

**Structural improvements of flexible pavements using geosynthetics for base
course reinforcement
Quarterly Progress Report
October – December 2008**

Next report due: April 30, 2009 (for period January to March 2009)

ACCOMPLISHMENTS DURING THE QUARTER:

ERDC-CRREL:

The technical report, for Phase I, was prepared in partnership with the University of Maine. A soft copy will be forwarded to Dale Peabody, Maine DOT, for dissemination to all of the sponsoring State DOT agencies for review and comment.

PROPOSED ACTIVITIES:

1. Complete the draft Phase I technical report;
2. Technical Panel members review and provide comments back on Phase I draft report;
3. Close out the project for the 31 March 2009 deadline.

UNIVERSITY OF MAINE:

Preparation of the technical report, for Phase 1, was conducted in cooperation with ERDC-CRREL. Several iterations of reviewing and editing were performed to refine the technical report. The University of Maine focused on presenting the measured results and modeling efforts.

PROPOSED ACTIVITIES:

1. Complete the draft Phase I technical report;
2. Technical Panel members review and provide comments back on Phase I draft report;
3. Close out the project for the 31 March 2009 deadline.

UNRESOLVED OR NOTABLE ISSUES:

No unresolved or notable issues at this time.

Respectfully submitted:

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PURPOSE AND SCOPE:

This study will provide missing data required to help determine whether geosynthetic reinforcement

is beneficial at conditions typically experienced in state highway construction. If the geogrid does provide benefit, the study will develop an AASHTO specification for geosynthetic reinforcement of the aggregate base course of flexible pavement structures. Furthermore, the results will be published in a format to conform with future modifications to the AASHTO Pavement Design Guide.

The objectives of this study are:

- 1.To determine whether and under what conditions geosynthetics (geogrids and geotextiles) increase the structural capacity of pavements typically constructed by state DOTs.
- 2.To determine whether and under what conditions geosynthetics increase the service life of pavements typically constructed by state DOTs.
- 3.To measure in-situ stress/strain response of the reinforced material for use in current or future pavement design processes.