



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

February 6, 2015

To: Prospective Bidders

From: Lloyd G. Royall, Jr.
Division Proposals Engineer

WBS Element: 3CR.20101.171
Contract #: DC00094

- **Subject: Addendum #1**

The Subject contract proposal contains the following addendums:

- Revision to existing Pavement Interlayer for Reinforcement of Asphalt Overlay.

The attached provision for Pavement Interlayer for Reinforcement of Asphalt Overlay, SHALL replace the existing provision located on page 27 of this contract.

You MUST sign as your acknowledgement that you did in fact receive this addendum. Failure to do so shall cause the bid to be considered irregular and shall be grounds for rejection of the bid.

Signature _____ **Date** _____

LGR/lgr

PAVEMENT INTERLAYER FOR REINFORCEMENT OF ASPHALT OVERLAY:

(11-30-12)

SPD 6-300

Description

Furnish and install a pavement interlayer for reinforcement of an asphalt overlay at locations shown on the plans.

Materials

Select either Option A or Option B or an approved equal. The pavement interlayer shall be resistant to chemicals, mildew and rot, and shall not have any tears or holes that will adversely affect the in-situ performance and physical properties of the installed pavement interlayer.

Pavement interlayer shall be capable of being placed on a milled asphalt surface and overlaid with asphalt, provide reinforcement to the asphalt overlay, and provide waterproofing capabilities.

Furnish with each shipment a Type 3 certification in accordance with Article 106-3 of the *2012 Standard Specifications* to Engineer at least 14 days prior to beginning work. Pavement interlayer shall meet the requirements of either Option A or Option B.

Polypropylene Fabric – Option A

Physical Properties	Test Method	Unit	Minimum Value
Mass / Unit Area	ASTM D5261	oz/yd ²	16.0
Wide Width Tensile Strength, Machine Direction	ASTM D6637 (Method A Modified)	lbs/in	459
Tensile Elongation		Percent	< 3
Melting Point	ASTM D276	°F	752
Asphalt Retention	ASTM D6140	gal/yd ²	0.17
Glass by Weight		Percent	85

Polyester Fabric – Option B

Physical Properties	Test Method	Unit	Minimum Value
Mass / Unit Area	ASTM D5261	oz/yd ²	8.0
Wide Width Tensile Strength	ASTM D6637	lbs/ft	3425
Tensile Strength at 3% Strain	ASTM D6637	lbs/ft	825
Tensile Elongation		Percent	10
Melting Point	ASTM D276	°F	490

Pre-Pave Meeting

Schedule a pre-pave meeting at least 14 days prior to beginning any paving operation. Include the Engineer, Roadway Inspector, Subcontractor, Fabric Manufacturer, Experienced Installer, Area Roadway Engineer, Materials and Tests Unit representative, State Pavement Management Engineer, and State Pavement Construction Engineer.

Pavement Interlayer Installation

A trained and experienced installer, certified by the manufacturer, shall be present on-site during the installation of the pavement interlayer until the crew has a comfort level working with and installing this material.

Inspect the pavement interlayer upon delivery to insure proper material has been received. Pavement interlayer shall be protected with protective wrapping and shall not be exposed to temperatures exceeding 150°F. Storage and handling shall be in accordance with ASTM D4873.

The surface to be overlaid with the pavement interlayer shall be cleaned, dry and free of all dirt and debris. Fill all surface cracks over 1/4 inch with sealant until flush with the existing pavement surface and in accordance with Section 657 of the *2012 Standard Specifications*. At the direction of the Engineer, perform leveling or wedging of asphalt to reduce any irregular surface conditions. Any and all pavement repairs to be made shall be made at the direction of the Engineer prior to the installation of the tack coat.

Tack Coat Application

Apply tack coat in accordance with Section 605 of the *2012 Standard Specifications* and the following:

- (A) Use Asphalt Binder, Grade PG 64-22 tack coat material or as approved.
- (B) Uniformly apply the tack coat material at a rate of application 0.20 gal/sy. The application rate may be increased for heavily aged or deteriorated pavements. The Engineer will establish the exact rate for the application.
- (C) The use of emulsions, cutbacks, or materials containing solvents shall not be permitted for use as tack coat.

The tack coat application temperatures shall be sufficiently hot so as to ensure proper coverage and proper adhesion of the pavement interlayer to the pavement surface. The use of hand sprayers, squeegee or brush-applied tack coat may be used in locations where the distributor truck cannot reach. Every effort shall be made to minimize the application of tack coat by hand-applied means.

The application width of tack coat shall be sufficiently wide to cover the entire width of the pavement interlayer, plus any additional width required for overlapping joints. The tack coat

shall be applied only as far in advance of the pavement interlayer installation to ensure a tacky surface at the time of the mat installation. Traffic shall not be permitted to drive on the tack coat at any time.

Clean any excess tack coat from the pavement. In the event that installation operations must be curtailed, prevent vehicular traffic from driving on the affected area where the tack coat and pavement interlayer have been installed.

Install the pavement interlayer over the hot asphalt tack coat. Use mechanically powered installation equipment to install the pavement interlayer to the surface. The mechanical equipment shall be capable of installing full width rolls of up to 12.5 feet in width. Where mechanical installation methods cannot be accomplished due to situations that require specially cut sections, install the pavement interlayer by hand. Use brooms or squeegees to remove any air bubbles and ensure the pavement interlayer is completely in contact with the tack-coated surface. Folds or wrinkles that are encountered during lay down operations shall be cut or smoothed and additional tack material shall be applied as needed to achieve a complete bond to the surface.

Overlap longitudinal joints a minimum of 2 inches and transverse joints a minimum of 10 inches to bond seams unless otherwise directed by the Engineer. Overlaps on the transverse roll ends shall be in the direction of the paving operation. All overlapping of pavement interlayer shall be tack coated to ensure proper adhesion.

Blotting the sealant, spreading sand or broadcasting hot mix asphalt over the pavement interlayer shall be used to minimize and prevent construction and or paving tires/tracks from adhering to the tack coat and pulling up the pavement interlayer. In the event that the pavement interlayer is displaced from the surface, additional rolling and hand-brushing shall be required to restore the bond between the surface and pavement interlayer. An additional application of tack may be required to ensure adhesion.

Measurement and Payment

Pavement Interlayer will be measured and paid 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 pavement interlayer or any additional tack coat or labor required for a satisfactory bond between the surface and pavement interlayer.

Such prices 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.

Payment will be made under:

Pay Item
Pavement Interlayer

Pay Unit
Square Yard