

**State Planning and Research Program
Quarterly Report**

PROJECT TITLE: Geocomposite Capillary Barrier Drain (GCBD)

OBJECTIVES:

Monitor and collect data from the sensors of the GCBD Research project at the MnROAD site.
3rd Quarter 2007 Report (July-September, 2007)

PERIOD COVERED: July-September, 2007

PARTICIPATING AGENCIES: Minnesota Department Of Transportation, Michigan Department Of Transportation, New York Department Of Transportation, CRREL, University of New Mexico

PROJECT MANAGER:

Andrew Eller

SP&R PROJECT NO:

TPF 5(126)

PROJECT IS:

 Planning
 X Research & Development

LEAD AGENCY:

Minnesota Dept. of Transportation

PRINCIPAL INVESTIGATOR:

John Stormont, Karen Henry

ANNUAL BUDGET:

A majority of the budget covered the 2006 construction. Year two will be significantly less.

1st year ~ 225,000

2nd year ~ 30,000

PROJECT EXPENDITURES TO DATE: \$222,699.83

Construction

HardDrives Inc. 179,244.20

Supplies/Instrumentation

Tenex (geonet) 7,763.16

Campbell(sensors) 17,844.59

Decagon (sensors) 5,705.09

Misc. equipment./expenses 740.18

Salaries

District 3:Design 5,247.72

GCBD material prep & assembly,
(Student worker salary, etc) 4,580.96

Travel/Misc

MI 645.21

NY 928.72

WORK COMPLETED:

Data collection and monitoring operation of the sensors. Forensic investigation on cell 28 structural failure and bituminous patch of damaged portion. Moisture samples taken to calibrate/verify TDR and ECH₂O sensor readings.

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

Monitor operation of TDR, heat dissipation, ECH₂O, tipping buckets, thermocouples, open standpipes with pressure transducers, and resistivity probes; and collect data for analysis.

STATUS AND COMPLETION DATE:

Data collection is ongoing, with completion of data collection and report completed by 7/2008.