

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT SECRETARY

April 3, 2008

Addendum No. 1

RE: Contract ID: C201095

WBS# 37451

**Washington County** 

SR-1126 From US-64 to SR-1155

April 15, 2008 Letting

To Whom It May Concern:

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

The following revisions have been made the proposal form:

Page Nos. 31 thru 34 have been revised to delete "Installer Qualifications" and to add a pay item for "Sealing Existing Pavement Cracks and Joints". Please void Page Nos. 31 thru 34 in your proposal and staple the revised Page Nos. 31 thru 34 thereto.

On Page No. 2 of the Item Sheets, by copy of this addendum the following new pay item is hereby added: "31-1702000000-E-657 Sealing Existing Pavement Cracks and Joints" (Quantity = 8,000LB).

The Contractor's bid price must include the new pay item. The contract will be prepared accordingly.

The Expedite File has been updated to reflect this revision. Please download the Expedite Addendum File 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/mwl/blr Attachments

> MAILING ADDRESS: NC DEPARTMENT OF TRANSPORTATION DESIGN SERVICES UNIT 1591 MAIL SERVICE CENTER RALEIGH NC 27699-1591

TELEPHONE: 919-250-4128 FAX: 919-250-4119

WEBSITE: WWW.NCDOT.ORG/

LOCATION: CENTURY CENTER COMPLEX ENTRANCE B2 1020 BIRCH RIDGE DRIVE RALEIGH NC

# Page 2

RE: Contract ID: C201095

# **Washington County**

cc: Mr. W. S. Varnedoe, PE

Mr. E. C. Powell, PE

Mr. A. W. Roper, PE

Ms. D. M. Barbour, PE

Mr. Art McMillan, PE

Mr. J. V. Barbour, PE

Mr. Mark Staley (2)

Mr. Robert Memory

Mr. R. E. Davenport, Jr., PE

Ms. Norma Smith

Mr. Ronnie Higgins

Mr. Larry Strickland

Project File (2)

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# Revised 4-3-08 Washington County

# **ASPHALT PLANT MIXTURES:**

(7-1-95)

R6 R20

Place asphalt concrete base course material in trench sections with asphalt pavement spreaders made for the purpose or with other equipment approved by the Engineer.

# **ASPHALT INTERLAYER REINFORCING SYSTEM:**

 $\overline{(3-10-08)}$ 

SPI

#### **Description**

Furnish and install an asphalt interlayer reinforcement system at locations shown on the plans.

#### **Materials**

High strength open fiberglass mesh grid, with a grid size of 1 in by 1 in, custom knitted in a stable construction and coated with an elastomeric coating and self-adhesive glue.

Furnish with each shipment a Type 3 Certification in accordance with Article 106-3 certifying that the paving mat is a fiberglass / polyester material meeting the requirements shown:

# Physical Properties of ASPHALT INTERLAYER REINFORCEMENT STSTEM

Property	Test Method	Units	Value
Tensile strength component	ASTM D6637	kN/m (lb/in)	560 (100)
strand strength			
Elongation at break	ASTM D6637	Percent	< 5
Melting Point	ASTM D276	°C (°F)	>218 (>425)
Mass/Unit Area	ASTM D5261	$G/SM (oz/yd^2)$	370 (11)

#### **General Requirements**

#### PRE-CONSTRUCTION MEETING

Prior to construction of interlayer reinforcement system, conduct a meeting at the site with the materials supplier, the installer, and the Contractor to review the preparation and installation requirements.

Notify the Owner and the Engineer at least 3 days in advance of the time of the meeting.

#### DELIVERY, STORAGE, AND HANDLING

Store products in manufacturer's unopened packaging until ready for installation.

Store in a dry, covered location that is free of dust dirt and moisture. Prevent excessive mud, fluid concrete, asphalt, or other deleterious materials from coming in contact with reinforcement mesh materials.

Store at temperatures above minus 20 degrees F (minus 29 degrees C).

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#### PROJECT CONDITIONS

Do not place mesh reinforcement when the surface is wet, or contaminated with oil, soil or excessive dust.

Do not place asphalt during wet or freezing weather that prevents conformance with specified requirements.

#### **PREPARATION**

Do not begin GlassGrid interlayer system until existing pavement condition has been evaluated and all repairs have been completed.

Seal cracks between 1/8 inch (3 mm) and 1/4 inch (6 mm) with a crack filler in accordance with Section 657 of the Standard Specifications. Repair wider cracks using a method that provides a level surface. All holes shall be filled with hot asphalt and compacted level with adjacent surfaces.

Surfaces shall be mechanically cleaned by sweeping and vacuuming and be free of oil, vegetation, sand, dirt, water, gravel and other contaminants prior to placement of interlayer reinforcing.

If subgrade preparation is the responsibility of others, notify Engineer of unsatisfactory preparation. Do not begin work until unsatisfactory conditions have been rectified.

#### TACK COAT

Tack coat shall be a material approved by the interlayer reinforcement manufacturer. Acceptable tack coat materials include hot AC 20-5TR, cationic emulsion CRS-2P, or trackless tack emulsion NTSS-1HM.

Do not dilute emulsified asphalts at the terminal or in the field.

Provide a certificate of compliance with the product specifications immediately prior to use.

Prepare surfaces as specified prior to application.

Unless otherwise recommended by the manufacturer, apply tack coat at the rate of 0.02 to 0.05 gallons per square yard of surface area. The rate should be specified by the Engineer, but could vary depending on the installation or surface conditions.

Protect adjacent surfaces and prevent spattering of tack coat when placed adjacent to curbs, gutter, structures and other adjacent surfaces. Clean any surfaces where it has been contaminated by the tack coat.

#### **PLACEMENT**

Surface temperature shall be between 40 degrees F (5 degree C and 140 degrees F (60 degrees C) prior to laying interlayer reinforcement.

Interlayer reinforcement grid shall be laid out by mechanical means or by hand using sufficient pressure to eliminate ripples. Remove any ripples by pulling the grid tight. Cutting of the grid may be done on tight radii to prevent ripples.

Lap transverse joint in the direction of the paving 3 inches (75 mm) to 6 inches (150 mm).

Lap longitudinal joints shall be overlapped 1 inch (25 mm) to 2 inches (50 mm).

After placement activate self-adhesive glue by rolling with a rubber coated drum roller or a pneumatic tire roller until properly adhered. Clean tires regularly during rolling operations.

Protect interlayer reinforcing mesh until placement of the finished asphalt topping. Repair damaged sections prior to placement of finished asphalt topping.

#### ASPHALT OVERLAY:

Place the asphaltic overlay course the same day the interlayer reinforcing mesh is placed,

# FIELD QUALITY CONTROL

Testing and Inspection shall be provided by an independent laboratory provided by the Contractor and acceptable to the Engineer.

Perform adhesion tests in accordance with the following:

- 1. Place a 1 SY (1 SM) of interlayer reinforcing mesh on a properly prepared leveling course
- 2. Activate self-adhesive glue by rolling with a rubber tired roller or by applying adequate pressure to fully activate the pressure-sensitive adhesive.
- 3. Use a calibrated spring balance by inserting the hook of the balance under the center of the mesh and pulling upwards until the mesh starts to pull away from the surface.
- 4. A 20 pound (9kg) pull is required without pulling the mesh free or creating ripples in the mesh.
- 5. Consult mesh manufacturer if mesh does not meet this pull rating and do not place asphalt topping until an acceptable adhesion is achieved.

Adhesion Test: Provide a minimum of one test per 1000 SF (100 SM) of surface area.

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Revised 4-3-08
Washington County

#### MANUFACTURERS FIELD SERVICES

Provide the services of the manufacturer's field representative for the first three days of interlayer reinforcing mesh installation.

#### **PROTECTION**

Protect installed product until completion of project.

Repair or replace damaged products before Substantial Completion.

#### Measurement and Payment

Asphalt Interlayer Reinforcement System will be measured and paid for at the contract unit price per square yard. In measuring this quantity, the length will be the actual length constructed, measured along the surface. The width will be the width measured along the ground that has been acceptably placed. No separate measurement will be made for overlapping fabric.

The contract prices for this section shall include but not be limited to furnishing all labor, materials (including asphalt tack coat), tools, equipment and other incidentals necessary to perform the required work.

Measurement and payment for sealing existing pavement cracks and joints will be in accordance with Section 657-4 of the Standard Specifications.

### PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:

 $\overline{(11-21-00)}$ 

R6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2006 Standard Specifications.

The base price index for asphalt binder for plant mix is \$ 361.54 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on March 1, 2008.

#### FINAL SURFACE TESTING – ASPHALT PAVEMENTS (Rideability):

(5-18-04) (Rev.7-18-06)

R6 R45 (Rev.)

### The work covered by this provision shall only apply to Map 2 and Map 5.

On portions of this project where the typical section requires two or more layers of new pavement, perform acceptance testing of the longitudinal profile of the finished pavement surface in accordance with these provisions using a North Carolina Hearne Straightedge (Model No. 1). Furnish and operate the straightedge to determine and record the longitudinal profile of the pavement on a continuous graph. Final surface testing is an integral part of the paving operation and is subject to observation and inspection by the Engineer as deemed necessary.