



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR


J. ERIC BOYETTE
SECRETARY

DATE: February 3, 2023

TO: Ron Davenport, P.E.
State Contract Officer

Tatia White, P.E.
State Roadway Design Engineer

Todd Whittington, P.E.
State Materials Engineer

FROM: John Pilipchuk, L.G., P.E. 
State Geotechnical Engineer

SUBJECT: Aggregate Subgrade Revisions

The Geotechnical Engineering Unit (GEU) has completed the revisions to the Aggregate Subgrade and associated documents. Listed below are the items that are new or revised:

- SP5 R08, *Aggregate Subgrade* Provision (revised – replaces Section 505 in the 2018 Standard Specifications)
- SP5 R09A, *Geotextile for Subgrade Stabilization* Provision (new – formerly a GEU provision renamed as “Geotextile for Pavement Stabilization” and used in conjunction with SP5 R08)
- SP5 R09B, *Geotextile for Subgrade Stabilization* Provision (new – formerly a GEU provision renamed as “Geotextile for Pavement Stabilization” and used independently without SP5 R08)
- SP5 R17, *Aggregate Subgrade in Lieu of Chemical Stabilization* Provision (revised – renamed from “Class IV Subgrade Stabilization in lieu of Chemical Stabilization”)
- SP10 R56, *Geosynthetics* Provision (new – revises Section 1056 in the 2018 Standard Specifications)
- Geotechnical Summary Tables (revised)
- GEU Standard Provisions List and Standard Roadway Pay Items & Earthwork Quantity Adjustments List (revised)
- GEU Summary of Quantities Worksheet (revised)

These items are effective beginning with the March 2023 letting. In addition, the Roadway Design Unit (RDU) is updating the typicals, plan views and terminology for these items in the Roadway

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Workspace (cell libraries) and Roadway Design Manual. The RDU will make an announcement when these changes are completed and available.

The primary changes made are summarized below:

- “Subbase” renamed “subsoil” for clarification in the Aggregate Subgrade and Aggregate Subgrade in Lieu of Chemical Stabilization provisions
- “Geotextile for Soil Stabilization, Type 4” replaced with “Geotextile for Subgrade Stabilization, Type 5” in the Aggregate Subgrade provision
- Geotextile direction turned to be parallel to the survey line for the Aggregate Subgrade and Geotextile for Subgrade Stabilization provisions
- “Geotextile for Pavement Stabilization” renamed “Geotextile for Subgrade Stabilization” to be consistent with changes to Section 1056
- Type 5 geotextile requirements changed in the Geosynthetics provision to be in accordance with recent AASHTO changes for Class 4a geotextiles and utilize the new NTPEP Subgrade Stabilization Geosynthetics (SSGEO) program

For projects that the GEU has previously finished, GEU pavement design and roadway recommendations will be revised. The roadway plans will also need to be revised to implement these changes. If there are any questions, please contact Scott Hidden, P.E. of the Geotechnical Engineering Unit at (919) 707-6856.

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