

National Road Research Alliance Geotechnical Team April Meeting

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Agenda

1. Welcome and Introductions
2. General NRRRA Update
3. Update Ongoing Research Projects
4. Discuss Revised Scope NRRRA Synthesis Project: Subgrade Design for New and Reconstructed
5. Update Determining Pavement Design Criteria for Recycled Aggregate Base and Large Stone Subbase - Task 7
6. Poll → Should we host/organize online Unsaturated Soil Mechanics Workshop?
7. Questions/Requests

General NRRA Update – Upcoming Events

2020 NRRA Pavement Workshop, Minneapolis (May 19-21)
Postponed

NRRA Call for Innovation Deadline May 1, 2020

Research Pays Off

April 21, 2020. *Performance Benefits of Fiber-Reinforced Thin Concrete Pavement and Overlays* by Manik Barman of University of Minnesota - Duluth

Revised Scope NRRRA Synthesis Project: Subgrade Design for New and Reconstructed

Project Overview and Goals:

The use of stabilizing techniques, such as geotextiles and geogrids or chemical treatments, to provide improved subgrade characteristics in lieu of standard excavation and backfill with higher quality soil and aggregate treatments, to extend pavement service life implemented or are being tested by NRRRA States.

The lower the quality and in place strength of a subgrade the greater the potential benefit.

This research study proposes to document existing NRRRA State practices for using ground improvement techniques including geotextiles, chemical treatments, or other. This study also proposes to identify any type of credit provided to the pavement sections (cost savings) within their pavement design procedures or standards that allow for reduced aggregate base or bound surfacing thicknesses. This study looks at Concrete and HMA pavement types.

Revised Scope NRRRA Synthesis Project: Subgrade Design for New and Reconstructed

Expected Tasks:

1. Perform a review of existing pavement design procedures for NRRRA States. Do States appear to include ground improvement techniques such as incorporating geotextiles, geogrids, chemical treatments, or other within their process.
2. Develop questions and survey NRRRA States for the following:
 - a. What ground improvement techniques (*that may include incorporating geotextiles, geogrids, chemical treatments, or other*) technique are used in your NRRRA State ?
 - b. What ground improvement techniques are being considered or researched by your State ?
 - c. Within your pavement design system or standards does your NRRRA State consider a credit (reduced aggregate base or bound surfacing thickness) for the incorporation of any ground improvement technique type.
 - d. Additional to be discussed with the TAP.
3. Compile survey response information
4. Compare survey response information with review of State Pavement Design practices
5. Prepare a summary report of findings.

NRRA Geotech Webinar

Team interest in webinar on
Unsaturated Soil Mechanics ?