

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT SECRETARY

January 8, 2009

Addendum No. 1

RE: Contract ID: C202049 WBS# 33524.3.1 F.A. # BRZ-1193(5) Lincoln County (B-4177) Bridge Over Howard's Creek and Approaches on SR-1193

January 20, 2009 Letting

To Whom It May Concern:

Reference is made to the plans and proposal recently furnished to you on this project.

The following revisions have been made to the plans:

On Sheet No.1-A the Index of Sheets has been revised to delete Sheet No.2-C and the list of Standard Drawings has been revised to add Std. No. 422.10. Please void Sheet No.1-A in your plans and staple the revised Sheet No.1-A thereto. Please void Sheet No.2-C in your plans as this sheet no longer applies

The following revisions have been made to the proposal form:

On Page Nos. 39 thru 41 the project special provision entitled "Bridge Approach Fill-Sub Regional Tier" has been replaced with the project special provision entitled "Reinforced Bridge Approach Fill". Please void Page Nos. 39 thru 41 in your proposal and staple revised Page Nos. 39 thru 41 thereto.

On Page No. 1 of the item sheets, by copy of this addendum, the following pay item is hereby deleted: "4-003000000-N-SP Bridge Approach Fill- Sub Regional Tier, Station 19+00 (Quantity = Lump Sum)". Also, on Page No. 4 of the item sheets, by copy of this addendum, the following new pay item is hereby added: "94-00290000000-N-SP Reinforced Bridge Approach Fill, Station 18+85.00-L- (Quantity = Lump Sum). The Contractor's bid must include this new pay item. The contract will be prepared accordingly.

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Contract ID: C202049 Lincoln County (B-4177)

The Expedite EBS file has been updated to reflect this revision. Please download the Expedite Addendum file for this project and follow the instructions for applying the addendum. Bid Express will not accept your bid unless the addendum has been applied.

Sincerely,

R. A. Garris, PE Contract Officer

#### RAG/jag Attachments

Mr. J. G. Nance, PE	Mr. Robert Memory
Mr. Ellis Powell, PE	Mr. R. E. Davenport, Jr., PE
Mr. M. L. Holder, PE	Ms. Norma Smith
Ms. D. M. Barbour, PE	Mr. Ronnie Higgins
Mr. Art McMillan, PE	Mr. Larry Strickland
Mr. J. V. Barbour, PE	Ms. Lori Strickland
Mr. Mark Staley (2)	Ms. Marsha Sample
Mr. G. R. Perfetti, PE	
Project File (2)	
	Mr. Ellis Powell, PE Mr. M. L. Holder, PE Ms. D. M. Barbour, PE Mr. Art McMillan, PE Mr. J. V. Barbour, PE Mr. Mark Staley (2) Mr. G. R. Perfetti, PE

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Revised 1-8-09
Lincoln County

#### **PIPE TESTING:**

4-17-07 SP3 R33

Revise the 2006 Standard Specifications as follows:

Page 3-3, Article 300-6, add the following as a new paragraph before (A):

The Department reserves the right to perform forensic testing on any installed pipe.

#### **REINFORCED BRIDGE APPROACH FILL:**

(3-18-03) (Rev 9-16-08)

**SP4 R01A** 

#### **Description**

This work consists of all work necessary to construct reinforced bridge approach fills in accordance with these provisions and the plans, and as directed by the Engineer.

#### **Materials**

#### (A) Geomembrane

Provide geomembrane that is impermeable, composed of polyethylene polymers or polyvinyl chloride, and meets the following physical requirements:

Property	Requirements	Test Method
Thickness	25 mils Minimum	<b>ASTM D1593</b>
Tensile Strength at Break	100 lb/inch Minimum	ASTM D638
Puncture Strength	40 lbs Minimum	<b>ASTM D 4833</b>
Moisture Vapor Transmission Rate	0.018 oz/yd per Day Maximum	ASTM E96

#### (B) Fabric

Refer to Section 1056 for Type 2 Engineering Fabric and the following:

Use a woven fabric consisting of strong rot-proof synthetic fibers such as polypropylene, polyethylene, or polyester formed into a stable network such that the filaments or yarns retain their relative positions to each other.

Fabric Property	Requirements	Test Method
Minimum Flow Rate	2 gallons/min/square foot	<b>ASTM D 4491</b>

Lamination of fabric sheets to produce the physical requirements of a fabric layer will not be accepted. Furnish letters of certification from the manufacturer with each shipment of the fabric and geomembrane attesting that the material meets the requirements of this provision; however, the material is subject to inspection, test, or rejection by the Engineer at any time.

During all periods of shipment and storage, wrap the geomembrane and fabric in a heavy-duty protective covering to protect the material from ultraviolet rays. After the protective wrapping has been removed, do not leave the material uncovered under any circumstances for longer than 4 days.

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### Revised 1-8-09 Lincoln County

#### (C) Select Material

Provide select material meeting the requirements of Class III, Type 1 or Type 2, or Class V select material of Section 1016 of the 2006 Standard Specifications. When select material is required under water, use select material class V only, up to one foot above the existing water elevation.

#### (D) 4 inch Diameter Corrugated Drainage Pipe and Fittings

Provide pipe and fittings that meet all the applicable requirements of Section 815 or 816 of the 2006 Standard Specifications.

#### **Construction Methods**

Place the geomembrane and fabric as shown on the plans or as directed by the Engineer. Perform the excavation for the fabric reinforced fill to the limits shown on the plans. Provide an excavated surface free of obstructions, debris, pockets, stumps, and cleared of all vegetation. The geomembrane or fabric will be rejected if it has defects, rips, holes, flaws, deterioration or damage incurred during manufacture, transportation, handling or storage. Lay all layers smooth, and free from tension, stress, folds, wrinkles or creases. Place all the fabric layers with the machine direction (roll direction) parallel to the centerline of the roadway. A minimum roll width of 10.0 feet for the fabric is required. Overlap geomembrane or fabric splices parallel to the centerline of the roadway a minimum of 18 inches. Geomembrane or fabric splices parallel to the backwall face will not be allowed.

Deposit and spread select material in successive, uniform, approximately horizontal layers of not more than 10 inches in depth, loose measurement, for the full width of the cross section, and keep each layer approximately level. Place and compact each layer of select material fill no more than 10 inches thick with low ground pressure equipment. Use hand operated equipment to compact the fill material within three feet of the backwall and wingwalls as directed by the Engineer. Compact select material to a density equal to at least 95% of that obtained by compacting a sample of the material in accordance with AASHTO T99 as modified by the Department. Compact the top eight inches of select material to a density to at least 100% of that obtained by compacting a sample of the material in accordance with AASHTO T99 as modified by the Department. Density requirements are not applicable to select material, class V; however compact the fill with at least four passes of low ground pressure equipment on the entire surface as directed by the Engineer. The compaction of each layer of select material shall be inspected and approved by the Department prior to the placement of the next fill layer. No equipment will be allowed to operate on the drainage pipe or any geomembrane/fabric layer until it is covered with at least six inches of fill material. Compaction shall not damage the drainage pipe, geomembrane, or fabric under the fill. Cover the geomembrane/fabric with a layer of fill material within four days after placement of the geomembrane/fabric. Geomembrane and fabric that are damaged as a result of installation will be replaced as directed by the Department at no additional cost.

Place the geomembrane on the ground, and attach and secure it tightly to the vertical face of the backwall and wingwalls with adhesives, duct-tape, nails or any other method approved by the Engineer. Place the first fabric layer on the surface of the geomembrane with the same dimensions of the geomembrane. No material or void is allowed between the geomembrane and the first fabric layer. Place and fold the remaining fabric layers on the edges as shown on the plans or as directed by the Engineer. Provide vertical separation between fabric layers as specified on the plans. The number of fabric layers will be shown in the plans.

Place four inch diameter perforated drainage pipe along the base of the backwall and sloped to drain as shown on the plans. Completely wrap perforated drainage pipe and #78M stone with Type 2 Engineering Fabric as shown on the plan detail. Install a pipe sleeve through the bottom of or under the wing wall prior to placing concrete for the wing wall. The pipe sleeve shall be of adequate strength to withstand the





wingwall load. Place the pipe sleeve in position to allow the drainage pipe to go through the wing wall with a proper slope. Connect four-inch diameter nonperforated (plain) drainage pipe with a coupling to the perforated pipe near the inside face of the wingwall. Place the nonperforated drainage pipe through the pipe sleeve, extend down to the toe of the slope and connect, to a ditch or other drainage systems as directed by the Engineer. For bridge approaches in cut sections where no side slope is available, direct the drainage pipe outlet to the end slope down to the toe using elbows as directed by the Engineer.

#### **Measurement and Payment**

Reinforced Bridge Approach Fill, Station \_\_\_\_\_ will be paid for at the contract lump sum price. Such price and payment will be full compensation for both approach fills at each bridge installation, including but not limited to furnishing, placing and compacting select material, furnishing and placing geomembrane and woven fabric, furnishing and placing pipe sleeve, drainage pipe, and stone, furnishing and installing concrete pads at the end of outlet pipes, excavation and any other items necessary to complete the work.

Payment will be made under:

Pay ItemPay UnitReinforced Bridge Approach Fill, StationLump Sum

#### **ASPHALT PAVEMENTS - SUPERPAVE:**

(7-18-06) (Rev 12-16-08)

SP6R01

Revise the 2006 Standard Specifications as follows:

Page 6-2, Article 600-9 Measurement and Payment, delete the second paragraph.

Page 6-12, Subarticle 609-5(C)2, Required Sampling and Testing Frequencies, first partial paragraph at the top of the page, delete last sentence and add the following:

If the Engineer allows the mix to remain in place, payment will be made in accordance with Article 105-3.

## Page 6-12, Subarticle 609-5(C)2, QUALITY CONTROL MINIMUM SAMPLING AND TESTING SCHEDULE

#### First paragraph, delete and replace with the following.

Sample and test the completed mixture from each mix design per plant per year at the following minimum frequency during mix production:

#### Second paragraph, delete the fourth sentence, and replace with the following

When daily production of each mix design exceeds 100 tons and a regularly scheduled full test series random sample location for that mix design does not occur during that day's production, perform at least one partial test series consisting of Items A and B in the schedule below.

#### Page 6-12, Subarticle 609-5(C)2(c) Maximum Specific Gravity, add after (AASHTO T 209):

or ASTM D 2041

Page 6-13, last line and on page and Page 6-14, Subarticle 609-5(C)(2)(e) Retained Tensile Strength, add a heading before the first paragraph as follows:

(i) Option 1