1) Mitigating Mud Season with Geosynthetics

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Objectives/Work Plan: The intent of this project is to demonstrate that it is easy and cost effective to eliminate many mud holes in Vermont's gravel roads using geosynthetics as a principal component in the mitigation.

Goals/Deliverables: Deliverables include a set of guidelines for use by town road commissioners and town officials as an aid in combating the perennial problem known as "mud season". A written report explaining each treatment, the benefits, costs and effectiveness will be provided along with video tape documentation of the roadways.

Accomplishments/Milestones Achieved: This project has been a team effort between the University of Vermont, the Cold Regions Research and Engineering Laboratory (U. S. Army), GeoDesign, Inc., and Applied Research Associates. Test sites were constructed in three Vermont locations utilizing different types of geosynthetic treatment. A site was constructed in Windsor using both Geowrap and GCBD, the site in South Royalton utilized a high strength geotextile, and Geocells were installed in Westford. The condition of the sites is monitored using temperature sensors and a Dynamic Cone Penetrometer. Karen Henry (CRREL) and Chris Benda (VAOT) were interviewed by two television stations, WCAX and WUNY of Burlington, VT on March 28, 2003 concerning the project.

Work Program/Pending Activities: The sites continue to be monitored, heavily through the spring thaw period.

Reports/Products: Interim Report has been finalized and submitted.