

NCDOT Pavement Preservation Bulletin Materials and Tests Unit

AST Web App and Double Microsurfacing

In This Issue

- 🖒 Our Mission
- **What is the AST Web App?**
- **Improving AST Operations**
- 🖌 Where to find the Web App
- **J** Double Microsurfacing Info
- **J** Division 11 Project
- **F** Rut Fill vs Scratch Course

Our Mission

The Pavement Preservation Team:

- attends preconstruction meetings
- provides on-site field assistance
- monitors & updates specifications
- interfaces with industry partners
- investigates new treatments
- hosts workshops for Maintenance& Construction offices.

What is the AST Web App?

- Online form to be completed daily by the Chip Seal Inspector
- This form replaces the old paper M&T 660 Form
- Developed by IT with guidance from
- NCDOT Field Staff and Materials and Tests
- Housed in the SharePoint and Connect
- sites of each Chip Seal contract
- Chip Seal and Fog Seal data can be input Note: Microsurfacing is not applicable.

NCDOT AST WebApp

How will this improve AST operations?

After obtaining and inputting aggregate and emulsion applications quantities, the form back-calculates the application rates.

Informs Proposals Engineers the proper application rates for future contracts.

Creates a historical database of aggregate types, applications rates, treated maps, types of seals, and division + statewide quantities.

Where to find the Web App

You can access it multiple ways:

- In Share Plus, click on your contract page (i.e. DI00309).
 Scroll down and click Inspector Links, then on the next page, click Inspector's Web App.
- In Share Plus or the Connect website, click Contruction
 Projects, then click
 Construction Resources. Scroll down and click on Construction
 Inspector's Web App.

LINK: Inspector's Web App

Save it to your home screen so you are always one click away!



June 2024

Double Microsurfacing Information

- Scratch course and surface course are placed totaling 32-36 pounds per sq yard. - On higher traffic routes, a double course system will increase longevity.

- The scratch course will deposit more material in lower areas of the pavement. - Type III gradation is ideal for the scratch

course if the profile needs correction. - Type II gradation for the surface course

provides a smooth ride in residential areas.

Division 11 Double Microsurfacing Contract Number: DK00369

Haymeadow Road (SR 1716) - Wilkes Co.

Pre-Treatment Condition:

- Ruts of variable widths and depths
- Irregular profile
- Little to no cracking
- Oxidation and minor raveling

Pictured below: Haymeadow Rd before treatment.





Pictured above: Applying scratch course. Pictured above: Applying surface course Inset picture: Scratch course texture. Inset picture: Surface course texture.

Haymeadow Road Project: Benefits

- Ruts were measured with a straight edge before and after treatment; Each lift reduced the ruts by $\sim 1/4$ ".

- The double course system will protect and preserve underlying pavement for 8-10 years, if not longer.

- Pavement texture was restored.
- A dark, uniform surface is now present, which satisfies residents.

If you would like more information about this project or if you would like to let a similar project in your division, reach out to Garrett Lee or David Spainhour, contact information listed below.

Rut Fill or Scratch Course?

A rut fill course should be applied when ruts greater than 0.5" are present along your road. (Microsurfacing will not fix subgrade ruts.) A scratch course should be applied when ruts less than 0.5" or minor surface irregularities are present.

Both are Type III gradation and finished with a full width course.

NCDOT's Pavement Preservation Team



Garrett Lee State Pavement Preservation Engineer 919-329-4206 gllee@ncdot.gov



David Spainhour, PE Project Engineer 336-978-0930 david.spainhour@summitde.com

828-284-3384

Britt McCurry, PE **Project Engineer** britt.mccurry@bamccurryengineering.com



Eugene Autry (Divisions 1-8) Transportation Tech V 919-308-7191 eugene.autry@summitde.com



Ronnie Brigmon (Divisions 9-14) Transportation Tech V 828-230-4320 ronnie.brigmon@bamccurryengineering.com

