

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

#### **ADDENDUM NO. 1**

January 17, 2023

Contract No. DK00343 TIP No.: N/A

Federal Aid No.: State Funded

WBS Element: 2023CPT.11.23.20052, 2023CPT.11.23.20972

County: Ashe, Wilkes

Description: Asphalt Surface Treatment (AST)

## January 19, 2023 Bid Letting

To Whom It May Concern:

Reference is made to the Contract Proposal located on the Division 11 Letting Page for the above-mentioned project.

The following revision has been made to the Contract Proposal:

Page R-5 thru R-7 – SLURRY SEAL, has been added. Please add Pages R-5 thru R-7 in you contract proposal. Pages R-5 thru R-7 are attached to this addendum letter.

This revision is reflected in the Proposal currently posted on the Division 11 Letting Page.

If you have any questions regarding this matter, please feel free to contact me at 336-903-9115.

Sincerely,

DocuSigned by:

## Kenny Heavner

910812B04BDC452... Kenny H. Heavner, PE

Acting Division Contract Engineer

cc: M. L. Poe, PE, Division Engineer

I. D. Dishman, PE, Division Construction Engineer

M. E. Evans, PE, Assistant Division Construction Engineer

R. A. Shaw, PE, Division Project Development Engineer

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Article 1150-3 of the *Standard Specifications*, even if flagging is not being performed as part of the traffic control.

Provide the name and contact information of all qualified work zone installers to the Engineer prior to or at the preconstruction conference. Additionally, provide a qualification statement that all other individuals participating in the setup, installation, and removal of temporary traffic control are qualified flaggers that have been properly trained through an NCDOT approved training agency or other NCDOT approved training provider.

All certification records for qualified work zone installers and flaggers shall be uploaded by the approved training agency or other NCDOT approved training provider to the Department's Work Zone Education Verification App (WZ-EVA) prior to the qualified work zone installer or flagger performing any traffic control duties on the project. For more information about WZ-EVA, see the Work Zone Safety Training webpage.

## **SLURRY SEAL**

## (a) Mix Requirements

Submit to the Engineer a mix design and results of the wear loss by the wet track abrasion test (WTAT) as prepared by an approved testing laboratory. The WTAT will be performed in accordance with ASTM D3910. The wear loss by the Wet Track Abrasion Test shall not be greater than 100 g/sf. Apply the wear loss to the asphalt content limits designated on the JMF.

Place a test strip for approval by the Engineer before beginning the work. Once the consistency of the mix has been approved by the Engineer, maintain the total water content within 3% of the approved blend during the course of operation.

Submit a mix design for each type slurry. The gradation of the mix produced shall conform to the job mix range. The asphalt content (residual asphalt) shall not vary by more than 1.5% from the approved mix design.

	3/8"	#4	#8	#16	#30	#50	#100	#200	
C	100	90-100	70-90	32-54	23-38	16-29	9-20	5-15	Design Asphalt Content,% #:
									8.5-11.5

## (b) Sampling Requirements

Samples for gradation will be taken from aggregate stockpiles designated by the Contractor for use. Take samples for asphalt content and total water content from the completed mixture. Samples of aggregate, filler and emulsion for wet track abrasion check test will be taken at the job site. The frequency of sampling and testing will be established by the Engineer based upon the Department's acceptance program and local conditions encountered.

## 1. Equipment

Combine the mixing and spreading equipment in a single mobile operating unit. Attach a burlap drag 19" wide to the back of the unit for the purpose of smoothing the slurry seal. Equip the mobile unit with an approved feeder that will accurately meter or otherwise introduce a predetermined amount of material into the mixer simultaneously with the aggregate. Use the feeder whenever mineral filler is added to the mix. Equip the mobile unit with a water pressure system and fog type spray bar capable of completely fogging the surface to that slurry seal is to be applied. Use a mobile unit capable of an operative speed of at least 60 ft/min and that has sufficient storage capacity to mix and apply a minimum of 5 tons of slurry.

#### 1. Mixer

Use a continuous flow type mixer capable of delivering water and a predetermined proportion of aggregate and asphalt emulsion to a revolving multiblade mixer tank. Use a mixer that discharges the thoroughly mixed product on a continuous basis and in that the blades of the mixing unit are capable of thoroughly blending all ingredients.

## 2. Spreader

Use a spreader equipped with a flexible type squeegee positioned in contact with the pavement surface and designed to apply a uniform spread with a minimum loss of slurry.

## 3. Auxiliary Equipment

Provide hand squeegees, shovels and other hand equipment as necessary to perform work in areas that are inaccessible to the unit.

#### 2. Construction Methods

## 1. Preparation of Surface

Thoroughly clean the surface upon which slurry seal is to be applied of all loose material, vegetation, silt spots and other objectionable materials immediately preceding application by either brooming or the use of compressed air.

## 2. Application

Wet aggregate immediately before mixing with the emulsion. The Engineer may direct that the surface of the pavement be fogged with water (approximately 0.05 gal/sy) immediately preceding the pass of the spreader. Provide a slurry mixture of a consistency such that it rolls in the spreader box in a continuous mass. Slurry that segregates in the spreader box, so that flowing of liquids (water and emulsion) is evident, is not acceptable and shall not be applied. The liquid portion of slurry mixture shall not flow from either the spreader box or the applied slurry. Evidence of such flow is sufficient cause for rejection of the applied material. Place the slurry on the road in full

lane widths up to and including 12 ft. Use a mechanical device such as an auger to distribute the slurry mix in the spreader box.

Correct excess buildup of slurry on longitudinal and transverse joints.

Do not open treated areas to traffic until such time as the slurry seal has cured to the extent that it will no longer be damaged by traffic. The applied slurry mixture shall be uniform in texture and not flush under traffic. Correct any areas not satisfactory to the Engineer. Nothing contained herein is intended to relieve the Contractor from sharing in the responsibility and performance of the treatments, if a failure occurs before acceptance of the contract. Article 105-17 is amended accordingly.

Do not apply slurry seal surface course on surfaces containing ponding water and the minimum surface temperature shall be 50°F.

The Engineer may require the surface area to that the slurry has been applied by hand to be rolled using a pneumatic-tire type roller. Operate the roller at an approximate tire pressure of 50 psi and subject the paved area to a minimum of 2 coverages.

If oversize aggregate is encountered in the stockpile, immediately cease operation and remove the oversize aggregate by screening.

## 3. Thickness of Application

The average minimum thickness of application shall be at least 3/16" for Type B and at least 5/16" for Type C, unless otherwise specified.

In the event of a test failure on compatibility or WTAT (loss greater than 100 g/sf) for a sample of material being applied to the road, take corrective action before start-up of another day's run. If the sample taken following adjustment fails the compatibility or WTAT, cease application on the road. Maintain responsibility for furnishing additional compatibility or WTAT results and field application site(s). Resume application when the acceptability of seal is clearly demonstrated.

The disposition of rejected material will be subject to the approval of the Engineer.