agencies on resolution of E&SC/SW issues due to the Design-Build Team's operations.

Ensure that proper cleanup occurs from vehicle tracking on paved surfaces and/or any location where sediment leaves the Right-of-Way.

Have available a set of erosion control plans that has been properly updated to reflect necessary plan and field changes for use and review by Department personnel as well as regulatory agencies.

(2) Requirements set forth under the NPDES Permit - The Department's NPDES permit outlines certain objectives and management measures pertaining to construction activities. The permit references NCG010000, General Permit to Discharge Stormwater under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated E&SC/SW Program. Some of the requirements are, but are not limited to:

Control project site waste to prevent contamination of surface or ground waters of the state (i.e. construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste).

Inspect E&SC/SW devices at least once every 7 calendar days, twice weekly for 303(d) impaired streams, and within 24 hours after a significant rainfall event of 0.5 inches within 24 hours.

Maintain an onsite rain gauge and a record of rainfall amounts and dates

Maintain E&SC/SW inspection records for review by Department and Regulatory personnel upon request.

Implement approved reclamation plans on all borrow pits and waste sites.

Maintain a log of turbidity test results as outlined in the Department's Procedure for Monitoring Borrow Pit Discharge.

Provide secondary containment for bulk storage of liquid materials.

Provide training for employees concerning general E&SC/SW awareness, the NPDES Permit requirements, and the requirements of the *General Permit*. NCG010000.

Report violations of the NPDES permit to the Engineer so that the DWQ Regional Office can be notified within 24 hours. The Supervisor will immediately notify the Engineer of any violations so that proper notification can be made to DWQ.

(3) Quality Control Program - Maintain a quality control program to control erosion, prevent sedimentation and follow provisions of permits. The quality control program shall:

Follow permit requirements related to the Design-Build Team and subcontractors' construction activities.

Ensure that all operators and/or subcontractor(s) on site have the proper E&SC/SW certification.

Notify the Engineer when the required certified E&SC/SW personnel are not available on the job site when needed.

Conduct the inspections required by the NPDES permit.

Take corrective actions in the proper timeframe as required by the NPDES permit for problem areas identified during the NPDES inspections.

Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch/seed or vegetative cover on a section-by-section basis.

Maintain temporary E&SC/SW devices.

Remove temporary erosion or sediment control devices when they are no longer necessary as agreed upon by the Engineer.

The Design-Build Team's quality control and inspection procedures shall be subject to review by the Engineer. Maintain NPDES inspection records at the project site. Make NPDES inspection records available at all times for verification by the Engineer.

(B) Certified Foreman - At least one Certified Foreman shall be onsite for each type of work listed herein during the respective construction activities to control erosion, prevent sedimentation and follow permit provisions:

Foreman in charge of grading activities

Foreman in charge of bridge or culvert construction over jurisdictional areas

Foreman in charge of utility activities

The Design-Build Team may request to use the same person as the Level II Supervisor and Level II Foreman. This person shall be on site whenever construction activities as described above are taking place. This request shall be approved by the Engineer prior to work beginning.

The Design-Build Team may request to name a single Level II Foreman to oversee multiple construction activities on small bridge or culvert replacement projects. This request shall be approved by the Engineer prior to work beginning.

III. Preconstruction Meeting

Furnish the names of *the Certified E&SC/SW Supervisor*, *Certified Foremen*, and notify the Engineer of changes in certified personnel over the life of the contract within 2 days of change.

IV. Ethical Responsibility

Any company performing work for the North Carolina Department of Transportation has the ethical responsibility to fully disclose any reprimand or dismissal of an employee resulting from improper testing or falsification of records.

V. Revocation or Suspension of Certification

Upon recommendation of the Director of Construction to the certification entity, certification for Supervisor and Certified Foremen may be revoked or suspended with the issuance of a *Continuing Immediate Corrective Action (CICA), Notice of Violation,* or Cease and Desist (C&D) Order for E&SC/SW related issues.

Should any of the following circumstances occur, the Director of Construction may suspend or permanently revoke such certification.

Failure to adequately perform the duties as defined within the certification program

Issuance of a CICA, NOV, or C&D Order

Failure to fully perform environmental commitments as detailed within the permit conditions and specifications

Demonstration of erroneous documentation or reporting techniques

Cheating or copying another candidate's work on an examination

Intentional falsification of records

Directing a subordinate under direct or indirect supervision to perform any of the above actions

Dismissal from a company for any of the above reasons

Suspension or revocation of one's certification within another state

Suspension or revocation of a certification will be sent by certified mail to the registrant and the Corporate Head of the company that employs the registrant.

A registrant has the right to appeal any adverse action which results in suspension or permanent revocation of certification by responding, in writing, to the Director of Construction within 10 calendar days after receiving notice of the proposed adverse action.

Director of Construction 1520 Mail Service Center Raleigh, NC 27699-1520

Failure to appeal within 10 calendar days will result in the proposed adverse action becoming effective on the date specified on the certified notice. Failure to appeal within the time specified will result in a waiver of all future appeal rights regarding the adverse action taken. The registrant will not be allowed to perform duties associated with the certification during the appeal process.

The Director of Construction will hear the appeal and make a decision within 7 days of hearing the appeal. Decision of the Director of Construction will be final and will be made in writing to the registrant.

If a certification is temporarily suspended, the registrant shall pass any applicable written examination and any proficiency examination, at the conclusion of the specified suspension period, prior to having the certification reinstated.

VII. Measurement and Payment

Certified E&SC/SW Supervisor is incidental to the project for which no direct compensation will be made.

Certified Foremen are incidental to the project for which no direct compensation will be made.

DB1G180

PRICE ADJUSTMENTS FOR ASPHALT BINDER (11-21-00)

Adjustments will be made to the payments due the Design-Build Team for each grade of asphalt binder when it has been determined that the monthly average terminal F.O.B. Selling Price of asphalt binder, Grade PG 64-22, has fluctuated from the Base Price Index for Asphalt Binder included in this Project Special Provision. The methods for calculating a Base Price Index, for calculating the monthly average terminal F.O.B. Selling Price and for determining the terminals used are in accordance with procedures on file with the Department's Construction Unit.

C 201269 (I-2808A)

Yadkin County

When it is determined that the monthly average terminal F.O.B. Selling Price of asphalt binder on the first business day of the calendar month during which the last day of the partial payment period occurs, varies either upward or downward from the Base Price Index, the partial payment for that period will be adjusted. The partial payment will be adjusted by adding the difference (+ or -) of the base price index subtracted from the monthly selling price multiplied by the total theoretical quantity of asphalt binder authorized for use in the plant mix placed during the partial payment period involved.

The Base Price Index for this project is \$ 255.31 per ton.

DB6 R25

PRICE ADJUSTMENTS - ASPHALT CONCRETE PLANT MIX

Revise the 2002 Standard Specifications as follows:

Page 6-20, Article 609-8 and Page 6-36, Article 610-13

Add the following paragraph before the first paragraph:

The "Asphalt Price" used to calculate any price adjustments set forth in this section shall be \$35 per theoretical ton. This price shall apply for all mix types.

DB6 R26

RECYCLING CONCRETE PAVEMENT (3-3-06)

The existing concrete pavement may be recycled into the future concrete pavement provided the Design Build Team utilizes a nationally recognized expert in the field of recycled/reclaimed concrete pavement construction. This individual will be responsible for performing or directly overseeing any testing of the existing concrete materials, to potentially include chemical and structural analysis; mix design; process control and testing. This expert shall also be intimately involved in crushing operations, production and associated process control to ensure that a quality, durable concrete pavement is produced which meets the Contract requirements. This individual shall be accessible to the Department to address any concerns or answer questions, which may arise during design or recycling operations.

If the Design Build Team elects to recycle the existing concrete into the future concrete payement, the name of the nationally recognized expert, proposed to perform the items detailed above, should be documented in the Technical Proposal.

The Design Build Team should perform any initial evaluation of the existing concrete pavement as deemed necessary prior to bid. The Department does not guarantee the quality or consistency of this concrete pavement, including the concrete's quality for recycling purposes.

SPI

OVERVIEW

The project will re-construct approximately 6.5 miles of I-77, including ramps at the US 421 interchange. The re-construction of I-77 shall include four 12-foot concrete lanes and ten-foot full-depth asphalt shoulders. The re-construction of the US 421 ramps and loops shall include 16-foot wide and 19-foot wide lanes, respectively, with four-foot asphalt shoulders. The project is located in Yadkin County.

Project services shall include but are not limited to:

- **Design Services** completion of construction plans. The PCE was approved on April 11, 2005.
- **Construction Services** necessary to build and ensure workmanship of the designed facility.

GENERAL SCOPE

The scope of work for this project will include design, construction and management of the project. The design work will include all aspects to re-construct the existing lanes on I-77 and ramps on US 421. The designs shall meet all appropriate latest versions of AASHTO Policy on Geometric Design of Highways and Streets, AASHTO Standard Specifications for the Design of Highway Bridges, Manual of Uniform Traffic Control Devices, and all NCDOT design criteria.

Construction will include, but not be limited to, all necessary roadway, drainage, utility coordination, and erosion and sediment control work items. Construction will comply with *NCDOT Standard Specifications for Roadways and Structures Edition of 2002* and any special provisions.

Areas of work required for this project will include, but are not limited to the following items:

- 1. Roadway Design
- 2. Hydraulic Design
- 3. Construction
- 4. Subgrade Stabilization
- 5. Erosion and Sediment Control
- 6. Traffic Control and Pavement Marking Design
- 7. Signing Design
- 8. Project and Construction Management
- 9. Construction Surveying
- 10. Location and Surveys
- 11. Public Involvement
- 12. R/W Utilities, Conflicts and / or Construction
- 13. Geotechnical Investigations / Recommendations

All designs shall be in Microstation format using Geopak software (current version used by the Department)

TRAFFIC CONTROL SCOPE OF WORK (3/14/06)

I. Traffic Control Plans

A. Design Parameters

The Design Build Team shall prepare the Traffic Control and Pavement Marking Plans for this project following the parameters listed below:

- 1. On I-77 and US 421, maintain a minimum of two 12-foot lanes in each direction at all times unless otherwise noted herein. Also, maintain a minimum of 12-foot wide lane for all ramps and loops, unless otherwise noted herein.
- 2. On I-77 maintain a minimum of one 12-foot lane in each direction during the time restrictions listed in section II.
- 3. On I-77, maintain a minimum 4-foot offset from edge of travel lane to guardrail, a minimum 6-foot offset from the edge of travel lane to cable guiderail and a minimum 2-foot offset from edge of travel lane to any traffic control device. Temporary paved shoulders within 500' north and south of the bridges over US 421 shall have no less than 2' paved shoulders. All other temporary shoulders shall be no less than 3' paved. If the outside shoulder is less than 10' paved, follow the requirements for a motorist breakdown lane, see sections II., F. of this scope.
- 4. Temporary crossovers may be used on I-77 to place traffic in a two lane / two way temporary traffic pattern only if the following conditions are met:
 - Follow the time restriction in Section II, A below.
 - Crossover shall be designed for the current posted speed limit of 70 mph following NCDOT Roadway Design Manual and 2004 AASHTO A Policy on Geometric Design of Highways and Streets.
 - Crossover lanes shall be a minimum of 12-foot wide.
 - An approved Temporary barrier system will be required to safely divide the two lane, two way traffic. Maintain a minimum of 4-foot offset from inside edge of travel lane to the approved unanchored temporary barrier system. A minimum 2-foot offset is acceptable if barrier is anchored. All other offsets and temporary paved shoulders shall adhere to the requirements in Section I., A., 3. above.
 - Crossover shall not affect existing interchange operation and shall not begin or end within the limits of the interchange.
 - Only one temporary crossover can be used at a time.
 - Provide Motorist breakdown areas when required. See Section II, F. below.
 - Existing guiderail and guardrail shall be modified or an approved barrier system will be required.
- 5. Temporary pavement markings and markers shall be required for any temporary traffic pattern that will be in place longer than the lane closure and narrowing time restrictions listed for I-77 part 1.) of Section II., A., 1., a. below (4 days, 9 hours). Temporary traffic patterns in place less than this time period shall adhere to the following requirements:
 - Where an approved temporary portable barrier system is required, markers shall be placed a minimum of 2' from face of the barrier to edge of travel lane. Barrier delineators shall be spaced no more than 50' apart.